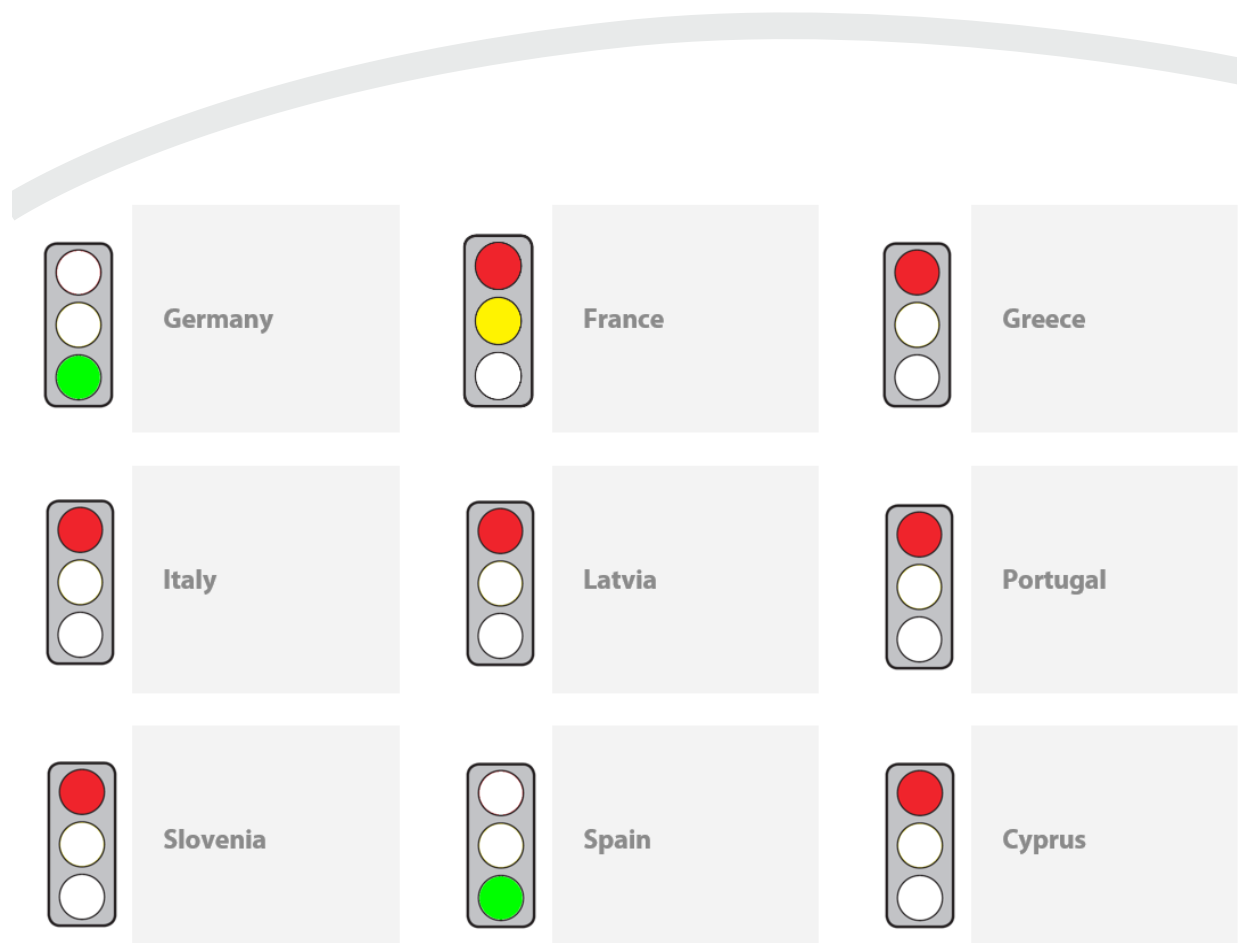


cepDefault-Index 2018






Creditworthiness Trends of Eurozone Countries

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Key Issues

- ▶ The cepDefault-Index 2018 describes the creditworthiness trends of eurozone countries from 2000 up to 2017.¹
- ▶ The cepDefault-Index 2018 shows: The eurozone is still a long way from achieving convergence between its member countries. In the current Index, there are six eurozone countries - Greece, Italy, Latvia, Portugal, Slovenia and Cyprus - in which the erosion of creditworthiness has become firmly established.
- ▶ **France's** creditworthiness has fallen again for the first time since 2014. The reason for this is that a part - albeit very small - of France's net borrowings was not used for capacity enhancing capital formation. 
- ▶ **Greece** is still not creditworthy and no reversal of this trend is in sight. On the contrary: The depletion of capital stock accelerated in the first half of 2017. The consumption rate is still much too high and even rose again sharply in the first half of 2017. 
- ▶ **Italy's** creditworthiness has been deteriorating since 2010. The reason for this is that there has been a lack of investments since 2013 which has led to a depletion of capital stock. The depletion is due to a lack of both public and private net investment. 
- ▶ **Latvia's** creditworthiness has been falling since 2000. A lack of private investment, in particular, has meant that Latvia's capital stock has been decreasing - with the exception of one year - since 2009. One reason for this is Latvia's excessive consumption rate. 
- ▶ **Portugal's** creditworthiness has been deteriorating since 2004. The reason for this is also a depletion of capital stock due to a lack of private and public investment and an excessive consumption rate. 
- ▶ **Slovenia's** creditworthiness has declined since 2012. The reason is a decline in capital stock due to a lack of private investment. By contrast with many other problem countries, public investment and the consumption rate are not the cause. 
- ▶ **Spain's** creditworthiness has continuously improved since 2012. Unlike previous years, however, this improvement did not gain momentum in the first half of 2017. In the medium term, public net investment, which has been negative since 2012, could be an obstacle to growth. 
- ▶ With the exception of one year, creditworthiness in **Cyprus** has been falling since 2004. This trend continued in 2016. The depletion of capital stock in Cyprus has stopped but the country is still using some capital imports for consumption. 
- ▶ The creditworthiness trend in Belgium and Finland was unclear; in Germany, Estonia, Lithuania, Luxembourg, Netherlands, Austria and Slovakia it rose.

¹ The Index could not be calculated for Ireland or Malta because the available data was not sufficiently reliable. Creditworthiness trends shown for Estonia, Finland, Luxembourg, Austria, Slovakia and Cyprus are from 2016 because the data required for calculating the cepDefault-Index for the first half of 2017 is incomplete.

► Trends in creditworthiness in the first half of 2017²

| Rank | Country | Creditworthiness trend | C: Capacity enhancing capital formation | NTE: Net lending or net borrowing of the total economy | C + NTE |
|---|-------------|------------------------|---|--|---------|
| Category 1: Countries with rising creditworthiness | | | | | |
| 1 | Netherlands | | 3.1 | 9.0 | 12.1 |
| 2 | Germany | | 1.9 | 7.9 | 9.8 |
| 3 | Estonia | | 5.1 | 1.4 | 6.5 |
| 4 | Austria | | 4.1 | 2.1 | 6.2 |
| 5 | Lithuania | | 4.7 | 1.2 | 5.9 |
| 6 | Eurozone | | 2.0 | 2.8 | 4.8 |
| 7 | Luxembourg | | 4.1 | 0.5 | 4.6 |
| 8 | Spain | | 2.1 | 2.0 | 4.1 |
| 9 | Slovakia | | 1.2 | 0.2 | 1.4 |
| Category 2: Countries where trend in creditworthiness is uncertain | | | | | |
| 10 | Belgium | | 3.4 | -0.1 | 3.3 |
| 11 | Finland | | 2.0 | -1.3 | 0.7 |
| Category 3: Countries with falling creditworthiness | | | | | |
| 12 | France | | 2.9 | -3.0 | -0.1 |
| Category 4: Countries where falling creditworthiness is firmly established | | | | | |
| 13 | Cyprus | | 2.8 | -5.0 | -2.2 |
| 14 | Italy | | -0.4 | 2.5 | 2.1 |
| 15 | Portugal | | -0.5 | 1.0 | 0.5 |
| 16 | Slovenia | | -1.6 | 4.8 | 3.2 |
| 17 | Latvia | | -2.5 | 1.3 | -1.2 |
| 18 | Greece | | -6.7 | 0.7 | -6.0 |

² The Index could not be calculated for Ireland or Malta because the available data was not sufficiently reliable. Creditworthiness trends shown for Estonia, Finland, Luxembourg, Austria, Slovakia and Cyprus are from 2016 because the data required for calculating the cepDefault-Index for the first half of 2017 is incomplete.

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1 Introduction

Seven years after the banking and sovereign debt crisis turned into an economic crisis, the eurozone as a whole looks healthy and stable: the economy is recovering and showing remarkable rates of growth. In 2017, the economy in the eurozone grew as strongly as in the USA. The unemployment rate fell in all eurozone countries in the third quarter of 2017, as compared with the previous year.³ The fears that parties hostile to Europe and the euro could come into power in France, Germany and the Netherlands, did not materialise. And, not least, the reduction of government deficits has made progress across the board.

Despite this positive news, the EU Commission still sees a need for reform in the eurozone. Thus on 6 December 2017, in addition to proposals for the integration into EU law of the European Stability Mechanism (ESM) and the Fiscal Compact⁴, a proposal to set up a “Stabilisation Function” to support the investment policy of eurozone countries⁵ and proposals for financial incentives and greater technical support for the implementation of structural reforms by Member States⁶ were put forward. In addition, the Commission has suggested setting up a facility to support Member States who want to introduce the euro⁷ and a “backstop” for the Banking Union⁸ as well as the creation of an EU finance ministry⁹.

Even if the details of the proposals are extremely problematic, the EU Commission has correctly recognised that, in spite of the positive headlines, the eurozone must be further stabilised because there is still a lack of convergence between the eurozone countries, which is essential for reducing the pressures in the eurozone. Thus, for example, Greece, France and Italy have already been showing below-average or even negative GDP growth for several years. Below average growth is also forecast for Italy and France in 2018.

The current cepDefault-Index shows that the eurozone is not yet stable: Trends in the creditworthiness of eurozone countries still vary widely. Thus the creditworthiness of two-thirds of eurozone countries is steadily increasing whilst in others it has been falling continuously or is already lost. The group of eurozone countries who have had diminishing or diminished creditworthiness for many years, includes Greece, Italy, Latvia, Portugal, Slovenia and Cyprus. With the exception of Cyprus, the decline in creditworthiness in these eurozone countries is the result of a negative investment rate. This is particularly problematic because a depletion of capital stock leads to the impoverishment of the economy if it continues for any length of time.

The depletion of capital stock shows that the affected eurozone countries are unable to offer competitive conditions to potential investors. The first objective of structural reform must therefore be to strengthen the competitiveness of these countries. As was already the case in 2014, France also finds itself in the group of countries whose creditworthiness is declining. The reason for this is the increased net borrowing which is once again above the investment rate, as was the case in 2014.

The following report sets out the results of the cepDefault-Index 2018 in detail. To begin with, Section 2 sets out the methodology and structure of the cepDefault-Index. Section 3 then presents a summary of the creditworthiness trends in the economies surveyed.

Chapter 4 describes the creditworthiness trends in the problem countries of the eurozone since 2000. These are, firstly, those eurozone countries who currently show an erosion of creditworthiness: France, Greece, Italy, Latvia, Portugal, Slovenia and Cyprus. Secondly, Section 4 provides a profile of

³ Eurostat, accessed on 18 January 2018.

⁴ COM(2017) 827 and COM(2017) 824.

⁵ COM(2017) 822.

⁶ COM(2017) 826, COM(2017) 825 and COM(2017) 822.

⁷ COM(2017) 821.

⁸ COM(2017) 827 and COM(2017) 822.

⁹ COM(2017) 823.

Spain, which has required financial aid in the past but whose current creditworthiness has in fact increased rather than declined thanks to the reforms undertaken since 2012.

Section 5 contains the current figures in the cepDefault-Index for the remaining eurozone countries - Belgium, Germany, Estonia, Lithuania, Luxembourg, Netherlands and Austria - as well as for the eurozone as a whole.

For most eurozone countries, the situation in the first half of 2017 has been incorporated. As regards Estonia, Finland, Luxembourg, Austria, Slovakia and Cyprus, the data for 2017 was not yet complete so the trends up to the end of 2016 are shown. The Index could not be calculated for Ireland or Malta because the required data was not available or not sufficiently reliable.

2 Methodology of the cepDefault-Index

The cepDefault-Index measures the trends in a country's ability to repay external loans, in other words, its creditworthiness.¹⁰ This does not depend solely on the country's indebtedness but rather on the stability of the entire economy. The competitiveness of companies on world markets has particular influence on a country's creditworthiness. The erosion of competitiveness invariably leads to higher imports and lower exports and thus to current account deficits,¹¹ the flip side of which is an increase in the foreign debt of private economic operators. In addition to government budgets, the cepDefault-Index therefore also takes account of the credit behaviour of banks, companies and consumers and thus measures the creditworthiness trends for the country as a whole.

The Index looks at two variables in relation to the calendar year and as a percentage of the gross domestic product (GDP): (1) the level of capacity enhancing capital formation (C) and (2) the net lending or borrowing of the total economy (NTE). Also of importance for the Index is (3) the sum of these two variables.

Capacity enhancing capital formation includes the net values (after depreciation) for fixed capital formation by companies and the public sector. Housing construction is not included as it does not result in an expansion of production potential. The fact that house construction is left out of the cepDefault-Index has the welcome side-effect that the creditworthiness trends of an economy can be measured without any distortion of the result arising from housing market bubbles. A positive value for capacity enhancing capital formation means that during the period in question additional production potential has been created giving rise to value added which can be used to pay off foreign debt. A negative value means that the potential of the economy, and thus its creation of value added which can be used to pay off foreign debt, is shrinking. This is a clear indication that an economy's creditworthiness is being eroded.

The net lending or net borrowing of the total economy illustrates how much net capital an economy requires from abroad and/or how much it transfers abroad. A negative NTE, i.e. net capital imports, may be caused by the following: Firstly, it may arise as a result of domestic current account deficits - due to a lack of competitiveness - which are financed by external loans. Secondly, it may arise where foreigners undertake more (direct-) investment domestically than abroad and this is financed by corresponding money transfers. Thirdly, it may arise where nationals move large volumes of capital from abroad (capital flight) back home.

¹⁰ It therefore measures a process rather than a state of affairs.

¹¹ Where there are flexible exchange rates, an adjustment is made over time which results in the balancing of the current account. However, in a currency union such an adjustment is not possible without the depletion of private assets.

For easier interpretation of the index results, the economies surveyed are divided into four risk categories.

Risk Category 1 (green light) exists where both the C value and the NTE value are positive. This means: The country's creditworthiness is increasing because it has created additional production potential in the year in question. In addition, it does not need capital from abroad; both capacity enhancing capital formation and domestic consumption can be financed on balance from domestic capital formation and there is even a surplus to invest abroad. The country is therefore increasing its creditworthiness.

Risk Category 2 (amber light) exists where a positive C value is accompanied by but exceeds a negative NTE value, i.e. the overall result is positive. In this case, it is not possible to give a clear assessment of the creditworthiness trend in the country in question because, on the one hand, additional production potential is being created, but, on the other, foreign capital is required, even if only a small amount.

In this situation, the crucial question is whether the influx of foreign capital is being used for investment or consumption¹². This question is important because external loans used for capacity enhancing capital formation create fixed assets with which the interest and loans can be repaid, given a reasonable rate of return on investment. This type of qualified net borrowing may even indicate that a country is highly attractive as a business location because foreign investors see profitable investment opportunities and seek to make use of them. On the other hand, external loans used for consumption expenditure do not add any value that might contribute to the repayment of interest and loans. In this case, domestic resources must be used to repay the external loan. This type of qualified net borrowing arises in particular where the economy is losing, or has already lost, its competitiveness on world markets.

The official statistics do not indicate for what purpose - investment or consumption - foreign capital is used domestically. In order to avoid ultimately unreliable estimates, the cepDefault-Index assumes a best-case scenario in favour of the surveyed economy. The calculation is based on the assumption that domestic investment is primarily funded from capital imports, while domestic income is primarily used for consumption expenditure. In other words, the assumption is that external loans maximise output which facilitates their repayment.

This leads to a systematic distortion: the Index makes the country look healthier than it actually is because it assumes that, for the maximum possible level of repayment of interest and capital, new production capacities will arise which are attributable to the external loan and whose additional output will facilitate the repayment of the external loan. In reality, this is obviously not the case.

Risk Category 3 (red-amber light) may exist in two forms which differ according to whether the capacity enhancing capital formation is positive or negative.

The first form is characterised by the fact that although - as in Category 2 - a positive C value is accompanied by a negative NTE, unlike category 2, the NTE value exceeds the C value, i.e. the C + NTE value is negative. This means: The country's creditworthiness is declining because the country needs more foreign capital than the total amount used for capacity enhancing capital formation. In other words: In arithmetical terms, the country is consuming not only 100% of the domestic income but, in addition, also a part of the net capital imports. Hence, the national economy incurs foreign debt in order to finance consumption. Such a trend threatens creditworthiness.

These correlations reveal an important feature of the cepDefault-Index: It distinguishes between whether a problem country reduces its demand for external loans by reducing consumption or by

¹² Here, and in the rest of the report, consumption refers to all expenditure which does not constitute capacity enhancing capital formation. Consumption in this sense therefore also includes, in particular, private housing construction.

reducing capacity enhancing capital formation. Only the former approach to reform is sustainable and therefore reflected in the Index. A drop in net borrowing at the cost of capacity enhancing capital formation, however, does not affect the Index. In order for the Index to show a trend reversal, a drop in net borrowing must be accompanied by an avoidance of consumption rather than of investment because the latter results in a decline in the economy's production potential - which is crucial for the repayment of external loans - relative to the demand for external loans. This hinders debt sustainability.

The second - even more problematic - form is characterised by the fact that the C value is actually negative. This also means: The country's creditworthiness is declining because capital stock - which it needs to pay off external loans - is, in this case, actually in absolute decline. Falling capital stock is a sign of a lack of competitiveness and low long-term growth expectations for companies; as a result of their expectations, foreign and domestic investors are not even willing to invest domestically at the level required simply to maintain the existing level of economic output. The diminished capital stock then actually results in low - or even negative - economic growth and rising unemployment. This sort of vicious circle of self-fulfilling expectations can lead to the impoverishment of a country.

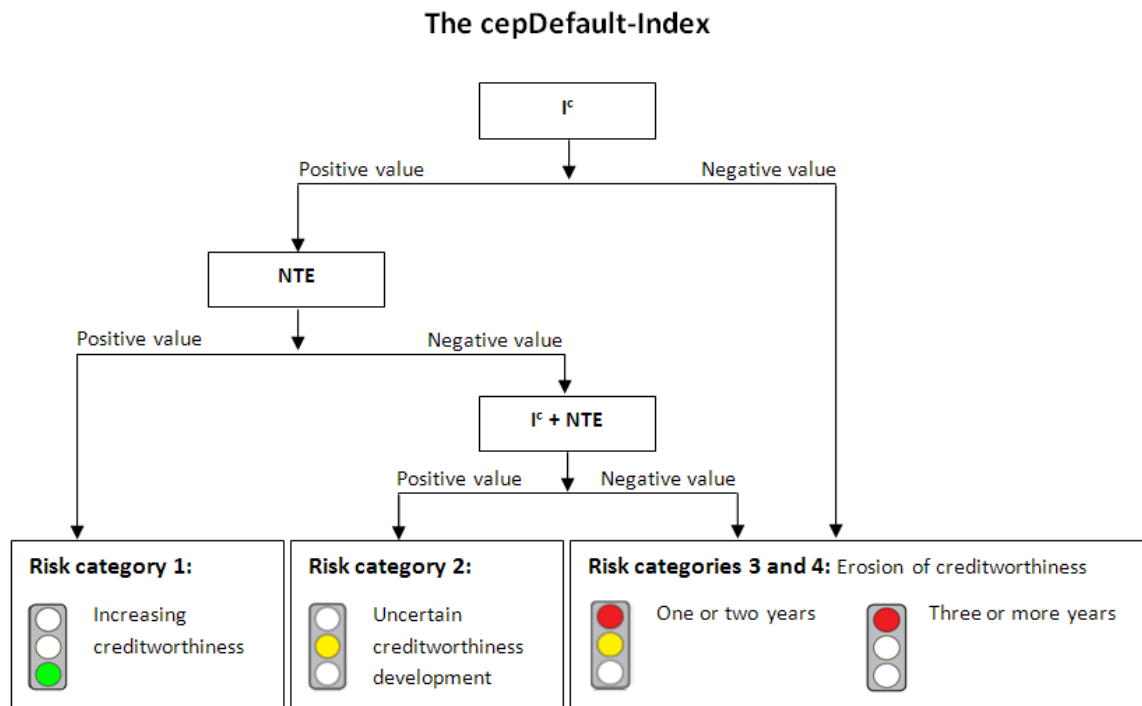
In this situation, the question whether NTE is also negative or positive, is of secondary importance as regards the trend in creditworthiness. A negative NTE indicates that irrespective of the negative net investment activity, foreign capital is required just to continue financing excessive domestic consumption - because there is no net investment. A positive NTE indicates that the fall in investment activity, and thus in economic output, is accompanied by the withdrawal of foreign capital, and possibly even by capital flight on the part of domestic investors transferring their money abroad.

Risk Category 4 (red light): Erosion of creditworthiness lasting for one or more years, in the forms described under Risk Category 3, indicates that this is not a temporary problem but a structural one; the risk of a complete loss of creditworthiness has intensified or, in fact, become reality.

Risks to a country's fiscal policy resulting from property and banking sector bubbles are deliberately only taken into account by the cepDefault-Index insofar as they lead to demand for external loans or to negative net investment because this sort of bubble can only damage an economy's international creditworthiness in such cases.

The cepDefault-Index also deliberately leaves out the origin of the external loan. This is sensible because state financial aid – from ESM, EFSF, EFSM, IWF and the individual eurozone countries - in fact simply replaces private foreign creditors with public foreign creditors without directly affecting the demand for foreign capital. This approach is the only way to provide an unrestricted picture of the structural situation of the economy.

The methodology used by the cepDefault-Index is summarised below.



3 Overview of the cepDefault-Index values for the eurozone countries surveyed

The following table shows the trends in creditworthiness for the economies surveyed in the first half of 2017.¹³

| Rank | Country | Creditworthiness trends | C: Capacity enhancing capital formation | NTE: Net lending or net borrowing of the total economy | C + NTE |
|---|-------------|-------------------------|---|--|---------|
| Category 1: Countries with rising creditworthiness | | | | | |
| 1 | Netherlands | | 3.1 | 9.0 | 12.1 |
| 2 | Germany | | 1.9 | 7.9 | 9.8 |
| 3 | Estonia | | 5.1 | 1.4 | 6.5 |
| 4 | Austria | | 4.1 | 2.1 | 6.2 |
| 5 | Lithuania | | 4.7 | 1.2 | 5.9 |
| 6 | Eurozone | | 2.0 | 2.8 | 4.8 |
| 7 | Luxembourg | | 4.1 | 0.5 | 4.6 |
| 8 | Spain | | 2.1 | 2.0 | 4.1 |
| 9 | Slovakia | | 1.2 | 0.2 | 1.4 |
| Category 2: Countries where trend in creditworthiness is uncertain | | | | | |
| 10 | Belgium | | 3.4 | -0.1 | 3.3 |
| 11 | Finland | | 2.0 | -1.3 | 0.7 |
| Category 3: Countries with falling creditworthiness | | | | | |
| 12 | France | | 2.9 | -3.0 | -0.1 |
| Category 4: Countries where falling creditworthiness is firmly established | | | | | |
| 13 | Cyprus | | 2.8 | -5.0 | -2.2 |
| 14 | Italy | | -0.4 | 2.5 | 2.1 |
| 15 | Portugal | | -0.5 | 1.0 | 0.5 |
| 16 | Slovenia | | -1.6 | 4.8 | 3.2 |
| 17 | Latvia | | -2.5 | 1.3 | -1.2 |
| 18 | Greece | | -6.7 | 0.7 | -6.0 |

As the table clearly shows, creditworthiness trends in the eurozone countries are still varied. The biggest increase in creditworthiness is seen in the Netherlands, followed by Germany and Estonia. Greece has the worst figures, as has been the case for years. In Cyprus, Italy, Slovenia, Portugal and Latvia the indications are also that the erosion of creditworthiness is becoming firmly established. Apart from Cyprus, where the decline is due to a high level of net borrowings, this is consistently and repeatedly due to dwindling - and thus increasingly ageing - capital stock. Capital stock is, however, crucial for the prosperity of the population and for sufficient tax revenue, in order to be able to cover public spending, on the one hand, and interest payments to foreign creditors, on the other. As a result, countries where capital stock is decreasing become less competitive. France's creditworthiness has fallen but only slightly. The drop in French creditworthiness is due to high net borrowings which have not been used exclusively for investment.

¹³ The Index could not be calculated for Ireland or Malta because the available data was not sufficiently reliable. Creditworthiness trends shown for Estonia, Finland, Luxembourg, Austria, Slovakia and Cyprus are from 2016 because the data required for calculating the cepDefault-Index for the first half of 2017 is incomplete.

4 Problem countries in the eurozone

This section firstly contains country profiles of those eurozone countries that are showing a decline in their creditworthiness. These are Greece, Italy, Latvia, Portugal, Slovenia and Cyprus, the decline in creditworthiness has become firmly established, and France whose creditworthiness fell again in the first half of 2017 - as was also the case in 2014. Secondly, this section contains a profile of Spain, which has required financial aid in the past but whose current creditworthiness has in fact increased rather than declined thanks to the reforms undertaken since 2012.

In addition to a summary of creditworthiness trends, each country profile contains four bar charts: Of importance for the Index are capacity enhancing capital formation (C), net lending or net borrowing of the total economy (NTE) as a percentage of the gross domestic product (GDP) in each case and the sum of the two (C + NTE).

The bar colouring in these first three charts corresponds to the methodology of the Index: It indicates whether the respective value is unproblematic (green), problematic (red) or whether no assessment can be made (amber), or whether it is irrelevant for the report (pale). The colouring system is briefly explained below.

Negative C values are red because the capital stock is diminishing. In this case, creditworthiness is eroding. The colours of the corresponding NTE values and C + NTE values are then shown as pale because they are irrelevant for assessing creditworthiness trends. Positive C values are green as they signal a growth in capital stock, which is a necessary but insufficient condition for increasing creditworthiness.

Where C values are positive, the positive NTE values - and thus also the Index values, which must also be positive - are also green because the country is increasing its creditworthiness.

Where C values are positive but NTE values negative, the colour of the NTE values and of the C + NTE values depends on the indication given by the C + NTE value. Where the C + NTE value is positive it will be amber, where it is negative the colour will be red. Amber indicates that capital imports can be used in full for capacity enhancing capital formation, i.e. they are not required to finance consumption. In this case the creditworthiness trend is uncertain. Red indicates that capital imports exceed capacity enhancing capital formation. In this case, some of the capital imports are used as external loans for consumption. This part of the capital imports will not therefore activate any investments which, since they create future value creation potential, are the prerequisite for repaying external loans. Result: The country's creditworthiness declines.

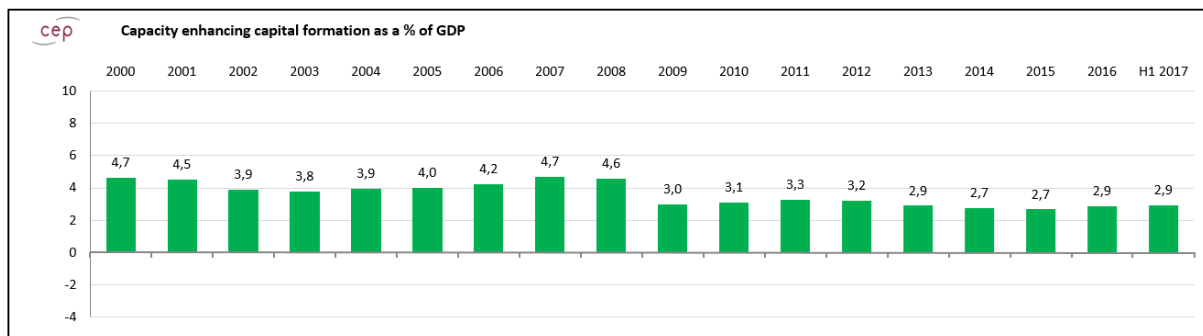
The fourth chart in the country profiles shows the consumption rate as a percentage of available income. Although it is not part of the calculation of the trend in creditworthiness, declining creditworthiness is often accompanied by excessive consumption. The illustration of the consumption rate therefore provides an impression of how serious the current problems of a country really are. The critical threshold is considered to be a consumption rate of 100% of the available income. Where this value is exceeded it means the population is consuming more than it is earning in income; in other words it is living beyond its means.

4.1 France

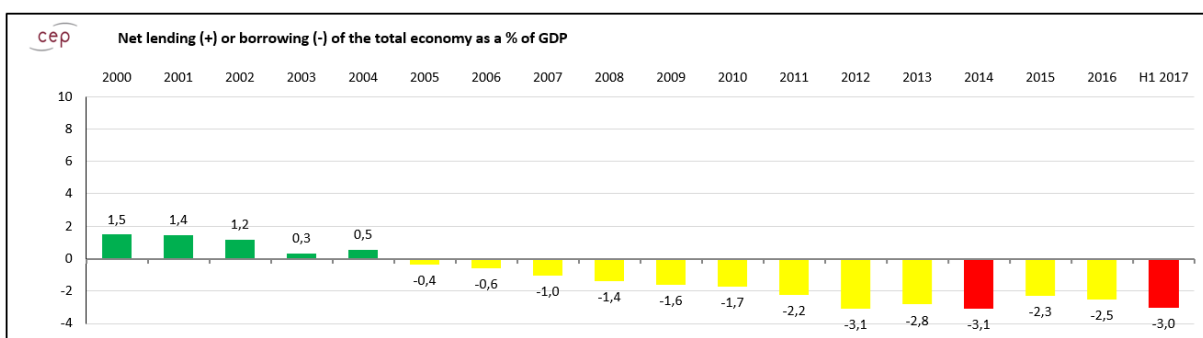
Summary: In the first half of 2017, as in 2014, French creditworthiness fell slightly. The trend has been unclear in the two years since. The overall negative trend of falling index values, which has been observed with few exceptions since 2000, continued in the first half of 2017.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| Risk category | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 |
| | | | | | | | | | | | | | | | | | | |
| I^c | 4,7 | 4,5 | 3,9 | 3,8 | 3,9 | 4,0 | 4,2 | 4,7 | 4,6 | 3,0 | 3,1 | 3,3 | 3,2 | 2,9 | 2,7 | 2,7 | 2,9 | 2,9 |
| NTE | 1,5 | 1,4 | 1,2 | 0,3 | 0,5 | -0,4 | -0,6 | -1,0 | -1,4 | -1,6 | -1,7 | -2,2 | -3,1 | -2,8 | -3,1 | -2,3 | -2,5 | -3,0 |
| I^c + NTE | 6,2 | 5,9 | 5,1 | 4,1 | 4,4 | 3,6 | 3,6 | 3,7 | 3,2 | 1,4 | 1,4 | 1,1 | 0,1 | 0,1 | -0,4 | 0,4 | 0,4 | -0,1 |

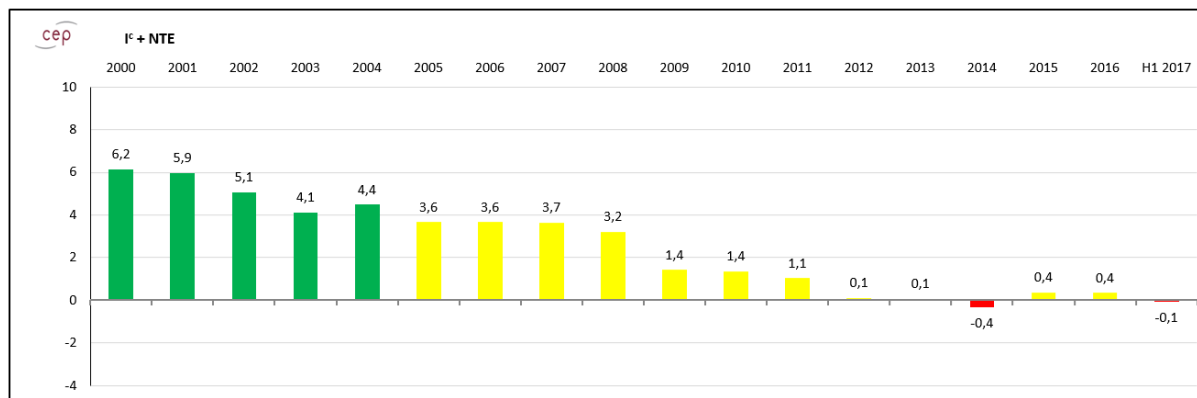
Capacity Enhancing Capital Formation (C): In the first half of 2017, capacity enhancing capital formation amounted to 2.9% of GDP. This investment rate has changed little since its collapse in 2009 but France's capacity enhancing capital formation remains significantly above the average for the eurozone of 2.0%



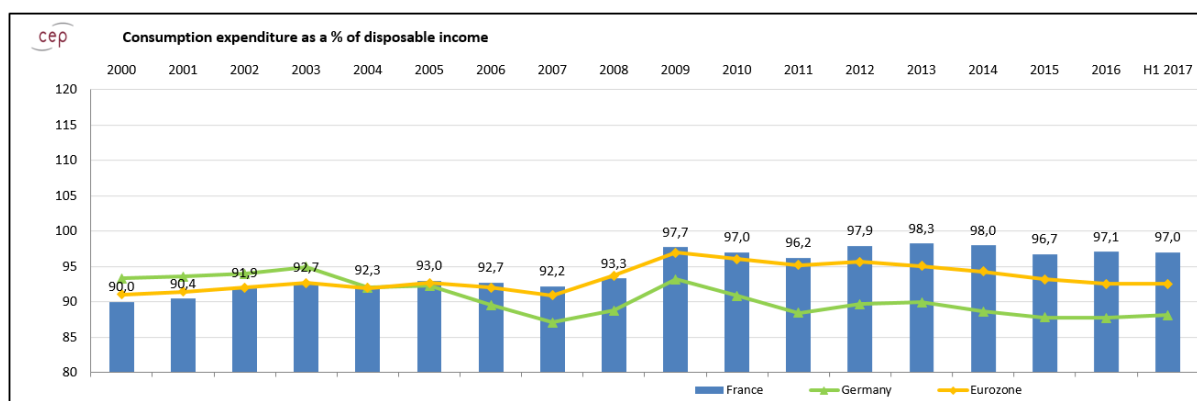
Net lending or net borrowing of the total economy (NTE): On balance, the French economy has been reliant on foreign credit since 2005 - and this trend is on the increase. France's net borrowing requirements rose in the first half of 2017 to 3.0% of GDP thus almost returning to its all-time high of 3.1% seen in 2012 and 2014.



C + NTE: The sum of C and NTE fell in the first half of 2017 and is negative again for the first time since 2014. Thus France incurred foreign debt in the first half of 2017 without matching these foreign loans with corresponding investments. This trend is reflected in the sharp rise in net borrowing as compared with 2016.



Consumption ratio: The French consumption rate is currently at 97.0% of available income. That is roughly the same as the previous year but is still significantly higher than the eurozone average of 92.6%.



Result: France's creditworthiness fell in the first half of 2017. Due to its political and economic importance, the trend in France's creditworthiness has a huge impact on the eurozone as a whole.

Cause: The negative trend is due to the fact that, on balance, the French economy has imported more foreign capital whilst capacity enhancing capital formation has remained constant. The country has incurred foreign debt and used some of the foreign loans for consumption rather than for capacity enhancing capital formation. This is reflected in the consumption rate which is significantly above the eurozone average.

Recommended action: Ceasing the decline in French creditworthiness and regaining its upward trend is of great importance for the eurozone and thus also for the EU. This requires a reduction in net borrowings from abroad, particularly for consumption purposes, accompanied by a fall in the consumption rate. The most socially acceptable way to do this is to increase the available overall economic income such as by reducing unemployment. The reforms announced by President Macron, some of which have already been implemented,¹⁴ may contribute to this.

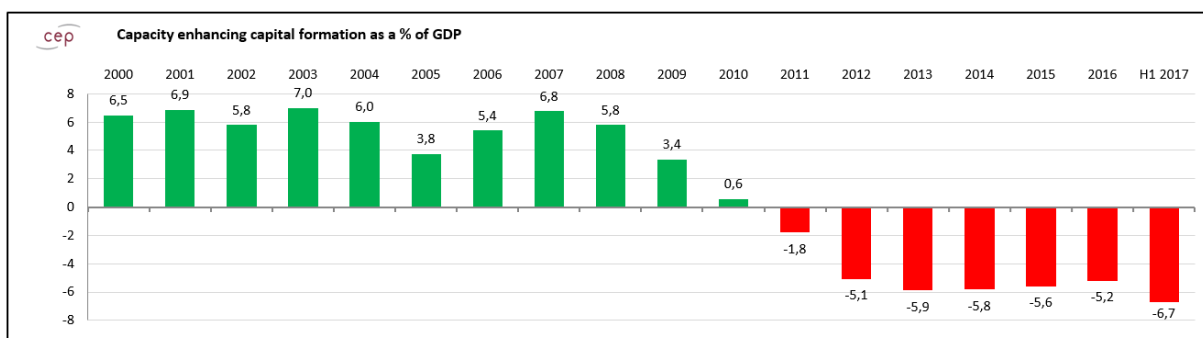
¹⁴ On French labour market reform see [cepAdhoc French Labour Market Reform](#).

4.2 Greece

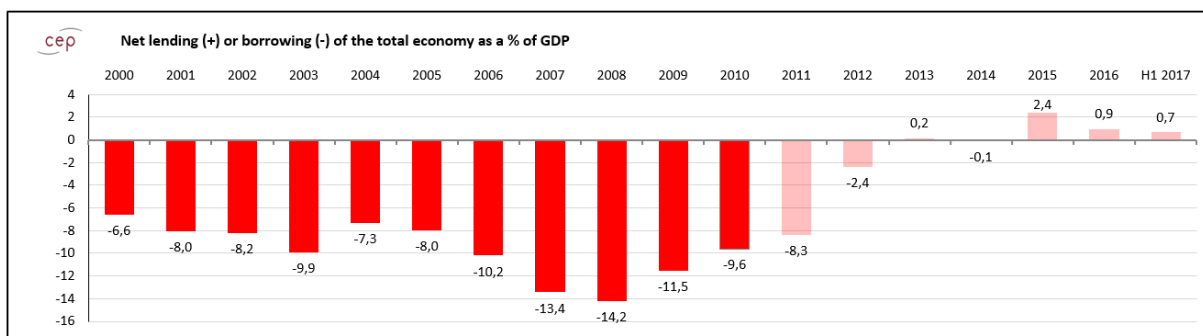
Summary: Greece's creditworthiness continues to deteriorate. The financial aid, which began in 2010, has done nothing to change that. Greece is still not creditworthy.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|------|------|------|------|------|------|-------|-------|-------|-------|------|-------|------|------|------|------|------|---------|
| Risk category | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| I^c | 6,5 | 6,9 | 5,8 | 7,0 | 6,0 | 3,8 | 5,4 | 6,8 | 5,8 | 3,4 | 0,6 | -1,8 | -5,1 | -5,9 | -5,8 | -5,6 | -5,2 | -6,7 |
| NTE | -6,6 | -8,0 | -8,2 | -9,9 | -7,3 | -8,0 | -10,2 | -13,4 | -14,2 | -11,5 | -9,6 | -8,3 | -2,4 | 0,2 | -0,1 | 2,4 | 0,9 | 0,7 |
| I^c + NTE | -0,1 | -1,1 | -2,4 | -2,9 | -1,3 | -4,2 | -4,8 | -6,6 | -8,4 | -8,1 | -9,0 | -10,1 | -7,5 | -5,7 | -5,9 | -3,2 | -4,3 | -6,0 |

Capacity Enhancing Capital Formation (C): Greek capital stock has now been falling for six and a half years. In the first half of 2017 alone, it fell by 6.7% of GDP. This is not only by far the highest level of all EU Member States but also the biggest fall yet measured in the country. The falling capital stock is due to a lack of both public and private investment, with the latter being the most significant factor.¹⁵ All in all, this shows that the conditions for foreign and domestic investment in Greece remain unattractive.

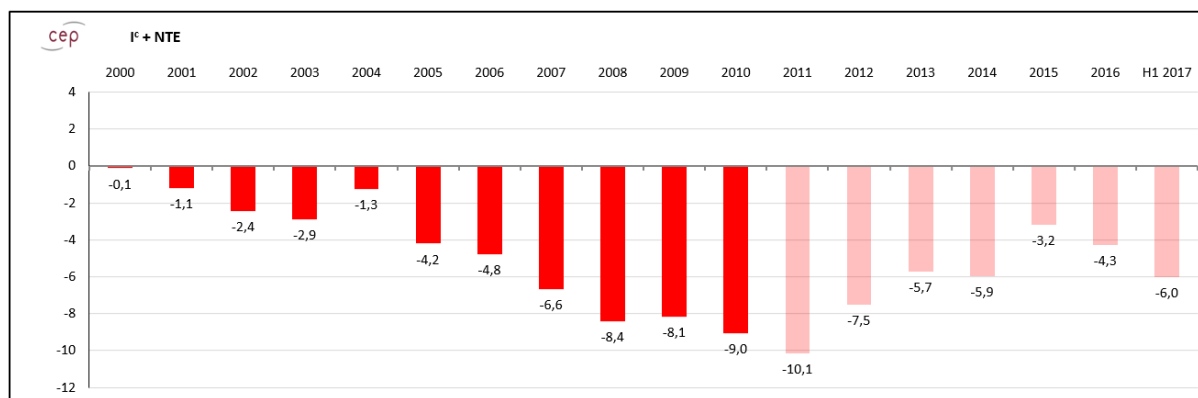


Net lending or net borrowing of the total economy (NTE): On balance, between 2000 and 2012, Greece incurred foreign debt every year although Greek net borrowings have fallen continuously since 2009. In the last two and a half years, Greece actually became a net capital exporter. This capital export is problematic, however, because at the same time Greece's capital stock has diminished. Thus the capital export is not a sign of an internationally competitive economy but of capital flight. By comparison with the previous two years, though, its level has dropped.

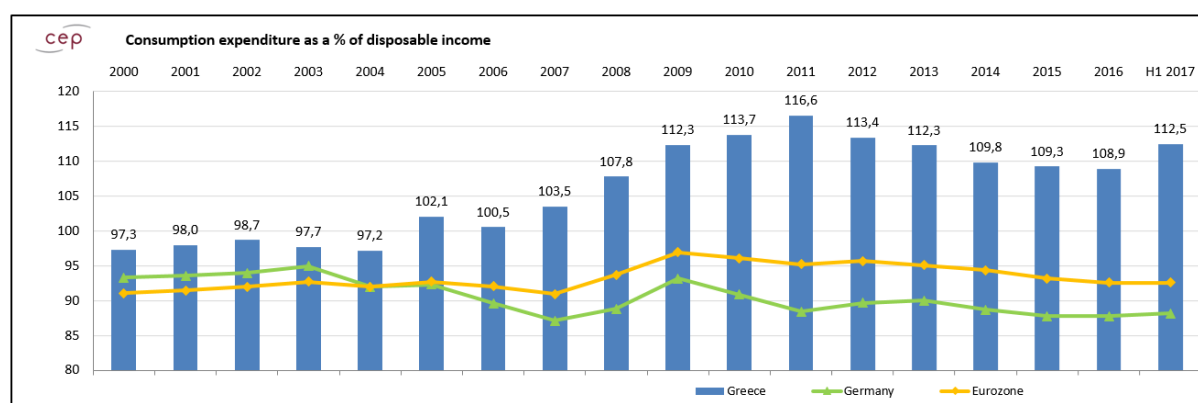


¹⁵ Cf. European Commission database, Ameco, online at: http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm, accessed on 12.01.2018.

C + NTE: The sum of C and NTE is negative for the entire reference period. To begin with, this was caused by massive borrowings. Since 2012, it has been due, in particular, to the fall in capital stock.



Consumption rate: Since as long ago as 2005, the Greek consumption rate has invariably exceeded the critical threshold of 100% of available income. The first half of 2017 saw a further significant increase to 112.5%. This value is not only significantly above the eurozone average of 92.6% but is by far the highest of all EU Member States.



Result: Greece is still not creditworthy. The three rescue packages undertaken since 2010 have done nothing to change that. Greece is therefore unlikely to manage for any length of time without a fourth rescue package.

Cause: Greece's lack of creditworthiness is firstly due to the fact that the country's capital stock has been falling since 2011. On that basis, last year's growth in the Greek economy is cyclical and will not be sustainable as long as capacity enhancing capital formation remains negative. The latter clearly indicates that Greece remains unattractive to international investors. Unless this changes, Greece will not regain its creditworthiness. Secondly, Greece's lack of creditworthiness is due to the propensity of the Greek population and the Greek government to consume.

Recommended action: In order for Greece to regain its creditworthiness, the country must become more attractive to domestic and foreign investors. For this to happen, investment conditions must be improved. The condition for the latter is a reduction in the consumption rate below 100% of available income so as to free up funds for investment. Public spending, in particular, must be used more for investment purposes.

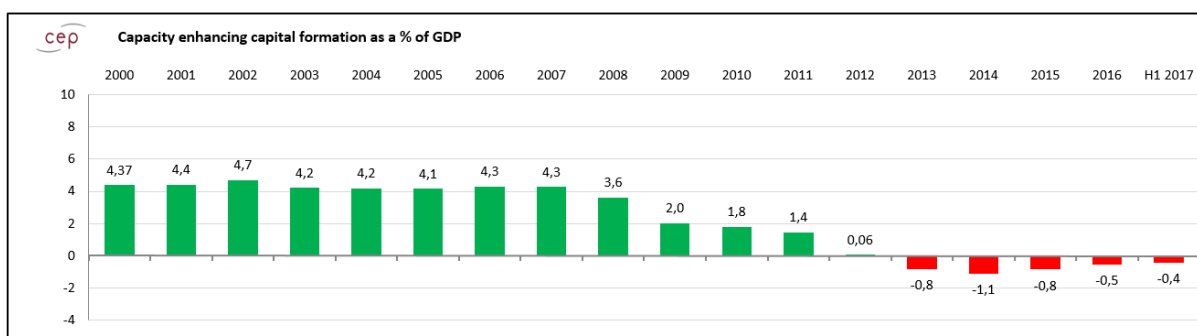
Above all, the country must implement reforms and must believe in those reforms. The best medicine in the world will not help if the patient believes the doctor is trying to poison him.

4.3 Italy

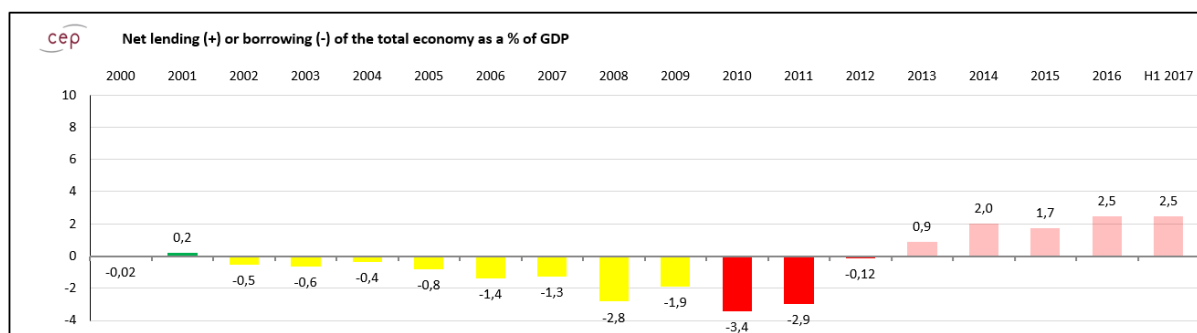
Summary: Italian creditworthiness has declined steadily since 2010.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|---------|
| Risk category | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| I^c | 4,37 | 4,4 | 4,7 | 4,2 | 4,2 | 4,1 | 4,3 | 4,3 | 3,6 | 2,0 | 1,8 | 1,4 | 0,06 | -0,8 | -1,1 | -0,8 | -0,5 | -0,4 |
| NTE | -0,02 | 0,2 | -0,5 | -0,6 | -0,4 | -0,8 | -1,4 | -1,3 | -2,8 | -1,9 | -3,4 | -2,9 | -0,12 | 0,9 | 2,0 | 1,7 | 2,5 | 2,5 |
| I^c + NTE | 4,35 | 4,6 | 4,2 | 3,6 | 3,8 | 3,3 | 2,9 | 3,0 | 0,8 | 0,1 | -1,6 | -1,5 | -0,06 | 0,1 | 0,9 | 0,9 | 2,0 | 2,1 |

Capacity Enhancing Capital Formation (C): Since 2013, Italy has shown a negative investment rate although the tendency has been declining since 2014. In the first half of 2017, the level of capital stock fell again by 0.4% of GDP. The main reason is the sharp decline in net public investment. This has been negative since 2012 – and the tendency is increasing.¹⁶ This is due to the state's high public debt and the resulting high interest burden; the proportion of public expenditure used for interest is the second highest in the EU.¹⁷ This money is not then available for public investment. Private investment, however, is also contributing to the reduction in capital stock because it has also been negative since 2013, although the tendency has been declining.



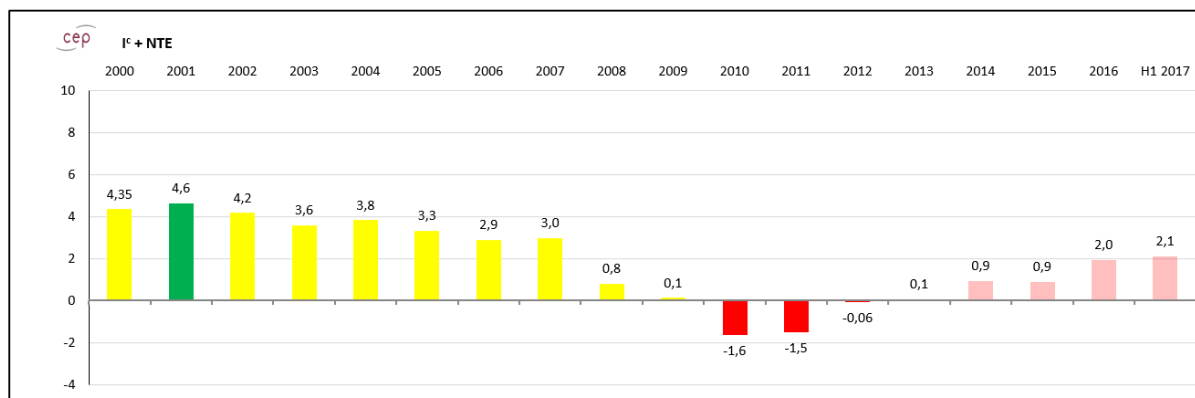
Net lending or net borrowing of the total economy (NTE): Whereas, on balance, Italy imported capital between 2002 and 2012, since 2013 capital has been going out of the country. Since, at the same time, Italy's capital stock is dwindling, the capital export is an indication of capital flight rather than a high level of competitiveness. Capital, which is urgently required for investment, is flowing out of the country.



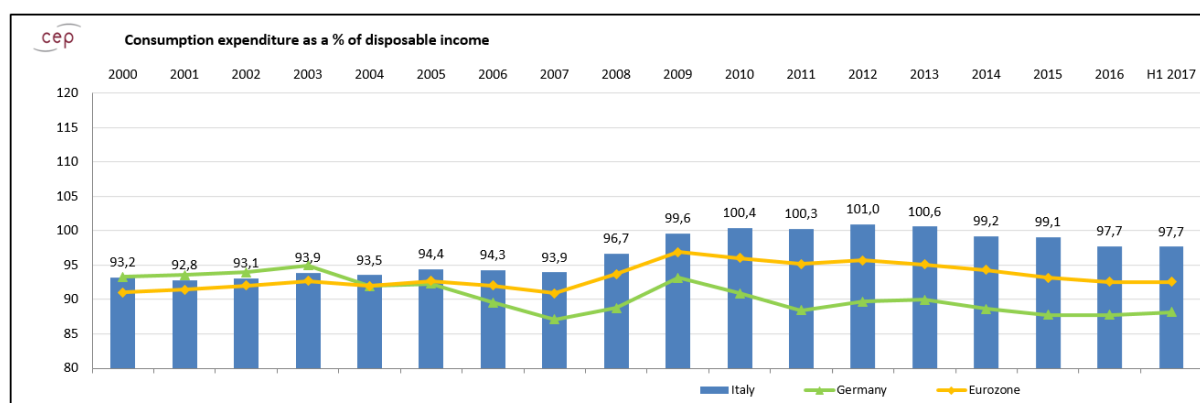
¹⁶ Cf. European Commission database, Ameco, online at: http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm, accessed on 12.01.2018.

¹⁷ Cf. Eurostat, measured as % of GDP.

C + NTE: Up to 2009, capacity enhancing capital formation exceeded borrowings; the sum of C and NTE was thus positive until 2009. This changed round between 2010 and 2012. Since 2013, the Index value has been positive but at the same time Italian capital stock has dwindled. This indicates capital flight, thus Italy's creditworthiness is deteriorating.



Consumption rate: Between 2010 and 2013, Italy's consumption rate was above the threshold of 100% of available income. The rate fell back to 97.7% between 2014 and 2016 and stagnated at that level in the first half of 2017. Thus it still remains significantly higher than the eurozone average of 92.6%.



Result: Italian creditworthiness has been in a continuous decline since 2010. The fact that, despite this trend, Italy is able to obtain cheap finance on the capital market is due in particular to huge purchases of Italian government bonds by the ECB.

Cause: Initially, the decline in Italy's creditworthiness was due to the Italian population's excessive propensity to consume which was partly financed by net borrowings. Since 2013, the declining creditworthiness has been a result of a reduction in capital stock; both public and private investment is negative. The former is due, among other things, to the state's high interest burden which is in turn the result of high public debt. The latter is an indication that Italy is unattractive to international investors.

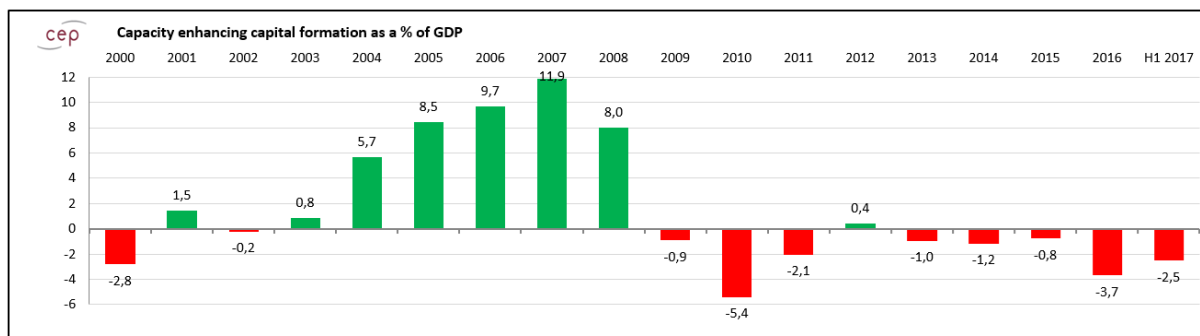
Recommended action: Italian capital stock must be increased by way of more investment. To achieve this, the government must primarily reduce public consumption and increase investment. At the same time, the Italian government should start to bring down public debt in order to reduce the interest burden. In addition, the investment climate for private investors must be improved so that private capital stock can increase again.

4.4 Latvia

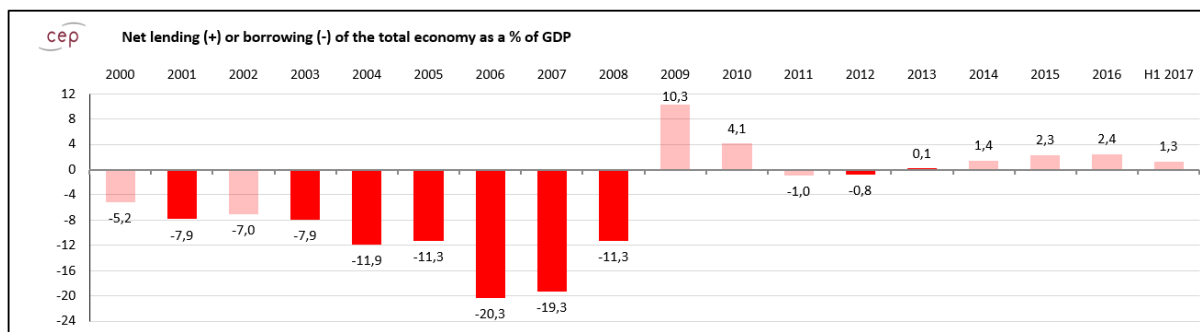
Summary: Latvian creditworthiness has been in decline since 2000. This trend continued in the first half of 2017.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|------|------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|---------|
| Risk category | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| I^c | -2,8 | 1,5 | -0,2 | 0,8 | 5,7 | 8,5 | 9,7 | 11,9 | 8,0 | -0,9 | -5,4 | -2,1 | 0,4 | -1,0 | -1,2 | -0,8 | -3,7 | -2,5 |
| NTE | -5,2 | -7,9 | -7,0 | -7,9 | -11,9 | -11,3 | -20,3 | -19,3 | -11,3 | 10,3 | 4,1 | -1,0 | -0,8 | 0,1 | 1,4 | 2,3 | 2,4 | 1,3 |
| I^c + NTE | -8,0 | -6,4 | -7,2 | -7,1 | -6,2 | -2,8 | -10,6 | -7,4 | -3,3 | 9,4 | -1,3 | -3,1 | -0,4 | -0,9 | 0,2 | 1,5 | -1,3 | -1,2 |

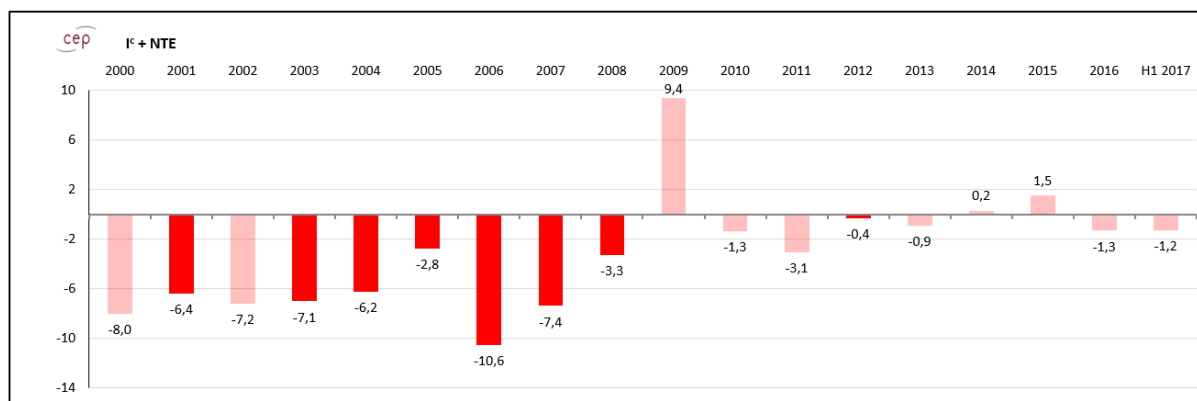
Capacity Enhancing Capital Formation (C): Latvia also belongs to the group of eurozone countries in which capital stock is declining. This has now been the trend every year since 2010 - with only one exception. In the first half of 2017, its level fell by 2.5% of GDP. Only Greek capital stock has fallen faster. The decline is due both to low public investment and a lack of private investment, with the latter being the main problem.



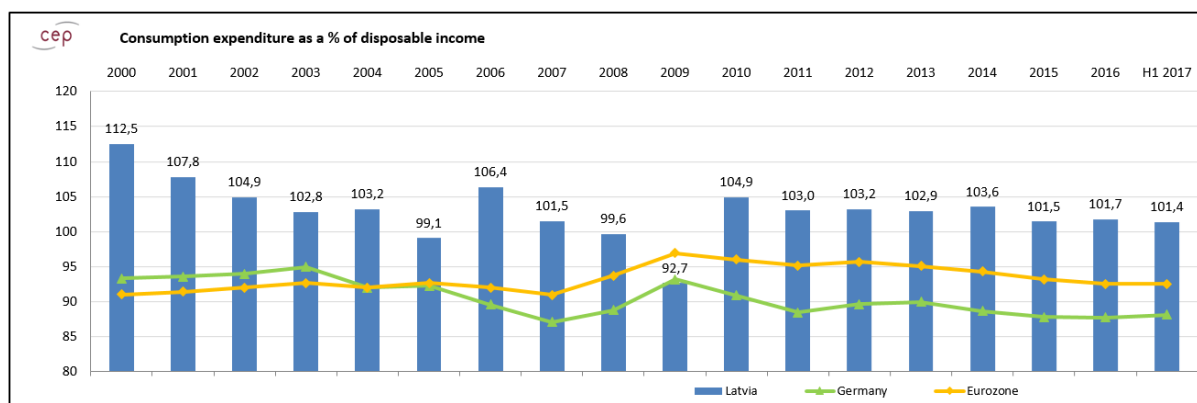
Net lending or net borrowing of the total economy (NTE): On balance, between 2000 and 2008, Latvia imported large amounts of capital. Since then - with the exception of 2011 and 2012 - the country has been a net capital exporter. On balance, in the first half of 2017, capital amounting to 1.3% of GDP left the country. The capital exports are a sign of capital flight because during the same period, Latvian capital stock fell.



C + NTE: The sum of C and NTE was slightly negative in the first half of 2017 - as was already the case the year before. Since capital stock also declined during this period, the sum of C and NTE is irrelevant as regards the trend in creditworthiness.



Consumption rate: One major problem in Latvia is the high propensity to consume. Since 2010, the consumption rate has invariably exceeded the critical threshold of 100%. Thus, for eight and a half years, the country has been living beyond its means. In the first half of 2017, the country consumed 101.4% of the available income. In the eurozone, only Greece and Cyprus have higher rates of consumption.



Result: The decline in Latvian creditworthiness also continued in the first half of 2017.

Cause: The decline in Latvia's creditworthiness is particularly due to the decline in capital stock which - with one exception - the country has had since 2010. In addition, there is an excessive propensity to consume. The country has been consuming beyond its means since 2010.

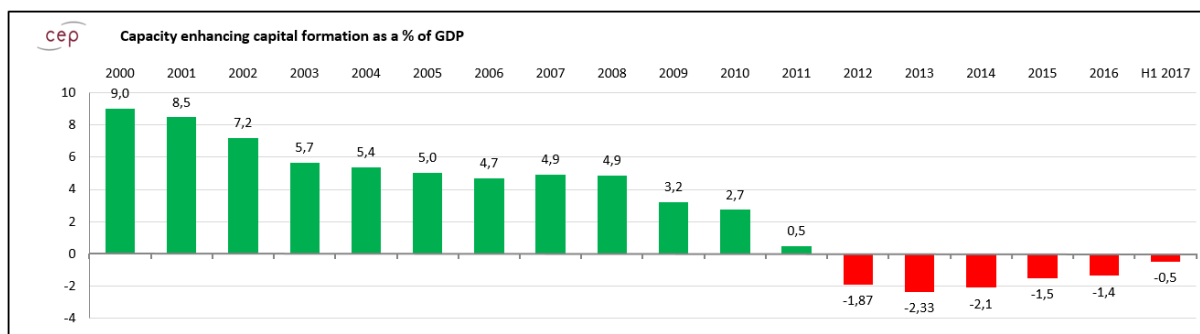
Recommended action: In order to stop the decline in capital stock, Latvia must improve the conditions for investment. At the same time, public spending, in particular, must be used more for investment purposes. This would help to reduce the high level of consumption. Otherwise the country's creditworthiness will fall further.

4.5 Portugal

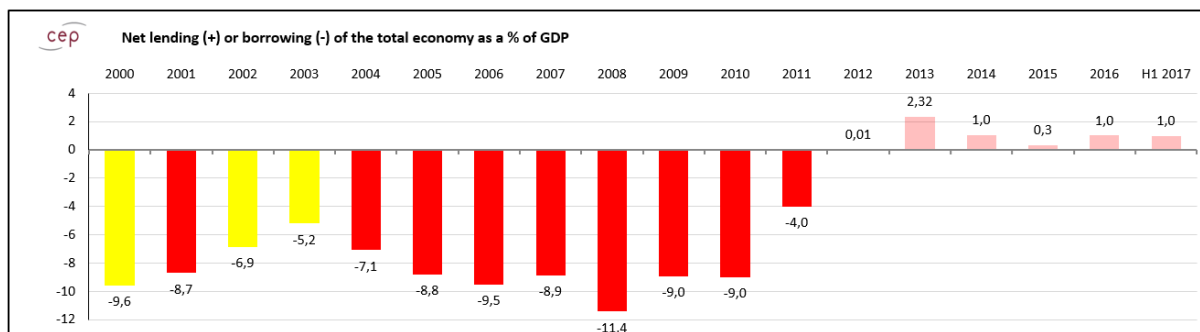
Summary: Portuguese creditworthiness has been declining since 2004 and this trend continued in the first half of 2017 albeit to a lesser extent than in previous years.

| | 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^c | 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^c + 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.¹⁸ 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.

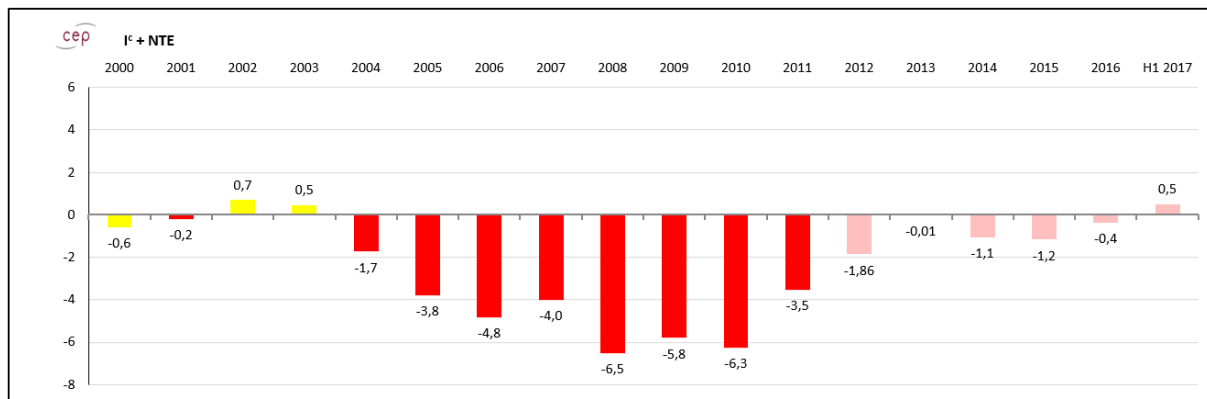


Net lending or net borrowing of the total economy (NTE): Until 2011, Portugal was a net importer of capital. Since 2012, on balance, capital has been going out of the country. The level appears to have settled down at one percent of GDP. This money is urgently needed in order to at least maintain Portugal's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

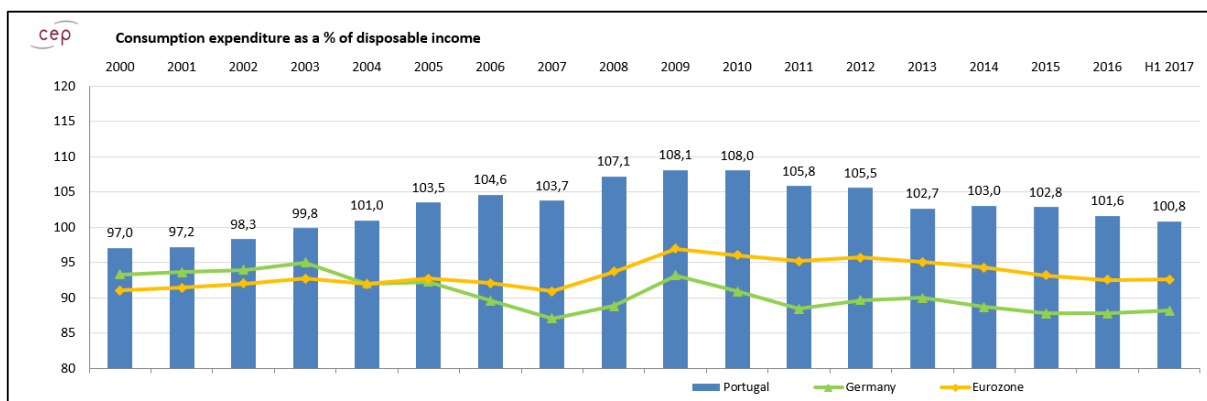


¹⁸ Cf. European Commission database, Ameco, online at: http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm, accessed on 12.01.2018.

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.

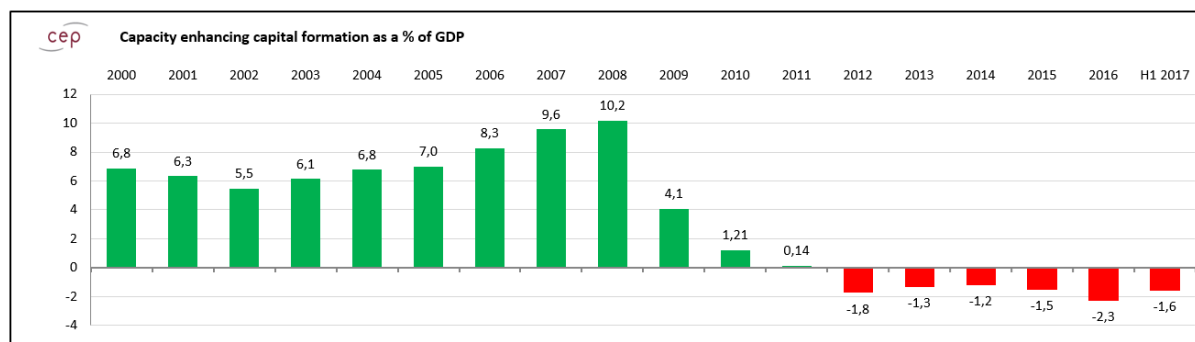
Recommended action: In order to maintain the tendency for improvement and put an end to the erosion of Portugal's creditworthiness, public expenditure must be used to a far lesser extent for consumption and more for investment; reducing the high level of public debt would, in particular, allow scope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

4.6 Slovenia

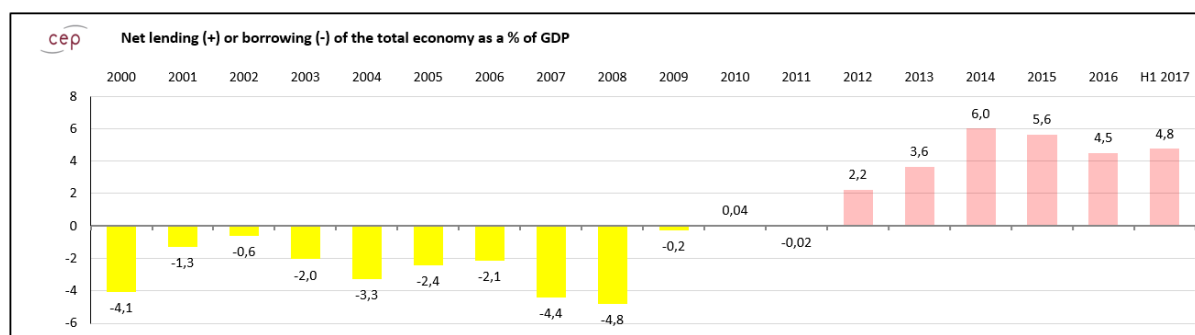
Summary: Slovenia's creditworthiness has declined since 2012. This trend continued in the first half of 2017.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|---------|
| Risk category | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 3 | 3 | 4 | 4 | 4 |
| I^c | 6,8 | 6,3 | 5,5 | 6,1 | 6,8 | 7,0 | 8,3 | 9,6 | 10,2 | 4,1 | 1,21 | 0,14 | -1,8 | -1,3 | -1,2 | -1,5 | -2,3 | -1,6 |
| NTE | -4,1 | -1,3 | -0,6 | -2,0 | -3,3 | -2,4 | -2,1 | -4,4 | -4,8 | -0,2 | 0,04 | -0,02 | 2,2 | 3,6 | 6,0 | 5,6 | 4,5 | 4,8 |
| I^c + NTE | 2,7 | 5,0 | 4,9 | 4,1 | 3,5 | 4,6 | 6,2 | 5,2 | 5,4 | 3,9 | 1,25 | 0,12 | 0,4 | 2,3 | 4,8 | 4,1 | 2,2 | 3,2 |

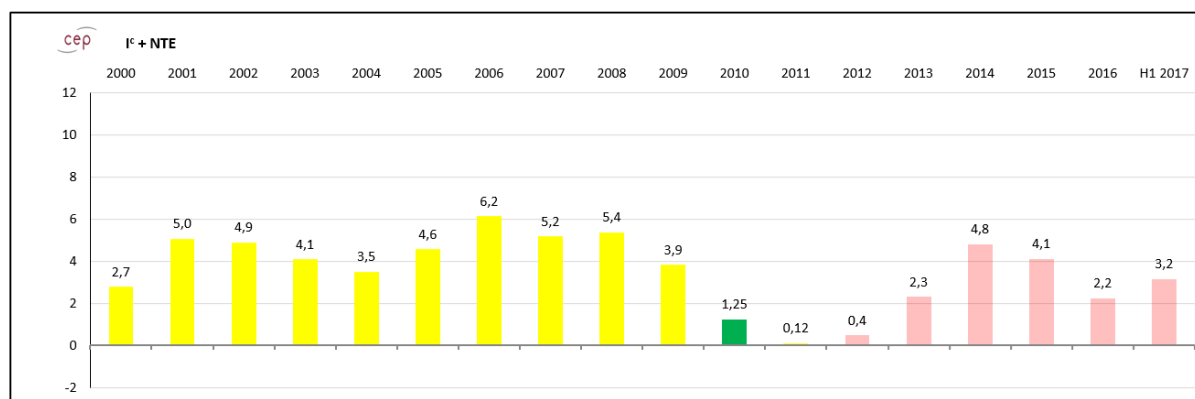
Capacity Enhancing Capital Formation (C): Slovenia also belongs to the group of eurozone countries in which capital stock is declining. This trend has now been continuing since 2012. In the first half of 2017, capital stock fell by 1.6% of GDP. The reason for this fall is not the lack of public investment but is exclusively due to the absence of private investment. This clearly shows that Slovenia is unattractive as an investment location.



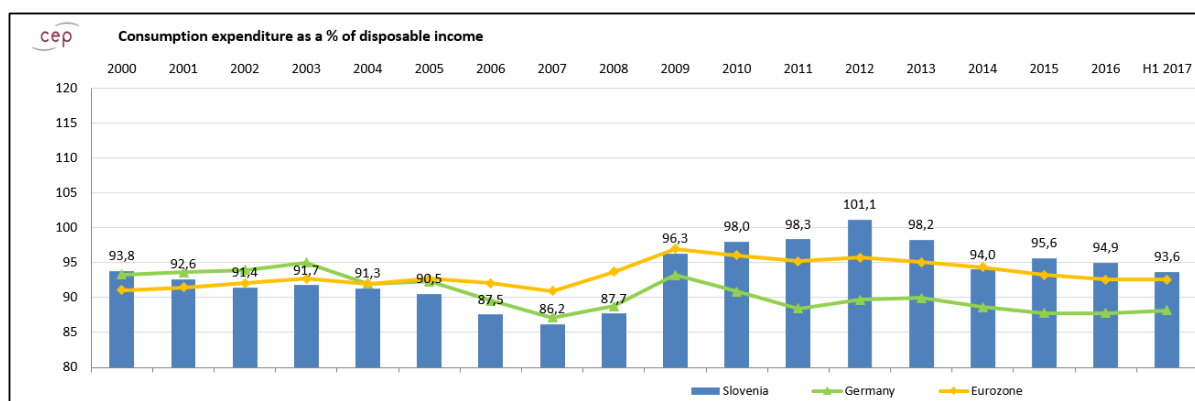
Net lending or net borrowing of the total economy (NTE): Until 2009, Slovenia was a net capital importer. Since 2012, the country has continuously been exporting capital. As capital stock is also shrinking, this is not a positive trend. In fact, the country is losing capital that is urgently needed to maintain capital stock. In the first half of 2017, capital amounting on balance to 4.8% of GDP was taken out of Slovenia.



C + NTE: The sum of C and NTE is positive over the entire reference period. Until 2009, the reason for this was the high level of investments which exceeded net borrowings. Since 2012, this has been caused by the fact that capital required for investment is being taken out of Slovenia.



Consumption rate: In the first few years following introduction of the euro in 2007, Slovenia's consumption rose sharply and in 2012 exceeded the critical threshold of 100% of available income. By 2017, the consumption rate had fallen back to 93.6% and was therefore just over the eurozone average of 92.6%.



Result: Slovenian creditworthiness has declined since 2012.

Cause: The country's capital stock is dwindling due to low private investment. By contrast with other problem countries, public investment and the consumption rate are not the cause.

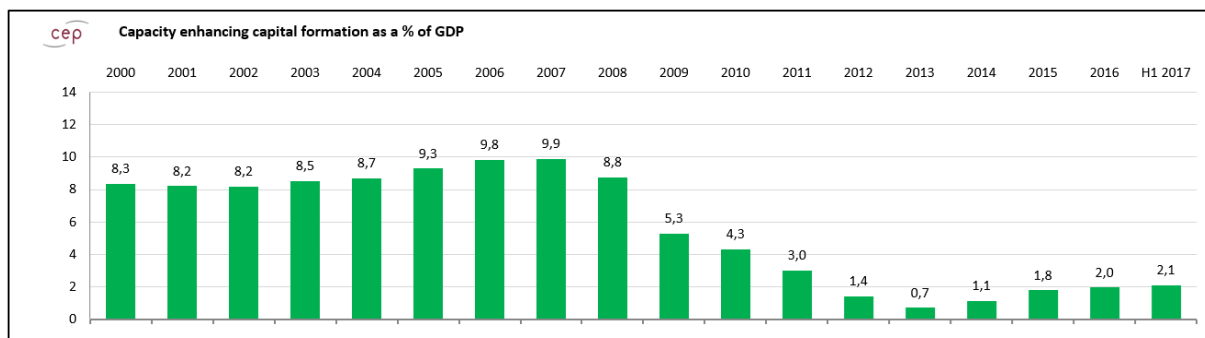
Recommended action: In order to prevent a further reduction in creditworthiness, Slovenia must improve its conditions for private investment.

4.7 Spain

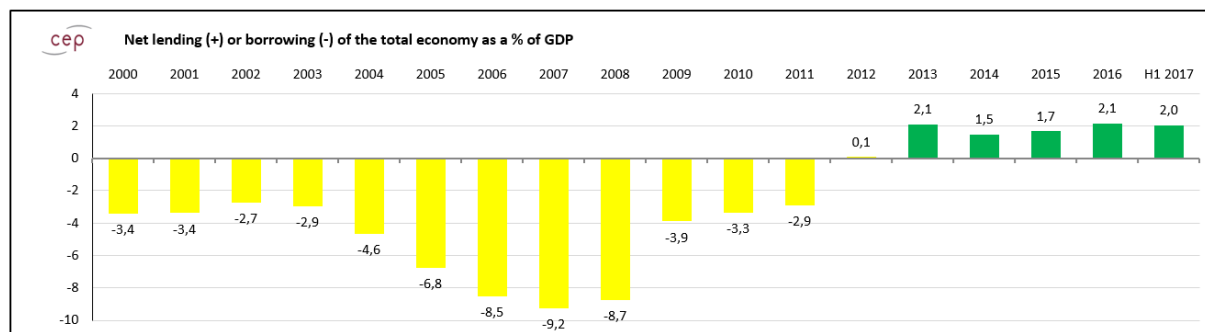
Summary: Spain's creditworthiness has continuously improved since 2012. Nevertheless, Spain required financial aid to support its banks between 2012 and 2014 after a property bubble burst. However, the cepDefault-Index deliberately only shows risks such as those which arise from property bubbles to the extent that they result in negative net foreign investment. This was not the case in Spain. Consequently, the Index did not show a clear fall in creditworthiness in any year.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| Risk category | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| I^c | 8,3 | 8,2 | 8,2 | 8,5 | 8,7 | 9,3 | 9,8 | 9,9 | 8,8 | 5,3 | 4,3 | 3,0 | 1,4 | 0,7 | 1,1 | 1,8 | 2,0 | 2,1 |
| NTE | -3,4 | -3,4 | -2,7 | -2,9 | -4,6 | -6,8 | -8,5 | -9,2 | -8,7 | -3,9 | -3,3 | -2,9 | 0,1 | 2,1 | 1,5 | 1,7 | 2,1 | 2,0 |
| I^c + NTE | 4,9 | 4,8 | 5,5 | 5,6 | 3,9 | 2,5 | 1,3 | 0,7 | 0,1 | 1,4 | 1,0 | 0,1 | 1,5 | 2,8 | 2,6 | 3,5 | 4,1 | 4,1 |

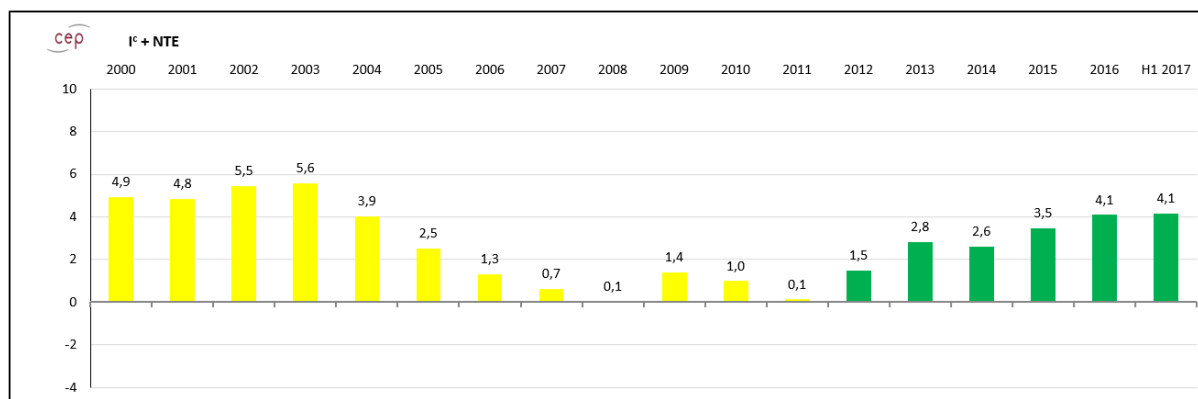
Capacity Enhancing Capital Formation (C): Capacity enhancing capital formation fell sharply between 2008 and 2013 but always remained positive. Since 2014, it has again been rising slowly, but surely. This trend continued in the first half of 2017. The positive C value is solely due to private investment. Net public investment has been negative since 2012.



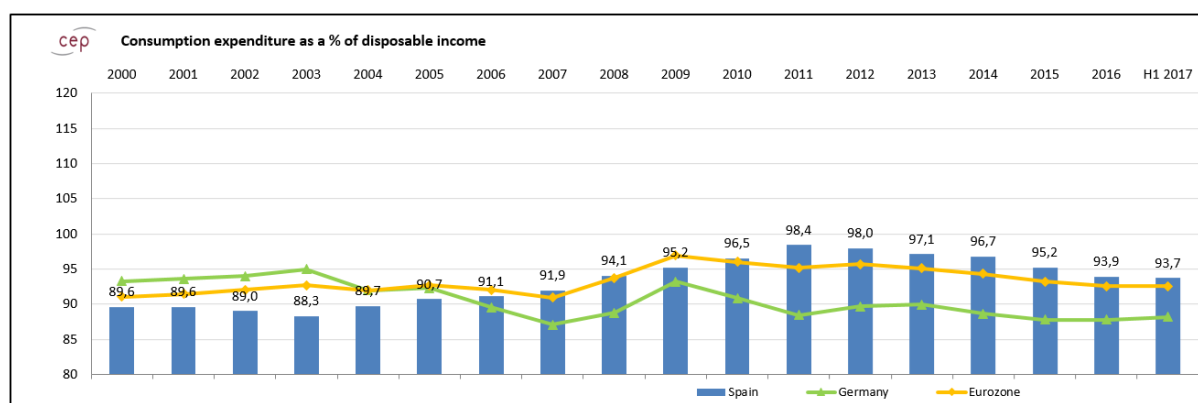
Net lending or net borrowing of the total economy (NTE): Having been a net capital importer until 2011, Spain has on balance been exporting capital since 2012. In the first half of 2017, the surplus was 2.0% of GDP.



C + NTE: The sum of C and NTE fell sharply as from 2004. Even during the crisis, starting in 2008, however, the index value remained in the low positive range. Since 2012, it has risen significantly and now stands at 4.1% of GDP.



Consumption rate: The consumption rate, which has been falling continuously since 2012, was 93.7% in the first half of 2017. It is therefore just above the eurozone average of 92.6%.



Result: The trend in Spanish creditworthiness was unclear up until 2011 and has risen continuously since 2012. In the medium term, public net investment, which has been negative since 2012, could be an obstacle to growth.

Cause: The rise in creditworthiness seen since 2012 is the result of structural reforms which have led to an increase in international competitiveness. It remains to be seen whether the political uncertainty arising from Catalonia's efforts to become independent will have an economic impact.

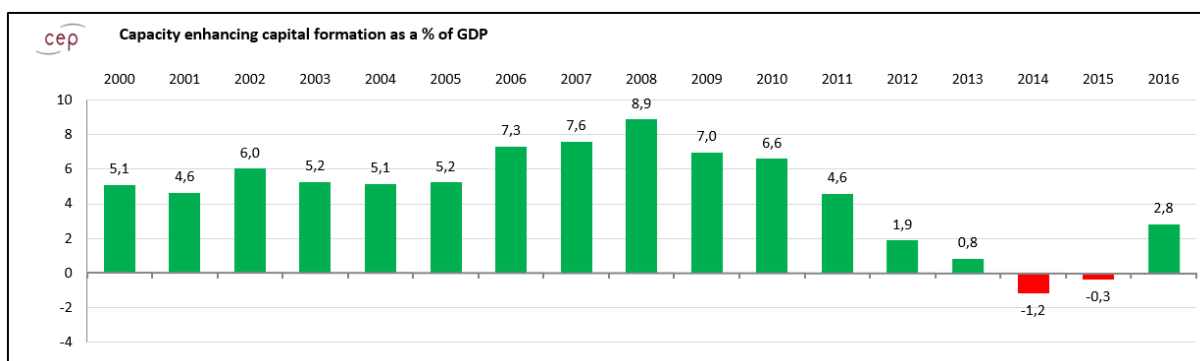
Recommended action: The Spanish Government should continue along the path of reform and reduce the still high public deficit. At the same time, it should ensure that this does not take place solely to the detriment of public investment.

4.8 Cyprus

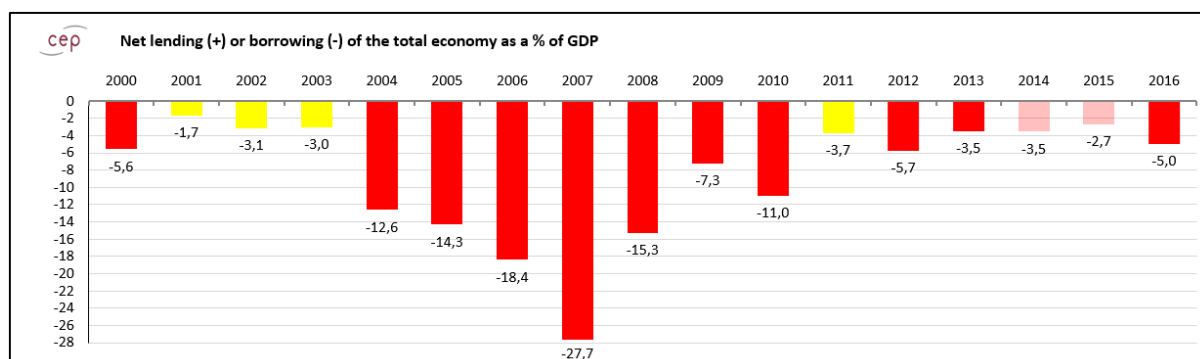
Summary: With the exception of one year, creditworthiness in Cyprus has been falling since 2004. This trend continued in 2016.

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Risk category | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 3 | 4 | 4 | 4 |
| I^c | 5,1 | 4,6 | 6,0 | 5,2 | 5,1 | 5,2 | 7,3 | 7,6 | 8,9 | 7,0 | 6,6 | 4,6 | 1,9 | 0,8 | -1,2 | -0,3 | 2,8 |
| NTE | -5,6 | -1,7 | -3,1 | -3,0 | -12,6 | -14,3 | -18,4 | -27,7 | -15,3 | -7,3 | -11,0 | -3,7 | -5,7 | -3,5 | -3,5 | -2,7 | -5,0 |
| I^c + NTE | -0,5 | 2,9 | 2,9 | 2,2 | -7,5 | -9,1 | -11,1 | -20,1 | -6,4 | -0,3 | -4,4 | 0,9 | -3,8 | -2,7 | -4,7 | -3,0 | -2,2 |

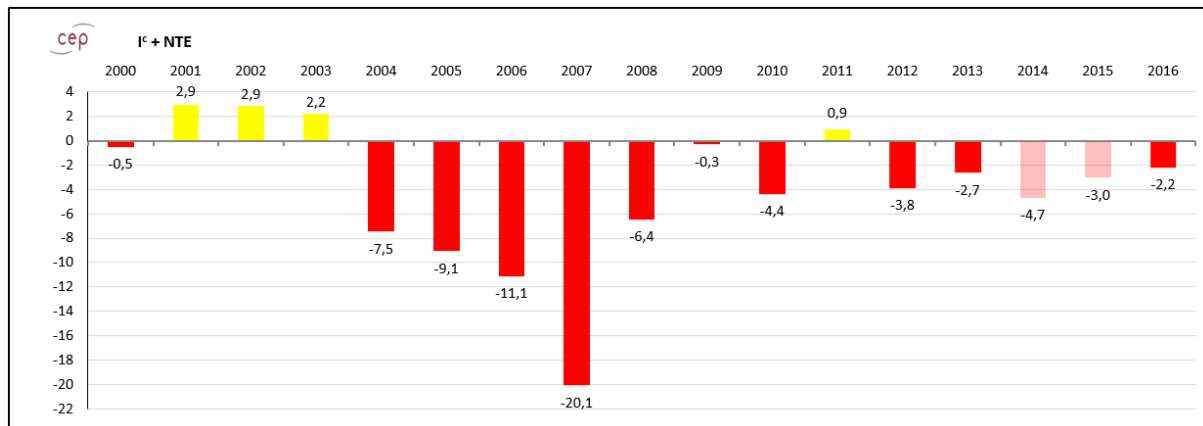
Capacity Enhancing Capital Formation (C): After shrinking in 2014 and 2015, Cyprus' capital stock grew again in 2016. At 2.8%, capacity enhancing capital formation was also significantly above the eurozone average of 1.8% in 2016.



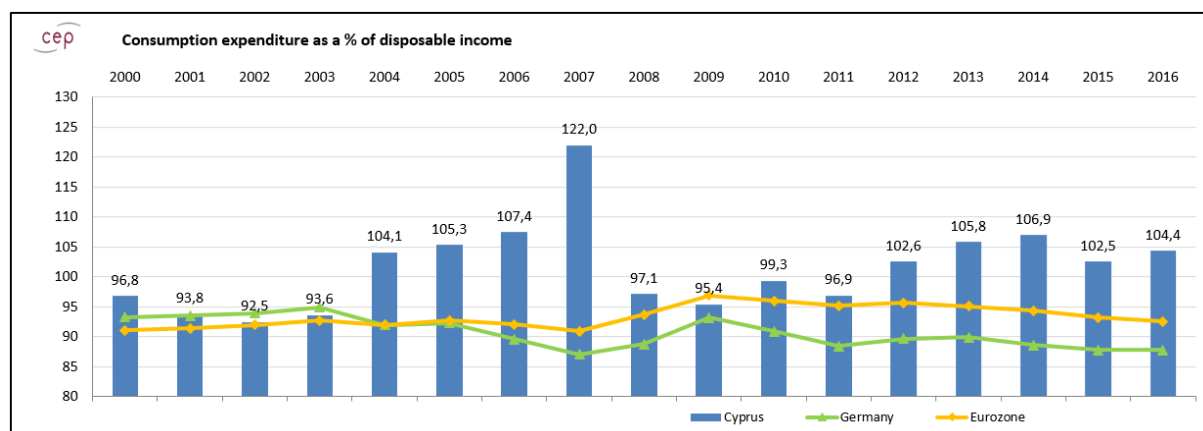
Net lending or net borrowing of the total economy (NTE): Cyprus has been an importer of capital continuously since 2000. In most years, some borrowings have been used for consumption. After a fall in borrowings in 2015, the figure rose sharply to 5.0% of GDP in 2016. A considerable amount of the borrowings were once again used not for investment but for consumption.



C + NTE: With the exception of 2011, the Index value for Cyprus has been negative since 2009 and has shown a downward trend since 2015. After a fall in capital stock in 2014 and 2015, investment in Cyprus is back in the positive but Cyprus is continuing to incur a significant amount of foreign debt to finance consumption.



Consumption rate: Since 2012, consumption in Cyprus has been in excess of the critical threshold of 100% of available income. The high propensity to consume in Cyprus means that borrowings are not only used to finance investments but also to finance domestic consumption. Whilst the consumption rate fell in 2015, in 2016 it rose again to 104.4% of available income. After Greece, this was the second highest figure of all the eurozone countries.



Result: With the exception of one year, creditworthiness in Cyprus has been falling since as long ago as 2004.

Cause: The main reason for declining creditworthiness in Cyprus is the high consumption rate. This means that Cyprus is incurring debt in order to finance consumption.

Recommended action: In order to reduce the high level of new debts in Cyprus, the consumption rate in particular has to come down.

5 Other European countries and the eurozone as a whole

5.1 Belgium

Trend according to the cepDefault-Index

Green = improvement in creditworthiness.
Yellow = uncertain trend in creditworthiness.

Red-yellow = erosion of creditworthiness.
Red = erosion of creditworthiness is firmly established.

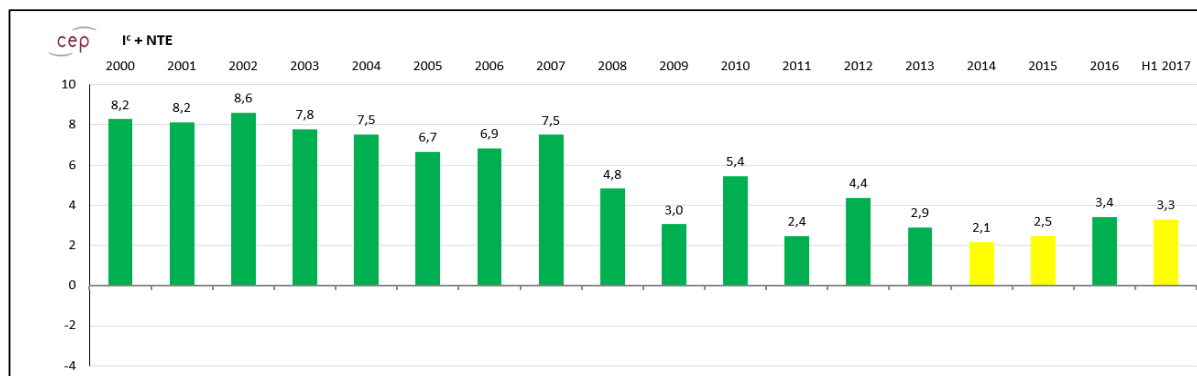
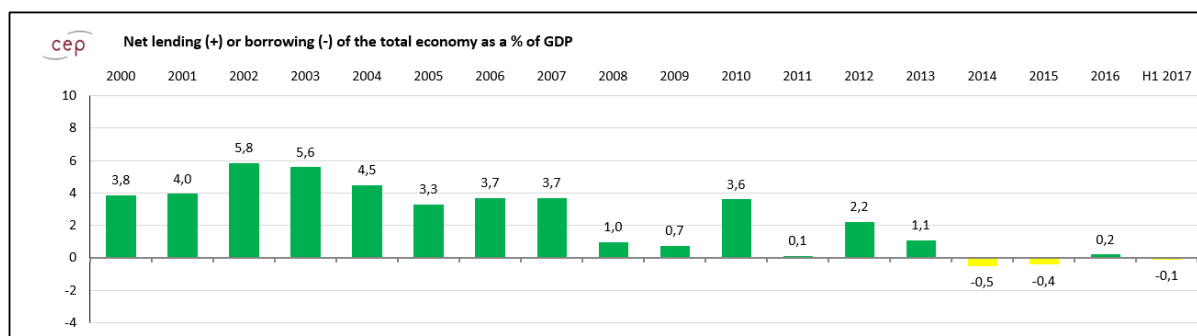
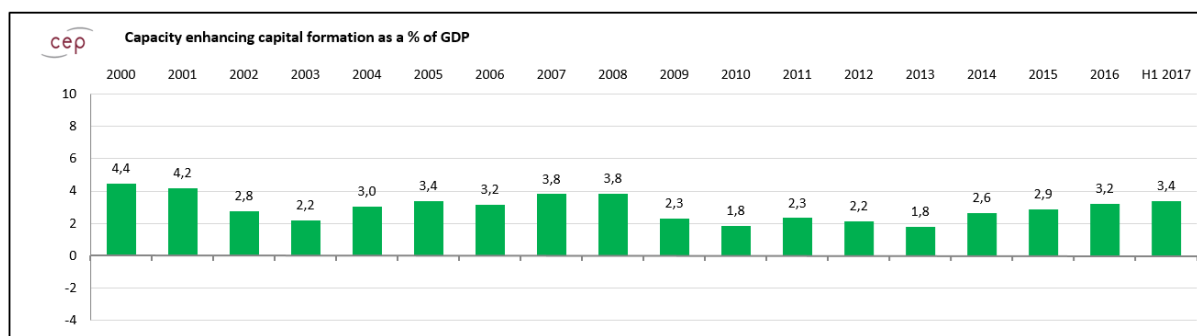
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| Risk category | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 |
| I ^c | 4,4 | 4,2 | 2,8 | 2,2 | 3,0 | 3,4 | 3,2 | 3,8 | 3,8 | 2,3 | 1,8 | 2,3 | 2,2 | 1,8 | 2,6 | 2,9 | 3,2 | 3,4 |
| NTE | 3,8 | 4,0 | 5,8 | 5,6 | 4,5 | 3,3 | 3,7 | 3,7 | 1,0 | 0,7 | 3,6 | 0,1 | 2,2 | 1,1 | -0,5 | -0,4 | 0,2 | -0,1 |
| I ^c + NTE | 8,2 | 8,2 | 8,6 | 7,8 | 7,5 | 6,7 | 6,9 | 7,5 | 4,8 | 3,0 | 5,4 | 2,4 | 4,4 | 2,9 | 2,1 | 2,5 | 3,4 | 3,3 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

NTE: The net lending or net borrowing of the total economy constitutes an economy's net capital import requirement (as a % of GDP). Economies that increase foreign assets or reduce foreign debt show a positive NTE (overall net lending). Economies that incur foreign debt or reduce existing foreign assets show a negative NTE (overall net borrowing).

Negative C leads to a reduction in production capital and thus, irrespective of the trend in NTE, to the erosion of creditworthiness.

Positive C generates additional value added which can be used to pay off external loans. Where there is positive C and **overall net lending** creditworthiness improves. Where there is positive C and **overall net borrowing** the creditworthiness trend depends on which of these factors prevails. If C exceeds overall net borrowing, a reliable assessment is not possible. If C is less than overall net borrowing, creditworthiness will fall.



5.2 Germany

Trend according to the cepDefault-Index

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Yellow = uncertain trend in creditworthiness.

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Red = erosion of creditworthiness is firmly established.

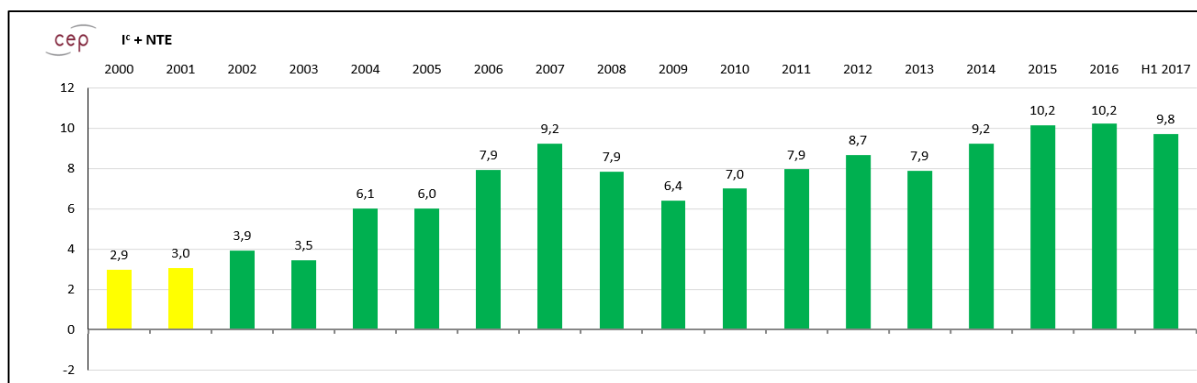
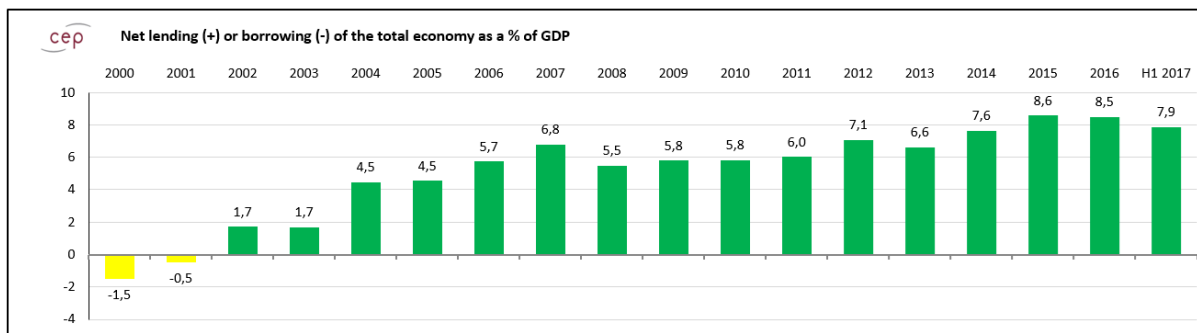
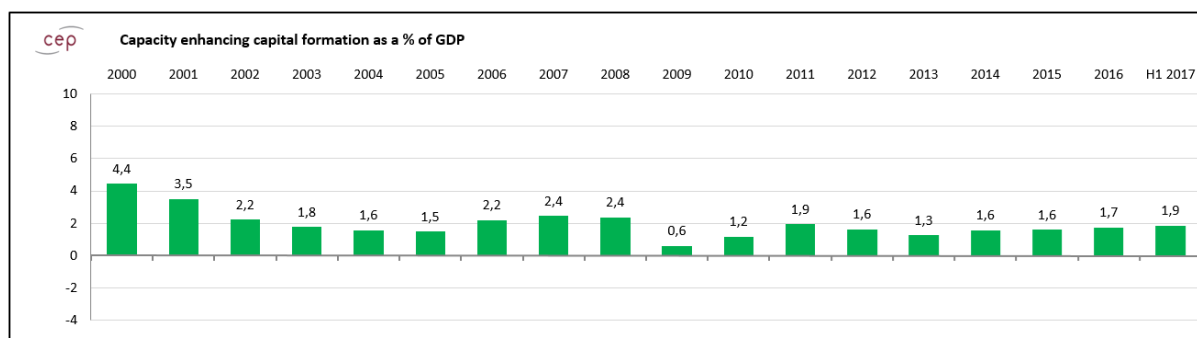
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| Risk category | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| I ^c | 4,4 | 3,5 | 2,2 | 1,8 | 1,6 | 1,5 | 2,2 | 2,4 | 2,4 | 0,6 | 1,2 | 1,9 | 1,6 | 1,3 | 1,6 | 1,6 | 1,7 | 1,9 |
| NTE | -1,5 | -0,5 | 1,7 | 1,7 | 4,5 | 4,5 | 5,7 | 6,8 | 5,5 | 5,8 | 5,8 | 6,0 | 7,1 | 6,6 | 7,6 | 8,6 | 8,5 | 7,9 |
| I ^c + NTE | 2,9 | 3,0 | 3,9 | 3,5 | 6,1 | 6,0 | 7,9 | 9,2 | 7,9 | 6,4 | 7,0 | 7,9 | 8,7 | 7,9 | 9,2 | 10,2 | 10,2 | 9,8 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

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5.3 Estonia

Trend according to the cepDefault-Index

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Yellow = uncertain trend in creditworthiness.

Red-yellow = erosion of creditworthiness.
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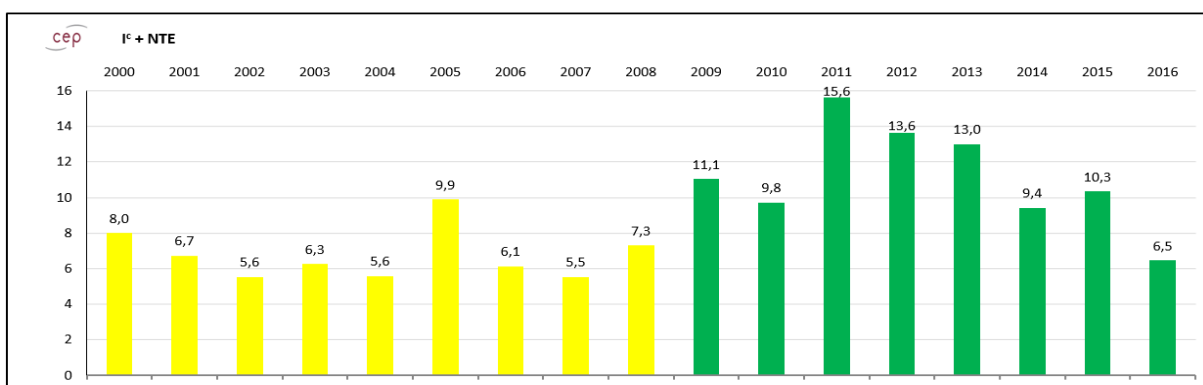
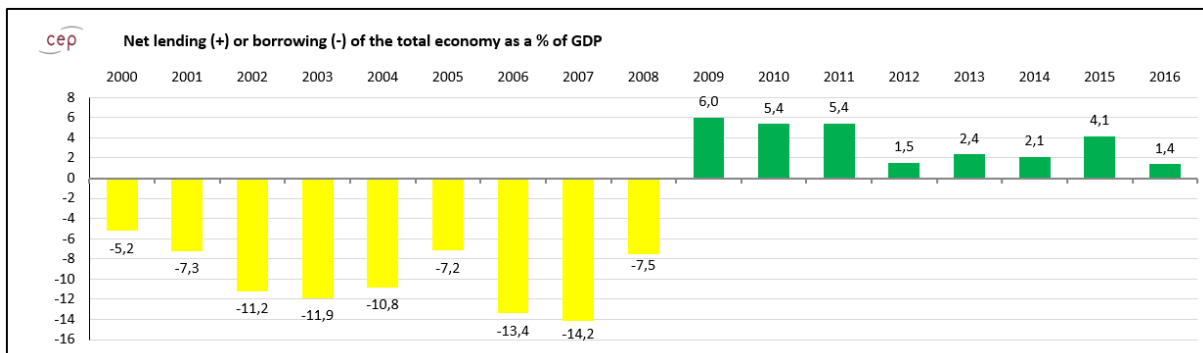
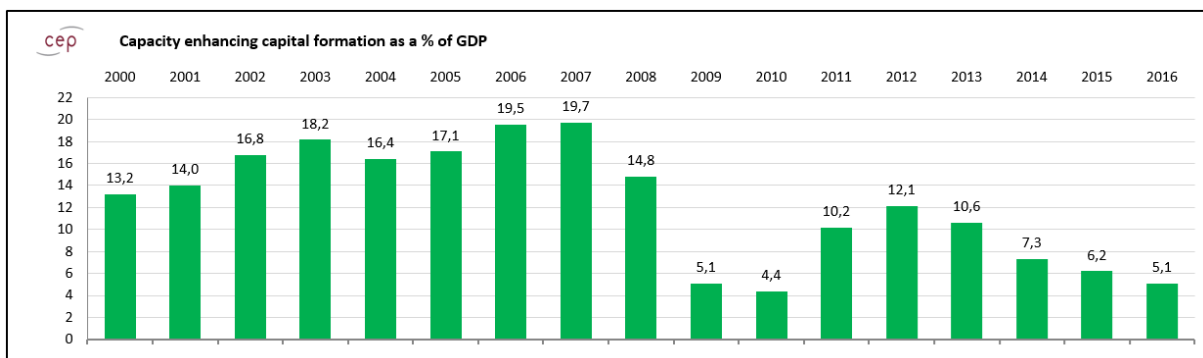
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|----------------------|------|------|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|------|------|------|
| Risk category | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| I ^c | 13,2 | 14,0 | 16,8 | 18,2 | 16,4 | 17,1 | 19,5 | 19,7 | 14,8 | 5,1 | 4,4 | 10,2 | 12,1 | 10,6 | 7,3 | 6,2 | 5,1 |
| NTE | -5,2 | -7,3 | -11,2 | -11,9 | -10,8 | -7,2 | -13,4 | -14,2 | -7,5 | 6,0 | 5,4 | 5,4 | 1,5 | 2,4 | 2,1 | 4,1 | 1,4 |
| I ^c + NTE | 8,0 | 6,7 | 5,6 | 6,3 | 5,6 | 9,9 | 6,1 | 5,5 | 7,3 | 11,1 | 9,8 | 15,6 | 13,6 | 13,0 | 9,4 | 10,3 | 6,5 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

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5.4 Finland

Trend according to the cepDefault-Index

Green = improvement in creditworthiness.
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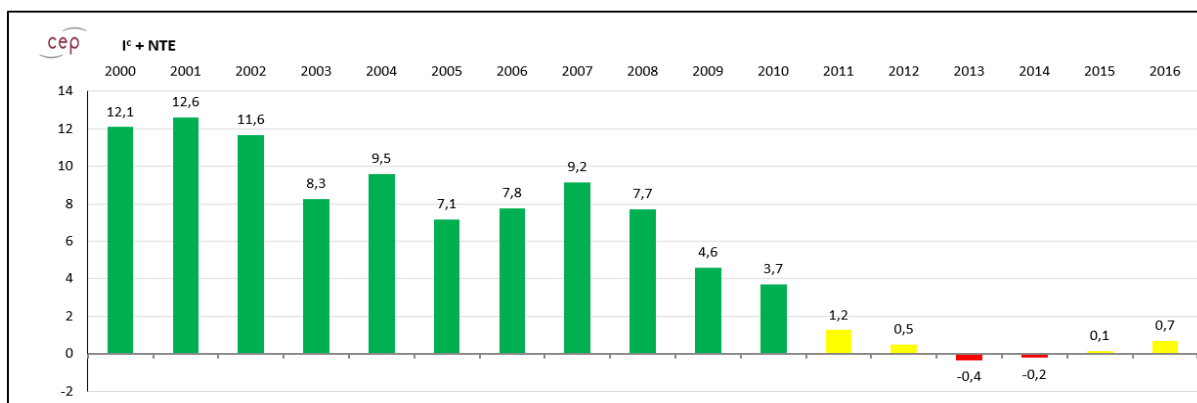
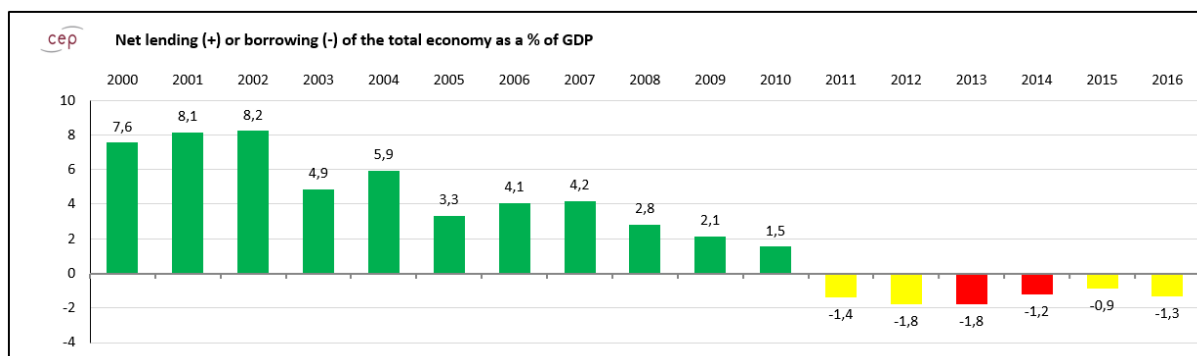
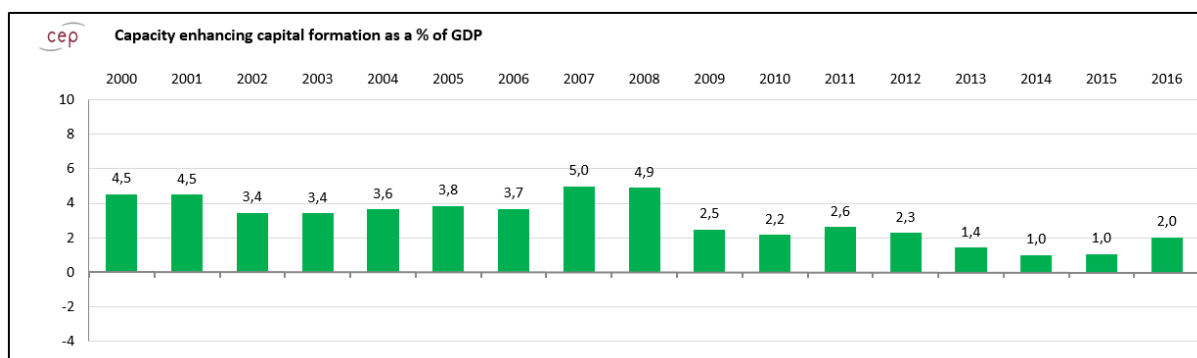
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Risk category | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 |
| I ^c | 4,5 | 4,5 | 3,4 | 3,4 | 3,6 | 3,8 | 3,7 | 5,0 | 4,9 | 2,5 | 2,2 | 2,6 | 2,3 | 1,4 | 1,0 | 1,0 | 2,0 |
| NTE | 7,6 | 8,1 | 8,2 | 4,9 | 5,9 | 3,3 | 4,1 | 4,2 | 2,8 | 2,1 | 1,5 | -1,4 | -1,8 | -1,8 | -1,2 | -0,9 | -1,3 |
| I ^c + NTE | 12,1 | 12,6 | 11,6 | 8,3 | 9,5 | 7,1 | 7,8 | 9,2 | 7,7 | 4,6 | 3,7 | 1,2 | 0,5 | -0,4 | -0,2 | 0,1 | 0,7 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

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5.5 Lithuania

Trend according to the cepDefault-Index

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Yellow = uncertain trend in creditworthiness.

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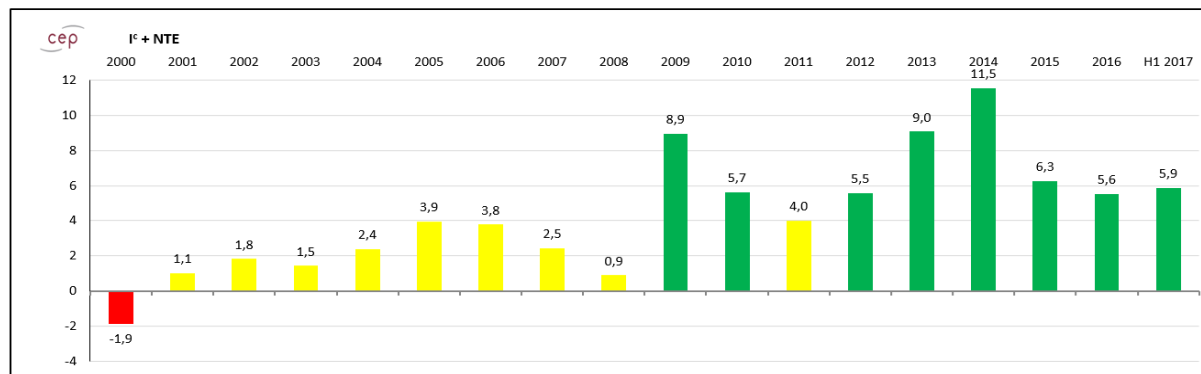
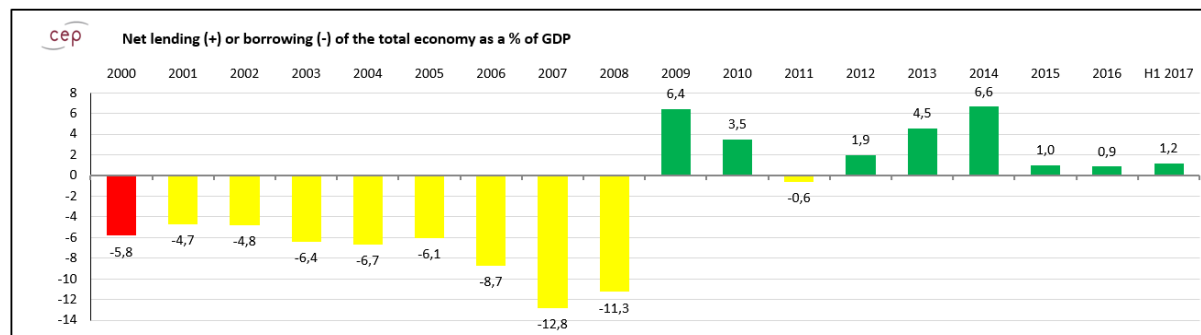
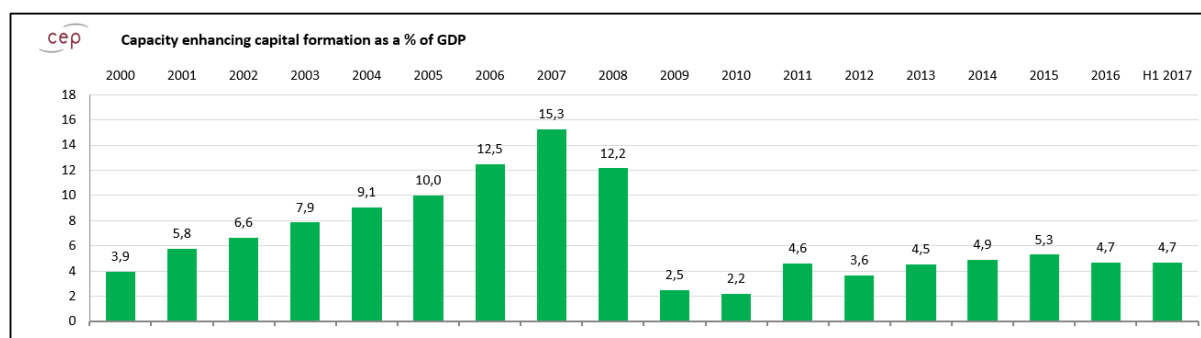
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|---------|
| Risk category | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| I ^c | 3,9 | 5,8 | 6,6 | 7,9 | 9,1 | 10,0 | 12,5 | 15,3 | 12,2 | 2,5 | 2,2 | 4,6 | 3,6 | 4,5 | 4,9 | 5,3 | 4,7 | 4,7 |
| NTE | -5,8 | -4,7 | -4,8 | -6,4 | -6,7 | -6,1 | -8,7 | -12,8 | -11,3 | 6,4 | 3,5 | -0,6 | 1,9 | 4,5 | 6,6 | 1,0 | 0,9 | 1,2 |
| I ^c + NTE | -1,9 | 1,1 | 1,8 | 1,5 | 2,4 | 3,9 | 3,8 | 2,5 | 0,9 | 8,9 | 5,7 | 4,0 | 5,5 | 9,0 | 11,5 | 6,3 | 5,6 | 5,9 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

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5.6 Luxembourg

Trend according to the cepDefault-Index

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Yellow = uncertain trend in creditworthiness.

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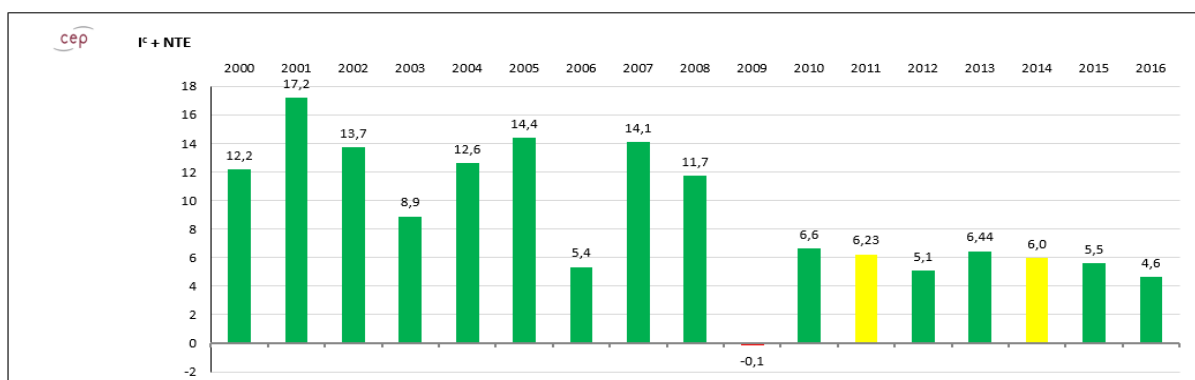
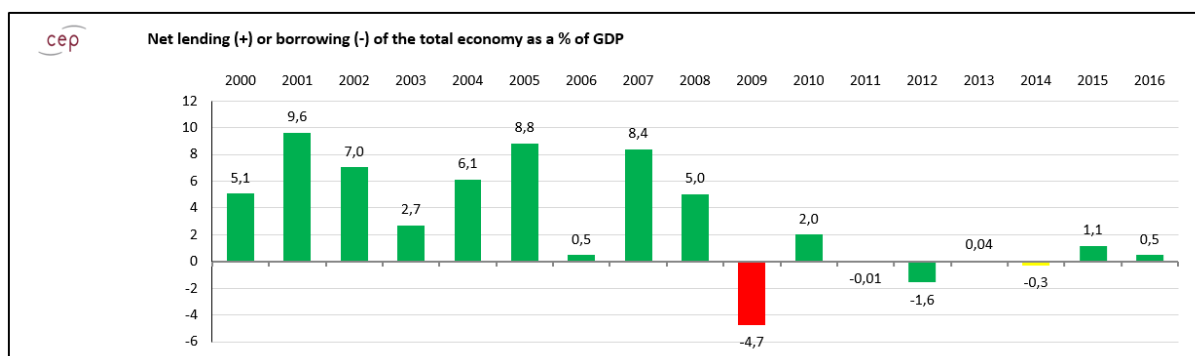
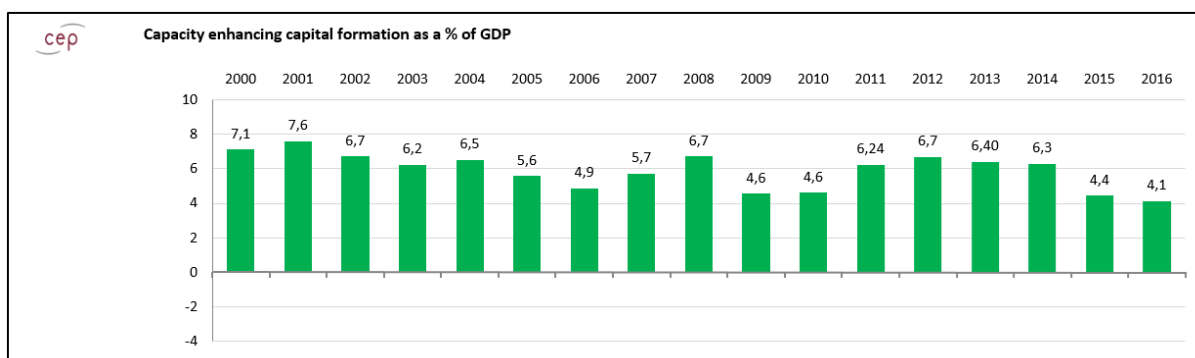
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Risk category | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 2 | 1 | 1 |
| I ^c | 7,1 | 7,6 | 6,7 | 6,2 | 6,5 | 5,6 | 4,9 | 5,7 | 6,7 | 4,6 | 4,6 | 6,24 | 6,7 | 6,40 | 6,3 | 4,4 | 4,1 |
| NTE | 5,1 | 9,6 | 7,0 | 2,7 | 6,1 | 8,8 | 0,5 | 8,4 | 5,0 | -4,7 | 2,0 | -0,01 | -1,6 | 0,04 | -0,3 | 1,1 | 0,5 |
| I ^c + NTE | 12,2 | 17,2 | 13,7 | 8,9 | 12,6 | 14,4 | 5,4 | 14,1 | 11,7 | -0,1 | 6,6 | 6,23 | 5,1 | 6,44 | 6,0 | 5,5 | 4,6 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

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5.7 Netherlands

Trend according to the cepDefault-Index

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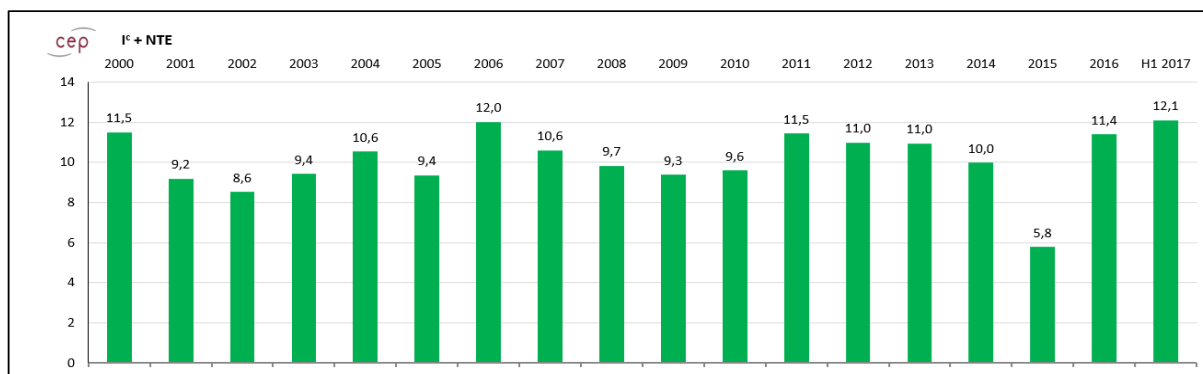
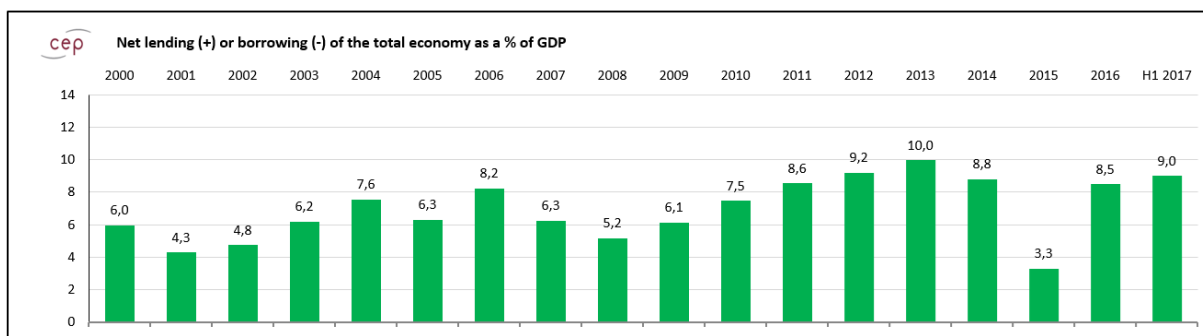
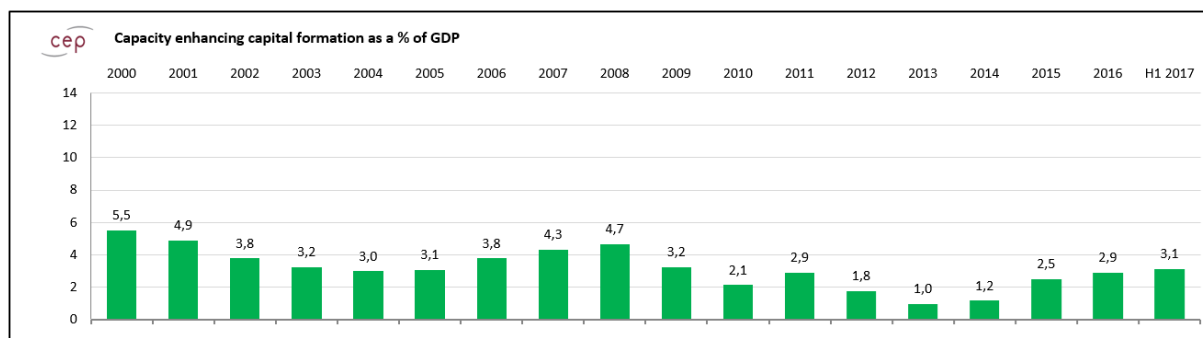
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| Risk category | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| I ^c | 5,5 | 4,9 | 3,8 | 3,2 | 3,0 | 3,1 | 3,8 | 4,3 | 4,7 | 3,2 | 2,1 | 2,9 | 1,8 | 1,0 | 1,2 | 2,5 | 2,9 | 3,1 |
| NTE | 6,0 | 4,3 | 4,8 | 6,2 | 7,6 | 6,3 | 8,2 | 6,3 | 5,2 | 6,1 | 7,5 | 8,6 | 9,2 | 10,0 | 8,8 | 3,3 | 8,5 | 9,0 |
| I ^c + NTE | 11,5 | 9,2 | 8,6 | 9,4 | 10,6 | 9,4 | 12,0 | 10,6 | 9,7 | 9,3 | 9,6 | 11,5 | 11,0 | 11,0 | 10,0 | 5,8 | 11,4 | 12,1 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

NTE: The net lending or net borrowing of the total economy constitutes an economy's net capital import requirement (as a % of GDP). Economies that increase foreign assets or reduce foreign debt show a positive NTE (overall net lending). Economies that incur foreign debt or reduce existing foreign assets show a negative NTE (overall net borrowing).

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5.8 Austria

Trend according to the cepDefault-Index

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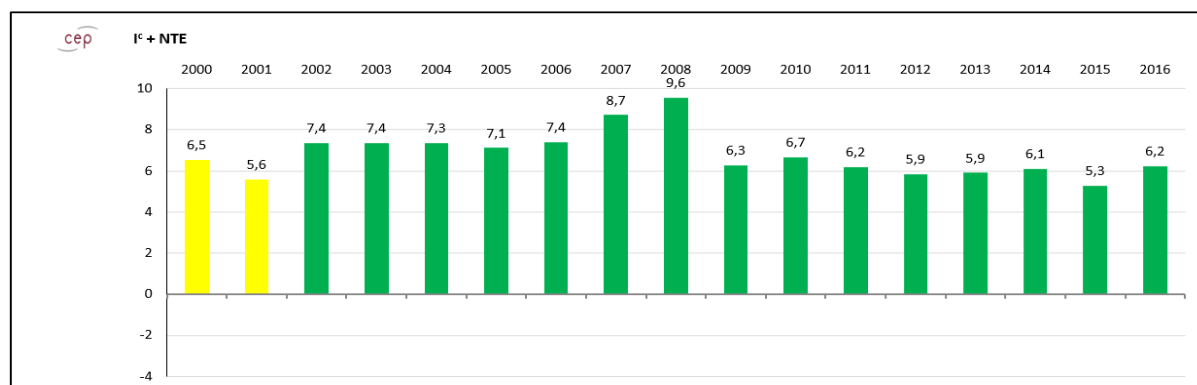
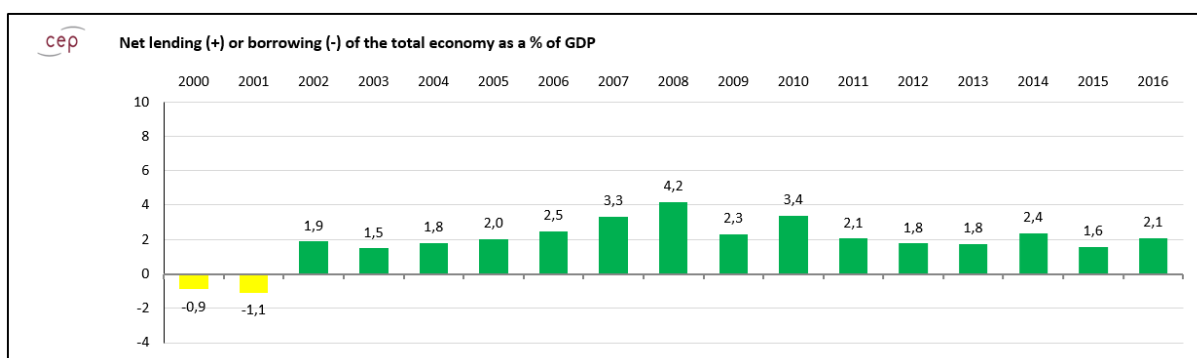
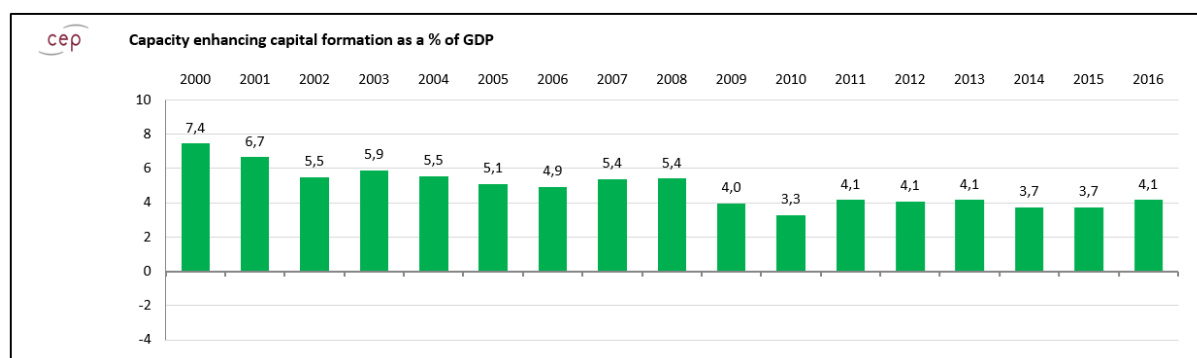
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Risk category | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| I^C | 7,4 | 6,7 | 5,5 | 5,9 | 5,5 | 5,1 | 4,9 | 5,4 | 5,4 | 4,0 | 3,3 | 4,1 | 4,1 | 4,1 | 3,7 | 3,7 | 4,1 |
| NTE | -0,9 | -1,1 | 1,9 | 1,5 | 1,8 | 2,0 | 2,5 | 3,3 | 4,2 | 2,3 | 3,4 | 2,1 | 1,8 | 1,8 | 2,4 | 1,6 | 2,1 |
| $I^C + NTE$ | 6,5 | 5,6 | 7,4 | 7,4 | 7,3 | 7,1 | 7,4 | 8,7 | 9,6 | 6,3 | 6,7 | 6,2 | 5,9 | 5,9 | 6,1 | 5,3 | 6,2 |

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5.9 Slovakia

Trend according to the cepDefault-Index

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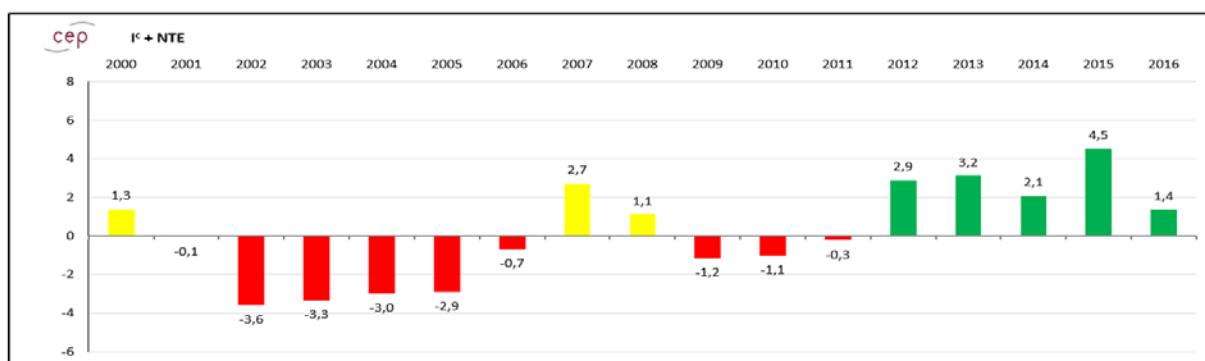
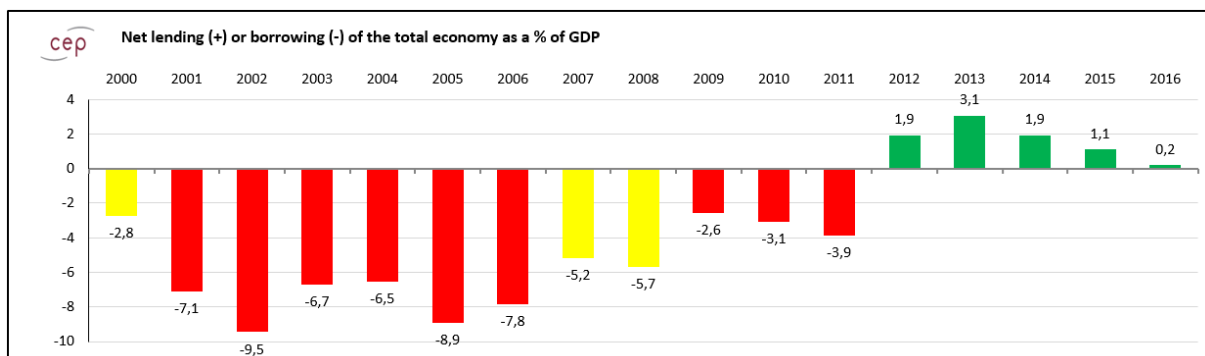
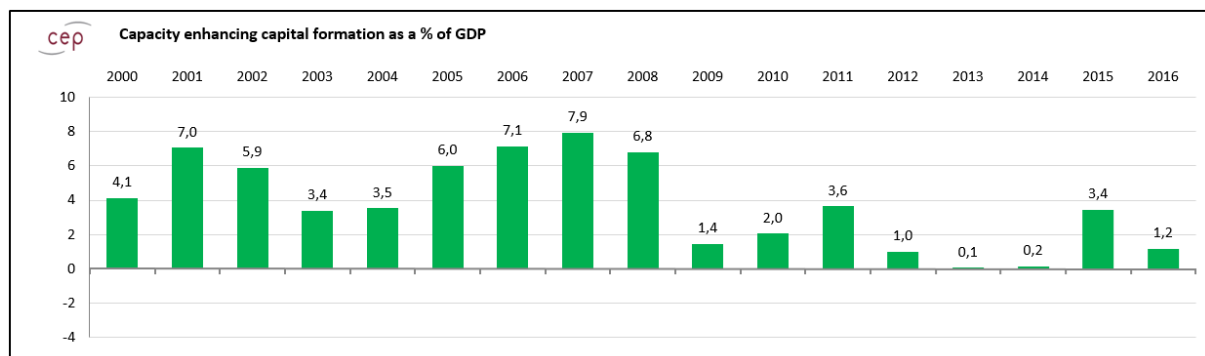
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Risk category | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 3 | 4 | 1 | 1 | 3 | 1 |
| I ^c | 4,1 | 7,0 | 5,9 | 3,4 | 3,5 | 6,0 | 7,1 | 7,9 | 6,8 | 1,4 | 2,0 | 3,6 | 1,0 | 0,1 | 0,2 | 3,4 | 1,2 |
| NTE | -2,8 | -7,1 | -9,5 | -6,7 | -6,5 | -8,9 | -7,8 | -5,2 | -5,7 | -2,6 | -3,1 | -3,9 | 1,9 | 3,1 | 1,9 | 1,1 | 0,2 |
| I ^c + NTE | 1,3 | -0,1 | -3,6 | -3,3 | -3,0 | -2,9 | -0,7 | 2,7 | 1,1 | -1,2 | -1,1 | -0,3 | 2,9 | 3,2 | 2,1 | 4,5 | 1,4 |

C: Capacity enhancing capital formation records the proportion of capital formation (as a % of GDP), that leads to an increase in the potential for value added. Thus growing economies exhibit a positive value, shrinking economies a negative one.

NTE: The net lending or net borrowing of the total economy constitutes an economy's net capital import requirement (as a % of GDP). Economies that increase foreign assets or reduce foreign debt show a positive NTE (overall net lending). Economies that incur foreign debt or reduce existing foreign assets show a negative NTE (overall net borrowing).

Negative C leads to a reduction in production capital and thus, irrespective of the trend in NTE, to the erosion of creditworthiness.

Positive C generates additional value added which can be used to pay off external loans. Where there is positive C and **overall net lending** creditworthiness improves. Where there is positive C and **overall net borrowing** the creditworthiness trend depends on which of these factors prevails. If C exceeds overall net borrowing, a reliable assessment is not possible. If C is less than overall net borrowing, creditworthiness will fall.



5.10 Eurozone as a whole

Trend according to the cepDefault-Index¹⁹

Green = improvement in creditworthiness.
Yellow = uncertain trend in creditworthiness.

Red-yellow = erosion of creditworthiness.
Red = erosion of creditworthiness is firmly established.

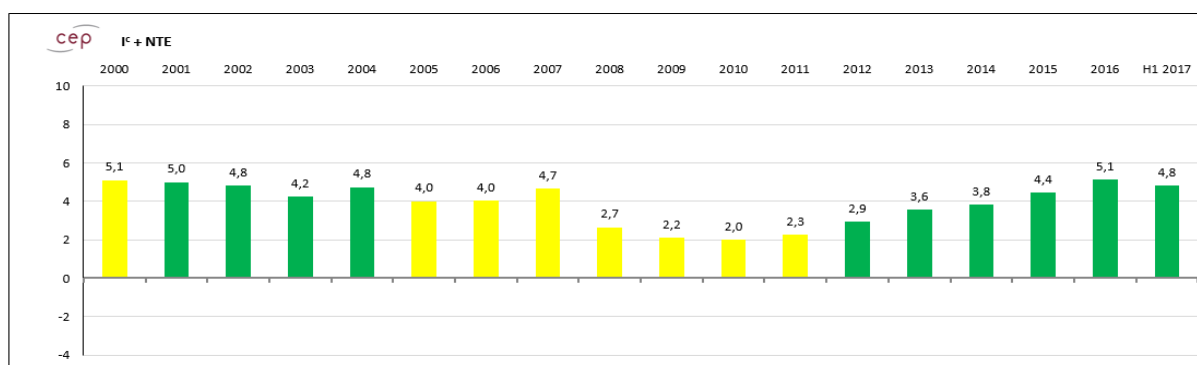
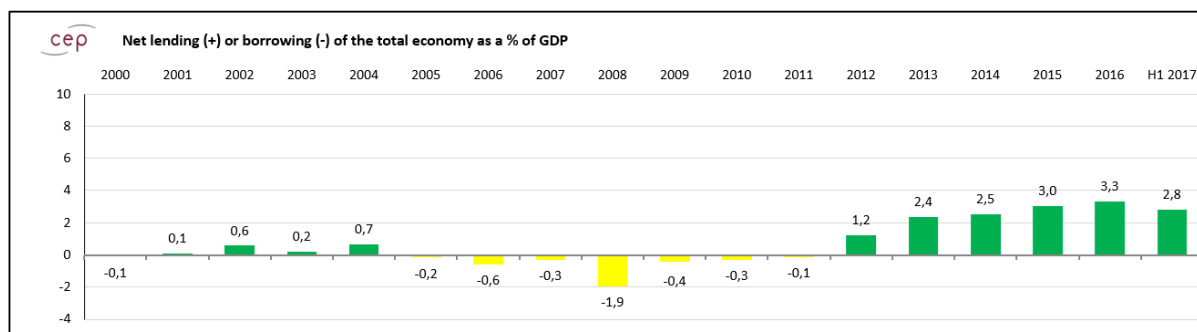
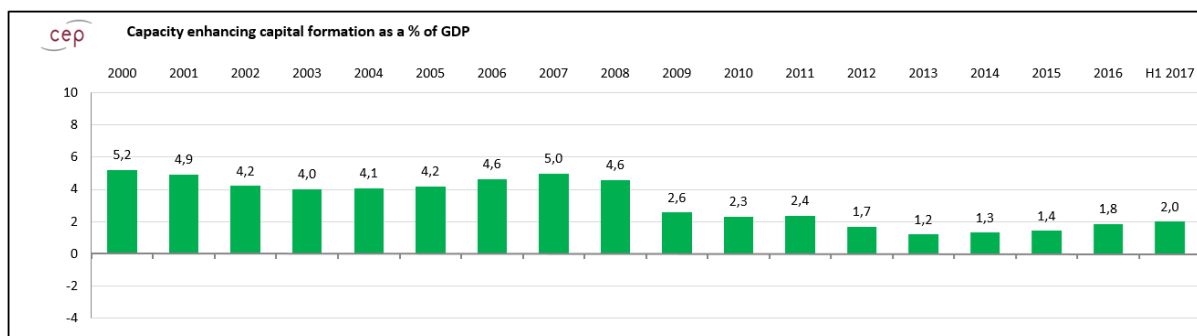
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | H1 2017 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| Risk category | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| I ^c | 5,2 | 4,9 | 4,2 | 4,0 | 4,1 | 4,2 | 4,6 | 5,0 | 4,6 | 2,6 | 2,3 | 2,4 | 1,7 | 1,2 | 1,3 | 1,4 | 1,8 | 2,0 |
| NTE | -0,1 | 0,1 | 0,6 | 0,2 | 0,7 | -0,2 | -0,6 | -0,3 | -1,9 | -0,4 | -0,3 | -0,1 | 1,2 | 2,4 | 2,5 | 3,0 | 3,3 | 2,8 |
| I ^c + NTE | 5,1 | 5,0 | 4,8 | 4,2 | 4,8 | 4,0 | 4,0 | 4,7 | 2,7 | 2,2 | 2,0 | 2,3 | 2,9 | 3,6 | 3,8 | 4,4 | 5,1 | 4,8 |

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¹⁹ The values for the eurozone in the first half of 2017 have been calculated without Estonia, Finland, Ireland, Luxembourg, Malta, Austria, Slovakia and Cyprus because the required data was not available or not sufficiently reliable for these countries.

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