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# Policy Lessons and the Future of Unconventional Monetary Policy

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BANK FOR INTERNATIONAL SETTLEMENTS

# Unconventional monetary policies in a broader context

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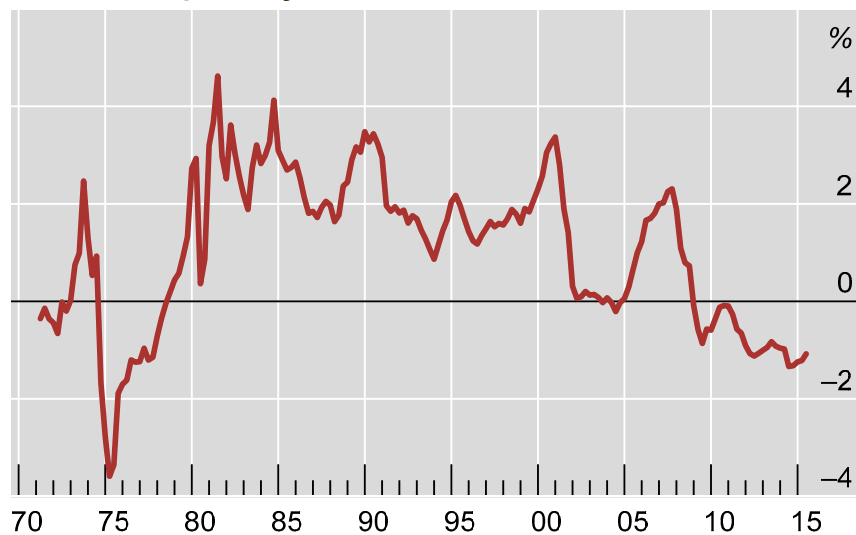
Sixteenth Jacques Polak Annual Research Conference  
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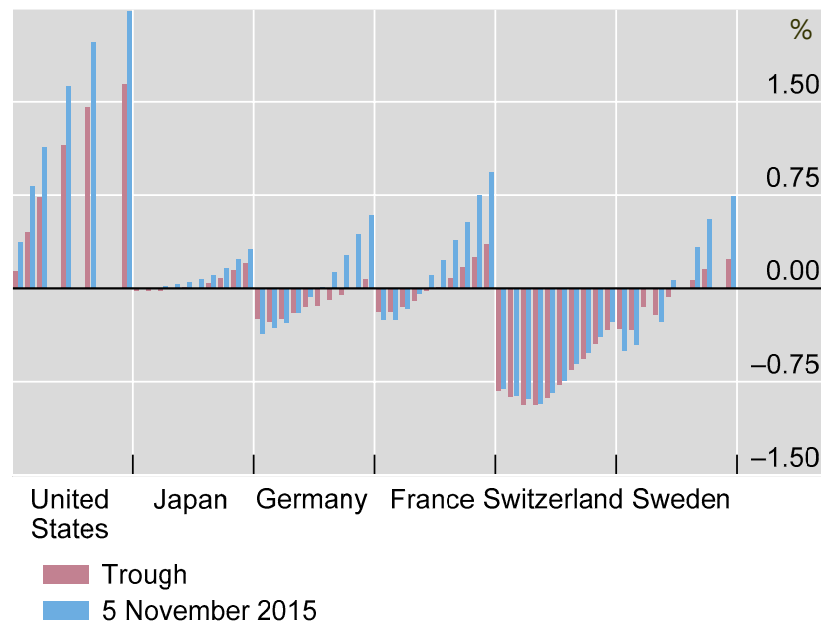
\* Head of the Monetary and Economic Department. The views expressed are those of the author and not necessarily those of the BIS.

# Graph 1: Interest rates have been exceptionally and persistently low

## G3 real policy rates<sup>1</sup>



## Bond yields<sup>2</sup>

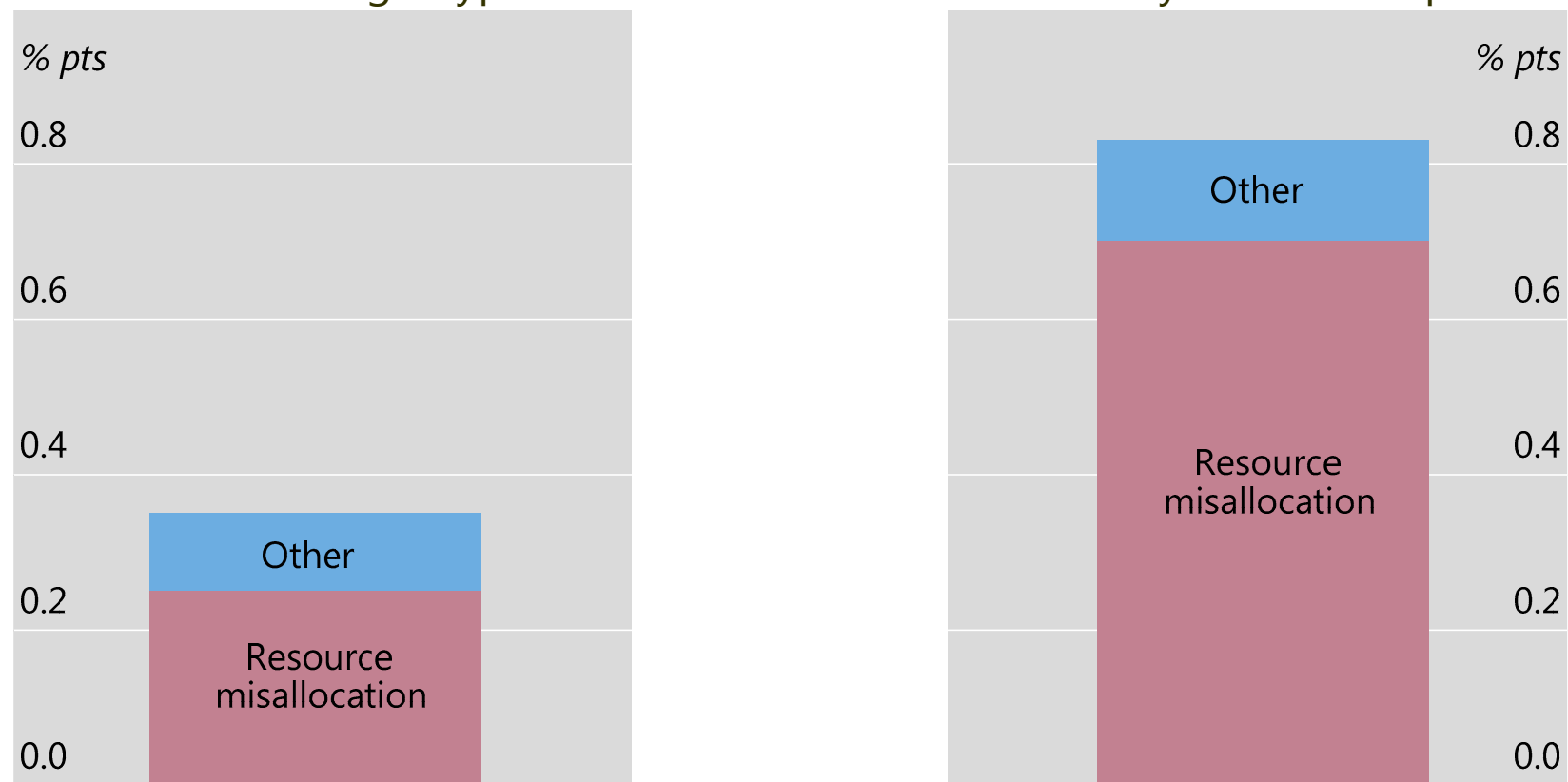


<sup>1</sup> Nominal policy rate less consumer price inflation excluding food and energy. Weighted averages for the euro area (Germany), Japan and the United States based on rolling GDP and PPP exchange rates. <sup>2</sup> Yield per maturity; for each country, the bars represent the maturities from one to 10 years.

Sources: Bloomberg; national data.

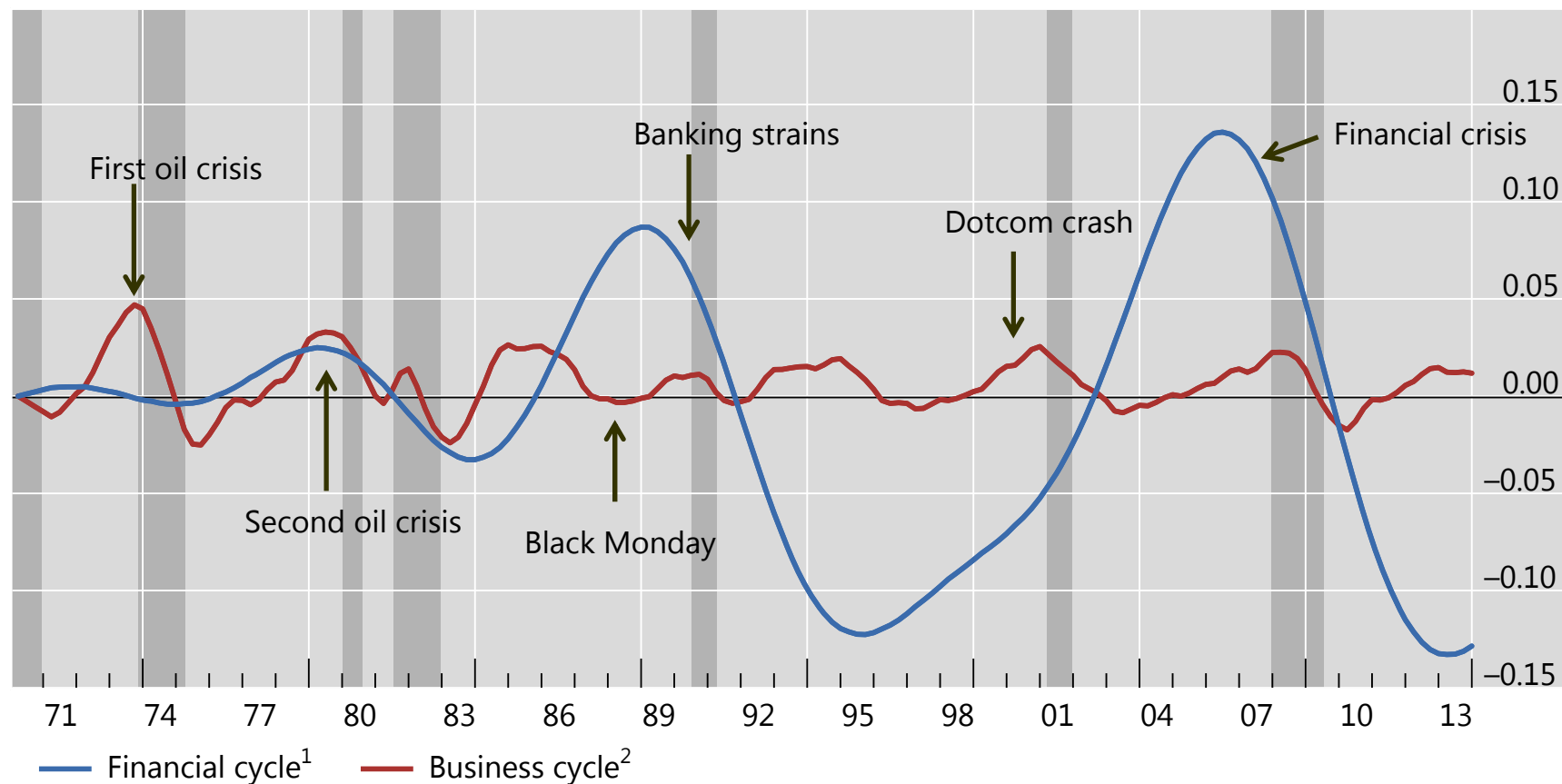
## Graph 2: Financial booms sap productivity by misallocating resources

Annual cost during a typical boom ... and over a five-year window post-crisis



Estimates calculated over the period 1980–2010 for 22 advanced economies. Resource misallocation = annual impact of labour shifts into less productive sectors during the credit boom on productivity growth as measured over the period shown. Other = annual impact in the absence of reallocations during the boom.  
 Source: based on Borio, C, E Kharroubi, C Upper and F Zampolli (2015).

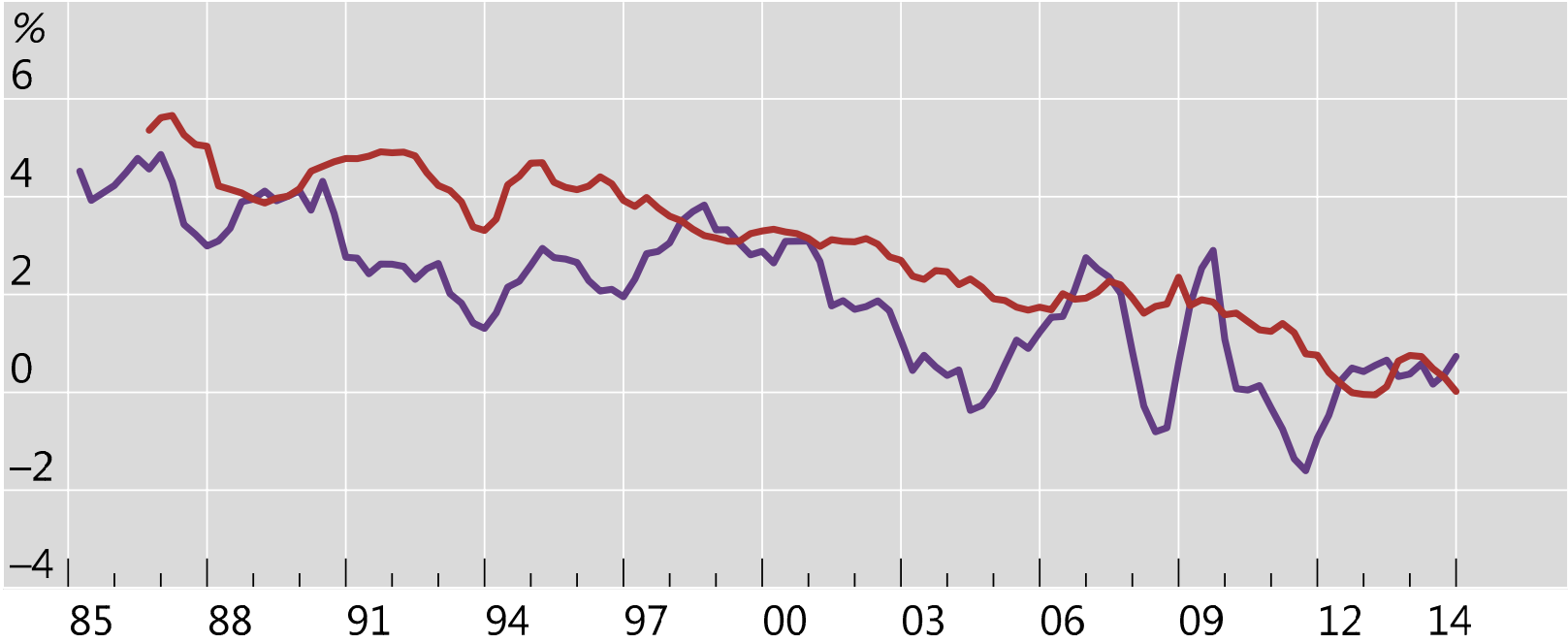
## Graph 3: The financial cycle is longer than the business cycle (the US example)



<sup>1</sup> The financial cycle as measured by frequency-based (bandpass) filters capturing medium-term cycles in real credit, the credit-to-GDP ratio and real house prices. <sup>2</sup> The business cycle as measured by a frequency-based (bandpass) filter capturing fluctuations in real GDP over a period from one to eight years.

Source: from Drehmann, M, C Borio and K Tsatsaronis (2012), updated.

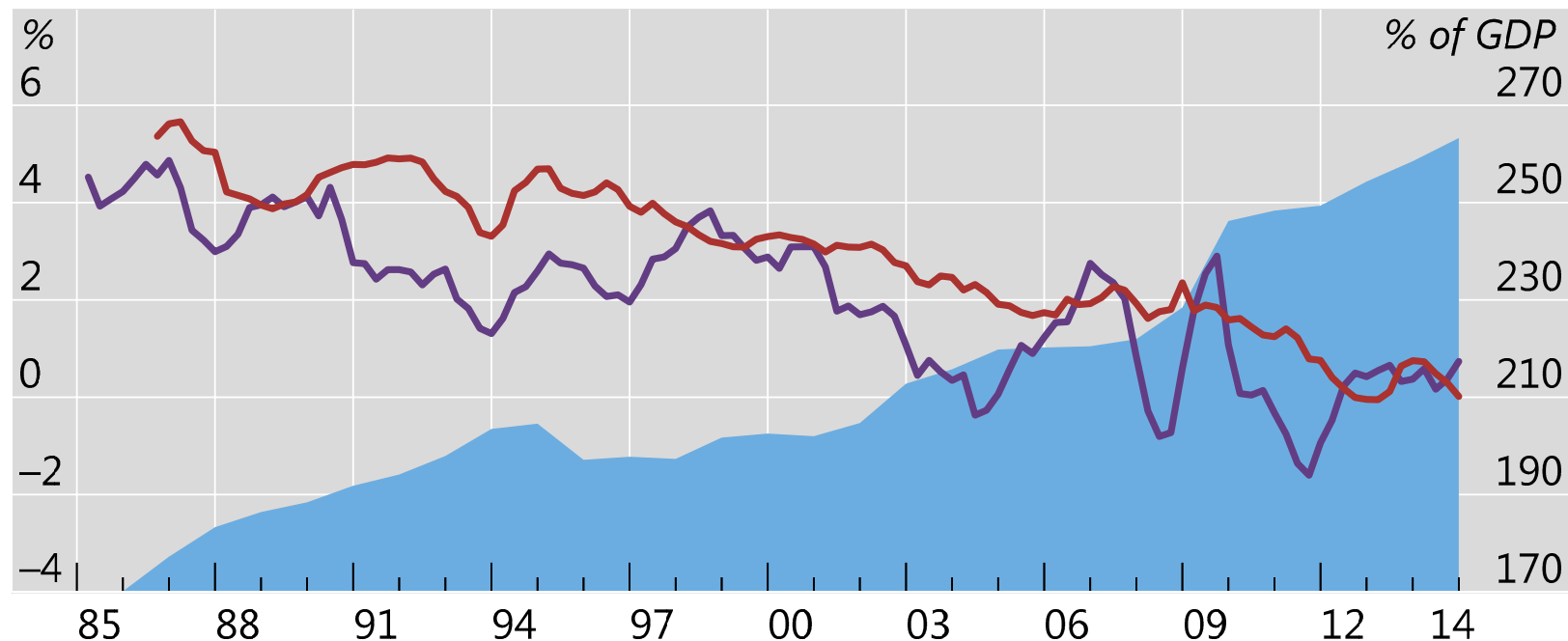
# Graph 4: Interest rates sink ...



— Long-term index-linked bond yield  
— Real policy rate



## Graph 5: Interest rates sink ... as debt soars



Lhs:

— Long-term index-linked bond yield<sup>1</sup>

— Real policy rate<sup>2, 3</sup>

Rhs:

■ Global debt (public and private non-financial sector)<sup>3</sup>

<sup>1</sup> From 1998, simple average of France, the United Kingdom and the United States; otherwise only the United Kingdom. <sup>2</sup> Nominal policy rate less consumer price inflation. <sup>3</sup> Aggregate based on weighted averages for G7 economies plus China based on rolling GDP and PPP exchange rates.

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

## Graph 6: Unusually accommodative global monetary conditions



Weighted averages. For details, see BIS, *85th Annual Report*, Graph V.3.



## Table 1: Early warning indicators for banking distress – risks ahead

	Credit-to-GDP gap <sup>2</sup>	Property price gap	Debt service ratio (DSR)	Debt service ratio if interest rates rise by 250 bp <sup>4</sup>
Asia	18.3	10.4	2.0	4.3
Australia	1.6	1.5	0.7	4.5
Brazil	15.7	-5.2	4.6	6.3
Canada	6.5	6.3	1.7	5.5
China	25.4	-6.3	5.8	9.1
Central and Eastern Europe	-11.2	7.1	1.2	2.7
France	5.7	-11.7	1.4	4.5
Germany	-5.9	9.7	-1.8	0.1
Greece	-7.4	4.6		
India	-3.4		2.1	3.2
Italy	-9.8	-17.2	0.8	3.0
Japan	5.2	13.3	-2.2	0.6
Korea	3.4	4.2	0.1	3.8
Mexico	6.0	-4.0	0.3	0.9
Netherlands	-14.7	-19.2	1.6	6.5
Nordic countries	1.5	2.6	1.7	5.9
Portugal	-29.7	7.6	-0.5	2.9
South Africa	-2.1	-6.2	-0.9	0.4
Spain	-39.1	-26.6	-2.2	0.8
Switzerland	9.3	11.6	0.4	3.6
Turkey	16.6		4.1	5.7
United Kingdom	-29.0	-3.1	-1.7	1.2
United States	-12.5	0.9	-1.8	0.7
<i>Legend</i>	<i>Credit/GDP gap &gt; 10</i>	<i>Property gap &gt; 10</i>	<i>DSR &gt; 6</i>	<i>DSR &gt; 6</i>
	<i>2 ≤ Credit/GDP gap ≤ 10</i>		<i>4 ≤ DSR ≤ 6</i>	<i>4 ≤ DSR ≤ 6</i>

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