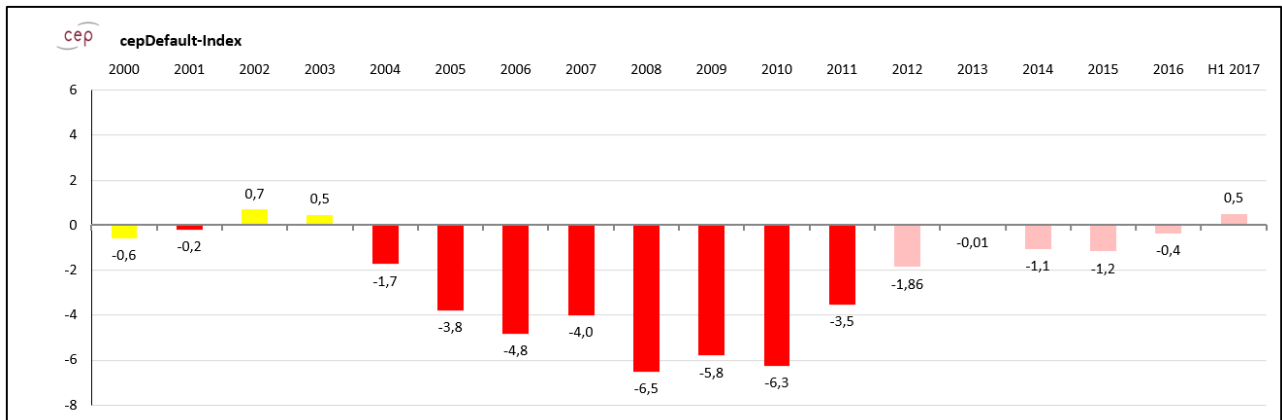


## cepDefault-Index Portugal

### Further Erosion of Portugal's Creditworthiness

Prof. Dr. Lüder Gerken, Dr. Matthias Kullas and Till Brombach

|                            | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008  | 2009 | 2010 | 2011 | 2012  | 2013  | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|---------|
| <b>Risk category</b>       | 2    | 3    | 3    | 2    | 2    | 3    | 3    | 4    | 4     | 4    | 4    | 4    | 4     | 4     | 4    | 4    | 4    | 4       |
| <b>I<sup>c</sup></b>       | 9,0  | 8,5  | 7,2  | 5,7  | 5,4  | 5,0  | 4,7  | 4,9  | 4,9   | 3,2  | 2,7  | 0,5  | -1,87 | -2,33 | -2,1 | -1,5 | -1,4 | -0,5    |
| <b>NTE</b>                 | -9,6 | -8,7 | -6,9 | -5,2 | -7,1 | -8,8 | -9,5 | -8,9 | -11,4 | -9,0 | -9,0 | -4,0 | 0,01  | 2,32  | 1,0  | 0,3  | 1,0  | 1,0     |
| <b>I<sup>c</sup> + NTE</b> | -0,6 | -0,2 | 0,7  | 0,5  | -1,7 | -3,8 | -4,8 | -4,0 | -6,5  | -5,8 | -6,3 | -3,5 | -1,86 | -0,01 | -1,1 | -1,2 | -0,4 | 0,5     |



- ▶ Portuguese creditworthiness has been declining continuously since 2004. This trend saw no change in the first half of 2017. Only the speed of decline has lessened.
- ▶ The decline in creditworthiness is, firstly, due to the fact that capital stock has been falling since 2012.
- ▶ Secondly, the country continues to consume beyond its means with the consumption ratio still in excess of the critical threshold of 100% of available income.

## 1 Layout and Informative Value of the cepDefault-Index

The cepDefault-Index measures the trend in creditworthiness for the overall economy – i.e. not only that of the state-sector. In addition to the state-sector, it also looks at credit behaviour in the financial sector and the credit behaviour of companies and consumers. The Index assesses (1) net lending or net borrowing of the total economy (NTE), reflecting the foreign credit needs of an economy, and (2) the resources used to increase the physical capital stock, i.e. capacity enhancing capital formation (C) over a certain period. The Index is formed from the sum of NTE and C; both values are indicated as a percentage of the gross domestic product (GDP):  $\text{cepDefault-Index} = \text{NTE} + \text{C}$ .<sup>1</sup>

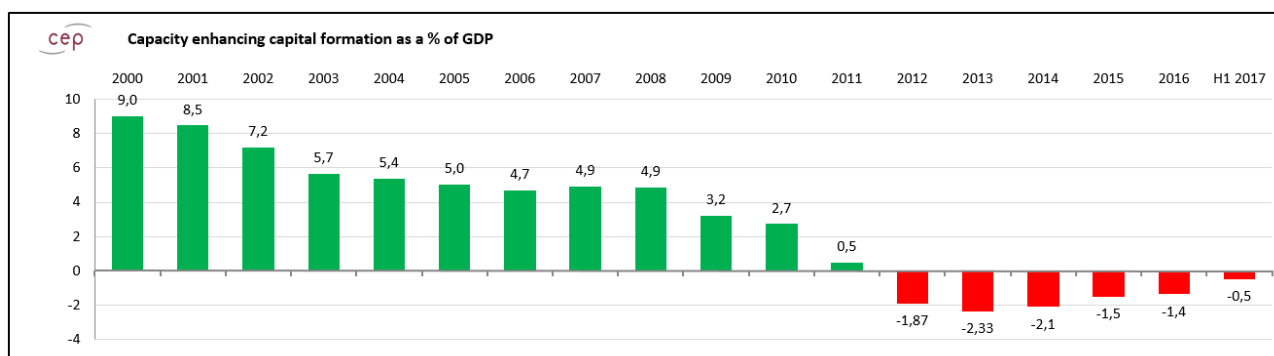
Risk Category 1 (green light) means: creditworthiness is increasing. Risk Category 2 (amber light) means: the trend in creditworthiness is unclear. Risk Category 3 (red-amber light) means: creditworthiness is declining. Risk Category 4 (red light) means: creditworthiness has been declining continuously for three or more years; the erosion of creditworthiness is not a temporary but a structural problem; the risk of a complete loss of creditworthiness has intensified or has actually occurred (Risk Category 4).

## 2 cepDefault-Index for Portugal

**Summary:** Portuguese creditworthiness has been declining since 2004 and this trend continued in the first half of 2017 albeit to a lesser extent than in previous years.

|                      | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008  | 2009 | 2010 | 2011 | 2012  | 2013  | 2014 | 2015 | 2016 | H1 2017 |
|----------------------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|---------|
| Risk category        | 2    | 3    | 3    | 2    | 2    | 3    | 3    | 4    | 4     | 4    | 4    | 4    | 4     | 4     | 4    | 4    | 4    | 4       |
| I <sup>c</sup>       | 9,0  | 8,5  | 7,2  | 5,7  | 5,4  | 5,0  | 4,7  | 4,9  | 4,9   | 3,2  | 2,7  | 0,5  | -1,87 | -2,33 | -2,1 | -1,5 | -1,4 | -0,5    |
| NTE                  | -9,6 | -8,7 | -6,9 | -5,2 | -7,1 | -8,8 | -9,5 | -8,9 | -11,4 | -9,0 | -9,0 | -4,0 | 0,01  | 2,32  | 1,0  | 0,3  | 1,0  | 1,0     |
| I <sup>c</sup> + NTE | -0,6 | -0,2 | 0,7  | 0,5  | -1,7 | -3,8 | -4,8 | -4,0 | -6,5  | -5,8 | -6,3 | -3,5 | -1,86 | -0,01 | -1,1 | -1,2 | -0,4 | 0,5     |

**Capacity Enhancing Capital Formation (C):** Portuguese capital stock has fallen since 2012. This negative trend has been slowing down continuously since its height in 2013 when capital stock fell by 2.3%. In the first half of 2017, its level fell again by 0.5% of GDP. Even though there was a drop in private investment, the main cause has been a collapse in public investment.<sup>2</sup> This is a consequence of the high level of national debt amounting to about 130% of GDP which means that the proportion of public expenditure on interest (as a % of GDP) is the highest of all the Member States. This money was not then available for public investment.

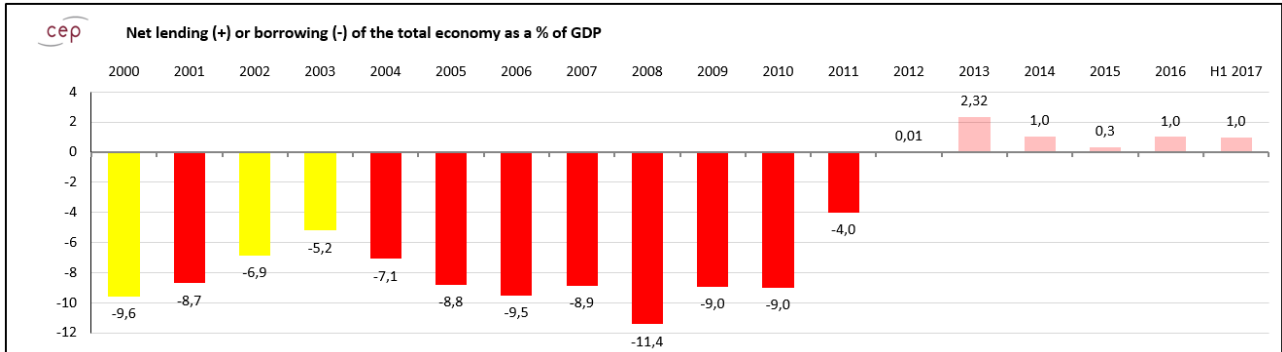


<sup>1</sup> For a detailed explanation see Gerken/Kullas/Brombach (2017): cepDefault-Index, Section 2.

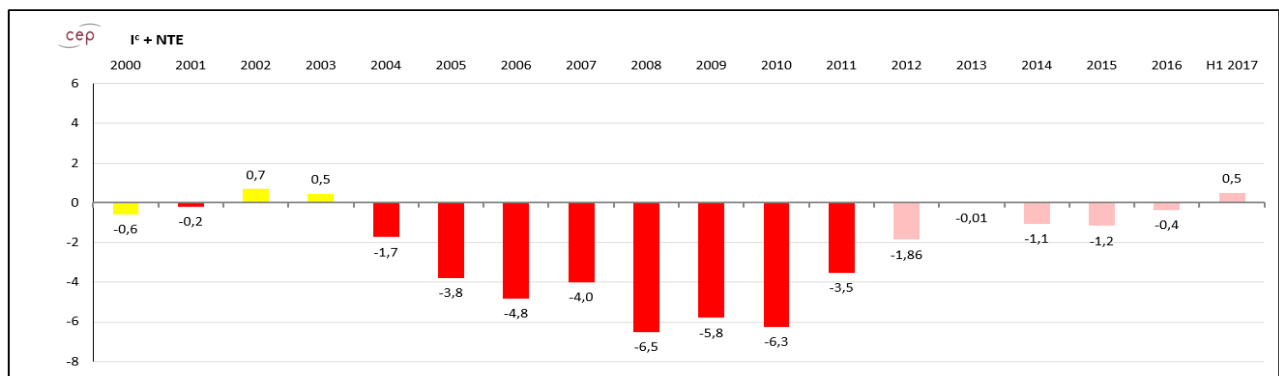
<sup>2</sup> Cf. European Commission database, Ameco, online at:

[http://ec.europa.eu/economy\\_finance/ameco/user/serie/SelectSerie.cfm](http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm), accessed on 12.01.2018.

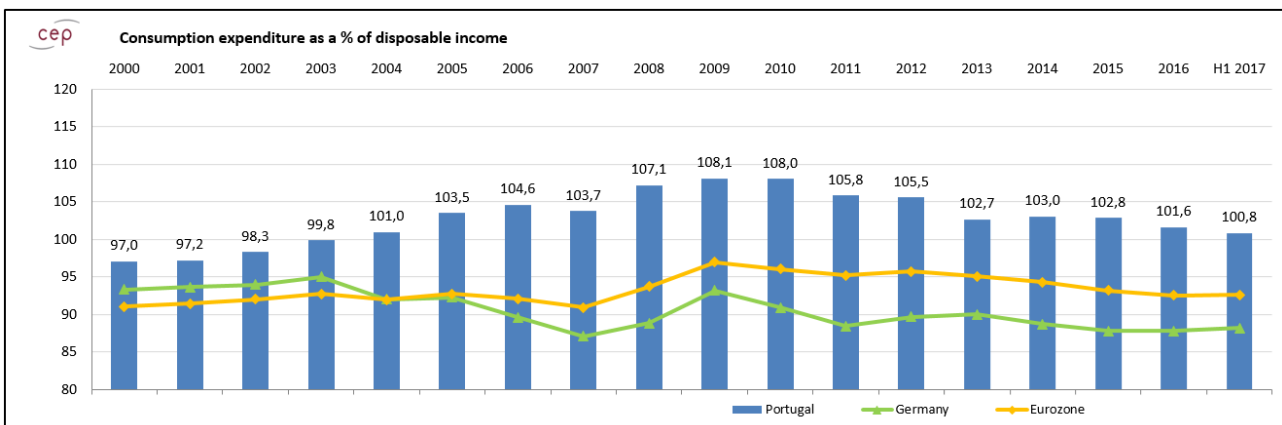
**Net lending or net borrowing of the total economy (NTE):** Until 2011, Portugal was a net importer of capital. Since 2012, on balance, capital has been going out of the country. The level appears to have settled down at one percent of GDP. This money is urgently needed in order to at least maintain Portugal’s capital stock.



**C + NTE:** The sum of C and NTE was negative from 2004 to 2016. Although it went slightly into the positive in the first half of 2017, this only means that capital stock is falling at a lower rate than capital is leaving the country.



**Consumption rate:** Since 2004, Portugal’s consumption has been in excess of the critical threshold of 100% of available income. Thus, for thirteen and a half years, the country has been consuming beyond its means. Although the consumption level has fallen markedly since its peak in 2009, it remains significantly above the eurozone average of 92.6% of available income.



**Result:** Portuguese creditworthiness has been eroding since 2004. However, the increase in the investment rate to a level which is only just negative, and the fall in the consumption rate to just over 100% of available income, indicate a tendency for improvement.

**Cause:** The continuing erosion of Portugal's creditworthiness is, firstly, due to the continued, if now only slight, fall in capital stock. The low level of public sector investment, in particular, has contributed to this. Secondly, the country continues to consume beyond its means although the consumption rate has dropped significantly since its peak in 2009.

**Recommended action:** In order to maintain the tendency for improvement and put an end to the erosion of Portugal's creditworthiness, public expenditure must be used to a lesser extent for consumption and more for investment; reducing the high level of public debt would, in particular, allow scope for this because it would bring down expenditure on interest. In addition, conditions for private investment must be improved.