Debt Sustainability

AN INTERNATIONAL PERSPECTIVE

LUDGER SCHUKNECHT

ASIAN INFRASTRUCTURE INVESTMENT BANK

"He who will not economize will have to agonize."

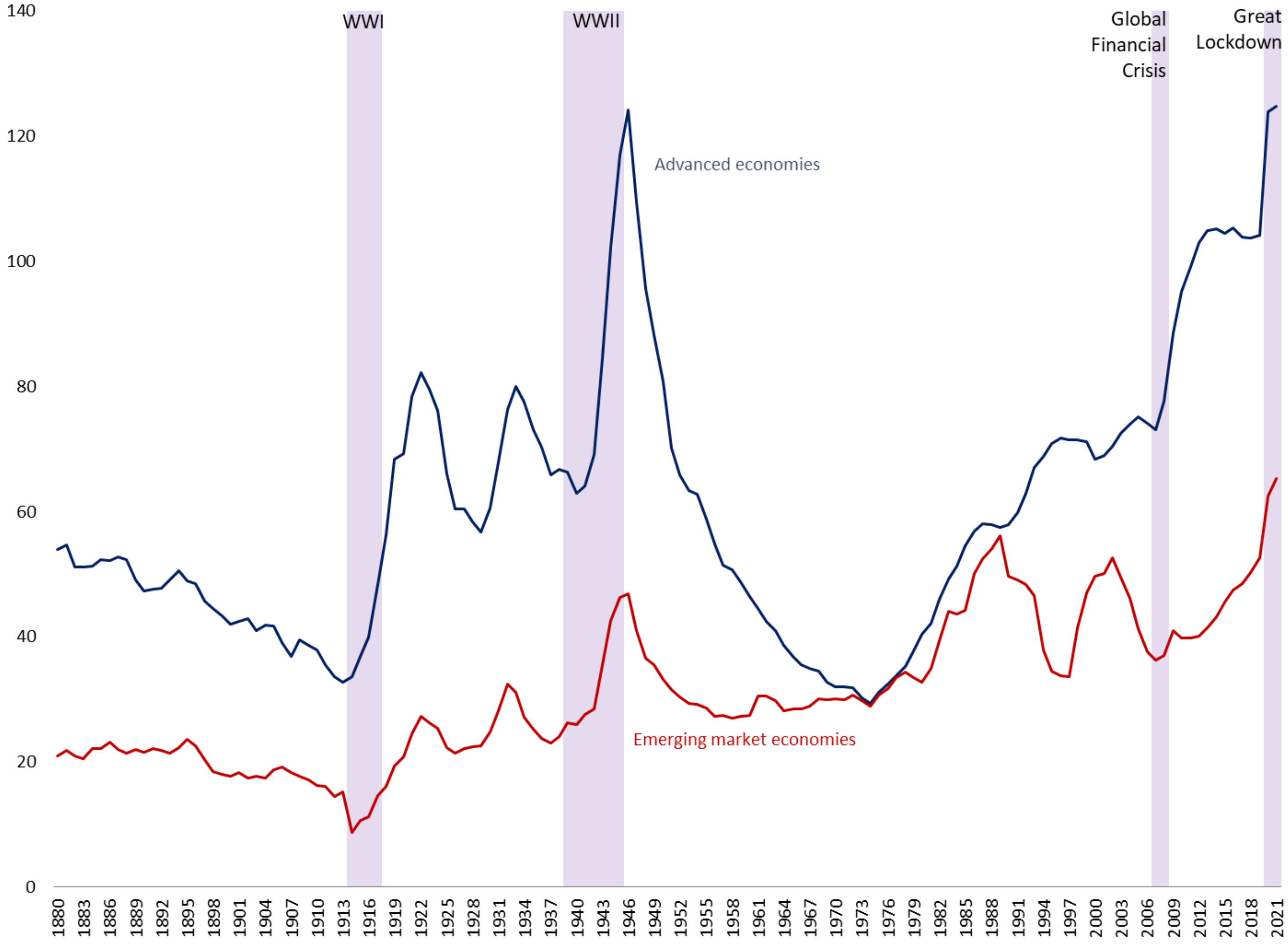
Confucius

Introduction

- Explore the debate around public debt and financial risks.
- Large economies are more vulnerable: fiscal support programmes in Covid-19, low growth, high private debt.
- High inflation exacerbates the risks.
- 4 possible scenarios.
- Key takeaways.

Advanced country public debt at same level as in 1945

- Highest for G7 at 140% of GDP
- Also record debt in EMs, more „Keynesian“
- Plus other risk factors
- No sense of urgency



Source: IMF Fiscal Monitor, Oct. 2020

Highest debt in large countries

Table 2.1 General government gross debt and overall balance

	Gross debt (percent of GDP)				Overall balance (percent of GDP)	
	2007	**2019**	**2020**	**2021**	**2020**	**2021**
G7	84.4	118.0	136.7	139.5	-13.2	-11.9
Canada	65.0	86.8	117.8	116.3	-10.7	-7.8
France	63.8	98.1	113.5	115.2	-9.9	-7.2
Germany	65.0	59.6	68.9	70.3	-4.2	-5.5
Ireland	24.9	57.4	59.8	63.2	-5.3	-5.5
Italy	103.4	134.6	155.6	157.1	-9.5	-8.8
Japan	187.7	234.9	256.2	256.5	-12.6	-9.4
Spain	36.1	95.5	117.1	118.4	-11.5	-9.0
Switzerland	43.6	39.8	42.9	44.8	-2.6	-3.4
United Kingdom	44.1	85.2	103.7	107.1	-13.4	-11.8
United States	62.1	108.2	127.1	132.8	-15.8	-15.0

Source: IMF

Table 2.2a General government debt, 2016–26, percent of GDP

				Projections
	2016	2019	2020	2021
Gross Debt (percent of GDP)				
World	**83.2**	**83.7**	**97.3**	**98.9**
Advanced Economies	105.5	103.8	120.1	122.5
Emerging Market Economie	48.4	54.7	64.4	65.1
Asia	**50.0**	**57.3**	**67.6**	**69.9**
China	48.2	57.1	66.8	69.6
India	68.7	73.9	89.6	86.6
Indonesia	28.0	30.6	36.6	41.4
Malaysia	55.8	57.2	67.5	67.0
Philippines	37.3	37.0	47.1	51.9
Singapore	106.5	129.0	128.4	129.5
Thailand	41.7	41.0	49.6	55.9
Russian Federation	14.8	13.8	19.3	18.1
Latin America	56.4	68.4	77.7	75.9
Argentina	53.1	90.2	103.0	
Brazil[2]	78.3	87.7	98.9	98.4
Mexico	56.7	53.3	60.6	60.5
South Africa	51.5	62.2	77.1	80.8

Source: IMF

Short term risks relate to financing costs (levels and spreads)

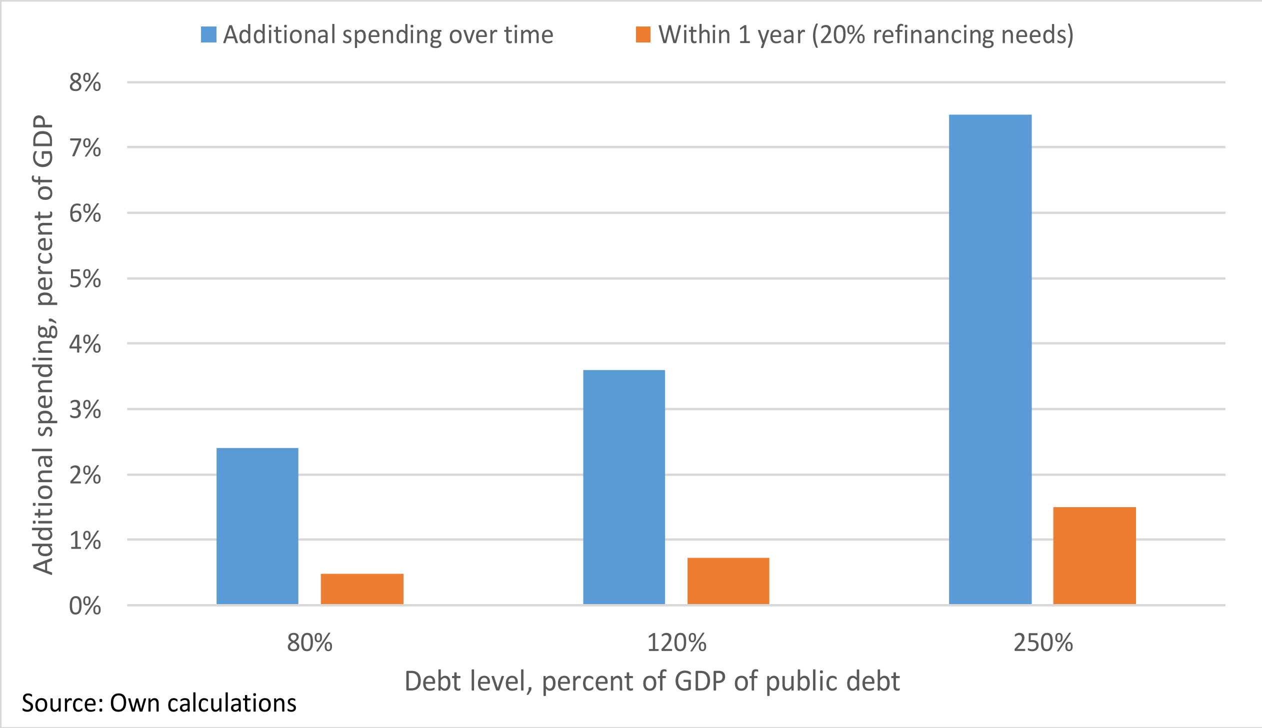


Figure 2.5 Stress test: additional spending with a 3% interest increase within 1 year and over time

Table 2.3 Gross financing needs, components, 2020 projections, % of GDP

	Budget deficit (percent of GDP)	Maturing debt (percent of GDP)	Stock flow adjustment (percent of GDP)	Gross financing needs (percent of GDP)
Austria	9.6	8.5	0.3	18.4
Belgium	11.2	13.5	1.2	26.0
Finland	7.6	9.1	1.2	18.0
France	10.5	15.8	0.2	26.5
Germany	6.0	12.4	3.7	22.0
Ireland	6.8	7.8	-2.1	12.4
Italy	10.8	20.7	1.3	32.7
Netherland	7.2	8.9	2.4	18.4
Spain	12.2	15.8	-0.2	27.8

Source: European Commission (2021)

Financial crisis very costly

Table 2.4 Financial crisis support before 2007

Country	Crisis Dates	Total Gross Fiscal Cost (percent of GDP)
Average all	1970-2007	14.8
EU Countries	1970-2007	6.6
Finland	1991-94	12.8
Norway	1991-93	2.7
Sweden	1991-94	3.6
Argentina	2001-05	9.6
Brazil	1994-96	13.2
Chile	1981-87	42.9
Indonesia	1997-2002	56.8
Japan	1997-2002	14.0
Korea	1997-2002	31.2
Mexico	1994-97	19.3
Malaysia	1997-2002	16.4
Russia	1998-2000	6.0
Thailand	1997-2002	43.8
Turkey	2000-03	32.0
Uruguay	2002-05	20.0

Sources: Laeven and Valencia (2008) and EU Commission

Table 3.3 The size of international support programs

		Amount approved (Billion SDRs) 1/	Amount approved (% of GDP) 2/	Additional European financial support (% of GDP) 3/
Argentina	2018	40.7	11.2%	
Greece	2012	23.8	14.9%	135.9%
Portugal	2011	23.7	15.0%	30.1%
Ireland	2010	19.5	13.7%	25.6%
Argentina	2001	16.9	8.7%	
Korea	1997	15.5	3.8%	
Thailand	1997	2.9	2.6%	
Mexico	1995	12.1	4.9%	

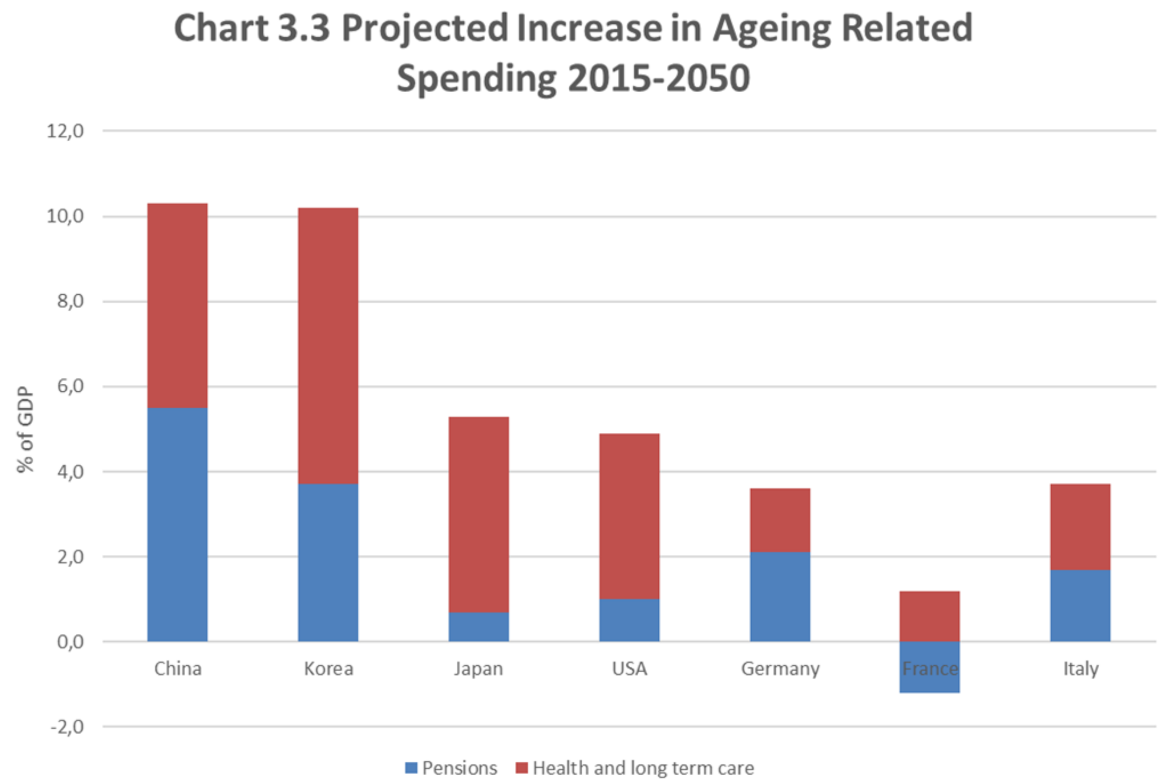
Sources: IMF Members' Financial Data; GDP from World Bank

1/ SDR=Special Drawing Right, a composite of the most important global currencies.

2/ GDP of respective country in indicated year.

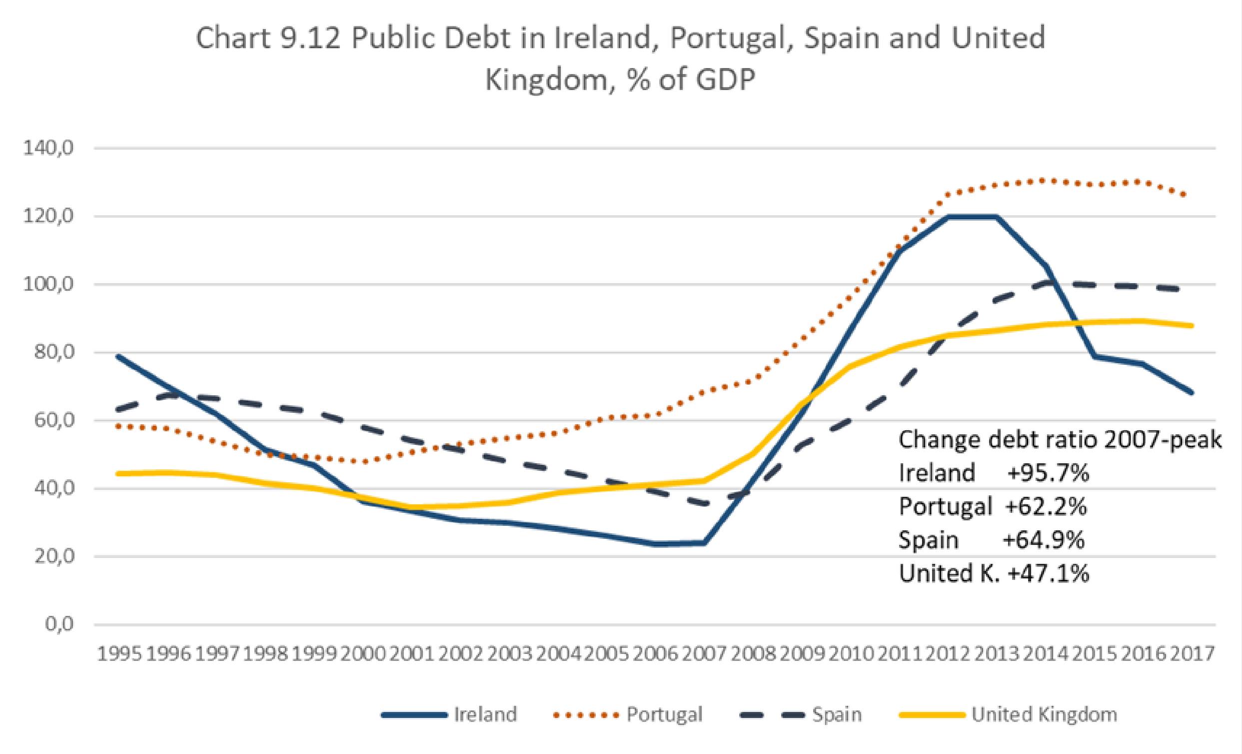
3/ Some non-Europen countries also received limited additional financial support, such as Mexico.

Plus major fiscal risks from population aging and potential financial crises

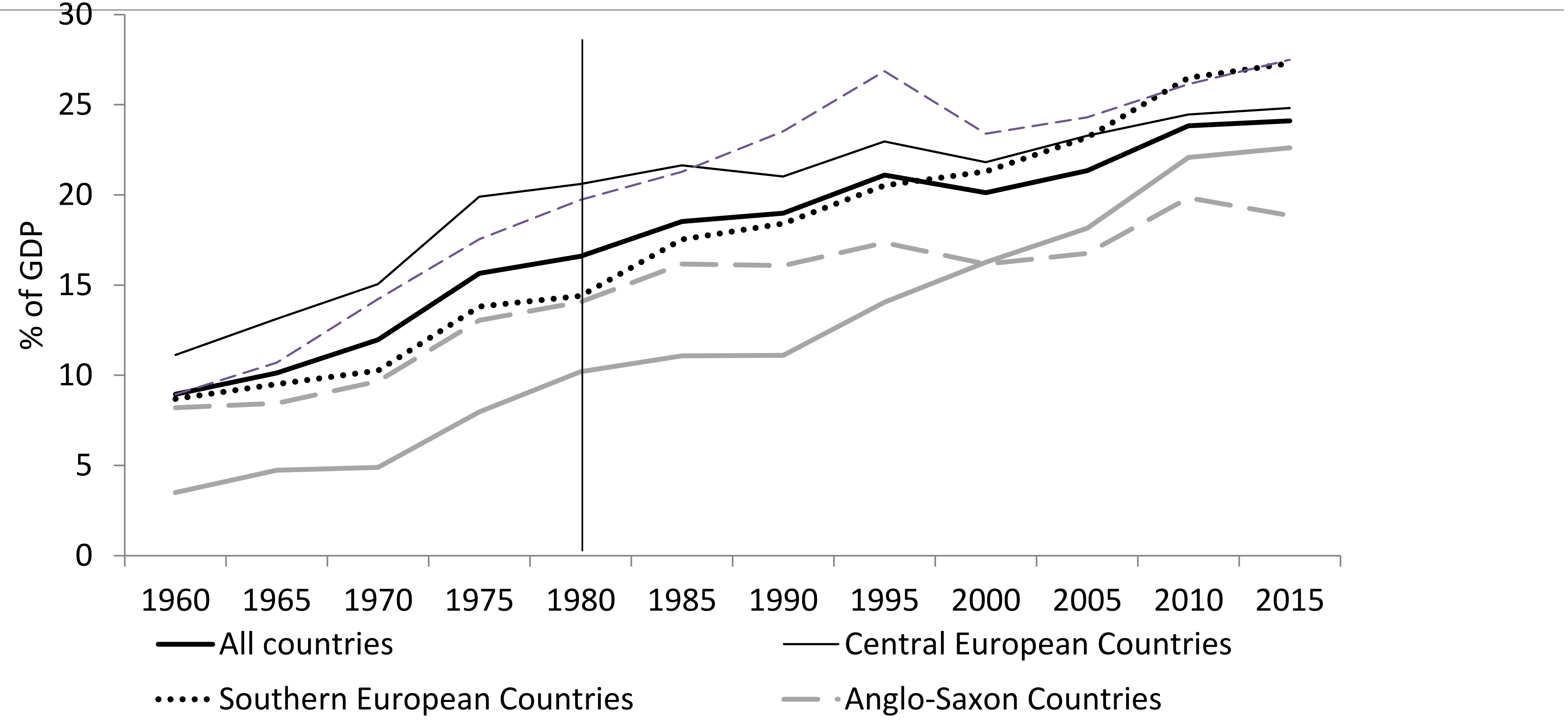


Sources: EU Ageing Report 2018; OECD; IMF.

Debt increase during global financial crisis

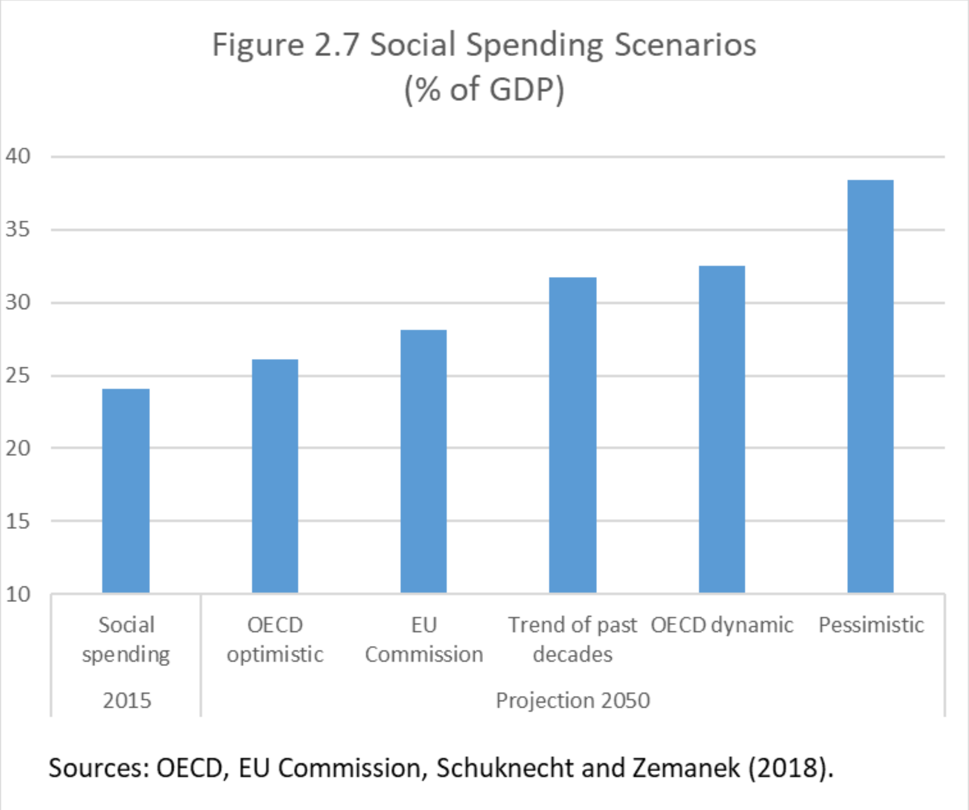


Social expenditure trends by country group



Source: Schuknecht and Zemanek, 2018

The fiscal costs of population aging strongly increasing



European Commission projections—baseline and risk scenario

Table III.1.137: Total cost of ageing as % of GDP - AWG reference scenari

Country	Ch 19-70	2019	2035	2050	2070
BE	5.4	25.6	28.5	30.2	30.9
BG	2.1	16.1	16.7	18.0	18.1
CZ	6.1	18.6	21.2	24.5	24.7
DK	1.5	25.4	26.2	26.5	26.9
DE	3.3	23.3	25.6	26.3	26.5
EE	-1.6	17.2	16.3	16.1	15.6
IE	6.2	13.2	15.9	18.1	19.4
EL	-3.7	23.6	21.5	21.7	19.9
ES	-0.4	22.3	22.9	24.5	21.9
FR	-0.8	29.5	30.9	30.2	28.7
HR	-0.3	21.5	22.0	21.4	21.2
IT	-0.1	26.5	29.7	29.1	26.4
CY	2.0	17.3	18.6	18.2	19.3
LV	-0.6	15.8	16.1	15.7	15.2
LT	1.6	15.3	17.0	17.3	16.9
LU	10.4	16.9	19.8	23.2	27.3
HU	5.5	17.1	17.7	20.8	22.5
MT	8.0	17.9	18.0	20.4	25.9
NL	5.4	21.0	24.5	25.8	26.4
AT	3.8	26.7	29.8	30.3	30.5
PL	4.0	20.1	22.1	23.0	24.1
PT	-1.3	23.1	25.6	24.8	21.8
RO	5.1	14.9	20.9	22.6	20.0
SI	8.9	20.7	24.2	28.8	29.5
SK	10.8	18.3	22.9	26.9	29.1
FI	3.4	26.5	27.7	27.4	29.9
SE	2.3	24.1	24.2	24.7	26.4
NO	7.1	29.2	32.3	33.9	36.4
EA	1.7	24.6	26.6	27.0	26.3
EU	1.9	24.0	25.9	26.5	25.9

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BE	7.3
BG	4.1
CZ	8.0
DK	3.5
DE	5.7
EE	4.4
IE	8.6
EL	-0.4
ES	2.4
FR	2.6
HR	2.9
IT	1.6
CY	4.9
LV	4.3
LT	7.3
LU	13.1
HU	9.8
MT	12.1
NL	7.4
AT	5.8
PL	9.8
PT	7.0
RO	9.9
SI	13.5
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Sources: Laeven and Valencia (2008) and EU Commission

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Sources: IMF Members' Financial Data; GDP from World Bank

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2/ GDP of respective country in indicated year.

3/ Some non-Europen countries also received limited additional financial support, such as Mexico.

Many European countries at high risk

Table 6 Countries at sustainability risk, European Commission analysis

Risk matrix for EU countries	Short term (1 year) (S0)	Medium term (2031 horizon) (S1 and DSA)	Long term (2070 horizon) (S2)
High risk	Belgium Spain France Hungary Italy Cyprus Latvia Portugal Romania Slovakia Finland	Belgium Spain France Italy Portugal Romania Slovenia Slovakia	Belgium Luxembourg Romania Slovenia Slovakia
Medium risk		6 countries (including the Netherlands)	16 countries (including all large countries)
Low risk	15 countries	12 countries (including Germany)	5 countries

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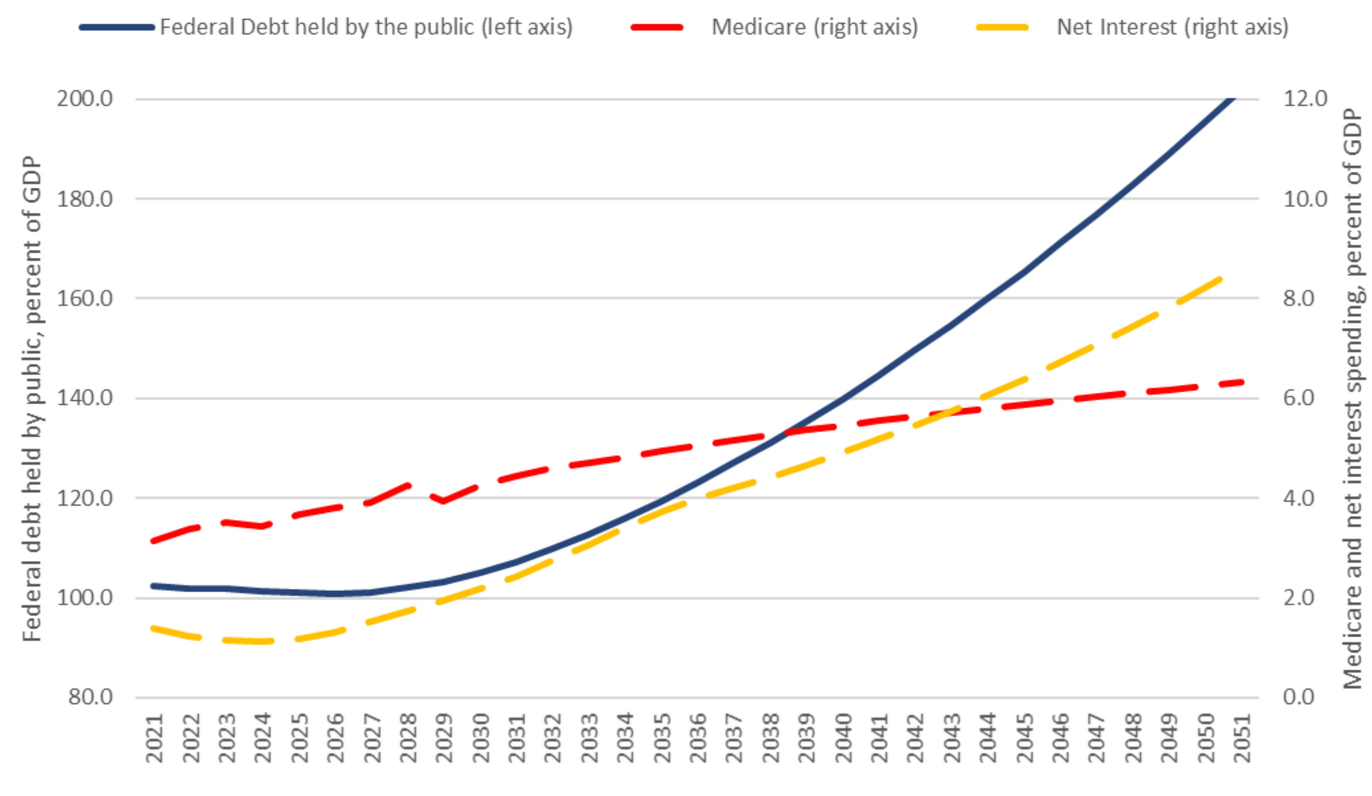
US' own assessment pretty blunt

Assumption of return



Source: United States, Congressional Budget Office (March 2021)

IMF assessment identifies significant vulnerabilities

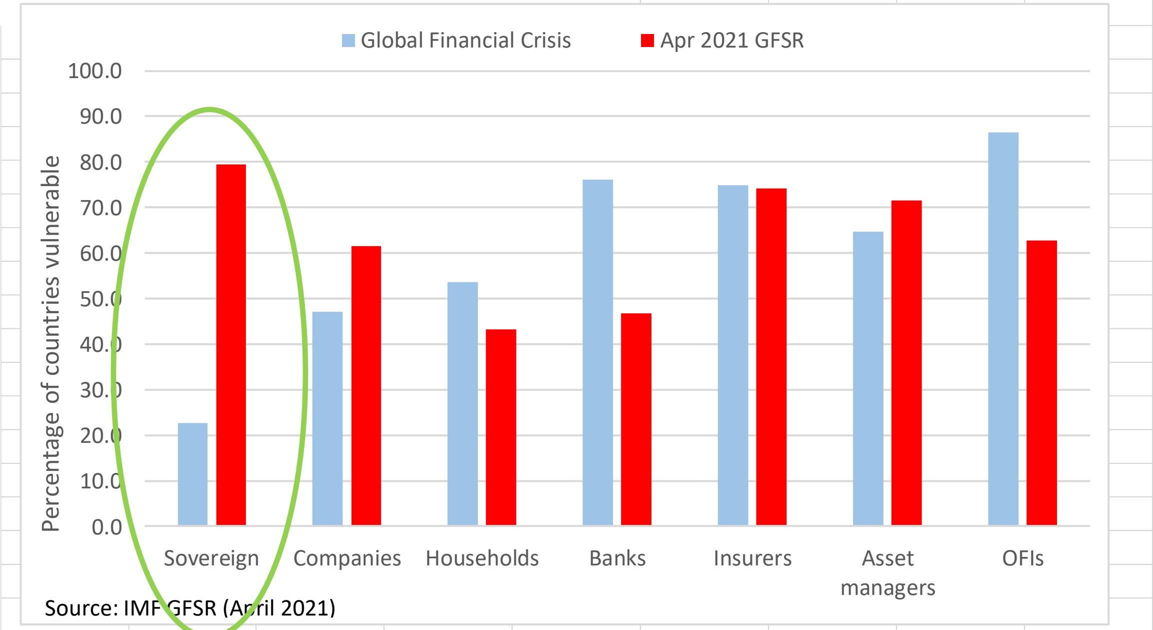
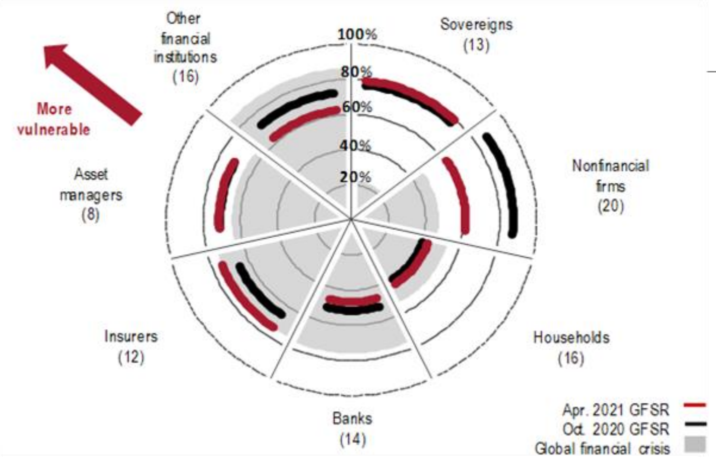


Figure 2.11 Global financial vulnerabilities, by sector

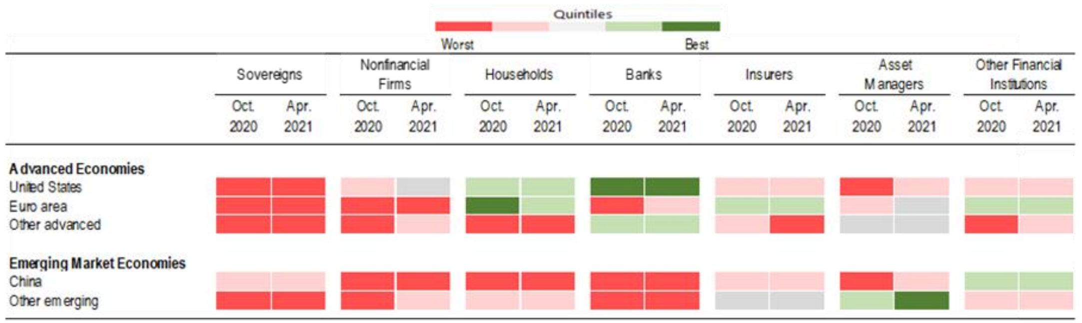
Figure 1.1.1. Global Financial Vulnerabilities

Vulnerabilities remain elevated across the large firms of the nonbank financial sector and amid rising debt levels in the sovereign sector, while improved liquidity conditions in the corporate sector have tempered near-term risks for large firms.

1. Proportion of Systemically Important Economies with Elevated Vulnerabilities, by Sector
(Percent of countries with high and medium-high vulnerabilities, by GDP or assets; numbers of countries, in parentheses)



2. Financial Vulnerabilities by Sector and Region

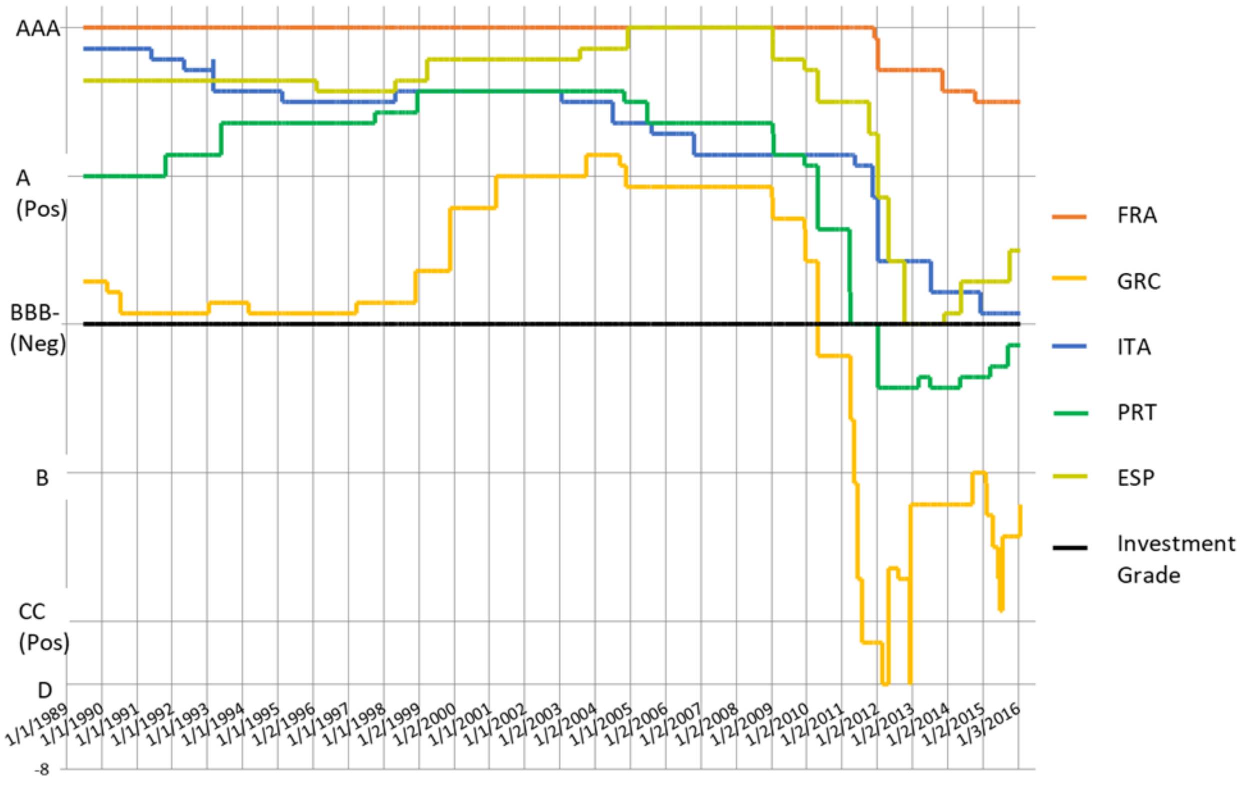


Sources: Banco de Mexico; Bank for International Settlements; Bank of Japan; Bloomberg Finance L.P.; China Insurance Regulatory Commission; European Central Bank; Haver Analytics; IMF, Financial Soundness Indicators database; Reserve Bank of India; S&P Global Market Intelligence; S&P Leveraged Commentary and Data; Securities and Exchange Commission of Brazil; Securities and Exchange Board of India; WIND Information Co.; and IMF staff calculations.

Note: Panel 1 is based on 29 jurisdictions with systemically important financial sectors. Vulnerabilities are by GDP for sovereigns, households, and nonfinancial firms; and by assets for banks, asset managers, other financial institutions, and insurers. "Global financial crisis" reflects the maximum vulnerability value during 2007–08. In panel 2, dark red shading indicates a value in the top 20 percent of pooled samples (advanced and emerging market economies pooled separately) for each sector during 2000–20 (or the longest sample available). Dark green shading indicates values in the bottom 20 percent. In panels 1 and 2, for households, the debt service ratio for emerging market economies is based on all private nonfinancial firms and households. In panel 2, a change in data sources for India and a related reorganization of the data for India led—due the relative ranking used in the methodology—to some changes in the values for other emerging markets compared to the values reported in the October 2020 GFSR. "Other advanced" economies are Australia, Canada, Denmark, Hong Kong Special Administrative Region, Japan, Korea, Norway, Singapore, Sweden, Switzerland, and the United Kingdom. "Other emerging" market economies are Brazil, India, Mexico, Poland, Russia, and Turkey.

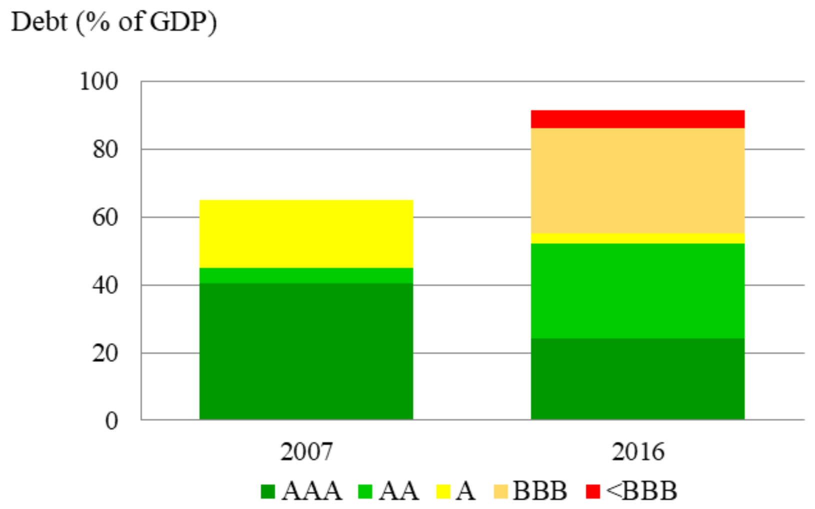
Government “black swans” possible

Chart 8.6 Rating History of selected European Countries



Source: Standard & Poors.

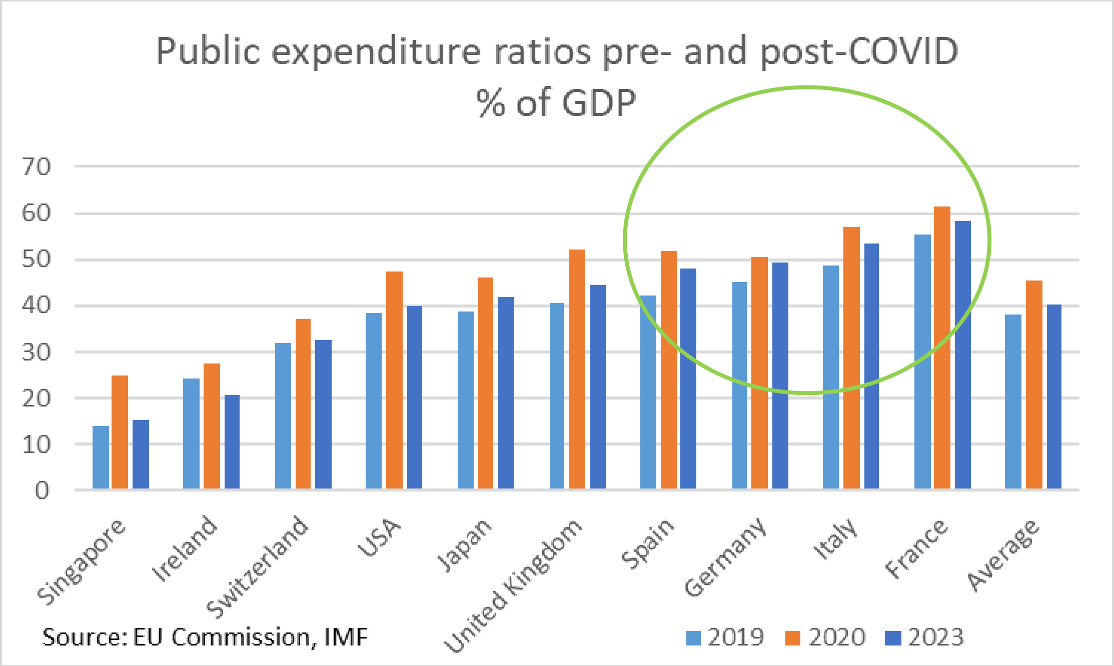
Chart 8.7 Euro area Debt Rating, 2007 vs 2016



Sources: S&P, own calculations.

Risks from high public spending

- Spending ratios significantly higher than pre-COVID
- Often too high to be financeable
- Not competitive
- Credibility of fiscal frameworks?



Euro area fiscal position not safe (debt excludes EU debt)

Euro area (20) (as a percentage of GDP)	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
				Autumn 2022 forecast		
Gross debt	85.7	99	97.1	93.6	92.3	91.4
Primary balance	1	-5.5	-3.6	-1.9	-1.9	-1.4
Interest expenditure	1.6	1.5	1.5	1.6	1.8	1.9
Net lending (-)	-0.6	-4	-5.1	-3.5	-3.7	-3.7
Total expenditure	46.9	53.5	52.3	50.5	50.3	49

Data retrieved from: Autumn 2022 Economic Forecast: The EU economy at a turning point. Retrieved from: https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/economic-forecasts/autumn-2022-economic-forecast-eu-economy-turning-point_en#documents

Some countries at serious risk of fiscal crisis

2023	General government (as percentage of GDP)		
Belgium	55.6	-5.8	107.9
Germany	49.1	-3.1	66.3
Spain	47.9	-4.3	112.5
France	58.1	-5.3	110.8
Italy	53.3	-3.6	143.6
Netherlands	46.8	-4	52.4
Portugal	45.5	-1.1	109.1
United Kingdom	44.4	-4.4	N/A
Japan	42	-4.7	261.1
United States	40.1	-6.7	121.9

Data retrieved from: Autumn 2022 Economic Forecast: The EU economy at a turning point. Retrieved from: https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/economic-forecasts/autumn-2022-economic-forecast-eu-economy-turning-point_en#documents

Spending in emerging economies much lower

Table 3.1 General government expenditure, 2019-2020, % of GDP

	2019	2020
Advanced countries	38.6	47.4
Emerging countries	31.8	35.0
Asia		
China	34.1	37.0
India	27.1	31.0
Indonesia	16.4	18.2
Philippines	21.7	25.1
Singapore	14.1	26.6
Thailand	21.8	25.3
Russian Federation	33.9	38.8
Latin America		
Argentina	38.3	41.6
Brasil	37.3	42.7

Source: IMF Fiscal Monitor (April 2021)

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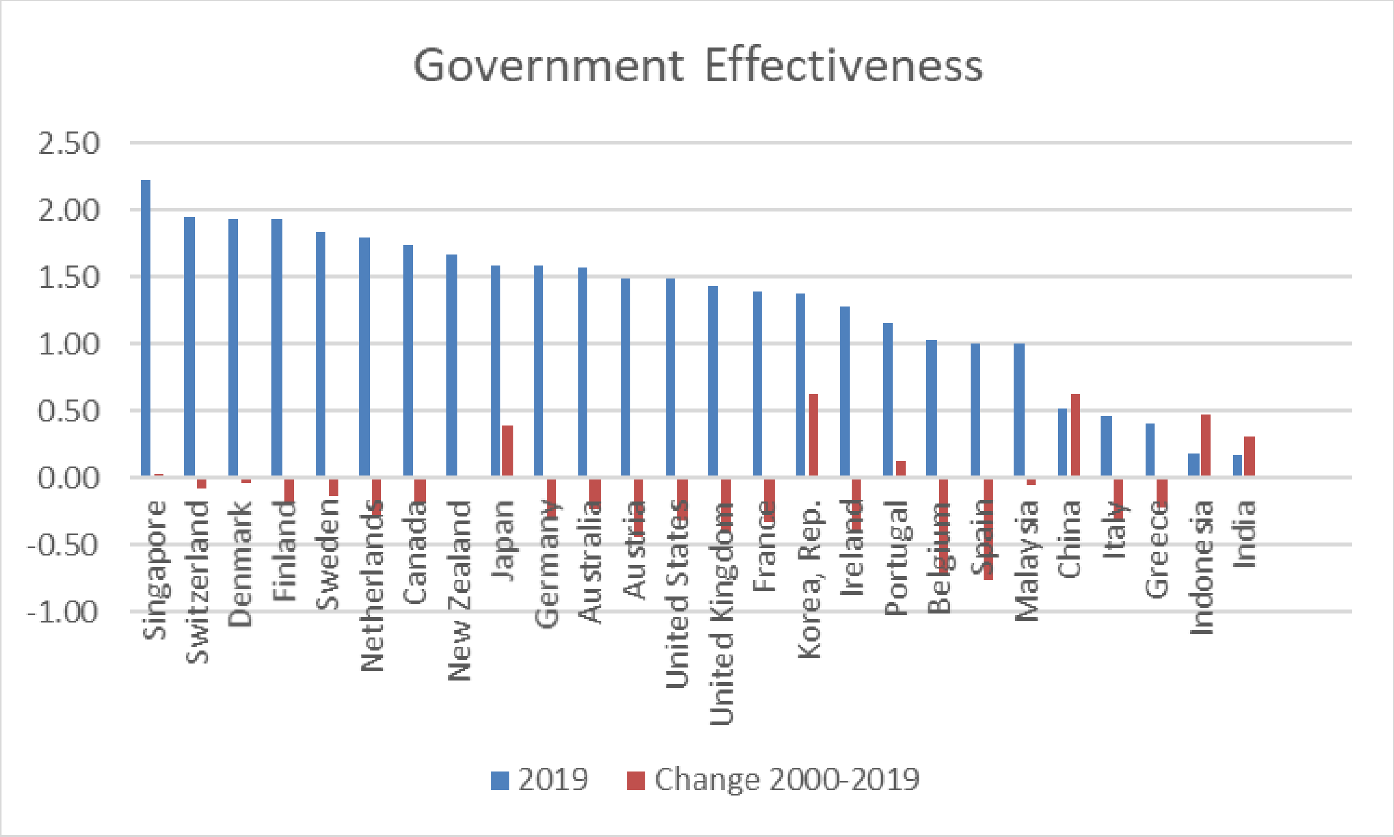
Growth potentially lower

Framework conditions and rules of the game worsening?
- Interventionism

Decarbonisation

Zombification

Protectionism



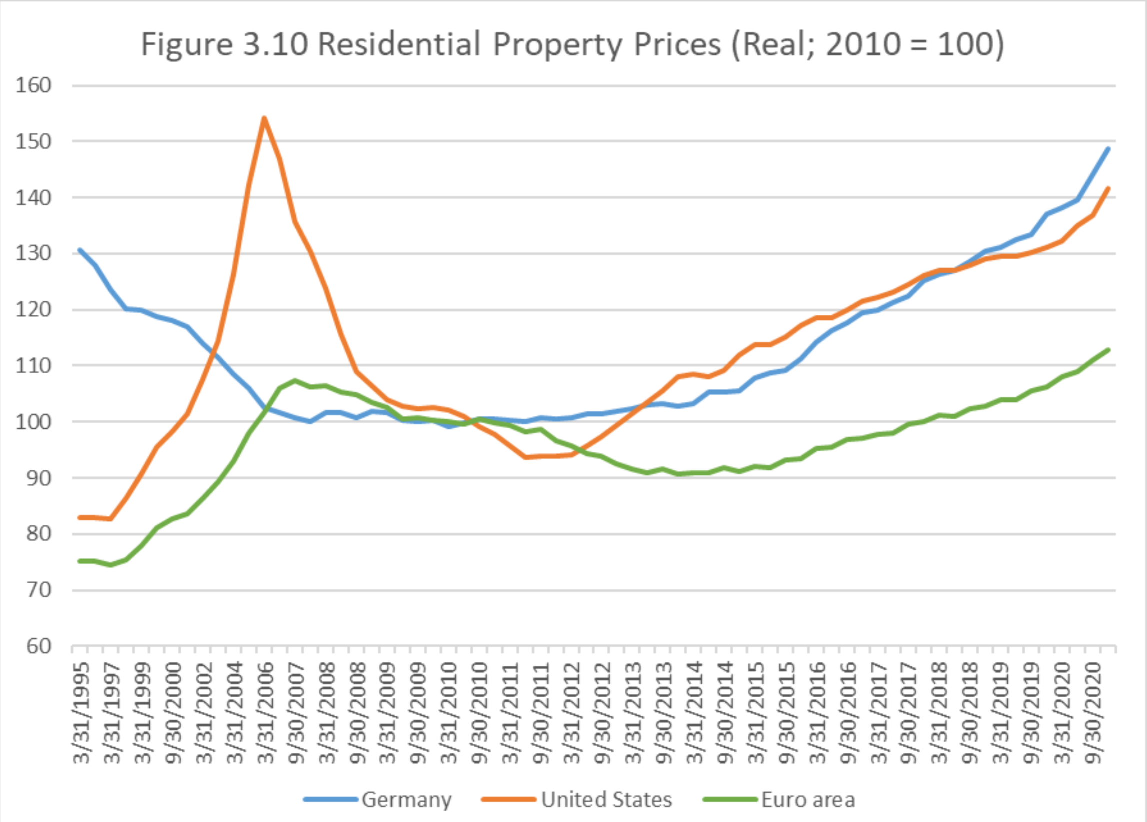
Financial distortions and financial stability risks

Excessive risk taking, credit growth plus asset price booms imply risk of financial busts

Central bank balance sheets and expectations by governments and financial industry

Money overhang and decline in money velocity

Demand, supply and monetary factors in place for more persistent inflation?



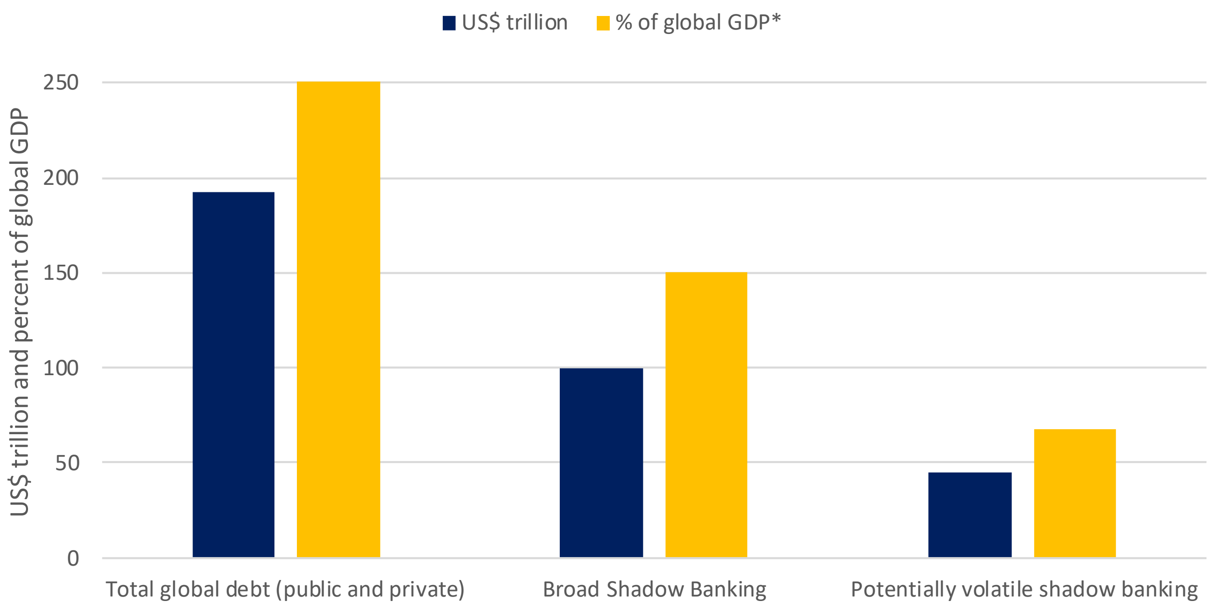
Source: BIS

High international credit, rising role of potentially run-prone non-banks

Table 3.2 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)



Sources: IMF, 2018 GFSR (debt), BIS (size of shadow banking). 'Broad Shadow Banking' refers to credit/assets managed by non-bank financial sector in FSB member countries (85% of global GDP). 'Pot. volatile' implies potentially run-prone.

Figure 3.15 Total global debt and the role of shadow banking

4 Scenarios for Debt Reduction

High debt and fiscal risks, notably in largest economies; not much prospect of decline it seems.

Debt will have to come down at some point, at the latest when financing conditions tighten significantly.

Scope of adjustment and reform needed is manageable, within historic ranges

Four scenarios:

1. Consolidation and reform desirable, likely for many
2. Debt restructuring, a realistic option?
3. Financial repression for long but stable?
4. Risk scenario: Destabilization

Scenario 1: Consolidation and reform

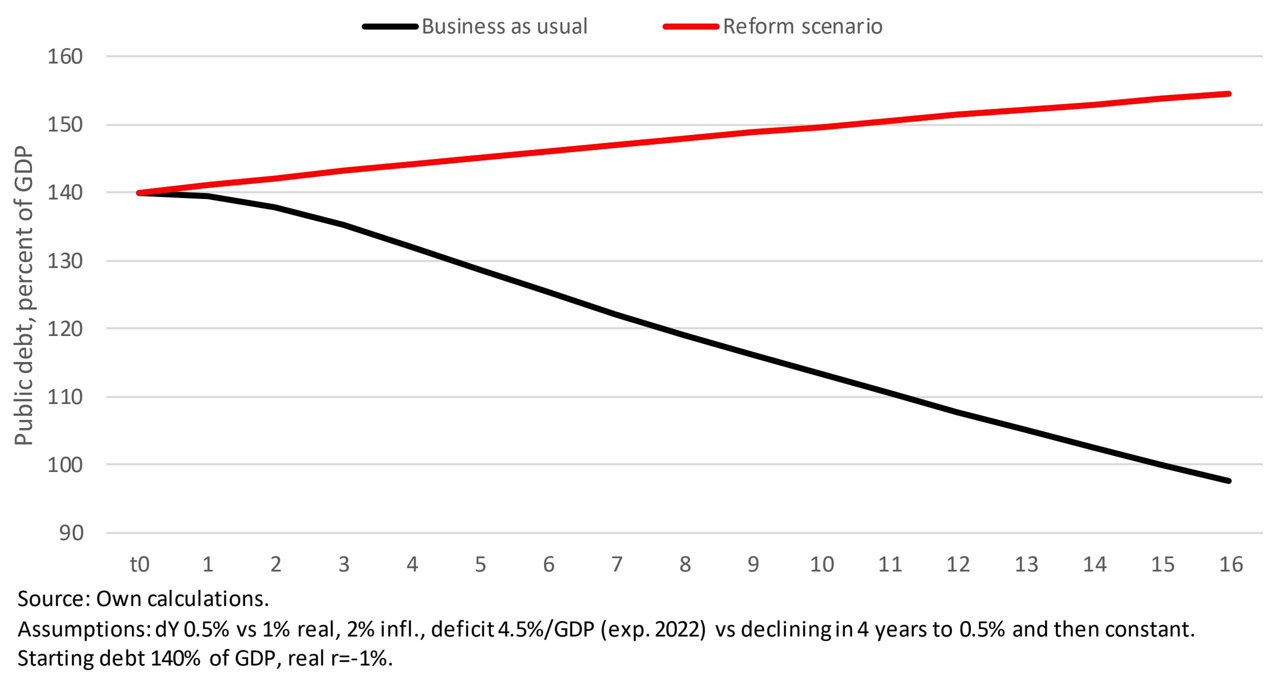


Figure 4.1 Consolidation vs "no reform" in a high-debt country, public debt in % of GDP

- Many countries dit it in 1980s, 1990s, 2010s
- More adjustment than needed today
- Very good fiscal, economic and distributional outcomes

Scenario 2 Debt restructuring/workouts

Reduction in debt burden through lower interest rate, stretched out repayment, lower principal (haircut)

Legally complicated (litigation), financially complicated especially for bonded debt (many holders, CACs), politically costly (shame effect)

Formats: Paris club (official industrial), London club (private), common framework (G20, two main bilateral + others)

Experience: small countries work (Greece, Africans)

Large countries: legally possible, economically and financially with huge risks of spillovers (doom loop, confidence effects and sudden stops) and (global and shifting) instability, alternative monetisation

Scenario 3: Financial repression ongoing, transitory gains?

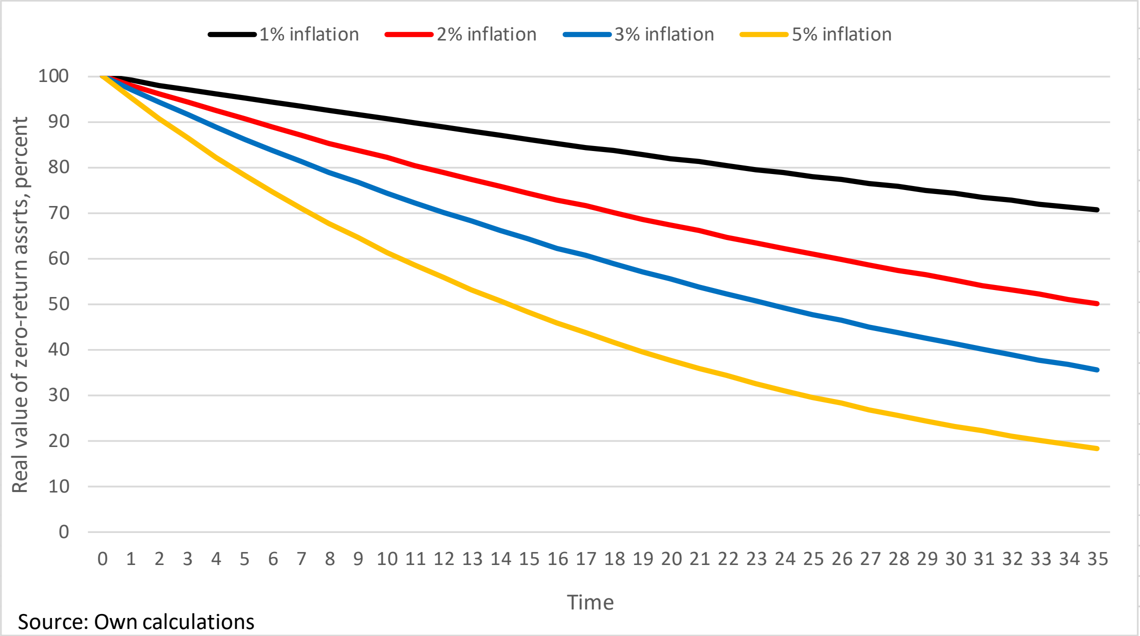


Figure 4.7 Effect of inflation on the real value of zero-return assets

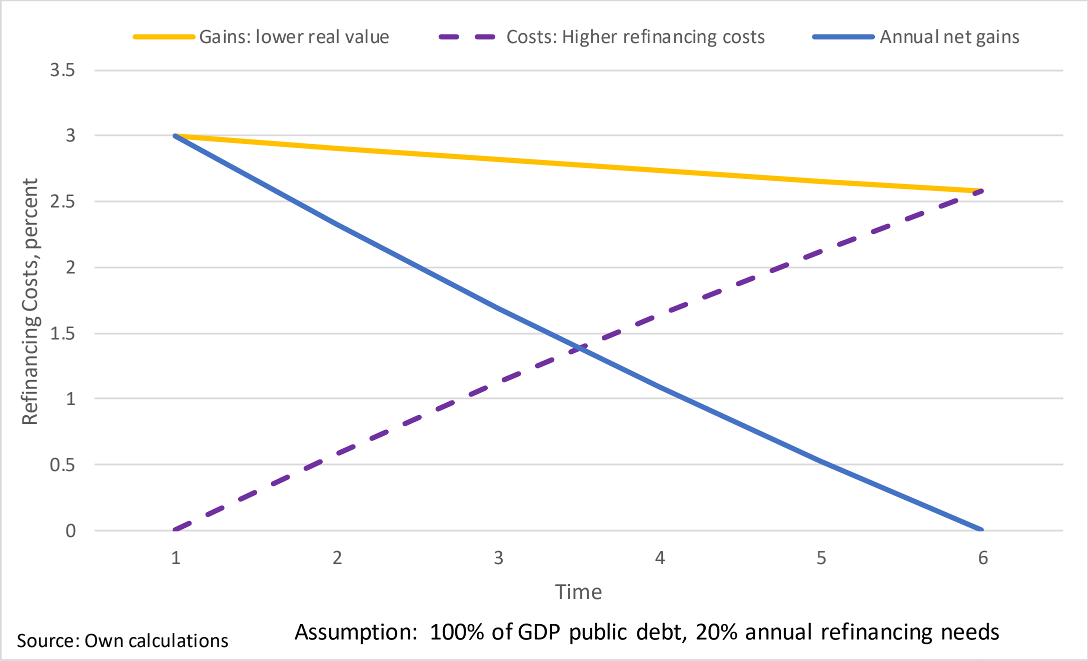
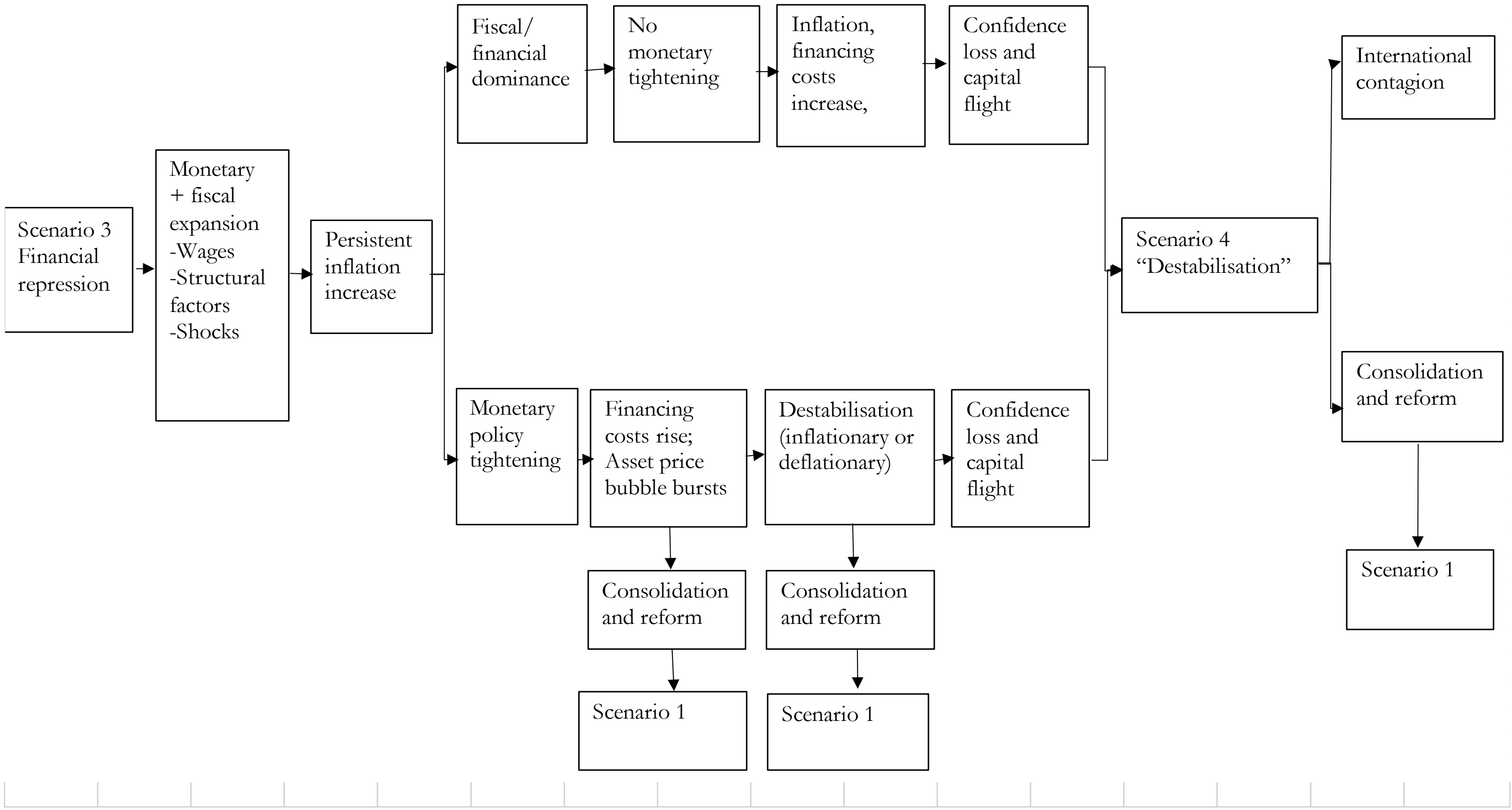


Figure 4.8 The transitory benefits of repression (3% higher inflation, 3% higher refinancing costs)

4. Risk scenario: destabilisation risks if CBs act and if they don‘t

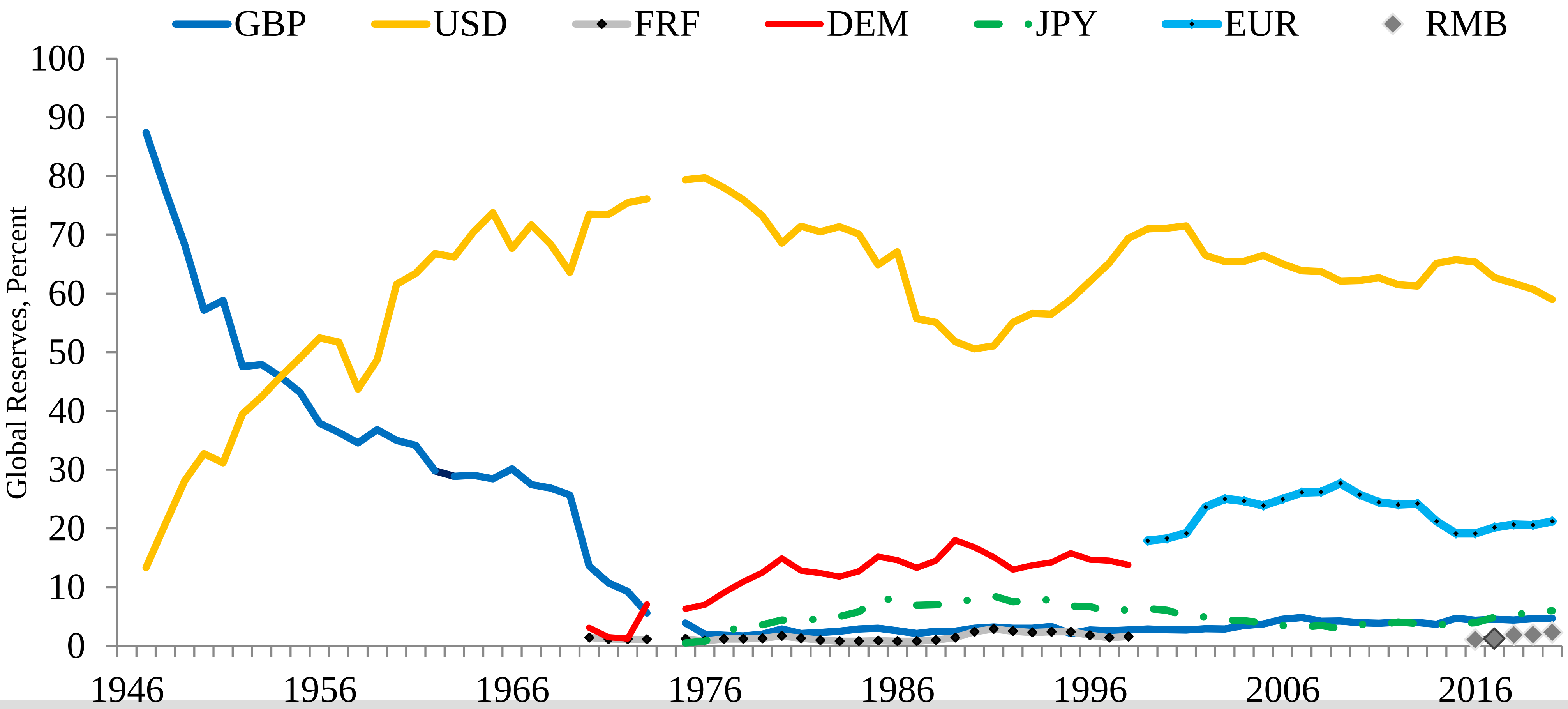
Figure 4.9 From financial repression to destabilisation



Confidence loss from policy errors, miscalculation and external shock possible

Political economy dynamics

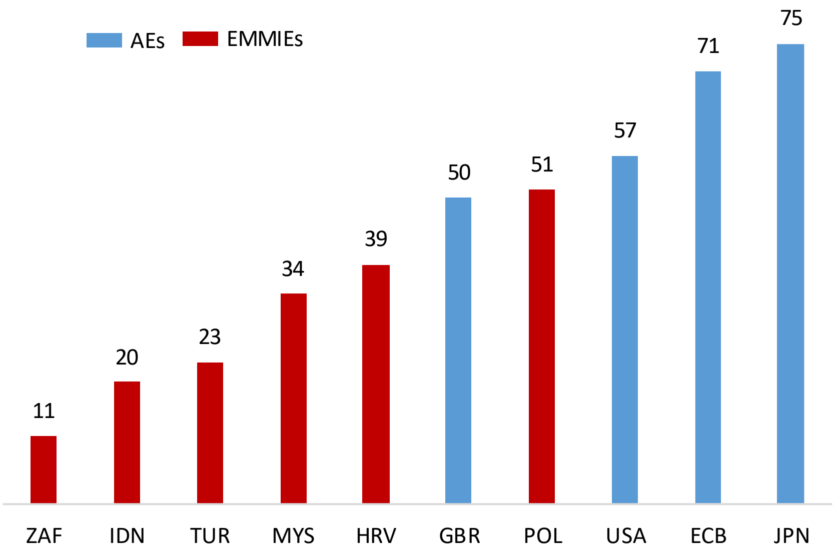
International reserve composition



Source: ECB; Updated from Eichengreen, Barry, Arnaud Mehl and Livia Chiţu (2017), How global currencies work, Princeton University Press

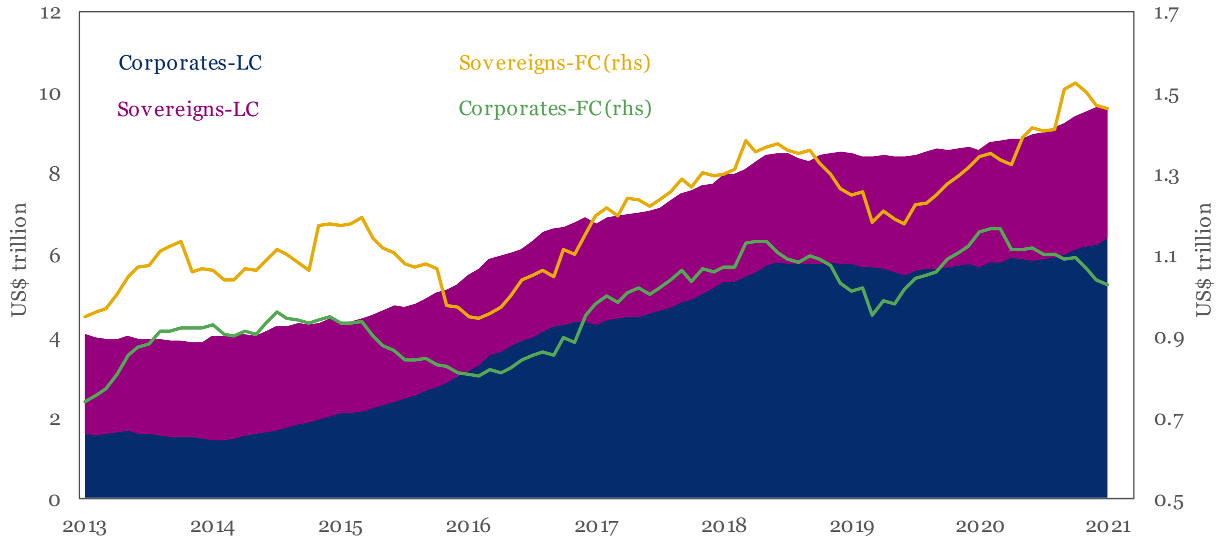
Emerging economies start resembling advanced countries on financing side

Figure 1.3. Central Bank Purchases of Government Debt
(Percent of central government marketable securities or debt issued since February 2020)



Sources: Country authorities; US Federal Reserve Economic Data; Haver Analytics; and IMF staff calculations.
Note: See the Methodological and Statistical Appendix for a description of the components of each country's ratio. Data labels use International Organization for Standardization country codes. AEs =

$ trillion, 12-month moving sum, EM32 corporate and sovereign bonds and loans, till end Jan-2021, includes short-term securities



Source: IIF

LC = local currency ; FC = foreign currency

Figure 3.17 Local vs. foreign currency debt favoured by EM corporate borrowers

+ Record low spreads

International dependence and contagion

Growing interdepence and spillovers via capital flows

Advanced country contagion possible (GFC!)

Emerging economies with mixed resilience, fiscal matters!

Safety nets from IOs, central banks + macro prudential measures

Table 3.3 The Size of International Support Programs

		Amount Approved (Billion SDRs)	Amount Approved (% of GDP) 1/	Additional European financial support (% of GDP)
Argentina	2018	40.7	11.2%	
Greece	2012	23.8	14.9%	135.9%
Portugal	2011	23.7	15.0%	30.1%
Ireland	2010	19.5	13.7%	25.6%
Argentina	2001	16.9	8.7%	
Korea	1997	15.5	3.8%	
Thailand	1997	2.9	2.6%	
Mexico	1995	12.1	4.9%	

Sources: IMF Members' Financial Data, GDP from World Bank.

1/ GDP of respective country in indicated year.

Key takeaways

- Recent geopolitical shocks and high inflation rates have exacerbated the urgency of dealing with public debts.
- 1: Best scenario: ambitious fiscal consolidation as part of a comprehensive, medium-term reform package.
- 2: Debt reconstructing: politically costly, difficult for large economies.
- 3: Negative interest rates: moderate debt reduction, restrains growth, can lead to destabilization BUT can buy time to implement fiscal reforms.
- 4: Destabilization: hurt the most vulnerable the most, raise of societal divisions and populism. The re-introduction of controls and protectionism will reduce everyone’s economic freedom.

Thank you

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"He who will not economize will have to agonize.“
Confucius