



Advisory Panel on Macroeconomic Models and Methods

Oslo, 27 November 2018

The Consequences of Large Fiscal Consolidations: Why Fiscal Frameworks Must Be Robust to Risk

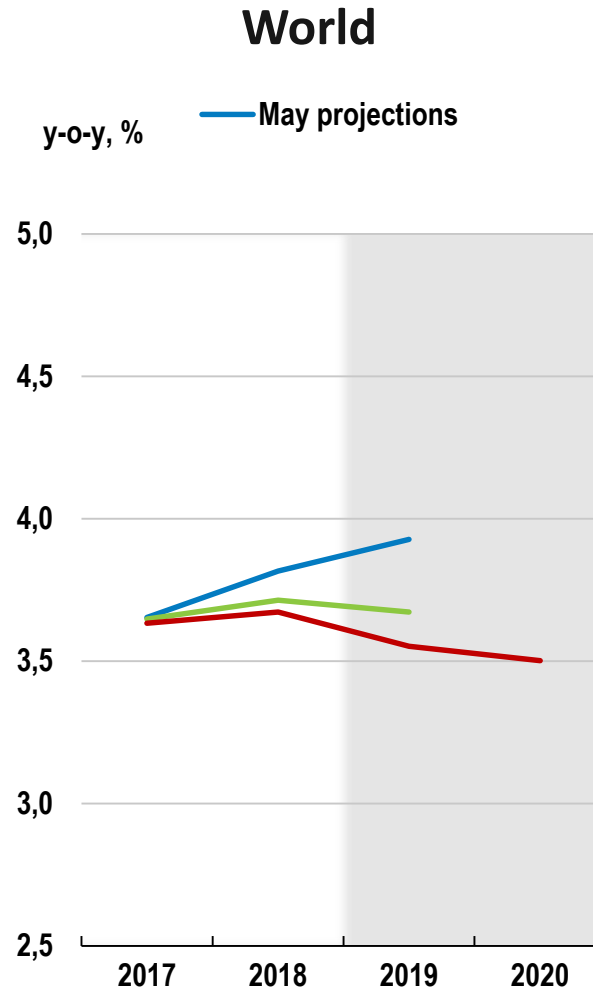
Ludger Schuknecht
Deputy Secretary-General



A Global Conjunction



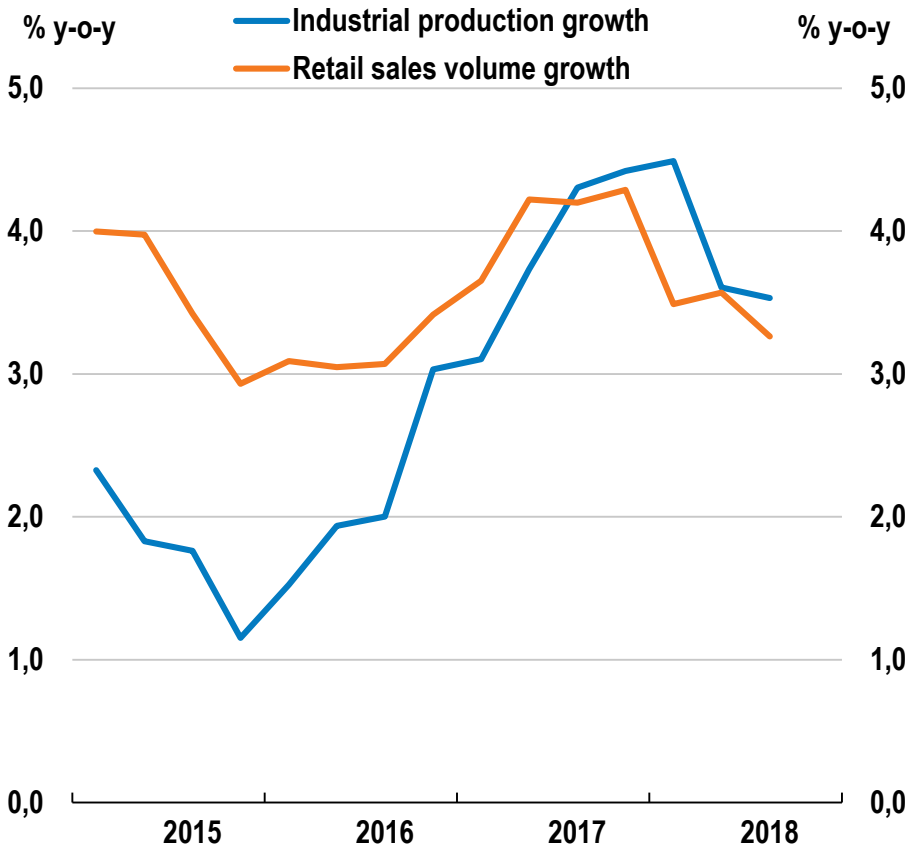
Global growth is losing momentum, but remains above long-term average





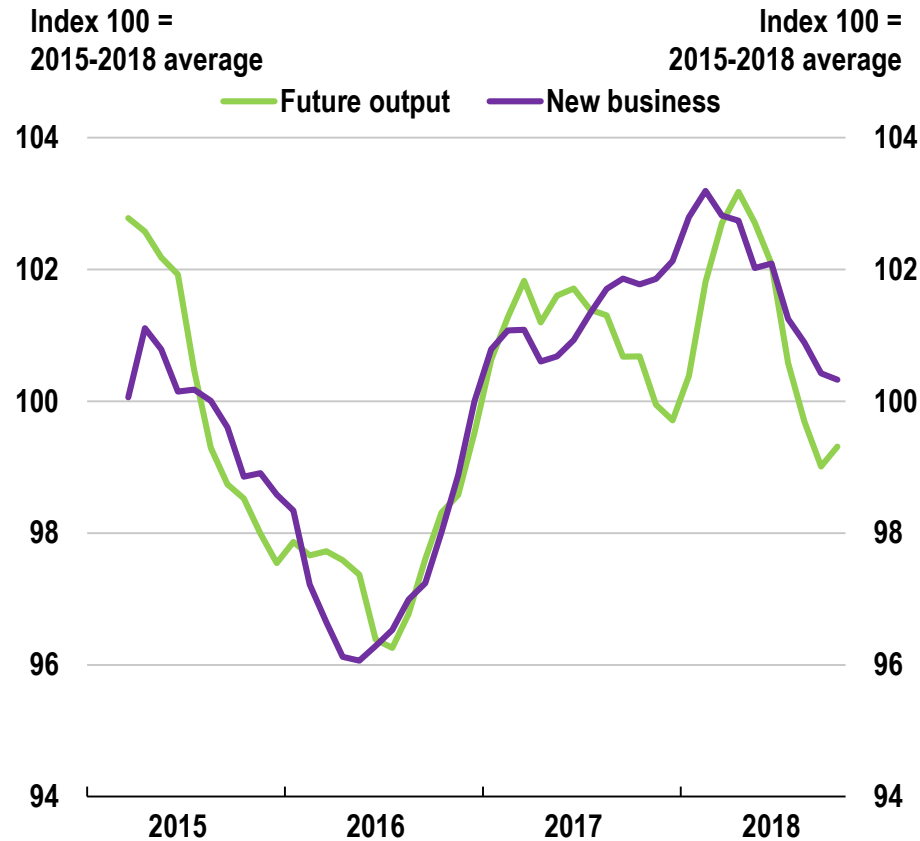
Activity is losing steam

Global short-term activity



Global composite PMI

3-month moving average



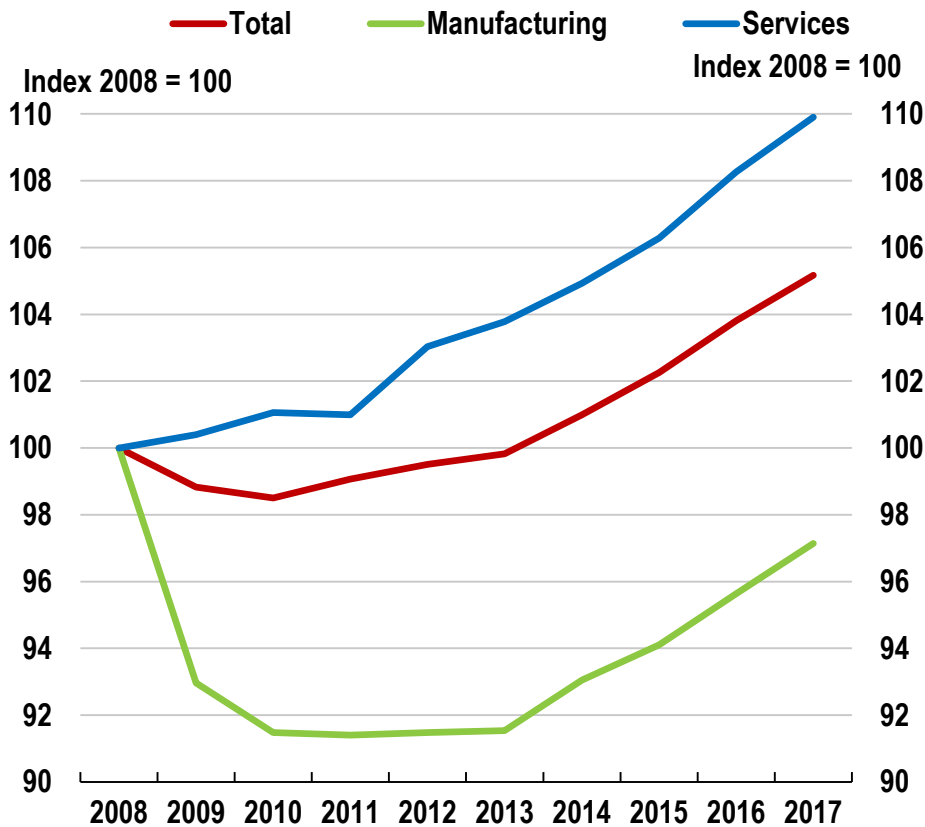
Note: Left panel: industrial production and retail sales aggregation use purchasing power parity weights. Data for retail sales volume growth are retail sales in the majority of countries, but monthly household consumption is used for the United States and the monthly synthetic consumption indicator is used for Japan. Data for India are unavailable for retail sales. Estimates for 18Q3 based on data for the three months up to August. Right panel: Data as of October 2018.

Source: OECD Economic Outlook Database; Thomson Reuters; Markit; and OECD calculations.

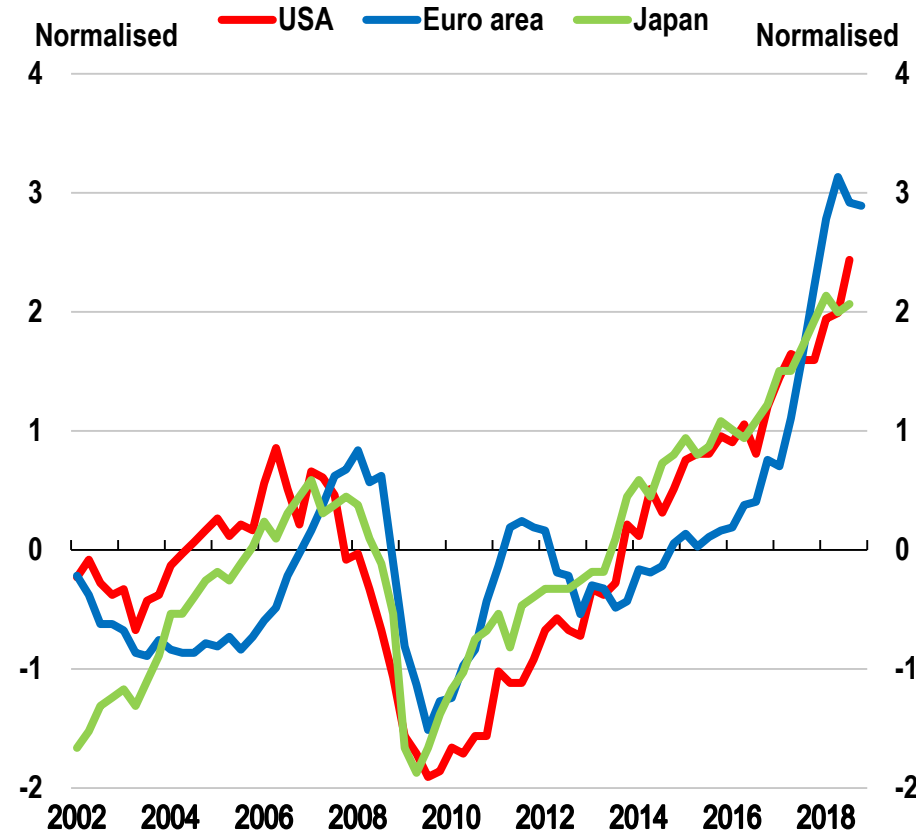


Employment is growing, capacity constraints are rising

OECD employment
by main sector of activity



Labour shortages
Based on business surveys



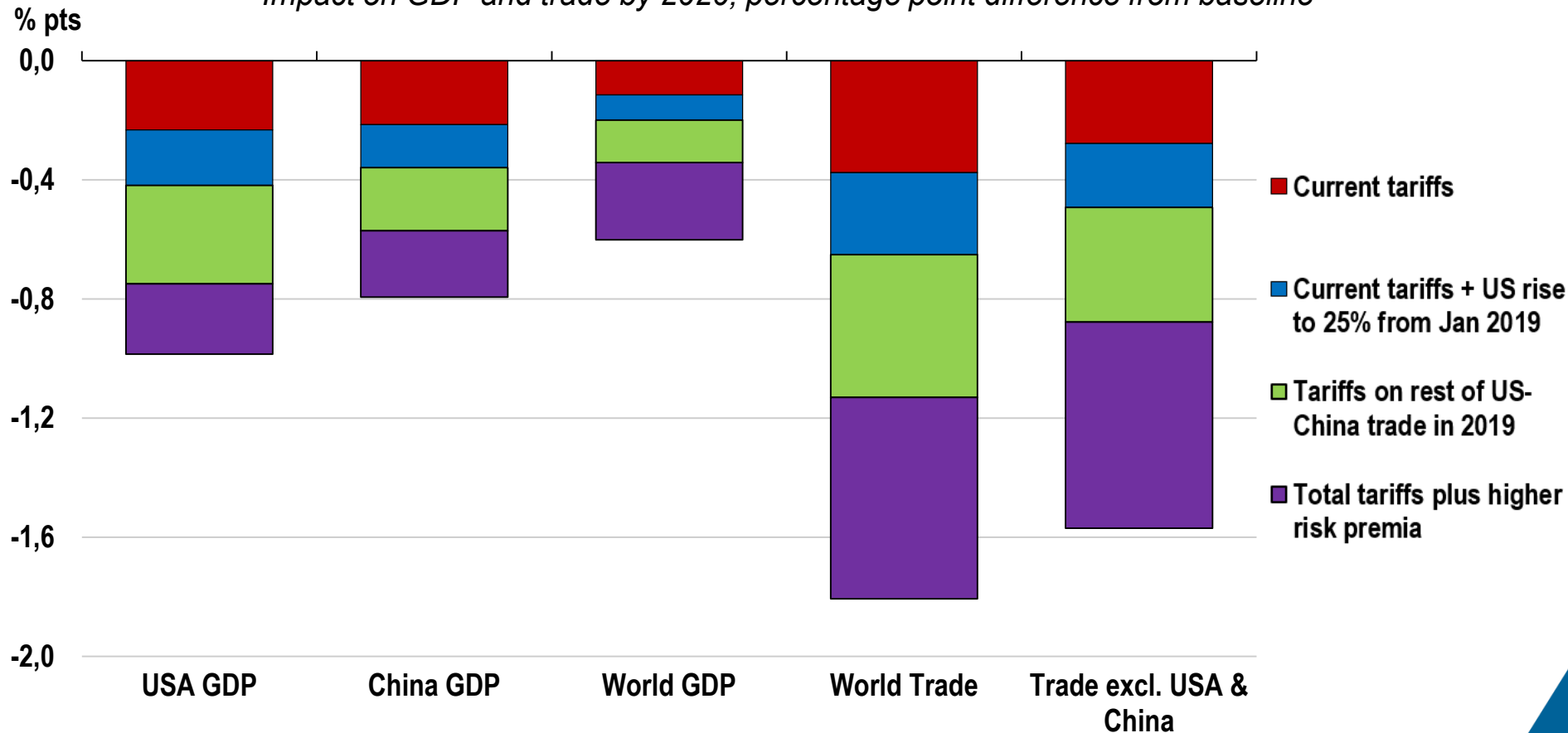
Note: Left panel: Employment data by sector of activity are available for 26 OECD countries. Right panel: Data normalised over the 2002-2018 period.

Source: OECD Employment database, National Federation of Independent Business; European Commission; Bank of Japan; Markit; and OECD calculations.



New tariff restrictions have had adverse effects on GDP and could intensify

Impact on GDP and trade by 2020, percentage point difference from baseline

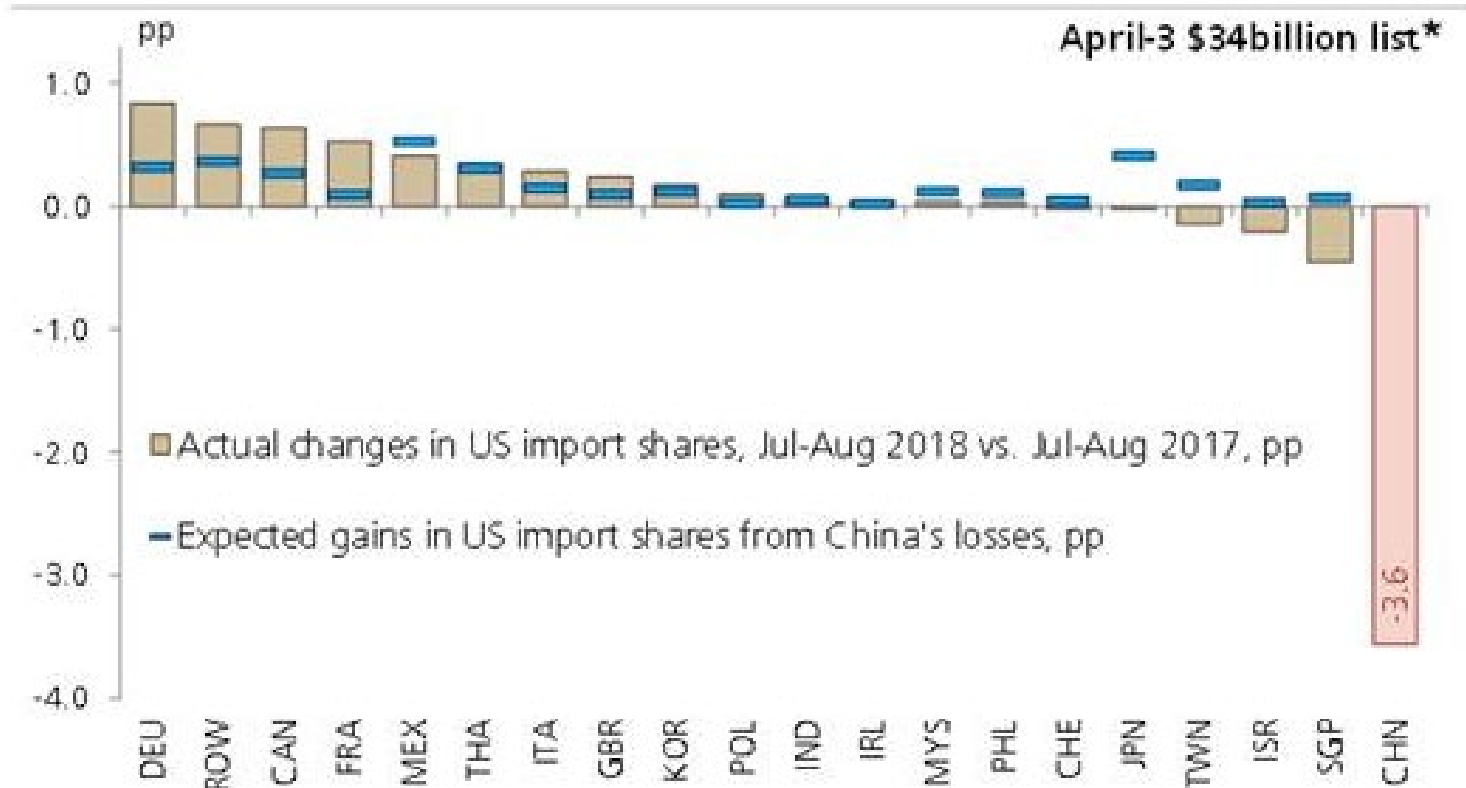


Note: The current tariffs include all tariffs imposed on bilateral US-China trade in 2018 up to the end of September. The blue scenario shows the additional impact of the United States raising tariffs on \$200 billion of imports from China from 10% to 25% from January 2019 (with reciprocal action by China on \$60 billion of imports from the United States). The green scenario shows the additional impact if tariffs of 25% are imposed on all remaining bilateral non-commodity trade between China and the United States from July 2019. The purple scenario shows the additional impact of related uncertainty resulting in a rise of 50bp in investment risk premia in all countries in 2019-2021. Source: OECD calculations.



Net effect of trade tensions are hard to gage

Trade war: China's loss, whose gain? Reality vs. ex-ante expectations

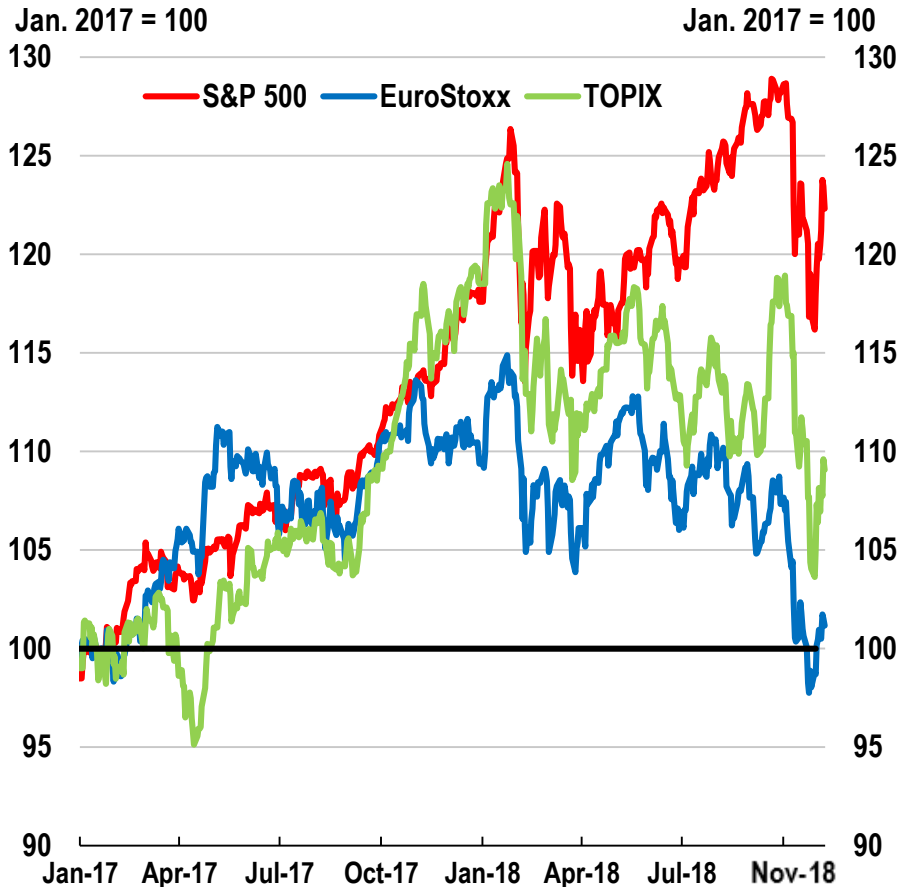


Source: US Census Bureau, USTR, UBS estimate. *The analysis includes only products under HS codes 84, 85 and 90, accounting for around 92.5% of the entire list. Please see Appendix 2 for a detailed explanation.



Stock market volatility has increased and further corrections are likely

Equity prices have fallen recently



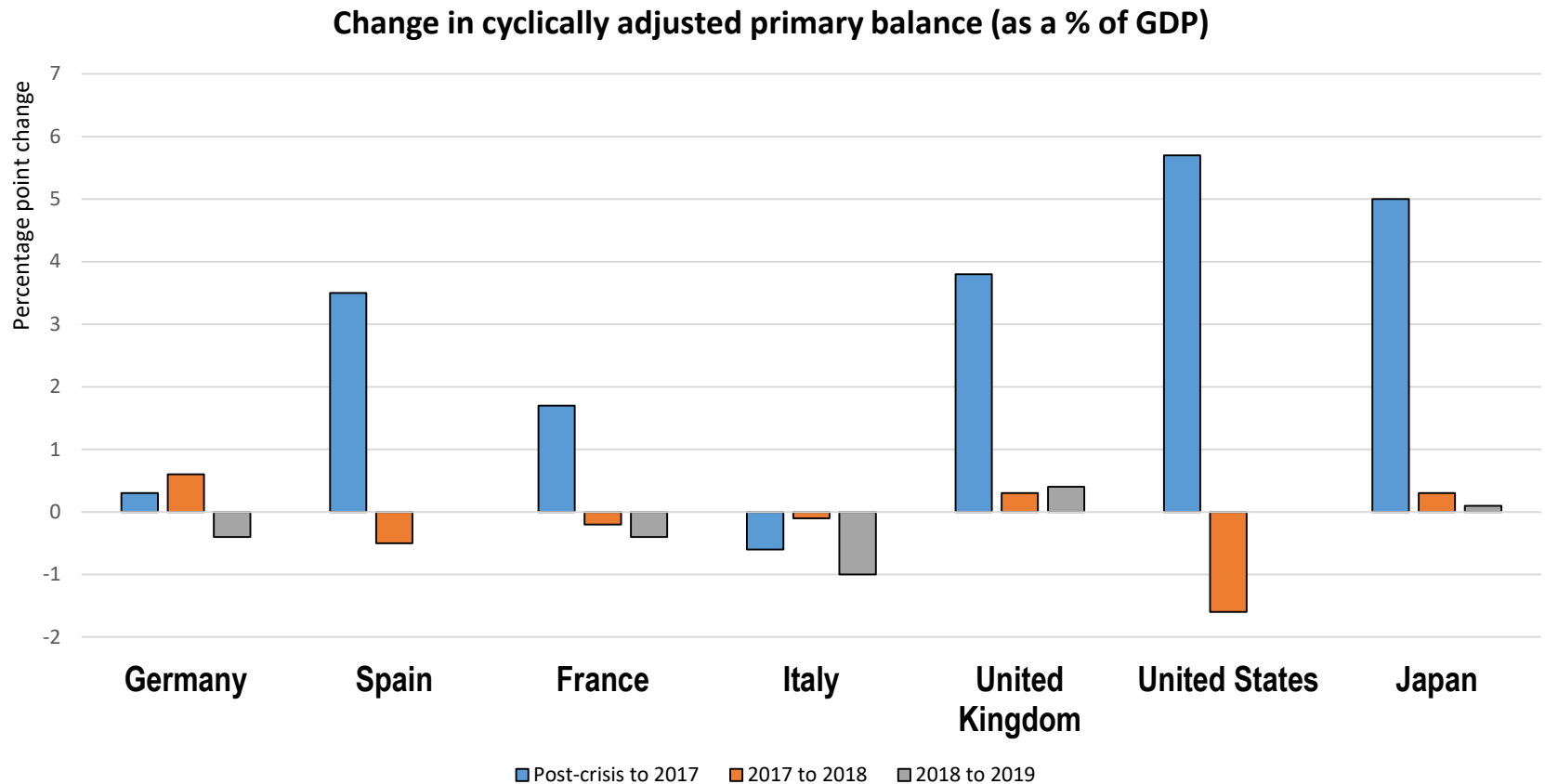
Volatility is back

VIX





Fiscal discipline has loosened during recovery, after a period of consolidation



*Post-crisis refers to the 2009-13 average

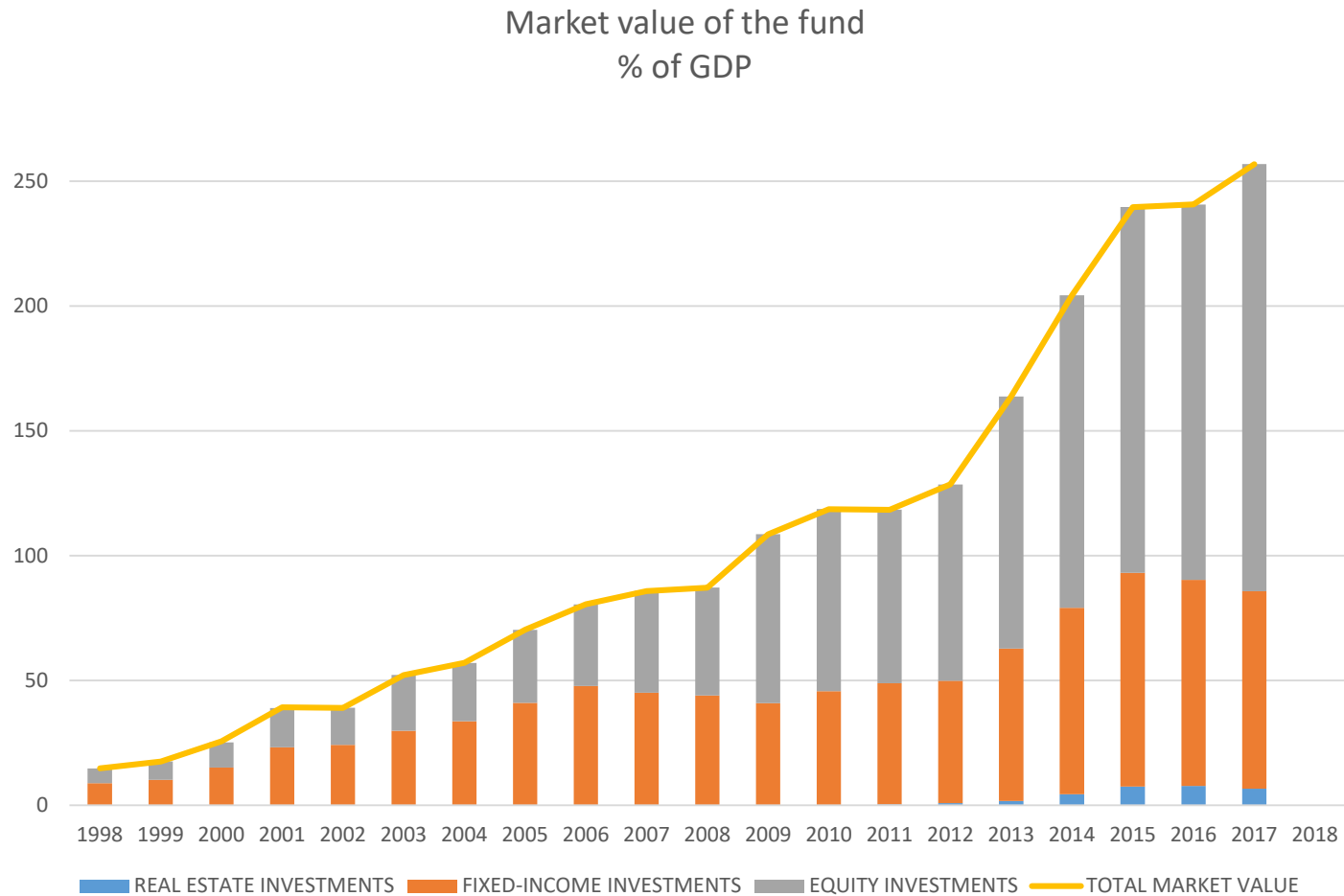
**Estimates for Japan and the United States are not cyclically adjusted



Norway: a few scenarios



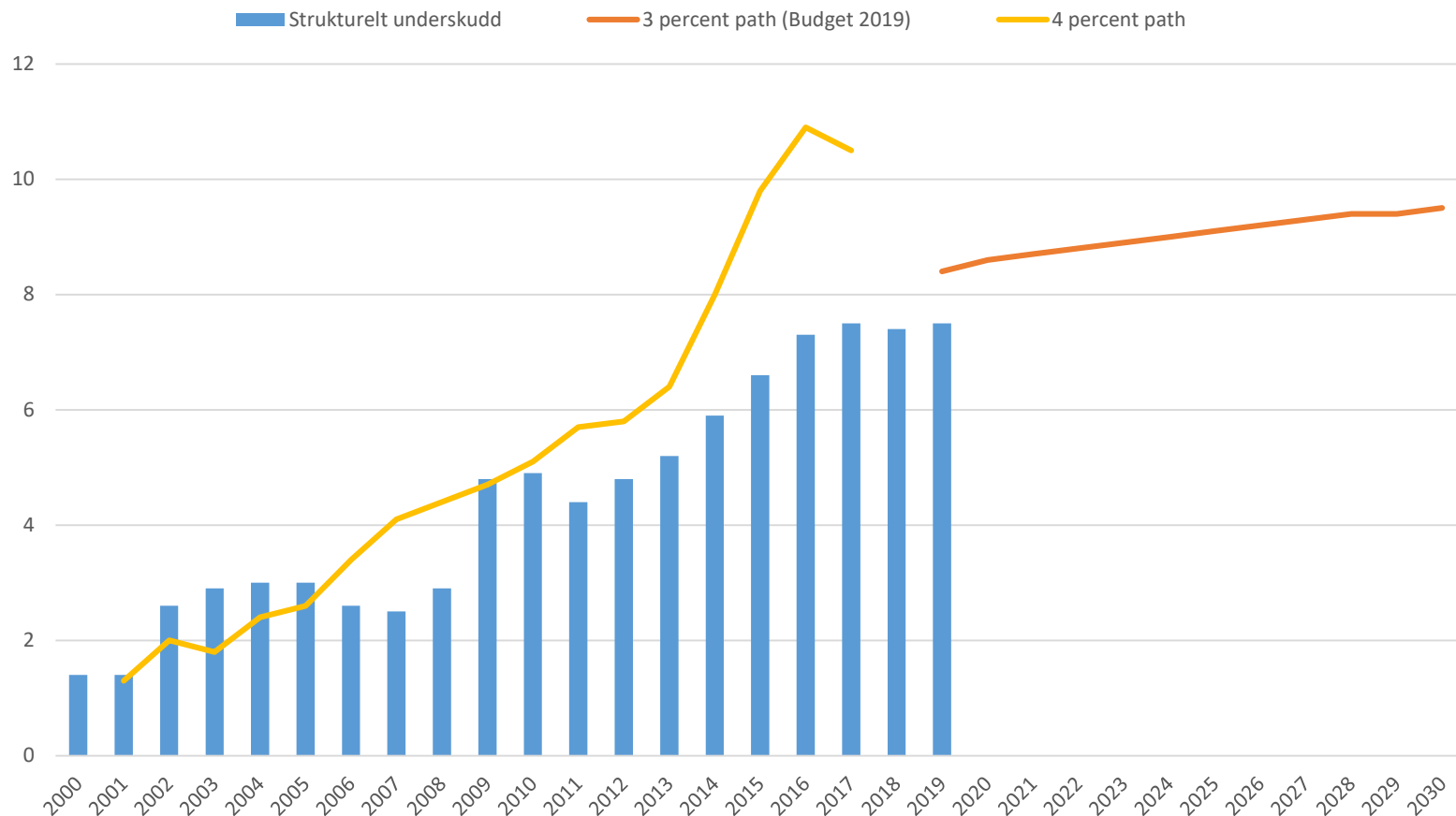
Norway: Substantial growth in the Fund relative to GDP





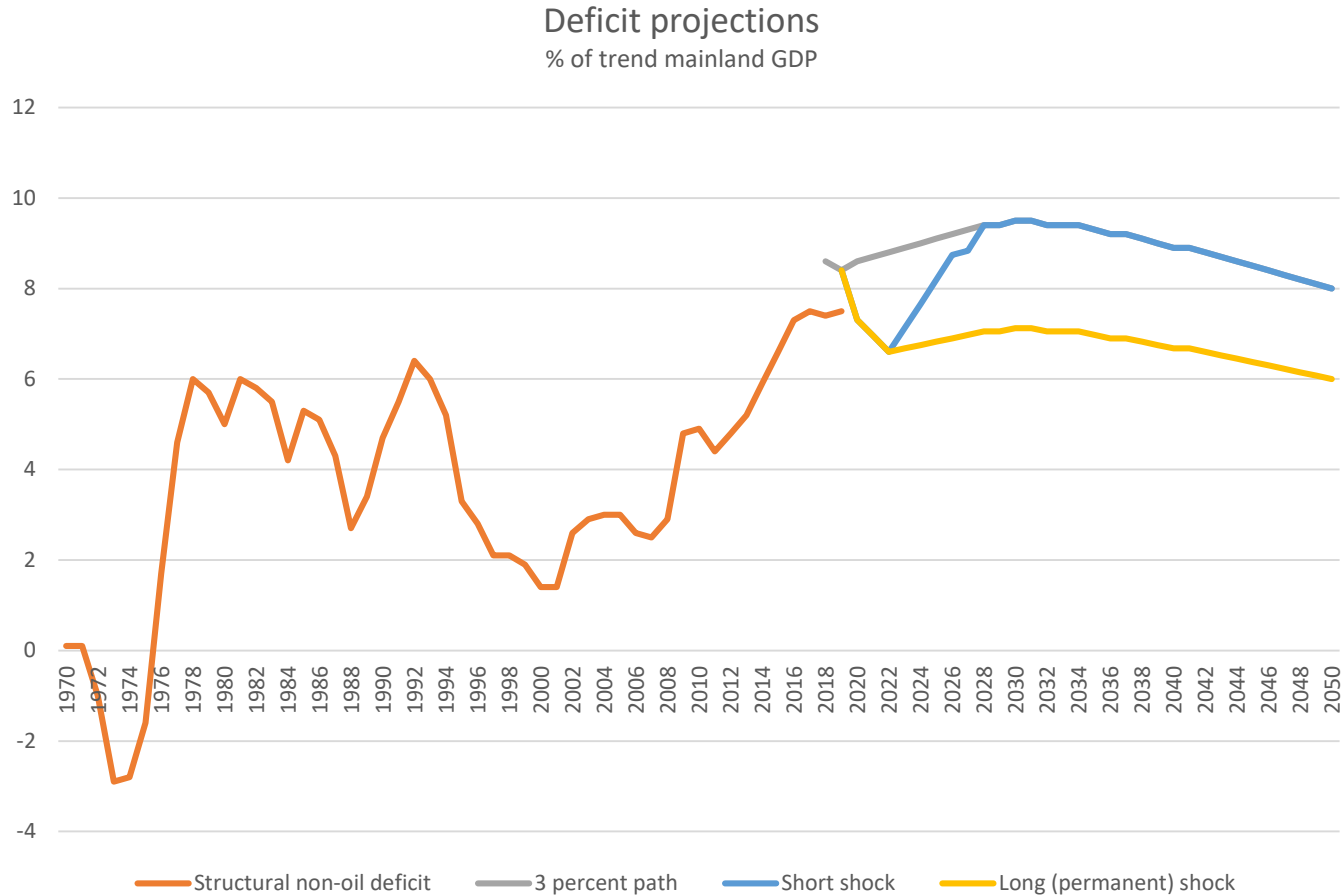
Norway: shift to the 3% rule has substantially lowered the deficit path

Deficit, historical values and real return expected in the budget
% of trend mainland GDP





Norway: how might shocks play out?



The “shock” supposes a substantial drop in the krone value of the fund such that the “allowable” deficit as a share of trend GDP falls by 25%.

Source: OECD Analytical Database.



Norway: A few scenarios

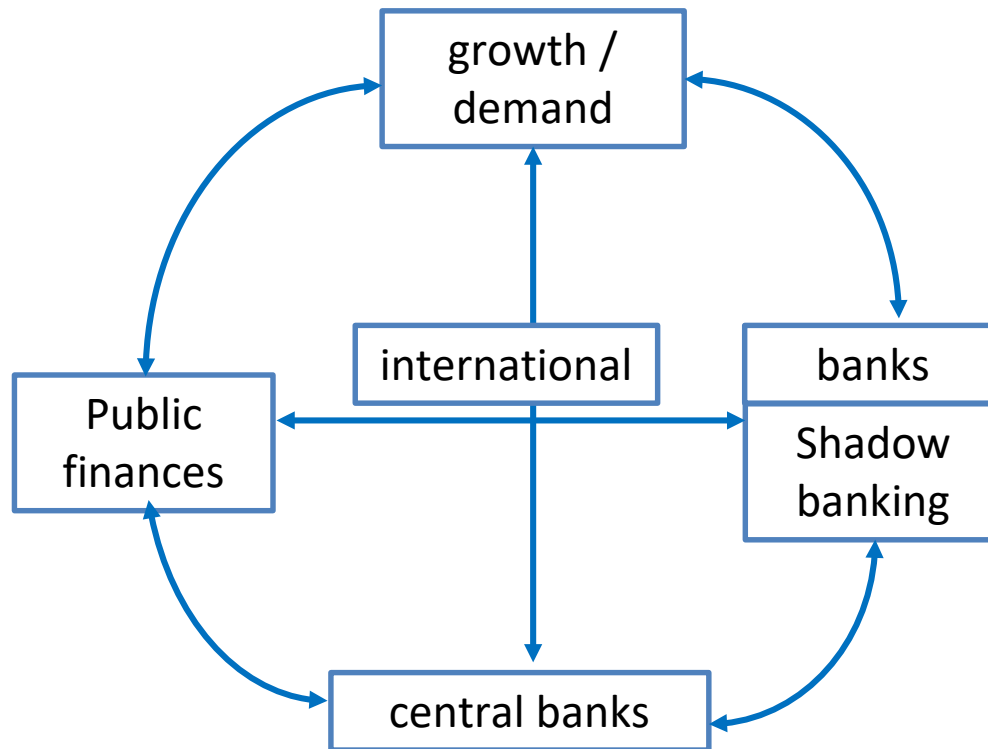
- **Baseline:** fund-to-GDP ratio rises to 2030 then long-run decline secular decline (or increases)
- **Short shock:** fund-to-GDP ratio cycles down for a period before recovering (e.g. dip down then recovery in oil and equity prices, counter-cyclical policy response in interest rates helps recovery)
- **Long (permanent) shock:** structural downward shift in fund-to-GDP ratio (e.g. lasting equity and bond devaluation and low oil prices)



Financial fiscal risks



Fiscal-Financial Risk Map





Lack of buffers and sustainability

General government deficit and debt (% of GDP)

	2007		2017	
	Deficit	Debt	Deficit	Debt (Δ 2007)
USA	-2.9	64.6	-4.6	+43
Japan	-3.2	175.4	-4.2	+61
Canada	1.8	66.8	-1.0	+23
United Kingdom	-2.6	41.9	-2.3	+45
Germany	0.2	63.7	1.1	0
France	-2.5	64.4	-2.6	+33
Italy	-1.5	99.8	-1.9	+32
G7	-2.2	80.6	-3.4	+38



Private sector debt stabilizing at high levels

Debt outstanding in percent of GDP

Private households

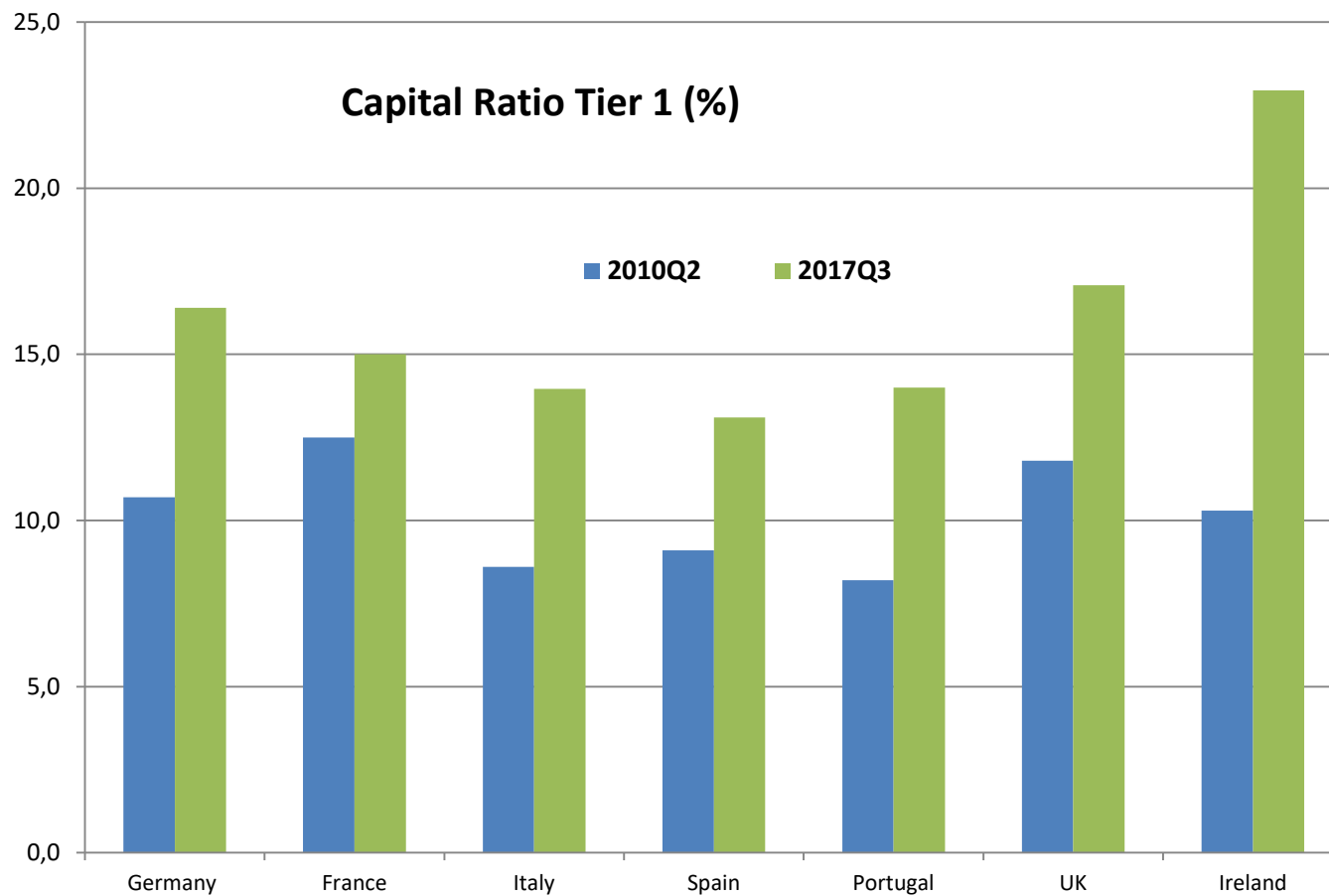
	1999	2007	2014	2017*
Germany	70	61	54	53
France	34	47	56	59
Italy	21	38	43	41
Spain	42	81	73	61
Greece	10	46	63	57
Portugal	53	87	82	69
United Kingdom	61	93	85	86

Nonfinancial corporations

	1999	2007	2014	2017*
Germany	62	64	61	63
France	93	104	125	134
Italy	60	81	85	78
Spain	62	125	114	97
Greece	34	56	66	62
Portugal	80	111	129	109
United Kingdom	90	119	119	115



Financial sector more resilient

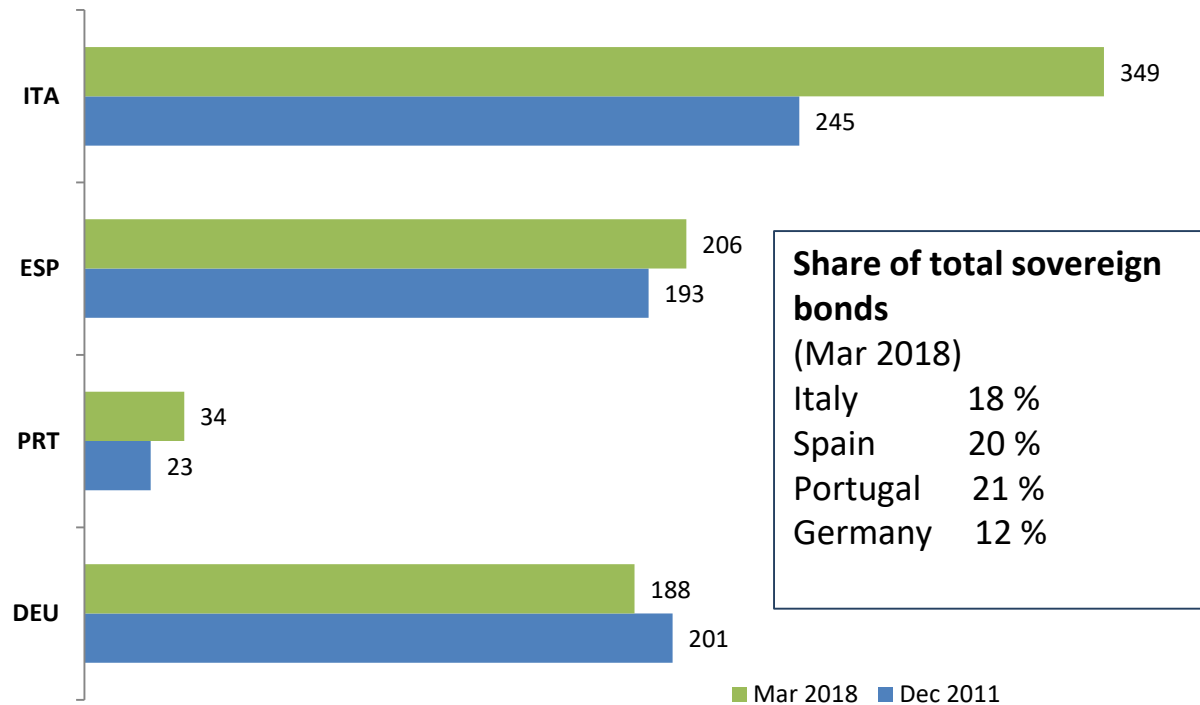


Source: ECB, Consolidated Banking Data



Sovereign bonds on banks' balance sheets

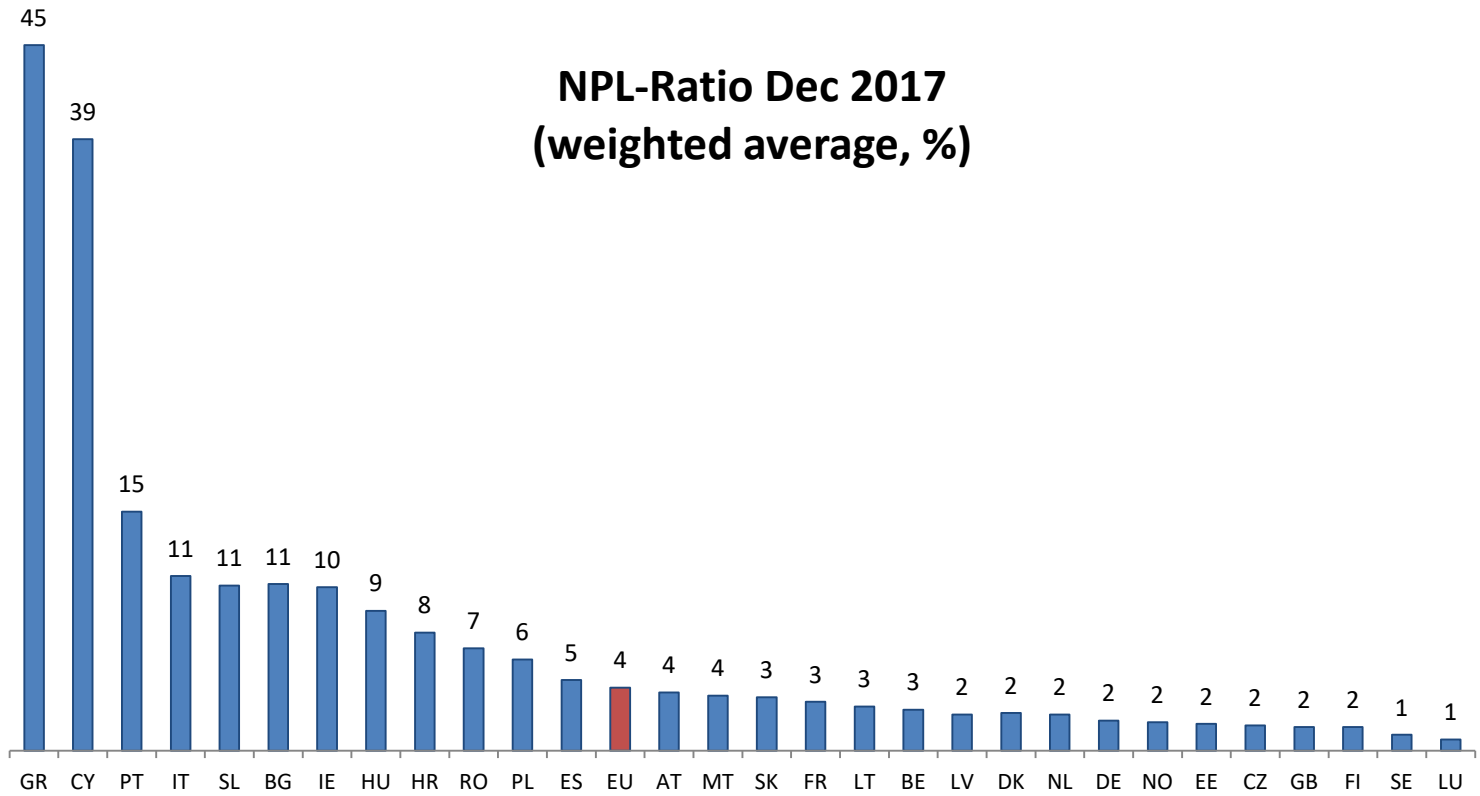
Sovereign bonds held by domestic banks, bn €



Source: ECB, Statistical Data Warehouse



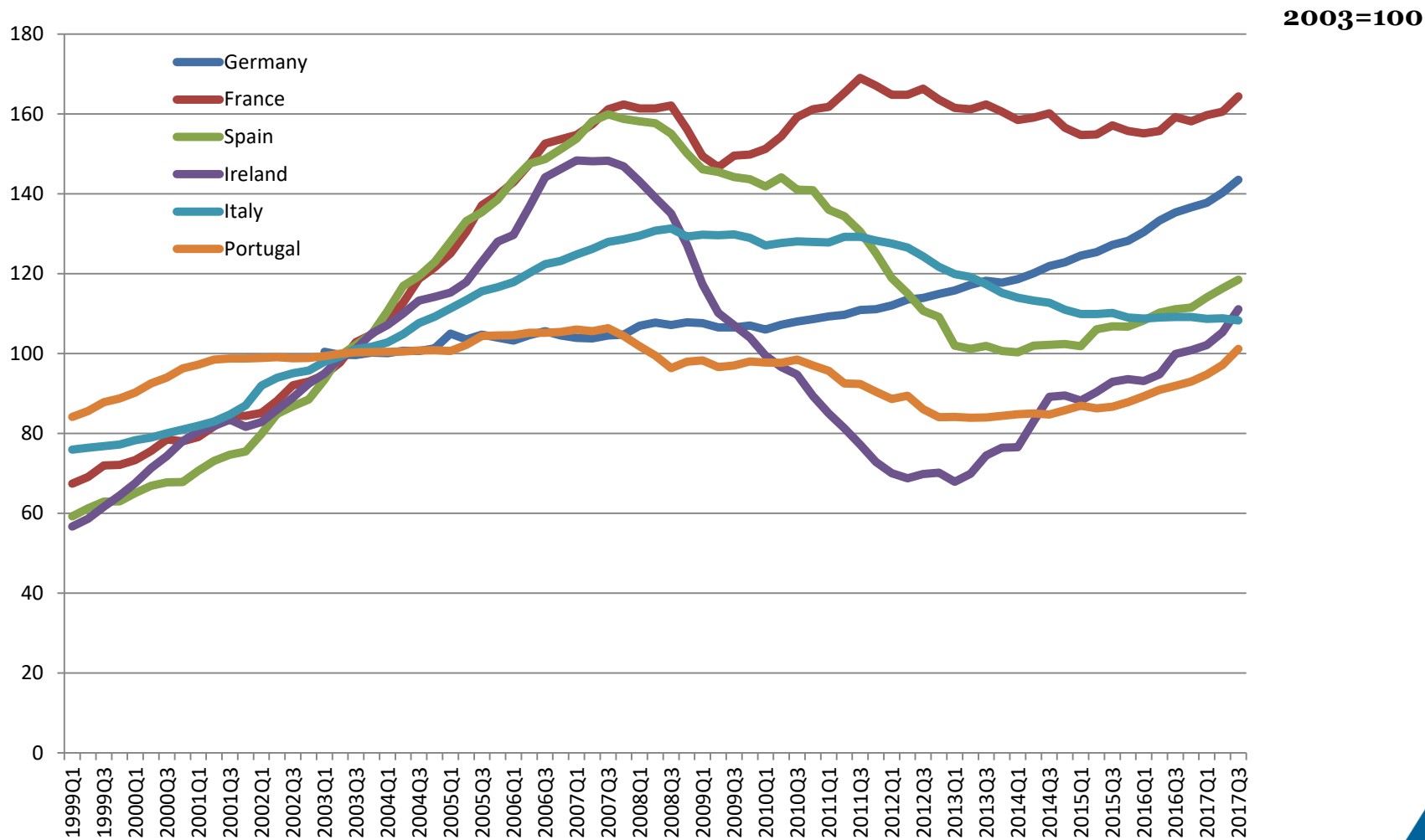
Non Performing Loans – unsolved problems in a number of countries



Source: EBA Risk Dashboard 4. Q/2017



House price indices: still big differences in the Euro area



Source: ECB; FRA w/o new dwellings



Stock prices highly valued

	1995	2007	2010	2013	2017	Change % 2017/2007
Euro area						
Austria						
Belgium	100	354	215	247	338	-5
Finland	100	581	361	339	494	-15
France	100	326	216	238	321	-1
Germany	100	257	187	233	322	25
Greece						
Ireland	100	433	145	205	340	-22
Italy	100	322	170	150	199	-38
Netherlands	100	277	180	193	272	-2
Portugal						
Spain	100	551	364	297	349	-37
Other EU						
Denmark	100	480	362	473	832	73
Sweden	100	413	346	406	603	46
United Kingdom	100	201	171	208	245	22
Other advanced						
Australia	100	305	228	249	285	-7
Canada	100	308	273	288	351	14
Japan	100	120	64	81	118	-2
Korea	100	183	188	210	247	35
New Zealand	100	158	102	134	180	14
Singapore						
Switzerland	100	393	308	399	544	38
United States	100	273	210	303	452	66
Averages						
Unweighted average (excl. Sgp. + Kor.)	100	338	229	261	367	10
Euro area						
United States	100	165	171	181	199	21
United States	100	190	198	222	255	35



International credit exposure huge

	<u>Trillion \$</u>	<u>GDP %</u>
Total	30.7	37.6
Bank loans	13.3	16.3
Cross border	8	9.8
Local in foreign currency	5.3	6.4
International debt securities	17.5	21.3
Held by banks	4.7	5.7
<u>Held by non banks</u>	<u>12.8</u>	<u>15.6</u>

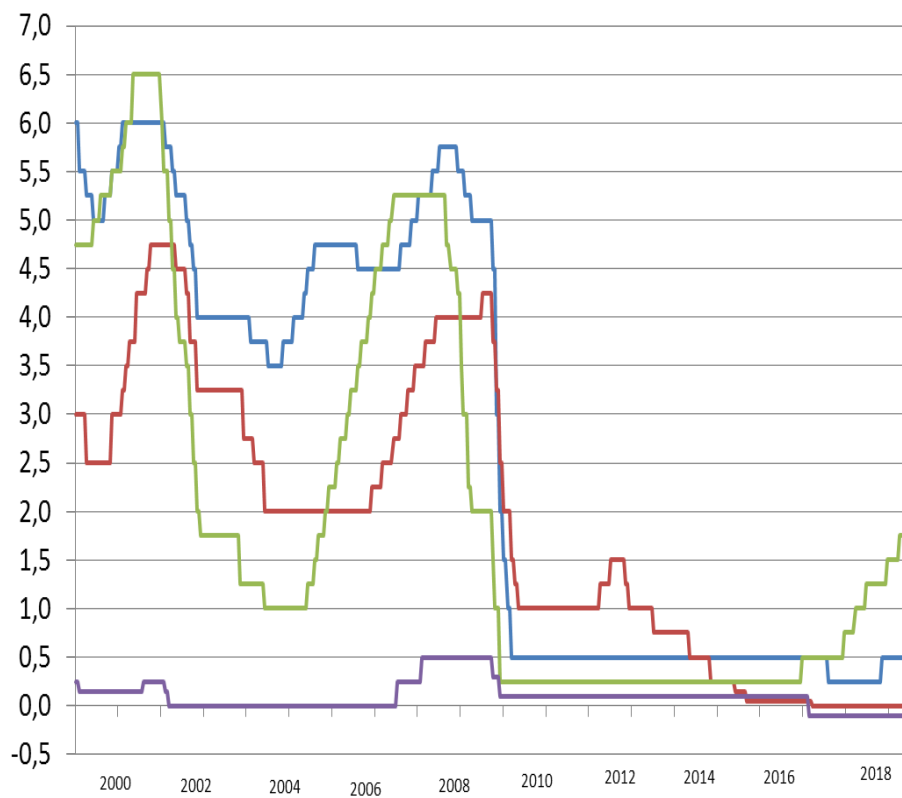
Source: BIS, 2018



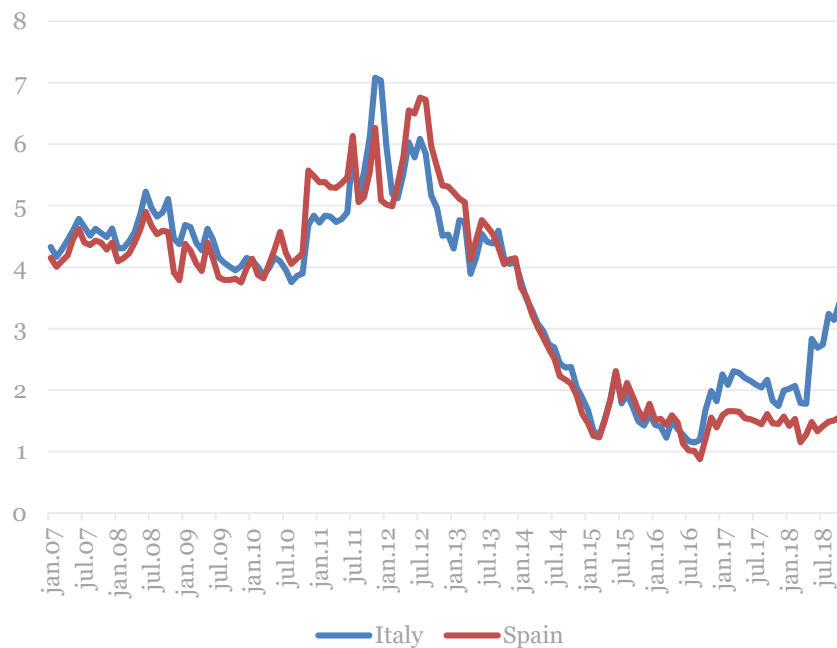
Snapback risks given near historically low interest rates and spreads

Key policy rates

— UK — Eurozone — USA — Japan



Interest Rates, 10yr Italian and Spanish Government Bonds



Source: Reuters, US-Fed, ECB, BoE, BoJ; own diagram



Expenditure reform experiences



Expenditure reform experiences, 80s and 90s

Percent of GDP

	Maximum public expenditure ratio	Fiscal balance in that year	2002 or nearest	Change Maximum-2002
Ambitious reformers, early	56.5	-4.6	43.3	-13.2
Ambitious reformers, late	56.7	-8.0	48.1	-8.6
Timid reformers, early	45.0	-5.7	40.3	-4.7
Timid reformers, late	49.4	-6.4	45.7	-3.7
Non reformers	45.8	-7.5	44.2	-1.6

Source: EU Commission, AMECO from Schuknecht and Tanzi, 2005

Ambitious reformers, early

=Belgium, Ireland, Netherlands, New Zealand

Ambitious reformers, late

=Austria, Canada, Finland, Norway, Spain, Sweden

Timid reformers, early

=Australia, Luxembourg, United Kingdom

Timid reformers, late

=Denmark, France, Germany, Italy, Switzerland, United States

Non reformers

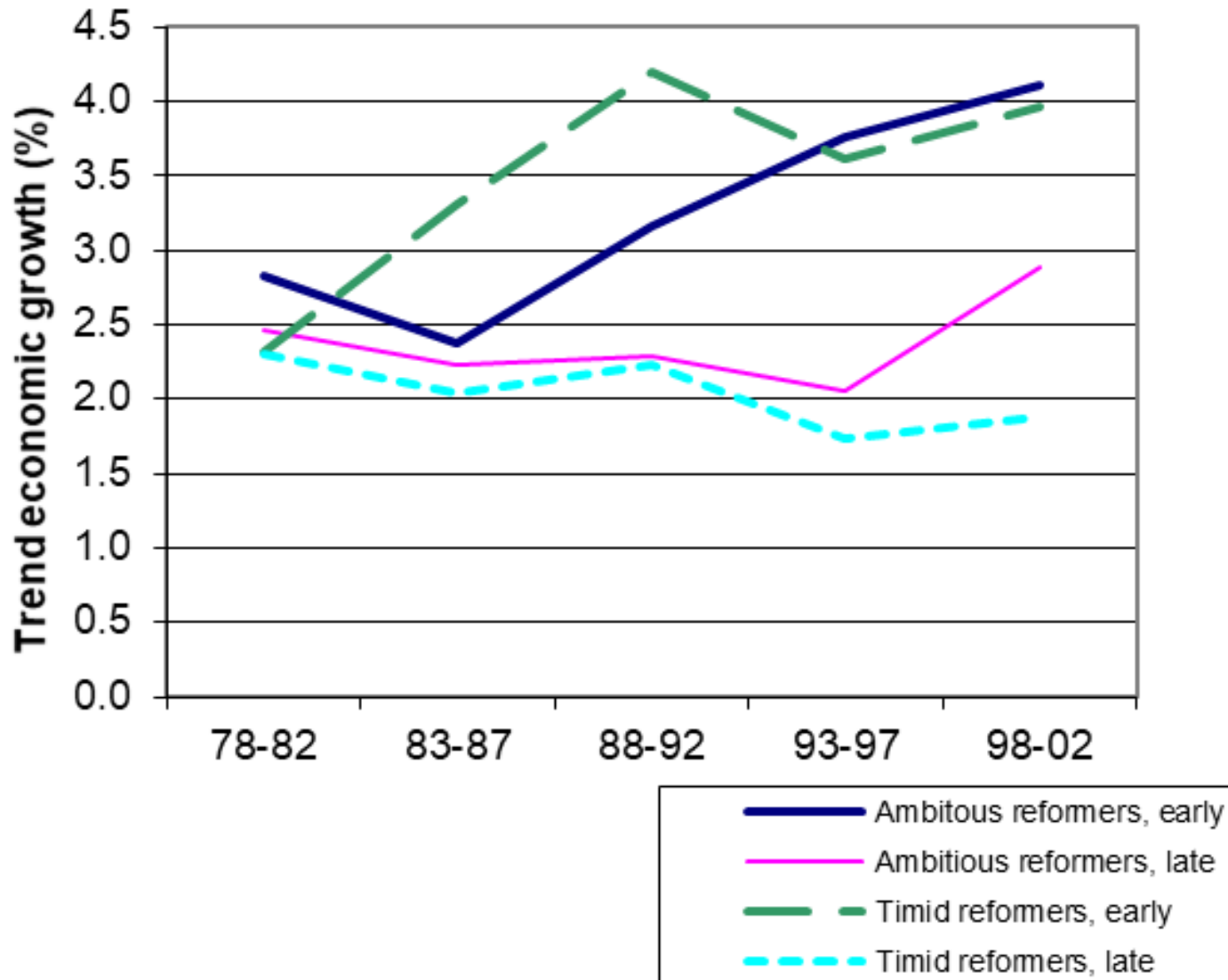
=Greece, Japan, Portugal



	Change total expenditure	Thereof: interest expenditure	Change primary expenditure	Transfers	Government	Investment
Average	-6.6	-2.4	-4.2	-2.5	-1.2	-0.5
Euro zone	-7.0	-2.7	-4.3	-2.3	-1.4	-0.6
Ambitious reformers, early	-13.2	-4.7	-8.6	-5.7	-2.1	-0.7
Ambitious reformers, late	-8.6	-1.3	-7.3	-4.6	-2.0	-0.7
Timid reformers, early	-4.7	-2.4	-2.3	0.1	-1.7	-0.7
Timid reformers, late	-3.7	-2.2	-1.5	-0.7	-0.5	-0.3
Non reformers	-1.6	-2.4	0.8	0.2	1.0	-0.4

Source: EU Commission, AMECO from Schuknecht and Tanzi 2005

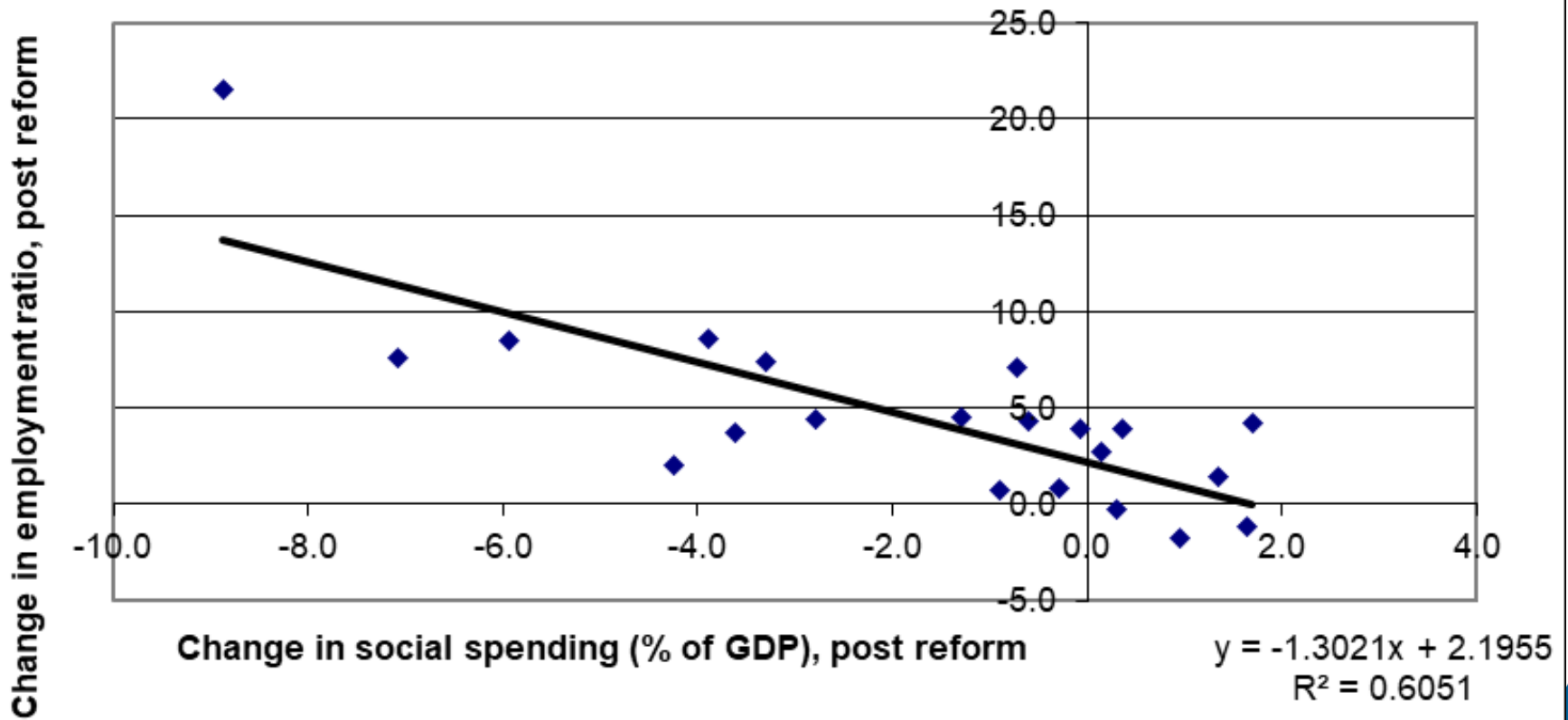
Chart V.1: Trend growth and reform timing and ambition





Social expenditure and employment ratio

Chart 4: Social expenditure and employment ratio





Expenditure Reform and Income Distribution

a. Share of total population below 50% of median income				
	Mid-1980s	Mid-1990s	2000	mid-1980s-2000
Ambitious reformers, late	9.9%	10.0%	9.4%	-0.5%
Timid reformers, early	8.3%	8.0%	7.8%	-0.5%
Timid reformers, late	8.3%	8.1%	7.9%	-0.4%
Non reformers	7.9%	7.6%	7.6%	-0.3%
d. Per-capita GDP poorest quintile, 1995 prices, PPP US\$				
	Mid-1980s	Mid-1990s	2000	mid-1980s-2000 % change
Average, all countries	7374	8677	9893	34.2
Euro area	6917	8128	9458	36.7
Ambitious reformers, early	7273	8456	10400	43.0
Ambitious reformers, late	9213	10532	11813	28.2
Timid reformers, early	6936	8141	9036	30.3
Timid reformers, late	7735	9047	9860	27.5
Non reformers	4299	4984	5819	35.4



Fiscal developments pre-crisis

	1999	1999-2007	2007	Peak	Year
France	52.1	0.2	52.2	57.0	(2013)
Germany	47.7	-4.9	42.8	47.6	(2009)
Italy	47.4	-0.6	46.8	51.2	(2009)
Average	49.0	-1.8	47.3	51.9	
Greece	46.2	0.9	47.1	55.4	(2012)
Ireland	34.0	1.9	35.9	47.0	(2009)
Portugal	42.6	1.9	44.5	51.8	(2010)
Spain	40.9	-2.0	38.9	48.1	(2012)
United Kingdom	35.3	5.6	40.9	48.9	(2010)



Fiscal developments post crisis

	Peak	2017	Peak-2017
France	57.0	56.5	-0.5
Germany	47.6	43.9	-3.7
Italy	51.2	48.9	-2.3
Average	51.9	49.8	-2.1
Greece	55.4	48.0	-7.4
Ireland	47.0	26.1	-20.9
Portugal	51.8	45.9	-5.9
Spain	48.1	41.0	-7.1
United Kingdc	48.9	41.0	-7.9



Expenditure Reform Composition

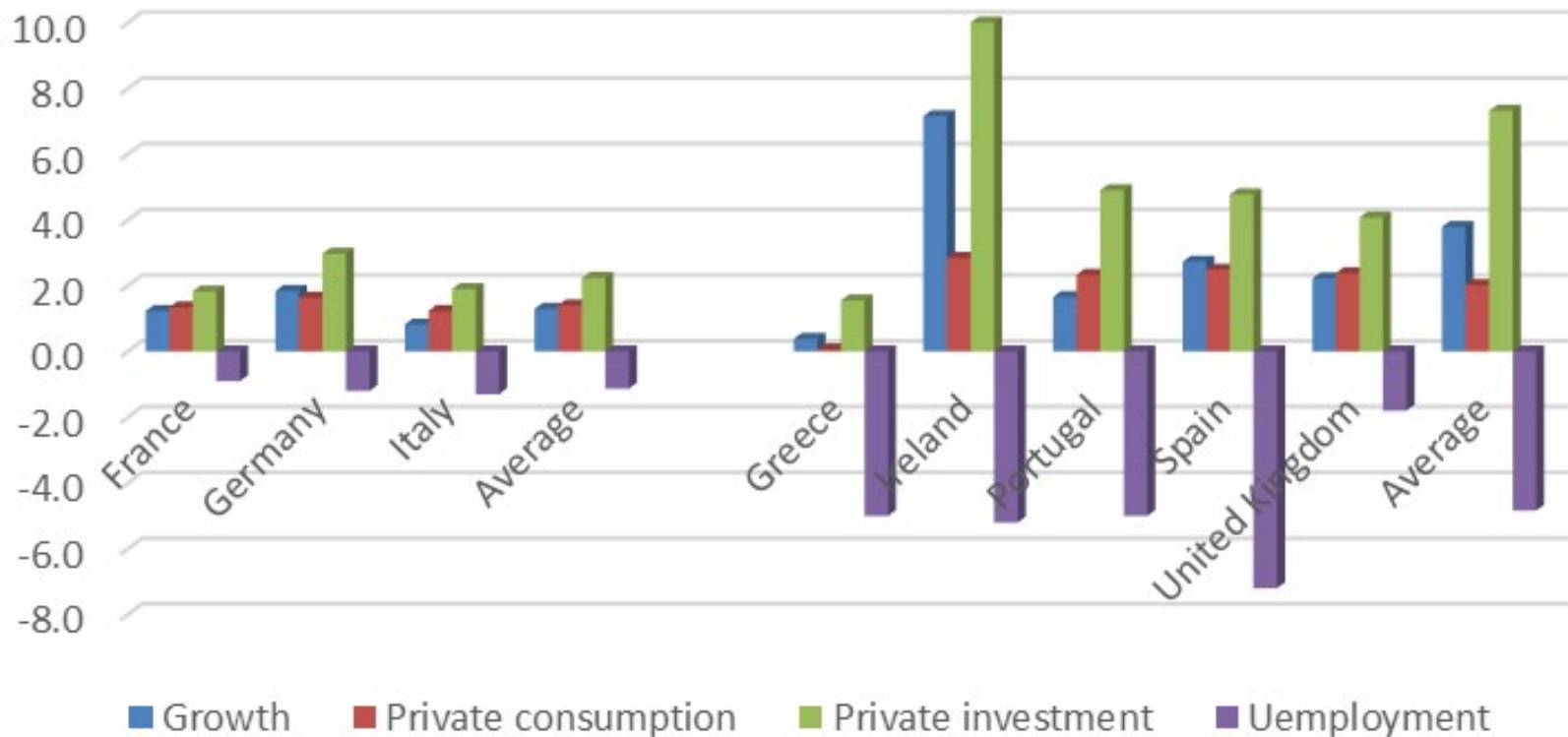
Change Peak - 2017

	Social expenditure	Non social primary	Government consumption	Public investment	Public education
France	0.1	-0.4	-0.5	-0.6	
Germany	-1.4	-0.6	-0.1	-0.2	
Italy	1.2	-2.3	-2.0	-1.4	
Average	-0.1	-1.1	-0.9	-0.7	
Greece	-1.0	-3.5	-1.8	2.1	
Ireland	-6.1	-13.3	-8.0	-1.8	
Portugal	-0.4	-7.7	-3.1	-3.5	
Spain	-1.5	-4.0	-1.2	-0.5	
United Kingdo	-2.3	-4.4	-2.6	-0.2	
Average	-2.2	-6.6	-4.0	-0.8	



Post reform change in economic variables

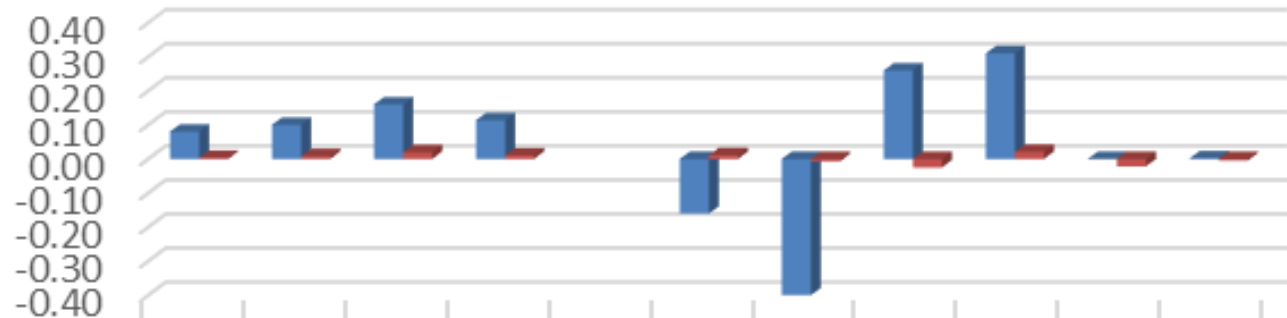
Chart V.3 Real economic and consumption growth, change in unemployment, 2014-2017





Post reform infrastructure and distribution

Chart V.4 Change in Infrastructure quality and Income Distribution, pre and post crisis



	France	Germany	Italy	Average	Greece	Ireland	Portugal	Spain	United Kingdom	Average
■ Infrastructure	0.08	0.10	0.16	0.11	-0.16	-0.40	0.26	0.31	0.00	0.00
■ Gini coefficient	0.00	0.01	0.02	0.01	0.01	-0.01	-0.03	0.02	-0.02	0.00

■ Infrastructure ■ Gini coefficient



Thank you!