



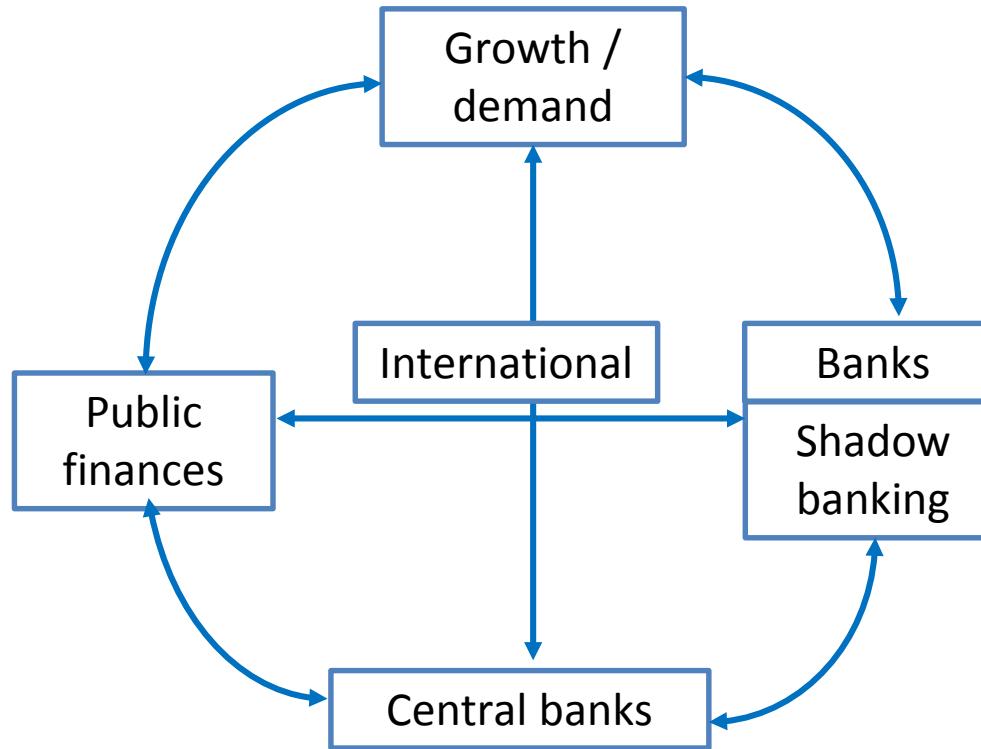
Fiscal Financial Vulnerabilities

Presentation for the 46th OeNB Economics Conference in
Cooperation with SUERF

May 2, 2019

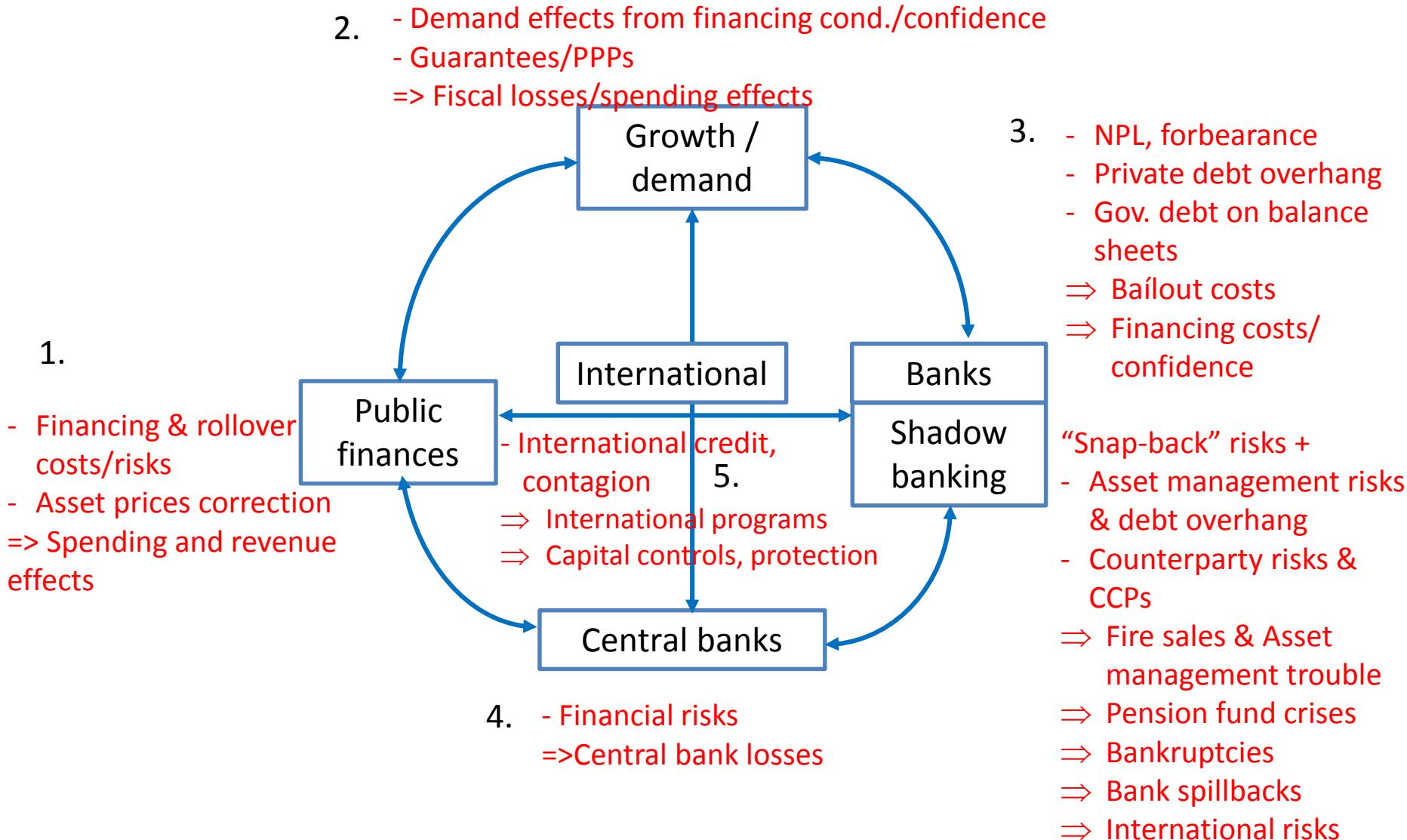
Ludger Schuknecht
Deputy Secretary-General

Fiscal-Financial Risk Map



- Complex effects from financing conditions and balance sheets

Chart IX.1 Fiscal-Financial Risk Map



Starting Point: Low Fiscal Buffers

General government deficit and debt (% of GDP)

| | 2007 | | 2017 | |
|----------------|---------|-------|---------|-----------------|
| | Deficit | Debt | Deficit | Debt (Δ2007) |
| 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 |

No Austerity: Few Countries Consolidated in Good Times

| Fiscal Consolidation, 2015-2019 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | Sum 2014-19 | Sum 2017-19 |
|---|---------|---------|---------|---------|---------|-------------|-------------|
| Change cyclically adjusted primary balance | | | | | | | |
| Germany | 0 | -0.4 | -0.3 | 0.6 | -0.4 | -0.5 | -0.1 |
| Spain | -1.3 | -0.8 | 0.2 | -0.5 | 0 | -2.4 | -0.3 |
| France | 0 | -0.1 | 0.3 | -0.2 | -0.4 | -0.4 | -0.3 |
| Italy | -0.6 | -0.8 | -0.7 | -0.1 | -1 | -3.2 | -1.8 |
| Japan | 1.8 | 0 | -0.1 | 0.3 | 0.1 | 2.1 | 0.3 |
| Ireland | -0.1 | 1.7 | 0.3 | -0.3 | -0.5 | 1.1 | -0.5 |
| Portugal | 1.7 | 1.5 | -2 | 1.6 | -0.1 | 2.7 | -0.5 |
| Change primary balance | | | | | | | |
| United Kingdom | 0.3 | 1.3 | 1.3 | 0.3 | 0.4 | 3.6 | 2 |
| United States | 0.4 | -0.5 | 0.9 | -1.6 | 0 | -0.8 | -0.7 |
| Source: Ameco, 2018 and 2019 are projections. | | | | | | | |

1a. Large financing needs in the coming years

- Gross financing needs, 2018 (% of GDP, based on IMF Fiscal Monitor, Oct. 2018)

| | Maturing debt | Deficit | Total financing need |
|------------------|---------------|---------|----------------------|
| Euro area | | | |
| Belgium | 17.0 | 1.3 | 18.3 |
| France | 10.4 | 2.4 | 12.8 |
| Italy | 20.6 | 1.6 | 22.2 |
| Portugal | 12.7 | 1.0 | 13.7 |
| Spain | 15.9 | 2.5 | 18.4 |
| | | | |
| Japan | 37.2 | 3.4 | 40.6 |
| US | 18.7 | 5.3 | 24.0 |

1b. Asset price effects on revenue can be huge, also expenditure pressure

Table VIII.2 Asset price related budget sensitivities, 1982-2005

| | Total |
|---------------------|-------|
| Belgium | 0.75 |
| Finland | 0.62 |
| France | 0.33 |
| Germany | 0.57 |
| Ireland | 0.62 |
| Italy | 0.45 |
| Netherlands | 0.55 |
| Spain | 0.79 |
| Weighted average | 0.53 |
| Euro area aggregate | 0.28 |

Source: Richard Morris and Ludger Schuknecht, 2007

Total refers to the sum of the effect from a 10% stock and real estate price change on the budget balance via direct taxes on corporations/households, indirect taxes and transaction taxes.

Revenue and expenditure changes in financial crisis, 2007 vs expenditure peak (mostly 2009)

| | Expenditure | Revenue |
|----------------|-------------|---------|
| Ireland | 11.1 | -2.8 |
| Spain | 7.0 | -6.1 |
| United Kingdom | 6.4 | -1.2 |
| France | 4.6 | -0.1 |
| Germany | 4.8 | 1.3 |
| Italy | 4.4 | 0.6 |

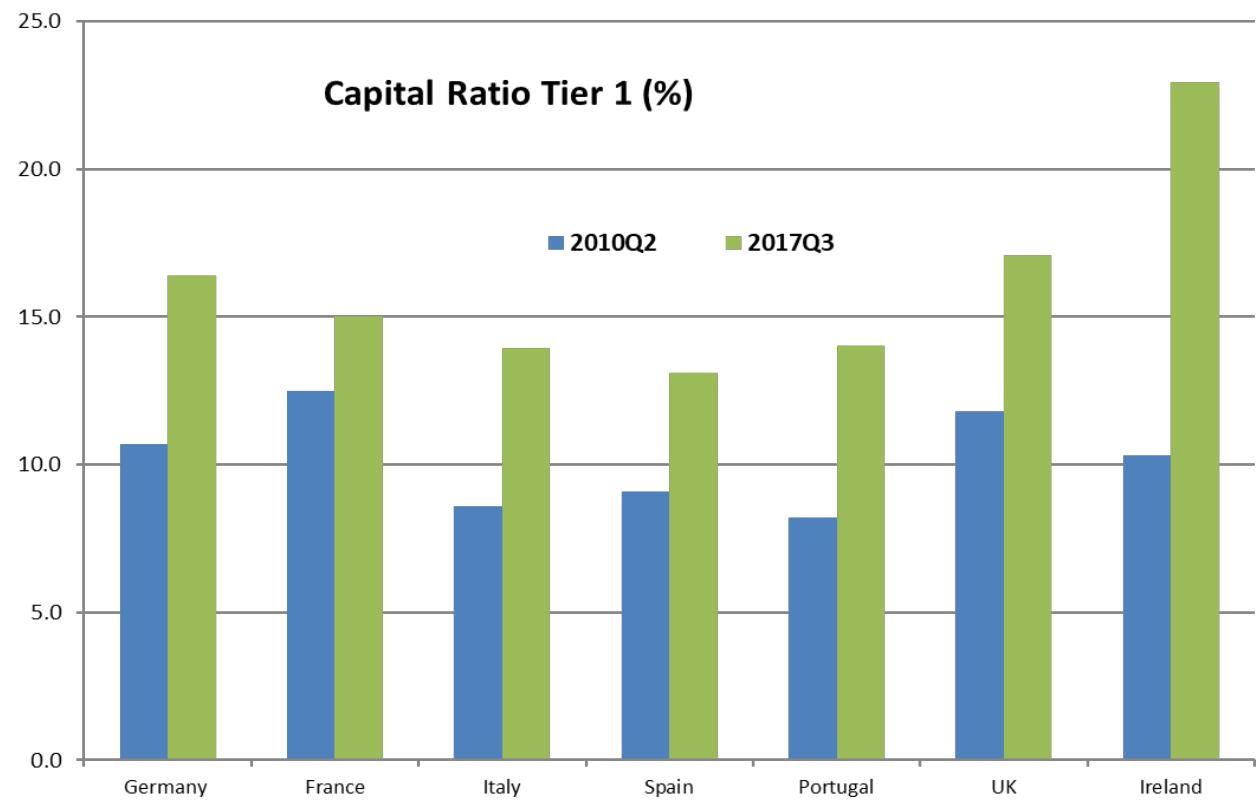
Source: OECD

2. Real economy linkages

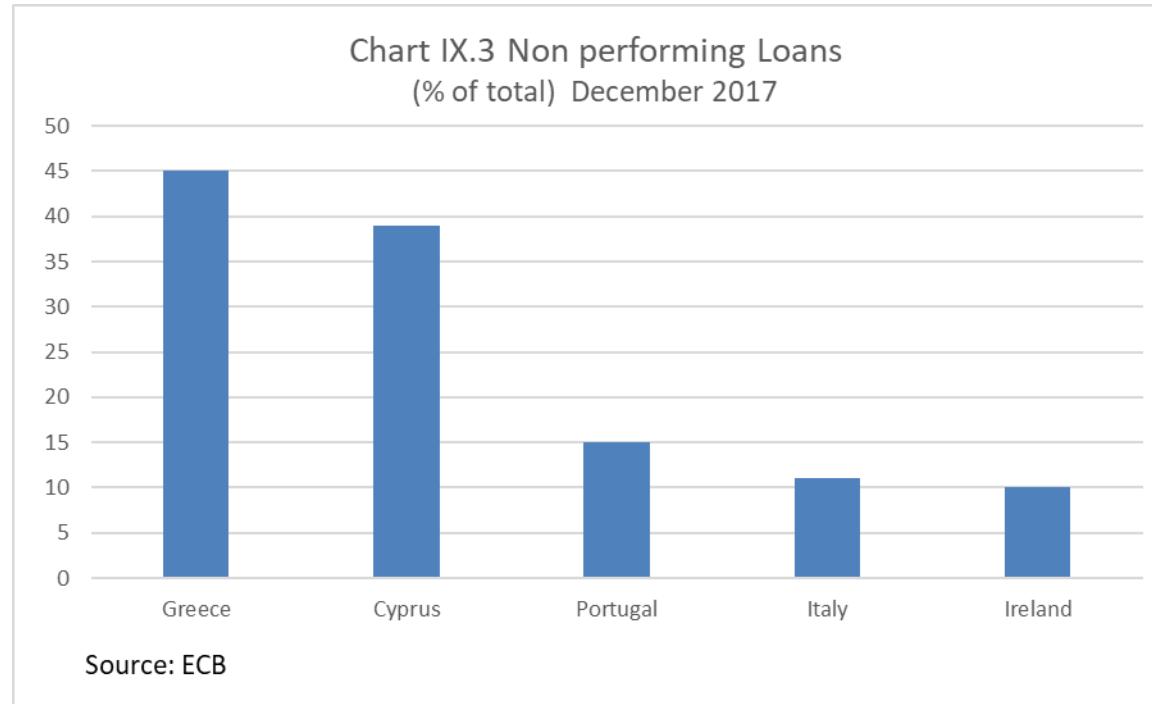
- Real economy effects strong (financial, confidence)
- Transmission to fiscal via automatic stabilisers (broadly equivalent to size of government)
- Government guarantees and PPPs falling due

3a. Bank risks: more buffers

- More capital and bailinable debt
- FSB finds liquidity and funding requirements (mostly) fulfilled
- Resolution plans often still work in progress
- Implementation!



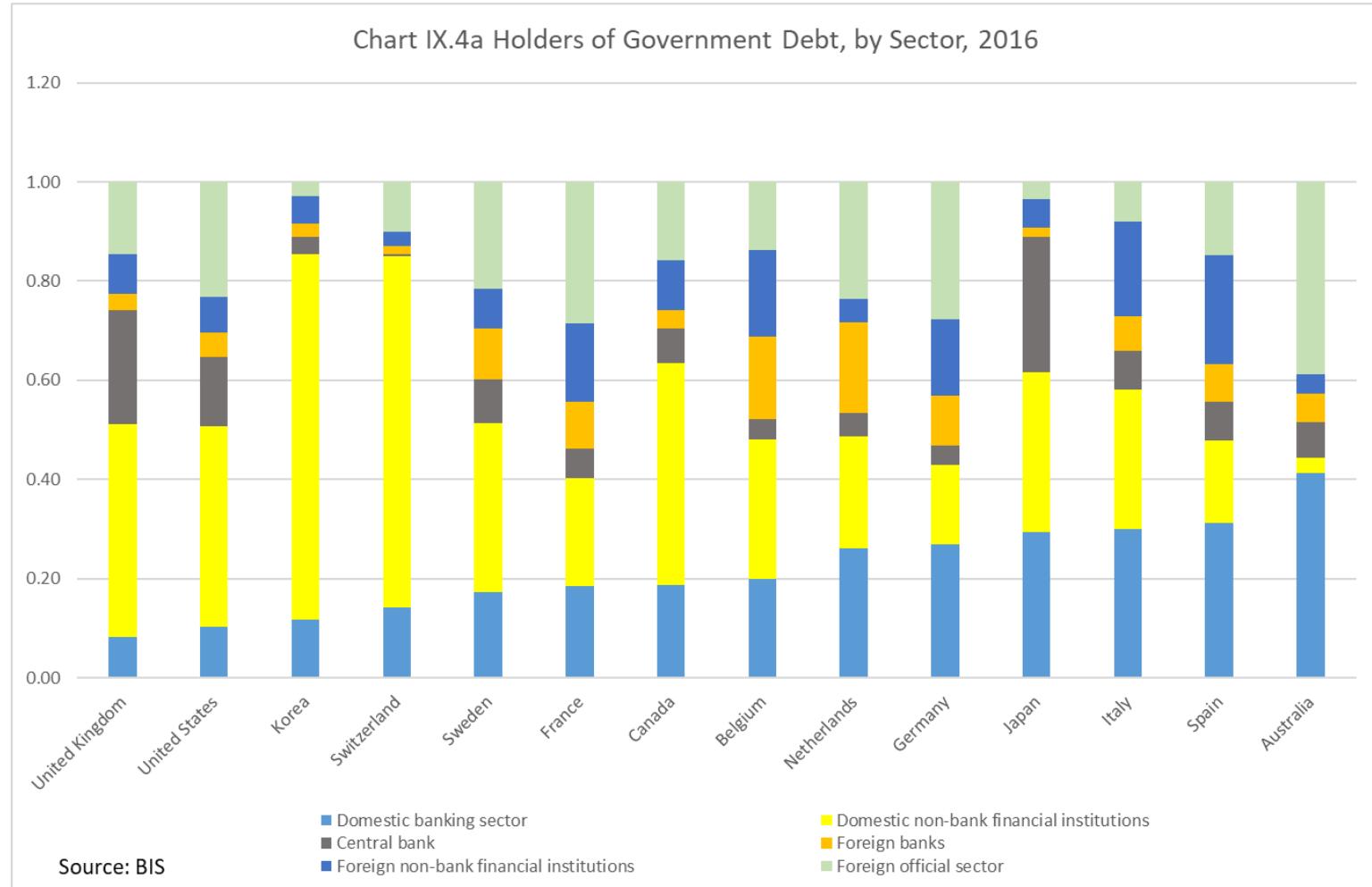
Remaining vulnerabilities: NPLs



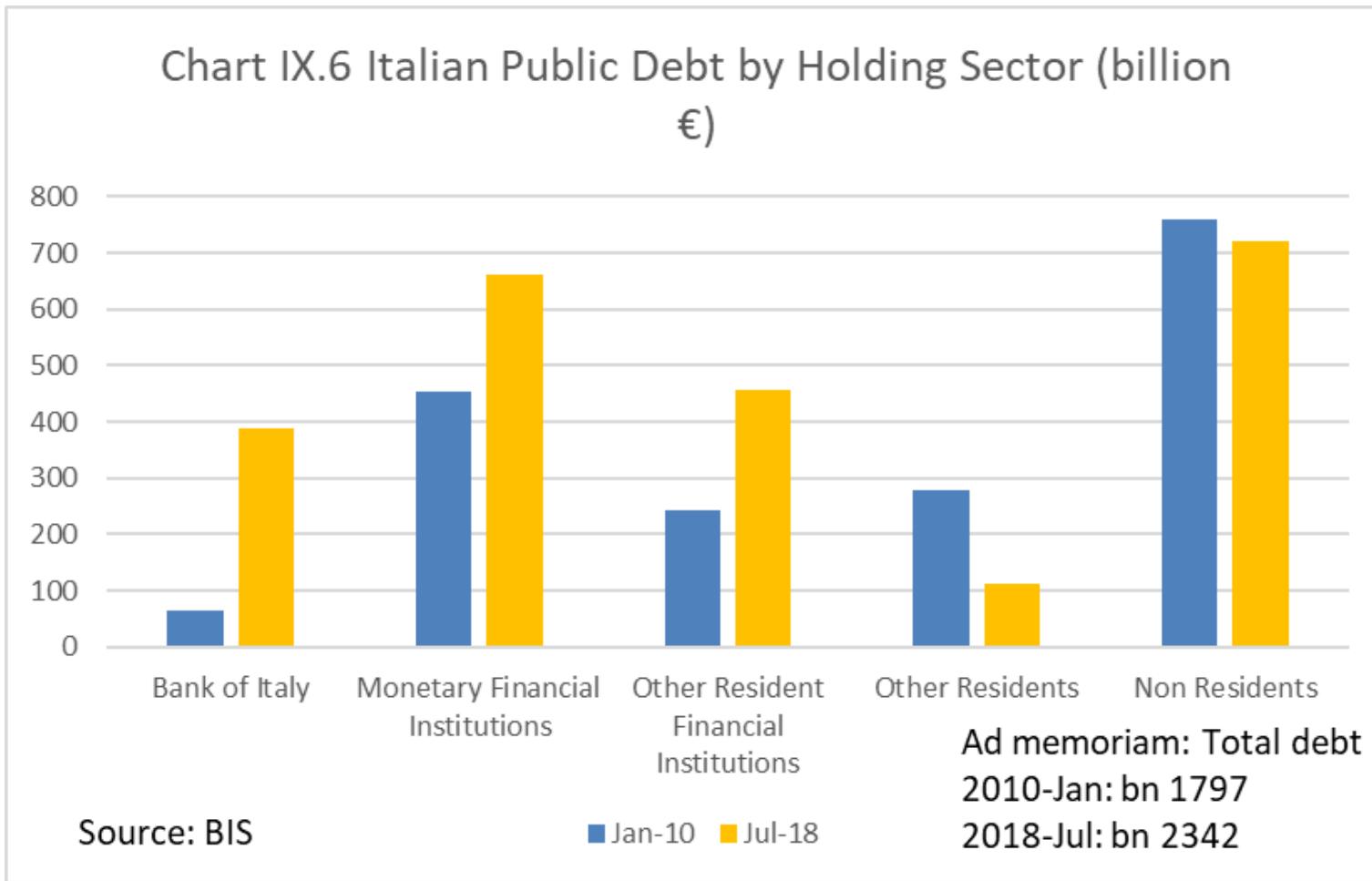
Corporate debt often high, often higher than in 2007

| | | | | Change pp | Overhang |
|--|-------|-------|-------|-----------|----------|
| | 2000 | 2007 | 2016 | 2007-16 | pp >80 |
| | (1) | (2) | (3) | (4) | (5) |
| Euro Area | | | | | |
| Austria | 82.6 | 88.8 | 90.9 | 2.0 | 10.9 |
| Belgium | 104.7 | 122.6 | 166.2 | 43.6 | 86.2 |
| Finland | 90.3 | 94.1 | 114.1 | 20.0 | 34.1 |
| France | 97.8 | 104.0 | 131.5 | 27.5 | 51.5 |
| Germany | 57.8 | 56.0 | 52.8 | -3.2 | |
| Greece | 39.1 | 50.5 | 63.9 | 13.4 | |
| Ireland | | 127.7 | 246.8 | 119.1 | 166.8 |
| Italy | 56.0 | 74.5 | 73.8 | -0.7 | |
| Netherlands | 128.9 | 111.3 | 123.0 | 11.8 | 43.0 |
| Portugal | 82.5 | 109.9 | 112.3 | 2.5 | 32.3 |
| Spain | 73.0 | 124.4 | 101.7 | -22.7 | 21.7 |
| Other EU | | | | | |
| Denmark | 69.7 | 106.5 | 104.1 | -2.5 | 24.1 |
| Sweden | 105.6 | 97.0 | 122.2 | 25.2 | 42.2 |
| United Kingdom | 79.8 | 94.7 | 82.9 | -11.9 | 2.9 |
| Other Advanced Economies | | | | | |
| Australia | 68.1 | 80.4 | 80.2 | -0.2 | 0.2 |
| Canada | 86.9 | 85.9 | 111.4 | 25.5 | 31.4 |
| Japan | 119.7 | 103.0 | 101.2 | -1.8 | 21.2 |
| Korea, Republic of | 91.3 | 88.6 | 100.4 | 11.8 | 20.4 |
| New Zealand | 82.0 | 94.7 | 81.7 | -13.0 | 1.7 |
| Switzerland | 86.1 | 90.2 | 111.4 | 21.3 | 31.4 |
| Singapore | 80.5 | 77.9 | 107.0 | 29.1 | 27.0 |
| United States | 63.9 | 69.7 | 72.2 | 2.5 | |
| Averages | | | | | |
| Unweighted average (excl. Sgp. + Kor.) | 82.6 | 93.7 | 107.0 | 13.3 | |
| Source: IMF | | | | | |

Risk of bank-government “doom” loop in some countries

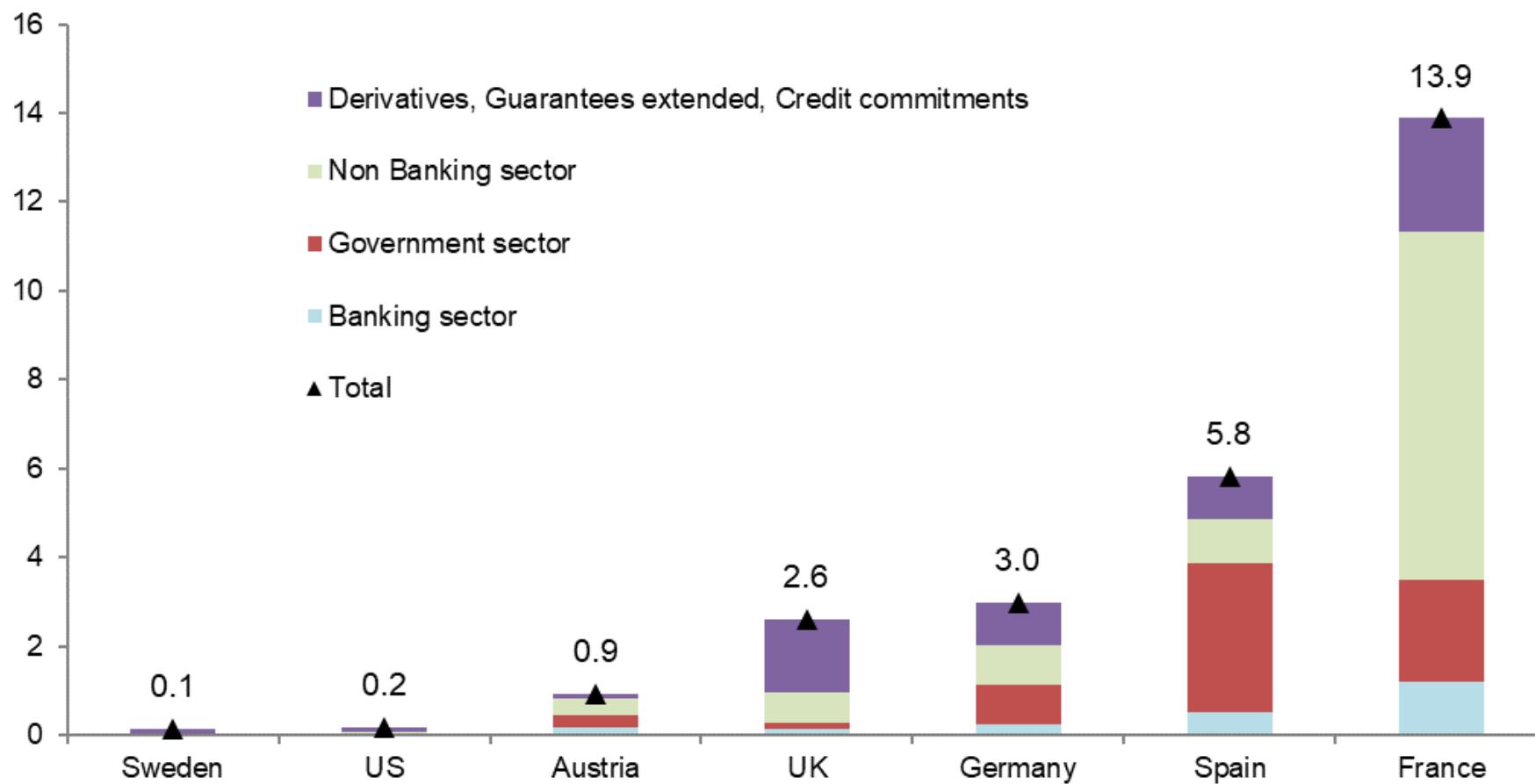


Links in Italy particularly intense

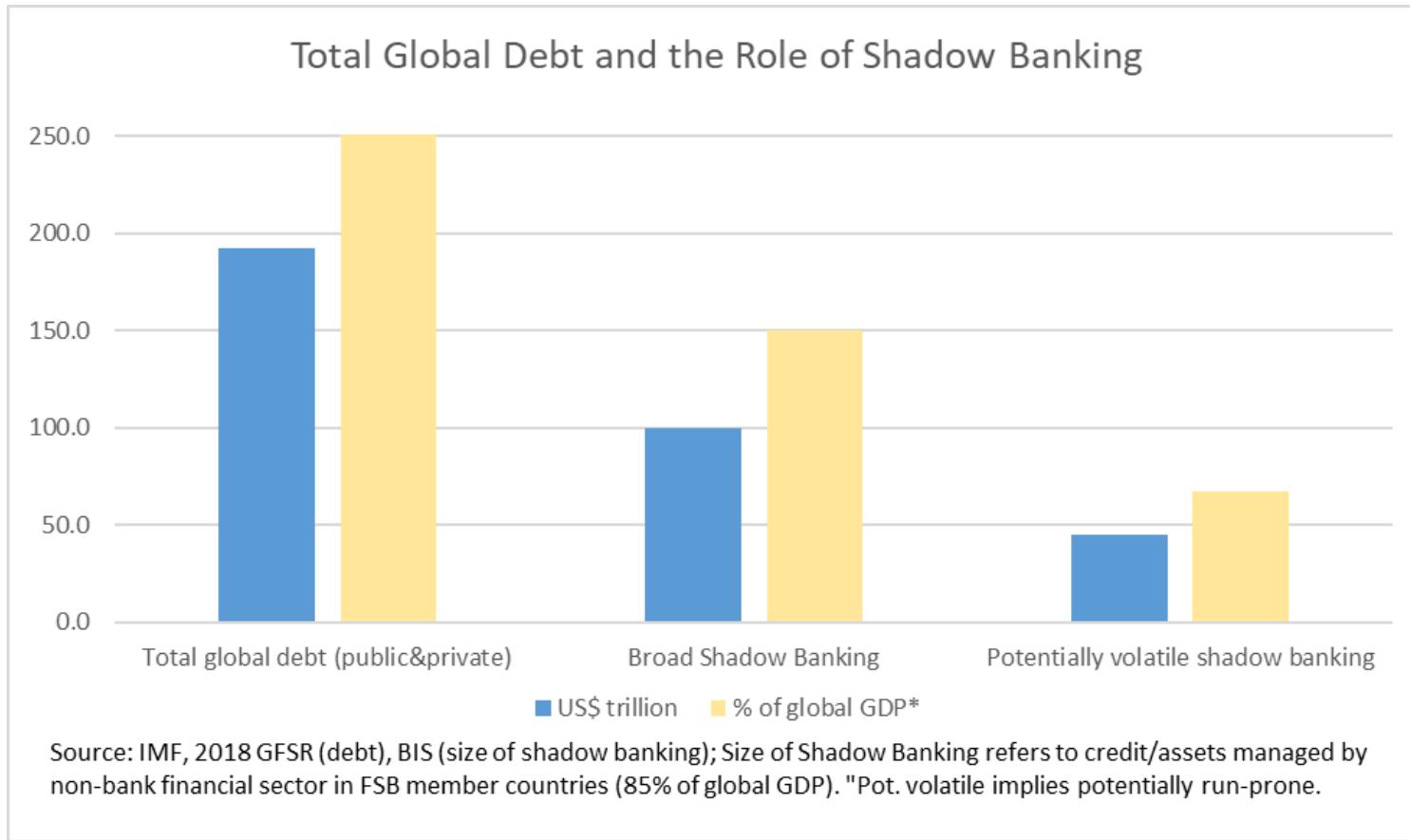


Exposure to Italy

Exposure to Italy (% of GDP), Q2 2018



3b. Vulnerabilities from shadow banking sector



Buffers improved in non-bank financing

- Agenda for systemic insurers/capital made progress
- G20 agenda for shadow banking but progress slower than for banks
- Agreed up to late 2017, IOSCO operationalisation, now implementation
- Progress on bank exposure to shadow banking (spillback risks)

Significant risks and vulnerabilities

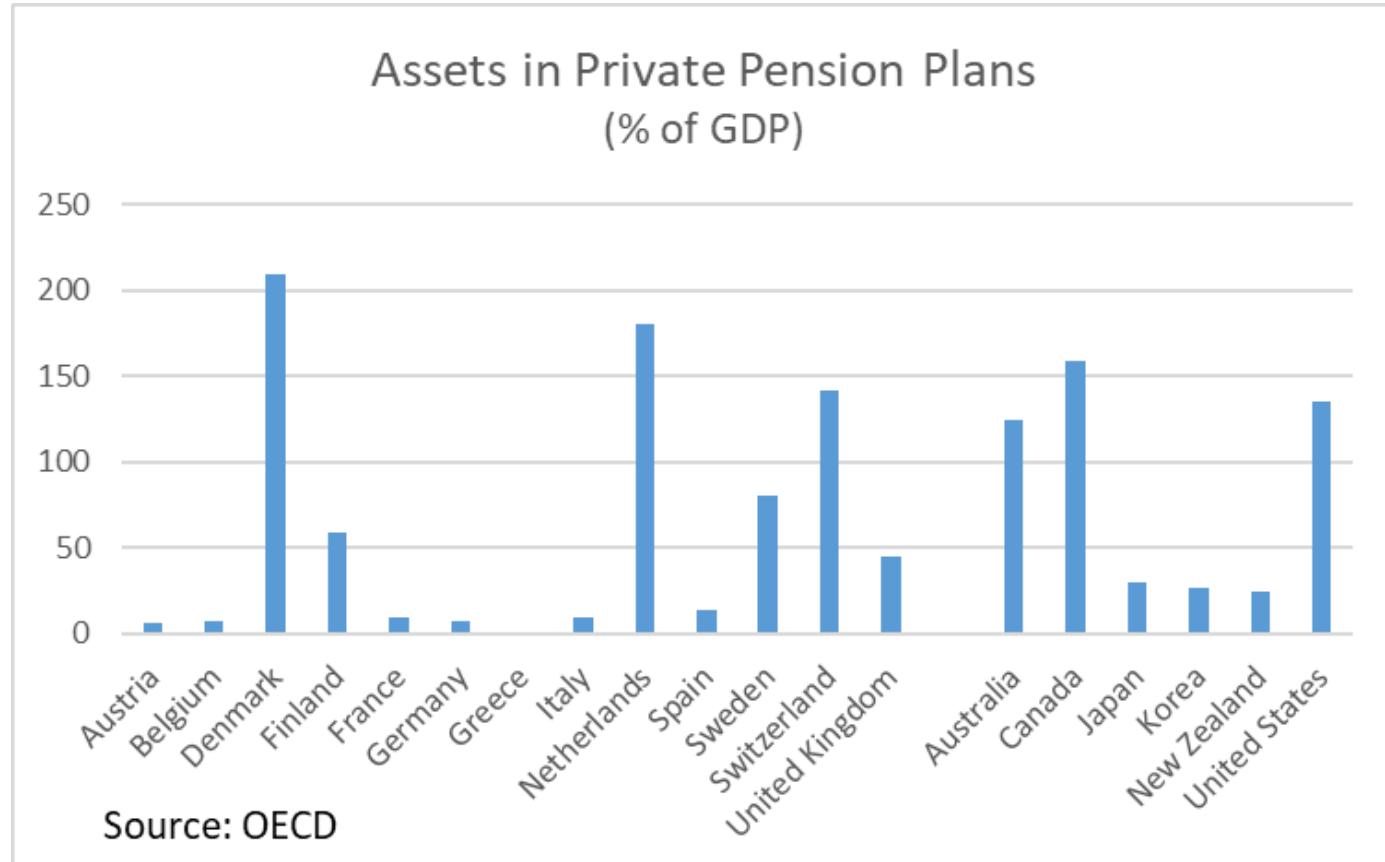
- Snapback risks when interest rates/spreads suddenly rise
- Run risks from high risk debt and high risk countries
- Worsened by regulatory cliff effects

Many pension funds underfunded

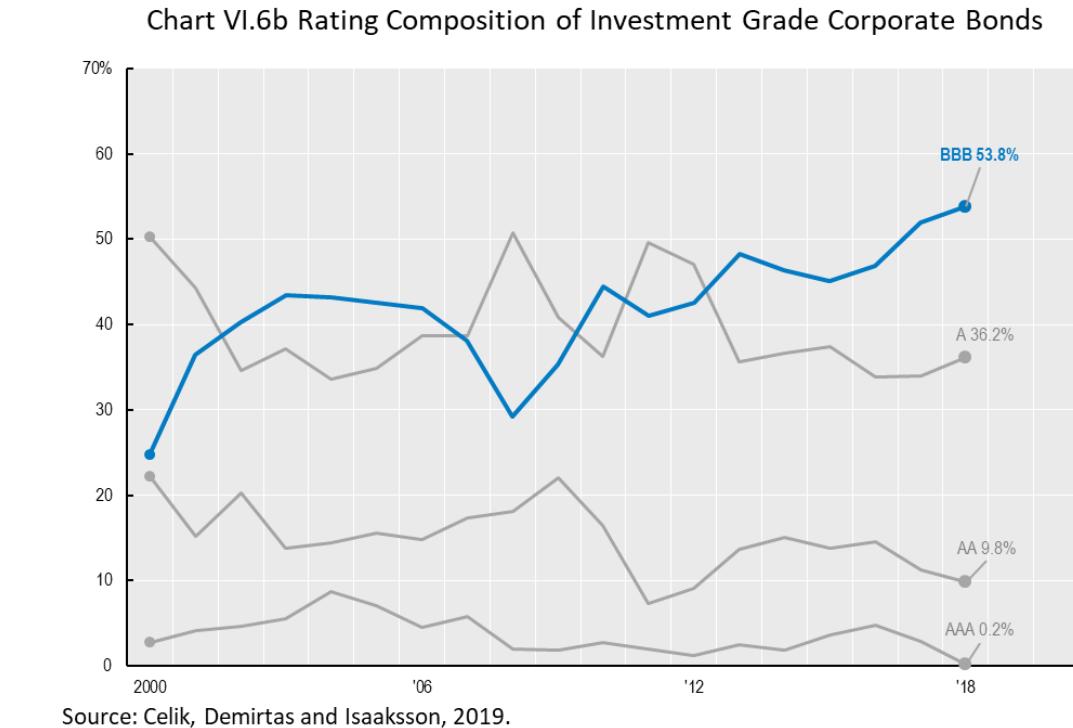
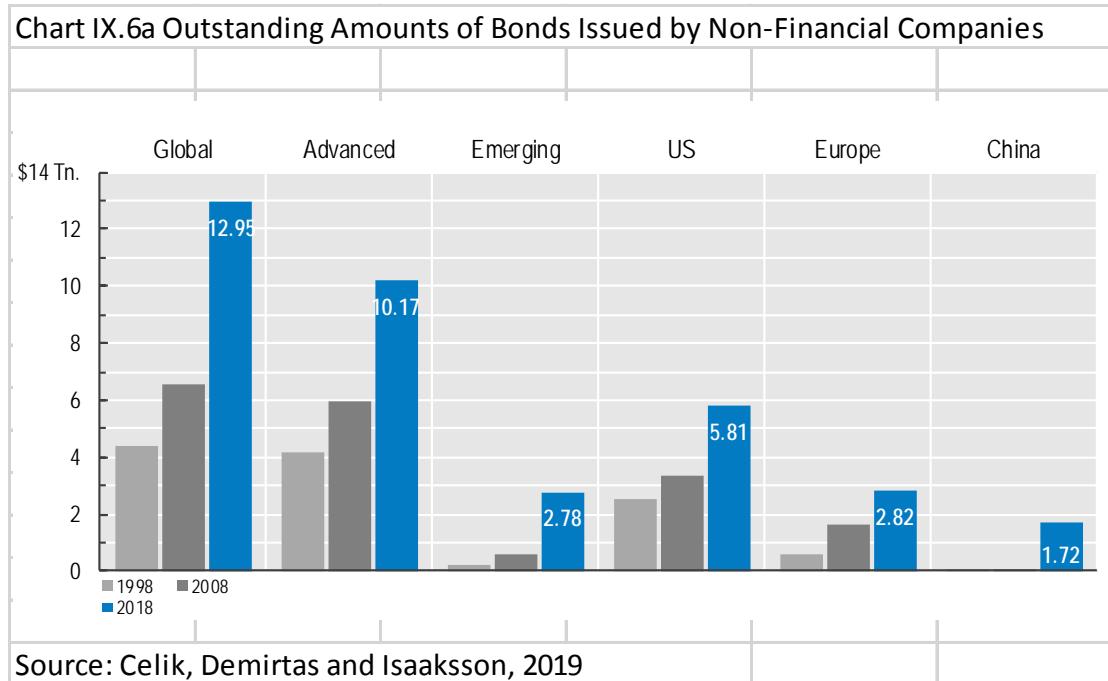
Table IX.3 Aggregate Pension Fund Solvency

| | Total liabilities | | Gap | Adverse scenario |
|---------------------|---------------------|--------|------|------------------|
| | Actuarial (billion) | Market | | |
| US Public (2015) | 4967 | 7435 | 2468 | |
| US Corporate (2016) | 1878 | 3075 | 1197 | |
| US Union (2015) | 614 | 1212 | 598 | |
| UK (2016) | 1825 | 2566 | 741 | 1411 |
| Netherlands (2016) | 1257 | 1339 | 82 | 348 |
| Germany (2016) | 171 | 210 | 39 | 61 |
| Total (sum/average) | 10712 | 15837 | 5125 | 1820 |
| Source: Rauh (2018) | | | | |

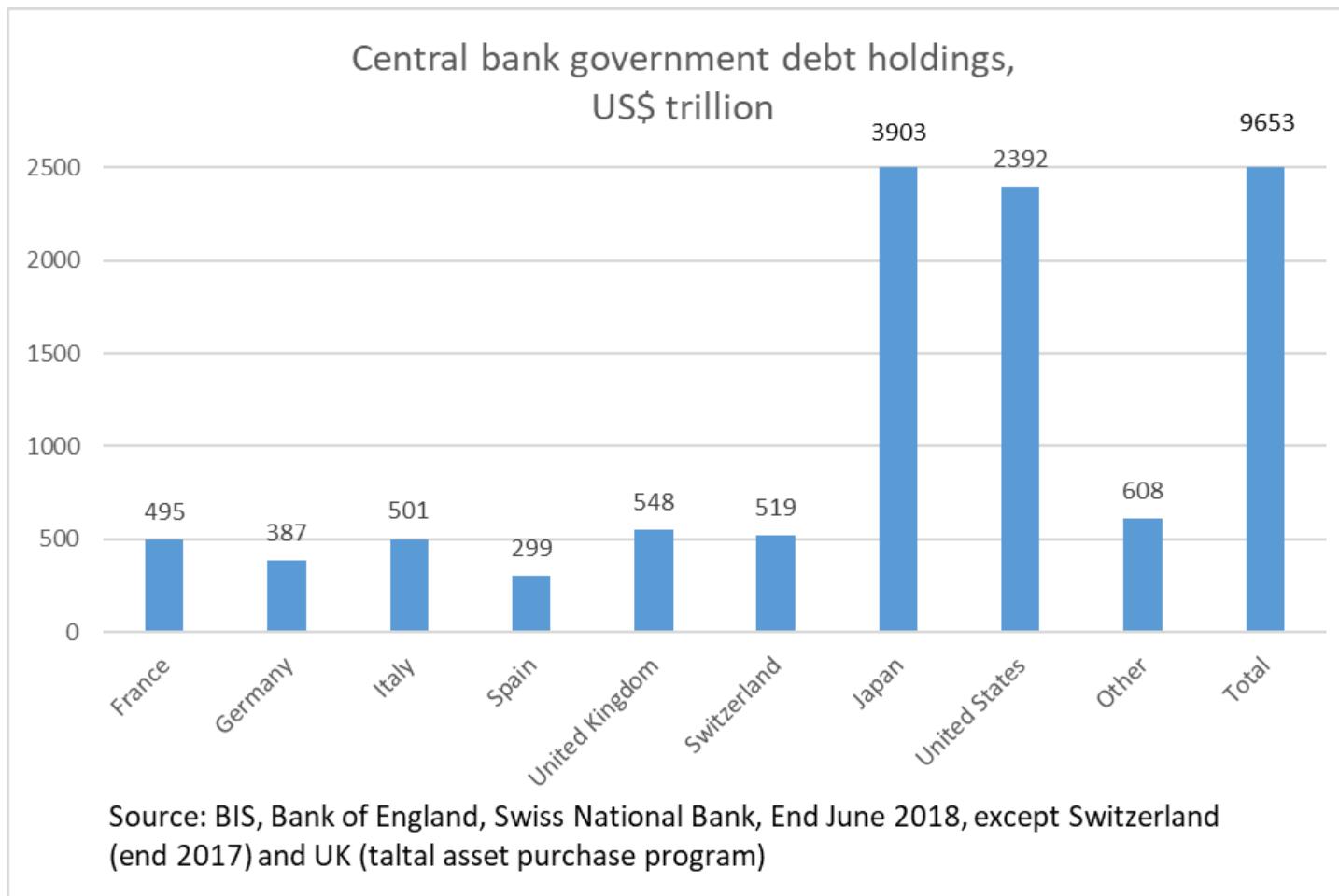
Pension assets big in several countries... Is “defined contribution” less of a fiscal risk?



High corporate debt—especially low rated, covenant light, corporate debt much increased



4. Risk of central bank losses: >20% of adv. country government debt on their balance sheets



5. International buffers strengthened but also more interdependence

- Bigger international and regional fire walls, contingency arrangements

| Table IX.4 International Credit | | |
|---------------------------------|-------------|-----------------|
| | Trillion \$ | % of Global GDP |
| Total | 30.7 | 37.6 |
| Bank loans | 13.3 | 16.3 |
| Cross border | 8.0 | 9.8 |
| Local in foreign currency | 5.3 | 6.4 |
| International debt securities | 17.5 | 21.3 |
| Held by banks | 4.7 | 5.7 |
| Held by non banks | 12.8 | 15.6 |

Source: BIS Quarterly Review, September 2018

Ever larger international support programs may face financial and political constraints...

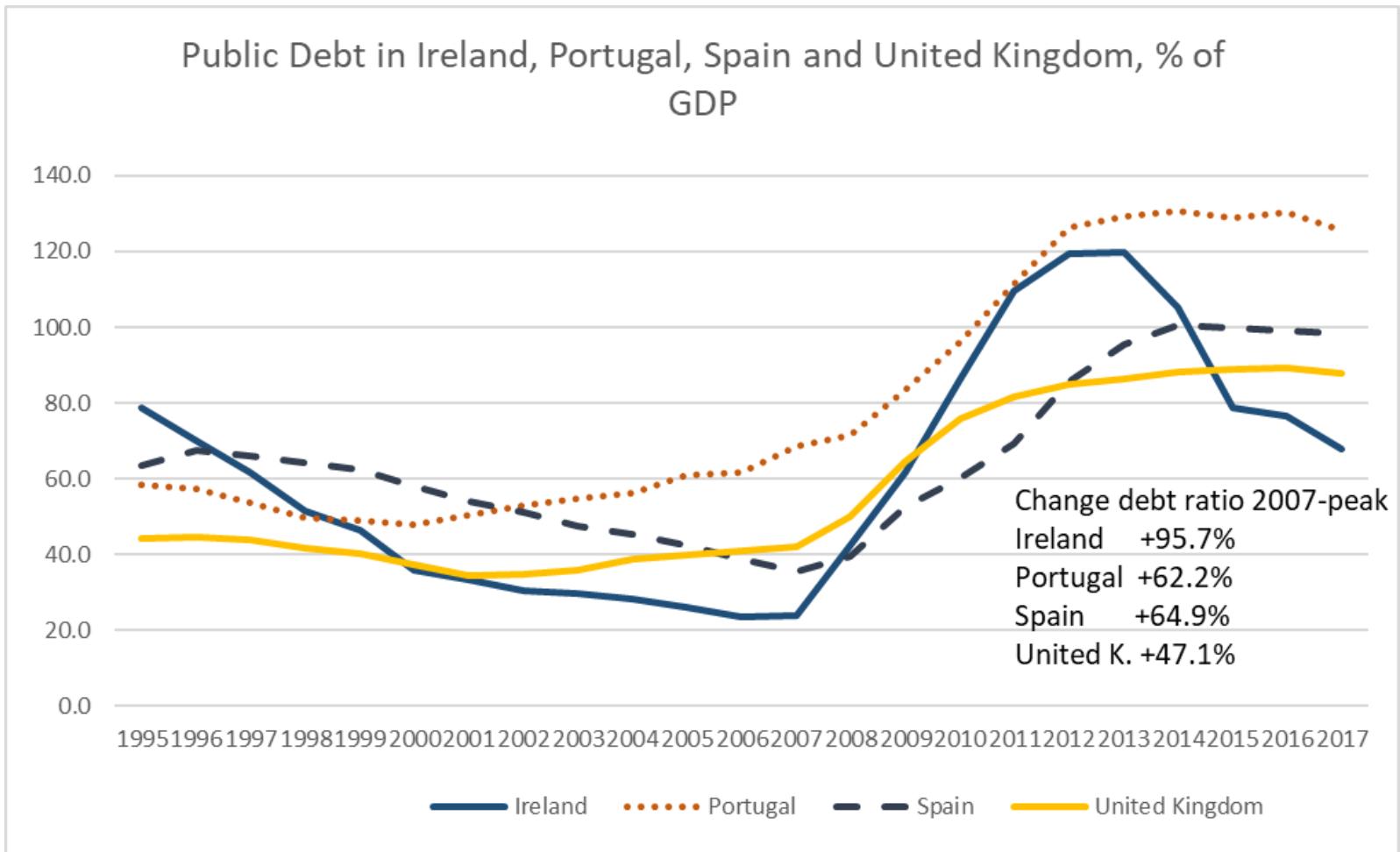
IMF Programs excluding additional support from countries/regional arrangements

| | | Amount Approved (Billion SDRs) | Amount Approved (% of GDP) |
|-----------|------|-----------------------------------|-------------------------------|
| Argentina | 2018 | 40.7 | 11.2% |
| Greece | 2012 | 23.8 | 14.9% |
| Portugal | 2011 | 23.7 | 15.0% |
| Ireland | 2010 | 19.5 | 13.7% |
| Greece | 2010 | 26.4 | 13.8% |
| Argentina | 2001 | 16.9 | 8.7% |
| Korea | 1997 | 15.5 | 3.8% |
| Thailand | 1997 | 2.9 | 2.6% |
| Mexico | 1995 | 12.1 | 4.9% |

6. Compound effects: Very significant fiscal costs of financial crisis

| | Gross Impact (% of GDP) | Gross impact in % of end 2009 Banking Assets |
|---|-------------------------|--|
| Austria | 6.2 | 5.6 |
| Belgium | 7.2 | 8.9 |
| Cyprus | 20.0 | .. |
| Germany | 12.3 | 10.4 |
| Greece | 34.9 | 33.1 |
| Ireland | 36.3 | 20.4 |
| Netherlands | 17.3 | 13.5 |
| Slovenia | 12.0 | 13.2 |
| Spain | 7.4 | 3.9 |
| United Kingdom | 11.6 | 5.9 |
| United States | 4.3 | 6.4 |
| Average | 7.4 | .. |
| US\$ Billions | 2114 | |
| Source: IMF, Fiscal Monitor, April 2015 | | |

Financial crisis can raise debt ratio enormously



7. What to do to limit fiscal financial vulnerabilities?

Factors correlated with fiscal costs of crises in the literature

- Macro:
 - High aggregate private debt
 - High public debt
- Financial sector:
 - Weak financial institutions/low capital
 - Low liquidity
- Government and CB
 - Weak regulation/supervision
 - Regulatory forbearance/slow reaction
 - (Blanket) guarantees/bail-outs for banks/depositors
 - Unlimited liquidity

Extend circuit breakers?

- Two types: insurance and controls
- National: capital outflow and inflow controls, freezing of deposits, trading stops beyond stocks, forbearance, bail-ins/loss distribution, bail-outs
- International: capital controls, support programs & swap lines
- Should be rules based! (OECD Codes, EU bail-in rules...)

8. Conclusions

- Understand fiscal-financial risks and policy factors that affect fiscal risks
 - Understand compound effects, how far will contagion go?
 - Role of circuit breakers?
-
- Prevent fiscal dominance, build buffers in good times (balanced budgets), implement fiscal rules, eliminate distortions
 - Prevent financial dominance, strengthen balance sheets of banks and borrowers, implement financial regulation agenda incl. shadow banks,
 - (Stop zombification and capital mis-allocation)
 - Strengthen circuit breakers?