

J Credit-to-GDP gap

www.bis.org/statistics/c_gaps.htm

Since September 2016, the BIS has been publishing time series on the credit-to-GDP gap for a number of countries.³⁹ The credit-to-GDP gap is defined as the difference between the credit-to-GDP ratio and its long-run trend, and captures the build-up of excessive credit in a reduced-form fashion. It has been found to be a reliable early warning indicator of impending financial crises.⁴⁰

This data set covers more than 40 economies, starting in 1961 for those with the longest run of data. As input, the BIS uses data on the credit-to-GDP ratio as published in its database of total credit to the private non-financial sector. The credit series capture total borrowing by the private non-financial sector (ie households and non-financial corporations).

Importantly, while the use of these total credit series as input data facilitates comparability across countries, it means that the credit-to-GDP gaps published by the BIS may differ from credit-to-GDP gaps considered by national authorities as part of their countercyclical capital buffer decisions. The gap indicator was adopted as a common reference point under Basel III to guide the build-up of countercyclical capital buffers.⁴¹ Authorities are expected, however, to apply judgment in the setting of the buffer in their jurisdiction after using the best information available to gauge the build-up of system-wide risk rather than relying mechanistically on the credit-to-GDP guide. For instance, national authorities may form their policy decisions using credit-to-GDP ratios that are based on different data series from the BIS's as input data, leading to credit-to-GDP gaps that differ from those published by the BIS.

³⁹ The methodology and the data used are discussed in greater detail in M Drehmann, S Pradhan, P Wooldridge and R Szemere, "Recent enhancement to the BIS statistics", *BIS Quarterly Review*, September 2016.

⁴⁰ 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, December 2011, pp 189–240.

⁴¹ Basel Committee on Banking Supervision, Guidance for national authorities operating the countercyclical capital buffer, December 2010.

Credit-to-GDP gaps¹

Table J1

	2012	2013	2014	2015	2016	Q3 16	Q4 16	Q1 17	Q2 17	Q3 17
Argentina	-1.3	0.7	-0.7	2.3	2.4	2.1	2.4	2.3	3.3	4.9
Australia	-12.6	-7.8	-3.6	3.0	-0.5	1.7	-0.5	-4.6	-5.6	-8.1
Austria	-7.1	-4.6	-9.6	-9.5	-9.1	-9.2	-9.1	-9.1	-10.3	-9.6
Belgium	3.4	-2.4	-4.9	-3.7	2.1	-1.5	2.1	-0.7	-4.1	-10.0
Brazil	6.6	7.8	4.5	3.1	-2.9	-2.2	-2.9	-4.2	-5.9	-6.4
Canada	6.8	7.8	5.1	15.3	13.0	15.4	13.0	12.0	11.4	9.6
Chile	3.5	7.9	14.4	19.1	12.0	12.6	12.0	10.9	9.5	6.1
China	13.3	18.9	21.5	27.2	24.7	26.4	24.7	22.3	19.0	16.7
Colombia	6.9	8.8	12.0	13.3	8.7	10.2	8.7	7.7	7.4	6.4
Czech Republic	17.3	19.7	11.4	4.5	1.2	1.5	1.2	2.6	1.7	0.9
Denmark	1.0	-16.2	-17.0	-29.4	-31.7	-27.5	-31.7	-34.0	-36.0	-44.4
Finland	8.9	7.9	9.5	10.3	-3.6	-0.2	-3.6	-1.7	-3.1	-5.2
France	8.3	2.8	4.6	3.5	4.6	4.2	4.6	5.9	5.1	4.0
Germany	-10.1	-7.2	-8.6	-7.0	-4.7	-4.4	-4.7	-3.4	-3.0	-2.1
Greece	7.6	-1.3	-6.8	-11.9	-15.3	-15.0	-15.3	-17.0	-18.8	-20.5
Hong Kong SAR	22.1	32.9	38.2	24.1	20.8	17.9	20.8	24.7	32.4	30.8
Hungary	-8.1	-17.8	-20.9	-27.3	-30.9	-31.4	-30.9	-32.2	-32.7	-32.5
India	1.6	-0.1	-3.0	-3.5	-7.7	-5.0	-7.7	-6.1	-8.9	-7.8
Indonesia	10.4	13.2	12.2	11.4	9.4	9.2	9.4	7.9	7.7	6.9
Ireland	9.3	-20.2	-23.4	-18.8	-49.3	-48.0	-49.3	-65.4	-82.1	-84.7
Israel	-13.8	-16.1	-15.4	-14.3	-11.1	-11.6	-11.1	-11.3	-10.4	-8.2
Italy	0.9	-4.9	-9.3	-14.2	-16.6	-15.5	-16.6	-16.2	-16.8	-18.0
Japan	1.7	2.1	2.7	1.0	5.2	3.3	5.2	6.7	6.5	7.7
Korea	3.2	1.4	2.2	1.7	0.2	0.4	0.2	-1.1	-0.5	-1.3
Luxembourg	-18.9	-28.1	-29.3	-10.3	-25.6	-25.8	-25.6	-25.3	-31.1	-35.5
Malaysia	-0.4	5.8	7.7	11.6	9.8	8.7	9.8	7.5	6.2	4.0
Mexico	4.2	6.3	6.3	7.8	8.6	8.8	8.6	6.4	5.4	5.6
Netherlands	-6.7	-12.8	-13.5	-12.4	-16.1	-13.4	-16.1	-16.6	-18.6	-20.2
New Zealand	-18.3	-21.0	-20.9	-18.1	-14.8	-15.3	-14.8	-15.0	-14.7	-14.1
Norway	4.7	-2.5	-0.1	13.2	8.8	16.1	8.8	5.0	4.0	-1.0
Poland	1.7	0.4	0.2	-1.2	-1.1	-2.4	-1.1	-3.0	-4.4	-5.8
Portugal	4.2	-12.5	-27.0	-37.7	-44.0	-42.8	-44.0	-45.1	-45.2	-45.4
Russia	-3.8	-0.1	8.8	7.3	-2.5	-0.7	-2.5	-4.6	-4.3	-4.6
Saudi Arabia	-8.8	-3.4	0.3	11.3	9.8	13.4	9.8	8.1	6.7	4.5
Singapore	14.4	21.4	23.3	19.6	15.1	17.8	15.1	12.0	14.3	11.1

Credit-to-GDP gaps¹ (cont)

Table J1

	2012	2013	2014	2015	2016	Q3 16	Q4 16	Q1 17	Q2 17	Q3 17
South Africa	-2.9	-3.3	-3.9	-0.5	-2.6	-2.0	-2.6	-1.9	-2.6	-2.2
Spain	-16.3	-28.6	-38.9	-47.1	-50.1	-49.0	-50.1	-49.5	-49.2	-50.7
Sweden	6.3	2.8	-2.0	-6.0	-11.3	-12.1	-11.3	-8.6	-9.8	-11.2
Switzerland	14.2	8.8	18.6	15.8	19.3	19.4	19.3	18.2	17.2	16.3
Thailand	9.0	15.5	16.1	15.1	10.3	10.1	10.3	8.1	7.6	6.0
Turkey	9.7	13.3	10.7	9.8	9.7	6.9	9.7	9.1	7.8	5.4
United Kingdom	-17.6	-24.7	-30.8	-29.2	-20.0	-18.7	-20.0	-20.6	-19.7	-17.9
United States	-15.2	-14.8	-13.5	-11.7	-8.4	-8.5	-8.4	-8.0	-7.4	-6.9
<i>Memo:</i>										
<i>Euro area</i>	-4.3	-9.1	-9.2	-9.7	-10.9	-10.5	-10.9	-10.8	-11.8	-13.1

¹ Estimates based on series on total credit to the private non-financial sector (in table F2.1). Credit-to-GDP gaps is defined as the difference between the credit-to-GDP ratio and its long-term trend; in percentage points. Long-term trend is calculated using a one-sided Hodrick-Prescott filter with a smoothing parameter of 400,000.