Abstract:

The global financial crisis (GFC) spread from the US and the EU economies to the developing world. In this article, we seek to gain a better understanding of clear contexts, attendant mechanisms, and processes associated with the GFC in China and India. We identify and synthesize the available evidence on the size of the external shock, the cushioning effects, and responses associated with the GFC to propose a framework that enables us to analyze more deeply the antecedents and consequences of the GFC in these two economies. Because of differences in their economic, social, and political backgrounds, China and India have exhibited noteworthy differences in the impacts and responses to the GFC. The findings indicated that trade and investment linkages with the outside world and the degree of personal globalization affected the size of the external shock associated with the GFC. In China's case, a sound macroeconomic policy framework and the state's control on the economy provided a cushion effect, which acted as a buffer to protect the economy against the external shock. China's and India's responses to the GFC included a shift from export-driven to domestic demand-led growth and diversion and shift of economic links away from economies associated with the GFC.

Keywords: China | India | global financial crisis | stimulus | macroeconomic policy

Article:

Introduction

“China certainly comes out of the crisis stronger rather than weaker, and it’s the opposite for the United States.”

Stephen Roach, chairman of Morgan Stanley Asia (cf. McDonald, 2009)
“The economic crisis has weakened the USA and made China look stronger.”

(Sally, 2009, p. 106)

The current global financial crisis (GFC) can be attributed to a “widespread mismatch between current conditions and previous plans, relationships, and contracts” (Cornell, 2009, p. 4). While the GFC is global (Reinhart & Rogoff, 2009), its impact and economic causes differ across economies.

China was arguably the “winner of the Great Recession” (Pei, 2009). Some observers noted that the GFC is likely to make China stronger (McDonald, 2009; Sally, 2009). Reflective pieces from the popular press and academic articles have suggested that China and India have stronger signs of trends toward recovery from the GFC than the industrialized countries (Kane, 2009; Schwartz, 2009). A preliminary analysis indicated that, excluding the economies that experienced negative growth, China and India accounted for 66% and 11%, respectively, of global growths in gross domestic product (GDP) in 2009 (Ghemawat, 2010). One final, but no less important, aspect of the GFC in the context of the emerging economies that renders it interesting to us is the fact that the GFC has transformed their economic orientation. For instance, in light of the GFC, Chinese policymakers are revisiting the developmental models to reduce external vulnerability (Joffe, 2009; Sally, 2009).

Prior research indicates that developed economies rise and fall around the same time, and emerging markets also reach peaks or troughs almost simultaneously (Kose, Otrok, & Eswar, 2008). However, emerging and developed nations’ business-cycle phases are not necessarily in agreement.

The literature lacks explicit attention to the processes associated with the effects of industrialized world–originated financial and economic crises on an emerging economy. Little theory or research exists to explain how structural and business-cycle dynamics affect the rise and fall of emerging economies. The goal in this article is modest—we seek to gain a better understanding of contexts, mechanisms, and processes associated with the GFC in China and India. We identify and synthesize the available evidence on the size of the external shock, the cushioning effects, and responses to the GFC to propose a framework that enables us to analyze the GFC in these two economies more deeply. These two economies’ global importance and increasingly important links with the world make this study important (Gupta & Wang, 2009; Khanna, 2007).

Broadly speaking, the approach employed in this article can be described as a positivistic epistemology. In a positivist framework, a theory would consist of a set of propositions representing the knowledge. Following the tradition of a positivist approach, this article thus seeks to identify details associated with the global financial crisis in China and India.

The remainder of the article is structured as follows: the next section reviews the prior literature. Then, we provide a brief survey of the GFC in China and India. It is followed by a section on discussion and a theory of determinants, impacts, and responses associated with the GFC. Finally, we provide a conclusion and implications.
**Literature Review**

We first organize the relevant literature into three streams of research: channels associated with the international flow of the GFC, relation of fiscal and monetary soundness to such crises, and organizations’ reaction to uncertainty, failure, and poor performance. The three streams can be mapped with the three boxes in Figure 1.

We selected these research streams for several reasons. First, the GFC originated in the United States and other industrialized countries and effects on most emerging economies are external shocks (left box, Figure 1). Second, soundness of government finances and macroeconomic stability are of paramount importance to deal with the GFC (middle box, Figure 1; Giammarioli, Nickel, Rother, & Vidal, 2007). Third, the GFC has been arguably equaled only by the Great Recession (Cornell, 2009; Reinhart & Rogoff, 2009). There has been an uncertainty about what would happen next and what an appropriate response would be. These streams of research would provide a better explanation of the relationship between the determinants of the shock, the nature and quality of the “cushion” to absorb the shocks, and response to the GFC (Figure 1).

**Figure 1** A Framework for Assessing the GFC’s Impacts on China and India, and Their Responses

Possible Channels of the GFC’s Impact on Emerging Economies

According to Gersbach (2002, p. 209), globalization can be measured “by the intensity of contacts through trade and foreign direct investment.” More broadly, the Globalization Index (GI), developed by *Foreign Policy* and A.T. Kearney, provides a helpful perspective to understand global integration (“The Globalization Index,” 2007). The GI has four dimensions: economic (trade and foreign direct investment [FDI]), personal, technological, and political. Possible channels of the GFC’s impact on emerging economies can be examined in terms of three links: financial and investment-related, trade-related, and consumer confidence–related (Table 1; “The Globalization Index,” 2007).

Financial and Investment-Related Links

Cross-border capital flow is probably the most important measure of financial globalization. Capital flows tend to fall when world economic growth is low. During the pre-GFC era, a bright global outlook drove cross-border capitals. The United States and Europe account for about four-fifths of the world’s investment-banking revenues (“Survey: The Alchemists of Finance,” 2007).
Trade-Related Links

An economy’s trade link with the outside world is positively related to the impact of the GFC. For instance, economies such as Hong Kong and Singapore, which are top performers in the economic category in the GI (“The Globalization Index,” 2007), are likely to experience a bigger shock.

Consumer Confidence–Related Links

From the US standpoint, a perception of a weak dollar or a weak economy would have adverse psychological effects on consumers and investors (Millman, 2010). In a discussion of consumer confidence in emerging economies, remittances deserve attention. A commonplace observation is that remittances are less affected by economic conditions. Remittances are sent mainly to support the sender’s family instead of expectation of returns. Anecdotal evidence suggests that remittances fall less in response to downturns than investment flows (“Big, but Dipping,” 2009).

Sound Fiscal and Monetary Policies

It is important to see the GFC in the backdrop of monetary and fiscal policies rather than as a self-contained phenomenon with self-contained solutions. To understand the health of public finances, we emphasize the importance of fiscal soundness and monetary soundness. Analysts considered Japan’s lost decade to be a result of tight monetary and fiscal policies after the country experienced an asset-bubble burst in the late 1980s (Lo, 2009).

A fiscal policy deals with government expenditure and revenue collection to achieve various goals. Fiscal soundness measures “fiscal stability” in the short run and “fiscal sustainability” in the long run (Giammarioli et al., 2007). In a financial crisis, fiscal stimulus measures involve increasing public spending and lowering taxation. An appropriate fiscal policy would help “provide the spark that breaks the impasse and averts a Japan-like scenario” (Estrella, 2009, p. 16). Moreover, different fiscal measures are needed to deal with situations facing an economy before, during, and after the crisis. It was, for instance, argued that Japan’s fiscal stimulus measures were enacted “too late and too erratically to have a sufficient impact” (Katz, 2009, p. 13).

Monetary stimulus, on the other hand, is a government’s attempt to stimulate economic growth by increasing money supply. A tighter monetary policy would force consumers to spend less, which is likely to lead to the downturn.

Fiscal soundness arguably is an important precondition for achieving overall macroeconomic stability and growth (Ghatak & Sánchez-Fung, 2007). In the short run, the government in a fiscally sound economy can meet the upcoming obligations. In the long run, fiscal soundness refers to the government’s capability to fulfill the “present value budget constraint” (Giammarioli et al., 2007). Overall, a sound macroeconomic policy would help lower inflation and the budget deficit and make the current account sustainable, thus promoting growth (Fischer, 1997).
Fiscal and monetary policies are critical for mature as well as emerging economies (Hale, 2007). Prior research indicates that devising a sound macroeconomic policy is more challenging in emerging economies due to economic and political reasons. Problems hindering efforts to achieve a sound macroeconomic policy concern the unsustainable fiscal policies and the lack of monetary policy credibility (Hale, 2007).

Reaction to Failure and Poor Performance

Reinhart and Rogoff’s (2009) data show that the current GFC is equaled only by the Great Recession. The GFC evolved in a markedly unexpected direction for most economies, which led to their poor economic performance. Consequently, they were forced to drastically revise expectations as well as the existing plans, relationships, and contracts (Cornell, 2009). In this regard, a review of the literature on organizations’ response to failure, uncertainty, and poor performance would be relevant.

Prior researchers have suggested that organizations tend to change structures when confronted with ambiguity and poor performance (Newman, 2000). Such changes may create confusion and uncertainty and produce an environment that lacks norms, templates, and models about appropriate strategies, structures, and legitimacy (Greenwood & Hinings, 1993; Newman, 2000). To put things in context, there is little experience of global meltdowns of the size of the GFC. Governments thus do not know what to expect next and how to respond (Reinhart & Rogoff, 2009).

A significant change creates ambiguity in cause-effect relationships, making learning difficult and inhibiting organizations’ ability to undertake a rational search for solutions (Lant & Mezias, 1992; Newman, 2000). Under such conditions, “superstitious learning” may occur (Levitt & March, 1988), and organizations may engage in strategically confused behavior (Haveman, 1992).

When there are significant institutional changes such as the ones associated with the current GFC, existing resources and capabilities of nations may become obsolete and/or insufficient. Moreover, it is difficult to learn from experience during periods of significant institutional change, because past experience is no longer an appropriate guide for future actions (Weick, 1979).

Theoretical and empirical evidence suggests that a failure is likely to lead to overreaction to signals from the environment—that is, signals are perceived to be more positive than they actually are (Hambrick & D’Aveni, 1988; Starbuck, Greve, & Hedberg, 1978). In Betts’s (1998, p. 33) words, “Ambiguity is a recipe for confusion and miscalculation in a time of crisis.”

A Brief Survey of the GFC in China and India

The Effects of the GFC on China and India
As Figure 2 makes it clear, economic growth rates have slowed in both China and India after the GFC. The International Monetary Fund’s (IMF’s) quarterly report released in July 2010, however, raised the 2010 growth forecast for China to 10.5% and for India to 9.4%.

**Figure 2** Economic Growth Rates of China and India Before and After the GFC

![GDP growth chart](image)


To have a better understanding of the GFC’s impact on China, it is worth noting that, since the late 1970s, about 150–200 million Chinese have moved from the countryside to urban areas, mainly the booming coastal cities, in search of employment (Fan, 2008; Hart-Landsberg, 2010). Migrant workers account for most of the workforce in the labor-intensive industries. Estimates suggest that internal migrant workers account for 70% of the manufacturing workforce and 80% of the construction workforce (Hart-Landsberg, 2010). The GFC led to a dramatic fall in exports, overcapacity in manufacturing industries, and increase in unemployment (China Country Report, 2009). It is estimated that 22 million migrant workers lost jobs (Jia, 2009).


As presented in Figures 3 and 4, total exports as well as FDI inflows in China and India declined in 2009. China’s current account surplus dropped from US $426 billion in 2008 to an estimated US $284 billion in 2009 (Batson, 2010).
Figure 3 Total Exports of China and India Before and After the GFC (US$, billion)


Figure 4 FDI Inflows in China and India Before and After the GFC (US$, billion)


Fiscal and Monetary Measures

In November 2008, China announced a fiscal stimulus package of US $586 billion. China also announced a substantial monetary stimulus, which included eliminating lending quotas and
reducing interest rates at a four-year low (China Country Report, 2009). These measures stimulated bank lending and led to an increase in prices of shares and commodities. In 2009, Chinese banks lent US $1.4 trillion, which was twice the 2008 level, and half the GDP (Xinhua, 2010). The country also raised rebates on export taxes for labor-intensive products.

Likewise, Indian Finance Minister Chidambaram announced his country’s plan to speed up market overhauls, construction, and infrastructure improvements (Narasimhan, 2009). India also announced a new foreign trade policy that focuses on expanding exports to emerging economies in Africa, Latin America, the Caribbean, East Asia, Oceania, and the Pacific, which are less affected by the GFC. The new policy gave an incentive of 2.5–3% on exports to countries such as Algeria, Egypt, Kenya, Nigeria, South Africa, Tanzania, Brazil, Mexico, Ukraine, Vietnam, Cambodia, Australia, and New Zealand (“India’s Exports to New Markets,” 2009).

China and India’s Signs of Trends Toward Recovery From the GFC

A number of other indicators also point to the trends toward recovery from the GFC in China and India (Kane, 2009). According to the United Nations Conference on Trade and Development (UNCTAD), among the world’s six largest foreign direct investment (FDI) recipients in 2009, China and the Netherlands had the best outlooks (Figure 4). In 2009, more than 11 million new jobs were created in China (“The ‘China Answer’ to Crisis,” 2010). By the third quarter of 2009, exports rebounded to the early 2008 level (Zakaria, 2009). In August 2009, the PC maker Dell announced that increasing demand from China and India would lead to a growth in the company’s revenue starting in 2010 (“Update 1,” 2009). In August 2009, Hewlett-Packard reported a double-digit revenue growth in China (Schwartz, 2009). While there were concerns about a decline in electricity demand, subsequent data indicated that electricity consumption has increased (Altman, 2009).

The growth in the sales of consumer goods, which slowed to 11.6% in February 2009, increased by 15.2% in July 2009 (Cheng, 2009). Especially, sales of textiles, cement, soft drinks, tractors, and automobiles grew at double-digit rates (Fisher, 2009). Likewise, domestic travel grew by 19% in May 2009 on a year-to-year basis (Wu, 2009).

According to the Pew Global Attitudes Project, 87% of the respondents in China in 2008 said that they were satisfied with their lives. Likewise, Nielsen’s survey indicated that consumer confidence in India registered a 13-point rise during March–June 2009.

Saving Rates

During 2000–08, household saving rates rose in China and India (Prasad, 2009). Indeed, some analysts argue that the “global savings glut” mainly from China led to the GFC (Choi, Mark, & Sul, 2008). Formal salary and wage employment as a proportion of total compensation is 15% in China compared to 40% in Indonesia, the Philippines, and Thailand and 90% in G-7 nations (Klein & Cukier, 2009). The high savings rates in China and India can be attributed to income insecurity associated with mostly informal jobs and thus may not automatically translate to investments.
The China-India Differences

Table 1 compares China’s and India’s positions in terms of various links associated with the GFC. Because of differences in their economic, cultural, historical, social, and political backgrounds, China and India have exhibited noteworthy differences in terms of the impacts of the GFC and their responses. For instance, Arvind Subramanian of the Washington, DC–based Peterson Institute for International Economics attributes India’s resilience and stronger signs of trends toward recovery to what he refers to as the “goldilocks globalization” (“Not Just Straw Men,” 2009). Compared to many economies in Eastern Europe, India’s dependence on foreign capital has been relatively low. Likewise, compared to some East Asian economies, it relies less on foreign trade (Table 1).

<table>
<thead>
<tr>
<th>Channels of the GFC’s Impact</th>
<th>China</th>
<th>India</th>
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</thead>
<tbody>
<tr>
<td>Financial and investment-related links</td>
<td>• Financial system fairly insulated: three banks had US $12 billion exposure to subprime US debt</td>
<td>• Banks had no direct exposure to the subprime US debt</td>
</tr>
<tr>
<td>Trade-related links</td>
<td>• Experienced more job losses due to dependence on exports • Introduced programs to encourage a transition to a consumption-led growth</td>
<td>• Export as a percentage of GDP is smaller than most countries • Outsourcing industry is more directly affected</td>
</tr>
<tr>
<td>Consumer confidence-related links</td>
<td>• Remittances inflow: expectations for Renminbi appreciation, higher interest rates, and investors’ optimistic expectations about asset markets</td>
<td>• Remittances inflow: weak rupee, expectation for appreciation of the rupee, and higher interest rates</td>
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Toward a Theory of Determinants, Impacts, and Responses Associated With the GFC

Our proposed framework for assessing the GFC’s impact on emerging economies and their responses is presented in Figure 1 in terms of a flow. The GFC arguably affected most emerging economies through an external shock (Mu, 2009). The left box summarizes factors that are likely to determine the size of the external shock. We argue that degrees of economic and personal globalization influence an economy’s exposure to the GFC and, hence, the size of the external shock. The middle box in Figure 1 represents the factors that provide the cushion effect to absorb the impact of the GFC. In the absence of a good-quality, dense cushion acting as a shock absorber, the shock associated with the GFC is likely to lead to job losses and slowdown in economic growth. Possible measures policymakers are likely to take to reduce exposure to future shocks or to redesign the cushion are shown in the right box in Figure 1.

Determinants of the Size of the External Shock

Economic Globalization
Globalization is about interconnection, interdependence, and integration of economic activities among countries. Globalization presents risks as well as opportunities.

The degree of shock to an emerging economy associated with the GFC is a function of the economy’s global integration. A reason why India has been less affected by the GFC than China concerns the former’s lower degree of economic globalization. India’s economic globalization has been at a smaller scale, which is also referred to as the “goldilocks globalization” (“Not Just Straw Men,” 2009).

In the GI, China ranked 66th in the world compared to India’s rank of 71 in 2007. In the economic component of the GI, China ranked 43rd compared to India’s 66th (“The Globalization Index,” 2007; also see Table 2). J. Stephen Morrison, an expert on Africa and senior vice president at the Center for Strategic and International Studies (CSIS) in Washington, DC, noted: “The upside of marginality is that when bad things happen to others, it’s not going to hurt you as much” (cf. Green, 2009, p. 19).

<table>
<thead>
<tr>
<th>Table 2 A Comparison of Economic Indicators Related to the GFC in India and China</th>
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<tbody>
<tr>
<td><strong>Indicators Related to Trade Linkage With the External World</strong></td>
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<tr>
<td>Exports-to-GDP ratio</td>
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<td>Trade-to-GDP ratio</td>
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<tr>
<td>Trade component</td>
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<tr>
<td><strong>Indicators Related to FDI Linkage With the External World</strong></td>
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<tr>
<td>Capital inflows (% of GDP)</td>
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<tr>
<td>FDI component</td>
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<tr>
<td><strong>Indicators Related to Personal Globalization</strong></td>
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</table>
### Remittances and Personal Transfers

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<th>China</th>
<th>India</th>
<th>Remarks</th>
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A lower number indicates a higher degree of globalization.

### Indicators Related to the Nature and Quality of the “Cushion” and Response to the GFC

<table>
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<tr>
<th>Indicator</th>
<th>China</th>
<th>India</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Fiscal stimulus as of July 2009 (US$, billion)</td>
<td>586</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Private consumption as a % of GDP (2008/09) (“India: The Global Growth Outperformer,” 2009)</td>
<td>35.4</td>
<td>59.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of the national economy controlled by the state (Pei, 2006)</td>
<td>70%</td>
<td>&lt; 7%</td>
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</tr>
</tbody>
</table>

### Investment-Related Links

China and India allow only limited participation of foreign firms in their capital markets. For instance, as of February 2010, only 86 foreign investors had been given permission to invest in China’s onshore capital markets. They were allowed to invest US $16.67 billion, which accounted for less than 1% of the country’s total stock market capitalization (Tang, 2010). While the broader Chinese economy was affected by the GFC, it had a limited direct impact on the financial sector (China Country Report, 2009).

Due to the small size and the low level of maturity of capital markets, policymakers in the two countries consider it important to protect their countries from speculative foreign capital, which may lead to adverse impacts such as currency appreciation and a loss in export competitiveness. Policymakers in the two countries also worry that a rapid inflow of funds controlled by investors looking for short-term returns (“hot money”) may result in the formation of asset bubbles and a subsequent burst.

Especially, India’s growth is largely based on domestic investment (Jha, 2009). Indian businesses are receiving loans from India’s state banks, which account for 70% of bank assets in the country (“Not Just Straw Men,” 2009). In March 2009, the State Bank of India had 12,100...
offices worldwide, over 150 million customers, and a total business of US $274 billion (2.2% of GDP) (Ramavarman, 2009).

A view, popular among economists, is that due to their relatively insulated financial sectors, both China and India are in a better position than many other developing economies to have stronger signs of trends toward recovery from the GFC (Bajoria, 2008). While banks in Western Europe were exposed to the risky subprime US debt (Schwartz, 2009), major Indian banks had no direct exposure to such debt (Jha, 2009). Likewise, China’s financial system is fairly insulated, and bank-financed investment growth has dominated GDP growth in the country (Altman, 2009; Prasad, 2009). However, in 2007, the Bank of China confirmed that it was holding US $9.7 billion of securities backed by US subprime loans. Two other Chinese banks, the Industrial and Commercial Bank of China and the China Construction Bank, also reported such exposure of US $1 billion each. The three Chinese banks’ US $12 billion exposure to subprime was 6% of the US $199 billion in private foreign securities they held (Thomas, 2007). In March 2008, the Central Bank Governor of China noted that there would be a limited effect of US-led subprime debt crisis on the Chinese banking system. He, however, pointed out a possible indirect effect (York, 2008). The Chinese government also confirmed that its foreign reserves hoard is not directly exposed to the subprime debt (Thomas, 2007).

Trade-Related Links

To compare China’s and India’s dependence to the US economy, consider one detail. According to Goldman Sachs, with a 1% drop in US consumption growth, China’s growth would decline from 12.3% to 10.9%. For India, the corresponding impact would be in the 0.15–0.25% range. India’s export as a percentage of GDP (14.5%) is lower than that of China (33.0%), Indonesia (26.8%), Japan (16.0%), Malaysia (89.6%), Singapore (185.2%), South Korea (45.4%), Taiwan (64.8%), and Germany (39.9%) (Yew, 2009a). China’s and India’s trade links with the external world are much smaller than Singapore’s (trade: 360% of GDP) and Hong Kong’s (trade: 350% of GDP). Especially, India’s growth is largely based on domestic consumption (Jha, 2009). Thus:

Tentative Proposition 1: An emerging economy’s degree of trade linkage with the external world is positively related to the GFC’s impact on the economy.

Tentative Proposition 1a: The GFC’s impact associated with the trade linkage in an emerging economy is positively associated with the degree of such linkage of the economy with global economies that are associated with the origin of the GFC.

Tentative Proposition 2: An emerging economy’s degree of investment linkage with the external world is positively related to the GFC’s impact on the economy.

Tentative Proposition 2a: The GFC’s impact associated with the investment linkage in an emerging economy is positively associated with the degree of such linkage of the economy with global economies that are associated with the origin of the GFC.
As to the personal globalization’s effects on developing countries, Wilson (2009, p. 587) notes: “In this era of globalization and strong migratory flows what happens in the United States and other core capitalist countries has repercussions on the developing world” (p. 587). Before moving to the specific cases, a few general points about the GFC’s effects on remittances are in order. In 2009, remittances worldwide decreased by 6% to US $316 billion from US $336 billion in 2008, which was the first decrease since the 1980s (Ratha, Mohapatra, & Silwal, 2010). However, the GFC-remittances flow nexus is more complex than first meets the eye. For instance, between 2007 and 2008, remittances from the United States to Latin America and the Caribbean slowed the most, and remittances to the Middle East and North Africa from all sources increased by 8% (Ratha, Mohapatra, & Xu, 2008). In 2009, remittance flows are estimated to decrease by 12% in Latin America and the Caribbean, 21% in Eastern Europe and Central Asia, and 8% in the Middle East and North Africa (Ratha et al., 2010).

Some countries are hard-hit by the GFC-led decline in remittance inflows. For instance, an estimated one in four families in Mexico receives remittances, which are spent on basic needs as well as in starting small businesses, savings, acquisition of property, and education (Cardoso, 2008).

Moving now to the specific contexts of China and India, it is worth noting that these are the world’s two biggest remittance recipients. In 2009, remittance inflows to India and China amounted to an estimated US $50 billion and US $48 billion, respectively (Ratha et al., 2010). The GFC has affected remittance inflows in both countries. Private transfers to India, which has remittances as the main component, remained flat between 2008 and 2009 (Ratha et al., 2010). In China, remittance inflows grew by 35.2% in 2007, but the growth rate declined to 23.2% in 2008 (“Hot Money Boosts China Asset Prices,” 2009) and further to 18.2% in 2009 (Ratha et al., 2010).

It is important to note, however, that the GFC has a differential impact on remittances depending upon migration destinations. As Table 2 indicates, remittances expressed as proportions of imports and exports are much higher for India than for China. Personal globalization is thus one area in which India performs better than China. About two-fifths of Indian migrants are in the Gulf, and a fifth are in North America (Ratha et al., 2010). The diversified migration destinations can be attributed to India’s modest fall in remittances in 2009 compared to many other countries (Ratha et al., 2010). According to the Reserve Bank of India (RBI), in fiscal year 2005–2006, a quarter of India’s remittances came from the Gulf region (Abdelal, Khan, & Khanna, 2008), which increased to 40% in 2009 (Ratha et al., 2010). Nobel Laureate James Mirrlees noted, “As things stand, India receives a huge quantum of remittances from Indians living and working in the Gulf region. And, the Gulf area has still not been impacted hugely by the recession. Therefore, one doesn’t expect remittances into India to drop immediately from Gulf Indians” (cf. Nag, 2009). In line with these arguments, the following propositions are presented:

*Tentative Proposition 3: An emerging economy’s degree of personal globalization is positively related to the GFC’s impact on the economy.*
Tentative Proposition 3a: The GFC’s impact associated with the personal globalization in an emerging economy is positively associated with the degree of linkage of the economy with global economies that are associated with the GFC.

However, there is an important caveat that must be noted. In addition to the recession’s impact in the United States on access to better-paying jobs, economic and financial risk and return-related considerations also affect remittance flows. They include inflation rates in the immigrant receiving and sending countries, expectations in domestic asset markets, expectations related to exchange-rate fluctuation, and interest-rate arbitrage opportunities (Cardoso, 2008; Wilson, 2009). It is suggested that factors such as a weak rupee, expectation for appreciation of the rupee, and higher interest rates compared with industrialized countries are a driving force behind the flow of remittances to India (“Big, but Dipping,” 2009). Likewise, remittance inflows to China are affected by expectations for Renminbi appreciation, higher interest rates in China, and investors’ optimistic expectations about the Chinese asset markets (“Hot Money Boosts Chinese Asset Prices,” 2009).

Internal Factors Influencing the Degree of Impact of the External Shock

Sound Macroeconomic Policy Framework

Sound government finances can help maintain price and macroeconomic stability, contribute to growth, and play the role of a cushion in case of an external shock (Giammarisi et al., 2007). In this regard, most of the world’s major economies were running high deficits. For instance, Greece had a budget deficit of 13.6% in 2009.

In light of the stereotypically different expectations that surround emerging economies, some have maintained a sound fiscal policy. China’s foreign-exchange reserves of US $2.3 trillion have provided a protective shielding for resisting the impact of the GFC and functioned as a cushion to absorb the shock. Richburg (2010) highlights how China’s sound macroeconomic policy helped react to the GFC’s impact: “In the United States, the US $787 billion stimulus was financed by the federal government running large deficits. In China . . . most of the spending came from the country’s state-run banks making loans to local government entities.”

A government with sound government finances may possess the ability to identify and implement economic projects with a high rate of return and in a timely manner, which is a prerequisite for a fiscal stimulus to work (Fatás & Mihov, 2009). China’s stimulus package has stimulated infrastructure development. The country is estimated to spend US $200 billion on railways in 2010 and 2011 (Zakaria, 2009). In the first 11 months of 2009, China spent over US $68 billion on railroads, 81% higher than the same period in 2008 (Shen, Zhang, Zhao, Harrington, & Akkermans, 2009).

India suffers from budget deficits and lags behind China in terms of its ability to respond with direct cash transfers (Tanzer, 2010). India’s fiscal stimulus is smaller than China’s (Table 2). In late 2008, reports indicated that half of India’s planned highway-improvement projects valued at over US $6 billion could be delayed by two years (Bellman & Range, 2008). India’s relatively
weaker macroeconomic policies meant that it lacked a cushion to act as a backup system to rapidly and effectively absorb the GFC’s shock. The above leads to the following:

*Tentative Proposition 4: The soundness of an emerging economy’s macroeconomic policy framework is positively related to its recovery from the GFC.*

The State’s Control on the Economy

Giving the GFC as proof, in recent years, some observers have argued that government intervention is necessary (Hvistendahl, 2009). According to the Union Bank of Switzerland (UBS), the state accounts for at least 70% of the Chinese economy, compared to less than 7% in India (Pei, 2006). Other estimates suggest that the state owns 76% of the country’s wealth in China (Klein & Cukier, 2009). As of 2001, in 70% of large- and medium-sized “corporatized” enterprises, communist party members were on the board of directors (Pei, 2006). The government controls the banking and financial sector and oversees state-owned enterprises. Compared to India’s inefficient democratic government, central control in China has been more effective to deal with and respond to the GFC (Tanzer, 2010).

How might this be the case? Note that like other economic resources, a stimulus follows a decision of how and when to spend that money. A high degree of control on the economy means that the government would be in a position to spend the allocated stimulus in a timely manner and in projects that are likely to address long-run problems facing the economy.

A good stimulus is one that works quickly and in a timely manner (Stiglitz, 2009). Indeed, an argument against a stimulus has been the tendency to be “ill timed” (Hassett, 2009, p. 77). The deep entrenchment in the economy allows the Chinese government to intervene quickly and produce desired outputs. Overholt (2009/2010, p. 29) notes: “Compared to the United States, China had many more shovel-ready projects and its system presented fewer legal or regulatory obstacles to their rapid implementation. Moreover, the Chinese fiscal stimulus was far more focused on actual crisis stimulus than its US counterpart, which was heavily a social improvement agenda that included health care, education, alternative energy, and the like . . . and with spending spread out over . . . many years.”

Second, effectiveness of a fiscal stimulus is directly related to the extent to which it allocates resources in projects with “a big bang for the buck” (Stiglitz, 2009). A stimulus has been criticized on the grounds that it has a tendency to be “poorly targeted” (Hassett, 2009, p. 77). In particular, economists have emphasized the importance of allocating stimulus money to create assets such as new technology, infrastructure, and human capital (Stiglitz, 2009). China’s central control has made it easy to invest in modern infrastructures. Richburg (2010) observes, “Forget the tax cuts; in China, it was infrastructure, infrastructure and more infrastructure.”

Another criticism often leveled against stimulus packages is that they may be of the wrong size (Hassett, 2009). Romer and Romer’s (1994) study indicated that insufficient size made most stimulus efforts in the past ineffective. As noted, the Chinese government’s share of direct production from the GDP is 70%. This allowed China to have a stimulus package of a substantial size (13.2% of GDP compared to 5.3% for the United States).
The government control allowed China to increase lending and effectively combine monetary and fiscal stimuli (“Not Just Another Fake,” 2010). Overholt (2009/2010, p. 29) notes, “In China, monetary and fiscal stimuli overlapped and reinforced each other to a far greater extent because China’s monetary stimulus, in a well-capitalized banking system, was channeled much more into actual projects.”

Finally, a good stimulus package is one that helps instead of worsens the long-run problems (Stiglitz, 2009). In this regard, estimates suggested that tax cuts in the United States accounted for 37% of the stimulus package (Hassett, 2009). Economists were concerned that tax cuts were not likely to provide much stimulus in the United States, as Americans are likely to save a significant proportion of such cuts (Stiglitz, 2009). China’s stimulus package, on the other hand, mostly consisted of spending increases. Thus, we propose that:

*Tentative Proposition 5: The government’s control on the economy is positively related to the effectiveness of fiscal and monetary stimuli.*

Response to the GFC

Shift From an Export-Driven to a Domestic Demand-Led Growth

Investor and philanthropist George Soros noted that while the GFC in the US context was “an internally-generated event leading to the collapse of the financial system,” it impacted China through “an external shock to exports” (Mu, 2009). A similar point can be made about India. Reinhart and Rogoff (2009) note: “When a crisis is truly global, exports no longer form a cushion for growth.” A growing number of observers have noted that the GFC especially exposed the weaknesses of China’s developmental model, which relied heavily on exports (Sally, 2009). The GFC has transformed the two economies’ orientation.

Measures to reduce external vulnerability and emphasis on a consumer-driven economy have been an important change in China’s structure of the developmental model in the post-GFC era (Platt, 2010; Zakaria, 2009). During the World Economic Forum Annual Meeting 2010 in Switzerland, Chinese Vice Premier Li Keqiang noted that China would explore a new development model. He reiterated the government’s goals of increasing domestic consumption to drive growth, which would provide the cushioning effect from external shocks (Vidailliet, 2010). Such reactions can be explained as organizations’ tendency to change structures when they face uncertainty, ambiguity, and poor performance (Newman, 2000).

China’s consumption rate (Table 2) is half that of the United States and two-thirds of Europe and Japan (Devan, Rowland, & Woetzel, 2009). Chinese Premier Wen emphasized that a long-term strategic growth policy would be on “greater effort to enhance the role of domestic demand, especially final consumption” (Yew, 2009b).

In an attempt to stimulate consumption, China has offered subsidies for consumer durables such as home appliances and fuel-efficient cars (Pierson, 2009). Furthermore, China has shown a long-term commitment of a fiscal stimulus, which is expected to support the recovery of the
private sector and allow a “self-sustaining growth” (Koo, 2009, p. 18). In 2009, the Chinese Commerce Minister warned that the world economy may suffer enormously if governments withdraw stimulus measures too quickly (“China’s Recovery Strengthens,” 2009). While less than 4% of spending currently goes to education and health care (Klein & Cukier, 2009), China is taking measures to increase spending in these areas (Pierson, 2009).

The Chinese government’s emphasis on increasing domestic consumption is also reflected in its recent surge in imports. According to China’s customs office, China’s imports grew by 56% year-on-year in December 2009. In 2009, China became the world’s second-biggest importer.

We might detour briefly to point out that China’s outward FDI rapidly took off in the past decade. As suggested by the latecomer perspective (Child & Rodrigues, 2005), Chinese firms internationalize in order to seek resources such as brand names and technologies. In recent years, however, domestic consumption, which was almost neglected in the past, has been clearly a national policy priority and has come to the top of the agenda. In sum, we argue that:

*Tentative Proposition 6: Due to the GFC, developing economies that relied on an export-led growth are likely to shift toward a domestic demand-led growth.*

Diversion and Shift of Economic Links

The GFC arguably served as a wake-up call that a heavy dependence on developed economies that are associated with the GFC would be harmful (Pereira, 2009). It forced them to search for alternate solutions. If factors such as trade barriers and macroeconomic policies are expected to slow down the growth of developed markets for exports from developing countries, south-south trade would be one option to meet export developing countries’ objectives (Razmi & Blecker, 2008). Consequently, China and other Asian economies have entered into various bilateral free-trade agreements (FTAs). The FTAs are driven fundamentally by their attempts to increase intra-Asian trade. In 2009, India and South Korea signed such a deal. Asian economies expect that bilateral agreements will enable them to specialize in an industry in which they have competitive advantage.

The GFC has also led to identification of opportunities that were previously untapped. For instance, the FTA with South Korea may arguably allow India to benefit from its low labor costs to become a major parts supplier for Korean electronics companies selling final products in the Middle East (“The Noodle Bowl,” 2009). China and India are also expanding trade links with Latin American countries (Platt, 2010).

At a higher level, some Chinese scholars and commentators think that the GFC has created a “historic opportunity” for China to strengthen its position. They have envisioned radical changes to use the current GFC to boost its strategic influence. An article in the *Economic Reference Journal* published by a government think-tank argued that the GFC would significantly weaken industrialized countries’ economic, political, military, and diplomatic power. To exert strategic influence in Southeast Asia, China has emphasized capital export (“A Time for Muscle-Flexing,” 2009).
The United States can be considered to be the epicenter of the GFC. Observers have noted China’s intention to diversify foreign asset holdings and move away from the US Treasury market. During the US Treasury Secretary’s June 2009 visit to China, he was pressured to reassure an audience about the security of US Treasury bonds (Eichengreen, 2009).

In an online poll conducted by the Chinese newspaper *Global Times*, 87% of Chinese respondents considered China’s holdings in US dollars unsafe (Eichengreen, 2009). China signed an agreement to acquire US $50 billion in notes issued by the IMF, arguing it would help fight the GFC. According to the Ministry of Finance, China invested 735.2 billion yen in Japanese government bonds in May 2010, which is much more than the 541 billion yen purchased in the first four months of 2010 and 253.8 billion yen invested in 2005. In 2009, Russia expressed its intention to trade US $10 billion in US Treasury holdings for “IMF bonds” denominated in special drawing rights (SDRs; Eichengreen, 2009). Other countries interested in purchasing the IMF notes include Brazil and India.

In March 2009, the governor of China’s central bank argued that SDRs should replace the dollar as the world’s reserve currency. The US dollar dropped to a 14-month low against the euro in October 2009 as a central bank researcher argued in favor of China’s holdings of other currencies (“Dollar Hits 14-Month Low,” 2009). As noted earlier, the GFC-led diversion of economic links away from the United States is apparent in the Indian government’s new foreign trade policy, which has focused on expanding exports to alternative destinations. It is important, however, to note that such incentives might have a distortive effect on the allocation of resources in the economy.

It may well be that China and India are overreacting to signals from the environment due to a failure of their current developmental model (Hambrick & D’Aveni, 1988; Starbuck et al., 1978). They may also be choosing actions that are myopic and behaviors that are strategically confused (Haveman, 1992). It is thus proposed that:

*Tentative Proposition 7: In response to the GFC, developing economies are likely to shift their economic orientation away from the countries that are associated with the origin of the GFC.*

**Conclusion and Implications**

This article brings together three streams of research to examine how China and India are affected by the GFC and how they are responding to the crisis. We identified the contexts, mechanisms, and processes associated with the GFC from the standpoint of these two economies. The findings of this article should be viewed as tentative because of the uniqueness of the two economies and the descriptive research design. That is, the above findings related to the degree of shock associated with the GFC, impacts, and responses cannot be generalized to make definitive statements about other emerging economies.

As noted earlier, the GFC affected most emerging economies through an external shock. Obviously, economies such as Israel that heavily depend on the United States have been more severely affected by the GFC (“Lands of Opportunity,” 2009). India and China are less affected compared to most industrialized economies. The nature of the impacts on the two economies,
however, differs. China’s unique blend of capitalism and socialism has helped the country to deal with the GFC more effectively.

The GFC affected China more than India because of its higher degree of economic globalization. That is, China experienced a higher degree of shock than India. The country was able to respond to the GFC more effectively because of its sound macroeconomic framework. China’s sizable fiscal program, which was supplemented by monetary and bank lending policies, acted as the cushion to absorb the impacts of shocks (Glick & Spiegel, 2010). The foreign-exchange reserves of US $2.3 trillion particularly provided a dense cushion. The state’s control on the economy provided a further resilient force resisting the impact.

India was not hurt as much because of its lower degree of globalization. As discussed earlier, while China has maintained a sound public finance system, India suffers from budget deficits. Had there been a bigger shock, the Indian economy would have lacked the cushion to act as a buffer to absorb the impact.

While China and India were among the fastest-growing economies, important questions remain regarding the global implications, welfare effect, and long-term sustainability. The real irony is the government’s failure to introduce policies that favor the population at the bottom of the pyramid. For instance, lending is disproportionately oriented toward powerful economic and political interests such as state-controlled companies in China and family-owned groups in India. In China, small and midsize enterprises (SMEs) account for 70% of GDP but have access to only 20% of financial resources (Klein & Cukier, 2009). In both countries, the effects of crisis-led spending are clearly skewed toward big enterprises.

The most glaring shortcoming of China and India concerns their relatively low emphasis on human capital. For instance, while China’s stimulus budget has plans to invest in social programs, the majority of the spending has been on infrastructure projects, which mainly employ unskilled workers. It may help very little in China’s attempt to slip into a higher gear and move beyond low-margin contract manufacturing.

In some aspects, however, the GFC may be a blessing in disguise. China has used the GFC as an opportunity to modernize its economy. Most of China’s spending on railways is expected to be in high-speed rail (Zakaria, 2009). China is planning to spend US $733 billion on the rail network to expand to 75,000 miles by 2020 and would have over half of the world’s high-speed railroads (Shen et al., 2009).

Stability in FDI inflow indicates a higher degree of investor confidence in the Chinese economy compared to other major world economies. One observation is that global health care investors are increasingly focusing on China, India, and other Asian economies, which is likely to lead to an increase in the consumption of health care services in these countries. A high FDI is likely to contribute to a recovery from the crisis and create a virtuous circle.
Notes

1. According to an article published in The Economist (“Not Just Another Fake,” 2010), China’s critics may “overstate their case.” The article convincingly argued that there are very few or no similarities between today’s China and the Japanese economy in the bubble era. It closely looked at three main concerns of China’s critics: overvalued asset prices, overinvestment, and excessive bank lending. As to the first concern, the article points out that the price-earnings ratio of Shanghai A shares is 28, which is below its long-run average of 37 and is much lower than it was in Tokyo’s stock market in 1989 (about 70). To address the overinvestment-related concern, the article suggests that the ratio of average home price to the average annual household income is about ten in China, which compares with four to five in most developed economies. Moreover, about a quarter of Chinese buyers pay cash to buy homes. Chinese homes thus carry less debt than Japanese properties did in the bubble era. Finally, the article argues that much of the bank lending in 2009 can be considered as a fiscal stimulus. For instance, infrastructure projects that have little hope of repaying loans may facilitate entrepreneurship in the country.

2. SDRs are the unit used by the IMF in transactions with its member countries. Currently SDRs consist of a basket of four currencies: the US dollar, euro, yen, and British pound.


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