38th Taiwan-U.S. Conference on Contemporary China

China Faces the Future

July 14–15, 2009

Center for Northeast Asian Policy Studies, The Brookings Institution
Institute of International Relations, National Chengchi University

The Brookings Institution
1775 Massachusetts Avenue, NW
Washington, DC

Session IV: Global Economic Crisis and China’s Response

The Global Economic Crisis and China's Response

Albert Keidel
Faculty
Georgetown University
AKeidel@Keidel.us

The Global Economic Crisis and China's Response

by Albert Keidel

for the Conference "China Faces the Future"
sponsored by: The Brookings Institution and
The Institute of International Relations, National Chengchi University
July 14-15, 2009[1]
The Brookings Institution, Washington, DC, USA

The global financial and economic crisis has propelled China onto the world scene perhaps faster than would otherwise have been the case. Whether China stays on that scene in such a prominent place depends on how China comes out of the crisis. China is frequently portrayed both as a cause of the crisis and as a potential savior for the world economy. Overall analysis of the situation, however, concludes it is unlikely that China had much to do with causes of the crisis. This paper concludes that the appearance of significant Chinese global surpluses in 2005 and their globally relevant large scale beginning in 2006 is just too late in the sequence of crisis-generating events to be a major, or even a minor, factor.

As for China's ability to stimulate global recovery, even if China's large fiscal and financial policy response brings quick domestic Chinese recovery, China's economy is almost certainly too small to pull the world out of recession by itself. China's GDP in 2009 will still be less than 5 trillion dollars, while the industrialized world's GDP is well over 30 trillion dollars.

China's crisis experience is, however, important for future international relations -- including security relations. If, after the crisis, China's economy returns to growth at rates in the high single digits, say 8 or 9 percent a year, then we must pay more attention to pre-crisis predictions that China's economy could be bigger than America's by as early as 2030. Such predictions are controversial, but with 8- or 9-percent Chinese growth, there would be little doubt. What policy and security challenges might the United States face were it no longer the world's largest commercial power?

This paper reviews China's experience in the crisis and its response and recovery record to date.

China's crisis response so far reflects the unusually complex nature of the crisis for China. China doesn't only face a trade crisis. It also faces crisis conditions that at first seem completely domestic. China had its own pre-crisis collapse in markets for stocks, real estate and large consumer durables like cars. Looking back, these, too, may have reflected international influences. Be that as it may, senior Chinese economists apparently think that these domestic

[1] China's economic performance reported here has been revised to include official Chinese data for the second quarter of 2009 released July 16, the day after the conference.

crisis conditions were China's main challenges through the first quarter of 2009.[2] In contrast, the most serious aspects of China's global trade-related crisis appear to be only just beginning.

Whatever the specific components of China's crisis challenge, and despite China's insulation from financial aspects of the crisis, domestic anxieties concerning the crisis seem to have amplified the crisis impact on consumption and private investment demand, especially in the fourth quarter of 2008, making the government's stimulus challenge even greater. China's response has been multi-faceted, with fiscal and monetary stimulus matched by structural reforms and efforts both to cushion the local impact and to exploit crisis-related international opportunities.

Most recently, recovery results have been impressive -- second-quarter GDP surged to become 7.9 percent greater than a year earlier, despite the severe impact on GDP growth of a nearly two-thirds real decline in China's trade surplus that quarter. It is not clear if this sudden growth spurt is based on sustainable expansion of domestic demand, or if it reflects a surge in inventories that may be difficult to keep up. If domestic demand growth doesn't prove to be robustly based on consumption and fixed asset investment growth, and if China's trade surplus continues its sharply negative slide, coming quarters may not prove to be as promising as is now expected.[3]

The global financial and economic crisis

A quick look at the financial crisis itself establishes basic parameters for assessing China's challenge and policy response. This paper will first address two aspects of the crisis. Details of global financial failures and subsequent world trade and output contractions are essential reference points. Just as important are answers to questions about what created the original U.S. market bubble conditions in the first place.

The immediate crisis outbreak exhibited financial sector failures too big to reverse, even for the world's richest developed countries. The timeline for the global financial crisis is by now well documented.[4] Financial failures started slowly in early 2007, as word spread of escalating default rates for poor quality real estate lending, in particular loans ultimately based on subprime and Alt-A mortgages. These defaults threatened financial sector balance sheets. Most large financial institutions had used innovative techniques, only recently developed and deregulated, to lend to

---

[2] Based on author interviews in China, April 2009.

[3] A Wall Street Journal survey of ten economists' quarter-on-quarter projections for the second half express the strong expectation that China's GDP growth for all of 2009 will be close to the 8-percent target, possibly surpassing it. See Andrew Batson, "Poll Shows China Growth Surge Expected to Slow," *WSJ Blogs*, http://blogs.wsj.com/chinajournal/2009/07/22/poll-shows-china%e2%80%99s-growth-surge-expected-to-slow/.

[4] This account relies heavily on: Federal Reserve Bank of St. Louis, "The Financial Crisis: A Timeline of Events and Policy Actions," http://timeline.stlouisfed.org/index.cfm?p=timeline; Federal Reserve Bank of New York, "Financial Turmoil Timeline," http://www.ny.frb.org/research/global_economy/Crisis_Timeline.pdf; *Financial Times*, "In depth: Global financial crisis," http://www.ft.com/indepth/global-financial-crisis; *New York Times*, "Credit Crisis -- the Essentials," http://topics.nytimes.com/top/reference/timestopics/subjects/c/credit_crisis/index.html?ref=business;

each other and to consumers in ways that appeared to reduce dramatically the riskiness of their loans. In early 2007, this image of lower risk began disintegrating.

In April 2007 a leading subprime mortgage lender (New Century) filed for bankruptcy. By summer, rating agencies were downgrading funds linked to subprime mortgages, several subprime-related investment funds had failed (Bear Sterns and BNP Paribas), and another U.S. mortgage lender (American Home Mortgage) entered bankruptcy. In the fall, bank write downs of subprime losses accelerated (Citigroup), and foreign investors in subprime-related assets were in trouble. In the winter of 2007-08, the U.S. Federal Reserve extended swap lines (totaling 24 billion dollars) to the European Central Bank and the Swiss Central Bank, as Britain nationalized its fifth largest bank (Northern Rock). In the United States, Citigroup took over the largest U.S. mortgage lender (Countrywide).

Financial difficulties intensified further in the first half of 2008 and reached a climax in September. In March, J. P. Morgan Chase took over failed Bear Sterns, and in July IndyMac Bank, one of the largest U.S. savings and loan associations, failed.[5] In September, conditions deteriorated dramatically. The federal government succeeded in taking over mortgage guarantors Freddie Mac and Fannie Mae (September 7) and bailing out insurance giant AIG (September 15). But when the government couldn't arrange a takeover of Lehman Brothers (September 15) and Lehman Brothers filed for bankruptcy, its obligations on the balance sheets of firms all around the world became worthless. With this development, the crisis entered a desperate several months when credit froze up around the globe because nobody could be sure whether potential business counterparts were solvent.

In the fall and winter of 2008-09 the crisis expanded from its financial roots into the real economies of the world. International trade and global economic investment and output began sharp declines that in more moderate forms continue to this day. Governments around the world introduced a series of financial bailout and economic stimulus programs, but for many countries a shortage of foreign exchange and heavy former reliance on export markets undermine recovery efforts.

This is not the place for a detailed analysis of the global crisis, but this summary emphasizes that the palpable nature of the crisis had everything to do with U.S. real estate markets, low-quality mortgages, and financial innovations like those employed heavily by Lehman Brothers, AIG and investment firms large and small around the world.[6] These innovations helped make plentiful

---

[5] Damien Paletta and David Enrich, "Crisis Deepens as Big Bank Fails," *Wall Street Journal*, July 12, 2008, http://online.wsj.com/article/SB121581435073947103.html

[6] The Federal Reserve Bank of St. Louis gives a succinct summary of what it sees as the most apparent causes of the financial crisis: "Many analysts blame the financial crisis on at least three interrelated causes: 1) Rapid growth and subsequent collapse of U.S. house prices; 2) a general decline in mortgage underwriting standards, reflected in a growing proportion of home purchases financed by nonprime mortgages; and 3) widespread mismanagement of financial risks by firms engaged in originating, distributing, and investing in mortgages, mortgage-backed securities, and derivative financial instruments." See: Federal Reserve Bank of St. Louis, "Frequently Asked Questions about the Financial Crisis: What caused the financial crisis?" http://timeline.stlouisfed.org/

funds available for companies to lend to each other and, ultimately and most importantly, to lend to households to buy homes and, through credit cards, to buy consumer goods.[7]

The role of U.S. financial deregulation in setting the stage for financial crisis has attracted significant attention. Beginning in the early 1980s and accelerating in the 1990s, the United States first weakened and then eliminated certain safeguards dating from Great Depression legislation. Regulation of savings and loan institutions weakened in the 1980s;[8] separation of commercial and investment banking weakened in the 1990s and then disappeared with the 1999 legislation repealing the Glass-Stiegel Act;[9] this same legislation, the Financial Services Modernization Act of 1999, allowed hedge funds to operate with essentially no regulation;[10] and in 2004, dramatic reduction in private mortgage regulatory standards, even as standards tightened for public mortgage agencies Freddie Mac and Fannie Mae, gave the financial sector leeway to launch large-scale highly leveraged securitization activities. According to an OECD report:

> In 2004, four time-specific factors came into play. (1) the Bush Administration 'American Dream' zero equity mortgage proposals became operative, helping low-income families to obtain mortgages; (2) the then regulator of Fannie Mae and Freddie Mac, the Office of Federal Housing Enterprise Oversight (OFHEO), imposed greater capital requirements and balance sheet controls on those two government sponsored mortgage securitisation monoliths, opening the way for banks to move in on their "patch" with plenty of low income mortgages coming on stream; (3) the Basel II accord on international bank regulation was published and opened an arbitrage opportunity for banks that caused them to accelerate off-balance-sheet activity; and (4) the SEC agreed to allow investment banks voluntarily to benefit from regulation changes to manage their risk using capital calculations under the 'consolidated supervised entities program'. (Prior to 2004 broker dealers were supervised by stringent rules allowing a 15:1 debt to net equity ratio. Under the new scheme investment banks could agree voluntarily to SEC consolidated oversight (not just broker dealer activities), but with less stringent rules that allowed them to increase their leverage ratio towards 40:1 in some cases.) The combination of these four changes in 2004 caused the banks to accelerate off-balance sheet mortgage securitisation as a key avenue to drive the revenue and the share price of banks.[11]

---

[7] Federal Reserve Chairman Ben Bernanke, in a 2009 speech, also emphasized financial sector behavior: "[A]lthough the subprime debacle triggered the crisis, the developments in the U.S. mortgage market were only one aspect of a much larger and more encompassing credit boom whose impact transcended the mortgage market to affect many other forms of credit. Aspects of this broader credit boom included widespread declines in underwriting standards, breakdowns in lending oversight by investors and rating agencies, increased reliance on complex and opaque credit instruments that proved fragile under stress, and unusually low compensation for risk-taking." See http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm.

[8] See, for example, U.S. Federal Deposit and Insurance Corporation (FDIC), " The S&L Crisis: A Chrono-Bibliography" at http://www.fdic.gov/bank/historical/s&l/index.html,

[9] Hedrick Smith and Rick Young (producers), "The Long Demise of Glass-Steagall," PBS *Frontline*, May 8, 2003, http://www.pbs.org/wgbh/pages/frontline/shows/wallstreet/weill/demise.html.

[10] [Senator] Byron Dorgan, speech on the Financial Services Modernization Act of 1999, from the *Congressional Record*, May 6, 1999, quoted at http://www.elitetrader.com/vb/showthread.php?threadid=138527.

[11] Blundell-Wignall & al., "The Current Financial Crisis: Causes and Policy Issues," *OECD Financial Market Trends*, 2008, http://www.oecd.org/dataoecd/47/26/41942872.pdf, pp. 3-4.

What does all this have to do with China? It is essential background for evaluating China's crisis response. Understanding causes of the crisis is also important as the United States and China prepare for their first joint "Strategic and Economic Dialogue" later this month. China's bilateral and international collaboration in responding to the crisis may be influenced by how strongly the United States makes "Chinese imbalances" a justification for suggesting significant changes to China's basic economic development strategy as a necessary part of its crisis response.

China's role in the crisis -- two theories

What did Chinese "imbalances" have to do with conditions leading up to the financial meltdown described above? What does China's place in the causes of the crisis say about the requirements for a appropriate Chinese policies and a successful Chinese recovery? Two competing descriptions of China's role point to significantly different priorities for China's crisis response.

The first explanation says that China's government-subsidized investment and growth strategies, together with predatory exchange rate policies, flooded the world, and especially U.S. and European markets, with such a large volume of profitable products that China was able to amass huge sums of dollars, which it reinvested in U.S. financial instruments. This explanation is thus a "supply-push" concept. China pushed its products on the world. The resulting burst of recycled Chinese liquidity, according to this theory, kept U.S. interest rates low and excessively encouraged risky behavior by borrowers and lenders alike.

A major reason why China amassed such large stores of wealth, according to this explanation, is the high savings rate in China. Then Federal Reserve Board Governor Ben Bernanke, in a 2005 speech, strongly supported what he called the "global savings glut" explanation for U.S. current account imbalances.[12] Instead of taking export earnings and spending them on imports, this argument says, foreign countries' penchant for high savings rates, especially in East Asia and including China, meant they saved the proceeds and put them back into America's investment liquidity pool. This extension of the "supply-push" concept juxtaposes high savings in countries like China with low savings in the United States.[13]

The second and competing explanation says that U.S. innovation and deregulation of financial instruments since the 1990s encouraged such highly leveraged asset creation and such a large expansion of credit and buying power that imports into America surged from many sources around the world--from all of East Asia, from oil exporters and from traditional northern European net exporters like Germany and the Netherlands. This is a "demand-pull" explanation for the crisis. It says the expansion of debt and liquidity that directly fed the domestic U.S. real

[12] See Ben Bernanke, "The global Savings Glut and U.S. Current Account Deficits," The Sandridge Lecture, March 10, 2005, http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/default.htm. Mr. Bernanke reiterated his global savings thesis in a speech at Morehouse College April 14, 2009. http://www.federalreserve.gov/newsevents/speech/bernanke20090414a.htm.

[13] For a recent exposition of this explanation, see Steven Dunaway, "Global Imbalances and the Financial Crisis," Council on Foreign Relations, Council Special Report No. 44, March 2009: http://www.cfr.org/content/publications/attachments/Global_Imbalances_CSR44.pdf

estate bubble also created U.S. buying power that pulled in imports to create large U.S. current account deficits. In a rejoinder to the "savings glut" theory, one senior bank analyst said, "In retrospect, we didn't have a global savings glut—we had an American consumption glut."[14]

One interpretation of this "demand-pull" explanation is that U.S. financial policies and deregulation steps created an inflationary threat that U.S. import demand then transferred to other countries, including China. The United States, according to this extension, exported its inflation to China. The surge in U.S. demand, on top of foreign investment spending encouraged by China's 2001 WTO accession, this analysis would argue, forced China to fight inflation by restricting investment, beginning in late 2004, which slowed its import growth even as export demand expanded--resulting in large trade surpluses. According to this picture, then, U.S. financial policies forced trade surpluses on China.

These two explanations are clearly quite different from one another. Their implications for China's crisis response also differ significantly. If China's economic strategies and exchange rates contributed significantly to causes of the crisis, then China needs to change those strategies fundamentally. The changes would include reducing the scale of its government-sponsored investments, emphasizing consumption by distributing profits and quickly implementing expensive pension and health insurance schemes, and importantly, liberalizing imports and further revaluing its currency.

But if the fundamental cause of both the crisis and the large U.S. current account deficits is a decade or more of U.S. liquidity expansion and a resulting U.S. spending spree around the world, then China's main job is to work out internal structural adjustments to the U.S. demand collapse, permitting a return to China's more balanced output and demand patterns before 2004, before the U.S. bubble pressures had built up. This kind of analysis places the overwhelming burden of response to the crisis on the United States. The current shrinking of U.S. consumer demand and an increase in U.S. savings rates, coupled with effective regulation of financial institutions, would then be the most important requirements for attenuating both future crisis risks and future global imbalances. Return to balanced growth in China would be a passive response, albeit a challenging response, to these trends.

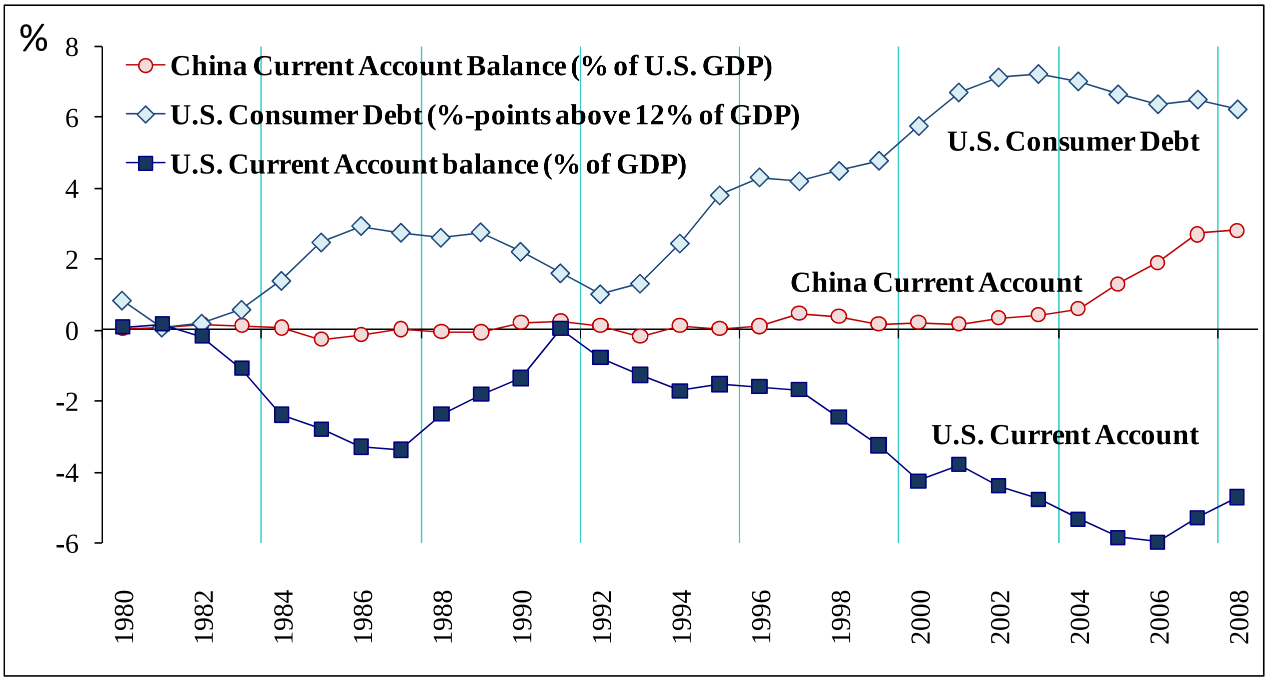
The empirical record -- Chinese surpluses came late in the game

How can we test these two descriptions of China's role in contributing to the causes of the global financial crisis? Is it possible that both explanations contain some truth? Statistics on the timing China's trade surpluses in comparison to the timing of the U.S. housing prices, lowered interest rates, liquidity expansion, and corporate debt expansion indicate that much of the U.S. bubble build-up occurred well before China had any significant trade or current account surplus to speak of and well before its foreign exchange reserves began their related rapid increase.

[14] Steven S. Roach, as Chairman of Morgan Stanley Asia, quoted in John Cassidy, "Anatomy of a Meltdown: Ben Bernanke and the financial crisis," *The New Yorker*, December 1, 2008, http://www.newyorker.com/reporting/2008/12/01/081201fa_fact_cassidy?currentPage=al

In considering China's trade surplus (or the current account surplus, which moves almost identically with the trade surplus) it is important to consider only China's *global* trade surplus, not its larger *bilateral* surplus with the United States. Because of U.S. Commerce Department monthly announcements, the bilateral balance is most frequently presented in U.S. news reports. But China assembles and processes a large volume of imports from other countries before shipping the final product to the United States, and it has large trade deficits with many of those countries. Hence, despite its large bilateral trade surpluses with the United States for many years, after accounting for trade payments to other countries, China's global trade and current account surpluses did not start becoming large until 2005 and weren't extremely large until 2006-07, by which time the U.S. real estate bubble had matured and popped.

Figure 1. Current Account Balances and U.S. Consumer Credit



Sources: U.S. Federal Reserve at http://www.federalreserve.gov and Bureau of Economic Analysis, U.S. Department of the Commerce at www.bea.gov.

According to government statistics, the U.S. housing price bubble began even before the 2001-02 recession but accelerated dramatically in the 2002-to-2004 period and peaked early in 2006.[15] Residential investment peaked in 2005, existing home sales peaked in 2005, and mortgage interest rates were at their lowest in 2003 before starting to rise sharply through 2006.[16] The overall picture is one of low interest rates and rapidly expanding housing construction in the years 2002-2005. Data on the proliferation of subprime lending show that it began in the late

---

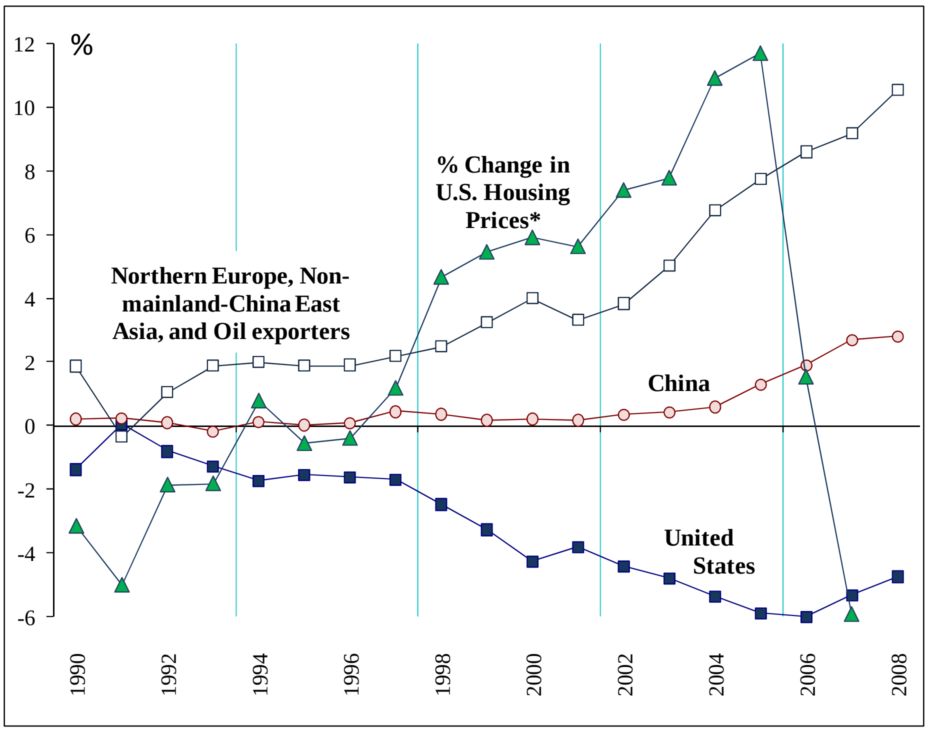
[15] Federal Reserve Bank of Cleveland, CPI-U-RS Research series, http://www.clevelandfed.org/Research/data/US-Inflation/chartsdata/

[16] Department of Housing and Urban Development, "U.S. Housing Market Conditions," May 2009, Table 20 (page 80), Table 9 (page 69), and Table 14 (page 74), respectively: http://www.huduser.org/periodicals/ushmc/spring09/USHMC_Q109.pdf.

1990s, with especially rapid expansion in 2001. According to researchers at the Controller of the Currency and the Federal Reserve Bank of St. Louis, "Overall, these observations illustrate that, since 1998-99, the subprime market (or at least the securitized segment of the market) has been expanding in its least-risky segment."[17] Even the least risky subprime mortgages were riskier than conventional mortgages, however. Considering mortgage lending that required no down payment, one compilation reported that "Nationwide, the share of mortgages that were interest-only shot up from 1.5% in 2001 to 6% in 2002, to 13% in 2003, and to 31% in 2004."[18] These data illustrate dramatic increases in risky U.S. mortgage lending early in the decade.

The timing of this surge in risky lending early in the decade corresponds closely with the U.S. consumer credit expansion, import surge and ballooning trade and current account deficits during that same time period. Figure 1 shows U.S. deficits worsening most rapidly from 2002-2004. Coincidentally, U.S. consumer debt (including credit card debt but not mortgages) peaked as early as 2003 (Figure 1).

Figure 2. Major World Current Account Balances and U.S. Housing Price Changes



* Housing prices are inflation-corrected. Source: U.S. Federal Reserve Bank of Cleveland, downloaded 12 July 2009. http://www.clevelandfed.org/Research/data/US-Inflation/chartsdata/.

In contrast to this concentration of U.S. international deficits and risky financial expansion in the 2002-to-2005 period, if not earlier, China's current account surplus is small in the scheme of

[17] See, for example, Souphala Chomsisengphet and Anthony Pennington-Cross, "The Evolution of the Subprime Mortgage Market", St. Louis Federal Reserve Bank, http://research.stlouisfed.org/publications/review/06/01/ChomPennCross.pdf

[18] Peter McCoy, "A Growing Tide of Risky Mortgages," *Business Week*, May 18, 2005, cited in "Mortgage Industry Statistics," *LenderRateMatch*, http://www.freeratesearch.com/en/newsroom/mortgage_statistics/

things until 2005 and becomes really large only in 2006-08 (Figures 1 and 2). Hence, in this one key test of timing, it is difficult to explain U.S. easy credit and risky behavior surging early in the decade as having been caused by Chinese surpluses, reserve accumulation and investment in Treasury debt that only began later in the decade. China's trade surpluses and large foreign exchange reserve increases didn't occur until several years after the U.S. real-estate bubble's rapid buildup was well under way.

Furthermore, the upward surge in U.S. housing prices had its most accelerated pace in the years 2002 to 2004, and after increase rates leveled off in 2005-06, prices began to drop in 2006. The relationship with Chinese and U.S. current account balances appears in Figure 2. By the time China's trade surplus was getting large in 2006, the U.S. housing price bubble had already reached its peak, and prices had started coming down.

While China's external surpluses during the 2002-2004 years of rapid U.S. bubble buildup were relatively insignificant, other U.S. trading partners recorded very large surpluses during these same years. Most prominent were northern Europe, especially Germany, non-mainland-China East Asia, especially Japan, and oil exporting nations (see Figure 2).[19] The U.S. financial system during these early decade years generated a steady flow of expanding liquidity. It not only financed the large U.S. external deficits and corresponding surpluses in non-mainland-China trading partners; it also at the same time financed the buildup of the U.S. real estate bubble. Academic research on the causes of the U.S. current account deficits has been unable to explain them with data on traditionally likely causes. One study introduced its work this way:

> In this paper, we focus on the role of domestic US factors. The main reason for doing so is that ... the secular deterioration of the net trade balance has occurred relative to most of the major regions of the world. This suggests that some of the main sources are likely to lie in developments in the US itself.[20]

Other research concluded that even a wide range of traditionally relevant factors could not explain the ten-year deterioration in the U.S. current account balance. But these analyses did not give weight to U.S. data commensurate with the power and scale they deserved; the analysis gave the same importance to data from all economies, regardless of their size. This made it difficult for the enormous scale of U.S. leveraged liquidity growth, fueled by deregulation since the 1990s, to be fully accounted for. The latter analysis also concludes that if a savings glut in East Asia is responsible for the large U.S. deficit, this cannot explain "why those surpluses ended up in the United States rather than being spread more evenly throughout the world."[21]

---

[19] For a more detailed treatment of the counterparts to U.S. current account deficits in the period 1990-2008, see Albert Keidel, "Global Imbalances and China," a paper presented at the international conference "Towards a New Economic Multilateralism," April 20-21, 2009, Shanghai, China, sponsored by the Friedrich Ebert Stiftung of Berlin and the Shanghai Institutes for International Studies. A copy for comment is available upon request from AKeidel@Keidel.us.

[20] Rudolfs Bems, Luca Dedola, Frank Smets, "US imbalances: The role of technology and policy" in *Journal of International Money and finance* 26 (2007), p. 524.

[21] Joseph W. Gru8ber and Steven B. Kamin, "Explaining the global pattern of current account imbalances," *Journal of International Money and Finance* 26 (2007) p. 502.

The record of large U.S. external deficits in the 1998-2004 period, matched by large external surpluses in trading partners other than China helps explain the motivation for one of China's most intriguing responses to the global crisis -- its criticism in 2009 of the U.S. dollar's recent role as the dominant global reserve currency. The paper will touch on this aspect of China's response to the crisis in a subsequent section.

This brief review of the global crisis and China's role would seem to put the brunt of the responsibility on U.S. financial policies and practices, not on China's investment and exchange rate policies. Nevertheless, China's participation in the expansion of global imbalances has clearly been relevant.

China's external surpluses started becoming large and significant beginning in 2005; they became extremely large in 2006-2008. Furthermore, after joining the WTO in 2001, China was able to absorb large inflows of foreign direct investment and increase its export capacity dramatically. Without this source of low-priced consumer products, the U.S. expansion in domestic liquidity and consumer buying power might easily have caused U.S. inflationary concerns and U.S. credit tightening policies to appear earlier in the decade than they actually did. While Freddie Mac greatly restricted its guarantees for subprime mortgages in 2004, it didn't completely stop guaranteeing them until February 2007.[22] An earlier more prudent anti-inflation program of U.S. credit management might have averted a crisis as serious as the one we have.

In a related dimension, without China's 2005-to-2006 purchases of bonds issued by the U.S. Treasury and major mortgage guarantee agencies Freddie Mac and Fannie Mae, interest rates would likely have been even higher than they had become by 2004-05, and these agencies might have shown financial stress earlier than they did -- possibly providing earlier warnings of impending crisis if not precipitating an earlier and possibly milder crisis. How big and significant this impact would have been is of course difficult to know.

After 2004, without China's foreign exchange reserve investments, interest rates in 2005-07 might indeed also have risen somewhat faster than they actually did. The Federal Reserve began trying to lift interest rates in 2004, and brought the short term Federal Funds rate up from 1 percent in mid-2004 to 5.5 percent in mid-2006.[23] Also, longer-term, rates for major categories of mortgages (30-year, 15-year and adjustable-rate) rose steadily from their 2003 lows through 2006.[24] Without inflows of Chinese funds, these rates may have risen even faster in 2005 and 2006, hastening the crisis onset and possibly reducing its severity. And third, a frenzy of private subprime mortgage securitization activity beginning with the 2004 deregulation steps, already mentioned, might not have been as strong without the recycling of Chinese net earnings. A major question mark about citing China in this regard, however, is the much larger set of surpluses being earned by other economies at that same time (Figure 2), suggesting that the source of the problem was the United States, not China.

---

[22] See http://timeline.stlouisfed.org/index.cfm?p=timeline

[23] Federal Reserve, "Selected Interest Rates: Historical Data," http://www.federalreserve.gov/releases/h15/data.htm

[24] Department of Housing and Urban Development, cited above, Tables 14 and 15 (pp. 74-75)

Finally, appearance of China's trade surpluses themselves deserves quick mention, because it helps explain an oddity of China's crisis experience presented in the next section -- forced closing of south-coast export factories beginning in early 2007. In a scale relevant for this paper, China's foreign trade remained almost balanced through most of 2004. Both exports and imports grew rapidly (see the current account balance record in Figure 1, which is very close to China's trade balance in this period). By 2004, however, inflationary pressures had become obvious, as grain prices rose and investment demand had continued to surge following Beijing's expansionary response to the 2003 SARS epidemic. A significant portion of the investment surge included expansion of export platforms, often as part of foreign-funded ventures intended to take advantage of the strong consumer market at that time in the United States.

To counter price inflation, in 2005 China slowed bank credit expansion and tightened controls on investment activity. Real annual growth of capital formation slowed from 16.9 percent in 2003 and 13.7 percent in 2004 to 9.0 percent in 2005.[25] As a consequence, while exports continued their rapid growth pace, growth of imports slowed, resulting in the appearance of a significant trade surplus in 2005.[26] Examination of detailed Chinese customs data shows that the main components of slower import growth were in the machinery sector, a major part of corporate investment demand.[27]

One possible implication of these statistical trends is an apparently passive dimension to the appearance of large trade surpluses in China from 2005 to 2008. Did China's large trade surpluses in these years result from a Chinese inability to absorb the demand for goods from the United States and Europe, and related investments, without facing serious price inflation? As the large trade surpluses continued from 2005 through to early 2009, their upward pressures on China's domestic money supply maintained inflationary pressures through the end of 2007. At that point, China implemented a strong credit tightening policy stance and curtailed investment in other ways as well. The result was a domestic demand contraction that popped China's own domestic real estate and stock market bubbles; Chinese real estate continued to slump through the summer of 2008 -- just in time for the impact of the global financial meltdown that fall.

China's triple challenge during the 2008-09 global economic crisis

China's challenge from the global economic crisis is not completely what it seems. China is not merely responding to a collapse in export demand. Instead, three seemingly unrelated challenges have confronted China since the fall of 2008, if not earlier, and overall the trade impact may have been the weakest of the three until the second quarter of 2009. That said, the psychological

---

[25] China National Bureau of Statistics, *2009 China Statistical Abstract* (2009 中国统计摘要) pp. 35-36, with author calculations.

[26] For a graphical presentation of 2005's trade surplus resulting from slowing import growth see Albert Keidel, "China's Economic Rise -- A Technical Note," July 2008, Carnegie Endowment for International Peace: http://www.carnegieendowment.org/files/Technical_Note.pdf.

[27] Customs General Administration of China, *China Monthly Exports & Imports* (海关统计) January 2006.

impact from Chinese media coverage of the U.S. and global crisis appears to have added to the slump in Chinese demand in the winter of 2008-09 and encouraged a cautious consumer and investor response to China's stimulus program.

First, and perhaps most importantly, as mentioned above, when the international crisis struck, China had just begun struggling with its own serious domestic demand slump -- brought on by government efforts late in 2007 to cool inflation pressures in its overheated economy. The resulting collapse of China's real estate bubble from winter through summer of 2008 preceded the global meltdown by as much as 9 months.

Next, and perhaps of secondary significance, has been the active Beijing program, beginning in early 2007, to close a large number of small, inefficient and heavily polluting export-oriented firms in southern China -- in Guangdong Province's Pearl River Delta, to be more precise.[28] Guangdong carried out this program in collaboration with the government of the Hong Kong Special Autonomous Region, since many of the shuttered firms were owned by Hong Kong businesses. The program caused significant rural migrant layoffs, but even so, in December 2(in the depths of international crisis trauma, China's cabinet, the State Council, passed the final formalized version of this active "restructuring" program.[29] This policy announcement almost certainly promises more layoffs to come, especially for rural migrant workers, with the program eventually spreading nationwide. Are such layoffs a result of the global crisis?

Finally, third, is the effect of the global trade contraction on China. It shrank both exports *and* imports, so the trade surplus, which is a part of GDP, didn't change as much as the export drop would indicate. Indeed, in nominal terms the surplus actually *increased* by 54 percent in the first quarter of 2009 compared to the same quarter a year earlier. One critical reason why China's cash trade surplus increased was the plummet in prices of oil

Table 1. Commodity Trade Surplus Growth
(percent, year-on-year)

		Nominal	Real
Monthly:	2008.10	29.6	28.0
	2008.11	52.5	29.3
	2008.12	72.1	3.5
	2009.01	102.9	24.5
	2009.02	-40.4	-75.7
	2009.03	41.4	-25.1
	2009.04	-20.1	-54.9
	2009.05	-32.5	-59.3
	2009.06	-60.1	-75.5
Quarterly:	2008 Q4	50.2	18.8
	2009 Q1	54.3	-3.8
	2009.Q2	-39.0	-63.7

Note: Monthly data are commodity trade statistics. Quarterly data are goods and services trade statistics, which are not reported monthly.
Sources: China National Bureau of Statistics (NBS), monthly statistical bulletin, NBS press conferences, and World Bank, "China Monthly Update (June 2009)," July 1, 2009, with author calculations.

[28] See Ivan Zhai, "Guangdong hit by Beijing's Policies, says governor," South China Morning Post, Hong Kong, January 1, 2009

[29] See New China News Agency (Xinhua), reprinted from the Yangcheng Evening News (羊城晚报), "State Council for the first time clarifies the 5 major orientations of the 'Scientific Development Pilot Reform Area'" (科学发展试验区" 国家首次明确珠三角五大定位), New China News Agency Web (新华网),December 19, 2008: http://news.xinhuanet.com/politics/2008-12/19/content_10528040.htm, in Mandarin Chinese.

and other material imports. These global price changes made China's surplus look larger than it really was.

The "real" trade surplus (i.e., price corrected) is the relevant GDP component to watch. Also, only commodity trade data are published monthly, but the full GDP component is a country's commodity and services trade surplus. China frequently has a service trade deficit, so calculations here based on commodity trade may somewhat overstate their measure of the trade contraction's affect on Chinese GDP.

As just mentioned, with import prices dropping continuously through the fall, winter and spring of 2008-09, nominal (that is, cash) trade balances are deceptive measures of the crisis impact on China's GDP growth. Because of falling prices for imports like energy and raw materials, instead of a nominal increase in China's trade surplus of 54 percent in the fourth quarter of 2008, the real increase, price corrected, was only 19 percent. For the month of December alone, it was only 3.5 percent, compared to the corresponding 72-percent nominal increase (Table 1). Nevertheless, despite the sharp drop in exports and even allowing for the drop in import prices, the growth for the fourth quarter of 2008 appears to have been positive rather than negative.

China's real trade surplus began shrinking in 2009, and although for the first quarter of 2009, after correcting for price changes, the goods and services trade surplus only dropped 4 percent from a year earlier, in the second quarter it dropped 64 percent, to nearly one-third its level a year earlier (Table 1).[30] Meanwhile, China's June commodity trade surplus was barely a fourth of its value a year earlier, after correcting for price changes. By both measures, China's real trade surplus plummeted in the second quarter. With such a surplus decline, domestic demand in the second quarter must have grown over 13 percent for China's GDP to have grown the reported 7.9 percent.

Looking ahead, if this scale of trade surplus decline were to apply to all of 2009, it would cause a roughly -4.5 percentage-point impact on GDP growth for the year. Domestic demand would have to contribute 12 percent points in order for total GDP to grow 7½ percent.[31] A 12-percent-point growth contribution from domestic demand for all of 2009 is a tall order; it would require real growth in domestic demand of 13 percent.

[30] New China News Agency (Xinhua), "NBS Chief Li Xiaochao: Consumption demand pulled first-quarter GDP 4.3 percentage points," (李晓超：一季度消费拉动中国经济增长 4.3 个百分点), Press Conference report, Xinhuanet April 16, 2009: http://news.xinhuanet.com/newscenter/2009-04/16/content_11194267.htm, in Mandarin Chinese and author calculations.

[31] The percentage-point impact conclusions in this and the previous paragraph are based on estimates of China's trade surplus a year earlier that are roughly 6 percent of GDP for the first quarter and 7 percent for the second quarter. The estimates are based on calculations of quarterly commodity trade shares converted from dollars to Chinese RMB as a share of quarterly GDP, with an adjustment to include trade in services consistent with the officially published share in 2008 total GDP of China's surplus in goods and services trade. Sources are the official China National Bureau of Statistics, *2009 Statistical Abstract* and monthly statistical bulletins. For all of 2008, the officially published goods and services trade surplus share is 7.9 percent.

In short, the trade impact of the global crisis is finally starting to bite China hard. The big question is whether China's stimulus program can sustain fast enough growth in domestic demand to compensate for the strong negative GDP impact of the worsening contraction in China's real trade surplus.

China's Domestic Response to the Crisis

Even though China's leaders had been starting to ease their tight monetary policy after the summer of 2008, they seemed to have realized quickly after the Lehman Brothers bankruptcy in September that the global crisis was going to hurt China severely. In November the State Council announced a large broad-based stimulus program initially estimated to be roughly 14 percent of GDP over two years (Table 2). This was larger than any other stimulus program announced around the world, and it brought China and the United States closer together during later international debates about how large a coordinated global stimulus would be necessary to combat the crisis.

Table 2. China's 10-Point Stimulus Program of November 2008

Program Name	GDP%	Description
1. Housing	1.3	Affordable low-rent housing, rural housing, nomad settlement, slum clearance
2. Rural infrastructure	1.2	Roads, power grids, methane use, potable water, North-South water diversion, reservoirs, irrigation, poverty relief
3. Transportation	5.0	Passenger rail, coal rail routes, trunk railways, airports, urban power grids
4. Health and education	0.5	Grass-roots medical system, junior high school construction, special education and cultural facilities
5. Environment and energy	0.7	Pollution protection, sewage and garbage treatment, forestation, energy conservation
6. Industry	1.2	Innovation, restructuring, high-tech industry and services
7. Disaster rebuilding	3.3	Speeding up Sichuan earthquake zone reconstruction
8. Household incomes	n/a	Minimum grain price, social safety net subsidies including pensions, farm subsidies
9. Taxes	0.4	VAT reform extension, technological upgrading
10. Finance	n/a	Remove commercial loan quotas, priority bank credit for priority projects, for rural areas, small enterprises, technical innovation, and M&A industrial rationalization.
	13.7	

Note: GDP shares are based on the officially reported 2008 GDP level. Sources: New China News Agency (Xinhua), "China plans 10 major steps to spark growth as fiscal, monetary policies ease," English web service China View, *Special Report*, November 9, 2008: http://news.xinhuanet.com/english/2008-11/09/content_10332422.htm and World Bank, "China Quarterly Update --March 2009," http://siteresources.worldbank.org/INTCHINA/Resources/318862-1237238982080/CQU_March2009_fullreport.pdf.

It subsequently turned out that the Chinese stimulus program was not everything it had first appeared to be. Some of the programs were already slated for action in the stimulus period, and others were brought forward from longer-term plans. Furthermore not all of the spending, not even close to half, was to come from government budgets, and only a small share of that was to come from the central government budget. The Ministry of Finance announced in June 2009 that central government spending on the stimulus would only be 3.3 percent of GDP over two years, with just less than half of this coming in 2009.[32] Nevertheless, the program is a sizeable spending initiative, and Chinese leaders have repeatedly insisted that if more stimulus spending is needed, it will be forthcoming.

The stimulus involves significant unfunded mandates for spending by local governments, which traditionally have not been allowed to issue local government bonds. They frequently instead borrow from China's large State Development Bank and also from China's state-owned commercial banks. Indeed, the bulk of stimulus funds are to come from bank loans, and this became the main vehicle for injecting liquidity into the economy in the first quarter of 2009. This bank-finance emphasis appears in the last item in the formal 10-point stimulus program. The other components represent an ambitious set of investments in social and physical infrastructure (Table 2).

In following implementation of the stimulus package, the most encouraging indicator from a liquidity perspective has been the scale of bank lending in 2009. In the first quarter alone bank loans were the equivalent of 15 percent of GDP, and for the first half of the year bank lending had risen to over one trillion dollars and is expected to reach 1.5 trillion dollars for the year as a whole.[33] This means that new bank lending has already reached 22 percent of likely GDP this year, and could amount to over 30 percent of GDP by year's end. This represents a major infusion of domestic liquidity. Widely published official bank data indicate that new bank lending in China has stayed very close to 14 percent of GDP in recent years (with the exception of 17 percent in 2003 and 9 percent in 2005).

While the government has announced extension of a number of social spending programs and has supported incomes in urban areas, the distribution of China's stimulus has heavily favored investment, especially investment in government-led projects like infrastructure. But Chinese investment statistics are difficult to interpret, because as reported administratively from company data they include a great deal of repurchasing of existing assets, which are not new investments for the economy as a whole. By this measure, fixed asset investment growth in May was 39 percent higher than a year earlier, but one well regarded China analyst team only expects correctly measured total real investment growth for 2009 to be up 11 percent.[34]

It is difficult to know at this point how effective the Chinese domestic response to the crisis is going to be. The report on GDP growth in the second quarter at 7.9 percent, is very strong, but it is not clear if a large part of "capital formation" demand was inventory build-up, which would be difficult to sustain if other demand dimensions were weak. A number of other indicators, such as retail sales growth and industrial profits, show clear signs of recovery, but some, like prices, are

[32] *China Daily*, "Stimulus package to hit 487b yuan," June 27, 2009, http://www.chinadaily.com.cn/china/2009-06/27/content_8329309.htm

[33] Reuters, cited in China Economic Review, 3 July 2009 http://www.chinaeconomicreview.com/dailybriefing/2009_07_03/Bank_lending_could_top___146t_in_2009.html

[34] Tao Wang and Harrison Hu, "China by the Numbers (June, 2009)," UBS Investment Research, Asia Economic Monitor, 2 July 2009.

less encouraging.[35] Overall, the most encouraging news has been strong second-quarter GDP growth and the rapid expansion of credit, on the vague expectation that all of that liquidity in the economy must generate a sustained stimulus result at some point.

China's International Response to the Crisis

China's international response includes both diplomatic steps and policy actions. Some of the most useful steps have reassured the international community that China will manage its large reserves in a way that supports global financial stability, both through repeated Chinese leadership assertions and through what appear to be only slow and relatively predictable adjustments in its international financial positions. The most controversial Chinese steps have focused on the United States' responsibility for causing the crisis and long-term needs for adjustments in the international monetary system to make it less dependent on the U.S. dollar. But this posture in particular, and China's related initiatives, appear to be intended more for a domestic Chinese audience than for global leaders working on currently relevant reforms to the international financial system. China itself admits that basic impracticalities prevent substantial movement over the short and medium term in the direction of its suggestions.

China's leadership concerns over the Chinese domestic political response to its handling of the crisis, including its apparent need to deflect criticism to the United States and other international parties, raises what could be an important issue facing future U.S.-China diplomatic discussions of both financial crisis issues and other challenges, like global warming. To an important degree, in order to reach workable agreements, each side will need to take well-informed consideration of the political constituencies that its counterpart must satisfy in order for a particular joint project to move ahead.

Reviewing the main features of China's international response, even China's initial stimulus announcement had an important international effect because it heavily supported one side in the international debate on the need for coordinated global public demand expansion. This was an important theme at both G20 summits, in November 2008 and April 2009. China also, and naturally, supported joint international statements on the importance of avoiding trade protectionism. However, like other countries, it also announced policy provisions encouraging preference for domestic products over imports in public stimulus projects.[36]

In more mundane matters, China emerged as a regular and important member of the international community's crisis related collaboration, but not a leader in that collaboration. For example, at the April G20 summit in London, China's President Hu, objecting to a stronger statement, eventually agreed that China "noted" a list of international tax havens other countries wanted to

[35] Wang and Hu, cited above.

[36] See, for example, Peter Foster, "China's 'Buy Chinese' decree with £400bn stimulus package risks US protectionism row," *Daily Telegraph*, June 17, 2009, http://www.telegraph.co.uk/finance/financetopics/recession/china-economic-slowdown/5556913/Chinas-Buy-Chinese-decree-with-400bn-stimulus-package-risks-US-protectionism-row.html

target for joint action.[37] In terms of actions, even though China ostensibly "guides" its RMB foreign exchange rates by referencing a basket of major world currencies, when the euro began a sharp devaluation against the U.S. dollar for several months earlier in the crisis, China did not follow with a nominal devaluation of the RMB against the dollar. Neither, however, did it continue the gradual revaluation of the RMB against the dollar that it began in 2005.

The most interesting and potentially significant Chinese international response to the crisis has been a series of statements and policy steps concerning the role of the U.S. dollar as the major international reserve currency and possible alternatives going forward.[38] It comprises mainly statements by China's central bank governor and policy actions taken to allow selected Chinese trading partners to settle their trade finances in RMB rather than in one of the leading internationally convertible currencies.

The central bank governor, in the weeks before the April G20 summit, issued several papers comparing a certain post-World War II dollar-related financial paradox with recent U.S. use of its privilege to provide the world with its dominant reserve currency. The upshot of the papers was that without international input or regulation, a single country's expanded provision of reserves for the world, through increasing the effective volume of its currency's circulation, faces a trade-off between its domestic liquidity needs and its international prudential responsibilities. The papers proposed exploring use of the IMF's Special Drawing Rights facility as a model for future creation of a truly international reserve currency. The papers made clear, however, as did subsequent authoritative statements by financial officials, that these were only long-term proposals and that for the foreseeable future there is no alternative to global use of the U.S. dollar as the preferred reserve currency.

Despite these assurances, it appeared to some that China's initiation of programs allowing certain trading partners to settle their trade-related finances in RMB rather than dollars meant an immediate RMB currency challenge to the dollar. Mainstream reporting of the process, however, does not support this interpretation.[39] Instead, the step seems a practical short-term solution to severe crisis-related tightening of credit globally and serious difficulties in Hong Kong and elsewhere for trading companies obtaining letters of credit. Crisis-related fluctuations in exchange rates between major global convertible currencies like the U.S. dollar end the euro also argued for this kind of mechanism to support stability in payment expectation for a select group of Chinese trading companies and a limited subset of their foreign counterparts.

The role of the RMB as a future global currency is, however, one of the important issues dependent on how China's economy responds to the crisis. If China's reliance on foreign trade for

---

[37] *The Economist*, "China and the G20: Taking the summit by strategy," April 8, 2009, http://www.economist.com/world/asia/displaystory.cfm?story_id=13447015

[38] For a good review of these and related issues, see Pieter Bottelier, "International Monetary Reform and the Future of the Renminbi," *China Brief*, The Jamestown Foundation, Volume: 9 Issue: 11, May 27, 2009. http://www.jamestown.org/programs/chinabrief/archivescb/cb2009/

[39] See, for example, Richard McGregor, "China to allow renminbi trade payments," *The Financial Times*, July 2, 2009, http://www.ft.com/cms/s/0/088d8158-6726-11de-925f-00144feabdc0.html.

healthy growth is indeed critical and difficult to unwind, such that China's is unable to recover its previous fast-growth trajectory, then issues of RMB ascendency, and with it many other issues, will fade for a quite some time to come. But if China rebounds robustly from this global crisis, then not only the RMB but a host of commercial, diplomatic, and strategic issues will take on strengthened immediacy.

China's Long-term Response to the Global Crisis

What difference does it make how well China's economy responds to the global crisis? More specifically, will China's post-crisis growth propel the scale of its economy to overtake that of the United States by 2030 as some, including this author before the crisis, suggested is likely?[40] Or, alternatively, will China's post-crisis growth slow substantially, so that by 2030 its GDP will likely only be half the size of U.S. output, as suggested by Professor Richard Cooper of Harvard University, also before the crisis struck?[41]

Such prediction controversies are, in their simplest modes, merely questions of growth rates and exchange rates. Both cited analyses begin their projections with 2005 as a base year. For U.S. growth, both estimates assumed 2.8 percent average growth. This author's analysis assumed average real growth over 25 years of 8.3 percent, and Professor Cooper's assumed 6.3 percent. This author's analysis assumed an annual average real appreciation of the RMB of 1.6 percent, compared to Professor Cooper's 1.0 percent. Such differences in assumptions result in significantly different results over 25 years.

Of course, both China and the United States have changed since 2005. If we take 2005-to-2008 growth for both countries and exchange-rate adjustments into account, starting in 2008 the rates needed to meet the two original results have also changed. China in these years grew significantly faster than either prediction expected, and the United States grew somewhat more slowly. Additionally, China revalued the RMB significantly beginning in 2005.

Starting in 2009, if the U.S. maintains an average of 2.8-percent growth through 2030, in order for its economy to be bigger than America's by 2030, China needs to grow at an average of 7.3 percent with average annual currency appreciation of 1.3 percent. If China is to attain only half the size of the U.S. GDP by 2030, then it need only average 5.6 percent real growth with annual RMB appreciation of 0.4 percent over the intervening years.[42]

Despite the tedium of such numbers, they reemphasize the major degree to which China's long-term economic response to the current global crisis will affect its future commercial place in the world and the resources it will command in comparison to the United States. The likely shape of

[40] See, for example, Albert Keidel, "China's Economic Rise -- Fact and Fiction," Policy Brief 61, Carnegie Endowment for International Peace, July 2009: http://www.carnegieendowment.org/files/pb61_keidel_final.pdf and Albert Keidel, "China's Economic Rise -- A Technical Note," Carnegie Endowment for International Peace: http://www.carnegieendowment.org/files/Technical_Note.pdf.

[41] See Richard Cooper, "Doubling Our World's Economy," World Policy Journal. Vol.25, No. 3, Fall 2008, pages 41-46.

[42] Author's calculations

that resource balance decades hence, with all that such a balance entails, must at least hover in the backs of the minds of U.S. and Chinese diplomats meeting for the U.S.-China Strategic and Economic Dialogue later this month.