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The publication includes 15 chapters: The first chapter is a summary of the entire publication, presenting general information with comparable statistics of the five countries, while the other 14 chapters reflect various aspects of the past development and current status of each country. They contain a summary table followed by country tables and graphs. The summary table and graphs present the most comparable information among the five countries while country tables show more detailed information separately by each country.

**UDK 311.311** 

# **Foreword**

Rosstat would like to extend its gratitude to all BRICS NSOs for contributions and continuous support in preparation of the BRICS Joint Statistical Publication.

Unfortunately, this year all processes and arrangements took more time and efforts than usually. This was also due to the global challenges that all countries had to face and handle.

However, thanks to common efforts we managed to succeed and we are happy to present you 2020 BRICS Joint Statistical Publication.

The publication includes 15 chapters: The first chapter is a summary of the entire publication, presenting general information with comparable statistics of the five countries, while the other 14 chapters reflect various aspects of the past development and current status of each country. They contain a summary table followed by country tables and graphs. The summary table and graphs present the most comparable information among the five countries while the country tables show more detailed information separately by each country.

We hope that this publication will be highly useful and probably in the nearest future its paper format will change to the electronic one that will also become more interactive.

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	Officers and Staff Associated with the Publication.	

# Symbols used:

- ... Figure not available;
   Not applicable;
  0; 0,0 Originally positive numerical data rounded to zero.

General Information,
Economic and Social
Indicators Comparison
of BRICS Countries



**Table 1.1** — General Information on BRICS Countries — 2019

	Area of territory (1000 km²)	Capital city	Mid-year population (million persons)	Population density (persons per km²)	National currency
Brazil	8516 <sup>(1)</sup>	Brasília	210 <sup>(2)</sup>	24.7	Real — R\$
Russia	17,125	Moscow	147	8.6	Rouble — Rub
India	3287	New Delhi	1338 <sup>(3)</sup>	407 <sup>(3)</sup>	Rupee — ₹
China	9600	Beijing	1398	146	Renminbi — RMB
South Africa	1221	Pretoria	59	48.1	Rand — ZAR

#### Brazil

Brazilian Institute of Geography and Statistics — IBGE.

#### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Service for State Registration, Cadastre and Cartography.

#### India

Ministry of Home Affairs, Office of Registrar General of India.

#### China

- a) Ministry of Culture and Tourism of the People's Republic of China.
- b) National Bureau of Statistics of China, China Statistical Abstract 2020.

#### **South Africa**

Statistics South Africa.

#### Footnotes:

#### Brazil

- (1) For the surface of Brazil was maintained the value of 8,515,767,049 km², published in the DOU No. 118 of 06/22/2016, according to Resolution No. 02 of June 21, 2016.
- (2) Information about the mid-year population and demographic indicators, were obtained by a projection of the population by sex and age groups by the component method for the Period 2000–2060.

#### India

(3) The information pertaining to population is as on 1st July, 2019 based on Population projections for India and States Report 2011–2036 of RGI using 2011 Census.

**Table 1.2** — Economic and Social Indicators Comparison of BRICS Countries

	Year	Value
ulation		
Mid-year (millions persons)		
Brazil <sup>(1)</sup>	2019	210
Russia	2019	147
India <sup>(2)</sup>	2019	1338
China	2019	1398
South Africa	2019	59
Male (%)	2012	
Brazil <sup>(1)</sup>	2019	48.9
Russia	2019	46.4
India <sup>(3)</sup>	2019	51.4
China <sup>(4)</sup>	2019	51.1
South Africa	2019	48.8
Female (%)		
Brazil <sup>(1)</sup>	2019	51.1
Russia	2019	53.6
India <sup>(3)</sup>	2019	48.6
China <sup>(4)</sup>	2019	48.9
South Africa	2019	51.2
Population density (persons per km²)		
Brazil <sup>(1)</sup>	2019	24.7
Russia	2019	8.6
India <sup>(2)</sup>	2019	407
China	2019	146
South Africa	2019	48.1
Crude birth rate (per 1000 persons)		
Brazil <sup>(1)</sup>	2019	14.2
Russia	2018	10.9
India	2018	20.0
China	2019	10.5
South Africa	2019	19.9
Crude death rate (per 1000 persons)		
Brazil <sup>(1)</sup>	2019	6.5
Russia	2018	12.5
India	2018	6.2
China	2019	7.1
South Africa	2019	9.2
Infant mortality rate (per 1000 live births)		
Brazil <sup>(1)</sup>	2019	11.9
Russia	2018	5.1
India	2018	32.0
China	2018	6.1
South Africa	2019	22.1
Maternal mortality rate (per 100,000 live births)		
Brazil	2019	
Russia	2018	9.1
India	2016–2018	113
China	2018	18.3
South Africa	2016	121

	Year	Value
Life expectancy at birth		
Brazil	2019	76.5
Russia	2018	72.9
India	2014–18	69.4
China	2015	76.3
South Africa	2019	64.7
Women's Participation in National Parliament (Congress) (%)		
Brazil	2019	
Russia	2019	16.9
India	2019	14.0
China (NPC)	2018	24.9
(CPPCC)	2018	20.4
South Africa	2017	41.7
abour Force		
Share of labour force to population 15 years and over (%)		
Brazil <sup>(5)</sup>	2019	63.9
Russia	2019	62.3
India <sup>(6)</sup>	2018	36.9
China <sup>(7)</sup>	2018	55.6
South Africa	2019	55.2
Unemployment rate (%)		
Brazil	2019	12.1
Russia	2019	4.6
India	2018	6.1
China <sup>(8)</sup>	2019	3.6
South Africa	2019	28.7
Prices		
Consumer Price Index (% change from preceding years)		
Brazil	2019	4.3
Russia	2019	4.5
India	2019	7.5
China	2019	2.9
South Africa		
Producer Price Index (% change from preceding years)	2019	4.1
Brazil	2019	
Russia (industrial products)	2019	2.9
India	2019	
China (industrial products)	2019	
		-0.3
South Africa (final manufactured goods)  National Accounts	2019	4.6
GDP (current prices/billion US\$)	2010	1040
Brazil	2019	1840
Russia	2019	1700
India <sup>(9)</sup>	2019	2713
China <sup>(10)</sup> (11)	2019	14,363 <sup>(P)</sup>
South Africa	2019	351
Per capita GDP (current prices/US\$)		
Brazil	2019	8754
Russia	2019	11,584
India <sup>(9)</sup>	2019	2045

	Year	Value
China <sup>(10)</sup>	2019	10,276 <sup>(P)</sup>
South Africa	2019	5979
cience and technology		
Proportion of R&D Expenditure to GDP (%)		
Brazil	2017	1.3
Russia <sup>(12)</sup>	2018	1.0
India	2016	0.7
China	2019	2.2
South Africa	2017	0.8
Full-Time Equivalent of R&D Personnel (1000 person-year)		
Brazil	2019	
Russia	2018	758
India	2014	283
China	2019	4801
South Africa	2017	44
eople's living Standards		
Share of public expenditure on education as % of GDP		
Brazil	2015	6.2
Russia	2019	3.7
India <sup>(9)</sup>	2017	2.7
China <sup>(13)</sup>	2019	4.0
South Africa	2015	6.9
Share of public expenditure on health as % of GDP		
Brazil	2017	4.0
Russia	2019	3.5
India <sup>(9)</sup>	2016	1.2
China <sup>(14)</sup>	2019	6.6
South Africa	2019	4.2
Gini coefficient		
Brazil <sup>(15)</sup>	2018	0.539
Russia <sup>(16)</sup>	2019	0.411
India		
Urban	2012	0.367
Rural	2012	0.280
China <sup>(17)</sup>	2019	0.465
South Africa <sup>(18)</sup>	2015	0.639
ndustry		
Industrial production (preceding year = 100) (%)		
Brazil	2019	98.9
Russia	2019	103.3
India <sup>(9)</sup>	2018	103.8
China	2019	105.7
South Africa	2019	100.5
Iron ore production (million tons)	20.0	
Brazil	2018	448
Russia (concentrate of iron ore)	2019	97.7
India <sup>(9)</sup>	2018	192
China	2019	844
South Africa	2019	74.7
Journalited	2019	/4./

	Year	Value
Steel production (million tons)		
Brazil	2019	32.2
Russia	2019	73.9
India <sup>(9)</sup>	2018	107
China	2019	996
South Africa	2019	
Passenger cars production (1000 sets)		
Brazil	2016	1876
Russia	2019	1525
India <sup>(9)</sup>	2016	2884
China	2019	10,182
South Africa	2019	
TV sets production (1000 sets)		
Brazil	2016	10,558
Russia	2019	7300
India	2019	
China <sup>(19)</sup>	2019	189,991
South Africa	2019	
ergy		
Petroleum production (million tons)		
Brazil	2019	142
Russia <sup>(20)</sup>	2019	561
India <sup>(9)</sup>	2018	34.2
China	2019	191
South Africa	2016	223
Coal production (million tons)		
Brazil	2016	7.5
Russia	2019	439
India <sup>(9)</sup>	2018	730
China	2019	3846
South Africa	2019	
Natural gas (billion m³)		
Brazil	2017	40.1
Russia	2019	739
India <sup>(9)</sup>	2018	32.9
China	2019	176
South Africa	2015	467
Electricity production (billion kWh)		
Brazil	2018	601
Russia	2019	1121
India <sup>(9)</sup>	2108	1547 <sup>(P)</sup>
China	2019	7503
South Africa	2019	253
Primary energy production (mtoe)	2013	
Brazil	2016	295
Russia	2018	2040
India <sup>(9)</sup>	2018	531 <sup>(P)</sup>
mura' /		
China <sup>(21)</sup>	2019	2779 <sup>(P)</sup>

	Year	Value
Consumption of energy (mtoe)	2016 2018 2018 2019 2019 2015  2016 2019 2014 2017 2019 2018 2019 2019 2019 2019 2019 2019 2019 2019	
Brazil	2016	288
Russia	2018	1374
India <sup>(9)</sup>	2018	570
China <sup>(21)</sup>	2019	3409 <sup>(P)</sup>
South Africa	2015	78
riculture		
Cultivated land (million hectares)		
Brazil	2016	75
Russia	2019	123
India <sup>(22)</sup>	2014	155
China	2017	135
South Africa	2019	12
Cereals production (million tons)		
Brazil	2018	99
Russia	2019	121
India <sup>(22)(23)</sup>	2019	273.5 <sup>(P)</sup>
China	2019	614
South Africa	2017	19
Fruits and vegetables (million tons)		
Brazil	2019	
Russia		20
India <sup>(24)</sup>		284
China		995
South Africa		
Meat production (1000 tons)	2013	
Brazil	2017	25,091
Russia		10,866
India <sup>(25)</sup>		8114
China		
South Africa		77,588
	2017	2893
Fish catch (1000 tons)	2010	
Brazil		
Russia <sup>(26)</sup>		4983 <sup>(P)</sup>
India <sup>(25)</sup>		12,610
China		8213
South Africa	2010	21
ransport		
Length of railways in operation (1000 km)		
Brazil		30
Russia	2019	87
India <sup>(27)</sup>	2018	67
China	2019	140
South Africa	2019	
Length of highways (1000 km)		
Brazil	2016	1571
Russia <sup>(28)</sup>	2019	1088 <sup>(P)</sup>
India <sup>(27)</sup>	2017	289
China	2019	5012
South Africa	2019	

	Year	Value
Passenger traffic by air (million persons-km)		
Brazil	2017	128,940
Russia	2019	322,982
India	2019	220,594
China	2019	1,170,530
South Africa	2019	
ternal Economic Relations		
Value of imports of goods and commercial services (million US\$)		
Brazil	2018	257,664
Russia	2019	353,352
India	2019	361,990
China	2019	2,479,255
South Africa	2019	103,147
Value of exports of goods and commercial services (million US\$)		
Brazil	2018	274,977
Russia	2019	481,493
India	2019	238,097
China	2019	2,643,377
South Africa	2019	104,916
Foreign exchange reserves (million US\$)		
Brazil	2018	365,544
Russia	2019	433,297
India	2019	481,892
China	2019	3,107,924
South Africa <sup>(29)</sup>	2019	55,058
Share of external debts to GDP (%)		
Brazil	2017	15.5
Russia	2019	27.6
India	2019	20.1
China	2019	14.3
South Africa	2019	52.7

#### Brazil

- a) Brazilian Institute of Geography and Statistics IBGE, Directorate of Surveys.
- b) National Petroleum Agency ANP.
- c) Energy Research Company EPE.
- d) Ministry of Fishery and Aquaculture MPA.
- e) Brazilian Institute of Environment and Renewable Natural Resources IBAMA.
- f) UNESCO Institute for Statistics Database.
- g) World Health Organization Database.
- h) World Bank Database Poverty and Equity.
- i) OECD.stat Database.
- j) World Steel Association.
- k) Intenational Labour Organization, ILOStat Database.
- I) International Energy Agency.

# Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Service for State Registration, Cadastre and Cartography.
- c) Federal Agency for Air Transport.
- d) Federal Road Agency.
- e) Federal Agency for Fishery.

#### India

Data in this table has been taken from tables of other chapters of this publication. Data sources are given in those chapters.

#### China

- a) National Bureau of Statistics of China.
- b) Ministry of Civil Affairs of the People's Republic of China, Annual Statistical Report 2019.
- c) National Health Commission of the People's Republic of China, Annual Statistical Report 2019.
- d) Ministry of Transport of the People's Republic of China, Annual Statistical Report 2019.
- e) National Radio and Television Administration of China, Annual Statistical Report 2019.
- f) National Bureau of Statistics of China, Annual Industrial Statistical Report 2020.
- g) National Bureau of Statistics of China, China Statistical Abstract 2020.
- h) National Bureau of Statistics of China, China Statistical Yearbook 2020.
- i) Ministry of Natural Resources of the People's Republic of China.
- j) Ministry of Human Resources and Social Security of the People's Republic of China.
- k) Ministry of Ecology and Environment of the People's Republic of China, Annual Statistical Report 2019.
- I) Ministry of Water Resources of the People's Republic of China, Annual Statistical Report 2019.
- m) Ministry of Education of the People's Republic of China, Annual Statistical Report 2011–2019.
- n) China Railway Corporation, Annual Statistical Report 2019.

#### South Africa

- a) Other data in this table has been taken from tables of other chapters of this publication. Data sources are given in those chapter.
- b) CeSTII. (2017). South African National Survey of Research and Experimental Development (Statistical Report: 2015/16).
   Pretoria: Department of Science and Technology.
- c) www.pa.org.za June 2017.
- d) Department of Energy.

#### **Footnotes**

Specific footnotes and sources of data may be seen from the respective chapters of the indicators. Some data are provisional (P) and budget estimates (BE).

#### **Brazil**

- (1) Information about the mid-year population and demographic indicators, were obtained by a projection of the population by sex and age groups by the component method for the Period 2000–2060.
- (5) Data from ILOSTAT database.
- (15) Data from World Bank database Poverty and Equity.

#### Russia

- (12) Proportion of internal research and development expenditure to GDP.
- (16) Calculations of Gini Index are based on macroeconomical per capita income data and information of sample household budget survey.
- (20) Including natural gas liquids. Provisional data.
- (26) Catch of fish and other live wild aquatic organisms.
- (28) Public paved roads.

### India

- (2) Projected population as on 1st July, 2019 based on Census 2001.
- (3) Projected as on 1st March based on Census 2001 estimate.
- (6) Share of labour force to national population.
- (9) Information is as per financial year.
- (22) The period of agricultural year is from July (of the year indicated in the table) to June (next year).
- (23) Fourth advance estimates of 2019-20.
- (24) First Advance estimates of 2019-20 (Kharif only).
- (25) The data pertains to March (of the year indicated in the table) to February (next year).
- (27) The information is as on 31st March of the Year indicated in the table. The information on Highways includes both National and State Highways (Excluding Rural Roads, Project Roads, Urban Roads etc.).

#### China

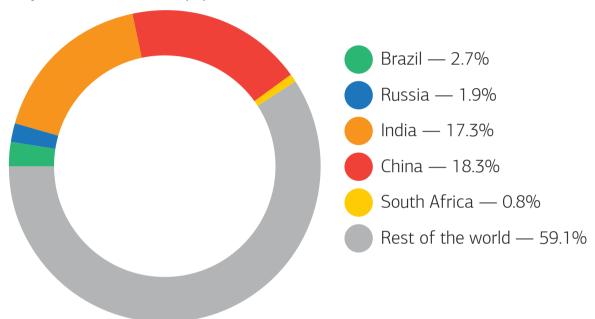
- (4) Year-end population.
- (7) Share of number of employed persons to national population.
- (8) Registered Unemployment Rate in Urban Areas.
- (10) GDP and Per Capita GDP in US dollars are converted using the annual average exchange rates.

- (11) Data of GDP are calculated at producers' prices.
- (13) Refers to government appropriation for education to GDP.
- (14) Refers to total expenditure on health as percentage of GDP.
- (17) Data of Gini Coefficient are based on per capita annual disposable income.
- (19) Refers only to Color TV.
- (21) Electric power in total primary energy production and total consumption of energy are converted on the basis of equal caloric value.

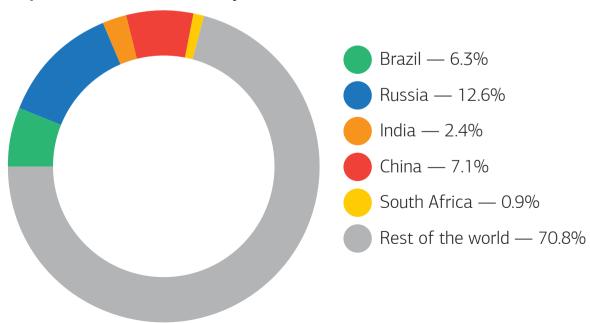
#### **South Africa**

- (18) Gini is per capita expenditure excluding taxes.
- (29) Including gold.

Graph 1.1 Share of world population, 2018



Graph 1.2 Share of world territory, 2018



# Population



**Table 2.1** — Summary of Population on BRICS Countries

# Population (million persons)

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total (Mid-year)											
Brazil <sup>(1)</sup>	173.4	195.5	197.4	199.2	201.0	202.8	204.5	206.1	207.7	208.5	210.1
Russia	146.6	142.8	143.0	143.2	143.5	146.1	146.4	146.7	146.8	146.8	146.8
India <sup>(2)</sup>	996.9	1176.7	1210.9	1232	1247.9	1263.8	1279.7	1295	1309.2	1323.4	1332.9
China <sup>(3)</sup>	1262.6	1337.7	1344.1	1350.7	1357.4	1364.3	1371.2	1378.7	1386.4	1392.7	1397.7
South Africa		51.3	52.1	52.9	53.8	54.6	55.4	56.3	57.1	57.9	58.8
Male											
Brazil <sup>(1)</sup>	86.2	96.7	97.6	98.5	99.3	100.2	101.0	208.5	102.5	102.0	102.7
Russia	68.5	66.0	66.1	66.3	66.5	67.7	67.8	68.0	68.1	68.1	68.1
India <sup>(2)</sup>	516.0	609.1	623.3	634.0	642.0	650.0	658.0	665.7	672.8	680.0	684.7
China <sup>(3)(4)</sup>	654.4	687.5	690.7	694.0	697.3	700.8	704.1	708.2	711.4	713.5	715.3
South Africa	21.0	24.9	25.3	25.7	26.1	26.5	27.0	27.4	27.8	28.2	28.7
Female											
Brazil <sup>(1)</sup>	87.3	98.8	99.8	100.8	101.7	102.6	103.5	104.4	105.2	106.5	107.4
Russia	78.1	76.8	76.9	76.9	77.1	78.4	78.6	78.7	78.8	78.7	78.7
India <sup>(2)</sup>	481.0	567.6	587.6	598.0	605.9	613.8	621.6	629.2	636.3	643.4	648.2
China <sup>(3)(4)</sup>	613.1	653.4	656.7	660.1	663.4	667.0	670.5	674.6	678.7	681.9	684.8
South Africa	23.0	26.5	26.8	27.2	27.6	28.0	28.5	28.9	29.2	29.7	30.1
Urban											
Brazil <sup>(5)</sup>	140.9	164.9	167.1	169.2	171.3	173.4	175.4	106.5	179.2	180.5	182.4
Russia	107.2	105.2	105.6	105.9	106.3	108.1	108.5	108.8	109.2	109.4	109.5
India <sup>(2)</sup>	283.7	350.6	377.1	389.3	398.5	407.9	417.4	426.7	435.8	445.0	451.2
China <sup>(3)(4)</sup>	459.1	669.8	690.8	711.8	731.1	749.2	771.2	793.0	813.5	831.4	848.4
South Africa <sup>(6)</sup>											
Rural											
Brazil <sup>(5)</sup>	35.2	30.6	30.3	30.0	29.7	29.4	29.1	180.5	28.5	28.0	27.7
Russia	39.4	37.6	37.4	37.3	37.2	38.0	37.9	37.8	37.7	37.4	37.3
India <sup>(2)</sup>	713.2	826.2	833.7	842.7	849.4	855.9	862.3	868.3	873.4	878.4	881.7
China <sup>(3)(4)</sup>	808.4	671.1	656.6	642.2	629.6	618.7	603.5	589.7	576.6	564.0	551.6
South Africa <sup>(6)</sup>					***		***		***		

#### **Brazil**

Brazilian Institute of Geography and Statistics — IBGE.

#### Russia

Federal State Statistics Service of the Russian Federation.

#### India

Ministry of Home Affairs, Office of the Registrar General of India, Reports of The Technical Committee on Population Projection 1996–2006 and 2001–2026.

Report of the Technical Group on Population Projections, November 2019, National Commission on Population, MoHFW.

#### China

National Bureau of Statistics of China, China Statistical Yearbooks 2001–2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

#### South Africa

Statistics South Africa, MYPE 2019 series.

#### **Footnotes**

#### Brazil

- (1) Data derived from Population Projection by Sex and Age for the Period 2000–2060. After the year 2018, Population Projection by Sex and Age for the Period 2010–2060. Review 2018.
- (5) Urban percentage estimated by linear interpolation for the intercensal period 2000–2010 and designed by the methodology of the United Nations from 2010.

#### India

(2) The information is as on 1st March and is based on population projection. Explanatory notes may be seen for Census 2011 figures. For 2012–2018 the information pertaining to population is as on 1st July based on Population projections for India and States Report 2011–2036 of RGI using 2011 Census.

#### China

- (3) Data in 2000 and 2010 are estimated from the fifth and sixth National Population Census respectively. Data in 2005 and 2015 are estimated from the National 1% Population Sample Survey. The other data are estimated from the annual national survey on population changes.
- (4) Year-end population.

#### **South Africa**

(6) Population estimation series not active in 2000. Population figures can not be verified. Population estimation series does not split population into rural/urban.

**Table 2.2.1** — Selected Data on Population — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total (mid-year) (million persons) <sup>(1)</sup>	173.4	195.5	197.4	199.2	201.0	202.8	204.5	206.1	207.7	208.4	210.1
Under 15 years	52.1	49.9	49.5	49.0	48.5	48.0	47.4	46.8	46.1	44.5	44.4
15 to 24 years	34.4	34.5	34.4	34.3	34.2	34.2	34.2	34.2	34.2	33.7	33.4
25 to 59 years	72.7	91.5	93.1	94.7	96.2	97.6	98.9	100.2	101.4	102.2	103.3
60 years and older	14.2	19.6	20.4	21.2	22.1	23.0	23.9	24.9	26.0	28.0	29.1
Sex ratio (female = 100) <sup>(1)</sup>	98.7	97.8	97.8	97.7	97.7	97.6	97.5	97.4	97.4	95.7	95.7
Under 15 years	103.6	104.1	104.2	104.2	104.3	104.4	104.4	104.5	104.5	104.6	104.6
15 to 24 years	102.4	102.6	102.6	102.6	102.7	102.7	102.8	102.8	102.9	102.6	102.8
25 to 59 years	97.4	97.3	97.4	97.4	97.4	97.4	97.5	97.5	97.5	94.9	95.0
60 years and older	81.1	79.0	79.1	79.1	79.2	79.2	79.3	79.4	79.5	79.0	79.0
Crude birth rate (per 1000 persons) <sup>(1)</sup>	20.9	15.9	15.5	15.1	14.8	14.5	14.2	13.9	13.6	14.4	14.2
Crude death rate (per 1000 persons) <sup>(1)</sup>	6.7	6.0	6.0	6.0	6.0	6.1	6.1	6.1	6.2	6.5	6.5
Natural increase rate (per 1000 persons)	14.2	9.9	9.5	9.1	8.8	8.4	8.1	7.8	7.4	7.9	7.7
Life expectancy at birth (years) <sup>(1)</sup>	69.8	73.9	74.2	74.5	74.8	75.1	75.4	75.7	76.0	76.3	76.5
Total fertility rate (per woman) <sup>(1)</sup>	2.4	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.8	1.8
Infant mortality rate (per 1000 live births) <sup>(1)</sup>	29.0	17.2	16.4	15.7	15.0	14.4	13.8	13.3	12.8	12.4	11.9
Under-five mortality rate (per 1000 live births) <sup>(1)</sup>	35.5	19.8	18.9	18.1	17.4	16.7	16.1	15.5	14.9	14.4	14.0
Crude marriage rate (per 1000 persons) <sup>(2)</sup>	6.0	6.7	6.9	6.9	6.9	7.1	7.2	6.9	6.6	6.4	
Crude divorce rate (per 1000 persons) <sup>(3)(4)</sup>	1.2	1.8	2.6	2.5	2.3	2.4	2.3	2.4	2.5	2.6	

Brazilian Institute of Geography and Statistics — IBGE.

#### **Footnotes**

- (1) Data derived from Population Projection by Sex and Age for the Period 2000–2060. For the years 2018 and 2019 Population Projection by Sex and Age for the Period 2010–2060. Review 2018.
- (2) Data derived from Civil Registration Statistics for the period 2000–2018.
- (3) Data derived from Civil Registration Statistics for the period 2000–2018, Data divorces, records refer to procedures provided in the first instance without resources. And from 2007 are included consensual divorces that were signed by the notary public deeds.
- (4) The divorce rate caculated by IBGE is obtained by dividing the number of divorces of people 20 years of age or older by the population of this same age group multiplied by a thousand.

**Table 2.2.2** — Selected Data on Population — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total (mid-year) (million persons)	146.6	142.8	143.0	143.2	143.5	146.1	146.4	146.7	146.8	146.8	146.8
Under 15 years	26.5	21.7	22.0	22.5	23.1	24.1	24.7	25.3	25.7	25.9	25.9
15 to 24 years	23.2	20.8	19.8	18.6	17.5	16.6	15.7	14.9	14.3	14.1	14.1
25 to 59 years	69.9	74.5	74.8	75.1	75.4	76.7	76.6	76.4	76.0	75.2	74.4
60 years and older	27.0	25.8	26.4	27.0	27.5	28.7	29.4	30.1	30.9	31.6	32.4
Sex ratio (female = 100)	87.8	86.0	86.0	86.1	86.2	86.3	86.3	86.4	86.4	86.5	86.6
Under 15 years	104.5	105.0	105.0	105.1	105.2	105.2	105.3	105.3	105.3	105.4	105.5
15 to 24 years	102.7	103.0	103.6	103.9	104.1	104.5	104.5	104.3	104.4	104.4	104.3
25 to 59 years	93.8	91.0	91.2	91.6	92.0	92.3	92.6	92.8	93.2	93.5	93.8
60 years and older	53.2	52.2	52.6	52.9	53.3	53.7	54.1	54.5	55.0	55.4	55.9
Crude birth rate (per 1000 persons)	8.7	12.5	12.6	13.3	13.2	13.3	13.3	12.9	11.5	10.9	10.1
Death rate (per 1000 persons)	15.3	14.2	13.5	13.3	13.0	13.1	13.0	12.9	12.4	12.5	12.3
Natural increase rate (per 1000 persons)	-6.60	-1.70	-0.90	-0.03	0.20	0.20	0.30	-0.01	-0.90	-1.60	-2.20
Life expectancy at birth (years)	65.3	68.9	69.8	70.2	70.8	70.9	71.4	71.9	72.7	72.9	73.3
Total fertility rate (per woman)	1.2	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.6	1.6	1.5
Infant mortality rate (per 1000 live births)	15.3	7.5	7.4	8.6	8.2	7.4	6.5	6.0	5.6	5.1	4.9
Under-five mortality rate (per 1000 live births)	19.3	9.9	9.4	10.6	9.9	9.1	8.0	7.4	6.9	6.3	6.0
Maternal mortality rate (per 100,000 live births)	39.7	16.5	16.2	11.5	11.3	10.8	10.1	10.0	8.8	9.1	9.0
Crude marriage rate (per 1000 persons)	6.2	8.5	9.2	8.5	8.5	8.4	7.9	6.7	7.1	6.1	6.5
Crude divorce rate (per 1000 persons)	4.3	4.5	4.7	4.5	4.7	4.7	4.2	4.1	4.2	4.0	4.2
Rate of net migration (%)	0.25	0.19	0.22	0.21	0.21	0.19	0.17	0.18	0.14	0.09	0.19
Dependency ratio (%)	57.4	49.9	51.1	52.8	54.5	56.5	58.6	60.7	62.6	64.4	66.0

Federal State Statistics Service of the Russian Federation.

**Table 2.2.3** — Selected Data on Population — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total (million persons) <sup>(1)</sup>	996.9	1176.7	1210.9	1226.7	1242.6	1258.5	1274.4	1290.2	1304.5	1318.7	1337.6
Under 15 years	342.0	363.7	346.9	351.5	348.7	341.9	342.3	340.3			
15 to 24 years	194.0	237.0	239.8	243.0	245.9	252.7	258.3	238.7			
25 to 59 years	389.0	487	507.3	513.0	526.1	542.6	549.3	571.9			
60 years and older	72.0	88.3	98.5	100.3	101.6	104.1	106.6	118.1			
Sex ratio (female = 100) <sup>(1)</sup>	107.3	107.2	106.1	106.0	106.0	105.9	105.9	105.8	105.8	105.7	105.6
Under 15 years	110.4	111.6	111.0	112.6	112.4	111.7	112.2	112.5			
15 to 24 years	109.7	108.8	110.0	107.9	107.9	107.4	107.4	108.2			
25 to 59 years	105.8	105.5	106.0	105.6	106.1	106.2	105.9	106.4			
60 years and older	94.6	97.7	96.0	97.5	95.2	98.6	99.8	96.9			
Crude birth rate (per 1000 persons)	25.8	22.1	21.8	21.6	21.4	21.0	20.8	20.4	20.2	20.0	
Death rate (per 1000 persons)	8.5	7.2	7.1	7.0	7.0	6.7	6.5	6.4	6.3	6.2	
Annual natural increase rate (per 1000 persons)	17.3	14.9	14.7	14.5	14.4	14.3	14.3	14.0	13.9		
Life expectancy at birth (years) <sup>(2)</sup>	62.9	67.0	67.5	67.9	68.3	68.7	66.9 <sup>(3)</sup>	67.4 <sup>(4)</sup>	69.0	69.4	
Total fertility rate (per woman)	3.2	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2	
Infant mortality rate (per 1000 live births)	68.0	47.0	44.0	42.0	40.0	39.0	37.0	34.0	33.0	32.0	
Under-five mortality rate (per 1000 live births)	99.1	59.0	55.0	52.0	49.0	45.0	43.0	39.0	37.0	36.0	
Maternal mortality ratio (per 100,000 live births) <sup>(5)</sup>	327	178	167	167	167				122 <sup>(6)</sup>	113 <sup>(7)</sup>	

Ministry of Home Affairs, Office of the Registrar General of India, Reports of The Technical Committee on Population Projection 2001–2026; Sample Registration System Statistical Reports 2017, 2018, Office of RGI, Ministry of Home Affairs.

Special Bulletin on Maternal Mortality in India 2016–18, SRS, Office of RGI, Ministry of Home Affairs.

#### **Footnotes**

- (1) The information pertaining to population is as on 1st March and is based on Population projections for India and States Report 2011–2026 of RGI. This may vary actual Census figure of 2011. For 2019 the information pertaining to total population is as on 1st July based on Population projections for India and States Report 2011–2036 of RGI using 2011 Census.
- (2) The correct data on Life Expectancy at Birth for the mid year 2009 to 2013.
- (3) For the period 2011–15.
- (4) For the period 2012–16.
- (5) Information on Maternal Mortality Ratio pertains to the period 1997–2001, 2004–2006, 2007–2009, 2010 and 2011–13.
- (6) For the period 2015–17.
- (7) For the period 2016–18.

Table 2.2.4 — Selected Data on Population — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total											
Mid-year (million persons)(1)	1262.6	1337.7	1344.1	1350.7	1357.4	1364.3	1371.2	1378.7	1386.4	1392.7	1397.7
Year-end (million persons)(1)	1267.4	1340.9	1347.4	1354	1360.7	1367.8	1374.6	1382.7	1390.1	1395.4	1400.1
Under 15 years	290.1	222.6	221.6	222.9	223.3	225.6	227.2	230.1	233.5	248.6	249.8
16 to 59 years	846.4	940.5	940.7	937.3	935.0	929.8	925.5	921.8	915.7	897.3	896.4
60 years and older	130.9	177.8	185.0	193.9	202.4	212.4	222.0	230.9	240.9	249.5	253.9
16 to 64 years	889.1	999.4	1002.8	1004.0	1005.8	1004.7	1003.6	1002.6	998.3	980.2	974.3
65 years and older	88.2	118.9	122.9	127.1	131.6	137.6	143.9	150.0	158.3	166.6	176
Sex ratio (female = 100)	106.7	105.2	105.2	105.1	105.1	105.1	105.0	105.0	104.8	104.6	104.5
Crude birth rate (per 1000 persons)	14.0	11.9	11.9	12.1	12.1	12.4	12.1	13.0	12.4	10.9	10.5
Death rate (per 1000 persons)	6.5	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.1	7.1	7.1
Natural increase rate (per 1000 persons)	7.6	4.8	4.8	5.0	4.9	5.2	5.0	5.9	5.3	3.8	3.3
Life expectancy at birth (years)	71.4	74.8					76.3				
Infant mortality rate (per 1000 persons)	32.2	13.1	12.1	10.3	9.5	8.9	8.1	7.5	6.8	6.1	5.6
Under-five mortality rate (per 1000 live births)	39.7	16.4	15.6	13.2	12.0	11.7	10.7	10.2	9.1	8.4	7.8
Crude marriage rate (per 1000 persons)	6.7	9.3	9.7	9.8	9.9	9.6	9.0	8.3	7.7	7.3	6.6
Crude divorce rate (per 1000 persons)	1.0	2.0	2.1	2.3	2.6	2.7	2.8	3.0	3.2	3.2	3.4
Maternal mortality rate (per 100,000 persons)	53.0	30.0	26.1	24.5	23.2	21.7	20.1	19.9	19.6	18.3	17.8

- a) National Bureau of Statistics of China, China Statistical Yearbooks 2001–2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.
- b) Ministry of Civil Affairs of the People's Republic of China, China Civil Affairs' Statistical Yearbook 2000–2019.
- c) National Health Commission of the People's Republic of China, Annual Statistical Reports 2000–2019.

#### **Footnotes**

(1) Data in 2000 and 2010 are estimated from the Fifth and Sixth National Population Census respectively. Data in 2005 and 2015 are estimated from the National 1% Population Sample Survey. The other data are estimated from the annual national sample survey on population changes.

Table 2.2.5 — Selected Data on Population — South Africa

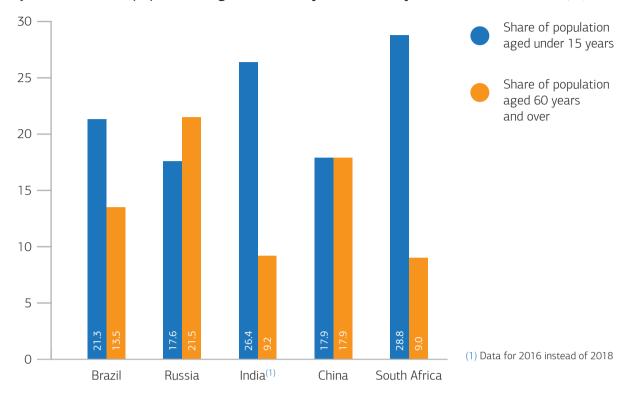
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total (mid-year) (million persons)										
Under 15 years	15.0	15.2	15.4	15.6	15.8	16.0	16.3	16.5	16.7	16.9
15 to 24 years	10.6	10.5	10.4	10.3	10.1	10.0	9.9	9.7	9.6	9.6
25 to 59 years	21.7	22.3	22.9	23.5	24.1	24.7	25.3	25.9	26.5	27.0
60 years and older	4.0	4.1	4.3	4.4	4.6	4.7	4.8	5.0	5.2	5.3
Sex ratio (female = 100)										
Under 15 years	102.0	102.1	102.2	102.2	102.3	102.3	102.3	102.4	102.4	102.4
15 to 24 years	101.3	101.4	101.4	101.4	101.4	101.4	101.4	101.4	101.4	101.4
25 to 59 years	91.7	92.3	92.8	93.4	93.9	94.4	94.9	95.4	95.9	96.4
60 years and older	64.5	64.5	64.5	64.4	64.3	64.1	63.9	63.7	63.4	63.2
Crude birth rate (per 1000 persons)	23.4	22.8	22.3	21.9	21.5	21.2	20.9	20.6	20.2	19.9
Crude death rate (per 1000 persons)	11.2	10.6	10.4	9.9	9.8	9.6	9.3	9.3	9.2	9.2
Natural increase rate (per 1000 persons)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1
Life expectancy at birth (years)	59.4	60.7	61.1	62.1	62.5	63.1	63.8	64.1	64.4	64.7
Total fertility rate (per woman)	2.6	2.5	2.5	2.4	2.4	2.4	2.4	2.3	2.3	2.3
Infant mortality rate (per 1000 live births)	40.9	36.1	33.4	31.5	29.0	27.1	26.3	24.3	22.4	22.1
Under-five mortality rate (per 1000 live births)	57.2	47.7	44.5	42.2	38.9	35.3	32.4	29.1	27.8	28.5
Crude marriage rate (per 1000 persons)	4.5	4.2	4.0	3.8	3.6	3.2	3.2	3.0	2.9	
Crude divorce rate (per 1000 persons)	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	

Statistics South Africa.

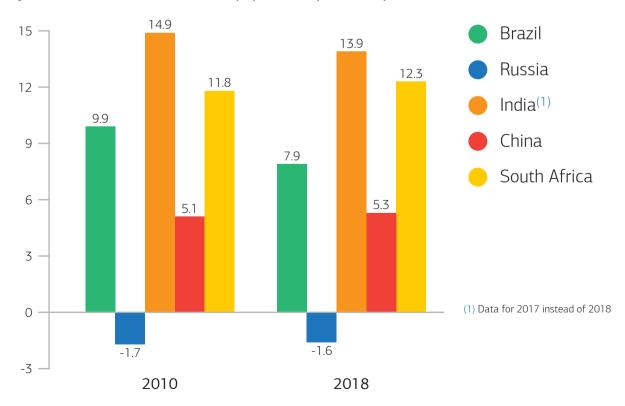
# **Footnotes**

For South Africa Natural Increase is expressed as a percentage year on year and not per 1000.

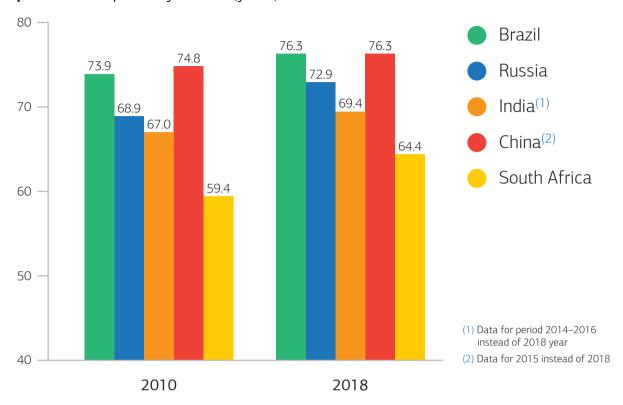
Graph 2.1 Share of population aged under 15 years and 60 years and over in 2018 (%)



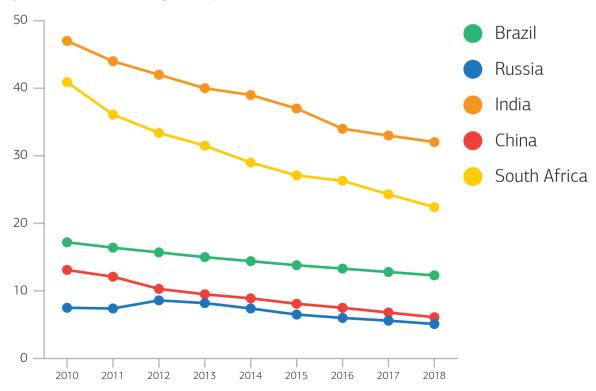
Graph 2.2 Natural increase rate of population (per 1000 persons)



**Graph 2.3** Life expectancy at birth (years)



**Graph 2.4** Infant mortality rate (per 1000 live births)



#### **Explanatory Notes**

#### **General Notes**

**Total population (Mid-Year)** — Information about the population in half of the year, was obtained by a projection of the population by sex and age groups by the component method. This method consists of working separately each component of population dynamics of the population; fertility, mortality and migration.

**Sex ratio** — expressed as the number of males for every 100 females. It is obtained from the ratio of the male and female populations by age group.

**Crude marriage rate** — The nuptiality rate is obtained by dividing the number of marriages of spouses 15 years of age or older by the population of this same age group multiplied by a thousand.

**Total fertility rate** — The total fertility rate expresses the number of children who, on average, would a woman belonging to a hypothetical cohort of women during their fertility life (15 a 49 years) c that had their children according to the fertility rates by age study period and were not exposed to the risk of mortality from birth to the end of the fertile period.

**Infant mortality rate** — The infant mortality rate is defined as the number of deaths of infants under one year of age (per thousand live births) in a given geographical area and time period, and is interpreted as the estimated risk of a born live to die during their first year of life.

Crude Birth rate: Number of Births per 1000 population in a given year. This definition excludes fetal deaths.

Crude Death Rate: Number of Deaths per 1000 population in a given year.

Expectation of life at birth: Average number of years a new born child is expected to live under current mortality conditions.

**Under-five mortality rate** (according to WHO methodology): The probability of dying of a child born in a specific year before reaching the age of five, expressed per 1000 live births.

Crude divorce rate refers to ratio of divorce couples to the annual average population for the reference year, the formula is:

**Dependency rate** — number of people aged 0–15 and 60 and over to the population 15–59.

**Census:** A canvass of a given area, resulting in an enumeration of the entire population and often the compilation of other demographic, social and economic information pertaining to that population at a specific time.

#### Russia

The information on births, deaths, marriages and divorces is received on the basis of annual processing of data contained in the records of Civil Registrar Offices.

# Labour Force



**Table 3.1** — Summary of Labour Force on BRICS Countries

		2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Share of Labour F	orce to po	pulation	15 years	and ove	r (%)							
	Total				62.7	62.9	62.4	62.9	62.9	63.2	64.0	63.9
Brazil <sup>(1)</sup>	Male				74.7	74.6	74.1	74.5	74.0	73.8	74.3	74.1
	Female				51.7	52.2	51.8	52.4	52.8	53.5	54.4	54.2
	Total	65.5	67.7	68.3	68.7	68.5	68.9	69.1	69.5	62.8	62.8	62.3
Russia <sup>(2)</sup>	Male	71.5	73.8	74.4	74.7	74.7	75.1	75.5	75.9	71.3	71.3	70.6
	Female	60.0	62.3	62.9	63.3	63.0	63.3	63.4	63.8	55.7	55.8	55.4
	Total	40.6	40.0		39.5						36.9	
India <sup>(3)</sup>	Male	54.0	55.7		55.6						55.5	
	Female	26.3	23.3		22.5						17.5	
	Total	56.9	56.8	56.7	56.6	56.6	56.5	56.3	56.1	55.9	55.6	55.3
China <sup>(4)(5)</sup>	Male											
	Female											
	Total		52.3	52.2	52.5	53.1	53.3	54.6	54.7	55.6	55.1	55.2
South Africa	Male		60.6	59.9	60.4	60.5	60.8	62.0	62.2	62.9	62.3	62.5
	Female		44.6	45.0	45.2	46.2	46.4	47.6	47.6	48.7	48.4	48.5
Share of employe	d persons	in the pri	mary ind	ustry to	total emp	oloyed pe	rsons (%	)				
	Total				11.5	11.1	10.4	10.2	10.0	9.5	9.3	9.2
Brazil <sup>(6)</sup>	Male				15.6	15.3	14.2	14.1	14.0	13.4	13.2	13.0
	Female				5.9	5.5	5.4	4.9	4.7	4.3	4.1	4.0
	Total	14.5	7.7	7.7	7.3	7.0	6.7	6.7	6.7	5.9	5.9	5.8
Russia <sup>(7)</sup>	Male	17.1	9.9	9.6	9.2	8.5	8.2	8.2	8.3	7.7	7.7	7.6
	Female	11.7	5.6	5.7	5.4	5.4	5.2	5.1	5.0	4.0	4.0	4.0
	Total										44.1	
India <sup>(8)</sup>	Male										40.2	
	Female										57.0	
	Total	50.0	36.7	34.8	33.6	31.4	29.5	28.3	27.7	27.0	26.1	25.1
China <sup>(5)</sup>	Male											
	Female											
	Total		7.2	7.0	7.4	7.7	7.4	8.5	8.4	7.9	7.7	7.8
South Africa	Male		9.3	9.2	9.7	10.4	9.9	11.1	11.1	10.5	10.1	10.3
504764	Female		4.4	4.1	4.4	4.3	4.3	5.1	4.7	4.5	4.6	4.6
Share of employe										5	1.0	
	Total				22.8	22.7	22.8	22.1	20.8	20.7	20.1	19.8
Brazil <sup>(6)</sup>	Male				30.2	30.6	30.8	29.9	28.4	28.2	27.1	26.6
DIGZII	Female				12.7	12.2	12.1	11.7	10.7	10.9	10.7	10.6
	Total	29.2	27.8	27.5	27.8	27.8	27.6	27.3	27.0	27.0	26.8	26.8
Russia <sup>(9)</sup>	Male	35.8	37.5	37.5	38.1	38.2	38.1	37.9	37.4	37.5	37.3	37.5
Nussia	Female	22.3	17.7	17.1	17.1	16.9	16.6	16.1	16.0	15.8	15.7	15.5
	Total	15.8	21.5		24.3						24.8	
India <sup>(8)</sup>	Male	17.7	23.5		25.9						26.9	***
iliula.	Female	11.7	16.3		20.0						17.8	
	Total	22.5	28.7	29.5	30.3	30.1	29.9	29.3	28.8	28.1	27.6	27.5
China <sup>(5)</sup>	Male											
Cillia.	Female											
	Total	20.6	22.0	21.8	20.9	20.8	20.6	21.0	20.5	20.6	20.6	19.8
South Africa		20.6					20.6					
South Africa	Male		29.3 12.5	29.0 12.4	28.0	27.9 11.6	28.1	28.8 10.9	27.8	27.8 11.5	28.2	26.6
hare of omploye	Female	in the ter							11.1	11.5	10.9	11.1
Share of employe			ciai y IIIO						60.2	60.0	70.0	700
D 1	Total				65.7	66.1	66.7	67.7	69.2	69.8	70.6	70.9
Brazil	Male				54.1	54.1	55.0	56.0	57.6	58.3	59.7	60.2
	Female				81.4	82.3	82.5	83.4	84.5	84.5	85.3	85.4

		2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	Total	56.3	64.5	64.9	64.9	65.2	65.7	66.0	66.3	67.1	67.3	67.4
Russia <sup>(10)</sup>	Male	47.1	52.7	52.9	52.7	53.3	53.6	53.9	54.2	54.8	55.0	54.9
	Female	66.0	76.7	77.2	77.5	77.7	78.3	78.8	79.0	80.2	80.3	80.5
	Total										31.0	
India <sup>(8)</sup>	Male										32.8	
	Female										25.2	
	Total	27.5	34.6	35.7	36.1	38.5	40.6	42.4	43.5	44.9	46.3	47.4
China <sup>(5)</sup>	Male											
	Female											
	Total		70.7	71.2	71.7	71.5	71.9	70.6	71.1	71.5	71.7	72.4
South Africa	Male		61.4	61.8	62.3	61.7	62.0	60.1	61.0	61.6	61.7	63.1
	Female		83.1	83.5	84.1	84.0	84.7	84.0	84.2	84.1	84.5	84.2

#### Brazil

Brazilian Institute of Geography and Statistics — IBGE, National Household Sample Survey 2005/2015. Intenational Labour Organization, ILOStat Database.

#### Russia

Federal State Statistics Service of the Russian Federation, Labour Force Sample Survey.

#### India

Ministry of Statistics and Programme Implementation, National Sample Survey Reports: Employment and Unemployment Situation in India (various issues).

#### China

National Bureau of Statistics of China, China Statistical Yearbooks 2001–2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

#### **South Africa**

Statistics South Africa, Mid-Year Population Estimates (Statistical Release P0302); Labour Force Survey (Statistical Release P0210); and Quarterly Labour Force Survey (Statistical Release P0211).

#### **Footnotes**

#### Brazil

- (1) Population 15 years old and over.
- (6) Industry activities: manufacturing, mining and quarrying, electricity, gas and water supply.

#### Russia

- (2) Before 2017 data on population 15–72 year, since 2017 on population 15 years and over.
- (7) Including: Agriculture, forestry, animal husbandry and fishery. The data for 2000 data are presented according to NACE 1 Classification of economic activities, since 2010 according to NACE 2 Classification of economic activities.
- (9) Including: Mining and quarrying, manufacturing and electricity, gas and water supply, construction. The data for 2000 data are presented according to NACE 1 Classification of economic activities, since 2010 — according to NACE 2 Classification of economic activities.
- (10) Other economic activities not included in the primary and secondary sectors of the economy. The data for 2000 data are presented according to NACE 1 Classification of economic activities, since 2010 — according to NACE 2 Classification of economic activities.

## India

- (3) For 2018, the estimates are obtained from the Annual Report, Periodic Labour Force Survey, 2017–18.
- (8) The information in based on Usual Activity Status taking into account both Principal & Subsidiary activity. Secondary Industry includes Mining & Quarrying, Manufacturing, Construction, Electricity Gas & Water Supply.

#### China

- (4) Share of number of employed persons to national population.
- (5) The total number of employed persons since 2001 are revised according to the 6th National Population Census.

**Table 3.2.1** — Selected Data on Labor Force — Brazil

		2012	2013	2014	2015	2016	2017	2018	2019
	Total	96.4	98.0	99.0	101.2	102.7	104.3	105.5	106.5
Labor force (million persons)	Male	54.8	55.4	56.0	57.3	57.7	58.0	59.6	60.1
(persons)	Female	41.5	42.6	43.0	44.0	45.1	46.3	45.9	46.4
	Total	89.3	90.9	92.2	92.4	91.1	91.3	92.5	93.6
Employed population (million persons)	Male	51.6	52.2	52.9	53.0	51.8	51.7	53.1	53.8
(persons)	Female	37.8	38.7	39.3	39.4	39.2	39.6	39.4	39.8
Age groups (%)									
	Total	17.9	17.3	16.4	15.9	14.4	14.8		
15 to 24 years	Male	18.5	17.7	16.9	16.6	15.0	15.4		
	Female	17.1	16.6	15.6	15.1	13.7	14.0		
	Total	75.9	76.3	77.1	77.1	78.4	77.8		
25 to 59 years	Male	74.3	74.8	75.4	75.6	76.8	76.0		
	Female	77.9	78.4	79.3	79.2	80.6	80.1		
	Total	6.2	6.4	6.6	6.9	7.1	7.4		
60 years and older	Male	7.2	7.4	7.7	7.9	8.2	8.5		
	Female	5.0	5.0	5.1	5.6	5.7	5.9		
Sector (million persons)									
	Total	10.3	10.1	9.6	9.4	9.1	8.7	8.6	8.6
Agriculture, forestry and fishing	Male	8.1	8.0	7.5	7.5	7.2	6.9	7.0	7.0
g	Female	2.2	2.1	2.1	1.9	1.8	1.7	1.6	1.6
	Total	12.8	12.7	13.3	12.8	11.5	11.8	11.9	11.8
Industry <sup>(1)</sup>	Male	8.4	8.3	8.8	8.4	7.5	7.8	7.9	7.8
	Female	4.5	4.4	4.5	4.4	4.0	4.1	4.0	4.0
	Total	7.5	8.0	7.8	7.7	7.4	7.0	6.7	6.7
Construction	Male	7.2	7.6	7.5	7.4	7.2	6.8	6.5	6.5
	Female	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
	Total	16.9	17.2	17.4	17.6	17.5	17.5	17.7	17.8
Trade	Male	9.8	9.8	9.9	10.0	10.1	10.0	10.3	10.5
	Female	7.1	7.4	7.4	7.6	7.4	7.6	7.4	7.3
	Total	41.8	42.9	44.2	44.9	45.6	46.2	47.6	48.6
Services	Male	18.1	18.4	19.1	19.7	19.8	20.2	21.4	21.9
	Female	23.7	24.5	25.0	25.2	25.8	26.0	26.2	26.7
	Total	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

		2012	2013	2014	2015	2016	2017	2018	2019
	Total	7.0	7.0	6.8	8.8	11.8	13.0	13.0	12.9
Unemployed population (million persons)	Male	3.3	3.2	3.2	4.2	5.9	6.3	6.5	6.3
V Property	Female	3.7	3.8	3.6	4.6	5.9	6.7	6.5	6.6
	Total	6.4	6.4	6.2	8.1	10.8	11.9	11.8	11.6
Unemployed urban population (million persons)	Male	2.9	2.8	2.9	3.8	5.3	5.7	5.8	5.6
V Property	Female	3.5	3.5	3.3	4.2	5.4	6.2	6.0	6.0
	Total	7.3	7.2	6.9	8.7	11.5	12.5	12.3	12.1
Unemployment rate (%)	Male	6.0	5.8	5.7	7.4	10.2	10.9	10.9	10.5
	Female	9.0	9.0	8.5	10.4	13.1	14.5	14.2	14.1
	Total	7.6	7.5	7.2	9.1	11.9	12.9	12.7	12.4
Urban unemployment rate (%)	Male	6.3	6.1	6.1	7.9	10.7	11.4	11.3	10.9
	Female	9.3	9.3	8.6	10.7	13.3	14.7	14.4	14.3
nemployment rate	Total	15.2	15.4	15.2	19.3	26.0	26.8	28.3	27.4
for population aged	Male	12.8	12.6	12.6	16.3	23.1	23.4	25.2	24.4
under 25 years (%)	Female	18.5	19.3	18.7	23.3	29.7	31.1	32.2	31.3

Brazilian Institute of Geography and Statistics — IBGE, Continuous *National Household Sample Survey 2012/2017*. Intenational Labour Organization, ILOStat Database.

# **Footnotes**

Population 15 years old and older.

- (1) Industry Sectors of ISIC Rev 4:
  - A Mining and quarrying;
  - B Manufacturing;
  - D Electricity, gas, steam and air conditioning supply;
  - ${\sf E-Water\ supply;\ sewerage,\ waste,\ management\ and\ remediation\ activities.}$

**Table 3.2.2** — Selected Data on Labour Force<sup>(1)</sup> — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total labour force (million persons)	72.8	75.5	75.8	75.7	75.5	75.4	76.6	76.6	76.3	76.2	75.4
Male	37.6	38.6	38.7	38.7	38.7	38.7	39.4	39.5	39.3	39.2	38.8
Female	35.1	36.9	37.1	37.0	36.8	36.7	37.2	37.2	37.0	37.0	36.6
Employed population (million persons)	65.1	69.9	70.9	71.5	71.4	71.5	72.3	72.4	72.3	72.5	71.9
Male	33.6	35.6	36.0	36.5	36.5	36.6	37.1	37.2	37.2	37.3	36.9
Female	31.5	34.4	34.8	35.1	34.9	34.9	35.2	35.2	35.1	35.3	35.0
Age (%)											
15 to 24 years	12.1	10.4	10.1	9.1	9.2	8.4	7.6	7.0	6.2	5.7	5.5
25 to 59 years	82.8	85.4	85.4	86.4	86.1	86.8	87.3	87.7	88.2	88.4	88.1
60 years and older	5.0	4.2	4.5	4.6	4.7	4.8	5.1	5.3	5.6	6.0	6.4
Sector (million persons) <sup>(2)</sup>											
Agriculture, forestry and fishing	9.4	5.4	5.4	5.2	5.0	4.8	4.9	4.9	4.3	4.3	4.2
Industry <sup>(3)</sup>	15.7	14.4	14.3	14.6	14.5	14.3	14.3	14.4	14.2	14.3	14.3
Construction	3.3	5.1	5.1	5.3	5.4	5.4	5.5	5.2	5.3	5.1	5.0
Trade	8.0	10.7	11.1	11.3	11.3	11.3	11.3	11.4	11.5	11.5	11.2
Services <sup>(4)</sup>	28.6	34.3	34.8	35.0	35.2	35.7	36.4	36.6	37.0	37.3	37.3
Other <sup>(5)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unemployed population (million persons)	7.7	5.5	4.9	4.1	4.1	3.9	4.3	4.2	4.0	3.7	3.5
Male	4.1	3.0	2.7	2.2	2.2	2.1	2.3	2.3	2.1	1.9	1.8
Female	3.6	2.5	2.2	1.9	1.9	1.8	2.0	2.0	1.9	1.7	1.6
Unemployed urban population (million persons)	5.8	3.6	3.2	2.6	2.6	2.5	2.8	2.8	2.5	2.4	2.3
Unemployment rate (%)	10.6	7.3	6.5	5.5	5.5	5.2	5.6	5.5	5.2	4.8	4.6
Urban unemployment rate (%)	10.7	6.3	5.5	4.5	4.6	4.3	4.8	4.8	4.3	4.0	3.9
Unemployment rate for population aged under 25 years (%)	20.7	16.9	15.2	14.8	13.8	13.7	16.0	16.3	16.1	16.6	15.5

Federal State Statistics Service of the Russian Federation, Labour Force Sample Survey.

#### **Footnotes**

- (1) Before 2017 data on population 15–72 year, since 2017 on population 15 years and over.
- (2) The data for 2000 data are presented according to NACE 1 Classification of economic activities, since 2010 according to NACE 2 Classification of economic activities.
- (3) Including Energy.
- (4) Including: hotels and restaurant; transport and communication; financial activity; real estate, renting and business activities; public administration and defence; social security; education; health and social work; other community, social and personal service activities.
- (5) Including activities of households and activities of extraterritorial organisations.

**Table 3.2.3** — Selected Data on Labour Force — India

		2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Total	373.6	408.4		429.9						
Labour Force (million persons)	Male	255.6	293.4		310.9						
	Female	118.0	115.0		119.0						
	Total	365.4	400.0		420.5						
Employed population (million persons)	Male	249.4	287.7		304.3						
persons,	Female	116	112.3		116.1						
Age wise break up of those emp	loyed (mi	llion per	sons) <sup>(1)</sup>								
	Total	75.8	68.8		67.8						
15 to 24 years	Male	52.1	50.4		49.9						
	Female	23.8	18.5		17.9						
	Total	255.2	296.8		316.4						
25 to 59 years	Male	173.5	212.0		227.4						
	Female	81.7	84.8		89.1						
	Total	24.6	30.1		32.9						
60 years and older	Male	18.6	22.6		25.1						
	Female	6.0	7.4		7.8						
Sectorwise break up of those en	nployed (	million p	ersons)								
	Total	225.6	212.8		205.6						***
Agriculture, forestry and fishing	Male	137.0	135.5		132.7						
<b>U</b>	Female	88.5	77.2		72.9				•••		***
	Total	2.1	2.4		2.3						
Mining and quarrying	Male	1.7	2.3		1.9						•••
	Female	0.4	0.3		0.3						
	Total	39.1	44.0		53.0						
Manufacturing	Male	27.8	31.9		37.4						
	Female	11.4	12.1		15.6						
	Total	0.9	1.2		2.2						***
Electricity, gas, water etc.	Male	0.9	0.9		1.9						
	Female	0.0	0.1		0.3						
	Total	15.8	38.4		44.6						
Construction	Male	13.9	32.5		37.5						
	Female	1.9	5.7		7.1						
	Total	35.8	43.2		46.1						
Trade, hotel and restaurant	Male	31.3	38.5		40.4						
	Female	4.6	4.8		5.6						
	Total	12.9	17.2		20.3						
Transport, storage and communication	Male	12.5	17.0		19.6						
	Female	0.4	0.4		0.8						

		2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Total	33.5	41.2		46.5						
Other services	Male	24.6	29.3		32.9						
	Female	9.0	11.5		13.6						
	Total	2.2	2.0		2.2						6.1
Unemployment rate (%)	Male	2.4	2.0		2.1						6.2
	Female	1.7	2.3		2.4						5.7
	Total	4.7	3.4		3.4						7.8
Urban unemployment rate (%)	Male	4.5	2.8		3.0						7.1
	Female	5.7	5.7		5.2						10.8

Ministry of Statistics and Programme Implementation, NSS Survey Reports: Employment and Unemployment Situation in India (various issues) for the estimates corresponding to the periods 2000, 2010 and 2012. For 2018, the estimates are obtained from the Annual Report, Periodic Labour Force Survey, 2017–18. These results are not comparable to the earlier estimates on account of a change in sampling methodology.

#### **Footnotes**

The information is based on Sample Surveys conducted by National Sample Survey Office & pertains to the Survey Period July (Previous Year) to June (Year Indicated in the table). For example, information for the year 2000 perains to survey period July 1999 to June 2000. The information is based on Usual Activity Status taking into account both Principal & Subsidiary activity.

(1) There is some population in the age group of 0–14 (especially in the age group of 10–14) which is also employed.

**Table 3.2.4** — Selected Data on Labor Force — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Employed population (million persons) <sup>(1)</sup>	720.9	761.1	764.2	767.0	769.8	772.5	774.5	776.0	776.4	775.9	774.7
By age (%) <sup>(1)</sup>											
16 to 24 years	15.9	14.3	13.4	12.0	11.4	10.4	9.7	8.9	8.5	8.0	7.6
25 to 59 years	77.8	78.2	78.7	79.1	79.3	79.7	81.2	81.3	81.5	81.9	82.1
60 years and older	6.4	7.5	7.9	8.9	9.3	9.9	9.2	9.8	10.0	10.1	10.3
By sector (million persons) <sup>(1)</sup>											
Agriculture, forestry and fishing	360.4	279.3	265.9	257.7	241.7	227.9	219.2	215.0	209.4	202.6	194.5
Industry <sup>(2)</sup>	162.2	218.4	225.4	232.4	231.7	231.0	226.9	223.5	218.2	213.9	213.1
Services	198.2	263.3	272.8	276.9	296.4	313.6	328.4	337.6	348.7	359.4	367.2
Total Labor Force											
Male											
Female											
Registered unemployment in urban areas (million persons)	6.0	9.1	9.2	9.2	9.3	9.5	9.7	9.8	9.7	9.7	9.5
Registered unemployment rate in urban areas (%)	3.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.8	3.6

- a) National Bureau of Statistics of China, China Statistical Yearbooks 2001–2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.
- b) Ministry of Human Resources and Social Security of the People's Republic of China.

- (1) The total number of employed persons since 2001 are revised according to the 6th National Population Census.
- (2) Including Energy and Construction.

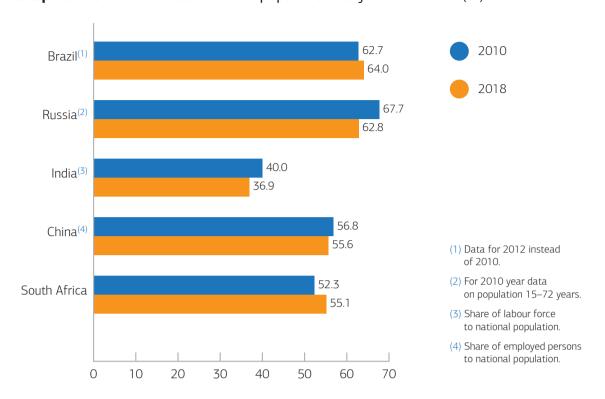
**Table 3.2.5** — Selected Data on Labour Force — South Africa

	<b>2000</b> <sup>(1)</sup>	2010	2011	2012	2013	2014	<b>2015</b> <sup>(2)</sup>	2016	2017	2018	2019
Labour Force (million persons)	16.1	18.4	18.7	19.2	19.8	20.2	21.1	21.5	22.3	22.5	22.9
Employed population (million persons)	12.3	13.8	14.1	14.4	14.9	15.1	15.7	15.8	16.2	16.4	16.3
Age (%)											
15 to 24 years	12.9	9.2	9.0	8.6	8.6	8.3	8.7	8.1	8.0	7.5	6.9
25 to 59 years	84.4	88.4	88.6	89.1	88.9	89.0	88.7	89.4	89.3	89.8	90.2
60 to 64 years	2.8	2.4	2.4	2.3	2.5	2.6	2.6	2.5	2.7	2.8	2.8
Sector (million persons)											
Agriculture	1.4	0.7	0.6	0.7	0.7	0.7	0.9	0.9	0.8	0.8	0.9
Mining	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4
Manufacturing	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8
Utilities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Construction	0.7	1.1	1.1	1.1	1.1	1.2	1.4	1.4	1.4	1.5	1.3
Trade	2.9	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.4
Transport	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Finance	1.0	1.7	1.8	1.9	2.0	2.0	2.2	2.3	2.4	2.5	2.5
Community and social services	2.1	2.9	3.0	3.2	3.4	3.5	3.6	3.6	3.6	3.7	3.7
Private households	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unemployed population (million persons)	3.7	4.6	4.6	4.8	4.9	5.1	5.3	5.8	6.1	6.1	6.6
Unemployment rate (%)	23.3	24.9	24.8	24.9	24.7	25.1	25.3	26.7	27.5	27.1	28.7
Unemployment rate for population aged under 25 years (%)	45.0	51.2	50.3	51.7	51.4	51.3	50.1	53.3	53.4	53.4	57.0

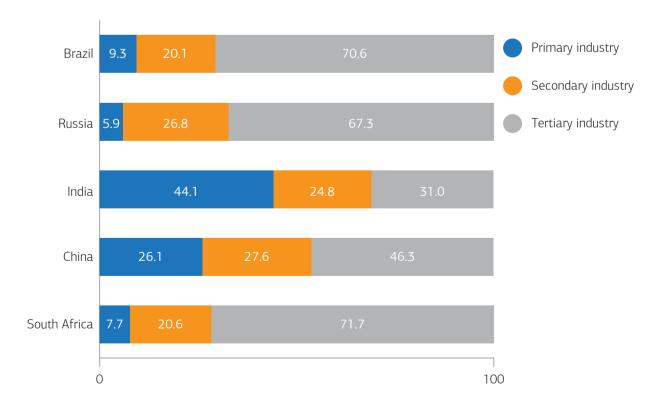
Statistics South Africa, Labour Force Survey (Statistical Release P0210) and Quarterly Labour Force Survey (Statistical Release P0211).

- (1) 2000 data are for the September wave only (not annual figures) since the March wave was a pilot.
- (2) 2015 estimates are from the 2013 Master Sample.

**Graph 3.1** Share of labour force to population 15 years and over (%)



Graph 3.2 Employment by industry in 2018 (%)



# **Explanatory Notes**

#### General notes

- **1. Labour Force:** Persons who were either 'working' (or employed) or 'seeking or available for work' (or unemployed) constituted the labour force. This is for a particular reference period.
- 2. Unemployment Rate (UR): UR is defined as the number of persons unemployed as persantage of the labour force (which includes both employed and unemployed)
- **3. Workers (or employed persons):** Persons who were engaged in any economic activity or who, despite their attachment to economic activity, abstained from work for reasons of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work, constituted workers. Unpaid helpers who assisted in the operation of an economic activity in the household farm or non farm activities were also considered as workers.
- **4. Activity status, Labour Force, Employment, Unemployment:** It is the activity situation in which a person was found during a reference period with regard to the person to the person's participation in economic and non-economic activities. According to this, a person could be in one or a combination of the following three broad activity statuses during reference period:
  - (i) Working or being engaged in economic activity;
  - (ii) Being not engaged in economic activity (work) but either making tangible efforts to seek 'work' or being available for 'work' if 'work' is available and;
  - (iii) Being not engaged in any economic activity (work) and also not available for (work).

Broad activity statuses mentioned in (i) and (ii) above are associated with 'being in labour force' and the last with 'not being in the labour force'. Within the labour force, broad activity status (i) and (ii) were associated with 'employed' and 'unemployed' respectively.

Primary Sector of industries includes Agriculture, Forestry & Fishing and Mining & Quarrying.

Secondary Sector of industries includes Manufacturing, Electricity Gas & Water Supply and Construction.

**Tertiary Sector** of industries includes other industries of national economy.

#### **Brazil**

Reference Week is the last complete week of September of each year.

#### Work

It was considered as work in the exercise of economic activity:

- a) Occupation paid in cash, products, goods or benefits (housing, food, clothes etc.) in the production of goods and services.
- b) Occupation paid in cash or benefits (housing, food, clothes etc) in domestic services.
- c) Occupation without pay in the production of goods and services, performed at least one hour per week:
  - Helping a member of the household who had work as: employee in the production of primary goods (which includes the activities of agriculture, forestry, livestock, vegetable or mineral extraction, hunting, fishing and fish farming): or own account or employer in any activity;
  - Helping in a religious, charitable or cooperative institute or;
  - As apprentice or trainee, or;
- d) Occupation developed for at least one hour per week:
  - In the production of goods, of the branch that includes the activities of agriculture, forestry, livestock, vegetal extraction, fishing and fish farming, for own consumption or for the consumption of at least one member of household, or;
  - In construction of buildings, private roads, wells and other improvements (except only repairs work) for their own use or for the
    use of at least one member of the household.

**Employed person** — A person who performed some work during all or part of the reference week. It is also included as employed persons who have not exercised their paid work during the reference week due to vacation, leave, strike etc.

**Unemployed person** — A person without work which had taken specific action to seek work (getting in touch with employers; enrolling or going in for official examination for a government job; registration at employment agency, union or similar body, placing or answering job advertisement; seeking assistance of relative, friend or colleague to find a job; taking an action to start a business; etc.) in the reference week.

# The New Household Sample Survey of IBGE (PNAD Continuous)

The National Household Sample Survey — PNAD was an annual survey and was discontinued in 2015. The PNAD was replased with updated methodology, by the Continuous National Household Sample Survey — PNAD Continuous.

PNAD Continuous is a quaterly survey and started in 2012. There are important methodological differences between PNAD and PNAD Continuous. Therefore, the results of these two surveys are not comparable. Thus, the results of the PNAD were erased and replaced by those of PNAD Continuous.

PNAD Continuous started with the labour force investigation, associated with basic demographic and educational information. Gradually other supplementary themes and topics were been agregated.

According to the rotation scheme adopted by PNAD Continuous, a housing unit stays in the sample for five quarters; it is then withdrawn from the sample. Some supplementary themes and topics are surveyed in the determined interviews in all four quarters of the year, and others are concentrated in the determined quarter of the year.

Housing characteristics are investigated in housing units which are being interviewed for the first time in each of the four quarters of the year, and information and communicating technologies characteristics are concentrated in the fourth quarter of the year. So, both themes started being surveyed in 2016.

Data on labour force are presented in accordance with Resolution 1 of the 19<sup>th</sup> Intenational Conference of Labour Statisticians. The numbers of labour force include data on employed and unemployed based on the results of the quaterly household sample survey.

#### Russia

Data on labour force are presented in accordance with the standards of the International Labour Organization. The number of labour force includes data on employed and unemployed based on the results of labour force surveys. Before 2017 the monitoring of labour force was carried out for persons of 15–72 years old, since 2017 it is carried out for persons 15 years and over.

# India

The National Sample Survey Office, Ministry of Statistics & Programme Implementation carries out survey on the subject of employment and unemployment and labour force characteristics at the National and State levels.

The Survey is conducted Quinquennially along with some annual surveys in between. The Reference Period is usually July to June. However some surveys were conducted in six months. The Report includes status based on Usual Activity (Reference Period 365 days), Current Weekly Status (Reference Period 7 days) & Current Daily Status (Reference Period 1 day).

**Usual principal activity status** — The usual activity status refers to the activity status of a person during the reference period of 365 days preceding the date of the survey. The activity status on which a person spent relatively longer time during the 365 days is considered as the usual principal activity status of the person.

**Usual subsidiary economic activity status** — A person whose usual principal status was determined on the basis of the major time criterion could have pursued some economic activity for a shorter time throughout the reference year of 365 days preceding the date of survey or for a minor period, which is not less than 30 days, during the reference year. The status in which such economic activity was pursued was the subsidiary economic activity status of that person.

**Usual activity status considering principal and subsidiary status taken together** — The usual status, determined on the basis of the usual principal activity and usual subsidiary economic activity of a person taken together, is considered as the usual activity status of the person and is written as usual status (ps+ss). According to the usual status (ps+ss), workers are those who perform some work activity either in the principal status or in the subsidiary status. Thus, a person who is not a worker in the usual principal status is considered as worker according to the usual status (ps+ss), if the person pursues some subsidiary economic activity for 30 days or more during 365 days preceding the date of survey.

**Unemployed** — Persons, who owing to lack of work, had not worked but either sought work through employment exchanges, intermediaries, friends or relatives or by making applications to prospective employers or expressed their willingness or availability for work under the prevailing conditions of work and remuneration, were considered as those who were 'seeking or available for work' or unemployed.

**Labour Bureau, Ministry of Labour** — Has also been conducting Annual Surveys on Employment & Unemployment in India since 2010–11.

# China

**Employed persons** refer to persons above a specified age who had labour capacity and performed some social work for compensation or business gains. Specifically, it refers to all persons, aged 16 and over, who performed some work for compensation or business gains for one hour or more during the reference period; or who had work units or sites but were temporarily not at work during the reference period.

**Registered unemployed persons in urban areas** refer to the persons with non-agricultural household registration at certain working ages (16 years old to retirement age), who are capable of working, unemployed and willing to work, and have been registered at the local employment service agencies to apply for a job.

**Registered unemployment rate in urban areas** refers to the ratio of the number of the registered unemployed persons to the sum of the number of persons employed in various units (minus the employed rural labour force, re-employed retirees, and Hong Kong, Macao, Taiwan or foreign employees), laid-off staff and workers in urban units, owners of private enterprises in urban areas, owners of self-employed individuals in urban areas, employees of private enterprises in urban areas, employees of self-employed individuals in urban areas, and the registered unemployed persons in urban areas.

# National Accounts



**Table 4.1** — Summary of National Accounts on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross domestic prod	uct (GDP)	(current p	orices/bill	ion US\$)							
Brazil <sup>(1)(2)</sup>	655	2208	2613	2464	2471	2456	1800	1796	2063	1885	1840
Russia	260	1525	2048	2192	2294	2082	1370	1280	1574	1673	1700
India <sup>(3)</sup>	459	1342	1678	1823	1828	1857	2039	2104	2295	2653	2713
China <sup>(4)(5)(6)</sup>	1211	6088	7555	8532	9574	10,477	11,060	11,237	12,323	13,892	14,363 <sup>(7)</sup>
South Africa	136	375	417	396	367	351	318	296	350	368	351
Per capita GDP (curre	ent prices	/US\$)									
Brazil <sup>(1)(2)</sup>	3771	11,330	13,293	12,423	12,357	12,174	8846	8754	9974	9042	8754
Russia	1772	10,675	14,326	15,308	15,982	14,248	9356	8726	10,722	11,394	11,584
India <sup>(3)</sup>	458	1147	1415	1494	1480	1484	1610	1640	1767	2019	2045
China <sup>(4)(6)</sup>	959	4551	5620	6317	7054	7679	8066	8151	8889	9975	10,276 <sup>(7)</sup>
South Africa	3073	7380	8083	7574	6908	6509	5775	5302	6187	6380	5979
GDP growth rate (cha	ange fron	the prec	eding yea	ar) (%)							
Brazil	4.4	7.5	4.0	1.9	3.0	0.5	-3.5	-3.3	1.3	1.3	1.1
Russia <sup>(8)</sup>	10.0	4.5	4.3	4.0	1.8	0.7	-2.0	0.2	1.8	2.5	1.3
India <sup>(3)</sup>	8.9	11.9	25.0	8.7	0.2	1.6	9.8	3.2	9.1	15.6	2.3
China <sup>(6)</sup>	8.5	10.6	9.6	7.9	7.8	7.4	7.0	6.8	6.9	6.7	6.1 <sup>(7)</sup>
South Africa	4.2	3.0	3.3	2.2	2.5	1.8	1.2	0.4	1.4	0.8	0.2
Share of primary ind	ustry to (	GDP (%)									
Brazil <sup>(1)(2)</sup>	5.5	4.8	5.1	4.9	5.3	5.0	5.0	5.7	5.3	5.2	5.2
Russia		3.8	3.6	3.4	3.4	3.9	4.3	4.3	3.9	3.8	3.8
India <sup>(3)(9)</sup>	27.7	21.1	21.9	21.7	21.3	21.4	20.9	20.1	20.4	20.3	19.3
China <sup>(6)</sup>	14.7	9.3	9.2	9.1	8.9	8.6	8.4	8.1	7.5	7.0	7.1 <sup>(7)</sup>
South Africa	10.7	11.9	12.1	11.5	11.4	10.8	10.1	10.7	10.9	10.5	10.4
Share of secondary i	ndustry t	o GDP (%)									
Brazil <sup>(1)(2)</sup>	26.7	27.4	27.2	26.0	24.9	23.8	22.5	21.2	21.1	21.2	20.9
Russia		34.8	34.1	33.6	32.3	32.1	33.2	32.4	34.0	36.6	35.9
India <sup>(3)(9)</sup>	26.5	29.9	29.6	29.3	28.7	27.9	27.3	27.6	27.0	26.9	26.6
China <sup>(6)</sup>	45.5	46.5	46.5	45.4	44.2	43.1	40.8	39.6	39.9	39.7	39 <sup>(7)</sup>
South Africa	24.5	20.9	20.3	20.5	20.6	21.2	21.3	21.2	21.1	20.9	20.9
Share of tertiary ind	ustry to C	iDP (%)									
Brazil <sup>(1)(2)</sup>	67.7	67.8	67.7	69.1	69.9	71.2	72.5	73.1	73.5	73.6	73.9
Russia		61.4	62.3	63.0	64.3	64.0	62.5	63.3	62.1	59.7	60.3
India <sup>(3)(9)</sup>	45.9	49.0	48.5	49.0	50.0	50.6	51.8	52.3	52.6	52.8	54.0
China <sup>(6)</sup>	39.8	44.2	44.3	45.5	46.9	48.3	50.8	52.4	52.7	53.3	53.9 <sup>(7)</sup>
South Africa	64.8	67.2	67.6	68.0	68.0	68.0	68.6	68.1	68.0	68.5	68.7

#### **Brazil**

Brazilian Institute of Geography and Statistics — IBGE, National Accounts System 2000–2017.

#### Russia

Federal State Statistics Service of the Russian Federation.

#### India

Ministry of Statistics and Programme Implementation, Central Statistics Office.

#### China

National Bureau of Statistics of China and China Statistical yearbook 2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

# **South Africa**

Statistics South Africa.

## **Footnotes**

#### Brazil

- (1) Data for 2018 and 2019 are derived from quarterly GDP results.
- (2) Data of 2018 and 2019 are preliminary estimation.

#### Russia

(8) At constant prices.

#### India

- (3) GDP in US\$ is computed using average Real Exchange Rate published by RBI. Data relate to new base year (2011–12 prices). The Back Series of GDP were released on 28th November, 2018 and the earlier data provided have been updated using the latest methodology. The Ministry had released the new series of national accounts, revising the base year from 2004–05 to 2011–12 in January, 2015. For the years from the last base (2004–05) to the current base (2011–12), the various components in NAS were re-estimated using a hybrid approach based on the availability and completeness of the requisite data sets for the relevant years in respect of different sectors/segments of the economy.
- (9) For the years up to 2010–11, the share in total GVA at factor cost and from the year 2011–12 onwards, share in total GVA at basic prices has been given.

# China

- (4) GDP and Per Capita GDP in US dollars are converted using the annual average exchange rates.
- (5) Data of GDP are calculated at producers' prices.
- (6) According to the results of China's Fourth National Economic Census, Historical GDP data from 2014 to 2018 have since been revised.
- (7) Preliminary data.

**Table 4.2.1** — Selected Data on National Accounts — Brazil

	2010	2011	2012	2013	2014	2015	2016	2017	<b>2018</b> <sup>(1)(2)</sup>	<b>2019</b> <sup>(1)(2)</sup>
Gross domestic product (GDP) (current prices/billion R\$)	3886	4376	4815	5332	5779	5996	6269	6583	6889	7257
Indices of GDP (preceding year = 100)	107.5	104.0	101.9	103	100.5	96.5	96.7	101.3	101.3	101.1
GDP deflator (preceding year = 100)	108.4	108.3	107.9	107.5	107.8	107.6	108.1	103.6	103.3	104.2
Growth rate of per capita GDP (% change)	6.5	3.1	1.0	2.1	-0.3	-4.4	-4.1	0.5	0.5	0.3
Indices of gross fixed capital formation (preceding year = 100)	117.9	106.8	100.8	105.8	95.8	86.1	87.9	97.4	103.9	102.2
Components of GDP by production approach (current prices/billion R\$)	3886	4376	4815	5332	5779	5996	6269	6583	6889	7257
Primary industry	160	190	201	240	250	259	307	303	304	322
Secondary industry	904	1011	1066	1132	1183	1161	1151	1197	1249	1301
Tertiary industry	2239	2519	2828	3182	3540	3736	3962	4170	4341	4590
Net taxes on products (billion R\$)	583	656	721	778	806	840	850	914	995	1044
Components of GDP by expenditure approach (current prices/billion R\$)	3886	4376	4815	5332	5779	5996	6269	6583	6889	7257
Final consumption expenditures	3079	3455	3849	4298	4745	5021	5306	5573	5841	6184
Gross fixed capital formation	798	902	997	1115	1148	1069	973	959	1050	1114
Change in inventory	49	53	34	42	39	-25	-35	4	-28	-18
Net exports of goods and services	-40	-34	-65	-123	-154	-69	25	47	26	-24
Final consumption rate (%)	79.2	78.9	79.9	80.6	82.1	83.7	84.6	84.7	84.8	85.2
Gross capital formation rate (%)	21.8	21.8	21.4	21.7	20.5	17.4	15.0	14.6	14.8	15.1

 $Brazilian\ Institute\ of\ Geography\ and\ Statistics -- IBGE,\ National\ Accounts\ System\ 2000-2017.$ 

- (1) Data derived from quarterly GDP results.
- (2) Preliminary estimation.

**Table 4.2.2** — Selected Data on National Accounts — Russia<sup>(1)</sup>

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross domestic product (GDP) (current prices/billion Rub)	7306	46,309	60,114	68,103	72,986	79,030	83,087	85,616	91,843	104,630	110,046
Indices of GDP (preceding year=100) (%)	110.0	104.5	104.3	104.0	101.8	100.7	98.0	100.2	101.8	102.5	101.3
GDP deflator (preceding year=100) (%)	137.6	114.2	115.9	108.9	105.3	107.5	107.2	102.8	105.3	111.1	103.8
Indices of per capita GDP (preceding year=100) (%)	110.5	104.5	104.2	103.8	101.5	99.0	97.8	100.0	101.7	102.5	101.4
Indices of gross fixed capital formation (preceding year=100) (%)	118.1	105.9	109.1	106.2	101.9	97.9	89.4	101.3	104.7	100.2	101.5
Components of GDP by production	approac	:h (billior	n Rub)								
Total <sup>(2)</sup>		40,040	51,916	58,936	63,721	68,738	74,621	77,077	82,897	93,886	98,646
Primary industry		1549	1894	1993	2185	2656	3218	3288	3264	3529	3795
Secondary industry		13,892	17,682	19,820	20,576	22,074	24,755	24,978	28,171	34,338	35,398
Tertiary industry		24,599	32,340	37,123	40,961	44,008	46,647	48,812	51,462	56,020	59,454
Components of GDP by expenditure	approa	ch (billio	n Rub)								
Final consumption expenditures	4477	32,515	40,884	47,273	52,434	56,736	58,531	61,399	65,290	70,148	75,579
Gross fixed capital formation	1232	10,014	12,817	14,684	16,013	16,926	17,126	18,734	20,189	21,293	23,114
Change in inventory	134	458	1767	2038	972	770	1277	1040	1492	1703	2313
Net exports of goods and services	1463	3740	4854	4538	3944	5074	6686	4444	4873	10,359	8311
Final consumption rate (%)	61.3	69.6	67.9	69.1	71.6	71.5	70.1	71.8	71.0	67.9	69.2
Gross capital formation rate (%)	16.9	22.5	24.2	24.4	23.0	22.2	21.9	23.1	23.6	22.1	23.2
Growth rate (index) of labour productivity (preceiding year = 100) (%) <sup>(3)</sup>		103.2	103.8	103.8	102.1	100.8	98.7	100.1	102.1	102.8	102.0

Federal State Statistics Service of the Russian Federation.

- (1) Data contains changes due to: implementation of an international methodology for the evaluation of housing services produced and consumed by homeowners; estimation of fixed capital consumption based on its current market value; harmonization of data on exports and imports with balance of payments data; updating of data on the development of the "Input-output" base tables for 2011 and 2016 and on the results of Agricultural Census of 2016; including the assessment of services for domestic workers, as well as the implementation of the 2008 SNA statements on estimation of research and development results and weapons systems and use of the services of the Central Bank of the Russian Federation.
- (2) Gross value added by economic activity at basic prices. Before 2011 year data are presented according to NACE 1 Classification of economic activities, since 2011 according to NACE 2 Classification.
- (3) Index of labour productivity is calculated as GDP volume index dividing by labour input index.

Table 4.2.3 — Selected Data on National Accounts — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP at market prices (current prices/₹ Crore)	1,988,262	6,366,407	7,634,472	8,736,329	9,944,013	11,233,522	12,467,959	13,771,874	15,391,669	17,098,304	18,971,237
GVA at basic prices (current prices)	1,816,202	5,974,906	7,083,671	8,106,946	9,202,692	10,363,153	11,504,279	12,574,499	13,965,200	15,513,122	17,139,962
GNI (current prices)	1,972,831	6,328,407	7,552,665	8,659,505	9,827,250	11,093,638	12,320,529	13,612,095	15,215,269	16,913,491	18,768,912
GVA at basic prices (constant prices) <sup>(1)</sup>	3,864,524	7,131,836	7,704,514	8,106,946	8,546,275	9,063,649	9,712,133	10,491,870	11,328,285	12,074,413	12,803,128
Per capita GVA at basic prices (current prices/₹)	18,144	51,068	59,727	66,450	74,516	82,839	90,799	98,009	107,282	117,650	129,163
Per capita GDP at market prices (current prices/₹)	19,863	54,414	64,372	71,609	80,518	89,796	98,405	107,341	118,263	129,901	142,963
GDP at constant prices (preceeding year=100) (%)	108.8	107.9	108.5	105.2	105.5	106.4	107.4	108.0	108.3	107.0	106.1
GDP Growth Rate at constant prices <sup>(2)</sup>	8.8	7.9	8.5	5.2	5.5	6.4	7.4	8.0	8.3	7.0	6.1
Growth rate of per capita GVA (basic prices, constant prices) (%)	8.0	5.4	6.6	2.3	4.1	4.7	5.8	6.7	6.6	5.6	9.8
Components of GVA (at basic price	es) by pr	oduction	approac	ch (curre	nt prices	s/₹ Crore	)				
Primary industry	502,764	1,259,271	1,551,187	1,762,983	1,960,949	2,222,166	2,402,088	2,521,544	2,845,470	3,154,696	3,312,168
Secondary industry	481,264	1,788,050	2,094,394	2,373,988	2,637,551	2,895,076	3,139,713	3,472,237	3,770,300	4,169,639	4,567,459
Tertiary industry	834,389	2,927,585	3,438,089	3,969,975	4,604,192	5,245,910	5,962,479	6,580,718	7,349,430	8,188,787	9,260,334
Components of GDP by expenditur	e approa	ach (curr	ent mark	cet price	/₹ Crore)	)					
Final consumption expenditure <sup>(3)</sup>	1,514,757	4,292,203	5,018,327	5,878,822	6,676,889	7,632,159	8,549,102	9,562,579	10,713,191	11,928,875	13,358,249
Gross capital formation(4)	572,904	2,473,478	3,037,520	3,403,008	3,847,122	3,794,135	4,179,779	4,422,659	4,918,077	5,849,224	6,108,582
Gross fixed capital formation	547,470	2,161,499	2,536,936	2,997,733	3,324,973	3,515,621	3,750,392	3,957,092	4,338,671	4,799,139	5,493,320
Change in stocks <sup>(5)</sup>	52,139	218,438	333,451	207,983	214,524	144,621	312,698	262,477	138,083	251,062	320,076
Final consumption rate (%)	76.2	67.4	65.7	67.3	67.1	67.9	68.6	69.4	69.6	69.8	70.4
Gross capital formation rate (%)	28.8	38.9	39.8	39.0	38.7	33.8	33.5	32.1	32.0	34.2	32.2
Net exports of goods and services (₹ Crore)	-38,005	-348,359	-339,989	-571,623	-668,721	-335,030	-372,326	-316,276	-271,819	-539,869	-701,873
Gross domestic savings (current prices/₹ Crore)	523,256	2,292,686	2,817,807	3,026,837	3,369,202	3,608,193	4,019,957	4,282,259	4,825,113	5,538,393	5,712,920
Population (Crore)	100.1	117.0	118.6	122.0	123.5	125.1	126.7	128.3	129.9	131.6	132.7
Exchange rate US\$/Rs average <sup>(6)</sup>	43.3	45.1	44.6	47.9	54.4	60.5	61.1	65.4	67.1	64.4	69.9

National Accounts Division, Ministry of Statistics & Programme Implementation, Press Note (First revised Estimate of National Income, Consumption Expenditure, Saving and Capital Formation 2017–18), released on 31st Jan. 2019.

- a) All Information pertains to Financial Year i.e. April of Year mentioned in the table above to March of next year.
- b) Data relates to base year 2011-12.
- c) One Crore is equal to ten millions.
- (1) &(2) Base year for data is 2011-12.
- (3) Includes private and government final consumption expenditure.
- (4) Includes valuables.
- (5) Does not include valuables.
- (6) Exchange Rate of US\$ to Rupee is as per RBI.

**Table 4.2.4** — Selected Data on National Accounts — China<sup>(1)</sup>

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP (current Prices/billion RMB)	10,028	41,212	48,794	53,858	59,296	64,356	68,886	74,640	83,204	91,928	99,087
GNI (current prices/billion US\$)(2)	1197	6062	7484	8512	9497	10,490	11,018	11,192	12,313	13,817	14,330
Indices of GDP (constant prices/ preceding year = 100) (%)	108.5	110.6	109.6	107.9	107.8	107.4	107.0	106.8	106.9	106.7	106.1
Growth rate of per capita GDP (%)	7.6	10.1	9.0	7.3	7.2	6.9	6.5	6.3	6.4	6.3	5.7
Components of GDP by production approa	ach (cur	rent pri	ces/billi	on RMB	(3)						
Total	10,028	41,212	48,794	53,858	59,296	64,356	68,886	74,640	83,204	91,928	99,087
By Sector <sup>(4)</sup>											
Primary industry	1472	3843	4478	4908	5303	5563	5777	6014	6210	6475	7047
Secondary industry	4566	19,163	22,704	24,464	26,195	27,728	28,134	29,543	33,158	36,484	38,617
Tertiary industry	3990	18,206	21,612	24,486	27,798	31,065	34,974	39,083	43,836	48,970	53,423
By Industry <sup>(4)</sup>											
Agriculture, forestry, animal husbandry and fishery	1494	3962	4612	5058	5469	5747	5985	6245	6466	6756	7357
Industry	4026	16,512	19,514	20,890	22,233	23,320	23,497	24,541	27,512	30,109	31,711
Construction	553	2726	3293	3690	4090	4540	4776	5150	5791	6549	7090
Wholesale and retail trades	816	3591	4373	4984	5629	6317	6772	7372	8116	8890	9585
Transport, storage and post	616	1878	2184	2376	2604	2853	3052	3303	3712	4034	4280
Hotels and catering services	215	771	857	954	1023	1123	1231	1361	1506	1652	1804
Financial intermediation	484	2573	3075	3527	4129	4685	5630	5996	6484	7061	7708
Real estate	414	2333	2778	3075	3534	3809	4257	4997	5709	6462	6963
Others	1409	6865	8108	9304	10,585	11,962	13,686	15,674	17,909	20,415	22,589
Components of GDP by expenditure appro	oach (cu	rrent pr	ices/bil	ion RMI	3)						
Total	9980	40,851	48,411	53,904	59,634	64,655	69,209	74,598	82,898	91,577	99,493
Final consumption expenditure	6375	20,158	24,475	27,544	30,666	33,803	37,192	41,081	45,652	50,613	55,149
Gross fixed capital formation	3267	18,104	21,402	23,832	26,398	28,224	28,997	31,014	34,830	39,385	42,202
Change in inventories	100	1083	1366	1064	1115	1266	786	805	959	874	661
Net exports of goods and services	238	1506	1169	1464	1455	1361	2235	1698	1458	705	1481
Final consumption rate (%)	63.9	49.3	50.6	51.1	51.4	52.3	53.7	55.1	55.1	55.3	55.4
Capital formation rate (%)	33.7	47.0	47.0	46.2	46.1	45.6	43.0	42.7	43.2	44.0	43.1
Growth rate of labour productivity (preceding year = 100, %)	7.4	10.2	9.1	7.4	7.4	6.9	6.6	6.5	6.6	6.6	

National Bureau of Statistics of China.

- (1) According to the results of China's Fourth National Economic Census, Historical GDP data from 2014 to 2018 have since been revised.
- (2) GNI in US dollars are converted using the annual average exchange rates.
- (3) The components of GDP by production approach are calculated at producers' prices.
- (4) After 2014, China economic activities are categorized into three strata of industries according to the "Three Strata of Industries Classification Regulations" enacted by NBS in 2012, and historical data are revised accordingly. Three strata of industry in China economic activities are categorized into the following three strata of industry: Primary industry refers to agriculture, forestry, animal husbandry and fishery industries (except support service activities to agriculture, forestry, animal husbandry and fishery industries). Secondary industry refers to mining and quarrying (except auxiliary activities of mining and quarrying), manufacturing (except repairs for metal products, machinery and equipment), production and supply of electricity, steam, gas and water, and construction. Tertiary industry refers to all other economic activities not included in the primary or secondary industries.

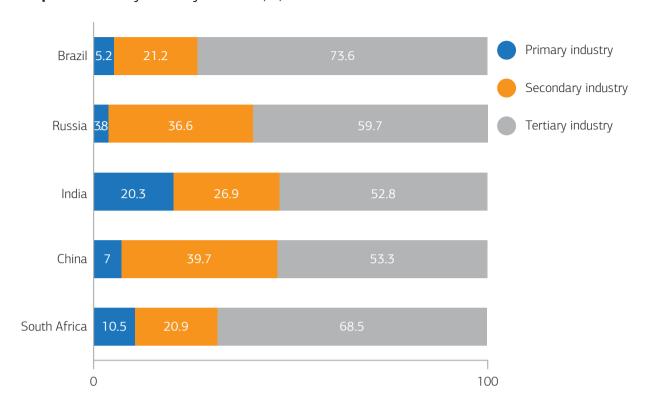
**Table 4.2.5** — Selected Data on National Accounts — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP (current prices/billion ZAR)	946	2748	3024	3254	3540	3805	4050	4359	4654	4874	5078
Indices of GDP (year 2010 = 100) (%) <sup>(2)</sup>	34.4	100.0	110.0	118.4	128.8	138.5	147.4	158.3	169.3	177.4	184.8
GDP deflator (year 2010 = 100) (%) <sup>(2)</sup>	72.7	100.0	106.5	112.2	119.1	125.7	132.2	141.7	149.2	156.0	161.5
Growth rate of per capita GDP (% change)	2.1	8.1	8.5	6.1	7.2	5.9	4.5	5.9	5.6	2.6	2.3
Indices of gross fixed capital formation (year 2005 = 100)	52	187	204	221	255	274	293	300	308		
Indices of gross fixed capital formation (year 2010 = 100)	28	100	109	118	136	147	156	160	165		
Components of GDP by production approach (billion ZAR)	946	2748	3024	3254	3540	3805	4050	4359	4654	4874	5078
Primary industry <sup>(3)</sup>	92	296	331	338	363	370	366	415	454	457	472
Secondary industry <sup>(4)</sup>	211	522	553	601	656	723	773	826	880	909	944
Tertiary industry <sup>(5)</sup>	559	1677	1841	1994	2165	2322	2486	2650	2840	2975	3108
Components of GDP by expenditures approach (billion ZAR)	953	2748	3022	3245	3540	3796	4043	4349	4659	4849	5059
Final consumption expenditures	771	2178	2402	2643	2873	3073	3249	3491	3724	3958	4140
Gross fixed capital formation	148	529	578	626	721	776	823	847	873	886	909
Change in inventory	7	7	18	24	28	4	25	-11	2	-12	-16
Net exports of goods and services	27	34	24	-47	-81	-57	-53	23	60	17	26
Final consumption rate (%)	80.9	79.2	79.5	81.4	81.1	81.0	80.4	80.3	79.9	81.6	81.8
Gross capital formation rate (%)	16.2	19.5	19.7	20.0	21.2	20.5	21.0	19.2	18.8	18.0	17.7

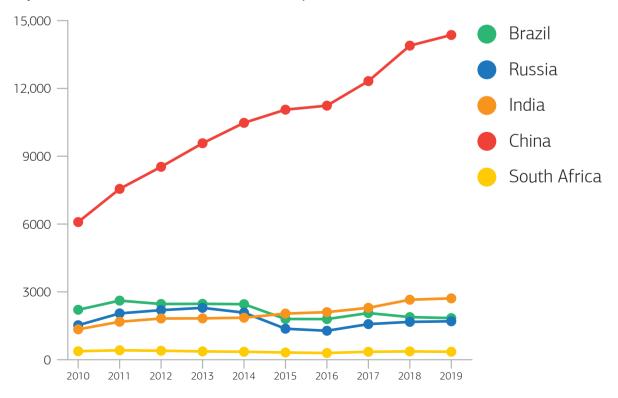
Statistics South Africa.

- (1) Data for 2016 is derived from quarterly GDP results.
- (2) Base year 2010 = 100.
- (3) Primary industries = Agriculture, forestry and fishing and Mining and quarrying.
- (4) Secondary industries = Manufacturing; Electricity, gas and water and Construction.
- (5) Tertiary industries = Wholesale, retail and motor trade, catering and accommodation; Transport, storage and communication; Finance, real estate and business services. General government and Personal services.

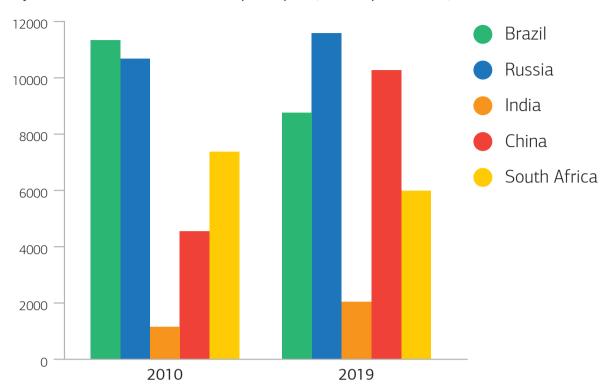
**Graph 4.1** GDP by industry in 2018 (%)



**Graph 4.2** Gross Domestic Product (current prices; billion US\$)



**Graph 4.3** Gross Domestic Product per capita (current prices; US\$)



# **Explanatory Notes**

#### General notes

National product by definition is a measure in monetary terms of the volume of all goods and services produced by an economy during a given period of time, accounted without duplication. The measure obviously has to be in value terms as the different units of production and different measures of services are not directly added. In the case of a closed economy, the measure amounts to domestic product (Gross Domestic Product).

# Gross national income (GNI)

GNI = GDP + compensation of employees and property income receivable from the rest of the world — compensation of employees and property income payable to the rest of the world.

# Government final consumption expenditure

Government final consumption expenditure comprises the compensation of employees and purchases of goods and services by the government including purchases abroad. Compensation of employees of general government consists of wages and salaries and social security contribution.

# **Brazil**

The Brazilian System of National Accounts reference 2010, as established by international recommendations, is in accordance with the new manual of the System of National Accounts 2008, SNA 2008.

**Expenditure measure of GDP:** The expenditure measure of gross domestic product (GDP) is derived as the sum of expenditure on final consumption plus gross capital formation plus exports less imports.

**Gross fixed capital formation** in a particular category of fixed asset consists of the value of producers' acquisitions of new and existing products of this type less the value of their disposals of fixed assets of the same type.

**Gross fixed capital formation** is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain specified expenditure on services that adds to the value of non-produced assets.

**Gross capital formation** shows the acquisition less disposal of produced assets for purposes of fixed capital formation, inventories or valuables.

**Expenditures on goods and services** are defined as the values of the amounts that buyers pay, or agree to pay, to sellers in exchange for goods or services that sellers provide to them or to other institutional units designated by the buyers.

**Goods and services account.** The goods and services account shows the balance between the total goods and services supplied as resources to the economy as output and imports (including the value of taxes less subsidies on products not already included in the valuation of output) and the use of the same goods and services as intermediate consumption, final consumption, capital formation and exports.

Final consumption expenditure is the amount of expenditure on consumption goods and services.

**Household final consumption expenditure** consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant and including consumption goods and services acquired abroad.

**General government final consumption expenditure** consists of expenditure, including expenditure whose value must be estimated indirectly, incurred by general government on both individual consumption goods and services and collective consumption services.

Final consumption expenditure of NPISHs consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident NPISHs on individual consumption goods and services and possibly on collective consumption services.

**Inventories** are produced assets that consist of goods and services, which came into existence in the current period or in an earlier period, and that are held for sale, use in production or other use at a later date.

Primary industry: Agriculture, Forestry, Animal Husbandry and Fishery.

Secondary industry: Mining, Manufacturing, Electricity, Gas and Water and Construction.

Tertiary industry: The other industries of national economy.

# Russia

**Primary industry:** Agriculture, Forestry, Animal Husbandry and Fishery. Before 2011 year data are presented according to NACE 1 Classification of economic activities, since 2011 — according to NACE 2 Classification.

**Secondary industry:** Mining, Manufacturing, Electricity, Gas and Water Supply and Construction. Before 2011 year data are presented according to NACE 1 Classification of economic activities, since 2011 — according to NACE 2 Classification.

**Tertiary industry:** The other industries of national economy. Before 2011 year data are presented according to NACE 1 Classification of economic activities, since 2011 — according to NACE 2 Classification.

**Gross domestic product (GDP)** at market prices is the final result of the production activity of all producer units within a country area. It may be estimated using three methods: production, use of incomes (or expenditure method) and GDP formation by income sources. GDP, measured by production method, is defined as a difference between total output of goods and services for the whole economy, on the one hand, and intermediate consumption, on the other, or otherwise as a sum of value added in the sectors of the economy. GDP, measured by the method of use of incomes, represents a sum of expenditures of all the institutional units — residents for final consumption, gross capital formation and net exports. GDP calculated on the basis of income sources reflects primary incomes accumulated in the process of production by all institutional units grouped by sectors of the economy.

**Final consumption expenditures** comprise final consumption expenditures of households, final consumption expenditures of public administration on individual goods and services and collective services, final consumption expenditures of non-profit institutions serving of households.

**Gross capital formation** indicates net acquisition by resident units of goods and services produced in the current period or imported, but not consumed in that period. Gross capital formation includes gross fixed capital formation, changes in inventories, as well as net acquisition of valuables.

**Net exports of goods and services** are calculated as a difference between exports and imports and include trade turnover of Russia with foreign countries.

# India

The Central Statistics Office (CSO) in the Ministry of Statistics PI compiles estimates of national accounts aggregates and publishes them in its annual publication called National Accounts Statistics. The estimates are based on performance during the Financial year (April — March (next year)). CSO brings out First Revised Estimates in January for the preceding year along with revision of estimates for a few earlier financial years using detailed and more comprehensive data. CSO also compiles Advance Estimates for the current financial year and releases it two months before the close of the year. Various aggregates brought out by CSO include GDP, NDP, GNI, and NNI, Product and Production taxes and subsidies, Consumption of Fixed Capital, Net National Disposable Income, Personal Disposable Income, Private Final Consumption Expenditure (PFCE), Government Final Consumption Expenditure (GFCE), exports and imports, Gross & Net Capital Formation, Savings, etc.

The economy of India is not closed as there are transactions with rest of the world in the form of exports, imports, loans etc. This gives rise to the concept of national or domestic. Gross Domestic Product refers to production of all resident units within the borders of a country, which is not exactly same as the production of all productive activities of residents. Some of the productive activities of residents may take place abroad. Conversely, some production taking place within a country may be attributed to temporary and seasonal foreign labour.

GNI = GDP + compensation of employees and property income receivable from the rest of the world — compensation of employees and property income payable to the rest of the world.

Final consumption expenditure includes both Private Final Consumption Expenditure & Government Final Consumption Expenditure.

**Private final consumption expenditure:** The household consumption expenditure referred to as private final consumption expenditure (PFCE) in National Accounts Statistics (NAS), consists of expenditure by households and non-profit institutions serving households on durable, semi-durable and non-durable consumer goods and services.

**Government final consumption expenditure:** Government final consumption expenditure comprises the compensation of employees paid and purchases of goods and services by the government used for production of non-market services. Compensation of employees of general government consists of wages and salaries.

**Final consumption rate** is total Final Consumption expenditure expressed as percent of Gross Domestic Product at Market Prices (Current Prices).

**Gross capital formation Rate** is total Gross Capital Formation expressed as percent of Gross Domestic Product at Market Prices (Current Prices).

Following categorization has been used for industry wise estimates in case of India:

Primary Sector of industries includes Agriculture, Forestry & Fishing and Mining & Quarrying.

Secondary Sector of industries includes Manufacturing, Electricity Gas & Water Supply and Construction.

**Tertiary Sector** of industries includes other industries of national economy.

# China

**Gross domestic product (GDP)** refers to the final products at market prices produced by all resident units in a country (or a region) during a certain period of time. In the practice of national accounting, GDP is calculated from three approaches, namely production approach, income approach and expenditure approach, which reflect GDP and its composition from different angles.

Per capita GDP = GDP/annual average population.

**Three strata of industry** — in China economic activities are categorized into the following three strata of industry: Primary industry refers to agriculture, forestry, animal husbandry and fishery industries (except support service activities to agriculture, forestry, animal husbandry and fishery industries). Secondary industry refers to mining and quarrying (except auxiliary activities of mining and quarrying), manufacturing (except repairs for metal products, machinery and equipment), production and supply of electricity, steam, gas and water, and construction. Tertiary industry refers to all other economic activities not included in the primary or secondary industries.

**Indices of GDP** measure the change of GDP at constant prices. GDP at constant prices converts GDP based on the current price into a value based on the price of the base period. When adjusted for price changes, the values of two different periods can be compared to reflect changes of both products and production activities.

**GDP by expenditure approach** refers to the method of measuring the final results of production activities of a country (region) during a given period from the perspective of final uses. It includes final consumption expenditure, gross capital formation and net export of goods and services. The formula for computation is: GDP by expenditure approach = final consumption expenditure + gross capital formation + net export of goods and services.

**Final consumption expenditure** refers to the total expenditure of resident units for purchases of goods and services from both the domestic economic territory and abroad to meet the needs of material, cultural and spiritual life. It does not include the expenditure of non-resident units on consumption in the economic territory of the country. The final consumption expenditure is broken down into household consumption expenditure and government consumption expenditure.

**Gross fixed capital formation** refers to the value of acquisitions less those disposals of fixed assets during a given period. Fixed assets are the assets produced through production activities with unit value above a specified amount and which could be used for over one year. Natural assets are not included.

Gross fixed capital formation can be categorized into total tangible fixed capital formation and total intangible fixed capital formation. Total tangible fixed capital formation includes the value of the construction projects and installation projects completed and the equipment, apparatus and instruments purchased (less those disposed) as well as the value of land improved, the value of draught animals, breeding stock and animals for milk, for wool and for recreational purposes and the newly increased forest with economic value. Total intangible fixed capital formation includes the prospecting of minerals and the acquisition of computer software minus the disposal of them.

Changes in inventories refer to the market value of the change in the physical volume of inventory of resident units during a given period, i.e. the difference between the values at the beginning and at the end of the period minus the gains due to the change in prices. The changes in inventories can have a positive or a negative value. A positive value indicates an increase in inventory while a negative value indicates a decrease in inventory. The inventory includes raw materials, fuels and reserve materials purchased by the production units as well as the inventory of finished products, semi-finished products and work-in-progress.

**Net export of goods and services** refers to the exports of goods and services subtracting the imports of goods and services. Exports include the value of various goods and services sold or gratuitously transferred by resident units to non-resident units. Imports include the value of various goods and services purchased or gratuitously acquired resident units from non-resident units. Because the provision of services and the use of them happen simultaneously, the acquisition of services by resident units from abroad is usually treated as import while the acquisition of services by non-resident units in this country is usually treated as export. The exports and imports of goods are calculated at FOB.

Final consumption rate refers to final consumption expenditures as percentage of gross domestic product by expenditure approach.

Gross capital formation rate refers to gross capital formation as percentage of gross domestic product by expenditure approach.

# South Africa

Base year 2010 = 100.

**Primary industries =** Agriculture, forestry and fishing and Mining and quarrying.

**Secondary industries** = Manufacturing; Electricity, gas and water and Construction.

**Tertiary industries =** Wholesale, retail and motor trade, catering and accommodation; Transport, storage and communication; Finance, real estate and business services; General government and Personal services.

# Price Indices



Table 5.1 — Summary of Consumer Price Index from the Previous Year on BRICS Countries

# Consumer price indices (% change from the preceding year)

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Brazil	6.0	5.9	6.5	5.8	5.9	6.4	10.7	6.3	3.0	3.8	4.3
Russia	20.8	6.9	8.4	5.1	6.8	7.8	15.5	7.1	3.7	2.9	4.5
India <sup>(1)</sup>	4.0	12.1	9.1	8.9	11.0	6.5	5.7	5.0	2.6	5.0	7.5
China	0.4	3.3	5.4	2.6	2.6	2.0	1.4	2.0	1.6	2.1	2.9
South Africa	5.3	4.3	5.0	5.6	5.7	6.1	4.6	6.4	5.3	4.7	4.1

# Source

#### Brazil

Brazilian Institute of Geography and Statistics — IBGE, Extended National Consumer Price Indices 2000–2019.

#### Russia

Federal State Statistics Service of the Russian Federation.

#### India

Ministry of Labour and Employment, Labour Bureau (http://labourbureau.gov.in/LBO\_indtab\_Feb\_2019.pdf).

# China

National Bureau of Statistics of China.

# **South Africa**

Statistics South Africa.

# **Footnotes**

(1) The Consumer price index of India pertains to industrial workers only. Information for 2000–2005 is based on base year 1982 whereas that for 2006 and onwards is based on base year 2001.

**Table 5.2.1** — Selected Data on Price Indices — Brazil

(preceding year = 100)

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumer price indices (all items)	106.0	105.9	106.5	105.8	105.9	106.4	110.7	106.3	103.0	103.8	104.3
Food and beverages	103.2	110.4	107.2	109.9	108.5	108.0	112.0	108.6	98.1	104.0	106.4
Housing	104.5	105.0	106.8	106.8	103.4	108.8	118.3	102.9	106.3	104.7	103.9
Rent residential	97.7	107.4	111.0	109.0	112.0	109.4	107.8	105.3	101.5	101.9	103.8
Fuels (domestics)	120.9	102.1	102.6	105.2	106.6	104.8	121.6	102.1	115.6	105.2	102.1
Residential electricity	112.7	103.1	104.0	102.9	84.3	117.1	151.0	89.3	110.4	108.7	105.0
Household articles	105.2	103.5	100.0	100.8	107.1	105.5	105.4	103.4	98.5	103.7	99.6
Apparel	104.1	107.5	108.3	105.8	105.4	103.6	104.5	103.6	102.9	100.6	100.7
Transportation	112.1	102.4	106.1	100.5	103.3	103.8	110.2	104.2	104.1	104.2	103.6
Health and personal care	102.6	105.1	106.3	106.0	107.0	107.0	109.2	111.0	106.5	104.0	105.4
Personal expenditures	105.7	107.4	108.6	110.2	108.4	108.3	109.5	108.0	104.4	103.0	104.7
Education	104.8	106.2	108.1	107.8	107.9	108.5	109.3	108.9	107.1	105.3	104.8
Communication	112.9	100.9	101.5	100.8	101.5	98.5	102.1	101.3	101.8	99.9	101.1
Urban area	106.0	105.9	106.5	105.8	105.9	106.4	110.7	106.3	103.0	103.8	104.3

# Source

Brazilian Institute of Geography and Statistics — IBGE, Extended National Consumer Price Indices 2000–2019.

Table 5.2.2 — Selected Data on Price Indices — Russia

(preceding year = 100)

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumer price indices (all items)	120.8	106.9	108.4	105.1	106.8	107.8	115.5	107.1	103.7	102.9	104.5
Food stuffs <sup>(1)</sup>	117.5	106.9	110.3	104.4	107.7	110.1	119.1	106.0	103.0	101.7	105.1
Non-food goods	122.7	105.6	106.4	105.6	104.9	105.4	114.2	108.2	104.0	103.4	103.8
Services	131.8	108.3	108.6	105.4	108.1	108.1	112.4	106.9	104.2	103.9	104.6
Housing	133.8	108.3	109.5	104.7	106.9	109.7	119.5	107.7	105.1	103.6	103.9
Public utilities	137.4	116.0	113.1	104.7	111.5	107.9	107.5	107.2	105.0	104.2	106.0
Producer price indic	es										
Agricultural products	136.5	106.5	118.6	99.5	107.8	107.9	114.1	103.8	97.7	99.2	108.4
Industrial products <sup>(2)</sup>	147.1	114.9	117.3	106.8	103.6	106.1	113.8	104.3	107.6	111.9	102.9

# Source

Federal State Statistics Service of the Russian Federation.

- (1) Including alcoholic beverages and catering.
- (2) Before 2013 year the aggregate index by kinds of economic activity "Mining and quarrying", "Manufacturing", "Electricity, gas and water production and supply", since 2013 by kinds of economic activity "Mining and quarrying", "Manufacturing", "Electricity, gas, steam and air conditioning supply", "Water supply, water removal, waste menegement and activity on liquidation of pollution".

Table 5.2.3 — Selected Data on Price Indices — India

(preceding year = 100)

	(b. 2552.1.55												
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Consumer price index (in	ndustrial v	vorkers) <sup>(1</sup>	1)										
Food	101.8	112.4	107.4	109.3	113.9	106.7	106.3	105.6	101.3	100.6	105.8		
Fuel and light	117.6	108.2	113.8	114.9	108.7	105.8	103.3	100.8	103.2	104.7	104.1		
Housing	106.0	126.6	111.8	107.8	106.8	105.2	106.4	105.3	103	118.4	118.6		
Clothing, bedding and footwear	104.3	105.6	113.5	109.9	107.8	105.0	104.3	104.1	103.9	103.8	102.3		
Medical care	102.4	104.1	106.6	112.3	109.9	104.0	104.3	105.1	102.6	103.4	108.7		
Education, recreation and amusement	107.4	103.5	101.4	98.7	104.1	104.5	106.8	104.7	102.8	104.9	104.1		
Transport and communication	114.4	109.2	112.6	109.6	110.2	106.2	100.4	102.5	103.6	107.0	101.5		
General index	104.0	112.1	109.1	108.9	111.0	106.5	105.7	105.0	102.6	105.0	107.5		
Wholesale price indices,	by comm	odity <sup>(2)</sup>											
All commodities	106.3	109.6	109.5	107.5	106.3	103.8	97.3	102.0	114.1	118.9			
Primary articles	102.7	119.1	112.1	109.1	110.6	104.4	99.7	104.6	130.2	132.9			
Electricity	115.9	105.1	101.5	110.6	119.5	110.9	104.0	99.3	103.8	108.7			
Manufactured products	102.7	105.4	107.4	105.7	103.3	103.2	99.1	101.6	112.9	117.2			

# Source

- a) Ministry of Labour and Employment, Labour Bureau.
- b) Ministry of Commerce and Industry, Office of the Economic Adviser (https://eaindustry.nic.in/download\_data\_1112.asp).

- (1) The information for 2000 is based on base year 1982 whereas that for 2006 onwards is based on base year 2001.
- (2) The information for the year 2000 relates to base year 1993–1994 and for the year 2005 to 2016 relates to base year 2004–2005 and index 2017 relates to base year 2011–12.(https://eaindustry.nic.in/download\_data\_1112.asp).

**Table 5.2.4** — Selected Data on Price Indices — China

									(prece	eding yea	ır = 100
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumer price indices (all items)	100.4	103.3	105.4	102.6	102.6	102.0	101.4	102.0	101.6	102.1	102.9
Urban area	100.8	103.2	105.3	102.7	102.6	102.1	101.5	102.1	101.7	102.1	102.8
Rural area	99.9	103.6	105.8	102.5	102.8	101.8	101.3	101.9	101.3	102.1	103.2
Classification one by components <sup>(1)</sup>											
Food		107.2	111.8	104.8	104.7	103.1	102.3				
Tobacco, liquor and articles		101.6	102.8	102.9	100.3	99.4	102.1				
Clothing		99.0	102.1	103.1	102.3	102.4	102.7				
Garments		99.1	102.4	103.3	102.4	102.6	102.8				
Household facilities, articles and services		100.0	102.4	101.9	101.5	101.2	101.0				
Health care and personal articles		103.2	103.4	102.0	101.3	101.3	102.0				
Transportation and communication		99.6	100.5	99.9	99.6	99.9	98.3				
Recreation, education, culture articles and services		100.6	100.4	100.5	101.8	101.9	101.4				
Housing		104.5	105.3	102.1	102.8	102.0	100.7				
Rent		104.9	105.3	102.7	104.1	103.3	102.6				
Electricity		100.0	99.9	101.7	101.6	100.2	100.0				
Gas		102.8	104.2	101.7	102.1	100.8	100.4				
Classification two by components(1)											
Food, tobacco, liquor								103.8	99.6	101.9	107.
Clothing								101.4	101.3	101.2	101.6
Residence								101.6	102.6	102.4	101.
Household articles and services								100.5	101.1	101.6	100.
Transportation and communication								98.7	101.1	101.7	98.3
Education, culture and recreation								101.6	102.4	102.2	102.
Health care								103.8	106.0	104.3	102.
Other articles and services								102.8	102.4	101.2	103.
Producer price indices											
Components of supply											
Industrial products <sup>(2)</sup>	102.8	105.5	106.0	98.3	98.1	98.1	94.8	98.6	106.3	103.5	99.7
Agricultural products <sup>(3)</sup>		105.5	110.6	102.2	101.2	99.4	98.7	100.2	100.6	100.3	103.

National Bureau of Statistics of China.

# **Footnotes**

Raw materials<sup>(4)</sup>

(1) Data on components of CPI of 2000 are not available since the classification of CPI was revised in 2001. Due to the revision of the components of CPI in 2016, some of the names and contents of the CPI classification has been changed and the related data is incomparable with the historical data.

109.1

98.2

98.0

97.8

93.9

98.0

108.1

104.1

99.3

- (2) Producer price indices of industrial products refer to the prices of industrial products when they leave factories.
- (3) Price indices for agricultural products refer to that for food processing industry of agricultural products.

105.1 109.6

(4) Price indices for raw materials refer to the purchasing price indices for raw materials, fuels, and power.

**Table 5.2.5** — Selected Data on Price Indices — South Africa

CPI (December 2016 = 100) PPI (December 2016 = 100)

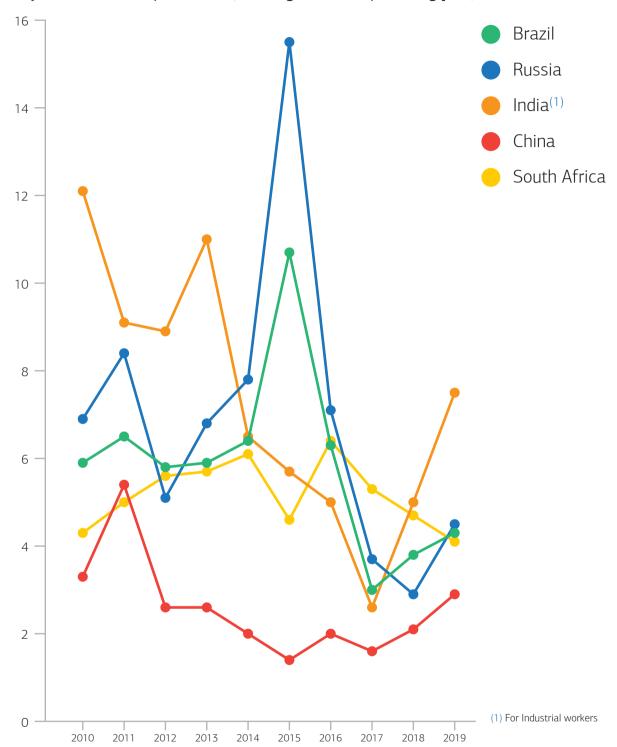
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumer price indices											
All items <sup>(1)</sup>		70.7	74.2	78.4	82.9	88.0	92.0	97.8	103.0	107.8	112.2
Urban area		70.7	74.2	78.4	82.9	88.0	92.0	97.8	103.0	107.8	112.2
Rural area <sup>(2)</sup>		69.0	72.7	77.3	81.6	86.9	90.5	97.6	102.1	105.7	110.0
Component <sup>(1)</sup>											
Housing indices <sup>(3)</sup>		68.4	72.9	77.4	81.8	86.5	91.7	97.2	102.1	107.2	112.5
Food indices <sup>(4)</sup>		63.0	67.7	72.6	76.9	82.9	87.2	96.6	103.3	107.0	110.7
Electricity <sup>(5)</sup>		51.9	61.3	69.4	75.5	80.9	88.4	96.6	101.1	106.4	116.4
Clothing indices		77.0	78.7	81.5	84.1	88.4	93.1	97.8	101.0	102.8	104.9
Rent indices		72.7	76.6	80.1	83.9	88.2	92.6	97.4	102.2	107.0	110.9
Producer price indices <sup>(6)</sup>											
Components of supply											
Domestic supply <sup>(7)</sup>	100.0	191.7	207.6	220.5							
Agricultural products <sup>(7)</sup>	100.0	187.0	199.7	208.5							
Final manufactured goods <sup>(8)</sup>				77.4	82.1	88.1	91.3	97.8	102.5	108.1	113.1
Agriculture <sup>(8)</sup>				74.6	76.3	80.2	84.2	98.4	97.5	98.0	94.5

# Source

Statistics South Africa.

- a) CPI Consumer price indices.
- b) PPI Producer price indices.
- c) Break in series, all indices prior to 2008 not official indices. Linking factors used to calculate continuous time series. Linking factors: Consumer Price Indices (all items, preceding year = 100); Consumer Price Indices Grouped by Urban Area; Consumer Price Indices Grouped by Rural Area; Housing Indices; Food Indices; Electricity; Clothing Indices; Rent Indices.
- (1) December 2016 = 100.
- (2) All items headline measure from 2000 to 2008 based on primary areas, currently based on primary and secondary areas.
- (3) Includes all housing, i.e. rental, owners equivalent rent, utilities and maintenance. Electricity excluded (2000–2007). Change in method of calculation in owner-occupied housing from 2008.
- (4) Food only (does not include non-alcoholic beverages).
- (5) Includes electricity and other solid and liquid fuels.
- (6) Year 2000 = 100.
- (7) Discontinued in December 2012.
- (8) Introduced in January 2013, history starts from January 2012. Base month December 2016 = 100.

**Graph 5.1** Consumer price index (% change from the preceding year)



# **Explanatory Notes**

#### General notes

The retail price is defined as money cost to the consumer of a specified unit of sale which is inclusive of all rebates and discounts etc.

Consumer price index (CPI): It indicates time fluctuations of retail prices of goods and services purchased by the consumers for non production consumption within a specified period of time. It is a ratio of value of a fixed basket of main goods and services at the prices of the current period as related to its value at the prices of the base period. CPI is calculated monthly on the basis of statistical data collected while observing price changes in retail trade and service establishments and also in commodity, mixed and food market and as well as on data of actual structure of consumer expenditures of households for the previous year.

**Producer price index:** It measures the average changes in producers' prices over a period of time. It represents bulk transaction generally at the early stage of trading. The price pertaining to bulk transactions may have divergent nomenclatures e.g. farm harvest prices, wholesale prices, procurement prices, support prices, administered prices, import prices, forward prices etc. Wholesale price index relates to the transactions at the primary stage which broadly correspond to producer prices.

#### Brazil

The Brazilian Institute of Geography and Statistics (IBGE) is the government organisation responsible for the computation of the Extended National Consumer Price Index (IPCA), which is the official and main inflation indicator of the country. IPCA is used by the Central Bank to monitor objectives set in the inflation targets system. The index is computed on a monthly basis and refers to families inhabiting in urban localities, with monthly income, from any source, ranging from 1 (one) to 40 (forty) minimum wages. The geographical coverage of the index encompasses 10 metropolitan regions, Goiânia and Campo Grande cities, and also Brasília (Brazil's capital). The indicator ensures a coverage of approximately 90% of urban areas in the geographical scope of the research.

The index tracks the movement of prices of a fixed basket of goods and services consumed by households, conceived from the Consumer Expenditure Survey (Pesquisa de Orçamentos Familiares — POF), which depicts the consumption habits of Brazilian families. The weights applied to the calculation of the **current** consumer price indices of IBGE are based on the Consumer Expenditure Survey (POF) conducted in 2008/2009.

Apparel includes clothing (female, male and child); footwear and accessories; jewels and trinkets; fabrics and haberdashery.

# Russia

Consumer price indices (CPI) indicates time fluctuations of prices on goods and services purchased by the consumers for nonproduction consumption within a specified period of time. It measures a ratio of value of a fixed basket of main goods and services at the prices of the current period as related to its value at the prices of the base period. CPI is calculated monthly on the basis of statistical data collected while observing level of prices in retail trade, service and catering establishments and markets and as well as on data of actual structure of consumer expenditures of households for 2 previous years.

CPI is computed for the urban population and it is diffused for the whole population.

**Producer price indices** (PPI) for industrial goods are complied on the basis of recording prices for representative goods (services) produced by 10 thousand basic (key) organisations covered by the survey. Average prices and price indices are calculated for more than 1100 representative goods (services). Producer prices are actual prices for produced and shipped goods (services rendered) provided for selling on the domestic market (except indirect taxes). PPI calculated for representative goods (services) shall be gradually aggregated into indices of corresponding types, kinds, classes, divisions of economics activities. Data on the volume of shipment in value terms of the base period are being used as the weight factors.

# India

**Consumer price index number** for industrial workers measures a change over time in prices of fixed basket of goods and services consumed by Industrial Workers. This index number is utilized for regulation of wages and dearness allowances of millions of employees and workers in the organised sector. It also serves as an indicator of retail prices in the country and is used for formulation of wages and interest policies The Labour Bureau, an attached office of the M/o Labour & Employment, has been compiling and disseminating Consumer Price Index for industrial worker since its inception in the year 1946.

This index series till 2005 was based on 1982 = 100. A new series on base: 2001 = 100 has been released w.e.f. January, 2006. The data on Consumer Expenditure have been obtained from an ad-hoc survey "Family Income and Expenditure Survey" conducted during September 1999 to August 2000 in respect of 78 selected centers by the NSSO on behalf of Labour Bureau. These 78 centres were selected on the basis of their industrial importance in the country and distributed among different States in proportion to the Industrial employment in the State subject to a maximum allotment of 5 centers per State per sector. On the basis of the results thrown up by the survey, the weighing diagrams have been derived in respect of each of 78 constituent centres and at All India level also. The indices are compiled by using price data collected on monthly basis and house rent survey data on half yearly basis. The CPI (IW), centrewise and at all India levels is released monthly with time lag of one month (on the last working day of the following month).

**Index number of wholesale prices** in India is compiled by Office of Economic Adviser, Ministry of Commerce & Industry. The present series has 2011–2012 as the base year and the data is released monthly. It is the most commonly used as measure of Inflation in India. Item Basket and the weighting diagram is based on Gross Value of Output as obtained from National Accounts Statistics, 2007. Seasonal Items have also been included and when they disappear, their weight is distributed over remaining items in the sub group on a pro rata basis. Unlike 1993–94 series, in the new series, instead of Public Distribution System prices of paddy and wheat, their procurement prices have been included to correctly represent the first point of sale.

The existing series is based on ex-factory/ex-mine prices in respect of the manufactured items. In the case of Agricultural commodities, however, the prices as quoted in primary wholesale markets are used. The collection of price data is through correspondence & self filing of information. Varous units submit the prices electronically through online forms.

The index is compiled on the principle of weighted arithmetic mean according to the Laspeyre's formula, which has fixed base year weights operating through the entire life span of the series up to 2016, and from 2017, the index is compiled on the principle of weighted average method.

# China

**Consumer price indices** reflect the trend and degree of changes in prices of consumer goods and services purchased by urban and rural households during a given period. They are obtained by combining consumer price indices of urban household and consumer price indices of rural household. The indices enable the observation and analysis of the degree of impact of the changes in the prices of retail goods and services on the actual living expenses of urban and rural residents.

**Producer price indices** for Industrial Products reflect the trend and degree of changes in general exfactory prices of all industrial goods during a given period, including sales of industrial goods by an industrial enterprise to all units outside the enterprise, as well as sales of consumer goods to residents. It can be used to analyze the impact of ex-factory prices on gross output value and value-added of the industrial sector.

#### South Africa

Break in series, all indices prior to 2008 not official indices. Linking factors used to calculate continuous time series. Linking factors: All items; Urban Area; Rural Area; Housing Indices; Food Indices; Electricity; Clothing Indices; Rent Indices.

# People's Living Standard



**Table 6.1** — Summary of People's Living Standard on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Ownership of colour TV sets	(per 100	persons	)									
Brazil												
Russia <sup>(1)</sup>	124	164	170	174	178	183	197	193	190	187	188	
India <sup>(2)</sup>			61.4	59.9	61.5	62.6	63.2	63.7				
China <sup>(3)</sup>					38.0	39.4	39.5	39.7	40.3			
Urban	37.3				41.8	42.8	42.6	42.4	42.9			
Rural	11.6				33.9	35.6	35.9	36.5	37.3			
South Africa <sup>(4)</sup>	***	20.0	20.8	21.3	21.6	22.3	22.5	22.8	23.4	23.7		
Ownership of cars (per 100 persons)												
Brazil <sup>(5)</sup>	8.8	6.1	5.7	5.3	5.1	4.9(6)	***	***		***		
Russia <sup>(7)</sup>	13	23	24	26	27	28	29	29	30	31	32	
India <sup>(8)</sup>	0.5	1.2	1.3	1.4	1.7	1.7 <sup>(9)</sup>	1.9 <sup>(9)</sup>	2.0	•••			
China <sup>(3)</sup>					5.5	6.4	7.5	9.1	9.8	10.8	11.6	
Urban	0.2				7.9	9.0	10.5	12.3	13.0	13.9	14.6	
Rural <sup>(10)</sup>	0.1				3.0	3.4	4.1	5.3	6.0	6.9	7.8	
South Africa <sup>(11)</sup>	***			8.0	8.0	8.0	8.0	8.0	8.3	8.8		
Growth rate of average annual real wage (% change from the preceding year)												
<b>Brazil</b> <sup>(12)(13)(14)</sup>	***				***		***	***	-1.4	***	***	
Russia	20.9	5.2	2.8	8.4	4.8	1.2	-9.0	0.8	2.9	8.5	4.8	
India	***				***		***	***	***	***		
China <sup>(15)</sup>	11.3	9.8	8.6	9.0	7.3	7.2	8.5	6.7	8.2	8.7	***	
South Africa												
Proportion of R&D expendit	ure to GI	OP (%)										
Brazil <sup>(16)</sup>	***	0.85	0.85	0.87	0.86	0.79		1.26 <sup>(17)</sup>	1.26 <sup>(17)</sup>	***	***	
Russia	1.05	1.13	1.01	1.03	1.03	1.07	1.10	1.10	1.11	1.00		
India	0.74	0.77	0.76	0.74	0.71	0.69	0.69 <sup>(9)</sup>	0.69 <sup>(9)</sup>				
China	0.9	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.2	
South Africa		0.74	0.73	0.73	0.72	0.77	0.80	0.82	0.83			
Full-time equivalent of R&D	personn	el (persoi	n-year)									
Brazil												
Russia	1,007,257	839,992	839,183	828,260	826,733	829,190	833,654	802,317	778,155	758,462		
India	93,836	192,819			***	282,994			***			
China	922,100	2,553,829	2,882,903	3,246,840	3,532,817	3,710,580	3,758,848	3,878,056	4,033,597	4,381,440	4,800,768	
South Africa		29,486.4	30,978.4	35,050.3	37,956.5	38,465	41,054.5	42,533	44,259.3			

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Share of public expenditure	e on educa	tion to C	DP (%)									
Brazil <sup>(18)</sup>	3.9	4.9	5.0	5.1	5.2	5.7	6.2 <sup>(19)</sup>			***		
Russia <sup>(20)</sup>	2.9	4.1	3.7	3.8	3.9	3.8	3.7	3.6	3.6	3.5	3.7	
India <sup>(21)</sup>	3.2	3.1	3.1	3.1	3.1	2.8 <sup>(9)</sup>	2.4 <sup>(9)</sup>	2.6 <sup>(9)</sup>	2.7 <sup>(9)</sup>			
China <sup>(22)</sup>	2.9	3.7	3.9	4.3	4.2	4.1	4.3	4.2	4.2	4.1	4.0	
South Africa <sup>(23)</sup>		6.6	6.8	6.9	6.9	6.9	6.9					
Average years of schooling (years)												
Brazil <sup>(24)</sup>			***	***	***		***	9.2	9.4	***		
Russia <sup>(25)</sup>			14.6	14.6	14.8	14.8	15.1	15.2	15.0			
India												
China <sup>(26)</sup>		9.1	9.1	9.2	9.3	9.3	9.4	9.4	9.6	9.6	9.7	
South Africa							***					
Share of public expenditure	on health	to GDP	(%)									
Brazil	3.9	4.9	4.8	5.0	4.9				4.0 <sup>(27)</sup>			
Russia <sup>(20)(28)</sup>	2.1	3.7	3.2	3.3	3.2	3.2	3.4	3.6	3.1	3.2	3.5	
India <sup>(21)</sup>		1.3	1.2	1.3	1.2	1.1	1.2	1.2				
China <sup>(29)</sup>	4.6	4.8	5.0	5.2	5.3	5.5	6.0	6.2	6.4	6.4	6.6	
South Africa <sup>(30)</sup>		3.9	4.0	4.1	4.1	4.1	4.2					
Gini coefficient												
Brazil <sup>(14)(31)</sup>			0.529 <sup>(32)</sup>				***	0.549	0.549	0.539 <sup>(32)</sup>		
Russia <sup>(33)</sup>	0.395	0.421	0.417	0.420	0.417	0.415	0.412	0.412	0.411	0.413	0.411	
India <sup>(34)</sup>												
Urban	0.342	0.371		0.367								
Rural	0.260	0.276	***	0.280	***		***					
China <sup>(35)</sup>		0.481	0.477	0.474	0.473	0.469	0.462	0.465	0.467	0.468	0.465	
South Africa <sup>(36)</sup>	0.640		0.650				0.639					

# Brazil

- a) Brazilian Institute of Geography and Statistics IBGE, National Household Sample Survey 2006/2014.
- b) Education expenditure data compiled by Ministry of Education, Anísio Teixeira National Institute for Education Research and Studies INEP.
- c) Brazilian Automotive Industry Association (ANFAVEA), Brazilian Automotive Industry Yearbook 2015.
- d) National Treasury Secretariat.
- e) UNESCO Institute for Statistics (UIS) database.
- f) World Health Organization (WHO) database.
- g) World Bank database Poverty and Equity.

#### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Ministry of the Interior of the Russian Federation.
- c) UNESCO Institute for Statistics (UIS) database.

#### India

- a) Telecom Regulatory Authority of India, Annual Report (various issues).
- b) Ministry of Road Transport & Highways, Road Transport Year Book.
- c) Ministry of Finance, Economic Survey.
- d) NITI Aayog.
- e) Department of Science & Technology.
- f) National Health Account Estimates for India: 2013-14 to 2016-17.

#### China

- a) National Bureau of Statistics of China, Integrated Household Survey in Urban and Rural Areas of China 2013–2020; Urban Household Survey in China 2000–2012; and Rural Household Survey in China 2000–2012.
- b) Ministry of Education of the People's Republic of China, Annual Statistical Reports 2000–2019.
- c) National Health Commission of the People's Republic of China, Annual Statistical Reports 2000-2019.

#### South Africa

- a) Statistics South Africa: Financial statistics of consolidated general government Time series summary data, 2004/2005–2015/2016.
- b) Statistics South Africa: Financial statistics of consolidated general government annual statistical releases, 2004/2005 2015/2016.
- c) Statistics South Africa: Gross Domestic Product: Annual quarterly and Regional Fourth quarter 2017.
- d) HSRC: Statistical Report 2017/2018: South African National Survey of Research & Experimental development.

# **Footnotes**

#### Brazil

- (5) The data for Brazil refer to vehicles per 100 persons.
- (6) Estimated data.
- (12) Revised data, according to the last population estimate.
- (13) Employed population 15 years and older with work income.
- (14) The indicators were calculated with information from the households visited for the first time in each of the four quarters of the year.
- (16) The expenditure on R&D activities on the surveyed units typically results from their own production, with estimatives based on the sum of cost approach (intermediate consumption, employees' compensation, consumption of fixed capital). The total expenditure on R&D activities is complemented with thoses units that produce for the market. The units can be public or private for own production, while R&D market producers are all private.
- (17) Gross domestic expenditure on R&D as percentage of GDP. Data are from UIS database.
- (18) The following groups of Nature of Expenditure were considered: Active Personnel and Social Costs; Other Current Expenditures; Investments and Financial Inversions; 2 This information does not include the following expenses: Retirement and reforms, pensions scholarship resources and financing student, expenses with interest and debt burdens, educational burdens amortizations, current and capital transfers to the private sector.
- (19) Government expenditure on education as % of GDP. Data from UIS database.
- (24) The indicators were calculated with information of the second quarter of the year.
- (27) Domestic general government health expenditure as % of GDP. Data from WHO database.
- (31) Gini Index of Household Income.
- (32) Data from World Bank database Poverty and Equity.

#### Russia

- (1) All type TV sets. Per 100 households. By data of sample household budget survey.
- (7) Personal passenger cars.
- (20) Calculations on the base of the data of the Federal Treasury. Since 2005 including budgets of the state non-budget funds.
- (23) According to data of Censuses of Population 2002, 2010 years and Microcensus of Population 2015 year.
- (25) School Life Expectancy from primary to tertiary education. Data from UNESCO Institute for Statistics (UIS) database.
- (28) Before 2011 year data include expenditures on physical culture and sport.
- (33) Calculations of Gini Index are based on macroeconomical per capita income data and information of sample household budget survey.

#### India

- (2) Figures are estimates indicating number of households having TV per 100 households as on 31st March of the year indicated in the table. The percentage of households having TV sets as per census 2001 was 31.6%.
- (8) Figures have been derived by dividing No. of registered vehicles as on 31st March of the year indicated in the table (except for 2000 where the data is as on 31st March 2001) by mid year population.
- (9) Provisional.
- (21) Information pertains to Financial Year (i.e. April of Year indicated in the table to March next year) and it relates to Expenditure of general government (i.e. Central Government & State Governments Combined).
- (34) Gini coefficient of household consumption has been calculated on the basis of National Sample Survey Periods (i.e. July 1999 June 2000, July 2004 June 2005 & July 2009 June 2010 to July 2011 June 2012) and is based on Mixed Recall Period.

#### China

- (3) In the fourth quarter of 2012, the National Bureau of Statistics of the People's Republic of China conducted the integrated survey of urban and rural households, unifying the names, classification and statistical standards of urban and rural households. On its basis, we got the ownership data of resident in China, including the number of colour TV sets, cars and personal computers etc.
- (10) In rural household survey of China, cars refer to the automobiles for living use, including vans.
- (15) Average annual wage of staff and workers refers to the average wage level in monetary terms per staff and worker during a year of time.
- (22) Government appropriation for education to GDP.
- (26) Average years of education attained by the population above 15 years of age.
- (29) Total expenditure on health as percentage of GDP.
- (35) Data of Gini coefficient are based on per capita annual disposable income.

# **South Africa**

- (4) Information based on data from the general household survey (GHS) in which household were asked to indicate whether the household contained at least one television set. Not asked whether it was colour. Calculation: Total number of sets/total population × k.
- (11) Data GHS in which household were asked to indicated whether the household contained at least one vehicle in working condition. Calculation: Total number of households with a working vehicle/total population × k.
- (23) General government expenditure on education as a percentage of GDP.
- (30) General government expenditure on health as a percentage of GDP.
- (36) Gini is per capita expenditure excluding taxes.

**Table 6.2.1** — Selected Data on People's Living Standard — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Income and expenditure									-	
Household's per capita disposible income (R\$)		12,713	14,238							
Household's per capita living consumption expenditure (R\$)										
Household's per capita savings balance (R\$)		1289	1417							
Population below international poverty line (1,90\$ a day PPP) as % of total population <sup>(1)</sup>			4.7	3.8	3.1	2.7	3.2	3.9	4.4	4.4
Percentage share of income or consumption by 20%	subgrou	ps of p	opulati	on <sup>(2)</sup>						
Lowest 20%			3.2	3.4	3.3	3.6	3.5			3.1(1)
Second 20%			7.6	7.7	7.7	7.9	7.9			7.3 <sup>(1)</sup>
Third 20%			12.4	12.5	12.6	12.6	12.8			12 <sup>(1)</sup>
Fourth 20%			19.5	19.4	19.4	19.6	19.6			19.2 <sup>(1)</sup>
Highest 20%			57.4	57.1	57.0	56.3	56.1			58.4(1)
Income quintile ratio			17.7	17.0	17.4	15.6	15.9			
Living quality										
Food expenditure as percentage of total consumption expenditure (%)										
Gini index of household income(3)								0.549	0.549	0.539(1)
Illiteracy rate (%)(3)(4)				8.6	8.3	7.9	7.7	7.2	7.0	
Scholarity level of the population (years)(3)(4)								9.2	9.4	
Classification of dwellings by number of rooms (%) <sup>(3)</sup>								100	100	
1 or 2 rooms								1.7	1.7	
3 rooms								5.8	5.9	
4 rooms								13.9	14.2	
5 rooms								29.7	29.3	
6 rooms								20.3	20.5	
7 rooms								12.2	12.3	
8 rooms or more								16.3	16.1	
Classification of dwellings by number of bedrooms (%) <sup>(3)</sup>								100	100	
1 bedroom								37.5	38.2	
2 bedrooms								44.1	44.1	
3 bedrooms								16.2	15.7	
4 bedrooms or more								2.1	2.0	
Average number of residents by dwelling (person) <sup>(3)</sup>	***		***		***		***	3.7	3.7	
Average number of residents by bedroom (person) <sup>(3)</sup>								1.7	1.7	
Classification of dwellings tenure (%)(3)								100	100	
Owner occupied								74.2	73.5	
Renter occupied								17.5	17.6	
Granted free of rent								8.2	8.7	
Other								0.2	0.2	
Classification of dwellings by equipment (%)(3)										
Television								97.4	96.8	
Radio										
Computer								46.2	44.0	
With Internet access								40.1	38.8	
Refrigerator								98.1	98.1	

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Dwellings with piped water within at least one room (%) <sup>(3)</sup>								95.4	95.4	
Dwellings whose fuel used for cooking is gas (%) <sup>(3)</sup>								98.4	98.4	
Average number of proteins per capita per day (gram) <sup>(5)</sup>										
Average number of calories per capita per day (kilo calories) <sup>(5)</sup>										
Average number of fats per capita per day (gram) <sup>(5)</sup>										
Culture, education and health										
Household expenditure on education, culture and entertainment (%)										
Enrolment by level of education (1000 persons) <sup>(6)</sup>	56,115	58,102	57,902	57,786	56,574	56,629	55,174	56,830		
Pre-primary (ISC 0)	6012	6792	7003	7314	7608	7840	7972	8279		
Primary (ISC 1)	21,225	16,893	17,455	17,056	16,761	16,630	16,299	16,118	16,107 <sup>(7)</sup>	
Lower secondary (ISC 2)	16,935	14,255	15,753	15,386	14,932	14,285	13,814	13,678	13,414 <sup>(7)</sup>	
Upper secondary (ISC 3)	9162	8359	10,760	10,788	9950	9940	10,710	9687	9704 <sup>(7)</sup>	
First stage of tertiary education (ISC 5)	2694	6488	6857	7162	7323	7840	6277	8285		
Advanced research programmes (ISC 6)	87	65	72	79		94	102	107		
Proportion of population 25 years and over with completed tertiary education, %								15.3	15.7	16.6 <sup>(7)</sup>
Hospital beds (per 1000 inhabitants)	2.9	2.4	2.4	2.4		2.2 <sup>(8)</sup>	2.2 <sup>(8)</sup>			

- a) Brazilian Institute of Geography and Statistics IBGE, Household Budget Survey 2002–2003 and 2008–2009; National Household Sample Survey 2006/2014; Medical Health Assistance Survey; and National Account System 2000–2010.
- b) Ministry of Education, Anísio Teixeira National Institute for Education Research and Studies INEP, Basic Education Census and Higher Education Census; and Coordination for the Improvement of Higher Education Personnel CAPES.
- c) Ministry of Health.
- d) World Bank, Development Research Group.
- e) World Bank database Poverty and Equity.
- f) UNESCO Institute for Statistics (UIS) database.
- g) World Health Organization (WHO) database.

- (1) Data from World Bank database Poverty and Equity.
- (2) Percentage of per capita household income by 20% subgroups of population.
- (3) Revised data, according the last population estimate.
- (4) Persons 15 years old and over.
- (5) Average available in the household, from HBS 2008-2009.
- (6) For education:
  - a) Special education are included in their respective ISCEDs.
  - b) Youth and adult education are included in their respective ISCEDs.
  - c) Includes special education.
  - d) Includes youth and adult education.
  - e) Includes professional education programmes.
  - f) Includes teacher education in ISCED 3 vocational programmes.
  - g) Until 2005 master degree programmes are classified as ISCED 6, from 2006 master degree programmes are classified as ISCED 5A (second or further degrees). Master and doctoral degree enrollment is not available for 2013.
- (7) Data from UIS database.
- (8) Data from WHO database.

**Table 6.2.2** — Selected Data on People's Living Standard — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	<b>2019</b> <sup>(P)</sup>
Income and expenditure											
Household's per capita per month disposable income (Rub) <sup>(1)</sup>			15,938		20,760	21,729	23,141	23,905	24,067	25,293	
Rural (Rub)	***		10,705		13,377	14,397	15,333	16,338	16,333	17,446	***
Urban (Rub)			17,786		23,320	24,300	25,868	26,521	26,734	27,973	
Household's per capita per month livir	g <sup>(2)</sup>										
Consumption expenditure (Rub)	1157	10,122	11,286	12,624	13,707	14,630	14,713	16,086	16,770	17,490	19,169
Rural (Rub)	732	6446	7292	8415	8829	9667	10,255	11,030	11,658	12,174	12,985
Urban (Rub)	1313	11,453	12,680	14,082	15,410	16,350	16,360	17,839	18,532	19,304	21,273
Population below international poverty line (1.9\$ a day PPP) as % of total population <sup>(3)</sup>	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Percentage share of income or consumption by 20% subgroups of population (%) <sup>(4)</sup>	100	100	100	100	100	100	100	100	100	100	100
Lowest 20%	5.9	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.3
Second 20%	10.4	9.8	9.9	9.8	9.9	9.9	10.1	10.1	10.1	10.0	10.1
Third 20%	15.1	14.8	14.9	14.9	14.9	15.0	15.0	15.0	15.1	15.0	15.1
Fourth 20%	21.9	22.5	22.6	22.5	22.6	22.6	22.6	22.6	22.6	22.6	22.6
Highest 20%	46.7	47.7	47.4	47.6	47.4	47.2	47.0	47.0	46.9	47.1	46.9
Income quintile ratio <sup>(4)</sup>	7.9	9.3	9.1	9.2	9.1	9.0	8.8	8.8	8.8	8.9	8.8
Living quality											
Consumption expenditure (%) <sup>(2)</sup>		100	100	100	100	100	100	100	100	100	100
Food products		29.6	29.5	28.1	27.7	28.5	32.1	32.3	31.2	30.2	29.7
Alcoholic beverages and tobacco	***	2.4	2.5	2.5	2.6	2.8	3.0	3.1	3.0	3.0	3.0
Apparel and footwear		10.8	10.1	10.1	9.5	8.9	9.2	9.2	8.8	7.9	8.2
Housing and communal service, fuel		11.3	11.4	10.9	10.5	10.3	10.8	11.3	10.9	11.1	10.8
Domestic articles, durables, housing support		6.2	6.5	6.3	6.7	6.3	5.5	5.9	5.3	5.3	5.3
Health care		3.3	3.5	3.4	3.6	3.6	3.7	3.6	3.8	3.7	3.8
Transport, communication		18.7	19.5	20.8	21.1	21.2	17.7	16.6	19.1	19.8	19.3
Recreation and cultural arrangements		6.8	6.8	6.9	7.2	7.1	6.7	6.7	6.9	7.7	8.4
Education		1.3	1.2	1.3	1.0	1.0	0.9	0.8	0.8	0.8	0.9
Other goods and services		9.6	9.0	9.7	10.1	10.3	10.4	10.5	10.2	10.5	10.6
Food expenditure (including catering) as a percentage of total $(\%)^{(4)}$	49.4	32.9	32.6	31.4	31.2	31.9	35.4	35.5	34.3	33.5	
Gini index <sup>(4)</sup>	0.395	0.421	0.417	0.420	0.417	0.415	0.412	0.412	0.411	0.413	0.411
Illiteracy rate (%) <sup>(5)</sup>		0.3					0.2				
Classification of dwellings by number of rooms (%) <sup>(6)</sup>	100	100	100	100	100	100	100	100	100	100	100
1 room	23.3	23.5	23.6	23.8	23.7	23.8	24.1	24.4	24.6	24.8	25.2
2 rooms	41.0	39.7	39.6	39.5	39.4	39.3	39.1	39.0	38.7	38.4	38.2
3 rooms	29.4	29.0	28.9	28.8	28.9	28.8	28.6	28.5	28.2	28.0	27.9
4 or more rooms	6.3	7.8	7.9	7.9	8.1	8.1	8.1	8.1	8.1	8.1	8.3

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	<b>2019</b> <sup>(P)</sup>
Classification of dwellings tenure (%) <sup>(6)</sup>	100	100	100	100	100	100	100	100	100	100	100
Private property	65.3	85.6	86.3	87.1	87.8	86.3	90.2	90.5	91.5	91.8	92.4
State-owned	6.3	4.3	4.0	3.7	3.4	3.4	3.2	3.5	2.8	2.8	2.7
Municipal property	26.5	9.9	9.5	9.0	7.7	6.7	5.7	5.3	4.9	4.7	4.4
Other	1.9	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4		
Classification of dwellings by equipme	ent (%) <sup>(6)</sup>										
Piped water within the dwelling	73.4	77.7	78.1	78.5	79.5	77.2	81.4	81.9	82.4	82.9	84.2
Sewerage	69.0	73.7	74.1	74.4	74.9	72.5	76.8	77.1	77.6	78.3	79.4
Heating	73.4	83.1	83.4	83.7	84.3	81.7	85.4	85.6	85.9	86.3	87.1
Hot water supply	59.4	64.9	65.3	65.5	66.2	63.9	68.1	68.7	69.2	70.1	71.7
Bath (shower)	63.8	66.7	66.9	67.1	67.7	65.4	69.2	69.5	69.9	70.5	71.5
Gas (network, liquefied)	70.0	69.0	68.6	68.3	67.5	65.4	66.7	66.3	66.5	66.4	66.8
City coverage rate of population with access to tap water (%) <sup>(7)</sup>	95.0	96.6	96.6	97.3	97.6	97.8		98.4		98.7	
City coverage rate of population with access to gas (%) <sup>(7)</sup>	74.0	75.4	75.8	75.9	74.0	73.7		71.3		71.5	
Per capita area of parks and green land (m²)(8)	169.4	203.7	207.0	213.6	212.1	213.4	215.0	217.9	206.9	207.2	205.2
Average number of proteins per capita per day (gram) <sup>(2)</sup>	62	77	77	78	78	78	77	80	80	80	81
Average number of calories per capita per day (kilo calories) <sup>(2)</sup>	2394	2652	2624	2633	2626	2603	2575	2675	2655	2647	2644
Average number of fats per capita per day (gram) <sup>(2)</sup>	82	105	105	105	106	105	105	109	108	108	109
Culture, education and health											
Percentage of household expenditure on education, culture and entertainment (%) <sup>(2)</sup>		8.1	8.0	8.2	8.2	8.1	7.6	7.5	7.8	8.5	9.3
Enrollment by level of education (1000	) person	s) <sup>(9)</sup>									
Primary education (1 level of ISCED 2011)	5920	5457	5654	5793	5868	6127	6343	6629	6928	7123	7307
Secondary education (2 and 3 levels of ISCED 2011)	16,332	9582	9504	9428	9370	9674	9824	10,022	9900	10,197	10,493
Tertiary education (5, 6, 7, 8 levels of ISCED 2011) <sup>(10)</sup>	7224	9337	8733	8314	7768	7435	7059	6804	6163	6076	6089
Proportion of internal R&D expenditure to GDP (%)	1.05	1.13	1.01	1.03	1.03	1.07	1.10	1.10	1.11	1.00	
Full-Time equivalent of R&D personnel (1000 persons-year)	1007	840	839	828	827	829	834	802	778	758	
School life expectancy (years)(11)			14.6	14.6	14.8	14.8	15.1	15.2	15.0		
Proportion of population 25 years and over with completed tertiary education, $\mathbf{\%}^{(5)}$		25.9					27.5				
Number of patents on inventions applied	28,688	42,500	41,414	44,211	44,914	40,308	45,517	41,587	36,454	37,957	
Physicians (per 1000 inhabitants)	4.7	5.0	5.1	4.9	4.9	4.9	4.6	4.6	4.8	4.8	4.9
Hospital beds (per 1000 inhabitants)	11.5	9.4	9.4	9.3	9.1	8.7	8.3	8.2	8.1	8.0	8.0

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	<b>2019</b> (P)
Girls enrolment per 100 boys (for primary education)	95	96	96	96	96	96	96	93	94	94	94
Age-standardized death rate by cause	per 10,	000 of 1	the stan	dard po	pulation	1 <sup>(12)</sup>					
From diseases of circulatory system	51.2	42.1	38.5	36.6	34.3	32.1	30.6	29.3	27.4	27.0	26.2
From neoplasms	13.8	12.4	12.2	11.9	11.8	11.6	11.7	11.5	11.0	10.9	10.9
From external causes of death	18.6	12.0	11.0	10.7	10.2	10.2	9.4	8.8	8.0	7.6	7.2
From diseases of digestive system	3.2	4.3	4.1	4.0	3.9	4.2	4.3	4.1	3.8	3.8	3.9
From diseases of respiratory system	5.1	3.3	3.3	3.0	3.1	3.2	2.9	2.7	2.3	2.2	2.2
From infectious and parasitic diseases	2.2	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.7

- a) Federal State Statistics Service of the Russian Federation (Rosstat).
- b) World Bank WDI database.
- c) Ministry of Education and Science of the Russian Federation (Minobrnauki of Russia).
- d) Federal Service for Intellectual Property (Rospatent).
- e) UNESCO Institute for Statistics (UIS).

- (P) Preliminary data.
- (1) According to the Sample Monitoring of Population Income and Participation in Social Programs.
- (2) According to the Sample Household Budget Survey.
- (3) The data are from World Bank WDI database and from Rosstat.
- (4) Esimates of Rosstat by data of sample household budget survey and macroeconomical per capita income data.
- (5) According to data of Censuses of Population 2002, 2010 years and Microcensus of Population 2015 year.
- (6) Since 2013 incomplete coverage.
- (7) Before 2016 year according to the Sample Household Budget Survey, since 2016 according to the Complex Supervision of the Population Life Conditions.
- (8) Per capita of urban population.
- (9) By data of Minobrnauki of Russia. Before 2015 year data are given according to Intarnational Standard Classification of Education 1997 year (ISCED97).
- (10) Before 2015 year 5 and 6 levels according to ISCED97.
- (11) The data are from UIS database.
- (12) World standard of WHO by all causes.

**Table 6.2.3** — Selected Data on People's Living Standard — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Income and expenditure										
Per capita monthly living consumption expen	diture <sup>(1)</sup>	)								
Urban area										
	855	1984		2630						
Food (%)	48.1	44.4		42.6			***			
Fuel and light (%)	7.8	6.9		6.7			***			
Clothing (%)	6.1	4.8	***	5.4	***		***			
Education (%)	4.3	8.1	***	6.9	***		***			
Medical care (%)	5.1	5.0	***	5.5	***		***			
Rural area										
Total (₹)	486.1	1053.6	***	1430.0			***			
Food (%)	59.4	57.0		52.9	***		***			
Fuel and light (%)	7.5	8.0		8.0						
Clothing (%)	6.8	5.3		6.0						
Education (%)	1.9	3.6		3.5	***		***			
Medical care (%)	6.1	5.4		6.7						
Percentage of population living				25.7						
below poverty line <sup>(1)</sup> : Rural  Urban				13.7						
	 100/- cub		ef nonul		***					
Percentage share of income or consumption by 2  Lowest 20%: Rural	20% SUD	9.4	от рори	9.1						
Urban	***	7.0		7.0		***				
				12.9						
Second 20%: Rural		13.2		10.8						
Urban		10.6	***							
Third 20%: Rural		16.5	***	16.2	***		***		***	***
Urban		14.7	***	14.7	***		***		***	***
Fourth 20%: Rural		21.2		21.1	***					
Urban		20.9	***	20.7	***		***		***	***
Highest 20%: Rural		39.7	***	40.6	***		***		***	
Urban		46.8		46.7		***				
Income quintile ratio <sup>(1)</sup> : Rural		4.2	***	4.4	***		***		***	***
Urban  Culture, education and health	***	6.7	***	6.6						
Public expenditure on education (%) <sup>(2)</sup>	117	11.4	11.4	11.6	11.0	10.8 <sup>(3)</sup>	9.8(3)	9.7 <sup>(3)</sup>	10.0 <sup>(3)</sup>	
	11.3	11.4	11.4	11.6	11.6	10.8(-7	9.8(-7	9./(-/	10.0(-7	
Enrollment by level of education (million pers		1747	170.0	1740	172.4	1705	120.1			
Primary level (class I-V) Secondary level (class IX-XII)	113.8	134.7	139.8	134.8	132.4	130.5	129.1			
Higher education level (graduation or above)	28.9	51.3	55.1	54.6	59.6	61.8	63.9	75.7		
Proportion of R&D expenditure to GDP (%)	8.6	27.5	29.2	30.1	32.3	34.2		35.7		
Full-Time equivalent of R&D personnel	0.74 93,836	0.77	0.76	0.74	0.71	0.69	0.69	0.69		
(persons-year)  Proportion of population 25 years and over	5.7	8.0		8.9						
with completed tertiary education, % <sup>(1)</sup>	5.7	5.5		5.5						
Number of PCT granted (Pieces)										
Total <sup>(4)</sup>	107	752	871	873	1042	816	801	693	744	764
Individuals	46	231	243	254	252	248	235	234	272	274
Leal entity	61	521	628	519	790	568	566	459	472	490
Public expenditure on health (%) <sup>(2)</sup>	4.7	4.7	4.6	4.7	3.8	3.9	3.7 <sup>(5)</sup>	3.8 <sup>(4)</sup>		
Doctors (1000 numbers) <sup>(6)</sup>	556	827	860	890	923	939	960 <sup>(7)</sup>	1005 <sup>(7)</sup>		
Hospital beds (1000 numbers) <sup>(6)</sup>	506	577	785	623	629	676	754 <sup>(7)</sup>	635 <sup>(7)</sup>		
Deaths by accident (unnatural causes) (1000 numbers) <sup>(8)</sup>	238	360	367	372	378	431	403			

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Death due to diseases (numbers):										
Cholera	18	9	10	2	5	5	4			
Malaria	932(9)	1018	754	519	440	562	384	331	104	
Dengue	7	110	169	242	193 <sup>(9)</sup>	137	220	245	253	
Kala-Azar	150	105	80	29	20	11	5	0.0	0.0	
Tuberculosis	10,463	63,781	63,261	63,265	61,888	63,226	63,295	59,728		
Dwellings by type of occupation										
Owned (per 1000 households)										
Urban	668 <sup>(9)</sup>		692 <sup>(9)</sup>	611 <sup>(10)</sup>						
Rural	943(9)		947 <sup>(9)</sup>	933(10)						
Hired (per 1000 households)										
Urban	285 <sup>(9)</sup>		276 <sup>(9)</sup>	354(10)						
Rural	36 <sup>(9)</sup>		34 <sup>(9)</sup>	51(10)			***			
Others (per 1000 households)										
Urban	47 <sup>(9)</sup>		33 <sup>(9)</sup>	34(10)			***		***	
Rural	21 <sup>(9)</sup>		19 <sup>(9)</sup>	16 <sup>(10)</sup>						
Living quality										
Housing amenities										
Tap water facilities (per 1000 households):	243 <sup>(9)</sup>		308 <sup>(9)</sup>	312 <sup>(10)</sup>						
Urban	687 <sup>(9)</sup>		706 <sup>(9)</sup>	691(10)						
Electricity facilities (per 1000 households): Rural	435(9)		553(9)	800(10)	***		***		***	
Urban	876 <sup>(9)</sup>		927 <sup>(9)</sup>	979(10)						
Toilet facilities (per 1000 households): Rural	219 <sup>(9)</sup>		307 <sup>(9)</sup>	406 <sup>(10)</sup>			***			
Urban	737 <sup>(9)</sup>		814 <sup>(9)</sup>	912 <sup>(10)</sup>						
Gini coefficient(1)(11)										
Urban (%)	0.342	0.400	***	0.400						
Rural (%)	0.26	0.30	***	0.30						
Illiteracy rate <sup>(1)(12)</sup>										
Urban (%)	20.2	14.6		14.0		14.0				
Rural (%)	44.2	31.2		30.0		29.0				
Classification of dwellings by equipment (%)	(9)									
Radio, transister	35.1		19.9							
Television	31.6		47.2							
Telephone	9.1		63.2							
Bicycle	43.7		44.8							
Scooter, motorcycle, moped	11.7		21.0							
Car, jeep, van	2.5		4.7							
None of the above assets	39.5		17.8							
Population with access to tap water (%)	36.7		43.5							
Population with access to gas (%)	17.5		28.5							
Average number of calories per capita (kilo										
Rural	2149	2020		2099						
Urban	2156	1946		2058						
Average number of proteins per capita (gran	n per da	y) <sup>(1)</sup>								
Rural	59.1	55.0		56.5	***		***			
Urban	58.5	53.5		55.7						
Average number of fats per capita (gram pe			***							
Rural	36.1	38.3		41.6			***			
Urban	49.6	47.9		52.5						
Olban	15.0	17.5		22.3						

- a) Ministry of Statistics&Programme Implementation, National Sample Survey Office, NSS Reports on Consumer Expenditure&Employment&Unemployment, Nutritional Intake in India and Drinking Water, Sanitation, Hygiene and Housing Condition in India (various issues).
- b) NITI Aavog.
- c) Ministry of Human Resource Development, Educational Statistics at a Glance (various issues); and Key Results of All India Survey on Higher Education (various issues).
- d) Ministry of Health & Family Welfare, National Health Profile.
- e) Ministry of Finance, Economic Survey.
- f) Ministry of Home Affairs, National Crime Records Bureau, Accidental Deaths & Suicides in India (various issues).
- g) Ministry of Home Affairs, Office of the Registrar General of India, Census 2001/2011 Reports.
- h) Ministry of Statistics and Pl, Statistical Year Book-2017.
- i) Department of Science & Technology (DST).
- j) Ministry of Commerce and Industry, Department of Industrial Policy  $\&\, Promotion.$

### **Footnotes**

Information provided in above table is for each peiod starting from 1st April of previous year to 31st March next year, i.e. Financial year period. The above information is also with respect to the applications filed by Indians in India wherein India is Receiving Office (RO) only.

- (1) Pertains to National Sample Survey Rounds (i.e. Period July of the previous year to June of the year mentioned in the table). The information on quintile groups and nutritional intakes pertains to uniform reference period where as that for poverty lines pertains to mixed recall period as per Tendulkar Methodology.
- (2) Information pertains to Financial Year (i.e. April of Year indicated in the table to March next year). Expenditure on health & education relates to Expenditure of general government (i.e. Central government & State governments combined). Assuming this indicator to be Government health expenditure as a percentage of General Government Expenditure (GGE); the given figures have been updated. The data sources used for different years are as follows: (1) for year 2013 the numerator and denominator are sourced from National Health Accounts estimates for India 2013–14 report (2) for year 2014 the numerator and denominator are sourced from National Health Accounts estimates for India 2014–15 (draft estimates) (3) For 2015 and 2016 the numerators (revised estimates 2015–16 and budget estimate 2016–17) are sourced from "health sector financing by centre and states/ UTs in India [2014–15 to 2016–17]", compiled by NHA Cell, MoHFW, GoI; and denominators (GGE for 2015 and 2016 repectively) are calculated by adding Revenue expenditure and capital out lay of all states and capital and revenue expenditure of Union Government. The revenue expenditure and capital outlay of all states is sourced from the "State Finances: A study of Budgets" an annual publication of Reserve Bank of India. The capital and revenue expenditure of the Union Government is sourced from "Union Budget 2017–18 Budget at a Glance, Expenditure (statement)".
- (3) Pertains to Economic Survey 2017–18 Volume 2.
- (4) Estimated Public Health Expenditure 2016–17 (BE), sourced from Health Sector Financing by Centre and States/UTs in India (2014–15 to 2016–17): Rs. 1.81 lakh Crores General Govt Expenditure: Revenue expenditure & Capital outlay of States sourced from State Finances: A Study of Budgets" (RBI publication) and Capital and Revenue Expenditure of Union Government is taken from Union Budget at a Glance 2016–17. However, the figures for 2008 to 2012 cannot be compared with the figures of later years, as the sources of the two periods are different.
- (5) Estimated Public Health Expenditure 2015–16 (RE), sourced from Health Sector Financing by Centre and States/UTs in India (2014–15 to 2016–17): Rs 1.58 lakh Crores General Govt Expenditure: Revenue expenditure & Capital outlay of States sourced from "State Finances: A Study of Budgets" (RBI publication) and Capital and Revenue Expenditure of Union Government is taken from Union Budget at a Glance 2015–16.
- (6) As on end of December of the year indicated in the table. The data relates to number of doctors and include Government Allopathic Doctors and Dental Surgeons & Average Population Served in India (Provisional) and number of beds in Government Hospitals including Community Health Centers.
- (7) National Health Profile for the year 2016 and 2017.
- (8) Includes deaths due to traffic accidents, air crash, fire, poisoning, electrocution etc.
- (9) Information under the column for year 2000 and 2011 is based on Census 2001 and 2011 and is as on 31st March 2001 and 31st March 2011 respectively.
- (10) Pertains to Survey period July December 2012. Figures under tap water for the year 2012 includes piped water/public taps but excludes bottled water.
- (11) Information on expenditure pertains to mixed reference period.
- (12) Illiteracy Rate pertains to age 7 years and above. Illetracy rate as per census 2011 is 15.9% in case of urban areas and 32.2% in case of rural areas.

**Table 6.2.4** — Selected Data on People's Living Standard — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Income and expenditure				_							
Per capita income of households (RMB)	)										
Per capita disposable income of national households	***				18,311	20,167	21,966	23,821	25,974	28,228	30,733
Disposable income of urban households	6280	19,109	21,810	24,565							
Net income of rural households	2253	5919	6977	7917							
Per capita consumption expenditure (R		3313	0377	7317							
Per capita consumption expenditure	IVID)										
of national households					13,220	14,491	15,712	17,111	18,322	19,853	21,559
Urban households (in cash)	4998	13,471	15,161	16,674							
Rural households	1670	4382	5221	5908							
Per capita savings balance (RMB) <sup>(1)</sup>	5076	22,619	25,505	29,508	32,894	35,477					
Poverty headcount ratio at \$1.9 a day (2011 PPP) as % of total population <sup>(2)</sup>		11.2	7.9	6.5	1.9	1.4	***				
Percentage share of income or consumption by 20% subgroups of population (%) <sup>(2)</sup>				100							
Lowest 20%				5.2							
Second 20%				9.8							
Third 20%				14.8							
Fourth 20%				22.3							
Highest 20%				47.9							
Income quintile ratio <sup>(2)</sup>					10.1						
Living quality											
Composition of consumption expenditu	re of ho	ouseholo	ds								
China (%)					100	100	100	100	100	100	100
Food, tobacco and liquor					31.2	31.0	30.6	30.1	29.3	28.4	28.2
Clothing					7.8	7.6	7.4	7.0	6.8	6.5	6.2
Residence					22.7	22.1	21.8	21.9	22.4	23.4	23.4
Household facilities, articles and services					6.1	6.1	6.1	6.1	6.1	6.2	5.9
Transport and communication					12.3	12.9	13.3	13.7	13.6	13.5	13.3
Education, cultural and recreation					10.6	10.6	11.0	11.2	11.4	11.2	11.7
Health care and medical services					6.9	7.2	7.4	7.6	7.9	8.5	8.8
Miscellaneous goods and services					2.5	2.5	2.5	2.4	2.4	2.4	2.4
Urban (in cash) (%)	100	100	100	100							
Food	39.4	35.7	36.3	36.2							
Clothing	10.0	10.7	11.0	10.9							
Residence	11.3	9.9	9.3	8.9							
Household facilities, articles and services	7.5	6.7	6.7	6.7							
Transport and communication	8.5	14.7	14.2	14.7							
Education, cultural and recreation and services	13.4	12.1	12.2	12.2							
Health care and medical services	6.4	6.5	6.4	6.4							
Miscellaneous goods and services	3.4	3.7	3.8	3.9							
Rural (%)	100	100	100	100							
Food	49.1	41.1	40.4	39.3							
Clothing	5.7	6.0	6.5	6.7							
Residence	15.5	19.1	18.4	18.4							
Household facilities, articles and services	4.5	5.3	5.9	5.8							
Transport and communication	5.6	10.5	10.5	11.1							
Education, cultural and recreation and services	11.2	8.4	7.6	7.5							
Health care and medical services	5.2	7.4	8.4	8.7	***						
	3.1	2.1	2.3	2.5							
Miscellaneous goods and services	3.1	2.1	2.3	2.5							

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gini coefficient <sup>(3)</sup>		0.481	0.477	0.474	0.473	0.469	0.462	0.465	0.467	0.468	0.465
Rural areas coverage rate of population with access to tap water (%)	55.2	71.2	72.1	74.6	76.4	79.0					
City coverage rate of population with access to gas (%)	45.4	92.0	92.4	93.2	94.3	94.6	95.3	95.8	96.3	96.7	97.3
Per capita area of parks and green land (m²)	3.7	11.2	11.8	12.3	12.6	13.1	13.4	13.7	14.0	14.1	14.4
Share of public expenditure on health (%) <sup>(4)</sup>	4.6	4.8	5.0	5.2	5.3	5.5	6.0	6.2	6.4	6.6	
Culture, education and health											
Share of consumption expenditure of education, cultural and recreation and services (%)					10.6	10.6	11.0	11.2	11.4	11.2	11.7
Urban households	13.4	12.1	12.2	12.2	12.7						
Rural households	11.2	8.4	7.6	7.5	7.3						
Enrollment by level of education (1000	person	s)									
Higher education	5561	22,318	23,085	23,913	24,681	25,477	26,253	26,958	27,536	28,310	30,315
Regular secondary schools	62,563	52,793	50,668	47,631	44,401	43,846	43,120	43,294	68,166	70,278	72,412
Vocational secondary schools	5032	7298	6836	6249	5353	4736	4404	4169	4143	4013	4068
Primary schools	130,133	99,407	99,264	96,959	93,605	94,511	96,922	99,130	100,937	103,393	105,612
Special schools	378	426	399	379	368	395	442	492	579	666	795
Pre-primary education	22,442	29,767	34,244	36,858	38,947	40,507	42,648	44,139	46,001	46,564	47,139
Proportion of R&D expenditure to GDP (%)	0.89	1.71	1.78	1.91	1.99	2.02	2.06	2.10	2.12	2.14	2.19
Full-Time equivalent of R&D personnel (1000 persons-year)	922	2554	2883	3247	3533	3711	3759	3878	4034	4381	4610
Average years of schooling (Years)		9.1	9.1	9.2	9.3	9.3	9.4	9.4	9.6	9.6	
Proportion of population 25 years and over with completed tertiary education, %	4.3	8.8									
Number of PCT Granted (Pieces)(5)		12,917	17,473	19,926	22,924	26,169	30,548	44,992	50,674	55,242	60,993
Licensed (assistant) doctors (per 1000 inhabitants)	1.7	1.8	1.8	1.9	2.1	2.1	2.2	2.3	2.4	2.6	2.7
Hospital beds (per 1000 inhabitants) <sup>(6)</sup>	2.4	3.3	3.5	3.9	4.5	4.9	5.1	5.4	5.7	6.0	6.4

- a) Ministry of Education of the People's Republic of China, Educational Statistics Yearbooks of China 2016–2020.
- b) National Health Commission of the People's Republic of China, China Health Statistical Yearbooks 2017–2020.
- c) Ministry of Housing and Urban-Rural Development of the People's Republic of China, Annual Statistical Reports 2000-2019.
- d) National Bureau of Statistics of China, China's Household Survey 2013–2020; Urban Household Survey in China 2000–2012; and Rural Household Survey in China 2000–2012.
- e) The People's Bank of China, Almanac of China's Finance and Banking 2000–2019.
- f) National Bureau of Statistics of China, Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.
- g) World Bank WDI database.

- (1) There's no data since 2015.
- (2) The data are from World Bank WDI database.
- (3) Data of Gini coefficient are based on per capita annual disposable income.
- (4) Total expenditure on health as percentage of GDP.
- (5) Refers to number of PCT international patent applications granted.
- (6) Refers to number of beds of hospitals and health care per 1000 population.

Table 6.2.5 — Selected Data on People's Living Standard — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Income and expenditure										
Household per capita disposable income (ZAR)	6364		42,905				53,661			
Household's per capita living consumption expenditure(1)	7546		34,897				40,874			
Population below international poverty line (1,25\$ a day PPP) as % of total population	17.0		7.4							
Percentage share of income or consumption by 20% subgroups of population			100				100			
Lowest 20%			4.4				4.5			
Second 20%			6.9				7.2			
Third 20%			9.8				10.1			
Fourth 20%			17.8				17.6			
Highest 20%			61.0				60.5			
Income quintile ratio			28.5				24.9			
Living quality										
Composition of household's consumption expenditure (%)	100		100		***	***	100		•••	
Food and non-alcoholic beverages <sup>(2)</sup>	27.7		12.8				12.9			
Alcoholic beverages and tobacco	2.6		1.1				0.9			
Clothing and footwear	5.4		4.5				4.8			
Housing, water, electricity, gas and other fuels	13.6		32.0		***		32.6			
Furnishings and household equipment	8.7		5.1				5.2			
Health	1.5		1.4				0.9			
Transport	13.3		17.1				16.3			
Communication	3.4		2.8				3.4			
Recreation and culture	3.7		3.0				3.8			
Education	2.4		2.7				2.5			
Restaurants and hotels	3.6		2.4				2.1			
Miscellaneous goods and services	14.2		14.7				14.7			
Other unclassified expenses	0.0		0.1				0.1			
Gini index (per capita expenditure excluding taxes)	0.650		0.650				0.639			
Literacy rate (%) <sup>(3)</sup>		18.7	17.5	16.2	15.8	15.4	15.0	14.2	13.7	13.0
Adult literacy <sup>(4)</sup>		5.9	6.0	5.5	5.5	5.1	5.0	4.2	4.4	4.2
Classification of dwellings by number of rooms (%) <sup>(5)</sup>										
1 room		18.5	17.8	18.9	19.3	19.6	21.6	21.3	21.3	21.0
2 rooms		10.8	10.3	9.6	9.2	9.0	9.2	9.2	9.0	8.6
3 rooms		12.1	12.1	11.1	11.4	10.9	11.3	11.1	11.6	11.7
4 rooms or more	***	58.6	59.8	60.5	60.1	60.5	58.0	58.4	58.1	58.8
Classification of dwellings tenure <sup>(6)</sup>		67.3	61.4				•••			
Private Property <sup>(7)</sup>		73.2	66.9	69.0	70.5	69.5	63.6	63.0	63.4	
Private property	***	58.1			***		***			
State-owned		10.9								
Municipal property		20.6								
Other  Classification of dwellings by equipment (%)		10.4								
Piped water within the dwelling		42.8	44.6	44.6	45.4	46.4	46.0	46.6	46.7	46.3
Piped/tap water within the dwelling or in the yard		71.9	73.4	72.1	72.1	73.3	73.0	73.4	74.2	74.9
Sewerage within the dwelling <sup>(5)</sup>		60.2	59.2	59.7	59.2	59.9	60.4	60.6	61.0	61.5

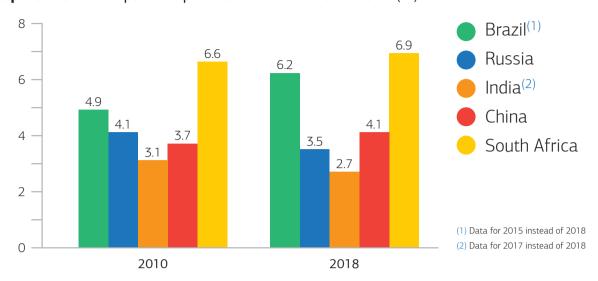
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
City coverage rate of population with access to tap water $(\%)^{(8)}$		68.7	70.3	69.5	70.9	71.9	71.1	71.3	72.3	73.0
Culture, education and health										
Household expenditure on education, culture and entertainment (%)	6.1									
Expenditure on education as percentage of total budget (%)	26.0	19.5	20.3							
Proportion of R&D expenditure to GDP (%)		0.74	0.73	0.73	0.72	0.77	0.80	0.82	0.83	
Full-Time equivalent of R&D personnel		29,486.4	30,978.4	35,050.3	37,956.5	38,465	41,054.5	42,533	44,259.3	
Proportion of population 25 years and over with completed tertiary education, %		6.1	6.2	6.4	6.9					
Number of PCT Granted (Pieces)										
Expenditure for medical and health care (%)	14.3	11.5	11.8							
Physicians (per 1000 inhabitants) <sup>(9)</sup>		0.4								
Hospital beds (per 1000 inhabitants) <sup>(9)</sup>		2.0								

- a) Statistics South Africa, General Household Survey 2002–2009; Income and Expenditure Survey 2000; Income and Expenditure Survey 2005–2006; District Health Information System 2010; and South African Health Review (various issues).
- b) National Treasury, Budget Reviews (various issues).

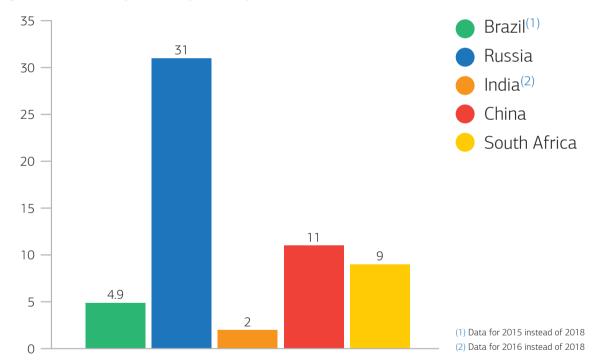
- (1) Excludes rental estimations for owner occupied dwelling units.
- (2) Adjusted for CPI.
- (3) Individuals over the age of 20 years who have not completed primary education (equivalent to grade 7 education). Figures were revised.
- (4) Individuals who were unable to read or who could not write a letter in at least one language. Figures were revised.
- (5) Figures where revised using the question which ask if the household toilet is connected to public sewage system.
- (6) Fully or partially owned.
- (7) Refers to fully or partially owned dwelling units.
- (8) Piped or tap water in the house or yard, for total population, not only cities.
- (9) Per 1000 uninsured population.

**Graph 6.1** Share of public expenditure on health to GDP (%)

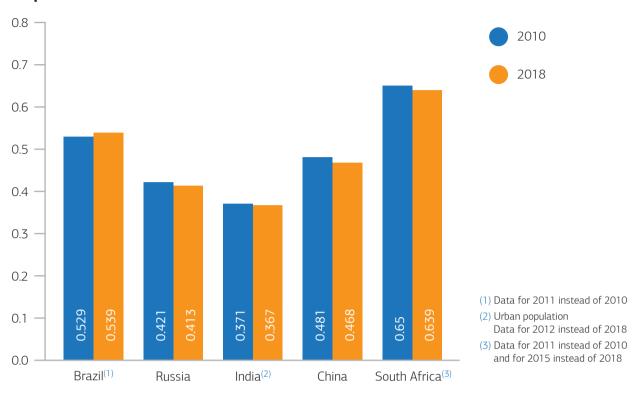
**Graph 6.2** Share of public expenditure on education to GDP (%)



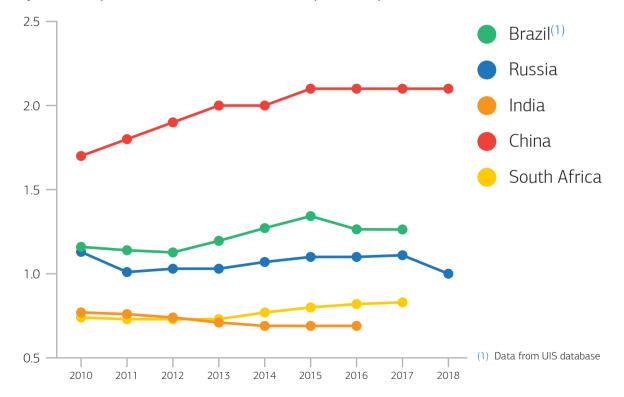
Graph 6.3 Ownership of cars per 100 persons in 2018



Graph 6.4 Gini coefficient



Graph 6.5 Proportion of Research and Development Expenditure to GDP (%)



# **Explanatory Notes**

**Population below international poverty line (1.25\$ a day PPP) as % of total population** — percentage of the population living on less than 1.25\$ a day at 2005 international prices (according to Purchasing Power Parity exchange rates).

**Percentage share of income or consumption by 20% subgroups of population** — share that accrues to 20% subgroupes (quintiles) of population.

**Income quintile ratio** — ratio of the average income (or consumption) of the highest (richest) 20% of population to the average income (or consumption) of the lowest (poorest) 20% of population.

**Proportion of population 25 years and over with completed tertiary education** — percentage share of the population aged 25 years and over with completed tertiary education (according to ISCED 5 or 6) to the total population.

# Brazil

**Household's per capita disposible income (R\$)** — Household's gross disposable income divided by the estimeted resident population on 1<sup>st</sup> July of the respective year.

**Household's per capita savings balance (R\$)** — Household's gross savings divided by the estimeted resident population on 1<sup>st</sup> July of the respective year.

Wage — it was considered the monthly wage usually received in the reference month (September of each year).

- a) **Employees:** the wage was the gross monthly income that would normally be entitled to the whole working month and, when the income was variable, it was the average monthly income for the month of reference of the survey year. It were not included 13th salary (14th salary and 15th salary etc.) and profit-sharing paid by the enterprise to their employees. Also the amount received in benefits (housing, food, clothing, transport, meal or food stamps etc.) was not included in the calculation of the income of the employees.
- b) **Employers and own account:** the income was the withdrawal usually made monthly or, when the gains was variable, the average monthly withdrawal for the month of reference of the survey year. The withdrawal was the gain (gross income less expense incurred with the enterprise, such as paying employees, raw material, electricity, telephones etc.). It was not included the value of the production of the enterprise used for own consumption.

**Research and development expenditure (% of GDP)** — The expenditure on R&D activities on the surveyed units typically results from their own production, with estimatives based on the sum of cost approach (intermediate consumption, employees´ compensation, consumption of fixed capital). The total expenditure on R&D activities is complemented with thoses units that produce for the market. The units can be public or private for own production, while R&D market producers are all private.

Average **years of schooling (Year)** refers to the average of total years of academic education by adults aged 15 years and above (including general education and adult academic education, excluding various non-academic education).

Explanatory note: this indicator is one of the most important indicators to reflect the educational attainment or national quality in a country or a region.

Formula: Mean years of schooling (of adults) = (sum of years of academic educational years by adults aged 15 years and above/population aged 15 years and above) × 100%, of which, the criteria of various educational levels converted into years of shooling is: never go to school = 0 year; primary school = 6 years; junior middle school = 9 years; senior middle school = 12 years; tertiary education = 16 years.

### Russia

**Growth rate (Index) of real wages** — relative indicator which is calculated by dividing the indices of accrued wage by consumer price indices for respective period of time. Average nominal accrued wage are compiled by dividing accrued wages fund of employees by average annual payroll number of employees. The accrued wages fund of employees includes sums of payments added to employed in the monetary and not monetary forms for fulfilled and unfinished time, the compensatory payments connected with working conditions, surcharges and extra charges, bonuses, occasional incentive payments and also payments of meal and residing, having regular character. Benefits granted to the employees from the state social extra-budget funds are not included in the wages fund.

**Proportion of R&D expenditure to GDP (%)** — proportion of internal research and development expenditure to GDP.

**Number of physicians** include all doctors with the higher medical education engaged in the treatment and sanitary organizations, social security establishments, research institutes policlinics, pre-school establishments, schools, orphanges and others.

Hospital beds are the beds equipped with the required appliances and ready to receive patients.

**Area of parks and green land** includes area of the common using green plantations (parks, gardens, squares and parkways), forest parks and city gardens, area of gardening of local roads.

**Gini index** characterizes the level of deviation of the actual distribution of the income of population from the line of the even distribution.

**School life expectancy** (according to the UNESCO methodology) — number of years a person of school entrance age can expect to spend within the specified level of education.

**Population below international poverty line (1.9\$ a day PPP) as % of total population** — percentage of the population living on less than 1.9\$ a day at 2011 international prices (according to Purchasing Power Parity exchange rates).

# India

**Gini coefficient:** Gini Coefficient in case of India is calculated by NITI Aayog of India on the basis of Consumer Expenditure data (expenditure is used as proxy for income to meausre inequality) compiled by National Sample Survey Office. The Gini Coefficient is produced both for uniform reference period and mixed reference period. The information included is based on mixed reference period i.e. different recall periods for different items.

**Tertiary education:** According to Indian Standard Classification of Education (InSCED) 2014, Ministry of Human Resource Development, Department of Higher Education, Government of India, definition of Tertiary Education is as follows:

Tertiary education builds on senior secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education.

In NSS surveys on Employment and Unemployment and on Education 'tertiary education' is not defined. However, for the purpose of this document, those with general educational level 'graduate and above' has been considered as having completed 'tertiary education'.

### China

**Government appropriation for education** refers to state budgetary fund for education, taxes and fees collected by governments at all levels that are used for education purpose, education fund for enterprise-run schools, income from school-run enterprises, workstudy programme and social services that are used for education purpose.

**Percentage of urban population with Access to Gas** refers to the ratio of the urban population with access to gas to the total urban population at the end of the reference period.

**Urban green areas per Capita** refers to the ratio of the urban green areas to the total urban population. Area of Urban Green Areas refers to the total area occupied for green projects at the end of the reference period, including park green land, protection green land, green land attached to institutions and other green land.

**Regular institutions of higher education** refer to educational establishments set up according to the government evaluation and approval procedures, recruiting graduates from senior secondary schools as the main target by National Matriculation TEST. They include full-time universities, colleges, institutions of higher professional education, institutions of higher vocational education and others (non-university tertiary, branch schools and undergraduate classes), including total enrollment in full undergraduate courses and in specialized courses.

**Regular secondary schools** are classified into regular senior secondary schools and junior secondary schools, including: Regular Senior Secondary School referring to education establishment providing senior secondary education service to graduates of junior secondary school; Regular Junior Secondary School referring to education establishment providing fundamental secondary education service to graduates of primary school;

**Vocational secondary schools** include vocational junior secondary school and vocational senior secondary school, referring to education establishment ratified by education authority at county level or above to enroll graduates of primary school and junior secondary school and provide junior or senior vocational education service.

**Regular primary schools** refer to education establishments ratified by education authority at county level or above to children of school age and provide primary education service.

**Special schools** refer to regular or vocational primary or secondary education institutions enrolling children with physical or intellectual disabilities and other special children and teenagers that have demand for special education.

**Pre-primary education institutions** include kindergarten and preschool class. Kindergarten enrolls three-year-old (and above) preschool children and provides care and education service. Establishment of kindergarten shall be approved by education authority at county level or above or town government, and shall be registered in file. In those regions without the resources of providing three year preschool education to preschool children, one-year preschool class can be set up to provide one-year preschool education service to preschool children.

**Physicians** refer to licensed (assistant) doctors. Licensed assistant doctors refer to the medical workers who have obtained the licenses of qualified (assistant) doctors and are employed in medical treatment, disease prevention or healthcare institutions, excluding the licensed (assistant) doctors engaged in management job. The classification of licensed (assistant) doctors is clinician, Chinese medicine, dentist and public health.

**Number of licensed (assistant) doctors per 1000 Population.** The formula is: Number of Licensed (Assistant) Doctors per 1000 Population = (Number of Licensed Doctors + Number of Licensed Assistant Doctors) / Population × 1000. The population is the figure of household registration from the Ministry of Public Security.

**Number of beds of hospitals and health care per 1000 Population** = (Number of Beds of Hospitals + Number of Beds of Health Care)/Population × 1000. The population is the figure of household registration from the Ministry of Public Security.

### South Africa

Documents on higher education include: Higher diploma, Post higher diploma, Bachelors Degree, Honours Degree, Higher Degree.

# Resources and Environment



Table 7.1 — Summary of Resources and Environment on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total water consumption	ı (Million	m³)		_		_					
Brazil					29,453	31,140	30,600	34,104			
Russia <sup>(1)</sup>	66,924	59,455	59,544	56,864	53,551	55,973	54,538	54,636	53,471	52,964	51,163
India											
China <sup>(2)</sup>		602,200	610,720	613,120	618,340	609,490	610,320	604,020	604,340	601,550	602,120
South Africa			***		***						
Utilization of forest area	a (1000 he	ectares)									
Brazil	545,943	519,522		463,000		493,500	495,700			499,525	498,073
Russia <sup>(3)</sup>	871,539	870,981	871,176	871,814	871,830	871,838	870,722	870,706	870,714	870,745	870,766
India <sup>(4)</sup>	69,843	70,028	70,035	70,007	69,790	70,167 <sup>(5)</sup>	70,167 <sup>(5)</sup>		70,827		71,224
China	174,909	207,687	207,687	207,687	207,687	220,446	220,446	220,446	220,446	220,446	220,446
South Africa	1331	1271	1273								
Utilization of perennial of	rop area	(1000 hed	tares)								
Brazil	6245	6315	6317	6191	6028	5832	5781	5767			
Russia <sup>(3)</sup>	1864	1800	1802	1804	1811	1827	1901	1901	1910	1914	1920
India <sup>(6)</sup>		9655	9352	9665	9946	9244	9516				
China <sup>(7)</sup>	11,000	14,500	15,200	15,800	16,000	16,020	16,000				
South Africa	959	787	781		***		***		***		***
Carbon dioxide emission	s per cap	ta (kg)									
Brazil	9952	5222	5140	4774	5123	4969	***		***		***
Russia <sup>(8)</sup>	6506	5985	6588	6733	6777	6271	6839	6679	6916	7159	
India <sup>(9)</sup>	940	1450	1500	1580	1490	1560					
China											
South Africa	8.4	9.3	9.2	9.0	8.8	8.0	7.7				
Sulfur dioxide emissions	per capit	a									
Brazil (g/m³) <sup>(10)</sup>	82	48	***		***						
Russia (kg) <sup>(11)</sup>	37	31	30	30	29	28	28	27	25	25	
India (kg)	***				•••				***		
China (kg) <sup>(12)</sup>	16	16	17	16	15	14	14		***		
South Africa (kg)	6.4	8.0	7.7	7.8	8.0	8.1	***	***	***		***
Proportion of population											
Brazil <sup>(13)</sup>	91.2	91.8	91.9	92.0	92.0	92.1	92.2	92.2	92.3		
Russia <sup>(14)</sup>	74.6	75.3	75.4	75.5	75.6	75.7	75.8	75.9	76.0		
India <sup>(15)</sup>									36.5	37.8	40.5
China	80.4	88.5	89.2	89.9	90.5	91.1	91.7	92.3	92.8		
South Africa <sup>(13)</sup>	90.1	87.3	86.5	85.7	85.0	84.2	83.4	82.6	81.9		

### Brazil

- a) Global forests resources assessment FRA 2015.
- b) Brazilian Institute of Geography and Statistics IBGE, Agricultural Municipal Production Survey.
- c) Second National Communication of Brazil to the United Nations Framework Convention on Climate Change, v. 1, part II.
- d) National inventory of anthropogenic emissions by sources and removals by sinks of Greenhouse gases. Annex-Estimation of Emissions of Greenhouse Gases by Gas and Sector, 1990 to 2005. Brasilia, 2010.
- e) IBGE, Directorate of Surveys, Population Projection of Brazil by sex and age: 1980–2050. Brasilia, 2010.
- f) IBGE, Sustainable Development Indicators Brazil.
- g) Ministry of Science, Technology, Innovation and Communication.
- h) FAO Database.
- i) United Nations Global SDG Database.

#### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Service for State Registration, Cadastre and Cartography.
- c) Federal Service for Hydrometeorology and Environmental Monitoring of the Russian Federation (Rosgidromet).
- d) Federal Agency for Water Resources.
- e) United Nations Global SDG Database.
- f) Federal Service for Supervision of Natural Resources.

### India

- a) Ministry of Agriculture, Directorate of Economics & Statistics, Land Use Statistics At a Glance.
- b) Ministry of Environment & Forests, Forest Survey of India, India State of Forest Report (various issues).
- c) International Energy Agency, Key World Energy Statistics (various issues).
- d) Ministry of Jal Shakti, DWS for Rural and MIS, NSS, Ministry of Statistics and PI for Urban/Periodicity: Annual for Rural and 3 years for Urban.

### China

- a) National Bureau of Statistics of China, China Statistical Yearbook 2020.
- b) Ministry of Ecology and Environment of the People's Republic of China.
- c) World Bank WDI Database.
- d) United National Global SDG Database.

### South Africa

- a) Millennium indicators, UN.
- b) United Nations Global SDG Database.

### **Footnotes**

### Brazil

- (10) Data in concentration (g/m³) for some metropolitan areas (Recife, Salvador-Camaçari, Belo Horizonte, Vitória, Rio de Janeiro, São Paulo, Curitiba, Porto Alegre and Distrito Federal) no weighting by population.
- (13) Urban area. Data are from United Nations Global SDG Database.

### Russia

- (1) Total Freshwater Use.
- (3) Year-end data.
- (8) By data of Rosgidromet. Data on emissions of carbon dioxide, with the account of land use, changing in land use and forestry, are taken from the Russian national inventory of antropogenic emissions by sources and absorption by absorbents of greenhouse gases not regulated by Montreal Protocol for 1990–2014 years.
- (11) Emissions from stationary sources.
- (14) Data are from United Nations Global SDG Database.

# India

- (5) The data pertains to 2015 assessment. The data for the entire country was procured from National Remote Sensing Centre (NRSC), Hyderabad in digital format corresponding to the period Oct 2013–Feb 2014.
- (9) Per Capita Carbon Dioxide Emission pertains to emission by fuel combustion only. Emission are calculated using the IEA's energy balance and the Revised 2006 IPCC Guidelines. The figure including Land Use Change & Forestry was 0.7 MT in 2000 and 1.08 MT in 2007 as per 'India Second National Communication to the United Nations Framework Convention on Climate Change', Ministry of Environment & Forests.
- (6) Data relates to agriculture year (i.e. July of the year indicated in the table to June next Year) and pertains to perennial horticultural crops.
- (4) Data (except for 2013 and 2014) relates to agricultural year (i.e. July of the year indicated in the table to June next year) and is based on Land Use Statistics. Information for 2013 and 2014 are based on Estimation by Forest Survey of India. 2019 data is from India State of Forest Report.
- (15) Percentage of Population getting safe and adequate drinking water within premises through Pipe Water Supply (PWS)

### China

- (2) Total freshwater use.
- (7) Data are from World Bank WDI Database, calculating by using "permanent cropland (% of land area)" multiply "land area of China".
- (12) Data of sulfur dioxide emissions per capita refer to the ratio of the volume of sulphur dioxide emission to the average population of the year.

### **South Africa**

(13) Urban area. Data are from United Nations Global SDG Database.

**Table 7.2.1** — Selected Data on Resources and Environment — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Natural resources										
Fresh water resources — Total (m³/s) <sup>(1)</sup>	247,889	220,294	246,432	231,916	231,916	235,720	235,720			
Number of protected areas				313	320					
Area of protected areas (1000 hectares)				75,058	76,006		79,600	79,300	79,365	
Main mineral reserves										
Crude oil (million tons)	1751	1925	2034	2070	2101	2189	1758			
National gas (million m³)	360,782	823,276	905,537	918,115	838,764	859,268	745,473			
Limestone (million)	45,459,758									
Ornamental stone (million)										
Iron (million)	11,275,749	20,359,000	29,604,000	19,948,000	23,126,000	22,565,000				
Magnesia and dolomite (million)	3,474,339	298,626	240,777	239,342	235,400	390,000		***		
Coal (million)	7,378,006	2,484,000	2,392,000	2,154,000	3,232,000	2,771,000				
Clays (million)	1805,011									
Mica (million) <sup>(2)</sup>	104	4000	< 4000	< 5000	4000	4000				
Kaolin (million)	2467,966	7,300,000	7,200,000	7,353,000	7,068,000	7,056,000				
Industrial sands (million)	1608									
Aluminum (bauxite) (million)	1,784,301	2,600,000	5,670,000	5,900,000	7,140,000	2,600,000				
Feldspar, leucite and nepheline		317	317	317	317	317				
Syenite (million)	498,278									
Gypsum (million)	888,639	228,411	230,000	288,490	291,807	400,000				
Talc (million)	57,031	227,000	46,243	44,834	44,010	52,133				
Salt (million)		21,653	21,633	21,632	21,630					
Other ornamental stone (million)										
Proportion of wastewater safely treated (%)	52.5	67.0	67.9	68.8	68.5	70.3	73.4			
The proportion of regularly collected urban solid waste in total solid waste (%)		89.0	89.7	90.2	90.4	90.7	90.8			

- a) Instituto Chico Mendes de Conservação da Biodiversidade ICMbio. Available in: http://www.icmbio.gov.br/portal/images/stories/servicos/geoprocessamento/DCOL/dados\_tabulares/Dados\_Gerais\_das\_UC\_fev\_2015.pdf Accessed March 2015.
- b) Water National Agency ANA, Conjuncture of Water Resources in Brazil Report 2013. Available in: http://arquivos.ana.gov.br/institucional/spr/conjuntura/PDFs%20agregados/ANA\_Conjuntura\_Recursos\_Hidricos\_Brasil\_capitulos\_pdf
- c) Ministry of Mines and Energy, National Department of Mineral Production DNPM and the National Petroleum Agency. Available in: http://www.dnpm.gov.br/dnpm/sumarios/sumario-executivo-2014/view Accessed March 2015.
- d) Ministry of Environment, National Register of Protected Areas. Available in: www.mma.gov.br/cadastro\_uc
- e) National Petroleum Agency. Available in: http://www.anp.gov.br/wwwanp/images/publicacoes/Anuario\_Estatistico\_ANP\_2016.pdf

- (1) Historical average 214,361 is the best information available until 2012.
- (2) In 2007 the data of main mineral reserve of mica was qualitative and was classified as plentiful.

**Table 7.2.2** — Selected Data on Resources and Environment — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Natural resources											
Fresh water resources (million m³)(1)	4,523,000	4,331,700	4,398,700	4,217,900	4,614,600	4,623,000	4,647,900	4,441,000	4,681,500	4,622,600	4,290,900
Annual flows (million m³)(2)	61,771	53,455	53,473	51,594	49,320	50,589	48,721	48,722	47,819	47,407	46,419
Number of protected areas <sup>(3)</sup>	135	141	143	144	146	12,942	12,993	11,935	11,938	11,864	11,822
Area of protected areas (1000 hectares) <sup>(3)</sup>	40,057	41,567	43,007	43,239	45,255	202,290	206,623	211,696	212,044	237,747	238,789
Proportion of important sites for biodiversity that are covered by protected areas to total area (%)						11.8	12.1	12.4	12.4	13.9	13.9
Main mineral reserves <sup>(4)</sup>											
Crude oil (billion tons)	24	28	29	29	29	29	30	30	30	30	
Natural gas (trillion m³)	64	68	68	69	69	70	70	69	73	73	
Coal (billion tons)	277	273	273	274	274	274	275	274	275	275	
Iron ore (billion tons)	101	99	99	101	106	109	110	110	110	113	
Manganese ore (million tons)	155	232	232	232	230	230	230	230	230	284	
Copper (million tons)	85	90	93	91	91	92	98	97	98	99	
Lead (million tons)	20	20	20	19	19	19	18	18	18	18	
Zinc (million tons)	61	61	61	60	60	60	60	60	59	59	***
Bauxite (million tons)	1540	1437	1431	1427	1421	1414	1407	1400	1393	1388	***
Tungsten (1000 tons)	1717	1481	1470	1568	1571	1557	1335	1332	1330	1328	
Tin (1000 tons)	2302	2262	2222	2168	2168	2167	2165	2164	2162	2153	
Antimony (1000 tons)	296	315	317	318	312	344	348	368	450	437	
Gold (1000 tons)	8.6	12.0	13.0	13.0	13.0	13.0	14.0	15.0	15.0	15.0	
Silver (1000 tons)	110	112	114	116	121	122	119	123	131	123	
Graphite mineral (million tons)	88.2	88.1	88.1	88.1	88.2	90.4	101	101	101	101	
Emissions per capita of nitrogen oxides (kg) <sup>(5)</sup>	12	13	13	14	13	12	12	12	13	12	
Emissions per capita of carbon monoxide (kg) <sup>(6)</sup>	34	39	40	42	37	34	33	33	34	33	
Expenditure on environment protection as % of GDP (%)	1.5	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Proportion of wastewater treated (%)	64	66	67	66	65	66	66	66	68	67	67
Urban solid waste collected (million m³)(7)	152	235	241	256	261	263	267	269	274	275	304
Emission of sulfur dioxide (percentage change from the previous year) <sup>(6)</sup>	-1.8	0.3	-1.0	0.0	-3.9	-3.3	1.6	-2.1	-7.7	-2.3	

- a) Federal States Statistics Service of the Russian Federation.
- b) Federal Agency for Water Resources.
- c) Federal Agency for Subsoil Usage (Rosnedra) of the Russian Federation.
- d) Federal Service for Hydrometeorology and Environmental Monitoring of the Russian Federation (Rosgidromet).
- e) Ministry of Natural Resources and Environment of the Russian Federation.
- f) Federal Service for Supervision of Natural Resources.

- (1) By the data of Rosgidromet. The data on total volume of a river drain (flows).
- (2) By the data of the Federal Agency for Water Resources.
- (3) Data on state strict nature reserves and national parks; since 2014 data on selected categories of the specially protected natural areas of federal, regional and local significance.
- (4) By the data of Ministry of Natural Resources and Environment of the Russian Federation.
- (5) The data on emissions of nitrogen oxide converted to NO2 from stationary sources.
- (6) Emissions from stationary sources.
- (7) Data on removal of solid domestic waste from the territories of urban settlements.

**Table 7.2.3** — Selected Data on Resources and Environment — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Natural resources											
Fresh utilizable water resources <sup>(1)</sup>											
Total (billion m³)	1123	1121	1123	1123	1123	1123	1123	1123	1123	1123	
Surface (billion m³)	690	690	690	690	690	690	690	690	690	690	
Ground (billion m³)	433	431	433	433	433	433	433	433	433	433	
Number of protected areas <sup>(2)(3)</sup>	574	670	677	693	717	745	759	763	769	771	
National parks	89	102	102	103	102	103	103	103	103	104	101
Wildlife sanctuaries	485	516	518	526	532	535	541	543	544	544	553
All protected areas (km²)(2)(3)	146,666	155,530	156,105	157,468	159,887	161,082	161,975	162,044	162,092	162,099	160,321
National parks (km²)	37,803	40,284	40,284	40,500	40,500	40,500	40,500	40,500	40,500	40,501	40,564
Wildlife sanctuaries (km²)	108,863	113,843	113,999	114,933	117,124	118,291	118,866	118,918	118,932	118,932	119,757
Proportion of important sites for biodiversity that are covered by protected areas to total area (%) <sup>(4)</sup>							48		48		49
Main mineral reserves <sup>(5)</sup>											
Crude oil (million tons) <sup>(6)</sup>	703	684	660	652	652	647	636	621 <sup>(7)</sup>	604	614	
Natural gas (billion m³)	760	1098	1142	1167	1172	1199	1252	1227 <sup>(7)</sup>	1290	1241	
Coal (billion tons)		277	286	294	299	301	307	309	315	319	
Iron ore & Cone (Hematite + Magnetite) (Million tons)	6312	8116			6642		5495 <sup>(7)</sup>				
Manganese ore (1000 tons)	104,541	141,977			95,871		93,475 <sup>(7)</sup>				
Copper Ore (1000 tons)	289,578	394,372			237,573		207,767 <sup>(7)</sup>				
Copper Metal (1000 tons)	3012	4768			2997		2735 <sup>(7)</sup>				
Lead metal (1000 tons)	1337	2245			2115		2482 <sup>(7)</sup>				
Zinc metal (1000 tons)	6412	12,453			10,893		9999 <sup>(7)</sup>				
Lead and zinc Ore (1000 tons)	100,830	108,979			102,795		106,116 <sup>(7)</sup>				
Bauxite (1000 tons)	524,098	592,938			830,195		656,422 <sup>(7)</sup>				
Gold Ore (Primary) (1000 tons)	10,085	24,125			14,616		17,228 <sup>(7)</sup>				
Gold Metal (Primary) (tons)	59	111			72		70 <sup>(7)</sup>				
Silver (ore) (1000 tons)	91,983	187,559			118,281		150,444 <sup>(7)</sup>				
Silver Metal (1000 tons)	3	8			8		7 <sup>(7)</sup>				
Graphite (1000 tons)	4796	8032			8469		7961 <sup>(7)</sup>				

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Expenditure on environment (million ₹) <sup>(8)</sup>	1624	4659	4654	3881	4164 <sup>(9)</sup>	5520	7637 <sup>(10)</sup>	4986 <sup>(11)</sup>			
Expenditure on environment as % of GDP (%)	0.007	0.006	0.005	0.004	0.004	0.004	0.006	0.003			
Proportion of wastewater safely treated (%)											
The proportion of regularly collected urban solid waste in total solid waste (%) <sup>(12)</sup>					19.4	27.8	45.7				
Water consumption (m³) per million USD of GDP											
Reduction rate of water usage per unit of GDP (%)											
Reduction rate of sulfur dioxide emission (%)											

- a) Ministry of Water Resources, Central Water Commission.
- b) Ministry of Environment & Forests, Wildlife Institute of India, National Wildlife Database.
- c) Ministry of Petroleum & Natural Gas, Indian Petroleum & Natural Gas Statistics.
- d) Ministry of Mines, Indian Bureau of Mines, National Mineral Inventory At a Glance and National Mineral Inventory An Overview (various issues).
- e) The data has been updated as on July 2019 (http://www.wiienvis.nic.in/Database/Protected\_Area\_854.aspx).
- f) Ministry of Statistics & Programme Implementation, Central Statistics Office, Energy Statistics (various issues Table 1.1 & Table 1.2).
- g) https://ibm.gov.in/writereaddata/files/063,020,141,72,804reserves142,010.pdf
- h) https://mines.gov.in/writereaddata/UploadFile/Mines\_AR\_2015-16\_English.pdf ANNEX-2.4
- i) https://mines.gov.in/writereaddata/UploadFile/Mines\_AR\_2017-18\_English.pdf ANNEX-2.4

- (1) The data are constant estimates based on studies conducted by Central Water Commission on Reassessment of water resources.
- (2) Includes both terrestrial and marine protected areas.
- (3) Includes National Parks, Wild Life Sanctuaries, Conservation Reserves & Community Reserves.
- (4) Protected area as percentage of total geographical area.
- (5) As on 31st March/1st April.
- (6) Data from 2009 onwards may not be strictly comparable with earlier years due to change in nomenclature, rationalisation and classification of reporting.
- (7) Provisional data.
- (8) Expenditure on environment is as per financial year (i.e. April of the year indicated in the table to March next year) and GDP estimate is based on current market price.
- (9) Expenditure on Environment data for 2013 pertains to expenditure as on 31st March, 2014.
- (10) Expenditure on Environment data for 2015 pertains to expenditure as on 31st January, 2016 as per sanctions.
- (11) Expenditure on Environment data for 2016 pertains to expenditure as on 31st December, 2016.
- (12) Year 2014 stands for 2013/2014; Year 2015 stands for 2014/2015; Year 2016 stands for 2015/2016.

**Table 7.2.4** — Selected Data on Resources and Environment — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Natural resources										
Fresh water resources (million m³)	2,770,080	3,090,641	2,325,670	2,952,879	2,795,786	2,726,690	2,796,260	3,246,640	2,876,120	2,904,100
Total water consumption (Million m³)		602,200	610,720	613,120	618,340	609,490	610,320	604,020	604,340	602,120
Water Usage per unit of GDP (m³)(1)		188	135	126	118	108	101			
Number of protected areas	1227	2588	2640	2669	2697	2729	2740	2750	2750	
Area of protected areas (1000 hectares)	98,210	149,441	149,711	149,787	146,310	146,992	147,028	147,332	147,167	
Main mineral reserves										
Crude oil (1000 tons)		3,174,353	3,239,679	3,332,583	3,367,328	3,433,350	3,496,107	3,501,203		
Natural gas (million m³)	***	3,779,320	4,020,640	4,378,988	4,642,884	4,945,178	5,193,950	5,436,546		
Coal (million tons)		279,390	215,790	229,886	236,290	239,993	244,010	249,226		
Iron ore (million tons)		22,200	19,280	19,477	19,917	20,656	20,760	20,120		
Manganese ore (1000 tons)		195,156	182,409	209,382	215,477	214,154	276,262	310,336		
Copper (1000 tons)		28,707	28,124	27,344	27,515	28,364	27,218	26,210		
Lead (1000 tons)		12,720	12,917	14,547	15,779	17,208	17,388	18,086		
Zinc (1000 tons)		32,514	31,244	34,907	37,662	40,341	41,027	44,391		
Bauxite (1000 tons)	***	897,327	1,050,643	905,900	983,235	983,219	997,582	1,009,553		
Nickel (1000 tons)	***	3121	2720	2609	2535	2530	2873	2774		
Tungsten (1000 tons)		2208	1567	2338	2349	2333	2331	2432		
Tin (1000 tons)		1382	1388	1175	1165	1106	1092	1164		
Antimony (1000 tons)		710	558	450	460	532	479	521		
Gold (1000 tons)		2	2	2	2	2	2	2		
Silver (1000 tons)		36	36	37	37	39	39	41		
Graphite mineral (1000 tons)		54,123	62,299	48,794	53,477	41,290	55,164	73,215		
Investment in the treatment of environment pollution as % of GDP (%)		1.85	1.46	1.53	1.52	1.49	1.28	1.24	1.15	
Proportion of regularly collected urban s	olid was	te in tota	al solid w	aste (%)	)					
Proportion of wastewater safely treated in Urban (%)		82.3	83.6	87.3	89.3	90.2	91.9	93.4	95.5	96.8
Sulfur Dioxide Emission (1000 tons) <sup>(2)</sup>		21,851	22,179	21,176	20,439	19,744	18,591			
Reduction rate of sulfur dioxide emission (%) <sup>(2)</sup>		1.3	-1.5	4.5	3.5	3.4	5.8			
Chemical oxygen demand emission (1000 tons) <sup>(2)</sup>		12,381	24,999	24,237	23,527	22,946	22,235			
Reduction rate of chemical oxygen demand (%) <sup>(2)</sup>		3.1		3.0	2.9	2.5	3.1			
Protected area as percentage of total country area (%)	10.2	15.6	15.6	15.2	15.3	15.3		17.1 <sup>(3)</sup>	15.4 <sup>(3)</sup>	15.4 <sup>(3)</sup>

- a) Ministry of Ecology and Environment of the People's Republic of China, Annual Statistical Reports 2000–2019.
- b) The Ministry of Water Resources of the People's Republic of China, Annual Statistical Reports 2000–2019.
- c) National Bureau of Statistics of China, China Statistical Yearbooks, 2009–2020.
- d) World Bank WDI Database.
- e) United National Global SDG Database.

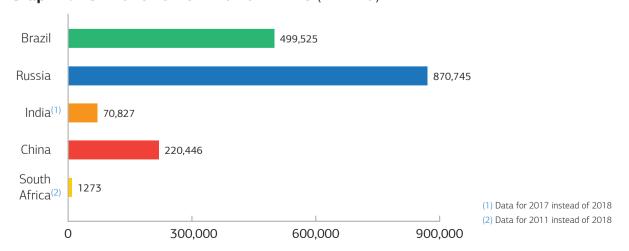
- (1) Data from 2006–2010 are based on 2005 constant prices and data from 2011–2015 based on 2010 constant prices.
- (2) Data from 2011 is incomparable to that in the previous years.
- (3) Terrestrial protected areas as percentage of total land area.

Table 7.2.5 — Selected Data on Resources and Environment — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Natural resources										
Number of protected areas		488			***					
Marine area protected	17	23	24	24	25	25	25	25	25	25
Terrestrial area protected	1277	1415	1420	1429	1451	1478	1507	1520	1535	1538
Area of protected areas (1000 hectares)		76,054								
Marine area protected (km²)	1902	4433	4681	4681	185,910	185,910	186,175	186,175	186,232	186,232
Terrestrial area protected (km²)	85,938	111,455	111,599	112,503	113,491	116,182	117,596	121,056	121,932	121,977
Main mineral reserves										
Iron ore (million tons)	1500	1000	1000	1000	1000	1000	1000	1000	1200	
Manganese ore (1000 tons)	650	650	650	650	650	650	650	650	770	
Copper (1000 tons)	4,000,000	120,000	150,000	150,000	150,000	150,000	200,000	200,000	200,000	
Lead (1000 tons)		***	***	***	***	***	***	300	300	
Zinc (1000 tons)		***	***		***	***	***	15,000	15,000	
Nickel (1000 tons)								3700	3700	
Antimony (1000 tons)	240	44	44	27	27	27	27	27	27	
Gold (1000 tons)	31	31	31	31	31	31	31	31	31	
Expenditure on environment protection as % of GDP (%)	0.01	0.01								
Proportion of wastewater safely treated (%)										
The proportion of regularly collected urban solid waste in total solid waste (%)										
Water Consumption (m³) per million USD of GDP										
Reduction Rate of Water Usage per unit of GDP (%)										
Reduction Rate of Sulfur Dioxide Emission (%)										

- a) United State Geological Survey.
- b) https://egis.environment.gov.za/protected\_areas\_database

Graph 7.1 Utilization of forest area in 2018 (1000 ha)



# **Explanatory Notes**

**Proportion of population using safely managed drinking water services (%)** — proportion of population using an improved basic drinking water source which is located on premises, available when needed and free of faecal (and priority chemical) contamination. Improved drinking water sources include: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs; packaged water; delivered water and rainwater (SDG indicators 6.1.1).

**Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas (%)** is the mean percentage of each important site for terrestrial and freshwater biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas. It is computed by dividing the total protected area within the country by the total territotial area of the country and multiplying by 100 (SDG indicators 15.1.2).

### Brasil

Fresh water resources — Historical Average 214,361 is the best information available until 2012.

**Sulfur Dioxides Emissions per Capita** — Data in concentration (g/m<sup>3</sup>) for some metropolitan areas (Recife, Salvador-Camaçari, Belo Horizonte, Vitória, Rio de Janeiro, São Paulo, Curitiba, Porto Alegre and Distrito Federal) no weighting by population.

**Utilization of perennial crop area** — Permanent crops is the land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops.

 $\textbf{Carbon dioxide emissions per capita} \ - \text{There has been a modification in the figures due to updating the estimates presented at the $3^{rd}$ National Communication of Greenhouse Gases. }$ 

Estimates updated in 2015 cover the GHG emissions in the 1970–2014 period for all sectors, except for change of land use, which covers the 1990–2014 period.

The methodological basis for the estimates is the Brazilian Inventory of Anthropogenic Emissions and Removals of Greenhouse Gases, published by Brazilian Ministry of Science, Technology, Innovation and Communication. For agriculture, energy, industry processes and waste sectors the 3<sup>rd</sup> Inventory methodology has been used. As for land use changes the methodology used was that from the second inventory.

### Russia

Perennial crop area is the part of utilised agricultural area taken up by perennial crops (fruit and berry plantations, grapes, tea, hop, etc.).

Freshwater Resources include internal renewable freshwater resources (river flows and groundwater from rainfall in the country).

Annual Flows (annual freshwater using) are water withdrawals, not counting losses from storage basins.

**Freshwater use** — use of water resources taken from various sources (including seawater) to meet domestic needs. This does not include turnaround water consumption, as well as recycling of sewage and collector-drainage water.

**Proportion of wastewater treated** is defined as the ratio of the volume of normatively pure water and water normatively purified at wastewater treatment plants to the total wastewater (sewage) discharge volume into surface water bodies (%).

# India

**Per capita carbon dioxide emission:** This has been derived by dividing total carbon di oxide emission by mid year population. Figures indicating net carbon di oxide emission (including removal) with land use change and forestry are occasionaly communicated to United Nations Framework Convention on Climate Change by Ministry of Environment& Forests. However, the time series information provided in table 7.1 relates only to emission by fuel combustion using sectoral approach, as provided by International Energy Agency.

### China

**Total water resources** refer to total volume of water resources measured as run-off for surface water from rainfall and recharge for groundwater in a given area, excluding transit water.

**National protected area** refers to certain areas of land, waters or sea that are representative in natural ecological systems, or are naturalhabitats for rare or endangered wild animals or plants, or water conservation zones, or the location of important natural or historicrelics, which are demarked by law and put under special protection and management. Natural reserves are designated by the formal approval of governments at and above county level. Scenic spots and cultural preservation zones are not included.

**Investment in the Treatment of Environment Pollution** refers to the proportion of investment in fixed assets in the total investment in harnessing industrial pollution and in the construction of urban environment infrastructure facilities. It includes investment in harnessing sources of industrial pollution, investment in environment protection facilities designed concurrently with construction projects, and investment in urban environment infrastructure facilities.

**Permanent cropland** is land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee, and rubber. This category includes land under flowering shrubs, fruit trees, nut trees, and vines, but excludes land under trees grown for wood or timber.

# Industry



Table 8.1 — Summary of Industry on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Indices of industrial production (	precedin	g year=	100)								
Brazil	106.6	110.2	100.4	97.7	102.1	97.0	91.8 <sup>(1)</sup>	93.6(1)	102.5 <sup>(1)</sup>	101.0 <sup>(1)</sup>	98.9(1)
Russia <sup>(2)</sup>	108.7	107.3	105.0	103.4	100.4	102.5	100.2	101.8	103.7	103.5	103.3
India <sup>(3)</sup>	105.0	108.2	102.9	103.3	103.3	104.0	103.3	104.6	104.4	103.8	***
China <sup>(4)</sup>	111.4	115.7	113.9	110.0	109.7	108.3	106.1	106.0	106.6	106.2	105.7
South Africa	104.2	104.6	102.9	102.2	101.3	100.1	100.0	100.7	100.3	101.4	100.5
Production of petroleum											
Brazil (million tons)	62.0	104.8 <sup>(5)</sup>	107.4	105.4	103.1	114.9	124.2	128.2	133.7	131.9	141.9
Russia (million tons) <sup>(6)</sup>	324.0	506.0	512.4	519.0	522.0	526.0	535.0	548.0	546.5	555.5	561.0
India (million tons) <sup>(3)</sup>	32.4	37.7	38.1	37.9	37.8	37.5	36.9	36.0	35.7	34.2	
China (million tons)	163	203	202.9	207.5	209.9	211.4	214.6	199.7	191.5	189.3	191
South Africa (million kl) <sup>(7)</sup>	21										
Electricity production (billion kild	watt/ho	urs)									
Brazil <sup>(8)</sup>	348.9	515.7 <sup>(9)</sup>	531.8 <sup>(9)</sup>	552.7 <sup>(9)</sup>	570.3 <sup>(9)</sup>	590.7 <sup>(9)</sup>	581.7 <sup>(9)</sup>	578.9 <sup>(9)</sup>	589.4 <sup>(9)</sup>	601.4 <sup>(9)</sup>	
Russia	877.8	1038	1055	1069	1059	1064	1068	1091	1094	1115	1121
India <sup>(3)(10)</sup>	554.5	965.7	1057	1109	1176	1267	1336	1433	1486		
China	1355.6	4207.2	4713	4987.6	5431.6	5794.5	5814.6	6133.2	6604.4	7166.1	7503.4
South Africa	210.7	259.6	262.5	257.9	256.1	254.8	250.4	253.1	255.4	256.3	252.6

### Brazil

- a) Brazilian Institute of Geography and Statistics IBGE, Indices of Industrial Production 2000–2016.
- b) National Agency of Petroleum, Natural Gas and Biofuels ANP.
- c) Electric System National Operator ONS.
- d) Energy Research Company EPE.
- e) OECD.Stat Database.
- f) International Energy Agency, World Energy Statistics 2019.
- g) Monthly Bulletin of Statistics Online, UN.

# Russia

Federal State Statistics Service of the Russian Federation.

# India

- a) Ministry of Statistics and Programme Implementation, Press Release of Quick Estimates of Industrial Production.
- b) Ministry of Petroleum & Natural Gas, Indian Petroleum & Natural Gas Statistics (various issues).
- c) Ministry of Finance, Economic Survey 2015-16.

### China

National Bureau of Statistics of China, Annual Industrial Statistical Reports 2000–2019; Monthly Industrial Production Survey 2000–2019; and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

# South Africa

- a) South African Petroleum Industry Association.
- b) Statistics South Africa, Monthly Manufacturing Production and Sales Survey 2000–2019.
- c) Statistics South Africa, Monthly Electricity Generated and Available for Distribution Survey 2000–2019.

# **Footnotes**

### Brazil

- (1) Data from OECD.stat Database.
- (5) Since 2010 data from Monthly Bulletin of Statistics Online.
- (8) Electricity Production data is from Operador Nacional do Sistema Elétrico ONS.
- (9) Since 2010 data from World Energy Statistics Yearbook 2019.

### Russia

- (2) Since 2017 year data were corrected in connection with application of the new base year.
- (6) Including natural gas liquids.

### India

- (3) The data of India pertains to fiscal year not calender year i.e. data for 2006 relates to the financial year 2006–07 & likewise. IIP figure for the year 2000 pertains to base year 1993–94, for 2008–2010 pertains to base year 2004–05 and from 2011 onwards as per new series of IIP with base year 2011–12.
- (10) Information pertains to Gross Electricity production in utilities (including thermal, hydro&nuclear) and non-utilities. Data for year 2008 is for calendar year 2008 (not for fiscal year 2008–09 i.e. April, 2008 to March, 2009).

### China

(4) Coverage of industrial enterprises above designed size had been adjusted since 2011, i.e., enterprises with annual revenue from principal business over 20 million yuan from 2011 on and over 5 million yuan prior to 2011.

### **South Africa**

(7) Includes: petrol, jet fuel, illum paraffin, fuel oil, bitumen, LPG.

**Table 8.2.1** — Selected Data on Output of Main Industrial Products — Brazil

Products	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Coal (million tons)	6.0	6.1	7.7	7.4	8.8	9.5	7.7	7.5			
Natural gas (million m³)(1)	13,328	22,938	24,074	25,832	28,174	31,895	35,126	37,891	40,117		
Iron ore (million tons)	218	435	469	470	454	476	488	456		448 <sup>(2)</sup>	
Steel (million tons)	30.2	49.2	52.3	51.1	51.9	48.6	45.3	42.6		35.4 <sup>(2)</sup>	32.2 <sup>(2)</sup>
Passenger cars (1000 sets)	1320	2918	2846	3012	3171	2668	2174	1876			
Household refrigerators (1000 sets)	4350	7861	7970	8281	9095	7703	6912	9451			
TV (1000 sets)	6022	12,212	13,541	14,082	14,960	14,097	10,865	10,558			
Mobile cellular subscriptions (1000 sets) <sup>(3)</sup>	10,921	57,618	63,130	56,908	62,455	67,905	51,536	46,143			
Washing machines (1000 sets)	3212	7532	8674	10,012	10,333	8599	8224	7331			
Fertilizers (1000 tons)	19,066	23,679	29,507	30,724	32,195	40,320	39,258	42,427			
Sawnwood (1000 m³)	13,497	19,160	19,672	20,988	23,234	28,449	30,736	32,377			
Paper and paperboard (million tons)		19.1	19.5	21.9	21.5	22.5	24.6	25.8			
Cement (1000 tons)	36,431	68,467	70,303	79,035	74,077	88,598	85,554	89,803			
Cotton woven fabrics (million tons)	0.5	0.7	0.6	0.6	0.5	0.5	0.4	1.7			
Woolen woven fabrics (1000 sets)	182	2042	1855	523	364	720	1104	774			
Footwear (ton) <sup>(4)(5)</sup>	8865	52,426	32,484	76,719	66,301	1601	1519	1572			

Brazilian Institute of Geography and Statisitics — IBGE, Annual Survey of Industry 2000–2015. World Steel Association, World Steel In Figures 2019.

# **Footnotes**

Since 2005, the Annual Survey of Industry — Product shall investigate all companies with more than 30 employees.

- (1) National Petroleum Agency.
- (2) Data from World Steel In Figures 2019.
- (3) Reflects the national production of mobile celular.
- (4) This industrial product is partially collected at the unit of measure kg and partially collected at the unit of measure Pair. Full information would be:  $2012 \rightarrow 74.881$  (ton) + 1.625.857 (1000 pairs).
- (5) The list of products (Prodlist) was changed in 2016 and footwear is presented in million pairs since 2014.

Table 8.2.2 — Selected Data on Output of Main Industrial Products — Russia

Products	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Coal (million tons)	258	322	336	357	353	357	372	386	410	439	439
Natural gas (billion m³)(1)	584	651	671	655	668	642	634	641	691	726	739
Iron ore (million tons) <sup>(2)</sup>	86.8	95.9	104	104	102	102	101	101	95.0	96.1	97.7
Steel (1000 tons) <sup>(3)</sup>	59,150	66,844	68,114	70,392	68,862	70,547	69,422	69,640	73,095	74,319	73,882
Passenger cars (1000 sets)	969	1210	1740	1964	1925	1695	1215	1120	1356	1565	1525
Household refrigerators (1000 sets) <sup>(4)</sup>	1327	3557	4100	4302	4128	3693	3117	3293	3152	3420	3368
TV (1000 sets) <sup>(5)</sup>	1116	11,973	14,714	16,170	14,714	16,255	9045	8382	5859	6674	7300
Telephone (1000 sets)	847										***
Household washing machines (1000 sets)	954	2761	3031	3355	3868	3862	3511	4040	4533	4676	4854
Mineral fertilizers (1000 tons) <sup>(6)</sup>	12,213	17,889	18,828	17,833	18,441	19,724	20,146	20,821	22,567	22,962	23,703
Sawnwood (1000 m³) <sup>(7)</sup>	20,583	21,890	22,636	21,211	21,744	21,526	22,030	23,780	25,162	28,523	29,967
Paper and paperboard (million tons)	5.3	7.7	7.6	7.8	7.8	8.2	8.2	8.6	8.7	9.1	9.1
Cement (1000 tons)(8)	32,389	50,392	56,153	61,691	66,549	69,139	62,103	54,935	54,721	53,678	57,676
Cotton woven fabrics (million m²)	1822	1542	1237	1389	1311	1231	1121	1168	1210	1352	1390
Woolen woven fabrics (million m²)	54.6	20.7	19.3	14.1	12.8	11.7	11.0	9.1	9.8	7.7	7.6
Footwear (1000 pairs)	56,506	102,789	110,245	103,318	118,327	109,021	91,703	95,410	120,074	122,902	108,826

Federal State Statistics Service of the Russian Federation.

- (1) Since 2010 including associated gas.
- (2) Since 2010 concentrate of iron ore.
- (3) Since 2017 production of steel includes ingots or other primary forms and semis of non-alloy steels, stainless steels and other alloy steels.
- (4) Household refrigerators and freezers.
- (5) Since 2017 data are not strictly comparable because of changes in the methodology.
- (6) In terms of 100% content of nutrients. Since 2010 mineral and chemical fertilizers.
- (7) Including sleepers. Since 2010 wood, sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6 mm; railway or tramway sleepers of wood, not impregnated.
- (8) Since 2010 portland cement, aluminous cement, slag cement and similar hydraulic cements.

Table 8.2.3 — Selected Data on Output of Main Industrial Products — India

Products	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Coal (million tons)	310	533	540	556	566	609	639	658	675	730
Natural gas (million m³)	29,480	52,219	47,559	40,679	35,407	33,657	32,249	31,900	32,648	32,874
Iron ore (million tons)	80.6	207	169	137	152	129	158	195	201	192
Crude steel (million tons)	31.0	70.7	74.3	78.4	81.7	89.0	89.8	97.9	103	107
Passenger cars (1000 sets)	524	2453	2775	2669	2519	2595	2747	2884		***
Household refrigerators (1000 sets)	2126	8716	7738	8685	8421	9234	9203			
Household washing machines (1000 sets)	733	3080	2995	3225	3429	3991	4310			***
Fertilizers (1000 tons) <sup>(1)</sup>	14,752	16,379	16,626	16,024	16,337	16,515	17,810	17,949	18,108	
Cement (all kinds) (million tons)	104	216	230	247	256	271	283	280	280	299
Cotton cloth (including hosiery) (m. m²)	19,718	31,718	30,570	33,870	35,513	36,959	38,440	38,837	33,234	

- a) Ministry of Finance, Economic Survey.
- b) Ministry of Petroleum & Natural Gas, Indian Petroleum & Natural Gas Statistics (various issues).
- c) Ministry of Mines, Indian Bureau of Mines.
- d) Ministry of Steel, Annual Reports (various issues).
- e) Ministry of Statistics & P.I., Statistical Year Book, 2016.
- f) Ministry of Chemicals & Fertilizers, Department of Fertilizers Annual Reports.
- g) Ministry of Commerce & Industry, DIPP.
- h) Ministry of Textiles, Office of the Textile Commissioner.

# **Footnotes**

The data of India pertains to fiscal year i.e. April (of the year mentioned in the table) to March (next year).

(1) Information relates to production of potassium, nitrogenous and phosphatic nutrient content (i.e. N, P&K) only.

**Table 8.2.4** — Selected Data on Output of Main Industrial Products — China

Products	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Coal (million tons)	1384	3428	3764	3945	3974	3874	3747	3411	3524	3698	3846
Natural gas (billion m³)	27.2	95.8	105	111	121	130	135	137	148	160	176
Iron ore (million tons)	223	1078	1307	1310	1486	1527	1381	1272	1229	802	845
Crude steel (million tons)	129	637	685	724	813	822	804	808	832	929	995
Cars (1000 sets)	607	9576	10,127	10,770	12,104	12,483	11,630	12,111	11,945	12,174	10,285
Home refrigerators (1000 sets)	12,790	72,957	86,992	84,270	92,557	87,961	79,928	84,816	85,484	81,088	79,043
Color TV (1000 sets)	39,360	118,300	122,313	128,235	127,452	141,289	144,757	157,696	159,326	196,950	189,991
Mobile telephones (1000 sets)	52,479	998,274	1,132,577	1,181,546	1,523,439	1,682,028	1,812,614	1,848,457	1,889,824	1,800,506	1,696,034
Home washing machines (1000 sets)	14,430	62,477	67,159	67,911	73,005	71,144	72,745	76,209	75,009	72,615	74,330
Chemical fertilizers (1000 tons)	31,860	63,379	64,194	68,321	70,262	68,769	74,320	71,286	61,843	54,035	57,312
Sawnwood (1000 m³)	6344	37,226	44,602	55,682	62,976	68,370	74,304	77,161	86,024	83,618	67,455
Machine-made paper and paperboard (million tons)	24.9	98.3	110	110	113	118	117	123	125	120	125
Cement (million tons)	597	1882	2099	2210	2419	2492	2359	2410	2337	2236	2344
Cotton woven fabrics (million m)	13,922	38,330	36,526	36,959	39,881	38,800	39,012	39,260	39,186	26,351	21,918
Woolen woven fabrics (million m)	278	566	518	479	494	600	633	464	481	479	490
Leather footwear (million pairs)	1468	4193	4266	4497	4524	4499	4558	4618	4477	3633	3947

a) National Bureau of Statistics of China, Annual Industrial Statistical Reports 2000–2019; Monthly Industrial Production Survey 2000–2019; and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

b) Nationl Forestry and Grassland Administration of China, Annual Reports 2000–2019.

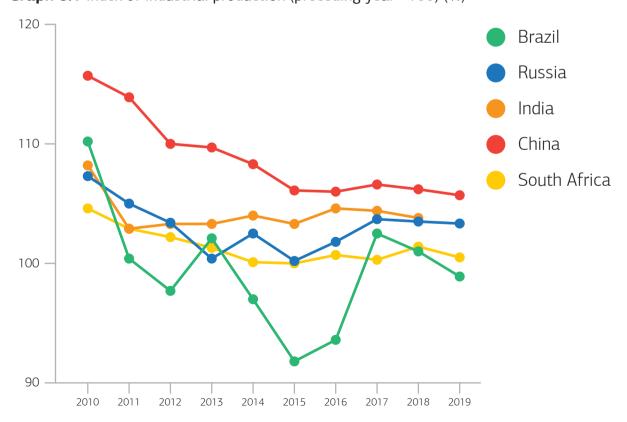
**Table 8.2.5** — Value of Sales by Product — South Africa

Value of sales, by product (million ZAR)	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Basic iron and steel	36,284	96,091	99,627	97,560	104,406	118,896	111,071	112,823	135,012	138,062	126,134
Motor vehicles	40,252	89,084	93,428	94,434	106,449	125,669	130,128	146,524	160,647	173,333	199,726
Household appliance	6351	10,306	10,581	11,365	12,019	13,020	13,646	13,821	13,334	12,928	14,028
Basic chemicals <sup>(1)</sup>	26,152	62,929	71,781	77,623	86,538	98,816	88,816	94,170	96,135	102,457	102,022
Sawmilling and planing of wood	3336	6714	7159	7708	8303	8894	10,335	11,332	11,686	10,887	10,665
Paper and paper products	26,619	50,013	51,625	54,693	58,289	63,701	68,785	73,530	76,067	79,716	81,298
Non-metallic mineral <sup>(2)</sup>	17,254	40,709	43,112	45,031	49,068	50,781	50,339	51,295	52,515	56,061	54,082
Textiles <sup>(3)</sup>	6524	5661	5650	5677	6231	6951	7338	8197	8332	8506	8115
Footwear	3124	4039	4180	4449	4708	5158	5207	5639	5621	5840	6456

Statistics South Africa, Monthly Manufacturing Production and Sales Survey 2000–2019.

- (1) Including fertilizers.
- (2) Including cement.
- (3) Including cotton fabrics.

Graph 8.1 Index of industrial production (preceding year = 100) (%)



# **Explanatory Notes**

### **Brazil**

The reported data on Output of Main Industrial Product reflect production by manufacturing units with more than 30 employees. Production of Mobile Cellular Subscriptions reflects the national production of mobile celular.

### Russia

**Index of industrial production** — the aggregate index by kinds of economic activities "Mining and quarryng", "Manufacturing", "Electricity, gas and water production and supply" before 2014 year and since 2014 year by kinds of economic activities "Mining and quarryng", "Manufacturing", "Electricity, gas, steam and air conditioning supply", "Water supply, water removal, waste management, activity on liquidation of pollution".

# India

**Index of industrial production** is a simple weighted arithmetic mean of production relatives, the weights being proportional to gross value of output as available from Annual Survey of Industries (ASI) factory sector. At the industry indicator levels, the weights were allocated in proportion to their gross value of output.

The new series of all India index of industrial production (IIP) with base 2004–05 has a broader coverage of 682 items (clubbed in 399 item groups: Mining-1, Manufacturing — 397, Electricity — 1) comprising 61 from Mining & Quarying, 620 from Manufacturing and 1 from Electricity Sector having the weightage of 14.16%, 75.53% and 10.32% respectively in the all-India IIP. National Industrial Classification (NIC)–2004 is being followed.

### China

**Industrial production index in China** refer to the indices of the PPI-deflated value added of industry (% to the previous year) covering industrial enterprises above the designated size. Industrial enterprises above the designated size refer to those with annual revenue from principal business over 20 million yuan from 2011 on and over 5 million yuan prior to 2011.

**Sawnwood** refers to manufactured woods using wood sawing machine or manual tools to process log into formation of wood of certain width and thickness of sectional dimensions along longitudinal direction.

# Energy



**Table 9.1** — Summary of Energy on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total primary energy production	on (mtoe)									
Brazil <sup>(1)</sup>	153	253	257	257	258	273	286	295		
Russia	1488	1863	1885	1899	1914	1917	1909	1935	1976	2040
India <sup>(2)</sup>	204	304	307	306	307	337	329 <sup>(3)</sup>	484 <sup>(3)</sup>	499(3)	531(3)
China <sup>(4)</sup>	970	2185	2381	2457	2512	2536	2535	2422	2512	2652
South Africa	153	162	161	164	127	167	138			
Total consumption of energy (r	ntoe)									
Brazil <sup>(5)</sup>	190	269	272	284	296	306	300	288		***
Russia	1131	1275	1308	1325	1308	1338	1317	1322	1337	1374
India <sup>(6)</sup>		536	570	600	615	659	675 <sup>(3)</sup>	541 <sup>(3)</sup>	554(3)	570 <sup>(3)</sup>
China <sup>(4)</sup>	1029	2525	2709	2815	2918	2998	3039	3090	3191	3304
South Africa	91	69	66	63	60	68	78			***
Energy consumption per capita	(kgoe)									
Brazil <sup>(7)</sup>	1088	1368	1373	1415	1468	1501	1459	1394		***
Russia	7715	8928	9148	9255	9114	9156	8993	9014	9107	9359
India <sup>(8)(9)</sup>		779	819	884	914	957	1010	1075	1122	1149
China <sup>(10)</sup>	809	1887	2016	2084	2150	2198	2216	2242	2302	2372
South Africa	1799	1539	1275	1217			***			
Share of renewable energy in	inal energ	y consum	ption (%)							
Brazil <sup>(11)</sup>	42.8	46.9	45.4	43.5	42.4	41.7	43.7	45.5	45.3	
Russia <sup>(11)</sup>	3.5	3.3	3.2	3.2	3.6	3.3	3.2	3.4	3.3	
India										
China <sup>(12)</sup>	7.3	9.4	8.4	9.7	10.2	11.3	12.0	13.0	13.6	14.5
South Africa <sup>(11)</sup>	16.0	10.2	9.9	9.6	9.2	9.5	9.7	10.3	10.0	
Share of net imports of energy	to total c	onsumpti	on (%)							
Brazil	22.0	7.6	7.9	10.7	14.4	12.7	7.4	2.1		***
Russia	2.9	1.7	2.0	1.7	1.9	1.9	2.0	1.6	1.7	1.7
India	***	49.8	51.3	70.4	60.6	64.8	61.3	60.3	62.8	66.5 <sup>(3)</sup>
China	3.4	13.6	14.7	15.3	15.7	16.3	15.6	17.7	19.2	20.6
South Africa	21.0	26.0	33.0	41.0	40.0	33.0	32.1		***	
Electricity export (million kilow	att hours)									
Brazil	7.0	1258	2544	467	0.0	2.5	219	518	160	
Russia	22,850	19,257	23,655	14,310	15,731	8117	16,115	16,049	11,593	12,086
India	***	128	135	154	1651	4433	5150	6710	7203	8494(3)
China	9880	19,060	19,310	17,650	18,670	18,160	18,650	18,910	19,470	20,910
South Africa <sup>(13)</sup>	4007	14,645	14,964	15,035	13,929	13,836	14,609		•••	

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Electricity import (million kilowa	att hours)									
Brazil	44,345	35,906	38,430	40,722	40,334	33,778	34,642	41,313	36,510	
Russia	8795	1860	9967	8337	11,461	8866	8809	3488	6410	5132
India	***	5610	5253	4795	5598	5008	5244	5617	5072	4657 <sup>(3)</sup>
China	1550	5550	6560	6870	7440	6750	6210	6190	6420	5690
South Africa <sup>(14)</sup>	4719	12,193	11,890	10,006	9428	11,117	13,059			
Electricity consumption (million	kilowatt	hours)								
Brazil	331,795	464,699	480,968	498,386	516,174	535,160	524,583	520,030		
Russia	863,709	1,020,633	1,041,122	1,063,320	1,054,823	1,064,956	1,060,243	1,077,948	1,089,105	1,108,134
India	316,600	694,392	785,194	824,301	874,209	948,522	1,001,191	1,061,183	1,123,427	1,158,310 <sup>(3)</sup>
China	1,347,240	4,193,450	4,700,090	4,976,260	5,420,340	5,782,970	5,802,000	6,120,510	6,591,400	7,150,820
South Africa	195,660	238,272	202,529	226,498	192,121	215,599	208,843			
Electricity consumption per capi	ita (kilow	att hours								
Brazil <sup>(15)</sup>	1900	2366	2425	2490	2557	2628	2556	2514		
Russia	5931	7145	7283	7425	7350	7290	7242	7352	7417	7547
India <sup>(16)</sup>	512 <sup>(9)</sup>	819	884	914	957	1010	1075	1122	1149	1181
China	1067	3135	3497	3684	3993	4238	4231	4439	4754	5134
South Africa	4587	4563	4590	4393	4315	4228				

# Brazil

- a) Ministry of Mines and Energy of Brazil. Brazillian Energy Balance 2016.
- b) International Energy Agency, Electricity information 2019.
- c) UNSD Database.

# Russia

- a) Federal State Statistics Service of the Russian Federation, Short Energy Balance.
- b) UNSD Database.

# India

- a) Ministry of Statistics & Programme Implementation, Central Statistics Office, Energy Statistics 2010 and 2017.
- b) Ministry of Power, Central Electricity Authority, Executive Summary: Power Sector (various issues).

# China

National Bureau of Statistics of China, China Energy Statistical Yearbooks 2000–2020.

# **South Africa**

- a) Statistcs South Africa: Statistical release P4141: January 2011 and Energy accounts.
- b) Department of Energy.
- c) UNSD Database.

### **Footnotes**

Mtoe stands for millon tonnes of oil equivalent, kgoe stands for kilo gram of oil equivalent and ktoe stands for kilo tonnes of oil equivalent.

### Brazil

- (1) Primary energy production: includes natural gas rejected and non-utilized.
- (5) Total consumption, total primary energy supply, or gross domestic supply: includes sectorial final energy consumption; losses in transformation, distribution and storage; and energy sector final consumption.
- (7) Energy consumption per capita = total consumption/population.
- (11) Data from Sustainable Development Goals Indicators, UNSD Database.
- (15) Electricity consumption per capita does not include energy consumption in energy sector and losses.

### Russia

(11) Data from Sustainable Development Goals Indicators, UNSD Database.

### India

Information pertains to Financial Year (i.e. April of the year indicated in the table to March next year). Conversion factors have been used for providing data in Oil Equivalents.

- (2) Primary energy comprises of coal, lignite, crude petroleum, natural gas and electricity. Elecricity includes hydro, nuclear and other renewable energy source). The conversion factor (production to energy terms) for each energy product has been updated as per the latest available information and accordingly data for the year 2017 to 2018 has been updated as per MoSPI publication Energy Statistics.
- (3) Provisional data.
- (6) Includes energy from coal, lignite, crude petroleum (Crude oil in terms of refinery crude throughput), Natural gas & Electricity (Hydro, Nuclear & other renewable sources electricity from utilities). The conversion factor (production to energy terms) for each energy product has been updated as per the latest available information and accordingly data for the year 2017 and 2018 has been updated as per MoSPI publication Energy Statistics.
- (8) The conversion factor (production to energy terms) for each energy product has been updated as per the latest available information and accordingly data for the year 2006 to 2016 has been updated.
- (9) Estimated from per capita consumption at the end of 8th and 9th Plan i.e. March 1997 & March 2002.
- (16) (Gross generation + Net imports) / Mid year population. As on 31st March of the year. The conversion factor (production to energy terms) for each energy product has been updated as per the latest available information and accordingly data for the year 2006 to 2016 has been updated.

### China

- (4) Electric power in total primary energy production and total consumption of energy are converted on the basis of equal caloric value.
- (10) Energy consumption per capita is calculated by annual average population.
- (12) Share of renewable energy in total energy consumption, include transformation losses and other losses.

### **South Africa**

- (11) Data from Sustainable Development Goals Indicators, UNSD Database.
- (13) Physical energy flowing out of South Africa as measured by the metering system at the South African borders.
- (14) Physical energy flowing into South Africa as measured by the metering system at the South African borders.

**Table 9.2.1** — Summary of Energy — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Consumption of crude petroleum (1000 tons) <sup>(1)</sup>	80,698	90,645	91,958	97,018	107,875	109,930	102,940	95,790		
Consumption of petrol (1000 tons) <sup>(2)</sup>	12,690	16,939	20,132	23,621	23,563	24,805	22,458	23,344		
Electricity consumption (million kWh) <sup>(3)</sup>	331,795	464,699	480,968	498,386	516,174	535,160	524,583	520,030		
Energy production (million kWh)										
Thermal <sup>(4)</sup>	38,471	95,809	85,061	116,066	157,810	189,498	185,066	148,549		
Hydro	304,403	403,290	428,333	415,342	390,992	373,439	359,743	380,911	370,906	388,971
Nuclear	6046	14,523	15,659	16,038	15,450	15,378	14,734	15,864	15,739	15,674
Wind	1	2177	2705	5050	6578	12,210	21,626	33,489	42,373	48,475
Energy consumption per USD (toe/USD) <sup>(5)</sup>	92.0	91.5	90.2	92.9	94.8	97.3	99.2	99.0		
Share of renewable energy in final energy consumption (%)	40.7	45.4 <sup>(6)</sup>	43.5	43.5	42.4	41.7	43.7	45.5	45.3	

Ministry of Mines and Energy of Brazil. Brazillian Energy Balance 2016.

International Energy Agency, Electricity Information 2019, World Energy Statistics 2019.

United Nations Global SDG Database.

- (1) Consumption of crude petroleum refinery oil input.
- (2) Consumption of petrol only motor gasoline (alcohol and biodiesel not included).
- (3) Electricity consumption not include energy consumption in energy sector and losses.
- (4) Energy production from thermal includes oil procucts, natural gas, industrial gas, coal and biomass.
- (5) Energy consumption total primary energy supply or gross domestic supply.
- (6) Since 2010 data from United Nations Global SDG Database.

**Table 9.2.2** — Summary of Energy — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumption of crude petroleum (1000 tons) <sup>(1)</sup>	182,935	255,883	264,900	278,019	283,561	298,934	289,250	292,746	293,818	294,765	
Consumption of petrol (1000 tons)	23,259	33,358	33,796	35,061	35,079	35,899	35,632	35,026	33,904	34,438	
Electricity consumption (billion kWh)	864	1021	1041	1063	1055	1065	1060	1078	1089	1108	
Electricity production (billion kWh)	878	1038	1055	1069	1059	1064	1068	1091	1094	1115	1121
Thermal	582	699	717	726	703	707	701	707	703	716	714
Hydro	165	168	165	165	183	175	170	187	187	193	197
Nuclear	131	171	173	178	173	181	195	197	203	205	209
Renewable sources	***	0.5	0.5	0.5	0.4	0.7	0.9	1.1	1.1	1.4	2.1
Share of renewable energy in final energy consumption (%)(2)	3.5	3.3	3.2	3.2	3.6	3.3	3.2	3.4	3.3		
Energy intesity level <sup>(3)</sup>	12.50	8.70	8.57	8.50	8.10	8.00	8.00	8.30	8.30		

Energy

- a) Federal State Statistics Service of the Russian Federation.
- b) UNSD Database.

- (1) Including natural gas liquids.
- (2) Source: Sustainable Development Goals Indicators, UNSD database.
- (3) Energy intensity measured in terms of primary energy and GDP. It is obtained by dividing total energy supply over GDP (in megajoules per USD constatnt 2011 PPP GDP). Source: Sustainable Development Goals Indicators, UNSD Database.

Table 9.2.3 — Summary of Energy — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	<b>2018</b> <sup>(1)</sup>
Consumption of crude petroleum (MMT) <sup>(2)</sup>	103	197	204	219	223	223	233	245	252	257
Electricity consumption (million kwh) <sup>(3)</sup>	316,600	694,392	785,194	824,301	874,209	948,522	1,001,191	1,061,183	1,123,427	1,158,310
Domestic		169,326	171,104	183,700	199,842	217,405	238,876	255,826	273,545	280,454
Commercial		67,289	65,381	72,794	74,247	78,391	86,037	89,825	93,755	97,251
Industrial power		272,589	352,291	365,989	384,418	418,346	423,523	440,206	468,613	484,843
Public lighting		-	-	-	-	-	-	-		
Railway/Tramways		14,003	14,206	14,100	15,540	16,177	16,594	15,683	17,433	16,823
Agriculture		131,967	140,960	147,462	152,744	168,913	173,185	191,151	199,247	207,791
Public water works & sewage pumping		-	+	-	+	-	-	-		
miscellaneous		39,218	41,252	40,256	47,418	49,289	62,976	68,493	70,834	71,149
Electricity production (million kwh) <sup>(4)</sup>	560,842	965,665	1,056,839	1,108,499	1,175,637	1,278,907	1,335,956	1,407,404	1,483,270	1,546,779
Utilities <sup>(5)(6)</sup>	501,204	844,748	922,451	964,489	1,026,649	1,116,850	1167,584	1,235,358	1,303,493	1,371,779
Thermal <sup>(7)</sup>	409,940	664,822	708,427	760,454	792,054	877,941	943,013	993,516	1,037,184	1,072,314
Hydro	74,362	114,416	130,511	113,720	134,848	129,244	121,377	122,378	126,123	134,894
Nuclear	16,902	26,266	32,287	32,866	34,228	36,102	37,414	37,916	38,346	37,813
Renewable Energy Sources		39,245	51,226	57,449	65,520	73,563	65,781	81,548	101,839	126,759
Non-Utilities <sup>(8)</sup>	59,638	120,917	134,388	144,010	148,988	162,057	168,372	172,046	179,777	175,000

- a) Ministry of Statistics & Programme Implementation, National Statistical Office, Energy Statistics 2020 for data up to the years 2018.
- b) Central Electricity Authority, Ministry of Power.

- (1) Provisional data.
- (2) crude oil in terms of refinery crude throughput. MMT means million metric tonnes.
- (3) Kwh means Killo Watt Hours.
- (4) It includes Utilities and Non-Utilities.
- (5) It consists of Renewable, Hydro, Nuclear and Thermal.
- (6) Utilities: undertakings of which the essential purpose is the production, transmission and distribution of electric energy. These may be private companies, cooperative organisations, local or regional authorities, nationalised undertakings or governmental organisations.
- (7) From 2010 onwards, Renewable Energy Sources have been shown separately.
- (8) Non-Utilities: An independent power producer which is not a public utility, but which owns facilities to generate electric power for sale to utilities and end users. They may be privately held facilities, corporations, cooperatives such as rural solar or wind energy producers, and non-energy industrial concerns capable of feeding excess energy into the system information pertains to Financial Year (i.e. April of the year indicated in the table to March next year).

**Table 9.2.4** — Summary of Energy — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumption of crude petroleum, by sec	tor (100	00 tons)									
Total	212,320	428,746	439,658	466,789	486,522	515,970	547,883	571,259	594,022	630,043	
Agriculture, forestry, animal husbandry, fishery and water conservancy	-	-	-	-	-	-	-	-	-		
Industry	210,521	427,166	438,604	465,595	485,034	515,521	547,524	571,036	593,935	629,955	
Construction	33	-	-	-	-	-	-	-	-		
Transport, storage and post	1751	1580	1054	1194	1487	449	359	223	87	88	
Wholesale, retail trade and hotel, restaurants	2	-	-	-	-	-	-	-	-		
Others	14	-	-	-	-	-	-	-	-		
Residential consumption	-	-	-	-	-	-	-	-	-		
Consumption of petrol, by sector (1000	tons)										
Total	35,046	69,562	75,960	81,659	93,664	97,764	113,685	118,660	122,963	130,553	
Agriculture, forestry, animal husbandry, fishery and water conservancy	892	1691	1860	1929	1987	2166	2313	2244	2296	2429	
Industry	6820	6895	6048	5811	5234	4890	4771	4363	3821	2965	
Construction	1156	2747	2828	2869	3265	3310	4086	4373	4523	5050	
Transport, storage and post	15,278	32,749	35,735	37,780	43,818	46,650	53,066	55,111	56,985	60,676	***
Wholesale, retail trade and hotel, restaurants	698	1682	1771	2001	2209	2178	2433	2409	2445	2755	
Others	7927	11,662	13,132	14,605	18,187	17,381	21,085	20,464	20,750	21,636	
Residential consumption	2276	12,137	14,586	16,665	18,965	21,188	25,931	29,697	32,142	35,042	
Electricity consumption (million kWh)											
Total	1,347,240	4,193,450	470,009	4,976,260	5,420,341	5,782,970	5,802,000	6,120,510	6,591,400	7,150,820	
Agriculture, forestry, animal husbandry, fishery and water conservancy	53,296	97,649	10,129	101,257	102,687	101,340	103,980	109,190	117,510	124,250	
Industry	1,000,462	3,087,177	346,916	3,623,221	3,923,688	4,224,870	4,155,000	4,299,690	4,605,280	4,909,490	
Construction	15,977	48,324	5718	60,840	67,507	72,170	69,870	72,560	78,920	88,780	
Transport, storage and post	28,120	73,453	8484	91,537	100,092	105,920	112,560	125,150	141,800	160,850	
Wholesale, retail trade and hotel, restaurants	41,868	129,200	15,031	169,149	187,689	199,560	212,200	232,380	252,660	290,040	
Others	62,320	245,183	27,531	308,364	339,762	361,500	391,860	439,480	488,060	571,650	
Residential consumption	145,195	512,463	56,201	621,896	698,916	717,610	756,520	842,060	907,160	1,005,760	
Electricity production (billion kWh)											
Thermal	1114	3332	3834	3893	4247	4400	4284	4437	4755	5096	5220
Hydro	222	722	699	872	920	1073	1130	1184	1198	1232	1304
Nuclear	17	74	86	97	112	133	171	213	248	294	348
Share of non-fossil energy in total energy consumption $(\%)^{(1)}$	7.3	9.4	8.4	9.7	10.2	11.3	12.0	13.0	13.6	14.5	
Energy consumption per USD (kgoe/USD)	0.85	0.41	0.36	0.33	0.30	0.29	0.27	0.28	0.36	0.24	

National Bureau of Statistics of China, China Energy Statistical Yearbooks 2000–2020; Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

### **Footnotes**

(1) Share of non-fossil energy in total energy consumption, include transformation losses and other losses.

**Table 9.2.5** — Summary of Energy — South Africa, 2015<sup>(1)</sup>

	Coal	Crude oil	Electricity	Gas to users	Hydro
Energy supply (trillion joules)					
a. Domestic production	5,964,384	11,417	0.0	46,732	6608
b. Imports	23,867	838,976	47,012	130,112	0.0
c. Total supply (a+b)	5,988,251	850,393	47,012	176,844	6608
Energy use (trillion joules)					
a. Intermediate consumption by industries	2,487,824	0.0	1,476,764	25,933	6608
Agriculture and fishing	1403.22	0.0	25,198	0.0	0.0
Commercial sector	10,962.14	0.0	103,798	1241.525	0.0
Construction	0.0	0.0	610	0.0	0.0
Electricity, gas and steam production	2,470,634	0.0	938,483	24,522	6608
Manufacturing	0.0	0.0	285,968	0.0	0.0
Mining and quarrying	4425	0.0	110,272	17077	0.0
Transport, storage and communication	400	0.0	12,435	0.0	0.0
b. Inventory changes	0.0	0.0	0.0	0.0	0.0
c. Private consumption, total	34,031	0.0	214,180	223	0.0
Heating, use of electricity etc.					
d. Exports	23,867	0.0	52,592	746	0.0
e. Losses in distribution	0.0	0.0	77,763	0.0	0.0
f. Total use (a+b+c+d+e)	2,545,722	0.0	1,821,299	26,902	6608
Energy flow diagrams					
Total (%)	100	100	100	100	100
Agriculture and fishing	0.0	0.0	53.6	0.0	
Commercial sector	0.2	0.0	220.8	0.7	0.0
Construction	0.0	0.0	1.3	0.0	
Electricity, gas and steam production	41.3	0.0	1996.2	13.9	100
Manufacturing	0.0	0.0	608.3	0.0	0.0
Mining and quarrying	0.1	0.0	234.6	0.0	0.0
Transport, storage and communication	0.0	0.0	26.5	0.0	
Domestic	0.6	0.0	455.6	0.0	
Exports	0.4	0.0	111.9	0.4	
Stock changes	0.0	0.0	0.0	0.0	
Imports (%)	0.4	98.7	100	73.6	

**Table 9.2.5** — Concluded

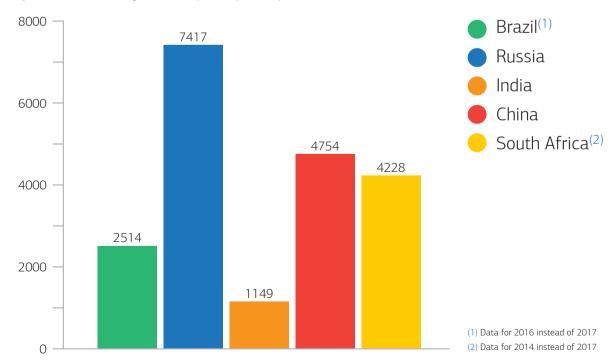
	Nuclear <sup>(2)</sup>	Petroleum products	Renewables and waste	Total energy supply or use
Energy supply (trillion joules)				
a. Domestic production	137,736		651,335	6,818,211
b. Imports	0.0	220,726	0.0	1,260,693
c. Total supply (a+b)	137,736	220,726	651,335	8,078,904
Energy use (trillion joules)				
a. Intermediate consumption by industries	141,458	886,741	301,833	5,327,161
Agriculture and fishing	0.0	52,686	0.0	79,287
Commercial sector	0.0	8568	0.0	124,570
Construction	0.0	4441	0.0	5051
Electricity, gas and steam production	137,736	0.0	8582	3,586,564
Manufacturing	0.0	0.0	0.0	285,968
Mining and quarrying	0.0	69,876	0.0	184,743
Transport, storage and communication	0.0	831,767	0.0	844,602

	Nuclear <sup>(2)</sup>	Petroleum products	Renewables and waste	Total energy supply or use
b. Inventory changes	0.0	0.0	0.0	0.0
c. Private consumption, total	0.0	52,695	688,709	989,838
Heating, use of electricity etc.				
d. Exports	0.0	137,442	0.0	214,647
e. Losses in distribution	0.0	0.0	0.0	77,763
f. Total use (a+b+c+d+e)	141,458	1,076,878	990,542	6,609,409
Energy flow diagrams				
Total (%)	100	100	100	78.2
Agriculture and fishing	0.0	3.2	0.0	1.0
Commercial sector	0.0	0.5	0.0	1.5
Construction	0.0	0.7	0.0	0.1
Electricity, gas and steam production	100	0.0	34.7	44.4
Manufacturing	0.0	0.0	12.5	3.5
Mining and quarrying	0.0	3.6	0.0	2.3
Transport, storage and communication	0.0	62.4	0.0	10.5
Domestic	0.0	7.5	52.9	12.3
Exports	0.0	17.1	0.0	2.7
Stock changes	0.0	0.0	0.0	0.0
Imports (%)	0.0	18.3	0.0	0.0

Department of Energy, 2015.

- (1) There is no row for losses in the % section and therefore the slight % imbalance.
- (2) Nuclear figure is derived from electricity produced from nuclear plants based on 33% efficiency.

**Graph 9.1** Electricity consumption per capita in 2017 (kWh)



### **Explanatory Notes**

### **Brazil**

Consumption of crude petroleum: refinery oil in put.

Consumption of petrol does not include alcohol and biodiesel. It includes only motor gasoline.

Energy production from thermal includes oil procucts, natural gas, industrial gas, coal and biomass.

Primary energy production includes natural gas rejected and non-utilized.

**Exports** include bunkers.

**Total consumption** includes sectorial final energy consumption; losses in transformation, distribution and storage; and energy sector final consumption.

Solids: Mineral and Coal Derivatives (other than coke oven gas), Firewood and Charcoal, sugarcane bagasse, liquor, biomass (Other Renewable) and Other Primary remaining.

Liquids: Oil and derivatives, molasses, cane juice, ethanol, vegetable oils (Other Renewable) and NGL (Other Non-Renewable).

Gases: Natural gas, coke oven gas, biogas (Other Renewable) and industrial gas (Other Non-Renewable).

Electricity: Hydraulics and Electricity, Uranium (U308) and Derivatives, Wind and solar.

### Russia

**Electricity production** refers to gross production of electricity.

### India

**Total primary energy production:** Primary energy does not include thermal electricity. **Electricity consumption per capita =** (Gross generation + Net imports)/Mid year population.

### China

**Total primary energy production** refers to the total production of primary energy by all energy producing enterprises in the country in a given period of time. It is a comprehensive indicator to show the level, scale, composition and pace of development of energy production of the country. The production of primary energy includes that of coal, crude oil, natural gas, hydro-power and electricity generated by nuclear energy and other means such as wind power and geothermal power. However, it does not include the production of fuels of low calorific value, bio-energy, solar energy and secondary energy converted from primary energy.

**Total consumption of energy** refers to the total consumption of energy of various kinds by the production sectors and the households in the country in a given period of time. It is a comprehensive indicator to show the scale, composition and pace of increase of energy consumption. Total energy consumption includes that of coal, crude oil and their products, natural gas and electricity. However, it does not include the consumption of fuel of low calorific value, bio-energy and solar energy. Total energy consumption can be divided into three parts: end-use energy consumption; loss during the process of energy conversion; and energy loss.

### South Africa

**General:** The figures populated in this table have been derived from the south African Energy Balance for the respective years. The definitions/descriptions of all energy commodities and activities in our energy balances are aligned to international recommendations espoused in the International Recommendations on Energy Statistics (IRES) document and the IEA's Energy Statistics Manual.

### Technical clarifications

Electricity, gas and steam production: We assumed that this include production of liquid fuels.

Nuclear: The figures were derived using electricity produced with the assumption of 33% efficiency.

Private consumption was assumed to be residential + non-specified other under Other Sectors and any unspecified consumption.

Manufacturing: calculated as the sum of all all industries less commercial and construction.

# 

### Agriculture, Forestry, Animal Husbandry and Fishery



**Table 10.1** — Summary of Agriculture, Forestry, Animal Husbandry and Fishery on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Area of cultivated land (	million h	ectares)									
Brazil <sup>(1)</sup>	50	65	67	67	71	75	76	75			
Russia <sup>(2)</sup>	124	121	121	121	121	121	123	123	123	123	123
India <sup>(3)</sup>	156	156	155	155	156	155					
China <sup>(4)</sup>	130	135	135	135	135	135	135	135	135		
South Africa											
Production of cereal (mi	llion tons	)									
Brazil <sup>(5)</sup>	45	73	75	87	98	98	103	82	115	99	***
Russia	65	61	94	71	92	105	105	121	136	113	121
India <sup>(3)</sup>	186	226	242	239	246	235	235 <sup>(6)</sup>	252	254 <sup>(6)</sup>	262 <sup>(7)</sup>	132 <sup>(8)</sup>
China	405	512	541	567	587	596	618	617	615	610	614
South Africa <sup>(9)</sup>	14	15	13	14	14	17	12	10	19		
Production of meat (100	0 tons)										
Brazil <sup>(10)</sup>	10,326	20,748	21,575	22,036	23,248	23,761	24,073	24,305	25,091		
Russia <sup>(11)</sup>	4446	7165	7516	8078	8525	9026	9519	9853	10,319	10,629	10,866
India <sup>(12)(13)</sup>	1851	4869	5514	5948	6235	6691	7020	7386	7656	8114	
China	60,139	79,936	80,230	84,711	86,328	88,179	87,495	86,283	86,544	86,246	77,588
South Africa <sup>(14)</sup>	1666	2968	2954	2911	3019	3136	3282	3365	2893		
Catch of fish (1000 tons	)										
Brazil <sup>(15)</sup>	667	785	803								
Russia	3776		***				4493(16)	4812(16)	4952(16)	5110 <sup>(16)</sup>	4983(16)
India <sup>(12)</sup>	5655	8231	8666	9040	9579(17)	10,072 <sup>(17)</sup>	10,260	10,762	11,409	12,610	
China	11,607	9870	10,222	11,618	11,730	12,509	12,929	12,884	9268	8633	8213
South Africa											
Timber Production (milli	on m³)										
Brazil	72	116	126	132	130	124	124	134			
Russia <sup>(18)</sup>	95	117	123	122	120	123	127	129	140	145	141
India											
China		81	81	82	84	82	72	78	78	88	89
South Africa <sup>(19)</sup>		18	19	18					***		

### Brazil

- a) Brazilian Institute of Geography and Statistics IBGE, Agricultural Municipal Production Survey; Sistematic Survey of Agricultural Production May 2017; Forestry Activities; and Quarterly Animal Slaughter Survey.
- b) Ministry of Fishery and Aquaculture, Fishery Data 2008–2011.
- c) Brazilian Institute of Environment and Renewable Natural Resources IBAMA, Fishery Data 2000–2007.
- d) FAOSTAT database.

### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Service for State Registration, Cadastre and Cartography.
- c) Federal Agency for Fishery.

### India

- a) Ministry of Agriculture and Farmars Welfare, Directorate of Economics & Statistics, Area Production Yield Statistics Database; Land Use Statistics at a Glance; and Advance Estimates.
- b) Ministry of Agriculture and Farmars Welfare, Department of Animal Husbandry, Dairying & Fisheries, Basic Animal Husbandry and Fisheries Statistics (various issues) and Handbook on Fisheries Statistics (various issues).

### China

- a) National Bureau of Statistics of China, China Statistical Yearbooks 2000–2020.
- b) Ministry of Natural Resources of the People's Republic of China.

### **South Africa**

- a) Statistics South Africa.
- b) Department of Agriculture, Forestry and Fisheries.

### **Footnotes**

### Brazil

- (1) Harvested area.
- (5) Major cereals (corn, rice and wheat).
- (6) Provisional data.
- (10) Major meat (beef, chicken and pork).
- (15) Fishery data refers only to the marine and continental extractive fisheries.

### Russia

- (2) The data are produced and disseminated by the Federal Service of State Registration, Cadastre and Cartography. At the end of the year.
- (11) Production of livestock and poultry for slaughter.
- (16) Catch of fish and other live wild aquatic organisms.
- (18) Since 2010 wood in the rough.

### India

- (3) The period of agricultural year is from July (of the year indicated in the table) to June (next year).
- (6) As per 2<sup>nd</sup> Advanced estimates (2017–18).
- (7) Fourth advance estimates of 2018-19.
- (8) First Advance estimates of 2019–20 (Kharif only).
- (12) The data pertains to March (of the year indicated in the table) to February (next year).
- (13) Meat production from commercial poultry farm is included from 2007–2008.
- (17) Preliminary data.

### China

(4) Data of area of cultivated land of China between 2000 to 2007 is calculated according to the "Communique of Main Data on Land Use Survey" from the First National Agricultural Census of China in 1996. Data of 2008 are from the "Survey of change of land". Data of 2009–2017 are from the "Communique on Land and Resource of China 2017" (Released on April 2017 by Ministry of Land and Resources, PRC).

### South Africa

- (9) Major cereals (maize/corn, wheat, malting barley, sorghum).
- (14) Major meat (beef and veal, mutton, goats, poultry).
- (19) Cubic meters derived from figures in tons provided by DAFF in the Report on Commercial timber resources and primary roundwood processing in South Africa. Figures obtained from the Report on Commercial timber resources and primary roundwood processing.

**Table 10.2.1** — Selected Data on Agriculture, Forestry, Animal Husbandry and Fishery — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Harvested areas of farm	crops (mil	lion hecta	res)							
Total	50.2	64.6	67.3	67.4	71.3	75.4	76.0	75.5		
Structure of farm produc	ts area by	main spe	cies (%)							
Soybean	27.2	36.1	35.6	37.1	39.1	40.2	42.4	43.9		
Corn	23.7	19.6	19.6	21.1	21.4	20.5	20.3	19.8	***	
Sugarcane	9.6	14.1	14.3	14.4	14.3	13.8	13.3	13.6		
Beans	8.6	5.3	5.5	4.0	3.9	4.2	3.8	3.4		
Rice	7.3	4.2	4.1	3.6	3.3	3.1	2.8	2.6		
Coffee	4.5	3.3	3.2	3.1	2.9	2.7	2.6	2.6		
Wheat	2.3	3.4	3.2	2.8	2.9	3.8	3.3	2.9		
Cassava	3.4	2.8	2.6	2.5	2.1	2.1	2.0	1.9		
Cotton	1.6	1.3	2.1	2.1	1.3	1.5	1.4	1.3		
Orange	1.7	1.2	1.2	1.1	1.0	0.9	0.9	0.9		
Cashew nuts	1.3	1.2	1.1	1.1	1.0	0.8	0.8	0.8		
Sorghum	1.1	1.0	1.1	1.0	1.1	1.1	1.0	0.7		
Cocoa	1.4	1.0	1.0	1.0	1.0	0.9	0.9	1.0		
Banana	1.0	0.8	0.7	0.7	0.7	0.6	0.6	0.6		
Tobacco	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.5		
Coconut	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3		
Oats	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4		
Sisal	0.4	0.4	0.4	0.4	0.2	0.2	0.3	0.3		
Castor beans	0.4	0.2	0.3	0.1	0.1	0.1	0.1	0.1		
Production of major farm	n products	(1000 ton	s)							
Soybean	32,821	68,756	74,815	65,849	81,724	86,761	97,465	96,395	114,732	117,888
Corn	32,321	55,364	55,660	71,073	80,273	79,882	85,283	64,188	97,911	82,288
Sugarcane	326,121	717,464	734,006	721,077	768,090	736,108	750,290	768,594	758,646	746,828
Beans	3056	3159	3435	2795	2893	3295	3089	2621	3046	2915
Rice	11,135	11,236	13,477	11,550	11,783	12,176	12,301	10,622	12,465	11,749
Coffee	1904	2907	2701	3038	2965	2804	2648	3024	2685	3557
Wheat	1726	6171	5690	4418	5738	6262	5508	6834	4343	5419
Cassava	23,044	24,967	25,350	23,045	21,484	23,254	23,060	21,036	18,502	17,645
Cotton	2015	2950	5071	4969	3417	4237	4007	3464	3839	
Oranges	21,330	18,503	19,811	18,013	17,550	16,928	16,953	16,980	17,493	16,714

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Yield of major farm crops	(kg/ha)									
Soybean	2403	2948	3121	2637	2929	2866	3029	2905	3379	3390
Corn	2718	4367	4211	5006	5254	5176	5535	4288	5618	5104
Sugarcane	67,878	79,045	76,449	74,297	75,339	70,646	74,203	75,176	74,456	74,369
Beans	705	923	935	1032	1028	1034	1078	1013	1087	1027
Rice	3038	4127	4896	4786	5007	5201	5753	5464	6213	6312
Coffee	839	1346	1257	1433	1422	1404	1339	1515	1489	1906
Wheat	1516	2829	2660	2310	2749	2209	2228	3155	2279	2624
Cassava	13,482	13,950	14,623	13,612	14,080	14,828	15,245	15,067	14,609	14,638
Cotton	2472	3554	3608	3596	3621	3751	3880	3477	4134	
Oranges	24,906	23,340	24,240	24,689	24,992	24,883	24,975	26,441	27,638	28,369
Fruits production (1000 tons) <sup>(1)</sup>	35,461	42,834	45,304	42,573	41,972	41,738	42,097	41,649		36,489 <sup>(2)</sup>
Number of livestock (100	0 heads)									
Bovines	169,876	209,541	212,815	211,279	211,764	212,366	215,225	218,191	215,004	213,523
Chickens	659,246	1,028,151	1,051,990	1,032,039	1,026,956	1,096,836	1,104,467	1,133,558	***	
Laying hens	183,495	210,761	216,220	213,230	219,682	223,914	221,986	218,733		
Ovines	14,785	17,381	17,668	16,789	17,291	17,614	18,411	18,404	18,607	18,949
Swines	31,562	38,957	39,307	38,796	36,744	37,930	39,795	40,053	41,383	41,444
Production of meat (1000	tons)									
Beef	3900	6977	6784	7351	8167	8063	7493	7359	7673	
Chicken	5981	10,693	11,422	11,535	11,964	12,504	13,149	13,235	13,607	14,915
Pork	2600	3195	3227	3150	3117	3193	3431	3711	3825	3788
Milk (1000 tons) <sup>(3)</sup>										
Cow milk	20,380	30,715	32,096	32,304	34,255	35,124	34,610	33,680	33,312	33,840
Amount of pesticide use per unit of cultivated land (kg/ha)	3.2	5.5	6.2	6.9	6.8	6.7	6.9	7.1	6.0 <sup>(4)</sup>	

- a) Brazilian Institute of Geography and Statistics IBGE, Agricultural Municipal Production Survey and Municipal Cattle Breeding Survey, 2000–2015; Quarterly Animal Slaughter Survey, 2000–2016; Sistematic Survey of Agricultural Production May 2017.
- b) Brazilian Institute of Environment and Renewable Natural Resources IBAMA; http://www.ibama.gov.br/areas-tematicas-qa/relatorio-de-comercialicao-de-agrotoxicos/pagina-3
- c) FAOSTAT database.

- (1) Fruits production consideres the following fruits: orange, banana, grape, pineapple, papaya, watermelon, apple, coconuts, passion fruit, mango, tangerine, lemon, melon, guava, peach, persimmon, avocado, cashew nuts, fig, pear, nut, quince.
- (2) Calculations by data of FAOSTAT database.
- (3) 1 kg corresponds to 1.03 litre.
- (4) Calculations by data of FAOSTAT database. Amount of pesticide use per area of cropland.

**Table 10.2.2** — Selected Data on Agriculture, Forestry, Animal Husbandry and Fishery — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Indices of agricultural production and its components (%) <sup>(1)</sup>	106.2	87.9	122.3	94.4	105.1	104.1	102.1	104.8	102.9	99.8	104.3
Volume indices of crops production at farms of all types (%)	110.9	74.9	147.1	86.7	110.3	105.4	102.1	107.8	103.3	98.5	106.6
Volume indices of animal husbandry at farms of all types (%)	101.1	100.3	102.4	102.4	100.4	102.8	102	101.6	102.6	101.1	101.9
Total sown or harvested areas of farm crops (million hectares) <sup>(2)</sup>	84.7	74.9	76.3	75.9	77.6	77.9	78.6	79.3	80.0	79.6	79.9
Structure of crops area by main	species (	%)									
Cereals and pulses	53.8	57.7	57.1	58.6	59.1	59.3	59.3	59.4	59.6	58.2	58.4
Including wheat	27.4	35.6	33.5	32.5	32.3	32.4	34.1	34.9	34.9	34.2	35.2
Tubers	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil-bearing crops	6.5	12.9	13.7	13.3	14.3	14.4	14.6	15.5	15.8	17.5	18.3
Rapeseeds	0.3	1.1	1.2	1.6	1.7	1.5	1.3	1.2	1.3	2.0	1.9
Sunflower seeds	5.5	9.6	10.0	8.6	9.4	8.9	8.9	9.6	10.0	10.2	10.7
Soybeans	0.5	1.6	1.6	2.0	2.0	2.6	2.7	2.8	3.3	3.7	3.9
Fiber crops (Fiber flax, hemp, cotton)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sugar beet	1.0	1.5	1.7	1.5	1.2	1.2	1.3	1.4	1.5	1.4	1.4
Tobacco	0.0	0.0	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0
Potatoes	3.3	2.6	2.5	2.4	2.2	2.1	2.0	1.8	1.7	1.7	1.6
Vegetable	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6
Fodder crops	34.1	24.1	23.8	23.1	22.2	22.0	21.6	20.7	20.4	20.2	19.3
Production of major farm produc	ts (1000	tons)									
Cereal and pulses											
Total	65,420	61,007	94,247	70,941	92,419	105,212	104,729	120,677	135,539	113,255	121,200
Wheat	34,460	41,555	56,293	37,767	52,140	59,713	61,811	73,346	86,003	72,136	74,453
Nuts	7.9	12.7	14.5	15.0	14.8	15.5	16.8	20.8	17.8	20.0	19.7
Oil-bearing crops(3)	4473	7463	12,234	10,574	13,150	12,870	13,854	16,271	16,497	19,535	22,769
Rapeseeds <sup>(3)</sup>	149	671	957	945	1259	1336	1013	1001	1510	1989	2060
Sunflower seeds <sup>(3)</sup>	3919	5347	9069	7501	9852	8481	9289	11,015	10,481	12,756	15,379
Soybeans <sup>(3)</sup>	342	1226	1648	1688	1520	2371	2716	3143	3622	4027	4360
Potatoes	29,465	18,498	27,985	24,542	24,021	24,284	25,406	22,463	21,708	22,395	22,075
Sugar beet	14,051	22,241	47,609	45,031	39,292	33,476	38,989	51,325	51,913	42,066	54,350
Vegetable	10,822	11,002	13,036	12,792	12,597	12,821	13,185	13,181	13,612	13,685	14,104
Tobacco	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0
Fruits <sup>(4)</sup>	2961	2398	2829	2779	3186	3334	3179	3636	3245	3945	4158

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Yield of major farm crops (kg/ha	)										
Cereal and pulses											
Total	1560	1830	2240	1830	2200	2410	2370	2620	2920	2540	2670
Wheat	1610	1910	2260	1770	2230	2500	2390	2680	3120	2720	2700
Nuts <sup>(5)</sup>	800	2000	2430	2830	2550	2570	2590	3100	2840	3350	3030
Oil-bearing crops(3)	890	990	1240	1140	1330	1240	1290	1390	1410	1460	1630
Rapeseeds <sup>(3)</sup>	860	1100	1140	970	1130	1260	1120	1100	1580	1330	1440
Sunflower seeds <sup>(3)</sup>	900	960	1250	1220	1450	1310	1420	1510	1450	1600	1830
Soybeans <sup>(3)</sup>	1010	1180	1380	1220	1260	1230	1300	1480	1410	1470	1570
Potatoes	10,470	10,000	14,960	13,630	14,660	15,280	16,410	15,760	16,250	17,040	17,810
Sugar beet	18,820	24,070	39,170	40,890	44,210	37,010	38,780	47,040	44,210	38,060	47,960
Vegetable	14,330	17,920	20,770	21,050	21,410	21,940	22,620	22,920	24,090	24,280	25,080
Tobacco	750	1070	1290	3000		-	-	-	870	1260	1220
Fruits <sup>(4)(5)</sup>	4280	5352	6397	6960	8120	7812	7816	8905	7989	9625	10,158
Fruits production, by species (1000 tons)	-	-	-	-	-	-	-	-	-	-	
Seedlings	1519	996	1184	1388	1527	1597	1495	1726	1521	1997	2179
Stone fruits	466	432	514	463	511	495	503	624	509	616	597
Subtropical cultures	0.7	2.1	1.8	1.9	2.0	2.0	1.8	1.9	2.0	2.0	2.0
Citrus cultures	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Berrying grounds	696	631	702	643	684	671	659	683	632	702	702
Vineyards	279	336	428	283	462	570	520	601	580	628	678
Number of livestock by species (	year-end	)									
Cattle (1000 heads)	27,520	19,794	19,901	19,680	19,273	18,920	18,621	18,346	18,294	18,151	18,126
Pigs (1000 heads)	15,824	17,251	17,263	18,785	19,010	19,452	21,406	21,925	23,076	23,727	25,163
Muttons and goats (1000 heads)	14,962	21,734	22,727	23,999	24,131	24,445	24,606	24,717	24,389	23,129	22,618
Production of meat (1000 tons) <sup>(6)</sup>	4446	7165	7516	8078	8525	9026	9519	9853	10,319	10,629	10,866
Production of milk (1000 tons)	32,259	31,508	31,204	31,197	29,865	29,995	29,887	29,787	30,185	30,612	31,360
Cow milk	32,000	31,248	30,947	30,944	29,625	29,723	29,620	29,529	29,921	30,345	31,101
Poultry eggs (mln. pieces)	34,085	40,759	41,289	42,133	41,390	41,747	42,510	43,514	44,829	44,901	44,858
Catch of fish (1000 tons)	3776				***		•••	4812 <sup>(7)</sup>	4952 <sup>(7)</sup>	5110 <sup>(7)</sup>	4983 <sup>(7)</sup>
Ownership of tractors in agriculture at year-end (1000 unit) <sup>(8)</sup>	747	310	293	276	260	247	234	223	217	212	206.7
Ownership of harvester in agriculture at year-end (1000 unit) <sup>(9)</sup>	288	109	103	97	90	86	81	78	76	74	71.6
Consumption of chemical fertilizers (kg/ha) <sup>(10)</sup>	19	38	39	38	38	40	42	49	55	56	61
Removals of round wood (mln. dense m³) <sup>(11)</sup>	95	117	123	122	120	123	127	129	140	149	143
Total production of fruits and vegetables (mln. tons)	13.8	14.6	17.5	17.1	17.3	17.7	18.1	18.7	18.7	19.6	20.0
Percentage of agricultural area treated by pesticide (%) <sup>(12)</sup>	14.8	26.7	31.6	33.4	35.3	36.1	36.8	39.2	43.8	42.7	

### **BRICS Joint Statistical Publication 2020**

Agriculture, Forestry, Animal Husbandry and Fishery

### Source

- a) Federal State Statistics Service of the Russian Federation.
- b) Ministry of Agriculture of the Russian Federation (Minselkhoz).
- c) Federal Service for State Registration, Cadastre and Cartography (Rosreestr).
- d) Federal Agency for Fishery.

- (1) Preceding year = 100.
- (2) Total sown area.
- (3) Since 2011, data are published in weight after processing.
- (4) Fruits (excluding nuts), berries and grapes.
- (5) Before 2012 yield is given per 1 hectare of plants in fruit-bearing age; for 2012–2019 per 1 ha harvested area.
- (6) Livestock and poultry for slaughter.
- (7) Catch of fish and other live wild aquatic organisms.
- (8) Availability of tractors in agricultural organizations (excluding tractors with mounted digging, ameliorative and other machines), since 2008 excluding micro enterprises.
- (9) Availability of harvesters and beet harvesting machines (excluding plant top gathering machines), since 2008 excluding micro enterprises.
- (10) Mineral fertilizers used per 1 ha of crops in agricultural organisations, since 2008-excluding data on micro enterprises.
- (11) Since 2010 wood in the rough.
- (12) Calculations by data of Minselkhoz and Rosreestr.

**Table 10.2.3** — Selected Data on Agriculture, Forestry, Animal Husbandry and Fishery — India

All India index numbers of production of principal crops (%)(1)(2)       94.0       117.7       108.2       91.8       103.6       99.2             Cereals       94.4       110.9       107.2       98.5       102.9       94.9       115.5       123.7           Total food grains       92.8       113.6       104.5       99.9       103.1       93.9       115.7       131.0	
Cereals     94.4     110.9     107.2     98.5     102.9     94.9     115.5     123.7	
- 11 11 1	
Total food grains 92.8 113.6 104.5 99.9 103.1 93.9 115.7 131.0	
Non-food grains 95.5 121.8 101.1 99.5 103.9 96.9 126.1 129.3	
Fruits and vegetables 100.5 107.1 104.4 104.1 104.7 99.8	
Planting structure of farm crops by main species <sup>(2)</sup>	
Total cropped area (million hectares)  185.3 197.7 195.8 194.2 200.9 198.4 197.1 198.	
Total cereals (%) 54.7 51.4 51.1 50.7 50.4 51.3 50.0	
Rice 24.2 21.9 22.3 22.0 22.1 22.3 22.0	
Wheat 13.9 15.2 15.4 15.7 15.6 16.2 15.7	***
Corn (maize) 3.7 4.3 4.4 4.4 4.5 4.4 4.3	***
Soybeans 3.4 4.8 5.2 5.6 6.0 5.8	***
Oil-bearing crops         13.3         14.6         14.3         14.9         15.0         14.3         14.3	
Peanuts (groundnut)         3.6         2.9         2.7         2.7         2.7         2.6         2.3	***
Rapeseed and Mustard 2.3 2.8 2.8 3.1 3.0 2.7 2.8	***
Sesame 0.9 1.1 1.0 0.9 0.8 0.9 1.0	
Cotton 4.6 5.5 6.2 6.1 5.9 6.4 6.1	
Other fiber crops         0.6         0.5         0.5         0.5         0.4         0.4	
Sugarcane         2.5         2.6         2.8         2.8         2.7         2.8         2.7	
Tobacco 0.2 0.2 0.2 0.2 0.2 0.2 0.2	
Tea 0.3 0.3 0.3 0.3 0.3 0.3	
Vegetables         2.5         2.8         2.8         2.8         2.9         3.5	
Fruits 1.9 2.0 2.1 2.1 2.1 2.1 2.4	
Production of major farm products <sup>(2)</sup>	
Cereal (1000 tons)         185,738         226,241         242,197         238,792         245,790         234,871         235,218         251,980         259,600 <sup>(3)</sup> 261,552	
Cotton (1000 bales)         9520         33,000         35,200         34,220         35,902         34,805         30,005         32,577         32,805 <sup>(3)</sup> 28,708	4) 32,267 <sup>(5)</sup>
Peanuts (groundnut)         6410         8265         6964         4694         9714         7402         6733         7462         9253(3)         6695	
Rapeseeds and mustard (1000 tons) 8179 6604 8029 7877 6282 6797 7917 8430 <sup>(3)</sup> 9339	
Sesame (1000 tons)         520         893         810         685         715         828         850         747         755(3)         755(3)	
Potatoes (1000 tons)         22,143         42,339         41,483         45,344         41,555         45,951(1)         43,417         48,605         51,310(3)         50,190	
Sugarcane (1000 tons)         295,960         342,382         361,037         341,200         352,142         362,333         348,448         306,069         37,9905(3)         40,015	(4) 37,766 <sup>(5)</sup>
<b>Tobacco (1000 tons)</b> 488 802 752 657 735 855 802	
Fruits (1000 tons) 43,138 74,878 76,424 81,285 88,977 86,602 90,183 92,918 97,358 <sup>(3)</sup> 97,967	
Vegetables (1000 tons)          146,554         156,325         162,187         162,897         169,478         169,064         178,172         184,394 <sup>(3)</sup> 183,172	(4) 188,009 <sup>(5)</sup>
Yield of major farm crops (100kg/ha) <sup>(2)</sup>	
<b>Cereal</b> 18.4 22.6 24.2 24.5 24.6 23.3 23.9 25.3 26.6 27.6	
Cotton         1.9         5.0         4.9         4.9         5.1         4.6         4.1         5.1         4.4         3.9	
Peanuts (groundnut)         9.8         14.1         13.2         9.9         17.6         15.5         14.6         14.0         16.7	
<b>Rapeseed and mustard</b> 9.4 11.9 11.2 12.6 11.9 10.8 11.8 13.0 12.9	
Sesame         3.0         4.3         4.3         4.0         4.3         4.7         4.3         4.5         4.6	
<b>Potatoes</b> 184 227 218 228 211 222 <sup>(1)</sup>	
<b>Sugarcane</b> 685.8 700.9 716.7 682.5 705.2 715.1 707.2 690.0	
<b>Tobacco</b> 13.2 16.3 16.1 15.4 16.1 18.3 17.8	

	2000	2010	2011	2012	2013	2014	2015	2016	2017	<b>2018</b> <sup>(6)</sup>	2019
Livestock products <sup>(7)</sup>											
Production of meat (1000 tons) <sup>(8)</sup>	1851	4869	5514	5948	6235	6691	7020	7386	7656	8114	
Milk (1000 tons) <sup>(9)</sup>	79,651	121,848	127,904	132,431	137,686	146,314	155,491	165,400	176,300		
Cow milk (1000 tons)	32,957	54,903	57,770	59,805	62,195						
Poultry eggs (million) <sup>(10)</sup>	36,632	63,024	66,450	69,731	74,752	78,484	82,929	88,139	95,217		
Fish production (1000 tons)	5656	8231	8666	9040	9579	10,260	10,762	11,409	12,610		
Consumption of chemical fertilizers <sup>(2)</sup>											
Total (N+P+K) (1000 tons)	16,702	28,122	27,790	25,536	24,482	25,576	26,753	25,949	26,591		
Nitrogenous (N) (1000 tons)	10,920	16,558	17,300	16,821	16,750	16,946	17,372	16,735	16,958		
Phosphatic (P) (1000 tons)	4215	8050	7914	6653	5633	6098	6979	6705	6854		
Potassic (K) (1000 tons)	1567	3514	2576	2062	2099	2532	2402	2508	2779		
Per hectare (kg)	90	142	142	131	118	127	131	123	128		
Number of livestock <sup>(11)</sup>											
Cattle (1000 heads)				190,904							192,483
Buffaloes (1000 heads)				108,702							109,852
Sheep and goats (1000 heads)				200,242		***					223,145
Total livestock (1000 heads)				512,057							535,785
Total poultry (1000 heads)				729,209							851,810
Ratio of pesticide use as compared to total area under all crops (%)	32.2 <sup>(12)</sup>			43.7 <sup>(13)</sup>							

- a) Ministry of Agriculture and Farmars Welfare, Directorate of Economics & Statistics Publications (Agricultural Statistics at a Glance, Pocket Book of Agricultural Statistics; Land Use Statistics at a Glance; Area Production Yield Statistics Database; and Advance Estimates).
- b) Ministry of Agriculture and Farmars Welfare, Annual Reports of Department of Animal Husbandary, Dairying & Fisheries various issues and Basic Animal Husbandary & Fishery Statistics various issues.
- c) Ministry of Agriculture, Indian Horticulture Database.
- d) Ministry of Agriculture, 19th, 20th Livestock Census 2012, 2019.

- (1) Preceding year = 100 with Base Year Triennium 2007–2008.
- (2) The period of agricultural year is from July (of the year indicated in the table) to June (next year).
- (3) Final Estimates of 2017–18.
- (4) Fourth Advance Estimates of the year 2019–20.
- (5) First advance estimates of Kharif only.
- (6) As per 2<sup>nd</sup> advanced estimates for the year 2017–18.
- (7) Data on livestock products pertains to March (of the year indicated in the table) to February (next year).
- (8) Meat production from commercial poultry farm is included from 2007–08 onwards.
- (9) Milk Includes cow, buffalo and goat milk.
- (10) Poultry eggs include eggs from fowls & ducks.
- (11) Data on number of livestock is produced from Livestock Census which is conducted at a gap of five years. Information from Last three census (2003, 2007 and 2012 Reference Date 15th October) has been included.
- (12) Data for 2001/2002.
- (13) Data for 2011/2012.

**Table 10.2.4** — Selected Data on Agriculture, Forestry, Animal Husbandry and Fishery — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Indices of agricultural gross out					2015	2011	2015	2010	2017	2010	2015
All (%)	103.6	104.4	104.4	104.9	104.0	104.3	104.0	103.5	104.0	103.5	102.8
Crop products (%)	101.4	104.3	105.6	104.3	104.4	104.9	105.4	104.2	104.7	103.9	104.6
Forestry products (%)	105.4	103.5	107.6	106.7	107.4	106.4	106.1	108.2	106.9	106.5	105.2 97.9
Livestock products (%)	106.5	104.2	104.1	105.2	105.1	102.0	100.3	101.1	102.1	101.7	102.5
Fishery products (%)  Sown or harvested areas of farm				103.0	105.1	104.0	104.5	102.9	102.0	102.7	102.5
Total	156.3	158.6	160.4	162.1	163.7	165.2	166.8	166.9	166.3	165.9	165.9
Planting structure of farm crops				102.1	103.7	103.2	100.0	100.9	100.5	105.9	103.9
Rice	19.2	19.0	18.9	18.8	18.8	18.6	18.5	18.4	18.5	18.2	17.9
Wheat	17.1	15.4	15.3	15.1	14.9	14.8	14.7	14.8	14.7	14.6	14.3
Corn	14.8	22.1	22.9	24.1	25.2	26.0	27.0	26.5	25.5	25.4	24.9
Soybeans	6.0	5.5	5.1	4.6	4.3	4.3	4.1	4.6	5.0	5.1	5.6
Tubers	6.7	5.1	5.0	4.8	4.7	4.6	4.4	4.0	4.3	4.3	4.3
Oil-bearing crops	9.9	8.6	8.4	8.3	8.2	8.1	8.0	7.9	7.9	7.8	7.8
Peanuts	3.1	2.8	2.7	2.7	2.7	2.6	2.6	2.7	2.8	2.8	2.8
Rapeseeds	4.8	4.6	4.5	4.4	4.4	4.3	4.2	4.0	4.0	3.9	4.0
Sesame	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Cotton	2.6	2.8	2.8	2.7	2.5	2.5	2.3	1.9	1.9	2.0	2.0
Jute and jute-like fibers	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sugar crops	1.0	1.1	1.1	1.2	1.1	1.1	0.9	0.9	0.9	1.0	1.0
Sugarcane	0.8	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.8
Beetroots	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Tobacco	0.9	0.1	0.9	1.0	0.9	0.1	0.8	0.7	0.7	0.6	0.6
Vegetables	9.7	11.0	11.2	11.4	11.5	11.6	11.8	11.7	12.0	12.3	12.6
Other	12.1	8.6	8.4	8.0	7.7	7.5	7.7	8.2	8.5	8.6	9.0
Production of major farm production			0.1	0.0	7.7	7.5	7.7	0.2	0.5	0.0	5.0
Cereal	405,224	511,967	540,617	566,590	586,504	596,015	618,184	616,665	615,205	610,036	613,697
Cotton	4417	5770	6519	6608	6282	6299	5907	5343	5653	6103	5889
Peanuts	14,437	15,136	15,302	15,792	16,109	15,901	15,961	16,361	17,092	17,332	17,520
Rapeseeds	11,381	12,788	13,137	13,401	13,636	13,914	13,859	13,128	13,274	13,281	13,485
Sesame	811	462	458	466	439	437	450	352	366	431	467
Potatoes	13,255	15,306	16,315	16,872	17,176	16,831	16,453	16,986	17,696	17,984	17,779
Sugarcane	68,280	105,982	108,674	115,746	119,264	115,788	107,064	103,215	104,404	108,097	109,388
Beetroots	8073	7051	7958	8772	6287	5099	5088	8545	9384	11,277	12,273
Tobacco	2552	2832	2998	3246	3220	2847	2677	2574	2391	2241	2153
Tea	683	1462	1608	1761	1887	2049	2277	2313	2460	2610	2777
Fruits	124,357	200,954	210,186	220,915	227,481	233,026	245,246	244,052	252,419	256,884	274,008
Top five area of fruits (1000 hec	tares)										
Citrus	1272	2025	2077	2112	2176	2161	2230	2328	2439	2487	2617
Apples	2254	1930	1946	1976	1967	1974	1983	1946	1947	1939	1978
Pears	1015	970	976	970	980	964	974	931	923	943	941
Grapes	283	513	550	613	647	689	716	716	707	725	726
Bananas	249	334	355	357	364	365	355	350	351	332	330

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Top five production of fruits (100	00 tons)										
Apples	20,431	31,649	33,673	35,814	36,298	37,354	38,899	40,393	41,390	39,233	42,425
Citrus	8783	25,817	28,641	30,894	31,964	33,622	36,175	35,915	38,168	41,381	45,845
Pears	8412	14,095	14,486	15,504	15,444	15,819	16,527	15,963	16,410	16,078	17,314
Bananas	4941	8841	9461	10,360	11,030	10,622	10,627	10,940	11,170	11,222	11,656
Grapes	3282	8135	8577	10,006	10,885	11,731	13,164	12,629	13,083	13,667	14,195
Top three production of spices (1	000 ton	5)									
Prickly ash seeds		251	198	219	209	277	293	319	344	346	417
Aniseed		117	122	130	138	148	158	172	172	177	178
Cinnamon		76									
Yield of major farm crops (kg/he	ctare)										
Cereal	4752.6	5528	5714	5833	5907	5896	5989	6004	6105	6120	6272
Cotton	1093.1	1322	1441	1516	1509	1508	1565	1671	1769	1819	1764
Peanuts	2973.3	3460	3529	3588	3664	3639	3640	3678	3709	3752	3781
Rapeseeds	1518.6	1748	1827	1865	1896	1944	1972	1982	1995	2027	2048
Sesame	1034.2	1293	1366	1439	1464	1443	1495	1529	1610	1645	1651
Potatoes	2806.4	3133	3256	3354	3418	3428	3438	3537	3641	3780	3805
Sugarcane	57,626.1	65,271	66,113	68,264	69,986	70,682	72,528	73,638	76,132	76,891	78,655
Beetroots	24,518	38,018	41,720	45,924	44,801	51,533	52,751	55,630	53,843	52,174	56,057
Tobacco	1776	2163	2115	2102	2075	2037	2134	2130	2115	2118	2098
Number of livestock at year-end	(1000 he	eads)									
Hogs	416,336	467,652	470,748	480,302	478,931	471,602	458,029	442,092	441,589	428,171	310,407
Cattle	123,532	98,200	93,840	91,373	89,858	90,073	90,558	88,345	90,387	89,153	91,383
Sheep and goats	279,482	287,302	286,641	285,127	289,352	303,913	311,743	299,305	302,317	297,135	300,721
Production of meat (1000 tons)	60,139	79,936	80,230	84,711	86,328	88,179	87,495	86,283	86,544	86,246	77,588
Milk (1000 tons)	9191	32,113	32,628	33,067	31,189	32,765	32,955	31,739	31,486	31,768	32,976
Cow Milk	8274	30,389	31,099	31,749	30,008	31,599	31,798	30,640	30,386	30,746	32,012
Poultry eggs (1000 tons)	21,820	27,769	28,304	28,854	29,055	29,303	30,461	31,605	30,963	31,283	33,090
Catch of fish (1000 tons)	11,607	9870	10,222	11,618	11,730	12,509	12,929	12,884	9268	8633	8213
Ownership of tractors and harvester-threshers in agriculture at year-end (1000 units) <sup>(3)</sup>	22,643	32,940	33,652	34,527	34,290	24,917	24,846	25,072	25,029		
Consumption of chemical fertilizers (kg/ha)	265.0	350.7	355.7	360.3	361.1	363.0	361.0	358.5	352.3	340.8	325.7
Amount of pesticide use per unit of cultivated land (kg/ha)		11.1	11.1	11.1	11.0	10.9	10.7	10.4	10.0	9.1	8.4

National Bureau of Statistics of China, China Rural Statistical Yearbook 2000–2016; China Statistical Yearbook 2000–2020; and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.

- (1) Data of indices of agricultural gross output prior to 2003 are calculated at 1990 prices. The new classification for national standard of industry classification has been implemented since 2003 and the gross output value includes the services in support of agriculture, forestry, animal husbandry and fishery.
- (2) Preceding year = 100.
- (3) Ownership of tractors and harvester-threshers in agriculture at year-end includes large, medium and small-sized tractors, harvesters and threshers. Data from 2014 do not include threshers.

**Table 10.2.5** — Selected Data on Agriculture, Forestry, Animal Husbandry and Fishery — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Crop products (%)											
Grain		100.0	104.3	103.1	106.6	117.4	95.0	87.7	125.6		
Forestry products		100.0	100.0								
Livestock products		100.0	100.0	101.1	104.4	106.3	111.7	111.1	108.6		
Production of major farm products (1000 tons)											
Cereal	13,844	14,636	12,832	14,425	14,096	16,567	11,848	10,114	18,814	14,915	13,249
Maize/corn	11,001	12,815	10,360	12,121	11,811	14,250	9955	7779	16,820	12,510	11,275
Wheat	2349	1430	2005	1870	1870	1750	1440	1910	1535	1868	1502
Malting barley	142	194	312	298	268	302	332	355	307	422	345
Sorghum	352	197	155	136	147	265	121	71	152	115	127
Sunflower seed	531	490	860	522	557	832	663	755	874	862	678
Soybeans	154	566	710	650	785	948	1070	742	1316	1540	1170
Cotton	70	21	46	32	14	24	51	27	42		
Peanuts	114	88	64	59	42	75	62	18	92	57	19
Dry beans	72	52	42	48	60	82	73	35	69	69	66
Sugarcane	23,876	16,015	16,800	17,278	20,032	11,155	14,861	15,074	16,785		
Tobacco	30	12	15	17	15	13	14	15	15		
Garden fruits											
Bananas	378	400	385	387	420	457	434	310	335	445	405
Apples	602	724	781	796	904	778	932	918	929	880	892
Citrus	1712	2150	2340	2382	2864	2759	2657	2260	2523	3034	2992
Pears	304	368	351	339	365	404	390	433	416	398	407
Grapes	210	270	348	272	258	274	309	363	354	391	315
Pineapples	168	94	109	99	101	91	100	88	103	112	115
Yield of major farm crops (	kg/ha)										
Cereal											
Maize/corn	3210	4670	4370	4490	4250	5300	3750	3996	6399	5395	4901
Wheat	2515	2560	3320	3660	3700	3672	2987	3757	3126	3711	2781
Malting barley	1830	2350	3890	3510	3290	3550	3540	4002	3360	3542	2615
Sorghum	2480	2270	2240	2790	2350	3360	1710	1454	3589	3993	2515
Sunflower seed	1340	1230	1340	1150	1100	1390	1150	1051	1375	1433	1316
Soybeans	1640	1820	1700	1380	1520	1890	1560	1476	2293	1956	1602
Cotton	1368	4085	3563	3514	2112	3167	3291	3334	3875		
Peanuts	1370	1530	1170	1300	880	1430	1070	782	1644	1012	968
Dry beans	1000	1180	1000	1200	1380	1470	1150	1030	1521	1300	1119
Potatoes	2987	4116	4179	4159	4353	4383	4635	3126	4713	4645	4524
Sugarcane	67,741	67,072	59,082	66,455	67,205	75,329	65,055	60,623	58,939		
Tobacco	1904	3075	2777	3207	2923	2745	2918	3000	3000		

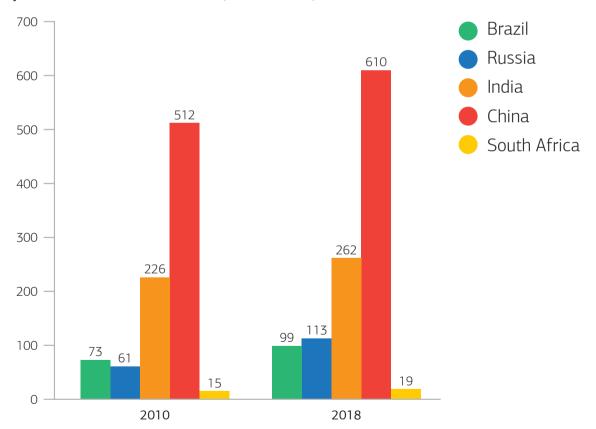
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Production of meat (1000 t	tons)										
Beef and veal	582	897	878	875	953	1001	1073	1090	1014	1003	1033
Mutton	94	146	135	146	167	173	168	169	156	151	161
Goats	9	10	11	11	11	11	11	11	11	11	12
Poultry	870	1712	1730	1697	1685	1650	1727	1678	1658	1743	1808
Milk (1000 tons)											
Cow milk	2306	3123	3107	3214	3260	3337	3538	3549	3643	3753	3873
Poultry eggs (1000 tons)	329	413	452	477	468	453	477	478	445	476	564

a) Department of Agriculture, Forestry and Fisheries.

### **Footnotes**

Data on commercial agriculture. Crop products (%) = Volume Index.

**Graph 10.1** Production of cereals (millions tons)



### **Explanatory Notes**

### General

Cultivated area: This consists of net area sown and current fallows.

**Average yield of crops:** Average yields per hectare of principal crops have been obtained by dividing the total production by the corresponding total area under each crop.

### Brasil

**Fruits production** consideres the following fruits: orange, banana, grape, pineapple, papaya, watermelon, apple, coconuts, passion fruit, mango, tangerine, lemon, melon, guava, peach, persimmon, avocado, cashew nuts, fig. pear, nut, quince.

Cultivated area includes only harvested area.

Milk data obtained in litres were converted to kg (1 kg = 1.03 litre)

Major part of 2016 final data will be available only on September 2017.

Catch of fish data not available after 2011.

**Timber production** refers to the volume of timber measured and accepted based on the national timber standards after the procedures of logging, bucking, yarding, and finally transporting to timber depots or defined distribution sites.

### Russia

**Agricultural production** is the sum of crop-growing and animal husbandry outputs of all agricultural producers including enterprises of private sector (household enterprises, peasant (farm) enterprises and individual employers) in value terms at actual current prices. To calculate agricultural production index, the indicator of production volume at comparable prices of previous year is used.

Data in table 10.2.2 about crop and livestock production since 2010 are with the account of All Russian agricultural census of 2016.

### India

 $Ministry\ of\ Agriculture\ is\ the\ nodal\ agency\ for\ collection,\ compilation \&\ dissemination\ of\ agriculture\ statistics\ in\ India.$ 

Directorate of Economics & Statistics in Department of Agriculture & Cooperation, Ministry of Agriculture is the agency primarily involved with Crop statistics and the reporting period for the same is agricultural year i.e. July to June next year whereas Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture produces & disseminates information on livestock with Financial Year as the reporting period (i.e. March-February next year).

Cultivated area consists of Net Area sown and current fallows.

### China

**Indices of agricultural gross output:** The development rates of agricultural gross output value deflated by using producers prices indices.

**Timber production** refers to the volume of timber measured and accepted based on the national timber standards after the procedures of logging, bucking, yarding, and finally transporting to timber depots or defined distribution sites.

**Amount of pesticide use per unit of cultivated land** refers to the ratio of total volume of pesticides used to the cultivated area in the same period, usually kg/ha or kg/mu used as measurement unit.

### Transport



**Table 11.1** — Summary of Transport on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Length of railways in op	eration (	1000 km)									
Brazil	29	28	29	29	30	30	30	30			
Russia	86	86	86	86	86	86	86	86	87	87	87
India <sup>(1)</sup>	63	64	64	65	65	66	66	67	67	67	
China	69	91	93	98	103	112	121	124	127	131	140
South Africa	21	21									
Length of highways (100	00 km)										
Brazil	1573	1558	1561	1561	1561	1563	1571	1571	***		
Russia <sup>(2)</sup>	532	665	728	925	985	1024	1046	1054	1064	1077	1089
India <sup>(1)</sup>	185	231	235	241	248	262	265	276	289		
China	1680	4008	4106	4238	4356	4464	4577	4696	4774	4847	5012
South Africa									***		
Length of petroleum pip	elines (10	000 km)									
Brazil		8	8	8	8	8	8				
Russia	48	49	51	55	55	55	55	54	53	53	53
India <sup>(1)(3)</sup>	16	30	31	34	38	41	41	42	43	44	
China	25	78	83	92	98	106	109	113	119	122	127
South Africa	3	3									
Passenger traffic (all me	ans) (billi	ion passe	engers-kr	n)							
Brazil											
Russia	496.0	483.7	502.5	532.3	546.9	555.9	529.7	519.4	560.2	593.6	635.2
India											
China <sup>(4)(5)</sup>	1226	2789	3098	3338	2757	2865	3006	3126	3281	3422	3535
South Africa									***		
Freight traffic (all means	s) (billion	tons-km	)								
Brazil									***		
Russia	3638	4752	4915	5056	5084	5080	5108	5198	5488	5636	5674
India											
China <sup>(4)(6)(7)</sup>	4432	14,184	15,932	17,380	16,801	18,167	17,836	18,663	19,737	20,469	19,939
South Africa											
Passenger traffic by air	million p	ersons-k	m)								
Brazil	48,165	93,991	107,816	113,488	116,032	122,475	127,528	122,076	128,940		
Russia	53,410	147,119	166,760	195,775	225,157	241,429	226,849	215,594	259,386	286,930	322,982
India <sup>(8)</sup>	26,212	103,171	112,794	105,208	114,036	126,903	145,787	163,929	190,357	221,357	220,594
China	97,054	403,900	453,696	502,574	565,676	633,419	728,255	837,813	951,304	1,071,232	1,170,530
South Africa			•••				***				

### **Brazil**

- a) National Terrestrial Transport Agency ANTT.
- b) National Civil Aviation Agency ANAC.
- c) National Department of Transport Infrastructure, National Transportation System 2013.
- d) National Petroleum, Natural Gas and Biofuels National Agency ANP.

### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Road Agency.
- c) Federal Air Transport Agency.

### India

- a) Ministry of Railways, Statistical Summary-Indian Railways (various issues).
- b) Ministry of Road Transport & Highways, Basic Road Statistics of India (various issues).
- c) Ministry of Petroleum & Natural Gas, Indian Petroleum & Natural Gas Statistics (various Issues).
- d) Ministry of Civil Aviation, Directorate General of Civil Aviation, Air Transport Statistics (various issues).

### China

- a) Ministry of Transport of the People's Republic of China, Annual Statistical Reports 2000-2019.
- b) Civil Aviation Administration of China, Annual Statistical Reports 2000–2019.
- c) China Railway Corporation, Annual Statistical Reports 2012–2019.
- d) China National Petroleum Corporation, Annual Statistical Reports 2000-2019.
- e) China National Offshore Oil Corporation, Annual Statistical Reports 2019.
- f) National Bureau of Statistics of China, China Statistical Yearbooks 2000–2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.
- g) China Petrochemical Corporation, Annual Statistical Reports 2000–2019.

### **South Africa**

Transnet.

### **Footnotes**

### Russia

(2) Length of public paved roads in operation (including highways). At the end of the year.

### India

- (1) The information is as on 31st March of the Year indicated in the table. The information on Highways includes both National and State Highways (Excluding Rural Roads, Project Roads, Urban Roads etc.).
- (8) Reference Period is Financial Year i.e. (April of the Year indicated in the Table to March next year).
- (3) The figures include crude oil and natural gas pipelines also.

### China

- (4) Since 2013, there have been some changes on the classification, so the data from 2013 and on can not be compared with the previous ones.
- (6) Since 2013, the statistical coverage of pipeline transport has included China National Offshore Oil Corporation on the basis of China National Petroleum Corporation and China Petroleum & Chemical Corporation.
- (5) All means: including railway, road, waterway and air.
- (7) All means: including railway, road, waterway, air and pipeline.

**Table 11.2.1** — Selected Data on Transport — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Traffic										
Passenger traffic by road (million persons-km)			***		***				***	
Passenger traffic by railway (million persons-km)	416	438	422	421	392					
Transport of goods by railway (million tons-km)	155,690	277,922	293,184	301,653	298,615					
Passenger traffic by air (million persons-km) <sup>(1)</sup>	48,000	94,000	108,000	113,000	116,000	122,481	127,528	122,079	128,940	
Transport of goods by air (million tons-km) <sup>(1)</sup>	6079	9970	11,697	12,092	12,544	12,967	13,294	12,802	13,539	
Freight traffic of petroleum pipelines (million tons)										
Length of railways in operation per 1000 km² of territory (km) <sup>(2)</sup>	3.4	3.3	3.4	3.4	3.5	3.5				
Ownership of automobiles										
Registered automobiles (1000 units)	19,973							***		
Passenger cars and buses (1000 units)	20,234									
Road traffic accident involving personal injury or death										
Accidents <sup>(3)</sup>	378,811								***	
Number of injured <sup>(3)</sup>	358,762								***	
Number of death <sup>(3)</sup>	20,049								***	
Number of International Airlines Service Routes (Lines) <sup>(4)</sup>	30,416	33,611	36,901	36,240	39,041	39,058	44,848	46,160	49,216	

- a) National Terrestrial Transport Agency ANTT.
- b) National Civil Aviation Agency ANAC.
- c) National Department of Transport Infrastructure, National Transportation System 2013.

- (1) It refers to paid traffic domestic and international.
- (2) Estimates.
- (3) It refers to the interstate and international collective passenger transport.
- (4) Number of International Airlines Service Routes (Lines) related to SDGS 9.1.2 Website: https://unstats.un.org/sdgs/metadata/files/Metadata-09-01-02.pdf

**Table 11.2.2** — Selected Data on Transport — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Traffic											
Passenger traffic by road (million passengers-km) <sup>(1)</sup>	173,660	140,611	138,588	133,275	126,042	127,090	126,271	124,347	123,382	122,536	122,493
Transport of goods by road (million tons-km) <sup>(2)</sup>	152,735	199,341	222,823	248,862	250,054	246,784	247,134	248,251	254,524	259,084	275,427 <sup>(P)</sup>
Passenger traffic by railway (million passengers-km)	167,054	138,885	139,842	144,612	138,517	130,027	120,644	124,620	123,096	129,542	133,589
Transport of goods by railway (million tons-km)	1,373,178	2,011,308	2,127,835	2,222,389	2,196,217	2,300,532	2,305,945	2,344,087	2,493,428	2,597,778	2,602,493
Passenger traffic by air (million passengers-km)	53,410	147,119	166,760	195,775	225,157	241,429	226,849	215,594	259,386	286,930	322,982
Transport of goods by air (million tons-km)	2515.3	4715.4	4950.2	5079.1	5011	5151.6	5581.6	6609.2	7856.1	7812.7	7388.6
Freight traffic of petrol	eum										
pipelines (million tons)	295	492	544	523	525	532	543	543	553	561	568
Length of roads in operation (1000 km) <sup>(3)</sup>	532	665	728	925	985	1024	1046	1054	1064	1077	1089
Length of railways in operation per 1000 km <sup>2</sup> of territory (km)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1
Ownership of automobiles	1)										
Number of registered lorries (1000 units)	4401	5414	5545	5751	6047	6238	6230	6230	6434	6490	6540
Passenger cars and buses (1000 units)	20,993	35,248	37,317	39,719	42,310	44,300	45,126	46,038	47,783	49,290	49,299
Road traffic accident involv	ing perso	nal injur	y or deat	:h							
Accidents	157,596	199,431	199,868	203,597	204,068	199,723	184,000	173,694	169,432	168,099	164,358
Number of injured	179,401	250,635	251,848	258,618	258,437	251,793	231,197	221,140	215,374	214,853	210,877
Number of death <sup>(5)</sup>	29,594	26,567	27,953	27,991	27,025	26,963	23,114	20,308	19,088	18,214	16,981

- a) Federal State Statistics Service of the Russian Federation.
- b) Ministry of the Interior of the Russian Federation.
- c) Federal Air Transport Agency.

- (1) Data is presented by legal entities and individual entrepreneurs (including small businesses) transported passengers by buses.
- (2) Transports of goods by all types of organizations and individual entrepreneurs.
- (3) Public paved roads. At the end of the year.
- (4) Number of cars in the property of physical and legal persons.
- (5) Since 2009 number of persons who died within 30 days after accidents, before 2009-persons who died within 7 days.

**Table 11.2.3** — Selected Data on Transport — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Traffic											
Passenger traffic by railway (million persons-km)	457,022	978,508	1,046,522	1,098,103	1,140,412	1,147,190	1,143,039	1,149,835	1,177,699	1,157,174	
Transport of goods by railway (million tons-km)	315,516	626,473	668,618	650,625	666,728	682,612	655,605	620,858	693,281	738,923	
Passenger traffic by air (million persons)	18	67	75	72	76	87	104	120	140	164	168
Passenger traffic by air (million persons km)	26,212	103,171	112,794	105,208	114,036	126,903	145,787	170,085	190,357	221,357	220,594
Transport of goods by air (million tons-km)	549	1647	1750	30,858	115,949	115,625	125,550	133,023			
Passenger traffic by Road (billion persons km) <sup>(4)</sup>	2076	8409	9478	10,461	11,730	13,403	15,415				
Transport of goods by Road (billion tons-km) <sup>(5)</sup>	494	1287	1408	1515	1651	1824	2026				
Air transport (hours flown) (1000 hours)	348	1355	1461	1312	1433	1500	1686	1884	2122	2524	2470
Aircraft kilometres flown (million km)	203	762	830	757	820	898	1077	1182	1316	1521	1525
Production of motor vehicles (in 1000) <sup>(1)</sup>	4759	17,916	20,382	20,648	21,500	23,358	24,016	25,331	29,094	30,915	
Registered passenger cars and buses (in 1000) <sup>(2)</sup>	6705	18,636	20,835	23,245	25,870	27,885	30,582	31,999	35,552		
Registered passenger cars (in 1000) <sup>(3)</sup>	5297	13,749	15,467	17,570	20,503	21,671	23,807	25,635			
Length of railways in operation per 1000 km <sup>2</sup> of territory (km)	19.2	19.6	19.7	19.9	20.0	20.1	20.3	20.5	20.8		
Road traffic accident involving p	ersonal	injury o	or death								
Accidents	391,449	499,628	497,686	490,383	486,476	489,400	501,423	480,652	464,910	467,044	
Number of injured	399,265	527,512	511,394	509,667	494,893	493,474	500,279	494,624	470,975	469,418	
Number of death	78,911	134,513	142,485	138,258	137,572	139,671	146,133	150,785	147,913	151,417	

- a) Ministry of Railways, Statistical Summary-Indian Railway (various issues).
- b) Ministry of Road Transport & Highways, Basic Road Statistics of India, Transport Year Book and Road Accidents in India (various issues).
- c) Ministry of Petroleum & Natural Gas, Indian Petroleum & Natural Gas Statistics (Various Issues).
- d) Ministry of Civil Aviation, Directorate General of Civil Aviation, Air Transport Statistics (various issues).

### **Footnotes**

Information on Railways, Civil Aviation & production of vehicles pertains to Financial Year i.e. April (Year Indicated in the table) to March (Next Year) whereas that for registered vehicles/ownership is as on 31st March and that on accidents, injuries and deaths pertains to calendar year.

- (1) It includes passenger vehicles (PVs), commercial vehicles (CVs), three wheelers, two wheelers.
- (2) Includes Cars, Jeeps, Taxis, Buses and Omnibuses. Data is as on 31st March of the year indicated in the table.
- (3) Figures indicate number of cars registered in India as on 31st March of the year indicated in the table except for 2000 where the data is as on 31st March 2001.
- (4) Figures for Road Transport from 2006–07 to 2014–15 is are estimated.
- (5) Figures for Road Transport from 2007–08 to 2014–15 is are estimated.

**Table 11.2.4** — Selected Data on Transport — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Traffic											
Passenger traffic by road (million persons-km) <sup>(6)</sup>	665,742	1,502,081	1,676,025	1,846,755	1,125,094	1,099,675	1,074,266	1,022,871	976,518	927,968	885,708
Transport of goods by road (million tons-km) <sup>(6)</sup>	612,940	4,338,967	5,137,474	5,953,486	5,573,808	5,684,690	5,795,572	6,108,010	6,677,152	7,124,921	5,963,639
Passenger traffic (all means) (billion passengers-km)	1226	2789	3098	3338	2757	2865	3006	3126	3281	3422	3535
Passenger traffic by railway (million persons-km)	453,259	876,218	961,229	981,233	1,059,562	1,124,185	1,196,060	1,257,929	1,345,692	1,414,658	1,470,664
Transport of goods by railway (million tons-km)	1,377,049	2,764,413	2,946,579	2,918,709	2,917,389	2,753,019	2,375,431	2,379,226	2,696,220	2,882,099	3,018,195
Passenger traffic by air (million persons-km)	97,054	403,900	453,696	502,574	565,676	633,419	728,255	837,813	951,304	1,071,232	1,170,530
Transport of goods by air (million tons-km)	5027	17,890	17,391	16,389	17,029	18,777	20,807	22,245	24,355	26,250	26,320
Passenger traffic by waterways (million persons-km) <sup>(6)</sup>	10,054	7227	7453	7748	6833	7434	7308	7233	7766	7957	8022
Transport of goods by waterways (million tons-km) <sup>(6)</sup>	2,373,420	6,842,753	7,542,384	8,170,758	7,943,565	9,277,456	9,177,245	9,733,880	9,861,125	9,905,282	10,396,304
Freight traffic of petroleum pipelines (million tons) <sup>(1)</sup>	187	500	571	623	652	738	759	734	806	898	913
Domestic Length of regular civil aviation routes (1000 km) <sup>(2)</sup>	994	1695	1996	1995	2603	2870	2923	3520	4237	4781	5468
Regular civil airports opened <sup>(3)</sup>	139	175	178	180	190	200	206	216	228	233	237
Length of railways in operation per 1000 km² of territory (km)	7	9	10	10	11	12	13	13	13	14	15
Ownership of automobiles											
Registered automobiles (1000 units) <sup>(4)</sup>	16,089	78,018	93,563	109,331	126,701	145,981	162,845	185,745	209,067	232,312	253,764
Passenger cars (1000 units) <sup>(5)</sup>		58,616	72,044	86,831	103,133	120,750	138,661	160,483	182,377	203,217	222,416
Number of international airlines service routes (Lines)	133	302	443	381	427	490	660	739	803	849	953
Road traffic accident involving per	sonal in	jury or d	eath								
Accidents	616,971	219,521	210,812	204,196	198,394	196,812	187,781	212,846	203,049	244,937	247,646
Number of injured	418,721	254,075	237,421	224,327	213,724	211,882	199,880	226,430	209,654	258,532	256,101
Number of death	93,853	65,225	62,387	59,997	58,539	58,523	58,022	63,093	63,772	63,194	62,763

- a) Ministry of Transport of the People's Republic of China, Annual Statistical Reports 2000–2019.
- b) Civil Aviation Administration of China, Annual Statistical Reports 2000–2019.
- c) China Railway Corporation, Annual Statistical Reports 2000-2019.
- d) China National Petroleum Corporation, Annual Statistical Reports 2000–2019.
- e) China National Offshore Oil Corporation, Annual Statistical Report 2019.
- f) National Bureau of Statistics of China, China Statistical Yearbooks 2000–2020 and Statistical Communiqué of the People's Republic of China on the 2019 National Economic and Social Development.
- g) The Ministry of Public Security of the People's Republic of China, Annual Statistical Reports 2000–2019.
- h) China Petrochemical Corporation, Annual Statistical Reports 2000-2019.

- (1) Since 2013, the statistical coverage of pipeline transport has included China National Offshore Oil Corporation on the basis of China National Petroleum Corporation and China Petroleum & Chemical Corporation.
- (2) The indicator "Length of Domestic Civil Aviation Routes" has been changed to "Length of Domestic Regular Civil Aviation Routes" from the year of 2011 but the coverage of the statistics remains stable.
- (3) The indicator "Number of Civil Airports" has been changed to "Number of Regular Civil Aviation Airports" from the year of 2011, but the coverage of the statistics remains unchanged.
- (4) The ownership of automobiles excludes three-wheel vehicles and low-speed trucks.
- (5) The number of passenger cars includes the number of small passenger vehicles and minicars.
- (6) Since 2013, there have been some changes on the classification, so the data from 2013 and on can not be compared with the previous ones.

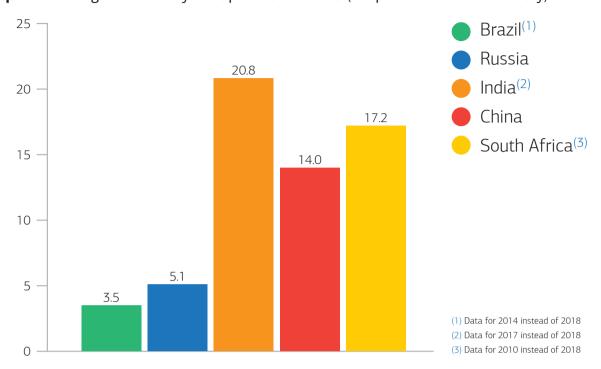
Table 11.2.5 — Selected Data on Transport — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Traffic											
Passenger traffic by road (million persons)		292	303	322	311	333	330	305	320	304	294
Transport of goods by road (million tons)		486	526	526	535	573	550	562	658	717	697
Passenger traffic by railway (million persons) <sup>(1)(2)</sup>		500	509	532	542	527	475	397	319	253	175
Transport of goods by railway (million tons)		186	198	210	216	225	224	220	227	218	216
Freight traffic of petroleum pipelines (million tons)(3)(4)											
Length of railways in operation per 1000 km² of territory (km)		17.2 <sup>(5)</sup>									
Ownership of passenger cars											
Passenger cars and buses (1000 units)		5929	6165	6448	6720	6971	7186	8138			
Road traffic accident involving personal i	njury or	death									
Number of death		13,967	13,954	13,528	11,844	12,702	12,944	14,071			***

- a) Statistics South Africa.
- b) Passenger Rail Agency of South Africa.
- c) Transnet.
- d) Road Traffic Management Corporation.

- (1) Passenger Rail Agency of South Africa.
- (2) These figures cover Metro rail only.
- (3) Transit Pipelines.
- (4) The Land Transport Survey is a monthly survey which covers passenger and freight transportation by rail and road in South Africa. This survey is based on a sample drawn from the 2010 Business Sampling Frame (BSF) that contains businesses registered for value-added tax. This survey has replaced the Land Freight Survey which was discontinued in 2003, and was re-engineered from 2008.
- (5) Estimates.

**Graph 11.1** Length of Railways in Operation in 2018 (km per 1000 km<sup>2</sup> of territory)



### **Explanatory Notes**

### **Brazil**

**Length of highways:** Refers to federal, state and municipal highways, excluding planned highways. Information on federal highways was published in December 2016 at <a href="https://www.dnit.gov.br">www.dnit.gov.br</a>

### Russia

**Passenger traffic (all means)** — passenger turnover which is determined multiplying the number of passengers for each position of transportation by the length of distance covered in km. Total passanger turnover is the sum of passanger turnover of the railway, bus, passenger taxi, tramway, trolley-bus, subway, maritime, inland water and air transport.

**Freight traffic (all means)** — freight turnover which is calculated multiplying the weight of shipped freight in tons by the length of its shipping in kilometers. Total freight traffic is the sum of freight turnover of the railway, motor, pipeline, maritime, inland water and air transport.

**Public Roads** refer to the federal roads of federal property; regional and inter municipal roads of the property of constituent entities of the Russian Federation; local roads of the property municipalities as well as of property of settlements, municipal and city districts.

### India

Length of Railways in Operation: This indicates total route kilometers, both electrified and non electrified.

Length of highways excludes urban and project roads.

Length of Petroleum Pipelines includes both onshore & offshore infrastructure.

**Civil Aviation:** information on air traffic and air operations includes operations of Indian Carriers on scheduled both domestic and international services.

### China

**Length of Railways in Operation** refers to the total length of the trunk line for passenger and freight transportation (including both full operation and temporary operation).

**Length of Highways** refers to the length of highways which are built in conformity with the grades specified by the highway engineering standard (Highways WTBZ-Technical Standard JTJ01–88) formulated by the Ministry of Transport, and have been formally checked and accepted by the departments of highways and put into use.

**Length of Petroleum Pipelines** refers to the actual transport distance of oil (or gas) products, which is in general calculated according to the length of single pipeline.

**Freight Traffic (passenger traffic)** refers to the sum of the product of the volume of transported cargo (passengers) multiplied by the transport distance in a given period of time.

Freight Traffic of Petroleum Pipelines refers to the total amount of oil (or gas) transported through petroleum pipelines.

**Length of Domestic Regular Civil Aviation Routes** refers to the total length of all domestic periodic civil aviation routes during statistical period.

**Number of Regular Civil Airports Opened** refers to the total number of areas assigned for civil aviation flights to do take-off, landing, taxing, parking and other actions.

**Ownership of Automobiles** refers to the total number of vehicles that are registered and received vehicles license tags according to the Work Standard for Motor Vehicles Registration formulated by the Transport Management Office under the Department of Public Security at the end of the reference period.

## 12

### Information and Communication Technology



Table 12.1 — Summary of Information and Communication Technology on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Main telephone lines per 1000 inhabitants											
Brazil	186	217	220	225	225	221	213	203	194 <sup>(1)</sup>	183 <sup>(1)</sup>	160 <sup>(1)</sup>
Russia	226	314	309	301	289	268	248	233	222	208	191
India <sup>(2)</sup>	26	30	27	25	23	22	20	19	18	17	16
China <sup>(3)</sup>	124	221	213	206	196	182	168	149	139	138	136
South Africa <sup>(4)</sup>		43	41	38	36	35	31	27	24	20	
Number of subscribers of cellular mobile telephones per 1000 inhabitants											
Brazil	140	1006 <sup>(1)</sup>	1187 <sup>(1)</sup>	1246 <sup>(1)</sup>	1349 <sup>(1)</sup>	1385 <sup>(1)</sup>	1261 <sup>(1)</sup>	1184 <sup>(1)</sup>	1050 <sup>(1)</sup>	988 <sup>(1)</sup>	988 <sup>(1)</sup>
Russia <sup>(5)</sup>	22	1664	1790	1827	1933	1908	1938	1978	2003	1969	2110
India <sup>(2)</sup>	2	632	742	708	717	754	798	880	901	898	889
China	67	644	736	825	903	940	925	956	1020	1122	1144
South Africa <sup>(1)</sup>	185	984	1231	1295	1432	1454	1589	1466	1552	1533	1656
Number of personal computers per 1000 inhabitants											
Brazil <sup>(6)</sup>		149	205	224	260						
Russia	64	437	***								
India	***										
China <sup>(7)</sup>	***				160	175	183	189	194	174	175
South Africa <sup>(8)</sup>				53	53	58	57	61	63	62	
Number of Internet users per 1000 inhabitants											
Brazil <sup>(6)(9)</sup>		410	460	490	510	544	583	609			
Russia <sup>(10)</sup>	20	469	-	-	680	705	734	764	798	838	856
India <sup>(11)</sup>	5	75	101	126	193	214	262	306	344	461	521
China	18	343	383	421	458	479	503	532	558	596	
South Africa <sup>(12)</sup>	***	28	27	27	28	31	29	29	30	30	
Number of daily news	oapers										
Brazil	***	652	684	727	722	784					***
Russia <sup>(13)</sup>	946	770	789	749	739	703	563	457	362		
India <sup>(14)</sup>	5364	9355	10,205	10,908	12,109	13,350	14,573	15,723	16,580		
China <sup>(15)</sup>	2007	1939	1928	1918	1915	1912	1906	1894	1884	1871	1851
South Africa <sup>(16)</sup>	16	21	22	22	22	22	22	22			

### Brazil

- a) National Telecommunication Agency ANATEL.
- b) Brazilian Institute of Geography and Statistics *IBGE*, *National Household Sample Survey 2007–2015*; *Projection of the Population by sex and age groups by the component method for the Period 2000–2030*.
- c) Statistics from the Center of Studies on Information and Communication Technologies CETIC.br, ICT Households Survey 2008–2015.
- d) Associacao Nacional de Jornais ANJ (National Association of Newspapers); http://www.anj.org.br/numero-de-jornais-brasileiros-2/
- e) International Telecommunication Union (ITU).

#### Russia

- a) Ministry of Communication and Mass Media of the Russian Federation.
- b) Federal State Statistics Service of the Russian Federation.
- c) World Bank

#### India

- a) Telecom Regulatory Authority of India, Indian Telecom Services Performance Indicator Report (various issues).
- b) Ministry of Information and Broadcasting, Office of the Registrar of Newspapers for India, Press in India (various issues).

#### China

- a) Ministry of Industry and Information Technology of the People's Republic of China.
- b) National Bureau of Statistics of China, China Household Survey 2013–2020; Urban Household Survey in China 2000–2012; and Rural Household Survey in China 2000–2012.
- c) National Radio and Television Administration of China, Annual Statistical Reports 2010–2019.

#### South Africa

- a) GHS 2002-2018. Statistics South Africa.
- b) South African Audience Research Foundation.
- c) International Telecommunication Union (ITU).

#### **Footnotes**

#### Brazil

- (1) Data from ITU database.
- (6) Considering population from 10 years old and above.
- (9) Until 2012, comprised only persons who accessed the Internet by personal computer and from 2013 onwards, by any equipment.

#### Russia

- (5) Number of user's devices of mobile radiotelephone (cellular) communication.
- (10) Until 2013 according to the World Bank. Since 2013, the indicator is calculated according to Rosstat as the ratio of the population aged 15–72 years using the internet within 12 months to the total number of the population aged 15–72 years, from 2017 at the age of 15–74 years.
- (13) Newspapers issued 3 and more times per week (number of titles).

#### India

- (2) Data is as on 31st December of the year indicated in the table except for 2000 where it is as on 31st March of the year 2001. Data for main telephone lines pertains to wireline whereas that for cellular mobile telephone pertains to wireless subscription in case of India.
- (11) Information for 2000–2012 is as per ITU database whereas data for 2013 to 2015 is as provided by Telecom Regulatory Authority of India and is on as 31st December of the year indicated in the table.
- (14) Data relates to 31st March of the year indicated in the table except for 2000 where the same is as on 31st December 2000.

#### China

- (3) PHS subscribers are also included in those of the main telephone lines.
- (7) Referes to Number of computers per 1000 Household. National Bureau of Statistics of China started an household survey in 2013–2014, including both urban and rural households. The coverage, methodology and definitions used in the survey are different from those used for the separate urban and rural household surveys prior to 2013.
- (15) Kinds of newspapers.

# **South Africa**

(1) Data from ITU database

Household based question:

- (4) Does the household have access to a telephone line in the dwelling or household? Calculation: Households with a telephone/total population × 1000. Survey data.
- (8) Does the household have access to a computer in the dwelling or household? Question was only asked in 2005, 2012–2017.
- (12) Does the household have access to an internet connection in the dwelling or household? Available from 2009.
- (16) Number of current daily newspapers, including those not printing on weekends and public holidays.

**Table 12.2.1** — Selected data on Information & Communication Technology (ICT) — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fixed telephone lines per 100 inhabitants	30.9	21.7	22.0	22.5	22.5	22.1	21.3	20.3	19.4(1)	18.3(1)
Mobile cellular telephone subscribers per 100 inhabitants	17.0	104.7	123.9	132.8	136.4	138.0	125.7	118.4	105.0 <sup>(1)</sup>	98.8 <sup>(1)</sup>
Fixed Internet subscribers per 100 inhabitants		7.8	8.7	9.9	11.0	11.8	12.4	13.0	13.8	
Fixed broadband Internet subscribers per 100 inhabitants	0.2	7.8	8.7	9.9	11.0	11.8	13.2	13.0	13.8	
Mobile broadband subscribers per 100 inhabitants	0.0	9.9	19.8	29.6	51.2	77.8	88.7	89.5	90.9	
Proportion of households with a TV			***					97.2		
Proportion of households with telephone			***					94.6	***	
Proportion of households with a computer								45.3		
Proportion of individuals who used a computer (from any location) in the last 3 months							***	63.7		
Proportion of households with Internet access at home								69.3		
Proportion of individuals who used the Internet (from any location) in the last 3 months								64.7		
Proportion of individuals using the Internet, by	ocation	in the l	ast 3 m	onths						
Home		56.0	68.0	74.0	78.0	89.0	89.5	91.8	***	
Work		22.0	31.0	30.0	34.0	33.0	38.0	40.5	***	
Place od education		14.0	16.0	15.0	17.0	15.0	19.3	20.2	***	
Another person's home		27.0	27.0	26.0	25.0	30.0	56.0	60.2	***	
Community Internet access facility		4.0	6.0	4.0	5.0	8.0	14.3	15.8		
Commercial Internet access facility		35.0	27.0	19.0	18.0	11.0	11.7	12.3		
Proportion of individuals with use of a mobile cellular telephone								77.1		
Proportion of individuals using the Internet, by	frequen	cy in the	last 3	months						
At least once a day		60.0	67.0	69.0	71.0	80.0	81.8	86.0		
At least once a week but not every day		30.0	24.0	23.0	22.0	15.0	14.2	10.3	***	
Less than once a week		10.0	8.0	8.0	6.0	5.0	4.0	3.8		
Proportion of households with electricity								99.8		
Proportion of businesses using computers		97.0	99.0	98.0	97.0	97.0	98.6			
Proportion of businesses using the Internet		95.0	98.0	97.0	96.0	96.0	97.9			
Proportion of businesses with a web presence	***	56.0	60.0	55.0	56.0	62.0	57.4		***	
Proportion of businesses with an intranet	***	31.0	42.0	32.0	31.0	34.0	34.3			
Proportion of businesses receiving orders over the Internet		32.9	12.0	16.0	16.0	21.0	20.8			
Proportion of businesses placing orders over the Internet		55.0	60.0	59.0	58.0	62.0	63.5			
Proportion of businesses with a local area network (LAN)		81.0	88.0	86.0	84.0	85.0	84.0			
Proportion of businesses with an extranet		21.0	34.0	28.0	28.0	27.0	26.5			

- a) National Telecommunication Agency ANATEL.
- b) Brazilian Institute of Geography and Statistics IBGE, National Household Sample Survey 2007–2015; Projection of the Population by sex and age groups by the component method for the Period 2000–2030.
- c) Statistics from the Center of Studies on Information and Communication Technologies CETIC.br, ICT Households Survey 2007–2015.
- d) ITU.

### **Footnotes**

Considering population from 10 years old and above.

(1) Data from ITU database.

Table 12.2.2 — Selected Data on Information and Communication Technology — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Main telephone lines per 100 inhabitants	23	31	31	30	29	27	25	23	22	21	19
Number of subscriber's devices of mobile radiotelephone (cellular) communication per 100 inhabitants	2	166	179	183	193	191	194	198	200	197	211
Number of Internet users per 100 inhabitants <sup>(1)</sup>	2	47	-	-	68	71	73	76	80	84	86
Organizations using											
personal computers (as % of total organizations observed)		93.8	94.1	94.0	94.0	93.8	92.3	92.4	92.1	94.0	93.5
e-mail (as % of total organizations observed)		81.9	83.1	85.2	86.5	84.2	84.0	87.6	88.3	90.9	91.1
Internet (as % of total organizations observed)		82.4	84.8	86.9	88.1	89.0	88.1	88.7	88.9	91.1	91.2
Organizations having web-sites (as % of total organizations observed)		28.5	33.0	37.8	41.3	40.3	42.6	45.9	47.4	50.9	51.9
Number of personal computers per 10	00 empl	oyees									
(in observed organizations), units		36	39	43	44	47	49	49	50	51	51
Share of households having <sup>(2)</sup>											
personal computers (%)		54.5	60.1	66.6	71.4	71.0	72.5	74.3	74.4	72.4	69.4
access to Internet (%)		48.4	56.8	63.8	69.1	69.9	72.1	74.8	76.3	76.6	76.9

Federal State Statistics Service of the Russian Federation.

#### **Footnotes**

- (1) Until 2013 according to the World Bank. Since 2013, the indicator is calculated according to Rosstat as the ratio of the population aged 15–72 years using the internet within 12 months to the total number of the population aged 15–72 years, from 2017 at the age of 15–74 years.
- (2) Until 2014 year by data of Household budget sample surveys, at the end of the year. Since 2014 by data of Sample survey of population on using of information technologies and information-telecommunication networks.

 $\textbf{Table 12.2.3} \ - \ \mathsf{Selected\ Data\ on\ Information\ and\ Communication\ Technology} \ - \ \mathsf{India}$ 

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Internet Subscribers per 100 inhabitants <sup>(1)</sup>		1.37	1.65	1.89	19.31	21.37	26.19	30.56	34.42	46.13	52.08
Fixed Internet (Fixed Broadb	and + Wir	ed Narro	wband) S	Subscribe	rs per 10	00 inhabit	tants <sup>(1)</sup>				
Total					1.48	1.51	1.58	1.68	1.64	1.64	1.69
Rural		***	***		0.14	0.21	0.21			***	
Urban			***		4.52	4.41	4.60			***	
Fixed Broadband Internet Su	bscribers	per 100	inhabita	nts <sup>(1)</sup>							
Total		0.75	1.00	1.14	1.18	1.22	1.30	1.42	1.38	1.39	1.44
Rural					0.14	0.15	0.15				
Urban					3.52	3.64	3.86				
Wired narrowband connection	ns per 10	00 inhabi	tants <sup>(1)</sup>								
Total					0.31	0.28	0.27	0.26	0.26	0.25	0.25
Rural					-	0.06	0.06				
Urban					1.00	0.77	0.74				
Mobil Broadband Subscriber	s per 100	inhabita	ants <sup>(1)</sup>								
Total					3.26	5.59	9.44	16.97	26.63	38.69	45.89
Rural					0.39	2.37	3.41				
Urban					9.74	12.80	22.78				
Fixed Wireless narrowband	onnectio	ns per 10	00 inhabi	tants <sup>(1)</sup>							
Total					0.040	0.040	0.040	0.020	0.001	0.0	0.0
Rural					-	0.0	0.0				
Urban					0.12	0.11	0.12				
Mobile Wireless narrowband	connecti	ons per 1	100 inhat	oitants <sup>(1)</sup>							
Total			•••		14.53	14.23	15.13	11.87	6.15	5.77	4.46
Rural					3.39	9.02	9.23				
Urban					39.72	25.88	28.20				
International Internet Bandwidth per inhabitants (in kbps) <sup>(2)</sup>					1.03	1.18	1.54	1.66	2.47		
Total number of telephone s	ubscriber	s per 100	) inhabita	ants <sup>(1)</sup>							
Total		66.16	70.86	73.34	74.02	77.58	81.83	89.90	91.90	91.45	90.52
Rural		31.18	37.48	39.85	42.67	46.09	49.94	53.27	56.66	59.50	57.59
Urban		147.88	167.85	149.9	144.95	148.06	152.45	170.15	168.29	159.98	160.63

- a) Telecom Regulatory Authority of India, Indian Telecom Services Performance Indicator Report (various issues).
- b) Ministry of Information and Broadcasting.

# **Footnotes**

(1) Data is as on 31<sup>st</sup> December of the each year indicated in the table. For 2019, data is as on 30<sup>th</sup> September.

**Table 12.2.4** — Selected Data on Information and Communication Technology — China

		2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Basic Instrument a	nd Core Lis	t of IC	T Indica	tors								
Broadband Subscribers of Internet Per 100 Inhabitants	(subscribers)		9.42	11.13	12.94	13.88	14.66	18.88	21.49	25.07	29.20	32.09
Mobile Broadband Users Per 100 Inhabitants	(subscribers)		3.51	9.53	17.19	29.51	42.59	51.37	68.04	81.40	93.57	
International Internet Bandwidth Per Inhabitant <sup>(1)</sup>	(bps/person)	2	859	1081	1471	2625	3157	4113	5036	5522	6723	6612
Mobile Cellular Telephone Subscribers Per 100 Households	(telephones)					203	216	225	235	240	249	253
urban						206	217	224	231	235	243	247
rural						200	215	226	241	246	257	261
Proportion of households with a computer	(%)	***				42.3	45.9	48.2	50.1	51.2	46.3	46.5
urban						60.8	64.6	66.8	68.2	68.9	62.2	61.7
rural						18.7	22.1	24.2	26.2	27.4	25.1	25.8
Development of I	CT											
Fixed Broadband Internet Access	(1000 households)		126,291	150,001	175,183	188,909	200,483	259,466	297,207	348,540	407,382	449,279
Flow Accessed to Mobile Internet	(1000 G)						2,061,936	4,187,533	9,378,635	24,593,803	70,900,393	121,992,006
Length of Optical Cable Lines	(1000 km)	1212	9962	12,119	14,793	17,454	20,613	24,863	30,421	37,801	43,168	47,412
Length of Long Distance Optical Cable Lines	(1000 km)	287	818	842	868	890	928	965	994	1045	994	1085
Base Stations of Mobile Telephones	(1000 Stations)	75	1398	1752	2066	2410	3508	4656	5594	6187	6672	8410
Broadband Subscribers Port of Internet	(1000 ports)		187,811	232,394	321,084	359,453	405,461	577,094	712,769	775,991	867,523	915,780
Number of Websites	(1000 sites)	265	1908	2296	2681	3202	3349	4229	4824	5333	5234	4966

- a) Ministry of Industry and Information Technology of the People's Republic of China, China Internet Network Information Center.
- b) National Bureau of Statistics of China, China Statistical Yearbook 2020; Statistical Communique of the People's Republic Of China on the 2019 National Economic And Social Development.

# **Footnotes**

(1) International Internet Bandwidth Per Inhabitant (bps/person) adopts International Internet Output Bandwidth (Mbps).

**Table 12.2.5** — Selected Data on Information and Communication Technology — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mobile network coverage											
Population covered by at least a 3G mobile network, %				84.25	90.4	95.0	98.0	99.2			
Population covered by at least a LTE/4G mobile network, %				5.0	14.2	34.0	54.0	77.6			
Fixed-telephone subscribers											
Fixed-telephone subscriptions (1000)	4962	4861	4854	4847	3876	3648	4131	4523	4810	3104	2025
Fixed-telephone subscriptions per 100 inhabitants	11.0	9.5	9.3	9.2	7.2	6.7	7.5	8.0	8.4	5.4	3.5
Mobile cellular subscribers											
Mobile cellular telephone subscriptions; by postpaid/ prepaid (1000)	8339	50,372	64,000	68,394	76,865	79,281	88,000	82,413	88,498	88,567	96,973
Mobile cellular telephone subscribers per 100 inhabitants	18.5	98.4	123.1	129.5	143.2	145.4	158.9	146.6	155.2	153.3	165.6
Fixed broadband subscribers											
Fixed broadband subscriptions		743,000	907,000	1,107,200	1,615,210	1,706,313	1,615,210	1,706,313			
Fixed broadband subscriptions per 100 inhabitants		1.44	1.75	2.11	3.06	3.21	2.63	2.84			
Mobile broadband subscribers											
Mobile-broadband subscriptions		8700	10,000	13,200	30,894	24,816	31,809	31,559			
Mobile-broadband subscriptions per 100 inhabitants		16.9	19.3	25.2	58.5	46.7	59.5	58.6		***	
Household ICT access and individual u	se										
Percentage of households with a TV		74.7	74.5	79.4	80.0	81.3	80.7	81.4	82.0	82.2	
Percentage of households with a fixed telephone		16.7	15.3	14.3	13.2	12.9	11.1	9.7	8.4	7.2	
Percentage of households with a mobile telephone		88.4	90.6	93.4	94.9	95.7	96.5	96.5	96.4	96.6	
Percentage of households with a computer		18.3	21.5	19.8	19.8	21.2	20.6	21.7	22.0	21.5	
Percentage of households with internet access		10.6	10.2	10.0	10.3	11.1	9.9	9.8	10.6	10.4	
ICT's contribution to the gross domest	ic prod	uct (GD	P)								
Information and communication technology share of GDP, %			***		3.1	3.0					
Telecommunication contribution to GDP, %					1.9	1.9					

GHS 2002-2018.

ITU World Telecommunication/ICT indicators (WTI) database, 2020.

Stats SA ICT Satellite account for South Africa, 2013 and 2014.

ICASA Report on the state of the ICT sector in South Africa, 31 March 2018.

# **Footnotes**

ITU — Inetrnational Telecommunications Union.

ICASA — Independent Communications Authority of South Africa.

2010 1006 Brazil<sup>(1)</sup> 988 2019 1664 Russia 2110 632 India 889 644 China 984 South Africa<sup>(1)</sup> 1656 (1) Data from ITU Database 0 500 1000 1500 2000 2500

**Graph 12.1** Number of subscribers of cellular mobile telephones (per 1000 inhabitants)

# **Explanatory Notes**

# Brazil

**Reference period** in the Brazilian surveys when asking about individual use of ICT refers about last three months according the international recommendation.

**Number of Internet Users per 1000 Inhabitants** — It was considered the inhabitants 10 years old or over. Internet users — persons 10 years old or over who accessed the Internet somewhere (own home, workplace, center of free or paid acess, home of other persons or any other place) by PC desktop or laptop (notebook, palmtop, pocket pc or handheld) at least once in the reference period of the last three months.

# Russia

**Main Telephone Lines** are telephone sets having independent numbers at the public telephone station as well as telephones with a shared line intended for public use. They switched on the public network and render service of local, intercities and international communication.

**Cellular communication** — mobile radio and telephone communication. Mobile communication — complex of technical means (radio and communication equipment, communication lines and structures), which render communication facilities for mobile subscribers and subscribers of public telephone network.

Data on orgnizations using personal computers and other information and communication technologies are given for orgnization which are under statistical observation (excluding small business).

#### India

**Main telephone Line** — Information relates to wireline connections i.e. connections with (fixed) telephone line connecting the subscriber's terminal equipment to the network. It includes WLL (fixed line extending upto the base unit).

**Subscribers of Cellular Mobile Telephone** — Includes wireless connections.

**Data on Internet User** — Includes information on subscription through both fixed lines as well as wireless (mobile phones) internet subscriptions.

Number of Daily Newspaper — includes newspapers in all languages & bilingual/multilingual newspapers.

**Total Internet Subscribers** — Comprises Narrowband Subscribers and Broadband Subscribers. This also comprises Wired Internet Subscribers & Wireless Internet Subscribers.

## China

**Main Telephone Line** refers to a main line which is a (fixed) telephone line connecting the subscriber's terminal equipment to the public switched network and which has a dedicated port in the telephone exchange equipment. The number of ISDN channels are included. PHS subscribers are included.

**Subscribers of Cellular Mobile Telephone** refer to number of portable telephone users subscribing to a public mobile telephone service and have access to Public Switched Telephone Network (PSTN) using cellular technology. This includes analogue and digital cellular systems.

Internet Users refer to the inhabitants aged 6 or above and have connected with Internet at least once in the last 6 months.

Number of Daily Newspapers includes all kinds of newspapers, with CSSN (China Standard Serial Number).

**Fixed Broadband Internet Access:** refers to those users registered accessing to the public internet through xDSL, FTTx+LAN, FTTH/O and other broadband access methods at the end of the reference period. By the administrative area, the internet broadband access users can be divided into urban and rural broadband access users. Breaking down by customers, they can be divided into household broadband access users and office broadband access users.

**Time Length Accessed to Fixed Broadband Internet:** refers to the actual time use by the fixed broadband Internet access users in the enterprise connected to the public Internet through the fixed broadband network at the end of the reference period.

Flow Volume Accessed to Mobile Internet: refers to the flow volume occured by the mobile phone users (including wireless LAN users)in the enterprise accessing to the public internet or WAP site through the mobile communication network, including uplink and downlink flow.

**Length of Optical Cable Lines:** refers to the sum of the length of the trunk line of the local network, the length of the cable line of the access network, and the length of the long distance optical cable line at the end of the reference period.

**Length of Long Distance Optical Cable Lines:** refers to the actual length of the long distance optical cable used to realize the transmission of optical signals. Overhead cable length is calculated by the actual length of rod road; cable length buried in the underground, underwater, submarine pipelines is based on the channel or pipe length.

**Base Stations of Mobile Telephones:** refer to all the sets of facilities that provides service for wireless receiving and transmitting apparatus for residence, processing the mobile wireless communication between base station and the mobile station, playing relay function between the mobile switching and the mobile stations, monitoring the quality of wireless transmission at the end of the reference period.

**Broadband Internet Access Ports:** refer to all kinds of broadband internet access ports acturally installed and operated for the access of the innternet users, and do not include narrowband dial-up access ports. According to the main technical modes at present used for the broadband internet access, the xDSL port, LAN port and FTTH/O port are used.

**Number of Websites:** refers to the websites with the domain name or "WWW.+domain name" as their site addresses, of which, including China's country websites of the top-level domain name (CN) and category top level domain name (gTLD). These domains are registered within the territory of China.

# South Africa

Household based question.

Does the household have access to a telephone line in the dwelling or household?

Does the household have access to a cell phone in the dwelling or household?

Does the household have access to a computer in the dwelling or household? Question was only asked in 2005, 2012 and 2013. Does the household have access to an internet connection in the dwelling or household? Question was asked in 2005, and then again in 2009, 2010. Available 2009–2013.

Not access to outside sources, just whether they have access in the household.

# Finance



**Table 13.1** — Summary of Finance on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Share of deficit (-)/surp	lus of ger	eral gove	rnment t	o GDP (%	)						
Brazil <sup>(1)(2)</sup>	-3.8	-2.8	-2.9	-2.7	-3.5	-6.2	-10.6	-8.9	-8.4		
Russia <sup>(3)</sup>	1.4	-3.9	0.7	-0.1	-0.4	-0.4	-2.4	-3.4	-1.4	2.9	1.9
India <sup>(4)(5)</sup>	-6.6	-3.2	-4.2	-3.5	-3.3	-3.0	-2.5	-2.1	-2.6	-2.4	-2.7
China	-2.5	-1.6	-1.1	-1.6	-1.9	-1.8	-3.4	-3.8	-3.7	-4.1	-4.9
South Africa <sup>(6)</sup>	-1.0	-4.2	-3.7	-4.5	-3.8	-3.4	-3.1	-3.3	-2.7	-2.6	-2.5
Share of income tax to r	evenue (	%)									
Brazil <sup>(7)</sup>											
Russia <sup>(8)</sup>	27.3	22.3	20.5	19.7	18.7	19.0	20.1	20.5	21.1	20.8	21.5
India <sup>(4)(9)</sup>	11.3	20.7	20.1	20.2	21.4	19.9					
China	12.4	21.3	22.0	21.7	22.4	22.8	23.5	24.4	25.5	26.8	25.0
South Africa <sup>(6)</sup>	42.3	44.0	41.2	41.5	41.0	40.7	40.5	40.1	41.0	41.1	40.2
M2 supply (year-end) (bi	llion US\$	)									
Brazil <sup>(10)</sup>	155.2	774.1	966.1	902.8	906.0	913.4	684.6	680.9	778.0		
Russia <sup>(11)</sup>	40.9	656.6	751.8	894.4	951.9	562.0	482.7	633.4	736.8	678.1	834.9
India <sup>(4)(12)</sup>	82.5	368.1	340.0	349.3	348.9	373.7					
China <sup>(13)</sup>	1626.1	10,960.1	13,515.4	15,498.4	18,149	20,074.8	21,440.8	22,344.9	25,867.5	26,616.5	28,475.2
South Africa <sup>(14)</sup>	62.7	245.7	220.0	216.3	197.7	194.2	163.5	188.0	212.7	204.1	209.6

# Brazil

- a) Central Bank of Brazil.
- b) National Treasury Secretariat.

#### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Treasury.
- c) Bank of Russia.

# India

- a) Ministry of Finance, Union Budget (various issues).
- b) Reserve Bank of India.

# China

- a) Ministry of Finance of the People's Republic of China.
- b) The People's Bank of China.
- c) National Bureau of Statistics of of China.

# **South Africa**

South African Reserve Bank.

#### **Footnotes**

#### **Brazil**

- (1) The general government includes federal government, state governments, and local governments, and excludes Central Bank of Brazil and public enterprises.
- (2) Nominal result.
- (7) Total tax revenue corresponds to the fiscal load.
- (10) The Annual average exchange rates used is available in Tables 13.2.1 and 14.1.

#### Russia

- (3) Share of deficit/surplus of Federal budget to GDP. The calculation carried out on the basis of data of the Federal Treasury.
- (8) Share of profit (income) tax of organisations and income tax of individuals to revenue.
- (11) The calculation is according to the data of Bank of Russia.

#### India

- (4) For all Information, reference year is Financial Year (i.e. April of the year indicated in the table to March next year). For example, figure given for year 2000 here is virtually for financial year 2000–01 which means April, 2000 to March 2001. This is applicable for each other figure in the row.
- (5) The data relates to Revenue Deficit of General Government i.e. Central Government & State Governments combined. For 2011 to 2015, figures given are based on GDP figures relating to new series (i.e. Revised Base year 2011–12 = 100) and worked out at current market price. Information since 2014 is provisional.
- (9) Revenue pertains to General Government & includes both revenue & capital receipts. Income Tax includes Personal Income Tax & Corporation Tax only. Income Tax is collected by Central Government only.
- (12) Includes Currency with public, deposit money of the public and post office saving bank deposit. M2 supply (year End) in million US\$ has been calculated on the basis of year end exchange rate of the concerned financial years.

#### China

(13) M2 is calculated using the year-end exchange rates released by State Administration of Foreign Exchange.

#### South Africa

- (6) Fiscal year: year begins on 1 April to 31 March of the following year.
- (14) Calendar year: year begins on 1 January to 31 December (year-end). Year end exchange rates are used.

#### M2 comprises:

- · Notes and coins in circulation outside monetary sector.
- · Cheque and transmission deposits.
- · Other demand, short & medium term deposits up to 6 months.
- · Monthly average exchangr rates at year end.

**Table 13.2.1** — Selected Data on Finance — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Expenditure (million R\$) <sup>(1)</sup>	315,421	1,115,572	1,179,629	1,519,572	1,440,397	1,651,950	2,382,043				
Structure of expenditure of co	onsolida	ted budge	et (%)								
General public services	5.3	4.5	4.2	3.5	3.8	3.5	2.9				
Foreign affairs	0.2	0.2	0.2	0.1	0.1	0.1	0.1				
National defense	3.4	2.9	2.7	2.4	2.6	2.4	1.7				
Public security	0.7	0.8	0.6	0.5	0.6	0.5	0.4				
Education	3.4	3.9	4.5	4.3	5.3	5.2	4.4				
Science and technology	0.4	0.7	0.6	0.5	0.7	0.5	0.4				
Culture, sport and media	0.1	0.2	0.2	0.2	0.3	0.3	0.2				
Social safety net and employment effort	33.0	35.5	37.4	32.8	40.0	38.5	28.6				
Medical and health care	6.4	5.4	6.0	5.2	5.8	5.6	4.3				
<b>Environment protection</b>	0.4	0.3	0.3	0.4	0.4	0.4	0.2				
Urban and rural community affairs	1.0	1.0	0.9	0.9	1.1	0.6	0.4				
Agriculture, forestry and water conservancy	1.6	1.3	1.3	1.0	1.4	1.1	0.9				
Transportation	1.0	1.8	1.6	1.5	1.4	1.3	0.7				
Industry, commerce and banking	0.7	0.5	0.5	0.4	0.5	0.4	0.3				
Other expenditure <sup>(2)</sup>	42.4	41.0	39.2	46.4	36.0	39.7	54.6				
Annual average exchange rates in national currency/ US dollar (R\$)	1.8	1.8	1.7	2.0	2.2	2.4	3.3	3.5	3.2 <sup>(3)</sup>	3.7 <sup>(3)</sup>	
Currency issued — M0 (year-end) (million R\$)	47,686	206,853	214,235	233,371	249,510	263,529	255,289	270,287	296,755		
Currency issued — M0 (year-end) (million US\$)	26,071	117,604	127,959	119,390	115,519	99,213	76,464	77,595	92,954		
Currency issued — M1 (year-end) (million R\$)	74,352	280,141	285,377	325,045	344,508	351,603	334,417	347,811	363,026		
Currency issued — M1 (year-end) (million US\$)	40,650	159,271	170,451	166,289	159,501	149,320	100,164	99,851	113,712		
Currency issued — M2 (year-end) (million R\$)	283,785	1,362,389	1,617,480	1,764,645	1,956,838	2,150,684	2,285,721	2,371,655	2,483,873		
Currency issued — M2 (year-end) (million US\$)	155,150	774,085	966,092	902,770	905,981	913,358	684,614	680,864	778,034		
Discount rate of Central Bank (%)	15.80	10.80	10.90	7.30	9.90	11.60	14.10	13.60	6.90		10.87 <sup>(3)</sup>
Interest rate of deposit and lending (%)	15.8	11.5	10.3	7.7	11.5	12.0	15.2	11.9	8.5		

- a) Central Bank of Brazil.
- b) National Treasury Secretariat.
- c) IMF.

# **Footnotes**

- (1) Data covers Federal Government only.
- (2) "Other expenditure" is the single largest item because it comprises transactions such as transfers to states and municipalities and debt management expenditure.
- (3) Data from IMF database.

**Table 13.2.2** — Selected Data on Finance — Russia

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
					2013	2014	2013	2010	2017	2018	2019	
Revenue and expenditure of consolidated	(gener	al gover	nment)	budget								
Revenue (billion Rub)(1)	2098	16,032	20,855	23,435	24,443	26,766	26,922	28,182	31,047	37,320	39,498	
Structure of revenue of consolidated bud	<b>get</b> (%)											
Profit (income) tax of organisations (%)	19.0	11.1	10.9	10.1	8.5	8.9	9.7	9.8	10.6	11.0	11.5	
Income tax of individuals (%)	8.3	11.2	9.6	9.6	10.2	10.1	10.4	10.7	10.5	9.8	10.0	
Tax, dues and regular payment for na	tural											
resources usage (%)		9.0	10.0	10.6	10.6	11.0	12.1	10.5	13.4	16.6	15.8	
Revenue from external economic activities (%)		20.1	22.4	21.2	20.5	20.4	12.2	9.2	8.4	9.9	7.6	
Expenditure (billion Rub) <sup>(1)</sup>	1960	17,617	19,995	23,175	25,291	27,612	29,742	31,324	32,396	34,285	37,382	
Structure of expenditure of consolidated	Structure of expenditure of consolidated budget (%)											
General and local government (%)(2)	3.7	8.2	6.8	6.2	6.0	5.9	6.2	5.9	6.0	6.2	6.2	
National economy (%)		13.2	14.0	14.1	13.0	16.5	12.7	12.4	13.4	13.0	13.8	
Social-cultural arrangements (%)	27.4	57.5	56.2	57.0	58.0	54.9	57.7	57.3	58.8	59.5	58.8	
Currency issued — M0 (year-end) (billion Rub) <sup>(3)</sup>	419	5063	5939	6430	6986	7172	7239	7715	8446	9339	9658	
Currency issued — M0 (year-end) (billion US\$) <sup>(4)</sup>	15	166	184	212	213	127	99	127	147	134	153	
Currency issued — M2 (year-end) (billion Rub) <sup>(3)</sup>	1151	20,012	24,205	27,165	31,156	31,616	35,180	38,418	42,442	47,109	51,660	
Currency issued — M2 (year-end) (billion US\$) <sup>(4)</sup>	41	657	752	894	952	562	483	633	737	678	835	
Discount rate of Central Bank (year-end) (%) <sup>(3)</sup>	25.00	7.75	8.00	8.25	8.25	8.25	8.25	10.00	7.75	7.75	6.25	
Interest rate (%) <sup>(3)</sup>												
Deposit	6.51	6.01	4.44	5.53	5.59	6.04	9.20	6.97	5.86	5.36	5.40	
Lending	24.43	10.82	8.46	9.10	9.47	11.14	15.72	12.60	10.56	8.87	8.75	

- a) Federal State Statistics Service of the Russian Federation.
- b) Federal Treasury.
- c) Bank of Russia.

# **Footnotes**

- (1) In 2005 in Russia has adopted a new budget classification. Since 2005 data are included budgets of state extra-budgetary funds.
- (2) In connection with adoption of a new budget classification in 2005, data for previous years are not strictly comparable. Since 2011 excepting expenses on services of the state and municipal debt.
- (3) By data of Bank of Russia.
- (4) The calculation is according to the data of Bank of Russia.

**Table 13.2.3** — Selected Data on Finance — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenue and expenditure of cons	olidated	(genera	l govern	ment) bu	dget						
Total receipts (billion ₹) <sup>(1)</sup>	5979	21,536	24,541	27,690	29,767	34,836	37,976	19,781(1)	21,319	23,151	26,986
Revenue receipts (%) <sup>(1)</sup>	63.4	73.3	69.0	71.2	73.6	74.9	75.2	69.6 <sup>(1)</sup>	71.1	67.1	68.6
Tax receipts (%) <sup>(1)</sup>	51.1	58.0	58.8	61.0	61.9	59.9	61.1	53.3(1)	57.6	56.9	55.8
Non-tax receipts (%) <sup>(1)</sup>	12.3	15.3	10.2	10.2	11.7	15.0	14.1	16.3 <sup>(1)</sup>	13.5	10.2	12.8
Expenditure of consolidated (general government) budget (billion $\tilde{\uparrow}$ )(1)	5956	21,451	24,218	26,949	29,760	35,215	38,151	23,762 <sup>(1)</sup>	27,527	29,231	34,091
Total expenditure of ministries/departments and its distribution (billion $\mathbb{T}$ )(2)	3256	11,973	13,044	14,104	15,594	16,637	17,908	19,781	21,420	23,151	26,986
Agriculture and rural development (%)	4.5	6.3	5.0	6.0	5.6	5.8	5.6	6.7	7.4	8.5	9.8
Defence services (%)	18.5	16.4	15.6	15.2	16.3	17.1	16.4	17.2	16.8	12.6	11.7
Health services (%)	1.6	2.1	2.0	2.2	1.9	1.9	2.0	2.0	2.3	2.4	2.4
Education (%)	2.4	4.6	4.7	4.8	4.6	4.1	3.8	3.7	3.7	3.5	3.5
Petroleum and natural gas (%)	0.1	5.4	6.8	3.9	5.5	3.6	1.8	1.5	1.4	1.4	1.6
Science, technology and IT (%)	0.5	0.7	0.6	0.7	0.6	0.9	0.7	0.8	0.8	0.5	0.4
Transport (%)	3.6	3.8	3.7	3.8	4.1	3.9	4.7	5.3	5.7	6.2	5.9
Economic affairs (centralized provisions) (%)	35.2	24.2	26.0	26.0	33.0	32.7	31.8	30.2	28.1	36.1	37.0
Home affairs (%)	3.2	3.5	3.4	3.4	3.4	3.6	4.5	4.5	4.5	4.8	5.2
Consumer affairs, food and public distribution (%)	3.8	5.7	6.1	5.5	6.0	7.1	7.9	7.2	7.2	4.7	4.3
Others (%)	26.6	27.3	26.1	28.5	19.2	19.2	21.0	21.1	22.2	19.4	18.3
Money stock measures (billion ₹)											
M1	3794	16,408	17,374	18,975	20,598	22,924	26,025	26,820	32,673	37,104	38,069(6)
M2	3883	16,699	17,705	19,354	21,075	23,398	26,713	27,875	33,765	38,511	39,487 <sup>(6)</sup>
M3	13,132	65,041	73,848	83,898	95,194	105,502	116,543	128,391	139,626	154,321	164,186 <sup>(6)</sup>
M4	13,476	66,239	74,890	85,287	96,773	107,239	118,620	130,933	142,634	157,994	168,279 <sup>(6)</sup>
Foreign currency assets — FCA (million US\$)	39,554	274,330	260,069	259,726	276,359	317,324	336,104	346,319	399,442	385,357	447,358 <sup>(7)</sup>
SDRs (million US\$)	2	4569	4469	4328	4464	3985	1502	1447	1540	1457	1449 <sup>(7)</sup>
"Reserve position in the IMF — RTP (million US\$)"	-	2947	2836	2301	1834	1292	2456	2321	2079	2986	3618 <sup>(7)</sup>
Foreign exchange reserves excluding gold (million US\$)	39,556	281,846	267,375	266,354	282,656	322,600	340,061	350,086	403,061	389,800	452,425 <sup>(7)</sup>
"Foreign exchange reserve of gold (million US\$)"	2725	22,972	27,023	25,692	21,567	19,038	20,115	19,869	21,484	23,071	29,467 <sup>(7)</sup>

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Structure of interest rates											
Deposit rates (% per annum) <sup>(3)</sup>											
Savings <sup>(4)</sup>	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5-4.0		
Term deposits											
1 to 3 years	8.50-9.50	8.25-9.00	9.00-9.25	8.75–9.00	8.75–9.25	8.50-8.75	7.25–7.50	6.75–7.00	6.25–6.75		
3 to 5 years	9.50-10.00	8.25-8.75	9.00-9.25	8.75–9.00	8.75–9.10	8.50-8.75	7.00–7.50	6.50-6.90	6.25–6.50		
Above 5 years	8.50-10.00	8.50-8.75	8.50-9.25	8.50-9.00	8.50-9.10	8.25-8.50	7.00–7.30	6.50-6.75	6.25–6.50		
Lending rates (% per annum) <sup>(5)</sup>	11.00–12.00	825–9.50	10.00-10.75	9.07–10.25	10.00-10.25	10.00–1025	9.30–9.70	7.75–8.10	7.75–8.10		

- a) Ministry of Finance, Union Budget (various issues).
- b) Reserve Bank of India, HandBook of Statistics on Indian Economy and Bulletin on Money Stock Measures (various issues).

#### **Footnotes**

For all Information, reference year is Financial Year (i.e. April of the year indicated in the table to March next year). As regards Foreign Exchange Reserves, they are given as at the end of Financial Year i.e. 31st March (Next year). Foreign Exchange Reserves data for 2017 pertains to week ending 30th March 2018 (latest available data). Month-end data of March will be available with a lag of one month.

- (1) Total Receipts and Total Expenditures pertains to Central Government Receipts and Expenditure. This data is not comparable with previous year's data as past data consists of consolidated Receipts and Expenditures of Central and State Governments. Revenue receipts consists of tax receipt and non tax receipts.
- (2) The information relates to expenditure (both Plan and Non Plan) by Ministries/Departments of Centre and Union Territories including Plan expenditure of States.
- (3) data source for structure of interest rates is: Scheduled Commercial Banks (excluding RRBs) and the Reserve Bank of India.

  Data on deposit and lending rates relate to five major Public Sector Banks up to 2003–04. While for the subsequent years, they relate to five major banks.
- (4) Savings deposit rates from 2011–12 onwards relates to balance up to 1 Lakh. Savings deposit rate was deregulated with effect from October 25, 2011.
- (5) Data on lending rates relate to either Prime Lending Rate (PLR) or Benchmark Prime Lending Rate (BPLR), Base Rate or Marginal Cost of Funds Based Lending Rate (MCLR) (overnight) as the case may be for the relevant year. BPLR system effective November 2003 was replaced by the Base Rate System effective from July 1, 2010. Base Rate System effective from July 1, 2010 was replaced by the MCLR System effective from April 1, 2016.
- (6) The data as on 31st January 2020.
- (7) Figures as on 13th March 2020.

**Table 13.2.4** — Selected Data on Finance — China

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Dovenue and ownerditure						2014	2013	2010	2017	2010	2019
Revenue (million RMB)											
(1)	1,339,523	8,310,151	10,387,443	11,725,352	12,920,964	14,037,003	15,226,923	15,960,497	17,259,277	18,335,984	19,039,008
Structure of revenue of o	onsolidate	ed budget (	%)								
Total tax revenue		88.1	86.4	85.8	85.5	84.9	82.0	81.7	83.6	85.3	83.0
Domestic value added tax		25.4	23.4	22.5	22.3	22.0	20.4	25.5	32.7	33.6	32.7
Domestic consumption tax		7.3	6.7	6.7	6.4	6.3	6.9	6.4	5.9	5.8	6.6
VAT and consumption tax from imports		12.6	13.1	12.6	10.8	10.3	8.2	8.0	9.3	9.2	8.3
VAT and consumption tax rebate for exports		-8.8	-8.9	-8.9	-8.1	-8.1	-8.5	-7.6	-8	-8.7	-8.7
Business tax	***	13.4	13.2	13.4	13.3	12.7	12.7	7.2			
Corporate income tax		15.5	16.1	16.8	17.4	17.6	17.8	18.1	18.6	19.3	19.6
Individual income tax		5.8	5.8	5.0	5.1	5.3	5.7	6.3	6.9	7.6	5.5
Resource tax		0.5	0.6	0.8	0.8	0.8	0.7	0.6	0.8	0.9	1.0
City maintenance and construction tax		2.3	2.7	2.7	2.6	2.6	2.6	2.5	2.5	2.6	2.5
House property tax		1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.6
Stamp tax		1.3	1.0	0.8	1.0	1.1	2.3	1.4	1.3	1.2	1.3
Stamp tax on security exchange		0.7	0.4	0.3	0.4	0.5	1.7	0.8	0.6	0.5	0.6
Urban land use tax		1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.2
Land appreciation tax		1.5	2.0	2.3	2.5	2.8	2.5	2.6	2.8	3.1	3.4
Tax on vehicles and boat operation		0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Tax on ship tonnage		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle purchase tax		2.2	2.0	1.9	2.0	2.1	1.8	1.7	1.9	1.9	1.8
Tariffs	***	2.4	2.5	2.4	2.0	2.0	1.7	1.6	1.7	1.6	1.5
Farm land occupation tax		1.1	1.0	1.4	1.4	1.5	1.4	1.3	1.0	0.7	0.7
Deed tax		3.0	2.7	2.5	3.0	2.9	2.6	2.7	2.8	3.1	3.3
Tobacco leaf tax		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Environment protection tax										0.1	0.1
Other tax revenue		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total non-tax revenue Special program receipts		2.5	2.9	2.8	2.7	2.6	18.0	18.3 4.3	4.1	4.1	17.0 3.7
Charge of administrative and institutional units		3.6	3.9	3.9	3.7	3.7	3.2	3.1	2.7	2.1	2.0
Penalty receipts	•••	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.4	1.5	1.6
Other non-tax receipts		4.5	5.5	6.2	6.7	7.5	8.9	9.7	8.1	7.0	9.6
Expenditure (million RMB) $^{(1)}$	1,588,650	8,987,416	10,924,779	12,595,297	14,021,210	15,178,556	17,587,777	18,775,521	20,308,549	22,090,413	23,885,837
Structure of expenditure	of consoli	dated budg	get (%)								
General public services		10.4	10.1	10.1	9.8	8.7	7.7	7.9	8.1	8.3	8.5
Foreign affairs		0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3
National defense		5.9	5.5	5.3	5.3	5.5	5.2	5.2	5.1	5.1	5.1
Public security		6.1	5.8	5.6	5.6	5.5	5.3	5.9	6.1	6.2	5.8
Education		14.0	15.1	16.9	15.7	15.2	14.9	15.0	14.8	14.6	14.6
Science and technology		3.6	3.5	3.5	3.6	3.5	3.3	3.5	3.6	3.8	4.0
Culture, sport and media		1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.7
Social safety net and employment effort		10.2	10.2	10.0	10.3	10.5	10.8	11.5	12.1	12.2	12.3
Medical and health care		5.3	5.9	5.8	5.9	6.7	6.8	7.0	7.1	7.1	7.0

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Environment protection		2.7	2.4	2.4	2.4	2.5	2.7	2.5	2.8	2.9	3.1
Urban and rural community affairs		6.7	7.0	7.2	8.0	8.5	9.0	9.8	10.1	10.0	10.4
Agriculture, forestry and water conservancy		9.0	9.1	9.5	9.5	9.3	9.9	9.9	9.4	9.5	9.6
Transportation		6.1	6.9	6.5	6.7	6.9	7.0	5.6	5.3	5.1	4.9
Affairs of exploration, power and information		3.9	3.7	3.5	3.5	3.3	3.4	3.1	2.5	2.3	2.1
Affairs of commerce and services		1.6	1.3	1.1	1.0	0.9	1.0	0.9	0.8	0.7	0.5
Financial affairs		0.7	0.6	0.4	0.3	0.3	0.5	0.7	0.6	0.6	0.7
Post-earthquake recovery and reconstruction		1.3	0.2	0.1	0.0	0.0	0.0	0.0			
Other regional assistance			1.4	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Affairs of land and weather		1.5	0.0	1.3	1.4	1.4	1.2	1.0	1.1	1.0	0.9
Affairs of housing security		2.6	3.5	3.6	3.2	3.3	3.3	3.6	3.2	3.1	2.7
Affairs of management of grain&oil reserves		1.3	1.2	1.1	1.2	1.3	1.5	1.2	1.1	0.9	0.8
Interest payment on debts		2.1	2.2	2.1	2.2	2.4	2.0	2.7	3.1	3.4	3.5
Issuing debts							0.0	0.0	0.0	0.0	0.0
Other expenditure		3.0	2.7	2.0	2.3	2.1	2.1	1.0	0.9	1.0	1.4
Currency issued — M0 (year-end) (million RMB)	1,465,270	4,462,820	5,074,846	5,465,981	5,857,444	6,025,953	6,321,658	6,830,387	7,064,560	7,320,840	7,718,947
Currency issued — M0 (year-end) (million US\$) <sup>(2)</sup>	177,006	673,867	805,416	869,618	960,725	984,794	973,521	984,631	1,081,167	1,066,680	1,106,469
Currency issued — M1 (year-end) (million RMB)	5,314,720	26,662,150	28,984,770	30,866,420	33,729,105	34,805,641	40,095,344	48,655,724	54,379,015	55,168,591	57,600,915
Currency issued — M1 (year-end) (million US\$) <sup>(2)</sup>	642,022	4,025,873	4,600,100	4,910,734	5,532,173	5,688,126	6,174,594	7,013,943	8,322,215	8,038,319	8,256,775
Currency issued — M2 (year-end) (million RMB)	13,461,030	72,585,180	85,159,090	97,414,880	110,652,498	122,837,481	139,227,811	155,006,667	169,023,531	182,674,422	198,648,882
Currency issued — M2 (year-end) (million US\$) <sup>(2)</sup>	1,626,101	10,960,059	13,515,385	15,498,350	18,148,977	20,074,764	21,440,774	22,344,914	25,867,517	26,616,509	28,475,227
Interest rate of deposit (year-end) (%) <sup>(3)</sup>	2.25	2.75	3.50	3.00	3.00	2.75	1.50	1.50	1.50	1.50	1.50
Interest rate of lending (year-end) $(\%)^{(3)}$	5.85	5.81	6.56	6.00	6.00	5.60	4.35	4.35	4.35	4.35	4.35

- a) Ministry of Finance of the People's Republic of China.
- b) The People's Bank of China.

# **Footnotes**

- (1) Since 2009, there have been some changes on the classification of expenditure, so the data can not be compared with the previous ones.
- (2) Currency issued on million US\$ is calculated using the year-end exchange rates released by State Administration of Foreign Exchange.
- (3) Deposit rates and lending rates refer to the one-year official interest rates of deposits and loans of financial institutions.

**Table 13.2.5** — Selected Data on Finance — South Africa

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenue and expenditure of co	onsolidate	d general	governme	ent <sup>(3)</sup>							
Revenue (million ZAR)	274,288	815,271.4	921,449.1	1,028,479.7	1,114,300.4	1,246,375.6	1,385,714.4	1,514,941.9	1,622,406.1	1,730,649.9	1,835,544.5
Structure of revenue of consol	idated bu	dget (%)									
Total tax revenue	79.2	78.8	78.8	78.0	78.9	78.1	77.1	77.0	77.0	76.7	77.5
Domestic value added tax	13.5	18.1	19.9	18.6	19.3	19.1	18.9	18.6	17.8	17.2	17.7
Domestic consumption tax	***										
VAT and consumption tax from imports	0.0	2.4	2.9	3.3	3.5	3.6	3.0	3.1	2.8	2.9	3.0
VAT and consumption tax rebate for exports	0.0	-	-	-	-	-	-	-	-	-	-
Business tax	0.0	-	-	-	-	-	-	-	-	-	-
Corporate income tax	10.8	18.7	16.5	17.0	16.2	15.8	15.0	14.4	14.7	14.4	13.3
Individual income tax	31.5	25.3	24.8	24.4	24.8	24.9	25.5	25.7	26.3	26.7	26.9
Resource tax	0.0	-	-	-	-	-	-	-	-	-	-
City maintenance and construction tax	0.0	-	-	-	-	-	-	-	-	-	-
House property tax	3.9	3.2	3.3	3.2	3.3	3.3	3.5	3.3	3.4	3.4	3.7
Stamp tax	0.0	-	-	-	-	-	-	-	-	-	-
Stamp tax on security exchange	1.3	1.0	0.9	0.7	0.7	0.7	0.8	0.9	0.8	0.8	0.7
Deed tax	0.7	0.6	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4
Tobacco leaf tax <sup>(2)</sup>	0.1	1.2	1.1	1.1	1.0	0.9	0.9	0.9	0.8	0.7	0.7
Other tax revenue <sup>(1)</sup>	1.8	8.3	8.8	9.3	9.6	9.3	9.0	9.8	9.9	10.1	11.0
Total non-tax revenue	20.8	21.2	21.2	22.0	21.1	21.9	22.9	23.0	23.0	23.3	22.5
Special program receipts	1.7	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Charge of administrative and institutional units	61.7	0.1	1.1	1.1	0.3	1.1	0.2	0.1	0.2	0.1	0.0
Penalty receipts	0.6	0.3	0.4	0.3	0.3	0.5	0.5	0.4	0.4	0.4	0.4
Other non-tax receipts	5.6	20.4	19.5	20.3	20.2	20.1	21.9	22.3	22.2	22.7	22.1
Total expenditure-consolidate	d general	governme	nt <sup>(3)</sup>								
Functional classification											
Expenditure (million ZAR)	283,740	923,362.5	1,026,314	1,166,164.7	1,242,930.1	1,371,217.6	1,505,597	1,650,702.8	1,742,570.4	1,854,675.8	1,959,683.3
Structure of expenditure of co				22.7	242	27.0	25.7	247	247	240	
Of which: Public debts	28.7	21.6	20.6	22.3	24.2	23.9	25.3	24.7	24.3	24.9	
transactions	16.8	6.6	7.2	7.2	7.4	7.8	8.4	8.5	9.2	9.5	
Defence	4.5	3.4	3.7	3.3	3.1	3.3	3.1	2.9	3.0	2.7	
Public order & safety	9.7	11.2	11.4	10.9	10.7	10.6	10.2	9.9	9.8	9.7	
Economic Affairs	9.8	10.4	10.0	10.2	9.3	9.7	9.7	11.2	10.7	10.5	
Of which:Agriculture, foresty, fishing											
and hunting	1.4	1.6	1.7	1.6	1.6	1.6	1.5	1.3	1.4	1.2	
Fuel and energy	0.2	0.7	0.5	0.5	0.4	0.5	0.5	2.0	0.5	0.4	
Mining, manufacturing & Constr	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	
Transport	5.0	5.0	5.0	5.3	4.7	4.5	4.8	4.8	5.5	5.4	
Communication	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.4	

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Other Industries	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Environmental protection	1.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	
Housing and community amenities	2.3	4.4	4.5	4.6	4.7	4.8	4.5	4.5	4.4	4.1	
Health	9.7	11.5	11.8	11.7	11.5	11.3	11.4	11.4	11.6	11.8	
Of which: Outpatient services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	
Hospital services	0.0	4.8	4.9	6.8	6.6	6.4	6.6	6.5	6.6	6.7	
Public Health	0.0	5.6	5.8	3.9	3.8	3.7	3.7	3.7	3.8	3.9	
Recreation, culture and religion	1.6	3.0	2.9	3.0	3.3	3.1	2.4	2.4	2.4	2.3	
Education	20.3	19.6	20.1	19.9	19.4	19.3	19.3	18.8	19.2	19.2	
Of which: Pre-primary education & Primary education	8.3	7.0	7.0	6.6	6.4	6.1	5.9	5.8	5.9	5.9	
Secondary education	6.5	5.2	5.4	5.2	4.9	4.8	4.7	4.5	4.6	4.6	
Tertiary education	5.2	4.4	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.9	
Social protection	11.4	14.2	14.2	13.3	12.9	13.2	13.3	13.4	13.9	13.9	
Total outlays	100	100	100	100	100	100	100	100	100	100	
Currency issued — M0 (year-end) (million ZAR)	43,568	135,999	158,666	176,850	193,902	209,636	225,901	240,465	256,894	280,228	291,880
Currency issued — M0 (year-end) (million US\$)	5757	19,909	19,406	20,468	18,702	18,285	15,124	17,645	19,476	19,754	20,214
Currency issued — M1 (year-end) (million ZAR)	274,355	862,876	947,269	1,035,142	1,132,039	1,241,272	1,428,508	1,606,911	1,700,966	1,778,087	1,827,051
Currency issued — M1 (year-end) (million US\$)	36,250	126,315	115,858	119,806	109,186	108,268	95,641	117,910	128,954	125,339	126,530
Currency issued — M2 (year-end) (million ZAR)	474,848	1,678,417	1,798,932	1,869,050	2,049,694	2,226,544	2,441,508	2,601,201	2,806,033	2,895,085	3,026,522
Currency issued — M2 (year-end) (million US\$)	62,742	245,701	220,023	216,321	197,694	194,206	163,463	190,869	212,732	204,078	209,598
Currency issued — M3 (year-end) (million ZAR) <sup>(4)</sup>	520,665	2,084,202	2,256,727	2,373,439	2,512,251	2,693,899	2,975,907	3,156,546	3,359,131	3,545,770	3,758,804
Currency issued — M3 (year-end) (million US\$) <sup>(4)</sup>	68,795	305,103	276,015	274,698	242,308	234,971	199,241	231,618	254,664	249,945	260,312
Discount rate of Central Bank (%)	12.00	5.50	5.50	5.00	5.00	5.75	6.25	7.00	6.80	6.80	6.50
Interest rate of deposit and lending (%) <sup>(5)</sup>	14.50	9.00	9.00	8.50	8.50	9.30	9.75	10.50	10.25	10.25	10.00

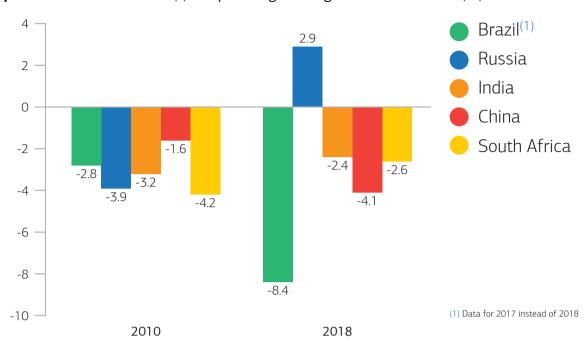
South African Reserve Bank.

# **Footnotes**

Fiscal years-year beginning April 1 to March 31 of the following year.

- (1) No definition available for some of the tax categories. Total net tax revenue minus the detail of all available categories. This also includes the adjustments made for South African Customs Union transfers and VAT refunds.
- (2) Data for excise duties on cigarette and cigarette tobacco only from 2001.
- (3) Consolidated General government refers to Central, prpvincial and local government.
- (4) M3 is the broadly defined money supply aggregate officially used in South Africa.
- (5) The prime overdraft rate serves as a market reference or benchmark rate for interest rates, but does not determine interest rates.

Note: This table can be listed respectively for BRICS countries in country tables if available.



**Graph 13.1** Share of deficit (-)/surplus of general government to GDP (%)

# **Explanatory Notes**

#### **Brazil**

**Share of Deficit (-)/Surplus of General Government to GDP** — The general government includes federal government, state governments, and local governments, and excludes Central Bank of Brazil (Bacen), and public enterprises. Nominal result.

Share of Income Tax to Revenue — Total tax revenue corresponds to the fiscal load.

**M2 Supply (End of the Year)** — The Annual average exchange rates used is available in Tables 13.2.1 and 14.1.

**Expenditure** — Data covers Federal Government only.

**Other expenditure** is the single largest item because it comprises transactions such as transfers to states and municipalities and debt management expenditure.

# Russia

**Budget Revenues** — monetary funds coming to the budget, excluding funds which in accordance to the Budget Code of the Russian Federation are the sources of financing the budget deficit.

**Budget Expenditures** — monetary funds paid from the budget funds, excluding funds which in accordance to the Budget Code of the Russian Federation are the sources financing the budget deficit.

**Deposit Rate** — average rate on deposits (in national currency) of individuals in credit institutions for up to 1 year.

 $\textbf{Lending Rate} \ -\ \text{average rate on loans (in national currency) to legal entities (companies and organizations) in credit institutions up to 1 year.$ 

Annual rates are calculated as the average of monthly data.

#### India

General Government includes both Central Government and State Governments.

**Income Tax:** Income Tax Act, 1961 imposes tax on the income of the individuals or Hindu undivided families or firms or cooperative societies (other than companies) and trust (identified as bodies of individuals associated of persons) or every artificial juridical person. The inclusion of a particular income in the total incomes of a person for income-tax in India is based on his/her residential status. There are three residential statuses, viz., (i) Resident & Ordinarily Resident (Resident), (ii) Resident but not Ordinary Resident and (iii) Non Resident. There are several steps involved in determining the residential status of a person. All residents are taxable for all their income, including income outside India.

M1 = Currency with the Public + Deposit money of the Public.

M2 = M1 + Post Office savings banks deposits.

M3 = M1 + Time deposits with banks.

M4 = M3 + Total Post Office Deposits.

#### China

**Revenue of Consolidated Budget** refers to income for the government finance through participating in the distribution of social products. It is the financial guarantee to ensure government functioning. The contents of government revenue have been changed several times.

**Expenditure of Consolidated Budget** refers to the distribution and use of the funds which the government finance has raised, so as to meet the needs of economic construction and various causes.

**Share of Deficit/Surplus of General Government to GDP =** (Revenue of consolidated budget - Expenditure of consolidated budget)/GDP.

The Contents of Government Revenue include the following main items:

- a) Various Tax Revenues including domestic value added tax (VAT), domestic consumption tax, VAT and consumption tax from imports, VAT and consumption tax rebate for exports, business tax, corporate income tax, individual income tax, resource tax, city maintenance and construct tax, house property tax, stamp tax, urban land use tax, land appreciation tax, tax on vehicles and boat operation, ship tonnage tax, vehicle purchase tax, tariffs, farm land occupation tax, deed tax, and tobacco leaf tax, etc.
- b) **Non-Tax Revenue** including special program receipts, charge of administrative and institutional units, penalty receipts and others non-tax receipts.

#### The Contents of Government Expenditure include the following main items:

- a) Expenditure for general public services;
- b) Expenditure for foreign affairs;
- c) Expenditure for national defence;
- d) Expenditure for public security;
- e) Expenditure for education;
- f) Expenditure for science and technology;
- g) Expenditure for culture, sports and media;
- h) Expenditure for social safety net and employment effort;
- i) Expenditure for medical and health care;
- j) Expenditure for environment protection;
- k) Expenditure for urban and rural community affairs;
- I) Expenditure for agriculture, forestry and water conservancy;
- m) Expenditure for transportation;
- n) Expenditure for industry, commerce and banking, etc.

#### South Africa

- MO = Deposits of monetary institutions with the central bank and banknotes and coin in circulation outside the central bank.
- M1 = Notes and coin in circulation plus cheque and transmission deposits and other demand deposits of domestic private sector with monetary institutions.
- M2 = M1 plus other short-term deposits held by the domestic private sector.
- M3 = M2 plus long-term deposits held by the domestic private sector.

# 

# External Economic Relations



**Table 14.1** — Summary of External Economic Relations on BRICS Countries

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Value of imports and expor	ts of god	ods and c	ommerci	al service	es (millio	n US\$)					
Brazil	136,994	475,657	594,517	584,947	605,159	582,862	466,988	420,916	473,265	532,641 <sup>(1)</sup>	
Russia	168,991	762,792	983,498	1,034,472	1,061,609	991,449	674,824	598,450	737,731	852,146	836,235
India <sup>(2)</sup>	125,940	826,096	1,015,835	1,017,576	995,163	997,988	882,242	918,998		844,157	600,088
China <sup>(3)</sup>	477,398	3,089,799	3,835,801	4,118,339	4,475,810	4,704,505	4,362,434	4,140,108	4,641,545	5,199,017	5,122,632
South Africa	70,187	210,127	250,598	241,365	235,657	226,104	195,709	179,706	202,650	219,022	208,063
Value of imports of goods	and com	nercial se	ervices (r	nillion US	5\$)						
Brazil	72,914	243,661	302,029	303,848	325,571	318,799	243,118	203,163	221,544	257,664 <sup>(1)</sup>	
Russia	58,471	320,958	410,050	444,698	469,651	428,898	281,789	266,097	327,248	343,585	353,599
India <sup>(2)</sup>	65,112	450,324	567,546	571,497	528,945	529,542	465,641	480,023		514,078	361,990
China <sup>(3)</sup>	224,306	1,433,388	1,826,949	1,943,247	2,120,215	2,241,603	2,002,282	1,942,185	2,212,267	2,548,007	2,479,255
South Africa	33,129	102,734	123,612	123,560	122,045	115,679	99,937	89,077	99,085	108,878	103,147
Value of exports of goods a	and com	nercial se	ervices (n	nillion US	\$\$)						
Brazil	64,081	231,996	292,488	281,100	279,588	264,063	223,870	217,753	251,721	274,977 <sup>(1)</sup>	***
Russia	110,520	441,833	573,448	589,774	591,958	562,551	393,035	332,353	410,483	508,561	482,636
India <sup>(2)</sup>	60,828	375,772	448,289	446,079	466,218	468,445	416,601	438,975	***	330,078	238,097
China <sup>(3)</sup>	253,092	1,656,412	2,008,852	2,175,092	2,355,595	2,462,902	2,360,152	2,197,922	2,429,277	2,651,010	2,643,377
South Africa	37,058	107,393	126,986	117,805	113,612	110,425	95,772	90,629	103,565	110,144	104,916
Share of current account surplus (+)/deficit (-) to GDP (%)											
Brazil	-3.8	-3.4	-3.0	-3.0	-3.0	-4.3	-3.3	-1.3	-0.5	-2.2 <sup>(1)</sup>	-2.7 <sup>(1)</sup>
Russia	16.3	4.1	4.8	3.3	1.5	2.8	5	1.9	2.1	6.8	5.7
India <sup>(2)(4)</sup>	-0.6	-2.8	-4.2	-4.8	-1.7	-1.3	-1.1				
China	1.7	3.9	1.8	2.5	1.5	2.3	2.8	1.8	1.6	0.2	1
South Africa	-0.1	-1.5	-2.2	-5.1	-5.8	-5.1	-4.6	-2.9	-2.5	-3.5	-3.0
Ratio of exports of goods a	and comn	nercial se	rvices to	imports	of goods	and con	nmercial	services	(%)		
Brazil	87.9	95.2	96.8	92.5	85.9	82.8	92.1	107.2	113.6	106.7 <sup>(1)</sup>	***
Russia	189.0	137.7	139.8	132.6	126.0	131.2	139.5	124.9	125.4	148.0	136.5
India <sup>(2)</sup>	93.4	83.4	79.0	78.1	88.1	88.5	89.5		***	64.2	***
China	112.8	115.6	110.0	111.9	111.1	109.9	117.9	113.2	109.8	104.0	106.6
South Africa	111.9	104.5	102.7	95.3	93.1	95.5	95.8	101.7	104.5	101.2	101.7
Ratio of exports of goods t	to import	s of good	ls (%)								
Brazil	97.2	110.1	112.1	107.7	100.2	97.1	110.2	132.3	141.8		
Russia	235.5	159.8	161.8	157.1	152.9	161.4	176.9	147.1	148.1	178.4	164.9
India <sup>(2)</sup>	88.2	67.9	62.5	61.2	69.8	69.3	68.8				
China	115.9	119.2	114.5	118.7	120.1	124.1	136.8	132.6	127.3	119.5	121.5
South Africa	117.2	109.8	106.6	95.7	93.1	94.9	95.6	102.8	105.9	102.0	103.1
Inflows of FDI (million US\$	)										
Brazil	32,995	88,452	101,158	86,607	69,686	97,180	74,718	78,248	70,332		
Russia <sup>(5)</sup>	2678	43,168	55,084	50,588	69,219	22,031	6853	32,539	28,557	8785	31,975
India <sup>(2)</sup>	4031	36,047	46,552	34,298	36,047	45,147	55,559	60,220 <sup>(5)</sup>	60,974	62,001	51,429
China <sup>(6)</sup>	40,715	105,735	116,011	111,716	117,586	119,562	126,267	126,001	131,035	134,966	138,135
South Africa <sup>(7)</sup>	888	3635	4248	4559	8304	5775	1730	2235	2010	5450	4624

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Outflows of FDI (million US	5\$)										
Brazil	2497	26,763	16,067	5208	14,942	26,040	13,518	12,816	6268		
Russia <sup>(5)</sup>	3,179	52,616	66,851	48,822	86,507	57,082	22,085	22,314	36,757	31,377	21,923
India <sup>(2)</sup>	759	17,195	10,892	7134	9199	4031	8886	6603 <sup>(8)</sup>	***		
China <sup>(6)(9)</sup>		68,811	74,654	87,804	107,844	123,120	145,667	196,149	158,288	143,037	136,908
South Africa <sup>(10)</sup>	271	-76	-257	2988	6652	7675	5747	4475	7377	4076	3119
Foreign exchange reserves	(million	US\$)									
Brazil <sup>(11)</sup>	33,011	288,575	352,012	373,147	358,808	363,551	356,464	365,016	373,972	365,544 <sup>(1)</sup>	
Russia <sup>(12)</sup>	24,263	432,948	441,162	473,110	456,447	327,727	309,387	308,031	346,507	371,733	433,297
India <sup>(13)</sup>	38,036	279,057	304,818	294,398	292,046	304,223	341,638	360,176	369,955	412,871	481,892
China	165,574	2,847,338	3,181,148	3,311,589	3,821,315	3,843,018	3,330,362	3,010,517	3,139,949	3,072,712	3,107,924
South Africa	7534	43,834	48,860	50,735	49,587	49,102	45,787	47,356	50,722	51,641	55,058 <sup>(14)</sup>
Share of external debts to	GDP (%)										
Brazil	36.6	12.0	11.8	13.3	12.7	14.4	18.6	17.9	15.5		
Russia <sup>(12)</sup>	61.7	32.1	28.8	28.4	32.6	42.7	45.5	36.3	32.5	30.2	27.6
India <sup>(13)</sup>	23.6	18.2	18.2	21.1	22.4	23.9	23.9	23.5	20.2	19.8	20.1
China <sup>(15)</sup>		9.0	9.2	8.6	9.0	17.0	12.5	12.6	14.3	14.3	14.3
South Africa	27.1	29.6	28.3	35.8	37.2	41.3	39.1	48.2	49.6	46.8	52.7
International investment p	osition (r	nillion US	5\$)								
Brazil <sup>(16)</sup>		-906,150	-820,350	-794,826	-723,914	-705,912	-379,693	-582,864	-688,469		
Russia <sup>(17)(18)</sup>		102,912	18,409	149,451	142,332	131,736	313,248	339,169	219,666	280,529	374,013
India <sup>(13)</sup>	-76,848	-159,200	-207,021	-264,730	-326,663	-340,760	-364,291	-358,865	-387,992	-418,533	-436,755
China		1,478,292	1,525,573	1,674,978	1,809,089	1,602,765	1,672,830	1,950,368	2,100,701	2,146,096	2,123,995
South Africa	-10,694	-98,969	-43,558	-55,671	-14,720	-26,090	40,902	22,428	34,597	44,877	31,081
Annual average exchange	ates										
Brazil (R\$ per US\$)	1.8	1.8	1.7	2.0	2.2	2.4	3.3	3.5	3.2	3.7 <sup>(1)</sup>	
Russia (RUB per US\$)	28.1	30.4	29.4	31.1	31.8	38.0	60.7	66.9	58.3	62.5	64.7
India (RS per US\$)(2)	45.7	45.6	47.9	54.4	60.5	61.1	65.5	67.1	64.5	69.9	68.9
China (RMB per US\$)	8.3	6.8	6.5	6.3	6.2	6.1	6.2	6.6	6.8	6.6	6.9
South Africa (ZAR per US\$)	6.9	7.3	7.3	8.2	9.7	10.8	12.8	14.7	13.3	13.2	14.4
Year-end exchange rates											
Brazil (R\$ per US\$)	2.0	1.7	1.9	2.0	2.3	2.7	3.9	3.3	3.3		***
Russia (RUB per US\$)	28.2	30.5	32.2	30.4	32.7	56.3	72.9	60.7	57.6	69.5	61.9
India (RS per US\$)(2)	45.1	44.6	51.2	54.4	60.1	62.6	66.3	64.8	65.0	69.2	75.4
China (RMB per US\$)	8.3	6.6	6.3	6.3	6.1	6.1	6.5	6.9	6.5	6.9	7.0
South Africa (ZAR per US\$)	7.6	6.6	8.1	8.5	10.5	11.6	15.6	13.6	12.3	14.5	14.0

# Brazil

- a) Central Bank of Brazil.
- b) Ministry of Development, Industry and Foreign Trade.
- c) International Monetary Fund.

#### Russia

- a) Federal State Statistics Service of the Russian Federation.
- b) Bank of Russia.
- c) International Monetary Fund.

### India

- a) Ministry of Commerce & Industry, Department of Commerce, Export Import Data Bank; and Department of Industrial Policy and Promotion, FDI Statistics (various issues).
- b) Reserve Bank of India, HandBook of Statistics on Indian Economy.
- c) Ministry of Finance, Report on India's External Debt (various issues).

#### China

- a) State Administration of Foreign Exchange.
- b) Ministry of Commerce of the People's Republic of China.

#### South Africa

South African Reserve Bank.

#### **Footnotes**

#### Brazil

- (1) According to IMF data.
- (11) Cash concept.
- (16) Since April 2015, Brazilian Direct Investment (DI) data is presented in accordance with the sixth edition of Balance of Payments and International Investment Position Manual (BPM6), edited by IMF, which uses the principle of assets and liabilities instead of the directional principle. Additionally, new sources of information enabled the inclusion of flows of reinvested earnings from 2010 onwards. As of BPM6, the expression "FDI" was replaced by "Direct Investment Liabilities".

#### Russia

- (5) According to the Bank of Russia. The data are submitted according to the principle of assets/liabilities. The sign (-) means a decrease.
- (12) At the end of the year. The calculation is according to the data of Bank of Russia.
- (17) At the beginning of the year.
- (18) Data are presented in accordance with the 6<sup>th</sup> version of the IMF's Balance of Payments and International Investment Position Manual.

#### India

- (2) All information in case of India pertains to financial year (i.e. from April 1 of the year mentioned in the table to March end of next year).
- (4) GDP estimates used are at Current Market Prices (with Base Year revised 2011–12 = 100).
- (8) Data are provisional.
- (13) Figures are as on 31st March of the year indicated in the table.

#### China

- (3) Data of imports and exports of goods and commercial services come from the State Administration of Foreign Exchange.
- (6) Data of FDI come from the Ministry of Commerce of the People's Republic of China.
- (9) Outflows of FDI from 2003 to 2006 did not include financial intermediation, data for 2007 and onwards included all sectors.
- (15) The scope of external debt was adjusted based on the IMF Special Data Dissemination Standard (SDDS) and consequently the external data with full coverage was released, including the debt in RMB, in 2015 in China. The debt figure at the end of 2014 was also adjusted accordingly for the convenience of comparison. The earlier data related have not been adjusted.

# South Africa

- (7) These indicate on a net basis an increase in liabilities and a decrease in assets.
- (10) These indicate on a net basis a decrease in liabilities and an increase in assets.
- (14) This includes gold.

**Table 14.2.1** — Selected Data on Merchandise Trade — Brazil

	2000	2010	2011	2012	2013	2014	2015	2016	2017
Import from major trade partners <sup>(1)</sup>	55,851	181,768	226,747	223,183	239,748	229,145	171,461	137,557	
China	1222	25,595	32,791	34,251	37,304	37,345	30,719	23,364	
United States	12,899	27,044	33,970	32,363	36,019	35,008	26,470	23,799	
Argentina	6843	14,435	16,906	16,444	16,463	14,143	10,284	9085	
Germany	4428	12,554	15,214	14,212	15,183	13,838	10,378	9129	
Nigeria	734	5920	8387	8012	9648	9495	4633	1305	
South Korea	1437	8422	10,097	9099	9492	8526	5421	5449	
India	271	4242	6081	5043	6358	6640	4290	2484	
Italy	2167	4838	6223	6202	6719	6311	4675	3702	
Japan	2961	6986	7872	7735	7081	5901	4877	3567	
France	1880	4801	5465	5910	6499	5700	4458	3679	
Mexico	754	3859	5131	6075	5795	5363	4378	3528	
Chile	968	4182	4547	4166	4325	4011	3423	2887	
Spain	1119	2773	3299	3543	4487	3910	3499	2565	
Bolivia	140	2233	2863	3431	4035	3816	2506	1342	
Saudi Arabia	779	2059	3093	3197	3194	3299	1907	1301	
Export to major trade partners <sup>(1)</sup>	55,119	201,915	256,040	242,578	242,034	225,101	191,134	185,280	
China	1085	30,786	44,315	41,228	46,026	40,616	35,608	35,138	
United States	13,190	19,307	25,805	26,701	24,653	27,028	24,080	23,159	
Argentina	6238	18,523	22,709	17,998	19,615	14,282	12,800	13,420	
Netherlands	2796	10,228	13,640	15,041	17,333	13,036	10,044	10,324	***
Japan	2474	7141	9473	7956	7964	6719	4845	4605	
Germany	2527	8138	9039	7277	6552	6633	5179	4863	
Chile	1248	4258	5418	4602	4484	4984	3978	4083	
India	217	3492	3201	5577	3130	4789	3617	3162	
Venezuela	753	3854	4592	5056	4850	4632	2987	1283	
Planes and ships provisions	945	3570	4813	4867	4135	4038	2427	1948	***
Italy	2146	4235	5441	4581	4098	4021	3270	3323	
South Korea	581	3760	4694	4501	4720	3831	3122	2881	
Russia	423	4152	4216	3141	2974	3829	2464	2300	
United Kingdom	1499	4628	5202	4460	4067	3827	2907	2842	
Mexico	1713	3715	3960	4003	4230	3670	3588	3814	
Import by principal commodities <sup>(1)</sup>	55,851	181,768	226,247	223,183	239,748	229,145	171,461	137,557	
Petroleum oils, crude	3190	10,093	14,081	13,410	16,321	15,533	7381	2899	
Diesel oil		5132	7422	6574	8285	8725	3415	2897	
Autom. with motor explosion, 1500 < cm <sup>3</sup> ≤ 3000, up to 6 pass	808	4928	6978	5845	5365	4479	2989	1517	
Naphtha for petrochemical			•••	3957	4459	4422	2580	2420	
Natural gas in the state gaseous	114	2132	2734	3336	3991	3827	2568	1278	
Natural gas, liquefied	0.0	777	291	1548	2835	3139	2754	768	
Other parts receivers apparatus radio-broad., televis., etc	274	2695	3054	3033	3233	2935	1997	1204	

	2000	2010	2011	2012	2013	2014	2015	2016	2017
Other potassium chloride	561	2204	3471	3510	3319	2893	2510	1989	
Other parts for appar./equip. of teleph./telegr.		788	1050	1212	2105	2768	2277	1904	
Other motor vehicles with diesel engine, weigh≤5t	399	1463	1664	2141	2535	2242	1489	1354	
Bituminous coal, not agglomerated	100	2150	3352	2347	1951	1907	1752	1456	
Other mixtures of wheat and rye, except for sowing				1721	2415	1812	1216	1335	
Parts of turbo-jets or of turbo-propellers	257	875	1058	1121	1390	1765	1947	2109	
Other gasolines, except for aviation				2915	2144	1582	1048	915	
Other inseticides, presented in another way		520	708	877	1316	1538	1188	787	
Export by principal commodities	55,119	201,915	256,040	242,578	242,034	225,101	191,134	185,280	
Soybeans, whether or not crushed, except for sowing				17,240	22,806	23,273	20,982	19,327	
Iron ores not agglomerated, and concentrates	1853	21,354	31,852	23,810	25,996	19,983	10,379	11,576	
Petroleum oils, crude	159	16,293	21,603	20,306	12,957	16,357	11,781	10,074	
Other cane sugar	***			9814	9156	7446	5899	8280	
Soybean waste, solid	1648	4673	5544	6246	6101	6062	5003	4331	
Coffee not roasted or decaffeinated, in grain	1559	5182	8000	5722	4582	6041	5555	4843	
Chemical wood pulp of n/conif., soda/sulphate, semi/ble	1526	4430	4605	4322	4821	4914	5343	5129	
Frozen bovine meat, boneless	333	3369	3506	3653	4477	4890	3953	3577	
Fowls spec. gal. domest. cuts and offal, frozen	445	3531	4454	4272	4199	4461	3959	3954	
Maize (corn) in grain, except for sowing	0.0	2122	2624	5285	6248	3870	4932	3655	
Iron ores agglomerated and concentrates	1195	7558	9965	7179	6495	3716	3697	1713	
Fuel oil		2194	3299	4773	3567	3113	1254	640	
Oth. airplanes/aircraft, weight>15,000kg, empty	602	3036	3201	3579	2916	2720	2985	3247	
Onboard consump. fuels and lubrication f/aircrafts	448	1526	2298	2554	2504	2614	1589	1127	
Frozen fowls spec. gallus domest.n/cut in piece	359	2254	2606	2460	2805	2432	2271	1993	

# **Footnotes**

Value is at FOB

(1) Trade data is only for goods and excludes services.

Table 14.3.1 — Selected Data on Direct Investment (DI) Net incurrence of liabilities — Brazil

DI inflow by source	2000	2010	2011	2012	2013	2014	2015	2016	2017
Netherlands	2228	6681	17,578	12,112	10,508	8649	11,562	10,539	10,892
United States	5398	4994	7982	11,792	8299	8029	5848	6298	10,678
British Virgin Islands		957	203	768	255	727	694	1621	8714
Luxembourg		8797	1749	5452	4920	6446	5553	7362	3488
Germany	374	435	668	759	883	1469	3426	1795	3175
Spain	9592	1523	8582	2522	2246	5959	6559	3554	2293
France	1909	803	-1606	919	-1490	1287	1896	1652	2145
Chile	29	907	746	1875	2943	1141	928	815	1580
Italy		300	430	984	898	867	1679	2834	1521
Mexico	224	27	195	-379	361	-304	336	-385	1502
Switzerland	306	6444	1171	4327	2311	1967	1125	962	1287
United Kingdom		-628	2200	1915	1537	-654	1636	3586	1124
Bahamas		46	-249	38	543	178	162	111	1079
Norway		1539	1011	874	396	553	2444	2183	901
Hong Kong		-124	2058	481	104	403	-2238	27	817
Japan	384	2443	7498	1355	2490	3726	2849	1381	497
Cayman Islands		406	610	615	173	579	537	363	460
South Korea		1018	1050	865	488	402	248	525	343
Portugal	2514	1188	464	532	589	3141	379	242	313
Bermudas		625	791	150	168	11	236	257	255
Denmark		295	150	483	338	285	329	165	178
Austria		3419	1506	85	88	281	60	88	175
Australia		357	1032	517	86	334	151	44	139
Belgium		46	420	656	473	347	989	614	123
Uruguay		-116	216	456	-164	126	262	274	82
Argentina	112	-80	-127	229	-80	21	-3	104	75
Ireland		-35	143	363	122	72	335	534	14
Netherlands Antilles		11	3	577	1	0.0	-70	-8	3
Costa Rica		2	-2167	0.0	-57	2	-123	2	0.0
Canada	192	681	1598	1939	1214	828	918	496	-14
Sweden		266	384	137	75	639	278	-4637	-60
Panama		-4605	-2955	-2963	-760	-1814	-1266	-307	-1960
Other countries		1494	1450	2399	2197	1801	1799	1876	2140

# Source

Central Bank of Brazil.

# Footnote

 $Includes\ Direct\ Investment\ (DI)\ --\ Equity\ and\ investment\ fund\ shares\ inflows\ and\ does\ not\ include\ DI\ --\ Debt\ instruments.$ 

Table 14.4.1 — Balance of Payments — Brazil, 2017

Type of transaction	Balance	Credit	Debit
Current account	-9762	269,148	278,910
Balance on goods (FOB)	64,028	217,243	153,215
Services and income (net)	-76,422	46,454	122,876
Services	-33,851	34,478	68,329
Primary income	-42,572	11,975	54,547
Secondary income	2632	5452	2820
Capital and current account	-9382	269,686	279,068
Capital account	379	538	158

Type of transaction	Net	Assets	Liabilities
Financial account			
Direct investment	-64,064	6268	70,332
Portfolio investments	13,445	12,371	-1075
Financial derivatives	705	-8153	-8858
Other investments	38,674	44,808	6134
Reserve Assets	5093	5093	
Errors and omissions	3236		

# Source

Central Bank of Brazil.

Table 14.2.2.1 — Selected Data on Merchandise Trade — Russia

										(milli	ion US\$)
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Import from major trad	e partners	5									
Germany	3898	26,699	37,683	38,305	37,916	32,975	20,441	19,455	24,232	25,519	25,112
Netherlands	740	4442	5925	5977	5856	5294	3096	3022	3894	3695	3978
China	949	38,964	48,202	51,628	53,065	50,773	34,948	38,022	48,055	52,231	54,140
Italy	1212	10,043	13,402	13,432	14,556	12,729	8320	7840	10,102	10,588	10,899
Turkey	349	4867	6360	6860	7271	6644	4059	2165	3387	4234	4978
USA	2694	11,097	14,584	15,366	16,538	18,496	11,454	10,688	12,593	12,528	13,180
France	1187	10,043	13,276	13,804	13,012	10,630	5919	8490	9778	9551	8587
India	557	2143	2786	3041	3089	3172	2258	2402	2903	3227	3922
Brazil	388	4067	4389	3359	3493	3969	2915	2523	3199	2451	2150
South Africa	71	473	465	686	782	691	565	522	628	786	827
Export to major trade p	artners										
Germany	9232	25,662	34,158	34,995	37,054	37,132	25,351	21,256	25,705	34,766	28,049
Netherlands	4349	53,974	62,695	76,886	70,105	68,040	40,848	29,215	35,577	43,708	44,788
China	5248	20,326	35,030	35,766	35,619	37,492	28,601	28,012	38,917	56,017	57,322
Italy	7254	27,476	32,658	32,301	38,778	35,225	22,294	11,960	13,838	16,391	14,342
Turkey	3098	20,317	25,350	27,419	25,444	24,937	19,287	13,536	18,410	21,294	21,150
USA	4644	12,320	16,425	12,867	11,113	10,583	9432	9223	10,152	12,484	13,049
France	1903	12,420	14,859	10,535	8995	7578	5712	4781	5833	7649	6369
India	1082	6392	6080	7563	6982	6343	5575	5312	6457	7750	7308
Brazil	259	1798	2125	2304	1983	2366	1924	1786	2032	2582	2455
South Africa	34	46	115	279	286	285	271	196	203	286	281
Imports by principal con	mmodities	(1)									
Fresh and frozen meats (including poultry meats)	967	5665	6034	6325	5913	5089	2846	2092	2438	1826	1700
Medicaments	1150	9346	10,964	10,784	11,805	10,211	6876	7066	8585	8106	10,448
Passenger cars	448	11,535	20,041	20,220	16,990	13,157	6488	6035	6697	7261	7906
Exports by principal cor	nmodities	(1)									
Crude oil	25,284	134,757	181,764	180,930	173,668	153,895	89,588	73,712	93,377	129,202	122,229
				_							

Federal Customs Service of Russia.

10,938

16,644

70,085

47,579

96,033

63,933

103,624

61,768

**Petroleum products** 

Natural gas

# **Footnote**

(1) By the data of the Federal Customs Service of Russia, including data on foreign trade with the Republic of Belarus and the Republic of Kazakhstan. Data for 2010 are given excluding data of mutual trade between Russia and the Republic of Kazakhstan in July-December 2010 in connection with the abolition of customs clearance of products on the Russian-Kazakhstan border.

109,414

65,972

115,810

54,685

67,454

41,779

46,191

31,280

58,248

38,693

78,231

49,148

66,947

41,633

Table 14.2.2.2 — Selected Data on Merchandise Trade — Russia, 2019

				(1111110111054			
Commodities	Brazil	India	China	South Africa	All countries <sup>(1)</sup>		
Import							
Total	2150	3922	54,140	827	244,283		
1. Fresh and frozen meat (including poultry)	479	61.3	1.1	-	1700		
2. Edible fruit and nuts	35.0	52.7	327	219	5113		
Medicaments not put up in measured doses or in forms or packings for retail sale	5.3	585	33.0	0.1	10,168		
<ol> <li>Machinery and plant industrial or similar laboratory for the treatment of materials by a process involving a change of temperature</li> </ol>	2.3	55.7	247	0.0	2176		
<ol><li>Automatic data processing machines and units thereof</li></ol>	0.0	0.3	3607	0.1	5666		
6. Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats and the like	2.1	46.6	651	0.3	2296		
7. Apparatus for telephone and telegraph communications	0.3	502	6207	0.1	9007		
8. Passenger cars	-	0.0	305	83.5	7906		
9. Parts and accessories for motor vehicles	13.7	121	1220	15.0	8761		
<ol> <li>Instruments and appliances for medical, surgical, dental or veterinary purposes</li> </ol>	0.8	10.4	341	0.0	2124		
Exports							
Total	2455	7308	57,322	281	424,393		
1. Wheat and meslin	17.9	-	10.8	92.1	6403		
2. Hard coal	121	642	2158	4.4	15,987		
3. Crude oil including gas condensate	-	1101	33,676	-	122,229		
4. Petroleum products	184	315	3353	8.7	66,947		
5. Petroleum gases and other gaseous hydrocarbons	-	-	475	-	9501		
6. Mineral mixed fertilizers	418	175	295	52.2	3165		
7. Treated wood	-	3.8	2511	0.1	4509		
8. Semi-finished products of iron or non-alloy steel	-	0.0	7.2	-	6100		
9. Refined copper	-	0.0	1098	-	4138		
10. Aluminium unprocessed	7.5	1.5	58.4	-	4643		

# Source

Federal Customs Service of Russia.

# Footnote

(1) Including trade with the countries of the Eurasian Economic Union.

Table 14.3.2 — Selected Data on Foreign Direct Investment (FDI) — Russia

	2010	2011	2012	2013	2014	2015	2016	2017	2018
FDI inflow by source	43,168	55,084	50,588	69,219	22,031	6853	32,539	28,557	8785
Cyprus	12,287	12,999	1985	8266	3158	-7069	-436	8674	-10,108
Bahamas	2282	1829	2111	2791	3638	5108	5802	6211	1009
Luxembourg	2892	4106	10,814	11,638	-693	-5770	-939	3378	-506
Singapore	3	51	577	-502	162	185	16,274	2703	1587
United Kingdom	1142	2007	46	18,927	120	1112	478	2076	2522
Switzerland	-1	741	401	1086	2472	203	1842	1511	1690
Bermudas	436	594	-320	404	1777	2239	2551	1256	843
Ireland	2326	5306	9877	10,399	-531	623	-1789	889	-3850
France	2592	1107	1232	2121	2224	1686	1997	854	1134
Jersey	126	775	642	509	-717	2122	608	832	598
United States	435	276	285	485	708	209	402	495	376
Hong Kong	25	94	65	45	165	136	-30	573	135
Germany	3196	2234	2265	335	349	1483	224	470	341
Kazakhstan	46	56	277	208	357	433	350	205	159
FDI outflows by destination	52,616	66,851	48,822	86,507	57,082	22,085	22,314	36,757	31,377
Cyprus	18,309	22,930	20,920	7671	23,546	4249	9827	21,241	10,681
Austria	847	512	1035	5265	1135	746	258	6739	221
Singapore	18	155	1262	304	817	383	888	6136	1566
Switzerland	1750	3719	76	1358	6927	203	1433	2281	794
Luxembourg	2483	2005	-504	1314	639	786	-1633	1857	2000
British Virgin Islands	1834	3861	7395	62,223	718	3301	1795	1401	885
Bahamas	457	455	443	560	756	1054	1205	1300	1258
Jersey	-25	919	388	-16	-261	1258	-112	865	752
Kazakhstan	-225	674	845	671	657	643	476	727	366
Germany	1880	971	1118	1334	1016	738	393	724	1078
Ireland	1185	527	512	264	91	479	1139	634	2032
France	334	656	1430	449	523	74	121	310	-65
Italy	315	387	403	538	587	117	165	297	31
Bermudas	1056	1072	1136	571	2997	-261	480	279	-39

# Source

Bank of Russia.

# Footnote

On methodology of the Balance of payments of the Russian Federation. The data are submitted according to the principle of assets/liabilities. The sign (-) means a decrease.

**Table 14.4.2** — Balance of Payments — Russia

Type of transation	Balance, 2015	Balance, 2016	Balance, 2017	Balance, 2018	Balance, 2019
Current account	67,777	24,469	32,179	115,680	65,337
Goods and services	111,246	66,256	83,235	164,976	129,038
Primary income	-37,749	-35,496	-42,053	-40,392	-53,521
Compensation of employees	-5104	-1813	-2278	-3323	-3603
Investments	-32,662	-33,744	-39,845	-37,148	-50,007
Rent	17	60	70	79	89
Secondary income	-5720	-6291	-9003	-8904	-10,180
Capital account	-309	-764	-192	-1104	-684
Finance account	70,328	18,305	34,570	116,686	62,617
Direct investment	15,232	-10,225	8200	22,592	-10,052
Portfolio investments	26,423	-2361	-7983	7593	-12,686
Financial derivatives	7122	-18	362	-734	2620
Other investments	19,847	22,665	11,356	49,033	16,254
Reserve assets	1704	8244	22,636	38,202	66,481
Net error and omission	2859	-5400	2584	2110	-2036

# Source

Bank of Russia.

Table 14.2.3.1 — Selected Data on Merchandise Trade: Major Trade Partners — India

(million US\$)

	lm	port		Export		
Countries	2018-19	2019–20 (till Dec-19)	Countries	2018-19	2019–20 (till Dec-19)	
China	70,319.6	51,911.6	United States of America	52,406.3	40,278.1	
United States of America	35,549.5	27,669.8	United Arab Emirates	30,126.7	22,137.6	
United Arab Emirates	29,785.3	22,599.5	China	16,752.2	12,923.4	
Saudi Arabia	28,479.2	20,388.9	Hong Kong	13,002	8606.8	
Switzerland	18,087.6	13,877.7	Singapore	11,572.3	6988	
Indonesia	15,849.7	11,613.4	Netherlands	8812.8	6443.4	
Korea RP	16,759	11,996.2	United Kingdom	9309.3	6401.6	
Iraq	22,372.5	16,963.1	Germany	8902.4	6265.6	
Hong Kong	17,987	13,149.2	Bangladesh	9210.1	6019.3	
Singapore	16,281.6	10,815.7	Nepal	7766.2	5410.8	
			Malaysia	6436.3	4840.4	
2018–19 and 2019–20	2018–19 and 2019–20 <sup>(1)</sup> (Apr to Dec — 2019)			6730	4530.7	

 $\label{thm:commercial} \mbox{ Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce \& Industry.}$ 

# **Footnote**

(1) All figures pertains to FY 2019–20 (till Dec-19) are provisional.

Table 14.2.3.2 — Selected Data on Merchandise Trade: BRICS Countries — India

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	<b>2019</b> <sup>(1)</sup>
Import											
Brazil		3549	4271	4826	3721	5401	4040	4115	5498	4406	2145
Russia	518	3600	4764	4232	3894	4249	4585	5552	8573	5840	4969
China	1502	43,480	55,314	52,248	51,035	60,413	61,708	61,283	76,381	70,320	51,912
South Africa	1022	7141	10,972	8888	6075	6497	5948	5834	6835	6517	4979
Export											
Brazil		4024	5770	6049	5552	5964	2650	2400	3063	3800	3080
Russia	889	1689	1778	2296	2121	2097	1588	1937	2113	2389	2219
China	831	15,483	18,077	13,535	14,824	11,934	9011	10,172	13,334	16,752	12,923
South Africa	311	3912	4731	5107	5074	5302	3588	3546	3825	4067	3125

# Source

Ministry of Commerce and Industry, Export Import Data Bank.

# **Footnote**

(1) All figures pertains to FY 2019–20 (till Dec-19) are provisional.

Data pertains to financial year i.e. 1st April of the year indicated in the table to 31st March of next year.

**Table 14.2.3.3** — Selected Data on Merchandise Trade — India

	2000-2001	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Export by principal commodities						
Articles of apparel and clothing accessories, knitted or crocheted	1786.9	4591.1	4768	5777	5554	6657.5
Articles of apparel and clothing accessories, not knitted or crocheted	3790.5	6127.8	6449	7961	7408	8343.4
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts	1292.5	7233.2	10,839	11,528	10,863	10,298.5
Ores, slag and ash	460.3	6651.9	5818	5425	2383	2201.5
Plastic and artecles thereof	700.9	2753.6	3948	5302	5150	5633.5
Residues and waste from the food industries; prepared animal fodder	462	1735.3	2461	2527	3236	3047.7
Ships boats and floating structures	52.3	2554.3	5274	8096	3838	3724.8
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	932.8	6169.5	11,301	10,931	12,193.	12,933
Pharmaceutical products	945.1	5191.2	6543	8483	10,063	11,140.5
Miscellaneous goods	34,137	135,743	193,735	239,932	239,712	250,424.9
Import by principal commodities						
Nuclear reactors boilers, machinery and mechanical appliences; parts thereof	4236.8	23,990	29,007.2	37,552	35,236	30,669.2
Iron and steel	956.5	8814	11,010	13,646	13,616	9109.6
Articles of iron or steel	306.1	2793	3617	4529	4101	3595.9
Organic chemicals	1599.6	9407	12,640	14,443	15,702	17,044.2
Fertilizers	444.9	5992	6182	9221	7413	5352
Plastic and articles thereof	657	5515	7571	8446	9611	10,104.2
Mineral fuels, mineral oils and products of there distillation; bituminus substances; mineral waxes	17,545	96,321	115,929	172,754	181,345	181,382.6
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts	2677.6	22,074	27,211	32,865	29,820	29,152.8
Natural or cultured pearls, precious or semiprecious stones; pre metals, clad with premetal and articles thereof; IMIT; jewlry; coin	9707.4	46,322	77,054	91,075	83,896	58,464.8

Table extension  $\rightarrow \rightarrow \rightarrow$ 

(million US\$)

	2014-2015	2015-2016	2016-2017	<b>2017–2018</b> <sup>(1)</sup>	2018-2019	2019-2020
Export by principal commodities						
Articles of apparel and clothing accessories, knitted or crocheted	7654.6	7665.1	8223.7	7997.2	7820.4	
Articles of apparel and clothing accessories, not knitted or crocheted	9192.1	9324.4	9164.6	8724.5	8336	
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts	8696.8	7998.3	8232	9324.5	12,727.8	
Ores, slag and ash	982.1	689.5	1896.4	1796.8	1839.4	
Plastic and artecles thereof	5081.5	5242.4	5294.1	6349.1	8014.9	
Residues and waste from the food industries; prepared animal fodder	1630.1	802.7	1110.8	1459.7	1915.2	
Ships boats and floating structures	5352.6	3091.7	4524.3	3074.9	5699.6	
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	14,473.8	14,351.6	14,950.1	17,255.4	18,096.3	
Pharmaceutical products	11,584.6	12,910	12,930.5	13,255.6	14,754.1	
Miscellaneous goods	245,690.3	199,984.4	209,525.2	52.9	149.9	
Import by principal commodities						
Nuclear reactors boilers, machinery and mechanical appliences; parts thereof	31,730.7	32,872.2	32,089	37,824.2	43,840.4	
Iron and steel	12,342	11,251.9	8238.9	10,432.2	12,582.3	
Articles of iron or steel	3978.8	3743.6	3466.5	4205.4	5095.2	
Organic chemicals	17,746.4	15,618.2	15,477.1	19,201.3	22,389.7	
Fertilizers	6386.6	7072.9	4285.9	4670.6	6661.9	
Plastic and articles thereof	11,690.8	11,412	11,568.5	13,926.4	15,246.9	
Mineral fuels, mineral oils and products of there distillation; bituminus substances; mineral waxes	156,400	96,953.1	103,163.2	132,294.6	167,871.9	
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts	33,149.4	35,960.1	38,570.6	48,269.2	52,048.9	
Natural or cultured pearls, precious or semiprecious stones; pre metals, clad with premetal and articles thereof; IMIT; jewlry; coin	62,379.9	56,537	53,767.4	74,710.4	64,720.2	

# Source

Ministry of Commerce & Industry, Export Import Data Bank.

## **Footnotes**

Data pertains to financial year. For example, financial year 2013–14 means 1st April 2013 to 31st March 2014. Each financial year consists of 12 months and starts from 1st April.

(1) Data for the year 2017–18 pertains to April 2017 to February 2018.

**Table 14.4.3** — Balance of Payments — India

(million US\$)

		2014-2015	5	- 2	2015-2016	5	2016-2017		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
A. Current account									
I. Merchandise	316,545	461,484	-144,940	266,365	396,444	-130,079	280,138	392,580	-112,442
II. Invisibles	241,645	123,564	118,081	235,044	127,116	107,928	242,051	144,025	98,026
Total current account (I + II)	558,190	585,049	-26,859	501,410	523,560	-22,151	521,116	536,412	-15,296
B. Capital account									
1. Foreign investment	308,556	235,100	73,456	276,433	244,542	31,891	310,522	267,299	43,224
2. Loans	123,355	120,170	3184	120,323	124,957	-4634	120,532	118,153	2379
3. Banking capital	90,094	78,476	11,618	88,884	78,254	10,630	83,669	100,285	-16,616
4. Rupee debt service	0.0	81	-81	0.0	73	-73	0.0	99	-99
5. Other capital	28,914	27,806	1109	24,419	21,103	3315	35,925	28,366	7559
Total capital account (1 to 5)	550,919	461,633	89,286	510,058	468,930	41,128	550,649	514,202	36,447
C. Errors and omissions	1089	2110	-1021	420	1493	-1073	377	857	-480
Overall balance (A + B + C)	1,110,198	1,048,792	61,406	1,011,888	993,984	17,905	1,073,215	1,051,665	21,550

## (million US\$)

		2017-2018	3	:	2018-2019	)
	Credit	Debit	Net	Credit	Debit	Net
A. Current account						
I. Merchandise	308,970	469,006	-160,036	337,237	517,519	-180,283
II. Invisibles	283,406	172,087	111,319	306,483	183,457	123,026
Total current account (I+II)	592,376	641,093	-48,717	643,720	700,976	-57,257
B. Capital account						
1. Foreign investment	359,546	307,145	52,401	321,776	291,682	30,094
2. Loans	147,111	130,451	16,660	94,099	78,249	15,850
3. Banking capital	95,673	79,483	16,190	92,798	85,365	7433
4. Rupee debt service	0.0	75	-75	0.0	31	-31
5. Other capital	41,282	35,069	6213	33,809	32,751	1057
Total capital account (1 to 5)	643,612	552,222	91,390	542,482	488,080	54,403
C. Errors and omissions	1900	998	902	582	1068	-486
Overall balance (A + B + C)	1,237,887	1,194,313	43,574	1,186,784	1,190,123	-3339

## Source

Reserve Bank of India, HandBook of Statistics on Indian Economy.

#### **Footnotes**

Data pertains to financial year. For example, financial year 2013–14 means  $1^{st}$  April 2013 to  $31^{st}$  March 2014. Each financial year consists of 12 months and starts from  $1^{st}$  April.

**Table 14.2.4.1** — Selected Data on Merchandise Trade — China

										(millio	n US\$)
	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Import from major trade partners											
Hong Kong, China	9429	12,260	15,492	17,880	16,207	12,621	12,746	16,701	7317	8502	9085
India	1353	20,846	23,371	18,796	16,970	16,359	13,369	11,764	16,345	18,833	17,987
Japan	41,510	176,736	194,564	177,834	162,245	162,921	142,903	145,671	165,794	180,661	171,762
Korea, Rep.	23,207	138,349	162,706	168,738	183,073	190,109	174,506	158,975	177,553	204,643	173,575
Taiwan, China	25,494	115,739	124,909	132,204	156,405	152,007	143,204	138,847	155,961	177,600	173,002
South Africa	1037	14,903	32,108	44,671	48,388	44,568	30,151	22,229	24,389	27,287	25,923
Germany	10,409	74,261	92,744	91,921	94,156	105,013	87,623	86,109	96,940	106,325	105,108
Russia	5770	25,921	40,370	44,155	39,668	41,594	33,259	32,260	41,390	59,142	61,053
Brazil	1621	38,125	52,394	52,329	54,299	51,653	44,089	45,855	58,857	77,570	79,798
United States	22,363	102,099	122,129	132,897	152,342	159,061	147,809	134,445	153,946	155,123	122,714
Australia	5024	61,122	82,673	84,618	98,954	97,631	73,510	70,895	95,009	105,811	121,432
ASEAN <sup>(1)</sup>	22,181	154,701	193,018	195,892	199,558	208,240	194,475	196,307	235,951	268,607	282,042
European Union <sup>(1)</sup>	30,845	168,370	211,158	212,078	219,937	244,164	208,766	208,136	244,970	273,484	276,596
Export to major trade partners											
Hong Kong, China	44,518	218,302	267,983	323,431	384,495	363,077	330,463	287,253	279,211	302,022	278,947
India	1561	40,915	50,537	47,678	48,432	54,217	58,228	58,415	68,042	76,676	74,827
Japan	41,654	121,043	148,270	151,622	150,132	149,391	135,616	129,410	137,259	147,049	143,270
Korea, Rep.	11,292	68,766	82,920	87,678	91,165	100,333	101,286	93,729	102,704	108,756	111,001
Taiwan, China	5039	29,674	35,109	36,777	40,634	46,277	44,892	40,241	43,979	48,643	55,081
South Africa	1014	10,800	13,362	15,323	16,831	15,699	15,858	12,854	14,809	16,248	16,543
Germany	9278	68,047	76,400	69,210	67,343	72,703	69,155	65,259	71,134	77,489	79,774
Russia	2233	29,612	38,904	44,056	49,591	53,677	34,757	37,356	42,831	47,965	49,742
Brazil	1224	24,461	31,837	33,420	35,895	34,890	27,412	21,979	28,951	33,665	35,544
United States	52,099	283,287	324,453	351,777	368,406	396,063	409,214	385,271	429,730	478,396	418,674
Australia	3429	27,220	33,910	37,728	37,554	39,146	40,307	37,327	41,438	47,330	48,205
ASEAN <sup>(1)</sup>	17,341	138,160	170,071	204,255	244,040	272,046	277,291	256,068	279,502	318,997	359,425
European Union <sup>(1)</sup>	38,192	311,219	355,975	333,959	338,953	370,843	355,816	339,256	372,031	408,510	428,700
Exports by principal commodities											
Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	46,067	301,119	388,755	445,756	487,321	561,286	570,924	594,325	553,185	664,030	670,452
Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	26,818	235,849	309,814	353,763	375,888	383,153	400,834	364,276	343,790	429,306	416,670
Furniture; Bedding, Mattresses, Mattress Supports, Cushions and Similar Stuffed Furnishings; Lamps and Lighting Fittings, not Elsewhere Specified or Included; Illuminated Signs, Illuminated	7016	38,927	50,584	59,336	77,886	86,415	93,374	98,531	87,514	95,443	99,067
Plastics and Articles Thereof	6388	25,278	34,696	45,421	55,193	61,753	66,789	65,683	62,374	79,620	84,165

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	4606	27,926	38,398	49,540	55,114	58,550	64,193	62,600	60,149	75,071	74,313
Optical, Photographic, Cinematographic, Measuring, Checking, Precision Medical or Surgical Instruments and Apparatus; Parts and Accessories Thereof	6314	38,908	52,110	60,685	72,626	74,530	74,001	73,677	67,488	71,466	72,954
Articles of Apparel and Clothing Accessories, Knitted or Crocheted	13,424	53,814	66,710	80,164	87,043	96,793	91,992	83,786	74,422	73,327	71,353
Articles of Iron or Steel	5478	33,780	39,135	51,196	56,160	57,348	60,637	60,523	51,901	65,128	69,263
Articles of Apparel and Clothing Accessories, not Knitted or Crocheted	18,865	46,730	54,361	63,074	61,220	68,252	81,445	78,440	72,069	71,293	66,678
Organic Chemicals	4170	24,198	31,452	39,292	40,405	42,202	45,443	42,667	42,165	59,762	56,783
Imports by principal commodities											
Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	50,744	243,727	314,315	350,951	381,520	439,417	424,319	428,694	412,885	521,618	497,438
Mineral Fuels, Mineral Oils and Products of Their Distillation; Bituminous Substances; Mineral Waxes	20,681	124,045	189,008	275,814	313,132	315,232	316,788	198,601	176,536	349,367	346,122
Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	34,434	123,538	172,157	199,295	181,980	170,571	179,378	157,043	147,660	202,192	190,251
Ores, Slag and Ash	3134	70,099	109,510	150,640	133,871	148,772	134,661	93,720	94,479	135,868	165,086
Optical, Photographic, Cinematographic, Measuring, Checking, Precision Medical or Surgical Instruments and Apparatus; Parts and Accessories Thereof	7277	66,986	89,920	99,138	106,154	107,588	105,806	99,636	92,689	102,626	98,714
Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	3613	28,367	49,505	65,465	70,598	74,148	89,509	69,629	71,506	81,520	75,136
Plastics and Articles Thereof	14,456	48,516	63,704	70,197	69,420	72,390	75,190	65,551	61,049	74,885	71,586
Natural or Cultured Pearls, Precious or Semi-Precious Stones, Precious Metals, Metals Clad With Precious Metal and Articles Thereof; Imitation Jewellery; Coin	2419	6545	10,847	14,912	13,220	18,340	42,333	96,593	79,327	78,020	60,272
Organic Chemicals	8327	36,174	48,261	63,131	60,864	65,877	60,313	47,758	43,906	67,305	57,547
Copper and Articles Thereof	4660	29,557	46,211	54,242	54,496	49,829	47,278	38,147	33,259	47,537	40,625

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## **Footnote**

(1) The scope of ASEAN, EU Member States subject to the current year, so attention should be paid to the coverage of its members in the annual comparisons.

Table 14.2.4.2 — Top 10 Commodities Exported to BRICS Countries — China, 2019

Brazil		
	Valı	<b>Je</b> <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	9031	10.8
2. Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	4819	15.7
3. Organic Chemicals	2555	5.4
4. Ships, Boats and Floating Structures	1707	-24.6
5. Optical, Photographic, Cinematographic, Measuring, Checking, Precision Medical or Surgical Instruments and Apparatus; Parts and Accessories Thereof	1644	4.8
6. Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	1443	15.3
7. Plastics and Articles Thereof	1140	8.4
8. Man-Made Filaments	795	2.8
9. Toys, Games and Sports Requisites; Parts and Accessories Thereof	752	24.9
10. Furniture; Bedding, Mattresses, Mattress Supports, Cushions and Similar Stuffed Furnishings; Lamps and Lighting Fittings, not Elsewhere Specified or Included; Illuminated Signs, Illuminated	735	9.5

India		
	Valı	ue <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	20,160	-12.8
2. Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	14,228	3.3
3. Organic Chemicals	8390	-0.6
4. Plastics and Articles Thereof	3207	9.2
5. Articles of Iron or Steel	2038	10.2
6. Optical, Photographic, Cinematographic, Measuring, Checking, Precision Medical or Surgical Instruments and Apparatus; Parts and Accessories Thereof	1825	-6.4
7. Furniture; Bedding, Mattresses, Mattress Supports, Cushions and Similar Stuffed Furnishings; Lamps and Lighting Fittings, not Elsewhere Specified or Included; Illuminated Signs, Illuminated	1747	7.9
8. Fertilizers	1670	6.6
9. Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	1427	-12.1
10.Iron and Steel	1376	-7.5

Russia		
	Val	ue <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	9473	1.5
2. Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	9308	4.4
3. Fur Skins and Artificial Fur; Manufactures Thereof	3273	-1.1
4. Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	2158	22.4
5. Footwear, Gaiters and The Like; Parts of Such Articles	2019	0.4
6. Articles of Apparel and Clothing Accessories, not Knitted or Crocheted	1892	-19.7
7. Plastics and Articles Thereof	1599	9.9
8. Articles of Iron or Steel	1544	22.1
9. Articles of Apparel and Clothing Accessories, Knitted or Crocheted	1465	-6.4
10. Organic Chemicals	1258	14.8

South Africa		
	Valı	ue <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	3298	7.9
2. Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	2333	0.3
3. Furniture; Bedding, Mattresses, Mattress Supports, Cushions and Similar Stuffed Furnishings; Lamps and Lighting Fittings, not Elsewhere Specified or Included; Illuminated Signs, Illuminated	985	22.7
4. Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	732	-0.7
5. Articles of Apparel and Clothing Accessories, Knitted or Crocheted	719	1.5
6. Footwear, Gaiters and The Like; Parts of Such Articles	708	2.5
7. Articles of Apparel and Clothing Accessories, not Knitted or Crocheted	684	-1.9
8. Articles of Iron or Steel	521	4.8
9. Plastics and Articles Thereof	518	-16.4
10. Organic Chemicals	469	-8.0

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# Footnotes

- (1) Preliminary data.
- (2) Change from the previous year.

Table 14.2.4.3 — Top 10 Commodities Imported from BRICS Countries — China, 2019

Brazil		
	Val	ue <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
1. Ores, Slag and Ash	23,563	22.4
2. Oil Seeds and Oleaginous Fruits; Miscellaneous Grains, Seeds and Fruit; Industrial or Medicinal Plants; Straw and Fodder	23,019	-20.2
3. Mineral Fuels, Mineral Oils and Products of Their Distillation; Bituminous Substances; Mineral Waxes	19,039	15.4
4. Meat and Edible Meat Offal	4025	45.3
5. Pulp of Wood or of Other Fibrous Cellulosic Material; Waste and Scrap of Paper or Paperboard	3964	-21.8
6. Iron and Steel	1327	46.0
7. Cotton	930.0	155.8
8. Tobacco and Manufactured Tobacco Substitutes	505.0	111.1
9. Sugars and Sugar Confectionery	437	97.1
10. Raw Hides and Skins (Other Than Fur Skins) and Leather	408	-23.1

India		
	Valı	ue <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
1. Organic Chemicals	2892	-3.0
2. Ores, Slag and Ash	2384	69.1
3. Natural or Cultured Pearls, Precious or Semi-Precious Stones, Precious Metals, Metals Clad With Precious Metal and Articles Thereof; Imitation Jewellery; Coin	1575	-45.6
4. Fish and Crustaceans Molluscs and Other Aquatic Invertebrates	1233	214.2
5. Cotton	1206	-24.9
6. Plastics and Articles Thereof	1092	5.1
7. Salt; Sulphur; Earths and Stone; Plastering Materials, Lime and Cement	962	-8.0
8. Electrical Machinery and Equipment and Parts Thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts and Accessories of Such Articles	885	53.4
9. Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	861	18.1
10. Iron and Steel	577	89.2

Russia		
	Val	ue <sup>(1)</sup>
Commodity	million US\$	<b>Variation</b> (%) <sup>(2)</sup>
Mineral Fuels, Mineral Oils and Products of Their Distillation;     Bituminous Substances;     Mineral Waxes	42,619	0.8
2. Wood and Articles of Wood; Wood Charcoal	4280	-8.8
3. Ores, Slag and Ash	2230	43.6
4.Fish and Crustaceans Molluscs and Other Aquatic Invertebrates	2185	3.6
5. Copper and Articles Thereof	1653	-0.4
6. Nickel and Articles Thereof	1313	17.1
7. Pulp of Wood or of Other Fibrous Cellulosic Material; Waste and Scrap of Paper or Paperboard	868	-23.8
8. Fertilizers	764	49.4
9. Natural or Cultured Pearls, Precious or Semi-Precious Stones, Precious Metals, Metals Clad With Precious Metal and Articles Thereof; Imitation Jewellery; Coin	640	64.9
10. Iron and Steel	524	2235.8

South Africa		
	Valı	ue <sup>(1)</sup>
Commodity	million US\$	Variation (%) <sup>(2)</sup>
Natural or Cultured Pearls, Precious or Semi-Precious Stones, Precious Metals, Metals Clad With Precious Metal and Articles Thereof; Imitation Jewellery; Coin	12,638	-17.3
2. Ores, Slag and Ash	9575	17.1
3. Iron and Steel	1528	10.2
4.Copper and Articles Thereof	448	7.1
5. Edible Fruit and Nuts; Peel of Citrus Fruit or Melons	336	4.2
6. Pulp of Wood or of Other Fibrous Cellulosic Material; Waste and Scrap of Paper or Paperboard	302	-8.7
7. Wool, Fine or Coarse Animal Hair; Horsehair Yarn and Woven Fabric	182	-39.4
8. Nickel and Articles Thereof	116	73.0
9. Vehicles Other Than Railway or Tramway Rolling-Stock, and Parts and Accessories Thereof	91	30.7
10. Miscellaneous Chemical Products	90	15.4

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## **Footnotes**

- (1) Preliminary data.
- (2) Change from the previous year.

Table 14.3.3 — Selected Data on Foreign Direct Investment (FDI) — China

											(millio	n US\$)
	2000	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
FDI inflow by source												
Hong Kong, China	15,500	46,075	60,567	70,500	65,561	73,397	81,268	86,387	81,465	94,509	89,917	96,299
Virgin Is.	3833	11,299	10,447	9725	7831	6159	6226	7388	6740	3991	4712	4964
Singapore	2172	3605	5428	6097	6305	7229	5827	6904	6047	4763	5210	7591
Korea, Rep.	1490	2700	2692	2551	3038	3054	3966	4034	4751	3673	4667	5538
Cayman Is.	624	2582	2499	2242	1975	1668	1255	1444	5151	2177	4068	2557
United States	4384	2555	3017	2369	2598	2820	2371	2089	2386	2649	2689	2686
Samoa	283	2020	1773	2076	1744	1858	1564	1991	872	1229	1554	1192
Taiwan, China	2296	1881	2476	2183	2847	2088	2018	1537	1963	1772	1391	1587
Germany	1041	1217	888	1129	1451	2078	2071	1556	2710	1542	3674	1658
Mauritius	265	1104	929	1139	959	910	591	346	862	344	261	270
India	10	55	49	42	44	27	51	81	52	158	48	26
Brazil	4	52	57	43	58	23	28	51	47	42	31	3
South Africa	9	41	66	13	16	13	6	2	4	65	42	3
Russia	16	32	35	31	30	22	41	13	73	24	57	54
FDI outflows by destination												
Hong Kong, China		35,601	38,505	35,655	51,238	62,824	70,867	89,790	114,233	91,153	86,869	90,550
Cayman Is.		5366	3496	4936	827	9253	4192	10,213	13,523	-6606	5473	-4357
Australia		2436	1702	3165	2173	3458	4049	3401	4187	4242	1986	2087
Luxembourg		2270	3207	1265	1133	1275	4578	-11,453	1602	1353	2487	686
Virgin Is.		1612	6120	6208	2239	3222	4570	1849	12,288	19,301	7150	8683
Singapore		1414	1119	3269	1519	2033	2814	10,452	3172	6320	6411	4826
United States		909	1308	1811	4048	3873	7596	8029	16,981	6425	7477	3807
Canada		613	1142	554	795	1009	904	1563	2872	321	1564	473
Macao, China		456	96	203	17	395	596	1081	822	-1024	811	594
Myanmar		377	876	218	749	475	343	332	288	428	-197	-42
Russia		348	568	716	785	1022	634	2961	1293	1548	725	-379
Brazil		116	487	126	194	311	730	-63	125	426	428	860
South Africa		42	411	-14	-815	-89	42	233	843	317	642	339
India		-25	48	180	277	149	317	705	93	290	206	535

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**Table 14.4.4** — Balance of Payments — China

(million US\$)

					(m	illion US\$
Type of transaction	2014	2015	2016	2017	2018	2019
I.Current Account	236,047	304,164	202,203	195,117	25,499	141,335
Credit	2,743,401	2,619,290	2,454,641	2,745,015	2,925,713	2,905,094
Debit	-2,507,354	-2,315,126	-2,252,437	-2,549,899	-2,900,214	-2,763,759
1.A Goods and Services	221,299	357,871	255,737	217,010	103,002	164,122
Credit	2,462,902	2,360,152	2,197,922	2,429,277	2,651,010	2,643,377
Debit	-2,241,603	-2,002,282	-1,942,185	-2,212,267	-2,548,007	-2,479,255
1.A.a Goods	435,042	576,191	488,883	475,941	395,171	425,271
Credit	2,243,761	2,142,753	1,989,519	2,216,214	2,417,443	2,399,018
Debit	-1,808,720	-1,566,562	-1,500,636	-1,740,272	-2,022,272	-1,973,747
1.A.b Services	-213,742	-218,320	-233,146	-258,932	-292,168	-261,149
Credit	219,141	217,399	208,404	213,064	233,567	244,359
Debit	-432,883	-435,719	-441,550	-471,995	-525,735	-505,508
1.A.b.1 Manufacturing Services	21,305	20,275	18,382	17,894	17,161	15,362
on Physical Inputs Owned by Others  Credit	21,421	20,436	18.540	18,070	17,424	15,743
Debit Credit	-116	-161	-158	-175	-264	-381
1.A.b.2 Maintenance and Repair Services n.i.e	-	2286	3240	3712	4647	6473
Credit	-	3605	5202	5968	7185	10,178
Debit	_	-1319	-1962	-2256	-2538	-3704
1.A.b.3 Transport	-57,915	-46,745	-46.753	-55,978	-66,903	-58,981
Credit	38,243	38,594	33,827	37,291	42,304	46,173
Debit	-96,158	-85,340	-80,580	-93,269	-109,206	-105,154
1.A.b.4 Travel	-183,300	-204,862	-205,680	-219,316	-236,879	-218,789
Credit						
	44,044	44,969	44,432	38,559	40,386	35,832
Debit	-227,344	-249,831	-250,112	-257,875	-277,265	-254,621
1.A.b.5 Construction	10,485	6455	4157	3609	4934	5100
Credit	15,355	16,652	12,661	12,251	13,551	14,432
Debit	-4870	-10,197	-8504	-8641	-8617	-9331
1.A.b.6 Insurance and Pension Services	-17,880	-3818	-8849	-7402	-6625	-6223
Credit	4574	4976	4064	4061	4927	4800
Debit	-22,454	-8794	-12,913	-11,463	-11,552	-11,023
1.A.b.7 Financial Service	-409	-310	1141	1815	1244	1508
Credit	4531	2334	3174	3432	3335	3907
Debit	-4940	-2645	-2033	-1617	-2091	-2399
1.A.b.8 Charges for the Use of Intellectual Property	-21,937	-20,938	-22,818	-23,943	-30,222	-27,766
Credit	676	1085	1161	4803	5561	6605
Debit	-22,614	-22,022	-23,980	-28,746	-35,783	-34,370
1.A.b.9 Telecommunications, Computer, and Information Service	9425	13,140	12,695	7493	6490	7992
Credit	20,173	24,549	25,432	26,860	30,023	34,948
Debit	-10,748	-11,409	-12,738	-19,367	-23,533	-26,956
1.A.b.10 Other Business Services	28,156	18,861	14,713	16,927	19,125	19,404
Credit	68,895	58,403	57,957	59,306	66,158	69,201
Debit	-40,739	-39,542	-43,244	-42,379	-47,033	-49,797
1.A.b.11 Personal, Cultural, and Recreational Services	-699	-1163	-1398	-1986	-2426	-3136
Credit	175	731	742	763	955	955
Debit	-873	-1894	-2141	-2750	-3382	-4091
Dear	5,5	.551	2111	2,30	3302	.031

Type of transaction	2014	2015	2016	2017	2018	2019
1.A.B.12 Government Goods and Services n.i.e	-973	-1501	-1973	-1756	-2715	-2094
Credit	1054	1064	1212	1699	1757	1587
Debit	-2027	-2566	-3185	-3455	-4472	-3681
1.B Primary Income	13,301	-41,057	-44,013	-10,037	-75,093	-33,037
Credit	239,372	223,200	225,818	287,570	246,946	235,810
Debit	-226,071	-264,257	-269,831	-297,607	-322,040	-268,847
1.B.1 Compensation of Employees	25,755	27,386	20,672	14,937	8163	3101
Credit	29,911	33,105	26,883	21,699	18,109	14,258
Debit	-4155	-5718	-6211	-6762	-9946	-11,157
1.B.2 Investment Income	-12,454	-69,112	-65,031	-25,412	-85,049	-37,208
Credit	209,462	189,268	198,374	265,175	226,746	219,760
Debit	-221,916	-258,380	-263,406	-290,587	-311,794	-256,968
1.B.3 Other Primary Income	-	668	346	438	1793	1070
Credit	-	826	560	697	2092	1792
Debit	-	-158	-215	-258	-299	-722
1.C Secondary Income	1446	-12,649	-9520	-11,856	-2410	10,250
Credit	41,127	35,938	30,900	28,168	27,757	25,907
Debit	-39,681	-48,588	-40,420	-40,024	-30,167	-15,657
2. Capital and Finance Account	-169,174	-91,207	27,250	17,930	153,227	56,718
2.1 Capital Account	-33	316	-344	-91	-569	-327
Credit	1939	512	318	227	297	218
Debit	-1972	-196	-662	-319	-865	-545
2.2 Financial Account	-169,141	-91,523	27,594	18,021	153,795	57,046
Assets	-580,634	9454	-231,985	-423,920	-362,039	-198,730
Liabilities	411,493	-100,977	259,579	441,941	515,835	255,776
2.2.1 Financial Account Excluding Reserve Assets	-51,361	-434,462	-416,070	109,537	172,682	37,755
Financial Assets Excluding Reserve Assets	-462,854	-333,485	-675,650	-332,405	-343,152	-218,021
Liabilities	411,493	-100,977	259,579	441,941	515,835	255,776
2.2.1.1 Direct Investments	144,968	68,099	-41,675	27,791	92,338	58,112
2.2.1.1.1 Assets	-123,130	-174,391	-216,424	-138,293	-143,027	-97,703
2.2.1.1.2 Liabilities	268,097	242,489	174,750	166,084	235,365	155,815
2.2.1.2 Porfolio Investment	82,429	-66,470	-52,271	29,498	106,874	57,948
2.2.1.2.1 Assets	-10,815	-73,209	-102,770	-94,803	-53,507	-89,419
2.2.1.2.2 Liabilities	93,244	6739	50,499	124,301	160,381	147,366
2.2.1.3 Financial Derivatives (other than reserves) and Employee Stock Options	-	-2087	-5384	354	-6153	-2355
2.2.1.3.1 Assets	-	-3420	-6550	1538	-4816	1393
2.2.1.3.2 Liabilities	-	1333	1166	-1185	-1338	-3748
2.2.1.4 Other Investment	-278,758	-434,004	-316,741	51,894	-20,376	-75,950
2.2.1.4.1 Assets	-328,909	-82,465	-349,906	-100,847	-141,803	-32,291
2.2.1.4.2 Liabilities	50,151	-351,538	33,165	152,742	121,427	-43,659
2.2.2 Reserve Assets	-117,780	342,939	443,665	-91,516	-18,887	19,291
2.2.2.1 Monetary Gold	-	-	-	-	-	-
2.2.2.2 Special Drawing Rights	61	-287	326	-739	33	-496
2.2.2.3 Reserve Position in the IMF	977	911	-5342	2190	-733	-11
2.2.2.4 Foreign Exchange Reserves	-118,818	342,316	448,681	-92,967	-18,187	19,797
2.2.2.5 Other Reserve Assets	-	-	=	-	-	-
3.Net Errors and Omissions	-66,873	-212,958	-229,453	-213,046	-178,726	-198,054
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State Administration of Foreign Exchange.

**Table 14.2.5** — Selected Data on Merchandise Trade: BRICS Countries — South Africa — 2019

(Rands)

Commodities	Brazil	Russia	India	China	All countries
Import					
Live animals	2,962,749,333	109,521,218	172,229,427	1,412,090,828	4,656,590,806
Vegetables	768,728,344	1,442,625,058	2,183,411,112	772,232,302	5,166,996,816
Animal or vegetable fats	65,370,277		82,748,475	30,913,897	179,032,649
Prepared foodstuffs	766,700,676	21,834,703	769,880,701	2,236,219,356	3,794,635,436
Mineral Products	758,544,334	835,795,284	12,605,719,777	2,432,889,605	16,632,949,000
Chemicals	1,057,177,570	1,185,934,261	11,992,668,365	16,710,831,828	30,946,612,024
Plastics & Rubber	449,498,126	132,997,590	1,889,559,923	11,080,454,254	13,552,509,893
Raw hides & leather	78,263,618	98,670	239,745,966	2,476,077,235	2,794,185,489
Wood Products	391,805,835	70,686,645	34,943,771	754,252,644	1,251,688,895
Wood pulp & paper	1,606,089,583	441,379,850	576,755,395	2,423,567,871	5,047,792,699
Textiles	99,643,120	4,806,999	2,860,559,997	21,809,012,659	24,774,022,775
Footwear	78,993,391	1,230,752	688,332,951	8,730,839,645	9,499,396,739
Stone & Glass	129,878,979	1,393,892	588,420,454	4,890,702,720	5,610,396,045
Precious Metal	8,005,006	312,133,889	660,993,548	440,558,135	1,421,690,578
Products Iron & Steel	1,961,936,433	2,824,564,717	2,349,187,978	19,415,776,458	26,551,465,586
Machinery	2,224,016,077	206,708,637	8,964,434,638	111,262,627,322	122,657,786,674
Vehicles aircraft & vessels	678,549,857	19,672,327	13,535,446,647	7,412,234,610	21,645,903,441
Photographic & medical equipment	103,412,772	13,600,170	498,668,056	5,147,693,093	5,763,374,091
Toys & Sport apparel	61,759,616	6,224,937	416,671,194	10,980,264,641	11,464,920,388
Works of art	1,063,787	231,097	2,872,617	16,633,498	20,800,999
Other unclassified goods	1,117,676	271,813	2,112,514	1,306,583	4,808,586
Equipment Components	2,863,265,847	25,718,396	1,365,511,618	4,622,644,214	8,877,140,075

Table extension

 $\downarrow$ 

 $\downarrow$ 

 $\downarrow$ 

Commodities	Brazil	Russia	India	China	All countries
Exports					
Live animals	8,067,776	671,454	5,410,712	786,009,916	800,159,858
Vegetables	37,630,702	2,174,652,583	638,648,480	3,850,713,501	6,701,645,266
Animal or vegetable fats	7200	548,742	870	4,373,040	4,929,852
Prepared foodstuffs	89,910,955	459,764,173	622,233,314	1,184,271,889	2,356,180,331
Mineral Products	1,454,093,678	1,524,491,906	41,928,714,040	102,469,703,256	147,377,002,880
Chemicals	1,714,028,878	117,938,192	1,814,875,483	1,905,205,767	5,552,048,320
Plastics & Rubber	71,064,881	13,149,311	124,635,628	805,148,010	1,013,997,830
Raw hides & leather	13,525,256	1,134,791	11,077,770	220,212,387	245,950,204
Wood Products	606,689	12,834	125,385,248	464,879,757	590,884,528
Wood pulp & paper	9,182,594	1,327,387	2,672,951,414	2,064,985,124	4,748,446,519
Textiles	40,356,413	3,735,715	296,319,679	2,718,204,339	3,058,616,146
Footwear	4,760,877		599,259	41,551,871	46,912,007
Stone & Glass	22,948,816	2,190,611	75,882,962	175,457,571	276,479,960
Precious Metal	752,744	609,953	2,148,294,047	1,198,532,985	3,348,189,729
Products Iron & Steel	2,080,098,294	235,087,417	4,482,303,605	19,772,449,608	26,569,938,924
Machinery	410,397,640	766,462,796	2,128,597,961	603,465,000	3,908,923,397
Vehicles aircraft & vessels	56,415,597	128,179,877	74,979,294	599,579,415	859,154,183
Photographic&medical equipment	59,874,164	13,007,235	150,683,364	32,568,189	256,132,952
Toys & Sport apparel	2,758,485	479,805	4,338,345	8,880,533	16,457,168
Works of art	709,012	7,944,287	1,848,921	14,545,310	25,047,530
Other unclassified goods	162,741	103,260	633,378	7,893,391	8,792,770
Equipment Components				1689	1689

South African Revenue Services.

Table 14.4.5 — Balance of Payments — South Africa, 2019

(million US\$)

Type of transaction	Balance	Credit	Debit
Current account	-10,601	114,851	125,452
Balance on goods (FOB)(1)	2721	90,193	87,472
Services and income (net)	-10,861	22,806	33,667
Services	-953	14,723	15,676
Income	-9908	8083	17,991
Current transfers	-2461	1852	4313
Capital and financial account <sup>(2)(3)(4)</sup>	9970	-1262	-11,232
Capital account <sup>(5)</sup>	17	29	12
Financial account	9953	-1291	-11,244
Direct investment	1505	4624	3119
Portfolio investments	9071	6091	-2980
Financial derivatives	-290	-11,298	-11,008
Other investments	-333	-708	-375
Errors and omissions <sup>(2)(6)</sup>	-2387		
Overall balance <sup>(2)</sup>	-1756		1756

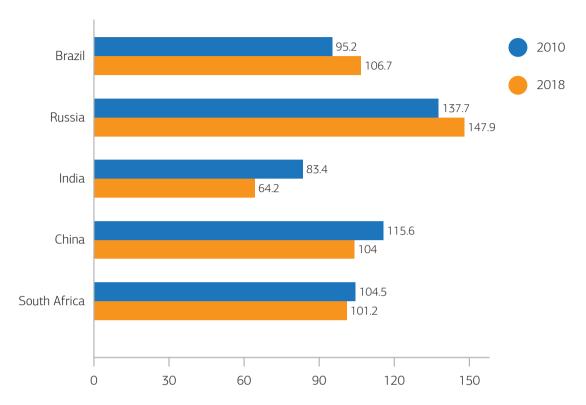
#### Source

South African Reserve Bank.

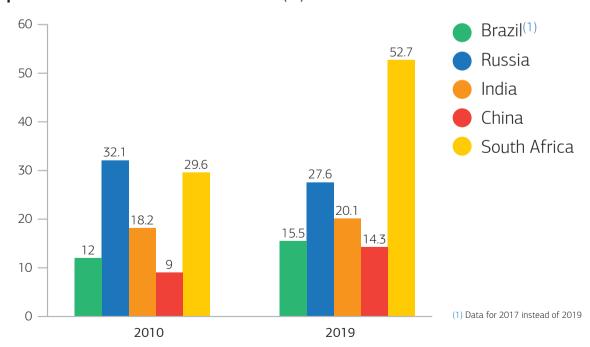
#### **Footnotes**

- (1) Public customs figures adjusted for balance-of-payment purposes.
- (2) Investments by foreigners in undertakings in South Africa in which they have individual or collectively in the case of affiliated organisations or persons, at least 10 per cent of the voting rights.
- (3) Investments by South African residents in undertakings abroad in which they have at least ten per cent of the voting rights.
- (4) Transactions on the current, capital transfer and financial accounts.
- (5) Commodity gold. Prior to 1981 net gold exports comprised net foreign sales of gold plus changes in gold holdings of the South African Reserve Bank and other banking institutions.
- (6) Liabilities related to foreign reserves include all foreign liabilities of South African Reserve bank and short term foreign loans to the central government by international organisations.

**Graph 14.1** Ratio of exports of goods and commercial services to imports of goods and commercial services (%)



Graph 14.2 Share of external debts to GDP (%)



## **Explanatory Notes**

#### **Brazil**

Since April 2015, Brazilian Direct Investment (DI) data is presented in accordance with the sixth edition of Balance of Payments and International Investment Position Manual (BPM6), edited by IMF, which uses the principle of assets and liabilities instead of the directional principle. Additionally, new sources of information enabled the inclusion of flows of reinvested earnings from 2010 onwards. As of BPM6, the expression "FDI" was replaced by "Direct Investment — Liabilities".

The title of the Table 14.3.1 has been changed because the new balance of payments methodology (BPM6).

The Table 14.4.1 has been adjusted to the new balance of payments methodology (BPM6).

#### Russia

**Export of goods** — removal of goods (commodities) from the Russian Federation territory without of a guarantee of the return them back. Export includes the removal of domestically produced goods and reexport of goods as well. Domestically produced goods include also foreign manufactured goods imported into the country and significantly reprocessed and as a result changed their qualitative and technical characteristics. Re-exports — goods imported to the territory of the Russian Federation and then removed from its territory without payment of customs dues, taxes and application of embargo of economic restrictions. Recording of the good exports is realised by FOB prices or border prices of the exporting country.

**Import of goods** — importing of goods into the Russian Federation territory without a guarantee of the return them removed back. Imports include the brought goods for consumption in the economy and good imported into the country territory in according to the reimport system. Re-imported goods are those moved out from the Russian Federation territory and then moved in this territory without payment of custom dues, taxes and application of embargo or economic restrictions. Recording of the good import is realised by in franco-border prices of the importing country (CIF), i.e. prices of goods include expenditures on the insurance and transportation to the border of the importing country.

**Balance of payments** data are presented in accordance with the 6<sup>th</sup> version of the IMF's Balance of Payments and International Investment Position Manual.

In the table 14.2.2.1 data on import and export of Russia are presented about the major trade partners and BRICS countries.

#### India

Exports are credited to the country of final destination as declared by exporters in the shipping bill whether that country possesses a sea-port or not. The country of final destination is defined as that to which goods exported from India are intended to pass whether by sea and land or by sea only or by air without interruption of transit, save in the course of transhipment or transfer from one means of conveyance to another.

**Imports** are classified with reference to the countries whence they were consigned to India and not with reference to the countries whence they were shipped directly to India. The country of consignment is defined as that from which the goods have come whether by land or sea or by sea only or by air, without interruption of transit save in the course of transhipment or transfer from one means of conveyance to another. Thus, the countries where goods are consigned are not in all cases the countries of actual origin of goods produces in one country maybe purchased by a firm in another country and then dispatched after an interval to India.

**The data for imports, exports and re-exports** given are according to the Indian Trade Classification (based on harmonized Commodity description and coding system).

**External debt to GDP** includes Long term debts as Multilateral loans, bilateral loans, International Monetary Funds Trade Credit, External Commercial borrowings; non-Resident Indian deposits, Rupees debts and Short term deposit.

Under current account of the BoP, transactions are classified into merchandise (export and imports) and invisibles. Invisible transactions are further classified into three categories, namely a) Service- travel, transportation, insurance, Government not included elsewhere (GNIE) and miscellaneous (such as, communication, construction, financial, software, news agency, royalties, management and business services); b) Income; and c) Transfers (grants, gifts, remittances, etc.) which do not have any quid pro quo. Under the Capital Account, capital inflows can be classified by instrument (debt or equity) and maturity (short or long term). The main components of the capital account include foreign investment, loans and banking capital. Foreign investment, compromising Foreign Direct Investment (FDI)& portfolio investment consisting of Foreign Institutional Investors (FIIs) investment, American Depository Receipts, Global Depository receipt (ADRs/GDRs) represents non-debt liabilities, while loans (external assistance, external commercial borrowings and trade credit) and banking capital, including non-resident Indian (NRI) deposits are debt liabilities.

#### China

Foreign Trade statistics and Coverage China's official external trade statistics is implemented by General Administration of Customs of the Peoples Republic of China. It's compiled from the declarations, which are made to the Customs by imports, exports or their agents and subject to verification by customs officers at the time of customs clearance. External Statistics comprise all merchandise passing through China's Customs territory (with the exceptions mentioned below). Including: goods from abroad entering customs warehouses, bonded areas or special economic zones (SEZ) and goods leaving abovementioned areas to abroad; goods for inward or outward processing or assembling and subsequent re-exportation or re-importation; goods on lease for one year or more; goods imported or exported by foreign-invested enterprises; international aid or donations, etc. Excluding: Customs statistics do not cover temporary imports or exports; goods on lease for less than one year; travellers' personal effects; ship's and aircraft' bunkers and stores obtained abroad; monetary gold and coins being legal tender; goods in transit through China.

**Import and Export Valuation** Imports are valued on a CIF basis, which is based on the transaction value and all freight, insurance and other charges incurred before discharging the goods at the first port of entry of China. Exports are valued on a FOB basis, which is based on the transaction value at China's port of shipment equivalent of the actual price at which the goods are sold. The statistical value is expressed in RMB and USD respectively. Any transaction value in terms of a currency other than RMB or USD shall be converted into RMB or USD at the exchange rate between issued by the State Administration of Foreign Exchange.

**Trading Partner** The country of origin is recorded for imports while the country of final destination for exports. The country of origin refers to the country or region where the imported goods have been grown, mined or manufactured. If two or more countries (regions) were involved in the manufacture of the products, the place where the last substantial working or processing was carried out will be recorded as the country (region) of origin. However, the countries (regions) of origin of the imported goods are not quite clear will be recorded as "country unkown". The country of final destination refers to the country or region where the exported goods are to be consumed, utilized or further processed or manufactured. In instance where the country of final destination can not be ascertained, the exports will be credited to the final country (region) dispatched to as known at the time of exportation.

**Inflows of FDI** refer to the investments inside China by foreign enterprises and economic organizations or individuals (including overseas Chinese, compatriots from Hong Kong, Macao and Taiwan, and Chinese enterprises registered abroad), following the relevant policies and laws of China, for the establishment of ventures exclusively with foreign own investment, Sino-foreign joint ventures and cooperative enterprises or for co-operative exploration of resources with enterprises or economic organizations in China. It includes the re-investment of the foreign entrepreneurs with the profits gained from the investment and the funds that enterprises borrow from abroad in the total investment of projects which are approved by the relevant department of government.

**Outflows of FDI** refer to investment made by domestic enterprises and organizations (referred to as domestic investors) in foreign countries and Hong Kong, Macao and Taiwan regions in the form of cash, in-kind, intangible assets and other ways, and the economic activities centering on controlling the operation and management of those foreign enterprises.

**The Balance of Payments (BOP)** is a statement that summarizes economic transactions between residents and nonresidents during a specific time period.

**The International Investment Position (IIP)** shows at a point in time the value of: financial assets of residents of an economy that are claims on nonresident or are gold bullion held as reserve assets; and the liabilities of residents of an economy to nonresidents.



**Table 15.1** — Number of Foreign Tourists Arrivals in BRICS Countries from Different Continents

(100 persons-time)

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Africa											
Brazil	345	837	865	923	948	1283	1110	814	704		
Russia <sup>(1)</sup>						371	398	352	400	938	502
India	902	2045	2324	2614	2753	2808	2936	3022	3180	3512	3623
China	656	4636	4888	5249	5527	5969	5802	5888	6291	6741	6857
South Africa		57,412	61,368	66,565	68,561	72,798	67,461	75,015	75,593	77,864	76,008
America											
Brazil	38,031	31,963	34,016	35,823	37,264	40,406	42,085	44,878	47,676		
Russia <sup>(1)</sup>						3902	3856	3833	4685	6939	4821
India	4554	12,364	13,007	13,597	14,090	14,574	15,658	16,924	18,044	19,088	19,628
China	12,157	29,954	32,010	31,795	31,238	31,065	31,153	33,813	35,454	37,885	36,453
South Africa		4580	4329	5134	5455	4349	4038	4737	5455	5612	5607
Asia											
Brazil	1038	1843	2270	2447	2476	2567	3053	3096	2638		***
Russia <sup>(1)</sup>	***					87,817	101,676	91,049	90,893	92,544	97,941
India	10,657	21,338	24,161	25,390	27,355	33,411	36,199	40,100	48,972	51,656	55,205
China	61,015	161,786	166,232	166,222	160,601	163,313	165,947	178,600	183,267	191,207	203,186
South Africa	***	2826	2505	3983	4313	2692	2515	3279	3172	3110	3114
Europe											
Brazil	12,661	15,755	15,756	15,980	15,812	17,793	16,104	15,837	14,329		***
Russia <sup>(1)</sup>	***		***		***	155,081	154,183	141,749	138,485	134,745	129,721
India	9257	19,780	21,133	21,658	22,609	22,829	22,113	24,285	26,065	27,097	26,349
China	24,890	56,979	59,378	59,482	56,881	55,143	49,167	54,715	59,116	60,443	63,327
South Africa	***	8399	12,732	14,104	14,936	13,793	13,313	15,440	16,608	16,188	15,565
Australasia											
Brazil	219	463	447	528	543	804	554	661	434		
Russia <sup>(1)</sup>	***		***		***	510	445	491	552	755	660
India	676	2103	2332	2445	2636	2863	3121	3489	3861	4126	4389
China <sup>(2)</sup>	2818	7893	8593	9149	8634	8101	7764	8255	8922	9131	8989
South Africa		1281	1228	1429	1483	1321	1189	1319	1337	1313	1282
Others (not specified)											
Brazil	840	753	979	1067	1091	1446	153	181	107		
Russia <sup>(1)</sup>						6698	7959	8231	8886	9589	10,542
India	405	128	136	74	233	307	246	217	221	101	108
China	68	21	19	19	22	18	21	22	22	22	23
South Africa		6238	1232	668	617	539	522	651	686	635	711

#### Brazil

Ministry of Tourism.

#### Russia

Federal State Statistics Service of the Russian Federation.

#### India

Ministry of Tourism, India Tourism Statistics (various issues).

#### China

- a) National Bureau of Statistics of China, China Statistical Yearbooks 2000–2020.
- b) Ministry of Culture and Tourism of the People's Republic of China, The Yearbook of China Tourism Statistics, 2000–2019.

#### South Africa

Statistics South Africa.

## **Footnotes**

The figures of Australasia pertains to a region of Oceania that includes Australia, New Zealand, the island of New Guinea, and neighboring islands in the Pacific Ocean.

#### Russia

(1) Number of tourist arrivals (visits) (in 100). Data are presented according to the new official statistical methodology adopted by Rosstat in 2014 year.

#### China

(2) Refer to Oceania and the Pacific Islands.

**Table 15.2.1** — Foreign Tourists Arrivals by Top 15 Countries — Brazil

Countries of origin	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	4,772,575	5,161,379	5,433,354	5,676,843	5,813,342	6,429,852	6,305,838	6,546,696	6,588,770	
Argentina	1,374,461	1,399,592	1,593,775	1,671,604	1,711,491	1,743,930	2,079,823	2,294,900	2,622,327	
United States of America	596,844	641,377	594,947	586,463	592,827	656,801	575,796	570,350	475,232	
Chile	153,921	200,724	217,200	250,586	268,203	336,950	306,331	311,813	342,143	
Paraguay	285,724	194,340	192,730	246,401	268,932	293,841	301,831	316,714	336,646	
Uruguay	304,682	228,545	261,204	253,864	262,512	223,508	267,321	284,113	328,098	
France	184,759	199,719	207,890	218,626	224,078	282,375	261,075	263,774	254,153	
Germany	320,050	226,630	241,739	258,437	236,505	265,498	224,549	221,513	203,045	
United Kingdom	143,626	167,355	149,564	155,548	169,732	217,003	189,269	202,671	185,858	
Italy	216,038	245,491	229,484	230,114	233,243	228,734	202,015	181,493	171,654	
Portugal	165,898	189,065	183,728	168,649	168,250	170,066	162,305	149,968	144,095	
Colombia	50,335	85,567	91,345	100,324	116,461	158,886	118,866	135,192	140,363	
Spain	126,928	179,340	190,392	180,406	169,751	166,759	151,029	147,846	137,202	
Bolivia	107,664	99,359	85,429	112,639	95,028	95,300	108,149	138,106	126,781	
Peru	48,405	81,020	86,795	91,996	98,602	117,230	113,078	114,276	115,320	
Mexico	40,765	67,616	64,451	61,658	76,738	109,637	90,361	94,609	81,778	
Others	652,475	955,639	1,042,681	1,089,528	1,120,989	1,363,334	1,154,040	1,119,358	924,075	

- a) Federal Police Department of Brazil.
- b) Ministry of Tourism.

**Table 15.3.1** — Foreign Tourists Arrivals in the Country from Different Macrogeographical Regions — Brazil

Continents of origin	2001	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	4,772,575	5,161,379	5,433,354	5,676,843	5,813,342	6,429,852	6,305,838	6,546,696	6,588,770	***
North America	693,238	773,181	729,756	716,583	737,175	844,969	734,450	735,062	605,961	
Central and South America	2,438,455	2,423,119	2,671,836	2,865,673	2,989,273	3,195,597	3,474,058	3,752,756	4,161,647	
Western Europe <sup>(1)</sup>	1,392,803	1,535,301	1,525,040	1,541,874	1,519,126	1,703,298	1,509,828	1,481,709	1,361,041	
Eastern Europe <sup>(2)</sup>		40,224	50,601	56,170	62,044	76,016	100,542	101,999	71,875	
Africa	36,352	83,688	86,511	92,349	94,832	128,252	110,983	81,391	70,351	
South East Asia <sup>(3)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	26,002	22,958	19,182	
East Asia <sup>(4)</sup>	82,620	128,450	163,855	189,036	191,704	187,660	187,846	199,000	172,969	
West Asia <sup>(5)</sup>	26,178	36,976	41,646	33,523	33,128	43,340	64,424	61,382	53,096	
South Asia <sup>(6)</sup>	0.0	18,829	21,530	22,096	22,719	25,675	27,025	26,212	18,576	
Australasia <sup>(7)</sup>	23,486	46,302	44,657	52,815	54,281	80,447	55,421	66,116	43,380	
Others (not specified)	79,443	75,309	97,922	106,724	109,060	144,598	15,259	18,111	10,692	

Ministry of Tourism.

#### **Footnotes**

- (1) Includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherland, Norway, Portugal, Spain, Sweden, Switzerland, U.K. and Luxembourg.
- (2) Includes Hungary, Poland, CIS, Croatia, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Serbia, Romania, Czech Republic, Ukraine.
- (3) Includes Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand.
- (4) Includes China, Hong Kong, Japan, Korea and Taiwan.
- (5) Includes Israel, Saudi Arabia, Syria, Turkey, U.A.E., Iran, Iraq, Lebanon.
- (6) Includes Pakistan, Bangladesh, India.
- (7) Includes Australia, New Zealand, the Island of New Guinea, and neighboring islands in the Pacific Ocean.

**Table 15.2.2** — Foreign Tourists Arrivals by Top 15 Countries — Russia<sup>(1)</sup>

(number of visits)

Countries of origin	2014	2015	2016	2017	2018	2019
Total <sup>(2)</sup>	25,437,893	26,851,658	24,570,518	24,390,002	24,550,910	24,418,749
China	873,792	1,121,536	1,288,720	1,478,212	1,690,186	1,882,820
Finland	1,380,179	1,415,853	1,319,030	1,016,738	949,796	895,931
Germany	583,824	553,493	566,434	580,366	645,157	689,966
Poland	1,772,336	1,725,157	1,017,462	714,282	682,229	641,174
Estonia	330,814	357,377	414,147	414,905	477,915	523,186
Korea, Republic	114,320	136,039	161,267	253,764	360,618	431,082
Mongolia	157,663	378,196	522,026	396,125	387,492	375,701
Latvia	295,081	278,265	288,682	260,858	286,914	299,633
United States of America	245,184	233,379	238,633	282,188	326,127	289,951
Israel	149,575	162,046	179,152	182,234	224,842	256,838
Italy	206,807	191,071	191,828	188,981	205,460	231,637
Lithuania	425,132	237,257	249,095	225,674	215,654	229,549
France	198,644	171,436	176,855	185,093	207,306	222,726
United Kingdom	214,909	179,674	177,080	178,496	197,472	176,750
Spain	90,851	103,756	108,776	110,190	116,264	132,327
India	48,920	50,853	59,311	70,551	85,709	90,872
Brazil	30,953	33,621	27,177	35,067	68,925	40,311
South Africa	7653	7879	7277	10,874	15,414	13,557

## Source

Federal State Statistics Service of the Russian Federation.

## **Footnotes**

Top 15 (rank for 2019 year) and BRICS countries.

- (1) Data are presented according to the new official statistical methodology adopted by Rosstat in 2014 year.
- (2) Foreign tourist arrivals from all countries.

**Table 15.3.2** — Foreign Tourists Arrivals in the Country from Different Macrogeographical Regions — Russia<sup>(1)</sup>

(number of visits)

Continents of origin	2014	2015	2016	2017	2018	2019
Total	25,437,893	26,851,658	24,570,518	24,390,002	24,550,910	24,418,749
North America	296,133	274,949	279,044	333,086	384,625	344,525
Central and South America	94,074	110,632	104,256	135,371	309,279	137,595
Western Europe	993,452	905,918	935,092	964,950	1,077,109	1,133,351
Eastern Europe	11,284,519	11,495,323	10,251,989	10,236,063	9,634,865	9,076,745
Northern Europe	2,788,641	2,589,970	2,560,507	2,214,740	2,274,084	2,251,896
Southern Europe	441,450	427,112	427,320	432,714	488,400	510,073
Africa	37,055	39,787	35,225	40,036	93,844	50,232
South East Asia	92,763	80,634	96,057	125,906	155,095	179,424
East Asia	1,256,180	1,735,202	2,070,537	2,249,046	2,571,305	2,838,735
West Asia	1,907,573	1,892,785	1,812,358	1,838,731	1,903,648	1,948,780
South Asia	5,525,219	6,458,933	5,125,919	4,875,591	4,624,316	4,827,121
Australasia <sup>(2)</sup>	50,994	44,526	49,109	55,208	75,462	66,043
Others	669,840	795,887	823,105	888,560	958,878	1,054,229

#### Source

Federal State Statistics Service of the Russian Federation.

#### **Footnotes**

Names and composition of geographical regions are given according to Standard Country or Area Codes for Statistical use by United Nations

- (1) Data are presented according to the new official statistical methodology adopted by Rosstat in 2014 year.
- (2) Includes Australia, New Zealand, the island of New Guinea, and neighboring islands in the Pacific Ocean.

**Table 15.2.3** — Foreign Tourists Arrivals by Top 15 Countries — India

(person-time)

Countries of origin	2001	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	2,537,282	5,775,692	6,309,222	6,577,745	6,967,601	7,679,099	8,027,133	8,804,411	10,035,803	10,557,976	10,930,355
Bangladesh	431,312	431,962	463,543	487,397	524,923	942,562	1,133,879	1,380,409	2,156,557	2,256,675	2,577,727
United States of America	329,147	931,292	980,688	1,039,947	1,085,309	1,118,983	1,213,624	1,296,939	1,376,919	1,456,678	1,512,032
United Kingdom	405,472	759,494	798,249	788,170	809,444	838,860	867,601	941,883	986,296	1,029,757	1,000,292
Srilanka	112,813	266,515	305,853	296,983	262,345	301,601	299,513	297,418	303,590	353,684	330,861
Russia	15,154 <sup>(1)</sup>	122,048	144,312	177,526	259,120	269,832	172,419	227,749	278,904	262,309	251,319
Canada	88,600	242,372	259,017	256,021	255,222	268,485	281,306	317,239	335,439	351,040	351,859
Germany	80,011	227,720	240,235	254,783	252,003	239,106	248,314	265,928	269,380	274,087	264,973
France	102,434	225,232	231,423	240,674	248,379	246,101	230,854	238,707	249,620	261,653	247,238
Malaysia	57,869	179,077	208,196	195,853	242,649	262,026	272,941	301,961	322,126	319,172	334,579
Japan	80,634	168,019	193,525	220,015	220,283	219,516	207,415	208,847	222,527	236,236	238,903
Australia	52,691	169,647	192,592	202,105	218,967	239,762	263,101	293,625	324,243	346,486	367,241
China (Mainland)	13,901 <sup>(1)</sup>	119,530	142,218	168,952	174,712	181,020	206,322	251,313	247,235	281,768	339,442
Singapore	42,824	107,487	119,022	131,452	143,025	150,731	152,238	163,688	175,852	183,581	190,089
South Korea	27,150	95,587	108,680	109,469	112,619 <sup>(1)</sup>	106,870 <sup>(1)</sup>	102,993 <sup>(1)</sup>	111,076	142,383	150,536	149,445
Italy	41,351	94,100 <sup>(1)</sup>	100,889 <sup>(1)</sup>	98,743 <sup>(1)</sup>	93,951(1)	91,589 <sup>(1)</sup>	88,091(1)	95,417	111,915	126,931	128,572
Nepal	41,135	104,374	119,131	125,375	113,790	126,416	154,720	161,097	164,018	174,096	164,040
Pakistan	52,762	51,739 <sup>(1)</sup>	48,640 <sup>(1)</sup>	59,846(1)	111,794 <sup>(1)</sup>	96,434(1)	124,924	104,720	44,266	41,659	39,018
Thailand	18,623 <sup>(1)</sup>	76,617 <sup>(1)</sup>	92,404(1)	105,141(1)	117,136	121,362	115,860 <sup>(1)</sup>	119,663	140,087	166,293	169,956
Others	543,399	1,402,880	1,560,605	1,619,293	1,721,930	1,857,843	1,891,018	2,026,732	2,184,446	2,285,335	2,272,769

## Source

Ministry of Tourism, India Tourism Statistics (various issues).

## **Footnote**

Year-wise figures in respect of total include all countries of the world from where India received tourists.

(1) The country to which this figure pertains is not included in Top 15 Countries in terms of foreign tourists arrivals to India during the year to which that figure belongs.

**Table 15.3.3** — Foreign Tourists Arrivals in the Country from Different Macrogeographical Regions — India

(person-time)

Continents of origin	2001	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	2,537,282	5,775,692	6,309,222	6,577,745	6,967,601	7,679,099	8,027,133	8,804,411	10,035,803	10,557,976	10,930,355
North America	417,747	1,173,664	1,239,705	1,295,968	1,340,531	1,387,468	1,494,930	1,614,178	1,712,358	1,807,718	1,863,892
Central and South America	21,925	62,728	60,988	63,699	68,436	69,926	70,831	78,232	92,067	101,085	98,926
Western Europe	819,973	1,750,342	1,838,695	1,853,066	1,855,866	1,860,580	1,880,203	2,022,521	2,133,673	2,243,635	2,178,441
Eastern Europe	38,863	227,650	274,598	312,686	405,083	422,278	331,051	405,986	472,872	466,049	456,481
Africa	90,962	204,525	232,386	261,428	275,271	280,754	293,569	301,409	318,023	351,198	362,308
West Asia	96,424	235,317	278,773	290,996	343,113	413,678	417,616	452,927	457,760	449,548	431,943
South Asia	672,133	1,047,444	1,139,659	1,171,499	1,215,035	1,694,857	1,946,207	2,194,555	2,951,665	3,104,422	3,375,819
South East Asia	139,975	439,043	521,755	540,914	630,054	685,805	700,298	745,868	824,575	887,088	930,540
East Asia	130,464	411,947	475,951	535,622	547,305	546,792	555,770	616,476	663,295	724,568	782,225
Australasia <sup>(1)</sup>	66,104	210,275	233,165	244,511	263,574	286,294	312,101	349,108	386,059	412,628	438,939
Others	42,712	12,757	13,547	7356	23,333	30,667	24,557	23,151	23,456	10,037	10,841

## Source

Ministry of Tourism, India Tourism Statistics (various issues).

## **Footnote**

(1) Includes Australia, New Zealand, the island of New Guinea, and neighboring islands in the Pacific Ocean.

**Table 15.2.4** — Foreign Tourists Arrivals by Top 15 Countries or Territories — China

(1000 persons-time)

Countries or territories of origin	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total <sup>(1)</sup>	10,160	26,127	27,112	27,192	26,290	26,361	25,985	28,130	29,170	30,543
Korea, Rep.	1345	4076	4185	4070	3969	4182	4444	4775	3864	4193
Vietnam	1080	2370	2536	2426	2186	2046	2161	2340	2527	3162
Japan	2202	3731	3658	3518	2878	2718	2498	2590	2683	2691
United States of America	896	2010	2116	2118	2085	2093	2086	2249	2313	2485
Russia		920	1007	1137	1365	1709	1582	1977	2357	2415
Mongolia	399	794	994	1011	1050	1083	1014	1581	1865	1916
Malaysia	441	1245	1245	1236	1207	1130	1075	1165	1233	1291
Philippines	364	828	894	962	997	968	1004	1135	1169	1205
Singapore	399	1004	1063	1028	967	971	905	925	941	978
India	241	636	608	648	652	613	641	799	822	864
Canada	237	685	748	708	684	667	680	741	806	850
Thailand	234	661	726	774	723	672	637	753	777	833
Australia	121	549	607	610	677	710	730	675	734	752
Germany	239	609	637	660	649	663	623	625	635	643
United Kingdom	284	575	596	618	625	605	580	595	592	608
Brazil		85	98	99	96	95	85	93	105	119
South Africa		65	67	72	69	68	65	67	75	84

## Source

Ministry of Culture and Tourism of the People's Republic of China, The Yearbook of China Tourism Statistics 2000–2019.

## **Footnote**

Top 15 (rank for 2018 year) and BRICS countries other than China.

(1) The data for Total include all foreign tourist arrivals in China.

**Table 15.3.4** — Foreign Tourists Arrivals in the Country from Different Continents and Countries — China

(1000 persons-time)

									(10	oo perse	nis tillic)
Continents and countries of origin	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	10,160	26,127	27,112	27,192	26,290	26,361	25,985	28,130	29,170	30,543	
Asia	6102	16,179	16,623	16,622	16,060	16,331	16,595	17,860	18,327	19,131	20,319
Korea, DPR	76	116	152	181	207	184	188	210	230	251	
India	121	549	607	610	677	710	730	799	822	864	
Indonesia	221	573	609	622	605	567	545	634	683	712	
Japan	2202	3731	3658	3518	2878	2718	2498	2590	2683	2691	
Malaysia	441	1245	1245	1236	1207	1130	1075	1165	1233	1291	
Mongolia	399	794	994	1011	1050	1083	1014	1581	1865	1916	
Philippines	364	828	894	962	997	968	1004	1135	1169	1205	
Singapore	399	1004	1063	1028	967	971	905	925	941	978	
Korea, Rep.	1345	4076	4185	4070	3969	4182	4444	4775	3864	4193	
Thailand	241	636	608	648	652	613	641	753	777	833	
Africa	66	464	489	525	553	597	580	589	629	674	686
South Africa		65	67	72	69	68	65	67	75	84	
Europe	2489	5698	5938	5948	5688	5514	4917	5472	5912	6044	6333
United Kingdom	284	575	596	618	625	605	580	595	592	608	
Germany	239	609	637	660	649	663	623	625	635	643	
France	185	513	493	525	534	517	487	504	495	500	
Italy	78	229	235	252	251	253	246	267	281	278	
Netherlands	76	189	198	196	189	180	182	200	194	196	
Portugal	23	48	47	49	49	52	53	55	56	56	
Sweden	54	155	170	172	159	142	118	115	112	110	
Switzerland	31	74	75	83	81	80	73	73	72	74	
Russia	1080	2370	2536	2426	2186	2046	1582	1977	2357	2415	
Latin America	83	301	337	353	354	346	350	390	426	454	
Brazil		85	98	99	96	95	85	93	105	119	
North America	1133	2695	2864	2826	2770	2760	2766	2991	3119	3335	
Canada	237	685	748	708	684	667	680	741	806	850	
United States	896	2010	2116	2118	2085	2093	2086	2250	2313	2485	
Oceania and the Pacific Islands	282	789	859	915	863	810	776	825	892	913	899
Australia	234	661	726	774	723	672	637	675	734	752	
New Zealand	38	116	121	128	129	127	125	136	144	146	
Others	7	2	2	2	2	2	2	2	2	2	2

# Source

National Bureau of Statistics of China, China Statistical Yearbooks 2000–2020.

**Table 15.2.5** — Foreign Tourists Arrivals by Top 15 Countries — South Africa

(person-time)

Countries of origin	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	8,073,552	8,339,354	9,188,368	9,536,568	9,549,236	8,903,773	10,044,163	10,285,197	10,472,105	10,228,593
Zimbabwe	1,513,714	1,553,008	1,847,973	1,935,159	2,143,716	1,900,791	2,028,881	2,039,932	2,208,930	2,258,794
Lesotho	1,275,838	1,526,597	1,618,222	1,461,267	1,501,642	1,394,913	1,757,058	1,747,211	1,739,188	1,563,448
Mozambique	1,051,502	1,076,753	1,104,404	1,116,735	1,283,016	1,200,335	1,268,258	1,339,245	1,360,896	1,333,195
Swaziland	632,490	700,119	768,728	836,467	918,490	838,006	893,618	876,992	883,735	917,631
Botswana	507,042	477,937	452,159	537,131	555,590	593,514	679,828	681,379	688,566	668,315
United Kingdom	453,030	420,483	438,023	436,599	401,914	407,486	447,840	447,901	430,708	436,559
United States of America	282,377	287,614	326,644	347,378	309,255	297,226	345,013	370,747	376,892	373,694
Germany	215,800	235,774	266,333	300,739	274,571	256,646	311,832	349,211	343,229	322,720
Namibia	190,903	197,835	200,841	222,028	211,453	212,514	214,664	208,747	200,367	184,431
Zambia	157,692	160,302	169,555	179,914	176,972	161,259	174,767	173,033	165,968	152,064
Malawi	126,120	135,577	142,063	170,345	166,964	135,260	154,017	175,014	197,317	199,079
From BRICS										
India	71,587	90,367	106,774	112,100	85,639	78,385	95,377	97,921	93,428	95,621
China	65,920	84,862	132,327	151,053	82,905	84,691	116,946	97,069	96,915	93,171
Brazil	53,756	54,183	78,376	82,730	39,082	29,339	38,814	67,797	70,539	77,261
Russian Federation	11,551	10,487	13,350	13,546	10,410	7244	8307	12,532	16,783	16,276
Others	1,464,230	1,328,456	1,522,596	1,633,377	1,387,617	1,306,164	1,508,943	1,600,466	1,598,644	1,536,334

## Source

Statistics South Africa.

**Table 15.3.5** — Foreign Tourists Arrivals in the Country from Different Macrogeographical Regions — South Africa

(person-time)

Continents of origin	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	8,073,552	8,339,354	9,188,367	9,536,568	9,549,236	8,903,773	10,044,163	10,285,197	10,472,105	10,228,593
North America	337,652	345,384	393,446	415,966	369,801	353,450	406,192	437,903	444,671	440,271
Central and South America	120,329	87,506	119,913	129,525	65,118	50,304	67,546	107,582	116,516	120,380
Western Europe	793,970	1,230,796	1,355,632	691,362	655,899	1,273,721	1,489,005	1,598,622	1,553,701	1,492,909
Eastern Europe	45,904	42,416	54,803	802,263	723,422	57,628	55,021	62,226	65,061	63,543
Africa	5,741,177	6,136,835	6,656,457	6,856,052	7,279,814	6,746,114	7,501,512	7,559,342	7,786,357	7,600,843
South East Asia	32,148	43,542	60,564	62,133	31,424	27,059	36,869	40,664	39,930	42,398
East Asia	120,149	138,376	197,840	226,070	129,462	124,350	169,121	153,301	152,390	148,909
West Asia	37,285	44,547	1696	1031	857	37,526	1147	1036	1221	1141
South Asia	92,986	24,007	138,204	142,105	107,498	102,027	120,753	122,180	117,441	118,923
Australasia <sup>(1)</sup>	128,149	122,784	142,949	148,316	132,080	118,908	131,856	133,713	131,348	128,153
Others (not specified)	623,803	123,161	66,863	61,745	53,861	12,686	65,141	68,628	63,469	71,123

## Source

Statistics South Africa.

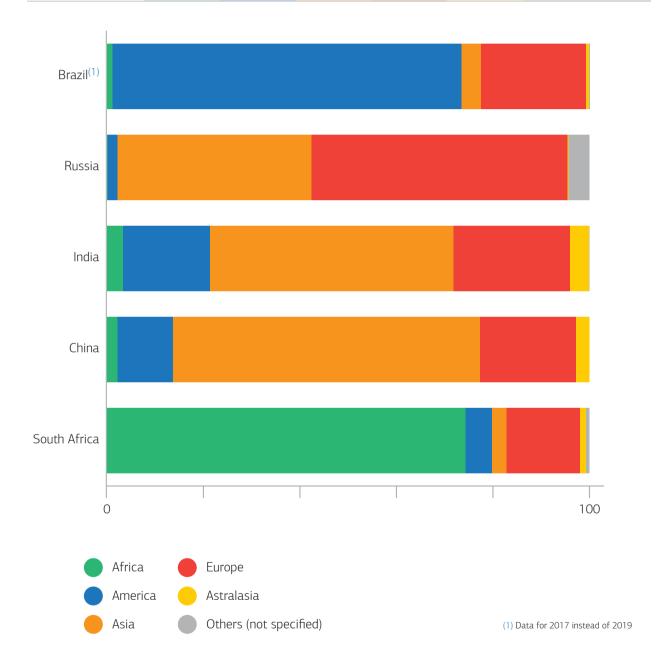
## **Footnote**

(1) Includes Australia, New Zealand, the Island of New Guinea, and neighboring islands in the Pacific Ocean.

Note: 2012 missing data has been populated.

Graph 15.1 Foreign tourist arrivals from different continents, 2019 (%)

	Africa	America	Asia	Europe	Astralasia	Others (not specified)
Brazil <sup>(1)</sup>	1.1%	72.4%	4.0%	21.7%	0.7%	0.2%
Russia	0.2%	2.0%	40.1%	53.1%	0.3%	4.3%
India	3.3%	18.0%	50.5%	24.1%	4.0%	0.1%
China	2.2%	11.4%	63.7%	19.9%	2.8%	0.0%
South Africa	74.3%	5.5%	3.0%	15.2%	1.3%	0.7%



## **Explanatory Notes**

#### General

Tourism, Rome 1963:

**International Visitor:** An international visitor to a country is any person visiting that country on a foreign passport and the main purpose of whose visit is other than the exercise of an activity remunerated from within the country or establishment of residence in the country. This definition covers two segments of visitors: "Tourists" and "Same Day Visitors".

#### Brazil

**Foreigner Tourist Arrival** — Arrivals of non-residents persons across international borders of Brazil classified as a tourist (or overnight visitors), and with a stay for less than a year for any main purpose: Personal (Holidays, leisure and recreation, Visiting friends and relatives, education and training, health and medical care, religion and pilgrimages, shopping and others) and Business and professional.

They are not counted as visitors/tourist: employed by a resident entity, border workers, seasonal workers, other short and long term workers, nomads and refugees, transit passengers not entering the economic and legal territory, crews on a public modes of transport, persons entering the country to establish there their country of residence, long-term students and patients and their family, diplomats, consular staff, military personnel and their dependants, armed forces on maneuver.

#### Russia

**A tourist** is a person who visits a country (place) of temporary stay in medical and treatment, recreational, cognitive, sports, professional, business, religious and other purposes without engaging in activities related to obtaining income from sources in the country (place) of temporary stay, for a period from 24 hours till 6 months or at least one night in the country (place) of temporary stay.

**Foreign Tourist Arrival** is a trip made by a foreign citizen to the Russian Federation during the reporting period, with any primary purpose (business trip, rest or other personal goal), except for the purpose of employment in an enterprise registered in the Russian Federation, for a long-term education and training course in the Russian Federation. Travels of foreign service personnel (crews of public modes of transport), diplomats, consular staff, military personnel and their dependents are also not included in the number of foreign tourist arrivals.

## India

A "foreign tourist" is a person visiting India on a foreign passport, staying at least twenty four hours in the country, the purpose of whose journey can be classified under one of the following headings:

- (i) Leisure (recreation, holiday, health, study, religion & sport)
- (ii) Business, family, mission, meeting.

#### China

**Foreign Tourists Arrivals** refer to foreign visitor arrivals who come to China (mainland) for sight-seeing, vacation, visiting relatives, medical treatments, shopping, attending conferences or to engage in activities of economic, cultural, sports and religious. In compiling statistics, each time of entering China (mainland) is counted as one person-time.

# Annexure



## **Annexure I** — A brief overview of the statistical system of Brazil

#### I. Organizational structure of the IBGE

The Brazilian Institute of Geography and Statistics (IBGE) is ruled according to the Law No. 5.878, of May 11th, 1973, and the Statute-Decree No. 3.740, of June 13th, 2003. It is linked to the Ministry of Planning, with the role of coordinating the Brazilian Statistical System and being the main producer of official statistics in Brazil.

The Brazilian official statistics are produced by IBGE, Central Bank, ministries and statistical state agencies. IBGE is the official statistics bureau responsible for the production, analysis and dissemination of Statistical information (demographic, economic and social), as well as geographical, cartographic and geodetic information and those related to natural resources and environment.

Besides its functions in the Statistical System, IBGE is also the main producer of geoscientific information and has the role of coordinating the National Cartographic System. One of the main projects of the production of geoscientific information is the construction of the National Spatial Data Infrastructure — INDE. The purpose of the INDE is to catalogue, to integrate and harmonize geospatial data from Brazilian institutions, producers and sponsors of this kind of data, so that the data can be easily located, accessed and used for several uses and for any user who has internet access.

IBGE is responsible for the construction, provision and operation of the Brazilian Geospatial Data Site — SIG Brazil, as well as for the management of the Brazilian Directorate of Geospatial Data — DBDG. It is also responsible to prepare the proposal for obtaining the necessary resources for the implementation and maintenance of INDE.

The programs carried out by IBGE are fundamental for both the government and the society. Several public policy actions are based on the information produced by IBGE on the Brazilian reality.

In order to produce statistical and geoscientific information, IBGE is present countrywide, with units at headquarters, in Rio de Janeiro, and in state and municipal levels, with the following composition: Collegiate bodies of senior direction: Technical Council, Board of Trustees, Board of Directors; Channels of direct and immediate assistance to the President: Cabinet, Attorney General; Sectional bodies: Internal Audit, Executive Board; Specific individual organs. Directorate of Surveys, Directorate of Geosciences, Directorate of Informatics, Centre for Documentation and Information Dissemination, National School of Statistical Sciences, 27 State Units (26 state and Federal District), with 572 agencies to collect and disseminate data.

The production of statistics and geoscientific information is carried out by the Directorate of Geoscience and Directorate of Surveys.

These departments are supported by the Directorate of Informatics, which ensures the infrastructure of computer hardware and software and data communication. The Centre for Documentation and Information Dissemination is in charge of the dissemination policy for the results of all surveys carried out by the institution, publicizing them online, including micro data, free of charge.

The Executive Board is accountable for planning, budget and overall coordination of IBGE's work.

The Directorate of Surveys is responsible for the production of social, economic and demographic statistics as well as for the production of synthesis to the System of National Accounts and Social indicators. It is also responsible for coordinating National Statistical System, systematically calling meetings with users and other producers of statistical information.

The Directorate of Geosciences is responsible for the production of geographical, geodetic and cartographic information, as well as those related to environmental and natural resources. It also coordinates the fundamentals Geodetic and Basic Cartography plans.

IBGE maintains the National School of Statistical Sciences, which offers the following courses: Bachelor of Science degree in Statistics, Post Graduate Diploma in Environmental Analysis and Land Management, Masters in Population Studies and Social Research and training programs for IBGE technicians.

The units of IBGE at headquarters are responsible for the design of surveys, analysis of results and coordination of the teams working at the national level.

The units of IBGE located throughout the national territory are responsible for the collection, review and submission of primary statistical data to headquarters.

These units also conduct field activities related to geodesy and cartography.

## II. Work program for the production of statistics

In 2017, IBGE has updated its Strategic Plan 2017–2027 in order to set goals and targets for the future years. Thus, the Strategic Plan is the main instrument of governance of the institution.

The program of work and its schedule are discussed by all technical and infrastructure areas before being consolidated into IBGE'S Strategic Plan. This is submitted to the Planning Board, composed by IBGE's President and directors, which evaluates and approves it.

IBGE's Strategic Plan subsidizes the preparation of the Federal Government Multi-Year Plan (PPA, in Portuguese) for the same period. The PPA covers all areas of government and describes the main objectives and goals for various organizations and ministries.

The institutional goals to be met in a semester have been set at the beginning of each semester. Institutional goals encompass the full range of publications planned for the period. These goals are approved by the Board and broadly disseminated, both internally and on the internet. They are an item in the objective evaluation of the institution's performance in accomplishing its mission.

IBGE's work program is presented to various Advisory Committees, which are composed of renowned members in the area, who discuss methodological issues and assist in setting priorities.

The Advisory Committees cover the following areas: Population Census, Agriculture Census; National Index of Consumer Prices; Mortality Statistics; Planning Control and Evaluation of Agricultural Statistics; Brazilian Regional Accounts.

As the demands for information not included in the predetermined work program cannot be satisfied with the resources available, they are met through agreements with the concerned governmental entities, which fund additional surveys. Examples of additional surveys are those demanded by the Ministries of Health, Education and Social Development.

IBGE also cooperates with various ministries, such as the Ministry of Finance, and the Central Bank for the preparation of National Accounts

Annually, the Ministry of the Economy provides IBGE with the Annual List of Social Information (RAIS) and the General Register of Employed and Unemployed Persons (Caged), which consist of the set of administrative records used to update the Central Business Register (CEMPRE) joining information from Annual Enterprises Surveys of IBGE. CEMPRE is used to select the sample of enterprises for the economic surveys, which has replaced the Economic Censuses since 1990's. To set its long-term lines of work, IBGE holds regular meetings with producers and users of social, economic and territorial information. These meetings aim at preparing the revision and expansion of the General Plan of Statistical and Geographical Information, based on mobilization and consultation to producers and users of information, including governmental institutions, survey institutes, NGOs, Scientific associations, as well as technicians and researchers interested in the production, dissemination and use of information.

This action resulted in the preparation of a diagnosis of the state of the art of production of information in the sphere of public services and the mapping of gaps, identifying opportunities for improvement and demands for new information.

The growing demand for socioeconomic and demographic information, as well as the inclusion of new issues, requires research in shorter time intervals.

One solution to fit the statistical offices to this new reality has been the adoption of models that address a systematic conception, with the production of integrated information sources and databases.

The Integrated System of Household Surveys (SIPD) is integrated by the Continuous National Sample Survey of Household (PNAD-C), the Household Budget Survey (POF) and National Healthy Survey (PNS). SIPD requires intensive contact with users and producers of information. In this sense, the steps in the development of SIPD have been presented in seminars and conferences sponsored by IBGE.

#### III. Social and Economic Statistics

The following Ministries and Institutions are part of the Social and Economic Statistics partnership:

- · Ministry of Education;
- · Ministry of the Economy;
- · Ministry of Health;
- Institute of Applied Economic Research IPEA;
- · Ministry of Justice and Citizenship;
- National Institute of Educational Studies and Research Anísio Teixeira INEP;
- · Brazilian Institute of Geography and Statistics IBGE;
- · Central Bank of Brazil;
- · National Treasury Secretariat.

One of the main goals of the partnership on social and economic statistics is to integrate the various database of social and economic information derived from surveys and administrative records, in order to promote the effective coordination and governance of the national statistical system.

#### IV. Census Planning and Monitoring Meeting

IBGE invests in strengthening the principle of transparency, allowing society to know and follow the development of its activities. This initiative has been created, from 2010 Brazilian Census, in order to broaden participation of local communities in the processes and dissemination of the studies, surveys and general maps developed by the institution.

The Census Planning and Monitoring Meeting include the participation of representatives from IBGE, as well as executive, legislative and judicial representatives of municipalities and representatives of other local civic organizations.

#### V. Technical cooperation

The following nationwide technical cooperation may be highlighted:

- · Ministry of Health;
- · Ministry of Education;
- · Ministry of Cities;
- · Ministry of Social and Agrarian Development;
- · Special Secretariat of Policies for Women and Special Secretariat for Human Rights at the Ministry of Justice and Citizenship;
- · Ministry of Culture;
- National Justice Council (CNJ).

Regarding international technical cooperation agreements, the following work may be highlighted: Specialized Meeting on Statistics of MERCOSUR — the Cooperation Project in Statistics towards the integration MERCOSUR and the strengthening of its national and regional institutions through the development, improvement, harmonization and integration of the production and dissemination of statistics.

In the period of 2010–2019, IBGE has been conducting international technical cooperation agreement on technology and methodology on population and agricultural censuses; social, demographic and economic statistics with many countries.

#### VI. Interaction with the international community

IBGE has extended its participation in the international Statistical community with United Nations Statistics Division — UNSD, the Statistical Conference of the Americas — SCA, the Conference of European Statistics — CES, the Organization for Economic Cooperation and Development — OECD, the World Tourism Organization — WTO, the International Labour Organization — ILO, the Community of Portuguese Speaking Countries — CPLP, BRICS, among others.

## VII. Courses and conferences for the press and general users

In the last two decades, IBGE has expanded the role of communication and the relationship with the press, as an alternative way of publicizing its work and building its image and credibility before the public.

In press conferences, the release is available for participants at the beginning of the event. At the same time, indicators and commentary on survey results are published at the IBGE's website.

Besides structural surveys, IBGE monthly publishes about ten short-term data. Thus, approximately 100 press conferences are held at IBGE a year.

The publication of the so-called short-term data is regulated by Decree No.355, issued on November 5, 2007, and signed by the Ministry of Planning. According to the decree, survey results must be sent to government officials at 7 a.m., i.e., two hours in advance of public access to the data, which happens at 9 a.m. As to access to information, IBGE releases, on this website, the list of state official who have the precedence over the public, a fact that ensures the transparency of the procedure.

Qualifying journalist is essential to improve the reports they write on IBGE surveys. In recent years, the Coordination of Social Communication (CCS) has organized several courses for journalists. Courses on more complex information were held (e.g. national accounts and census) as well as training for the use of digital tools that allow quick access to statistical information.

#### VIII. Access to the internet and other access

IBGE provides several ways for accessing the information it produces, so that the public is better served: publications (books and periodicals); free telephone consultation; a Central Library, located at the Centre for Documentation and Information Dissemination in Rio de Janeiro; a connection with the Department of Documentation and Information Dissemination at the IBGE State Units, located in all Brazilian state capitals.

IBGE provides electronic products and services that are the main media through which information such as specific files with data on population, economy, cartography, geodesy, natural resources and environment in free access in the website (http://www.ibge.gov.br). Besides the electronic publications the IBGE web page has two important databases to stand out: Aggregated Statistical Tables (SIDRA in Portuguese) — Database with information grouped in territorial level that allows the users to construct their own tables according and compare data to selected information; and Statistical Multidimensional Database (BME in Portuguese) — Database with micro data information that allows users to construct tables according to selected information and confidentiality constraints. This one requires internet subscription.

## **Annexure II** — A brief overview of the statistical system of Russia

Since 2017, according to the decree of the President of the Russian Federation, the Federal State Statistics Service (Rosstat) has been subordinated to the Ministry of Economic Development of the Russian Federation. Adoption of the new structure aims to align and delimit the spheres of Rosstat and the Ministry of Economic Development in matters of reconciling official statistical methodology.

Rosstat is the authority responsible for production of the official statistics on social, economic, demographic, ecological and other dimensions of society.

National statistical system in the Russian Federation is based on the principals of centralized structure. The main task of the national statistical system is to provide timely, comprehensive and objective information on the socio-economic development of Russia, its regions and economic sectors to the governmental authorities at all levels, media, scientific community, business entities, population and international organizations. In order to achieve this aim the Federal plan of statistical works has been developed. It defines the main directions of statistical monitoring of socio-economic and demographical processes in the country. The Federal plan is worked out by Rosstat in cooperation with other governmental agencies and adopted by the Government of the Russian Federation.

#### Rosstat main functions

- To submit the official statistics in accordance with the established regulations to the President and the Government of the Russian Federation, Federal Assembly of the Russian Federation, other governmental entities, including regional authorities, media, legal entities and individuals, and also to international organizations;
- To develop and approve within its power the official statistical methodology for the federal statistical observation and official statistics production in accordance with the established regulations; to ensure that methodology complies with international standards and the UN Fundamental Principles of Official Statistics;
- To approve federal statistical observation forms and instructions on their completion;
- · To coordinate activities in the field of official statistics while developing Federal plan of statistical works, proposals on its updating;
- · To maintain, provide methodological support and conduct federal statistical observations and to process collected data;
- · To develop and maintain national classifications of technical, economic and social data in accordance with the established regulations;
- · To ensure within its power protection of confidential information received as a result of statistical observation;
- To provide users with official statistical and other information in accordance with established regulations;
- To implement internationally adopted statistical practices, gained from the membership of the Russian Federation in international organizations.

## I. Statistical system: Principles of organization

The national statistical system is a network of interacting governmental entities and bodies that collect, process and disseminate statistics, describing the pace of socio-economic and demographic development of the country.

The system is developed in accordance with the administrative territorial division of the country in order to ensure provision of comprehensive and objective statistics on socio-economic development of the Russian Federation, its regions, industries and economic sectors to the public authorities and all levels of government, the media, scientific community, business entities, public and international organizations.

The system comprises two organizational levels: federal, represented by Rosstat Head Office, and regional level, represented by Rosstat regional offices.

## II. Federal level of the state statistics

Federal level of the state statistics involves Rosstat Head Office, Main Computing Centre, Scientific Research Institute for problems of socioeconomic statistics, Information and Publishing Center "Statistics of Russia".

#### III. Regional level of state statistics

Russian Federation is divided into 85 constituted entities (regions). In 54 constituent entities (republic, oblast, autonomous area, territory) Rosstat has its regional offices. Besides, there has been established 12 interregional offices.

Rosstat regional and interregional offices collect, process statistics, provide data to the republic, provincial and regional authorities and other users.

#### IV. Legal basis of the official statistical activities

Federal State Statistical Service activities are regulated by the Constitution of the Russian Federation, federal laws, Decrees of the President and the Government of the Russian Federation, international treaties of the Russian Federation.

The basis of the statistical activities in Russia is the Federal Law "On official statistical accounting and the system of national statistics in the Russian Federation" of 2007 (as amended).

Carrying out of major statistical surveys, such as Population Census and Agricultural Census is supported by the specific federal laws.

In order to provide Rosstat with all necessary data aiming at creating national information resources, the Government of the Russian Federation issued an act on obligatory provision of primary statistical and administrative data.

## V. Emerging challenges

Timely, accurate, reliable official statistics on social, economic, demographic, ecological and other dimensions of the society is vital for the country's socio-economic development and governance.

Nowadays the Russian statistical system is being developed in the environment of significant socio-economic changes, implementation of the international standards of financial data reporting. This transition defines the demand for new approaches in official statistics as well as creation of a flexible statistical information system, responding to changes occurring in the society.

Development of the statistical system is based on further technological modernization, implementation of new planning and decision-making methods and improvement of human resources.

The principal aspect of Russian statistics modernization is higher transparency of statistical methodology and a broader access to official statistics for all users.

New approaches and the need to meet the growing information needs of the society, triggered adoption by the Government of the Russian Federation of the subprogram "Official statistics production" for the period until 2020 within the framework of the state program of the Russian Federation "Economic development and innovative economy".

## Main tasks of the subprogram

- · Design and delivery of statistical data to users to the full extent, according to the Federal Statistical Work Plan;
- Preparation, conduct of Russian censuses and summarizing of their results, taking various surveys and observations, optimization of statistical surveys and reduction of statistical burden;
- · Building basic input-output tables;
- Modernization of the system of statistical data collection, processing, storage and dissemination by application of new information and telecommunication technologies.

In 2020 Rosstat introduced 2024 Rosstat Development Strategy. It determines goals, objectives and measures for the implementation of the state regulatory policy in the field of official statistics, the development of the Federal State Statistics Service (Rosstat) and the system of official statistics of the Russian Federation until 2024. It also defines the main directions and measures for the improvement of the performance of Rosstat and the development of statistics in the Russian Federation.

#### The Strategy key focuses are:

- Digitalization of statistical production process;
- · Reducing the reporting burden on respondents;
- Better coordination of statistical activities;
- · Meeting user needs and improving confidence in official statistics;
- · Improving statistical methodology;
- Intensification of international cooperation;
- · New approaches to human resource management;
- · Optimization of the administrative processes in Rosstat;
- · Implementation of the projects of a national value.

## **Annexure III** — A brief overview of the Indian statistical system

India, consisting of a number of States and Union Territories (UTs), has a federal structure of Government and the Indian Statistical System functions within the overall administrative set up of the country. The division of responsibility for administration between the Union Government and the State Governments is on the basis of three-fold classification of all subjects, namely, the Union List, the State List, and the Concurrent List. The Concurrent list represents the subjects where both the Union and State Governments can operate, and it includes the subject "Statistics". There is a further division of responsibility, by subjects or groups of subjects, among the different Ministries/Departments of the Union Government and among the Departments of State Government, on the basis of their administrative functions.

The Indian Statistical System, therefore, may be treated as both decentralized and centralized system. For example, the large-scale statistical operations conducted all over the country like Population Census, Economics Census, Agricultural Census and Livestock Census, as well as nation-wide sample surveys including the Annual Survey of Industries and the Socio-Economic Surveys are the responsibility of central agencies. Similarly, compilation of National Accounts, preparation of all-India prices and industrial production indices are also Central activities. In the case of States, the State statistical organizations collect and generate data on a number of variables. The Central Government acts as the coordinating agency for presentation of statistics on an all-India basis even in fields where the States have primary authority and responsibility for collection of statistics. The State Directorates of Economics and Statistics (DESs) carry out the responsibility of coordination of all statistical activities at the State level and keeping liaison with the Ministry of Statistics and Programme Implementation (MOSPI) at the Centre for the purpose of maintaining uniformity and consistency in the data produced and consolidated at different levels.

## Statistical System at the Centre

The Ministry of Statistics and Programme Implementation (MOSPI) is the nodal agency for planning and facilitating the integrated development of the statistical system in the country, including laying down norms and standards in the field of official statistics, evolving concepts and definitions, suggesting methodologies of data collection, processing and dissemination of results. The Ministry has two wings viz. National Statistical Office (NSO), commonly called 'Statistics Wing' and the 'Programme Implementation (PI) Wing'.

National Statistical Office (NSO): The NSO is headed by Secretary and Chief Statistician of India with assisted by three Director Generals. It functions under the overall direction of National Statistical Commission with requisite independence and autonomy in the matter of collection, processing and publication of National Sample Survey data. The National Statistical Office is responsible for coordination of statistical activities in the country, and evolving and maintaining statistical standards. NSO has 11 major Divisionshandled by three Director Generals namely (i) Director General (Statistics) handles the works related to viz National Accounts Division (NAD), Economic Statistics Division(ESD), Price Statistics Division (PSD) and Social Statistics Division (SSD) (ii) Director General (Coordination& Administration) handles the works related to Coordination and Publication (CAP) Division, Data Informatics and Innovation Division (DIID) and Training Division (iii) Director General (Survey) handles the work related to Survey Design and Research Division (SDRD), Field Operations Division(FOD), Data Quality Assurance Division (DQAD), Survey Coordination Division(SCD), which act as the pillars of statistics in India.

NSO has a premier training institute called National Statistical Systems Training Academy (NSSTA) located near Delhi which has been conducting national/international statistical training programmes since its inauguration in February 2009.

**Programme Implementation Wing:** The Programme Implementation Wing is headed by Additional Secretary and has two divisions viz. Infrastructure Project Monitoring Division (IPMD), and Member of Parliament Local Area Development Division (MPLAD). IPMD monitors important infrastructure sectors in the country to provide an overview of the performance with a view to highlighting slippages, if any, in respect of Power, Coal, Steel, Railways, Telecommunications, Ports, Fertilizers, Cement, Petroleum & Natural Gas, Roads, and Civil Aviation. MPLAD scheme was launched in 1993 to provide a mechanism for Members of Parliament to recommend works of developmental nature for creation of durable community assets based on local needs. The scheme addresses locally felt development and infrastructural needs of the community and bridges the gap for developmental works.

In addition to a number of publications brought out by the MOSPI, both NSO and PI wing generate a lot of statistical information that is used by policy planners, researches and other users.

#### Indian Statistical Institute

The MOSPI also has an autonomous Organization, viz. the Indian Statistical Institute (ISI), which is a premier statistical institute of international repute, devoted to research and teaching, and the applications of Statistics in the Natural and Social Sciences. Founded by Professor P.C. Mahalanobis in Kolkata on 17th December, 1931, the institute gained the status of an Institution of National Importance by an act of the Indian Parliament in 1959. The Headquarters of ISI is located in Kolkata and additionally, there are four centres located in Delhi, Bangalore, Chennai and Tezpur

Besides the NSO, most of the line Ministries/Departments in the Union Government, i.e., the Government of India, dealing with different subjects such as Agriculture, Water, Health, Education, Labour & Employment, Rural Development sectors etc. have their own statistical establishments to perform statistical activities for the respective Ministries/ Departments, and they are generally headed by senior level statistical functionaries to facilitate proper coordination with NSO. Most of these Departments bring out respective statistical data/publications.

#### **National Statistical Commission**

The Government of India through a Resolution dated 1st June 2005 decided to set up the National Statistical Commission (NSC). The setting up of the NSC followed the decision of the Cabinet to accept a recommendation of the Rangarajan Commission, which reviewed the Indian Statistical System in 2001. The NSC was initially constituted on 12th July 2006 and it has been functioning since then. The NSC has a part-time Chairperson and four part-time Members, each having specialization and experience in specified statistical fields. Besides, Chief Executive Officer of the NITI Aayog is the ex-officio member of the NSC. The maximum tenure of a part-time Chairperson/Member is three years. The Chief Statistician of India is the Secretary to the NSC. He is also the Secretary to the Government of India in the Ministry of Statistics & Programme Implementation.

#### Statistical System in the States

The Directorates of Economic and Statistics (DESs) in the States/UTs act as the nodal agencies for coordination of all statistical activities in the States/UTs. While the DES in most of the States/UTs have been formally declared by the State Governments as the Nodal Agencies for all statistical activities, the remaining few though not yet formally declared, continue to act as coordinating agency on statistical matters in the States /UTs. Most of the States/UTs have District Statistical Offices (DSOs) which act as the field offices of the DESs for collection and compilation of statistical data for the districts. The DESs perform almost the same functions in the States/UTs as the NSO at the Centre, viz., bringing out some key statistics, coordination with the Central and State statistical agencies, dissemination of statistics, etc.

#### Legal support for collection of data

Data collection in India has been largely based on a voluntary response except for the statutory support provided through the erstwhile "Collection of Statistics Act, 1953' to collect industrial data. This Act has since been amended as the new 'Collection of Statistics Act 2008', which is much more comprehensive to enable collection of various socio-economic data. The Collection of Statistics Act 2008 is administered by the Ministry of Statistics and Programme Implementation while another Act viz. Census Act 1948 is administered by the Office of the Registrar General and Census Commissioner of India under the Ministry of Home Affairs, to collect population and other demographic data. Besides the two important Acts, there are a number of other Acts, Rules and Procedures being administered by concerned line Ministries/Departments, to collect statutory administrative returns, which help in generating different subject related data.

#### **Initiatives**

MoSPI is developing a National Integrated Information Platform (NIIP) for official statistics in the country. NIIP will be the state-of-theart digital repository of all official statistics with homogenized meta-data. NIIP will provide high end platform for data analytics and interpretation of socio-economic data to Central Ministries/State Governments and other stakeholders, including general public. This will also have a dashboard for socio-economic indicators for real time monitoring and now-casting of macro-economic indicators.

MoSPI is also developing a Generalised Survey Solution platform for surveys to be conducted through Mobile Devices. It will facilitate real-time collection, validation and processing of data and will reduce the time lag in releasing the survey results.

#### **Emerging challenges**

In the face of rapid major technological and socio-economic changes, official statistical landscape is becoming more complex, expectations of policy makers are increasing exponentially, and the system is challenged to deliver best possible statistics in more efficient and innovative ways.

India is at the cusp of a new phase of socio-economic transformation. As a result of increased penetration of digital technologies, the amount of information available is increasing exponentially and with improved access to the public. The central and state governments are rapidly intensifying their efforts to harness these new sources of data. These developments provide a new challenge for the national statistical system to align and converge the information flow across varied sources so that an integrated picture emerges for more effective and timely policy interventions.

Fulfilment under Sustainable Development Goals (SDGs) commitment also places new demands on the need for quality data and statistics, disaggregated by location, sex, age, income group and other dimensions of development. MoSPI is taking the lead to respond to these demands with timely and robust official statistics for addressing these priorities.

Critical pillars to this transformation are not only the technological interventions but also the management of human capital for the statistical framework being put in place. There is a need to evolve innovative techniques for exploiting new data sources (big data sources, etc.) and will require involvement of research and other institutions so that new ideas can be crowd sourced, incubated and developed for use in the national statistical system.

National statistical system is operating in a dynamic environment with new opportunities and challenges. The COVID-19 pandemic has swept across the world, causing tremendous social and economic upheaval and profoundly altering the everyday lives of billions of people. In this pandemic, the National Statistical Offices have found themselves facing unprecedented challenges. The COVID-19 outbreak is impacting on the ability to collect and process data in the traditional manner. In India, all data collection for surveys and censuses so far have mostly been through face to face interviews. Collecting information in this mode became a huge challenge while the massive use of teleworking places demands on technical infrastructure. MoSPI is working on modifying its data collection system to become multi modal, and a hybrid model of contemporary survey instruments like CAPI, CATI and CAWI is being worked out.

In view of above, there is a dire need that the existing institutional arrangements, resources and technical infrastructure undergo significant modernization so that the system can address these challenges and cater to the increased requirements of data for monitoring the health of the economy on a real-time basis.

# **ANNEXURE IV** — A brief overview of the statistical system of China

Since its establishment, National Statistical System of the People's Republic of China has been developed and improved in 70 years' process of reform and adjustment to meet the new demands for the new conditions and situation. The Statistical Law of the People's Republic of China stipulates that the State shall establish a centralized and unified statistical system, with a statistical administrative structure under unified leadership and with each level assuming responsibility for its own work. The Chinese Government organizes and undertakes statistical investigations, collects, compiles and releases statistical data, and provides high-quality statistical services for economic and social development based on laws.

#### I. Government Statistical System

The government statistical system comprises the government comprehensive statistical system and the government departmental statistical system. The government comprehensive statistical system is consisted of the statistical institutions established through a top-to-down model and relevant statistical staff from all the administrative levels. National Bureau of Statistics of China is established under the Central Government, independent statistical institutions are established in local governments at and above the county level, and governments of townships and towns are staffed with full-time or part-time statisticians, who are responsible for the statistical work.

#### 1) National Bureau of Statistics of China

As an organ directly under the State Council, the National Bureau of Statistics of China (NBS) is responsible for directing and coordinating the statistical work throughout the country. In the entire national statistical system, NBS is a main provider of national statistical data and an organizer, leader and coordinator of the government departmental statistics and local statistics. Pursuant to the Statistics Law of the People's Republic of China and other national regulations, the main function of NBS is to be responsible for organizing, directing and coordinating the statistical work throughout the country, to formulate statistical policy and planning, basic national statistical system and unified statistical standards, approve the statistical standards of departments, draw up a plan or scheme for important general surveys of the national conditions and strength jointly with the departments concerned, organize and conduct the important general surveys of the national conditions and strength such as Population Census, Economic Census and Agricultural Census; organize and conduct the statistical survey of key industries of the economy; collect, aggregate, collate and provide the statistical data related to the surveys, and synthetically collate and provide the basic national statistical data, and to check, administer and publish the basic national statistical data, and to administer the departmental and local statistical survey programs by law.

NBS internally sets up 31 organs (departments)(see the organization chart and number of NBS of China), such as integrated coordination, construction of statistical laws and regulations, formulation of statistical system and standards, organization and implementation of statistical investigation, national accounts, economic analysis, data dissemination and development, etc.

NBS of China also establishes Survey Offices in each province (municipality, autonomous region) and a survey team in each city (prefecture, autonomous prefecture and league) and in one-third of counties (cities at county level, districts and banners), which are as agents detached by NBS and vertically administrated under NBS, and are mainly responsible for the surveys of key statistical data required for the macroeconomic control and national accounts assigned by NBS mainly through sampling surveys.

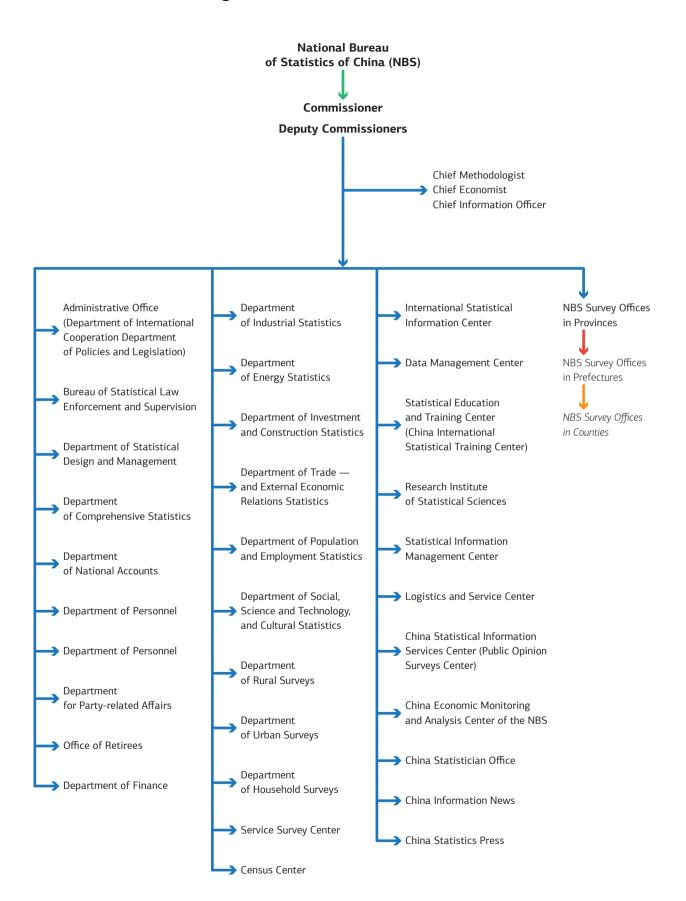
## 2) Local Bureau of Statistics

Independent statistical institutions are established in local governments at and above the county level, and statistical stations are established or statisticians are staffed in the people's governments of townships and towns, who are responsible for carrying out their tasks of national statistical surveys and for organizing, guiding and coordinating the statistical work in their respective administrative areas. The statistical institutions of local governments at various levels are subordinated to the dual leadership of the governments at their level and the statistical institutions at higher level, in terms of statistical work, mainly under the leadership of the statistical institutions at higher level.

#### 3) Departmental Statistical System

Other ministries of the State Council and departments of local governments at various government levels do, according to the needs of their statistical work, establish statistical institutions and staffed with statisticians, forming a departmental statistical system. Its main function is to organize in accordance with laws and regulations and govern the statistical work within the departments, to execute the tasks of national statistical surveys, to draw up and carry out statistical survey plans within the departments and to collect, compile and provide statistical data, to make statistical analysis and exercise statistical supervision over the implementation of plans of the departments and of the enterprises or institutions under their jurisdiction.

# Organizational chart of NBS of China



#### II. Statistical Laws

Whether government agencies (mainly statistical agencies) or statistical respondents, must comply with the statistical laws, organize or support and coordinate statistical surveys according to the statistical standards and statistical survey methodologies formulated based on the laws.

The Statistics Law of the People's Republic of China was initially formulated in 1983 and revised twice in 1996 and 2009 respectively by the Standing Committee of the National People's Congress of China. Based on the reality of the economic and social development and statistical work, the Statistical Law embodies the basic spirits of the Fundamental Principles of Official Statistics of the United Nations and is the basic compliance to undertake statistical work.

In order to implement the Statistical Law, a series of statistical laws and regulations were formulated, such as Regulations on Implementation of the Statistical Law, Regulations for National Economic Censuses, Regulations for National Population Census and Measures for Survey Programs of Departmental Statistics, etc. According to the Statistical Law, the survey programs are classified as national, departmental and local survey programs as per the Statistical Law.

#### III. Statistical Surveys

NBS collects statistical data mainly through periodical censuses and current statistical surveys, and sorts out statistical data through ad hoc surveys and administrative registry records. At present, the important general surveys of the national conditions and strength by NBS include Population Census, Agricultural Census and Economic Census, and around 70 current statistical surveys, including agriculture, industry, energy, investment, construction, trade and external economy, services, urban and rural households, price, society and science and technology, labor force, wages and salaries, etc., are organized and conducted. These surveys cover main aspects of economy, society, population, environment and resources. The contents of both the censuses and surveys basically cover all the aspects concerning with economy, society, population, environment and resources.

The government departmental statistics involve traffic, tourism, finance, banking, import and export in customs, utilization of foreign capital, culture, education, health, science and technology, registry of permanent residence, social development, etc.

#### IV. Release of Statistics and Provision of Statistical Products

In order to provide the official statistics and products on China to the whole society and international community more in quantity, shorter in time lag, and better in quality, NBS releases statistical survey data and supplies with products via statistical processing through various channels and in various ways. For the time being, a system of regular releases of statistical information has been established, including various well-incorporated types, such as press conference, internet release, public data bank and publications, "Statistics Info" through WeChat and official mobile information service platform, as well as the paper products mainly of varieties of yearbooks, which enable the release and provision of statistical data and products more efficient in time, richer in contents and more extensive in coverage of audience. NBS has set up three micro data laboratories at the Headquarters of NBS, the Tsinghua University and Renmin University of China for the development and utilization of micro data by experts from various ministries and departments, relevant institutions of higher learning and research institutions. In addition, the statistical institutions in 31 provinces, autonomous regions and municipalities, as well as many cities and counties have also formed their own relevant regular patterns for timely data release, which forms a hierarchical and widely covered layout for statistical data release and provision in China.

#### V. The Main Targets and Latest Development of China's Statistics

China Economy is at an important stage of development to the escalation of structural transformation. The fast development and profound change in China's society and economy have posed newer and higher requirements on the statistical system in China. Since 2012, with its great efforts on reform of the statistical production modes, NBS has basically established a true, complete and timely updated database of establishments; a worked out a standardized system of integrated questionnaires for business surveys; developed a comparatively convenient and applicable data collection and processing software; and built up a comparatively safe and efficient online reporting system for business statistics used all over China. With its open attitude and innovative courage, the National Statistical System in China is actively promoting the reform on national accounts, exploring and promoting the statistical monitoring on the new economy (new industry, new business format and new business mode), building up and perfecting relevant statistical standards for better serving the socio-economic development, at the same time, actively pushing forward the information sharing among various departments, and deeply mining big data treasure by taking advantage of registry records and survey data from other departments. Thereby, the role of the big data can be developed in terms of current statistics from assessment, supplement to substitution. Statistics China will continuously improve the statistical system and methodology with its unremitting efforts, more extensively make use of modern information technology, continuously expand the statistical service channel, upgrade service quality and build up an advanced statistical survey system, which enables data quality better ensured, and the socio-economic development better served.

# **ANNEXURE V** — A brief overview of the statistical system of South Africa

The South African Statistical system is nearly 100 years old, but has only served the needs of all its peoples for a relatively short period. The advent in 1994 of the democratic dispensation provided the production of statistics with two organizational model options for transformation. The first model was to centralize the production of most of the statistics into a single agency, the national statistical office (NSO) which was the then Central Statistical Service (CSS). The CSS was later transformed into Statistics South Africa (Stats SA) consisting of a head office and branches in the provinces, and much later on regional offices were established at sub-provincial level. The minority of the statistics excluded from centralization were largely of a financial nature such as the balance of payments. These would be generated by the relevant agencies including the South African Reserve Bank (SARB) and the National Treasury (NT). Indeed the feeling that centralization was the way to go was prevalent both within Stats SA and in other organs of state. The second model was to decentralize the production of most of the statistics whereby the various organs of state would produce statistics on the basis of their specialist subject areas. Naturally statistics-producing organs of state would constitute a statistical production system which would require coordination. The model ultimately adopted was a product of an evolutionary process. Statistical production faced five major pressures which overlapped in some areas. First was ideological transformation from a focus on "own affairs" of the apartheid political dispensation to a focus on integration of the total population and geography of the new state. This translated into transformation of the demographics of the CSS, integration of the Bantustan statistics offices into the CSS, and establishment of provincial CSS offices to facilitate data collection by head office. Second was the data gap facing the new government with regard to policy and programme development. Alleviation of poverty and inequality, especially service delivery, and the provision of developmental opportunities were unquestionably urgent. This provided the imperative for the 1996 census of population and housing. Third was the rationalization of the statistical series produced so they could be relevant to the aspirations of the citizenry. The rationalization included the introduction of the production of social statistics in addition to the existing economic statistics. Fourth was the drive to improve the quality of the statistics produced by the NSO. Fifth was the skills deficit across the statistics system to produce high quality statistics.

Although they are still around at different levels of intensity, the pressures mentioned above were most intense during, and coincided with, the tenure (1995–99) of the first head of the CSS which later became Stats SA. During this period the transformation model of statistical production was the centralize done. However, overtime it had become increasingly clear that Stats SA had very limited capacity to cater for most statistical needs of users. In the same breath the potential of other organs of state for filing the gap between what Stats SA produced and what users needed was recognized. New statistical legislation was introduced and the current Statistics Act (No.6 of 1999) was promulgated in 1999. The Act specifically provided for Statistician — General as executive head of Stats SA as well as coordinator of statistics produced by other organs of state. It was a land marking for the production of statistics in the country because it defined a new direction for the strategic and work programmes of Stats SA as well as defining the role of other organs of state in the production of statistics. Incidentally the Act coincided with the change of name of the NSO from CSS to Stats SA.

In 2000 a new head took over the reins at Stats SA and immediately embarked on a new vision for statistical production in the country. Although the new vision was as yet to be formally defined, it was hinged on coordination of statistical production. A National Statistics Systems Division (NSSD) was established at Stats SA to tease out the coordination process. The NSS concept was adopted by a Cabinet Lekgotla in January 2002. Although the SANSS was included in the Programmes of Action (POA) of the government, for the next eight years or so it lacked prominence especially at Stats SA for three main reasons. First was the relatively perennial capacity constraint. Second and most significant was the continued pressure to get Stats SA as an entity to work more effectively and efficiently with particular regard to the quality of its own products. The third was the challenge of change management.

It was not until 2009 that the NSS concept influenced the strategic direction of Stats SA. Since then the department's five-year strategic plan and the annual work programme have undergo a strategic shift that emphasizes implementation of statistical coordination as mandated by section 14 of the Statistics Act. As its new vision and mission indicated, the department assumed a leadership position by partnering with other organs of state to advance statistical development in the county. The shift has been widening statistical production beyond the product of Stats SA to setting up a system to support other organs of state to produce statistics of good quality. Building on the strategic gains made in the five year strategy (2009–2014) Stats SA changed its strategic focus for the period 2015–2019 to "use" of statistical information for Transparency, Accountability, Results-based management and Transformation.

#### The organisation has set the following strategic outcome goals to be achieved by 2030:

Firstly, our statistical information system will have fully responded to the information demands of the National Development Plan (NDP) that informs development and transformation consistent with the mandate of our Constitution.

Secondly, the national statistics system will be driven by a diverse, transformed and united cadre of professionals imbued with the statistical capability to lead the national statistical system. The statistical literacy of citizens and statistical capability in the national statistics system will have increased. School leavers will be better equipped to understand statistical concepts and it application in their daily lives. A new generation of statistical leaders will have been grown to head statistical information systems in the National Statistics System (NSS). A true data revolution will inspire us.

Thirdly, Stats SA will be a top-performing organ of state and an employer of choice. Technology will drive an end-to-end robust statistical production system. Our governance and statistical systems are flexible, efficient and innovative, underpinned by sound governance and statistical methodologies.

Fourthly, Stats SA will be the statistical authority at the heart of the NSS. Collaborative partnerships and statistics units will be established within organs of state under the statistical leadership of the Statistician-General. The production of statistics has now become part of the annual performance plans of organs of state and is used for decision-making by all to inform policy, planning, monitoring and evaluation. Users and the public are delighted and have confidence and trust in official statistics as it is common knowledge and practice that statistics produced in the NSS are based on statistical quality principles and international best practices.

Fifthly, by 2020, the statistics value chain will be based on sound statistical quality principles in line with international standards and classifications that engender trust in our products.

In order to address the major measure measurement requirements, both at national and international levels, Stats SA will be revamping its statistics legislation in South Africa.

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