

Piatkowski, Marcin

Working Paper

The inexorable rise of Chimerica: The long-term scenario

TIGER Working Paper Series, No. 122

Provided in Cooperation with:

TIGER - Transformation, Integration and Globalization Economic Research, Warsaw

Suggested Citation: Piatkowski, Marcin (2011) : The inexorable rise of Chimerica: The long-term scenario, TIGER Working Paper Series, No. 122, Transformation, Integration and Globalization Economic Research (TIGER), Warsaw

This Version is available at:

<https://hdl.handle.net/10419/140774>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

TIGER

TRANSFORMATION, INTEGRATION and GLOBALIZATION ECONOMIC RESEARCH

CENTRUM BADAWCZE TRANSFORMACJI, INTEGRACJI I GLOBALIZACJI

TIGER Working Paper Series

No. 122

The Inexorable Rise of Chimerica: The Long-Term Scenario

Marcin Piatkowski

Warsaw, February 2011

The Inexorable Rise of Chimerica: The Long-Term Scenario

Marcin Piatkowski¹

Abstract

The objective of this paper is to develop a scenario for the development of the world's economy, in which China and America become the two global economic hegemon, who dominate over other players, mainly including the EU, Japan and other BRICs, in a new multi polar world. For the purpose of this paper the two new superpowers will be called Chimerica.²

Chimerica today

China and USA today represent around 13 percent of the world's surface, a quarter of the world's population, one third of the world's GDP and over half of the global economic growth in the past six years, largely owing to China (Ferguson, 2009).

The US represents the larger portion of Chimerica, with 20% of total world's GDP in 2010, down from 25% reached in 1990 (Figure 1). China's share is smaller, with 13% of the world's GDP in 2010 based on purchasing power parities, but this share has risen tremendously in the last 30 years, which have witnessed a truly historically unprecedented rise of China and a relative decline of the US and the European Union. China's share in global GDP increased spectacularly from 4% in 1990 to 13% today, while that of the EU-27, for instance, declined to 21% (Figure 1). Since 1978, China's economy has grown by about 10 percent annually, doubling GDP every seven years and increasing GDP per capita by 26 times since 1980. No country in the history of mankind has developed so fast as China did in the recent past. And likely no other country will ever be able to reproduce it (Kolodko, 2011).

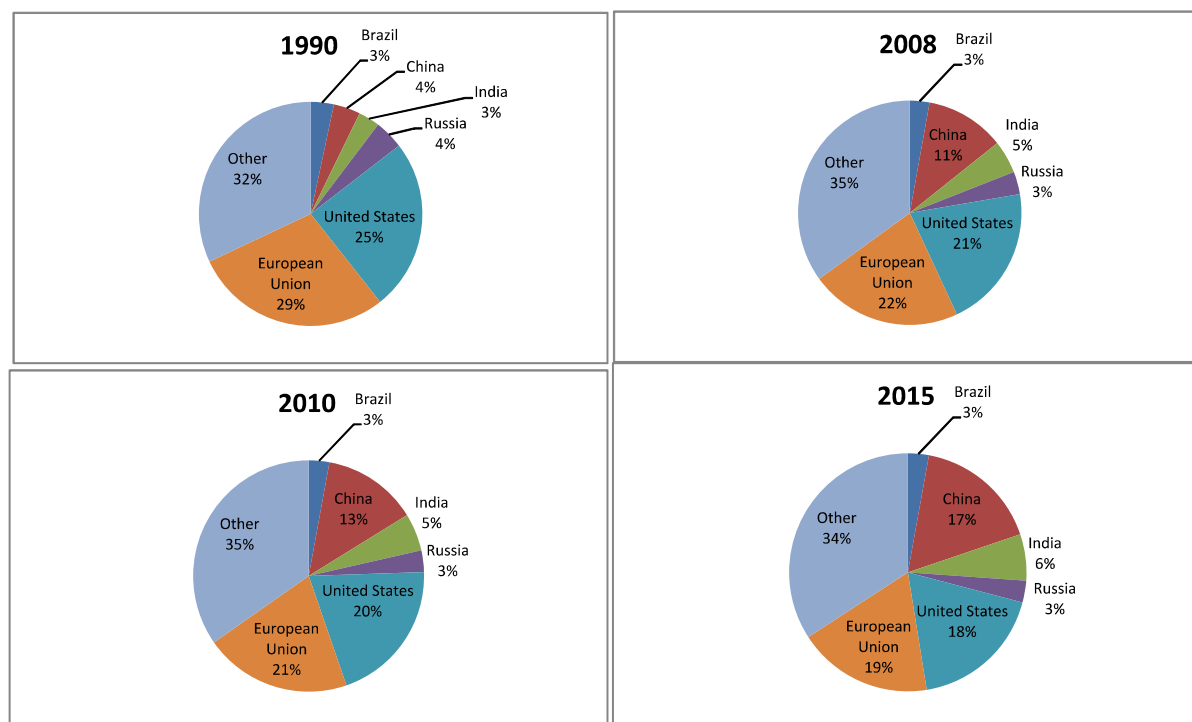
The global financial crisis has only accelerated the rise of China, with China catching up with advanced economies at the fastest speed in the world's economic history: China's GDP in 2008-10 grew at an average rate of 9.7%, while the US GDP stagnated and the average GDP growth of the EU-27 was negative 0.6% (IMF, 2010).

The global crisis has also witnessed other remarkable changes in the global position of China: In 2009, it leapfrogged Germany to become the world's largest global exporter. In 2010, it overtook Japan to become the world's second-biggest economy in terms of GDP. Going forward, in 2011, China will become the world's biggest manufacturer, overtaking the US after 110 years of its supremacy. Finally, in 2011 it is likely to become the world's largest registrar of patents (The Economist, 2010b).

¹ Assistant professor at TIGER, Kozminski University, Warsaw Poland

² Chimerica is a neologism coined by Niall Ferguson and Moritz Schularick in 2006 to describe the symbiotic economic relationship between oversaving China and overspending America.

Figure 1: The structure of the world's GDP, 1990-2015, PPP



Note: Projections for 2010 and 2015.

Source: IMF World Economic Outlook database, October 2010, own calculations

There is large literature explaining the sources of China's growth.³ It emphasizes the role of high saving, low labor costs, competitive exchange rate, macroeconomic stability and strong structural policies. It also underlines the importance of Chinese gradualism, experimental and pragmatic approach to reforms, high public investment in infrastructure, and capital controls preventing inflows of speculative capital. Finally, it emphasizes the fast growth in TFP, the ultimate source of long-term development, driven by rapidly rising R&D spending, increase in the number of researchers, a growing number of international patents and improving structure of exports towards high-tech products.⁴

As to the latter, in 2007, China spent 1.4% of GDP on gross domestic expenditure on R&D, up from only 0.6% in 1996, only slightly below the EU average at 1.8% (Figure 2). China has also

³ See, for instance, IMF 2010, Bergsten et al. 2009, Naughton 2007, Kolodko 2006, Prasad 2004, Lin 2004, Qian 2003. Brandt and Rawski (2008) provide a comprehensive summary.

⁴ In 2008, Huawei, a Chinese telecom firm, filed more international patents than any other firm in the world (The Economist 2010c).

dramatically increased the number of researchers, from only 0.5 million in 1996 to 1.5 million in 2007, almost on par in absolute terms with the US and the EU, catching up on most other countries as a proportion to total population (Figure 3). The growing army of Chinese scientists produced more than 10% of world's publications in 2007, up from below 5% in 2002. America's share of world publications, at 28% in 2007, slipped from 31% in 2002; the EU's share in turn fell from 40% to 37% (The Economist, 2010a). In 2011, China is likely to overtake Japan in patent applications, a remarkable turnaround from 2000, when Japanese patent applications were four times greater than China's (Economist 2010b). Finally, the structure of exports has improved dramatically: between 2000 and 2008 the share of high-tech exports in total exports almost doubled to about one third of total exports, one of the highest shares in the world (Figure 5).

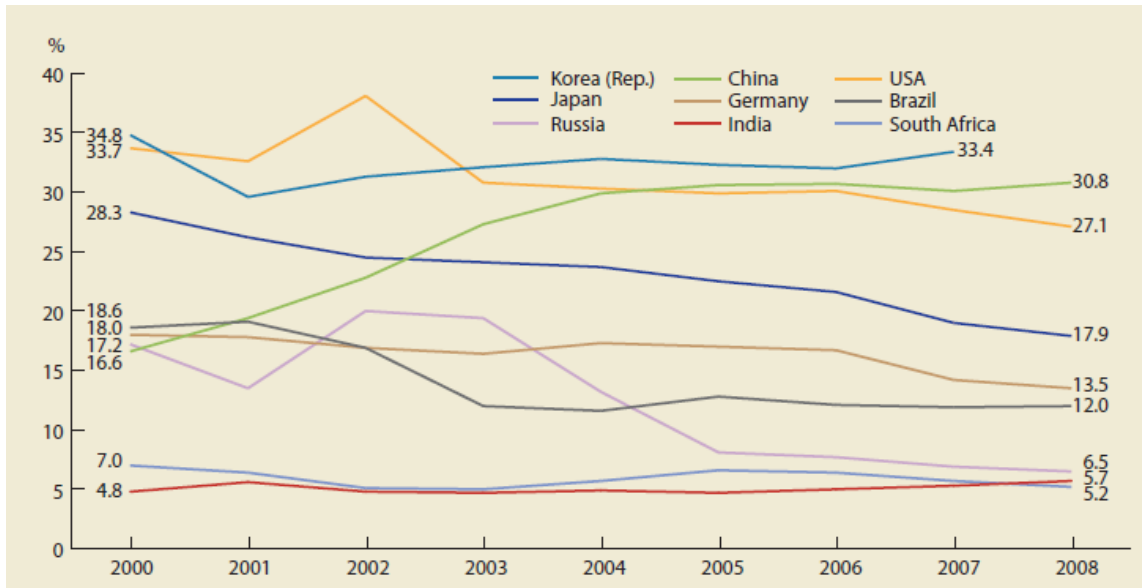
Figure 2. Spending on R&D (GERD) in selected countries, 1996-2007, in % of GDP

Source: Unesco and Eurostat

Figure 3. Researchers per million inhabitants, 1996-2007

Source: Unesco

Figure 4. Share of high-tech exports in manufactured exports, 2000-08, in % of total



Source: Unesco (2010)

Why China and America will dominate the world by 2025.

Based on today's baseline scenarios, China and America are destined to dominate the global economy by 2025 and onwards.

China's GDP growth is projected to continue to exceed the growth rate in advanced economies for decades to come, leading to a relative decline of the West and a relative rise of China.

Goldman Sachs (2009a) projects that China's economy will continue to grow at rates above 6% a year until 2030, double the rate of advanced economies and the highest growth rate among BRIC countries (Table 1). HSBC (2011) and PWC (2011) provide similar projections.

Table 1: GDP growth projections for BRICs, 2011-50

	2011-20	2021-30	2031-40	2041-50	2011-50
Brazil	4.6	4.4	4.4	3.9	4.3
Russia	4.4	3.1	2.4	1.5	2.9
India	6.5	6.4	6.6	5.8	6.3
China	7.9	5.7	4.4	3.6	5.4

Source: Goldman Sachs (2009a)

As a result, the Chinese share in the global GDP (or, rather more appropriately, in the Gross World Product, GWP) will continue to increase: according to the IMF, China's share in total world's GDP will reach 17% in 2015 on a PPP basis, becoming virtually on par with the US

and the EU (Figure 1). In turn, the market exchange based value of China's GDP will overtake the US GDP by 2027 at the latest according to Goldman Sachs and by 2032 according to PWC (2011). However, with slightly more optimistic growth projections, with China maintaining growth rates of 7.5 percent a year and yuan appreciating by 3 percent a year, China could overtake the US already in 2020⁵. These dates are much closer to what was projected previously: When Goldman Sachs published its original BRICs article in 2001 (Goldman Sachs, 2001), it projected that China would overtake the United States in terms of GDP only in 2040.⁶

In 2025, based on illustrative projections laid out in Table 2 for nominal GDP growth rates and levels of GDP in 2025, the world's economy is likely to be dominated by China, America and the European Union. India, the likely fourth largest global economy in 2025, will be far behind the three leaders, with nominal GDP at around only one fourth of China's (Figure 5).

Table 2: Assumptions to GDP growth projections until 2025, per year

	Growth rates (nominal GDP)	Real GDP growth	Inflation	Currency appreciation
European Union	3.5	1.5	2	0
Brazil	10	4	3	3
China	12	6	3	3
India	12	6	3	3
Russia	10	4	3	3
United States	4.5	2.5	2	0

Note: IMF projections until 2015; own projections for 2016-2025

Source: author's own

Figure 5: Projections of the size of GDP in 2025, nominal exchange rates, in trillion US dollars

⁵ Under an assumption that the US economy would grow at 2.5 percent a year, with 2.5 percent annual inflation. See The Economist for a chance to play around with the growth projections for China and the US: http://www.economist.com/blogs/dailychart/2010/12/save_date

⁶ Coincidentally, the large difference in the projected number of years that China will need to catch up with America points to the inherent fragility of long-term projections.

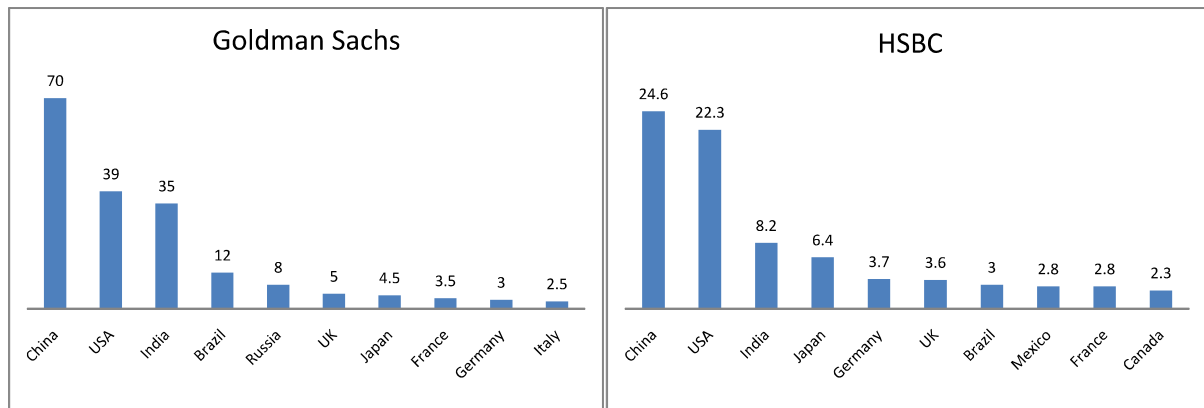
Note: IMF projections until 2015; author's own for 2016-25.

Source: own calculations; IMF World Economic Outlook, October 2010.

Going forward, Goldman Sachs projects that by 2050 the global trio—China, US and the EU countries combined—will continue to dominate the global economy, although India will not be far behind (Figure 6). HSBC (2011) arrives at some projections, but the share of India in the world's GDP is expected to be much smaller, at only one third of that of China (Figure 7).⁷ Taken individually, the EU countries will lose much of its current position in the global economy, with the size of Germany's GDP, the largest EU economy, barely exceeding 15% of that of China.

Figure 6: Projected GDP of top 10 countries in 2050, in trillion dollars

⁷ As the comparison of two projections suggests, even small differences in underlying growth assumptions can make a big difference to the long-term projections and the way the world's economy might look like in 2050. See later in the text about the risks to these baseline forecasts.



Note: Goldman Sachs in constant 2007 dollars, HSBC in constant 2000 dollars.

Source: Goldman Sachs (2009) and HSBC (2011).

By 2050, the world's economy will then much different than today, with China and the remaining BRIC countries representing a sizeable part of the world's GDP. But this pattern will not actually be unusual: in 1820, the role of today BRIC's in the world's economy was even larger, with China and India alone representing almost half of the world's GDP then (Figure 8). Hence, the current trends are only a return to the way the world largely looked like some 200 years earlier. However, the XXI century world is likely to be much different than the XIX century one, with non-Western countries playing a much more important role in global politics and economics than two hundred years ago, when the world was largely dominated by the British Empire.

Figure 7: A history of world GDP, % of total, 1-2008, 1990\$ at PPP

Source: author's calculations based on Angus Maddison's database.

What are the assumptions to the long-term growth projections?

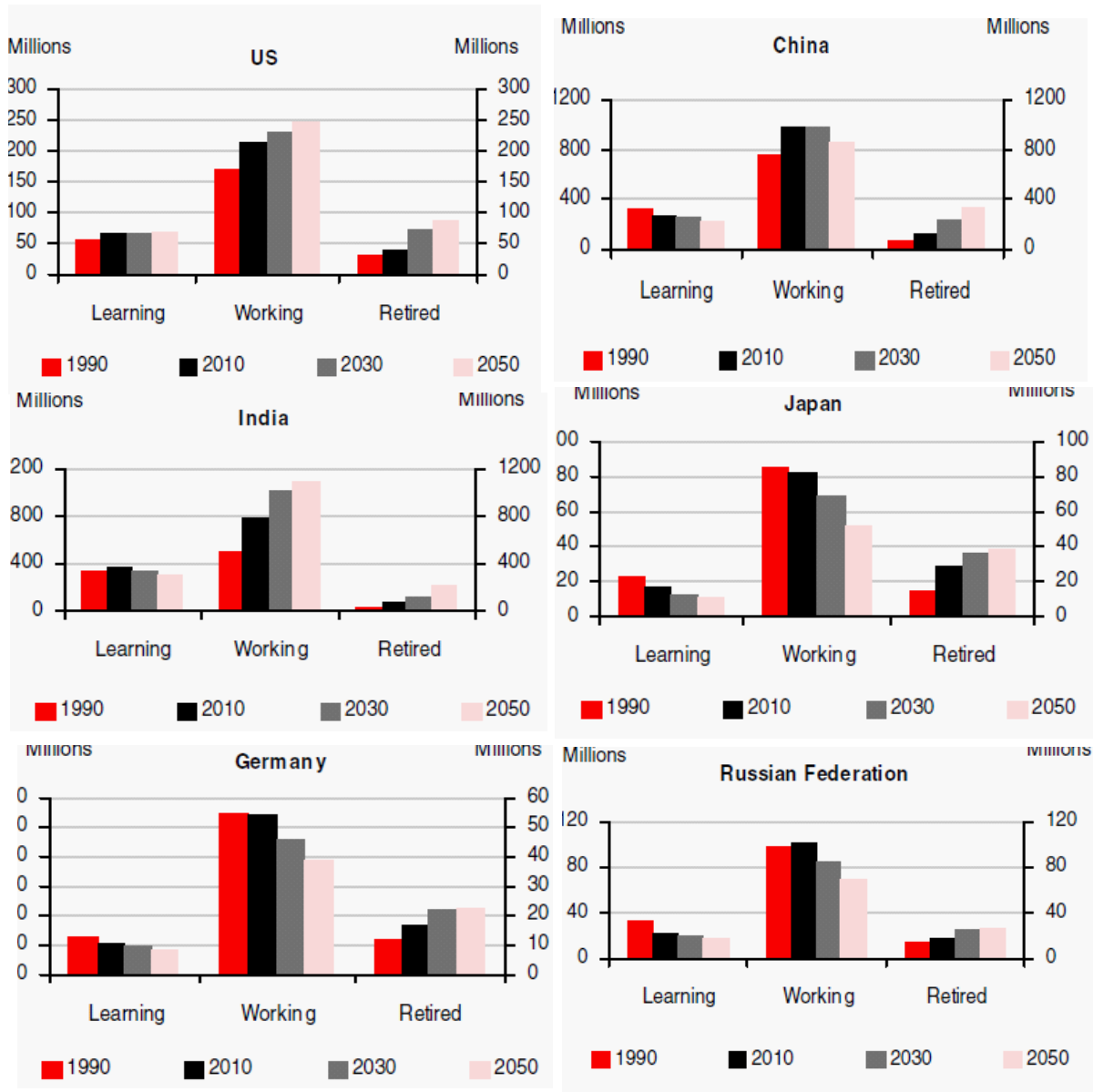
USA

According to baseline scenarios, by 2025 and onwards the US is projected to continue to grow at a steady pace of about 2.5 percent a year in real terms based on conducive demographics, supported by high fertility rates and positive net migration flows, high quality of tertiary education and world class innovation. Positive demographics will in particular set the US

apart from all of its global competitors, which—with the exception of India—face substantial challenges in terms of declining and ageing populations (Figure 8).⁸

Figure 8: Projected changes in the labor force, 2010-2050

⁸ Japan's workforce, for instance, is projected to shrink by a remarkable 37% by 2050; China's workforce is anticipated to decline by more than 10% (The Economist, 2010d).



Source: HSBC (2011)

In addition, growth in the US is likely to be supported by generally strong macroeconomic policies, flexible labor markets, and high-quality infrastructure. The continued privileged global position of the dollar as the premier world's reserve currency, which allows it to borrow from abroad at low interest rates in its own currency, will also be helpful, although the dollar is likely to be increasingly challenged by the rise of the euro, despite the current turmoil, and the Chinese yuan.⁹

⁹ Chinese government is actively promoting the yuan as a new global reserve currency, through, for instance, spurring development of yuan-denominated bonds.

The global crisis 2008-10 has weakened the US economy in the short term, but its long-term growth prospects do not seem to be undermined. As argued by Ferguson (2009), contrary to comments prophesying the decline of the United States in the wake of the global recession, the US has gone through fundamental crises before, such as the Great Depression or the Great Stagflation of the 1970s, but each time it emerged with its global position unchanged or even enhanced. Of course, this time around it could be different, but one nonetheless has to factor in the historically proven resilience of the US economy, which will at least slow its relative global decline.

China

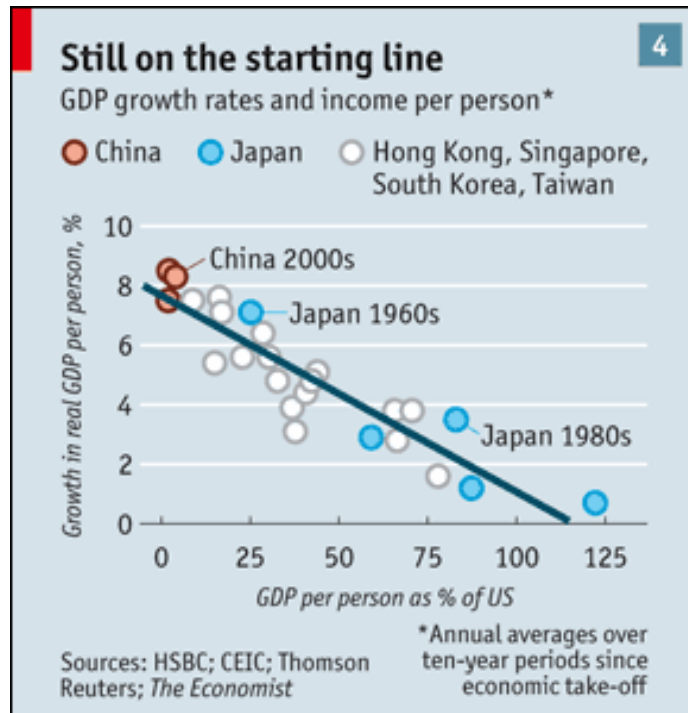
Long-term growth in China is projected to continue to be based on China's traditional strengths, mainly low labor costs, high saving rates, and a competitive exchange rate. However, in addition to the traditional sources of growth, the Chinese economy will increasingly be supported by domestic consumption, as China gradually shifts from an export-based growth strategy to a more balanced, domestically-driven growth mix. Despite the recent substantial increase in outlays on infrastructure, infrastructure investment will continue to spur growth, as "over half of the power and water infrastructure that will exist in China by 2020 has not yet been built yet" (Goldman Sachs 2010, p.7). Finally, the rising level of innovation should continue to underpin positive changes in the structure of Chinese exports, supported by strong governmental policies.¹⁰

Given that China's GDP per person is still below one-tenth of America's or Japan's, growth in China will be made easier by the existing large scope for catching-up with advanced economies through increasing capital stock, absorbing foreign technology, and raising productivity by shifting labor from agriculture to industry. Figure 9 shows that, despite fast growth in the past, China's GDP per head relative to the US is still much lower than that of Japan in 1960s, suggesting that Chinese growth potential is even higher than Japan's then when it was growing at an average rate exceeding 7% a year. The same applies to other Asian "Tigers"—Hong Kong, Singapore, South Korea and Taiwan—who grew at rates above 6% a year when they were at a similar level of development as China today. China's vulnerability to crises is mitigated by the gargantuan international currency reserves, which exceeded \$2.8 billion in 2010.

Finally, Chinese urbanization still has a long way to go, raising the productivity level: in 2009, 40% of the Chinese population still worked in agriculture, producing only 12% of GDP (HSBC, 2011). The corresponding movement of labor should continue to help slow the growth rate in wages, keeping China competitive.

¹⁰ The Economist (2010c) reports that "anxious to promote domestic innovation, the Chinese government has created an ecosystem of incentives for its people to file patents. Professors who do so are more likely to win tenure. Workers and students who file patents are more likely to earn a *hukou* (residence permit) to live in a desirable city. For some patents the government pays cash bonuses; for others it covers the substantial cost of filing. Corporate income tax can be cut from 25% to 15% for firms that file many patents. They are also more likely to win lucrative government contracts. Many companies therefore offer incentives to their employees to come up with patentable ideas.

Figure 9: Chinese catching-up potential based on a historical comparison with other Asian countries



Source: The Economist (2010e)

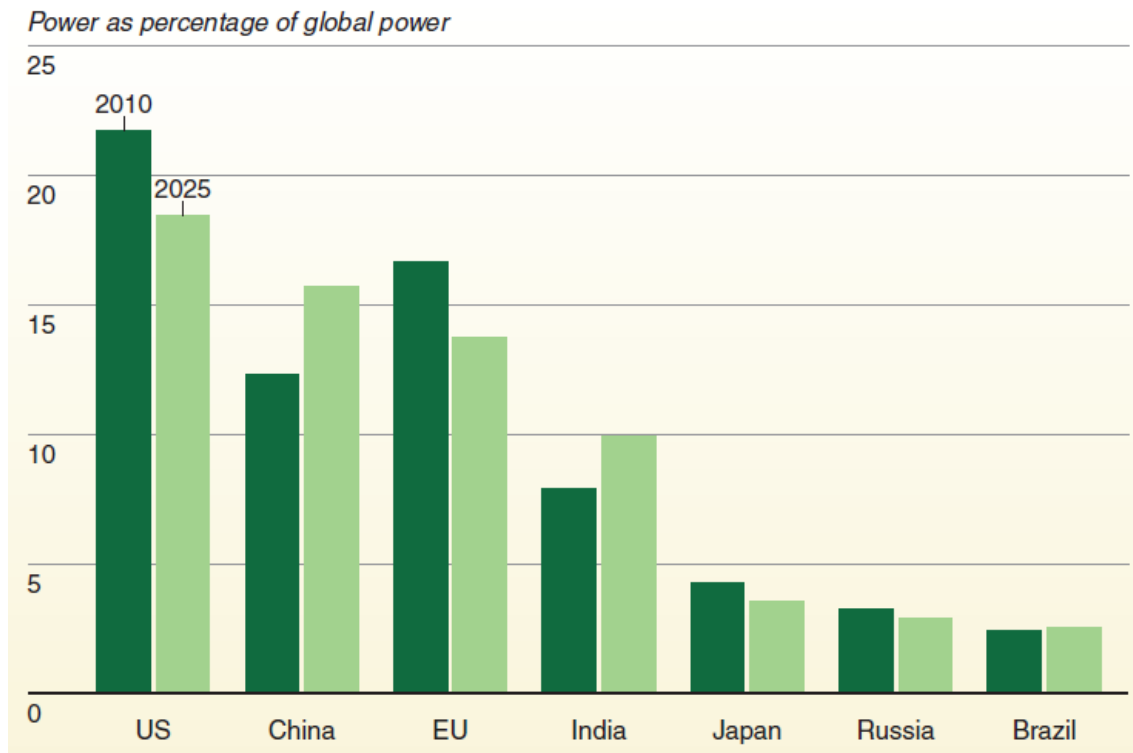
By 2025, the combined GDP of China and America is projected to represent almost half of the world's GDP on a PPP basis; by 2050, under the assumption of continued fast growth in China, Chimerica's share in total world's GDP is likely to represent more than a half of the world's total.

China and the US are likely to dominate the global economy even assuming much less robust growth scenarios: the difference in the projected size of the two economies in 2025 (and 2050) relative to other contenders—Japan, India, Brazil, Russia—is so large that even slower growth rates would not dramatically change the emerging pattern in the global balance of power.

China and America's global dominance will be supported not only by their economic power, but also by other traditional sources of influence such as the military might, population size, level of technology, attractiveness of culture and ideology and others. According to a National Power index developed by the US National Intelligence Council, which measures the global clout of individual countries based on GDP, defense spending, population and level of technology, America and China will dominate the world by 2025, although slightly less so than based

on GDP alone (Figure 10).¹¹ Nye (2010) presents a similar view based on a more qualitative assessment.

Figure 10: Index of National Power in 2010 and 2025, in % of the world's total



Note: National power scores, computed by the International Futures computer model, are the product of an index combining the weighted factors of GDP, defense spending, population, and technology.

Source: National Intelligence Council (2010)

Only the EU and—to a lesser extent—India are likely to be serious contenders to the US and China's dominance in the future.

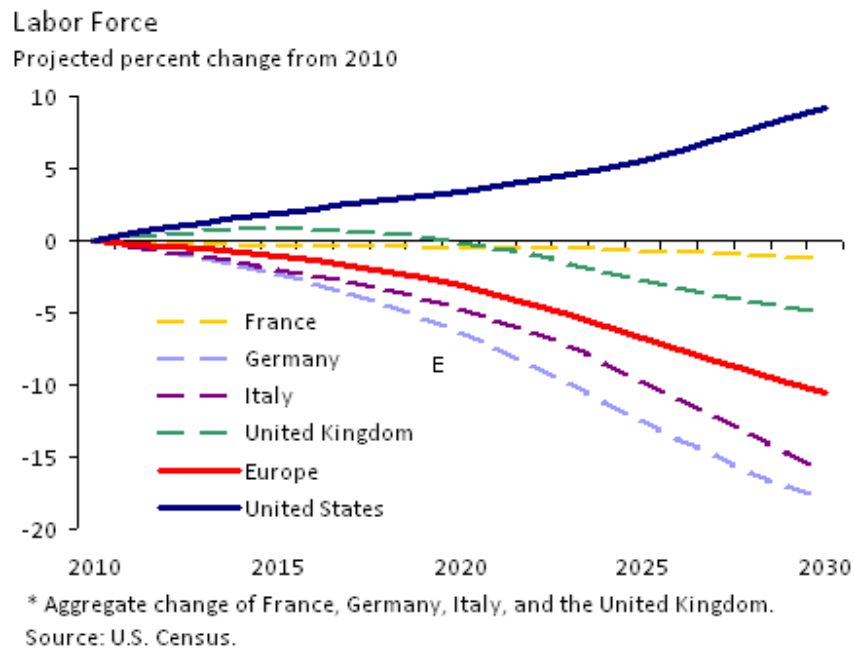
The European Union

The EU's influence is likely to continue to benefit from the large size of its economy, large combined military spending, strong position in international institutions, high-quality human capital, and—last, but not least—attractiveness of its culture and post-modernist ideology. Despite the projected slower growth rate owing to negative demographic trends (Figure 11), fast population ageing, high public debts, relatively inflexible labor and products markets as well as stagnating productivity growth, the size of the EU's economy will continue to be comparable to

¹¹ America and China are already the two largest world's spenders on military (Sipri, 2010). Their lead in military expenditures is likely to increase further, as Chinese military expenditures grow at double digit rates annually, while military spending by Russia and the EU stagnates.

that of the US and China at least until 2025 (Figure 6).¹² This is largely thanks to a high starting point, with the EU's economy being the largest in the world in 2010 with a combined GDP worth \$16.1 billion, relative to \$14.6 billion for the US and only \$5.7 billion for China.¹³ Going forward, however, the projected difference in the size of GDP between the EU and the US and China is set to increase, relegating the EU more and more into a secondary power status.

Figure 11. Labor force projections for the US and the European Union, % change from 2010 until 2030



As regards political influence, EU's soft power is likely to continue to have a global impact, although it may gradually diminish as China and other BRICs expand their global political reach. However, the attractiveness of the EU's culture and social ideology is not likely to decrease. To the contrary, its global influence may rise as the EU social-economic model, emphasizing not only GDP, but also broadly understood well-being, will provide a useful alternative for countries not willing to follow either the US or Chinese distinct socio-economic development models.

However, on the whole the impact of the European Union on the global stage is likely to continue to suffer because of it simply not being a nation-state. Despite the EU being ever more deeply integrated, its policies are likely to continue to be constrained by the divergent interests of its main members, including Germany, France, UK, Italy, Spain and—increasingly—Poland.

¹² This is large literature on the growth prospects for the EU, which there is no need to repeat here. See, for instance, the European Union Ageing Report 2009 (European Commission, 2009) for a useful summary.

¹³ The size of the EU economy will also marginally increase as it expands its membership to the Balkans, Moldova and possibly also Belarus, Ukraine and Turkey. The addition of Turkey, in particular, would add almost one trillion US dollars to the EU's GDP, 6-7% of the total.

India

The global role of India, the likely third largest world economy by 2025, is likely to increase in the decades to come, but its individual influence—because of smaller economy (only one fourth of the size of China), lower spending on the military, and weaker diplomatic position, best embodied by its absence at the UN’s Security Council, despite efforts to join—is likely to be much weaker than that of the US and China.

Other countries

The role of the other countries in the world, especially the remaining BRICs—Brazil and Russia—will also increase in line with the projected growth in the size of their GDP, but will nonetheless remain much smaller than that of the US and China. In 2025, Russian and Brazilian GDP is projected to amount to only slightly above one sixth of the projected size of the Chinese economy.

This will also be the case of Japan, today’s third largest economy in the world, whose role in global affairs is likely to experience the largest relative decline, mainly owing to the projected fast demographic decline, which could cut the size of its population by almost one third by 2050.

On the whole, by 2025, the US will most likely remain the most powerful country in the world, while China will become the undisputed global second superpower. No individual country in the world is likely to match the combined global clout of the US and China in the coming decades. The world’s economy and its accompanying institutions will increasingly follow rules set by the two countries, although with the emergence of the global multi polar system, the power of Chimerica will be much more constrained than it has been the case in the past for the US or—earlier—the UK. The US and China are likely to become the global *primus inter pares*, the two indispensable global players, without whose consent no major global initiative is likely to succeed.

What can go wrong with Chimerica?

All the long-term growth projections, including those for the US and China, are largely based on a simple extrapolation of the past growth trends.

This, of course, may not be the case going forward, as growth and development are non-linear and are subject to reversals (Piatkowski 2009, Kolodko 2011, Rodrik 2011). In hindsight, baseline growth projections from, for instance, year 1968, 1978 or—in particular—1989 turned out to be quite wrong, as unforeseen events—political and social upheavals in the US and in Western Europe, the beginning of economic reforms in China and the collapse of communism—pushed the world’s development trajectory in a much different direction than anticipated.

The same may happen with today’s baseline projections, as unexpected events, a priori impossible to predict today (the so-called “unknown unknowns”) are likely to continue to overwhelm simple economic extrapolations. Given the growing interconnectedness and

complexity of today's and tomorrow's world society and economy, the vulnerability of baseline scenarios to political and economic reversals will increase, and so will the risks to today's scenarios.

The known risks to the projections, the “known unknowns”, cannot be ignored, either, as economic, political, social, and ecological challenges to the projections of the continued rise of Chimerica abound.

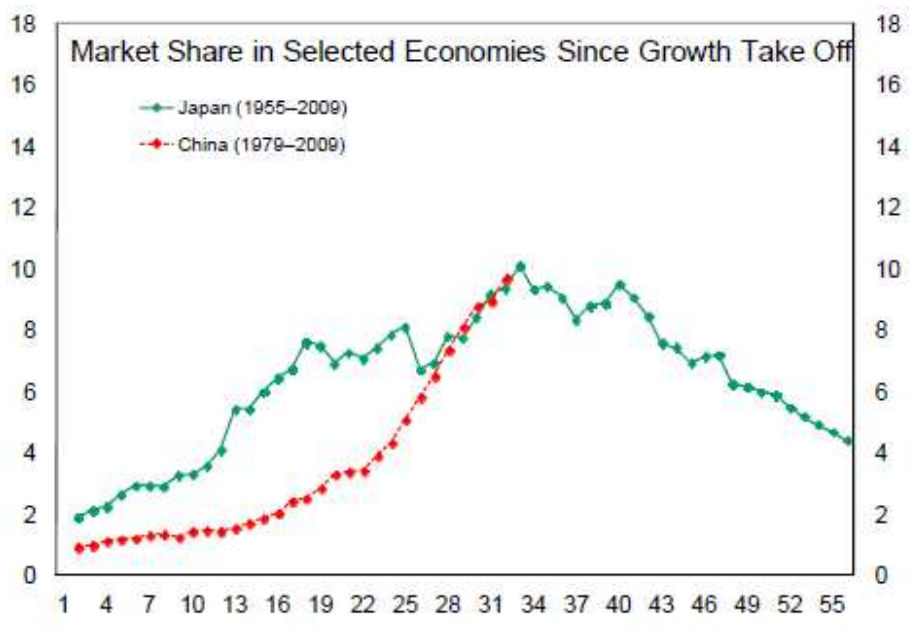
There is sizeable literature on the risks pertaining to the future development path of the US, which emphasizes its long-term fiscal problems, low quality of basic education, rising costs of military overstretch, and high social inequality.¹⁴ It also underlines the fact that the US is vulnerable to climate change and—especially—to the depletion of natural resources, with America being the world's largest consumer per capita (seven times larger than China). Finally, as the global hegemon the US is the prime target of global terrorism.

The multiple risks to the rise of China are also well documented.

First and foremost, to continue to grow China will have to adjust its export-growth model to rely more on domestic consumption and production of nontradables. This is because the current policy of export-led growth is increasingly unsustainable given the size of China's economy, its already large share in the global export markets, exceeding the record share achieved by Japan in the past (Figure 12) and the fact that the times of freely spending consumers in advanced countries, particularly in America, may be over.

Figure 12: China and Japan: Comparison of Historical Shares in the Global Export Market

¹⁴ See, for instance, Nye (2010), Rajan (2010), Summers (2010).



Source: N'Diaye (2010)

The situation in China today is in many ways similar to that of Japan in 1980's when it too tried to re-orient its export-based economy towards growth supported by domestic private consumption. The ensuing Japanese "lost decade" in the 1990's, when supportive macroeconomic policies adopted to cushion the impact of a rapid real exchange rate appreciation led to a boom and then a bust in asset prices, suggests that the switch to domestic-based growth is not necessarily easy. This is especially so in light of the strong vested interests of the export sector, entrenched social habits, and weakness of the service sector. Thus, the dangers of falling into years of stagnation and deflation cannot be underestimated. Recent rapid increases in asset prices in China seem to provide evidence that China is facing similar dangers as Japan did in 1980's, despite a number of mitigants (N'Diaye 2010).

Financial sector is also a source of a significant long-term risk as fast pace of lending by state-owned banks to, in particular, state-owned firms and local government raise concerns over the quality of lending and a future surge in nonperforming loans (Bergsten et al. 2009). In 2009 alone, for instance, total lending increased by 30%, bringing the total lending-to-GDP ratio to 130% GDP, significantly higher than for countries at the same level of development (the same ratio for India barely exceeds 50% of GDP). The allocative efficiency of the financial sector is also probably not high, especially in view of rising overinvestment in many sectors and resulting diminishing returns to investment (China invested a remarkable 47% of GDP in 2009). China will also have to cope with the risks associated with financial liberalization, including lifting of the current restrictions on interest rates on deposits, which would increase the banks' cost of funding.

China will also have to face an increasing problem of aging: owing to the "one child policy"

adopted in 1978, the current positive demographics will soon reach a turning point: in 2015, China's working age population will already start to decline, even though its overall population is projected to increase by 100 million to 1.4 billion people in 2025 (Figure 9). By 2025, a large proportion of China's population will be retired or entering retirement, supported by a relatively low effective retirement age. Significant gender imbalance, with the number of men substantially larger than the number of women (the ratio reaching 106 to 100 on average, but 122 to 100 in some parts of China) may worsen the demographic decline further. The demographic decline and population aging is reversible, but this would require an immediate change in family policies as well as promotion of immigration inflows. The latter in particular will not be easy to achieve, as China for years to come is likely to remain a country of net emigration rather than immigration.

Second, on a political and social front, China will have to tackle rising aspirations of its citizens for a larger say in the country's governance and emergence of democracy at some point in the future. It will also have deal with the remarkable social inequalities, which have emerged in the last thirty years: in a nominally communist country, the Gini coefficient, a measure of income inequality, has increased from 0.16 some thirty years ago to 0.47 today, only slightly below the world's most unequal societies, including Brazil and Russia.

Third, risks in international relations and politics are on the rise, as the emergence of China as the global superpower will increasingly lead to conflict situations with the US, the current hegemon, who may not want to share power and may not want to peacefully accommodate the rise of China. The axis of global conflict in the XXI century will firmly shift from Europe, where it has led to innumerable conflicts in the last 500 years, including the two largest global wars, to the Pacific Ocean, where it is likely to stay for a long time, if not for ever, producing its own global and regional turbulence.

The regional political risks are also on the rise, as rising China undermines the existing regional power status quo and as Chinese foreign policy becomes ever more assertive, including as regards territorial claims (The Economist 2010d).

It cannot, alas, be excluded that the large shifts in the global and regional balance of power, such as the one experienced by Asia today, will lead to military conflicts. Asia increasingly resembles XIX century Europe, with a complex network of adversarial national interests, especially among China, Japan, Korea, Taiwan, Pakistan and India. Importantly, unlike in Europe, there are no regional mechanisms of cooperation, which could prevent conflicts from escalating. The risks of military conflicts are additionally increased by the rapidly growing Chinese military expenditures, already the second largest in the world after the US, and the fact that multi polar global governance systems have historically proven to be less stable than bipolar (such as during the Cold War) or unipolar systems (as with the recent post-Cold War US hegemony) (National Intelligence Council, 2008).

Finally, the development of China can be stymied by challenges due to the climate change and

the growing scarcity of global strategic resources, such as energy, food, and water, on whose imports China largely relies. China is already the largest global emitter of carbon dioxide and environmental pollution has reached catastrophic levels—16 of the world’s 20 most air-polluted cities are in China (The Economist, 2010f). Reducing emissions will put additional pressure on its economy and may slow growth.¹⁵ Food shortages cannot be excluded either, especially as the water irrigating North China plains are being exhausted at a remarkable rate (HSBC, 2011). If Chinese GDP per capita were to reach today’s US level, it would require natural resources of almost two more planets. This is clearly impossible, even assuming fast technological improvements.

Conclusions

By 2025, the US and China are likely to become the two undisputed global economic and political superpowers. No individual country in the world is likely to match their global clout. The EU alone might be able to contend with Chimerica, largely because of its still relatively large economy and strong “soft power”, but the competition with the two hegemonies may become increasingly difficult as the EU experiences its relative economic decline and as—far from creating the United States of Europe—its key members continue to have divergent interests and views.

As a result, the world’s economy and its accompanying institutions will increasingly follow rules set by the US and China, the Chimerica. However, the emergence of a global multipolar system, mainly due to the rise of the remaining BRICs (Brazil, India, and Russia) and a few of the larger emerging markets, such as Indonesia or Turkey, will constrain the power of Chimerica much more than what has been the case in the past for the US or—earlier—the British Empire. Nonetheless, the US and China are likely to become the global *primus inter pares*, the two indispensable global players, without whose consent no major global initiative is likely to succeed.

¹⁵ As hypothesized in a fictional book by Glass (2010), climate change issues may spark a military conflict between China and the US, the two largest global emitters.

References

- Bergsten, Fred, Charles Freeman, Nicholas R. Lardy, Derek Mitchell (2009) *China's Rise: Challenges and Opportunities*, Peterson Institute for International Economics; 1 edition (October 1, 2009),
- Brandt, Loren, and Thomas G. Rawski (2008) *China's Great Economic Transformation*, Cambridge University Press; London.
- The Economist (2010a) Climbing Mount Publishable, The Economist, November 30.
- The Economist (2010b) Innovation in Asia, The Economist, Sep 30th 2010.
- The Economist (2010c) Innovation in China, The Economist, October 14.
- The Economist (2010d) Friend or Foe? A Special Report on China's Place in the World, The Economist, December 4.
- The Economist (2010e) Not just another fake, The Economist, January 14.
- The Economist (2010f) China's economy, The Economist, August 16.
- European Commission (2009) "European Union Ageing Report 2009", Brussels.
- Ferguson, Niall (2009) "What 'Chimerica' Hath Wrought, The American Interest, January-February. From: <http://www.the-american-interest.com/article.cfm?piece=533>
- Goldman Sachs (2010) "Crossing the Rubicon: Our investment framework for the next decade
- Goldman Sachs (2009a) The Long-Term Outlook for the BRICs and N-11 Post Crisis, December
- Goldman Sachs (2009b) The BRICs Nifty 50: The EM & DM winners
- Goldman Sachs (2001) "Building Better Global Economic BRICs", November
- Glass, Matthew (2009) *Ultimatum*. Atlantic Monthly Press.
- HSBC (2011) "The World in 2050. Quantifying the shift in the global economy". January
- IMF (2010a) "People's Republic of China: 2010 Article IV Staff Report", International Monetary Fund, July.
- IMF (2010b) *IMF World Economic Outlook*, International Monetary Fund, October
- Islam, Nazrul, Erbiao Dai and Hiroshi Sakamoto (2006) "Role of TFP in China's Growth", *Asian Economic Journal*, 2006, vol. 20, issue 2, pages 127-159

Kolodko, Grzegorz W. (2011) *Truth, Errors and Lies. Politics and Economics in a Volatile World*. New York: Columbia University Press, p. XII+460.

Kolodko, Grzegorz W (2006) *The World Economy and Great Post-Communist Change*, New York: Nova Science Publishers, p. VIII + 194.

Lin, Justin Yifu (2004) "Lessons of China's Transition from a Planned Economy to a Market Economy", *Kozminski University and TIGER Distinguished Lectures Series No. 16*, Warsaw, p. 1-45.

National Intelligence Council (2010) "Global Governance 2025: At a Critical Juncture", National Intelligence Council, September

National Intelligence Council (2008) "Global Trends 2025: The National Intelligence Council's 2025 Project". National Intelligence Council, January.

Naughton, Barry (2007) *The Chinese Economy: Transitions and Growth*, B001IGSKB6 **Barry Naughton** (Author) › [Visit Amazon's Barry Naughton Page](#)

Find all the books, read about the author, and more.

See [search results](#) for this author

Are you an author? [Learn about Author Central](#)

The MIT Press, January.

N'Diaye, Papa (2010) "Lessons for China from Japan's Experience in the 1980s," *IMF Working Paper WP/10/284*, December

Nye, Joseph S. Jr. (2010) "The Future of American Power", *Foreign Affairs*, November/December.

Qian, Yingyi (2003) "How Reform Worked in China?" in Dani Rodrik, editor, *In Search of Prosperity: Analytic Narratives on Economic Growth*, Princeton University Press, pp. 297-333.

Piatkowski, Marcin (2009) "The Coming Golden Age of New Europe", *CEPA Reports No. 26*, Central Europe Policy Analysis, October.

Prasad, Eswar (2004) "China's Growth and Integration into the World Economy: Prospects and Challenges", Occasional Paper, International Monetary Fund, July 21.

PWC (2011) "The world in 2050". PWC: London.

Rodrik, Dani (2011) *The Globalization Paradox: Democracy and the Future of the World Economy*, New York and London: W.W. Norton.

Sipri (2010) *SIPRI Yearbook 2010*, Stockholm International Peace Research Institute.

Summers, Lawrence (2010) “Economic Progress and Economic Policy”, Remarks at the Economic Progress Institute Lawrence H. Summers, December 13. From: <http://www.whitehouse.gov/administration/eop/nec/speeches/economic-progress-economic-policy>

White House (2010) “The National Security Strategy”, May. From: http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf

Unesco (2010) *Unesco Science Report 2010*. The Current Status of Science Around the World, Unesco, Paris.

Vivek, Arora and Athanasios Vamvakidis (2010) “Gauging China’s Influence”, *Finance & Development*, December 2010, Vol. 47, No. 4. From: <http://www.imf.org/external/pubs/ft/fandd/2010/12/arora.htm>