

# THE BALANCE OF PAYMENTS IV EXTERNAL DEBT ASSESSMENT "HOW MUCH GETS TOO MUCH?"



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## Roots of external financial crisis

Rising money supply  
+ large and cheap bank credit  
+ budget deficit

Inflationary pressures  
+ exchange rate overvaluation  
+ declining FX reserves + flight capital

Consumption > Savings =  
excessive absorption

Large spending on domestic  
and foreign goods  
= Mounting twin deficits

Balance of payments crisis

DEBT DEFAULT

ADJUSTMENT

IMF's financing +  
macroeconomic  
stabilization

- Exchange rate adjustment + control of the money supply: shrinking creation of reserve money + declining money multiplier of the deposit money banks + interest rate rise +  $\Delta$  reserve requirements
- Fiscal adjustment + cuts in public spending
- Structural measures to stimulate competitiveness



Debt restructuring + return to market access (?) <sup>2</sup>

## THE CURRENT ACCOUNT OF THE BALANCE OF PAYMENTS

- + Export of goods f.o.b.
- Imports of goods f.o.b.
- = **Trade balance**
- + Exports of non-financial services
- Imports of non-financial services
- + Investment income (credit)
- **Interest payments**
- + Private unrequited transfers
- + Official unrequited transfers
- = **Current account balance**

From less liquid items  
toward more liquid items!



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## The capital account of the balance of payments

### Capital account

- + (-) Direct investment (non debt creating flows)
- + (-) Portfolio investment (NDCF)
- + **LT capital inflows (private + official)**
- **LT debt repayments (bonds/loans)**
- + **ST capital inflows (private + official)**
- **ST debt repayments**
- + (-) Net errors and omissions
- + (-) Counterpart items
- + (-) Change in reserves
- = **Capital account balance**
- + **Exceptional Financing (or arrears)**

From less liquid items  
to more liquid items!



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Exports	5000		
Portfolio	150		
LT K	1200		
Transfers	285		
Debt repayments	-1650		
ST K	350		
Current account			
FDI	325		
Imports	-6500		
Trade			
Services revenues	1200		
Interest payments	-750		
E&Os	-455		
Counterpart items	100		
Change in reserves			
CA/GDP%			
GDP	12500		
R/M ratio (months)			
Reserve level 12/2017	4500		

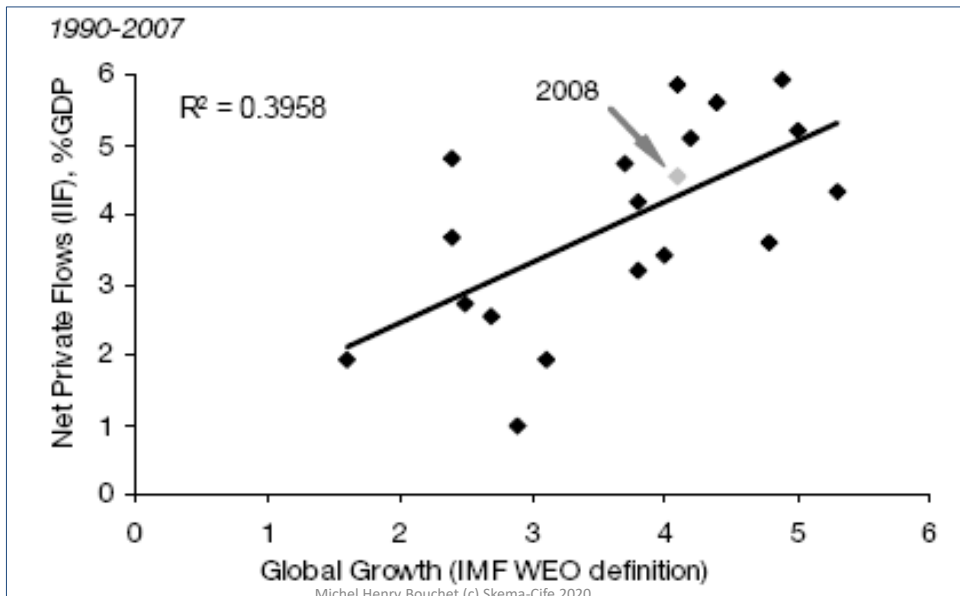
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Exports	5000
Imports	-6500
Trade	-1500
Services revenues	1200
Interest payments	-750
Transfers	285
Current account	-765
FDI	325
Portfolio	150
LT K	1200
Debt repayments	-1650
ST K	350
E&Os	-455
Counterpart items	100
Change in reserves	745
CA/GDP%	-6,12%
GDP	12500
R/M ratio (months)	6,9
Reserve level 12/2017	4500

## EXTERNAL FINANCING HELPS BOOSTING GDP GROWTH



IIF, Washington, D.C.

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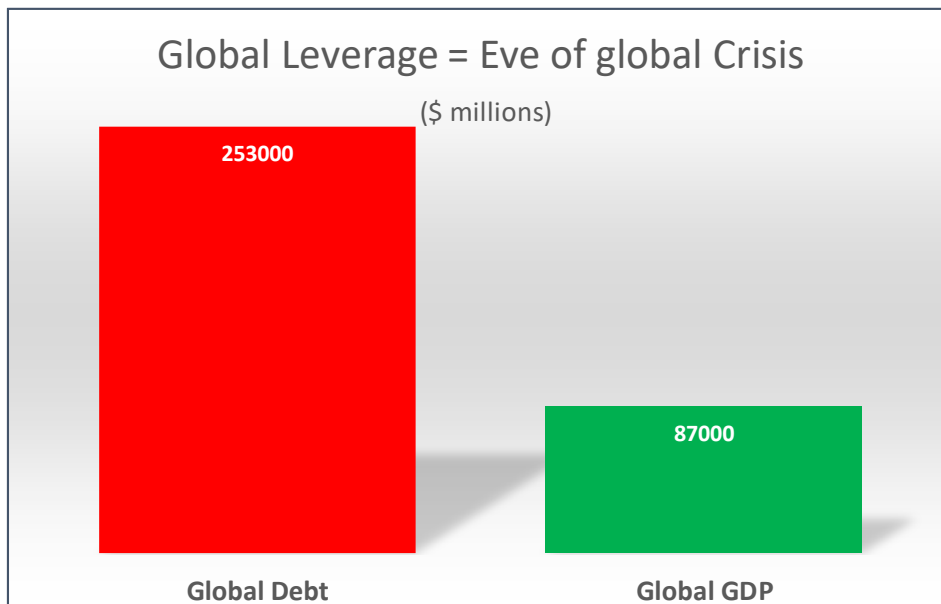
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## US FEDERAL FUNDS RATES 1950-2020



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## HOW MUCH IS TOO MUCH? >300%

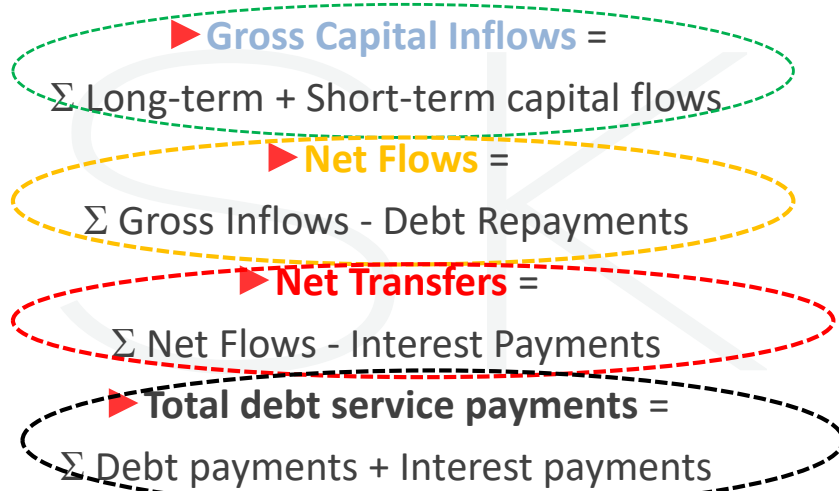


Source: IMF & IIF 2020

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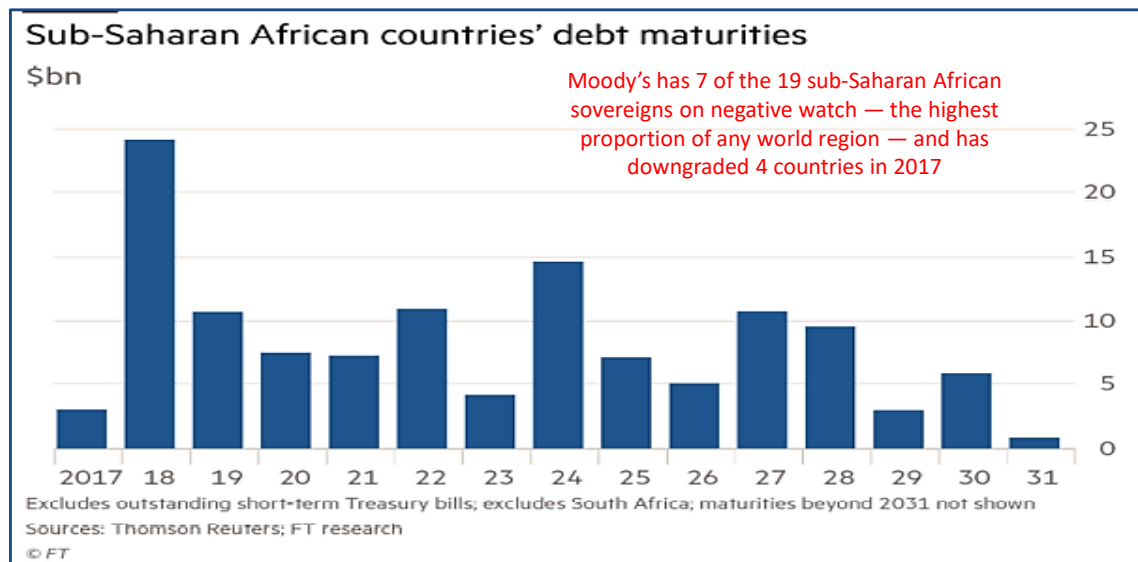
## WHY/WHEN DOES A FINANCIAL CRISIS ERUPT? GROSS AND NET FLOWS



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## SUB-SAHARAN AFRICA: CONCERNS OVER HIGH DEBT LEVELS AND CREDIT RISK RESONATE FOR 2018 AND BEYOND!



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# EXTERNAL DEBT ANALYSIS

## FLOWS

Balance of payments analysis and capital flight

- ▶ Liquidity (net flows)
- ▶ Sustainability of debt strategy (refinancing, market access, rescheduling, restructuring)

## STOCKS

Structure of debt by creditors, maturity (ST/LT), currency and interest rates (fixed/floating)

- ▶ Mismatch (interest rate, currency, maturity)
- ▶ Solvency ratios
- ▶ London Club debt : secondary market discounts
- ▶ Spread/margin over US T Bills
- ▶ CDS

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<b>Emerging Market Economies: Capital Flows</b>				
<i>\$ billion</i>				
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Capital Inflows</b>				
<u>Total Inflows, Net:</u>	<u>1269</u>	<u>1188</u>	<u>1079</u>	<u>1164</u>
<b>Private Inflows, Net</b>	1232	1156	1032	1112
Equity Investment, Net	668	626	657	675
Direct Investment, Net	545	548	540	560
Portfolio Investment, Net	124	78	117	114
Private Creditors, Net	564	530	375	437
Commercial Banks, Net	118	193	124	151
Nonbanks, Net	446	338	251	287
Official Inflows, Net	37	32	47	53
International Financial Institutions	5	-3	19	27
Bilateral Creditors	31	35	28	25
<b>Capital Outflows</b>				
<u>Total Outflows, Net</u>	<u>-1299</u>	<u>-1360</u>	<u>-1348</u>	<u>-1339</u>
Private Outflows, Net	-946	-825	-981	-950
Equity Investment Abroad, Net	-332	-403	-368	-381
Resident Lending/Other, Net	-614	-422	-613	-570
Reserves (- = Increase)	-352	-534	-367	-388
<b>Memo:</b>				
<u>Net Errors and Omissions</u>	<u>-246</u>	<u>-65</u>	<u>0</u>	<u>0</u>
<u>Current Account Balance</u>	<u>276</u>	<u>236</u>	<u>269</u>	<u>174</u>

Source: IIF

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## RISK MANAGEMENT AND BOP ANALYSIS

- + Export of goods f.o.b.
  - Imports of goods f.o.b.
  - = **Trade balance**
  - +/- Exports/Imports of non-financial services
  - Interest payments
  - + Investment income (dividends) credit/debit
  - + (-) Private/Official unrequited transfers
  - = **Current account balance**
  - +/- FDI
  - +/- Portfolio capital Flows
  - + LT Capital Inflows
  - Debt Servicing Payments
  - +/- ST Capital Flows
  - +/- Reserve Variation
- 

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## EXTERNAL DEBT ANALYSIS: THE DUAL FACE OF COUNTRY RISK

### Liquidity Risk

- ▶ Debt Service Ratio:  
( $P+I/X$ )
- ▶ Interest Ratio ( $I/X$ )
- ▶ Current account/GDP
- ▶ Growth rate of exports/  
Average external  
interest rate

### Solvency Risk

- ▶ Debt/Export ratio
- ▶ Debt/GDP ratio
- ▶ Debt/Reserves
- ▶ ST Debt/Total Debt
- ▶ ST Debt/Reserves
- ▶ Reserve/Import ratio

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## LIQUIDITY AND SOLVENCY THRESHOLDS

### Stock variables

► **Solvency** =  $\text{Debt/GDP} < 100\%$  (66% = EMCs)

Debt/Exports < 150%

Reserves/months of Imports > 6 months

### Flow variables

► **Liquidity** = Debt Service ratio < 33% of X

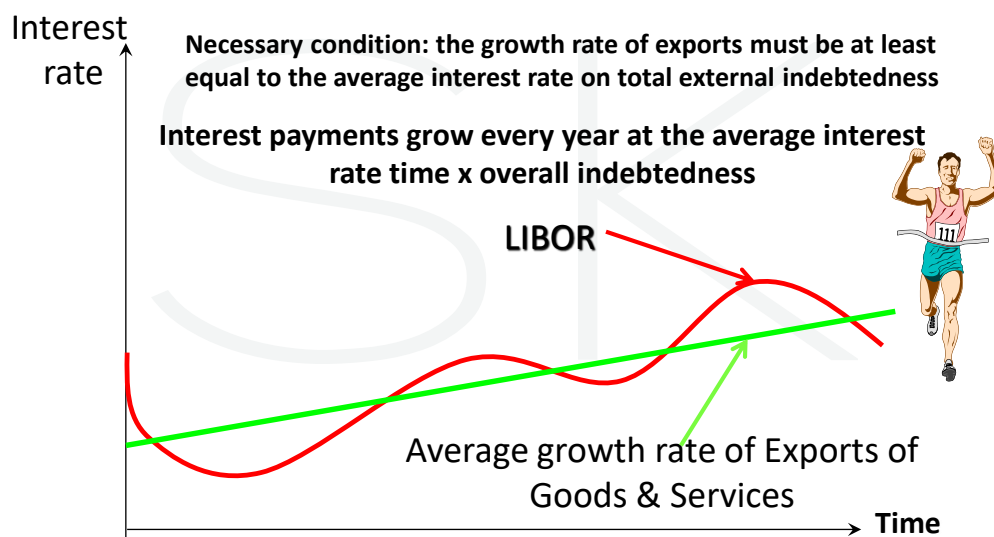
Interest/X ratio < 25%

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## EXTERNAL DEBT ANALYSIS I

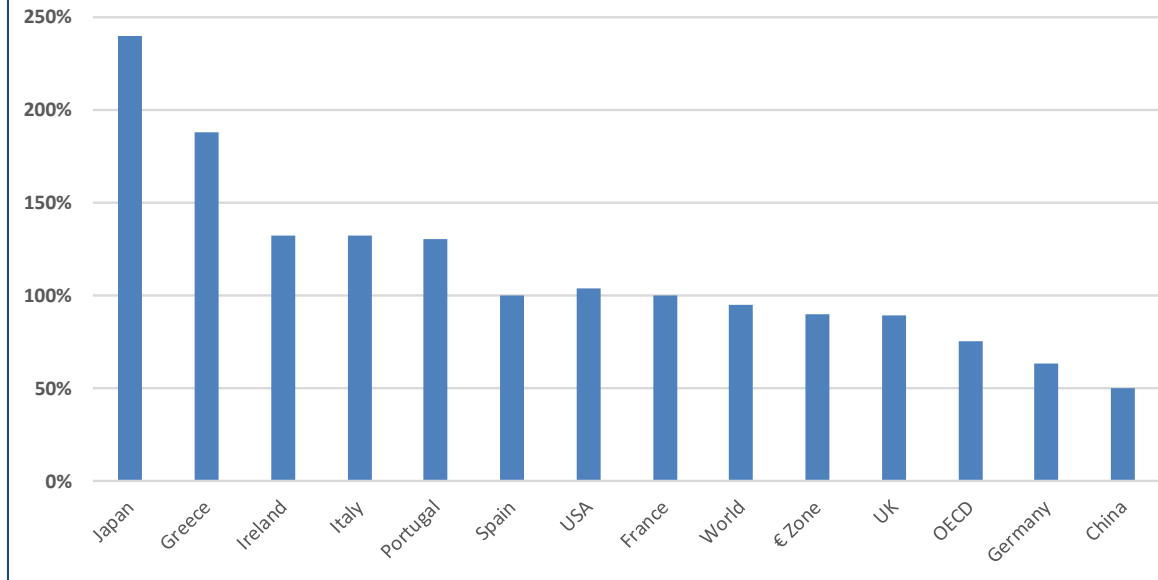
### How to stabilize the Interest/Export ratio?



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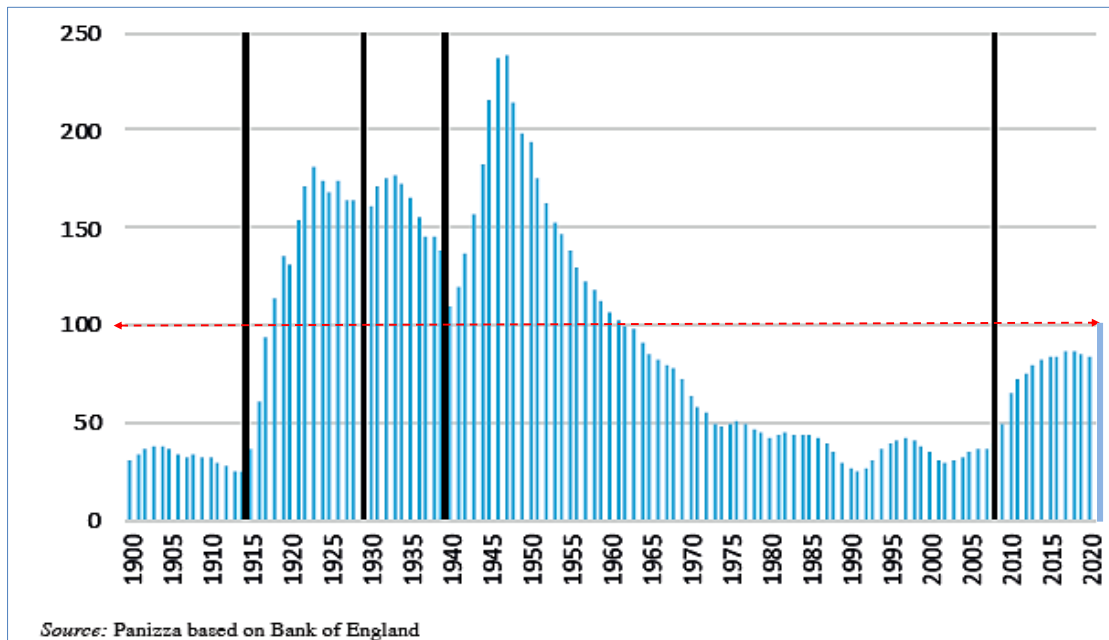
### Public Debt/GDP 2019



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### UK PUBLIC DEBT/GDP RATIO 1900-2020 (WARS AND CRISES)

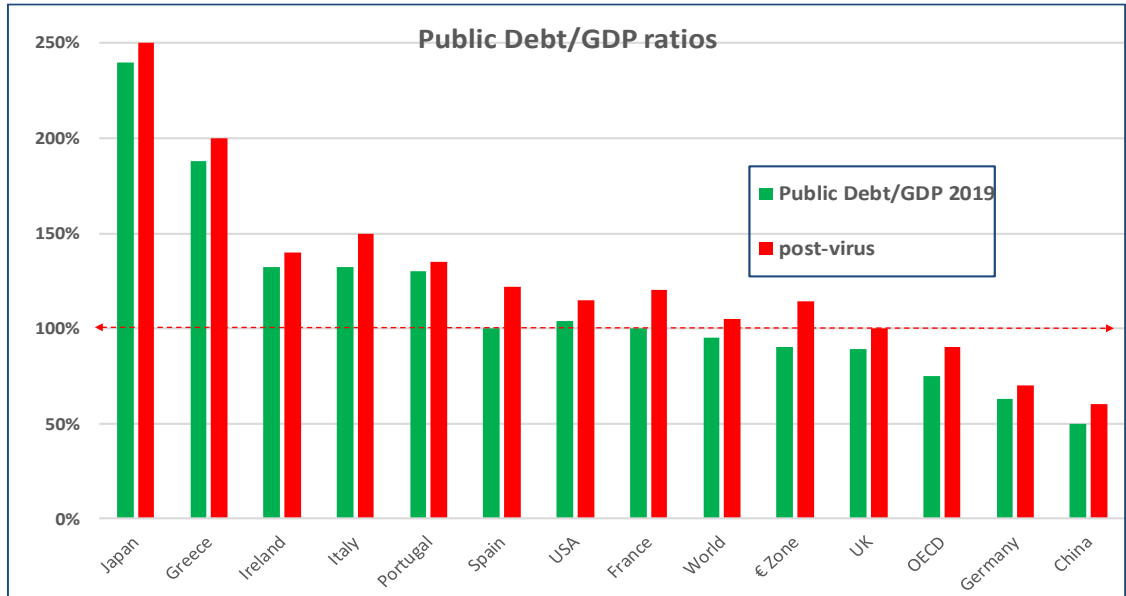


Source: Panizza based on Bank of England

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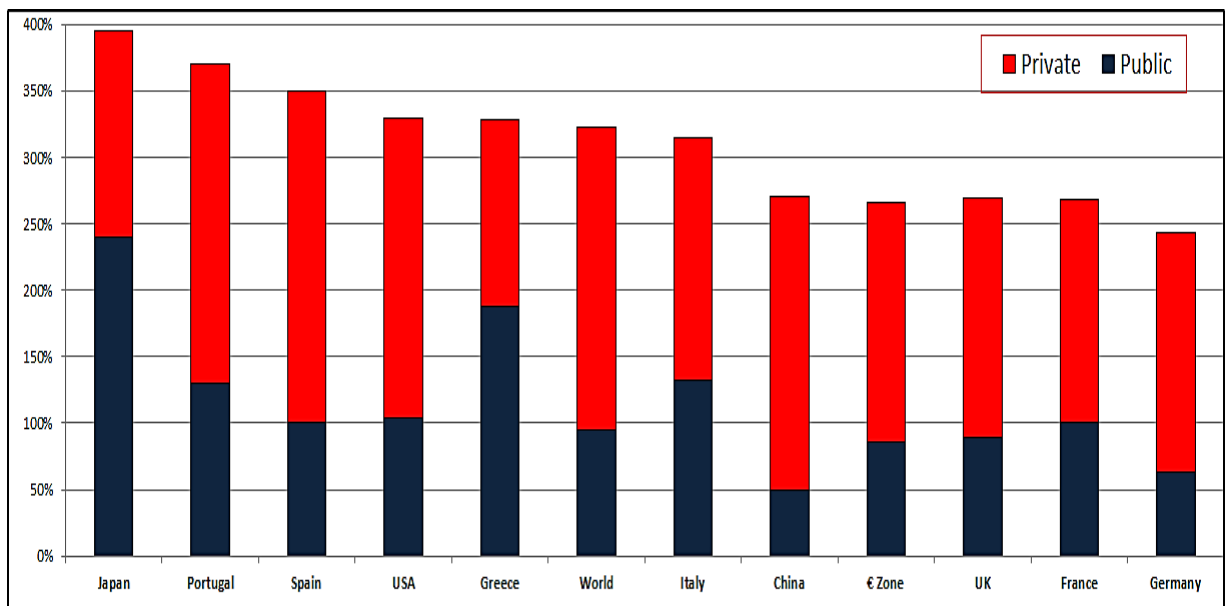
## THE BUDGETARY AND DEBT IMPACT OF THE CORONA VIRUS CRISIS



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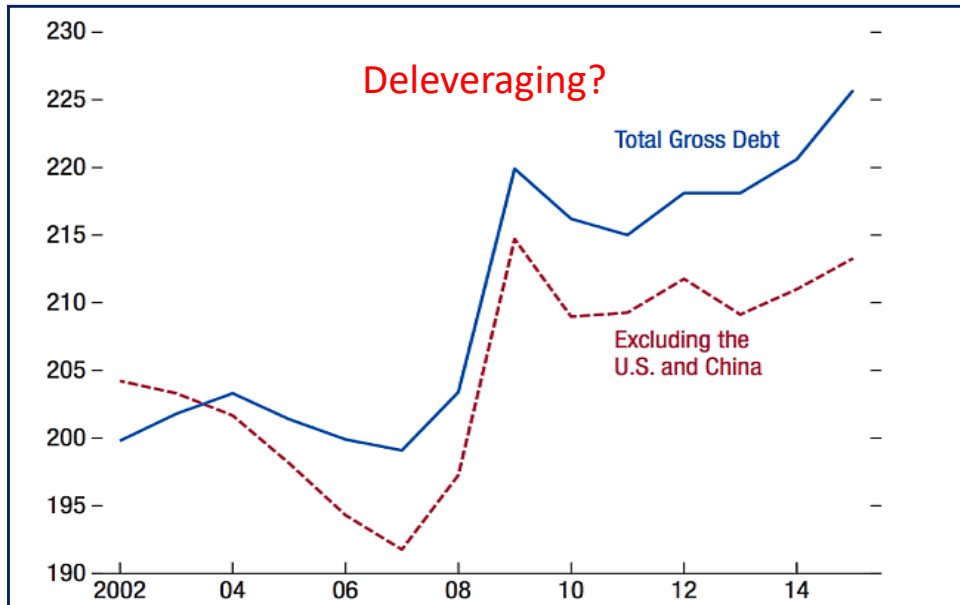
## HOW MUCH IS TOO MUCH?



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## GLOBAL PRIVATE SECTOR DEBT IN % OF GLOBAL GDP (COMPANIES AND HOUSEHOLDS)



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## US debt burden was even higher after World War II

US government debt (as a % of GDP)



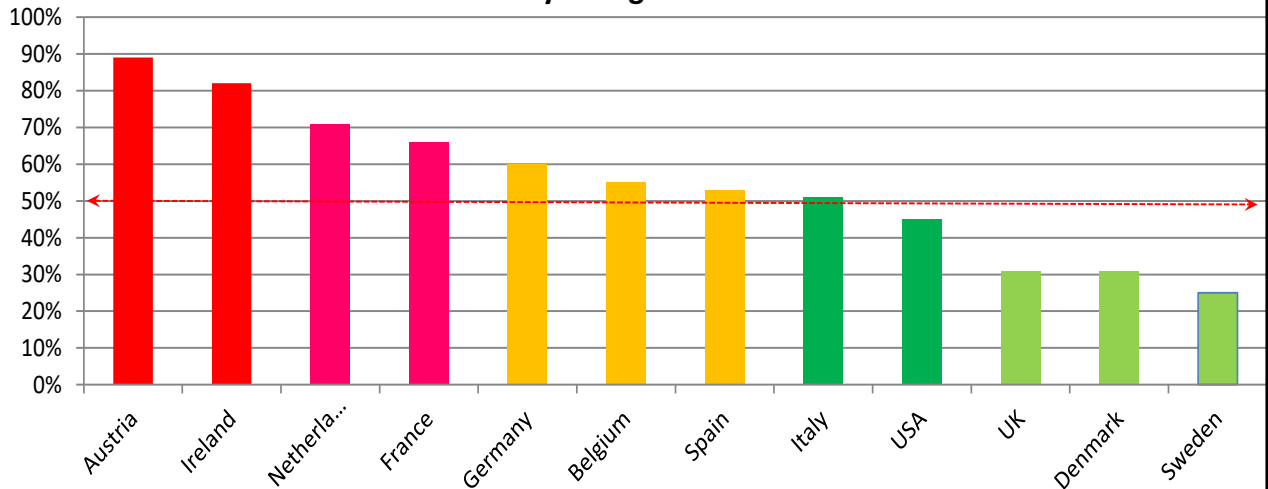
Sources: Reinhart & Rogoff; Federal Reserve  
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## CAPITAL MARKET GLOBALIZATION = INVESTMENT FUNDS AND RATING AGENCIES IN THE DRIVING SEAT

### Share of Public Debt held by foreign investors in 2017 %



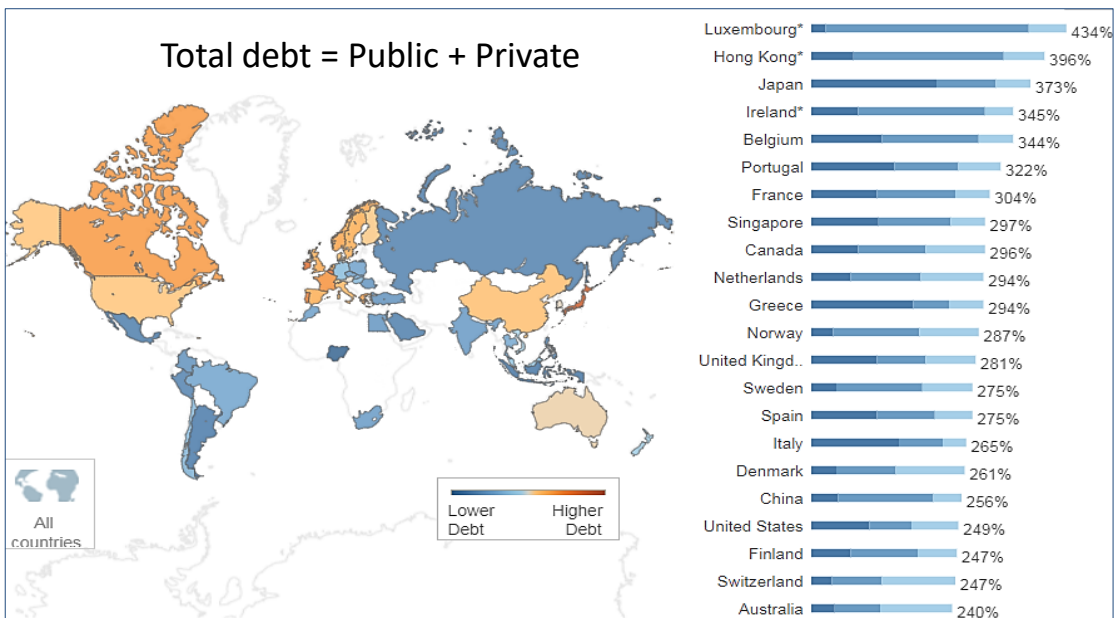
Source: FT, IMF, Natixis, US Treasury 2017

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## SOVEREIGN DEBT 2008-2018: NOT MUCH DELEVERAGING!

### Total debt = Public + Private

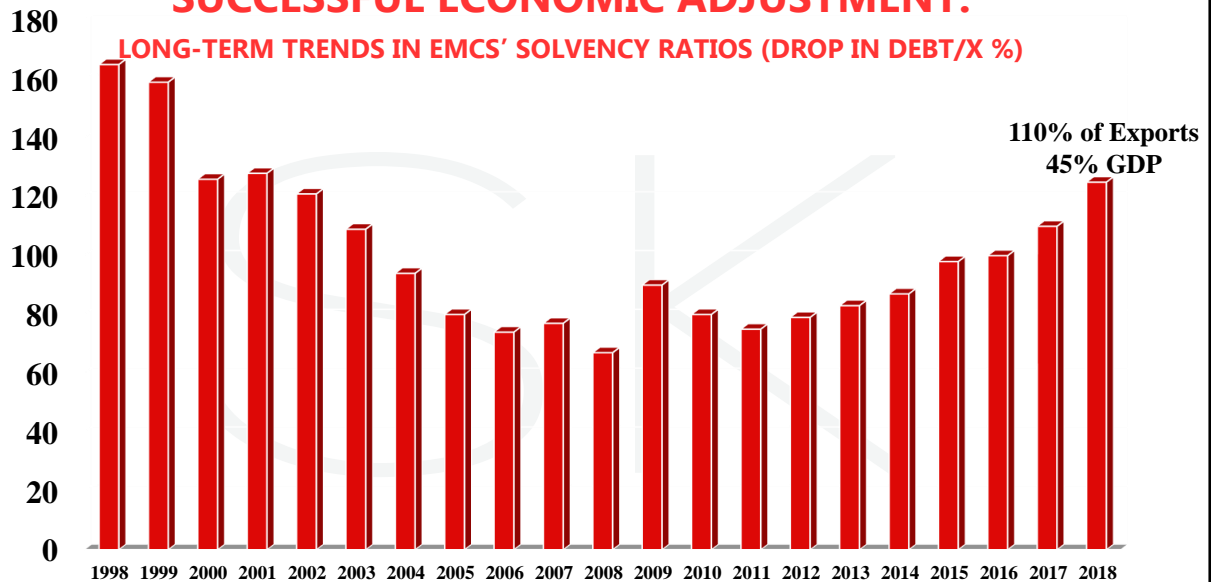


Source: McKinsey Global Institute 2018

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## SUCCESSFUL ECONOMIC ADJUSTMENT:



Source: IMF

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## TWO COUNTRIES = TWO DEBT TRAJECTORIES

### Solvencia

Public Debt/GDP= 100%

- ▶ Diversified export base
  - ▶ Diversified markets
  - ▶ Mainly official creditors
  - ▶ Long-term maturities= 12 years
    - ▶ Fixed rate for 80% of debt
    - ▶ Similar currency structure X revenues/liabilities
- = no mismatch!

### Liquidia




Public Debt/GDP= 100%

- ▶ Main export: hydrocarbons
- ▶ One main export destination: EU
- ▶ X revenues in €/debt payments in \$
  - ▶ Average debt maturity: 3 years
  - ▶ 66% of debt on floating rates
- ▶ Large and growing private debt (corporate, bank and households)
- ▶ Large reliance on private capital markets

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## EXTERNAL FINANCING PROFILES IN 2020

RATIOS	 VIETNAM	 GABON	 ECUADOR
1. CA/GDP	+2,2%	-4%	0,5%
2. Debt/GDP	47%	40%	43%
3. Coface	B/B	C/C	C/B
4. GDP pc \$	2200	7700	6500
5. R/M	2	5	2
6. FDI/GDP	9%	7%	<1%
7. Doing Bus/190	69	169	123

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## DEBT DATA?

- [http://www.bis.org/statistics/annex\\_map.htm](http://www.bis.org/statistics/annex_map.htm)
- <http://stats.bis.org/statx/srs/table/A6?c=TN&p=20144>
- <http://www.clubdeparis.org/en/communications/page/as-of-31-december-2015>

Morecco

Table1 Joint BIS-IMF-OECD-World Bank Statistics on External Debt (mill. US\$)

Data are in millions	2016Q1	2016Q2	2016Q3	2016Q4	2016Q1
<b>A1. Loans and other credits (Debt of)</b>					
01_Cross-border loans, by BIS reporting banks	8,289	8,768	8,882	8,125	8,514
02_o/w to nonbanks	6,868	6,040	6,235	6,059	6,344
03_Official bilateral loans, total	...	...	...	...	...
04_o/w aid loans	...	...	...	...	...
05_o/w other	...	...	...	...	...
06_Multilateral loans, total	6,766	7,113	7,266	...	...
07_o/w IMF	0	0	0	...	...
08_o/w other institutions	6,766	7,113	7,266	7,621	7,726
09_Insured export credit, Berne Union	7,807	7,721	7,660	7,144	7,173
10_o/w short term	4,613	4,634	4,690	4,421	4,484
11_SDR allocations	774	790	788	778	781
<b>A2. Loans and other credits (Debt due within a year)</b>					
12_Liabilities to BIS banks (cons.), short term	2,674	2,301	2,429	2,378	2,617
13_Multilateral loans, IMF, short term	...	...	...	...	...
<b>B1. Debt securities (All maturities)</b>					
14_Debt securities held by nonresidents	...	6,442	...	...	...
<b>B2. Debt securities (short term, original maturity)</b>					
15_Debt securities held by nonresidents	...	132	...	...	...
<b>C. Supplementary information on debt (liabilities)</b>					
16_International debt securities, all maturities	6,864	7,863	8,120	8,037	8,102
17_o/w issued by nonbanks	6,664	7,662	7,820	7,738	7,802
18_International debt securities, short term	64	66	66	64	0
19_o/w issued by nonbanks	64	66	66	64	0
20_Paris Club claims (ODA)	...	...	...	...	...
21_Paris Club claims (non ODA)	...	...	...	...	...
22_Liabilities to BIS banks, locational, total	12,828	12,632	12,676	12,784	13,237
23_Liabilities to BIS banks, consolidated, total	10,834	10,309	10,568	10,783	11,184
<b>D. Memorandum items: selected foreign assets</b>					
24_International reserves (excluding gold)	17,864	19,762	21,680	22,254	24,327
25_o/w SDR holdings	770	786	773	783	778
26_Portfolio investment assets	...	...	...	...	...
27_Cross-border deposits with BIS rep. banks	4,838	5,767	6,071	5,372	6,787
28_o/w deposits from nonbanks	2,804	2,689	2,472	2,333	2,484

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## Solvencia - case study

BALANCE of PAYMENTS (\$ million)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Trade Balance</b>	-1 130	-411	-1 577	-2 494	-4 000	-1 050	1 040	1 270	300	-500	-1 500	-4 000	-3 850	750
Merchandise exports	4 882	6 151	7 910	8 061	9 000	10 500	11 000	12 000	13 800	14 000	13 500	12 000	13 650	15 000
Merchandise imports	-6 012	-6 562	-9 487	-10 555	-13 000	-11 550	-9 960	-10 730	-13 500	-14 500	-15 000	-16 000	-17 500	-14 250
Balance on Services, Income & Transfers	-699	-529	-1 044	-2 201	-3 281	-2 107	-75	629	403	465	-184	-1 967	-3 010	-1 263
Services & income receipts	824	1 008	1 464	1 652	1 447	1 629	2 251	2 594	2 730	2 590	2 769	2 244	2 150	2 750
Exports of services	697	879	1 130	1 152	1 286	1 500	1 571	1 714	1 800	1 750	1 929	1 714	1 500	1 850
Interest receipts	124	120	317	486	146	70	650	850	900	800	800	500	600	850
Other services & income receipts	2	9	17	15	15	59	30	30	30	40	40	30	50	50
Services & income payments	-1 737	-1 832	-3 133	-4 448	-5 197	-4 352	-3 077	-2 796	-3 207	-2 825	-3 452	-4 611	-5 385	-4 913
Imports of services	-902	-984	-1 423	-1 583	-1 950	-1 733	-1 494	-1 610	-2 025	-2 175	-2 250	-2 400	-2 625	-2 138
Interest payments	-831	-835	-1 681	-2 831	-3 197	-2 460	-1 433	-1 006	-992	-450	-802	-1 711	-2 235	-2 224
Other services & income payments	-4	-12	-29	-33	-50	-160	-150	-180	-190	-200	-400	-500	-525	-551
Transfers, net	214	295	625	594	469	616	750	830	880	700	500	400	225	900
Private transfers, net	103	182	320	394	269	565	600	630	630	450	400	300	125	650
Official transfers, net	111	113	305	200	200	51	150	200	250	250	100	100	100	250
<b>Current Account</b>	-1 829	-940	-2 621	-4 695	-7 281	-3 157	965	1 899	703	-35	-1 684	-5 967	-6 860	-513

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