



An Roinn Airgeadais
Department of Finance

The economics of public debt

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Presentation at IPA

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Birds-eye view

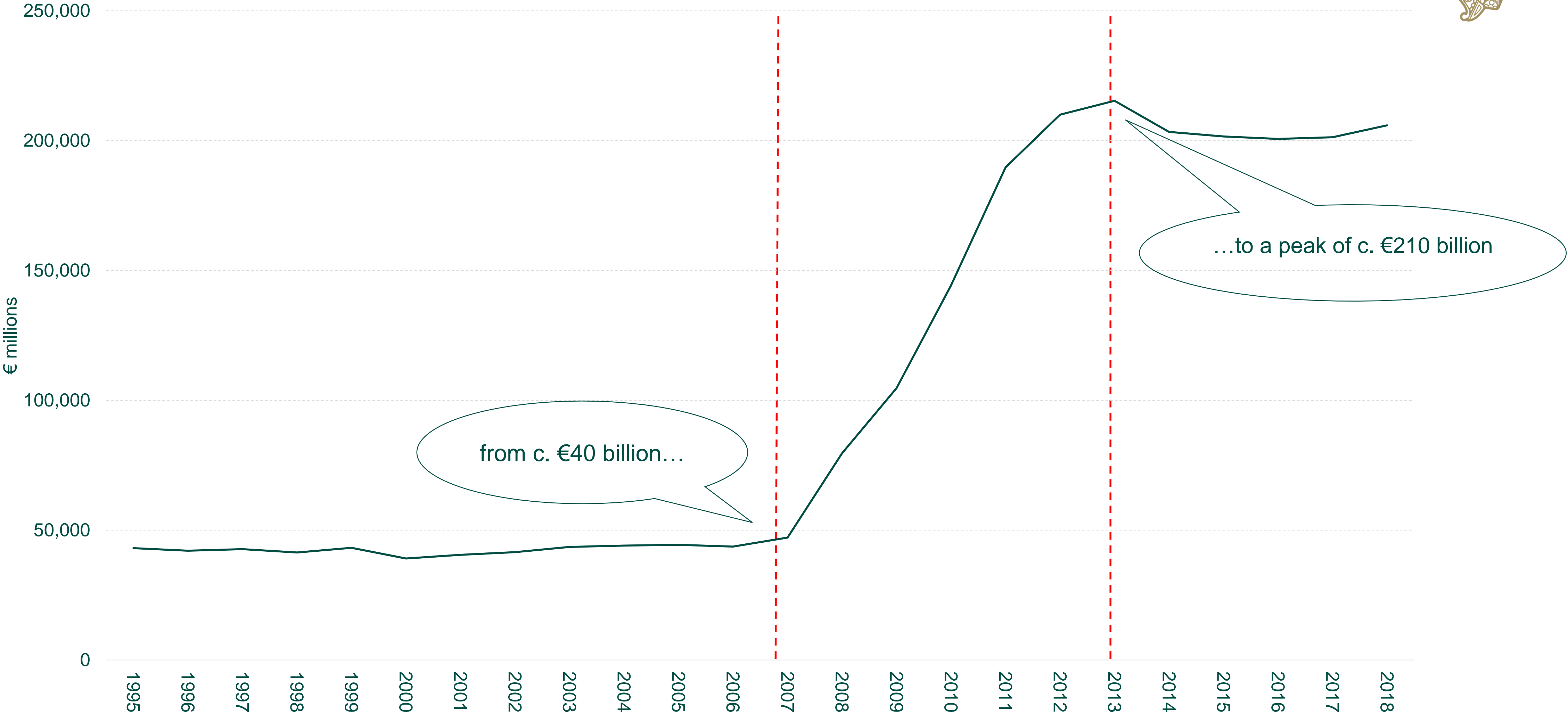


- Irish public debt: facts and figures
 - evolution
 - interest bill
- Irish public debt dynamics in international perspective
- Beyond the headline figures - structure of debt
 - maturity profile
 - composition
 - interest rate
- Economic aspects of public debt
 - debt accumulation: “ $r - g$ ”
 - impact on economic growth
 - debt sustainability toolkit
- Conclusion

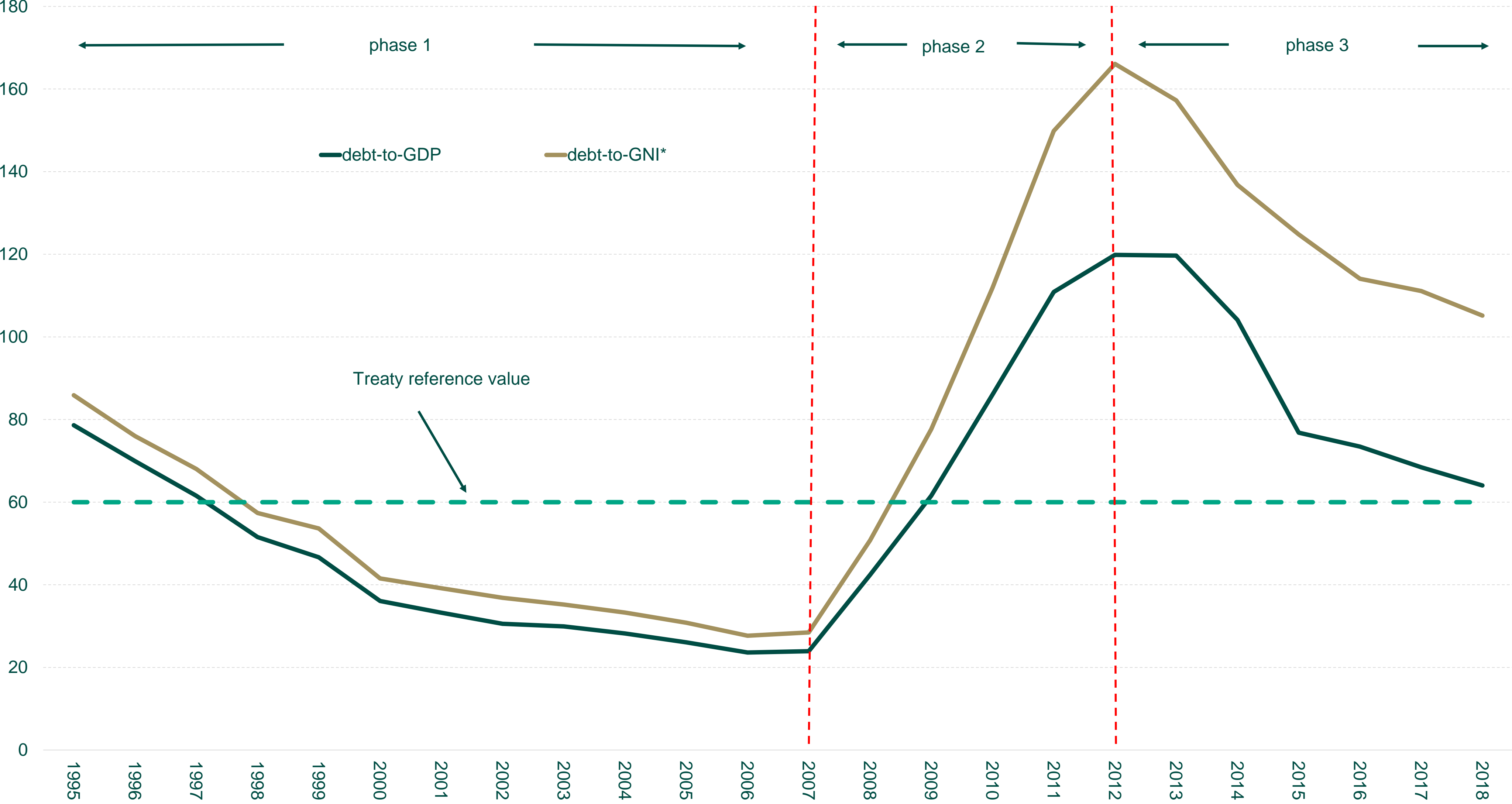


Irish public debt: facts and figures

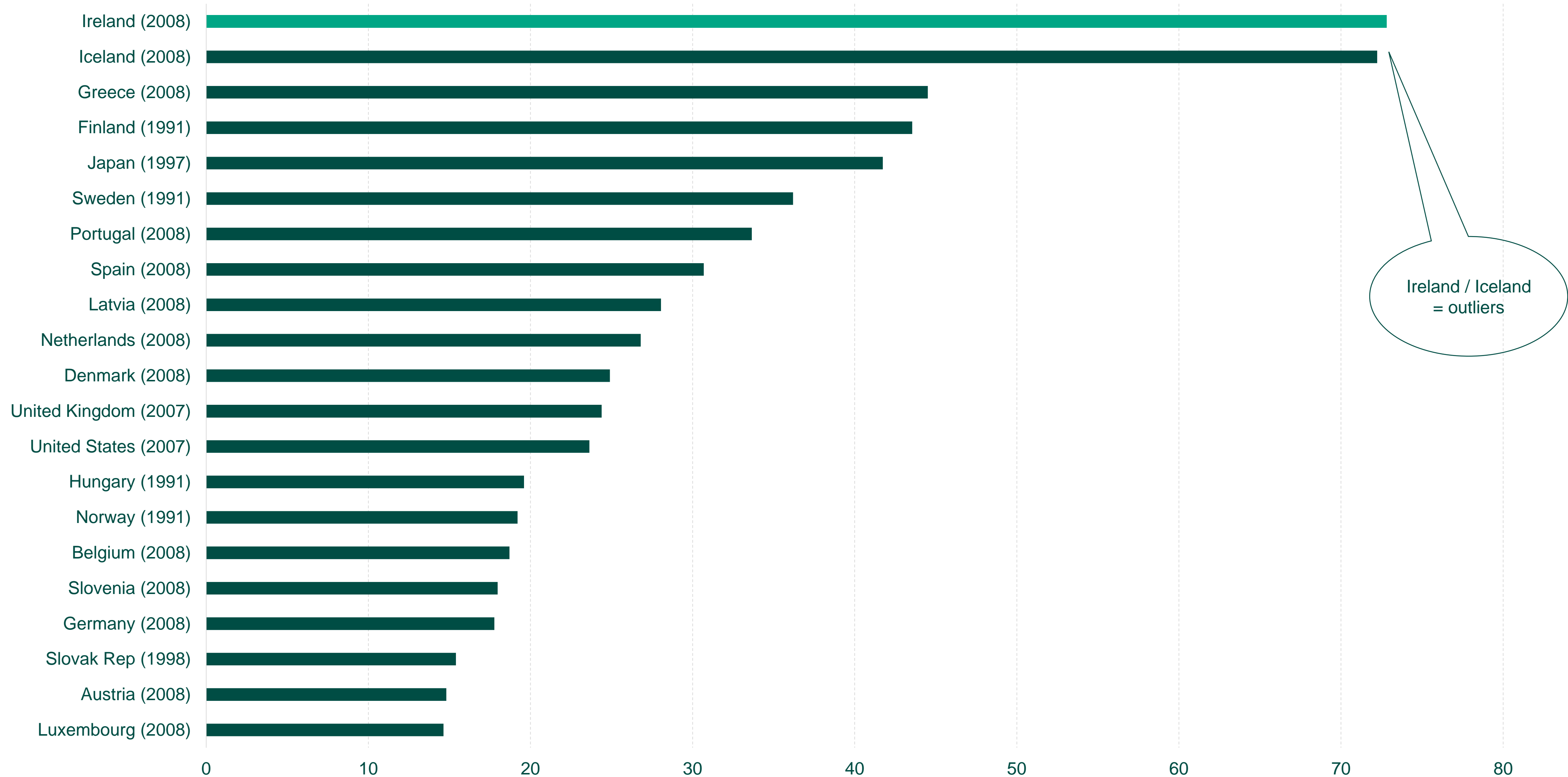
Stock of public debt (GG) has increased sharply



Debt-to-income ratios (GNI* and GDP) follow similar path

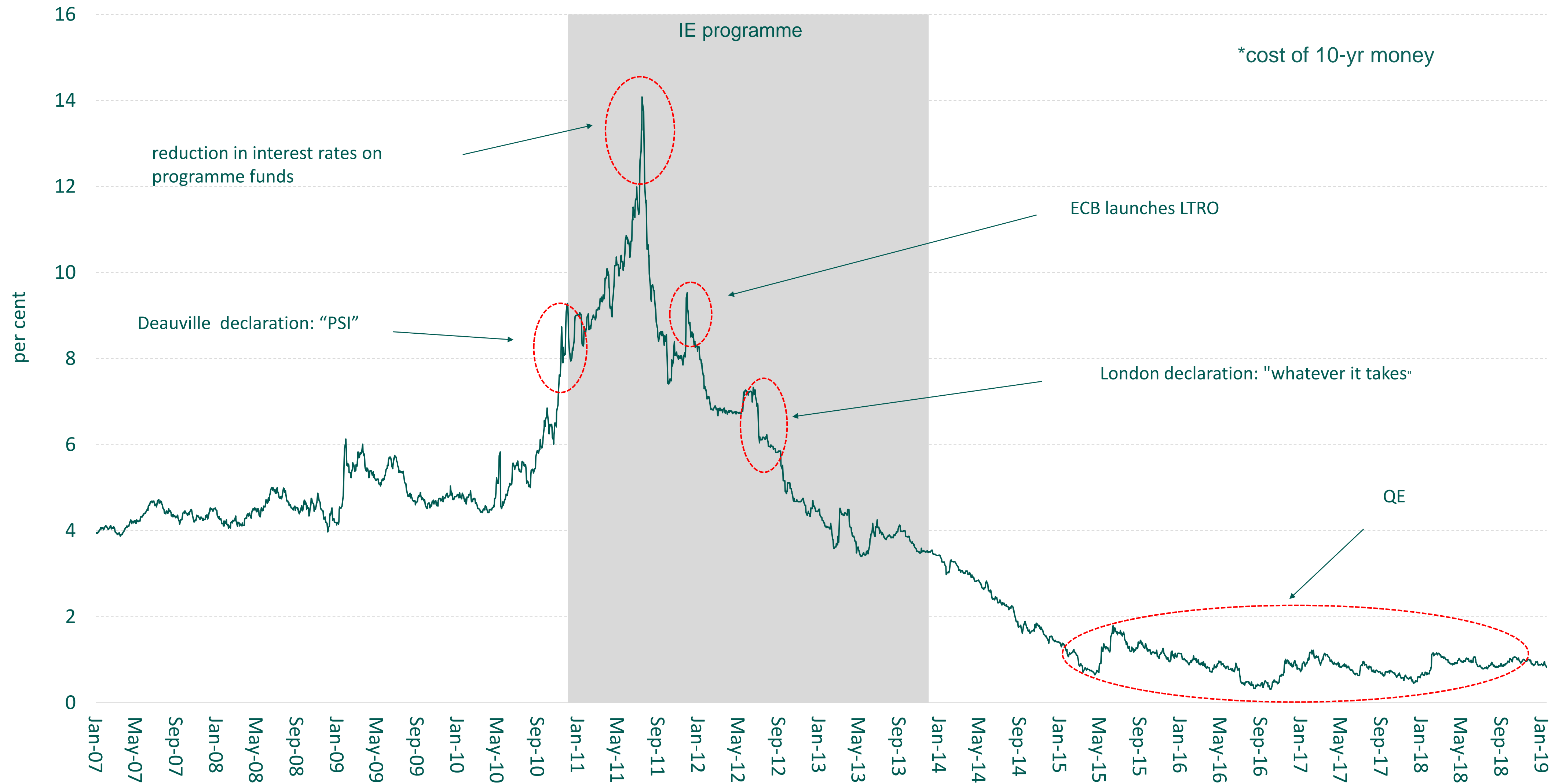


Increase in public debt from crisis, per cent of GDP

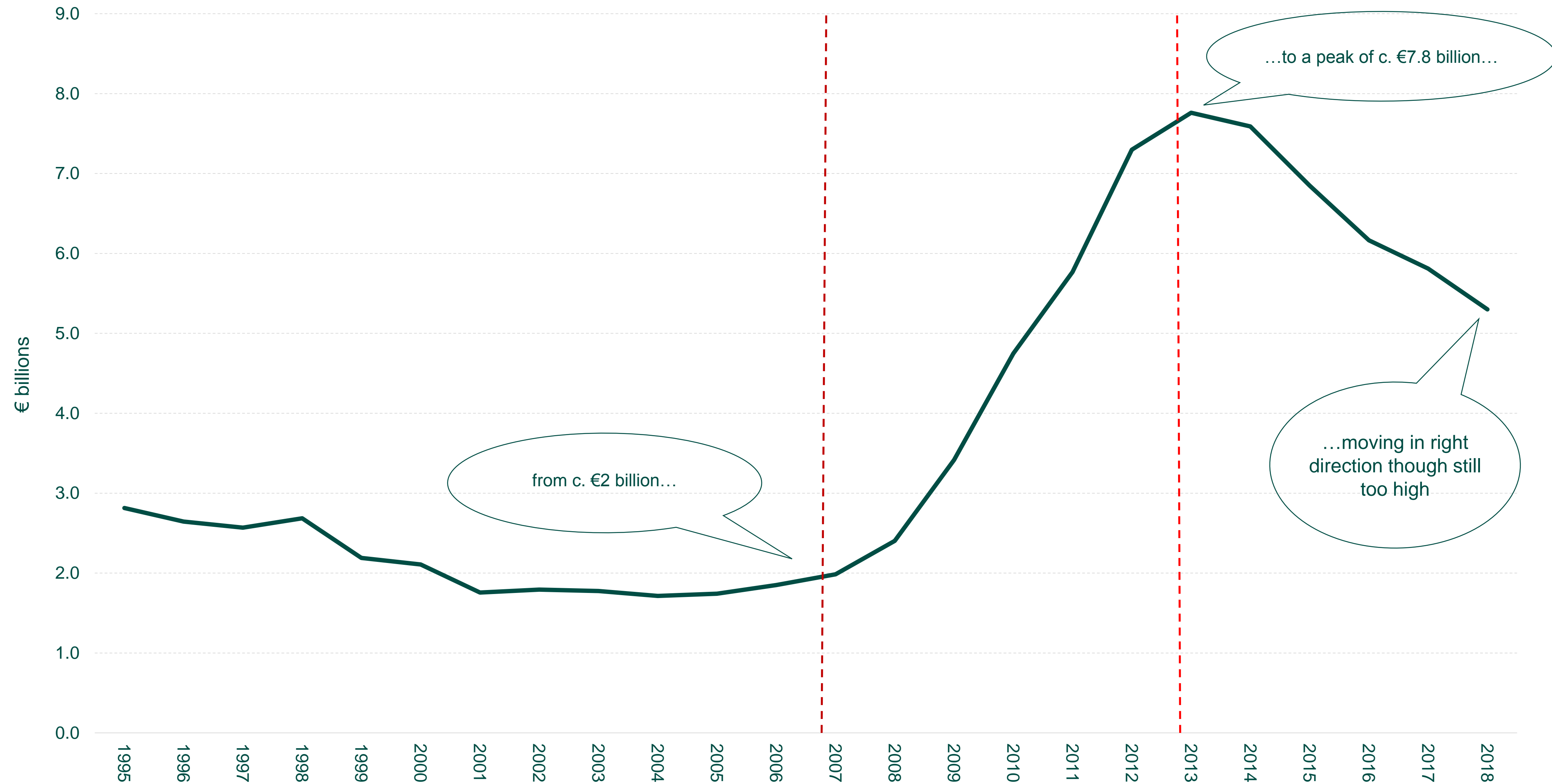


Ireland / Iceland
= outliers

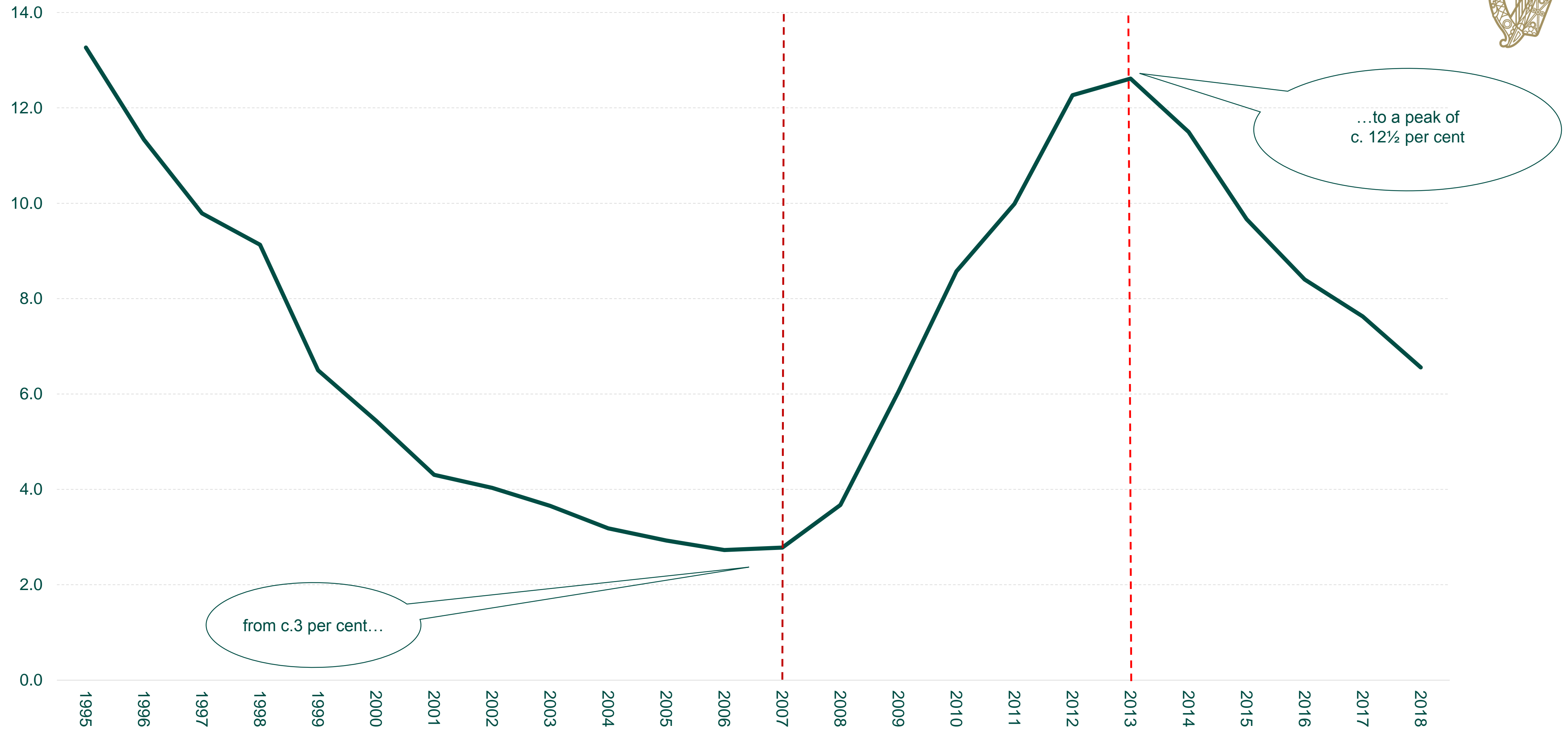
Borrowing costs have been contained – official sector funding and ‘QE’



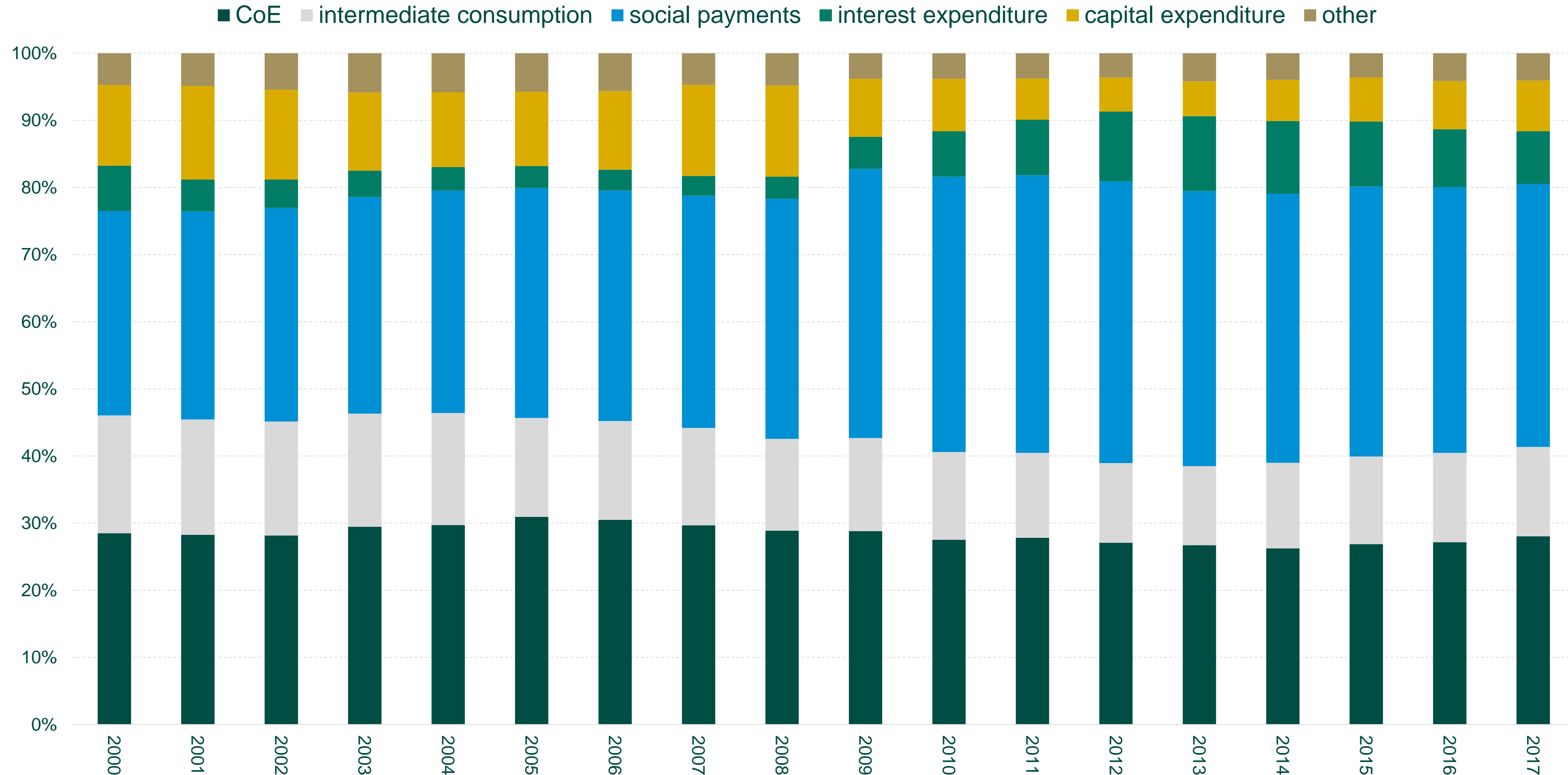
The interest bill has increased accordingly



Interest bill absorbs more tax revenue than pre-crisis



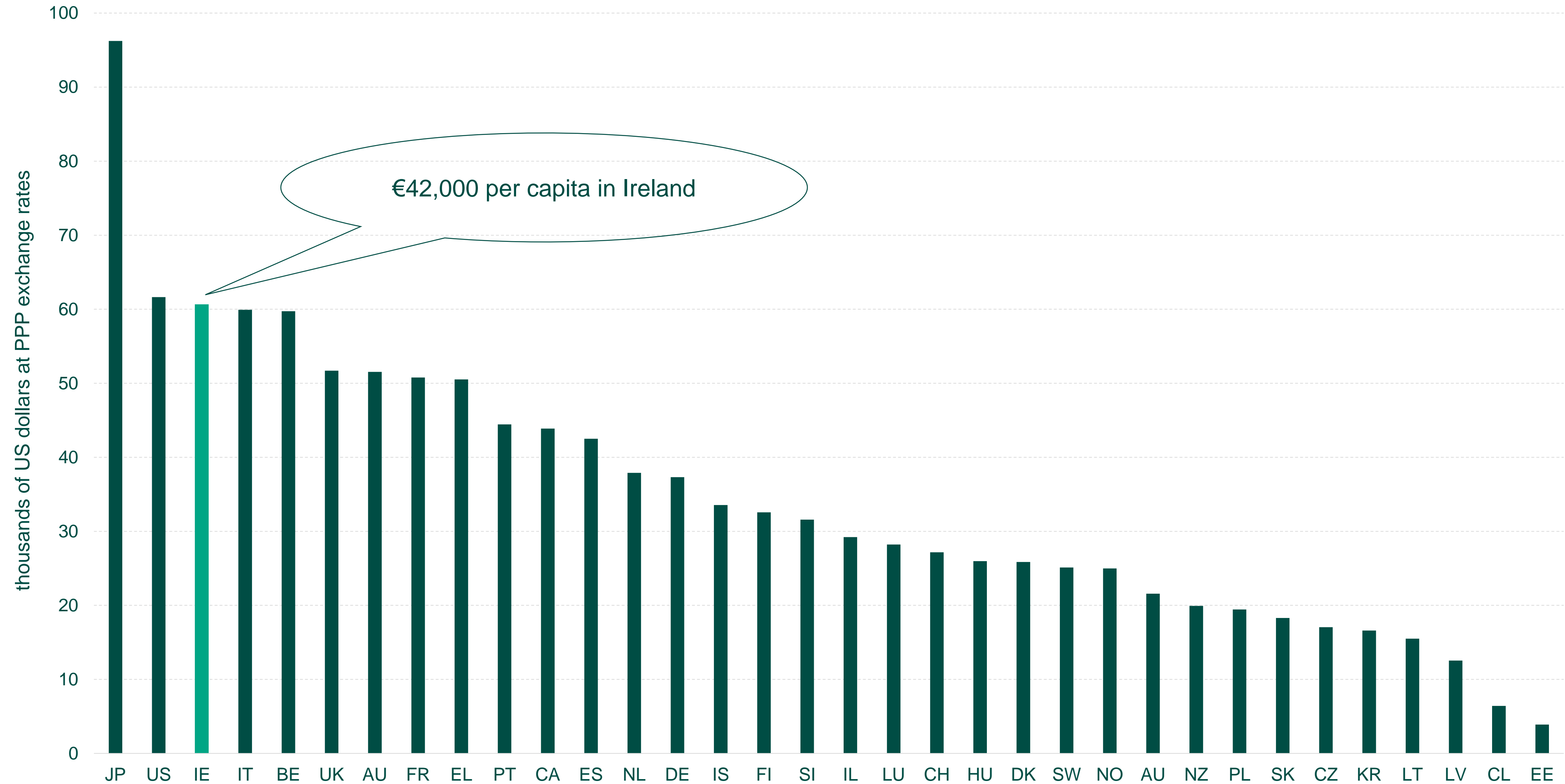
Share of debt interest expenditure has risen



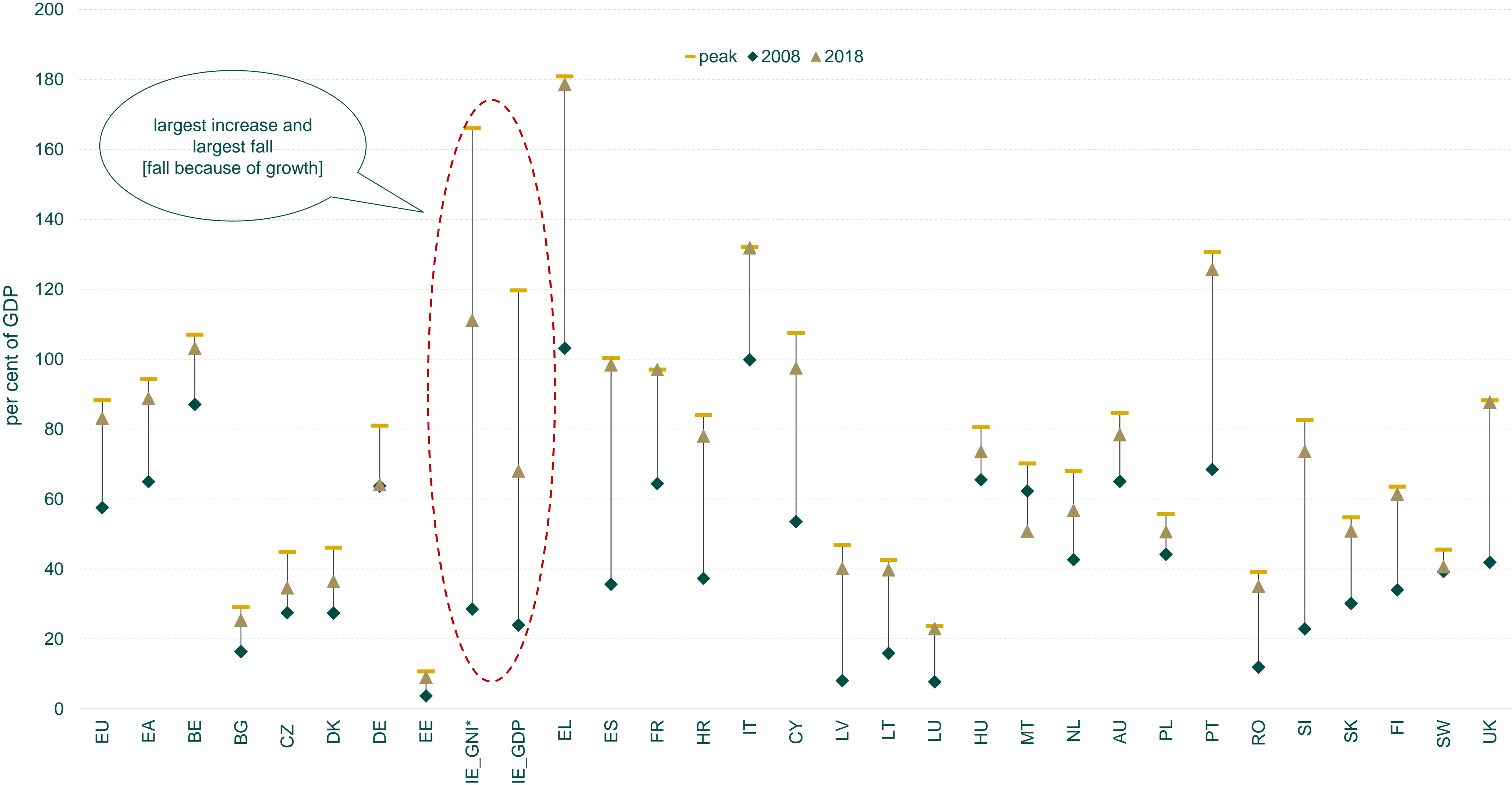


Irish public debt dynamics in international perspective

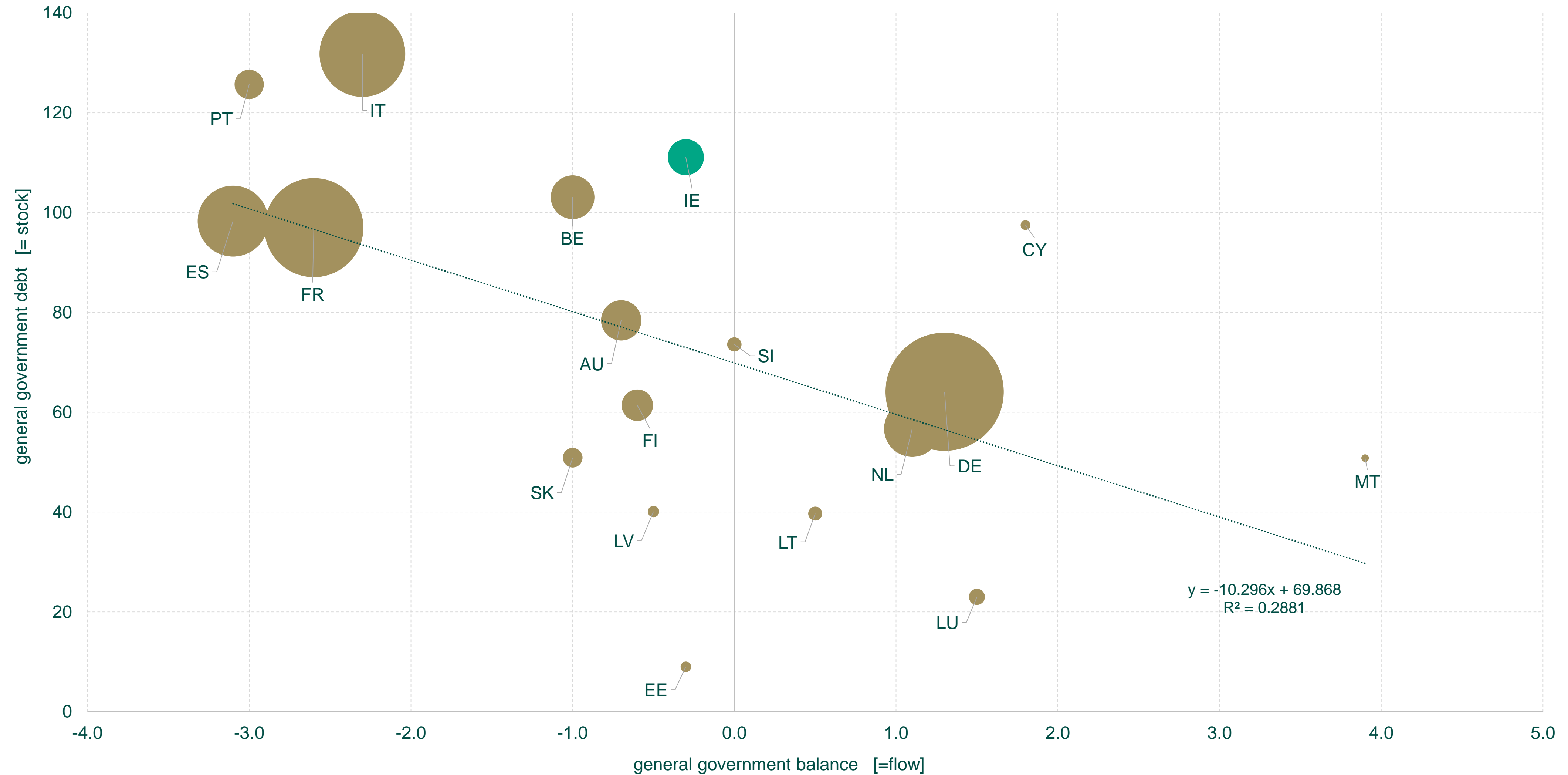
General government debt per capita, 2016 data



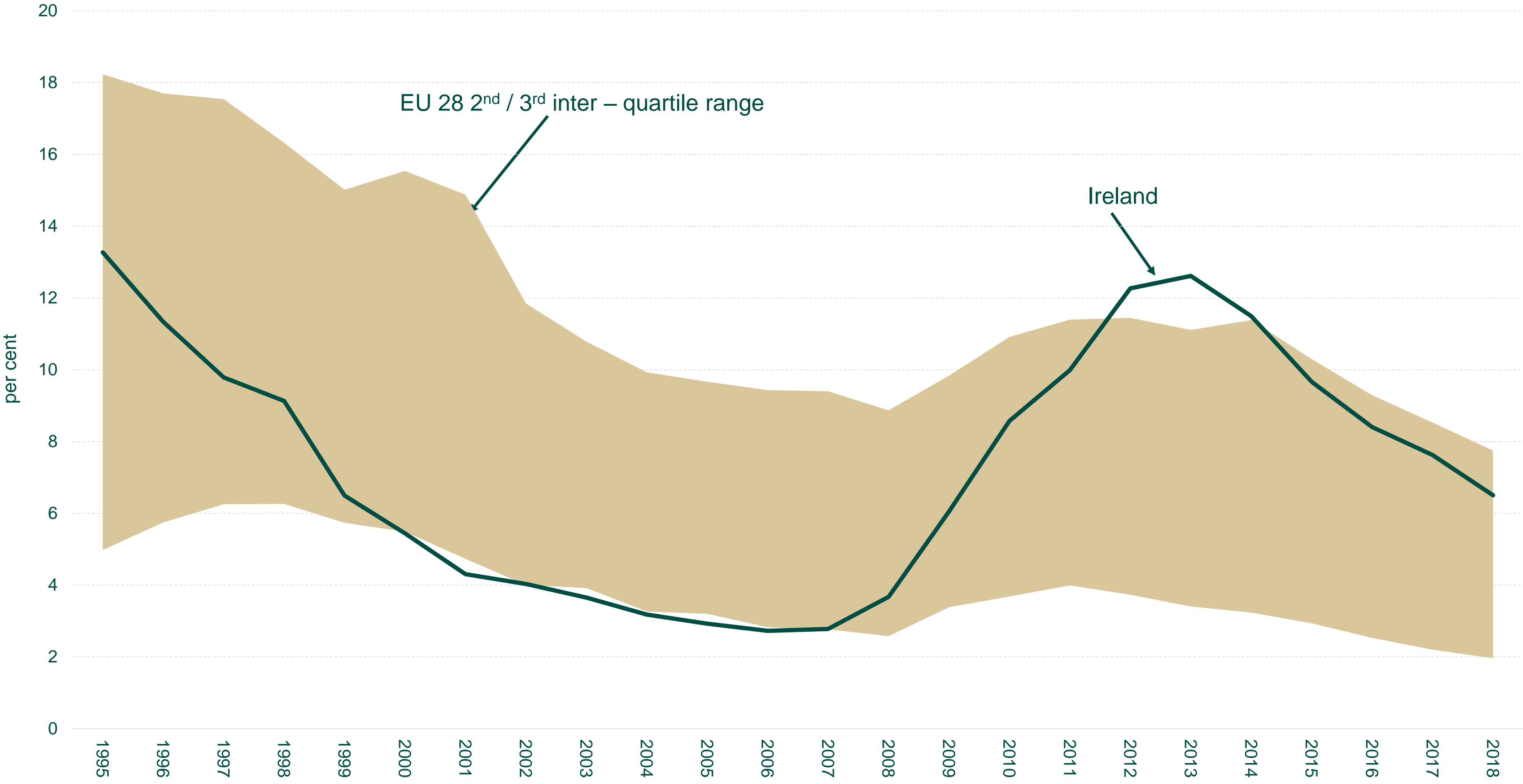
Debt dynamics in the EU28 since the crisis (2008-2018)



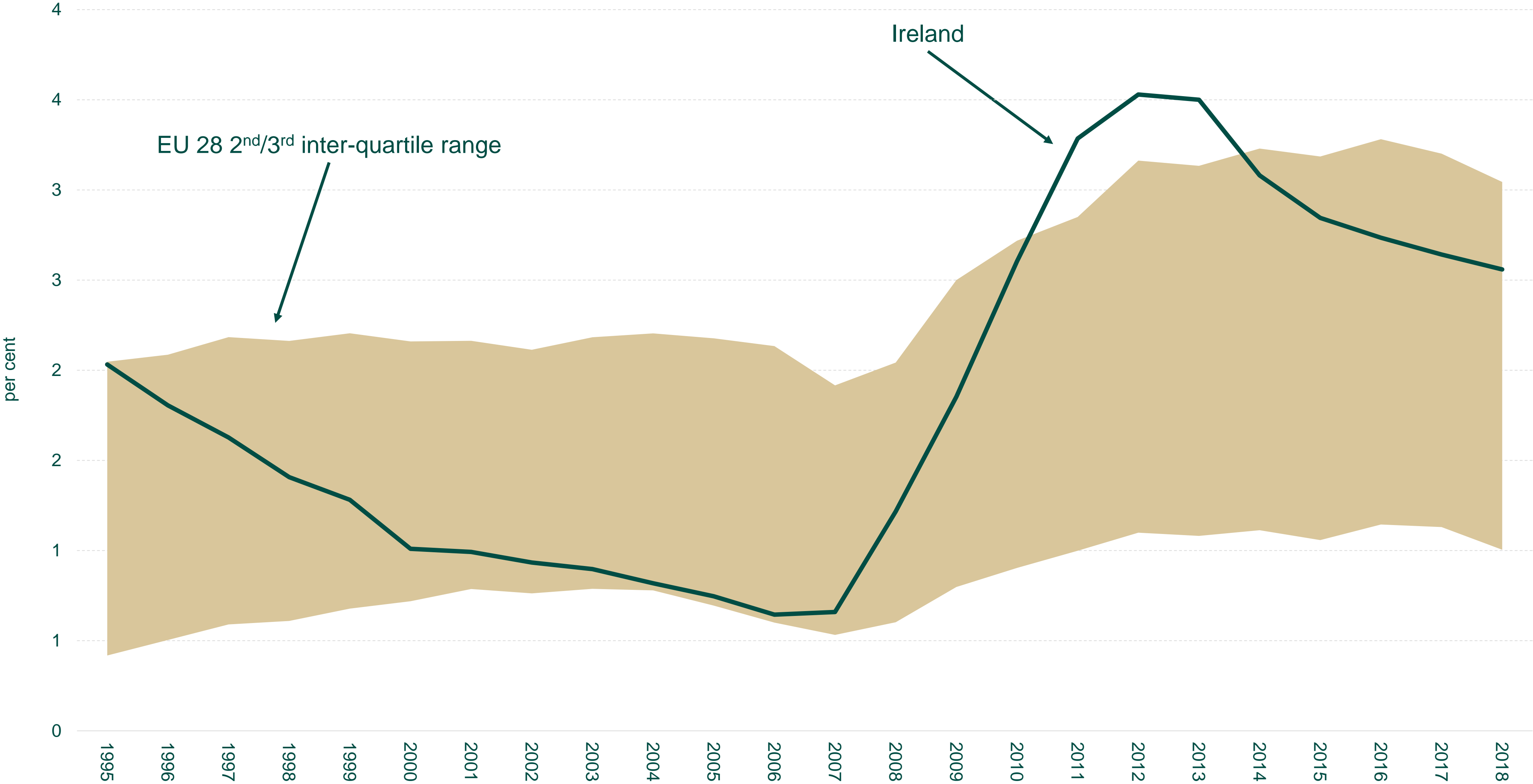
Public finances in the euro area (stock and flow), per cent of GDP



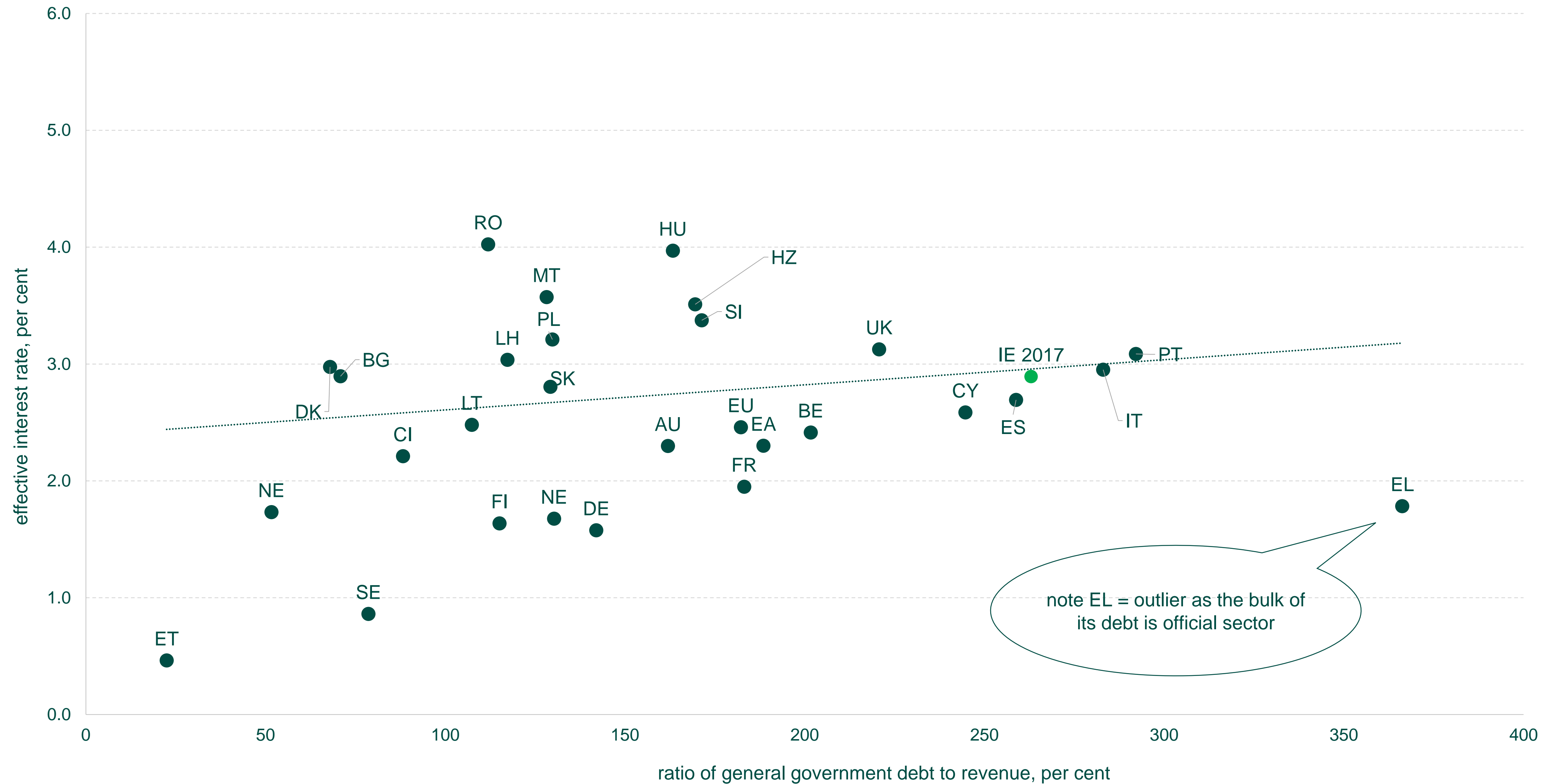
Debt burden (=interest-to-revenue ratio), IE relative to EU 28



Leverage (=debt-to-revenue) ratio, IE relative to EU 28



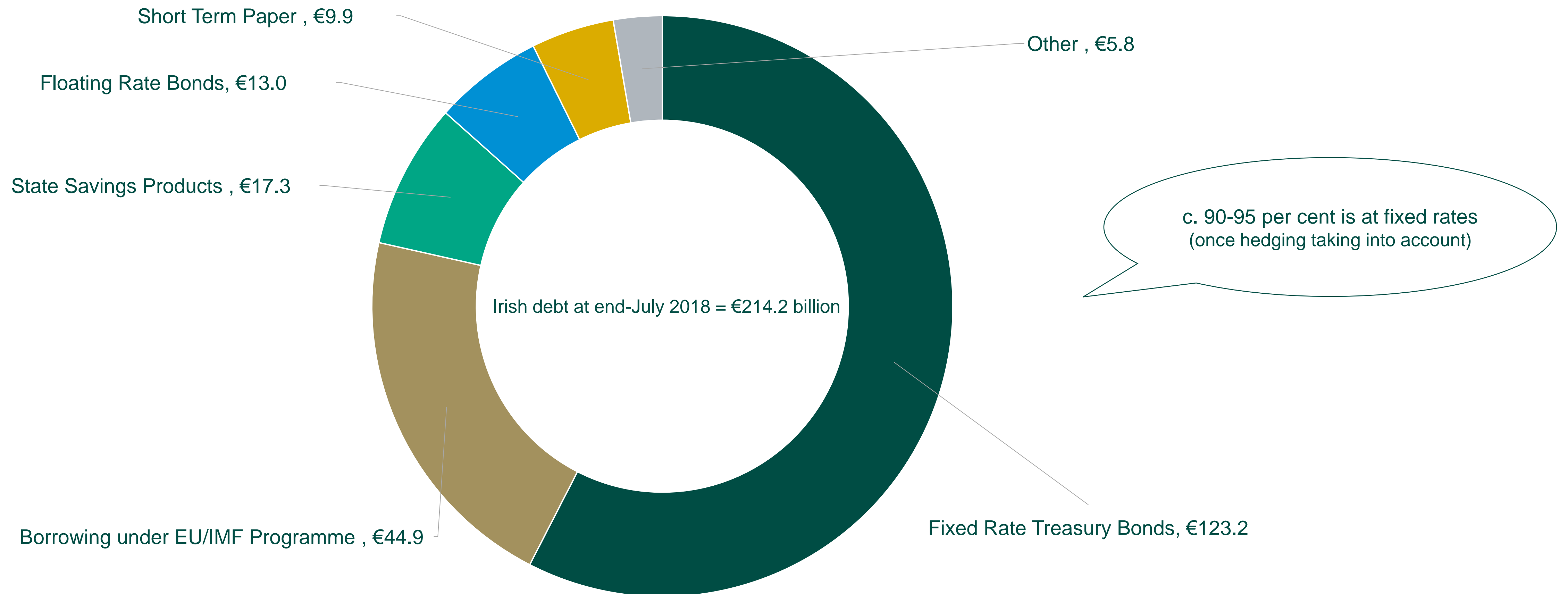
Cost of sovereign borrowing related to debt burden



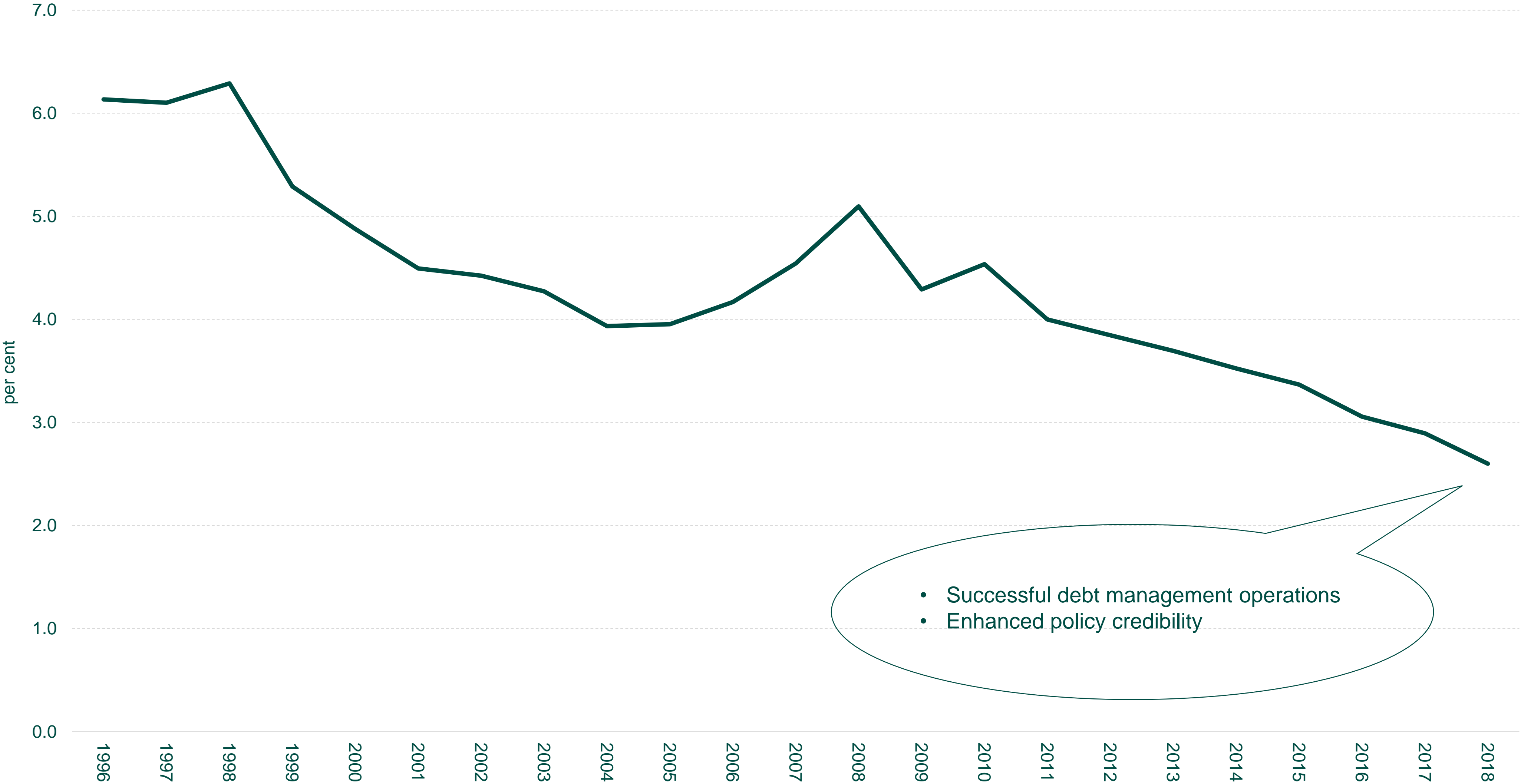


Beyond the headline figures - structure of Irish public debt

Composition of Irish debt, end-July 2018, € billions

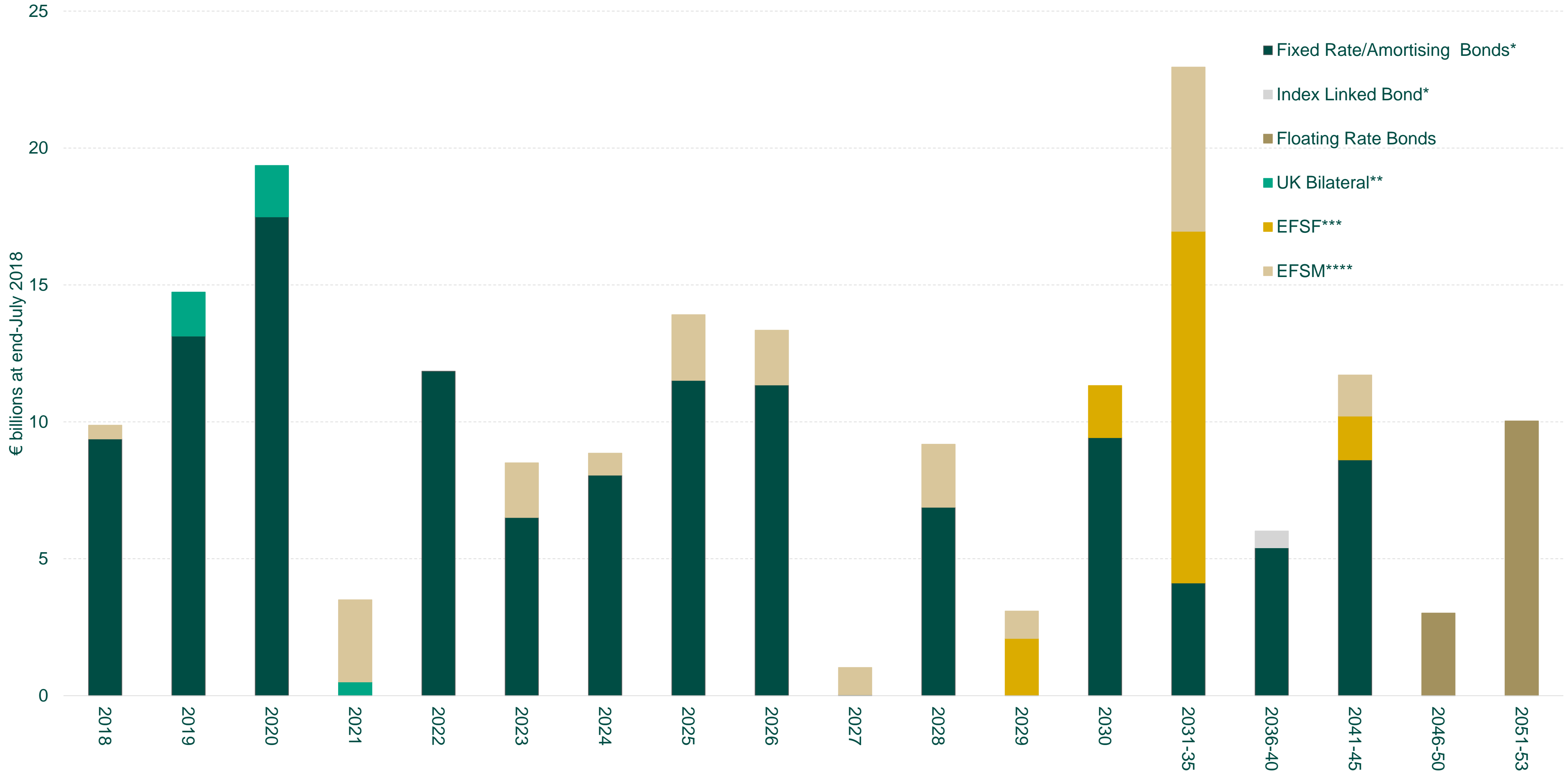


Effective interest rate on Irish public debt

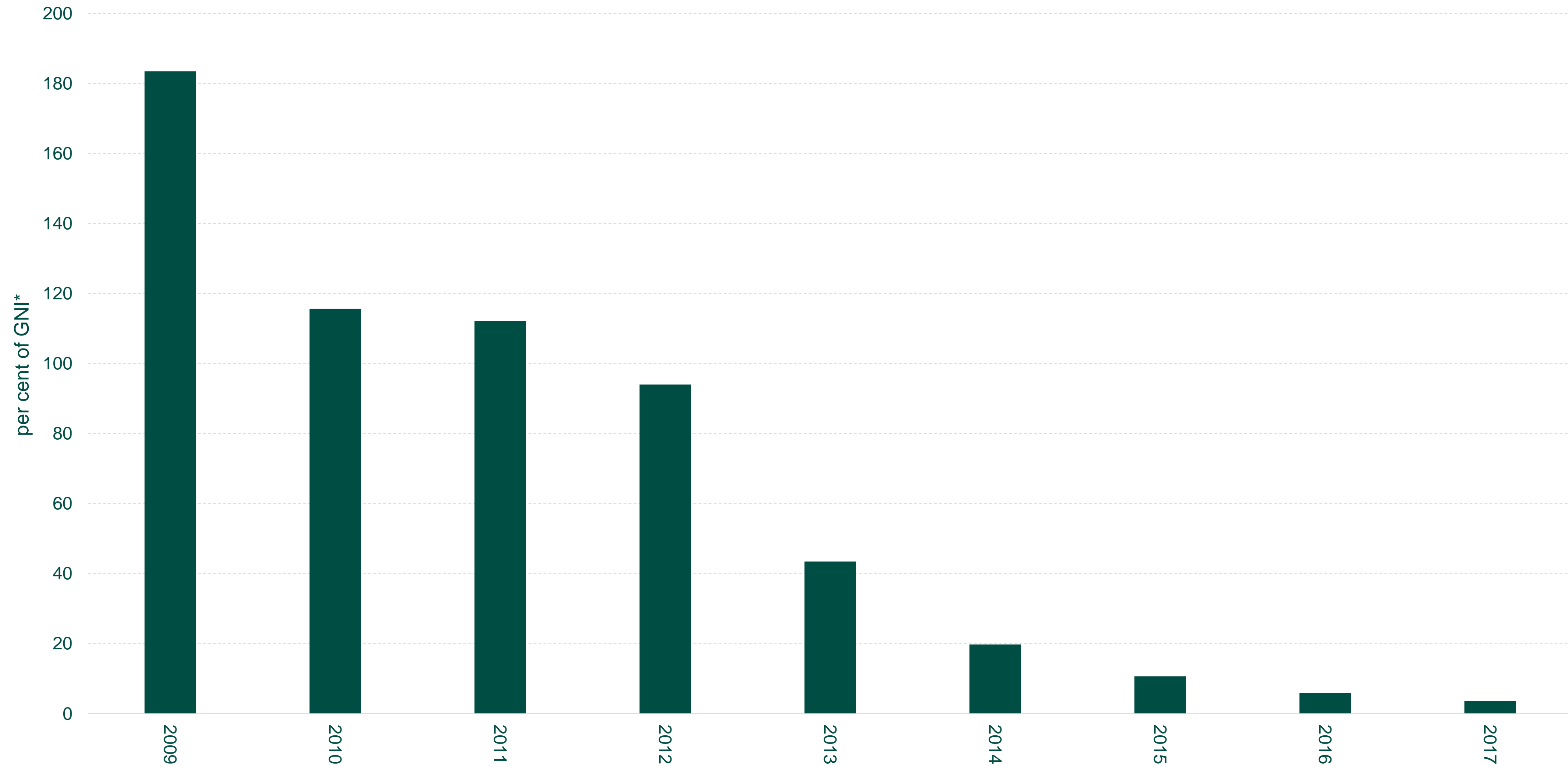


- Successful debt management operations
- Enhanced policy credibility

Maturity profile of Irish government debt

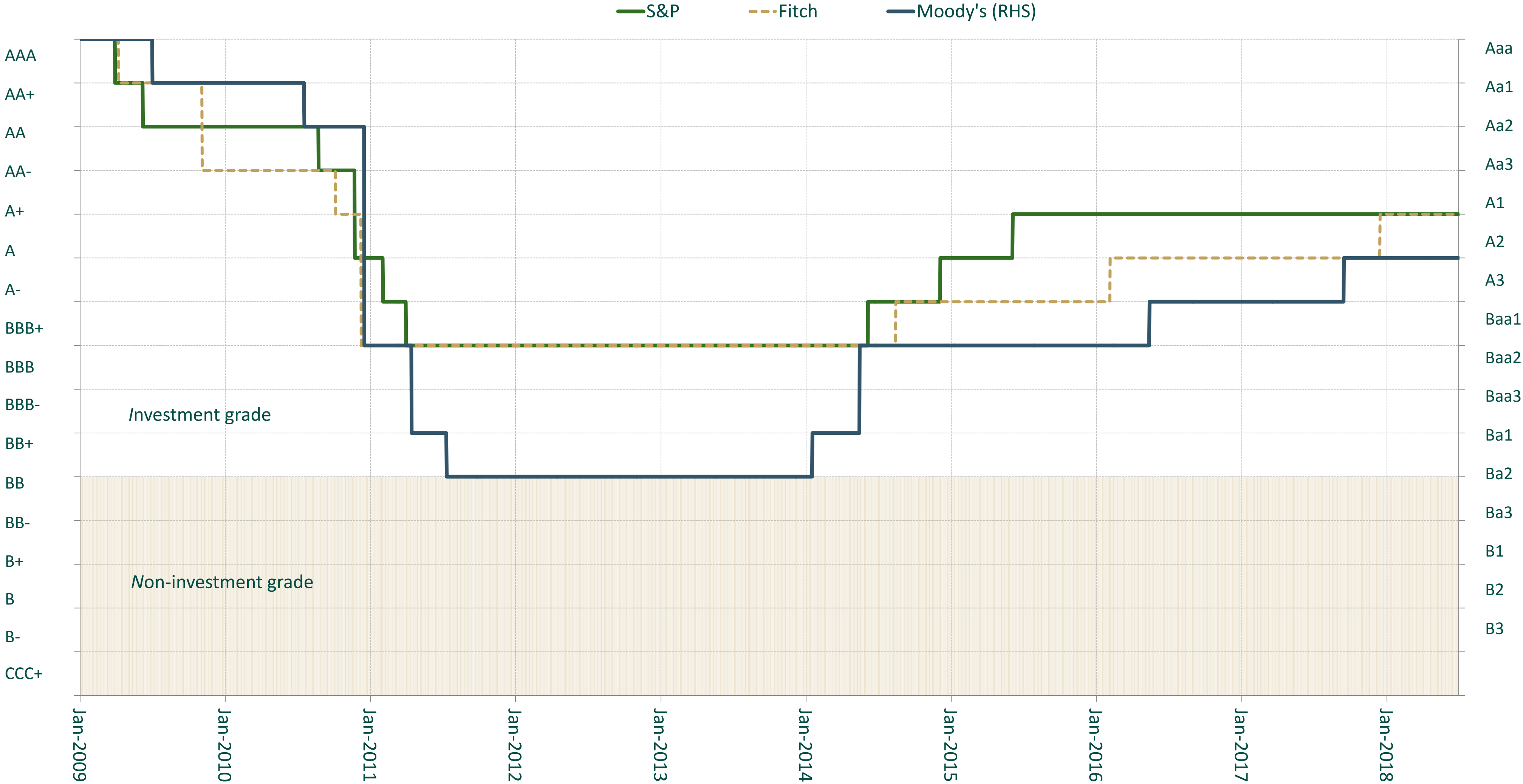


Contingent liabilities – almost eliminated



note: 2018 data not yet available

Creditworthiness has been restored





Economic aspects of public debt

Reconciling the stock (debt) with flow (balance)



- standard debt accumulation equation
- role of economic growth : $(r - g) = \text{vital}$
- Blanchard (2018) – American Economic Review

$$\Delta d = \frac{(r-g)}{(1+g)} * d_{t-1} + pbt + sfa_t$$

↑
annual change in debt ratio

↑
the “snowball” effect
(nominal growth and interest rate)

↑
primary balance
(flow)

↑
“stock-flow adjustment”
(= residual)

Growth damaging effects of public debt



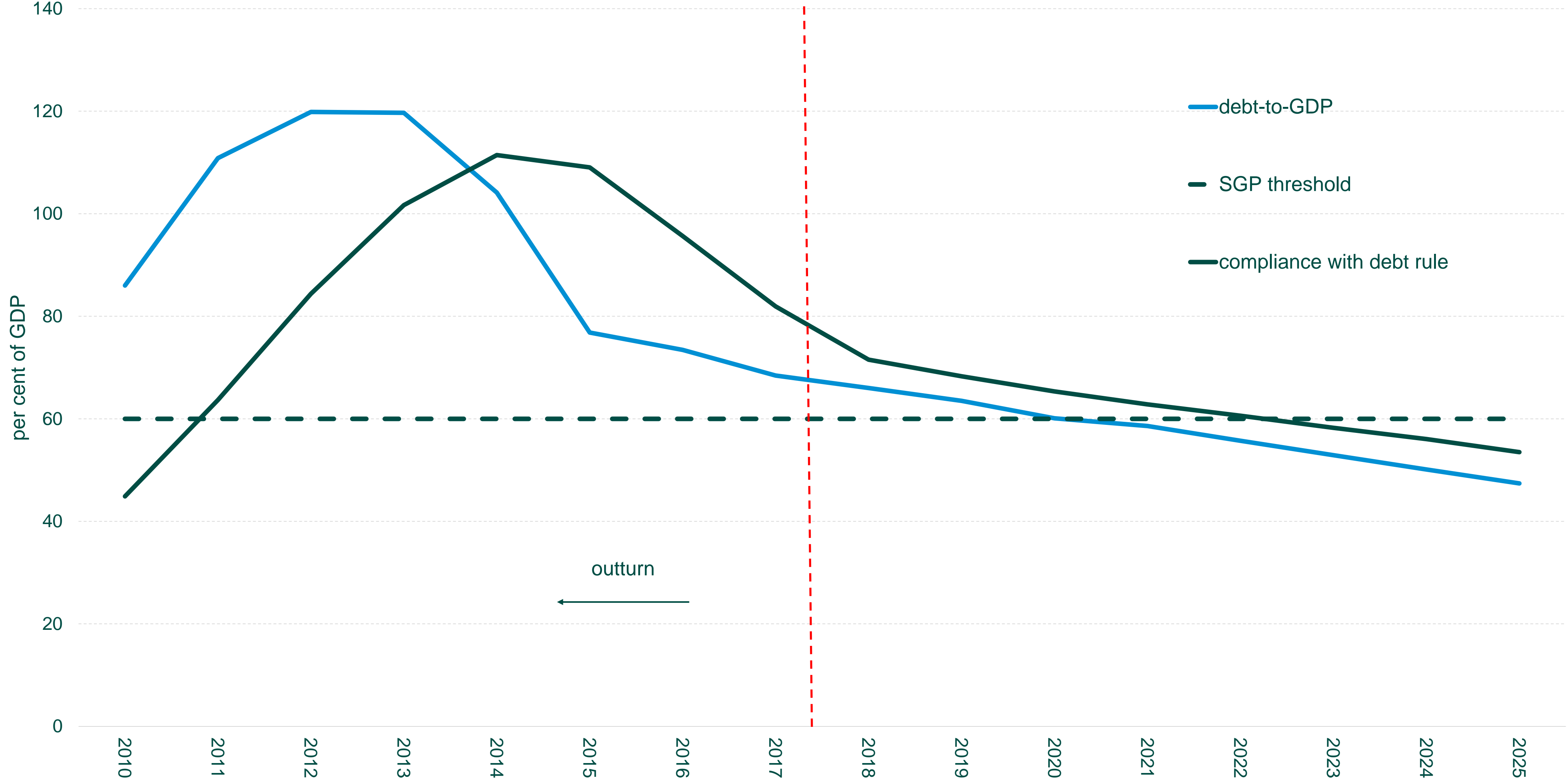
Transmission channels

- Reduces room for manoeuvre
 - automatic stabilisers / discretionary
 - amplify the cycle (hysteresis effects)
- Diverts resources from productive areas to debt service
 - ‘first charge’
 - potential growth
- ‘crowding out channel’
 - higher interest rates
- Inter-generational equity

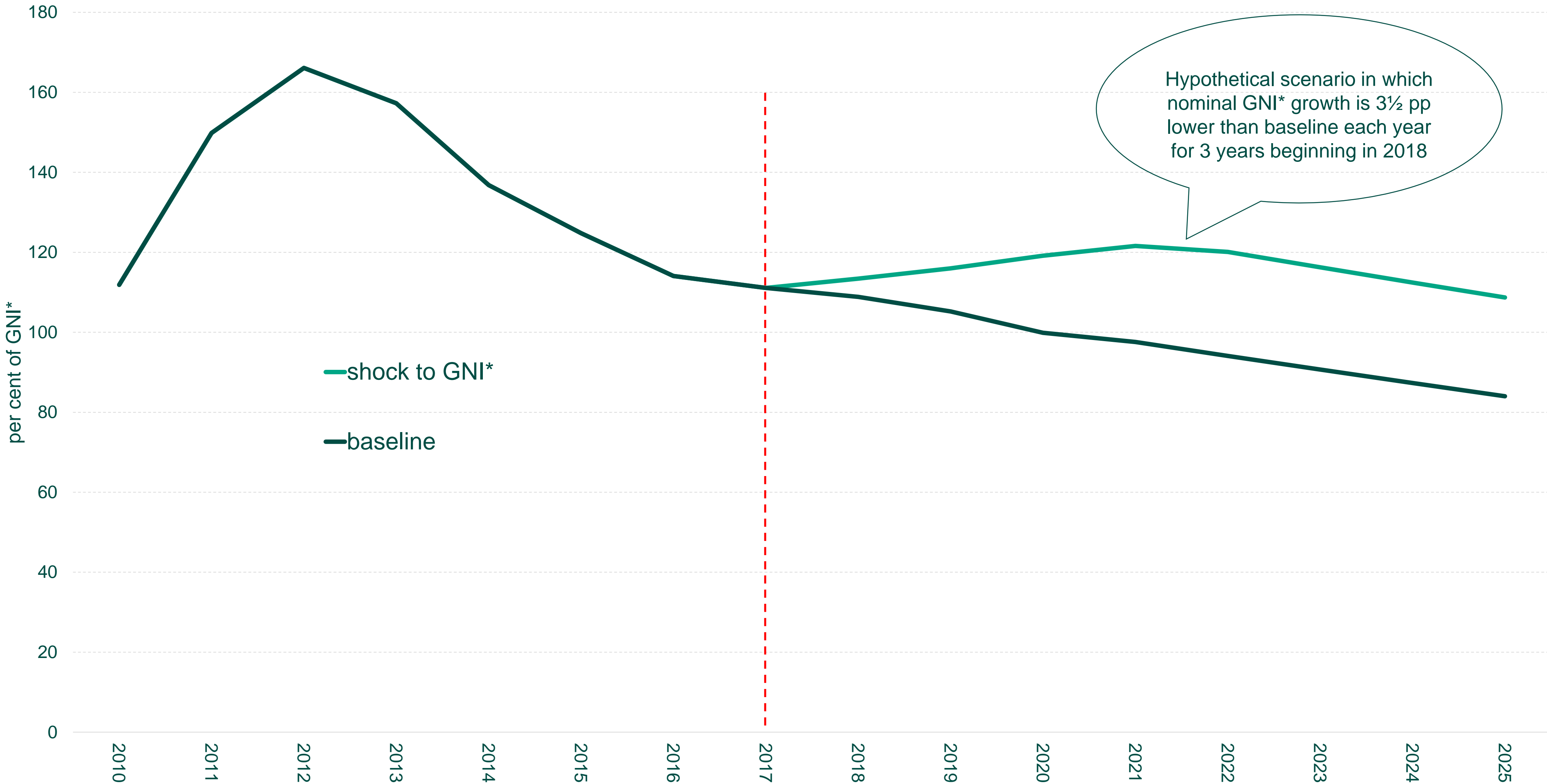
Threshold effects?

- Considerable academic debate
 - no consensus

Stability and Growth Pact: 1/20th debt reduction rule



Debt sustainability analysis: GNI* shock



Enhancing the toolkit – heat map indicators



Deviation from compliance	LR Average (p.p)	Threshold	Min (p.p)	Max (p.p)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GG Debt GDP	5.2	60.0%	-32.2	47.2															
GG Debt GNI*	11.9	60.0%	-19.0	70.8															
3% Deficit rule	-1.1	-3.0%	-29.0	5.8															
Structural Balance (CAM) real time **	-2.2	-0.5%	-9.5	3.2															
Structural Balance (CAM) ex-post **	-2.3	-0.5%	-10.4	1.7															
Structural Balance (ALT) **	-2.2	-0.5%	-11.4	1.9															

note: heat map shadings based on gap from key thresholds



Conclusions



Conclusion

- Surge in Irish public debt due to “twin crises”
 - part banking-related
 - but mostly fiscal
- Policy has put debt ratio on downward trend
 - consolidation
 - debt management
- Crucial that debt burden continues to be contained
 - ending of QE (rollover needs)
 - market view can change rapidly
 - ageing population



Disclaimer and other information:

The views expressed in this presentation are those of the presenter and do not necessarily reflect the views held by the Department of Finance, the Minister for Finance or the Government of Ireland.

The analysis set out in this presentation is based on “*Annual Debt Report*” published by the Department of Finance (September 2018). Some of the figures have been updated, taking into account the Departments latest forecasts and estimates as set out in “*Economic and Fiscal Outlook*”, published by the Department of Finance at the time of Budget 2019 .

Outturn data are sourced from a variety of sources including the Department of Finance, Central Statistics Office, European Commission (AMECO) and Central Bank of Ireland.

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