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STRATEGY & CHANGE

NEW PLAYERS, NEW GAME?

THE IMPACT OF EMERGING ECONOMIES ON GLOBAL GOVERNANCE

THE HAGUE CENTRE FOR STRATEGIC STUDIES AND TNO

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The TNO and *The Hague* Centre for Strategic Studies (HCSS) programme Strategy & Change analyzes global trends in a dynamic world affecting the foundations of our security, welfare and well-being.

The programme attempts to answer the critical question: what are the policies and strategies that must be developed to effectively anticipate on these emerging challenges?

Strategy & Change provides both a better understanding and feeds the agenda for a sustainable future of our society.

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1 INTRODUCTION

The first decade of the 21st century has been a period of rapid economic growth in many large emerging economies, especially China. This has brought about substantial changes in the relative power balance between the emerging economies and the West. The financial and economic crisis that started in 2007–2008 has reinforced this global shift. While the U.S. and many European economies are weighed down by sovereign debt and austerity measures that could condemn them to several years of slow growth, many emerging economies are in much better fiscal shape and have recovered quickly from the global recession. Some large emerging economies have even been considered potential creditors for a number of struggling countries in the Eurozone – a situation that would have been difficult to imagine several years ago. These developments have contributed to the (re-)emergence of a debate on the 'decline of the West'.[1]

Rapid economic growth in emerging economies has had many advantages for Western companies and consumers. For Western firms it has opened up new opportunities for expanding sales and investments. Western consumers have benefited from imports of cheaper consumer goods from these countries. For instance, Germany's strong economic performance in recent years has been closely associated with its strong exports to large emerging economies. Not surprisingly, in a period of economic downturn in Europe

1 An intense debate has emerged in scholarly and policy circles over the 'Decline of the West.' A small selection of recent works include Edward Luce, *Time to Start Thinking: America in the Age of Descent*; Fareed Zakaria, *The Post-American World*; Michael Mandelbaum, *The Frugal Superpower: America's Global Leadership in a Cash-Strapped Era;* Ian Bremmer; *Every Nation for Itself: Winners & Losers in a G-Zero World*; Walter Laqueur, *After the Fall: The End of the European Dream and the Decline of a Continent*; Martin Jacques, *When China Rules the World: The End of the Western World and the Birth of a New Global Order*.

there has been substantial interest on the part of governments and businesses alike to reach out to these economies.

At the same time, the growing economic and financial momentum of many larger emerging economies raises serious questions for Western decision makers. Of central strategic concern is whether (several of) the emerging economies are likely to coalesce into an economic or political bloc (be it formal or informal) that might promote alternative approaches to global economic, diplomatic or security issues and develop a counterbalance to Western influence in existing economic, financial and political institutions. Although the development of counterbalancing forces to Western pre-eminence is a response to be expected as emerging countries rise – and is in fact predicted by International Relations theory – the extent and pace of this transformation are unclear. In the event that this counterbalancing results in the formation of a bloc of emerging countries, including coordinated challenges to limit Western influence or the development of alternative economic-financial regimes, European interests stand to suffer. The emergence of a de facto bipolar world with 'the West against the Rest' could increase the costs of doing business, severely complicate reaching agreement on transnational problems such as climate change or resource security, potentially challenge the promotion of Western values and human rights, lead to increased diplomatic or military tensions and potentially jeopardize the ongoing process of economic globalization.

Questions that arise from this include: could the BRICS (Brazil, Russia, India, China, South Africa) annual summits pave the way to a new economic or political bloc? What are the sources of influence of the emerging countries? In which international forums is collaboration between emerging economies taking place? How could bloc formation impact on economic opportunities for European firms in these emerging economies? To answer this and other questions, we must explore the extent of cooperation between the emerging economies when it comes to key issues of global governance and security.

Specifically this study looks at the following key questions:

- In what ways has the rise of emerging economies affected the international power balance?
- To what extent are the emerging economies cooperating strategically on economic, diplomatic and security matters?

This report summarizes the results of a study undertaken by The Hague Centre for Strategic Studies (HCSS) on behalf of TNO (Dutch Organization for Applied Scientific Research) to address some of the political, economic and security issues related to rapid growth of emerging economies. First, it describes the rationale for selecting eight large emerging economies (combined under the acronym BRICS+ in this report) for further analysis. It then provides a broad overview of the recent trends in the selected countries and their significance for the global geopolitical and geo-economic order. Next, the report looks at the interactions between these large emerging economies and the factors that might lead this group of countries to evolve (or not) into a geo-economic and geopolitical bloc. It also provides some conclusions on the future of BRICS+. More detailed information on specific BRICS+ countries including societal challenges they face can be found in the Annex.

2 SELECTION OF COUNTRIES

Goldman Sachs economist Jim O'Neill coined the BRIC acronym in a paper from 2001 ('Building Better Global Economic BRICs').[2] He predicted that the share of the BRIC countries (Brazil, Russia, India and China) in the world's economic pie would grow in the next decade and as such also their role in global economic governance. In a follow-up paper in 2003 Goldman Sachs predicted that by 2040 the 'BRIC' countries collectively would be economically bigger than the traditional G6 (U.S., Japan, Germany, France, UK and Italy).

The BRIC acronym took on a life of its own with an associated cottage industry of economic and political analysis. Currently various entities from research centers to investment funds have 'BRIC' in their names. In 2009 the leaders of the BRIC nations held their first summit in Russia, which have since become regular events. In 2010 the leaders of the BRIC nations invited South Africa to join them and the South African President attended summits in 2011 and 2012 as a full member with the group being renamed as BRICS.[3] The rationale for this is that although the South African population is relatively small (around 50 million), it is the largest economy in Africa and often the leading political actor in the African Union.

Many analysts have proposed other similar groupings of states that could play dominant geo-economic roles in the future, such as the MIKT (Mexico, Indonesia, South Korea, Turkey) coined by Goldman Sachs and TIMBI

2 Jim O'Neill, *Building Better Global Economic BRICs*, Global Economics (London: Goldman Sachs, November 30, 2001).

3 Wikipedia, 'BRICS,' Wikipedia, the Free Encyclopedia, n.d., http://en.wikipedia.org/wiki/BRICS.

(Turkey, India, Mexico, Brazil, and Indonesia) by Prof. J. Goldstone.[4] Within the BRICS, cooperation between more democratic India, Brazil and South Africa has often taken place under the banner of the IBSA Dialogue Forum, while less democratic (and permanent members of the United Nations Security Council, UNSC) China and Russia have collaborated within the Shanghai Cooperation Organization, which also includes several Central Asian states.

In this study we opted not to focus exclusively on the 5 BRICS countries. We also wanted to look at some other large middle-income emerging economies of particular and increasing importance for the European Union (EU) and the Netherlands. This made the selection of Turkey and Indonesia quite obvious. Turkey has very close political and economic ties with the EU. It is a member of the North Atlantic Treaty Organization (NATO) and the EU Customs Union, an EU candidate country and the second largest country (after Russia) with which the EU shares a land border. In the 2000s it significantly improved its economic performance, regained its political confidence and became much more active internationally, especially in the Middle East, Central Asia and Africa where it aspires to be a model for other states in the region. Indonesia is the fourth-largest country in the world in terms of population (above Brazil and Russia) and its population is expected to continue to grow rapidly. The Indonesian economy has developed very fast in the first decade of 21st century, reinforcing its leading position in southeast Asia and its leadership of the ASEAN group of southeast Asian nations. In addition, it has important historical and economic ties with the Netherlands.

The choice of South Korea might be considered less straightforward; it is already a member of the Organisation for Economic Cooperation and Development (OECD), a club of developed countries, and in terms of population it is well behind the other countries in our selection (with the exception of South Africa). At the same time, as one of the East Asian Tigers it provides an interesting example of a possible future economic (and possibly political) evolution of other developing economies. Many

4 Jack A. Goldstone, 'Rise of the TIMBIs,' Foreign Policy, December 2, 2011, http://www.foreignpolicy.com/articles/2011/12/02/rise_of_the_timbis.

organizations such as Dow Jones and MSCI Barra still classify South Korea as an emerging economy.[5] It has also recently deepened its ties with the EU by signing a Free Trade Agreement in late 2010.

Altogether this gives us a group of eight countries that we will call 'BRICS+' in this report. Obviously this is not the only possible list of large emerging economies and some might criticize the inclusion of countries such as South Africa and Korea because of their small populations.[6] Therefore it is also worth mentioning for at least some other countries the reasons for their exclusion.

Mexico, a large middle-income country witnessing strong growth potential, is often mentioned. Mexico is very closely integrated economically within the North American Free Trade Agreement (NAFTA) and the United States is the destination for more than 80% of its exports. These close ties within North America make it less important economically for the EU. Politically, its relationship with the U.S. is also by far the most important for Mexico. Mexico's focus on the North American continent, dominated by the U.S., seems to limit its significance on the global or regional scale compared with other countries in our selection.

Some other larger countries such as Pakistan, Nigeria and Bangladesh might be considered on the basis of demographics, yet they are still rather underdeveloped. Their low economic development limits their possible geopolitical ambitions and weight on the international scene. They are more often considered a source of problems rather than contributors to global governance. Consequently, their governments are expected to focus more on domestic or regional issues rather than on playing an active role on the global stage.

5 Wikipedia, 'Emerging Markets,' Wikipedia, the Free Encyclopedia, n.d., http://en.wikipedia.org/wiki/Emerging_markets.

6 Antoine van Agtmael, 'Think Again: The BRICS,' Foreign Policy, November 2012, http://www.foreignpolicy.com/articles/2012/10/08/think_again_the_brics.

3 MAIN POWER TRENDS AMONG THE BRICS+

In this chapter we analyze the shifting balance of power between the BRICS+ and the West. We attempt to identify the impact of the rise of emerging economies in this respect. In this context the notion of national power comes to mind. National power can be defined as 'all of the means available to the government in its pursuit of national objectives'.[7] Some authors try to quantify national power by combining several variables measuring different elements of power into one aggregate index. In practice, however, national power is context-dependent and can be evaluated only in relation to other actor(s) and the situation in which power is being exercised.[8] This limits the usefulness of aggregate measures of national power in any specific situation or event.

Our goal however is to evaluate medium- and long-term changes in power balances between states. In this respect the concept of national power and its constituting elements provide a useful framework for analysis. There are many possible elements of national power. However, the following five components are essential for any analysis:

- Population
- Economy
- Public finances
- Military power
- Technological sophistication

7 U.S. Department of Defense, 'Instruments of National Power,' *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington, D. C., April 12, 2001), http://www.fas.org/irp/doddir/dod/jp1_02-april2010.pdf.

8 David Jablonsky, 'National Power,' in *The U.S. Army War College Guide to National Security Issues*, vol. 1: Theory of War and Strategy, Fourth. (Pennsylvania: U.S. Army War College, 2010), 123.

This chapter reviews broad trends in BRICS+ countries with respect to all five components over the last 10–20 years. These trends within countries however, provide only a limited picture. In the next steps we will look at the interactions between BRICS+ and the West in various domains.

3.1 POPULATION

Demographic projections are among the most reliable in social sciences for future trends. For instance, the size of the labor force in a particular country in 20 years' time is to a large extent already determined since young people who will join the labor force in that time are already born. Even when demographic dynamics in a country experience a rapid change, it typically takes many years for aggregate numbers to change significantly. Fertility patterns and demographic statistics are thus relevant measures for a country's future potential. Countries with rapidly rising populations will have a larger number of workers in the future and larger economic output, all other things being equal. However, when young people suffer from high unemployment and inequality, their large share in the population might increase the risk of political instability in that country.[9]

Demographically, the BRICS+ countries do not bear many similarities (see Figure 1). They can be separated into two broad clusters based on the expected population growth rate:

- Slow-growing (or declining) and aging: Russia, South Korea and China;
- Fast growing and young: India, Indonesia, Turkey and Brazil.

South Africa is placed somewhere between these two clusters. On the one hand, it is still a young country with a higher fertility rate than any other BRICS+ country except India (2.5 births per woman). On the other hand, its very high mortality rate[10] makes its expected population growth closer to the first cluster than the second.

9 I. Bremmer and P. Keat, *The Fat Tails: The Power of Political Knowledge for Strategic Investing* (Oxford: Oxford University Press, 2009).

10 Probability for a newborn male infant to live to 65 years is just 32% in South Africa, by far the lowest number among all BRICS+ countries. By way of comparison, it is 76% in China.

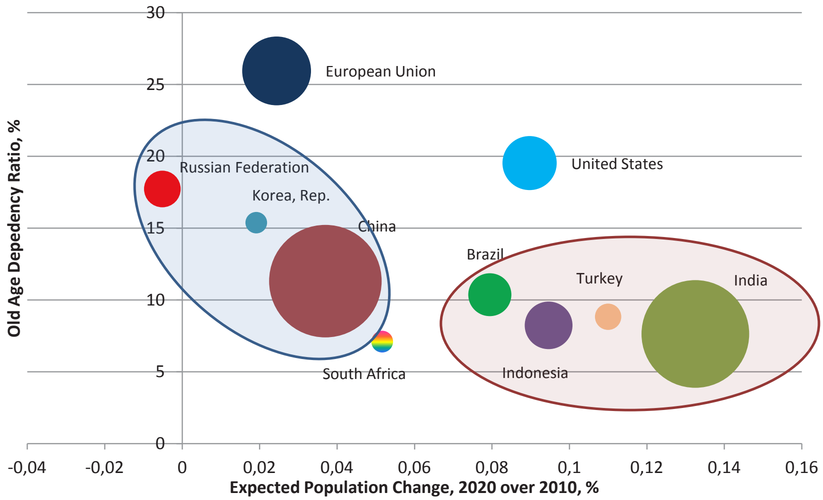

FIGURE 1 DEMOGRAPHIC PROFILE OF BRICS+, THE EU AND THE U.S. SIZE OF BUBBLE REPRESENTS TOTAL POPULATION OF A COUNTRY. SOURCE: UN WORLD POPULATION PROSPECTS, THE 2010 REVISION, HTTP://ESA.UN.ORG/WPP/INDEX.HTM.

Although population growth in some BRICS+ countries is expected to be considerable, only India's population is likely to grow at a rate faster than the world's average in the next 30 years. India is also expected to become the world's most populous nation around 2020, overtaking China. Nevertheless, the combined population of BRICS+ countries is likely to decline from 48% of the world total in 2010 to 47% in 2020 and 43% in 2040.

3.2 ECONOMICS

The first decade of the 21st century was a time of rapid economic growth in large emerging economies. As Figure 2 illustrates, growth in all BRICS+ economies was faster in the first decade of 21st century than in the 1990s, with the exception of South Korea.[11] In the case of Russia the reversal of economic fortunes was striking; the average growth rate in Russia went from -3.6% in the 1990s to +4.9% in 2001–2010. But countries such as India,

11 This is another observation suggesting that this country is in many respects closer to the U.S. and the EU than to the rest of BRICS+.

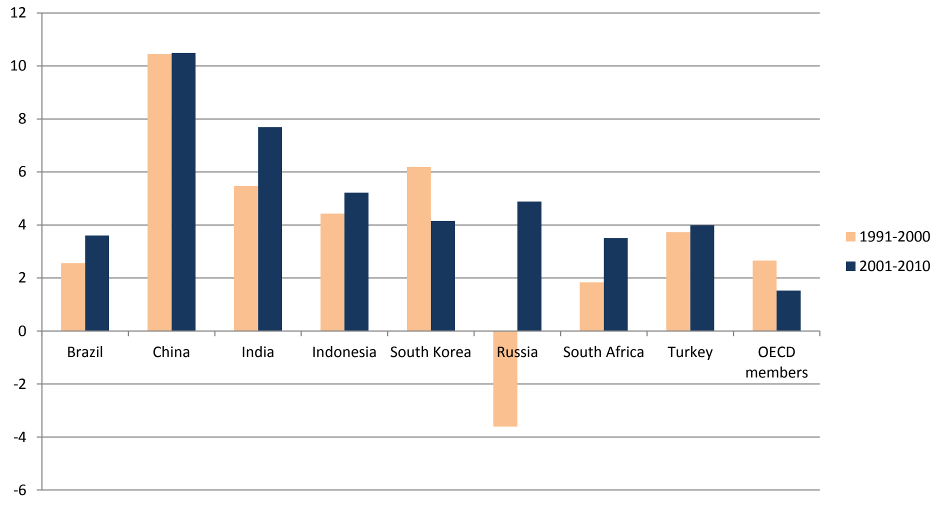

FIGURE 2 AVERAGE GDP GROWTH RATES. SOURCE: WORLD DEVELOPMENT INDICATORS; AUTHORS' CALCULATIONS.

South Africa and Brazil have also seen a significant up-tick in economic growth. By contrast, growth in most OECD countries was substantially slower in the first decade of the 21st century than in the previous decade. Recessions, first after the dotcom boom in early 2000s and then after the financial crisis of 2007–2008 (the Great Recession) have had a large negative impact on growth in OECD countries.

A direct implication of these diverging rates of economic growth is that the BRICS+ economies are getting larger not just in monetary (absolute) terms but also relative to the EU (see Figure 3). The combined gross domestic product (GDP) of all BRICS+ countries increased from 69% of the EU's in 1991 to 147% in 2010 (at purchasing power parity, PPP). The chart also shows that growth in the BRICS+ accelerated substantially around 2003, mostly as a result of accelerated growth in China.

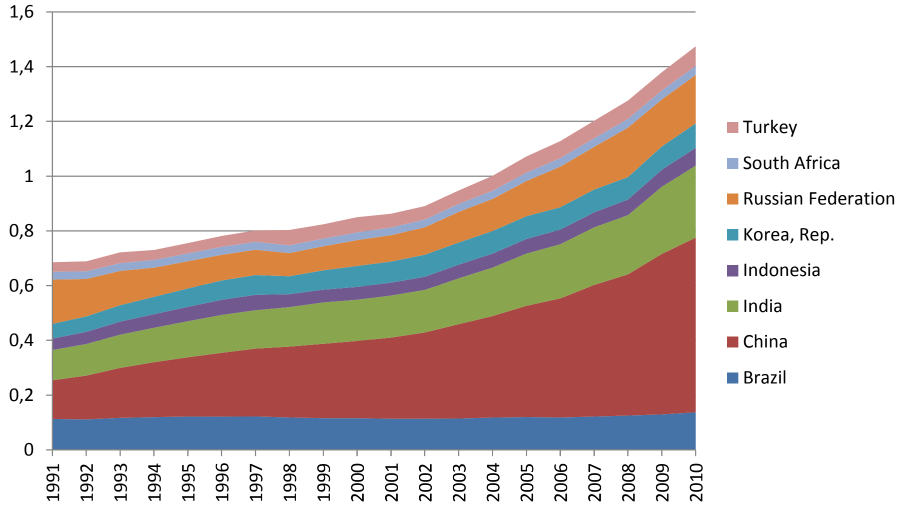

FIGURE 3 GDP OF BRICS+ COUNTRIES AS PERCENTAGE OF EU'S GDP (AT PPP IN CURRENT INTERNATIONAL DOLLARS). SOURCE: WORLD DEVELOPMENT INDICATORS; AUTHORS' CALCULATIONS.

Spectacular growth in China made the real difference. It managed to more than double the size of its economy relative to the EU's in both decades (see Table 1). As a result, its GDP leaped from just 14% of the EU's in 1991 to 64% in 2010. Other countries were not as successful. The 1990s were a difficult decade for Russia and South Africa; their economies actually shrank relative to the EU's, while the Brazilian and Indonesian economies saw only minor increases. This volatility in the economic performance of emerging countries should be kept in mind when considering forecasts projecting growth rates for the BRICS+ well into the future. Others are more skeptical, arguing that increasing wealth will dampen rampant growth as consumers want more health care, education and free time.[12]

12 van Agtmael, 'Think Again: The BRICS.'

COUNTRY	1991	2001	2010
Brazil	11.3%	11.4%	13.7%
China	14.1%	29.6%	63.8%
India	11.1%	15.4%	26.3%
Indonesia	4.2%	4.7%	6.5%
South Korea	5.4%	7.7%	8.9%
Russian Federation	16.2%	9.6%	17.7%
South Africa	2.9%	2.8%	3.3%
Turkey	3.5%	5.0%	7.2%
Combined BRICS+	**68.5%**	**86.2%**	**147.4%**

TABLE 1 GDP OF BRICS+ COUNTRIES AS PERCENTAGE OF EU'S GDP (AT PPP IN CURRENT INTERNATIONAL DOLLARS)

There is substantial debate over the main factors explaining the acceleration in growth in the BRICS+ during the first decade of this century. There are obviously some factors unique to each country. However, given the fact that rapid growth in the first decade of 21st century was not confined to just the BRICS+ but was a common phenomenon among developing countries there should be some more general explanations. We would like to highlight two of them. The first is the 'China factor'. Although the average growth rate in China remained essentially the same in the 1990s and 2000s, the contribution of the Chinese economy to global growth became much larger. One aspect of this growth is that China became the largest market for many commodities. China's exploding demand for commodities put upward pressures on prices worldwide and was likely a major factor in driving the current upswing in a commodity supercycle.[13] This boosted growth among commodity exporters such as Russia, Brazil and South Africa. This commodity boom cannot be viewed independently from China's role as a major energy consumer. The International Energy Agency (IEA) notes that China alone accounts for 30% of the projected growth in energy demand

13 Bilge Erten and José Antonio Ocampo, *Super-cycles of Commodity Prices Since the Mid-nineteenth Century*, DESA Working Paper (United Nations Department of Economic and Social Affairs, February 2012), http://www.un.org/esa/desa/papers/2012/wp110_2012.pdf.

over the next 25 years. By 2035 China will consume nearly 70% more energy than the United States, making it the world's largest energy consumer. India, Indonesia and Brazil will experience similarly high rates of growth in energy consumption.[14]

China also became the largest trading partner of many of its neighbors (more later on the importance of China as a trading partner and its impact on all BRICS+). In addition, Chinese outward foreign investment has played a big role in many developing countries, especially in Africa and Asia.

The second factor was a general expansion of foreign investment driven by the worldwide flood of cheap money after interest rate cuts in the early 2000s in the U.S. and the EU.[15] Private investment into emerging markets accounted for 2% of their GDP in the 1990s but jumped to 9% in 2007.[16] Furthermore, many BRICS+ countries experienced significant economic difficulties, economic and financial crises in 1990s and early 2000s (e.g. Russia, India, Indonesia, Brazil, Turkey). In response, many of these nations improved financial discipline, liberalized markets and restructured many uncompetitive industries. These reform efforts brought benefits in the 2000s.

3.3 PUBLIC FINANCES

Improved financial discipline combined with rapid economic growth led to visible improvements in the public finance situation in the BRICS+, including lower debt and budget deficits. At the same time, the economic crisis starting in 2008–2009 has caused public debt to swell in many European countries. Currently not a single large EU country meets the criteria established by the Maastricht Treaty with respect to government finance:

- The ratio of the annual government deficit to gross domestic product (GDP) must not exceed 3%;
- The ratio of gross government debt to GDP must not exceed 60%.

14 International Energy Agency, 'World Energy Outlook 2011 Factsheet', 2011, http://www.worldenergyoutlook.org/media/weowebsite/factsheets/factsheets.pdf.
15 The current head of the Federal Reserve B. Bernanke called it a 'saving glut'.
16 Ruchir Sharma, *Breakout Nations: In Pursuit of the Next Economic Miracles*, First. (New York: W. W. Norton & Company, Inc., 2012).

Meanwhile six out of eight countries in the BRICS+ group easily satisfy the Maastricht criteria (see Figure 4). The other two, South Africa and India, still have debt lower than 60% of GDP.

The irony of this positive state of BRICS+ finances is that many have in fact been serial defaulters. In the 20th century Brazil defaulted 7 times, Turkey and Indonesia 5 times, India 4 times, Russia 3 times and China twice.[17] These cases only include defaults on external debt; the count would be higher if defaults or restructuring of domestic debt were included.

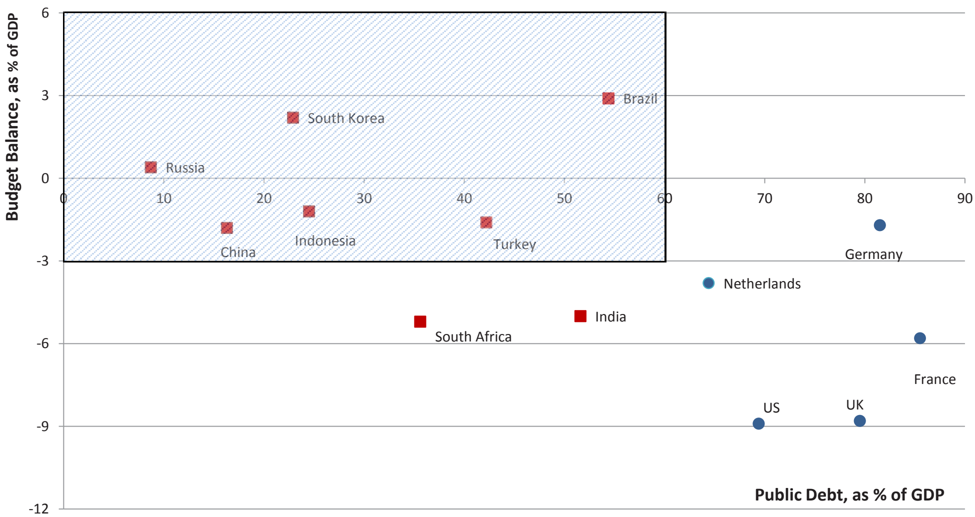

FIGURE 4 PUBLIC FINANCE SITUATION IN BRICS+ AND MAJOR OECD COUNTRIES. THE SHADED REGION SHOWS THE ZONE WHERE THE MAASTRICHT CRITERIA ARE MET. SOURCE: THE CIA WORLD FACTBOOK, DATA FOR 2011 OR LATEST AVAILABLE.

This historic reminder might have relevance for the future as well. Although BRICS+ countries are generally younger and likely to grow faster than the OECD group, economic growth in the BRICS+ has been more volatile than in the OECD. This directly affects government revenues and makes servicing the same amount of debt more challenging, all other things being equal.

17 Reinhart, Carmen M., Vincent R. Reinhart, and Kenneth S. Rogoff. 'Debt Overhangs: Past and Present'. Harvard, 2012. http://www.economics.harvard.edu/files/faculty/51_Debt_Overhangs.pdf. Tables 4 and 5.

The past volatility of the BRICS+ economic and credit performance is reflected in their relatively lower credit ratings. In October 2012 China had the highest rating among BRICS+ according to Standard & Poors'; AA, reflecting 'very strong capacity to meet financial commitments' while Turkey and Indonesia were still below investment grade (BBB-) and could face 'major uncertainties to adverse business, financial and economic conditions.'[18]

In terms of financial health, the BRICS+ countries are varied (see Table 2). Standard & Poors' credit ratings for these states in September 2012 range from 'very strong capacity to meet financial commitments (A+)' such as for Korea, to 'lowest investment grade' such as for Turkey (BB) and Indonesia (BB+). Notable however is that according to the rating agency all BRICS+ governments have 'investment grade' status. In other words, the bonds floated by these emerging economies are considered solid enough to expect repayment. This is a testament to the relative promise and solidity of the economies and their governing institutions, which have only recently started to play a notable role in the international economy.

COUNTRY	RATING
Brazil	BBB
China	AA-
India	BBB-
Indonesia	BB+
Korea Rep of	A+
Russia	BBB
South Africa	BBB+
Turkey	BB

TABLE 2 FOREIGN CURRENCY SOVEREIGN CREDIT RATING BY STANDARD&POOR'S.[19]

18 Standard and Poor's Rating Services, 'Ratings Sovereigns Rating List,' *S&P*, 2012, http://www.standardandpoors.com/ratings/sovereigns/ratings-list/en/us?sectorName=null&subSectorCode=&filter=K.

19 Ibid.

3.4 MILITARY POWER

Rapid economic growth generally fills a government's treasury. Among other things this can be used to increase military expenditure. According to the Stockholm International Peace Research Institute (SIPRI), military spending in the BRICS+ was 109% higher in 2011 than in 2000 (in 2010 constant U.S. dollars), compared with an 80% increase in the U.S. and a 7% increase among the three largest EU spenders (Germany, UK and France).[20] The largest absolute and relative (percentage) increase in military expenditure was in China, where it grew by 286% between 2000 and 2011. However even in China this startling growth looks much less impressive when military expenditure is measured as a percentage of GDP (see Figure 5). With respect to that metric, China's military expenditure grew from 1.9% of GDP in 2000 to 2.1% in 2010.[21]

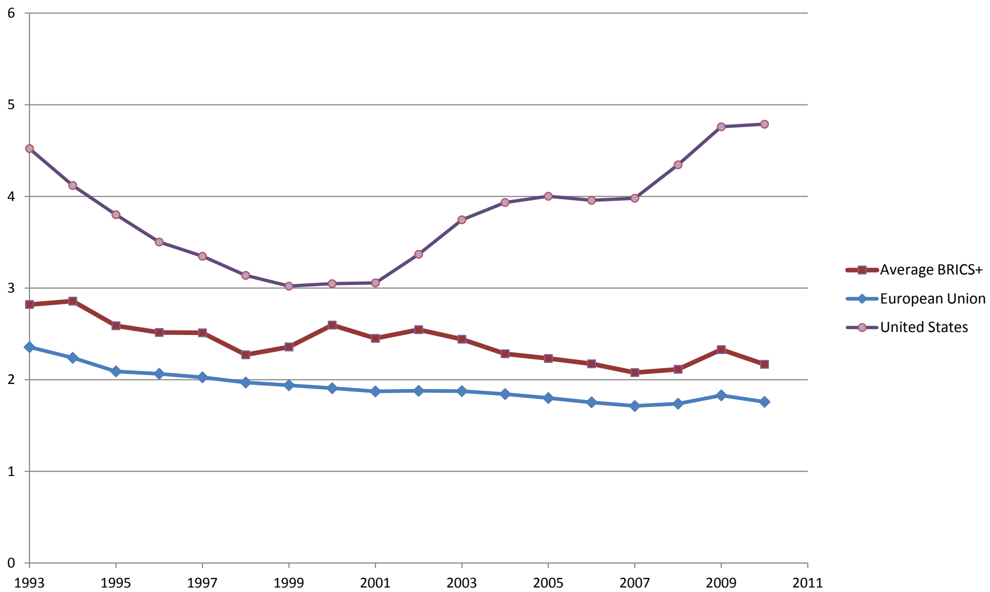

FIGURE 5 MILITARY EXPENDITURE AS % OF GDP.

20 Stockholm International Peace Research Institute, SIPRI Yearbook 2012, SIPRI Yearbook Series (Oxford: Oxford University Press, 2012).

21 Ibid.

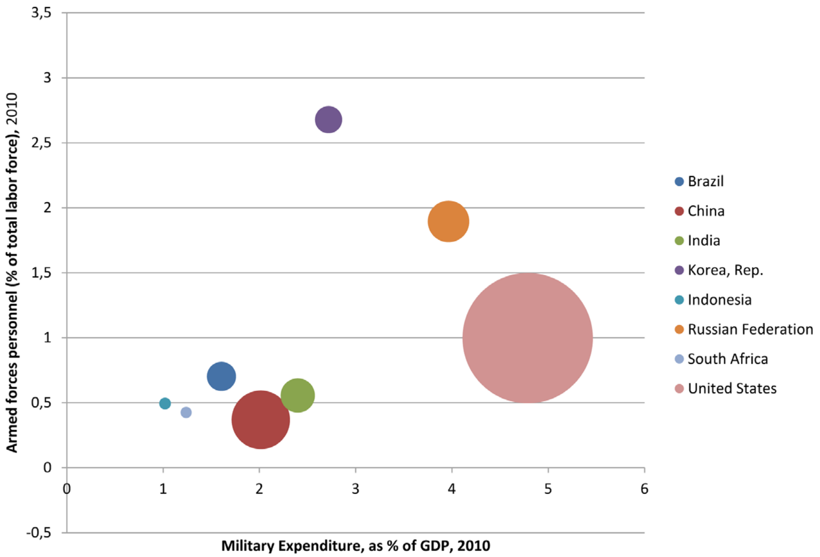

FIGURE 6 MILITARIZATION IN BRICS+ AND THE USA. SIZE OF BUBBLE CORRESPONDS TO THE ABSOLUTE SIZE OF MILITARY EXPENDITURE. SOURCE: WORLD DEVELOPMENT INDICATORS

In other countries, with the exception of the United States in response to the 9/11 attacks and the wars in Iraq and Afghanistan, military expenditure as a share of GDP was generally either flat or declining in the first decade of 21st century (chart). On the whole, on two basic measures of militarization – military expenditure as a share of GDP and armed forces personnel as a percentage of the total labor force – BRICS+ countries do not look excessively militarized. Most of them spend around 2% or less of GDP on defense (which is the NATO goal). Only two countries stand out: Russia and South Korea, the latter of which maintains a large military standing as a result of persistent threats from North Korea (see Figure 6).

Still, since their economies have been expanding rapidly, the absolute increases in military expenditure are significant. Many countries have undertaken large modernization programs of their armed forces. As a result, one can expect considerably improved military capabilities. This appears true at least for India, Brazil and China.

Analyses done by think tanks such as the Center for Strategic and International Studies (CSIS), the Center for Strategic and Budgetary Assessments (CSBA) and RAND Corporation show that China's military capabilities are indeed improving rapidly, as a result of constant double-digit growth in the defense budget over several years.[22] RAND published two studies in 2000 and 2009 assessing the balance of power over the Taiwan Strait. The most recent assessment signaled a rapid modernization and expansion of military capabilities at the disposal of China's People's Liberation Army. This is just one example but it is indicative of changing power trends.

The growing military might of China and in some recent cases its increased assertiveness in territorial disputes, such as in the South China Sea, is raising eyebrows among China's neighbors and in the U.S.

3.5 TECHNOLOGICAL SOPHISTICATION

Economic development and technological sophistication typically go hand in hand. The richer a country becomes, the more it relies on employing capital and moving up the value chain. Since there is no single comprehensive measure of technological development that can be easily used for comparison between countries, we looked at several indicators related to the technological prowess of nations, which are described below. Taken together, these indicators should provide a broad picture of the relative performance of the BRICS+ countries in the science and technology field.

The level of penetration and use of information and communication technology (ICT) infrastructure is one such indicator. ICT has become a key technology in recent decades and its level of penetration provides an important indicator of technological sophistication of firms and population in a particular country. Figure 7 compares the situation in the BRICS+ countries to the EU level in this respect. It illustrates that the penetration of

22 See for example, a broad assessment of Chinese defense modernization in Anthony H. Cordesman and Nicholas S. Yarosh, Chinese Military Modernization and Force Development: A Western Perspective (Washington, D. C.: Center for International and Strategic Studies, July 30, 2012), http://csis.org/files/publication/120727_Chinese_Military_Modernization_Force_Dvlpment.pdf.

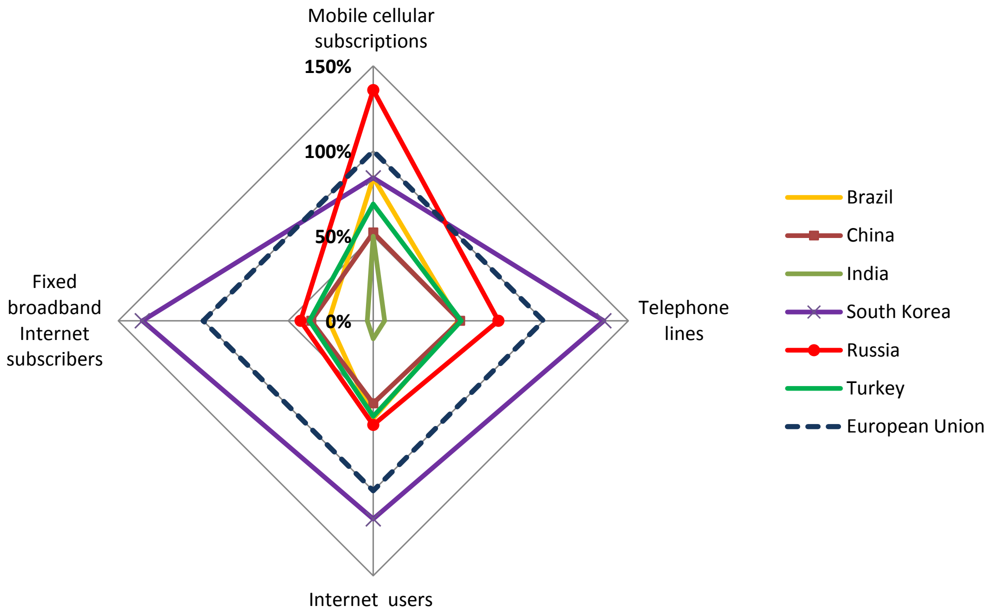

FIGURE 7 ICT INFRASTRUCTURE (EU LEVEL = 100%). EACH INDICATOR MEASURES THE LEVEL OF PENETRATION PER 100 PEOPLE. SOURCE: WORLD DEVELOPMENT INDICATORS.

ICT infrastructure in various BRICS+ differs wildly. On the one hand, South Korea outperforms the EU on most measures. On the other, India is far behind the other countries on almost all measures. This might be surprising given the global prominence of such Indian ICT companies as Infosys, Wipro and TCS. However, these companies are just a pocket of excellence in a country where the penetration of modern ICT infrastructure is quite limited and has yet to reach many areas.

Another way to assess a country's performance in science and technology is to look at how much it invests in research and development (R&D). R&D expenditure is one of the most commonly used measures of innovation. It is an imperfect measure since it shows only input to the innovation process but it also clearly demonstrates the priority that governments and firms give to investment in science and technology.

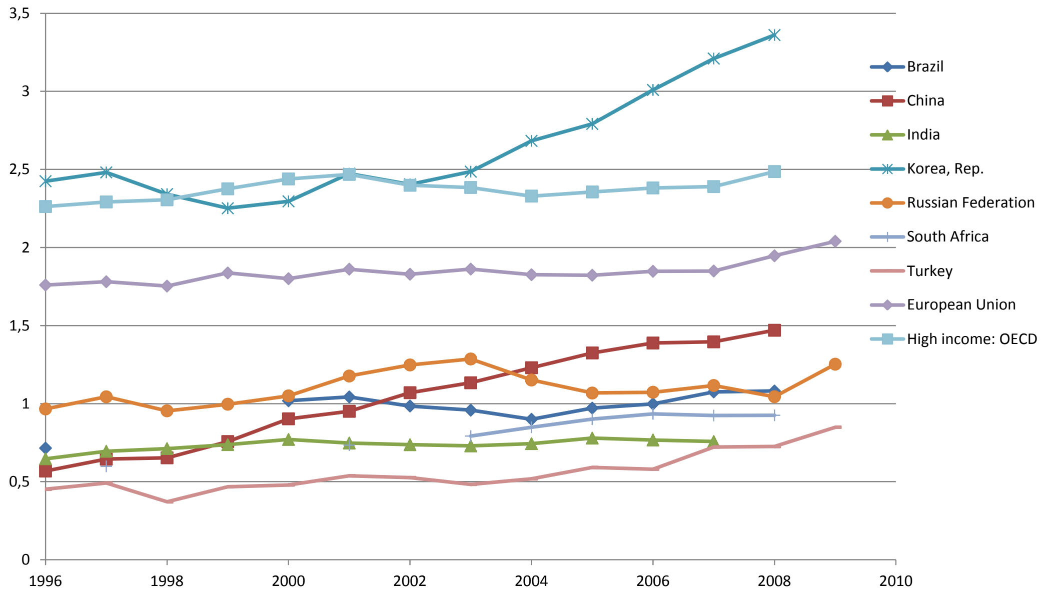

FIGURE 8 R&D EXPENDITURE AS % OF GDP. SOURCE: WORLD DEVELOPMENT INDICATORS.

Figure 8 shows that two countries have had a very rapid increase in R&D expenditure: South Korea and China. Korea's R&D expenditure as a percentage of GDP far exceeds that of the EU and that of the OECD countries in general. In the EU only Finland was spending more than South Korea on R&D in 2010. China is a remarkable case for its sustained growth; it is on the way to triple its R&D expenditure over 15 years. Given that its GDP also grew very rapidly over the same period, this means R&D grew by approximately 19% per year over 1996–2008 in constant prices. Currently, China is above all other BRICS+ countries on this measure (excluding South Korea).

In the rest of the BRICS+ there is also a slight trend toward greater R&D expenditure but this trend is much less sustained and impressive than in South Korea and China. R&D expenditure in this group tends to be either slightly above or below 1% of GDP. Nevertheless, growth in R&D expenditure in almost all of these countries was quite substantial.

Another source of information that is helpful for a quick assessment of countries' technological performance is comparing rankings of countries on various technological development indices: the World Economic Forum's Networked Readiness Index; the International Telecommunication Union's ICT Development Index; the World Bank's Knowledge Economy Index; and the Global Innovation Index of INSEAD, an international business school, in cooperation with the World Intellectual Property Organization.

Table 3 below shows the percentage of countries that perform worse than the given country in each particular ranking. The higher the percentage, the better the score. The four selected rankings give a good indication of the relative standing of the BRICS+ in terms of their ICT infrastructure development and capacity to generate and use innovations.

The average numbers from all the rankings again suggest that South Korea is among the world leaders (it is in the top 10% of all countries) while other BRICS+ countries are far behind. Overall, the results of Russia, Brazil, China and Turkey in the rankings are quite similar. India and Indonesia perform significantly worse and South Africa is between these two groups.

COUNTRY	NETWORKED READINESS INDEX, 2012 (WEF)	ICT DEVELOPMENT INDEX, 2010 (ITU)	KNOWLEDGE ECONOMY INDEX, 2012 (WORLD BANK)	GLOBAL INNOVATION INDEX, 2011 (INSEAD)	AVERAGE
Brazil	54%	58%	59%	62%	**58%**
China	64%	47%	42%	77%	**58%**
India	51%	24%	25%	50%	**38%**
Indonesia	44%	34%	26%	21%	**31%**
Korea	92%	99%	80%	87%	**90%**
Russian Federation	61%	69%	62%	55%	**62%**
South Africa	49%	36%	54%	53%	**48%**
Turkey	63%	61%	53%	48%	**56%**

TABLE 3 BRICS+ POSITION IN INNOVATION/TECHNOLOGY RANKING.

3.6 CONCLUSIONS

In economic terms, the rise of the BRICS+ countries is clear. All countries in this group grew significantly faster during the 2000s than in the previous decade. Fiscal policies within the BRICS+ countries have greatly improved and the state of their public finances is in most cases better than in the EU or the U.S. The improved financial health of the BRICS+ countries gives them more freedom in selecting their own political and economic priorities (rather than following the ones imposed externally e.g. by the International Monetary Fund, IMF) and becoming stewards of their own economic destiny. Military forces have been one of the beneficiaries of increased spending and in some cases the improvement in military capabilities has been rapid and substantial.

However, it should be pointed out that previous economic performance of the BRICS+ economies has been quite volatile and future economic conditions might not be as favorable as they were between 2003 and 2008. Some of these countries are already showing signs of complacency and diminishing drive to implement difficult economic reforms to sustain growth.[23] With the exception of South Korea, all of the BRICS+ countries lag significantly behind the EU in terms of their level of development and technological sophistication. Ultimately, the BRICS+ group (and BRIC for that matter) comprises countries that are very different in terms of their levels of development, economic structure and future challenges and prospects. This creates different interests and national priorities. Although their influence in the international arena has increased significantly, these differences evidently create barriers for developing a common position on many political and economic issues.

23 Sharma, *Breakout Nations: In Pursuit of the Next Economic Miracles*; van Agtmael, 'Think Again: The BRICS.'

4 BRICS+ AND GLOBAL ECONOMIC GOVERNANCE

The previous sections looked at the broad trends within the BRICS+ countries essentially in isolation from each other. These trends, however, do not reveal a great deal as to whether BRICS+ countries are moving toward becoming a bloc, coordinating policy efforts and collectively challenging the existing status quo. For this we need to look at interactions among the BRICS+ countries and between the BRICS+ and the West. This chapter addresses the extent to which the BRICS+ are cooperating strategically on economic governance issues. It reviews changes in geographical trade patterns for BRICS+ in last 10–20 years and examines their proposals and efforts for reforming the global economic and financial system. The next chapter will look at strategic diplomatic cooperation connections and BRICS+ approaches to security issues.

4.1 TRADE

The last two decades have been a period of a very rapid expansion in international trade and BRICS+ countries have been at the forefront of this. From 1995 to 2010 their exports increased by a factor of 6.3.[24] In China the growth was even more breathtaking as its exports increased more than tenfold in the same period. Exports from other BRICS+ countries expanded at a slower but still brisk rate – by 4.4 times in the same period. As a result the importance of BRICS+ countries, especially China, in global merchandise trade has increased greatly in the last 10–15 years (see Figure 9). Together all BRICS+ countries account for more than one fifth of global exports (see Table 4).

24 This number excludes exports from Indonesia because the data on Indonesia were available only from 2003.

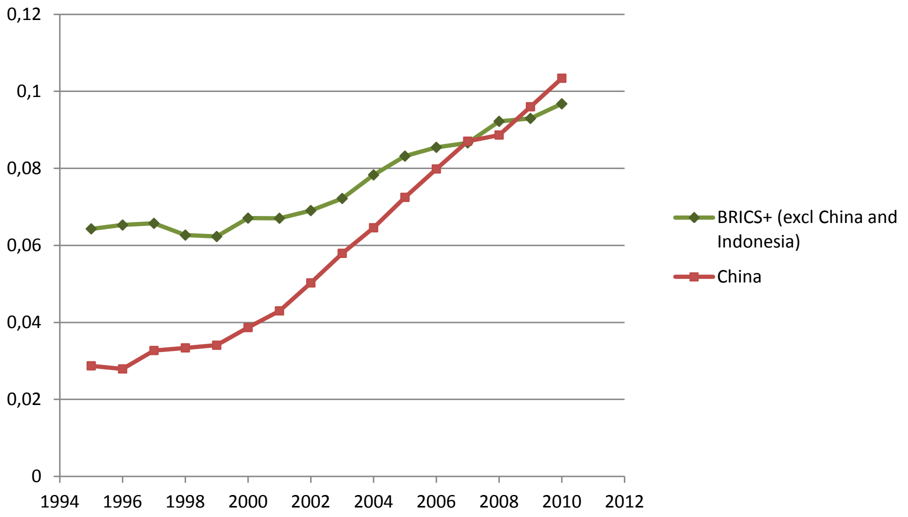

FIGURE 9 BRICS+ SHARE OF WORLD'S EXPORTS.

COUNTRY	SHARE
Brazil	1.3%
China	10,4%
India	1.6%
Indonesia	1.0%
South Korea	3.1%
Russia	2.5%
South Africa	0.6%
Turkey	0.8%
BRICS+ Total	**21.20%**

TABLE 4 SHARE OF WORLD EXPORTS, 2010.

SOURCE: AUTHORS' CALCULATIONS; UN CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD).

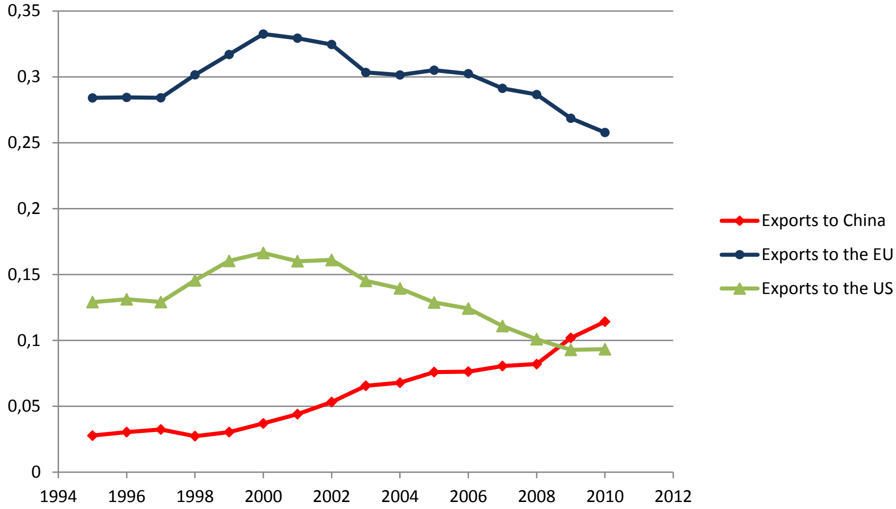

FIGURE 10 UNWEIGHTED AVERAGE SHARE OF BRICS+ EXPORTS.

The ratio of foreign trade to GDP[25] in the BRICS+ countries increased from 41.9% in 1995 to 61.0% in 2008 before sliding to 53.6% in 2010[26] as a result of the global economic crisis. By comparison in the EU this ratio was 78% in 2010. There are substantial differences between individual BRICS+ countries in this respect however. The lowest trade openness ratio was Brazil (23% in 2010) and the highest South Korea (101%).

China is increasingly becoming one of the most important trade partners for BRICS+ countries. The share of China as a destination for BRICS+ exports has been steadily increasing while the shares of the EU and the U.S. have been declining almost as steadily (see Figure 10).[27] However the chart below shows that the EU still remains the main export destination for these emerging economies. This is also apparent from Table 5, which shows major trading partners for each BRICS+ country.

25 This ratio is also known as trade openness ratio or index.
26 These are unweighted shares.
27 We used unweighted averages for all countries in order to give a broader picture of trends in BRICS+ countries.

The EU is the main export market for 6 BRICS+ countries, the exceptions being Indonesia and Korea (see Table 5). In five out of eight BRICS+ countries the EU is also the main origin of imports; and for the other three it is in the top four. From a geopolitical point of view this underlines the influence of the EU and Europe's trade commissioner in particular, in shaping relations with the BRICS+. This provides leverage to the EU, if it chooses to take advantage of it. The gravitational pull exerted by the Chinese economy is more visible in Asia. In Indonesia and South Korea trade with China exceeds that with the EU.

The table further shows that the BRICS+ can be clearly divided into two clusters depending on the economic sector of their main export goods. Such BRICS+ economies as Russia, Brazil, South Africa and Indonesia are heavily dependent on the export of primary commodities – agricultural and/or mineral. At the same time more than half of the merchandized exports from Turkey, Korea, India and China are manufactured goods.

One way to summarize and present changing patterns of trade is to look at how trade 'centers of gravity' have shifted over time. For this we calculated where the center of gravity lay for all BRICS countries in 2000 and 2010 (see Figure 11). In these calculations, the share of trade (exports + imports) for any BRICS+ country with the EU, U.S., BRICS+ and the rest of the world (RoW) is analogous to the mass of the body in a corresponding corner. The location of each country is then determined as the weighted average location of all the mass in a group of these 4 bodies. Thus if a country trades equally (25% of the total) with all 4 selected countries/regions it would be located in the centre of the square. If it trades only with the EU for instance, then its location on the plane would be in the upper-left corner where the EU lies. Arrows show the direction of change in 2010 compared to 2000.

	MAIN COMMODITY EXPORTS			SHARE BY EXPORT DESTINATION					SHARE BY IMPORT ORIGIN				
	Agricultural Products	**Fuels and Mining Products**	**Manufactures**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
BRAZIL	34	27.9	35.2	EU (21.8)	China (15.6)	USA (9.7)	Argentina (9.3)	Japan (3.6)	EU (21.2)	USA (15.1)	China (14.2)	Argentina (8)	Korea (4.7)
CHINA	3.3	3.0	93.6	EU (19.7)	USA (18)	Hong Kong (13.8)	Japan (7.7)	Korea (4.4)	Japan (12.7)	EU (12.1)	Korea (9.9)	Taiwan (8.3)	China (7.7)
INDIA	10.7	25.4	63.9	EU (18.8)	UAE (12.4)	USA (10.7)	China (7.9)	Hong Kong (4.3)	EU (12.1)	China (11.8)	UAE (8.8)	Switzer-land (6.3)	Saudi Arabia (5.8)
INDONESIA	22.8	39.4	37	Japan (16.3)	EU (10.9)	China (9.9)	USA (9.1)	Singapore (8.7)	China (15.1)	Singapore (14.9)	Japan (12.5)	EU (7.3)	USA (6.9)
KOREA, REPUBLIC OF	2.0	9.1	88.2	China (25.1)	EU (11.5)	USA (10.7)	Japan (6.0)	Hong Kong (5.4)	China (16.8)	Japan (15.1)	USA (9.5)	EU (9.1)	Saudi Arabia (6.3)
RUSSIAN FEDERATION	5.2	70.4	20.2	EU (52.2)	Ukraine (5.8)	Turkey (5.1)	China (5.1)	Belarus (4.5)	EU (38.3)	China (15.7)	Ukraine (5.6)	USA (4.5)	Japan (4.1)
SOUTH AFRICA	9.6	37.3	40.1	EU (26.1)	China (11.4)	USA (9.9)	Japan (9.0)	India (4.2)	EU (32.1)	China (14.3)	USA (7.3)	Japan (5.3)	Saudi Arabia (4.0)
TURKEY	10.9	8.2	77.6	EU (47.1)	Iraq (5.3)	Russian Fed. (4.1)	USA (3.3)	UAE (2.9)	EU (39.0)	Russian Fed. (11.6)	China (9.3)	USA (6.6)	Iran (4.1)

TABLE 5 MAJOR TRADING PARTNERS FOR EACH BRICS+ COUNTRY

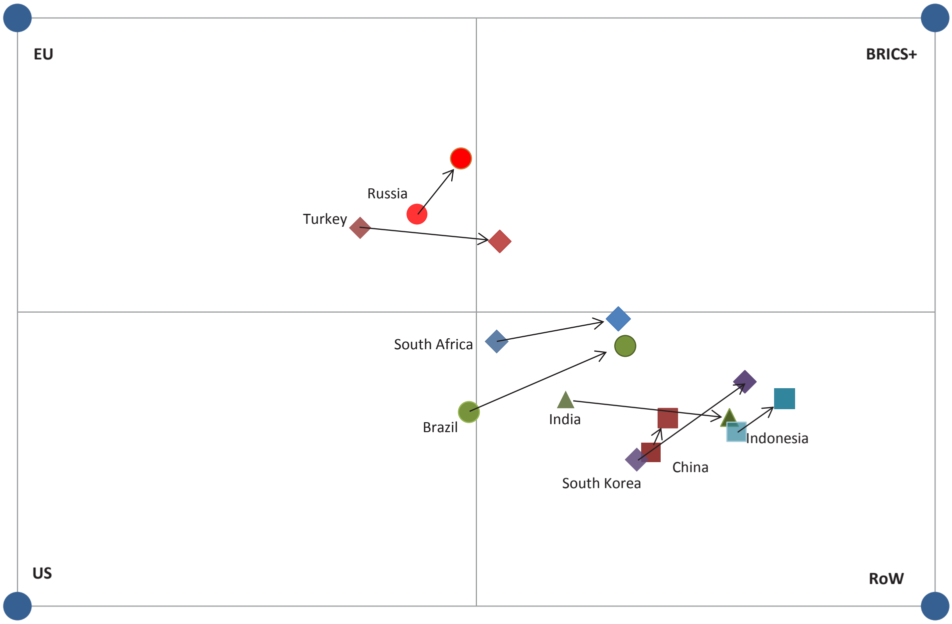

FIGURE 11 TRADE CENTERS OF GRAVITY, 2010 VS. 2000

NOTES: ROW=REST OF WORLD; ORIGIN OF ARROWS CORRESPONDS TO COUNTRY'S TRADE CENTRE OF GRAVITY IN 2000 EXCEPT FOR INDONESIA, FOR WHICH IT CORRESPONDS TO 2003; THE DESTINATION OF ARROWS CORRESPONDS TO COUNTRY'S TRADE CENTRE OF GRAVITY IN 2010. SOURCE: AUTHORS' CALCULATIONS;, UNCTAD

The graph illustrates a clear shift in the centre of gravity over 2000–2010 for all countries. The general movement is towards the upper right-hand corner, implying that inter-BRICS+ trade was expanding more rapidly than BRICS+ trade with other regions. Since growing trade with China was the main driver of this change, China's position shifted less than the other BRICS+ countries. India and Turkey present a partial exception to this general trend. Their centers moved not just rightwards but also downwards indicating that trade with the rest of the world was also expanding rapidly, at the expense of trade with the EU and the U.S.

Despite these shifts, it should be kept in mind that little by way of formal rapprochement appears to be occurring in the economic sphere. BRICS+ countries continue to compete as rivals in various arenas, for example China and Brazil in the quest for resources in Africa.[28] This is underpinned by the fact that no single free trade agreement has yet been signed between any of the original five BRICS countries.

4.2 ARMS TRADE

One aspect of trade is much more strategic in character than any other: this is the trade in armaments. If, as von Clausewitz said, '[w]ar is the continuation of politics by other means', then the arms trade can be also be viewed as a continuation of politics in the economic area. Countries select their arms suppliers very carefully given that they often have to rely on suppliers' services and support for many years. Their views on the security environment, possible future conflicts, quality, friendliness and assessed reliability of suppliers all play an important role in the selection process.

In short, arms-buying countries want to rely on suppliers that they consider friendly or at least neutral toward them. Price and performance characteristics sometimes play a subordinate role to political and strategic considerations. Sometimes large arms deals serve as a substantial stepping stone toward a closer political relationship between a supplier and a buyer, and might lead to a closer relationship in other areas as well.

This is why we look at main arms suppliers for all BRICS+ countries. Table 6 indicates three main arms suppliers to each BRICS+ country, which are listed in the top row. The number in parentheses indicates the share of all arms over the period 2000–2011 that came from that supplier.

28 van Agtmael, 'Think Again: The BRICS.'

BRAZIL	CHINA	INDIA	INDONESIA	SOUTH KOREA	RUSSIA	TURKEY	SOUTH AFRICA
France (31%)	Russia (86%)	Russia (77%)	Russia (29%)	USA (74%)	Ukraine (87%)	USA (33%)	Germany (63%)
USA (17%)	France (7%)	Israel (5%)	Netherlands (25%)	Germany (12%)	Czech Republic (8%)	Germany (28%)	Sweden (19%)
Germany (14%)	Switzerland (3%)	UK (4%)	South Korea (19%)	France (8%)	Germany (4%)	Israel (10%)	UK (9%)

TABLE 6 MAIN ARMS SUPPLIERS TO BRICS+ COUNTRIES (FOR 2000-2011) SOURCE: SIPRI ARMS TRANSFERS DATABASE, HTTP://WWW.SIPRI.ORG/DATABASES/ARMSTRANSFERS.

This table reveals some interesting facts. First, among BRICS+ countries only Russia has been a substantial supplier of armaments to other BRICS+ countries (with the exception of South Korea, a large supplier to Indonesia). Second, all BRICS+ can be clearly split in two groups: the first one include Brazil, South Korea, Turkey and South Africa, who rely on Western countries as suppliers; and the second one of China and India, for whom Russia is a dominant supplier. Indonesia is somewhere in between, with Russia and South Korea competing with the EU countries.

It should be also noted that this table reflects aggregate results for the last 12 years. Given that many countries want to develop their domestic defense industry and become significant arms suppliers on their own (Turkey and South Korea, for example) it might look quite different in a few years' time. For example, China has been quite successful in this respect and has significantly cut purchases of Russian weapons in recent years.

4.3 PROTECTIONISM

Of growing concern is the scale of protectionist measures in the BRICS+. Figure 12 illustrates the number of protectionist measures identified by the European Commission over the past four years.[29] For comparative purposes,

29 Directorate-General for Trade, *Ninth Report on Potentially Trade Restrictive Measures Identified in the Context of the Financial and Economic Crisis* (European Commission, May 1, 2012), http://trade.ec.europa.eu/doclib/docs/2012/june/tradoc_149526.pdf.

the United States and Japan are included as well. It shows that Russia has introduced the greatest number of measures in the four-year period, mostly in the form of border barriers such as duties and quotas. Indonesia also has substantial services barriers in place as well as murky 'behind-the-border' barriers which may include certification requirements that discriminate against international goods and set standards that deviate from those recognized internationally. Oft-used measures furthermore include the application of stimuli to support domestic companies, for instance to promote the creation of 'national champions'. The European Commission has observed that 'notably Brazil, China, India, South Africa and Ukraine have recently introduced large stimulus packages to promote specific industrial sectors, combined with trade distortive measures.'[30] Other measures, which are also common in developed countries, may include the preferable treatment of domestic producers for government procurement. The graph below illustrates that the BRICS+ economies have more protectionist measures in place than the developed economies.

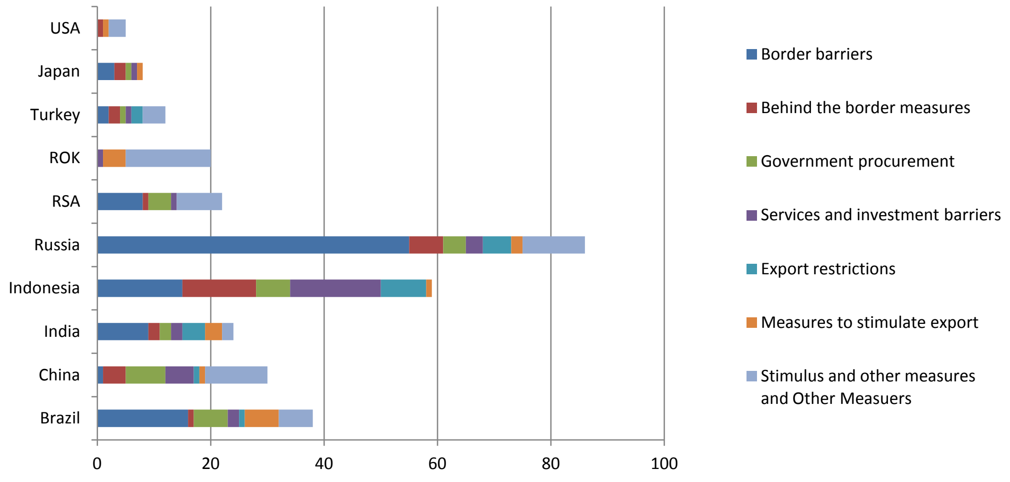

FIGURE 12 NUMBER OF POTENTIALLY TRADE-RESTRICTIVE MEASURE INTRODUCED FROM OCTOBER 2008 TO MAY 2012.[31]

30 Ibid.
31 Ibid.

These market-distorting measures are undertaken to maintain or increase economic advantage by protecting domestic production. The emerging economies, we learn from the declarations of yearly meetings of BRICS leaders, have claimed special privileges as developing economies which offers them 'policy space to pursue legitimate objectives of growth', in other words allowing them to apply protectionist measures.[32] The argument advanced is that because emerging economies are still relatively poor in terms of GDP per capita, they are entitled to protect their markets and industries.

4.4 REFORM OF INTERNATIONAL FINANCIAL INSTITUTIONS

The data above demonstrate the diverse economic and financial characteristics of the BRICS+ countries, yet we have also seen that there is more and more intra-BRICS+ trade taking place. On several economic and financial policy measures the states are increasingly finding common ground. Coalescing mostly takes place within the BRICS arrangement. The strongest example of how the emerging economies are taking an assertive stance on the international stage is with respect to international finance and development.

Among the most important topics is the issue of the future of international financial institutions. BRICS policy is potentially leading to the development of alternatives to the existing international financial institutions, and thereby a move away from the current international economic model.

IMF and World Bank reform is a major issue of concern. The BRICS countries are frustrated with the balance of power in the international financial institutions, which is skewed towards the Western, developed economies. The emerging economies are concerned by a lack of representative voting weight and allocation of senior positions in the institutions. Since at least 2009 they have repeatedly pointed this out in common declarations. The BRICS summit in 2012 noted that 'more representative international financial architectures, with an increase in the voice and representation of

32 The 2nd Meeting of the BRICS Trade and Economic Ministers, 'Joint Press Release: Overview of Global Economic Developments and Impact on Trade and Investment', March 28, 2012, http://www.brics.utoronto.ca/docs/120328-trade.pdf.

developing countries' were needed to create stability in the international financial system. To underline the increasing power of their economies, the BRICS alluded to the notion that they are 'now significant contributors to global recovery.' In 2010 a package of IMF/World Bank reform was agreed upon, yielding a greater say in the institutions to emerging economies. The BRICS voiced increasing frustration with the lack of comprehensive implementation of the reform agreement, and warned that their contribution to solving the global financial crisis was dependent on 'confidence that the entire membership of the [IMF] is truly committed to implement' the reforms. A related factor is that the global financial crisis harms development initiatives in developing countries. This led the BRICS to worry that most of the attention was going to the wealthy eurozone countries instead of pursuing a development agenda.

At previous BRICS summits, the leaders of the emerging economies called for more equitable representation in international financial institutions, as well as greater attention to the impact of the crisis on developing countries. From their point of view, these calls went unheeded. As a result, at the 2012 summit the leaders of the BRICS countries announced that they would explore the creation of a 'new Development Bank for mobilizing resources for infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries.' This so-called BRICS bank will be discussed at the next BRICS summit in 2013, yet given the current and future size of the BRICS economies it could effectively become an alternative to the existing World Bank, and offer another vehicle through which the BRICS economies influence the global economy while pursuing greater cooperation.

This matches the commitment of the BRICS economies to 'expand economic cooperation both among BRICS countries and between BRICS countries and all developing countries, with a South-South perspective.'[33] This underlines that the BRICS countries exhibit the ambition to play a role of global economic significance, and could in time evolve into a alternative South-South economic regime.

33 BRICS Trade Ministers, 'Ministerial Declaration of the BRICS Trade Ministers', December 14, 2011, http://www.brics.utoronto.ca/docs/111214-trade.html.

4.5 FINANCIAL INITIATIVES

BRICS+ countries are some of the largest holders of foreign reserves in the world. China alone accounts for 27% of total world reserves (including gold), making it by far the largest holder in the world.[34] However, four other BRICS+ countries – Russia, Brazil, South Korea and India – are also among the top ten holders of foreign reserves. Altogether the BRICS+ own 42% of world reserves – a higher share than the OECD countries. Since 2000 the total reserves of the 4 BRIC countries have increased by a factor of 16. The large holdings of U.S. dollars is a double-edged sword: it gives these countries the ability to influence the exchange rate of their own currencies, yet it also gives them leverage over the U.S. Treasury. Large holdings of foreign currencies also make BRICS+ countries active participants in the discussion on global reserve currencies. It also is leading them to look for ways to reduce their reliance on the U.S. dollar given its current volatility in light of the credit crisis.

The renminbi (RMB) is the most likely candidate to be a competitor to the dollar and the euro as a vehicle for international trade. Until now, China has artificially kept its exchange rate low in order to promote export-led growth. This and controls on the movement of capital have kept it from using its currency to settle accounts with other countries. However this might change and recent decisions at the BRICS summit in 2012 indicate a new step in this direction.

The use of the renminbi in the settlement of cross-border trade has been growing very rapidly and RMB-denominated trade transactions account for almost 10% of China's total trade.[35] In August 2012 HSBC concluded the first renminbi-denominated transaction with India. This demonstrates increasing willingness from the Chinese to use the RMB as a currency for international finance, as well as confidence from trading partners in the Chinese currency.

34 Data for 2011 from the World Bank. Data for China excludes reserves of Hong Kong.

35 Lingling Wei, 'Yuan Shows Potential to Be Reserve Currency,' *The Wall Street Journal*, June 29, 2012, http://online.wsj.com/article/SB100014240527023035615045774962333626944 86.html.

The growing volatility in international capital markets as a result of the euro crisis and the previous U.S. credit crisis have led to skeptical attitudes towards both the dollar and the euro. This volatility has substantial impact on intra-BRICS+ trade and commodity prices. Creating alternative models that limit exposure to euro or dollar volatility therefore makes sense. While the details are still under consideration, this signals a move away from the dollar as the only global reserve currency.

The so-called Master Agreement on Extending Credit Facility in Local Currency and the BRICS Multilateral Letter of Credit Confirmation Facility Agreement are two initiatives presented at the 2012 BRICS summit in New Delhi. Both initiatives are intended to facilitate a move away from relying on the U.S. dollar as a go-between in intra-BRICS trade.

The BRICS challenge to the reserve currency is also apparent in criticism of U.S. financial policy and calls for greater transparency and more 'balanced, proactive, coordinated and countercyclical' macroeconomic policy from the U.S.[36] The BRICS have also called for a balancing of foreign reserve holdings to better match the SDR (Special Drawing Rights – a basket of international currencies developed by the IMF), in order to reduce dollar holdings. In addition, they have called for more studies from the IMF on the role of reserve currencies in general.

The fundamental question remains whether the BRICS will play a role in stabilizing the existing international financial system, or whether they wish to develop alternatives to shield themselves from its volatility?

4.6 CONCLUSIONS

The role of the BRICS+ and other large emerging economies in global trade and finance is expanding rapidly. It should come as no surprise then that these countries expect a greater say in decision making on the issues related to the governance of global trade and the international financial system. The last decade has also seen a rapid expansion of inter-BRICS+ trade and investment, driven foremost by the breathtaking growth in China.

36 Reuters, 'Full Text of BRIC Countries Joint Communique,' *Reuters*, March 14, 2009, http://www.reuters.com/article/2009/03/14/g20-brics-text-idUSLE47000820090314.

China's role is especially prominent among Asian countries, where it is the main trading partner for many countries. Expanding inter-BRICS+ trade provides an economic foundation for increasing policy coordination on issues of global economic and financial governance. In order to form a counterweight to this process, Europe along with the United States could from a strategic perspective aim to increase trade relations with the non-China BRICS+ in order to reduce the increasing momentum towards BRICS+ economic cohesion and policy coordination. Economically this would also allow Europe to enjoy the fruits of the growth witnessed among the BRICS+ at a time of domestic economic malaise.

BRICS+ countries often share similar concerns over Western economic policies. One of the issues where they find common ground is reallocation of votes between the West and developing countries in the international financial institutions. Loose monetary policy, especially in the U.S., that might undermine the value of foreign currency reserves held by BRICS+, is another cause for concern in many of these countries. It is also a factor in their search for alternatives to the U.S. dollar as the main reserve currency. The proposal of a BRICS bank and their currency initiatives demonstrate a rising ambition among the BRICS to play an increasingly large role in international economics and finance as an alternative to dominant Western regimes.

At the same time it seems that it is much easier for the BRICS+ to demonstrate their opposition to ´Western´ economic policies and institutions than it is for them to put forward a ´positive´ international agenda. So far their proposals have often been vague and limited in scope. These countries have also been quite active in introducing trade-restrictive measures in the wake of the global financial crisis of 2007–2008, despite their pledges at G20 summits.

5 DIPLOMATIC INTERACTIONS OF THE BRICS+ AND THE WEST

This chapter assesses the extent to which there is strategic cooperation among the BRICS+ in diplomatic forums and on selected security issues. What unites the countries in this study is first and foremost their status as 'emerging economies', their strong economic growth and their desire to be heard in the debate on international economic and financial governance. At the same time it seems clear that this is a grouping of very different countries in terms of level of development, geopolitical aspirations, economic structure, future challenges and future prospects. As mentioned in the introduction, the question is whether their new-found wealth also lies at the basis of closer diplomatic ties. More importantly, does this translate into a more assertive stance on geopolitical issues and a drive towards a mutual coordination of policies in this area? In other words, is there a kind of 'BRICS+ pact' on issues of global governance and security?

To test whether this is the case, the following chapter demonstrates the results of an analysis into four different elements of diplomatic interaction: first, an assessment is made of the extent of formal diplomatic ties between the BRICS+ countries and the rest of the world (5.1). The second part of this chapter focuses on the decision-making behavior of the BRICS+ countries within the UNSC (section 5.2). Paragraph 5.3 discusses the degree to which common positions are taken during Non-Proliferation Treaty (NPT) Review Conferences and, finally, paragraph 5.4 analyzes the extent of BRICS+ coordination during Conference of the Parties (COP) Summits in the context of the United Nations Framework Convention on Climate Change (UNFCCC).

5.1 DIPLOMATIC CONNECTIONS

Trade relations are important, but just one factor connecting two countries. Diplomatic links are another crucial consideration. Diplomatic relationships are top-down and centralized in a way that makes them very different from trade (or other economic) connections, which are – at least in theory – an aggregate outcome of decisions made by many independent actors and as such are much more bottom-up.

There is no single indicator that can be used to judge the closeness of the diplomatic relationship between two countries. Many are possible and some can be only assessed in a qualitative way, e.g. the extent to which two countries share common ground with respect to the most important international issues. In this section we use two more quantitative proxies to assess the strength of diplomatic connections between countries. The first is the number of consulates they keep in a particular country. The second is destinations for official visits by the head of state or the head of government. These indicators obviously provide only a very crude assessment that misses out many important considerations in the relationship between countries. But at the same time they are more objective and verifiable and less easily manipulated. For example, having an additional consulate is expensive; a building (or part of it) must be bought or leased and additional diplomats and other staff hired. Therefore, unless there are sufficient grounds, such as significant economic, touristic or other links to a particular region of a country, it is unlikely that a consulate will be established. Obviously if a country is territorially small, it probably does not make sense to have several consulates. As a result, more densely populated countries should expect a proportionally smaller number of consulates than less densely populated, large countries (in proportion to population). Another disadvantage is that the number of consulates does not tell much about commonalities of political positions between countries. Hence, in the next section we consider diplomatic positions of the BRICS+ on several important international issues. However, despite all the aforementioned drawbacks, the number of consulates nonetheless provides a useful indication of where main interests currently lie.

In Table 7 we list for all BRICS+ the countries where they keep at least three consulates. The countries are ordered by the number of consulates, which is given in parentheses. Other BRICS+ countries are highlighted in green.

BRAZIL	CHINA	INDIA	INDONESIA	SOUTH KOREA	RUSSIA	TURKEY	SOUTH AFRICA
U.S. (10)	Japan (6)	U.S. (4)	Malaysia (5)	U.S. (11)	Germany (5)	Germany (12)	U.S. (3)
Bolivia (5)	France (5)	Afghanistan (4)	Australia (4)	Japan (9)	U.S. (4)	France (4)	
Paraguay (5)	U.S. (5)	Australia (3)		China (7)	China (4)	Greece (4)	
Argentina (4)	Canada (4)	Germany (3)		Russia (4)	Italy (4)	U.S. (4)	
Uruguay (4)	Russia (4)	South Africa (3)		Germany (3)	Japan (4)	Austria (3)	
Canada (3)	Germany (3)	Sri Lanka (3)		Canada (3)	Ukraine (4)	China (3)	
Venezuela (3)	South Africa (3)				India (3)	Iraq (3)	
					Italy (3)	Russia (3)	
					Poland (3)		
					Turkey (3)		

TABLE 7 CONSULAR PRESENCE OF BRICS+ COUNTRIES.

There are some important lessons that can be drawn from the table. Neighbors are important. Despite often strained relationships between some neighboring countries (e.g., China and Japan, Russia and Poland, Turkey and Greece), all countries keep significant number of consulates there. Judging by the number of consulates that the BRICS+ maintain in various countries, the West still seems more important than other BRICS+. The U.S., Germany and Japan are the largest countries by the number of BRICS+ consulates. China comes fourth on this list. In terms of inter-BRICS+ diplomatic presence the three most important countries seem to be China, Russia and India. Indonesia and South Africa do not have a substantial diplomatic presence abroad compared to other BRICS+. They also focus mainly on close neighbors.

It should be kept in mind that diplomatic presence is typically (but not always) a lagging indicator; it takes some time for diplomats to react to the changing intensity of bilateral connections. As such it presents a somewhat outdated picture. In a few years' time it might become more BRICS+-centric, reflecting more fully the changing trends in trade highlighted earlier. But we still expect that Western countries will remain dominant on this indicator over the next ten years.

These observations are largely supported by the destinations of BRICS+ state leaders' visits in the last three years. Neighboring countries typically account for the largest share of state visits. The Brazilian president most often visits other Latin American countries and close to half of all visits of the South African president were to African countries. For Russia, countries in the EU and the former Soviet Union accounted for almost two-thirds of presidential visits in 2009–2011. BRICS+ countries account for a relatively small share of official visits. Unsurprisingly, China receives more official visits than any other BRICS+ country. However it is usually not the most frequently visited country, even by leaders of the BRICS+ group.

5.2 THE BRICS+ WITHIN THE UNITED NATIONS SECURITY COUNCIL

The UNSC is commonly seen as the pinnacle of geopolitics. If the BRICS+ wish to influence international decision making, the UNSC is the obvious vehicle of choice. If coordination is taking place among the BRICS+, one would expect disagreement with other Security Council members to occur more often than not. However, in practice, the overwhelming majority of resolutions which are put to a vote are passed unanimously.

Figure 13 shows that in the observed period (1997–2012)[37], only 7% of UNSC resolutions were adopted with some countries either having abstained or voted against. Topically, most of the observed disagreement centers around issues that affect another state's sovereignty, such as sanctions, diplomatic pressures/demands, and non-combat missions (see Figure 14).

Cases of 'across-the-board' abstentions – cases when Russia and/or China, and at least one other Western and BRICS+ country abstain – are rare (4% of the total; see Figure 15). The only two observed cases where this has happened were over the imposition of no-fly zones over Libya in March 2011 (UNSC Resolution 1973) and the March 2005 resolution to refer the war in Darfur to the International Criminal Court (UNSC Resolution 1593).

37 An analysis was carried out of all UNSC resolutions which were passed in the period 1997-2012.

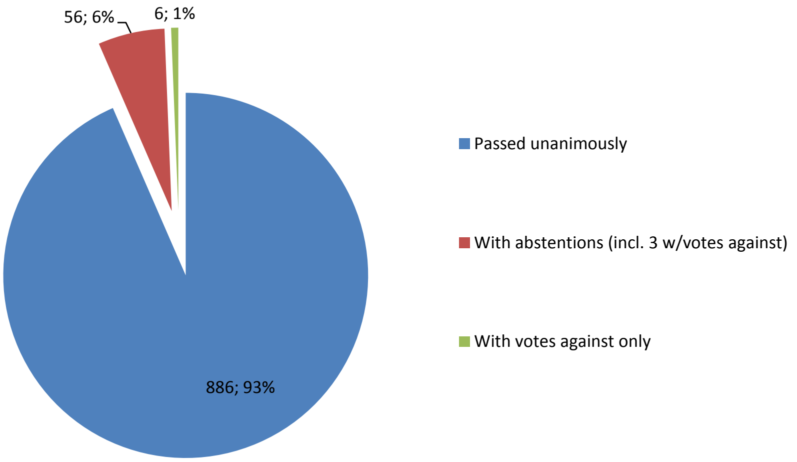

FIGURE 13 DISTRIBUTION OF NON-UNANIMOUS UNSC RESOLUTIONS 1997-2012 OUT OF 948 TOTAL ADOPTED RESOLUTIONS

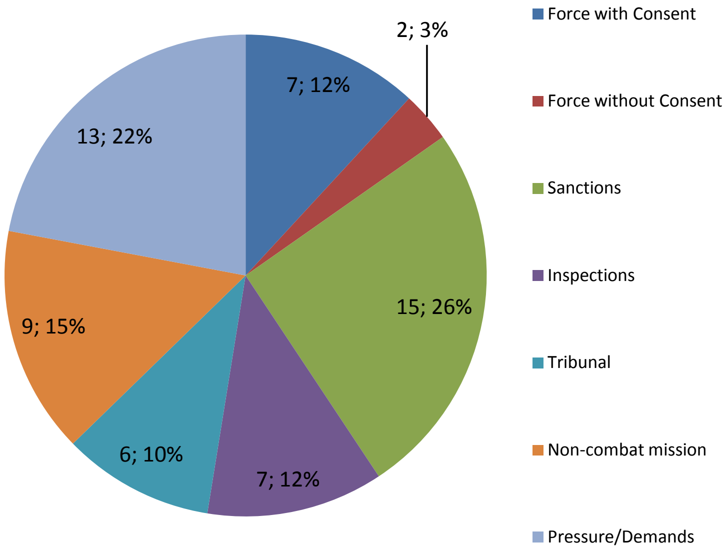

FIGURE 14 TOPICAL DISTRIBUTION OF NON-UNANIMOUS UNSC RESOLUTIONS 1997-2012 (62/948; 7%)

Another known case where disagreement occurred between the BRICS+ and the West, but where a final vote was not cast in the end, was the possible intervention in Iraq during the period 2002–2003.

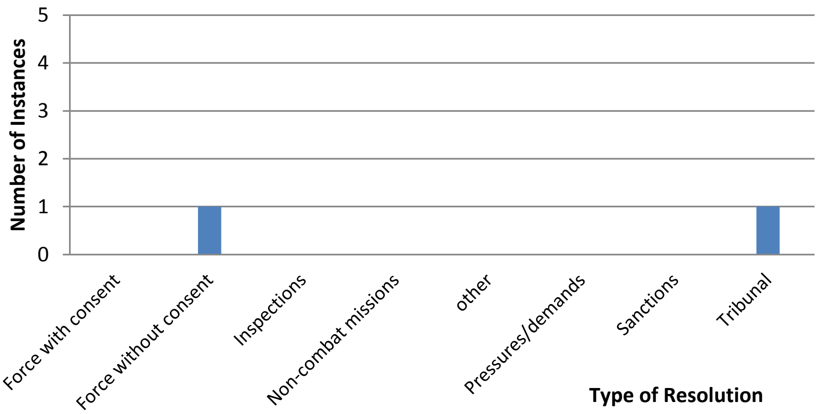

FIGURE 15 ACROSS-THE-BOARD ABSTENTIONS: NUMBER OF TIMES CHINA OR RUSSIA ABSTAINED TOGETHER WITH AT LEAST ONE OTHER WESTERN AND BRICS+ COUNTRY (2/56; 4%) SOURCE: UNITED NATIONS SECURITY COUNCIL.

Within the BRICS+ group, abstentions on the part of Russia and/or China together with at least one other BRICS+ country were rare occurrences (a mere 5% of the total; see Figure 16). Topically, resolutions featuring such 'BRICS+ unity' were confined to the authorization of 'UN interventions without consent of the host country'[38] and the establishment, referral of cases to, or mandating the extension of UN tribunals.[39]

38 UNSC Resolution 1973 on the establishment of no-fly zones over Libya of 17 March 2011.

39 UNSC Resolution 1593 on the referral of the war in Darfur to the International Criminal Court of 31 March 2005 and UNSC Resolution 1757 on the establishment of a tribunal for the assassins of the former Prime Minister Hariri of Lebanon of 30 May 2007.

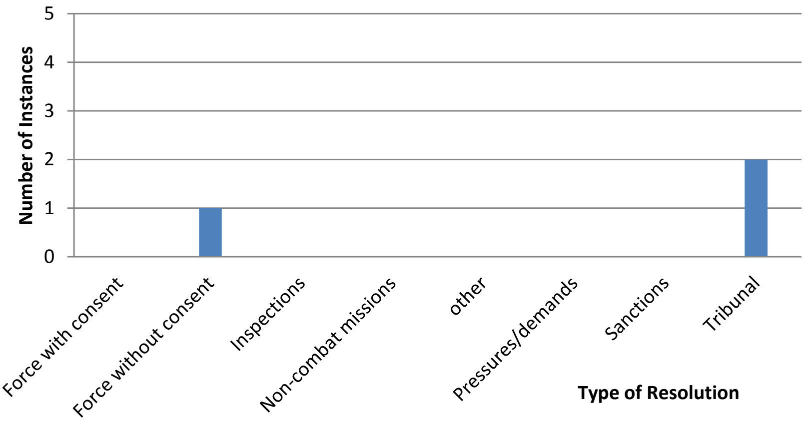

FIGURE 16 LACK OF BRICS+ UNITY: NUMBER OF TIMES CHINA OR RUSSIA ABSTAINED TOGETHER WITH AT LEAST ONE OTHER BRICS+ COUNTRY (3/56; 5%). SOURCE: UNITED NATIONS SECURITY COUNCIL.

This leads us to conclude that a kind of 'BRICS+ geopolitical pact' within the UNSC does not exist. When there is disagreement within the Council, the BRICS+ countries are often found acting alone, rather than in concert. Moreover, it is more common for China and/or Russia to abstain together with at least one Western country (see Figure 17).

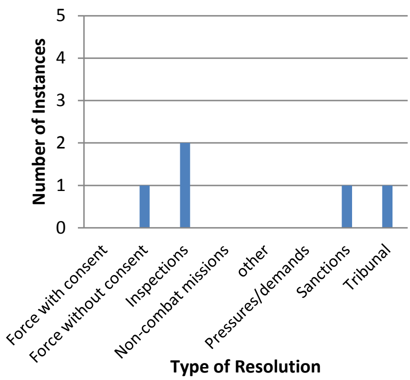

FIGURE 17 CHINESE AND/OR RUSSIAN AND WESTERN ABSTENTION: NUMBER OF TIMES CHINA OR RUSSIA ABSTAINED TOGETHER WITH AT LEAST ONE WESTERN COUNTRY (5/56; 9%). SOURCE: UNITED NATIONS SECURITY COUNCIL.

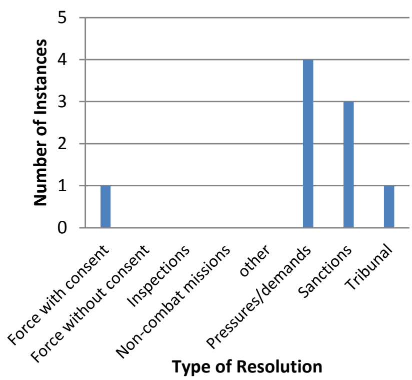

FIGURE 18 WESTERN ABSTENTION: NUMBER OF TIMES ONLY ONE OR MORE WESTERN COUNTRIES ABSTAINED (9/56; 16%). SOURCE: UNITED NATIONS SECURITY COUNCIL.

Finally, the most abstentions were in fact recorded on the part of Western countries only (16% of the total; see Figure 18).

5.3 NON-PROLIFERATION

UNSC resolutions on non-proliferation are generally adopted unanimously. One notable exception however is UNSC Resolution 1929 of 9 June 2010 on sanctions against Iran over the latter's nuclear program. Prior to the vote, Brazil and Turkey had been trying to revive a deal in which Iran would ship much of its stockpile of enriched uranium fuel abroad for further processing; the uranium would return afterwards as fuel rods for use in a medical research reactor. When the plans were largely dismissed by other members of the Security Council and sanctions ultimately proposed, Brazil and Turkey voted against. Russia and China did not vote along with the other two BRICS+ members however. Such open disagreement on non-proliferation within the UNSC is rare. It is much more common for such differences to arise in the proceedings of the 5-yearly NPT Review Conferences.

Based on an analysis of the last three NPT Review Conferences (held in 2000[40], 2005[41] and 2010[42]), Brazil and South Africa[43], as part of the New Agenda Coalition (NAC),[44] and Indonesia, as part of the Non-Aligned Movement (NAM)[45], appear the most vociferous advocates of total

40 All documents released prior and in the course of the 2000 NPT Review Conference can be found here: http://www.un.org/disarmament/WMD/Nuclear/2000-NPT/2000NPT.shtm.

41 All documents released prior and in the course of the 2005 NPT Review Conference can be found here: http://www.un.org/en/conf/npt/2005/.

42 All documents released prior and in the course of the 2010 NPT Review Conference can be found here: http://www.un.org/en/conf/npt/2010/.

43 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/43.', May 20, 2005; 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2010/WP.8.', March 23, 2010.

44 The New Agenda Coalition (NAC), composed of Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa and Sweden, is a geographically dispersed group of middle power countries which seek to build an international consensus to make progress on nuclear disarmament.

45 The Non-Aligned Movement (NAM) consists of a group of states which do not formally associate themselves with or against any major power bloc.

disarmament of nuclear-weapon states.[46] Turkey also proves an ardent advocate of disarmament when Ankara acts alone. When acting in concert with the EU, its tone softens due to the presence of European and nuclear-weapon states France and the United Kingdom.[47] China and Russia are – at least on paper – committed to nuclear disarmament. However China insists that Russia and the U.S. should take the first step, all the while strongly emphasizing that it is a strictly sovereign decision.[48] Russia for its part insists the first step should be taken by the U.S.[49]

Brazil and South Africa share the view that the use of nuclear power for peaceful purposes is a fundamental right. Most Western countries, Turkey and the five permanent members of the Security Council (P5) with the exception of China see ratification of the International Atomic Energy Agency (IAEA)'s Safeguards Agreements and Additional Protocols as preconditions for the transfer of nuclear technology. This view is shared by the group of nuclear supplier countries[50], who strongly emphasize international regulation of technology transfer to prevent the uncontrolled

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46 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2000/18.', April 24, 2000; 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/45.', May 20, 2005.

47 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/27.', May 5, 2005; 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/WP.35.', May 11, 2005; 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/WP.43.', May 18, 2005; 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2010/WP.69.', May 11, 2010.

48 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2000/22.', May 2, 2000; 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2000/1.', May 21, 1999; 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2010/WP.63.', May 6, 2010.

49 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/29', May 6, 2010.

50 Nuclear supplier countries are united in the so-called 'Zangger Committee', consisting *inter alia* of China, France, Germany, Netherlands, Russia, South Africa, Turkey, UK, USA and South Korea.

spread of nuclear material. The presence of several major powers in the group of nuclear suppliers appears to hinder the otherwise vocal South Africa in its quest for the right to non-discriminatory access.

Whereas the West and the P5 hold firmly to their belief that ratification of the IAEA Safeguards Agreements and Additional Protocols are a necessary precondition for the transfer of nuclear technology, Brazil and the NAM (including Indonesia) claim such conditionality violates their fundamental rights and represents a form of outright discrimination.[51] Within the P5, China appears to be the only member who does not strictly require ratification of the Additional Protocols, only encouraging states to do so.

In conclusion, there appears to be no common position on non-proliferation among the BRICS+ countries as a whole. However this is not to say that cooperation is entirely absent. Indeed, partnerships within the BRICS+ do exist, though they arise more on a case-by-case basis. The alliance between South Africa and Brazil on the right to nuclear technology for peaceful use as part of the New Agenda Coalition is the clearest example of this type of ad hoc cooperation. Similarly, albeit less formalized, some overlap in behavior occurs between South Africa, Brazil and Indonesia when it comes to disarmament and the latter two's reluctance to sign up to the IAEA Additional Protocols.

5.4 THE BRICS+ AND THE GLOBAL COMMONS: NEGOTIATIONS WITHIN THE UNFCCC

For any international agreement on climate change to have a serious impact, it is essential for the emerging economies to be on board. Therefore the extent to which the BRICS+ countries coordinate their positions prior

51 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/WP.11', April 26, 2005; 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/WP.14', April 26, 2005; 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2010/35', May 5, 2010; 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2005/WP.19', May 2, 2005; 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 'NPT/CONF.2010/WP.8.'

to UNFCCC Conference of the Parties' (COP) meetings is something which could carry enormous consequences for the ability of the Conference to conclude a successful deal.

The goal of the December 2009 Copenhagen Climate Summit (COP15) was clear: to reach agreement on a global climate deal stretching beyond 2012, when the Kyoto Protocol would expire. Whereas the EU was open about its intentions to work towards a legal agreement that would incorporate binding emission targets for both developed and developing states, the emerging economies had a different view on the matter altogether. Indeed, for Brazil, South Africa, India and China (commonly referred to as the BASIC countries within the UNFCCC), binding emission cuts and the negotiation of a wholly new agreement were a non-starter.[52] Prior to the Conference, the BASIC countries had agreed on a common strategy which involved establishing a second commitment period under the Kyoto Protocol and a demand for increased funding for climate-change mitigation and adaptation.[53] These diametrically opposed views resulted in a heavy clash between the EU on the one hand and China and India on the other. When confronted with the draft final text brokered by the Danish Presidency which proposed an alternative to the Kyoto Protocol, India and China claimed to have been 'ambushed' by the EU.[54] In response, BASIC joined forces with the U.S. to broker a final deal. The 'Copenhagen Accord' was afterwards presented to the EU as a 'done deal' without European leaders having been actively involved.[55]

Copenhagen was a clear victory for the emerging economies. However, the BASIC countries are not always as united in their efforts as they were during Copenhagen. Illustrative was the disagreement in the run-up to the COP16 meeting in Cancun, Mexico on whether all countries, both developed and emerging, would be bound by legally binding emissions cuts. Whereas

52 Stockholm Environment Institute, 'Together Alone? Brazil, South Africa, India, China (BASIC) and the Climate Change Conundrum - Policy Brief', 2010.

53 Ibid.

54 Norden, 'Together Alone - Basic Countries and the Climate Change Conundrum', 2011, 20.

55 C. Haug and F. Berkhout, 'Learning the Hard Way? European Climate Policy After Copenhagen,' *Environment* 52, no. 3 (2010): 24.

South Africa and Brazil indicated an openness to the idea, China and India thoroughly disapproved. Similarly, South Africa hinted that all decisions taken at Cancun ought to be part of a single legally binding agreement – much to the chagrin of Brazil, India and China.[56]

Following COP15 and 16, Brussels began to realize that a legally binding climate treaty with both the U.S., as well as the emerging economies on board, was growing increasingly unrealistic. This belief led the Union to be more receptive to the idea of a second commitment period under the Kyoto Protocol, albeit out of necessity. In Durban (COP17), the EU put forward a 'Roadmap' which proposed developing a legal framework applicable to all countries. The process would work towards a framework agreement under which all countries would commit to new targets to cut greenhouse gas emissions 'after 2020' when their current, non-binding targets ran out. In return for agreement on the Roadmap, the EU offered to endorse a second commitment period of the Kyoto Protocol.

Whereas South Africa and Brazil signaled an openness to the idea of binding emission cuts after 2020, India and China proved more reluctant. India felt that as it has one of the smallest per-capita carbon footprints in the world, it should not be compelled to agree to tougher reduction measures.[57] Wary of the proposed deal, negotiations almost fell through on the final day after India inserted the words 'legal outcome' into the negotiating text at the last minute. India felt developing countries were being asked to sign up to a deal before they knew what the content of the proposed treaty would be and whether it would be fair to poor nations. China joined India in its angry calls. In the end, Brazil managed to broker a compromise between the two sides by inserting the words 'an agreed outcome with legal force' into the text – an act which ultimately proved

56 N. Sethi, 'SA Toes West Line, Ruptures BASIC Unity,' *The Times of India*, October 9, 2010, http://articles.timesofindia.indiatimes.com/2010-10-09/india/28235935_1_bali-action-plan-basic-meeting-basic-group.

57 K. Palitza, 'TRADE: Small Steps Towards Emission Reduction Deal,' *IBSA News and Media Portal – India, Brazil and South Africa*, December 5, 2011, http://www.ibsanews.com/trade-small-steps-towards-emission-reduction-deal/.

convincing enough for the EU to endorse a second commitment period for Kyoto.[58]

In conclusion, coordination in the field of climate change is much more outspoken than it is within the UNSC or in the area of non-proliferation. The emerging economies have much to gain from forming a 'bloc' against industrialized nations in what they see as protection against measures harmful to their (continued) economic growth. Differences within the BASIC group do exist however. Whereas Brazil and South Africa often display a sense of pragmatism and a general willingness to commit to legally binding measures over time, India and China act as hard-liners. That said, the analysis makes clear that the BASIC group has a firm impact on international climate talks, strategically utilizing their combined 'weight' as the world's major greenhouse-gas emitters.

58 L. Rajamani, 'Deconstructing Durban,' *Indian Express*, December 15, 2011, http://www.indianexpress.com/news/deconstructing-durban/887892/.

6 CONCLUSION

This study has addressed the question of whether a group of emerging economies are likely to coalesce into an economic or political bloc that would promote alternative approaches to global economic, diplomatic or security issues and develop a counterbalance to Western influence in existing economic, financial and political institutions. The two main issues addressed are:

- The nature of the increased influence of emerging economies on the international stage;
- The extent to which the emerging economies are cooperating strategically on economic, diplomatic and security matters.

Our brief review of large emerging economies shows that the recent decade was a period when their economic growth accelerated substantially compared to the decade before. At the same time, in OECD countries (the West) the trend went in the opposite direction: growth rates have been negatively affected by two recessions – the first after the dotcom boom and the second (the 'great recession') in the aftermath of the 2007–2008 financial crisis. In 2010 the economic output of all eight BRICS+ countries combined (measured in GDP at PPP) exceeded the EU's GDP by almost 50%, while just 9 years before (in 2001) it was 14% less than the EU's overall GDP.

Rapid economic growth in the BRICS+ countries has helped many of them to greatly improve the state of their public finances. This is quite a remarkable improvement taking into account that in the 1990s and early 2000s Russia, Brazil, Turkey and Indonesia along with some other large emerging economies all either defaulted on their foreign debt or were at the brink of doing so. Public finances in many BRICS+ countries are currently in much better shape than in large OECD members. Public debt in the U.S., UK, and many continental European economies has surged as a result of the great recession and reached a level that is likely to weigh down their economic growth in the coming years.[59]

The military in the BRICS+ is another sector that has benefited from the rapid growth. While the general trend in military expenditure as a share of GDP in the BRICS+ countries does not show any substantial increase over the last 10 years, absolute resources available to defense increased significantly across the board. Apart from Brazil, Indonesia and South Africa, all of them spend more on defense as a proportion of GDP than the EU member states. In some particular cases this seems to be shifting the military balance of power in favor of the BRICS+ countries.

At the same time, it should be kept in mind that all of the BRICS+ are relatively poor in per-capita terms compared to the OECD countries (with the exception of South Korea). The technological sophistication of their economies and their research capacities are still quite a way behind OECD member states (again with the exception of South Korea). The BRICS+ are also dependent on Western foreign direct investment (FDI) to bring in new technologies and know-how. An analysis of BRICS+ technological levels reveals big differences between individual countries in the group. This is what causes some analysts to argue that 'though an era of American or Western domination may be over, BRICS domination is still some time off.'[60]

China has been the engine behind BRICS+ economic growth. All the while, China's growth rate has been far higher than in the rest of the BRICS+ and the size of the Chinese economy exceeds that of the combined economies of Brazil, India, Russia and South Africa (at PPP). Growing Chinese economic influence has been especially visible in foreign trade. The share of inter-BRICS+ trade has been growing very rapidly in the first decade of the 21st century, often coinciding with a declining share in trade with the EU and

59 Carmen M. Reinhart, Vincent R. Reinhart, and Kenneth S. Rogoff, 'Debt Overhangs: Past and Present' (Harvard, 2012), http://www.economics.harvard.edu/files/faculty/51_Debt_Overhangs.pdf.

60 van Agtmael, 'Think Again: The BRICS.'

the U.S. Nevertheless, the EU remains the most important trading partner for the BRICS+.

These developments beg the question: are the BRICS+ countries slowly forming an economic and political bloc to counterbalance Western influence and putting forward alternative agendas for global economic and political governance? To answer this question we analyzed the interaction between the BRICS+ in a number of different areas where their economic and diplomatic behavior play out. Our examination reveals that although substantial differences between the BRICS+ countries still exist, they all exhibit an ambition for greater policy coordination on economic issues.

Arguably the most prominent arena where states take up political positions is in the UN Security Council. If coordination between BRICS+ countries does take place, one would expect disagreement with Western UNSC members to occur more often than not. However, most of the resolutions that are put to a vote are passed unanimously; only in a relatively small number of cases were abstentions or votes against recorded (a mere 7% of the total resolutions in the period 1997–2012). There thus seems to be little desire to voice dissent during voting. Moreover, disagreements among the BRICS+ countries in terms of UNSC voting demonstrate a lack of any consistent pattern that would indicate common approaches. It is true that China and Russia have often voted or abstained together but when they abstain they are more likely to be joined by one of the Western countries than any of the other BRICS+. Non-proliferation issues are another example where divided attitudes among the BRICS+ countries come to the fore. Here the main dividing line lies between the haves and have-nots, i.e. nuclear weapon states and the rest. Whereas the former see the IAEA Additional Protocols as a precondition for the transfer of nuclear technology (albeit with varying degrees of firmness), Brazil, Indonesia and many other developing countries see this as outright discrimination. In other words, we see significant divergences here among the BRICS+ themselves.

We also see this in the domain of climate change. However there is stronger agreement among the emerging economies, particularly among Brazil, South Africa, India and China – commonly known as BASIC – within the UNFCCC. On a general level, the 'BASIC climate alliance' plays into each country's common foreign policy objective to raise their international status. Climate diplomacy should thus be viewed as part of a wider geopolitical game which raises the possibility for bargaining between major parties (both intra-BASIC, as well as towards developed nations).[61] On a more detailed level however, significant differences remain. On the part of Brazil and South Africa, a general realization that binding emissions cuts will in time be inescapable seems to be part of their mindset. For India and China however, this notion is still very far away. As a result, they often find themselves vehemently opposed to what they view as a 'warming up' of Brazil and South Africa to Western proposals. Nevertheless, as emerging economies, many of their goals coincide, endowing them with formidable influence over global climate change negotiations.

With respect to arms trade, a clear dividing line between BRICS+ countries emerges. On the one hand, Brazil, South Korea, Turkey and South Africa rely on the West for arms supplies, whereas on the other, China and India source most of their arms imports from Russia. Indonesia is positioned somewhere in between these two groups.

An analysis of BRICS+ diplomatic ties to the rest of the world (measured by the number of consulates) reveals that neighboring and Western countries feature strongly in BRICS+ foreign relations. Although the growing trade between the BRICS+ may result in a shift towards closer diplomatic ties between the BRICS+, it is likely that this will take many years to substantially change the diplomatic balance.

The main area where the emerging economies share common views and exhibit an ambition to further pursue policy coordination is the issue of global economic governance. Here the BRICS countries often take similar positions. The reform of the Bretton Woods international financial institutions, the IMF and the World Bank, is one of the issues where they find common ground. The initiative to develop a BRICS bank as a counterweight to the World Bank could potentially constitute a first step toward developing an alternative economic development regime based on South-South relations. The BRICS countries have also voiced concern over

61 Stockholm Environment Institute, 'Together Alone? Brazil, South Africa, India, China (BASIC) and the Climate Change Conundrum - Policy Brief.'

the current international financial architecture which relies on the U.S. dollar, and have taken steps to challenge its role as the main global reserve currency. Many of these countries have also introduced trade-restrictive protectionist measures in the wake of the global financial crisis of 2007–2008 while expecting easy access to Western markets. Compounded with the trend of greater intra-BRICS+ trade, this could potentially evolve towards increasingly anti-Western economic policy coordination.[62]

On the whole, the BRICS+ countries have a much easier time sharing their opposition to 'Western' economic policies and institutions than in developing concrete proposals on reforming the existing system. Many of the policy initiatives they have proposed still need to come to fruition. Nevertheless, economic coordination often precedes political coordination, and we therefore may well be witnessing the first signs of economic bloc formation.

In sum, our analysis suggests that while cooperation between the BRICS+ countries is increasing, differences between them remain large as well. These differences include economic structure, level of economic development, external and internal security situation, level of democracy and so on. They create substantial barriers for finding true common ground and often limit cooperation among the BRICS+ on many issues. The absence of a broadly shared positive agenda is the main reason why it is highly unlikely for these countries to grow into a geo-economic, geopolitical alternative to the West within the next five to ten years.

The good news for Europe is that there is still more dividing the BRICS+ than there is uniting them. For Europe this implies that, in order to avoid further bloc-formation in the economic realm, it is necessary to engage with the BRICS+, particularly the non-China ones, through intensified trade relations. This will increase political and economic influence in these countries, potentially reduce the momentum of intra-BRICS+ economic

62 A further issue where this is possible, which we did not address in this study, is the role of resource governance. The BRICS+ countries are major primary commodity exporters as well as consumers. Greater economic policy coordination in the field of resources among these states could evolve to become a challenge for U.S. and European economic interests.

integration and dampen its spillover into the political domain, while serving as a source of economic growth in Europe. Secondly, Europe should engage in a strategic-level discussion on economic governance and the future of development policy to ensure that the BRICS+ complement and do not substitute existing regimes. The question is whether Europe is up for the task.

7 BIBLIOGRAPHY

'120 Million Surviving on $2 a Day.' *Jakarta Post*, September 15, 2010. http://www.thejakartaglobe.com/home/120-million-surviving-on-2-a-day/396341#Scene_1.

2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 'NPT/CONF.2000/1.', May 21, 1999.

———. 'NPT/CONF.2000/18.', April 24, 2000.

———. 'NPT/CONF.2000/22.', May 2, 2000.

2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 'NPT/CONF.2005/27.', May 5, 2005.

———. 'NPT/CONF.2005/29', May 6, 2010.

———. 'NPT/CONF.2005/43.', May 20, 2005.

———. 'NPT/CONF.2005/45.', May 20, 2005.

———. 'NPT/CONF.2005/WP.11', April 26, 2005.

———. 'NPT/CONF.2005/WP.14', April 26, 2005.

———. 'NPT/CONF.2005/WP.19', May 2, 2005.

———. 'NPT/CONF.2005/WP.35.', May 11, 2005.

———. 'NPT/CONF.2005/WP.43.', May 18, 2005.

2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 'NPT/CONF.2010/35', May 5, 2010.

———. 'NPT/CONF.2010/WP.63.', May 6, 2010.

———. 'NPT/CONF.2010/WP.69.', May 11, 2010.

———. 'NPT/CONF.2010/WP.8.', March 23, 2010.

Agentschap NL. 'Turkije: Automotive, Kwartaal I - 2012', January 31, 2012. http://www.agentschapnl.nl/onderwerp/turkije-automotive-kwartaal-i-2012.

van Agtmael, Antoine. 'Think Again: The BRICS.' *Foreign Policy*, November 2012. http://www.foreignpolicy.com/articles/2012/10/08/think_again_the_brics.

Albayrak, Aydin . 'Turkish Defense Industry Set to Boost Economy', May 27, 2012. http://www.todayszaman.com/newsDetail_getNewsById.action?newsId=281588.

Ambarita, B. 'Separatists Kill Soldier, Attack Chopper in Papua: Police.' *Jakarta Globe*, August 3, 2011. http://www.thejakartaglobe.com/home/separatists-kill-soldier-attack-chopper-in-papua-police/457062.

Australian Government Department of Foreign Affairs and Trade. 'Indonesia | Travel Advice', September 20, 2012. http://www.smartraveller.gov.au/zw-cgi/view/Advice/Indonesia.

Bellman, E., and A. Ismar. 'Indonesia to Ramp Up Infrastructure - WSJ.com.' *The Wallstreet Journal*, August 16, 2012. http://online.wsj.com/article/SB10000872396390444375104577592690374350480.html.

Bertelsmann Stiftung. 'BTI - Brazil Country Report', 2012.

———. 'BTI - Brazil Country Report', 2012.

———. 'BTI 2012 | Indonesia Country Report', 2012.

Bland, B. 'Indonesia Infrastructure: Good Intentions, Little Progress.' *Financial Times - Beyondbrics*, August 28, 2012. http://blogs.ft.com/beyond-brics/2012/08/28/indonesia-infrastructure-good-intentions-little-progress/#axzz27f3ueBxt.

Bloomberg News. 'China Plans Talks With Japan, Korea on Free-Trade Area.' *Bloomberg*, May 13, 2012. http://www.bloomberg.com/news/2012-05-12/china-japan-korea-to-start-free-trade-talks-this-year.html.

Brazilian Ministry of Science and Technology. 'PORTAL DO MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INOVAÇÃO', September 24, 2012. http://www.mct.gov.br/index.php/content/view/336625/Dispendios_nacionais_em_pesquisa_e_desenvolvimento_P_D_em_relacao_ao_produto_interno_bruto_PIB_de_paises_selecionados.html.

Bremmer, Ian. 'Brazil Wants Some Security Council Love. But It Won't Get I t (yet).' *Foreign Policy*, April 3, 2012. http://eurasia.foreignpolicy.com/posts/2012/04/03/brazil_wants_some_security_council_love_but_won_t_get_it_yet.

Bremmer, I., and P. Keat. *The Fat Tails: The Power of Political Knowledge for Strategic Investing*. Oxford: Oxford University Press, 2009.

BRICS Trade Ministers. 'Ministerial Declaration of the BRICS Trade Ministers', December 14, 2011. http://www.brics.utoronto.ca/docs/111214-trade.html.

Brooks, K. 'Is Indonesia Bound for the BRICs?' *Foreign Affairs*, December 2011. http://www.foreignaffairs.com/articles/136539/karen-brooks/is-indonesia-bound-for-the-brics.

Business Monitor International. 'Turkey Autos Report Q2 2012', June 2012. http://www.marketreportsonline.com/158897-turkey-autos-repo.html.

Chang Bae Chun, Soon Yang Kim, Jun Young Lee, and Sang Yi Lee. 'Republic of Korea: Health System Review.' *Health Systems in Transition* 11, no. 7 (2009). http://www.euro.who.int/__data/assets/pdf_file/0019/101476/E93762.pdf.

Choe, Sang-Hun. 'President Lee Myung-bak of South Korea Apologizes for Corruption Scandals.' *The New York Times*, July 24, 2012. http://www.nytimes.com/2012/07/25/world/asia/lee-myung-bak-of-south-korea-apologizes-for-corruption-scandals.html?_r=1.

CNN. 'Report: 2010 Was Worst Year yet for Piracy on High Seas – This Just In - CNN.com Blogs', January 18, 2011. http://news.blogs.cnn.com/2011/01/18/report-2010-was-worst-year-yet-for-piracy-on-high-seas/.

Colitt, Raymond, and Stephan Nielsen. 'Brazil Ethanol Drive Falters on Domestic Supply Shortage.' *Bloomberg*, March 13, 2012. http://www.bloomberg.com/news/2012-03-13/brazil-ethanol-slows.html.

Company in Turkey. 'Turkish Construction Sector Increases by 10.6% in 2011', n.d. http://www.companyinturkey.com/turkish-construction-sector-increases-in-2011.html.

Cordesman, Anthony H., and Nicholas S. Yarosh. *Chinese Military Modernization and Force Development: A Western Perspective*. Washington, D. C.: Center for International and Strategic Studies, July 30, 2012. http://csis.org/files/publication/120727_Chinese_Military_Modernization_Force_Dvlpment.pdf.

Cyranoski, David. 'South Korean R&D Budget to Soar.' *Nature*, November 19, 2009. http://www.nature.com/news/2009/091119/full/news.2009.1090.html.

Department Health, Republic of South Africa. 'Tuberculosis Strategic Plan for South Africa, 2007-2011', 2007.

Dharma Somba, N., and R. Pramadutama. 'Shoot First, Riot Later in Papua.' *The Jakarta Post*, June 8, 2012. http://www.thejakartapost.com/news/2012/06/08/shoot-first-riot-later-papua.html.

Directorate-General for Trade. *Ninth Report on Potentially Trade Restrictive Measures Identified in the Context of the Financial and Economic Crisis*. European Commission, May 1, 2012. http://trade.ec.europa.eu/doclib/docs/2012/june/tradoc_149526.pdf.

Economist Intelligence Unit. 'Brazil Business Environment', August 19, 2010. http://store.eiu.com/article.aspx?productid=1930000193&articleid=417375826.

———. 'Making up for Lost Time: Public Transportation in Brazil's Metropolitan Areas', November 2011.

———. 'Traffic Congestion in Brazil's Metropolitan Regions Undermines Country's Competitiveness.' *EUI for the Media*, November 3, 2011. http://www.eiumedia.com/index.php/latest-press-releases/item/247-traffic-congestion-in-brazil%E2%80%99s-metropolitan-regions-undermines-country%E2%80%99s-competitiveness.

EDC Economics. 'Brazil Country Report', May 2012.

Eginsoy, Ümit. 'ECONOMY Turkey Targets Indonesia, Malaysia for Defense Exports', March 29, 2011. http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=turkey-targets-indonesia-malaysia-for-defense-exports-2011-03-29.

Elite SA Security Solutions. 'Private Security Growth in 2012 | Security Guarding In Pretoria', April 10, 2012. http://securityguardinginpretoria.co.za/private-security-growth-in-2012/.

Erawatch. 'Basic Overview of South African Research System', July 16, 2012. http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/za/country?section=Overview&subsection=BasicChar.

Erawatch Brazil. 'Basic Characterisation of the Research System', 2011. http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/br/country?section=Overview&subsection=BasicChar.

Erawatch. 'Brazil Country Report', 2011.

———. 'Erawatch - Research Policy Goals', n.d. http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/za/country?section=ResearchPolicy&subsection=RecentPol.

———. 'Erawatch Country Reports 2010: Brazil', 2010.

Erawatch South Africa. 'Research Infrastructures', July 16, 2012. http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/za/country?section=NationalPolicyDevAndEuropeanResearchArea&subsection=ResearchInfraestructures.

Erawatch. 'Turkey Country Report', February 13, 2012.

Erten, Bilge, and José Antonio Ocampo. *Super-cycles of Commodity Prices Since the Mid-nineteenth Century*. DESA Working Paper. United Nations Department of Economic and Social Affairs, February 2012. http://www.un.org/esa/desa/papers/2012/wp110_2012.pdf.

Eunkyung, Seo. 'South Korea Shuns Moms at Peril as Workforce Shrinks.' *Bloomberg*, July 3, 2012. http://www.bloomberg.com/news/2012-07-03/south-korea-shuns-moms-at-peril-a-workforce-shrinks.html.

Fadillah, R.D. 'First LNG for Domestic Users Dispatched.' *The Jakarta Post*, April 26, 2012. http://www.thejakartapost.com/news/2012/04/26/first-lng-domestic-users-dispatched.html.

Fairbanks, Eve. 'South Africa's Awkward Teenage Years.' *Foreign Policy*, February 2012. http://www.foreignpolicy.com/articles/2012/01/03/south_africa_s_awkward_teenage_years?page=0,1.

Figuers, Morgan. 'Apologies for Food Safety in China.' *China Digital Times*, March 9, 2007. http://chinadigitaltimes.net/2007/03/apologies-for-food-safety-in-china/.

Fishlow, Albert. 'Down, but Not Out.' \i Foreign Policy, May 18, 2012. http://www.foreignpolicy.com/articles/2012/05/18/down_but_not_out.

George Mason University Centre for Entrepeneurship and Public Policy (CEPP). 'The Global Entrepeneurship and Development Index (GEDI) 2012 Country Rankings', 2012.

Global Intelligence Alliance. 'Geothermal Energy in Indonesia Heating Up', June 28, 2012. http://www.globalintelligence.com/insights-analysis/bulletins/geothermal-energy-in-indonesia-heating-up.

Goldstone, Jack A. 'Rise of the TIMBIs.' *Foreign Policy*, December 2, 2011. http://www.foreignpolicy.com/articles/2011/12/02/rise_of_the_timbis.

GPS Navigation & Road Safety Blog. 'TomTom Releases Remarkable Traffic Statistics in South Africa', May 16, 2012. http://gps.arrivealive.co.za/2011/05/tomtom-release-remarkable-traffic-statistics-in-south-africa/.

Haug, C., and F. Berkhout. 'Learning the Hard Way? European Climate Policy After Copenhagen.' *Environment* 52, no. 3 (2010): 20–27.

Hill, H., and P. Tandon. 'Innovation and Technological Capability in Indonesia', June 2010.

Hinchberger, Bill. 'Carnaval Is Over.' *Foreign Policy*, April 7, 2012. http://www.foreignpolicy.com/articles/2012/04/07/carnaval_is_over?print=yes&hidecomments=yes&page=full.

IBM. 'IBM Global Commuter Pain Study Reveals Traffic Crisis in Key International Cities', June 30, 2010. http://www-03.ibm.com/press/us/en/pressrelease/32017.wss?re=traffic_hero.

ICD Research. *The South Korean Defense Industry: Market Opportunities and Entry Strategies, Analyses and Forecasts to 2017*, July 2012. http://www.reportlinker.com/p0936510-summary/The-South-Korean-Defense-Industry-Market-Opportunities-and-Entry-Strategies-Analyses-and-Forecasts-to.html.

'Indonesia Considers Limiting Gas Exports.' *UPI*, July 6, 2012. http://www.upi.com/Business_News/Energy-Resources/2012/07/06/Indonesia-considers-limiting-gas-exports/UPI-77801341590232/.

'Indonesia's Poverty Line: To Make a Million People Unpoor.' *Economist*, August 3, 2011. http://www.economist.com/blogs/banyan/2011/08/indonesias-poverty-line.

Institute of Southeast Asian Studies. 'Indonesia's Population: Ethnicity and Religion in a Changing Political Landscape', 2003. http://muse.jhu.edu/login?auth=0&type=summary&url=/journals/population_review/v042/42.1hugo.pdf.

International Chamber of Commerce. 'Six Month Drop in World Piracy, IMB Report Shows', July 16, 2012. http://www.icc-ccs.org/news/747-six-month-drop-in-world-piracy-imb-report-shows.

International Crisis Group. 'Asia Briefing No 126 Indonesia: Hope and Hard Reality in Papua', August 22, 2011.

———. 'Asia Briefing No 128 Indonesia: Trouble Again in Ambon', October 4, 2011.

———. 'Asia Briefing No 132 Indonesia: From Vigilantism to Terrorism in Cirebon', January 26, 2012.

International Energy Agency. 'World Energy Outlook 2011 Factsheet', 2011. http://www.worldenergyoutlook.org/media/weowebsite/factsheets/facts-heets.pdf.

International Gas Union (IGU). 'World LNG Report 2011', 2011.

Jablonsky, David. 'National Power.' In *The U.S. Army War College Guide to National Security Issues*, 1: Theory of War and Strategy:123. Fourth. Pennsylvania: U.S. Army War College, 2010.

Jaruzelski, Barry, and John Loehr. *The Global Innovation 1000: Why Culture Is Key*. Strategy + Business. Booz & Company, 2011. http://www.booz.com/media/uploads/BoozCo-Global-Innovation-1000-2011-Culture-Key.pdf.

KPMG. 'Investing in Brazil', 2011.

Kraska, J. *Contemporary Maritime Piracy: International Law, Strategy, and Diplomacy at Sea*. Santa Barbara, CA: ABC-CLIO, 2011.

Labour and Social Trends in Indonesia 2010: Translating Economic Growth into Employment Creation. Genève: International Labour Organisation, 2011.

Lingling Wei. 'Yuan Shows Potential to Be Reserve Currency.' *The Wall Street Journal*, June 29, 2012. http://online.wsj.com/article/SB10001424052702303561504577496233362694486.html.

Marcelino, Francisco & Andre Soliani. 'Credit Suisse Cuts Brazil's 2012 GD P Growth Forecast to 1.5%.' Bloomberg, June 20, 2012. http://www.bloomberg.com/news/2012-06-20/credit-suisse-cuts-brazil-s-2012-gdp-growth-forecast-to-1-5-1-.html.

Marks, K. 'Illegal Logging Responsible for Loss of 10 Million Hectares in Indonesia.' *The Independent*, October 26, 2009. http://www.independent.co.uk/news/world/asia/illegal-logging-responsible-for-loss-of-10-million-hectares-in-indonesia-1809417.html?printService=print.

Mello, Juliana. 'Introduction to the Security Industry in Brazil.' *The Brazil Business*, March 28, 2012. http://thebrazilbusiness.com/article/introduction-to-the-security-industry-in-brazil.

Milan, Francesco F. 'Turkey's Booming Defense Industry', May 17, 2011. http://www.isn.ethz.ch/isn/Digital-Library/ISN-Insights/Detail?lng=en&id=129257&tabid=1450752282&contextid734=129257&contextid735=129255.

Ministry of National Development Planning/National Development Planning Agency. 'Appendices Regulation of the President of the Reupblic of Indonesia Number 5 of 2010 Regarding the National Medium-Term Development Plan (RPJM) 2010-2014 Book 1 National Prorities', 2010.

Moon, Ihlwan. 'Do the Chaebol Choke Off Innovation?' *Bloomberg Businessweek*, December 3, 2009. http://www.businessweek.com/magazine/content/09_50/b4159058699422.htm.

MRJ Jakarta. 'Overview - Project Feature', September 27, 2012. http://jakartamrt.com/index.php?option=com_content&view=article&id=52&Itemid=95&lang=en.

Nazeer, Z. 'Indonesia Warned to Invest More in Education', March 27, 2012. http://www.thejakartaglobe.com/education/indonesia-warned-to-invest-more-in-education/507426.

Newsweek. 'How Street Gangs Have Replaced Cops in Rio - The Gangs of Rio.' *Newsweek*, February 22, 2009. http://www.thedailybeast.com/newsweek/2009/02/22/the-gangs-of-rio.html.

Norden. 'Together Alone - Basic Countries and the Climate Change Conundrum', 2011.

O'Neill, Jim. *Building Better Global Economic BRICs*. Global Economics. London: Goldman Sachs, November 30, 2001.

OECD. 'Country Statistical Profile: Korea.' *OECD iLibrary*, January 18, 2012. http://www.oecd-ilibrary.org/economics/country-statistical-profile-korea_20752288-table-kor.

———. 'Turkey – OECD Better Life Index', October 1, 2012. http://www.oecd-betterlifeindex.org/countries/turkey/.

Oliver, Christian. 'South Korea: An Economy Divided.' *Financial Times*, May 29, 2011. http://www.ft.com/intl/cms/s/0e9c9e6a-8a1c-11e0-beff-00144feab49a,Authorised=false.html?_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2F0e9c9e6a-8a1c-11e0-beff-00144feab49a.html&_i_referer=#axzz26R5tMzOh.

Oxford Analytica. 'South Korea: Country Profile.' *Oxford Analytica*, July 2, 2012. http://www.oxan.com/.

Palitza, K. 'TRADE: Small Steps Towards Emission Reduction Deal.' *IBSA News and Media Portal – India, Brazil and South Africa*, December 5, 2011. http://www.ibsanews.com/trade-small-steps-towards-emission-reduction-deal/.

'Papua Man Injured in Police Shootout.' *The Jakarta Globe*, September 25, 2012. http://www.thejakartaglobe.com/lawandorder/papua-man-injured-in-police-shootout/546383.

PayScale South Africa. ‘Johannesburg City Commute Time Survey’, July 17, 2012. http://www.payscale.com/research/ZA/Location=Johannesburg/Commute_Time.

Pramudatama, R. ‘LNG Plant Construction on Schedule: Medco.’ *The Jakarta Post*, August 3, 2012. http://www.thejakartapost.com/news/2012/08/03/lng-plant-construction-schedule-medco.html.

Prasodjo, D. ‘Fighting Illegal Fishing Is a Net Gain | The Jakarta Post.’ *The Jakarta Post*, September 12, 2011. http://www.thejakartapost.com/news/2011/09/12/fighting-illegal-fishing-a-net-gain.html.

R&D Magazine, Batelle, International Monetary Fund, World Bank and CIA Factbook. ‘2012 Global R&D Funding Forecast: R&D Spending Growth Continues While Globalization Accelerates’, December 16, 2011. http://www.rdmag.com/Featured-Articles/2011/12/2012-Global-RD-Funding-Forecast-RD-Spending-Growth-Continues-While-Globalization-Accelerates/.

Rabobank. ‘Country Report South Africa’, February 2012.

Rajamani, L. ‘Deconstructing Durban.’ *Indian Express*, December 15, 2011. http://www.indianexpress.com/news/deconstructing-durban/887892/.

‘Ranking of Economies - Doing Business - World Bank Group’, June 2011. http://www.doingbusiness.org/rankings/.

‘Ranking of Economies - Doing Business - World Bank Group’, June 2011. http://www.doingbusiness.org/rankings/.

Rapid Alert System for Food and Feed. *2011 Annual Report*. Luxembourg: European Commission, 2012. http://ec.europa.eu/food/food/rapidalert/docs/rasff_annual_report_2011_en.pdf.

Reinhart, Carmen M., Vincent R. Reinhart, and Kenneth S. Rogoff. ‘Debt Overhangs: Past and Present’. Harvard, 2012. http://www.economics.harvard.edu/files/faculty/51_Debt_Overhangs.pdf.

Reuters. ‘Analysts Cut Brazil GDP Growth, Inflation Forecasts.’ *Reuters*, June 11, 2012. http://www.reuters.com/article/2012/06/11/us-brazil-economy-survey-idUSBRE85A0JG20120611.

———. ‘Full Text of BRIC Countries Joint Communique.’ *Reuters*, March 14, 2009. http://www.reuters.com/article/2009/03/14/g20-brics-text-idUSLE47000820090314.

Romo, Rafael. ‘Rich Fight Brazil’s Congestion with Helicopters.’ *CNN*, April 8, 2010. http://articles.cnn.com/2010-04-08/world/brazil.congestion_1_motorcycle-messengers-anderson-silva?_s=PM:WORLD.

Rosenberg, D. ‘The Political Economy of Piracy in the South China Sea.’ *Naval College War Review* 62, no. 3 (2009).

Rothkopf, David. ‘Brazil’s New Swagger.’ *Foreign Policy*, February 28, 2012. http://www.foreignpolicy.com/articles/2012/02/28/brazil_s_new_swagger?page=full.

Rusmana, Y., and F. Wulandari. ‘Yudhoyono’s Support Slips as Indonesia Stalls on Fuel Policy.’ *Bloomberg*, n.d. http://www.bloomberg.com/news/2012-04-01/yudhoyono-s-support-falters-as-indonesia-stalls-on-fuel-policy.html.

SAccess ACCESS4EU - South Africa. ‘Supporting the EU Access to South Africa’s Research and Innovation Programmes’, 2011.

Sangwon Yoon. ‘South Korea to Focus Defense Strategy on Possible Border Island Conflict.’ *Bloomberg*, January 4, 2012. http://www.bloomberg.com/news/2012-01-04/south-korea-to-focus-defense-strategy-on-possible-border-island-conflict.html.

SEA-EU-NET. ‘R&D Country Profile Indonesia’, 2009. http://www.sea-eu.net/asia/info/4/indonesia.html.

Sethi, N. ‘SA Toes West Line, Ruptures BASIC Unity.’ *The Times of India*, October 9, 2010. http://articles.timesofindia.indiatimes.com/2010-10-09/india/28235935_1_bali-action-plan-basic-meeting-basic-group.

Sharma, Ruchir. *Breakout Nations: In Pursuit of the Next Economic Miracles*. First. New York: W. W. Norton & Company, Inc., 2012.

Romero, Simon. 'In Brazil, Energy Finds Put Country at a Whole New Power Level', October 10, 2011. http://www.nytimes.com/2011/10/11/business/energy-environment/in-brazil-energy-finds-put-country-at-a-whole-new-power-level.html?pagewanted=all.

Standard and Poor's Rating Services. 'Ratings Sovereigns Rating List.' *S&P*, 2012. http://www.standardandpoors.com/ratings/sovereigns/ratings-list/en/us?sectorName=null&subSectorCode=&filter=K.

Statistics Indonesia. 'BPS Strategic Data', August 2011.

Statistics South Africa. 'Quarterly Labour Force Survey. Quarter 1, 2012.', May 2012.

Stockholm Environment Institute. 'Together Alone? Brazil, South Africa, India, China (BASIC) and the Climate Change Conundrum - Policy Brief', 2010.

Stockholm International Peace Research Institute. *SIPRI Yearbook 2012*. SIPRI Yearbook Series. Oxford: Oxford University Press, 2012.

Sukma, R. 'Insight: Without Unity, No Centrality.' *The Jakarta Post*, July 17, 2012. http://www.thejakartapost.com/news/2012/07/17/insight-without-unity-no-centrality.html.

Swiss Business Hub Brazil. 'The Brazilian Oil and Gas Sector', September 2011.

Swiss Business Hub South Africa. 'South Africa Private Security Industry', December 2011.

Taspınar, Ömer. 'Islamist Politics in Turkey: The New Model? | Brookings Ins titution', April 2012. http://www.brookings.edu/research/papers/2012/04/24-turkey-new-model-taspinar.

The 2nd Meeting of the BRICS Trade and Economic Ministers. 'Joint Press Release: Overview of Global Economic Developments and Impact on Trade and Investment', March 28, 2012. http://www.brics.utoronto.ca/docs/120328-trade.pdf.

The Center for Strategic and International Studies (CSIS) Global Health Policy Centre. 'South Africa and Tuberculosis', August 5, 2011. http://www.smartglobalhealth.org/blog/entry/south-africa-and-tuberculosis/.

The Economist. 'ASEAN in Crisis: Divided We Stagger', August 18, 2012. http://www.economist.com/node/21560585.

———. 'Brazil's Economy: A Bull Diminished', May 19, 2012. http://www.economist.com/node/21555588?zid=305&ah=417bd5664dc76da5d98af4f7a640fd8a.

———. 'Brazilian-American Relations: One Step at a Time | The Economist', April 14, 2012. http://www.economist.com/node/21552592?zid=305&ah=417bd5664dc76da5d98af4f7a640fd8a.

———. 'Corruption in South Korea: Rotten Shot.' *The Economist*, July 21, 2011. http://www.economist.com/node/18989193.

———. 'Education in South Africa: Still Dysfunctional', January 21, 2012. http://www.economist.com/node/21543214.

———. 'Exams in South Korea: The One-shot Society.' *The Economist*, December 17, 2011. http://www.economist.com/node/21541713.

———. 'Higher Education in Brazil: The Mortarboard Boom', September 15, 2012. http://www.economist.com/node/21562955.

———. 'Indonesia: The Komodo Economy', February 18, 2012. http://www.economist.com/node/21547866.

———. 'Indonesia's Politics: Corruption Everywhere', September 2, 2011. http://www.economist.com/blogs/banyan/2011/09/indonesias-politics.

———. 'Reformed Characters.' *The Economist*, September 25, 2008. http://www.economist.com/node/12237177.

———. 'Religious Persecution in Indonesia: Lightly on the Lynch Mob', July 31, 2011. http://www.economist.com/blogs/banyan/2011/07/religious-persecution-indonesia.

———. 'South Africa's Foreign Policy: All over the Place', March 24, 2011. http://www.economist.com/node/18447027.

———. 'South Africa: The Gateway to Africa?', June 2, 2012. http://www.economist.com/node/21556300?zid=304&ah=e5690753dc78ce91909083042ad12e30.

———. 'South Korea's Economy: What Do You Do When You Reach the Top?' *The Economist*, November 12, 2011. http://www.economist.com/node/21538104.

———. 'South Korea's Foreign-born: The Lovable Ms Lee.' *The Economist*, May 12, 2012. http://www.economist.com/node/21554582.

———. 'South Korean Politics: The Iron Lady in Red.' *The Economist*, July 14, 2012. http://www.economist.com/node/21558623.

———. 'The B in BRICS: The Brazil Backlash.' *The Economist*, May 19, 2012. http://www.economist.com/node/21555583/.

———. 'Turkey's Foreign Policy: Growing Less Mild', April 14, 2012. http://www.economist.com/node/21552602?zid=307&ah=5e80419d1bc9821ebe173f4f0f060a07.

———. 'Turkey and Its Neighbours: Delicate Balance', July 7, 2012. http://www.economist.com/node/21558279?zid=307&ah=5e80419d1bc9821ebe173f4f0f060a07.

The Huffington Post. 'Turkey Earthquake 2011: Death Toll Rises To 534', October 27, 2011. http://www.huffingtonpost.com/2011/10/27/turkey-earthquake-2011-death-toll_n_1034565.html.

The World Bank. 'Country Partnership Strategy Progress Report for Indonesia FY2009-2012. Investing in Indonesia's Institutions for Inclusive and Sustainable Development', February 8, 2011.

———. 'Data on Trade and Import Barriers', December 2011. http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:21051044~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html.

———. 'Gross Fixed Capital Formation (annual % Growth)', 2011. http://data.worldbank.org/indicator/NE.GDI.FTOT.KD.ZG.

———. 'Gross Fixed Capital Formation (annual % Growth)', 2011. http://data.worldbank.org/indicator/NE.GDI.FTOT.KD.ZG.

———. 'Logistics Performance Index', August 23, 2012. http://info.worldbank.org/etools/tradesurvey/mode1b.asp.

———. 'Population Growth.' *Population Growth (annual %)*, 2011. http://data.worldbank.org/indicator/SP.POP.GROW.

———. 'Population Growth.' *Population Growth (annual %)*, 2011. http://data.worldbank.org/indicator/SP.POP.GROW.

———. 'Research and Development Expenditure (% of GDP)', 2009. http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS.

———. 'World Development Indicators - Agriculture, Value Added (% of GDP) | Data | Table', September 24, 2012. http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS.

———. 'World Development Indicators - Industry, Value Added (% of GDP) | Data | Table', September 24, 2012. http://data.worldbank.org/indicator/NV.IND.TOTL.ZS.

———. 'World Development Indicators - Services, Etc., Value Added (% of GDP) | Data | Table', September 24, 2012. http://data.worldbank.org/indicator/NV.SRV.TETC.ZS.

———. 'World Development Indicators | Data', July 2012. http://data.worldbank.org/data-catalog/world-development-indicators.

———. 'World Development Indicators | Data', July 2012. http://data.worldbank.org/data-catalog/world-development-indicators.

The World Economic Forum. 'The Global Competitiveness Report 2011 - 2012', August 23, 2012. http://reports.weforum.org/global-competitiveness-2011-2012/.

Trading Economics. 'Brazil Exports.' *Trading Economics*, July 2012. http://www.tradingeconomics.com/brazil/exports.

Transparency International. '2011 Corruption Perceptions Index -- Results', September 24, 2012. http://cpi.transparency.org/cpi2011/results/.

———. '2011 Corruption Perceptions Index -- Results', n.d. http://cpi.transparency.org/cpi2011/results/.

Traub, James. 'Will the Good BRICS Please Stand Up?' *Foreign Policy*, March 9, 2012. http://www.foreignpolicy.com/articles/2012/03/09/will_the_good_brics_please_stand_up.

TÜBĐTAK - BTYPD (STIPD). 'National Science, Technology and Innovation Strategy (2011-2016)', 2010. http://www.tubitak.gov.tr/sid/2415/pid/2400/index.htm;jsessionid=D8765AD20D4E48F6029BB30638F10B7D%20(link%20to%20UBTYS%20strategic%20framework%20in%20English).

Two Tomorrows. 'Tomorrow's Value Rating 2011.' *Tomorrow's Value Rating*, 2011. http://www.tomorrowsvaluerating.com/Page/TomorrowsValueRating2011.

UK Foreign and Commonwealth Office. 'Country Profile: South Africa', May 2012. http://www.fco.gov.uk/en/travel-and-living-abroad/travel-advice-by-country/country-profile/sub-saharan-africa/south-africa/?profile=politics.

UNCTAD. 'Investment Country Profiles: South Africa', February 2012.

———. 'Investment Country Profiles: Turkey', February 2012.

———. 'World Investment Report 2011. Country Fact Sheet: Brazil', 2010.

———. 'World Investment Report 2011. Country Fact Sheet: South Africa', 2010.

UNDP. 'Education Index (expected and Mean Years of Schooling)', August 23, 2012. http://hdrstats.undp.org/en/indicators/103706.html.

———. 'International Human Development Indicators - UNDP', August 23, 2012. http://hdr.undp.org/en/data/profiles/.

United Nations Office on Drugs and Crime. 'Homicide Statistics', 2011. http://www.unodc.org/unodc/en/data-and-analysis/homicide.html.

US Central Intelligence Agency. 'CIA - The World Factbook, Indonesia Country Page', September 10, 2012. https://www.cia.gov/library/publications/the-world-factbook/geos/id.html.

———. 'CIA - The World Factbook. Brazil Country Page', n.d. https://www.cia.gov/library/publications/the-world-factbook/geos/br.html.

———. 'CIA - The World Factbook. South Africa Country Page.', 2011. https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html.

———. 'CIA - The World Factbook. South Korea Country Page.' *CIA - The World Factbook*, September 10, 2012. https://www.cia.gov/library/publications/the-world-factbook/geos/ks.html.

———. 'CIA - The World Factbook. Turkey Country Page.', 2010. https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html.

US Department of Commerce / International Trade Administration. 'Renewable Energy Market Assessment Report: Indonesia', May 2010.

US Department of Defense. 'Instruments of National Power.' *Department of Defense Dictionary of Military and Associated Terms*. Joint Publication

1-02. Washington, D. C., April 12, 2001. http://www.fas.org/irp/doddir/dod/jp1_02-april2010.pdf.

US Department of State. 'South Korea.' *US Department of State*, April 12, 2012. http://www.state.gov/r/pa/ei/bgn/2800.htm#foreign.

US Energy Information Administration. 'Country Analysis Brief Indonesia', May 2011.

———. 'Country Analysis Briefs: Brazil', February 28, 2012.
Vela, Justin. 'Turkey's Not Messing Around Anymore - By Justin Vela | Forei gn Policy', June 27, 2012. http://www.foreignpolicy.com/articles/2012/06/27/turkey_s_not_messing_around_anymore.

Vit, J. 'Criminals Increasingly Targeting Indonesian Ports: World Piracy Report.' *The Jakarta Globe*, n.d. http://www.thejakartaglobe.com/home/criminals-increasingly-targeting-indonesian-ports-world-piracy-report/530837.

Waldmeir, Patti. 'China Milk: Not so Bright.' *Financial Times*, June 28, 2012. http://blogs.ft.com/beyond-brics/2012/06/28/china-milk-not-so-bright/#axzz252PzGVPh.

Wikipedia. 'BRICS.' *Wikipedia, the Free Encyclopedia*, n.d. http://en.wikipedia.org/wiki/BRICS.

———. 'Emerging Markets.' *Wikipedia, the Free Encyclopedia*, n.d. http://en.wikipedia.org/wiki/Emerging_markets.

———. 'List of Earthquakes in Japan - Wikipedia, the Free Encyclopedia', June 6, 2012. http://en.wikipedia.org/wiki/List_of_earthquakes_in_Japan.

World Health Organization. 'Country Cooperation Strategy South Africa', May 2011.

———. 'Global Health Observatory Data Repository', 2011. http://apps.who.int/ghodata/?vid=18400&theme=country.

———. 'South Africa Health Profile', May 2012.

———. 'South Africa Road Safety Profile', 2008.

Yale University. '2012 EPI :: Rankings | Environmental Performance Index', August 23, 2012. http://epi.yale.edu/epi2012/rankings.

Zamiska, Nicholas. 'Who's Monitoring Chinese Food Exports?' *The Wall Street Journal*, April 9, 2007. http://online.wsj.com/article/SB117608207682763704.html.

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