Germany Profits from Growth in Brazil, Russia, India, China, and South Africa—But for How Much Longer?

by Georg Erber and Mechthild Schrooten

Brazil, Russia, India, China, and South Africa—the BRICS—show high overall economic growth rates by international standards. Even during the recent economic crisis, most BRICS countries still recorded above-average growth. This development has benefited German foreign trade in particular. This applies especially to automotive and mechanical engineering.

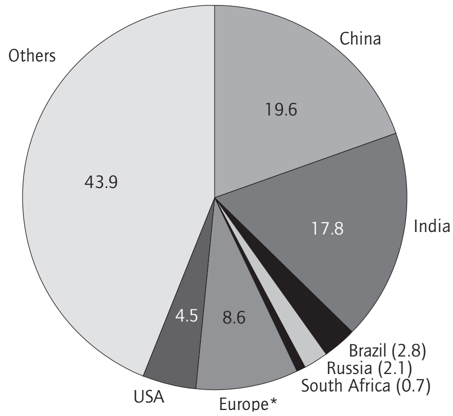
However, this geographical reorientation of German export trade in favor of the BRICS countries could soon reach its limits. The institutional and infrastructural conditions of the BRICS are increasingly proving to be bottlenecks for their economic catch-up processes. With the exception of Russia, rapid economic growth in these countries already slowed down in 2011. Further development will depend on the extent to which the governments of the BRICS countries are able to remove the obstacles to growth that have been identified.

The five BRICS countries are Brazil, Russia, India, China, and South Africa.[1] About 43 percent of the world's population (see Figure 1) live in the BRICS countries. Their share of global production has increased significantly in the last ten years, and in 2011 it was approximately 20 percent (see Figure 2). However, the contribution of the BRICS countries to global economic output is still well below their share of the world's population, despite strong growth in recent years.[2]

Figure 1

Proportion of BRICS to World Population 2010

In percent



* *Excluding Russia, Europe includes the EU and other European economies.*
Source: United Nations Population Division, online data.

The BRICS have an overall share of about 43 percent of world population.

Average economic growth in the BRICS countries has been high in recent years. Even in the wake of the international financial crisis, the economies of these countries proved to be relatively stable; only Russia's growth took a real hit in 2009 (see Figure 3). Consequently, economic development in the BRICS countries has had a stabilizing effect on the global economy. Despite a partial decoupling from the global economic environment, individual BRICS countries are not yet able to assume the role of economic driver for the world's economy.[3] In 2011, overall economic dynamism slowed in all BRICS

1 The acronym BRICS was coined by the investment bank Goldman Sachs, attesting to these countries having disproportionately high development potential.

2 M. Schrooten, „Brasilien, Russland, Indien, China und Südafrika: Starkes Wirtschaftswachstum – große Herausforderungen, „Wochenbericht des DIW Berlin, no. 37/38 (2011).

3 C. Dreger and Y. Zhang, China, „Trotz hoher gesamtwirtschaftlicher Dynamik noch keine Lokomotive der Weltwirtschaft," Wochenbericht des DIW Berlin, no. 33 (2012).

countries except Russia. This may be due to government stimulus programs coming to an end. However, growth rates are still higher than those of the major industrial countries.

Differences in International Integration

The BRICS countries rely on international economic integration; there is also growing interdependence. However, in view of its external economic integration, BRICS represent a highly heterogeneous group of countries. Russia and China have achieved years of trade surpluses compared to the rest of the world. However, in recent years, the current account balances of these countries relative to the gross domestic product have decreased significantly (see Figure 4). China's large current account surpluses have allowed China to become a major net creditor on the international capital market. China's overall savings rate is still more than 50 percent, and the rate of investment is high by international standards at more than 48 percent.[4] With such high rates of investment, however, there is a risk that unprofitable investment may also occur. This can affect long-term macroeconomic development. Domestic consumption, which increased in 2011 by more than nine percent, could be a strong pillar of China's economic development in future.

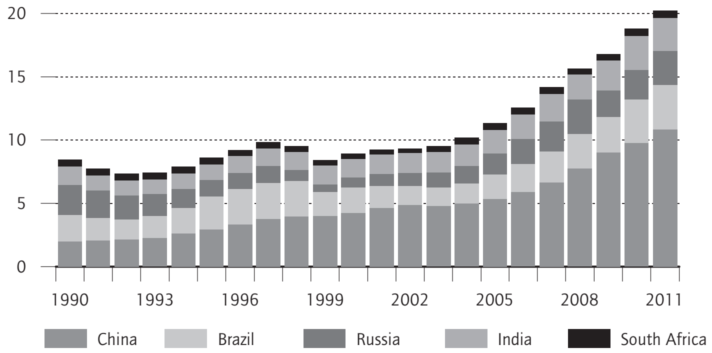
Russia, which formerly had massive debts on the international financial markets, also has now a current account surplus. This was 5.3 percent of gross domestic product in 2011. However, if exports of energy resources are excluded, it has a significant current account deficit of -13.1 percent of gross domestic product for 2011. This shows how strongly dependent Russia is on demand for and price development of energy resources in the international markets. In addition to exports of oil and gas, which accounted for 65 percent of all Russian exports in 2011, arms exports have become increasingly important in recent years.[5]

The situation in Brazil, India, and South Africa is quite different. These countries have moderate current account deficits, the causes of which, however, are very different. Brazil's current account deficit in 2011 was primarily attributable to the recovery of profits from international investors.[6] In contrast, the Brazilian trade balance shows a surplus, although regional demand for cars manufactured in Brazil fell. Its trade surplus is expected to continue to rise after the planned development of large offshore oil fields. India's current account deficit in 2011 was less than three percent of gross domestic product. What is striking is the positive balance of ser-

Figure 2

BRICS' Share of Global Economic Output 1990 to 2011

In percent



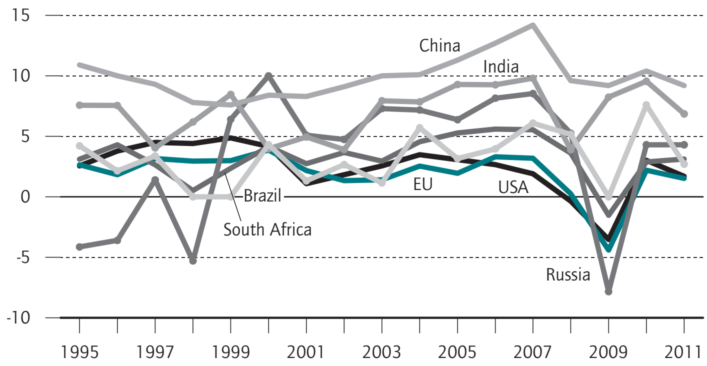
Based on the current US dollar. China includes Hong Kong and Macau.
Sources: The World Bank, calculations by DIW Berlin.

There has been a particularly sharp increase in China's share of global output.

Figure 3

Growth of the BRICS Compared to the EU and the US from 1995 to 2011

In percent



Growth in real gross domestic product; preliminary figures for 2011.
EU = EU27.

Sources: International Monetary Fund, national statistics, calculations by DIW Berlin.

Past growth in the BRICS countries was mostly above average.

4 International Monetary Fund, „People's Republic of China," IMF Country Report, no. 12/195 (July 2012).

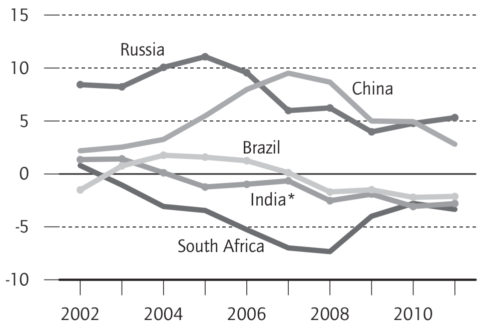
5 International Monetary Fund, „Russian Federation," IMF Country Report, no. 12/217 (August 2012).

6 International Monetary Fund, „Brazil," IMF Country Report no. 12/191 (July 2012).

Figure 4

Current Account Balances of BRICS 2002 to 2011

As percentage of gross domestic product



* *Fiscal year 2011/2012.*

Sources: The World Bank, International Monetary Fund, calculations by DIW Berlin.

In recent years, China and Russia have had large current account surpluses.

Table 1

Human Development Index for BRICS and Germany 2011

	Rank	Human Development Index
Germany	9	0.905
Russia	66	0.755
Brazil	84	0.718
China*	101	0.687
South Africa	123	0.619
India	134	0.547

* *China, excluding Hong Kong.*

The HDI is, by definition, between 0 (worst) and 1 (best).

Source: United Nations Development Programme.

As before, most BRICS have relatively low HDI values.

vices; software development plays a major role here.[7] In recent years, there has been a shift away from direct foreign investments to short-term portfolio investments in its capital account. South Africa has reduced its current account deficit significantly since 2008.[8] This resource-rich country has a near-even trade balance. Gold exports make up about ten percent of goods exports.

Risks to Future Economic Development

The durability of the economic catch-up process also depends on the social, institutional, and infrastructural framework of an economy. These may pose risks to future macroeconomic dynamic growth in the BRICS countries. Indicators assessing overall framework conditions still point to a clear gap between BRICS and industrialized countries. The development gap between the individual BRICS countries is also evident from these indicators.

The Human Development Index (HDI), an international ranking regularly compiled by the United Nations, not only includes per capita GDP but also access to education and life expectancy.[9] It shows that the BRICS countries still have a lot of catching up to do (see Table 1). This is particularly clear in the case of India, 134th out of a total of 187 countries. India's structural weaknesses are also apparent when looking at the World Bank's Doing Business Indicator. This indicator compares how easy it is to do business in a particular country (see Table 2).[10] India ranks poorly here, too. It is worth noting the position of South Africa in this list which is significantly ahead of the other BRICS countries. Even partial indicators—for example for foreign trade or access to credit—show that the BRICS countries still have considerable potential for improving their framework conditions.

The Corruption Perceptions Index (CPI) compares the perceived corruption problems in various countries.[11] Here too, the BRICS countries are ranked far behind Germany and other industrialized countries (see Table

7 International Monetary Fund, „India," IMF Country Report no. 12/96 (April 2012).

8 International Monetary Fund, „South Africa," IMF Country Report no. 11/258 (July 2011)

9 In 2011, the leader was Norway. In 187th and therefore last place was the Democratic Republic of Congo. United Nations Development Programme, Human Development Report 2011 (2011).

10 In the current ranking, Singapore is in first place, Chad is in 183rd and therefore last place. The World Bank und International Finance Corporation, Doing Business 2012 (Washington, D. C.: 2012).

11 The Corruption Perception Index CPI is compiled annually by the non-governmental organization, Transparency International. In 2011, New Zealand was in first place, North Korea and Somalia were last equal in 182nd place.

3). South Africa leads the ranking of BRICS countries, ahead of Brazil, China, and India; Russia brings up the rear. A perceived susceptibility to corruption can question, in particular, foreign investors' confidence in the legal security of the country in question. There is also a risk that existing economic potentials cannot be fully exploited because of corruption and, at the same time, the necessary investment in infrastructure lags behind the needs of the private sector and the general public.

Infrastructural Barriers

The establishment and development of infrastructure in BRICS countries, particularly with regard to energy supply and transport (such as roads and ports), has not kept pace with economic growth. Consequently, access to electricity in most of the BRICS countries is still a major problem (see Table 2). Examples of this include the recent power outages in India. Even in China, there are power shortages, especially in the hot summer months, so factories need to reallocate production from the daytime to nighttime.[12] Thanks to the extremely rapid rise in the number of car owners in major cities such as Beijing, Shanghai, or Chong Ching in China, extensive traffic jams are common in these places.[13] The same also applies in similar megacities in the other BRICS countries. There are also bottlenecks in drinking water supply and sanitation. Furthermore—despite significant progress—there are still bottlenecks in information and communication infrastructures.[14] According to a comparison of infrastructure by the World Economic Forum, Brazil ranks only 104th out of 142 countries. Russia was ranked in 100th place, India in 86th, China in 69th, and South Africa in 62nd place.[15] Without massive investment, infrastructure in the BRICS countries could soon become a key obstacle to growth for these countries. Opportunities are opening up for the German export economy to offer appropriate technology and financing.

Table 2

Doing Business Rankings for BRICS and Germany 2011

	Overall ranking	Partial valuations		
		Cross-border trade	Access to credit	Access to electricity
Germany	19	12	24	2
South Africa	35	144	1	124
China*	91	60	67	115
Russia	120	160	98	183
Brazil	126	121	98	51
India	132	109	40	98

**China, excluding Hong Kong.*

Comparison of 183 countries. The lower the rank, the easier it is to do business in this country.

Sources: International Finance Corporation, the World Bank.

It is comparatively difficult to do business in Russia, Brazil, and India.

Table 3

Corruption Perception Index CPI for BRICS and Selected Industrialized Countries 2011

Country	Rank	CPI
New Zealand	1	9.5
Germany	14	8.0
Japan	14	8.0
USA	24	7.1
South Africa	64	4.1
Brazil	73	3.8
China	75	3.6
India	95	3.2
Russia	143	2.4

The index can be a value between 1 (high corruption) and 10 (low corruption).
Source: Transparency International, Corruption Perceptions Index 2011.

Most BRICS countries are still lagging a long way behind in the corruption index.

12 Z. Yangpeng, „China's electricity shortages may worsen as summer looms," China Daily, February 24, 2012.

13 Freeways are also struggling with congestion problems. H. Dan and W. Qian, „Monster traffic jam... again," China Daily, September 4, 2010.

14 „Telecommunications in Brazil—The next big blackout?," The Economist, August 11, 2012.

15 Table 5 in the World Economic Forum, The Global Competitiveness Report 2011-2012 (Geneva: 2011).

Box

Germany's Foreign Trade in Cars by Country and Region

Table

Exports of Automobiles from Germany to Importing Countries in 2010 and 2011

	2010		2011		
	Quantities	Shares in percent	Quantities	Shares in percent	Rates of change 2010/2011
Total	**4,238,759**	**100.0**	**4,518,973**	**100.0**	**6.6**
Europe overall	**2,634,866**	**62.2**	**2,729,928**	**60.4**	**3.6**
GIIPS	**659,012**	**15.5**	**607,959**	**13.5**	**–7.7**
Greece	16,131	0.4	14,823	0.3	–8.1
Ireland	25,615	0.6	26,597	0.6	3.8
Italy	372,457	8.8	349,240	7.7	–6.2
Portugal	43,863	1.0	34,097	0.8	–22.3
Spain	200,946	4.7	183,202	4.1	–8.8
BRIC	**596,245**	**14.1**	**774,457**	**17.1**	**29.9**
Russia	93,088	2.2	150,227	3.3	61.4
Brazil	26,129	0.6	34,492	0.8	32.0
China	462,486	10.9	566,357	12.5	22.5
India	14,542	0.3	23,381	0.5	60.8
Africa	**79,939**	**1.9**	**76,365**	**1.7**	**–4.5**
USA	**518,137**	**12.2**	**525,608**	**11.6**	**1.4**

No data available for South Africa.
Source: German Association of the Automotive Industry (Verband der Automobilindustrie, VDA).

From 2010 to 2011, rising exports in BRICS countries have more than offset export losses to GIIPS countries.

With a share of 17.4 percent of German foreign trade, motor vehicles and motor vehicle parts was the most important branch of the export economy in 2011. Mechanical engineering is also prominent with a share of 15.2 percent.[1] In 2011, road transport equipment had an export rate of 77 percent. Certainly, development has varied widely in the individual regions and countries over the past two years.

Europe was still the most important market in 2011 with a share of around 60 percent of all automobile exports. That share in the eurozone was 47 percent. The GIIPS countries most affected by the euro crisis achieved a share of almost 14 percent. Compared to 2010, sales in these countries fell by eight percent, since automobiles, as durable goods, were particularly affected by the weak consumer demand in those countries. In absolute terms, the declines in Italy and Spain were the largest.

In contrast, during the same period, automobile sales boomed in the BRICS countries. They even exceeded exports to the GIIPS countries in 2011. Between 2010 and 2011, there was an increase in BRICS exports of almost 30 percent. Based on the absolute number of cars exported there, China is the clear frontrunner. There has been particularly strong growth in exports to Russia and India at more than 60 percent, although the level is still relatively low here. The South African market still has significant growth potential, too. However, the high growth rates of the past year will not continue permanently.

The growing importance of the BRICS countries for German automobile manufacturers can also be seen when compared to its traditional sales market, the US, whose share declined over the past year to less than twelve percent.

1 E. Triebskorn, "Der deutsche Außenhandel im Jahr 2011," Wirtschaft und Statistik (April 2012): 332–341.

German Export Industry Benefits from BRICS

Due to their dynamic growth, the BRICS countries are gaining increasing importance as export markets for industrial countries. The German export industry has been able to benefit significantly from this development.[16] Since 1999, German exports, particularly to China and Russia, have increased dramatically (see Figure 5). In particular, automotive manufacturing and mechanical engineering played a major role (see box).

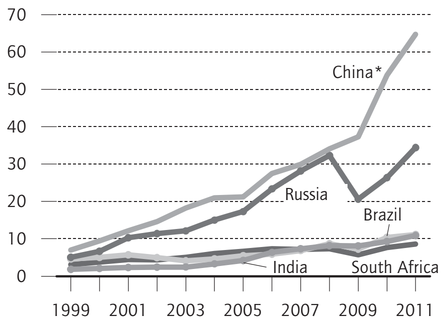
Compared to other trading partners, the importance of the BRICS countries for the German export market has increased significantly since 1999 (see Figure 6). In

16 G. Erber, „German-Chinese Economic Relations—Opportunities and Risks," Economic Bulletin, no. 3 (2012).

Figure 5

German Exports to BRICS Countries from 1999 to 2011

In billion euros at respective prices



Excluding Hong Kong and Macau.

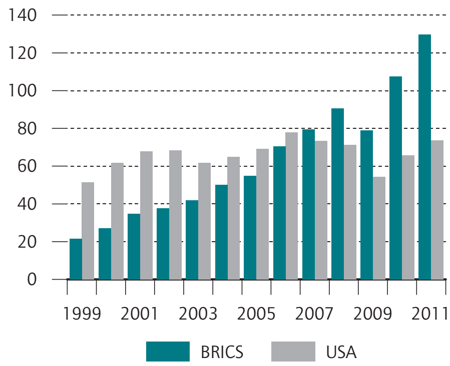
Sources: Federal Statistical Office, calculations by DIW Berlin.

Exports to China and Russia since 1999 have increased dramatically.

Figure 7

German Exports to the USA and BRICS Countries from 1999 to 2011

In billion euros at respective prices



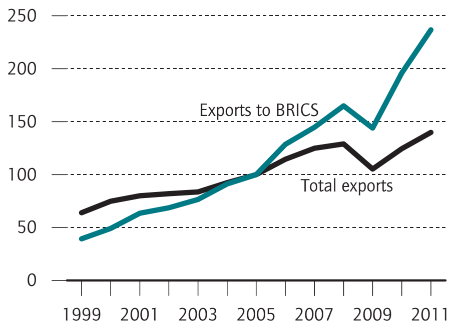
Source: Federal Statistical Office, calculations by DIW Berlin.

Exports to BRICS countries have overtaken exports to the US.

Figure 6

Development of German Goods Exports to the BRICS Countries and Overall 1999 to 2011

Index 2005 = 100



Sources: Federal Statistical Office, calculations by DIW Berlin.

Exports to BRICS countries have developed disproportionately well since 1999.

1999, China only reached 16th place in the list of German export destinations (in terms of value of exported goods); in 2011, China has already risen up the ranks to 5th place. India improved its position in the same period from the 40th to 21st place, Russia, from 20th to 12th place, and South Africa rose from 30th to 24th place. Only the importance of Brazil for German exports remains virtually unchanged (from 21st to 20th place). Alongside European countries, the US, and Japan, the BRICS countries are already Germany's most important trading partners. In 2011, German exports to BRICS countries reached nearly 130 billion euros, almost double exports to the US at 74 billion euros (see Figure 7). In future, this ratio is likely to shift even more in favor of the BRICS countries due to the different growth dynamics.

A comparison with the current crisis countries in the eurozone, Greece, Ireland, Italy, Portugal, and Spain (GIIPS) shows that in 2011 German exports to BRICS countries (129.8 billion euros) clearly exceeded those to the GIIPS countries (113.5 billion euros). The remaining countries in the eurozone, with a total of 307.4 billion euros in 2011, are still of much greater importance to German foreign trade. Without a sustained increase in Europe's growth dynamic, the trend towards a shift in the importance of the BRICS countries for German foreign trade and away from Europe will continue. However, against the background of the above risks to the further economic development of BRICS countries, it is doubtful whether these countries can maintain their current growth paths.

Conclusion

In recent years, Germany has benefited significantly from strong economic growth in the BRICS countries. This is especially true for the recent crisis years. The example of trade relations with the BRICS countries shows that the German export industry is flexible enough to adapt to changing growth poles in the global economy.

Meanwhile, there have been indications of a decrease in overall economic growth in the BRICS countries. This is not solely due to global economic conditions—in particular. the crisis in some industrialized countries. Rather, these are more likely also due to homemade obstacles to growth. Inadequate institutional and infrastructural framework conditions still represent a bottleneck factor for the further economic development of the BRICS countries. The onus is on national economic policies to ensure an improvement in framework conditions.

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