

Is China Replacing US in the International Monetary System?

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Abstract—The wisest economic decision of United States in the 20th century was establishing the favorable international monetary system, and capturing the leadership position in it. This decision gave economic hegemony to the US for the next more than 7 decades. The continuation of this hegemony till the next decade seems difficult as the US economy is under continuous streams of recessions since 2007. On the other hand, Chinese economy is progressing with a very fast speed and is estimated to pass the US economy till 2025, in various aspects. Will the US be able to continue its leadership in the IMS? Will China replace US in the international monetary system? The answers to these questions have been explored by comparing the economic competitiveness of US and China, with respect to each other. The paper concludes that the change in global economic environment will compel US to share the leadership of international monetary system with China. This sharing will solve most problems of the current IMS, but will also birth some new problems.

Keywords—Economic competitiveness, Global economic environment (GEE), International monetary fund (IMF), International monetary system (IMS)

I. INTRODUCTION

THE combination of all the economic factors such as income, employment, inflation etc is called economic environment, and economic environment is the driving force of individuals and institutions. For their economic survival, individuals and institutions always have to respond to the changes in economic environment e.g., the IMF and the current international monetary system (IMS) were developed in 1940s and got changes after that. Understanding the economic environment and capturing the right competitive position in the economic environment can give you economic hegemony, for a long time. United States (US) understood the global economic environment (GEE) of 1940s, became successful to implement the IMS of her own choice, and also captured the position of IMS leader. It made US the economic superpower of the world and, US is capturing this position until now.

The series of US and global financial crisis since 2007 are revealing the fact that the time of US leadership of IMS is near to an end. Although recovery is on the way but the results are not adequate. In spite of having stimulus packages, advance economies are not performing according to the plans. Emerging economies are performing much better than the

advance economies. The global economy is in transition. Global economy has an urgent need to address the challenges of global imbalance, uncontrollable capital flows, inadequate global liquidity, and too few options for safe global assets to meet the demand; as mentioned by the Strauss-Kahn at China in March 2011 [1].

China is gathering power and becoming the new economic power house. US, with the help of international monetary fund (IMF), is trying to control the problems of IMS, and in this way, ultimately trying to continue its leadership of IMS. Considering Chinese economic strategies as threat to the US and the world economy, US is pressing China on various economic issues e.g., insisting China to over value RMB etc. On the other hand, US is using the ultimate weapon to save the US economic position i.e., the devaluation of US dollar. China is continuously discussing its reservations about the value of US dollar, as having huge reserves in US dollar of more than 2.5 trillion US dollars. It seems that in the near future, the great change will be taken place in the current IMS i.e., the change of the leadership of IMS.

This article is an attempt to foresee the future scenario of IMS, by finding the answer to the question, “whether China will be able to take the leading role in IMS?” The Sino-US economic competitiveness has been analyzed to answer this question. This study will add up to the current literature by: comparing the competitive economic position of US and China for the IMS leadership, identifications of the upcoming major changes in IMS, and also the identification of new problems may arise due to changes. This study also provides solutions to the current problems of IMS, and identifies the new areas of research in the reform of IMS.

II. SELECTIVE LITERATURE REVIEW

Bretton woods IMS came under debate just after its inception. The reason was that it was not according to the proposals of its designers. US got success in approval and implementation of the proposals of creation of Bretton woods IMS, according to the changes made for the protection of economic benefits of the US. The designers of Bretton woods IMS especially Mr. Keynes had forecasted the expected future changes in global economic environment, and proposed an IMS to work for long time. Due to strong economic competitiveness of US and its highest share in the world economy, the IMS continued well till early 1960s. There were considerable changes in global economic environment between 1944 to early 1960s. The Europe and Japan got reconstruction and became ready to get their share from global economy. This gave birth to dollar glut. Triffin identified this

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problem and offered creation & issuance of new reserve units (independent of gold and USD) as its solution. Triffin insisted on the need to link the issuance of new reserve units with development finance, and assigning comprehensive roles to 3 components of reserves i.e., gold, foreign exchange and collectively created assets [2]. Like Bretton woods proposals, Triffin proposal was again modified to serve the interests of few industrial nations including US. This ultimately led to the breakdown of Bretton woods system in early 1970s.

The new floating exchange rate system was inherently unsustainable as identified by the Kaldor in 1971. The system was not so stable to work well for very long time [3]. US economic competitiveness was high at that time, combined with the advantage of technology. Global economic environment became also in favor of US from 1980, contributed to the US sales of arms and high technology products. With the presence of strong US competitive position and favorable GEE, floating exchange rate worked well for more than 3 decades. During this time, issuance of IMF SDRs was the hot topic of research related to IMS reform, as remained under consideration by the IMF (1987) and other researchers like Lipton (1999) etc [4] [5].

Deng Xiaoping economic reform led to the opening up of Chinese economy to the world, and ultimately transferred Chinese economy into a new economic powerhouse of the world. China focused on export led growth from 1990s, a policy followed by Japan and South Korea in 1970s and 1980s respectively. With the passage of time, this policy resulted in huge amount of trade surpluses every year, and establishment of a mountain of international reserves by China. This imbalance in the world economy contributed to the disturbance of floating exchange system, in the same way as identified by Kaldor. A continued stream of research work is underway with the start of global financial crises. The proposals of IMS reforms range from focus on current IMS to an increased role of IMF [6] [7].

IMS reform is the major topic of debate by the economists of the world. From 2007 to up till now, various G-20 meetings have been held on this issue. Considerable good suggestions have been generated for IMS reform, but implementation of these suggestions is not easy. Few reforms have also been taken place, including the increase in IMF SDRs, adjustment of SDR basket, and change in IMF quota [8] [9] [10]. Although, these reforms will make situation slightly better but these are not sufficient enough to solve the problems of the world economy. US has the leading role in IMS and she wants to maintain this position, as long as possible. In order to maintain its position, US only allows implementation of the suggestions which are in the interest of US e.g., IMF quota has been changed in response to various proposals by merely 6%, and US still have veto power in IMF. Similarly, the greater use of IMF SDRs has been proposed by various economists and countries but US did not allow increase in SDRs role, over a limit. This behavior of US was favorable for US economy but mostly not very much favorable for the world.

Because of poor performance of US economy in the past, US leadership in the IMS is under threat. With a large economy and consistent strong economic performance, China may be able to capture the IMS leadership in future. Keeping in view the limited role of RMB outside China, researchers are neglecting the competitive economic position of China to take over the leadership of IMS. The GEE is changing. China is adjusting its competitive economic position to share the leadership of IMS. We have analyzed the competitive position of US and China, for the leadership of IMS. This comparison includes all the major variables of the world economy e.g., population, GDP, international trade, productivity, debt and liquidity etc.

III. COMPETITIVE ECONOMIC POSITION OF US AND CHINA

The US market got the maturity and now it is on decline. Contrary to this, the Chinese economy is on steady road to development, and still has much potential of growth before getting and sustaining maturity. The comparison of economic competitiveness for the IMS leadership is given below. Data related to future estimates have been derived from the "country analysis and forecasts" of Economic Intelligence Unit (EIU).

A. Debt and Liquidity

Debt and liquidity ratios are most important criteria to decide about the potential of the country, to act as IMS leader. All the debt and liquidity ratios of Chinese economy are outstanding as shown in table I. US economy is under burden of higher external debt (14456 Billion US dollars (USD) at the end of 2010). The unavailability of sufficient international reserves (only 132 Billion USD in 2010) is making the situation more badly, and increasing the chance of default. Short term external debt of 5405 Billion USD in 2010 is 4095% of international reserves. All the debt and liquidity ratios of US economy show highly worse situation, and clearly indicating the potential high competitiveness of China as leader of IMS.

TABLE I
 DEBT AND LIQUIDITY (ESTIMATED DATA FOR 2015)

Variable	1981		2010		2015	
	US	China	US	China	US	China
Public debt (Bil USD)	712	n.a.	9023	997	13390	1670
External debt (Bil USD)	908	n.a.	14456	548	n.a.	708
Long term external debt (%)	n.a.	n.a.	9051	175	n.a.	n.a.
Short term external debt (%)	n.a.	n.a.	5405	373	n.a.	n.a.
Interest payment (Bil USD)	n.a.	0	414	4	n.a.	16

International reserves (Bil USD)	30	n.a.	132	2871	n.a.	4405
Net debt (Bil USD)	n.a.	n.a.	14324	-2323	n.a.	-3697
Short-term external debt (% of International reserves)	n.a.	n.a.	4095	13	n.a.	n.a.
Short-term external debt (% of nominal GDP)	n.a.	n.a.	37	3.6	n.a.	n.a.

Sources: China national bureau of statistics, US economic report of the president, CIA fact book, Treasury department, State administration of foreign exchange, IMF international financial statistics, Daniel Martin & Gareth Leather (EIU calculation)

B. Gross Domestic Product (GDP)

The nation having the largest GDP can qualify for the leadership of IMS. In 1944, there were other more populous nations, but 60% share in the world GDP by US, made US successful to get the leadership of IMS. The GDP ratios have been shown in table II. The current share of US in the world GDP is less than 20% and it is further declining. Contrary, Chinese GDP has been increased from 293 billion USD in 1981 to 10163 billion USD in 2010, approximately 35 times more in 29 years. In 2020, Chinese GDP is expected to surpass the US GDP, by increasing up to 27144 billion USD. Chinese real GDP growth was 9.7% in 2010, compared to US real GDP growth of only 2.9% (including stimulus package effect). Chinese per head GDP has also been increased from 254 USD in 1981 to 7740 in 2010, and also estimated to become 38800 USD in 2020. Although US GDP per head has also increased but its growth was very less compared to that of Chinese. Chinese economy is estimated to get early maturity in 2020 but even in 2020, its growth rate of GDP will be approximately twice than that of US. Chinese GDP structure (47% industry, 43% services, 10% agriculture) seems to be more stable than US GDP structure (76% services, 23% industry, 1% agriculture), and also contains more potential for growth. The balanced structure of Chinese GDP, High GDP growth and estimated crossing of nominal GDP of US in 2020 makes China more potential candidate for the leadership of IMS.

TABLE II
GDP (ESTIMATED DATA FOR 2020)

Variable	1981		2010		2020	
	US	China	US	China	US	China
Nominal GDP (Bil USD at PPP)	3127	293	14660	10163	25059	27144
Share in world GDP (%)	n.a.	n.a.	20	14	n.a.	n.a.
GDP (% real change pa)	2.5	5.3	2.9	10.3	2.9	5.1

GDP per head (USD at PPP)	13597	254	47360	7740	74400	38800
Real GDP growth per head (% pa)	1.5	3.8	1.9	9.7	2.1	4.5
Agriculture (% of GDP)	2	32	1	10	n.a.	n.a.
Industry (% of GDP)	30	46	23	47	n.a.	n.a.
Services (% of GDP)	68	22	76	43	n.a.	n.a.

Sources: US bureau of economic analysis, China National Bureau of Statistics, World Bank estimates, Daniel Martin & Gareth Leather (EIU calculation)

C. Budget

Important Budget ratios are displayed in table III. US continued its position as having largest budget revenue and expenditure in the world and seems to continue its position in the near future also. China is increasing its budget with fast speed and Chinese budget revenue and expenditure will almost be double in 2015, from the level of 2010. China has become successful in maintaining the balanced budget over the time, with a budget deficit not more than 2% of GDP. Continuing budget deficits (1294 Billion USD or 9% of GDP in 2010 only) are increasing the debt burden on US economy and resultantly making difficult for US to continue its leadership in IMS. The budget deficit of US has been financed by China in the last few years. It has also given authority to China to interfere in the US economy. The authority of China in US economy is being increasing with the passage of time, with the increase in its share in US debt financing. Moreover, consumption and domestic demand are increasing at a much high speed in China than US. All these factors are continuously increasing the competitiveness of China for IMS leadership while decreasing that of US.

TABLE III
BUDGET (ESTIMATED DATA FOR 2015)

Variable	1981		2010		2015	
	US	China	US	China	US	China
Budget Revenue (Bil USD at 2005 prices)	599	18	2162	1246	3120	2418
Budget expenditure (Bil USD at 2005 prices)	657	17	3456	1343	3826	2506
Budget deficit (Bil USD at 2005)	-58	-1	-1294	-97	-706	-88
Budget deficit (% of GDP)	-1	0	-9	-2	-3	-1

Government consumption (% real change pa)	0.9	4.3	1	7.5	1	9.2
Private consumption (% change p.a.)	1.5	8.5	1.7	9.8	2.6	9.2
Domestic demand (% real change pa)	2.3	5	3.2	9.5	2.8	9.1

Sources: China national bureau of statistics, IMF International Financial Statistics, US department of the treasury, US bureau of economic analysis, and Daniel Martin & Gareth Leather (EIU calculation)

Share in world imports (%)	12	3.2	14	8.5	13	11
Trade balance (Bil USD)	-37	4	-647	254	-858	151
Current account balance (Bil USD)	-6	6	-470	306	-633	264

Sources: China State administration of Foreign Exchange, US bureau of economic analysis, Jan Friederich, Robert Ward, Danial Martin & Gareth Leather (EIU calculation)

D. International Trade

Chinese and US exports jointly accounts for more than 20% of the world's exports in 2010. US share in the world exports have been consistent in the last 29 years but Chinese share in the world exports has been increase by 3 times from just 91 billion USD in 1981 to 1456 billion USD in 2010. Chinese exports are estimated to continue to grow and pass the US exports in terms of value in 2015. However in the world's imports, US will continue to maintain its position of largest importer. US trade deficit and current account deficit are increasing with high speed. Being a reserve issuing currency, medium amount of trade deficit is inevitable but, US economy is bearing very high trade deficit that will also continue in future. This continuous high trade deficit is more than the capacity of US economy. Every year US has to finance this trade deficit through interest bearing debt, and that multiplies the problems. On the other hand, China is consistently enjoying the export led growth with a medium trade surplus that is giving stability to Chinese economy. Because of trade deficits, US competitiveness is declining while that of China is increasing, because of its surplus trade. Relevant data of international trade has been shown in table IV.

TABLE IV
INTERNATIONAL TRADE (ESTIMATED DATA FOR 2015)

Variable	1982		2010		2015	
	US	China	US	China	US	China
Real exports of G&S (Bill USD at 2005 prices)	329	91	1666	1456	2297	2311
Share in world's exports (%)	10	3	11	9	11	11
Real imports of G&S (Bill USD at 2005 prices)	349	97	2088	1288	2790	2264

E. Population

Data related to population has been shown in table V. China and US jointly consists of 26% of the world population in 2010, and have a prominent position in the world. China is the most populous country of the world while US is the third most populous country in the world. The ratio of US population to Chinese population has been almost similar in 2010 as it was in 1981 i.e., US population is 1/4th of Chinese population. The important variable here is the % of labor force in the total population. The Chinese economy got rise in competitiveness as its labor force increased from 454 million in 1981 to 815 million in 2010. Labor productivity of Chinese labor force grew dramatically from 2% in 1981 to 9.6% in 2010. This increase of Chinese population, labor force and labor force productivity will be continue in the future. China comprises 1/5th of the world's population that is becoming rich with the passage of time. In this way, China has a biggest growing domestic market. China has the largest and sufficiently productive labor force, whose productivity is increasing much faster than US labor force. 1/5th world's population, largest developing domestic market, largest productive work force, and high labor productivity growth rate gives China a strong competitive edge over US, for the leadership of IMS.

TABLE V
POPULATION (ESTIMATED DATA FOR 2020)

Variable	1981		2010		2020	
	US	China	US	China	US	China
population (million)	230	1000	310	1312	337	1391
Population (% change pa)	1	1.4	1	0.6	0.8	0.6
Labor force	109	454	154	815	166	817
Labor force (% of population)	47	45	50	62	49	59
Labor productivity growth (% p.a.)	1.4	2	3.5	9.6	2.6	4.7

Sources: US bureau of census, US labor department, China National Bureau of Statistics, and Daniel Martin & Gareth Leather (EIU calculation)

F. Productivity

According to productivity data given in table VI, growth of all labor productivity and capital stock are very high in China, as compared to US. Although China is still unable to compete US in development of technology, but growth of total factor productivity is still high in China than US i.e., 5.2% growth rate of China in 2010 compared to 3.8% growth rate of US. In 2015, total factor productivity growth rate of China is expected to be the 4 fold of US. Due to these growth factors, real potential output and industrial production rates have been 3 times high in China than those of US in 2010. These Chinese real potential output growth and Chinese industrial production growth are estimated to become even higher than those of US in the future. High productivity of China and estimated productivity growth in future proves China a strong candidate of IMS leadership than US.

TABLE VI
 PRODUCTIVITY (ESTIMATED DATA FOR 2015)

Variable	1981		2010		2015	
	US	China	US	China	US	China
Labor productivity growth (%)	1.4	2	3.5	9.6	1.4	7.8
Total factor productivity growth (%)	0.4	0	3.8	5.2	1	4
Growth of real capital stock (%)	4.1	9.1	-1.3	13.6	2.9	10.9
Growth of real potential output (%)	3.1	4.6	3.2	10.1	2.6	7.6
Industrial production (% change pa)	1.4	n.a.	5.3	16	2.1	11

Sources: China national bureau of statistics, US Federal Reserve board, OECD economic outlook, Daniel Martin & Gareth Leather (EIU calculation)

G. Employment, Inflation & Interest Rates

Unemployment rate has been increased in both US and China, from the past few years. Relevant data related to employment, inflation and interest rates has been shown in table VII. Unemployment rate in US has increased sharply with the start of global financial crisis. In China, it increased in a more consistent way mainly because of consistent increase in labor force and higher growth of labor productivity. According to 2015 estimates, unemployment rate will be decreased in US while it will slightly rise in China. Inflation had remained at minimum level of 1.5% in 2010 in US, mainly because of recession and, contributed to unemployment. While in China, it was at a medium level of 5% in 2010. Consumer price index (CPI) has been increased in both countries. The increase of consumer price index is

more in China than US. Keeping in view the recession in US and growth of Chinese economy, this increased consumer price index level is not harmful for China. Average real wages in China grew by 9.7% in 2010, almost double than the rate of inflation, improved the life style of Chinese population. Average real wages grew by only 0.3 in US in 2010, compared to the inflation of 1.5%, and ultimately resulted in a decrease in life style of US population. Both lending and deposit interest rates are extremely lower in US in 2010. These lower interest rates are as a result of US efforts to improve the economic conditions through decreasing interest rates. US has become successful to maintain low deposit interest rate with the help of debt financing by China. Interest rates in both economies are expected to grow in future. China is performing much better in employment than US. Increase in inflation rate and consumer price index are medium in China compared to low in US, but a high increase in average real wages in China and medium level lending interest rate are improving the Chinese competitiveness for IMS leadership.

TABLE VII
 EMPLOYMENT, INFLATION AND INTEREST RATES (ESTIMATED DATA FOR 2015)

Variable	1981		2010		2015	
	US	China	US	China	US	China
Unemployment (%)	7.6	3.1	9.6	6.1	6.8	6.3
Inflation	n.a.	n.a.	1.5	5	n.a.	n.a.
Consumer price index (2005=100; av)	n.a.	n.a.	112	116	127	142
Average real wages (% change pa)	-1.5	n.a.	0.3	9.7	0.5	7.4
Lending Interest Rate (%)	15.3	5	3.3	5.8	7.5	7.3
Deposit Interest Rate (%)	16	5.4	0.31	2.8	4.8	4.2

Sources: US department of labor, Ministry of labor and social security, Bureau of labor statistics, IMF International Financial Statistics, China national bureau of statistics, Daniel Martin & Gareth Leather (EIU calculation)

IV. OVERALL ANALYSIS OF SINO-US COMPETITIVE ECONOMIC POSITION

US competitiveness for the IMS leadership is declining with a fast speed. The imbalances between the external debt of US and surpluses of other countries have got the peak of breaking point, a danger identified by Kaldor in 1971. With the inception of Euro, it was expected that Euro will capture some share of USD in IMS and current IMS will continue its stability over a long time. Fiscal problems faced by Euro zone in the last few years, made it nearly impossible for Euro to give support to US in the stability of current IMS. A stream of natural disasters in the last few years in various countries of

the world has made it also very difficult for the other countries, especially Japan to do so. Rising oil prices are worsening the situation, by disturbing the economies of net oil importing countries; hence, compelling them to seek the help from other countries and IMF. It has become difficult for the US to continue its leadership in IMS. US either shall have to share or to shift the leadership of IMS to China, but who will bear the cost of this sharing or shift? The sharing or shifting of IMS leadership will badly affect the US economy. US will be willing to share the IMS leadership with China, through including RMB in IMF SDR basket, but US will avoid bearing the high cost of this sharing.

China has become the new economic power house of the world economy. Change in GEE increased US dependence on China. China is acting as largest bank for the US economy. Almost on every variable of GEE, Chinese competitiveness is considerable higher than US, and it will even continue to increase in the future. In the current scenario, China has remained the only competitor to US for the leadership of IMS, after the rising problems of Euro zone and tsunami in Japan. Although China has supported US in the past to strengthen the current IMS, but economic conflicts between China and US are rising continuously. As a last weapon to control the situation, US has started continuing devaluation of dollar, to reduce the debt burden and to flourish the US economy. US is also pressing China to increase domestic spending instead of export led growth, and overvalue RMB [9]. On the other hand, China is raising its concern over the devaluation of US dollar, as containing the huge US dollar reserves. China is the largest owner of US national debt according to the data of US treasury at the end of February 2011 [11]. Although China sold some US debt at the end of 2010, but US authorities believe that China is getting more hidden debt through intermediaries e.g., UK banks etc. US is considering Chinese increasing economic power as a threat for the US economic reforms, as discussed by Morrison and Labonte (2009) [12].

Sino-US economic conflicts are rising. Both countries will have strategic dialogues in May 09-10, 2011 in Washington. These dialogues and the coming meetings will clear the situation of future moves of both countries. It seems that US will convince China to accept the share in leadership of IMS. If convinced, China is expected to continue its policy of slow and steady increase in the world economic power. According to this policy, China shall wait for a time; the world itself asks China to fully takeover the leadership of IMS, in order to save the IMS from destruction. If both countries don't convince each other, the result will be the scrape of current system like 1971. Combined with strong economic competitiveness, Chinese sharing of the leadership of IMS will solve most current problems of IMS including global imbalance, uncontrollable capital flows, and inadequate global liquidity. This sharing of leadership of the IMS by a socialist country will create some new economic problems e.g., more restrictions on capital movement, data insufficiency etc, requiring the attention of economist for further research.

V. CONCLUSION

The GEE has been changed dramatically in the past especially in the first decade of 21st century. The US, being the leader of IMS, tried its best to modify the IMS according to the new GEE but now the GEE is demanding the great change i.e., the change of leading player of the IMS. The leading role of the US in the IMS is declining with a fast pace due to the decline in its competitive economic position. China, by becoming a new economic powerhouse is gradually changing the status of US in the IMS. China has got the strongest competitiveness for the leadership of IMS. Sooner or later, the US will have to share the leading position in the IMS with China, as this is the only option for the current IMS to work or progress. This shift of leading position will cause to solve most of the problems of IMS, and will make it stable for a long time; but on contrary it will also birth to some new problems. Hence, the issues needed to pay attention by the IMS authorities and economic researchers are: "how this sharing will be executed?", "either it will be a slow—more cooperative or fast—more aggressive change?", "who will bear the cost of this change?", and "how the problems will be tackled that will emerge in the wake of this very crucial change—Sino-US joint leadership of the IMS?"

REFERENCES

- [1] D. Strauss-Kahn, "Nanjing and the New International Monetary System", IMFdirect, International Monetary Fund, 31 Mar 2011. Available online at <http://blog-imfdirect.imf.org/2011/03/31/new-international-monetary-system/>
- [2] R. Triffin, "Our International Monetary System: Yesterday, Today and Tomorrow", New York, Random House, 1968.
- [3] N. Kaldor, "The Dollar Crisis", The Times, 6, 7, 8 September 1971. [reprinted in Kaldor, N. 1978, Further Essays on Applied Economics, New York, Holmes and Meier]
- [4] "The Role of the SDR in the International Monetary System", IMF Staff Study, Washington, DC, 1987.
- [5] D. Lipton, "Refocusing the Role of the International Monetary Fund", Discussion paper, Carnegie Endowment for International Peace, Washington, DC, 1999.
- [6] Isabelle Mateos y Lago, Rupa Duttagupta, and Rishi Goyal, "The Debate on the International Monetary System", IMF Staff Position Note, IMF Research Department, November 2009.
- [7] Richard N. Cooper, "Necessary Reform? The IMF and International Financial Architecture", Harvard International Review, volume 30, Issue 4, Winter 2009.
- [8] "IMF Resources and the G-20 Summit", IMF, Washington, DC, 11 February 2010. Available online at <http://www.imf.org/external/np/exr/faq/sdrfaq.htm>
- [9] "Currency Amounts in New Special Drawing Rights (SDR) Basket", IMF, Washington, DC, 30 December 2010. Available online at <http://www.imf.org/external/np/tre/sdr/sdrbasket.htm>
- [10] "IMF Quota and Governance Reform—Elements of an Agreement", IMF, Washington, DC, 31 October 2010. Available online at <http://www.imf.org/external/np/pp/eng/2010/103110.pdf>
- [11] "Major foreign holders of US treasury securities", US treasury department, United States, 29 April 2011. Available online at <http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt>
- [12] Wayne M. Morrison and Marc Labonte, "China's Holdings of U.S. Securities: Implications for the U.S. Economy", Congressional Research Service, United States, 30 July 2009. Available online at <http://www.fas.org/sgp/crs/row/RL34314.pdf>