

Appendices

Appendix 1 Summary of Main Stimulus Packages of the Six BRICKS Countries

Country	Date	Amount	Item	Sponsor & remarks
Brazil	Sep 2008	#1 (reference #) Please see the next column	<ol style="list-style-type: none"> Public bank could purchase the stock of real estate firms and other sectors (US\$80 mn to US\$1.09 bn) Loans to companies for refinancing their external debts (US\$20 bn) On January 21, 2009, the central bank cut its basic rate by 100 basis points (from 13.75% to 12.75%) Expansion of borrowing capacity of PETROBRAS and the National Bank (BNDES) to keep up planned investment levels (US\$5.3 bn) US\$6.5 bn in support for the agricultural sector A 12% increase in the minimum wage 	
		#1	Fiscal policy:	
		Please see next column	<ol style="list-style-type: none"> Injection of over US\$43.8 bn to keep up consumption levels Ensure a budget of at least US\$11.4 bn for spending The sectors worst hit by the crisis were granted fresh tax cuts and more resources US\$9.2 bn earmarked for the Growth Acceleration Program in the 2009 budget US\$6.3 bn reserved for the Sovereign Fund on projects Release US\$17.5 bn to help Brazilian firms get raw materials A series of tax cuts totaling around US\$3.7 bn to boost consumption Extra US\$4.2 bn of government investment, in addition to US\$16.6 bn already planned US\$2.5 bn Treasury Bond for infrastructure investments 	
		#2	Lowering car tax	
		#3 US\$221.4 bn	Infrastructure building—focusing on transport system and energy segment.	Central government

2009	#4		The 2009 stimulus package amounted to a US\$20 bn injection into the economy, equivalent to 1.2% of Brazil's GDP, which composed of:	
			1. Infrastructure investment (41.5%), including My house, My Life housing program for low- and middle-income households	
			2. Tax cuts (35%)	
			3. Interest rate subsidies (15.5%)	
			4. Extraordinary budget transfers to municipalities (5.5%)	
			5. Extension of the Family Fund (1.5%)	
			6. Extension of unemployment insurance benefits (1%)	
March 2009	#4 #5	US\$40 bn (BRL72 bn)	Budget for new homes for low- and middle-income families program was increased from US\$19 bn to US\$40 bn (BRL72 bn).	Central bank
2009	#6		Reduced deposit requirements, bought portfolios from smaller banks, and provide loans to micro- and small enterprises	Central bank
2008/2009	#6		Public banks provided about 41% of all loans (18.5% of GDP). Reduced the basic interest rate to its lowest level in 20 years (8.75%, equivalent to a real annual rate of less than 5%)	Central bank
March – 4th quarter, 2009	#6		Temporarily reduced the industrial products tax on automobile sales, household electrical appliances and construction inputs. Lower income tax rates for middle-income families.	Central government
	#6		Extended payment deadlines for various taxes.	The federal government and some states
	#6	US\$9 bn (BRL20.5 bn)	Federal government investment rose 12.7%, reaching US\$9 bn (BRL20.5 bn)	Federal government #7 From 2008–2010, US\$152 bn (around 15% of 2008 GDP)
Russia	Late 2008	#7 US\$200 bn (about 7% GDP)	Increase liquidity in the banking sector and aid Russian firms unable to roll over large foreign debts coming due.	Central government

(continued)

Appendix 1 (continued)

Country	Date	Amount	Item	Sponsor & remarks
	Sep 17, 2008	#8 US\$44 bn (RUB1.13 tn)	Loan to the three biggest banks, Sberbank, VTB Bank and Gazprombank to boost liquidity	Central government
	Nov 20, 2008	#9	Corporate profit tax rate (24% in 2008) was reduced to 20%	Central government
	Nov 2008	#9 US\$20 bn	Surplus package worth US\$20 bn was earmarked for cushioning Russian economy	
	2008/2009	#10	1. Direct support to 295 strategically and 1,148 regionally important firms across various economic sectors (about 75% are large firms)	Up to about US\$8.1 bn (RUB276 bn) from the federal budget
	2009	US\$11 bn (RUB2.9 tn)	2. On-the-job training, creating temporary work programs for the unemployed, ensuring direct support to households, facilitating internal labor mobility, and providing support for small and medium enterprises	#7 From 2008–2010, US\$101 bn (8% of 2008 GDP)
	Apr 2009 to Mar 2010	about 6.7% of GDP	3. Increase child allowances by 220%, unemployment benefit budget by 70% and 20% of the pensions of the lowest 30% pensioners	
		#11	Increased government expenditures from 33.7% of GDP to 40.6% of GDP	Central government
India	Dec 7, 2008 (1st stimulus)	#12 US\$4.2 bn (INR200 bn)	Excise duty reduction by 4% in 2008 (extended in the 3rd stimulus) Import Duty on Naphtha for use in the power sector was eliminated (extended in the 3rd stimulus)	Indian Central government #13—1st to 3rd stimulus package amount 1.8% of GDP
	1st stimulus	#13 US\$73 mn (INR3.5 bn)	Interest subvention of 2% up to March 2009 Provide guarantees for exports to difficult markets/products Exporters refund of service tax on foreign agent commissions of up to 10% of FOB value of exports	Pre- and post-shipment export credit for labor intensive exports and SME sector Back-up guarantee

1st stimulus	#13 US\$229 mn (INR11 bn)	Additional funds to ensure full refund of Terminal Excise duty/ Central Sales Tax (CST)	
1st stimulus	#13 US\$833 mn (INR40 bn)	Refinancing the Indian National Housing Bank	
1st stimulus	#13 US\$1.5 bn (INR70 bn)	Support incremental lending, either directly to medium, small and micro enterprises, or indirectly via banks	
1st stimulus	#13 US\$292 mn (INR14 bn)	Additional allocation to clear the entire backlog in Technology Upgradation Fund (TUF) scheme	For textile industry
1st stimulus	#14	Reduced lending rates on housing loans for low- and middle-income segments (reduced lending rate to 6.5% and borrowing rate to 5%) Removed duty on export of iron ore fines and cut levy on iron lump exports from 15% to 5%.	Indian Central government Reserve Bank of India
Jan 2, 2009 (2nd stimulus)	#13 US\$2.1 bn (INR100 bn)	The India Infrastructure Finance Company Limited (IIFCL) refinanced bank lending of longer maturity to eligible infrastructure projects, such as highway	Raise US\$2.1 bn (INR100 bn) through tax-free bonds by March 2009
2nd stimulus	#15 US\$6.2 bn (INR300 bn) US\$5.2 bn (INR250 bn)	The “all-in-cost” ceiling of external commercial borrowing was removed. Increase denominated corporate bonds from US\$6 bn to US\$15 bn. Provide liquidity support to non-banking finance companies	India’s 2nd stimulus package is mainly boosting up what has been planned in the 1st stimulus package.
Feb 24, 2009 (3rd stimulus)	#12	Across-the-board cut on all products other than petroleum and those with rate less than 4%	

(continued)

Appendix 1 (continued)

Country	Date	Amount	Item	Sponsor & remarks
	3rd stimulus	#16	Service Tax Rates reduction by 2%, from 12% to 10% Central Excise Rate reduced by 2%, from 10% to 8% to benefit home appliance and commodity industries	India's 3rd and 4th stimulus packages are mainly based on the first two packages with additions focused on specific sectors
	Feb 26, 2009 (4th stimulus)	#17 US\$67.7 mn (INR3.25 bn)	Special Package for Leather and Textiles sector Gem and Jewelry export–import restrictions on worked corals removed	Amounted to 3.5% of GDP for 2008–2009
China	Nov 9, 2008	#18 #19 #20 US\$586 bn (CNY4 tn) (19% of 2008 GDP) * CNY is the formal name of Chinese currency, also known as RMB.	More than 86% of the PRC's stimulus package went to infrastructure spending, out of which: 45% was for road, rail, and airport infrastructure (US\$ 263.7 bn) (CNY1.8 tn), 9.5% was for improving electricity, water, and road infrastructure in rural areas (US\$54.2 bn) (CNY370 bn), 7% was for low-income housing (US\$41 bn) (CNY280 bn), and 24.7% was for the reconstruction of towns devastated by the May 12, 2008, earthquake. The remainder of the stimulus package went to health care and education (US\$5.9 bn) (CNY40 bn or 1% of the total package), ecological and environmental protection (US\$51.3 bn) (CNY350 bn or 8.8%), and technical innovation (US\$23.4 bn) (CNY160 bn or 4%).	Central government and local government
	Jan 12, 2009	#19 US\$87.8 bn investment spending	Scientific and technical innovation/upgrades	
	Jan 21, 2009	#19 US\$124.3 bn	Health-care reform to provide basic medical security for all citizens, improve the quality of medical services, and make medical services more accessible	

Korea	Sep 26, 2008	#18, #21 US\$36 bn (KRW50 tn, 5.14% of 2008 GDP) (spread over four years) for Green New Deal	<ol style="list-style-type: none"> 1. Inject US\$10 bn into the currency swap market 2. Tax reduction for lower-income taxpayers, income support for low-income households, low-income households received a cash stipend 3. Support for small and medium-sized enterprises and investment. 4. Green New Deal comprises nine major projects including: US\$6 bn to improve energy conservation in villages and schools, US\$7 bn on mass transit and railroads, and US\$11 bn on river restoration. 5. Permanent personal income tax cut (to be executed in 2009 and 2010). 6. The maximum per-person deduction was raised. 	<p>More than a quarter of South Korea's stimulus measures consist of tax measures.</p> <p>Social policy measures encompass roughly 1/3 of the total stimulus package and reductions in both the corporate income tax and the personal income tax also account for almost 1/3 of stimulus volume in 2009.</p> <p>US\$30 bn—prop up the Korean banking system</p>
	Oct 19, 2008	#22 #23 #24 US\$100 bn US\$30 bn	<p>Loan guarantees</p> <p>US\$30 bn to banks and exporters in urgent need of foreign exchange</p>	
	Oct 27, 2008 Dec 12, 2008	#23 #24 Please see the next column	<ol style="list-style-type: none"> 1. Reduced interest rate from 5% to 4.25% and the interest rate on the Aggregate Ceiling Credit Program from 3.25% to 2.5% to enhance bond market conditions and alleviate credit crunch of SMEs. 2. Expand the currency swap arrangement with the Bank of Japan from US\$3 bn to US\$20 bn on Dec 12, 2008. 3. Korean government expanded fiscal budget by more than US\$34 bn (KRW50 tn) (over 5% of GDP) since the second half of 2008, including: <ol style="list-style-type: none"> (a) US\$3 bn (KRW4.4 tn) through tax refund on oil consumption and others (b) US\$3.1 bn (KRW4.6 tn) fiscal spending of US\$7.8 bn (KRW11.4 tn) (c) US\$6.9 bn (KRW10.2 tn) tax cuts (d) US\$11.7 bn (KRW17.2 tn)—revised fiscal budget and supplementary budget in 2009. 	<p>Currency swap arrangements with the U.S., Japan, and China, which brought US\$90 bn additional liquidity to mobilize funds</p> <p>#24</p> <p>The expansion in fiscal stimulus package after the second half of 2008 reached US\$34 bn (KRW50 tn), which accounted for more than 5% of Korea's nominal GDP in 2008</p>

(continued)

Appendix 1 (continued)

Country	Date	Amount	Item	Sponsor & remarks
	The 2nd half of 2008,	#24 Please see next column	<ol style="list-style-type: none"> 1. Provided US\$55 bn of liquidity directly into the foreign exchange market 2. Increased the Foreign Exchange Stabilization Fund by issuing the US\$3 bn Global Bond. 3. For 2008 and 2009, Korea's total fiscal stimulus package amounts to US\$39 bn (KRW49.6 tn), including US\$26.1 bn (KRW33.2 tn) of public expenditure and US\$12.9 bn (KRW16.4 tn) in tax reduction. The volume accounted for 4.5% of the GDP in 2009. 4. The stimulus package for 2010 will come up with US\$17 bn (KRW20.9 tn) comprising US\$6.3 bn (KRW7.7 tn) for public expenditure and US\$10.7 bn (KRW13.2 tn) won for tax reduction. 	<p>The total amount of fiscal stimulus for three years amounts to US\$57.4 bn (KRW70.5 tn) accounting for 6.9% of Korea's GDP.</p> <p>Korean government agreed with ASEAN+3 countries to create a Chiang Mai Initiative reserve pool of US\$120 bn to be used in case of crises.</p>
	Jan 6, 2009	#25	<p>Details of the Green New Deal:</p> <ol style="list-style-type: none"> 1. US\$13.7 bn (KRW18 tn)—improve the use of the nation's four major rivers and in construction of dams, reservoirs, and other water management facilities. This was expected to create 280,000 new jobs. 2. US\$1.5 bn (KRW2 tn)—invest in small and medium dams to tap new water resources and to help control flooding. This was expected to add 30,000 new jobs. 3. US\$8.4 bn (KRW11 tn)—build “green” transportation networks like low-carbon emitting railways, bicycle roads, and other public transport systems. This is projected to create 160,000 new jobs. 4. US\$2.3 bn (KRW3 tn)—expand existing forest areas. The public sector would help conserve energy and electricity by constructing 2 mn “green” homes and offices. 	

South Africa	Feb 2008	#26 US\$69 bn	1. Infrastructural expenditure 2. Provided business entities rewards that increase spending of financial resources	
	Jan 2009	#26 US\$14.81 mn	Development Bank of Southern Africa provided Airports Company South Africa with financial assistance	
	Feb 11, 2009	# 27 Please see next column	1. Poverty reduction: US\$2.5 bn (ZAR25 bn)—for education and health care, US\$1.3 bn (ZAR13 bn)—for social assistance grants, US\$404 mn (ZAR4 bn)—for school nutrition program, and US\$252.5 mn (ZAR2.5 bn)—to municipalities for basic services. 2. Accelerate employment growth: (a) Additional funding over the medium term—Working for Water and Working on Fire programs, (b) US\$101 mn (ZAR1 bn)—the Umsobomvu Youth Fund, (c) US\$373.7 mn (ZAR3.7 bn)—low-income housing projects, and (d) US\$414.1 mn (ZAR4.1 bn)—the second phase of the expanded public works program. 3. Building capacity to grow: US\$79.5 bn (ZAR787 bn) infrastructure investment plans, including (a) US\$646.4 mn (ZAR6.4 bn)—public transport, roads, and rail networks, (b) US\$414.1 mn (ZAR4.1 bn)—school buildings, clinics, and other provincial infrastructure projects, (c) US\$535.3 mn (ZAR5.3 bn)—municipal infrastructure and bulk water systems. 4. Reduce regulatory and microeconomic barriers: (a) US\$161.6 mn (ZAR1.6 bn)—industrial development and small enterprise support programs, (b) US\$181.8 mn (ZAR1.8 bn)—rural development and small farmer support, (c) US\$101 mn (ZAR1 bn)—electricity demand management, together with tax incentives for investment in energy efficient technologies.	Added to the budgets of provinces Government works with business and organized labor to protect work opportunities and accelerate skills development.

(continued)

Appendix 1 (continued)

Country	Date	Amount	Item	Sponsor & remarks
	Apr 2009	#28	<ol style="list-style-type: none"> 1. Supporting a new Special Drawing Rights (SDR) allocation of US\$250 bn 2. An additional US\$100 bn in lending from the Multilateral Development Banks, 3. Ensuring US\$250 bn for trade finance 	Tripling the resources available to the IMF, to US\$750 bn
	Oct 2011	#29 US\$3.2 bn	A competitiveness support package over the next six years to boost industrial development, assist enterprises, and accelerate job creation.	

1. Valadão, M., & Porto, N.G. (2009) *Brazilian Response to International Financial Crisis, the Pre-Salt Discoveries by Petrobras and the New Free Trade Areas in the Cities of Brazil*. 15 Law & Bus. Rev. Am, pp. 673–674.

2. Mendonça de Barros, J.R. (2010) The impact of the international financial crisis on Brazil (ARD), Real Instituto Elcano. Retrieved from http://www.realinstitutoelcano.org/wps/portal/rielcano_eng/Content?WCM_GLOBAL_CONTEXT=elcano/elcano_in/zonas_in/cooperacion+desarrollo/ari38-2010

3. Economy Watch (June 30, 2010a) Brazil economic stimulus package. Retrieved from <http://www.economywatch.com/economic-stimulus-package/brazil.html>

4. International Labour Office (ILO) (2010) G20 country briefs: Brazil's response to the crisis. G20 Meeting of Labour and Employment Ministers, Washington, D.C. April 20–21, 2010. Retrieved from http://www.dol.gov/ilab/media/events/G20_ministersmeeting/G20-brazil-brief.pdf

5. Novacich, S.E. (May 17, 2011) Minha Casa Minha Vida development, The Rio Times. Retrieved from <http://riotimesonline.com/brazil-news/front-page/minha-casa-minha-vida-development/#>

6. Economic Commission for Latin America and the Caribbean (ECLAC) (2009) *Preliminary Overview of the Economies of Latin America and the Caribbean 2009* (pp. 78–80). Retrieved from <http://www.eclac.org/publicaciones/xml/3/38063/Brazil.pdf>

7. Central Intelligence Agency (CIA) (June 15, 2011) The World Factbook. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html>

8. Nicholson, A. (September 17, 2008) Russia offers Sberbank, VTB, Gazprombank \$44 billion. Retrieved from <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a1sZsKZ32kvU&refer=europa>

9. Economy Watch (June 30, 2010b) Russia economic stimulus package. Retrieved from <http://www.economywatch.com/economic-stimulus-package/russia.html>

10. The World Bank in Russia (March, 2009) Russian economic report No. 18. Retrieved from <http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/retl18eng.pdf>

11. Åslund, A., Bogetic, Z., Sutela, P., & Carothers, T. (May 4, 2010) Russia's response to the financial crisis, Carnegie Endowment. Retrieved from <http://carnegieendowment.org/2010/05/04/russia-s-response-to-financial-crisis/2k>

12. Joseph, M. (2009) Global financial crisis: How was India impacted? Prepared for presentation to InWEnt-DIE Conference on Global Financial Governance—Challenges and Regional Responses, September 3–4, 2009 in Berlin, Germany. Retrieved from [http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/\(ymDK_contentByKey\)/MSJN-7SVEYB/\\$FILE/Global%20Financial%20Crisis%20and%20Impact%20on%20India_Berlin030909.pdf](http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/(ymDK_contentByKey)/MSJN-7SVEYB/$FILE/Global%20Financial%20Crisis%20and%20Impact%20on%20India_Berlin030909.pdf)

13. Government of India, Ministry of Finance (December 7, 2008) First stimulus package, in *Different Economic Stimulus Packages for Easing Difficulties of Micro, Small and Medium Sector Enterprises* (pp. 1–4). Office of the Commissioner of Industries, Government of Rajasthan. Retrieved from http://rajind.rajasthan.gov.in/Stimulus_Packages.pdf
14. Kumar, R., & A. Soumya. (September, 2010) Fiscal Policy Issues for India after the Global Financial Crisis (2008–2010). *ADB Working Paper 249*. Tokyo: Asian Development Bank Institute. Retrieved from <http://www.adbi.org/files/2010.09.17.wp249.fiscal.policy.issues.india.after.gfc.pdf>
15. Government of India, Ministry of Finance (January 2, 2009) Second stimulus package, in *Different Economic Stimulus Packages for Easing Difficulties of Micro, Small and Medium Sector Enterprises* (pp. 5–9). Office of the Commissioner of Industries, Government of Rajasthan. Retrieved from http://rajind.rajasthan.gov.in/Stimulus_Packages.pdf
16. Government of India, Ministry of Finance (February 24, 2009) Third stimulus package, in *Different Economic Stimulus Packages for Easing Difficulties of Micro, Small and Medium Sector Enterprises* (pp. 10). Office of the Commissioner of Industries, Government of Rajasthan. Retrieved from http://rajind.rajasthan.gov.in/Stimulus_Packages.pdf
17. Government of India, Ministry of Finance (February 26, 2009) Fourth set of stimulus provided through foreign trade policy, in *Different Economic Stimulus Packages for Easing Difficulties of Micro, Small and Medium Sector Enterprises* (pp. 11–12). Office of the Commissioner of Industries, Government of Rajasthan. Retrieved from http://rajind.rajasthan.gov.in/Stimulus_Packages.pdf
18. OECD (June, 2009) *Policy Responses to the Economic Crisis: Investing in innovation for long-term growth*. Retrieved from <http://www.oecd.org/sti/internet-economy/42983414.pdf>
19. Abidin, M.Z. (July, 2010) Fiscal policy coordination in Asia: East Asian infrastructure investment fund. *Asian Development Bank Institute Working Paper 232*. Retrieved from <http://www.adbi.org/working-paper/2010/07/30/3973.fiscal.policy.coordination.asia/east.asian.response.measures/>
20. Heilmann, S., & Schmidt, D. (2010) China country report, in Bertelsmann Stiftung (ed.), *Managing the Crisis. A comparative assessment of economic governance in 14 economies*. Gütersloh: Bertelsmann Stiftung. Retrieved from <http://www.bertelsmann-transformation-index.de/pdf/China.pdf>
21. Pascha, W. (2010) South Korea country report, in Bertelsmann Stiftung (ed.), *Managing the Crisis. A comparative assessment of economic governance in 14 economies*. Gütersloh: Bertelsmann Stiftung.
22. Fackler, M. (October 24, 2008). South Koreans relieving nightmare of last financial crisis, *The New York Times*. Retrieved from <http://www.nytimes.com/2008/10/24/business/worldbusiness/24iht-24won.17217405.html>
23. Kim, H.W. (2010a) Macroeconomic policies of Korea to cope with the crisis. EWC / KDI Conference, Honolulu, Hawaii, 19–20 August 2010. Retrieved from <http://www.ssc.wisc.edu/~mchinn/08Kim-Aug2010.pdf>.
24. Yoon, D.R. (2011) The Korean economic adjustment to the world financial crisis. *Asian Economic Papers* (10.1) 106–127. Retrieved from http://www.mitpress-journals.org/doi/pdf/10.1162/ASEP_a_00058
25. Instataforex (January 6, 2009) South Korea plans green stimulus package. Retrieved from <http://instataforex.com/az/forex-news/163.html>
26. Economy Watch (June 30, 2010c) South Africa economic stimulus package. Retrieved from <http://www.economywatch.com/economic-stimulus-package/south-africa.html>
27. Manuel, T.A. (February 11, 2009) *2009 Budget Speech*. Retrieved from <http://www.treasury.gov.za/documents/national%20budget/2009/speech/speech.pdf>
28. Dlamini, T. (2010) South Africa country report, in Bertelsmann Stiftung (ed.), *Managing the Crisis. A comparative assessment of economic governance in 14 economies*. Gütersloh: Bertelsmann Stiftung.
29. Gerardy, J. (October 26, 2011) South Africa to launch \$3.2 bn stimulus package, Africa Review. Retrieved from <http://www.africareview.com/Business+++Finance/-/979184/1261984/-/115wekyz/-index.html>

Appendix 2 Important Meetings Held by World Leaders to Address the 2008 Global Financial Crisis

Date	Place	Participants
June 18–19, 2012	Los Cabos, Mexico	G20
June 17, 2012	Los Cabos, Mexico	G7 finance ministers
March 1–2, 2012	Brussels	European Council
January 30, 2012	Brussels	Informal meeting of members of the European Council
December 8–9, 2011	Brussels	European Council
November 12–13, 2011	Honolulu, USA	19th APEC Economic Leaders' Meeting
November 3–4, 2011	Cannes, France	G20
October 23, 2011	Brussels	European Council
September 10, 2011	Marseille	G8 Deauville Partnership finance ministers
September 9–10, 2011	Marseille	G7 finance ministers and central bank governors
July 21, 2011	Brussels	Meeting of heads of state or government of the Euro area
June 23–24, 2011	Brussels	European Council
March 24–25, 2011	Brussels	European Council
March 17, 2011	Japan	G7 finance ministers telephone conference
March 11, 2011	Brussels	Extraordinary European Council
February 4, 2011	Brussels	European Council
December 16–17, 2010	Brussels	European Council
November 21, 2010	Ireland	G7 finance ministers
November 13–14, 2010	Yokohama, Japan	18th APEC Economic Leaders' Meeting
November 11–12, 2010	Seoul, Korea	G20
October 28–29, 2010	Brussels	European Council
October 8, 2010	Washington DC	G7 finance ministers and central bank governors
September 16, 2010	Brussels	European Council
June 26–27, 2010	Toronto, Canada	G20
June 17, 2010	Brussels	European Council
March 25–26, 2010	Brussels	European Council
February 11, 2010	Brussels	Informal meeting of heads of state or government of the European Union
February 5–6, 2010	Iqaluit, Nunavut, Canada	G7 finance ministers and central bank governors
December 10–11, 2009	Brussels	European Council
November 19, 2009	Brussels	Informal meeting of heads of state or government of the European Union
November 14–15, 2009	Singapore	17th APEC Economic Leaders' Meeting
October 29–30, 2009	Brussels	European Council
October 3, 2009	Istanbul, Turkey	G7 finance ministers and central bank governors
September 24–25, 2009	Pittsburgh, USA	G20

(continued)

Appendix 2 (continued)

Date	Place	Participants
September 17, 2009	Brussels	Informal meeting of heads of state or government of the European Union
June 18–19, 2009	Brussels	European Council
June 12–13, 2009	Lecce, Italy	G8 finance ministers
April 24, 2009	Washington DC	G7 finance ministers and central bank governors
April 2, 2009	G20 London Summit United Kingdom	G20
March 19–20, 2009	Brussels	European Council
February 2009	Rome	G7 finance ministers and central bank governors
December 11–12, 2008	Brussels	European Council
November 2008	G20 APEC Peru	G20
November 22–23, 2008	Lima, Peru	16th APEC Economic Leaders' Meeting
November 14–15, 2008	Washington D.C., USA	G7
October 15–16, 2008	Brussels	European Council
October 10, 2008	Washington, DC	G7 Finance Ministers
September 1, 2008	Brussels	Extraordinary European Council
July 7–9, 2008	Tokyo	34th G8 Summit
June 19–20, 2008	Brussels	European Council
June 13–14, 2008	Osaka	G8 Finance Ministers Meeting
March 13–14, 2008	Brussels	European Council
February 9, 2008	Tokyo	G7 Finance Ministers and Central Bank Governors Meeting

For further information:

<http://g20mexico.org/en/g20/previous-leaders-summits>

<http://www.g8.utoronto.ca/finance/index.htm>

<http://video.consilium.europa.eu/ecofin/>

<http://www.european-council.europa.eu/council-meetings/conclusions>

<http://www.apec.org/>

Appendix 3 Indicators in Each Type of Capital

Human capital index	Market capital index
1. Skilled labor*	1. Corporate tax*
2. Employee training*	2. Cross-border venture*
3. Literacy rate	3. Openness of culture*
4. Higher education enrollment	4. Globalization*
5. Pupil-teacher ratio	5. Transparency*
6. Internet subscribers	6. Image of country*
7. Public expenditure on education	7. Exports of goods
Process capital index	Renewal capital index
1. Business competition environment*	1. Business R&D spending
2. Government efficiency*	2. Basic research*
3. Intellectual property rights protection*	3. R&D spending/GDP
4. Capital availability*	4. R&D researchers
5. Computers in use per capita	5. Cooperation between universities and enterprises*
6. Convenience of establishing new firms*	6. Scientific articles
7. Mobile phone subscribers	7. Patents per capita (USPTO + EPO)

Remarks:

1. Financial capital is the logarithm of GDP per capita adjusted by purchasing power parity.
2. Indicators marked with an asterisk are rated qualitatively using a scale of 1–10.
3. Indicators with objective numbers are transformed to 1–10 scores, by calculating the ratio to the highest number in that indicator and then multiply 10.
4. Readers can refer to the book *National Intellectual Capital: A Comparison of 40 Countries* for model validation details (www.nic40.org)

Appendix 4 Definition of the 29 Indicators

Indicators	Definition
Human capital	
Skilled labor*	Whether skilled labor is readily available
Employee training*	Whether employee training is a high propriety in companies
Literacy rate	Adult (over 15 years) literacy rate as a percentage of population
Higher education enrollment	Percentage of population that has attained at least tertiary education
Pupil-teacher ratio	Ratio of teaching staff to students
Internet subscribers	Number of Internet users per 1,000 people
Public expenditure on education	Total public expenditure on education (percentage of GDP)
Market capital	
Corporate tax encouragement*	Whether corporate taxes encourage entrepreneurial activity
Cross-border venture*	Whether international transactions can be freely negotiated with foreign partners
Openness to foreign culture*	Whether the national culture is open to foreign culture ideas
Attitudes toward globalization*	Whether attitudes toward globalization are generally positive in a given society
Transparency*	Whether transparency of government policy is satisfactory
Country image*	Whether the image abroad of a given country encourages business development
Exports of goods	Exports of goods (percentage of GDP)
Process capital	
Business competition environment*	Whether competition legislation is efficient in preventing unfair competition
Government efficiency*	Whether government bureaucracy hinders business activity
Intellectual property rights protection*	Whether intellectual property rights are adequately enforced
Capital availability*	Whether cost of capital encourages business development
Computers in use per capita	Number of computers per 1,000 people
Convenience of establishing new firms*	Whether creation of firms is supported by legislation
Mobile phone subscribers	Number of subscribers per 1,000 inhabitants
Renewal capital	
Business R&D spending	Business expenditure on R&D (per capita)
Basic research*	Whether basic research enhances long-term economic development
R&D spending/GDP	Total expenditure on R&D (percentage of GDP)
R&D researchers	Total R&D personnel nationwide per capita (Full-time work equivalent per 1,000 people)
Cooperation between universities and enterprises*	Whether knowledge transfer is highly developed between universities and companies
Scientific articles	Scientific articles published by origin of author (per capita)
Patents per capita (USPTO + EPO)	USPTO and EPO total patents granted (per capita)
Financial capital	
GDP per capita (PPP) (from IMF)	Gross domestic product based on purchasing-power-parity (PPP) per capita

* Indicators marked with an asterisk are rated qualitatively using a scale of 1–10

Appendix 5 Forty-Eight Countries by Cluster and by Continent

This booklet series covers a total of 48 countries in 11 country clusters. China, Brazil, and South Africa are grouped twice to maintain cluster completeness. China is in both Greater China region and BRICKS region, Brazil is in both BRICKS region and Latin American region, and South Africa is in both BRICKS region and in Cluster 5.

Eleven country clusters:

1. Portugal, Italy, Greece, Spain
2. Greater China region (China, Hong Kong, Singapore, Taiwan)
3. Brazil, Russia, India, China, Korea, South Africa (BRICKS)
4. Indonesia, Malaysia, the Philippines, Thailand
5. Israel, Jordan, Turkey, South Africa
6. Bulgaria, Czech Republic, Hungary, Romania, Poland
7. Austria, Belgium, the Netherlands, Switzerland
8. France, Germany, Ireland, United Kingdom
9. Argentina, Brazil, Chile, Colombia, Mexico, Venezuela
10. Australia, Canada, Japan, New Zealand, USA
11. Denmark, Finland, Iceland, Norway, Sweden

Forty-Eight countries by continent:

Europe—24 countries

Nordic Europe—Denmark, Finland, Iceland, Norway, and Sweden

Western Europe—Austria, Belgium, France, Germany, Ireland, Netherlands, Switzerland, and UK.

Southern Europe—Greece, Italy, Portugal, and Spain

Eastern Europe—Russia

East Central Europe—Bulgaria, Czech Republic, Hungary, Poland, Romania, Turkey

Americas—8 countries

North America—Canada, USA

Latin America—Argentina, Brazil, Chile, Colombia, Mexico, Venezuela

Australia—2 countries

Australia and New Zealand

Asia—13 countries

East Asia—China, Hong Kong, Japan, Korea, Taiwan

West Asia—Israel, Jordan

Southeast Asia—Indonesia, Malaysia, Philippines, Singapore, Thailand

South Asia—India

Africa—1 country

South Africa

Appendix 6 National Intellectual Capital Scores and Ranking for 48 Countries (2005–2010)

2005–2010	Human capital		Market capital		Process capital		Renewal capital		Financial capital		NIC	
	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking
Mean	6.420	36	5.409	36	5.345	47	3.658	45	9.115	34	29.946	45
SD	1.217	15	1.085	12	1.454	9	2.056	16	0.690	11	5.840	13
Country	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking
Argentina	5.370	36	3.340	47	3.038	47	1.413	45	8.755	34	21.916	45
Australia	7.205	15	6.199	12	6.938	9	4.927	16	9.695	11	34.964	13
Austria	7.229	14	6.203	11	6.982	8	5.296	12	9.708	10	35.418	11
Belgium	7.666	8	5.519	23	5.924	21	4.706	17	9.635	14	33.450	19
Brazil	4.757	44	4.589	38	3.076	46	1.753	36	8.481	40	22.656	42
Bulgaria	5.493	34	4.929	31	4.054	36	1.589	41	8.646	37	24.710	35
Canada	7.855	6	6.137	13	6.464	15	5.064	14	9.710	9	35.229	12
Chile	5.414	35	6.663	5	5.163	28	1.710	37	8.784	32	27.734	30
China	4.942	39	5.184	28	3.746	40	2.099	33	7.967	44	23.938	40
Colombia	4.941	40	4.677	36	3.951	37	1.435	44	8.348	42	23.352	41
Czech Republic	5.995	30	5.720	18	5.378	25	2.905	24	9.271	27	29.269	25
Denmark	8.545	1	6.662	6	7.642	1	6.587	6	9.665	13	39.101	3
Finland	7.601	9	6.232	10	7.399	3	7.755	3	9.606	17	38.593	4
France	6.956	20	4.141	45	5.730	22	4.500	20	9.585	18	30.912	23
Germany	6.761	23	5.630	19	6.489	14	5.796	9	9.612	16	34.287	17
Greece	5.986	31	4.216	43	4.113	35	2.168	32	9.440	23	25.923	31
Hong Kong	6.564	25	8.090	2	7.209	5	3.277	23	9.794	4	34.934	14
Hungary	6.674	24	4.836	32	5.095	29	2.301	29	9.046	29	27.952	29
Iceland	8.357	3	5.614	21	6.561	12	5.931	8	9.713	8	36.154	8
India	3.926	48	5.620	20	3.556	42	1.954	34	7.285	48	22.340	44
Indonesia	4.062	47	4.832	33	3.257	44	1.519	42	7.594	46	21.263	47
Ireland	7.145	16	6.816	3	6.711	11	4.101	21	9.768	5	34.541	16

(continued)

Appendix 6 (continued)

2005–2010	Human capital	Market capital	Process capital	Renewal capital	Financial capital	NIC						
Israel	8,040	4	5,954	16	6,454	17	7,091	4	9,414	24	36,953	6
Italy	6,471	28	4,155	44	5,184	27	2,745	26	9,479	22	28,035	28
Japan	7,581	10	4,820	34	6,209	18	6,473	7	9,576	19	34,659	15
Jordan	5,345	37	5,341	26	4,411	32	2,212	30	7,865	45	25,174	33
Korea	6,964	19	5,123	29	5,282	26	4,595	19	9,383	25	31,348	22
Malaysia	6,538	26	6,410	9	5,567	23	2,186	31	8,740	35	29,442	24
Mexico	4,871	42	4,491	39	3,226	45	1,237	48	8,781	33	22,606	43
Netherlands	7,312	12	6,761	4	6,879	10	5,163	13	9,739	7	35,855	10
New Zealand	7,123	18	5,999	15	6,460	16	3,701	22	9,380	26	32,662	21
Norway	7,936	5	6,055	14	7,008	7	4,961	15	9,987	1	35,947	9
Philippines	4,772	43	4,464	40	3,317	43	1,268	47	7,481	47	21,302	46
Poland	6,393	29	4,246	41	3,895	38	1,819	35	8,945	30	25,299	32
Portugal	6,882	22	4,801	35	5,470	24	2,467	27	9,224	28	28,844	26
Romania	5,829	32	4,219	42	3,806	39	1,685	38	8,594	39	24,133	39
Russia	5,530	33	3,860	46	3,588	41	2,349	28	8,822	31	24,150	38
Singapore	7,144	17	8,306	1	7,506	2	5,416	11	9,961	2	38,334	5
South Africa	4,708	45	4,976	30	4,472	31	1,677	39	8,472	41	24,306	37
Spain	6,524	27	4,649	37	5,033	30	2,787	25	9,484	21	28,476	27
Sweden	8,385	2	6,563	7	7,174	6	7,780	2	9,673	12	39,575	1
Switzerland	7,575	11	6,481	8	7,374	4	7,988	1	9,753	6	39,172	2
Taiwan	7,244	13	5,823	17	6,026	20	5,425	10	9,526	20	34,044	18
Thailand	5,310	38	5,524	22	4,365	33	1,436	43	8,304	43	24,938	34
Turkey	4,703	46	5,227	27	4,167	34	1,666	40	8,690	36	24,453	36
United Kingdom	6,939	21	5,440	24	6,090	19	4,697	18	9,626	15	32,793	20
USA	7,695	7	5,348	25	6,558	13	6,715	5	9,886	3	36,202	7
Venezuela	4,884	41	2,761	48	2,545	48	1,277	46	8,625	38	20,092	48

Appendix 7 Country Profile: Additional Statistics

1. International reserves in millions of US\$

Country	2005	2006	2007	2008	2009	2010
Brazil	61,498	59,196	108,817	194,223	189,398	242,561
China	663,190	877,637	1,204,035	1,684,280	1,956,830	2,463,547
India	137,008	145,854	192,398	299,684	242,345	261,393
Korea	205,375	217,271	243,840	264,171	206,267	272,248
Russia	133,651	198,677	330,334	498,890	368,065	423,318
South Africa	14,148	20,607	23,849	30,615	30,376	37,496

Source: Global Finance <http://www.gfmag.com/>

2. GDP per capita (ppp) in US\$

Country	2005	2006	2007	2008	2009	2010
Brazil	8,603	9,166	9,900	10,528	10,453	11,239
China	4,103	4,749	5,554	6,189	6,786	7,519
India	2,153	2,402	2,677	2,862	3,039	3,339
Korea	22,783	24,662	26,597	27,716	27,938	29,836
Russia	11,882	13,325	14,909	16,043	14,927	15,837
South Africa	8,654	9,336	10,049	10,453	10,238	10,498

Source: World Economic Outlook Database <http://www.imf.org/external/ns/cs.aspx?id=28>

3. GDP (PPP)—share of world total_ %

Country	2005	2006	2007	2008	2009	2010
Brazil	2.80	2.76	2.78	2.85	2.86	2.93
China	9.46	10.14	11.00	11.74	12.95	13.61
India	4.29	4.47	4.67	4.83	5.20	5.46
Korea	1.93	1.94	1.93	1.93	1.95	1.97
Russia	2.99	3.08	3.17	3.25	3.03	3.00
South Africa	0.72	0.72	0.72	0.73	0.72	0.71

Source: World Economic Outlook Database <http://www.imf.org/external/ns/cs.aspx?id=28>

4. Gross domestic expenditure on R&D as a % of GDP

Country	2005	2006	2007	2008	2009	2010
Brazil	0.93	0.83	1.02	1.1	1.09	1.23
China	1.23	1.33	1.42	1.49	1.54	1.7
India	0.84	0.84	0.61	0.75	0.83	0.8
Korea	2.63	2.98	3.22	3.01	3.21	3.36
Russia	1.17	1.07	1.07	1.12	1.04	1.23
South Africa	0.73	0.78	0.92	0.92	0.95	0.92

Source: IMD World Competitiveness Yearbook 2006–2011

Glossary

12th Five-Year Plan	China's ambitious 12th Five-Year Plan, from 2011 to 2015
AIIF	Asia Investment Infrastructure Fund
ASEAN	Association of Southeast Asian countries (including Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam), China, and India
Basel II	Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. Basel II, initially published in June 2004, was intended to create an international standard for banking regulators to control how much capital banks need to put aside to guard against the types of financial and operational risks banks face, 8% ratio usually recommended by the Basel agreements.
BBC	British Broadcasting Corporation
BSEC	Black Sea Economic Cooperation (BSEC) region
Cap and trade	Cap and trade is an environmental policy tool that delivers results with a mandatory cap on emissions while providing sources flexibility in how they comply.
CIA	The U.S. Central Intelligence Agency
CPI	Consumer price inflation
CSIS	Center for Strategic & International Studies
ECLAC	Economic Commission for Latin America and the Caribbean
EU	European Union
ETS	Emission trading system
FC	Financial capital
FDI	Foreign direct investment
FTA	Free trade agreement
GCI	Global Competitiveness Index (published by World Economic Forum)
GDP	Gross domestic product

GDP per capita (ppp)	Gross domestic product per capita adjusted by purchasing power parity
HC	Human capital
IMD	International Institute for Management Development
IMF	International Monetary Fund
IP	Intellectual Property
IT	Information technology
Long-term NIC	Long-term oriented national intellectual capital, represented by human capital and renewal capital
MC	Market capital
MICEX	Moscow Interbank Currency Exchange (index in Russia)
Green New Deal	To mitigate the impact of the financial crisis, Korea government launched nine major projects totaling US\$36 billion (spread over four years), including almost US\$6 billion to improve energy conservation in villages and schools, US\$7 billion on mass transit and railroads, and almost US\$11 billion on river restoration
NIC	National intellectual capital
OECD	Organization for Economic Cooperation and Development
PC	Process capital
PPP	Purchasing power parity
R&D	Research and development
RC	Renewal capital
RTS	Russian Trading System cash index
Short-term NIC	Short-term oriented national intellectual capital, represented by market capital and process capital
SMEs	Small- and medium-sized enterprises
Term of trade	Term of trade means what quantity of imports can be purchased through the sale of a fixed quantity of exports
Three time periods	For the convenience of comparing ranking changes, the six years data were separated into three time periods, namely 2005–2006, 2007–2008, and 2009–2010. Two years each represents “before, during, and after” the 2008 global financial crisis. Even though Euro zone is still in sovereign debt trouble as of mid-2012, the time partition is based on the financial crisis progression in the epicenter. The signs of financial trouble appeared in 2007 and the crisis was declared over in the third quarter of 2009.
Tier 1 capital	Tier I capital is core capital, including disclosed reserves and equity capital, which cannot be redeemed at the option of the holder.
UNCTAD	United Nations Conference on Trade and Development
USPTO	United States Patent and Trademark Office
VAT	Value-added tax
WEF	World Economic Forum that ranked Global Competitiveness Index (GCI)
WTO	World Trade Organization

References

- Adam S (2010) China to exceed U.S. by 2020, Standard Chartered says, Bloomberg
- Aris B (2011) Russia 2011–2014. Johnson's Russia List. Retrieved from <http://www.cdi.org/russia/johnson/russia-economy-forecast-feb-447.cfm>
- Arnoldy B (2011) Why India could feel the global financial aftershocks this time. The Christian Science Monitor. Retrieved from <http://www.csmonitor.com/World/Asia-South-Central/2011/0808/Why-India-could-feel-the-global-financial-aftershocks-this-time>
- Aslund A, Bogetic Z, Sutela P, Carothers T (2010) Russia's response to the financial crisis. Carnegie Endowment for International Peace. Retrieved from <http://carnegieendowment.org/2010/05/04/russia-s-response-to-financial-crisis/2kc>
- Assubuji P, Luckscheiter J, Ben-Zeev K (eds) (2009) The global economic crisis and South Africa. Perspectives, #3.09, Political Analysis and Commentary from Southern Africa. Retrieved from http://www.boell.org.za/downloads/Perspectives_3-09.pdf
- Bajpai N (2010a) Global financial crisis, its impact on India and the policy response. Retrieved from <http://pdffinder.net/Global-Financial-Crisis,-its-Impact-on-India-and-the-Policy-Response.html>
- Bajpai N (2010b) Global financial crisis, its impact on India and the policy response. Retrieved from <http://aric.adb.org/grs/papers/Bajpai.pdf>
- Baxter R (2012) The global economic crisis and its impact on South Africa and the country's mining industry. South African Reserve Bank. Retrieved from <http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/51/Roger+Baxter.pdf> in May 2012
- Blignaut J (2009) South Africa and sustainable development: a reflection. In: Assubuji P, Luckscheiter J, Ben-Zeev K (eds) Perspectives, #3.09. Retrieved from http://www.boell.org.za/downloads/Perspectives_3-09.pdf
- Bloomberg Business Week (2010) Mexico, Brazil start trade negotiations. Bloomberg Business week. Retrieved from <http://www.businessweek.com/ap/financialnews/D9JCAKIG0.htm>
- Bogetic Z (2009) Global crisis and its impacts on Russia: refocusing policy on households. Carnegie Endowment for International Peace. Retrieved from <http://carnegieendowment.org/2009/04/15/global-crisis-and-its-impacts-on-russia-refocusing-policy-on-households/yt>
- Bogetic Z (2010). Russia: reform after the great recession, International economic Bulletin. Carnegie Endowment for International Peace. Retrieved from <http://carnegieendowment.org/2010/03/30/russia%2Dreform%2Dafter%2Dgreat%2Drecession/3g1v>
- Bradsher K (2011) China, driver of world economy, may be slowing. The New York Times. Retrieved from <http://www.nytimes.com/2011/09/24/business/global/chinas-economic-engine-shows-signs-of-slowing.html?pagewanted=all>
- Branigan T (2009) Chinese officials and analysts play down deflation fears as prices fall. Retrieved from <http://www.guardian.co.uk/business/2009/mar/10/china-deflation-prices-fall>

- Bryant L (2011) Growth expected to slow in world's largest economies, Voice of America News. Retrieved from [http://www.voanews.com/english/news/europe/OECD-- Economic-Slowdown-Likely-to-Continue-129458543.html](http://www.voanews.com/english/news/europe/OECD--Economic-Slowdown-Likely-to-Continue-129458543.html)
- Business in Asia (2012) India's free trade agreement with ASEAN: India's first major multilateral FTA, Business in Asia. Retrieved from http://www.business-in-asia.com/asia/india_fta.html in July 2012
- Cárdenas M (2008) Global financial crisis: is Brazil a bystander? Retrieved from http://www.brookings.edu/opinions/2008/1015_financial_crisis_cardenas.aspx
- Central Intelligence Agency (CIA) (2011) The World Factbook. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html>
- Central Intelligence Agency (CIA) (2012) The World Factbook. Retrieved from <https://www.cia.org>
- Chandrasekhar CP, Ghosh J (2008) India and the global financial crisis. Retrieved from <http://www.thehindubusinessline.in/bline/2008/10/21/stories/2008102150440900.htm>
- Changmook S (2010). Recent economic trend in Korea. SERI Quarterly. Retrieved from <http://periodicals.faq.s.org/201010/2165371651.html>
- CSIS, Center for Strategic & International Studies (2012) Economic change in Russia. Retrieved from <http://csis.org/program/economic-change-russia>
- Dahlman C (2009). Different innovation strategies, different results: Brazil, Russia, India, China and Korea. In: Chandra V, Ercol D, Padoan PC, Braga CP (eds) Innovation and growth: chasing a moving frontier. OECD and International Bank for Reconstruction and Development/The World Bank
- Debroy B (2010) India country report. In: Bertelsmann Stiftung (ed) Managing the crisis. A comparative assessment of economic governance in 14 economies. Bertelsmann Stiftung, Gütersloh
- Delasantellis J (2008) Paulson placates China, Russia – for now. Asia Times Online. Retrieved from http://www.atimes.com/atimes/Global_Economy/JI10Dj04.html
- Devan J, Negri S, Woetzel JR (2008) Meeting the challenges of China's growing cities, McKinsey Quarterly. Retrieved from https://www.mckinseyquarterly.com/Economic_Studies/Country_Reports/Meeting_the_challenges_of_Chinas_growing_cities_2152
- Dlamini T (2010) South Africa country report. In: Bertelsmann Stiftung (ed) Managing the crisis. A comparative assessment of economic governance in 14 economies. Bertelsmann Stiftung, Gütersloh, 2010. Retrieved from http://www.bertelsmann-transformation-index.de/pdf/South_Africa.pdf
- Dmitriev M, Aslund A, Kuchins A, Charap S (2008) Russian economic goals to 2020: Dreams or reality? A CSIS project. Retrieved from http://csis.org/images/stories/Russia%20and%20Eurasia/080829_ruseura_sumdmitrievaslund.pdf
- Dobb R, Sankhe S, Vittal I (2010) India's high-stakes urban challenge. McKinsey Quarterly
- Draper P, Freytag A, Voll S (2009) Global financial crisis, protectionism and current account deficit: South Africa on the brink? Working paper No. 8 Global Financial Markets, University Jena and University Halle. Retrieved from http://pubdb.wiwi.uni-jena.de/pdf/wp_hlj08-2009.pdf
- ECLAC, Economic Commission for Latin America and the Caribbean – United Nations (2009) Preliminary overview of the economies of Latin America and the Caribbean 2009 (pp 78–80). Retrieved from <http://www.eclac.org/publicaciones/xml/3/38063/Brazil.pdf>
- Edvinsson L, Malone MS (1997) Intellectual capital: realizing your company's true value by finding its hidden brainpower. Harper Business, New York
- Eghbal M (2008) BRIC economies withstand global financial crisis. Retrieved from <http://blog.euromonitor.com/2008/11/bric-economies-withstand-global-financial-crisis.html>
- Fakir S (2009) Caught between a rock and hard place: the state of play for South Africa's beleaguered development state. In: Assubuji P, Luckscheiter J, Ben-Zeev K (ed) Perspectives, #3.09. Retrieved from http://www.boell.org.za/downloads/Perspectives_3-09.pdf
- Fleet JD (2010) Can China manage its economy? The Diplomat. Retrieved from <http://the-diplomat.com/2010/01/21/can-china-manage-its-economy/>
- Frye I (2009) Responses and alternatives: South Africa's response to the crisis. In: Assubuji P, Luckscheiter J, Ben-Zeev K (ed) Perspectives, #3.09. Retrieved from http://www.boell.org.za/downloads/Perspectives_3-09.pdf

- Global Finance (2012) Data on GDP and economic information: South Africa. Retrieved from <http://www.gfmag.com/gdp-data-country-reports/176-south-africa-gdp-country-report.html#axzz1urt0NIn8> in July 2012
- Government of India, Ministry of Finance (2008) First stimulus package. In: Different economic stimulus packages for easing difficulties of micro, small and medium sector enterprises (pp 1–4). Office of the Commissioner of Industries, Government of Rajasthan. Retrieved from http://rajind.rajasthan.gov.in/Stimulus_Packages.pdf
- Government of Rajasthan, Office of the Commissioner of Industries (2009) Different economic stimulus packages for easing difficulties of micro, small and medium sector enterprises. Retrieved from http://rajind.rajasthan.gov.in/Stimulus_Packages.pdf
- Government of India, Ministry of Finance (2008.12.07) First stimulus package
- Gurria A (2009) Recent reforms strengthening Brazil's resilience to economic crisis. Retrieved from http://www.oecd.org/document/44/0,3746,fr_21571361_44315115_43294124_1_1_1_1,00.html
- Gurria A (2010) Economic survey of South Africa 2010. OECD. Retrieved from http://www.oecd.org/document/21/0,3746,en_2649_34571_45637781_1_1_1_1,00.html
- Gurria A (2011) Economic survey of India 2011. Retrieved from http://www.oecd.org/document/36/0,3746,en_2649_33733_48079140_1_1_1_1,00.html
- Heilmann S, Schmidt D (2010) China country report. In: Bertelsmann Stiftung (ed) Managing the crisis. A comparative assessment of economic governance in 14 economies. Bertelsmann Stiftung, Gütersloh. Retrieved from <http://www.bertelsmann-transformation-index.de/pdf/China.pdf>
- Herd R, Conway P, Hill S, Koen V, Chalaux T (2011a) Can India achieve double-digit growth? OECD Economics Department Working Papers, No. 883
- Herd R, Koen V, Noord P (2011b) China's emergence as a market economy: achievements and challenges. OECD contribution to the China Development Forum 20–21 March 2011, Beijing
- Heritage Foundation (2012) Index of Economic Freedom. Retrieved from <http://www.heritage.org/index/ranking>
- IMF (2011) China economic outlook. Retrieved from <http://www.imf.org/external/country/CHN/rr/2011/092611.pdf>
- IMF (2012a) Regional economic outlook: Asia and Pacific, Managing spillovers and advancing economic rebalancing. Retrieved from <http://www.imf.org/external/pubs/ft/reo/2012/APD/eng/areo0412.htm>
- IMF (2012b) Regional economic outlook: Sub-Saharan Africa, sustaining growth amid global uncertainty, International Monetary Fund. Retrieved from <http://www.imf.org/external/pubs/ft/reo/2012/afr/eng/sreo0412.pdf>
- Indian Brand Equity Foundation (IBEF) (2011) Indian economy overview. Retrieved from <http://www.ibef.org/india/economy/economyoverview.aspx>
- International Labour Office (ILO) (2010) G20 country briefs: Brazil's response to the crisis. G20 Meeting of Labour and Employment Ministers, Washington, D.C., April 20–21, 2010. Retrieved from http://www.dol.gov/ilab/media/events/G20_ministersmeeting/G20-brazil-brief.pdf
- Jha R (2008) India: confronting the global financial crisis. Retrieved from <http://www.eastasiaforum.org/2008/11/15/india-confronting-the-global-financial-crisis/>
- Joseph M (2009a) Global financial crisis: how was India impacted? Prepared for presentation to InWEnt-DIE Conference on Global Financial Governance – Challenges and Regional Responses, September 3–4, 2009 in Berlin, Germany. Retrieved from [http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/\(ynDK_contentByKey\)/MSIN-7SVEYB/\\$FILE/Global%20Financial%20Crisis%20and%20Impact%20on%20India_Berlin030909.pdf](http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/(ynDK_contentByKey)/MSIN-7SVEYB/$FILE/Global%20Financial%20Crisis%20and%20Impact%20on%20India_Berlin030909.pdf)
- Joseph M (2009b) Global financial crisis: how was India impacted? Presentation to InWEnt-DIE Conference on Global Financial Governance – Challenges and Regional Responses, September 3–4, 2009 in Berlin, Germany, Indian Council for Research on International Economic Relations (ICRIER), New Delhi
- Kehoe T (2010) The current financial crisis in Spain: what should we learn from the great depressions of the twentieth century? University of Minnesota and Federal Reserve Bank of Minneapolis, 18th Barcelona Lecture, Barcelona G.S.E. and Banc Sabadell, February 2010

- Khemka S, Chou S, Fonseca O (2008) Feeling the pain: how the financial crisis is affecting Brazil, Russia, India and China. Knowledge@Wharton. Retrieved from <http://knowledge.wharton.upenn.edu/article.cfm?articleid=2079>
- Kim HW (2010a) Macroeconomic policies of Korea to cope with the crisis. EWC/KDI Conference, Honolulu, Hawaii, 19–20 August 2010. Retrieved from <http://www.ssc.wisc.edu/~mchinn/08Kim-Aug2010.pdf>
- Kim HW (2010b) Macroeconomic policies of Korea to cope with the crisis. Conference Proceedings, Global economic crisis: impacts, transmission, and recovery, Honolulu, Hawaii, 19–20 August 2010
- Kim JY (2010c) 2011: year of economic challenges. Korea Times. Retrieved from http://www.koreatimes.co.kr/www/news/biz/2010/12/123_78986.html
- Kumar R, Soumya A (2010a) Fiscal policy issues for India after the global financial crisis (2008–2010). ADBI Working Paper 249. Asian Development Bank Institute, Tokyo. Available: <http://www.adbi.org/working-paper/2010/09/17/4075.fiscal.policy.issues.india.after.gfc/>
- Kumar R, Soumya A (2010b) Fiscal policy issues for India after the global financial crisis (2008–2010). ADBI Working Paper 249. Asian Development Bank Institute, Tokyo. Retrieved from <http://www.adbi.org/files/2010.09.17.wp249.fiscal.policy.issues.india.after.gfc.pdf>
- Lin CYY (2011) Leveraging intellectual capital for future competitiveness in Finland, Presentation at Tekes, Helsinki on November 10, 2011
- Lin CYY, Edvinsson L (2011) National intellectual capital: a comparison of 40 countries. Springer, New York
- Lopez L (2011) Brazil sees BRICs rising, euro zone default change. Reuters. Retrieved from <http://www.reuters.com/article/2011/09/21/brazil-economy-financeministry-idUSS1E78K07T20110921>
- Lopez L, Cascione S (2011) Brazil economy surges in 2010: growth seen cooling. Reuters. Retrieved from <http://www.reuters.com/article/2011/03/03/us-brazil-economy-idUSTRE7222QZ20110303>
- Mail and Guardian (2012) Business confidence on a steady decline. Retrieved from <http://mg.co.za/article/2012-05-03-business-confidence-on-a-steady-decline>
- Masaki H (2010) Japan, India reach free trade agreement, The Journal of Commerce. Retrieved from <http://www.joc.com/government-regulation/japan-india-reach-free-trade-agreement>
- Mendonça de Barros JR (2010) The impact of the international financial crisis on Brazil (ARI), Real Instituto Elcano. Retrieved from http://www.realinstitutoelcano.org/wps/portal/rielcano_eng/Content?WCM_GLOBAL_CONTEXT=/elcano/elcano_in/zonas_in/cooperation+development/ari38-2010
- Michener G (2011) Brazil's economic outlook a mixed bag. Latin America Monitor. Retrieved from <http://www.csmonitor.com/World/Americas/Latin-America-Monitor/2011/0728/Brazils-economic-outlook-a-mixed-bag>
- Ministry of Foreign Affairs & Trade (MFAT) (2012) New Zealand – India free trade agreement (FTA), New Zealand Ministry of Foreign Affairs & Trade. Retrieved from <http://www.mfat.govt.nz/Trade-and-Economic-Relations/2-Trade-Relationships-and-Agreements/India/index.php> in July 2012
- Morrison WM (2011) China's economic conditions. Congressional Research Service report for Congress, 7-5700. Retrieved from <http://www.fas.org/sgp/crs/row/RL33534.pdf>
- Mu X (2010) South Africa joins BRIC as full member, Xinhua Net. Retrieved from http://news.xinhuanet.com/english2010/china/2010-12/24/c_13662138.htm
- Nanto DK (2009) The global financial crisis: analysis and policy implications. CRS Report for Congress, Congressional Research Service 7-5700, RL34742
- Nicholson A (2008) Russia offers Sberbank, VTB, Gazprombank US\$44 Billion. Bloomberg. Retrieved from <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a1sZsKZ32kvU&refer=europe>
- Nicholson A (2009) Russian economy exited recession in third quarter. Bloomberg. Retrieved from <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aon.9KAC7AMw>
- OECD (2008) Economic survey of Korea 2008: priorities for macroeconomic policy. Retrieved from http://www.oecd.org/document/39/0,3746,en_2649_34577_41832743_1_1_1_1,00.html

- OECD (2009a) Economic survey of Brazil. Retrieved from <http://www.oecd.org/dataoecd/35/18/43247511.pdf>
- OECD (2009b) Policy responses to the economic crisis: investing in innovation for long-term growth. Retrieved from <http://www.oecd.org/sti/interneteconomy/42983414.pdf>
- OECD (2010) Economic survey of Korea 2010. Retrieved from http://www.oecd.org/document/2/4/0,3746,en_2649_34569_45393816_1_1_1_1,00.html
- OECD (2011a) Brazil – economic forecast summary (November 2011). Retrieved from http://www.oecd.org/document/21/0,3746,en_33873108_36016449_45274709_1_1_1_1,00.html
- OECD (2011b) OECD economic outlook No. 89 May 2011, OECD. Retrieved from http://www.keeper.com/Digital-Asset-Management/oecd/economics/oecd-economic-outlook-volume-2011-issue-1-preliminary-version_eco_outlook-v2011-1-en
- OECD (2012a) Brazil: economic forecast summary (May 2012), OECD. Retrieved from <http://www.oecd.org/brazil/brazil-economicforecastssummarymay2012.htm>
- OECD (2012b) Korea: economic forecast summary (May 2012), OECD. Retrieved from <http://www.oecd.org/korea/korea-economicforecastssummarymay2012.htm>
- OECD (2012c) Russian federation: economic forecast summary (May 2012), OECD. Retrieved from <http://www.oecd.org/russia/russianfederation-economicforecastssummarymay2012.htm>
- OECD (2012d) South Africa: economic forecast summary (May 2012), OECD. Retrieved from <http://www.oecd.org/southafrica/southafrica-economicforecastssummarymay2012.htm>
- Padayachee V (2012) Global economic recession: effects and implications for South Africa at a time of political challenges, Claves de la Economía Mundial, University of KwaZulu-Natal, Durban. Retrieved from <http://www2.lse.ac.uk/internationalDevelopment/20thAnniversaryConference/ImpactoftheGlobalFC.pdf> retrieved in February 2012
- Palmieri DA (2012) Russia and the global economic crisis. ICOSA Connection and Collaboration. Retrieved from <http://www.theicosamagazine.com/russia-and-the-global> in January 2012
- Pascha W (2010) South Korea country report. In: Bertelsmann Stiftung (ed) Managing the crisis. A comparative assessment of economic governance in 14 economies. Bertelsmann Stiftung, Gütersloh
- Pierson D (2011) Inflation remains a worry in China. Los Angeles Times. Retrieved from <http://articles.latimes.com/2011/oct/15/business/la-fi-china-inflation-20111015>
- Pradhan M (2012) 2012: split down the middle. Morgan Stanley. Retrieved from <http://www.morganstanley.com/views/gef/>
- Ratnayake K (2008) International financial crisis exposes vulnerability of Indian economy. Retrieved from <http://www.wsws.org/articles/2008/oct2008/indi-o13.shtml>
- Reavis C (2009) The global financial crisis of 2008–2009: the role of greed, fear and oligarchs. MIT Sloan Management Case #09-093
- Reinhart, C.M., and Rogoff, K. (2009) *This time is different: eight centuries of financial folly*. Princeton University Press, Princeton
- Reuters (2012) Russia to become WTO's 156th member on August 22, Reuters. Retrieved from <http://news.yahoo.com/russia-become-wtos-156th-member-aug-22-135121653.html>
- SAinfo (2011) New era as South Africa joins BRICS, South Africa Information. Retrieved from <http://www.southafrica.info/global/brics/brics-080411.htm>
- Schwab K (ed) (2011) The global competitiveness report 2011–2012. World Economic Forum, Geneva
- Seo E (2011) South Korea's biggest economic challenge is inflation, Kim says. Bloomberg. Retrieved from <http://www.bloomberg.com/news/2011-03-16/south-korea-s-biggest-economic-challenge-is-inflation-kim-says.html>
- SERI (2011) Economic outlook for 2012, Samsung Economic Research Institute. retrieved from http://www.seriworld.org/10/wldSeasonRptL.html?sort=C§no=1&cont_type=C
- Singh A, Takeda M, Schiff J, Utsunomiya K (2012) Transcript of the Asia and Pacific economic outlook, International Monetary Fund. Retrieved from <http://www.imf.org/external/np/tr/2012/tr042112.htm>
- Smit W (2011) Are you a Tata or a Birla? A study on India's best brands for the world. Retrieved from http://www.imd.org/research/challenges/TC051-11.cfm/?MRK_CMPG_SOURCE=webletter-

- sep-11&wt.mc_id=webletter-sep-11&utm_source=DM&utm_medium=em&utm_campaign=webletter-sep-11obr
- Smith J (2011) BRIC becomes BRICS: changes on the geopolitical chessboard, *Foreign Policy Journal*. Retrieved from <http://www.foreignpolicyjournal.com/2011/01/21/bric-becomes-brics-changes-on-the-geopolitical-chessboard/2/>
- Stedman L, Cunico JB (2007) Competitiveness: Korea's latest economic challenge. Korea Economic Institute of America. Retrieved from <http://www.keia.org/sites/default/files/publications/december%2007.pdf>
- Taindian News (2008) India's foreign exchange reserves drop nearly US\$8 billion. Retrieved from http://www.thaindian.com/newsportal/business/indias-foreign-exchange-reserves-drop-nearly-8-billion_100106096.html
- TDS, Travel Document Systems (2012) Brazil economy. Retrieved from <http://www.traveldocs.com/br/economy.htm>
- Tharoor S (2010) How India survived the financial crisis. Retrieved from <http://www.project-syndicate.org/commentary/tharoor23/English>
- The World Bank in Russia (2009) Russian economic report No. 18. Retrieved from <http://sitere-sources.worldbank.org/INTRUSSIANFEDERATION/Resources/rer18eng.pdf>
- Thessaloniki (2011) Russia: country strategy 2011–2014. Black Sea Trade and Development Bank. Retrieved from http://www.bstbd.org/about-us/key-documents/Country_Strategy_2011-2014_Russia.pdf
- United Nations (2009) Global financial crisis and monetary policy response: experience of India. United Nations economic and social commission for Asia and the Pacific, Regional High-Level Workshop on “Strengthening the response to the global financial crisis in Asia-Pacific”, 27–30 July 2009
- United Nations (2010) Creative economy report 2010, United Nations. Retrieved from http://unctad.org/en/docs/ditctab20103_en.pdf
- Valadão M, Porto NG (2009) Brazilian response to international financial crisis, the pre-salt discoveries by Petrobras and the New Free Trade Areas in the Cities of Brazil. *15 Law & Bus Rev Am*, pp 673–674. Retrieved from <http://studentorgs.law.smu.edu/getattachment/International-Law-Review-Association/Resources/LBRA-Archive/15-3/SMB308.pdf.aspx>
- Wang G (2010) Bright prospects for BRIC, *Xinhua Net*. Retrieved from http://news.xinhuanet.com/english2010/indepth/2010-04/15/c_13252144.htm
- World Bank in Russia (2008) Russian economic report No.17. Retrieved from www.worldbank.org.ru
- World Trade Organization (WTO) (2012) Member information: China and the WTO, World Trade Organization. Retrieved from http://www.wto.org/english/thewto_e/countries_e/china_e.htm in July 2012
- Yoon DR (2011) The Korean economic adjustment to the world financial crisis. *Asian Econ Papers* 10(1):106–127. Retrieved from http://www.mitpressjournals.org/doi/pdf/10.1162/ASEP_a_00058
- Young A (2011) Russian economy 2011. Retrieved from <http://siberianlight.net/russian-economy-2011/>
- Zini M (2009) Update on the impact of the financial crisis on South Africa. World Bank. Retrieved from <http://blogs.worldbank.org/african/update-on-the-impact-of-the-financial-crisis-on-south-africa>

Author Index

A

Abidin, M.Z., 103
Aris, B., 65, 66, 79
Arnoldy, B., 80
Aslund, A., 12, 13, 79

B

Bajpai, N., 7, 14, 66, 74, 75, 80, 81
Baxter, R., 69, 70
Bogetic, Z., 12, 13, 65, 79, 80, 102
Bradsher, K., 67, 68
Branigan, T., 10
Bryant, L., 4

C

Cárdenas, M., 11, 72
Carothers, T., 12, 13, 79
Cascione, S., 64
Chaloux, T., 16, 67, 75, 81, 82, 90
Chandrasekhar, C.P., 14
Changmock, S., 69, 76
Charap, S., 79, 115
Chou, S., 7, 13, 14, 17
Conway, P., 16, 67, 75, 81, 82
Cunico, J.B., 84

D

Dahlman, C., 2, 3
Debroy, B., 14, 74, 80, 81
Delasantellis, J., 12
Dlamini, T., 70, 77, 103
Dmitriev, M., 79
Dobb, R., 81

E

Eghbal, M., 7, 63, 64, 71

F

Fackler, M., 103
Fonseca, O., 7, 13, 14, 17

G

Gerardy, J., 103
Ghosh, J., 14
Gurria, A., 12, 69, 74, 78, 80, 81,
84, 85

H

Heilmann, S., 15–17, 81, 103
Herd, R., 16, 67, 75, 81, 82, 90
Hill, S., 16, 67, 75, 81, 82

J

Jha, R., 14
Joseph, M., 14, 15, 102

K

Kehoe, T., 63
Khemka, S., 7, 13, 14, 17
Kim, H.W., 19, 82, 103
Kim, J.Y., 7, 18, 68, 83
Koen, V., 16, 67, 75, 81,
82, 90
Kuchins, A., 79
Kumar, R., 14, 103

L

Lopez, L., 64, 90

M

Manuel, T.A., 103

Masaki, H., 75

Mendonça, J.R., 1, 11, 12, 64, 78, 102

Michener, G., 64, 78

Mu, X., 2

N

Nicholson, A., 12, 13, 102

Noord, P., 16, 67, 75, 82, 90

Novacich, S.E., 102

P

Padayachee, V., 19, 20

Palmieri, D.A., 13, 73

Pascha, W., 17–19, 68, 76, 83, 103

Pierson, D., 81

Porto, N.G., 12, 102

Pradhan, M., 64

R

Ratnayake, K., 80

S

Sankhe, S., 81

Schiff, J., 5

Schmidt, D., 15–17, 81, 103

Seo, E., 83

Singh, A., 5

Smith, J., 3

Smit, W., 66, 80

Soumya, A., 14, 103

Stedman, L., 84

Sutela, P., 102

T

Takeda, M., 5

Tharoor, S., 15, 66, 74

Thessaloniki, 12, 65,
73, 74

U

Utsunomiya, K., 5

V

Valadão, M., 12, 102

Vittal, I., 81

W

Wang, G., 72

Y

Yoon, D.R., 18, 19, 68,
82, 103

Young, A., 65

Subject Index

A

Aging, 81–83

B

Benchmarking, 58, 59, 89

C

Capital availability, 24, 52–58, 106, 107

Consumer price inflation (CPI), 7, 8, 10, 81, 88

D

Deficiency factors, 58, 59

3D landscape, 45

E

Efficiency drivers, 45, 58–61, 86

Enhancing factors, 45, 48–58, 61

F

Foreign exchange reserves, 14, 17, 63, 67, 71, 86

G

Global Competitiveness Index (GCI), 3, 4, 88

Green investment/management, 74

H

High capability region, 46, 47

I

IMF. *See* International Monetary Fund (IMF)

Impeding factors, 45, 48–52, 54, 56–58, 61

Inequality, 82

Innovation driven, 4

International Monetary Fund (IMF), 1, 3, 5, 19, 67, 68, 90, 102, 107

L

Long-term NIC, 35, 44, 87,

Low capability region, 47, 48, 56–58

M

Middle capability region, 47, 48, 56, 57

N

National development, 32, 43, 44, 70, 72, 80, 84, 86–88

National financial capital, 26

National human capital, 23

National market capital, 23–24

National process capital, 24–25

National renewal capital, 25–26

NIC development trajectory, 45

NIC-GDP co-development, 28, 32, 86

NIC turning point, 48, 61

R

Rating agencies, 86

Stimulus package, 1, 9, 11–13, 15, 16,
18, 19, 64, 68, 71, 76, 78, 90,
94–100,

S

Short-term NIC, 35, 36, 88

Small and medium enterprises (SMEs), 19, 81,
83, 89, 96, 99