

Statistical Annex

Output growth, inflation and current account balances¹

Table A1

	Real GDP				Consumer prices				Current account balance ²		
	Annual percentage changes				Annual percentage changes				Percentage of GDP		
	2014	2015	2016	1996–2006	2014	2015	2016	1996–2006	2014	2015	2016
World	3.4	3.2	3.1	3.9	3.1	2.3	2.5	4.6	0.2	0.6	0.6
AEs	1.7	1.9	1.6	2.7	1.4	0.2	0.7	1.9	-0.2	-0.2	-0.1
United States	2.4	2.4	1.8	3.4	1.6	0.1	1.2	2.6	-2.2	-2.7	-2.7
Euro area ³	0.9	1.6	1.6	2.3	0.4	0.0	0.2	1.9	2.4	3.2	2.9
<i>France</i>	<i>0.7</i>	<i>1.2</i>	<i>1.3</i>	<i>2.3</i>	<i>0.5</i>	<i>0.0</i>	<i>0.2</i>	<i>1.6</i>	<i>-0.9</i>	<i>-0.1</i>	<i>-0.4</i>
<i>Germany</i>	<i>1.6</i>	<i>1.4</i>	<i>1.6</i>	<i>1.5</i>	<i>0.9</i>	<i>0.2</i>	<i>0.4</i>	<i>1.4</i>	<i>7.3</i>	<i>8.5</i>	<i>8.0</i>
<i>Italy</i>	<i>-0.3</i>	<i>0.6</i>	<i>1.1</i>	<i>1.5</i>	<i>0.3</i>	<i>0.0</i>	<i>0.1</i>	<i>2.4</i>	<i>1.9</i>	<i>2.2</i>	<i>2.2</i>
<i>Spain</i>	<i>1.4</i>	<i>3.2</i>	<i>2.7</i>	<i>3.8</i>	<i>-0.1</i>	<i>-0.5</i>	<i>-0.3</i>	<i>3.0</i>	<i>1.0</i>	<i>1.5</i>	<i>1.5</i>
Japan	-0.1	0.6	0.5	1.1	2.7	0.8	0.0	0.0	0.5	3.3	4.1
United Kingdom	2.9	2.3	1.9	3.0	1.5	0.1	0.7	1.6	-5.1	-5.2	-4.6
Other western Europe ⁴	2.0	2.0	1.9	2.7	0.5	0.2	0.8	1.4	8.4	8.7	7.3
Canada	2.5	1.1	1.7	3.2	1.9	1.1	1.6	2.0	-2.3	-3.3	-2.8
Australia	2.7	2.5	2.6	3.7	2.5	1.5	1.5	2.6	-3.0	-4.6	-4.4
EMEs	4.9	4.3	4.4	5.6	4.6	4.1	4.0	5.6	0.9	1.9	1.8
Asia	6.4	6.2	6.0	7.0	3.2	2.4	2.7	3.1	2.4	3.4	3.0
<i>China</i>	<i>7.3</i>	<i>6.9</i>	<i>6.5</i>	<i>9.5</i>	<i>2.0</i>	<i>1.4</i>	<i>1.9</i>	<i>1.4</i>	<i>2.1</i>	<i>3.0</i>	<i>2.7</i>
<i>India</i> ⁵	<i>7.3</i>	<i>7.6</i>	<i>7.6</i>	<i>6.7</i>	<i>6.0</i>	<i>4.9</i>	<i>5.1</i>	<i>4.5</i>	<i>-1.3</i>	<i>-1.0</i>	<i>-1.2</i>
<i>Korea</i>	<i>3.3</i>	<i>2.6</i>	<i>2.6</i>	<i>5.2</i>	<i>1.3</i>	<i>0.7</i>	<i>1.2</i>	<i>3.2</i>	<i>6.0</i>	<i>7.7</i>	<i>7.3</i>
<i>Other Asia</i> ⁶	<i>4.2</i>	<i>3.7</i>	<i>3.8</i>	<i>4.0</i>	<i>3.9</i>	<i>2.7</i>	<i>2.4</i>	<i>4.6</i>	<i>4.4</i>	<i>5.8</i>	<i>5.2</i>
Latin America ⁷	1.3	-0.1	-0.4	3.1	7.4	7.7	8.8	6.5	-3.3	-3.3	-2.6
<i>Brazil</i>	<i>0.1</i>	<i>-3.8</i>	<i>-3.7</i>	<i>2.7</i>	<i>6.4</i>	<i>10.7</i>	<i>7.0</i>	<i>7.7</i>	<i>-4.3</i>	<i>-3.3</i>	<i>-1.4</i>
<i>Mexico</i>	<i>2.3</i>	<i>2.5</i>	<i>2.4</i>	<i>3.5</i>	<i>4.1</i>	<i>2.1</i>	<i>3.2</i>	<i>4.4</i>	<i>-1.9</i>	<i>-2.8</i>	<i>-3.0</i>
Central Europe ⁸	3.1	3.7	3.1	4.0	0.1	-0.5	0.0	3.1	-0.9	0.7	0.5
<i>Poland</i>	<i>3.3</i>	<i>3.6</i>	<i>3.5</i>	<i>4.4</i>	<i>0.2</i>	<i>-0.9</i>	<i>-0.3</i>	<i>2.5</i>	<i>-2.0</i>	<i>-0.2</i>	<i>-0.5</i>
Russia	0.7	-3.7	-1.2	4.3	11.4	12.9	7.2	12.9	2.9	5.3	4.1
Turkey	3.1	4.0	3.4	4.7	8.9	7.7	7.7	24.6	-5.5	-4.4	-4.4
Saudi Arabia	3.7	3.5	0.8	2.9	2.7	2.2	3.5	0.5	9.8	-8.2	-12.6
South Africa	1.6	1.3	0.9	3.5	6.1	4.6	6.4	4.2	-5.4	-4.4	-4.4

¹ Based on May 2016 consensus forecasts. For the aggregates, weighted averages based on GDP and PPP exchange rates. 1996–2006 values refer to average annual growth and inflation (for EMEs, inflation calculated over 2001–06). ² For the aggregates, sum of the countries and regions shown or cited; world figures do not sum to zero because of incomplete country coverage and statistical discrepancies. ³ Current account based on the aggregation of extra-euro area transactions. ⁴ Denmark, Norway, Sweden and Switzerland. ⁵ Fiscal years (starting in April). ⁶ Chinese Taipei, Hong Kong SAR, Indonesia, Malaysia, the Philippines, Singapore and Thailand. ⁷ Argentina, Brazil, Chile, Colombia, Mexico and Peru. For Argentina, consumer price data are based on official estimates, which contain a methodological break in December 2013. ⁸ The Czech Republic, Hungary and Poland.

Sources: IMF, *World Economic Outlook*; Consensus Economics; national data; BIS calculations.

Residential property prices

Annual averages, year-on-year changes; in per cent

Table A2

	Nominal				Real ¹			
	2013	2014	2015	2007–12 average	2013	2014	2015	2007–12 average
United States	11.1	7.1	5.1	-4.8	9.5	5.4	4.9	-6.9
Euro area	-1.9	0.2	1.6	0.5	-3.2	-0.2	1.5	-1.5
<i>Austria</i>	4.7	3.4	4.2	5.4	2.6	1.8	3.2	3.1
<i>Belgium</i>	1.2	-0.5	0.7	3.5	0.1	-0.8	0.2	1.0
<i>France</i>	-1.9	-1.6	-1.4	1.9	-2.7	-2.1	-1.4	0.2
<i>Germany</i>	3.2	3.1	4.5	1.4	1.7	2.2	4.3	-0.3
<i>Greece</i>	-10.8	-7.5	-5.0	-3.0	-10.0	-6.2	-3.3	-5.8
<i>Ireland</i>	2.1	13.0	10.5	-9.4	1.6	12.8	10.9	-10.6
<i>Italy</i>	-5.7	-4.4	-2.4	0.6	-6.9	-4.6	-2.5	-1.6
<i>Netherlands</i>	-6.0	0.8	3.5	-1.3	-8.3	-0.2	2.9	-3.1
<i>Portugal</i>	-1.9	4.3	3.1	-3.0	-2.2	4.5	2.6	-4.9
<i>Spain</i>	-9.1	0.3	3.6	-3.7	-10.4	0.5	4.1	-5.9
Japan	1.6	1.6	2.4	-1.0	1.3	-1.2	1.6	-0.8
United Kingdom	3.5	10.0	6.7	1.7	0.9	8.4	6.6	-1.4
Canada	5.7	6.6	8.3	4.7	4.7	4.6	7.1	2.8
Sweden	5.5	9.4	13.1	4.7	5.5	9.6	13.2	3.0
Australia	6.6	9.1	9.0	4.6	4.1	6.4	7.4	1.8
Asia								
<i>China</i>	5.9	2.6	-3.8	4.4	3.2	0.6	-5.2	0.8
<i>Hong Kong SAR</i>	17.5	6.0	15.5	14.5	12.6	1.5	12.1	11.0
<i>India</i>	14.5	14.8	13.6	21.8	4.0	7.9	8.3	11.1
<i>Indonesia</i>	12.0	7.0	5.6	3.1	5.3	0.6	-0.8	-2.8
<i>Korea</i>	-0.4	1.5	3.4	4.0	-1.7	0.2	2.6	0.8
<i>Malaysia</i>	10.9	8.5	7.1	6.6	8.6	5.2	4.9	4.1
<i>Philippines</i>	11.3	8.9	6.5	3.7	8.2	4.5	5.0	-0.2
<i>Singapore</i>	3.2	-2.9	-3.9	9.8	0.8	-3.9	-3.3	5.9
<i>Thailand</i>	7.8	5.7	2.5	2.6	5.5	3.8	3.5	-0.2
Latin America								
<i>Brazil</i>	9.5	5.1	-2.5	20.2	3.1	-1.2	-10.6	14.3
<i>Chile</i>	8.5	5.9	...	4.7	6.3	1.4	...	1.0
<i>Colombia</i>	9.7	8.2	10.7	11.8	7.5	5.1	5.4	7.2
<i>Mexico</i>	3.8	4.4	6.6	5.1	0.0	0.4	3.8	0.7
<i>Peru</i>	16.9	12.7	6.2	16.5	13.7	9.2	2.6	12.8
Central Europe								
<i>Czech Republic</i>	0.0	2.4	4.0	-1.8	-1.4	2.1	3.7	-3.6
<i>Hungary</i>	-2.6	4.3	11.5	-2.5	-4.2	4.5	11.6	-7.1
<i>Poland</i>	-4.4	1.0	1.5	-1.0	-5.5	0.8	2.5	-4.6
Russia	3.8	1.4	1.2	11.8	-2.8	-6.0	-12.4	2.4
South Africa	10.0	9.3	6.0	4.7	4.0	3.1	1.4	-1.5
Turkey	12.7	14.4	18.4	11.0	4.9	5.1	9.9	3.1

¹ Deflated using consumer prices.

Sources: CEIC; national data; BIS database on property price statistics; BIS calculations.

Fiscal positions¹

Table A3

	Overall balance ²			Underlying government primary balance ³			Gross debt ²		
	2013–15 average	2016	Change	2013–15 average	2016	Change	2006	2015	Change
AEs									
Austria	-1.9	-1.9	0.1	1.8	1.8	0.0	67	86	19.3
Belgium	-2.9	-2.0	0.9	0.6	1.2	0.6	91	106	14.9
Canada	-2.1	-1.5	0.6	-1.2	-1.0	0.3	53	71	18.3
France	-3.9	-3.4	0.6	-0.8	-0.5	0.3	64	96	31.6
Germany	0.4	0.6	0.3	2.0	1.6	-0.4	66	71	4.9
Greece	-6.7	-7.7	-0.9	5.8	6.1	0.2	104	177	73.8
Ireland	-3.9	-1.1	2.8	0.8	1.3	0.6	24	94	70.2
Italy	-2.9	-2.2	0.7	4.2	3.7	-0.5	102	133	30.4
Japan	-7.6	-5.7	2.0	-6.9	-5.5	1.5	152	212	59.9
Netherlands	-2.3	-1.3	1.0	-0.2	-0.1	0.0	44	65	20.6
Portugal	-5.0	-2.8	2.2	3.8	3.9	0.1	69	129	59.8
Spain	-5.7	-2.9	2.8	1.8	1.6	-0.2	39	99	60.3
Sweden	-1.4	-0.6	0.8	-0.2	-0.9	-0.7	43	43	0.3
United Kingdom	-5.1	-2.6	2.5	-4.1	-3.4	0.7	42	89	46.9
United States	-5.1	-4.2	0.9	-1.2	-0.8	0.5	57	97	40.0
EMEs									
Brazil	-6.4	-8.7	-2.2	-0.9	-0.5	0.4	65	73	8.2
China	-1.5	-3.1	-1.6	-0.6	-2.2	-1.6	32	44	12.1
India	-7.3	-7.0	0.3	-2.6	-2.4	0.3	77	68	-8.6
Indonesia	-2.3	-2.7	-0.4	-1.0	-1.2	-0.2	36	27	-9.5
Korea	0.3	0.3	0.0	-0.2	0.4	0.6	24	40	16.7
Malaysia	-3.2	-3.3	-0.1	-1.2	-1.9	-0.6	39	55	15.1
Mexico	-4.1	-3.5	0.6	-1.4	-0.4	1.0	20	36	15.6
South Africa	-4.0	-3.8	0.2	-0.6	0.3	0.9	34	52	18.9
Thailand	-0.1	-0.4	-0.3	0.9	0.5	-0.3	23	33	9.3

¹ For the general government. ² As a percentage of GDP; gross debt at nominal value (for Korea, at market value). ³ As a percentage of potential GDP; excluding net interest payments. OECD estimates are adjusted for the cycle and for one-off transactions, and IMF estimates are adjusted for the cycle.

Sources: C Dembiermont, M Scatigna, R Szemere and B Tissot, "A new database on general government debt", *BIS Quarterly Review*, September 2015, pp 69–87; IMF, *World Economic Outlook*; IMF, *Fiscal Monitor*; OECD, *Economic Outlook*; BIS total credit statistics.

Early warning indicators for stress in domestic banking systems¹

Table A4

	Credit-to-GDP gap ²	Property price gap ³	Debt service ratio ⁴	Debt service ratio if interest rates rise by 250 bp ^{4,5}
Asia ⁶	14.0	6.6	1.8	4.1
Australia	3.9	3.9	1.2	5.1
Brazil	8.5	-19.6	7.4	9.2
Canada	13.5	8.7	2.6	6.7
China	29.7	-4.9	5.5	8.8
Central and eastern Europe ⁷	-10.8	8.3	0.4	1.9
France	1.2	-11.0	1.0	4.0
Germany	-6.8	12.2	-1.8	0.0
Greece	-12.1	9.4		
India	-3.2		1.8	2.9
Italy	-11.2	-15.5	0.1	2.3
Japan	4.4	12.5	-1.9	0.9
Korea	3.9	6.1	-0.6	3.0
Mexico	7.7	2.1	0.5	1.2
Netherlands	-19.0	-13.0	1.0	5.8
Nordic countries ⁸	-0.6	3.4	1.0	5.0
Portugal	-38.3	10.2	-1.3	1.9
South Africa	-0.3	-7.6	-0.5	0.9
Spain	-46.1	-21.2	-2.9	-0.1
Switzerland	5.5	9.4	-0.1	3.0
Turkey	11.8		5.7	7.4
United Kingdom	-25.6	2.2	-2.0	0.8
United States	-10.1	3.0	-1.8	0.8
<i>Legend</i>	<i>Credit/GDP gap > 10</i>	<i>Property gap > 10</i>	<i>DSR > 6</i>	<i>DSR > 6</i>
	<i>2 ≤ Credit/GDP gap ≤ 10</i>		<i>4 ≤ DSR ≤ 6</i>	<i>4 ≤ DSR ≤ 6</i>

For the credit-to-GDP gap, data up to Q4 2015 except for Bulgaria, Lithuania and the Philippines, for which data end in Q1 2016; for the property price gap, data up to Q4 2015 except for France, Germany, Greece, Hong Kong SAR, Korea, the Netherlands, Norway, Singapore, South Africa, Sweden, Switzerland, Thailand and the United Kingdom, for which data end in Q1 2016; for the debt service ratio, data up to Q4 2015.

¹ Thresholds for red cells are chosen by minimising false alarms conditional on capturing at least two thirds of the crises over a cumulative three-year horizon. A signal is correct if a crisis occurs in any of the three years ahead. The noise is measured by the wrong predictions outside this horizon. Beige cells for the credit-to-GDP gap are based on guidelines for countercyclical capital buffers under Basel III. Beige cells for the debt service ratio (DSR) are based on critical thresholds if a two-year forecast horizon is used. For a derivation of critical thresholds for credit-to-GDP gaps and property price gaps, see M Drehmann, C Borio and K Tsatsaronis, "Anchoring countercyclical capital buffers: the role of credit aggregates", *International Journal of Central Banking*, vol 7, no 4, 2011, pp 189–240. Country aggregates are simple averages. ² Difference of the credit-to-GDP ratio from its long-run, real-time trend calculated with a one-sided HP filter using a smoothing factor of 400,000, in percentage points. ³ Deviations of real residential property prices from their long-run trend calculated with a one-sided HP filter using a smoothing factor of 400,000, in per cent. ⁴ For the DSR series and methodology, see www.bis.org/statistics/dsr/index.htm. Difference of DSRs from country-specific long-run averages since 1999 or later depending on data availability and when five-year average inflation fell below 10%, in percentage points. ⁵ Assuming that interest rates increase 2.50 percentage points and all the other components of the DSR stay fixed. ⁶ Hong Kong SAR, Indonesia, Malaysia, the Philippines, Singapore and Thailand; excluding the Philippines and Singapore for the DSR and its forecast. ⁷ Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Russia; excluding the Czech Republic and Romania for the real property price gap; excluding Bulgaria, Estonia, Latvia, Lithuania and Romania for the DSR and its forecast. ⁸ Finland, Norway and Sweden.

Sources: National data; BIS; BIS calculations.

Annual changes in foreign exchange reserves

In billions of US dollars

Table A5

	At current exchange rates						Memo: Amounts outstanding
	2010	2011	2012	2013	2014	2015	Dec 2015
World	1,100	940	747	730	-94	-668	10,921
AEs	194	269	195	55	7	71	2,364
United States	2	0	-2	-2	-6	-3	39
Euro area	13	1	12	1	7	18	246
Japan	39	185	-28	9	-3	-21	1,180
Switzerland	126	54	197	21	10	62	561
EMEs	823	621	485	602	-90	-672	7,378
Asia	651	424	239	529	52	-471	5,461
China	448	334	130	510	22	-513	3,330
Chinese Taipei	34	4	18	14	2	7	426
Hong Kong SAR	13	17	32	-6	17	30	359
India	9	-5	-1	6	28	32	328
Indonesia	29	14	2	-12	13	-5	101
Korea	22	11	19	19	18	5	359
Malaysia	9	27	6	-4	-19	-20	91
Philippines	16	12	6	2	-4	2	72
Singapore	38	12	21	14	-16	-9	246
Thailand	32	0	6	-12	-10	0	149
Latin America ¹	81	97	51	-6	25	-32	686
Argentina	4	-7	-3	-12	1	-5	21
Brazil	49	63	19	-13	6	-6	349
Chile	2	14	0	0	0	-2	37
Mexico	21	23	16	15	17	-17	168
Venezuela	-9	-3	0	-4	1	-1	6
CEE ²	14	3	15	20	-22	-12	261
Middle East ³	50	88	148	76	-16	-140	662
Russia	27	8	32	-17	-129	-18	309
<i>Memo: Net oil exporters⁴</i>	<i>107</i>	<i>141</i>	<i>220</i>	<i>76</i>	<i>-146</i>	<i>-228</i>	<i>1,387</i>

¹ Countries shown plus Colombia and Peru. ² Central and eastern Europe: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. ³ Kuwait, Libya, Qatar and Saudi Arabia. ⁴ Algeria, Angola, Kazakhstan, Mexico, Nigeria, Norway, Russia, Venezuela and the Middle East.

Sources: IMF, *International Financial Statistics*; Datastream; national data.