Greece versus Portugal

July 18, 2018

Main messages

- **Expect 100-150bps compression in Greece 10y yield** over the next 6-18 months;

- The run up to **program exit in August** will provide another **catalyst** for Greek assets to rally; this is subject to…

- **Main risks**:
    1. Spillovers from **Italy risk**;
    2. **Early elections** in context of Macedonia name dispute;
    3. **Global rates** and PSPP uncertainty;

- **Issues**:
    4. ALM exercise, cash management, **debt issuance**?
    5. **PSPP inclusion**?

Outline

- Credit rating;
- PSPP inclusion? Not near-term.
- Yields;
- BoG balance sheet;
- GDP;
- Unemployment;
- Fiscal;
- External;
- Sustainability;

Credit rating

Credit rating: Greece remains below investment grade

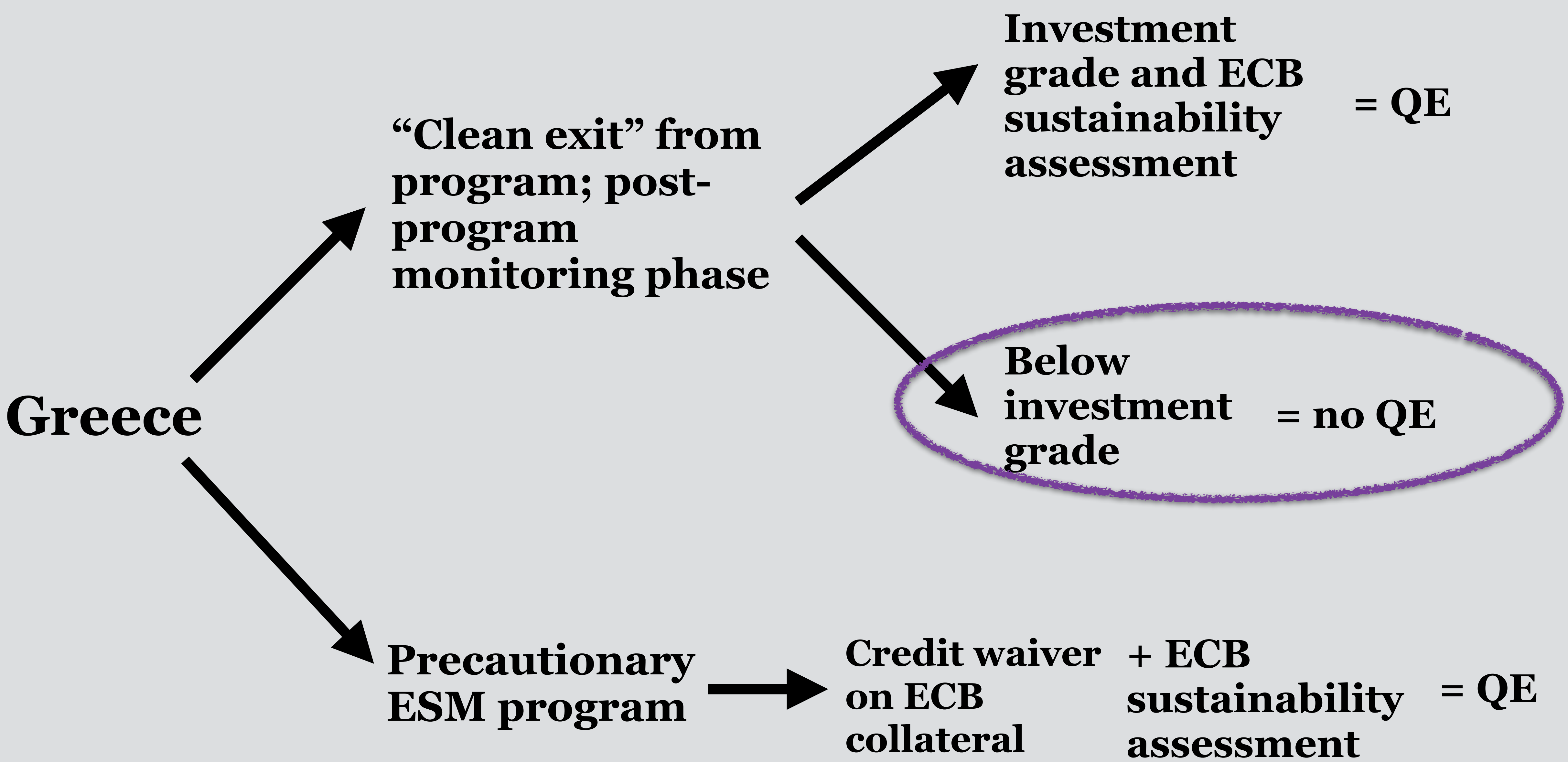
	Greece	Portugal
S&P	B+ (stable) June 25, 2018	BBB-(stable) * Sept 15, 2017
Moody's	B3 (positive) Feb 21, 2018	Ba1 (positive) Sept 01, 2017
Fitch	B (positive) Feb 16, 2018	BBB (stable) * Dec 15, 2017
DBRS	B (high) (positive) June 29, 2018	BBB (stable) * April 20, 2018

* Lowest investment grade rating for each is: S&P = BBB-; Moody's = Baa3; Fitch = BBB-; BDRS = BBB;

Logistics of PSPP inclusion

Time is running out for PSPP inclusion…

For inclusion in PSPP you need either: (i) to be under program monitoring (with debt assessed sustainable); or (ii) outside a program with investment grade rating by *at least one* of the Big 4 credit rating agencies.



* The Greek program formally ends on August 21st; in principle before this time Greece could be included in PSPP, but delays in finalising the program mean there is little time for QE during the next month.

Timeline

Program ends

August 21st, 2018

PSPP ends

Dec 31st, 2018

APP continues…

APP reinvestment phase…

Program

Post-program monitoring

Need

- **Rating upgrade;**
- **ECB sustainability;**

Need

- **Rating upgrade;**
- **ECB sustainability;**
- **Clarification of PSPP reinvestment rules**

ECB Press Release own APP (October 26, 2017)

Additional information on asset purchase programme

26 October 2017

- ECB provides additional data on redemptions as well as information about reinvestments and role of private sector purchase programmes
- Additional information supports continued smooth implementation of asset purchases

The Governing Council of the European Central Bank (ECB) has decided to publish from now on, with a monthly frequency, the expected monthly redemption amounts for the asset purchase programme (APP) over a rolling 12-month horizon. It has also decided to provide additional details on the implementation of the programme. This reflects the ECB's commitment to increase transparency further.

The redemption dataset will include the estimated cumulative monthly redemptions for each of the four individual components of the APP, i.e. the asset-backed securities purchase programme (ABSPP), the third covered bond purchase programme (CBPP3), the public sector purchase programme (PSPP) and the corporate sector purchase programme (CSPP), for a rolling 12-month period. These will be accompanied by the historical redemption figures since the start of the APP. The first monthly release will be published on 6 November 2017. The decision to start publishing these data reflects their increasing relevance, given the higher redemption amounts that will be seen in 2018.

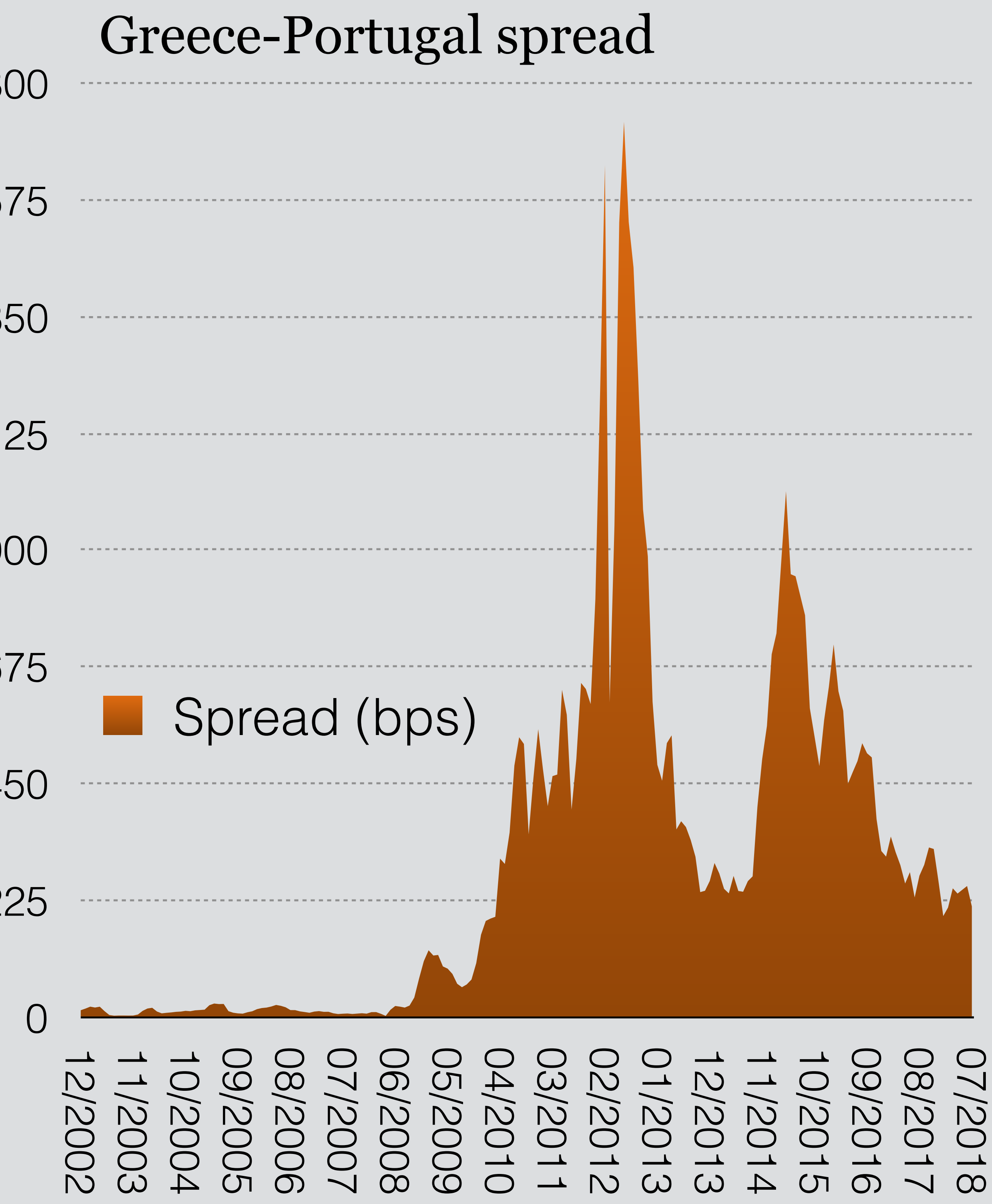
Principal redemptions on securities purchased under the PSPP are reinvested by the Eurosystem in a flexible and timely manner in the month they fall due, on a best effort basis, or in the subsequent two months, if warranted by market liquidity conditions. The published monthly net purchase volumes per jurisdiction may therefore fluctuate owing to the timing of these reinvestments.

During the period of net asset purchases, PSPP principal redemptions will be reinvested in the jurisdiction in which the maturing bond was issued.

The Eurosystem anticipates that the purchase volumes under the three private sector purchase programmes (the ABSPP, the CBPP3 and the CSPP) will remain sizeable.

10y yields

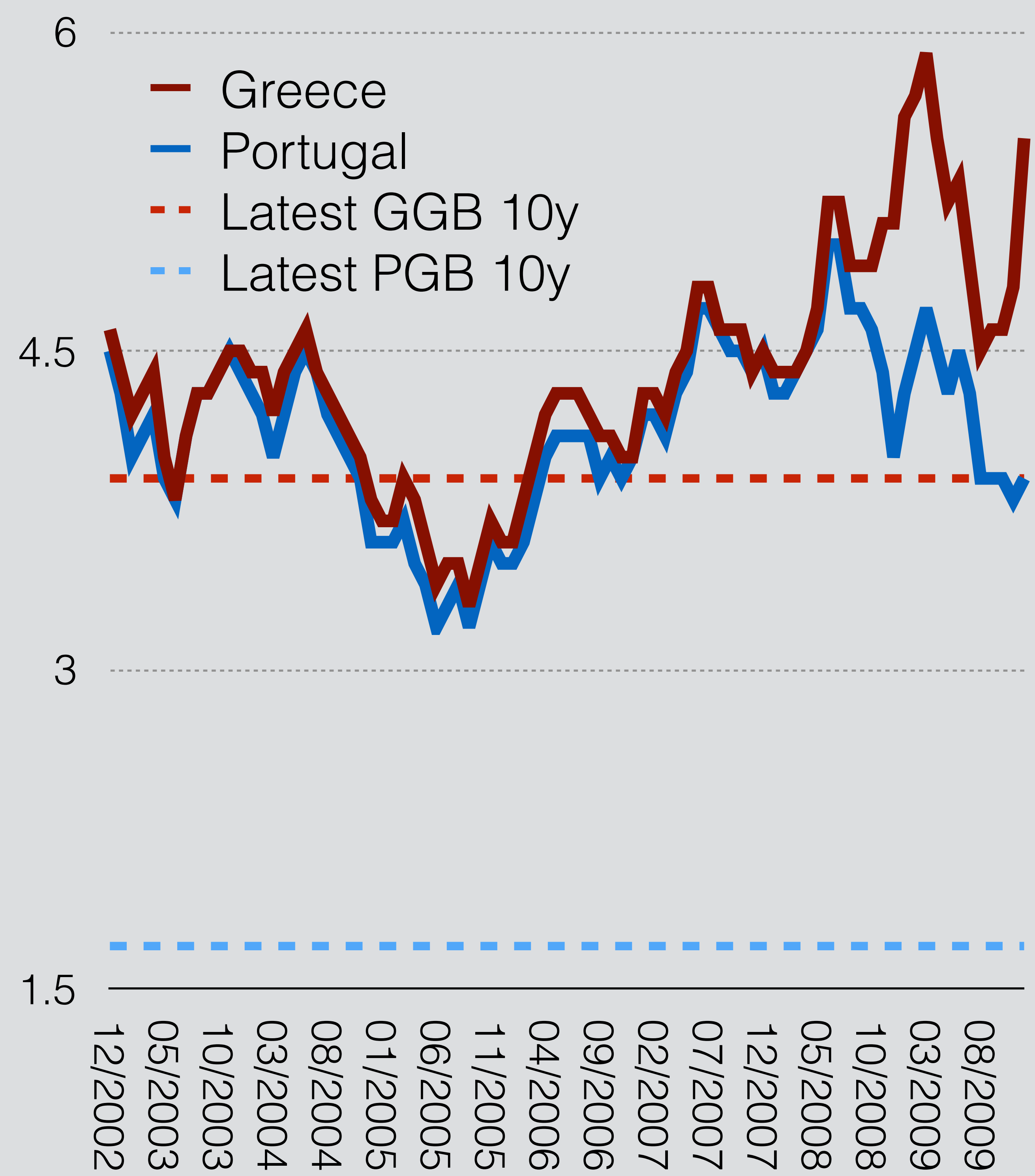
Government bond 10y yields compared (%): Greek yields remain about 220bps above Portugal



Pre-crisis government bond 10y yields compared

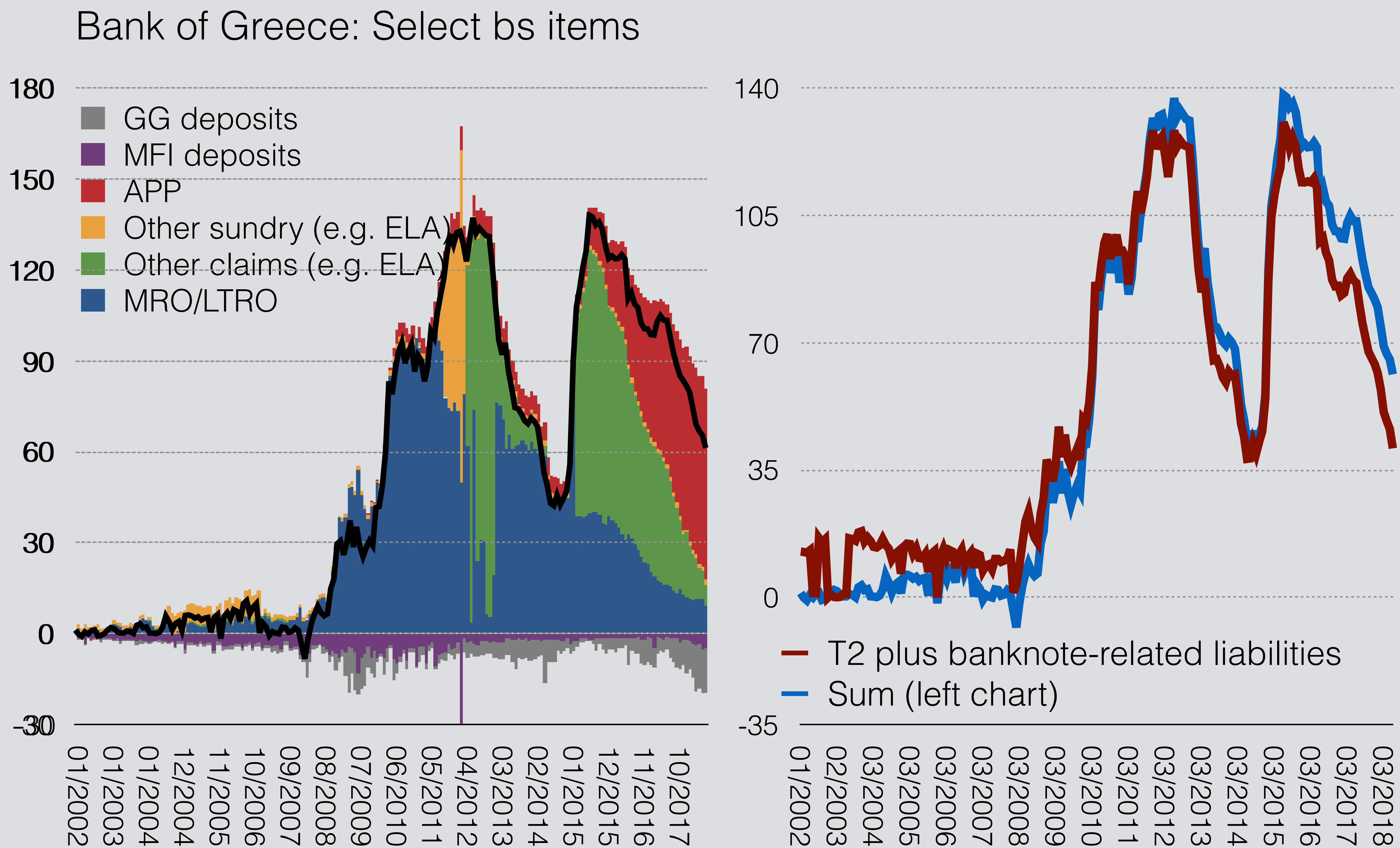
Until 2008/09 Greek and Portuguese 10y government bond yields closely tracked each other…

… risk adjusted, are Greek yields +220bps today justified?

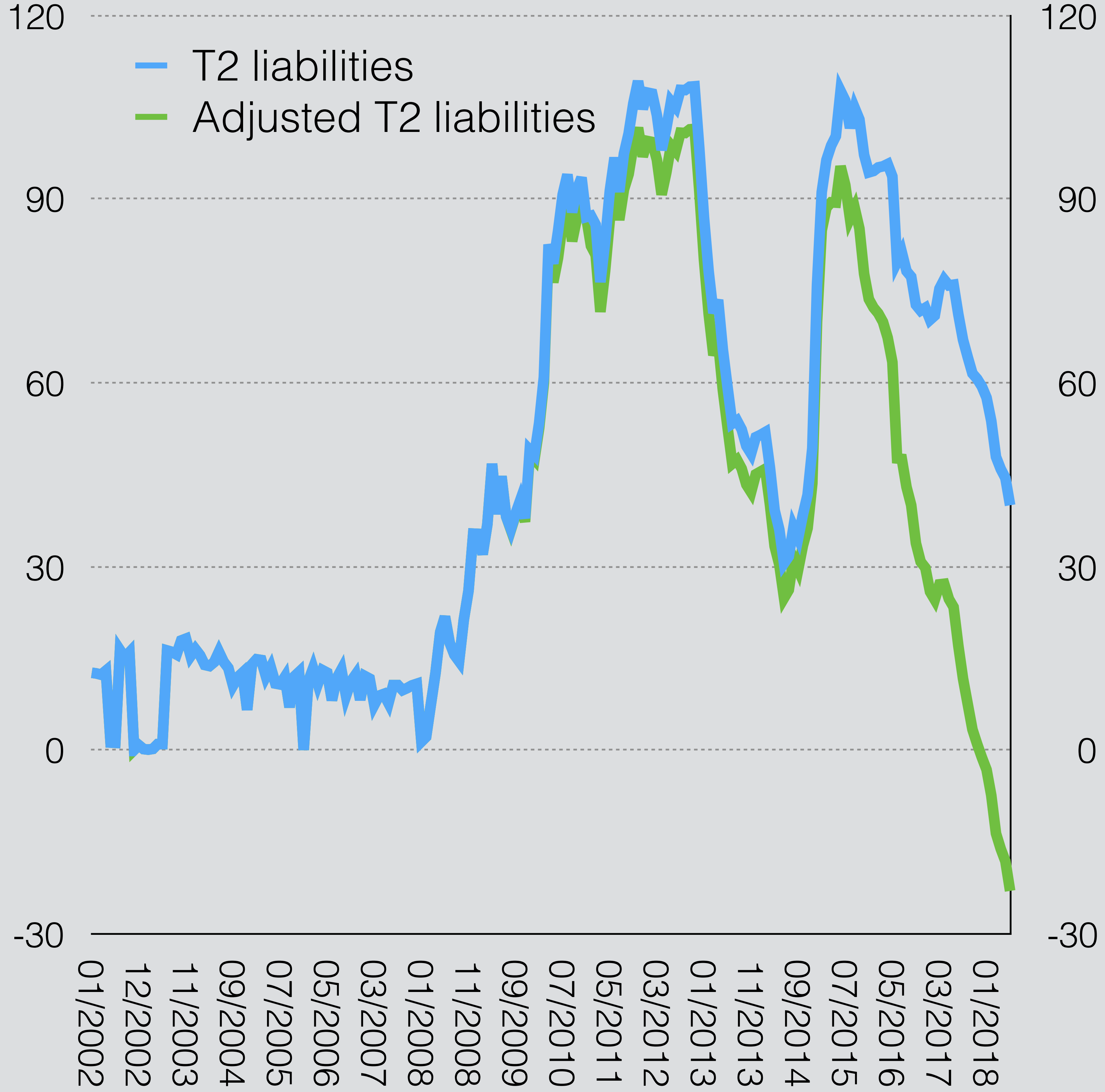


Bank of Greece balance sheet

Bank of Greece balance sheet (€ billions)

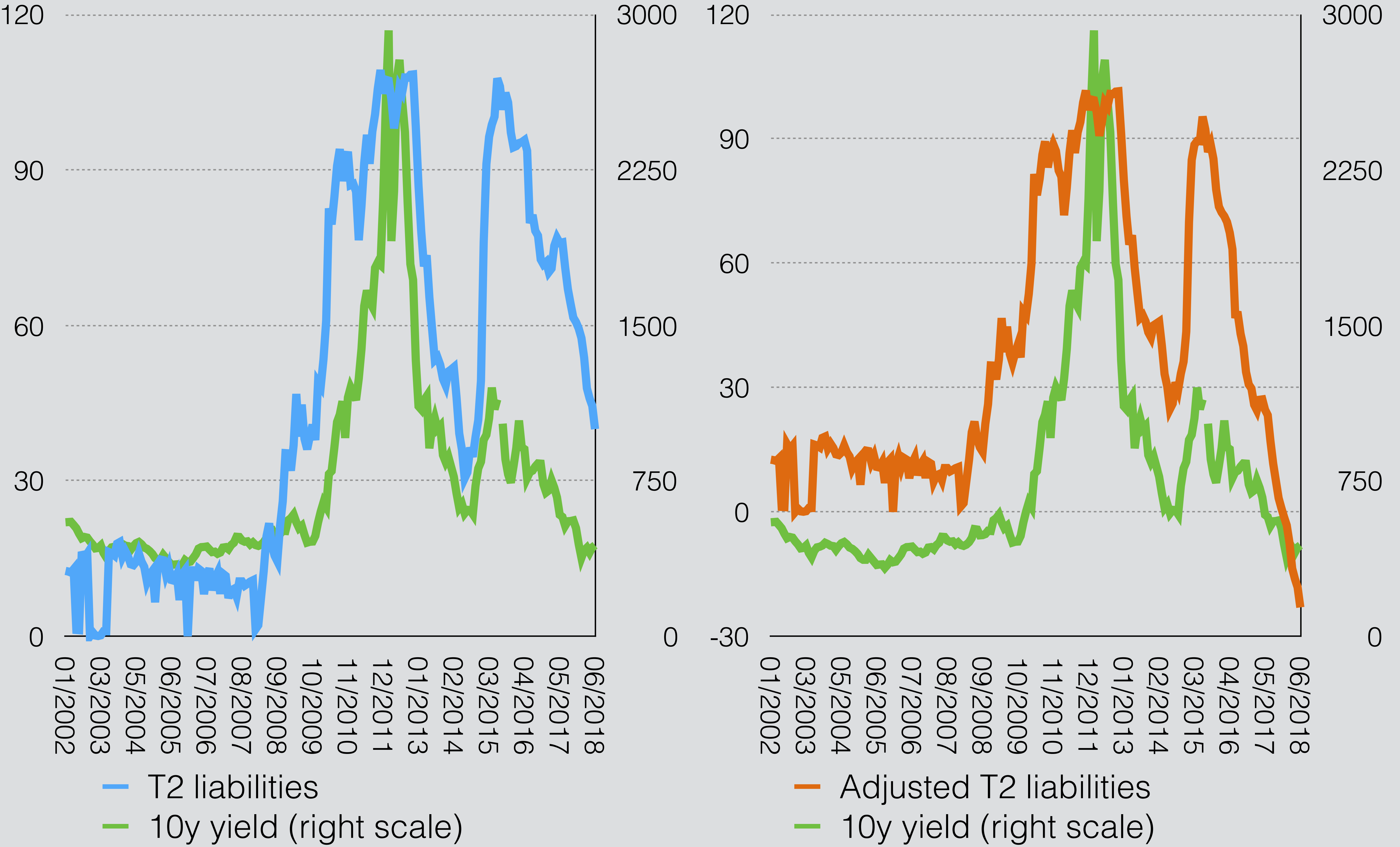


TARGET2 liabilities and adjusted* T2 liabilities (€ billions)



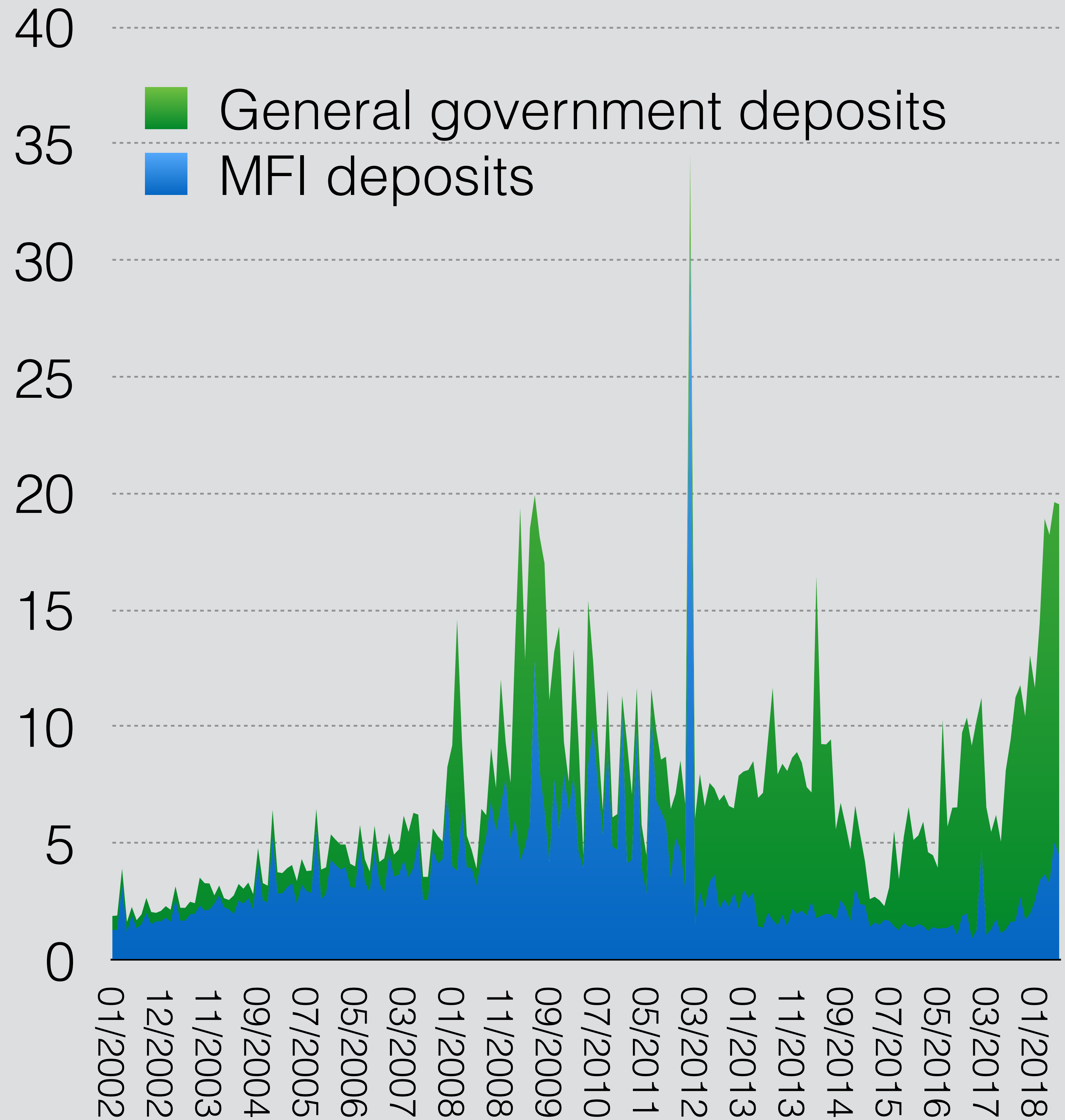
* Adjusted for APP purchase conducted by the Bank of Greece.

TARGET2 (€ billions) **and 10y yield** (bps)

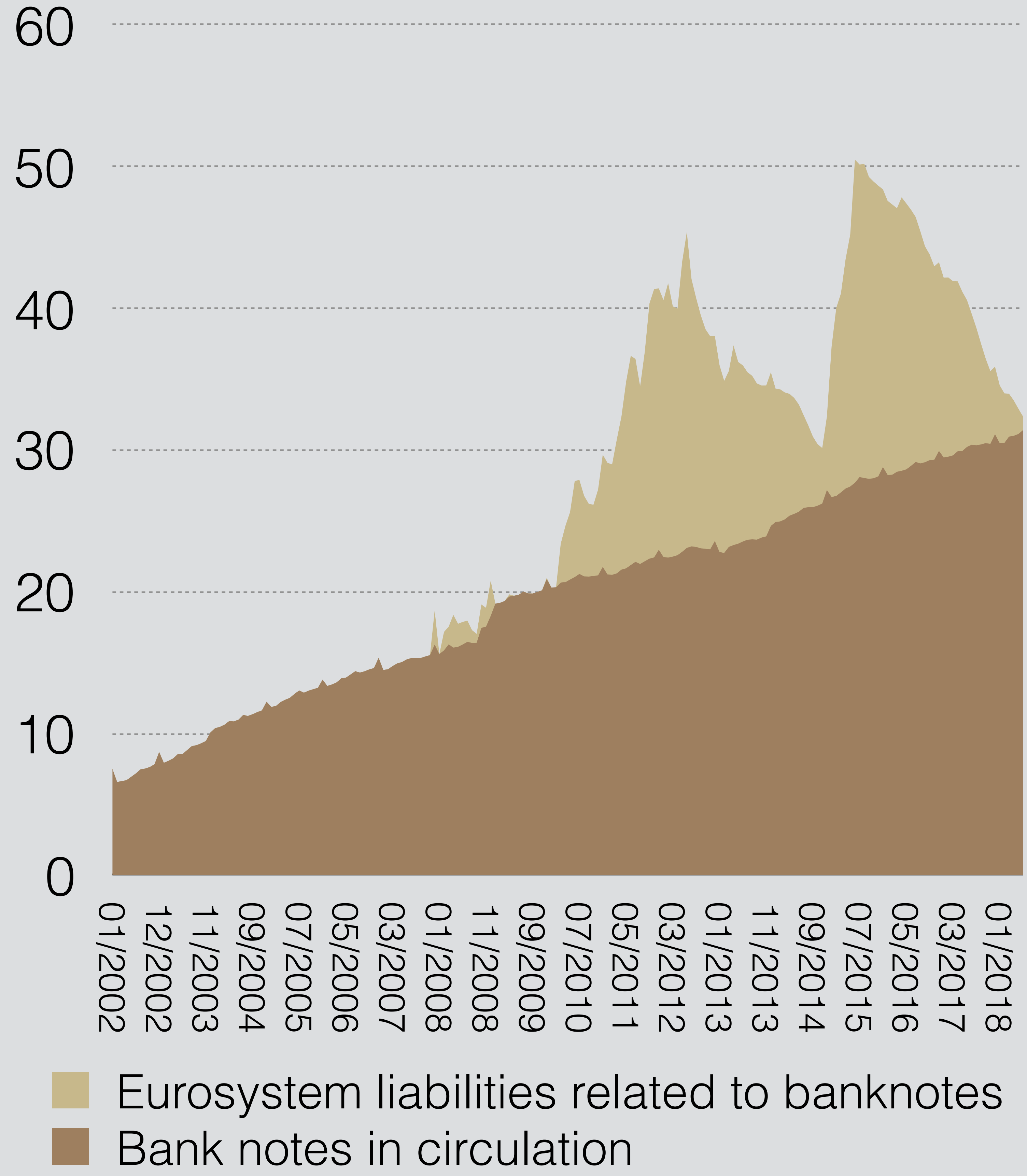


Deposits with Bank of Greece (€ billions)

Greece now has a substantial cash buffer (>€20 billion) plus more disbursements to come from ESM…

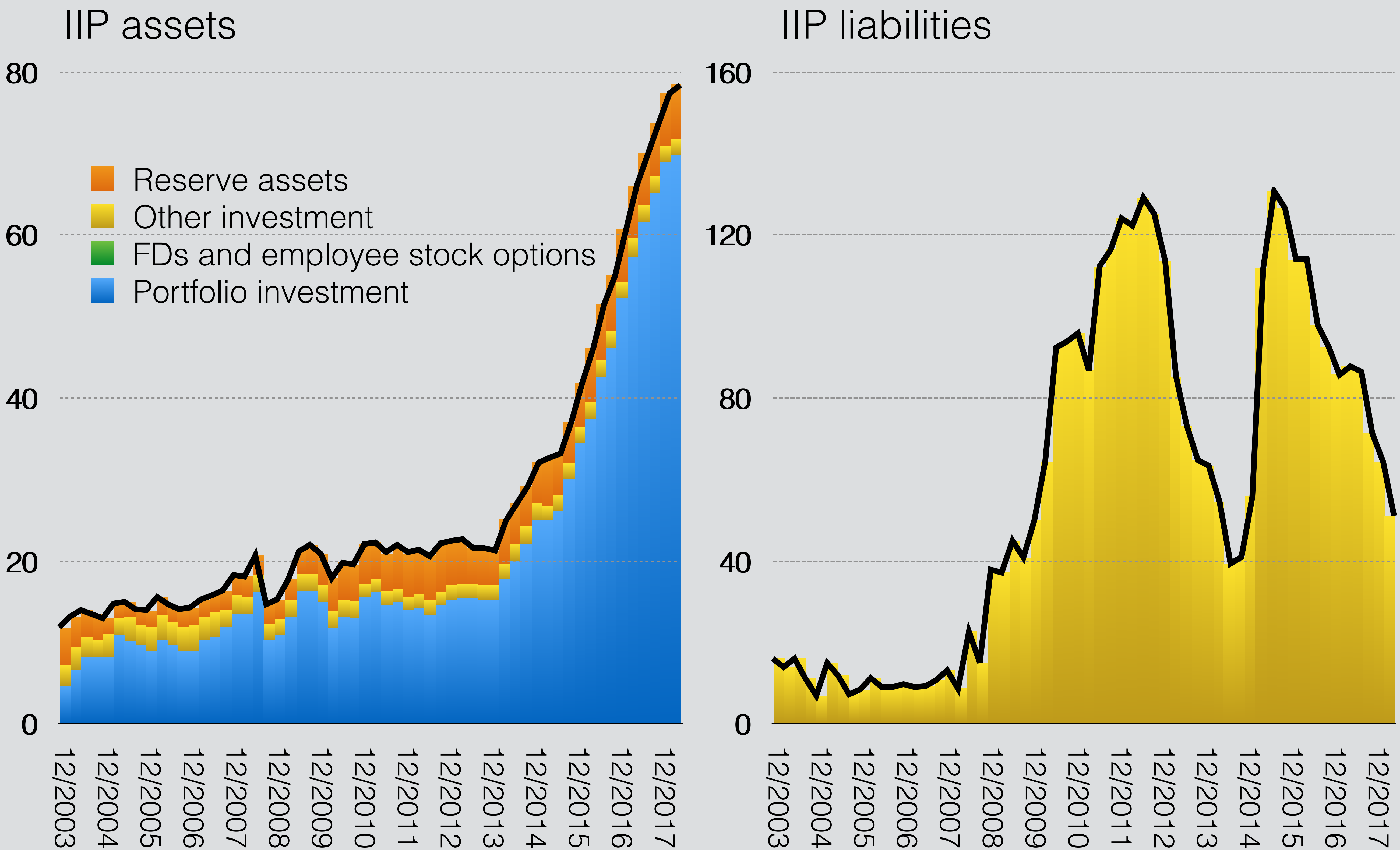


Greece € banknotes in circulation (€ billions)

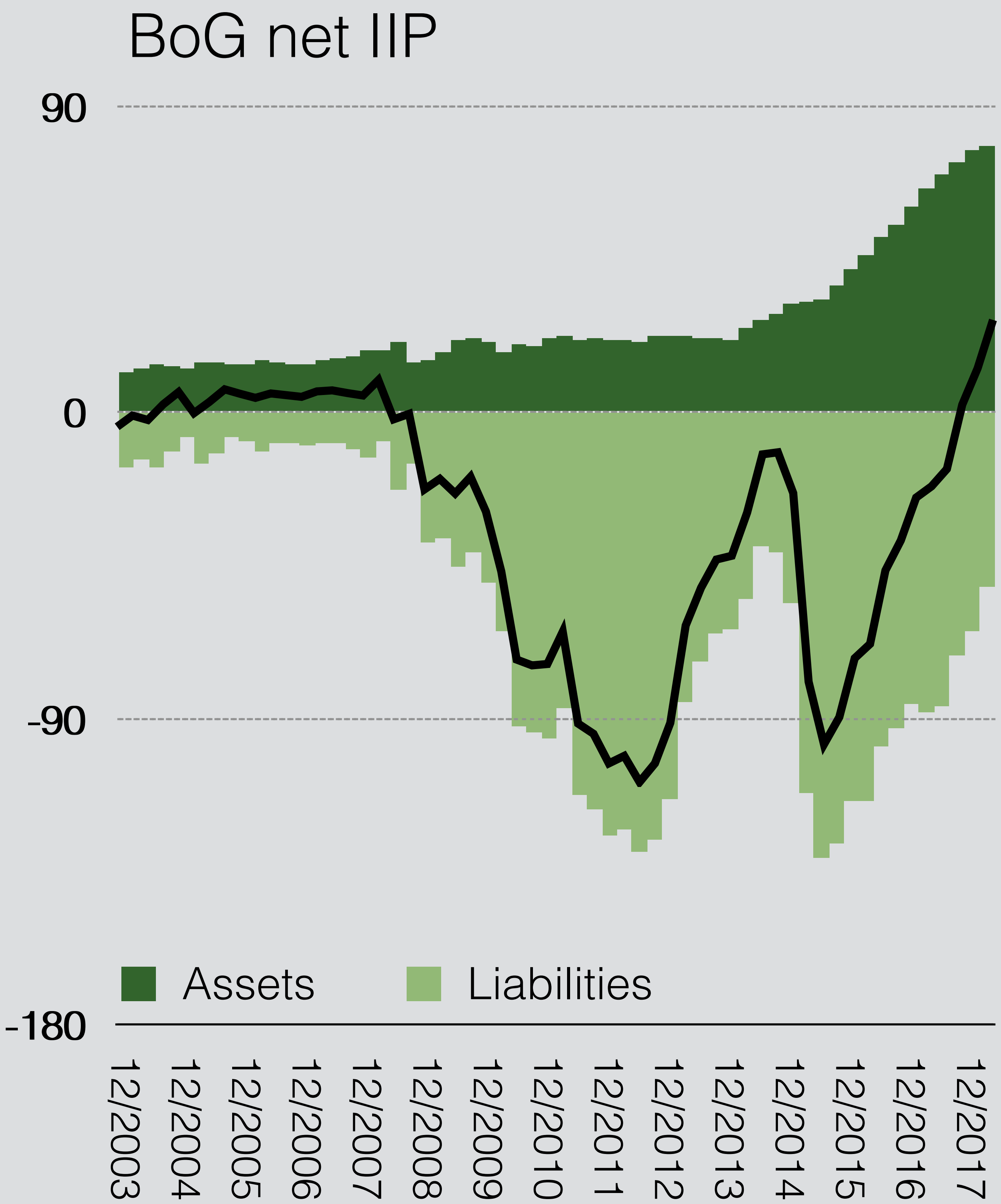


All the cash withdrawn from banks during the two phases of Crisis have now returned…

Bank of Greece international investment position (€ billions)

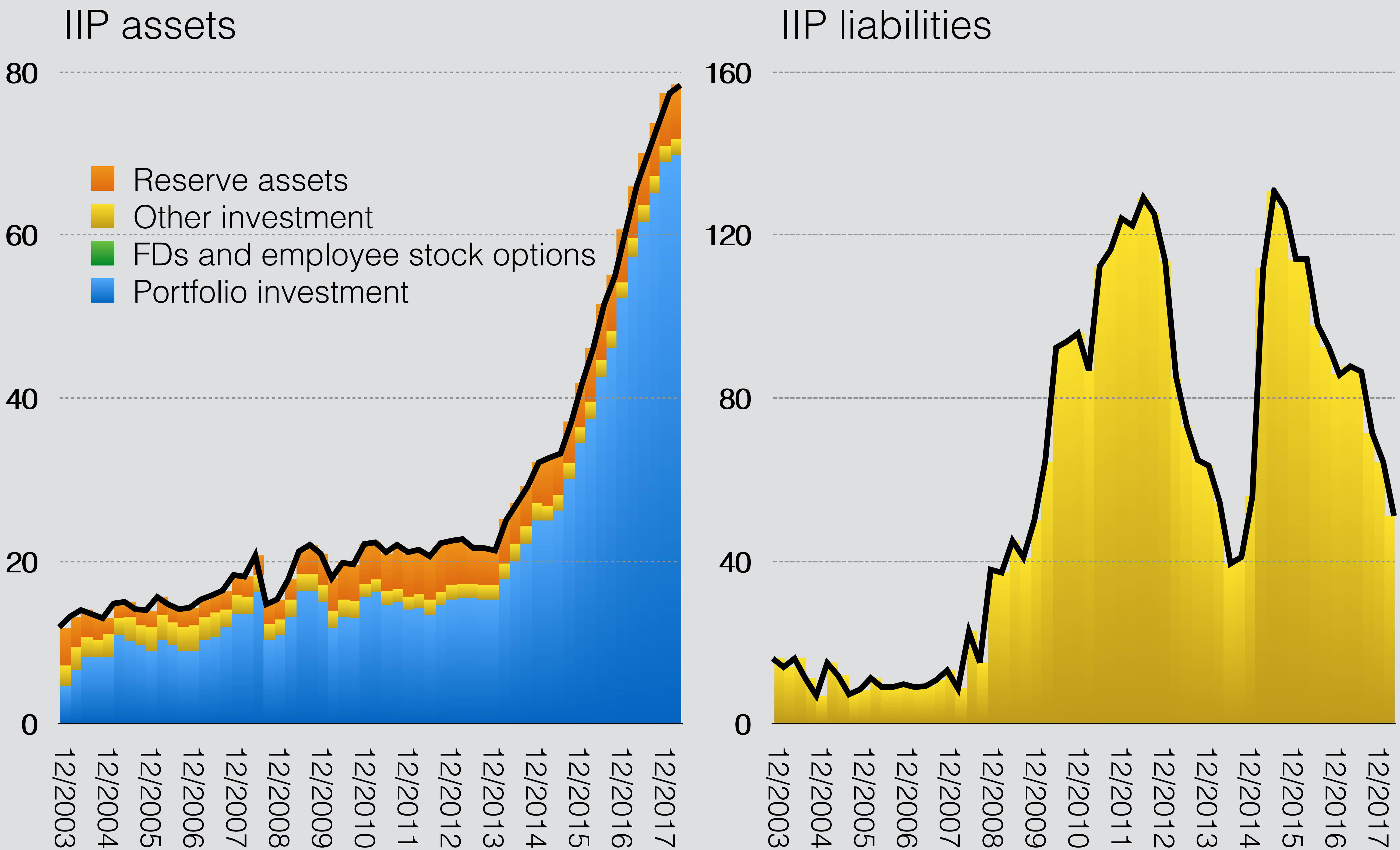


Bank of Greece net international investment position (€ billions)



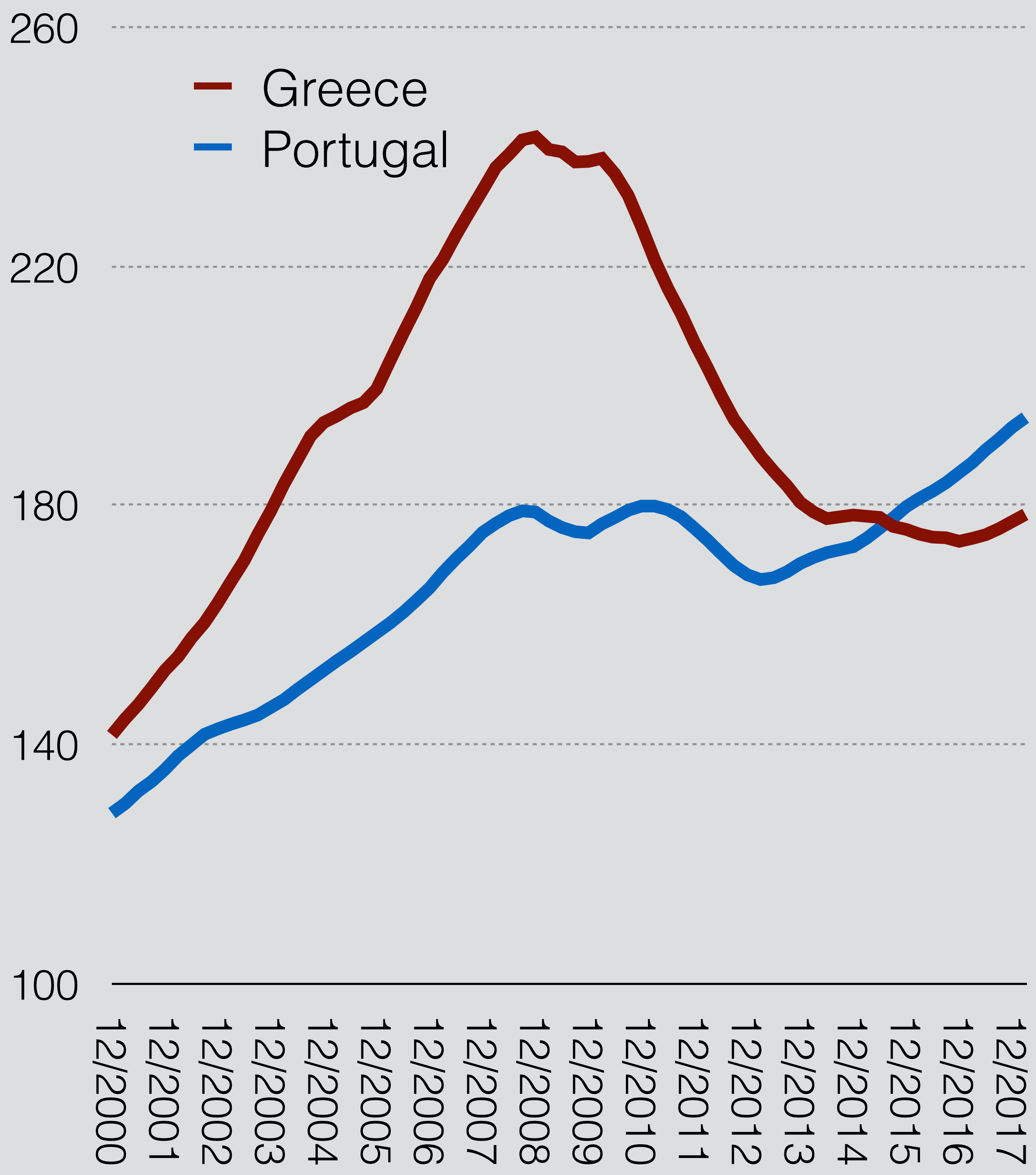
Net foreign assets of the Bank of Greece is no close to pre-crisis norm…

Bank of Greece net international investment position (€ billions)



GDP

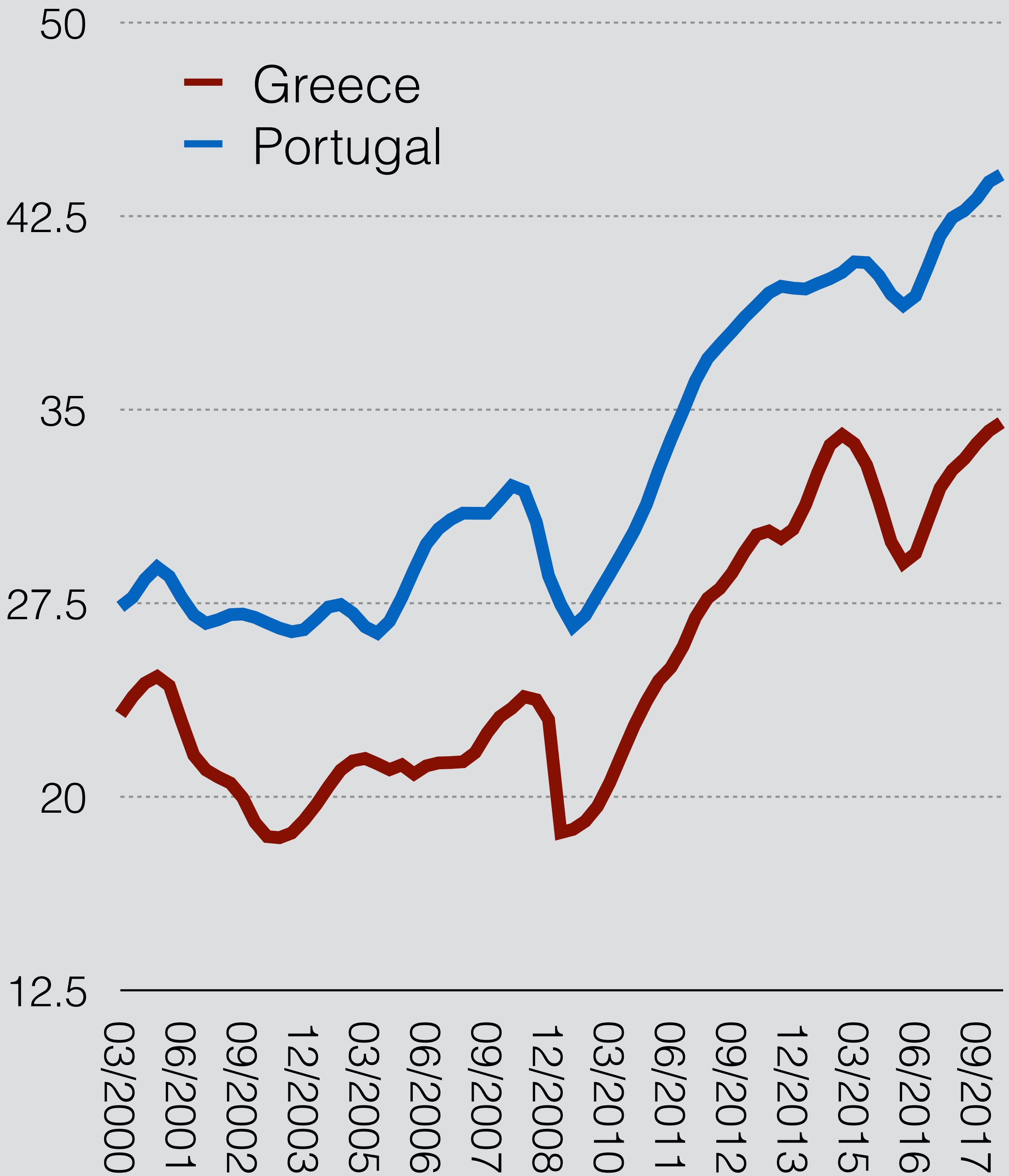
Nominal GDP (trend, € billions)

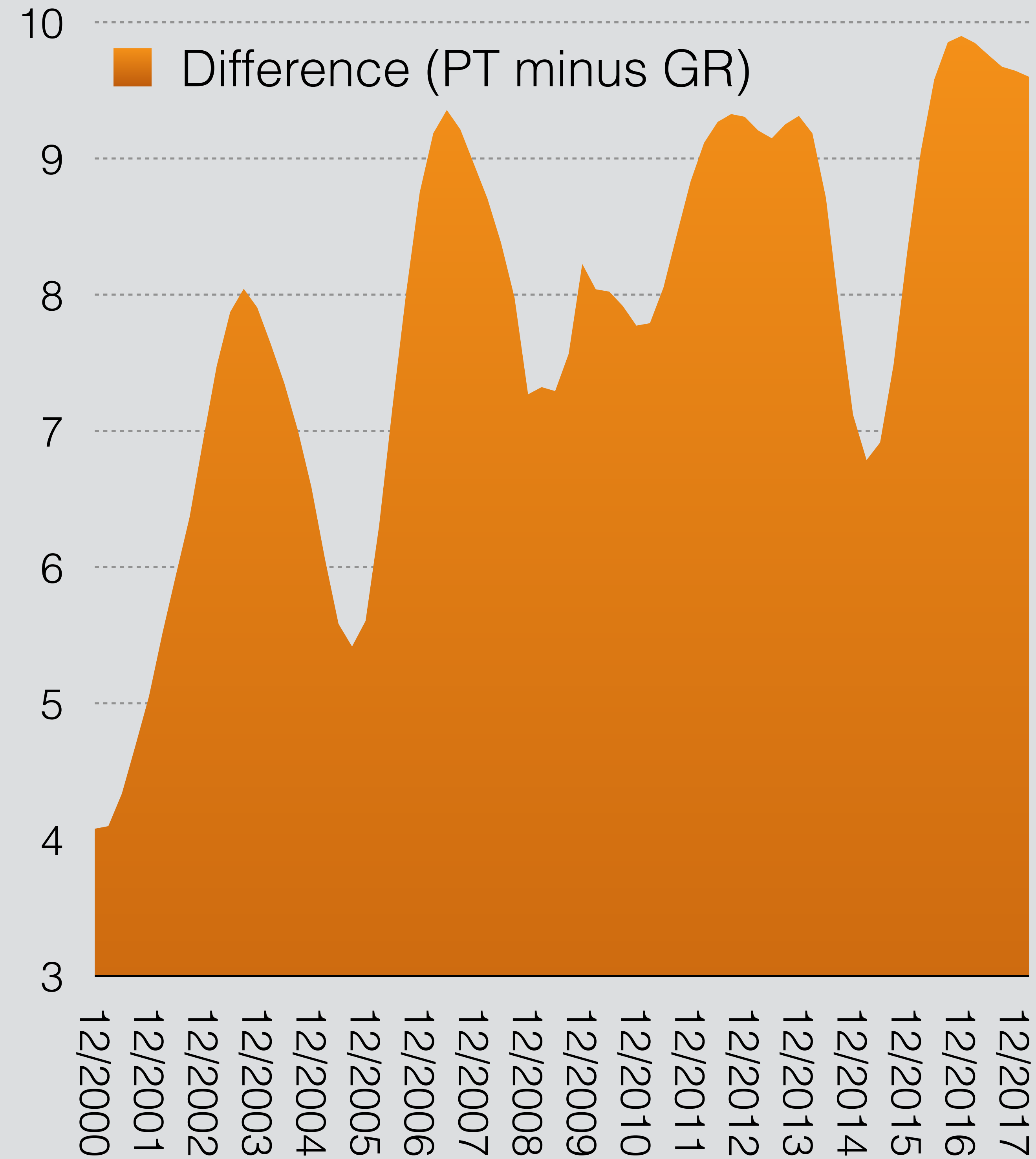


In 2000, Portugal's NGDP was 10% smaller than Greece, today is it 9% larger.

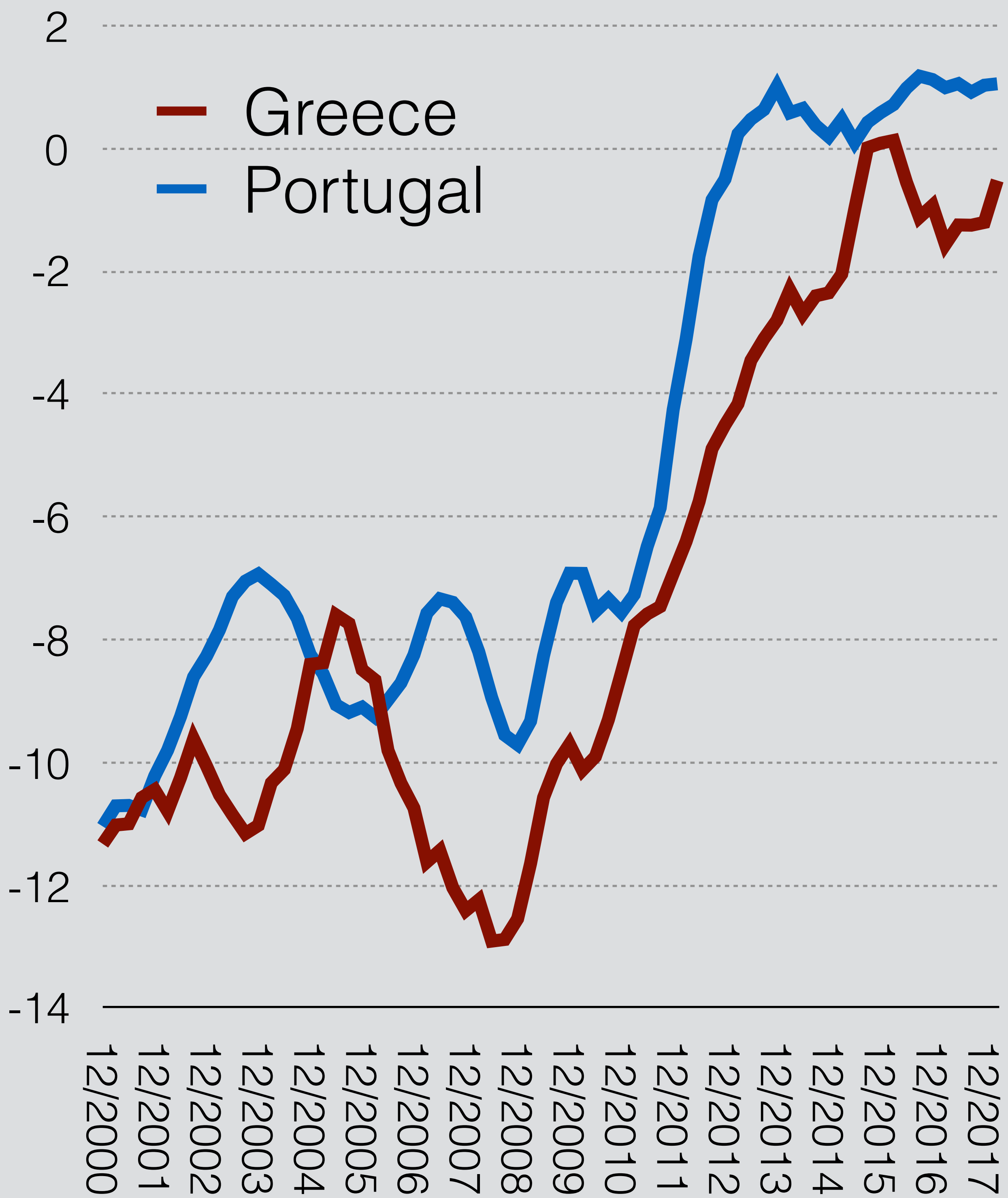
Exports of goods and services/GDP (percent)

Portugal has always had a larger share of exports of goods and services in GDP, but this difference increased over the decade since joining €





Goods and services balance/GDP (4QMA, percent)

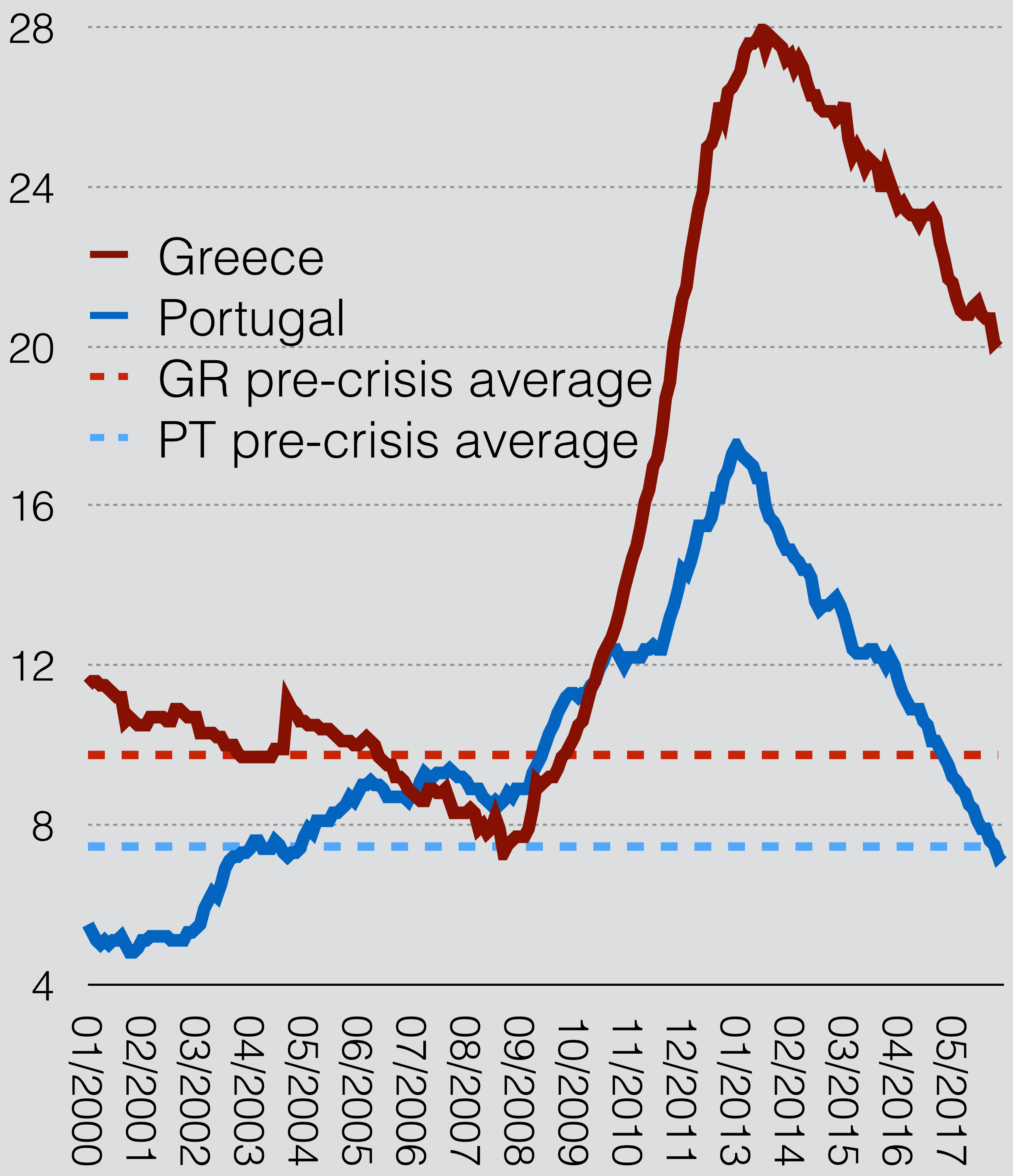


Portugal's external imbalance* adjusted quicker than Greece, and at +1% of GDP is more favourable, though Greece suffered following the Varoufakis stand-off upon election of Syria in 2015.

* from national accounts data,there are small discrepancies compared with BOP.

Unemployment

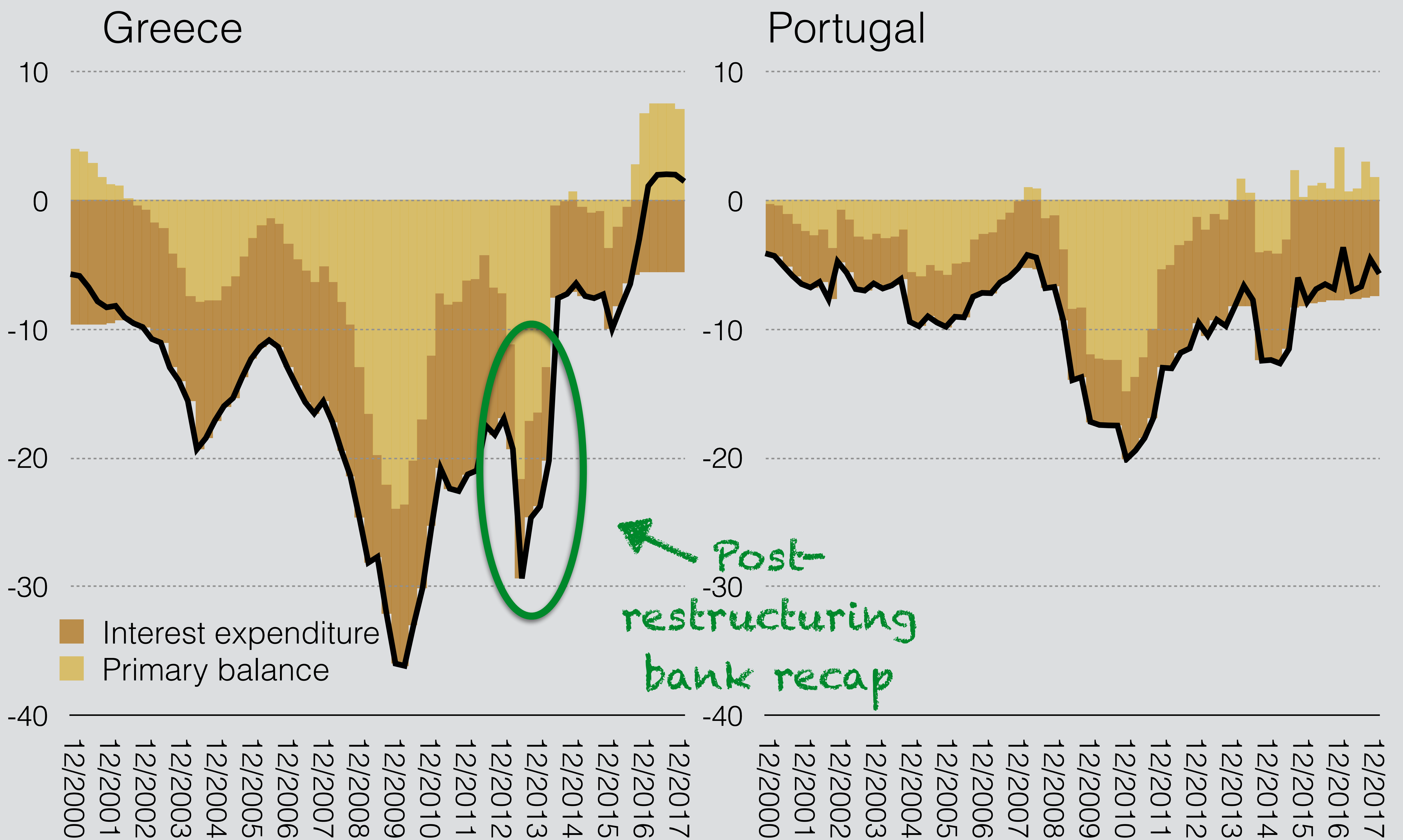
Unemployment rate (%)



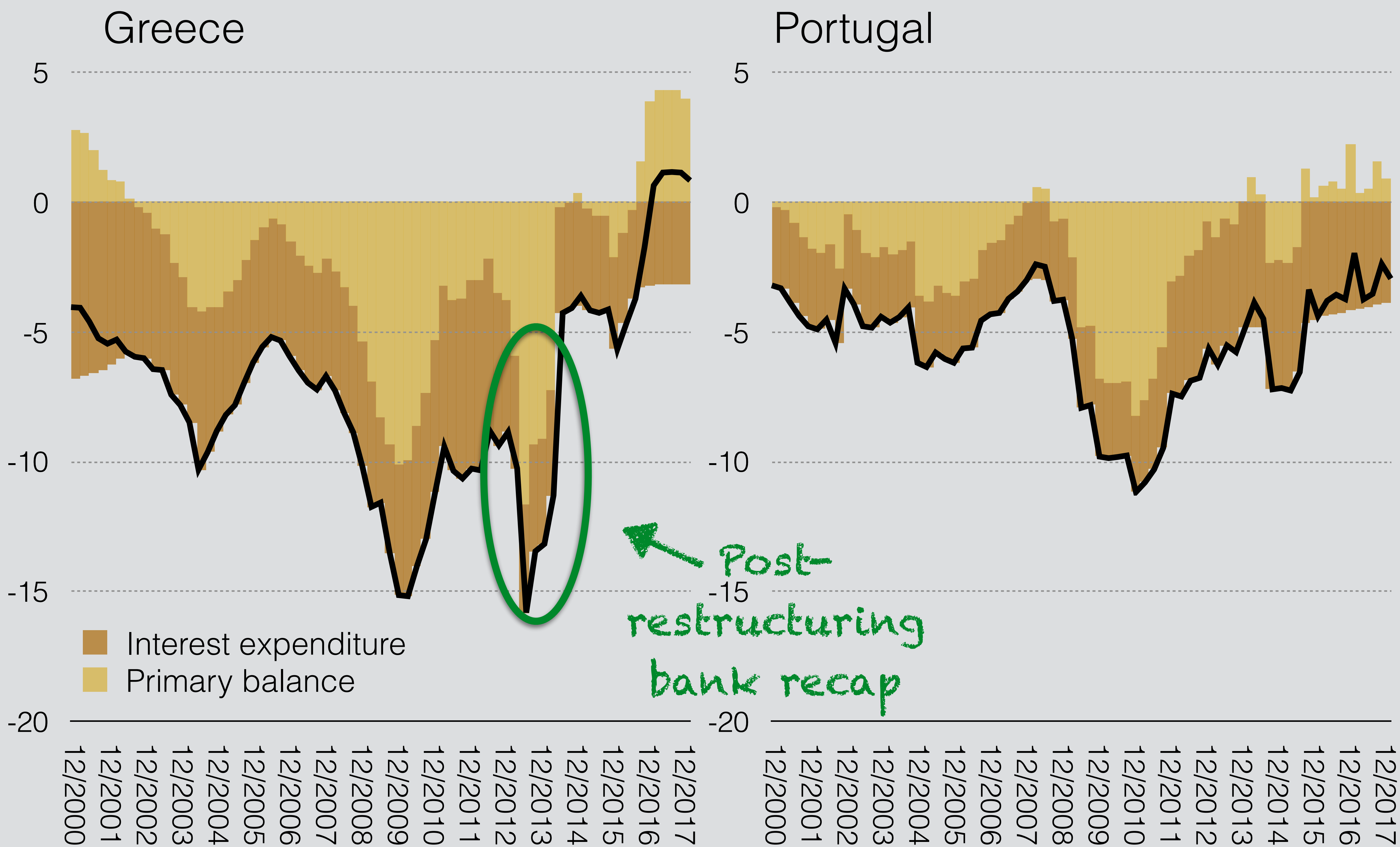
Unemployment in Portugal is now below the pre-Crisis average; in Greece is remains about 10bps above

Fiscal

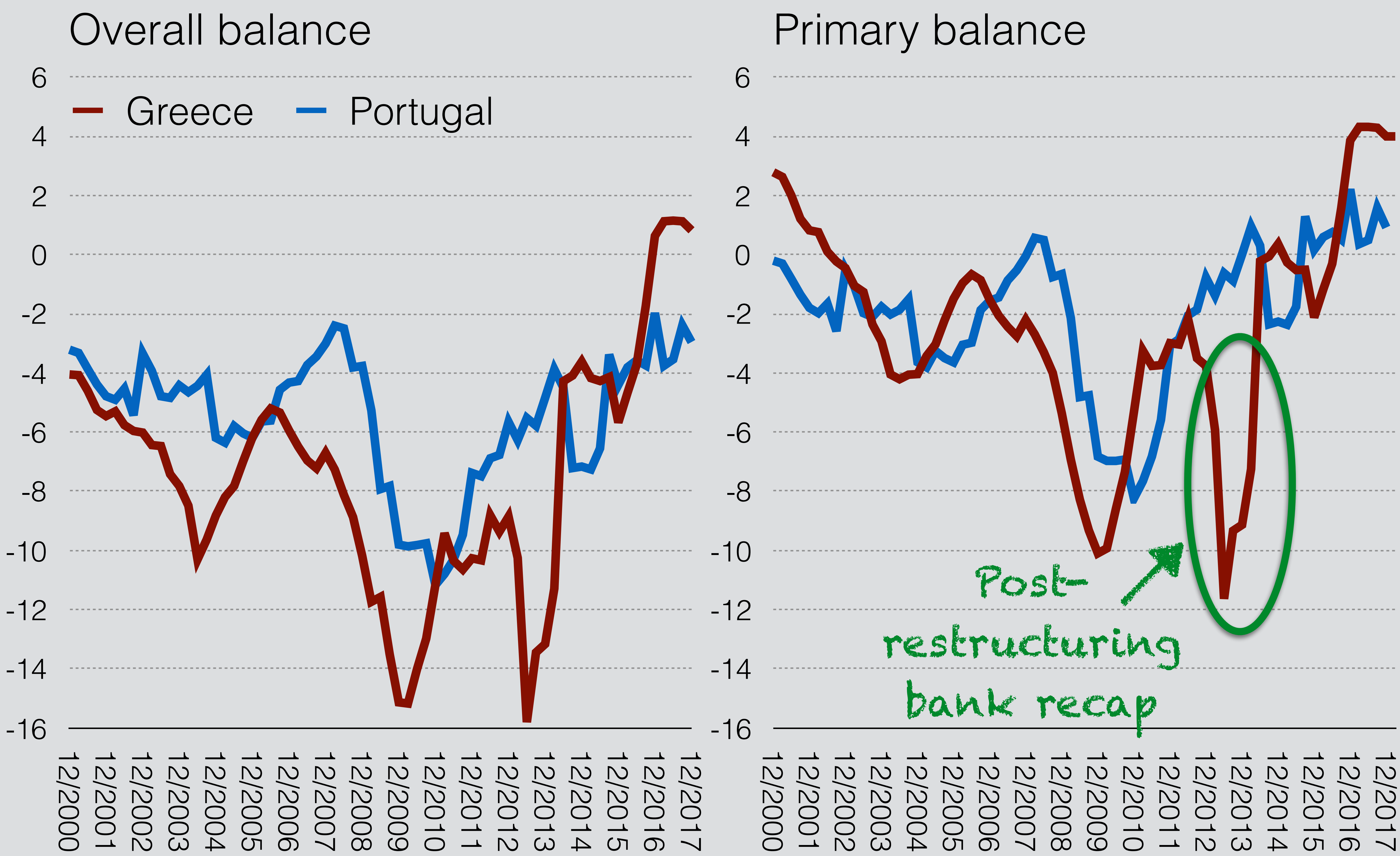
Fiscal balance (€ billions)



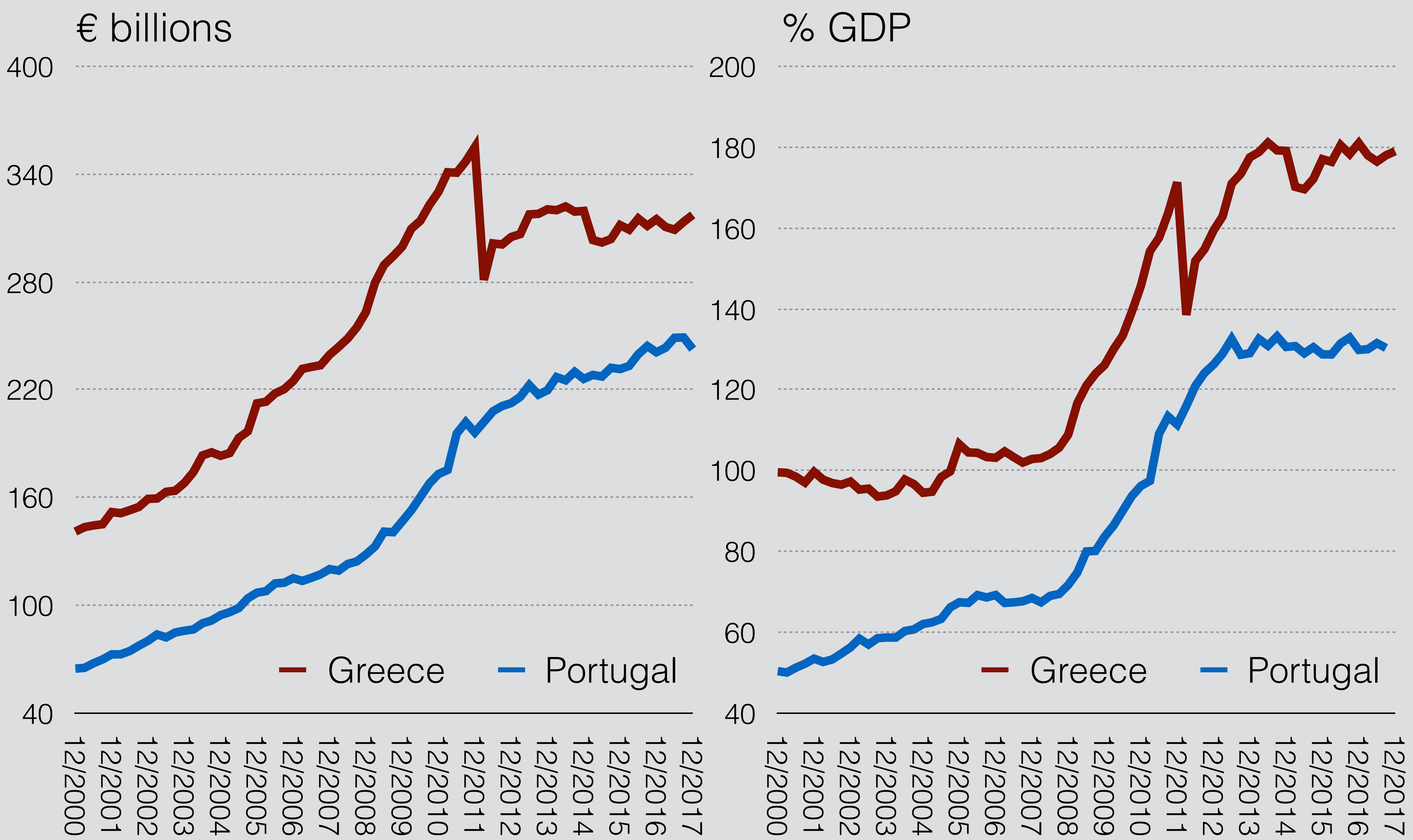
Fiscal balance (%GDP)



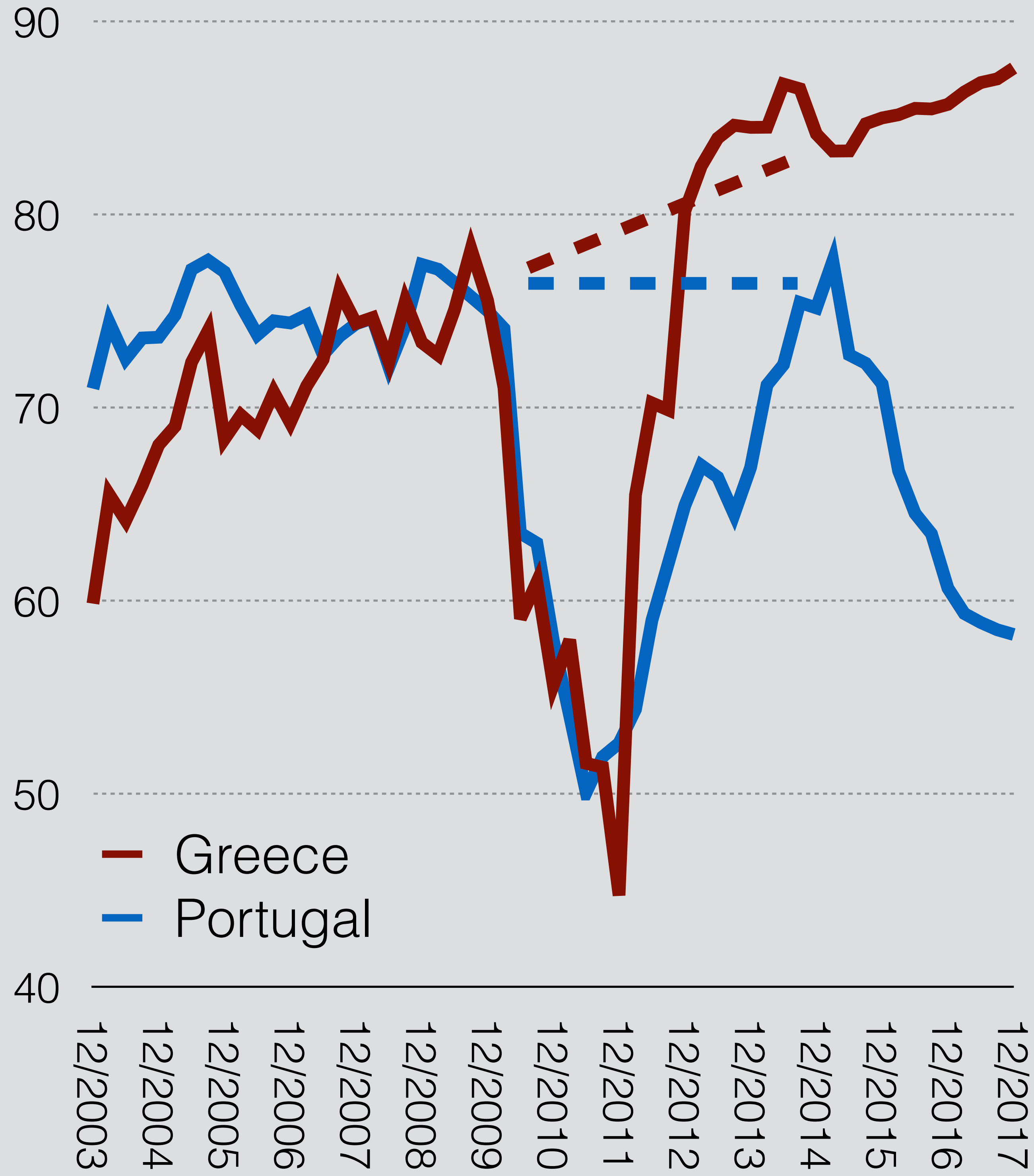
Fiscal balance (%GDP)



General government gross debt (Maastricht)



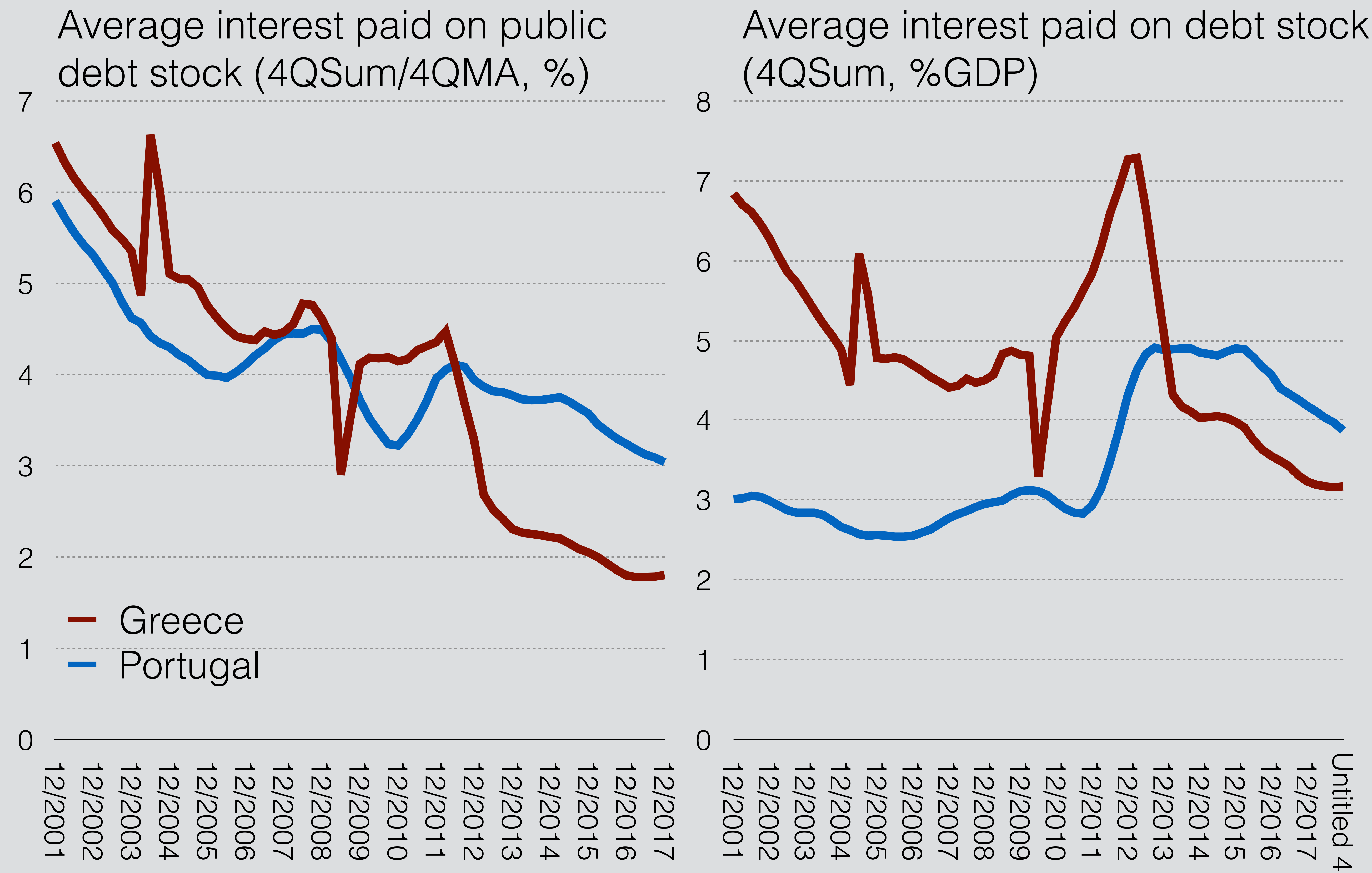
External share in government debt (market price/face value, %)



Greek debt is closing on 90% share held externally (and nearly all to official sector, see later)…

…PSPP has sharply reduced the share of Portuguese debt held externally

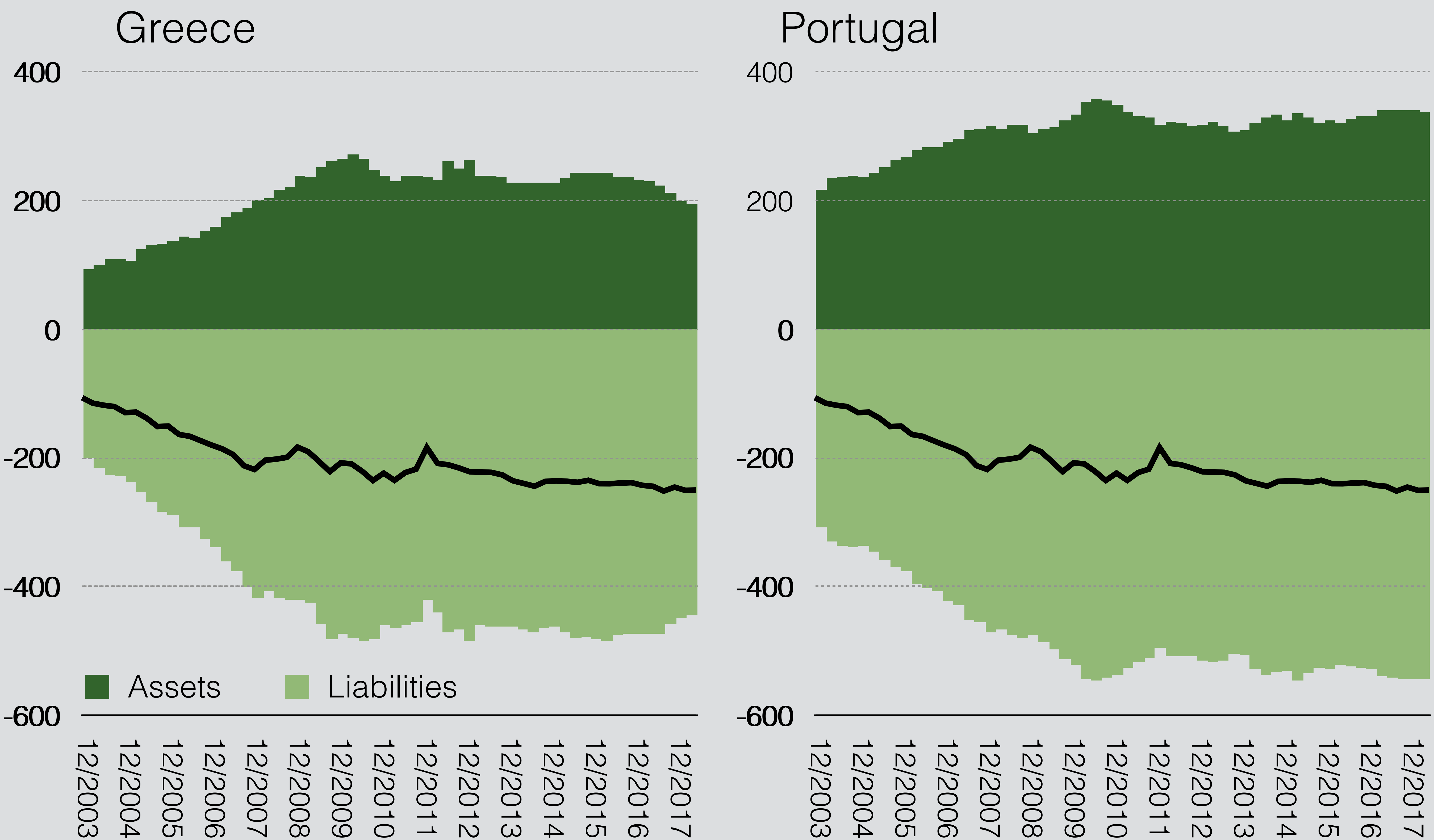
Interest rate on public debt (%)



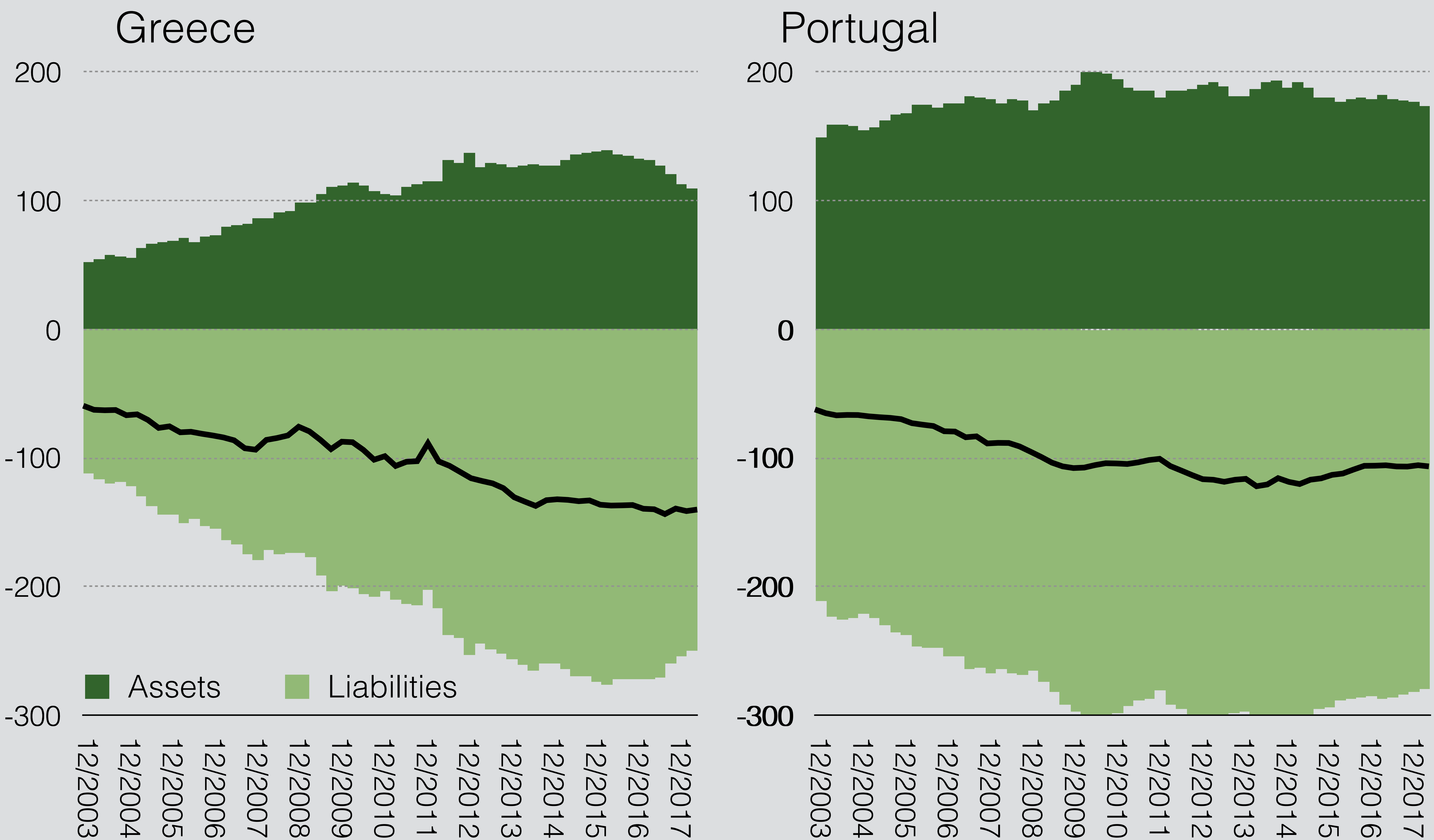
External

External stocks

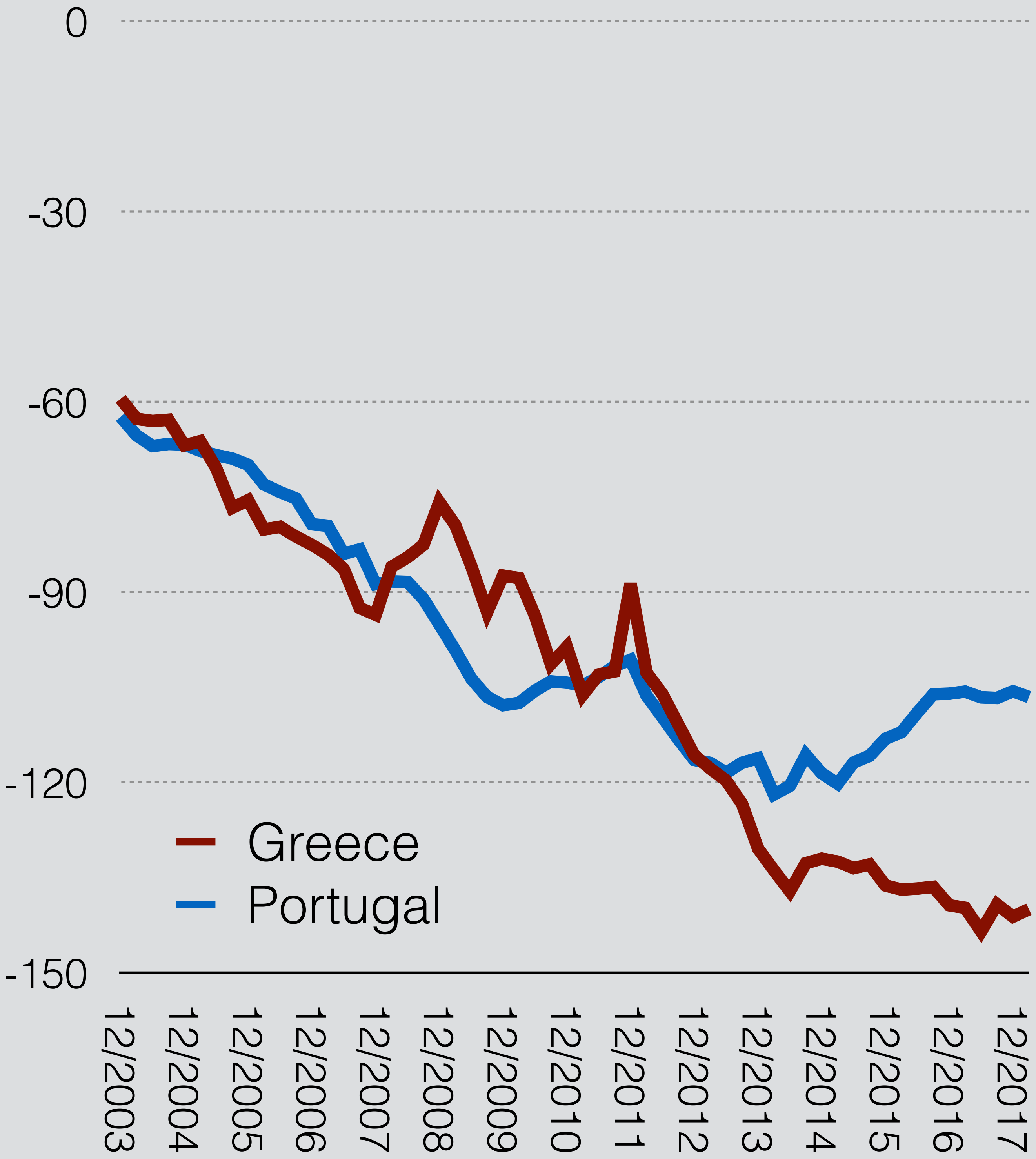
International investment position (€ billions)



International investment position (%GDP)



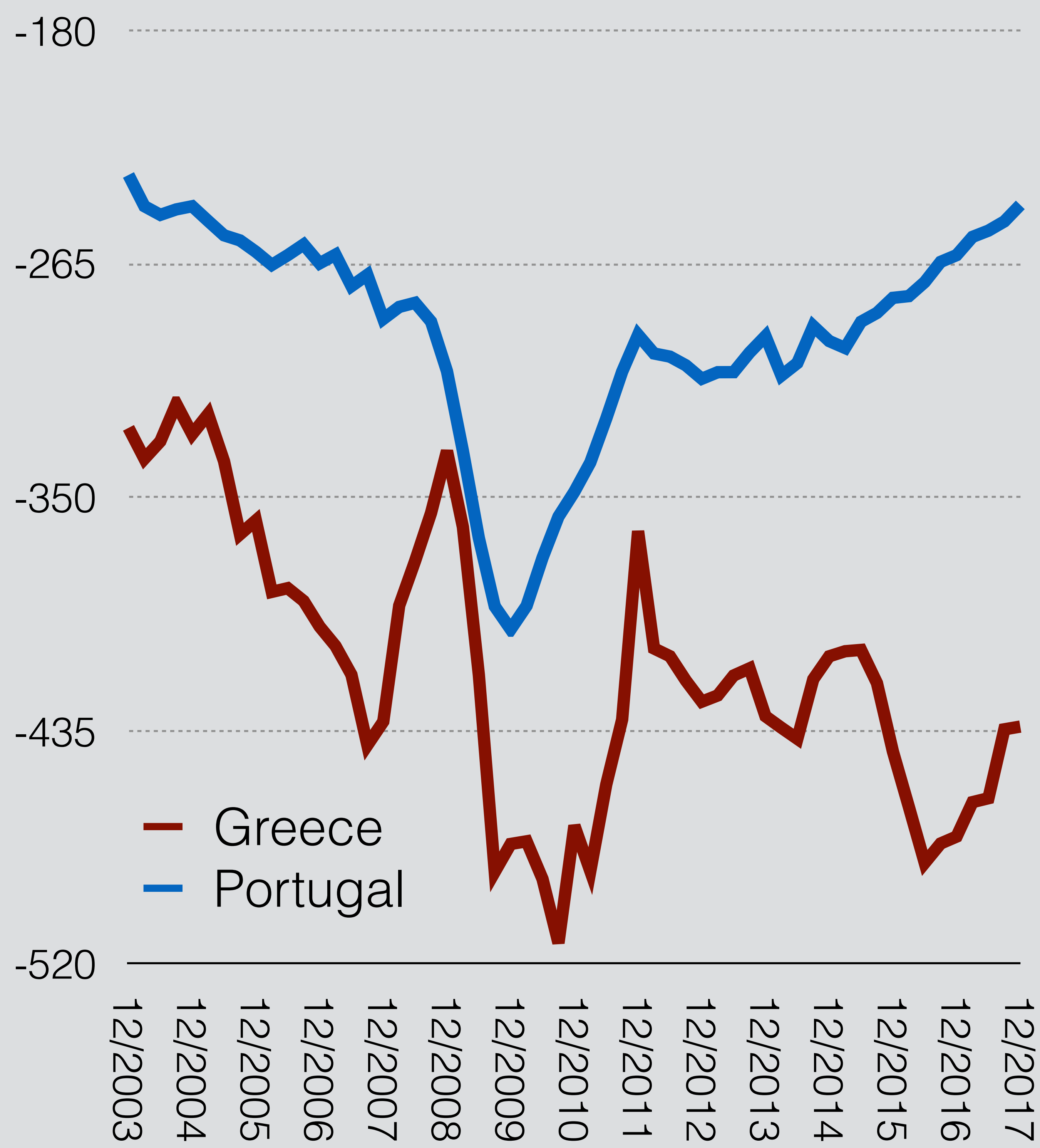
Net international investment position (%GDP)



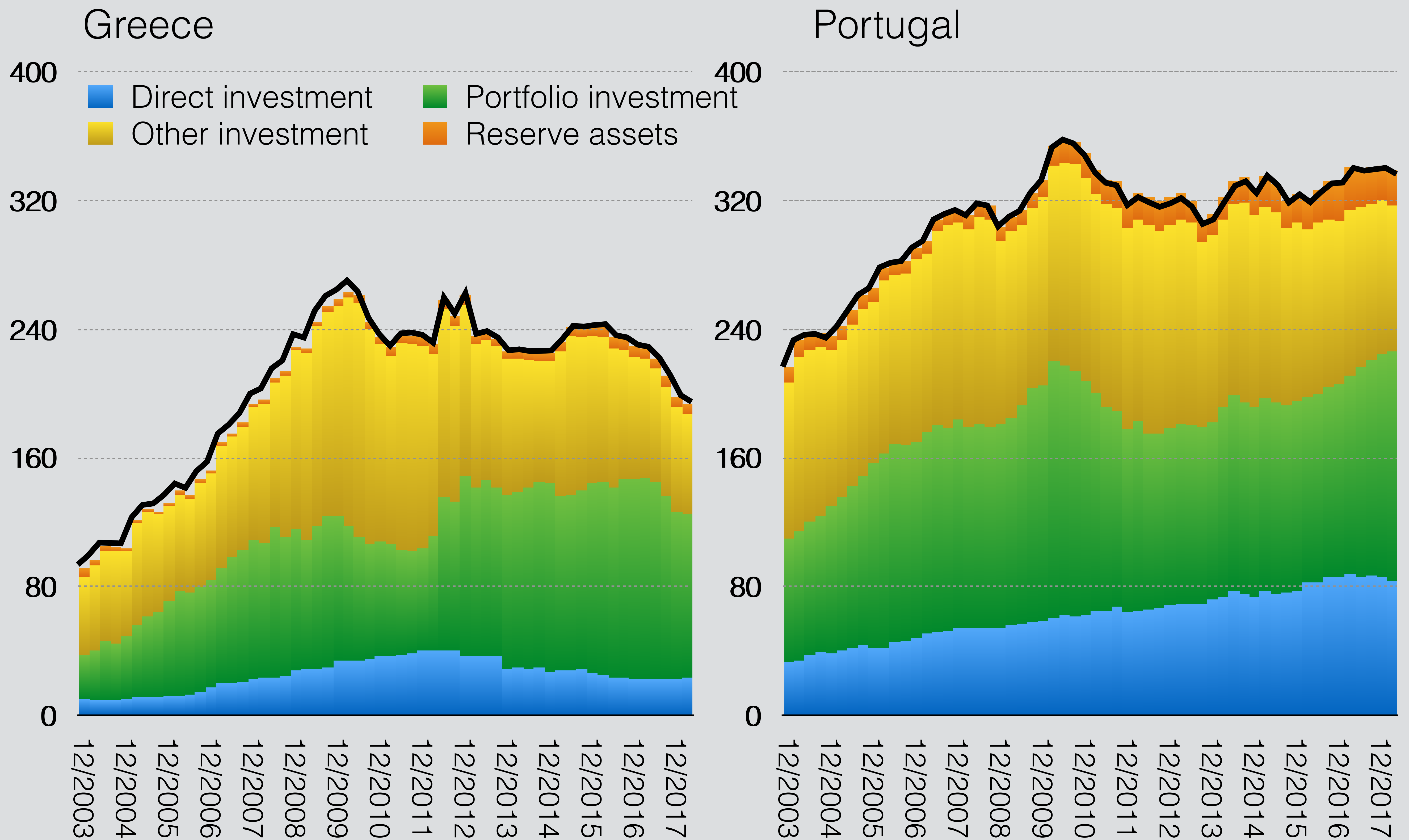
Greek NIIP deteriorated compared with Portugal since the euro area crisis when measured relative to GDP…

Net international investment position (% exports of goods and services)

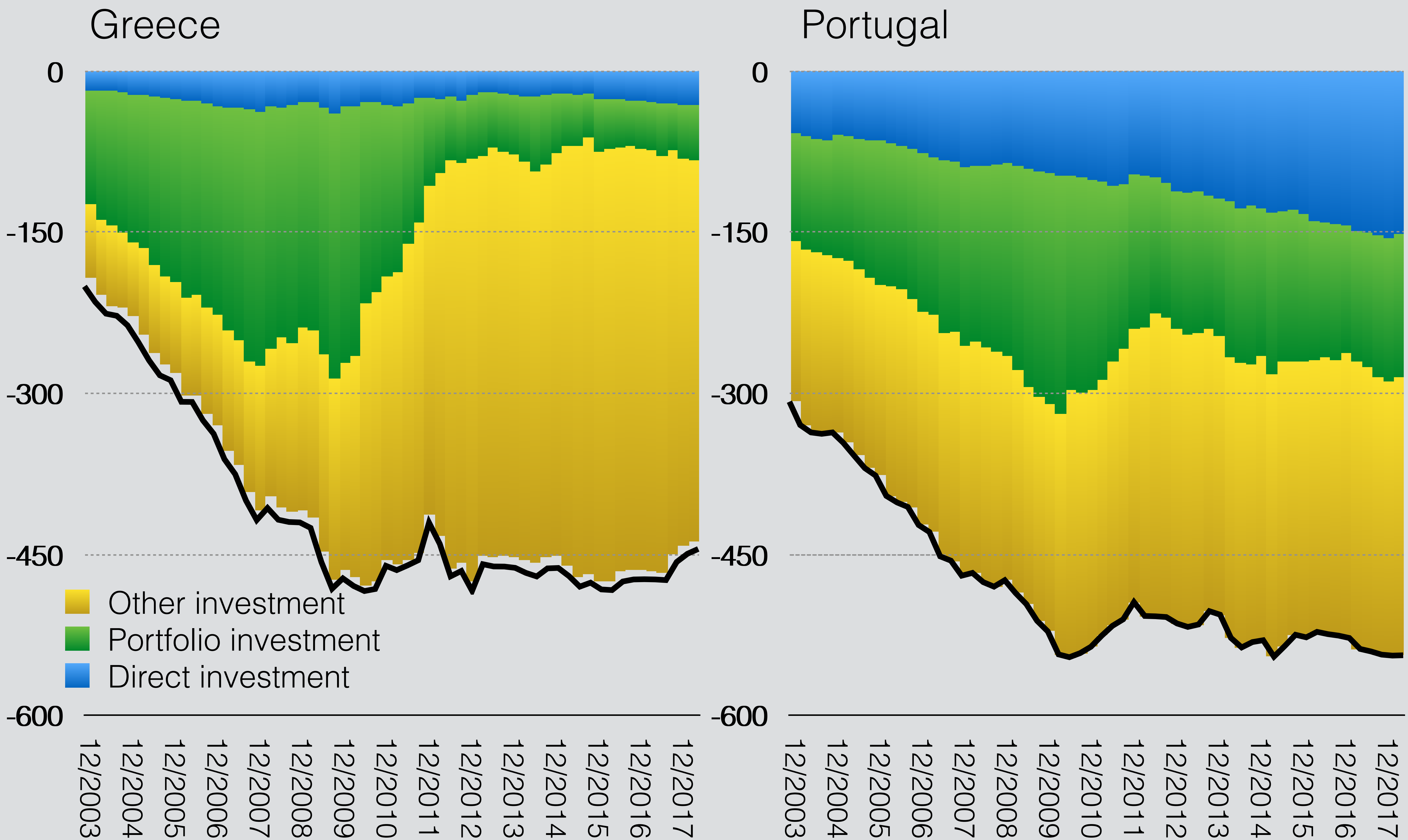
...while compared with exports of goods and services, the Greek NIIP has always been structurally more stretched as exports are smaller than in Portugal



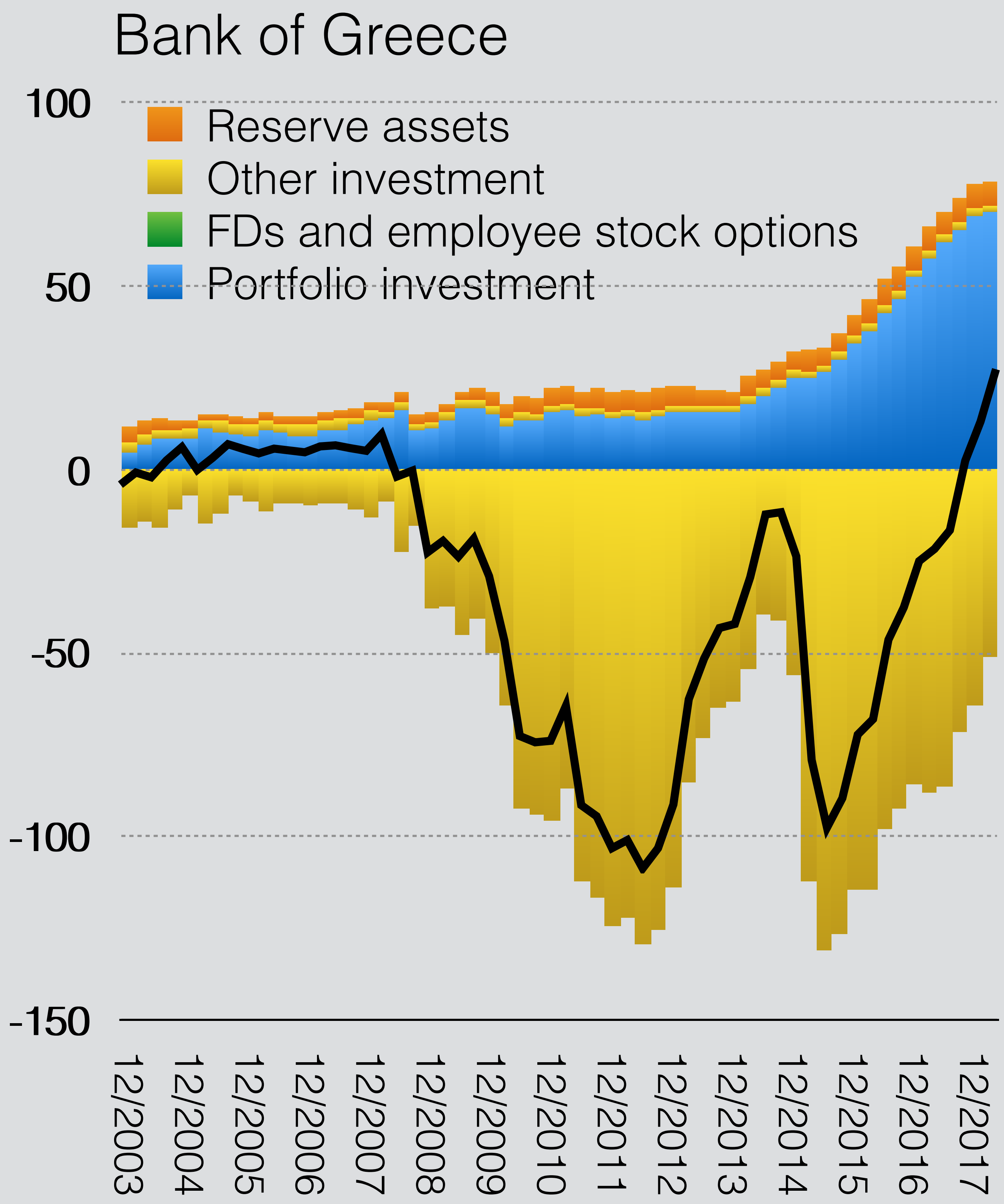
IIP assets (€ billions)

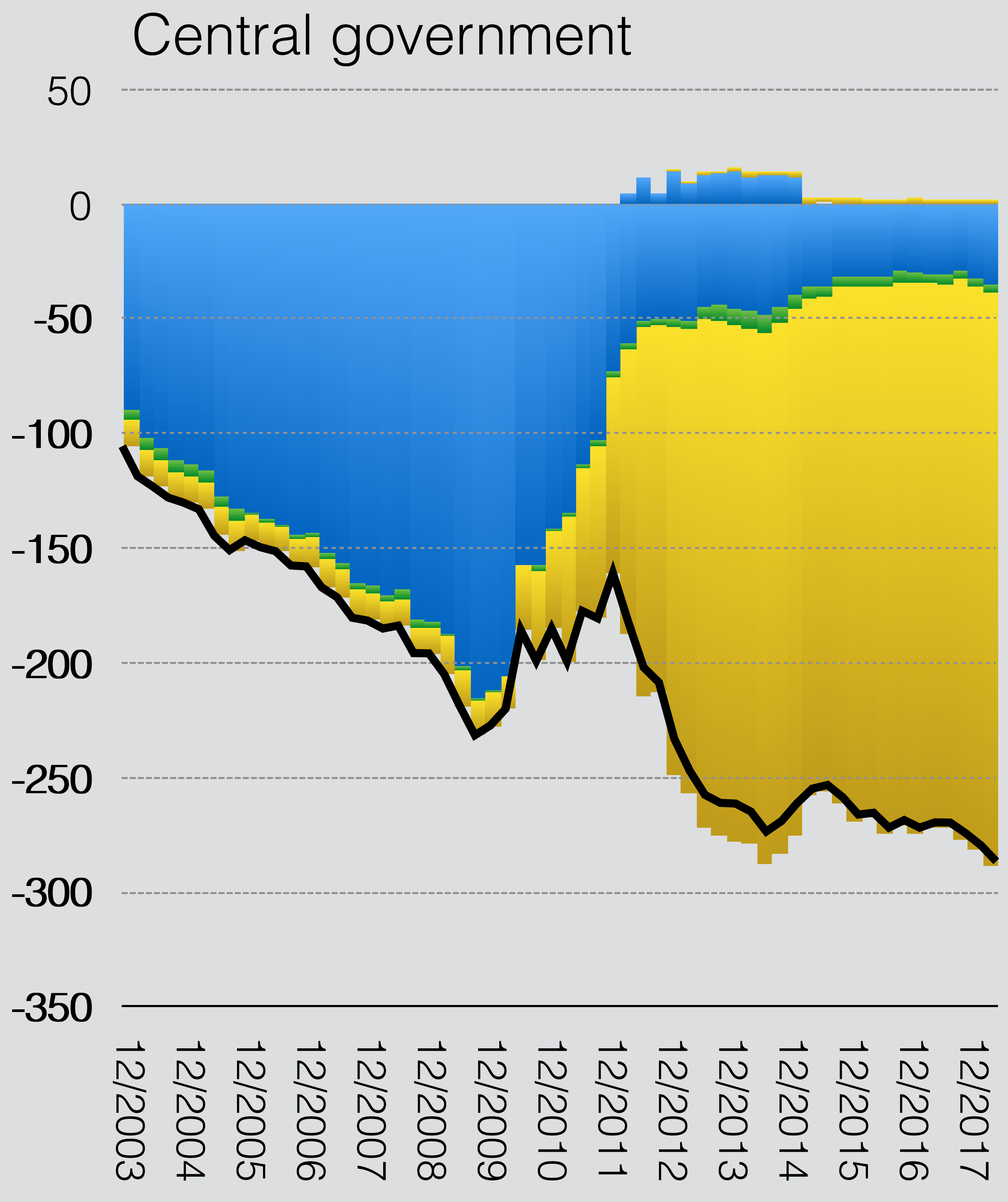


IIP liabilities (€ billions)

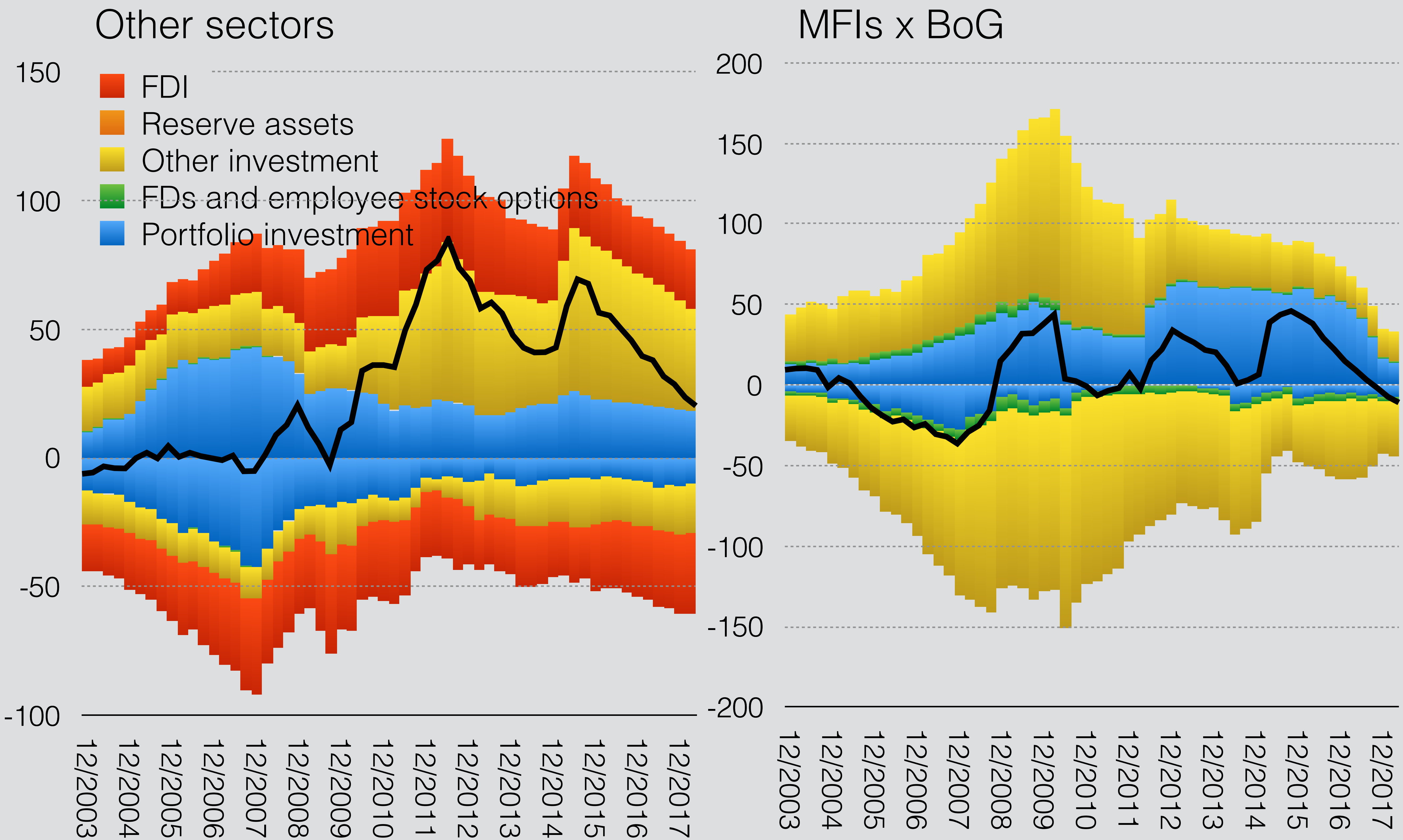


Greece net IIP by sector (€ billions)

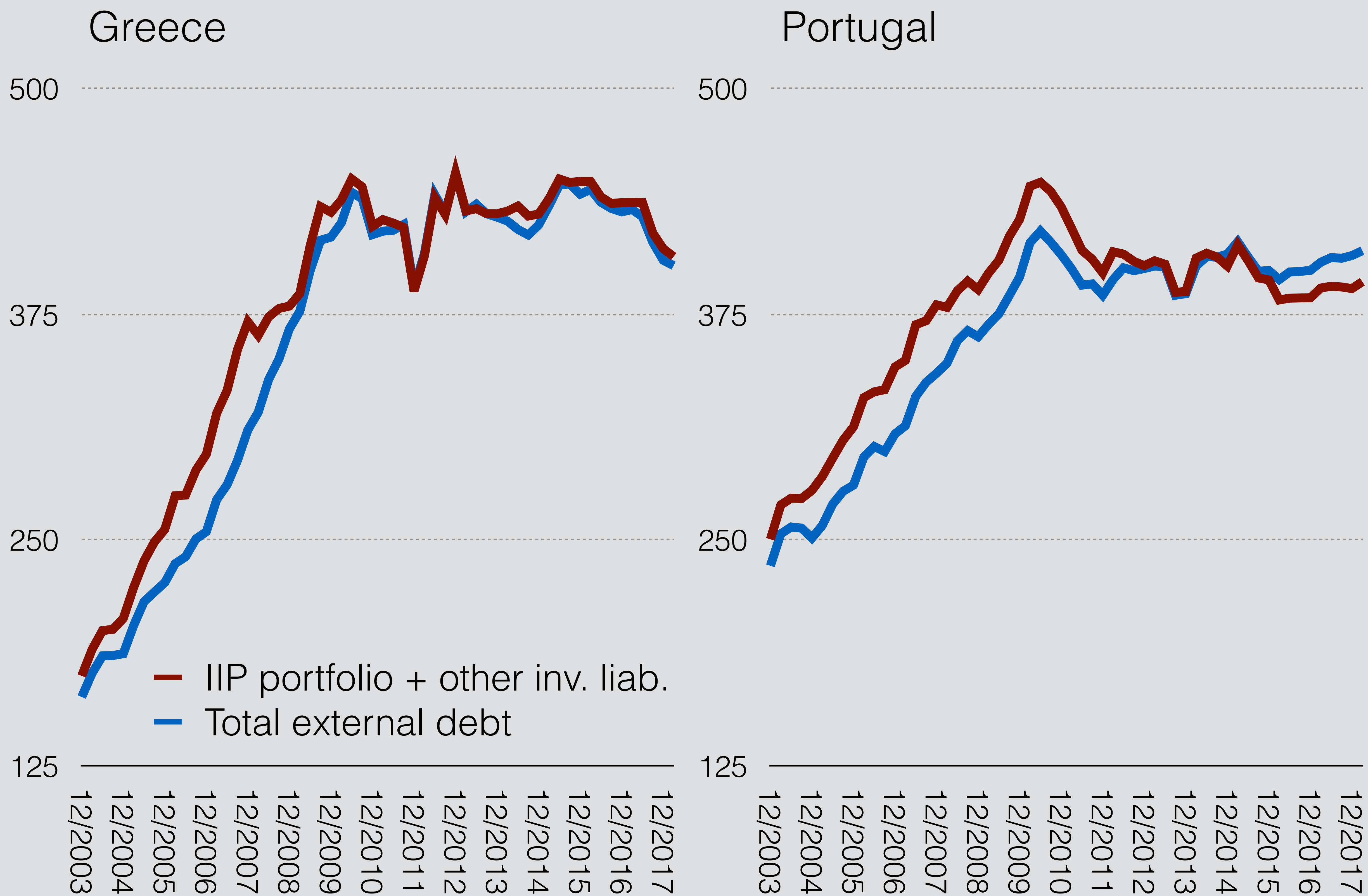




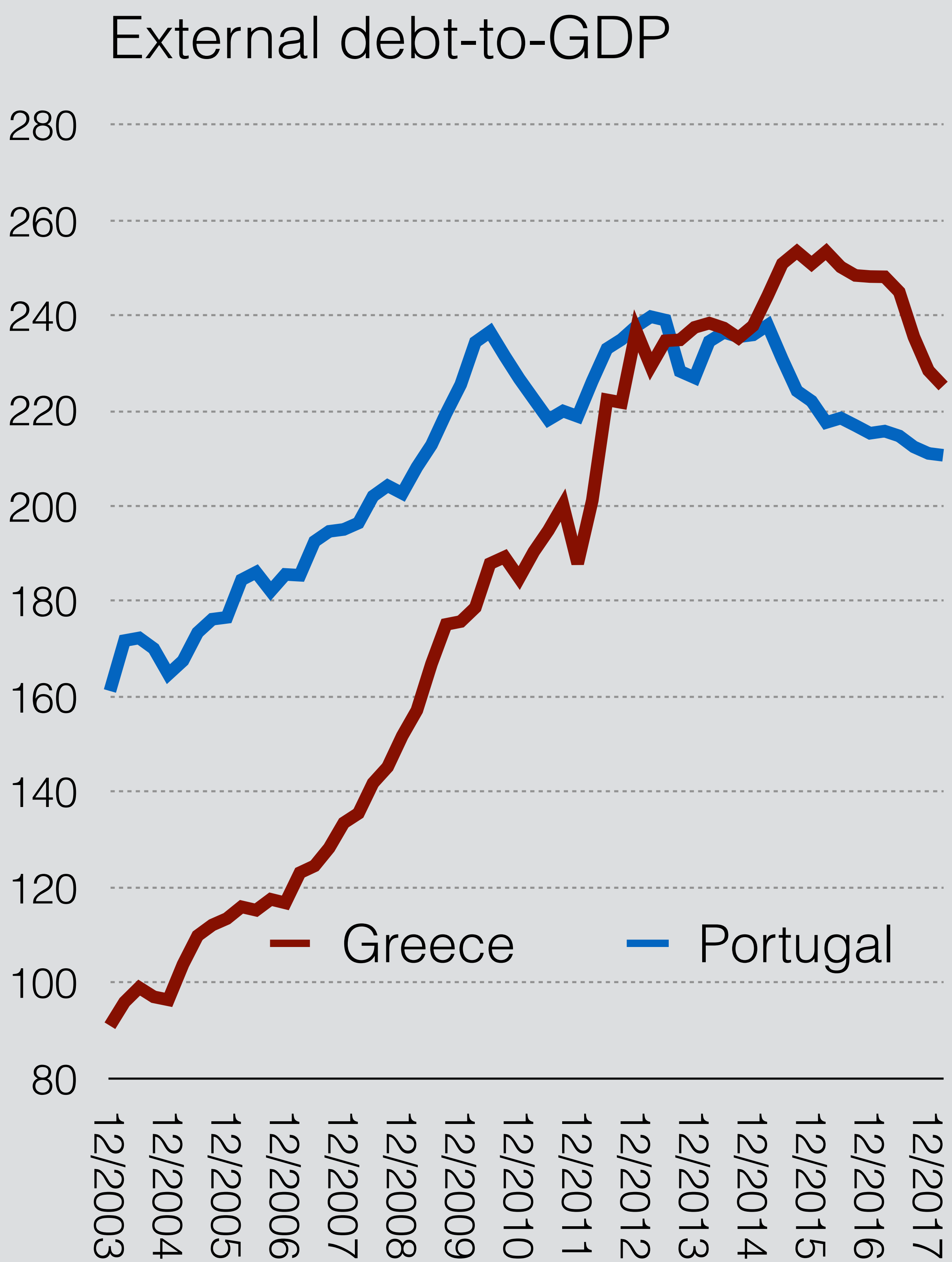
Greece net IIP by sector (€ billions)

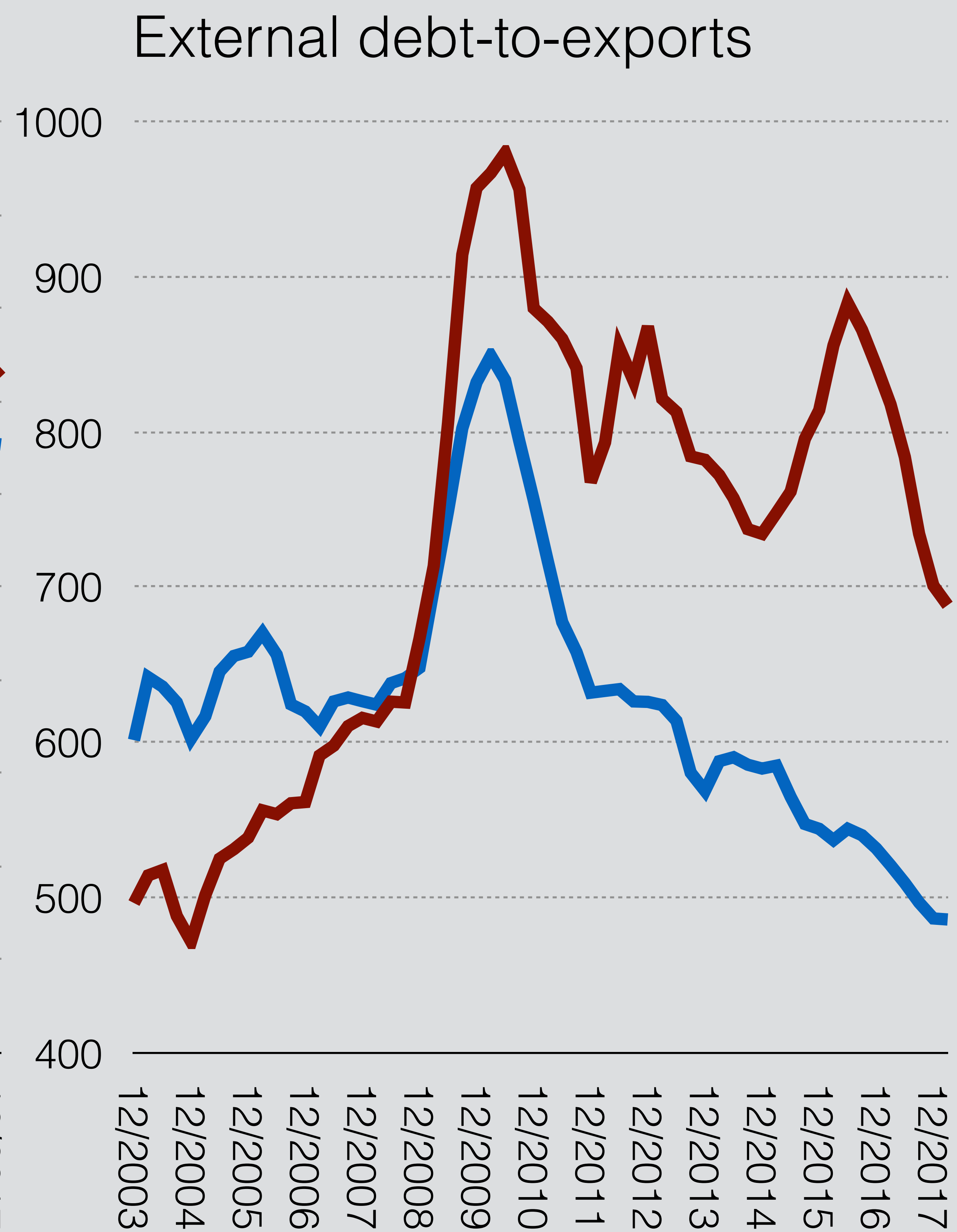


External debt and IIP portfolio and other investment liabilities (€ billions)

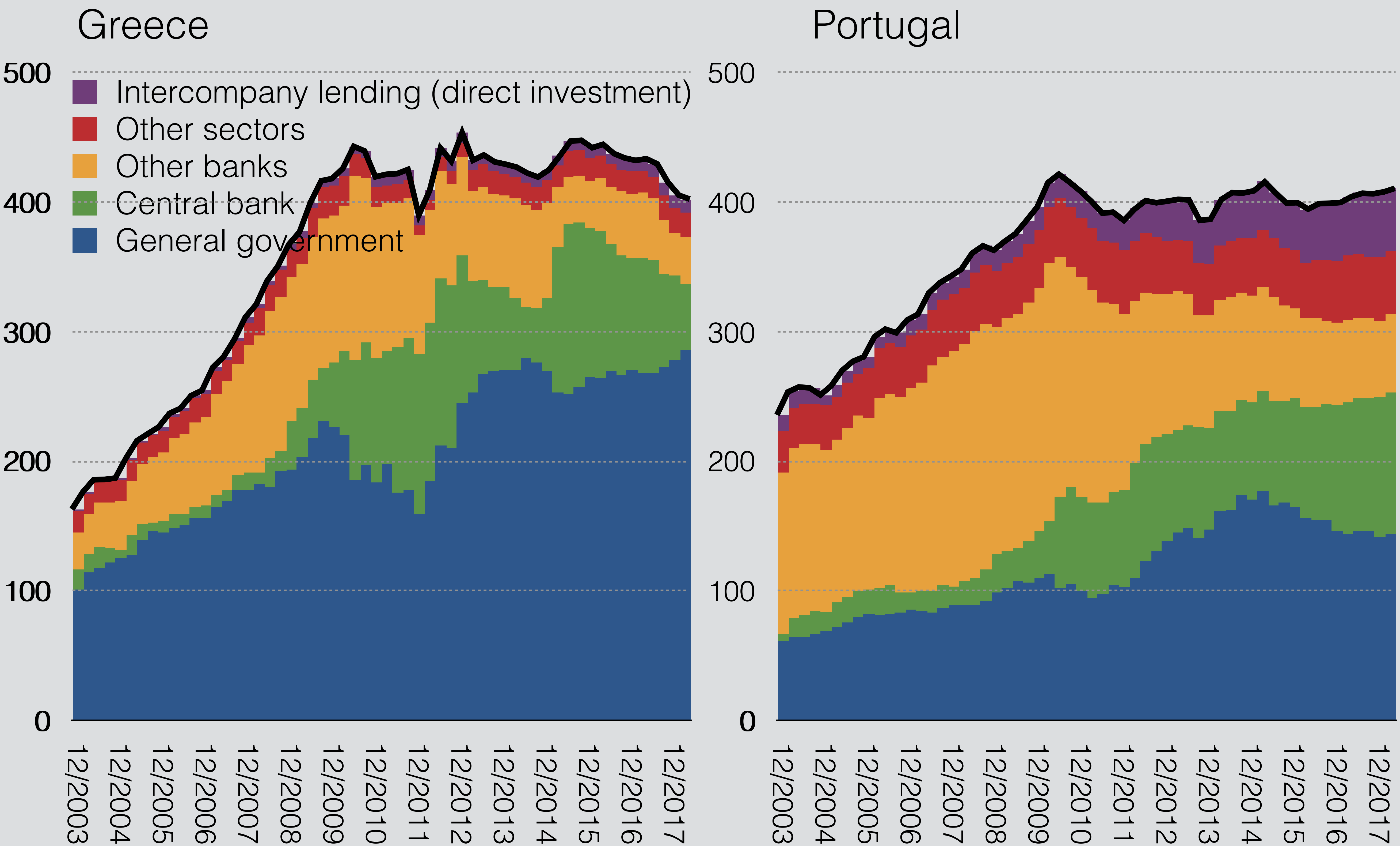


External debt metrics (%)



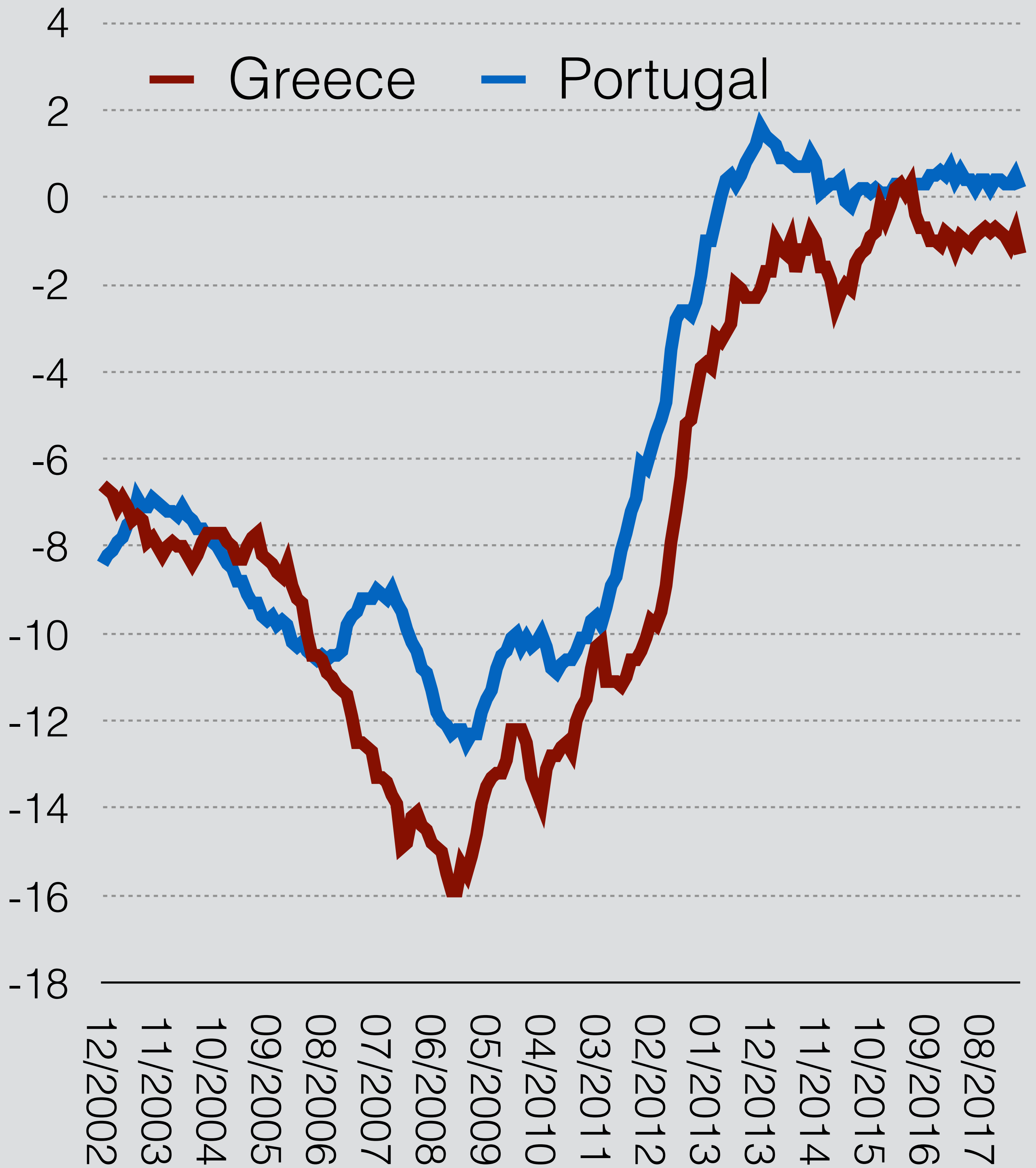


External debt by sector (€ billions)

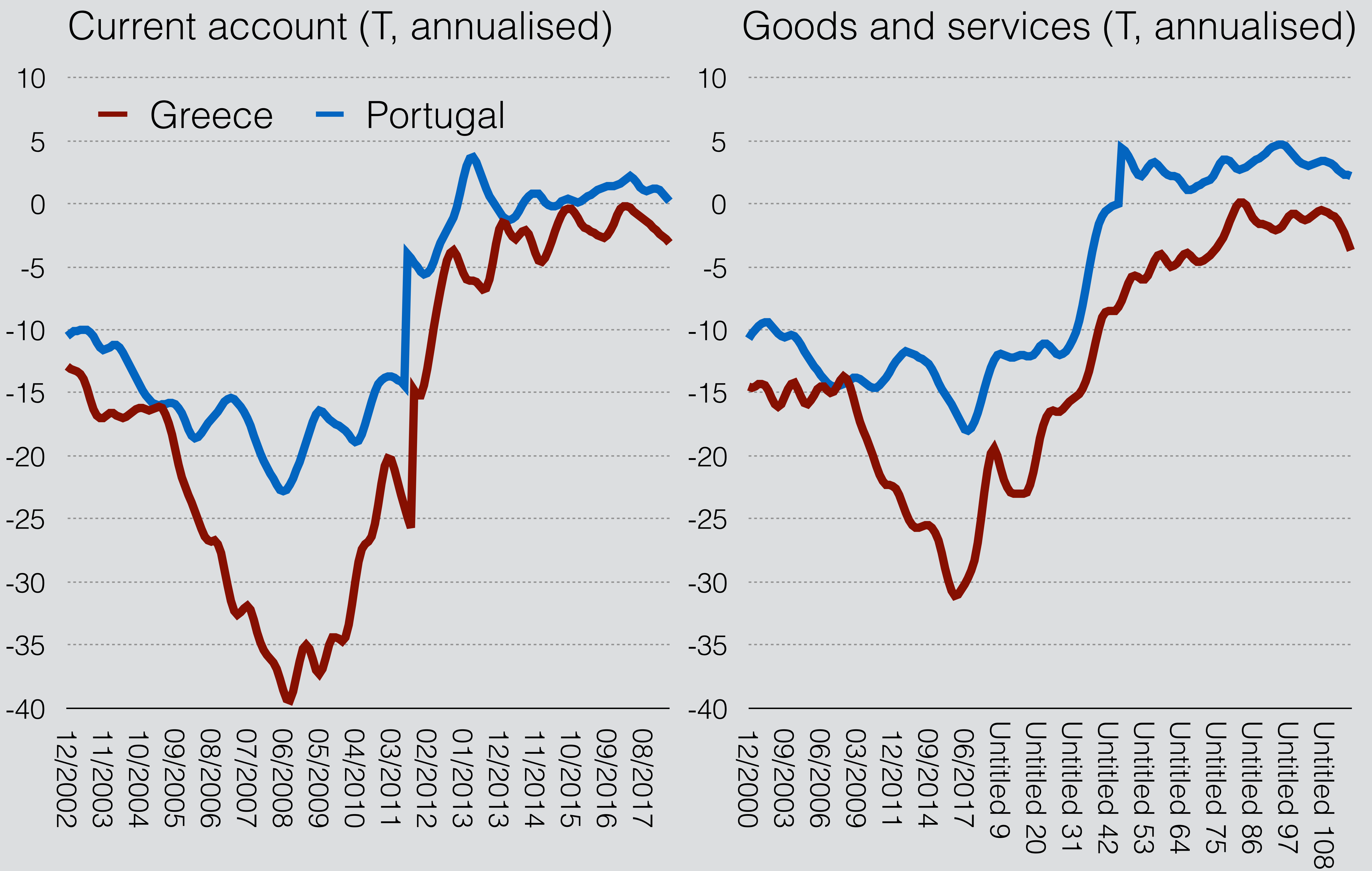


External flows

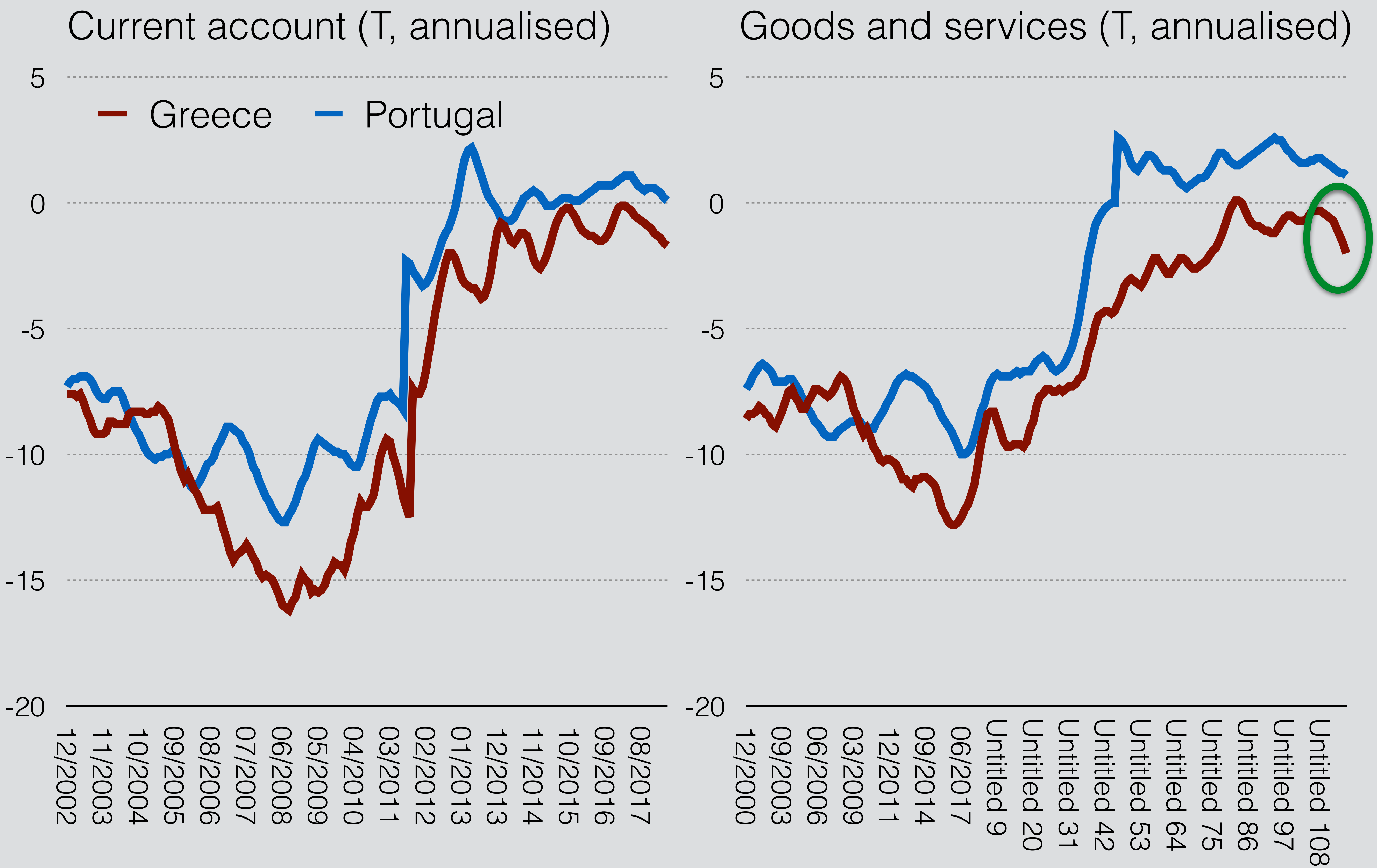
Current account (NSA, 12M Sum, %GDP)



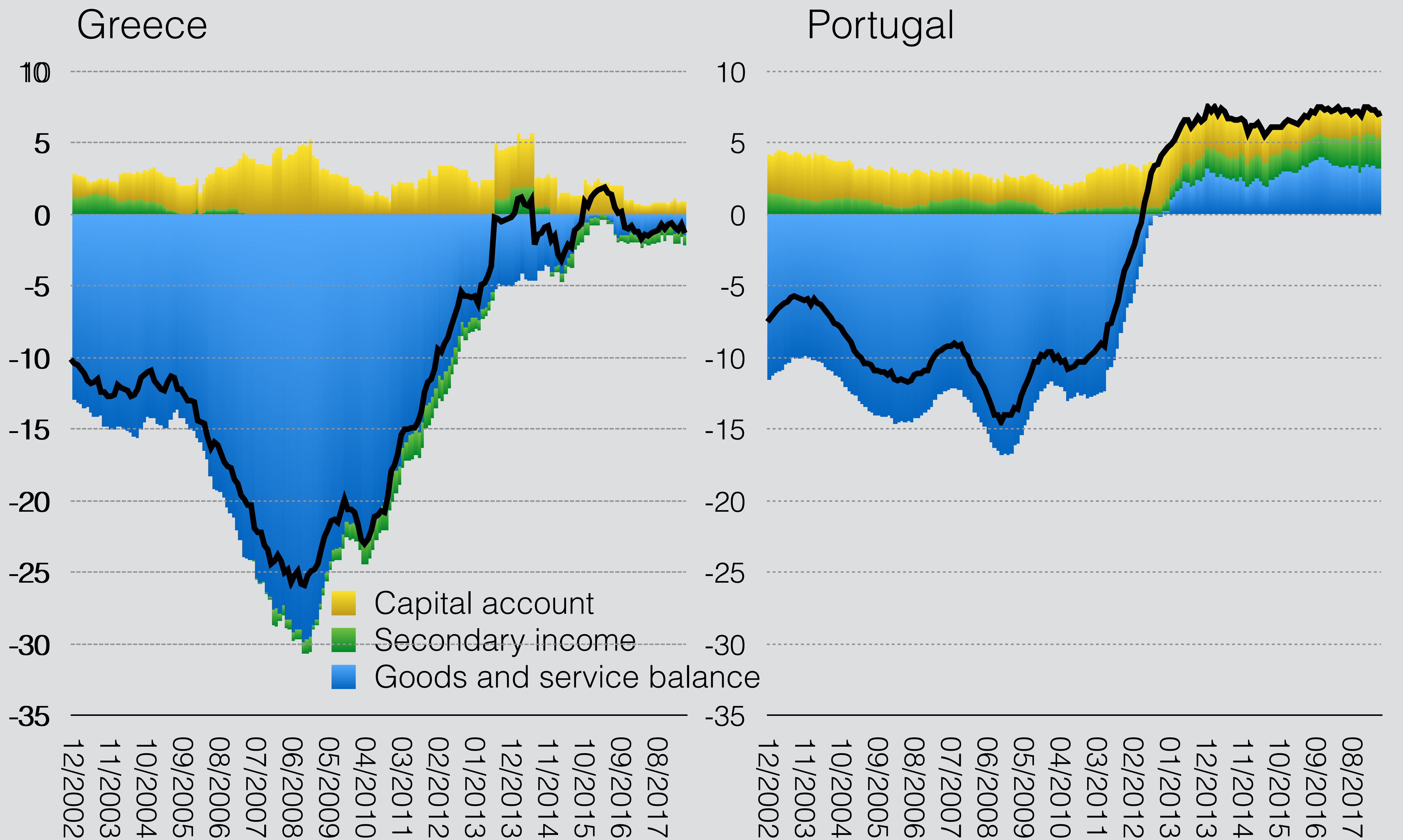
Current account and goods and service balance (€ billions)



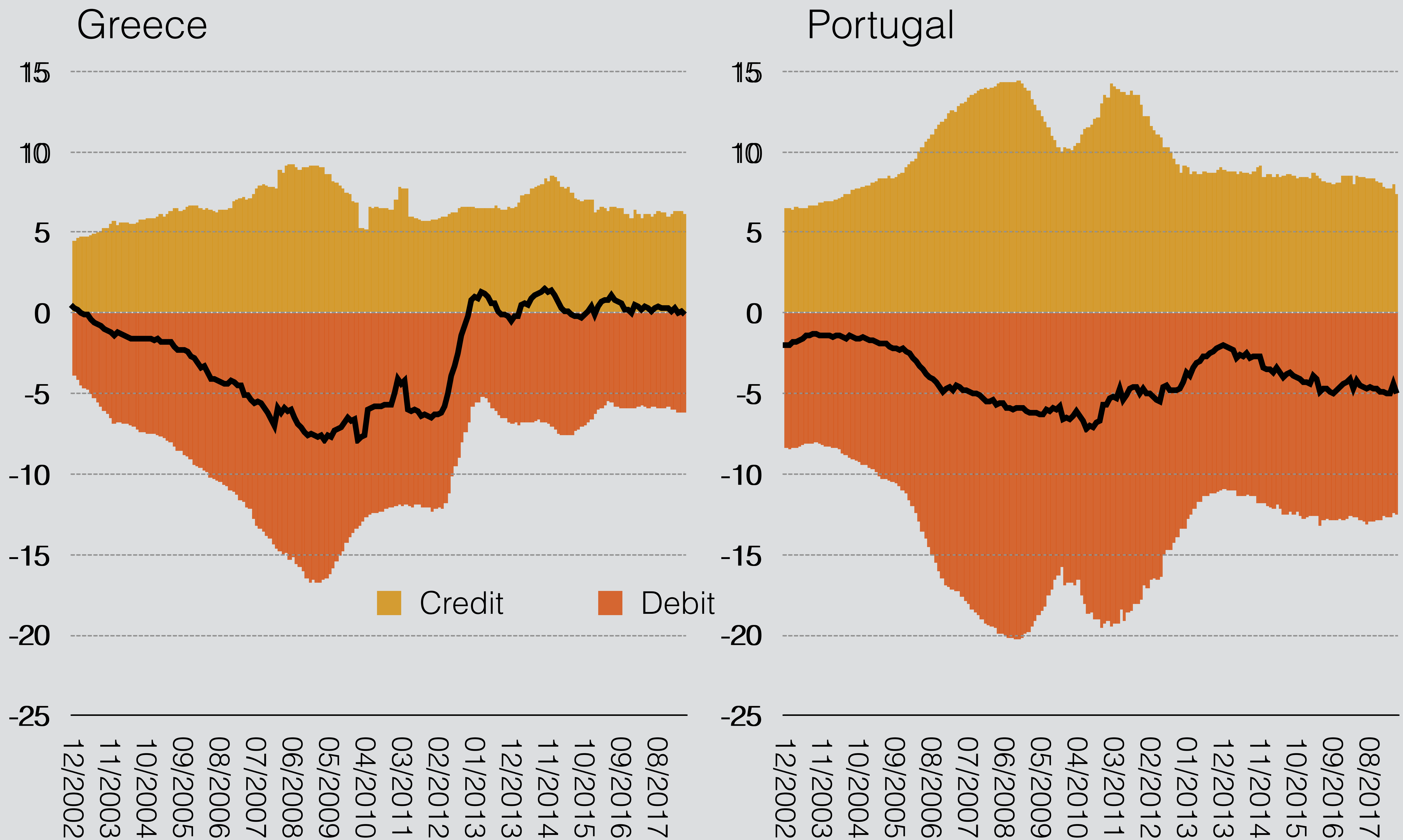
Current account and goods and service balance (%GDP)



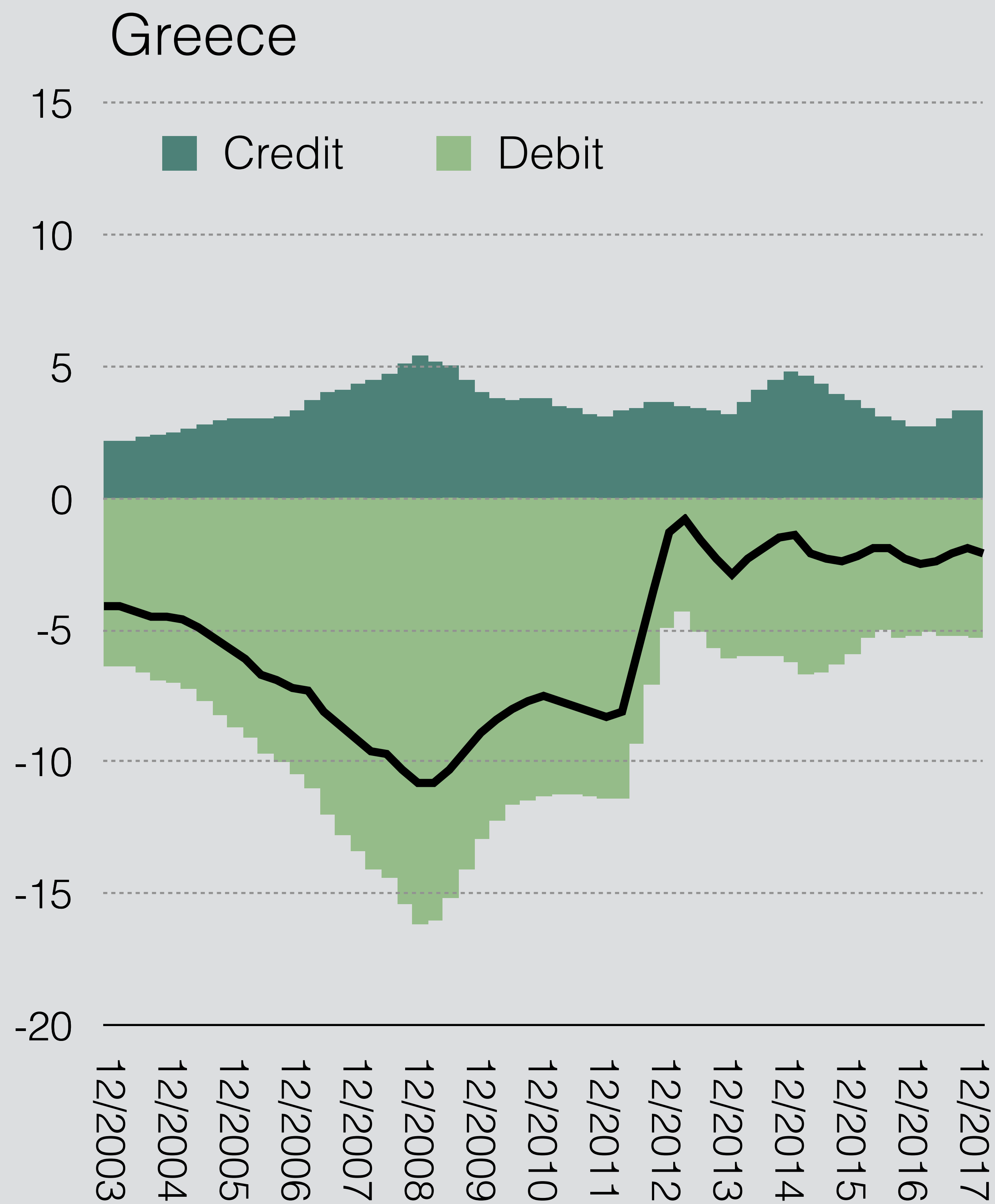
Non-interest current account plus capital account (€ billions)

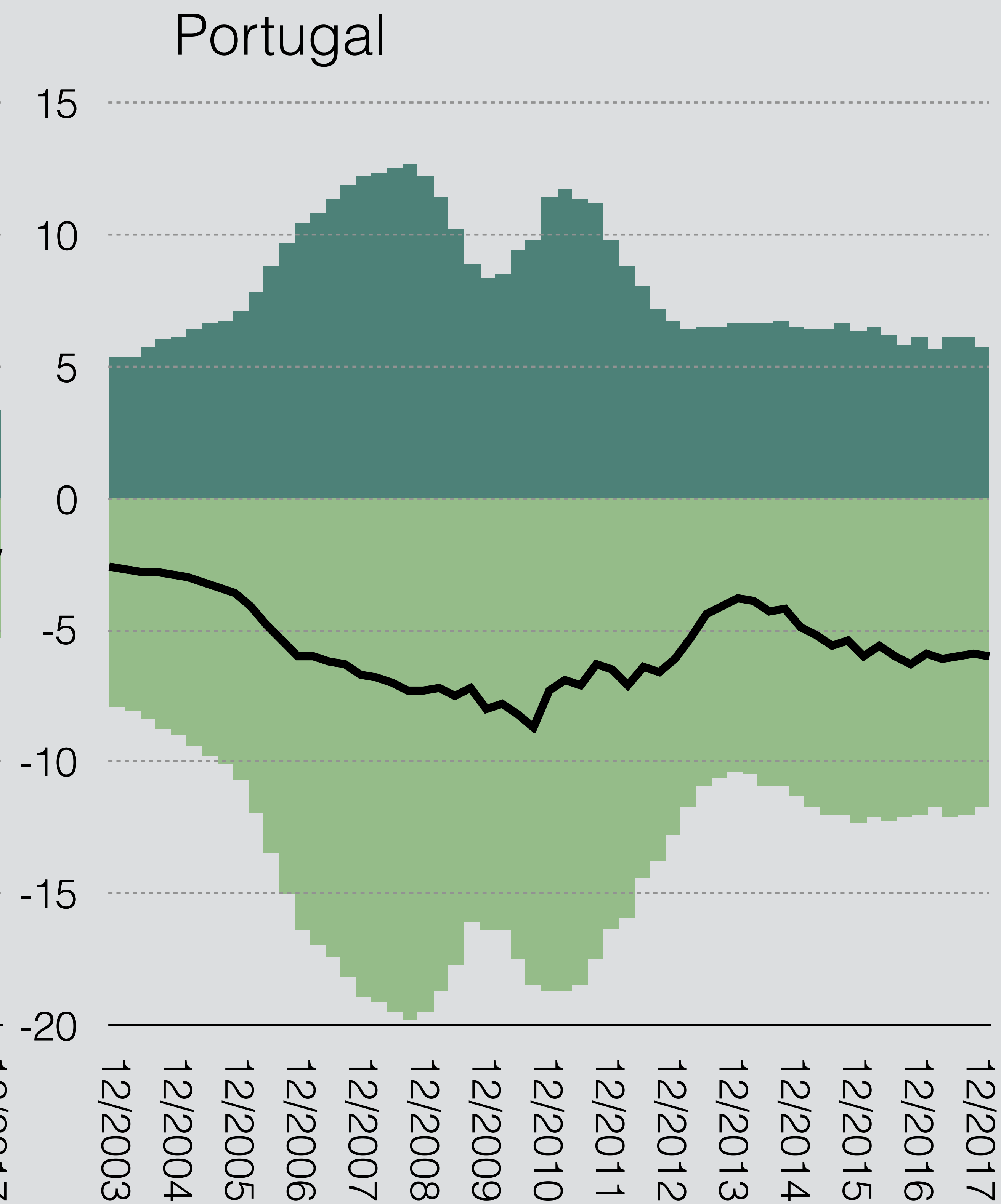


Primary income balance (€ billions)

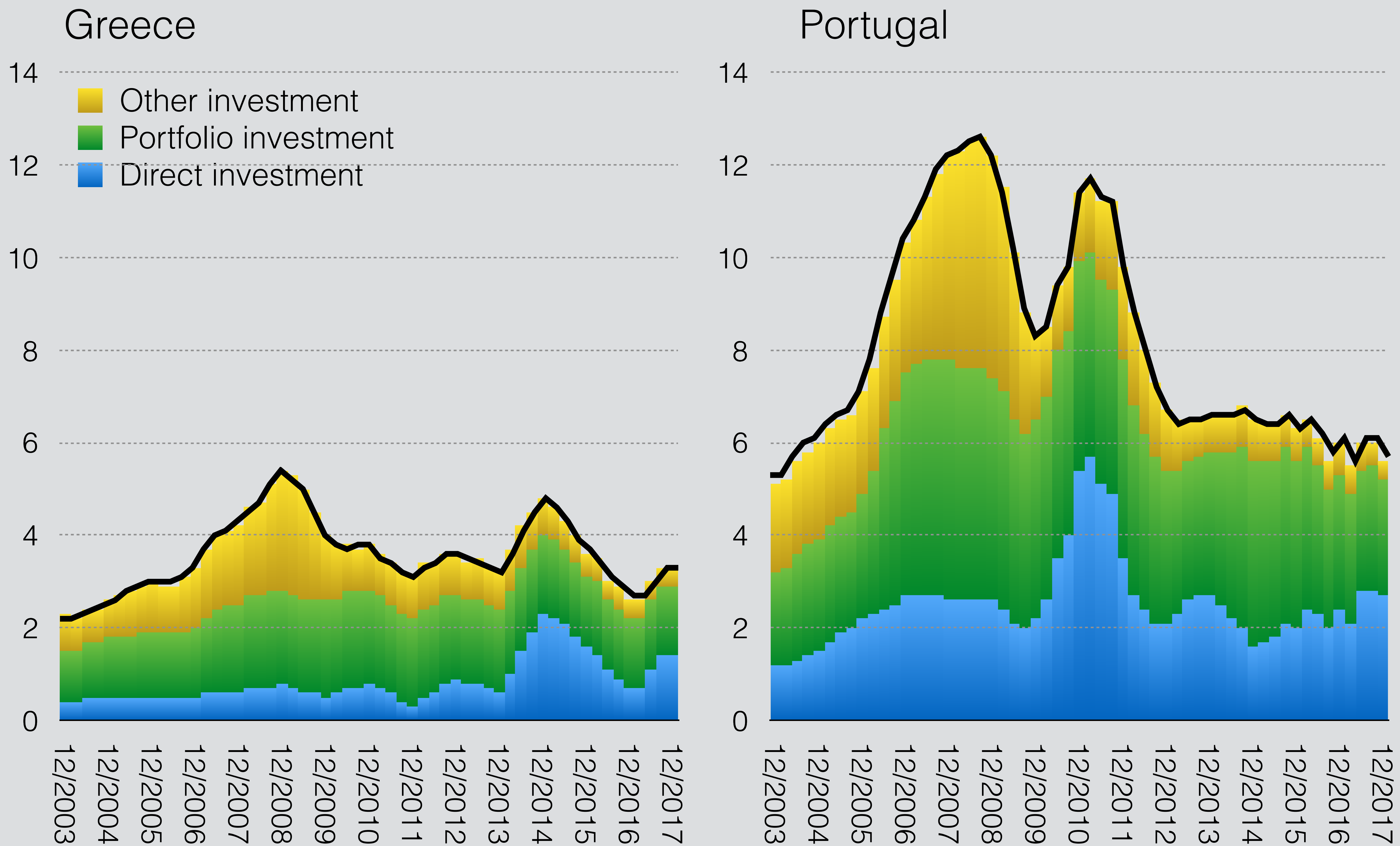


Investment income in current account (€ billions)

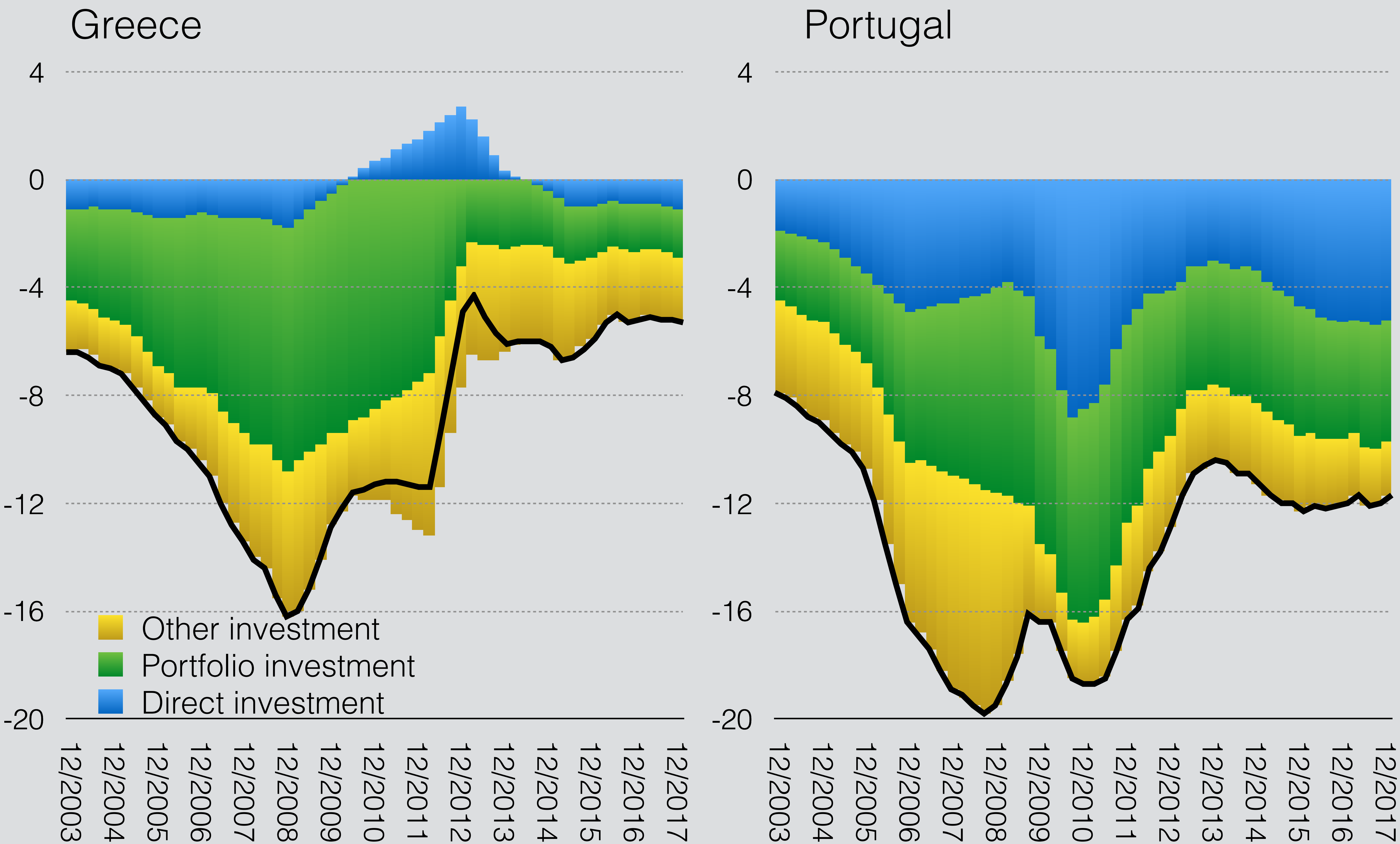




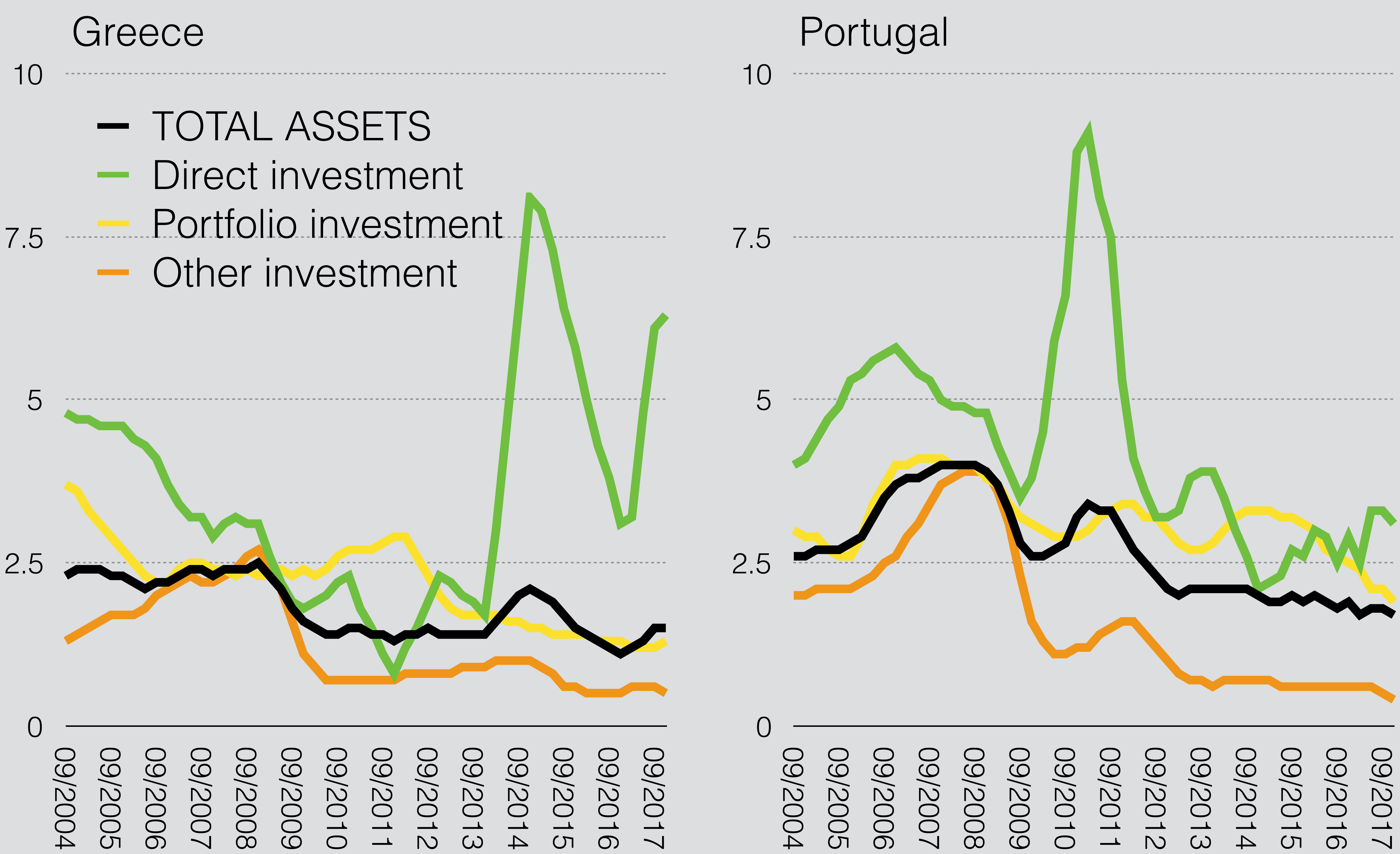
Investment income credit (€ billions)



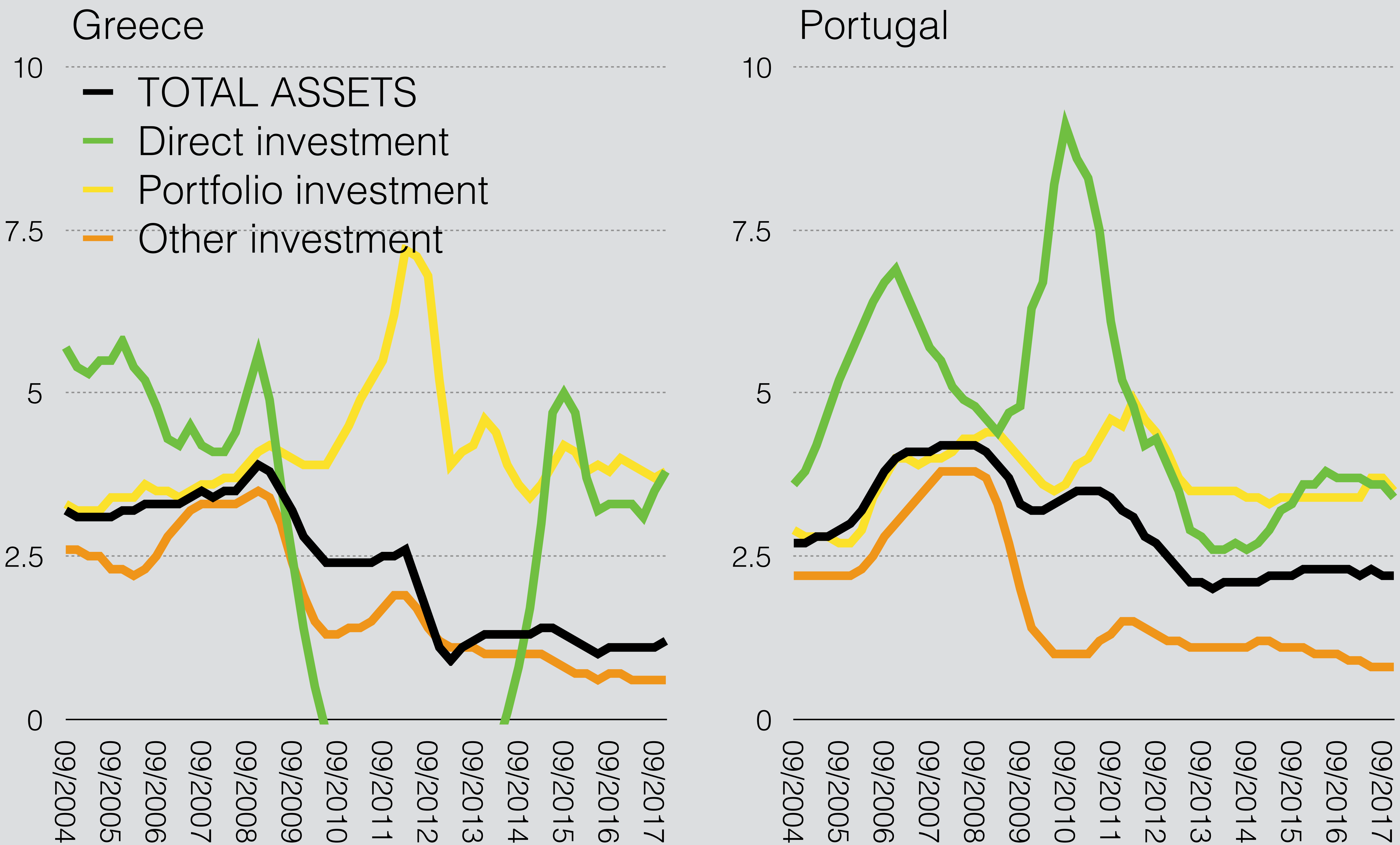
Investment income debit (€ billions)



Yield on external assets (%)



Yield on external liabilities (%)



Sustainability metric

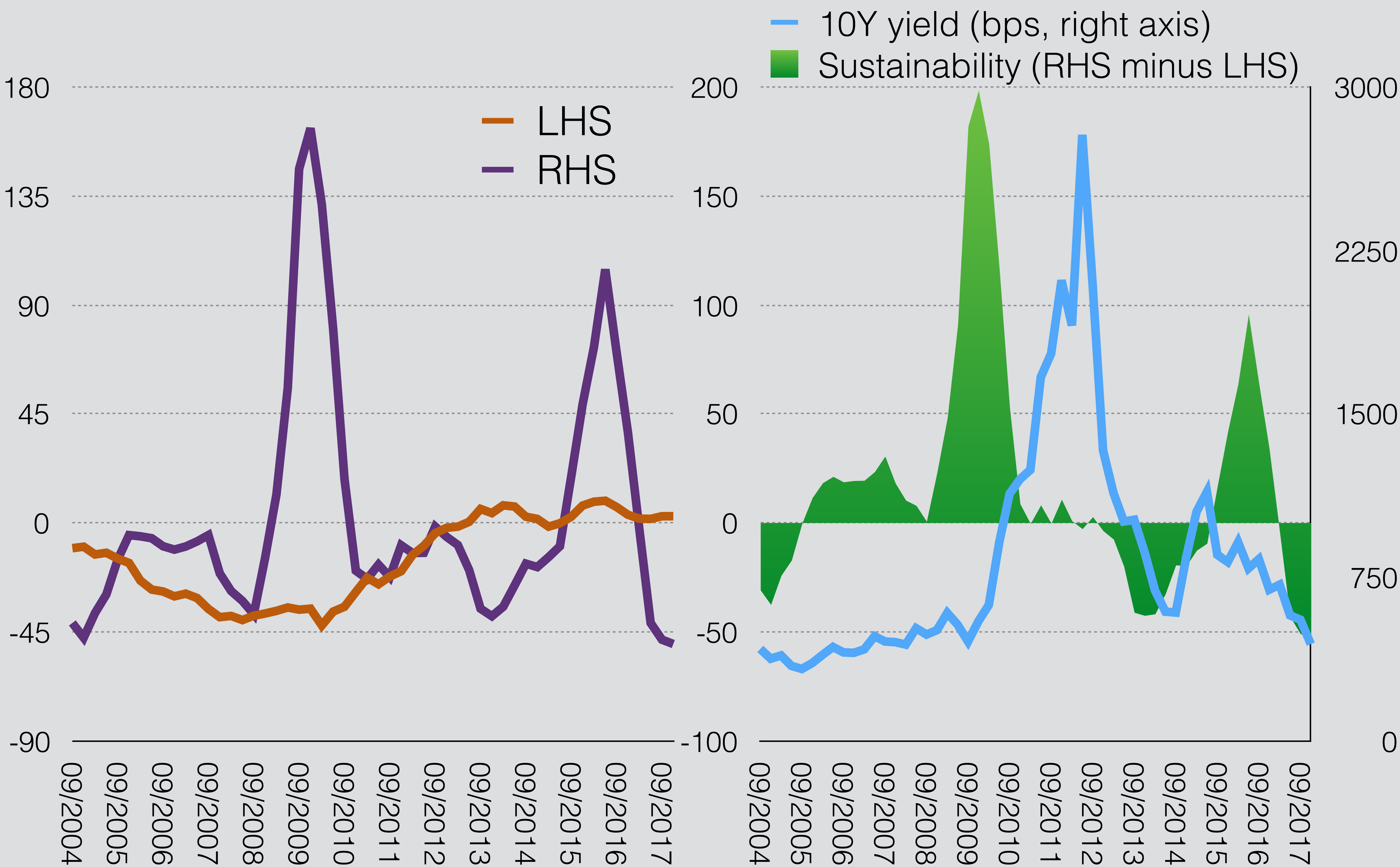
$$TB/X > -(i_A - g_X)NFA/X + (i_L - i_A)L/X$$

LHS > RHS => *external sustainability is improving*

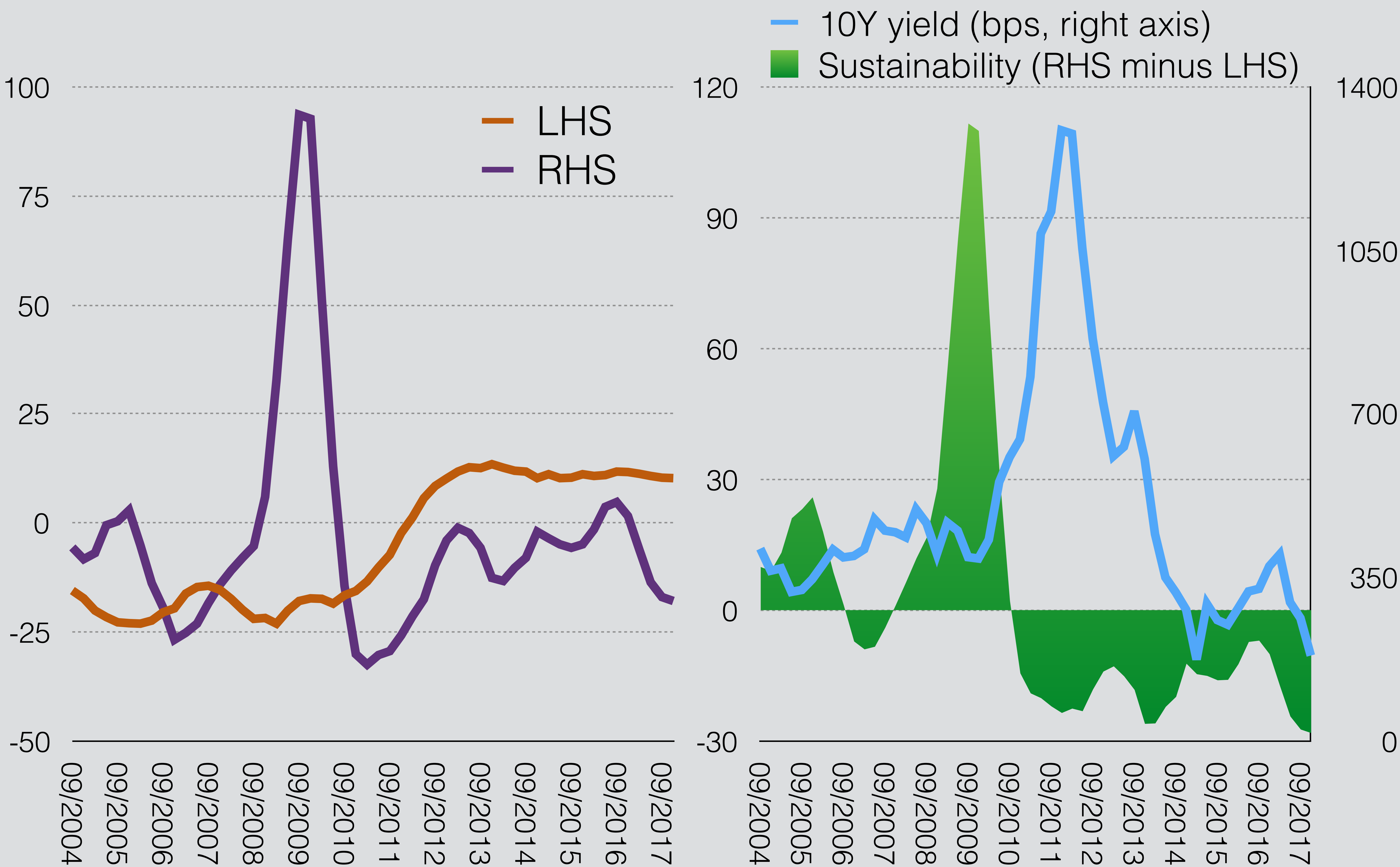
where

TB: goods and service balance plus other non-interest flows;
X: exports of goods and services;
g_X: growth of exports of goods and services;
i_A: average interest earned on external assets;
i_L: average interest paid on external liabilities;
NFA: net external assets from IIP;
L: external liabilities from IIP;

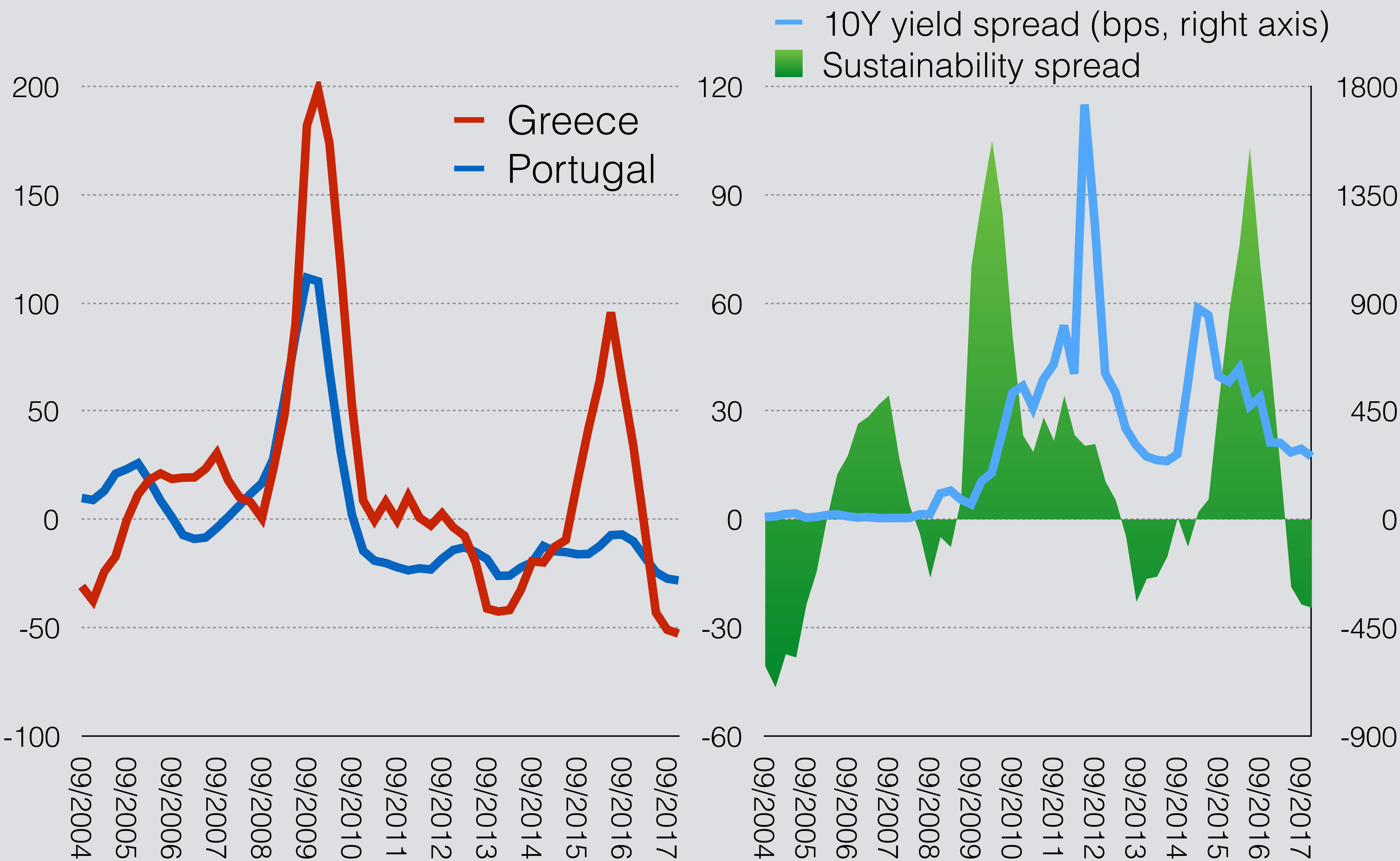
External sustainability metric: Greece



External sustainability metric: Portugal



External sustainability metrics: Greece versus Portugal



Public debt

Greece General Government Debt (Dec 2017)

	(€ billions)			(% GDP)		
	TOTAL	External	Domestic	TOTAL	External	Domestic
	317.4	277.1	40.3	179.1	156.4	22.7
Currency and deposits	5.9	0.0	5.9	3.4	0.0	3.4
ST securities (T-bills)	14.3	6.2	8.1	8.1	3.5	4.6
LT securities	40.6	26.2	14.4	22.9	14.8	8.1
ST loans	0.4	0.0	0.4	0.2	0.0	0.2
LT loans	256.1	244.7	11.4	144.5	138.0	6.4
Memo items:						
NGDP (€ billions)	177.3					

Benchmark bonds: Following the ALM exercise in December, Greece now has benchmark bonds maturing 2028, 2033, 2037 and 2042

Benchmark Bonds Outstanding

ISIN	Issuer	Coupon	Issue Date	Maturity Date	Amount Outstanding
GR0114028534	Hellenic Republic	4.750%	17-Apr-14	17-Apr-19	2,456,470,000 EUR
GR0114029540	Hellenic Republic	4.375%	1-Aug-17	1-Aug-22	3,000,000,000 EUR
GR0114030555	Hellenic Republic	3.500%	5-Dec-17	30-Jan-23	4,355,990,324 EUR
GR0118017657	Hellenic Republic	3.375%	15-Feb-18	15-Feb-25	3,000,000,000 EUR
GR0124034688	Hellenic Republic	3.750%	5-Dec-17	30-Jan-28	5,962,747,327 EUR
GR0128015725	Hellenic Republic	3.900%	5-Dec-17	30-Jan-33	6,091,218,404 EUR
GR0133011248	Hellenic Republic	4.000%	5-Dec-17	30-Jan-37	4,805,399,486 EUR
GR0138015814	Hellenic Republic	4.200%	5-Dec-17	30-Jan-42	4,603,713,186 EUR