

**cepStudy**

## **CEP Default Index 2013**

**Current creditworthiness trends in Euro countries  
and other countries outside the Euro Zone**

Lüder Gerken, Matthias Kullas and Iris Hohmann

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**Centrum für Europäische Politik (CEP)**

Kaiser-Joseph-Strasse 266 | 79098 Freiburg | Germany

Telephone +49 (0)761 38693-0 | [www.cep.eu](http://www.cep.eu)

## Main Issues

- ▶ **The Euro crisis has not been averted.** We must not be deceived by falling yields on government bonds; for these we have to thank the ECB's assurance that it will buy unlimited amounts of government bonds. The **CEP Default Index** for the first half of 2012 clearly shows that, with the exception of Ireland, the crisis countries in receipt of financial assistance have not succeeded in halting the **decline in creditworthiness**. Even Italy and France are under direct threat.
- ▶ **GDP deflator and unit labour costs are of limited use for measuring** the problems in the crisis countries. Their values are also contradictory with regard to many problem countries.
- ▶ Although **Greece** has carried out significant reforms, they do not go far enough and their implementation has not been forceful enough. The propensity to consume is the highest of all the European countries. Greece is still a long way from regaining its creditworthiness. It seems impossible that the country will recover in the foreseeable future.
- ▶ **Ireland's** creditworthiness has increased since 2010. It seems to have got through the critical phase which followed the bursting of the property bubble. The competitiveness of the Irish economy has noticeably improved but the public deficit remains very high.
- ▶ **Italy's** creditworthiness has been deteriorating continuously since 2009. Capital formation has almost come to a halt. The reforms implemented so far are insufficient. The population's propensity to consume must fall. The competitiveness of the Italian economy must be significantly increased by way of reforms which are more forceful than those undertaken so far.
- ▶ Although **Portugal's** creditworthiness still seems to be falling the reforms undertaken have noticeably reduced this trend. For the recovery to continue, capacity enhancing capital formation financed by domestic savings is essential. For this to happen, the population's propensity to consume must be significantly reduced.
- ▶ The deterioration in **Spain's** creditworthiness does not arise solely from the bursting of the real estate bubble but also because the Spanish economy has been losing price competitiveness. The situation is, however, less dramatic than in the other crisis countries, including Italy. The efforts to restructure public budgets and deregulate the labour market must be rigorously carried forward. The economic structure of the country must also be geared more towards exports.
- ▶ Following a slow-down in **Cyprus' loss of creditworthiness** in 2011, the first half of 2012 saw a dramatic setback. The future of Cyprus not only depends on whether Cypriot banks can successfully be recapitalised but also on fundamental reforms to regain competitiveness. So far there have been virtually none. The reforms so far undertaken to restructure the public budget, which are aimed mainly at increasing revenues rather than reducing expenditure, do not go far enough.
- ▶ In **France**, the negative trend continues. Even if the French situation is not yet as dramatic as in the southern European countries, it still requires an urgent course correction. The trend in French creditworthiness is of significant importance for the future development of the Euro Zone because France is guaranteeing 20% of the European rescue fund, the second largest share after Germany. A drop in France's creditworthiness could therefore place the entire Euro rescue package in doubt.
- ▶ The **United Kingdom** and the **USA** also had falling creditworthiness in the first half of 2012 and in 2011 respectively, the United Kingdom for the first time, the USA since 2008, thus the erosion of the USA's creditworthiness has become firmly established.

► Trends in creditworthiness in the first half of 2012<sup>1</sup>

Ranking	Country	CEP Default Index	Net lending or borrowing of the total economy	Capacity enhancing capital formation	Creditworthiness trends
<b>Category 1: Countries with rising creditworthiness</b>					
1	Switzerland	+ 15.1	+ 13.6	+ 1.5	
1	South Korea	+ 15.1	+ 2.3	+ 12.8	
3	<b>Luxembourg</b>	+ 12.7	+ 6.8	+ 5.9	
4	Sweden	+ 11.6	+ 6.9	+ 4.7	
5	<b>Estonia</b>	+ 10.3	+ 2.2	+ 8.1	
6	<b>Netherlands</b>	+ 9.8	+ 7.9	+ 1.9	
7	Bulgaria	+ 9.5	+ 2.9	+ 6.6	
8	<b>Germany</b>	+ 8.0	+ 6.2	+ 1.8	
9	Denmark	+ 7.8	+ 6.8	+ 1.0	
10	Latvia	+ 7.1	+ 0.1	+ 7.0	
11	<b>Austria</b>	+ 6.5	+ 2.1	+ 4.4	
12	<b>Slovakia</b>	+ 5.3	+ 3.2	+ 2.1	
13	Hungary	+ 4.9	+ 3.4	+ 1.5	
14	Lithuania	+ 4.7	+ 0.4	+ 4.3	
15	<b>Belgium</b>	+ 3.2	+ 0.8	+ 2.4	
16	Euro Zone	+ 3.1	+ 1.0	+ 2.1	
16	<b>Ireland</b>	+ 3.1	+ 2.3	+ 0.8	
18	<b>Malta</b>	+ 1.6	+ 0.7	+ 0.9	
19	<b>Slovenia</b>	+ 1.5	+ 0.8	+ 0.7	
20	Japan	+ 0.4	+ 1.9	- 1.5	
<b>Category 2: Countries where trend in creditworthiness is uncertain</b>					
21	Poland	+ 6.1	- 2.3	+ 8.4	
22	<b>France</b>	+ 2.0	- 2.3	+ 4.3	
23	<b>Finland</b>	+ 1.9	- 0.3	+ 2.2	
24	Czech Republic	+ 1.5	- 2.5	+ 4.0	
<b>Category 3: Countries with falling creditworthiness</b>					
25	<b>Spain</b>	- 0.2	- 2.7	+ 2.5	
26	United Kingdom	- 1.3	- 3.6	+ 2.3	
<b>Category 4: Countries where falling creditworthiness has become firmly established</b>					
27	<b>Italy</b>	- 1.3	- 1.6	+ 0.3	
27	USA	- 1.3	- 3.3	+ 2.0	
29	<b>Portugal</b>	- 3.8	- 1.9	- 1.9	
30	Iceland	- 8.2	- 7.0	- 1.2	
31	<b>Cyprus</b>	- 9.7	- 13.0	+ 3.3	
32	<b>Greece</b>	- 10.9	- 6.5	- 4.4	

<sup>1</sup> For Bulgaria, Iceland, Japan, Luxembourg, Malta, South Korea, Hungary and the USA, the creditworthiness trends shown are for 2011 due to a lack of data for the first half of 2012. The Euro countries are shown in bold in the table.

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## 1 The Euro crisis is not over

Politicians all over Europe, including Berlin in particular, have been tirelessly proclaiming for weeks that the crisis in the Euro Zone has been overcome. They are wrong.

The current condition of the Euro Zone is best compared with that of a sick patient showing symptoms of fever. The medicine he is given succeeds in bringing down his fever but cannot cure the infection itself and, in fact, only weakens the healing power of the fever.

The cause of the crisis from which the Euro Zone is still suffering – the "infection" – is the divergence between the competitiveness of the economies within the Euro Zone. This and the resulting huge current account deficits in the southern countries, which for years have been financed by credit, have resulted in the erosion of their creditworthiness. Investors, however, only realised this in 2010, whereupon the risk premiums for new credits – the "fever" – shot up. The announcement by the European Central Bank (ECB), that it was going to provide the stricken borrowers with unlimited funds by printing more money – the "medicine" –, removed the lenders' concern over insolvencies and so the risk premiums came down. The ECB's announcement could do nothing for the cause, however, that being the erosion of Southern Europe's competitiveness.

Proof of this is provided by the latest figures from the CEP Default Index: Creditworthiness went down in all southern European countries in the first half of 2012.<sup>2</sup> Of the crisis countries, only Ireland was able to increase its creditworthiness and thus win back lost confidence. The country has noticeably improved its international competitiveness as a result of structural reforms. In addition, the risks arising from the Irish banking sector have been noticeably reduced. The CEP Default Index published in July 2011 already showed that the situation in Ireland is less dramatic than in other crisis countries.<sup>3</sup> This view is now shared by capital market players. Thus Ireland was able to issue government bonds with a multi-year term – five and eight years – for the first time since receiving financial aid.

The CEP Default Index published in 2011 also displayed a high level of predictive capability as regards the southern European countries. Spain and Cyprus, which it then showed to have a deteriorating creditworthiness, have meanwhile applied for financial aid. What is more, the CEP Default Index is also borne out by the credit ratings of the major ratings agencies. Thus the downgrading of a number of Euro countries by Standard and Poor's (S&P) in January 2012 reflected exactly what the CEP Default Index had indicated in July 2011. The CEP Default Index also referred to the problems in the USA. Shortly afterwards, S&P also downgraded the USA's credit rating.

The CEP Default Index 2011 also confirmed a reduction in France's creditworthiness. Although current index values show the situation to be not quite so bad this effect is actually due to the fact that, in summer 2011 – straight after the CEP Default Index results were published – the French statistics authority INSEE<sup>4</sup> withdrew the core statistical data on economic trends in France, used by the Index, and – several weeks later – published new data which was significantly more favourable for France.<sup>5</sup> The long-term trend, however, even based on the changed statistical data, shows that France is gradually turning into a crisis country. The ratings agency S&P downgraded France's credit rating on 13 January 2012. On 19 November 2012, the ratings agency Moody's followed suit and also downgraded France's Triple A status. The ratings agencies based the downgrading on the

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<sup>2</sup> There is not enough data available for Malta to calculate creditworthiness trends in the first half of 2012. In 2011, however, its creditworthiness increased for the first time since 2002.

<sup>3</sup> Cf. Gerken/Kullas (2011), CEP Default Index p. 32.

<sup>4</sup> Institut national de la statistique et des études économiques.

<sup>5</sup> See Chapter 6.

high level of public debt and the inflexible labour market. As a result of France's downgrading, both ratings agencies also downgraded the credit rating of the European Financial Stability Facility (EFSF); Moody's also downgraded the European Stability Mechanism (ESM).

France urgently needs to introduce reforms to increase its creditworthiness. The trend in French creditworthiness is of significant importance for the future development of the Euro Zone. France is guaranteeing about 20% of the ESM, the second largest share after Germany. The erosion of France's creditworthiness could therefore throw the entire Euro rescue package into doubt. In addition, Germany is reliant on France's support when it comes to demanding the necessary structural reforms in Southern Europe. The more France turns into a crisis country itself, however, the greater the danger that France will take the side of the crisis countries who are all too keen to avoid reforms to increase their competitiveness. That is the reason why this publication is focussing on the creditworthiness trends in France.

First, however, Chapter 2 will briefly summarise the development of the Euro crisis in 2012.

Chapter 3 provides an outline of the most important decisions which were taken at European level in 2012 to tackle the Euro crisis.

Chapter 4 explains the idea and explanatory content of the CEP Default Index.

Chapter 5 contains an overview of the creditworthiness trends in all the surveyed countries in the first half of 2012.

The creditworthiness trend in France is set out in Chapter 6 in a comprehensive country report.

Chapter 7 contains reports for all those Euro countries who receive financial aid or saw a fall in creditworthiness in the first half of 2012. These are: Greece, Ireland, Italy, Portugal, Spain and Cyprus. In addition to the latest development of the index figures showing creditworthiness trends, these reports also contain summaries of the status of reforms and other statistical data such as the development of consumption expenditure, the GDP deflator and unit labour costs.

Chapter 8 contains the current figures in the CEP Default Index for the other Euro countries Belgium, Germany, Estonia, Finland, Luxembourg, Malta, Netherlands, Austria, Slovakia and Slovenia and the Euro Zone as a whole.

Chapter 9 sets out the figures for the remaining EU Member States Bulgaria, Denmark, Latvia, Lithuania, Poland, Sweden, Czech Republic, Hungary and the United Kingdom; no index could be prepared for Romania due to a lack of information on this country.

Chapter 10 contains the figures for important countries outside the EU. These are Iceland, Japan, Switzerland, South Korea and the USA.

## 2 Outline of the current problems in the Euro Zone

Europe remained in a state of crisis in 2012. The ill omens, which began in 2009 with the admission by the Greek government that it had falsified deficit figures, persisted in 2012. Thus, on 13 January 2012, the ratings agency S&P downgraded the credit ratings of nine Euro countries, France among them. In addition, it became apparent in 2012 that Greece's fiscal and economic problems were much greater than previously thought and the financial aid granted in 2010 amounting to € 107.3 billion was not going to be nearly enough.<sup>6</sup> In March 2012, Greek debt received a "haircut" of more than € 100 billion. At the same time, additional financial aid of € 138 billion<sup>7</sup> was granted increasing the total amount of financial aid that Greece is to receive by 2016 to € 245.3 billion. This corresponds to about 118% of Greek gross domestic product (GDP). The difficulty of the Greek situation was shown by the parliamentary elections brought forward to 6 May 2012. First a government could not be formed because the elected parties were unable to agree on the continuation of the austerity and reform policy, so new elections took place on 17 June 2012. Although the resulting coalition government agreed to continue the policy of austerity and reform, Greece has so far only made a basic attempt at implementation of the reform proposals put forward by the troika made up of the European Commission, ECB and International Monetary Fund (IMF).

The crisis also grew more acute in Spain in 2012. The high recapitalisation requirement of the Spanish banks, the rising unemployment and the deep recession in the Spanish economy resulted, from March, in increasing yields on Spanish government bonds. In May, the threshold of 6%, previously regarded as critical, was exceeded. On 9 June 2012, Spain decided to apply for financial aid from the European bailout fund to recapitalise its banks. The official application was made on 25 June 2012.

On the same day, the Cypriot government also applied for financial aid from the European bailout fund. It based its application on the negative effects which the Greek crisis was having on Cyprus arising from the fact that the two economies were closely interlinked. In fact, the haircut carried out by the Greek government had led to write-downs by Cypriot banks amounting to € 4 billion. The discussion about the Greek haircut, which began in mid-2011, had already made it difficult for Cyprus to obtain refinancing on the capital markets in 2011. At the end of 2011, however, Cyprus received a loan of € 2.5 billion from Russia which secured its financial requirement for a few months. Greece and Ireland having applied for financial aid in 2010, and Portugal in 2011, Spain and Cyprus will soon bring the number to five, out of the 17 Euro countries, to receive financial aid.

On 23 August 2012, the Portuguese finance ministry announced that Portugal could not comply with the deficit targets agreed with the troika. Although the country had implemented the troika's reform proposals, the recession was proving to be more severe than previously anticipated. As a result, tax revenue turned out to be less than forecast. The troika then delayed the deficit target of 3% by one year to 2014 and relaxed the targets for 2012 and 2013.

In summer 2012, the crisis also worsened once again in Italy. The yields on Italian government bonds, having dropped in the first quarter of 2012, as a result of the reform proposals put forward

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<sup>6</sup> Of the financial aid originally promised, amounting to € 110 billion, Slovakia, Ireland and Portugal did not pay their (entire) share so that only € 107.3 billion was made available to Greece (cf. Der Haftungspegel, ifo Institut, <http://www.cesifo-group.de/de/ifoHome/policy/Haftungspegel.html>).

<sup>7</sup> Financial aid of € 138 billion is made up of € 130 billion from the Euro states and the IMF by 2014 and € 8 billion from the IMF by 2016 (cf. IMF Country Report No. 12/57, p. 84, Euro Group Statement of 21 February 2012, [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/128075.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/128075.pdf)).

by the government led since November 2011 by Mario Monti, rose again in July 2012. This was due partly to the fact that the Monti government did not fully implement its own proposals and thereby failed also to fulfil the expectations of the capital market players. In particular, the labour market reform passed in April 2012 fell short of expectations. On 8 December 2012, Monti announced his resignation. The Italian parliament had refused to support his reform policy.

Only in Ireland did the situation remain stable in 2012. This was primarily due to the strict implementation of the structural reforms.

On 6 September 2012, due, in particular, to the rising yields on Spanish and Italian government bonds, the ECB announced a new outright monetary transactions programme (OMT). Outright transactions are outright purchases and sales of securities by the Eurosystem. OMTs are intended to be used for buying unlimited amounts of government bonds from Euro countries with financing problems. Purchase will only take place, however, if a Euro country receives financial aid from the European bailout fund, complies with the reforms laid down in the Memorandum of Understanding and has access to the primary market. The OMT announcement has alleviated the symptoms of the crisis for now. Thus Italian and Spanish government bond yields, with a ten year residual term to the end of 2012, came down by 0.71 and 0.57 percentage points respectively.

Not only the ECB but also the Euro countries took numerous measures in 2012 to overcome the Euro crisis and to avoid a recurrence of the crisis in the future. These include both national reforms and savings programmes as well as decisions at European level. The most important reforms taken at national level by the Euro countries with financing problems in 2012 will be considered in Chapter 7. The following Chapter 3 sets out the most important decisions taken at European level.

### 3 Measures taken at European level to overcome the Euro crisis

In order to avoid excessive public deficits and debt levels in the future, the heads of state of the 17 Euro countries and eight additional EU countries<sup>8</sup> signed the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (Fiscal Compact) on 2 March 2012.<sup>9</sup> In it, the signatory states undertake to incorporate a "debt brake" into national law and to simplify the imposition of sanctions in the excessive deficit procedure. Once twelve Euro countries had ratified the Fiscal Compact, it was brought into force as planned at the beginning of 2013.

As a number of southern European Euro countries went into recession in 2012 and unemployment rose noticeably in large parts of the Euro Zone, calls for a stronger policy on growth increased in mid-2012. At the meeting of the European Council on 28 and 29 June 2012, the heads of state of the EU countries therefore agreed on a pact containing measures for increasing growth, investment and employment as well as competitiveness.

In addition, essentially four measures were passed in 2012 under the heading "Banking Union" intended to prevent the public budgets of individual Euro countries being overstrained by measures to rescue system relevant banks thus triggering a national debt crisis. This was the case in Ireland and to some extent also in Spain and Cyprus. Firstly, the European Banking Authority (EBA) is to issue a set of rules (single rulebook) stipulating uniform rules for the banks. Secondly, the ECB is to act as a central regulatory body to monitor compliance with these rules.<sup>10</sup> Thirdly, a European bank resolution authority is to be set up which will be responsible for the recovery and resolution of banks in difficulty. Fourthly, a Bank Resolution Fund will be set up to provide the financial resources for the resolution and recovery of such banks so that public budgets will no longer have to face this burden.

The ESM was passed in 2011 as a permanent aid fund for Euro countries with finance difficulties in order to improve crisis management.<sup>11</sup> It came into force on 27 September 2012. Prior to that, the German Federal Constitutional Court authorised the ratification of the ESM. It did so under the condition that Germany's share of € 190 billion could not be increased without Germany's consent and the Bundestag and Bundesrat would be kept fully informed. The European Court of Justice (ECJ) ruled on 27 November 2012 that the ESM was compatible with European law.

In order to avoid individual Euro countries losing their competitiveness – as has happened in the past – the President of the European Council, Herman Van Rompuy, together with the Commission President, José Manuel Barroso, the then chief of the Eurogroup, Jean-Claude Juncker, and ECB President, Mario Draghi, drew up a roadmap for closer economic and monetary union. Van Rompuy presented this plan, on 5 December 2012, under the heading "Towards a Genuine Economic and Monetary Union". It identifies several stages on the way towards an integrated financial, budgetary and economic policy framework. At the EU summit on 13 December 2012, heads of state agreed to substantiate the proposed concept in June 2013.

The said measures and the falling yields on government bonds in some Euro countries must not deceive us into thinking that the Euro crisis has been banished. The CEP Default Index clearly shows that some Euro countries have not yet succeeded in halting the drop in the creditworthiness of their economies. These include, in addition to Greece and Cyprus, the two heavyweights, Spain and Italy. In France too, the negative trend continues. Even if the French situation is not yet as

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<sup>8</sup> The United Kingdom and Czech Republic are not participating.

<sup>9</sup> Cf. CEP Policy Briefs No. 2012-13 and No. 2012-49.

<sup>10</sup> Cf. CEP Policy Briefs No. 2012-47 and No. 2012-48.

<sup>11</sup> Cf. CEP Policy Brief No. 2012-12.

dramatic as in many southern European countries, it still requires an urgent course correction. Although a positive trend has emerged in Portugal further efforts are required for it to continue. Only Ireland is on the way to making a full recovery.

In order to overcome the Euro crisis, willingness and the ability to reform at both national and European level must not slacken in 2013.

## 4 Creditworthiness of Economies: The CEP Default Index

### 4.1 Structure and methodology of the CEP Default Index<sup>12</sup>

The CEP Default Index is not a measurement of stock but of flow: It measures the evolution of a country's ability to repay foreign credits, in other words, its creditworthiness. This does not depend only on government debt; the solidity of the entire economy is in fact a crucial factor. The CEP Default Index therefore takes account of lending and borrowing behaviour with regard to banks, companies and consumers and thus measures the creditworthiness of the country as a whole. National economies are sub-divided into four risk categories.

The Index assesses (1) the 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. the capacity enhancing capital formation (CECF) over a certain period.

Housing construction, in particular, does not constitute capacity enhancing capital formation. This allows for an economy's creditworthiness trends to be measured without the result being distorted by price bubbles in the housing market.

Net borrowing of the total economy (negative NTE) occurs primarily due to a current account deficit – arising from a lack of competitiveness<sup>13</sup> –, in other words an import surplus in goods trading financed by foreign credits. It can also occur due to cross-border payments from earned or investment income as well as from current transfers. This sort of net transfer is normally created in countries where more foreign capital is invested than their inhabitants have invested abroad. In order to prevent net borrowing it must be compensated for by export surpluses in goods trading. However, this option too is subject to the precondition that a country is sufficiently competitive.

The Index is made up of the sum of NTE and CECF. Both values are indicated as a percentage of the gross domestic product (GDP).

$$\text{CEP Default Index} = \text{NTE} + \text{CECF}.$$

Countries with current account surpluses export capital and therefore register net lending (a positive NTE). Since they do not need any foreign credits in the relevant period, they are not at risk of insolvency (Risk Category 1).

Countries with current account deficits need foreign capital in order to finance such deficits. They therefore register net borrowing. To determine their medium-term creditworthiness, it is vital to know whether or not the foreign capital is used for capacity enhancing capital formation with the resulting value added generating the means to repay the foreign credit, or whether it is used to finance the importation of consumer goods which are eliminated by consumption.

A positive value in the CEP Default Index despite an overall net borrowing means: Capacity enhancing capital formation in one year exceeds the net capital imports. In this case, it is not possible to make a general statement on whether or not the creditworthiness of an economy is under threat (Risk Category 2).

A negative value in the CEP Default Index means: Net capital imports exceed capacity enhancing capital formation. That means the country concerned consumes not only 100% of the domestic income but also a part of the net borrowings on top of that. Hence, the national economy

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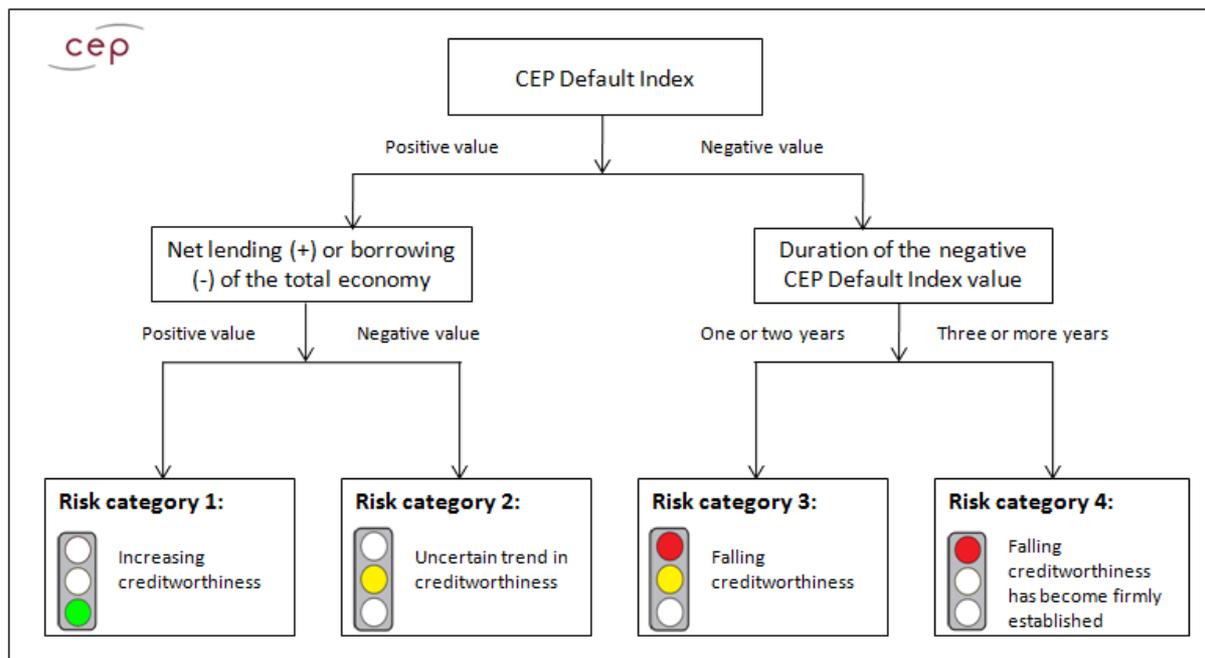
<sup>12</sup> For a detailed description see Gerken/Kullas (2011), CEP Default Index Chapter 3.

<sup>13</sup> See Section 4.3.

accumulates debts in order to finance consumption. Such a trend threatens creditworthiness (Risk Category 3).

A CEP Default Index that has been negative for three or more years means: The erosion of creditworthiness is not a temporary but a structural problem; the risk to creditworthiness has become established or insolvency has actually occurred (Risk Category 4).

The Structure of the CEP Default Index:



Risks to a country's fiscal policy resulting from real estate and banking sector bubbles are deliberately only taken into account by the CEP Default Index insofar as they lead to foreign credit demand because this sort of bubble cannot damage an economy's international creditworthiness if the latter continues to export capital.

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

## 4.2 Best case scenarios in the Index favourable to the countries under examination<sup>14</sup>

The CEP Default Index compares the net lending or net borrowing of the total economy (NTE) with the capacity enhancing capital formation (CECF) of an economy:  $\text{CEP Default Index} = \text{NTE} + \text{CECF}$ .

Empirical values for NTE and the volume of capacity enhancing capital formation can be calculated from official statistics. However, to what extent the capital formation volume is funded by domestic income and to what extent by capital imports cannot be determined.

<sup>14</sup> See Gerken/Kullas (2011), CEP Default Index, Chapter 3.4.

This question is important because foreign credits used for capacity enhancing capital formation create fixed assets with which interest and credits can be paid back, given a reasonable rate of return on investment. On the other hand, foreign credits used for consumption expenditure do not add any value that might contribute to the repayment of interest and credits. In such a case, other resources must be used to repay the external credit.

In order to avoid unreliable estimations, the CEP Default Index assumes a best-case scenario which is favourable to the economy under examination: The calculation is based on the assumption that domestic investments are primarily funded by net lending, while domestic income is primarily used for consumption expenditure. In other words, the implication is that foreign credits create maximum value added which can be used for their repayment.

This leads to a systematic distortion: the Index very probably makes the economy look healthier than it actually is because it assumes that foreign credits are used to create new production capacities whose additional value added serves to repay interest and credit to a maximum extent.

### **4.3 The Creditworthiness and Competitiveness of Economies**

The main cause of the erosion of the creditworthiness of an economy is net borrowing over a period of years without the corresponding level of capacity enhancing capital formation. This is precisely the trend measured by the Index.

Net borrowing mainly arises due to current account deficits, that is to say when more goods are imported than exported. This is generally unproblematic where net borrowing is the result of domestic investment activities financed by foreign credit which increase the potential to create value; in this case current account deficits may even be an indication that this is an attractive location for business because foreign investors are seeing the profitable investment possibilities and seeking to use them. Current account deficits resulting from excessive imports of consumer goods, i.e. which are not accompanied by corresponding levels of investment, are problematic however. They arise in particular when the economy is losing, or has lost, its price competitiveness on world markets.

Creditworthiness and competitiveness are, therefore, generally closely related: An erosion of competitiveness leads to an erosion of creditworthiness. Looked at the other way, this means: the creditworthiness of an economy under threat of insolvency can be improved by increasing its competitiveness.

### **4.4 Indicators for competitiveness: Unit labour costs or GDP deflator?**

An erosion of competitiveness is expressed by the fact that domestic companies have to ask higher prices for their products on the world market than their foreign competitors do, for products of the same nature and quality. Such inflated prices result from production costs which are higher – ultimately too high – than those of the foreign competition.

It is difficult to show, by empirical means – either directly or indirectly by level of production costs – that there is a lack of competitiveness on price. Generally, one of two measurements is drawn upon: the GDP deflator or unit labour costs.

Unit labour costs correspond to the ratio between compensation of employees and GDP. They therefore provide a measurement of the productivity of an economy.

The GDP deflator, on the other hand, is an implied price-index. By contrast with familiar consumer price indexes, it covers not only price trends for consumer goods but also price trends for the entire

GDP. The GDP deflator corresponds to the ratio between nominal and real – price-adjusted – GDP. It is calculated by comparing the GDP of one year, firstly, with current prices, and secondly, with the previous year's prices. The ratio provides the rate of price increase, the GDP deflator.

Both measurements provide, at best, an imprecise picture of the competitiveness of the companies of a country on the world market: They both include the trends in the entire economy, including those sectors which are not part of worldwide competition. It is, for example of no relevance to the current account balance, how prices or unit labour costs for hairdressing services are performing. More important are the trends in export-orientated sectors and those in sectors subject to import competition.

Using unit labour costs as an indicator of competitiveness is also problematic because a drop in unit labour costs – and presumably therefore a *rise* in competitiveness – is also registered when the economy shrinks – such as due to the actual erosion of competitiveness: Where competitiveness is deteriorating, the least productive companies will be the first to drop out of the market and other companies will dismiss their least productive employees ("dismissing productivity"). A drop in unit labour costs in this case, then, is no indication of an improvement in competitiveness.

Also, unit labour costs only represent one part – in some industries a relatively small part – of the overall production costs. In capital-intensive industries, in particular, financing costs play a significant role. These in turn depend, not least, on the overall economic situation, that is to say on the creditworthiness of the economy as a whole, and thus on the risk premium which the investors are demanding.

Likewise, a drop in unit labour costs does not increase competitiveness unless the commodity prices for internationally traded goods drop as well; these are what it comes down to in the end. At first glance, this seems to argue in favour of the GDP deflator as an approximate measurement of competitiveness.

However, the GDP deflator is also seriously flawed. In particular, it includes increases in indirect taxes, particularly value added tax, and price increases on goods supplied by the government, i.e. increases which have been undertaken, in the last few years, in order to reduce government deficits, by those very countries whose creditworthiness is deteriorating. Conclusions drawn from the trend in the GDP deflator with regard to price trends in tradeable commodities and thereby with regard to competitiveness are also problematic.

The problems described indicate the significant methodological problems involved in measuring the competitiveness of an economy: Neither the trend in unit labour costs nor the trend in the GDP deflator allow really methodologically reliable conclusions to be drawn about the trends in competitiveness; they are at best an approximation.

This – in addition to the situation that creditworthiness can also be lost through reasons other than an erosion of competitiveness – is one important reason why the CEP Default Index applies directly to creditworthiness and not indirectly to competitiveness, by whatever method it is measured.

In this study, therefore, the two indicators of competitiveness described above will only be used cautiously and as a supportive measure. Conclusions can best be drawn when both indicators can be looked at together and are both pointing in the same direction.

## 5 Overview of the CEP Default Index values for the countries surveyed

The table on page 12 shows the trends in creditworthiness for the economies surveyed in the first half of 2012. Not all the data was available for Bulgaria, Iceland, Japan, Luxembourg, Malta, South Korea, Hungary and the USA to calculate the CEP Default Index for the first half of 2012 so the creditworthiness trends shown for these countries are from 2011. The creditworthiness trends since 1999 are shown for the countries surveyed in Chapters 6 to 10.

The table shows that the creditworthiness trends of the countries in the Euro Zone have been very heterogeneous. The creditworthiness of Luxembourg, Estonia and the Netherlands has increased the most. The creditworthiness of the Euro Zone as a whole has also increased. Ireland's development has also been a positive one. It is the only crisis country which has managed to increase its creditworthiness. This is imperative if the country wants to get by without financial aid in the near future and therefore has to refinance itself entirely by way of the capital market.

The other Euro countries currently relying on financial aid are still showing falling creditworthiness. The fall in Portugal's creditworthiness has slowed down. This trend must continue in the coming years if the country is to get by once again without financial aid. The fall in Greece's creditworthiness has also slowed down somewhat. However the deterioration is still so great that Greece is not expected to regain its creditworthiness for the foreseeable future.

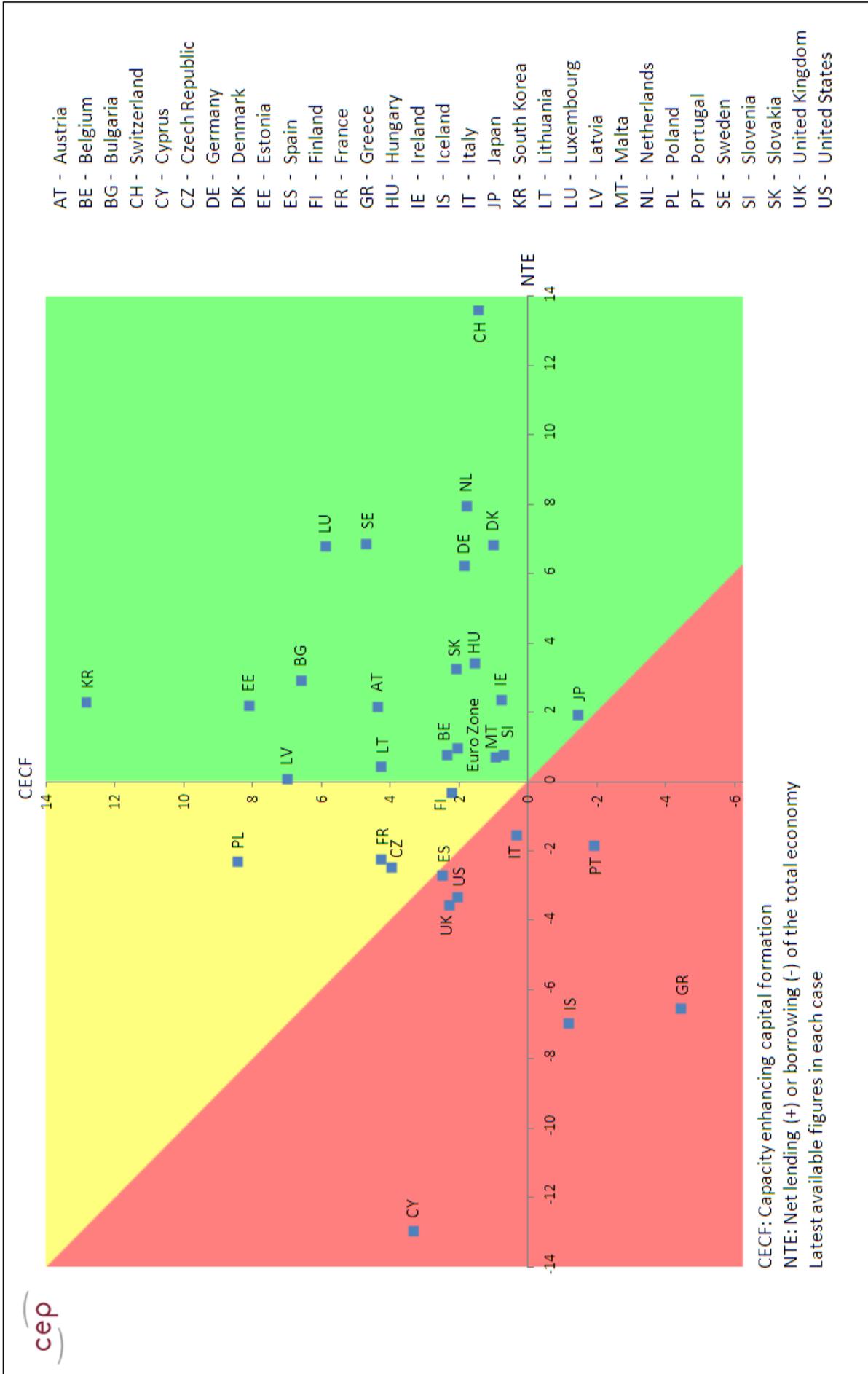
The highest Index figures are for Switzerland and South Korea but for different reasons. South Korea shows a very high level of capacity enhancing capital formation which it finances, in net terms, solely from its national savings. The country's savings are also enough for them to export a small amount of capital. A different story in Switzerland: The high Index figures for Switzerland are based on high capital exports. Capacity enhancing capital formation, however, is small. The positive creditworthiness trend in Switzerland can thus be traced back to an increase in net foreign assets whereas the positive trend in South Korean creditworthiness is based on an increase in economic performance.

The United Kingdom and the USA also had falling creditworthiness in the first half of 2012 and in 2011 respectively, the United Kingdom for the first time, the USA since 2008, thus the deterioration in the USA's creditworthiness must be categorised as firmly established.

The graphic on page 13 shows the two components which make up the CEP Default Index – net lending or borrowing of the total economy and capacity enhancing capital formation – for the countries surveyed. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

Ranking	Country	CEP Default Index <sup>15</sup>	Net lending or borrowing of the total economy <sup>15</sup>	Capacity enhancing capital formation <sup>15</sup>	Creditworthiness trends <sup>15</sup>
<b>Category 1: Countries with rising creditworthiness</b>					
1	Switzerland	+ 15.1	+ 13.6	+ 1.5	
1	South Korea	+ 15.1	+ 2.3	+ 12.8	
3	<b>Luxembourg</b>	+ 12.7	+ 6.8	+ 5.9	
4	Sweden	+ 11.6	+ 6.9	+ 4.7	
5	<b>Estonia</b>	+ 10.3	+ 2.2	+ 8.1	
6	<b>Netherlands</b>	+ 9.8	+ 7.9	+ 1.9	
7	Bulgaria	+ 9.5	+ 2.9	+ 6.6	
8	<b>Germany</b>	+ 8.0	+ 6.2	+ 1.8	
9	Denmark	+ 7.8	+ 6.8	+ 1.0	
10	Latvia	+ 7.1	+ 0.1	+ 7.0	
11	<b>Austria</b>	+ 6.5	+ 2.1	+ 4.4	
12	<b>Slovakia</b>	+ 5.3	+ 3.2	+ 2.1	
13	Hungary	+ 4.9	+ 3.4	+ 1.5	
14	Lithuania	+ 4.7	+ 0.4	+ 4.3	
15	<b>Belgium</b>	+ 3.2	+ 0.8	+ 2.4	
16	Euro Zone	+ 3.1	+ 1.0	+ 2.1	
16	<b>Ireland</b>	+ 3.1	+ 2.3	+ 0.8	
18	<b>Malta</b>	+ 1.6	+ 0.7	+ 0.9	
19	<b>Slovenia</b>	+ 1.5	+ 0.8	+ 0.7	
20	Japan	+ 0.4	+ 1.9	- 1.5	
<b>Category 2: Countries where trend in creditworthiness is uncertain</b>					
21	Poland	+ 6.1	- 2.3	+ 8.4	
22	<b>France</b>	+ 2.0	- 2.3	+ 4.3	
23	<b>Finland</b>	+ 1.9	- 0.3	+ 2.2	
24	Czech Republic	+ 1.5	- 2.5	+ 4.0	
<b>Category 3: Countries with falling creditworthiness</b>					
25	<b>Spain</b>	- 0.2	- 2.7	+ 2.5	
26	United Kingdom	- 1.3	- 3.6	+ 2.3	
<b>Category 4: Countries where falling creditworthiness has become firmly established</b>					
27	<b>Italy</b>	- 1.3	- 1.6	+ 0.3	
27	USA	- 1.3	- 3.3	+ 2.0	
29	<b>Portugal</b>	- 3.8	- 1.9	- 1.9	
30	Iceland	- 8.2	- 7.0	- 1.2	
31	<b>Cyprus</b>	- 9.7	- 13.0	+ 3.3	
32	<b>Greece</b>	- 10.9	- 6.5	- 4.4	

<sup>15</sup> For Bulgaria, Iceland, Japan, Luxembourg, Malta, South Korea, Hungary and the USA, the creditworthiness trends shown are for 2011 due to a lack of data for the first half of 2012.





## 6 France

### 6.1 Erosion of competitiveness in the French economy

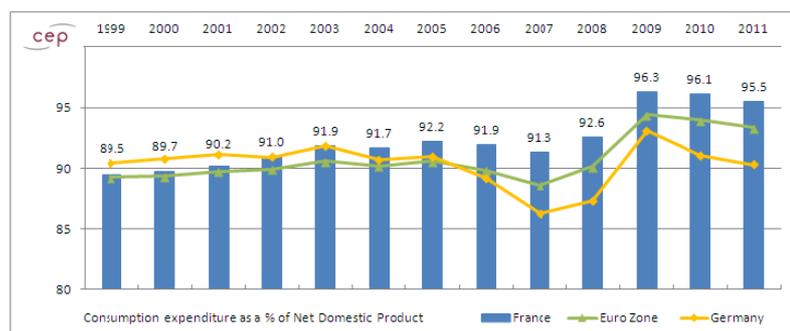
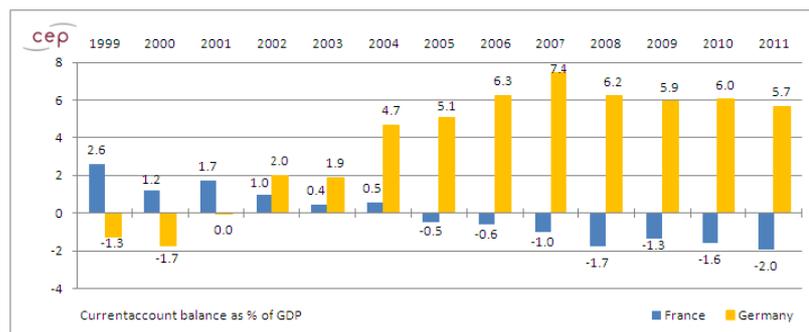
The French economy – public and private sectors taken together – has incurred an increasing amount of foreign debt over recent years. This development results from the current account deficit which has existed without interruption since 2005. A current account deficit arises when domestic demand for consumption and investment exceeds domestic production. Thus an economy's imports exceed its exports. In order to finance the excess demand for goods and services, the economy must borrow foreign capital. A country with a current account deficit therefore incurs foreign debt. Apart from 2009, the French current account deficit has grown year on year since 2005. Germany, by contrast with France, has high current account surpluses.<sup>16</sup>

Current account deficits are not a problem per se because,

if foreign credit is used for capacity enhancing capital formation, the production potential of the economy grows. Thus it creates the possibility of paying off interest and capital from additional value added. Creditworthiness suffers, however, if the foreign credit is used for consumption expenditure rather than capital formation. This trend in the consumption rate can be measured based on the net domestic product (NDP). The net domestic product provides a picture of the amounts available in an economy for consumption and for additional capital formation if capital stock is to be maintained. Highly problematic is a consumption rate above 100% of NDP. In this case, either the funds to maintain the capital stock will be insufficient or the country has to obtain foreign credit in order to finance its consumption.

When the Euro was brought in, in 1999, the level of consumption in France stood at 89.5%, below that of Germany which was 90.4%.<sup>17</sup> This changed in 2003. Since then it has been above Germany's.

In 2009 the French consumption rate soared to 96% of NDP and since then has only dropped slightly. Although the consumption rate has not yet exceeded 100% it is above the Euro Zone average. Only Greece, Portugal, Italy and Cyprus have higher rates.



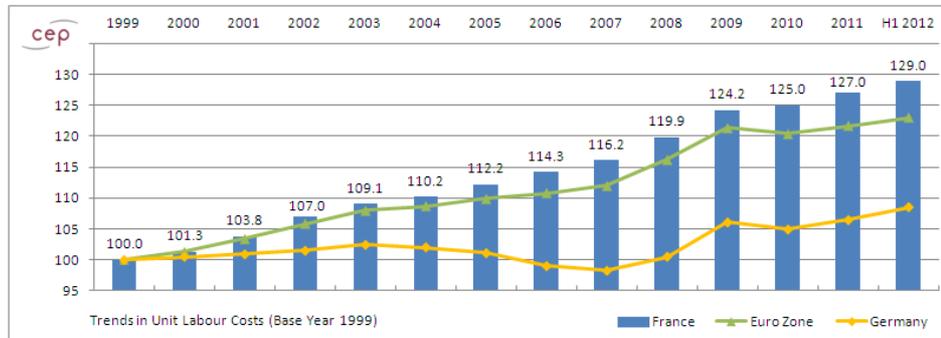
The main cause of France's rising current account deficit and the accompanying increase in its need for foreign credit is the French economy's substantial loss of competitiveness which in turn stems from the increase in French production costs. If we accept either the GDP deflator or the unit

<sup>16</sup> Source: Eurostat, own calculations.

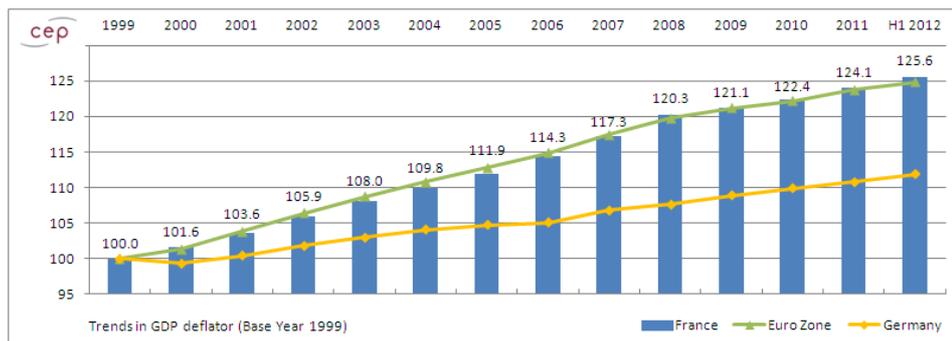
<sup>17</sup> Source: Eurostat, own calculations.

labour costs, in the economy as a whole, as a statistical measurement of price competitiveness and production costs<sup>18</sup>, we find the following:

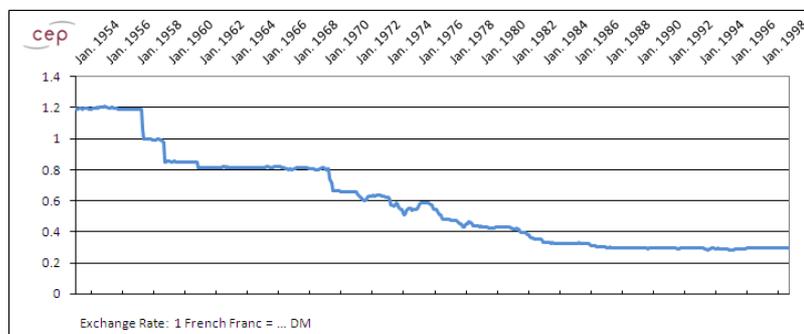
The unit labour costs show labour costs as a proportion of workers' productivity. They rise when labour costs increase faster than productivity. In France, the unit labour costs over the whole economy have risen since 1999 by 29%.<sup>19</sup> The rise is therefore not only above the Euro Zone average of 23% but, in particular, way above the 8.5% rise in Germany, one of France's main competitors on world markets. If we accept the unit labour costs, in the economy as a whole, as a measure of price competitiveness, France has therefore become far less competitive than Germany. The difference of 20.5 percentage points indicates the gap in competitiveness between France and Germany.



The GDP deflator has risen in France since 1999 by 25.6% which largely corresponds to the trend in the Euro Zone as a whole. This is the result of large price increases in all countries in Southern Europe whereas the prices in Northern Europe have only seen a moderate increase. This clearly shows that France's problems are similar to those in the southern European countries. If we accept the GDP deflator as a measurement for the trend in competitiveness, it shows that France has forfeited a significant amount of competitiveness by comparison to Germany in particular.



Before the Euro came into existence, the French government regularly compensated for losses in competitiveness against Germany by systematically devaluing the French franc against the D-Mark. Following a devaluation, a higher amount of domestic currency is required to buy foreign currencies. A devaluation therefore leads to domestic companies being able to offer their goods at a lower price in foreign currency, although the domestic price remains constant, thereby increasing their price competitiveness on the world market. Imports, on the other hand, whose price in foreign currency remains constant, become more expensive in



<sup>18</sup> For the methodological weaknesses of the two measurements see Chapter 4.4.

<sup>19</sup> Source: Eurostat, own calculations.

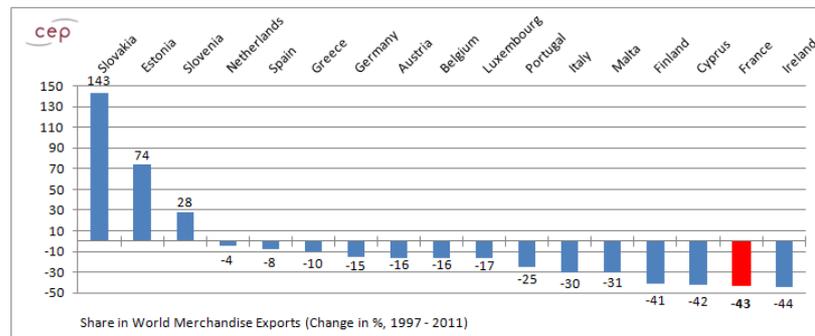
domestic currency so foreign suppliers become less competitive by comparison with domestic competitors. Thus a lack of competitiveness can be offset. In 1953, one franc was still equal to DM 1.19.<sup>20</sup> When the Euro was launched in 1999, the figure was DM 0.30, i.e. about a quarter of the 1953 value. Devaluation of its currency as against Germany and the other more competitive economies in the Euro Zone has been off-limits to France since the introduction of the Euro.

## 6.2 Consequence of the erosion of French competitiveness

The increasing decline in the competitiveness of the French economy has led, in recent years, to a large drop in France's share of world trade (6.2.1), to the limitation of growth impulses from world markets (6.2.2) and to a process of de-industrialisation (6.2.3).

### 6.2.1 Stark decline in France's share of world trade

As a result of the erosion of competitiveness, France's share of world exports has declined by 43% since the Euro was brought in 1999.<sup>21</sup> Although most industrialised countries are reporting a decline in their share of global exports due to the economic rise of some emerging markets, French decline is way above average: It is almost three times that of Germany, which stands at 15%, and it is the second highest of all the Euro countries. France's problems are acutely apparent at France's largest car producer, PSA Peugeot-Citroën, whose global sales plunged by 16.5% as compared with the previous year.<sup>22</sup>



### 6.2.2 Limitation on growth impulses from the export markets

A rise in demand for domestically manufactured consumer or investment products increases GDP. This sort of growth impulse can be triggered by internal demand ("domestic demand") or by foreign demand ("foreign balance"). Growth induced by rising demand will not necessarily be lasting. This is particularly the case where there is a rise in the demand for consumer goods financed by credit.

Problems of competitiveness in the French Economy have led to a sharp decline in foreign demand for French goods which has had a corresponding negative effect on economic growth. This now depends solely on domestic demand.

From 1970 to 1998, France registered average annual GDP growth of 2.7%.<sup>23</sup> 2.5 percentage points were based on a rise in domestic demand and 0.2 percentage points on a change in the foreign balance. Since the introduction of the Euro, average GDP growth has been 1.5%. The increase in domestic demand makes up 1.8%, whilst the change in the foreign balance  $-0.3\%$ .<sup>24</sup>

<sup>20</sup> Source: Deutsche Bundesbank.

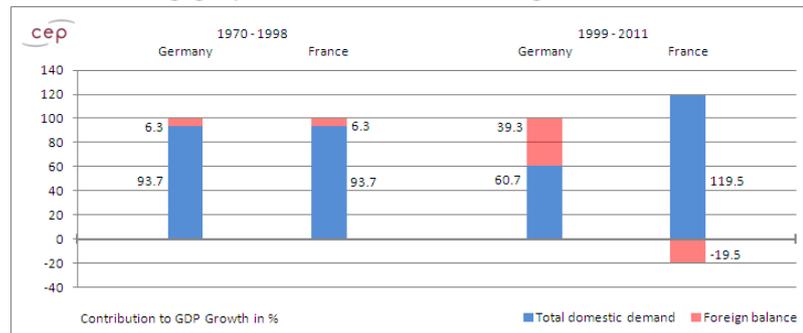
<sup>21</sup> Source: Ameco, own calculations.

<sup>22</sup> Source: Börsenzeitung, 11 January 2013.

<sup>23</sup> Source: Ameco, own calculations.

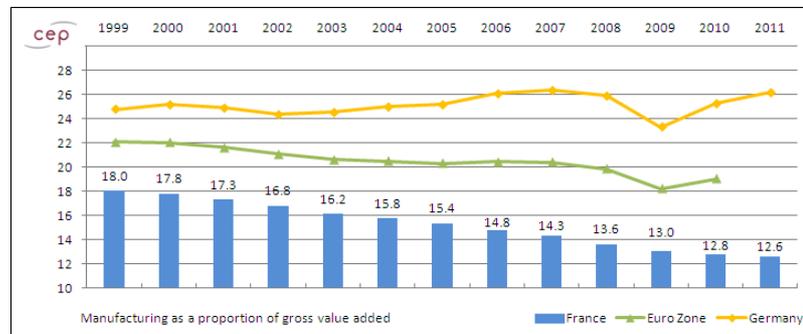
<sup>24</sup> Source: Ameco, own calculations.

In order to allow for a comparison with Germany, the average annual GDP-growth for both countries has been set at 100% in the following graph. The contribution to growth from domestic demand and from the foreign balance is shown as a proportion thereof. Whereas, in Germany, almost 40% of growth has come from exports since 1999, France's entire growth has been based on domestic demand.<sup>25</sup>



### 6.2.3 De-industrialisation

Competitiveness problems have led, in France, to a marked reduction in the proportion of industrial production in the last few years. Since 1999 it has dropped from 18.0% to 12.6%.<sup>26</sup> It rose in Germany in the same period from 24.8% to 26.2%. In the Euro Zone only the two smallest countries, Malta and Luxembourg, register a larger drop in industrial production than France. This is further aggravated by the fact that industrial production in France was never especially pronounced. In 1999, the proportion of industrial production was already below the Euro Zone average.



## 6.3 Creditworthiness trends: The CEP Default Index for France

When the Euro was introduced as deposit money in 1999, the creditworthiness of the French economy continued to increase. In subsequent years, however, it gradually declined. For the period since 2005, the CEP Default Index, based on the data currently provided by the French statistics authority INSEE, does not allow for any definite conclusion.<sup>27</sup>

The CEP Default Index is calculated from the net lending or borrowing of the total economy and the volume of capacity enhancing capital formation:

<sup>25</sup> Source: Ameco, own calculations.

<sup>26</sup> Source: Eurostat, own calculations.

<sup>27</sup> Since the summer of 2011, the French statistics authority INSEE has, on several occasions, made grave changes to the statistical data on the state of the French economy. The International Monetary Fund has explicitly criticised this: The balance of payments statistics contained "large errors and omissions" (International Monetary Fund (2012): France – Staff Report for the 2012 Article IV Consultation–Informational Annex, S. 8). As a result of the changes to the data, the current values in the CEP Default Index also vary as compared with those of 2011.

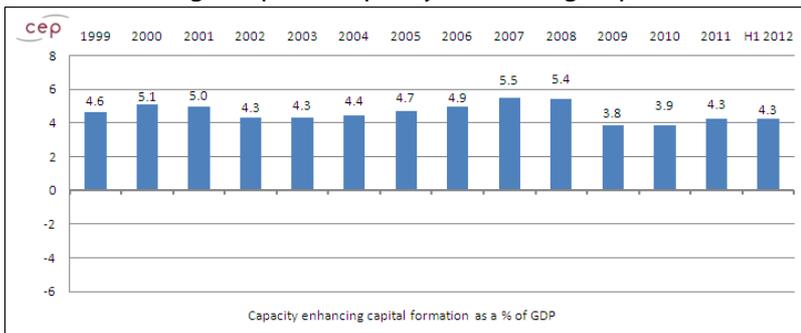
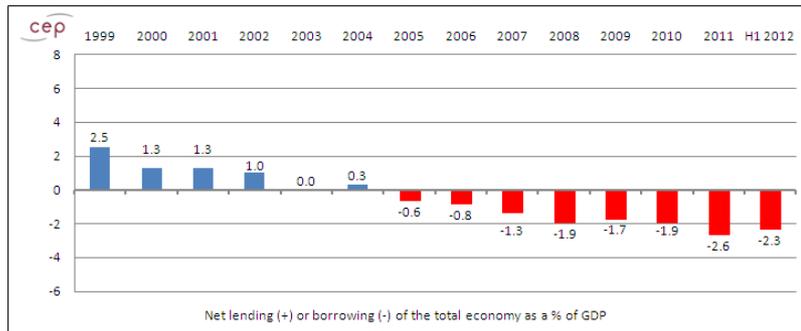
**Net lending or borrowing of the total economy (NTE):** Net lending or borrowing of the total economy measures the net borrowing requirement of an economy. It is positive if, in net terms, the economy exports capital. It is negative if, in net terms, the economy imports capital, in particular if credit is obtained from abroad. Net borrowing economies (negative NTE) either incur debts abroad or reduce existing foreign assets. Net lending countries (positive

NTE), however, increase foreign assets or reduce existing foreign debt. Since France has had a current account deficit since 2005, which has had to be financed by foreign capital, it shows net borrowing.<sup>28</sup> The net borrowing has led to the French economy's foreign debt almost doubling since the launch of the Euro. In 2011 it stood at 15.9% of GDP. Although the French net borrowing requirement did reduce in the first half of 2012, France continued to incur foreign debt.

**Capacity enhancing capital formation (CECF):** Net borrowing is not a problem in itself. The essential question is how France uses the foreign capital. Capacity enhancing capital formation financed from abroad increases the production potential of an economy. The value thus generated can be used to repay the foreign credit. French CECF is among the highest in the Euro Zone.<sup>29</sup> As in many other countries, it plummeted as a result of the financial crisis in 2009 but has increased slightly since then.

**CEP Default Index:** The Index shows a country's creditworthiness trends. The creditworthiness of net lending countries increases. In net borrowing countries, creditworthiness decreases if the credit is used, in net terms, for consumption. In this case the Index value will be negative.

Although France has shown net borrowing since 2005, at the same time, the country registers capacity enhancing capital formation which exceeds the borrowing. The creditworthiness trend thus depends on the earnings generated by the capital formation. This cannot be ascertained in advance, however. In particular, there are no statistics which break down borrowings according to their domestic use – as capital expenditure or as consumption. No definitive statement can therefore be made, as to whether France's creditworthiness is increasing or decreasing, based solely on the current statistical data.



<sup>28</sup> Source: Eurostat, own calculations.

<sup>29</sup> Source: Eurostat, Ameco, own calculations.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
<b>NTE</b>	2.5	1.3	1.3	1.0	0.0	0.3	-0.6	-0.8	-1.3	-1.9	-1.7	-1.9	-2.6	-2.3
<b>CECF</b>	4.6	5.1	5.0	4.3	4.3	4.4	4.7	4.9	5.5	5.4	3.8	3.9	4.3	4.3
<b>CEP Default Index</b>	7.1	6.4	6.3	5.3	4.3	4.7	4.1	4.1	4.2	3.5	2.1	2.0	1.7	2.0
<b>Risk category</b>	1	1	1	1	1	1	2	2	2	2	2	2	2	2

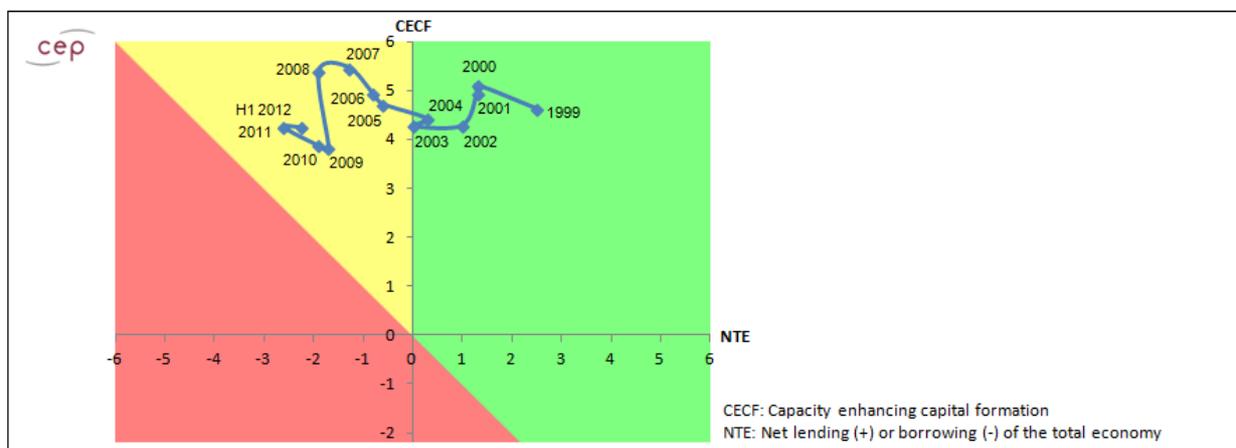
**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

It must be borne in mind in this regard, however, that the CEP Default Index is based on a theoretical best-case scenario, within the meaning of the prudence principle, in favour of the country surveyed, which assumes that the borrowings are primarily used for capacity enhancing capital formation so the income generated is also fully available to investors to service foreign credit.<sup>30</sup> In reality, of course, this is not the case.

In the light of this best-case scenario, it is ominous that the Index trend since 1999 – as shown in the above table and the graphic<sup>31</sup> below – indicates a decline in creditworthiness. In 1999, capacity enhancing capital formation could still be financed by domestic savings, i.e. by cutting down consumption. In subsequent years, domestic consumption rose significantly, however, as a result of which domestic savings fell accordingly. Since 2005, savings in France have not been enough to finance capacity enhancing capital formation.



## 6.4 Possibilities for action

In order to prevent the dependency on foreign credit from increasing further, the French current account deficit must be reduced. Political efforts must therefore focus on reinstating the competitiveness of the French economy. For this, the prices must be reduced which ultimately means that the production costs of French companies must come down in those branches subject

<sup>30</sup> See Chapter 4.2.

<sup>31</sup> The graphic shows the development of the NTE, CECF and France's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

to international competition. In particular, this requires the rise in labour costs to remain below the growth in productivity. In other words, unit labour costs must fall in these branches.

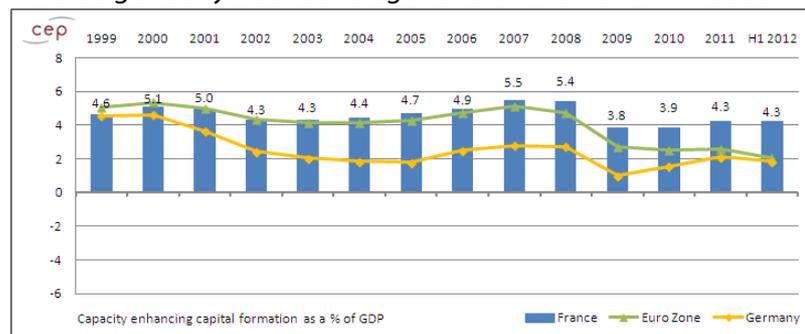
The unit labour costs can be reduced in two ways: by increasing labour productivity through investment or innovation, and by reducing labour costs. These measures can and must be accompanied by further reforms, not least a restructuring of the public budget. The recovery of French public finances alone will not lead France out of the crisis however. Success will stand or fall on whether the French economy succeeds in regaining its competitiveness.<sup>32</sup>

#### 6.4.1 Improving competitiveness by increasing productivity?

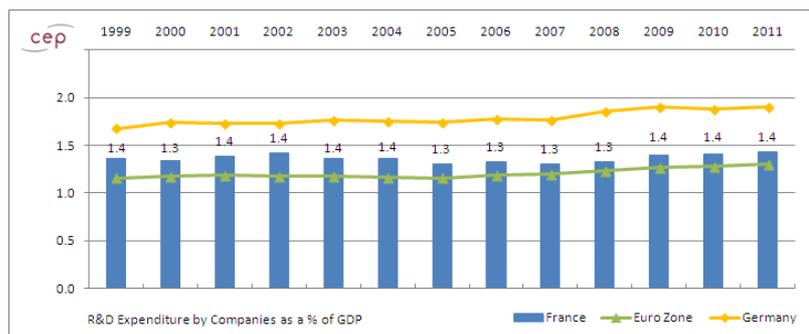
Where labour productivity can be increased there is no need to reduce labour costs, particularly wages. This route therefore has the advantage of being a socially more acceptable alternative. The labour productivity of an economy can be improved with investment and / or innovation.

Investment increases capital stock. This leads to a rise in the productivity of the individual employees. An employee who operates an automatic production line is more productive than an employee who has to assemble a car largely by hand.

In France, in the last few years, the level of capacity enhancing capital formation has always been far higher than that of Germany, and also generally above average for the Euro Zone.<sup>33</sup> The declining competitiveness in France does not therefore result from a lack of investment activity. Nevertheless, it is right to ask, whether the capacity enhancing capital formation has been directed into the "right", i.e. most profitable, areas.



The second possibility for increasing labour productivity lies in innovation in the form of more efficient production processes or new products. One requirement for this is expenditure on research and development (R&D). This allows new findings to be made which can then be turned into new products or manufacturing processes. If, on the other hand, R&D expenditure in a country is below average it runs the risk of forfeiting relative productivity and international competitiveness due to a lack of innovative ability. Since the introduction of the Euro in 1999, France's expenditure on R&D, as a % of GDP, has been lower than that of Germany.<sup>34</sup> And this remains the case today.



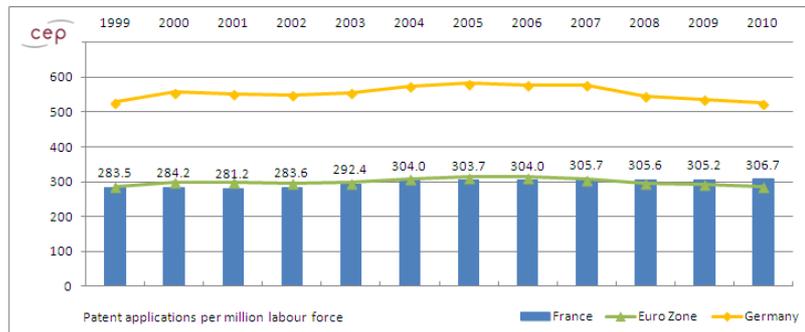
In fact, however, it is not the R&D expenditure which is the crucial factor for productivity but the return on this expenditure, i.e. innovation efficiency. One indication of this is the number of patent applications. Whereas, Germany registered 525 patents per million labour force with the European Patent Office in 2010, in France it was only 307.

<sup>32</sup> On the following see also Gerken/Kullas (2011), CEP Default Index, Chapter 3.7.

<sup>33</sup> Source: Eurostat, own calculations.

<sup>34</sup> Source: Eurostat

The lower level of innovation efficiency of the French economy, as compared with that of Germany, is also a consequence of the subsidising of large companies in France in the 1970s. This led to a lack of small and medium-sized hi-tech companies in the French economy. As a result, French exports largely consisted of goods with a low or moderate technological content. Such goods are subject to particularly tough price competition.



The French government has realised that the economy lacks young, dynamic companies and has therefore introduced measures to encourage them. These are unlikely to achieve short-term success however. Establishing an entrepreneurial and innovative culture takes many years, as shown by the example of East Germany. Productivity and thereby also the international competitiveness of the French economy will, at best, be improved over the longer term by these measures.

#### 6.4.2 Improving competitiveness by reducing real wages

In order to restore competitiveness in the short term, the only option therefore is a relative reduction in the compensation of employees in those branches subject to international competition. Since 1999, the compensation of employees in France has risen by 46.2%.<sup>35</sup> The rise was therefore above the level of productivity growth. It was also more than the rise in the compensation of employees in the Euro Zone (+30.7%) and in Germany (+23.2%). Particularly problematic are the high non-wage labour costs in France which are among the highest in Europe.



On the one hand, the new government of François Hollande has passed measures which exacerbate this problem, on the other hand, it is trying to bring down the compensation of employees indirectly. The measures which are exacerbating the problem include the decision to reduce the statutory retirement age, for people with at least 41.5 years of contributions, from 62 to 60. This has resulted in an increase of 0.5 percentage points in social insurance contributions and a corresponding rise in the compensation of employees. In addition, the Hollande government has already raised the French minimum wage twice to its current level of € 9.43 per hour. This makes the necessary reduction in the compensation of employees more difficult because, according to a survey by the Banque de France<sup>36</sup>, an increase in the minimum wage also results in an increase – albeit not one to one – in other wages.

The government is endeavouring to achieve an indirect reduction in the compensation of employees by way of the tax rebate for companies in the order of € 20 billion. As the tax rebate is

<sup>35</sup> Source: Eurostat, own calculations.

<sup>36</sup> Cf. Cette/Chourad/Verdugo (2012): Les effets des hausses du SMIC sur le salaire moyen, Document de travail No. 366.

linked to the wage bill<sup>37</sup>, it acts as a reduction in the compensation of employees for companies. It also has this effect for the employees because it is to be financed partly by way of an increase in value added tax. It is questionable whether the government will achieve the desired effect with this measure because it is likely that, at the next round of wage negotiations, the employees will demand higher wages as compensation for the increase in value added tax.

Furthermore, in January 2013, employers and unions agreed on a joint draft bill for reform of the employment market. According to the draft bill, which still has to be passed into law by the government, it should be possible for individual companies to reduce wages temporarily in order to cushion economic downturns thus safeguarding jobs. At the same time, companies should be able to relocate employees without needing a social plan. In addition, time-limits are to be shortened for bringing unfair dismissal claims. Employers indicated their agreement to higher social contributions for fixed-term workers. In addition, health and unemployment insurance is to be extended. Although the draft bill will improve companies' flexibility it will not achieve the necessary reduction in the compensation of employees.

A reduction in the compensation of employees would be made significantly easier by shifting wage negotiations from national to company level because wage negotiations at company level would take greater account of the economic situation of the individual company. The trend in the compensation of employees would be based to a much greater extent on productivity.

Increasing the normal working week to 35 hours without (fully) compensatory wage increases would also reduce the compensation of employees. Prime Minister Jean-Marc Ayrault called for this at the end of 2012 but distanced himself from it just a few hours later following huge protests. A liberalisation of the employment protection laws could also result in a reduction of the compensation of employees by weakening the employees' negotiating power.

A reduction in the compensation of employees would also combat the rising unemployment. Rather than taking the measures described, however, the government has decided to subsidise 150,000 jobs for young people. Given the French government's current policies one can only assume that it is shying away from bringing in the reforms which are urgently needed to restore competitiveness.

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<sup>37</sup> This only includes wages under two and half times the minimum wage.



## 7 Crisis countries

### 7.1 Greece

#### 7.1.1 CEP Default Index<sup>38</sup>

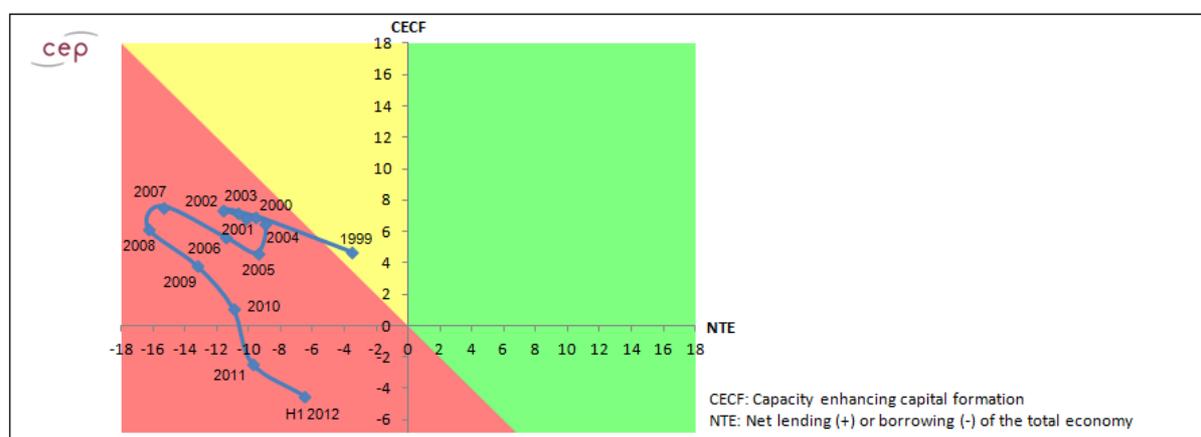
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-3.6	-9.6	-10.2	-11.7	-10.7	-9.0	-9.5	-11.5	-15.4	-16.3	-13.3	-11.0	-9.8	-6.5
CECF	4.7	7.0	6.9	7.4	7.3	6.5	4.6	5.6	7.6	6.2	3.8	1.1	-2.4	-4.4
CEP Default Index	1.1	-2.6	-3.3	-4.3	-3.4	-2.5	-4.9	-5.9	-7.8	-10.1	-9.5	-9.9	-12.2	-10.9
Risk category	2	3	3	4	4	4	4	4	4	4	4	4	4	4

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

**Trend in the CEP Default Index:** Since 2000, Greece's creditworthiness – as the above table and the following graphic<sup>39</sup> show – has been eroding continuously. It also fell in 2001 and the first half of 2012. After reaching an all-time low of –12.2 in 2011, the index value improved only slightly to –10.9 in the first half of 2012. Despite the slight fall in the index value in the first half of 2012, there is no sign of any sustained positive trend. The country has been insolvent for years and this result has become even more firmly established.

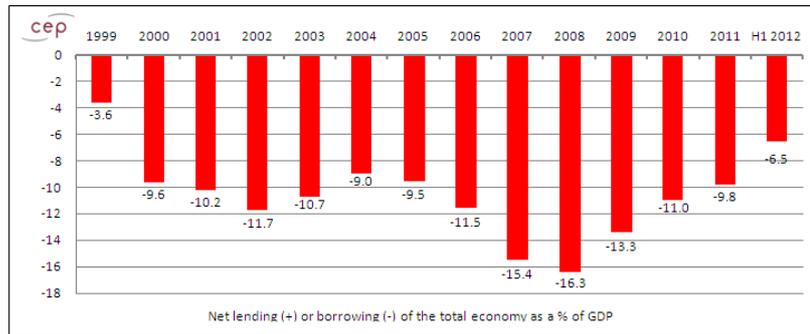


For an improvement of the situation in Greece, net borrowing would have had to move a lot closer to zero and capacity enhancing capital formation would have needed to show a distinct rise. Neither of these happened.

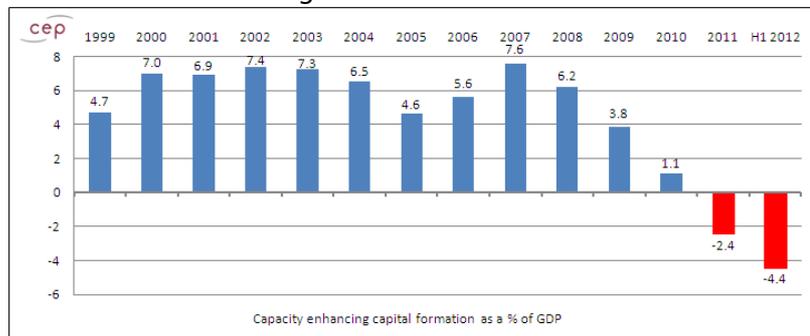
<sup>38</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. For the first half of 2012, the CEP Default Index was calculated based on the period from Q3 2011 to Q2 2012 because no seasonally adjusted or daily adjusted data was available.

<sup>39</sup> The graphic shows the development of the NTE, CECF and Greece's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

**Net lending or borrowing of the total economy (NTE):** Although Greece's net borrowing was further reduced in 2011 and in the first half of 2012<sup>40</sup> the country still needed foreign capital amounting to 6.5% of GDP. This further increased the Greek economy's foreign debt. Another haircut will be unavoidable if the NTE continues to show significant deficits. For the country's creditworthiness to increase Greece must become a net exporter of capital, i.e. show net lending.

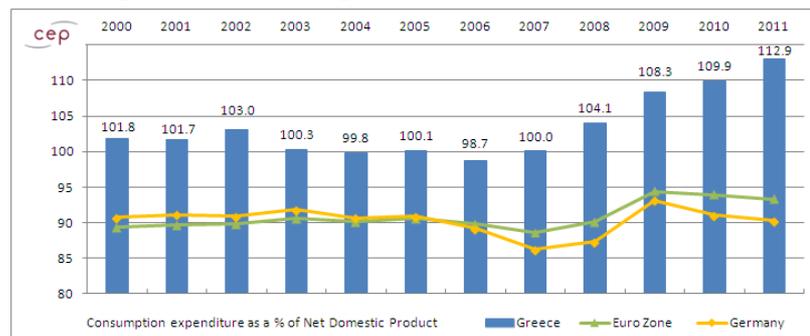


**Capacity enhancing capital formation (CECF):** In 2011, Greece had a negative investment rate for the first time.<sup>41</sup> Capital stock therefore contracted. This negative trend accelerated in the first half of 2012. One reason for this is the great uncertainty about the country's future development because companies only invest when they have sufficient planning certainty. An increase in legal certainty would also favour investment.



### 7.1.2 Key factors for the trend in creditworthiness

**Consumption expenditure:** One of the main causes of a continuously high level of demand for borrowing, and therefore an accompanying increase in foreign debt, is the excessive consumption of the Greek population, which is in fact growing: In 2011, the Greek population consumed 113% of the net domestic product, the highest level since its accession to the Euro.<sup>42</sup> This means, on the one hand, that the country is incurring more and more foreign debt for consumption purposes. It also means that, in Greece, no savings are being accumulated which could be used to finance capital formation; if this development continues, the country will rapidly become impoverished and fall into decline.

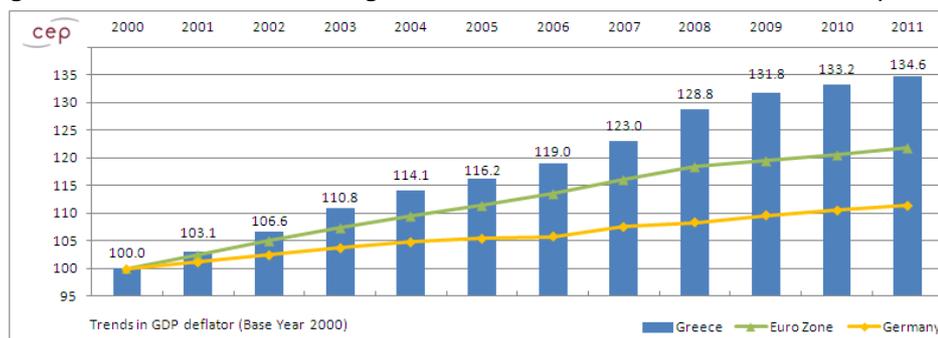


<sup>40</sup> Source: Eurostat, own calculations.

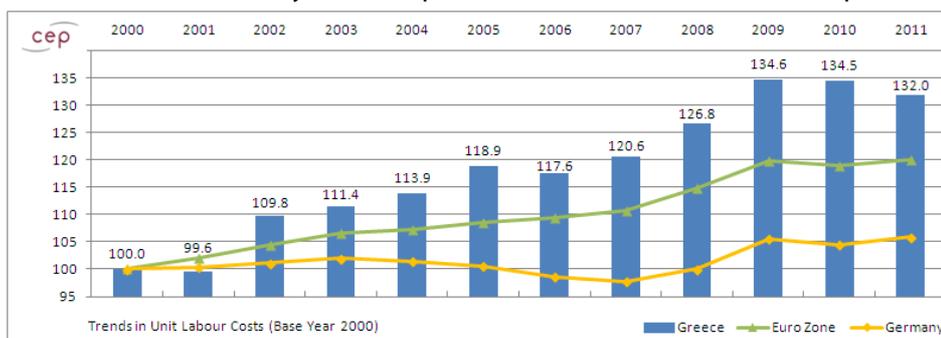
<sup>41</sup> Source: Eurostat, own calculations.

<sup>42</sup> Source: Eurostat, own calculations. Figures are unavailable for the first half of 2012.

**Competitiveness on world markets:** Loss of price competitiveness by Greek companies in the international trade in goods and services (including tourism) is the main cause for the collapse of the country's creditworthiness. If we accept the GDP deflator as an empirical measurement of competitiveness,<sup>43</sup> the result shows that it rose continuously from the outbreak of the crisis until 2011<sup>44</sup>: Greece's competitiveness has not only failed to increase, it has decreased even further: Prices should have fallen, or at least increased at a much slower rate than in the other Euro countries.



**Production costs:** The key factor in the loss of competitiveness by Greek companies in world markets is the rise in production costs in Greece, which is significantly above the average. If we accept unit labour costs for the total economy as an empirical measurement of the development of production costs and thereby ultimately of competitiveness<sup>45</sup>, the result shows that the unit labour costs fell – if only slightly – between 2009 and 2011<sup>46</sup>:



The situation on the costs side has improved slightly for increasing competitiveness but is still absolutely insufficient. Unit labour costs are still far higher than in Germany and even well above the Euro Zone average.

For Greece, the values for the GDP deflator and those for unit labour costs – as indicators of the competitiveness of a country – contradict each other: Although unit labour costs have fallen, the commodity prices have risen continuously. These two measurements do not therefore give any clear indication of whether or not the Greek economy has regained international competitiveness since the outbreak of the crisis. The CEP Default Index provides a more accurate picture of what is in any case a more fundamental problem, the trend in creditworthiness: Irrespective of whether or not competitiveness has increased – Greece is further away than ever from regaining its creditworthiness.

### 7.1.3 Reforms

Greece has undertaken to implement fundamental reforms in return for the promised financial aid. Many of these reforms have not yet been carried out however, others have been passed but not yet implemented by the administration.

<sup>43</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>44</sup> Source: Eurostat, own calculations. Figures are unavailable for the first half of 2012.

<sup>45</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>46</sup> Source: Eurostat, own calculations. Figures are unavailable for the first half of 2012.

### Measures to restructure public finances

- ▶ The 13th and 14th additional monthly salaries for the civil service have been abolished. At the end of 2011, a new tariff structure was passed for the civil service which reduced public sector salaries by almost 20%. Since August 2012, the salaries of judges, police officers and professors have been cut by between 5% and 35%. The new tariff structure is to be extended to cover public companies as well.
- ▶ Greece agreed with the troika that the number of public sector employees has to fall by 150,000 by 2013. In 2010, a rule was introduced that only one in every five public sector jobs coming available could be filled. This rule and early retirement have led to the number of public sector workers falling by just under 80,000. In order to achieve the agreed target, full use must be made of the mobility scheme which is to absorb the public sector workers. Employees in the scheme must find another job in the public sector within one year or face redundancy. The scheme should cover 27,000 employees by the end of 2013; by the end of 2012 it was said to cover 15,000 employees. In fact it only had 100 employees in it as the administration refused to provide the appropriate lists of names.
- ▶ Another problem is that Greece still does not have a functioning tax administration system to implement the existing and new rules. At the same time, the public's fiscal morality is low because judicial enforcement of tax demands is difficult and very slow. In addition, there were, in the past, regular tax amnesties which further reduced fiscal morality. In order to increase revenue, therefore, indirect tax, in particular, has been increased. Thus value added tax went up from 21% to 23%. Tax on petrol, alcohol and heating oil was also increased by 10%. In addition, profits from share transactions will be taxed at 20% from April 2013. In 2011, the Greek government decided to raise a special tax on property which is collected automatically via the electricity bill; the level of the tax depends on the size, age and position of the property.
- ▶ The Greek government gained revenues of € 1.7 billion by way of privatisations. It is therefore significantly behind the schedule under which € 5.2 billion were to have been gained from privatisations by the end of 2012. Numerous privatisations are to be carried out in 2013. These include the gas company Depa, the lottery company Opap and the railway operator Trainose.
- ▶ In order to assist the health insurance system, controls have been increased to reduce fraud and the over-prescription of medicines. The increased use of generic drugs has been stipulated, the patient's surcharge increased and pharmacists' profit margins reduced. Bookkeeping in hospitals has also been improved. The largest state health funds have been merged into one fund. Some of the measures passed have not been strictly implemented, however, which contributed to the state health funds not reaching their deficit targets in 2012.

### Measures to improve competitiveness

- ▶ In November 2012, a law was passed to decentralise wage negotiations. Under this law, sectoral wage bargains now only apply to the parties involved in the negotiations. In addition, works agreements take precedence over other collective agreements. Collective agreements can now only be concluded for a maximum of three years and are not extended automatically if no new agreement can be reached afterwards.
- ▶ The monthly minimum wage of € 751 has been reduced to € 586 for the under-25s to € 525.
- ▶ Sackings have been made easier in that the maximum notice period has been brought down from six to four months. Redundancy pay has been limited to twelve months' earnings for new contracts.
- ▶ In order to encourage free enterprise, the reporting and registration obligations for companies have been reduced.
- ▶ The retail industry has been deregulated by making the working hours more flexible. Thus employees can now be employed for six days without any additional costs being incurred provided the contractually agreed weekly working hours are not exceeded. Sale of goods under the cost price has been allowed although competition rules must be complied with. In addition, a ban on the sale of packaged meat, cheese and fish in supermarkets has been lifted.
- ▶ The liberalisation of professions previously protected from competition, has so far only been partially implemented. Although entering into certain professions has been made easier, such as for bus operators, lawyers, sworn experts, customs brokers, estate agents, travel guides, travel agents and travel operators and dock workers, in other professions unreasonable qualification requirements are still an obstacle to market entry. In addition, competition in some professions is still hampered by minimum charges.

### **7.1.4 Conclusion and outlook**

- ▶ It seems impossible that the CEP Default Index will move towards zero in the foreseeable future. This means that the conditions for Greece regaining creditworthiness could get worse.
- ▶ If Greece is to have any chance of improvement, the demand for foreign credit must be drastically reduced and capacity enhancing capital formation massively increased. The conditions for this are a reduction in the demand for consumption, an improvement in the price competitiveness of Greek companies in international trade and a greater than previous reduction in production costs.
- ▶ It is currently doubtful whether the measures which the Greek government has taken in the last few years, and has yet to take, will lead to a rapid and significant reduction in the demand for foreign credit or to a significant increase in investment in the country.
- ▶ The reforms presented are considerable but we should not forget that many of the necessary reforms have not yet been taken. In addition to this, measures that have been passed have not been properly implemented, or not implemented at all.
- ▶ Due to the failure to implement reforms, and the lower than expected economic growth, Greece has failed to meet the budget target for 2012 – a structural deficit of a maximum of 1% of GDP – imposed by the troika. The deficit targets for 2013 to 2016 have therefore been adjusted. The primary surplus for 2014 now only has to reach 1.5% of GDP rather than 4.5% of GDP, a primary surplus of 4.5% will not have to be achieved until 2016.

- ▶ It is still uncertain whether Greece is actually willing to fully implement the reforms imposed by the troika. During the 2012 election campaign, some members of the current government would not commit themselves to the reforms. In fact, they even promised to reverse some of the implemented reforms. The same applies to the necessary fiscal consolidation. Against this background, Greece's future still looks uncertain. The accompanying insecurity reduces the willingness of private stakeholders to invest at a time when private investment is needed more urgently than ever.
- ▶ The Greek population – not least the upper echelons – must send a clear signal that it is willing to give up vested rights so that the country can recover.

## 7.2 Ireland

### 7.2.1 CEP Default Index<sup>47</sup>

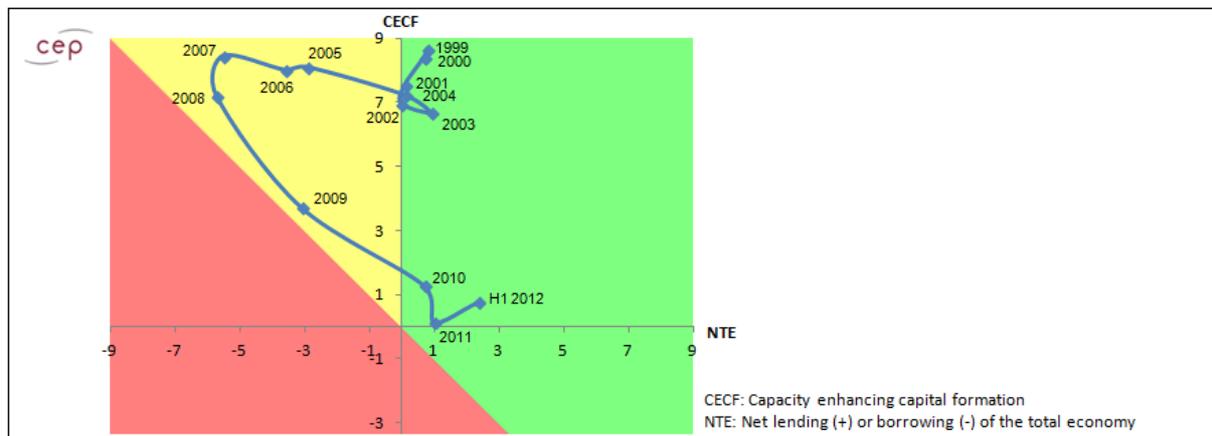
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	0.8	0.7	0.1	0.0	0.9	0.1	-2.9	-3.6	-5.5	-5.7	-3.1	0.7	1.0	2.3
CECF	8.7	8.4	7.5	7.0	6.7	7.2	8.1	8.0	8.5	7.2	3.7	1.3	0.1	0.8
CEP Default Index	9.5	9.1	7.6	7.0	7.6	7.3	5.2	4.4	3.0	1.5	0.6	2.0	1.1	3.1
Risk category	1	1	1	1	1	1	2	2	2	2	2	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

**Trend in the CEP Default Index:** Ireland's creditworthiness – as the above table and following graphic<sup>48</sup> show – grew in 2010, 2011 and, particularly strongly, in the first half of 2012. The Index value of 3.1 is the highest value achieved by Ireland since the beginning of the Irish crisis in 2007. The critical phase in 2008 and 2009, when the Index value noticeably worsened, seems to have been overcome.



Ireland's Index value was in the yellow area up until 2010, rather than the red area. This means that no definitive conclusion could be reached on the trend in creditworthiness of the Irish *economy* – public and private sector together. In fact, however, the Irish *public sector* had lost its creditworthiness: In Ireland, as in Spain, high levels of credit-financed investments in the construction sector had led to a real estate bubble thereby triggering a banking crisis. Supporting the Irish banks had placed too great a burden on the Irish state so it had to apply for financial aid in 2010. The CEP Default Index deliberately only represents this situation to the extent that it leads to

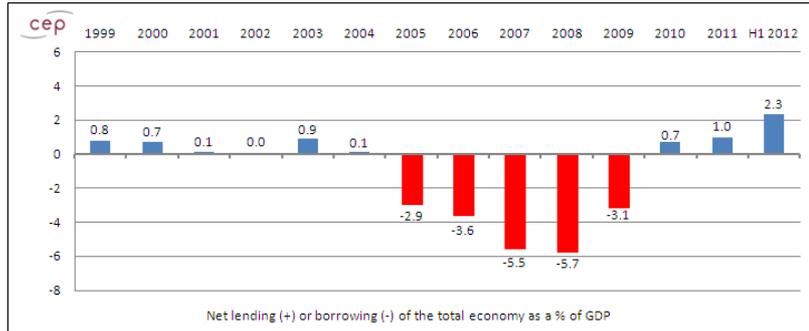
<sup>47</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. The figures for net capital investment in residential buildings, required for calculating capacity enhancing capital formation, have been estimated for the first half of 2012 on the basis of an annual prognosis from the Commission.

<sup>48</sup> The graphic shows the development of the NTE, CECF and Ireland's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

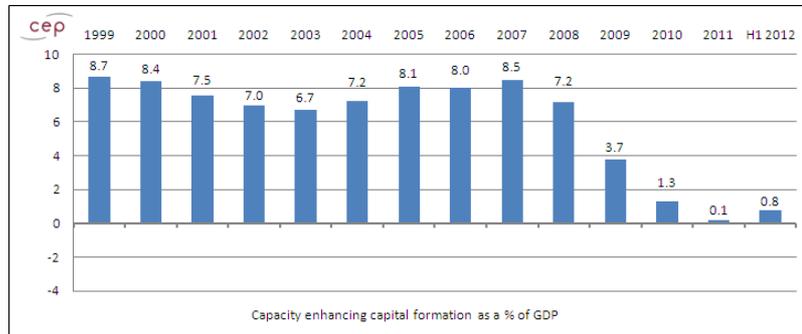
a demand for foreign credit. In addition, these are "one off" burdens which – by contrast with a country's competitiveness problems – do not return or get worse each year.

Ireland's positive development is due both to the improvement in net lending or borrowing of the total economy and to higher capacity enhancing capital formation. Whereas in 2011, the improvement in net lending or borrowing of the total economy was still being overcompensated by the fall in capacity enhancing capital formation – which did not however lead to a negative Index value –, both values rose in the first half of 2012.

**Net lending or borrowing of the total economy (NTE):** In 2010 and 2011, and to an even greater extent the first half of 2012, Ireland registered capital export surpluses.<sup>49</sup> This is due to the fact that, by contrast with the period 2005 to 2009, the country achieved current account surpluses. The country needs capital export surpluses in order to reduce its foreign debt which arose in particular in 2008 and 2009. In 2011, the Irish economy's foreign debt stood at 96% of Irish GDP.<sup>50</sup> At 105% of GDP, only Portugal's foreign debt was higher in the group of Euro countries.



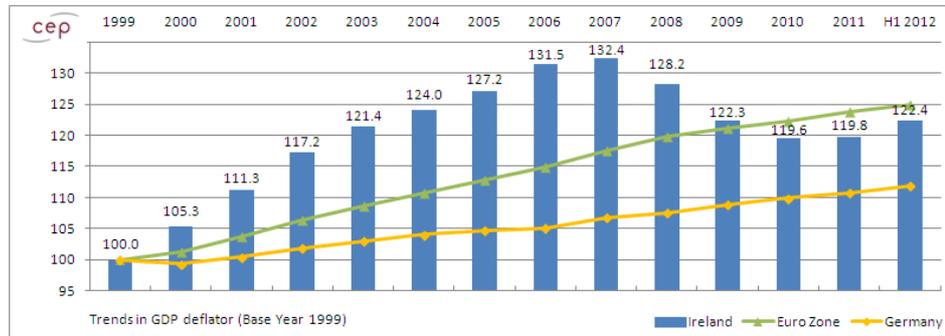
**Capacity enhancing capital formation (CECF):** Capacity enhancing capital formation nose-dived dramatically in 2009 and 2010; capital formation almost came to a standstill in 2011. In the first half of 2012, however, it increased for the first time since 2007.<sup>51</sup> Capacity enhancing capital formation rose to 0.8% of Irish GDP but the value is still well below the Euro Zone average of 2.1%.



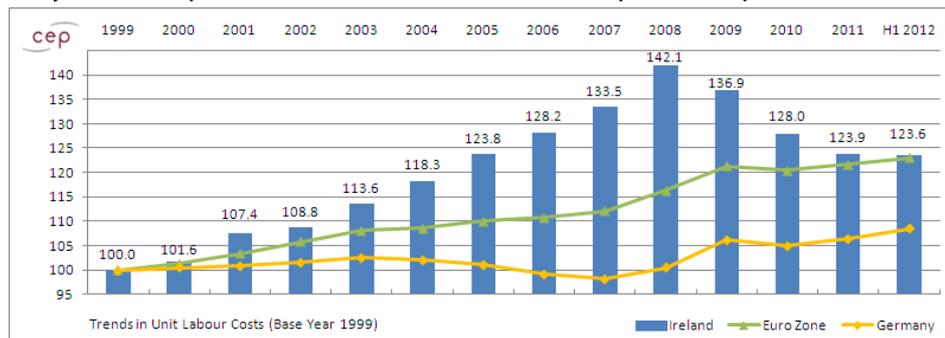
<sup>49</sup> Source: Eurostat, own calculations.  
<sup>50</sup> Source: Eurostat, own calculations.  
<sup>51</sup> Source: Eurostat, Ameco, own calculations.

### 7.2.2 Key factors for the trend in creditworthiness

**Competitiveness on world markets:** In the years following the introduction of the Euro up until 2007, Irish companies lost a considerable amount of competitiveness. This was the result of a real-estate boom. It led to the highly labour intensive construction sector demanding increased manpower. The result of this was an increase in the wage level in all branches leading to a corresponding rise in the price of goods. If we accept the GDP deflator as an empirical measurement of competitiveness<sup>52</sup>, its trend shows: the price competitiveness of Irish companies on the world market has significantly improved since 2009. No other country in the Euro Zone has registered such a large drop in the GDP deflator.<sup>53</sup>



**Production costs:** Production costs are a key factor for competitiveness. If we accept unit labour costs in the total economy as an empirical measurement of the development of production costs and thereby ultimately of competitiveness, it gives the following result<sup>54</sup> for Ireland: Together with unit labour costs, production costs also rose quickly between 1999 and 2008 and thus led to a loss in competitiveness for Irish companies.<sup>55</sup> Since 2009, this trend has turned around: The drop in unit labour costs indicates a clear reduction in production costs: No other Euro country has seen such a stark reduction in unit labour costs as Ireland. In the first half of 2012, Irish unit labour costs fell to around the Euro Zone average. The conditions on the cost side for an increase in competitiveness have thus significantly improved.



The simultaneous drop in the GDP deflator and in unit labour costs in Ireland – a trend which has not yet been seen in any other Euro crisis country – is a clear indication that the Irish economy has been able to improve its competitiveness since the outbreak of the crisis, which is crucial to regaining the country's creditworthiness.

### 7.2.3 Reforms

Ireland remains the model pupil among the crisis countries. Since the country applied for financial aid from the European bailout fund in 2010, it has consistently implemented structural reforms.

<sup>52</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>53</sup> Source: Eurostat, own calculations.

<sup>54</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>55</sup> Source: Eurostat, own calculations.

### Measures to restructure public finances

- ▶ In order to reduce the budget deficit, public expenditure, in particular has been cut. Thus public sector salaries have been brought down by 14% since 2009 and at the same time the number of public sector workers has also been reduced by 9% since 2008. Social benefits have also been cut back. On the revenue side, consumption and capital gains tax have been increased, and tax exemptions abolished. In 2013, the government is planning, among other things, to introduce a property tax and to raise tuition fees at universities.
- ▶ The recapitalisation of Irish banks is largely complete and debt reduction is proceeding. The risks arising from the Irish banking sector have therefore been significantly reduced over the last few years.

### Measures to improve competitiveness

- ▶ In order to combat the 15.1% unemployment, the initiative "Pathways to Work" has been started which aims to improve the matching process between unemployed people and employers and remove the incentives which prevent people from taking up work. Wage flexibility has been increased by way of a law to ensure that the economic conditions of individual companies as well as of entire industries are given greater consideration when setting wages.
- ▶ In addition, measures have been concluded to intensify competition on the market for medical and legal services. Last but not least, a law has been passed which aims to improve the implementation of competition law.

## **7.2.4 Conclusion and outlook**

- ▶ Ireland is on the right track as the continued increase in Irish creditworthiness shows.
- ▶ In June 2012, Ireland was able to issue government bonds with a multi-year term – five and eight years – for the first time since receiving financial aid. Interest of 5.9% or 6.1% shows that the country has regained the trust of investors.
- ▶ Whether interest will fall in the future, depends on the extent to which Ireland will be dependent on foreign lenders for refinancing old debt and for financing the current state deficit. Both depend on the trend in exports as the country can only reduce its dependency on foreign lenders by way of export surpluses.
- ▶ The future trend in interest rates also depends on whether the country achieves the targets for the public deficit set by the troika – 2013: –7.5%; 2014: –5.1%; 2015: –2.9%. Risks in this respect arise particularly from the fact that economic growth in 2013 is likely to be lower than originally expected. This gives rise to an additional consolidation requirement of € 200 million in the public budget.
- ▶ The referendum on the Fiscal Compact suggests that the public will continue to support the consolidation of the public budgets. Over 60% of the votes supported the Fiscal Compact and thereby also a continuation of the budget consolidation.

## 7.3 Italy

### 7.3.1 CEP Default Index<sup>56</sup>

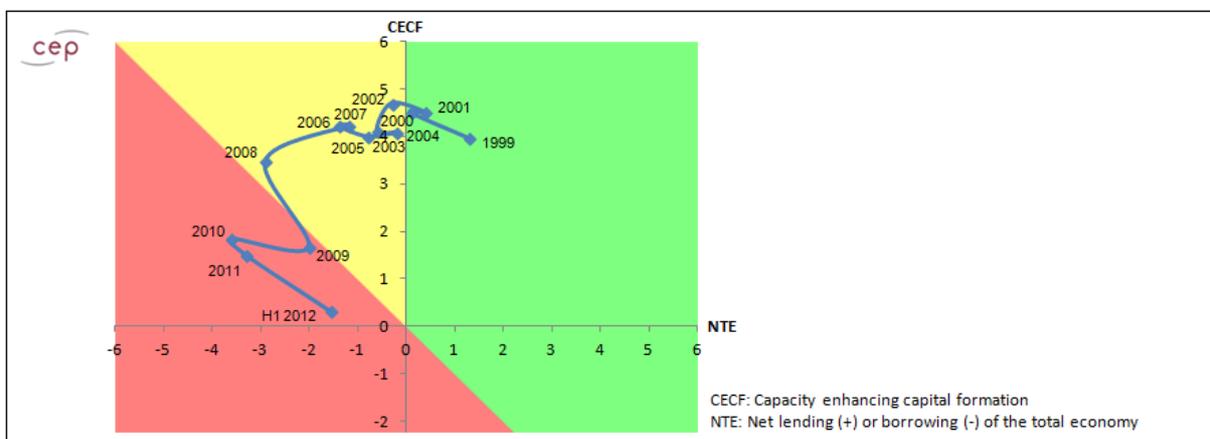
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	1.3	0.1	0.4	-0.3	-0.6	-0.2	-0.8	-1.4	-1.2	-2.9	-2.0	-3.6	-3.3	-1.6
CECF	4.0	4.5	4.5	4.7	4.1	4.1	4.0	4.2	4.2	3.5	1.7	1.8	1.5	0.3
CEP Default Index	5.3	4.6	4.9	4.4	3.5	3.9	3.2	2.8	3.0	0.6	-0.3	-1.8	-1.8	-1.3
Risk category	1	1	1	2	2	2	2	2	2	2	3	3	4	4

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

**Trend in the CEP Default Index:** Italy's creditworthiness has been continuously eroding since 2009 as shown by the above table and the following graphic<sup>57</sup>. The fall in net borrowing in the first half of 2012 was accompanied by an absence of capital formation. It did not therefore have a positive effect on the country's creditworthiness. Italy's creditworthiness thus also fell in the first half of 2012 if only by -1.3, somewhat less than in previous years. The slight reduction in the Index value is not sufficient, however, to indicate a turnaround. In fact, the negative trend, which began with the introduction of the Euro in 1999, is continuing.

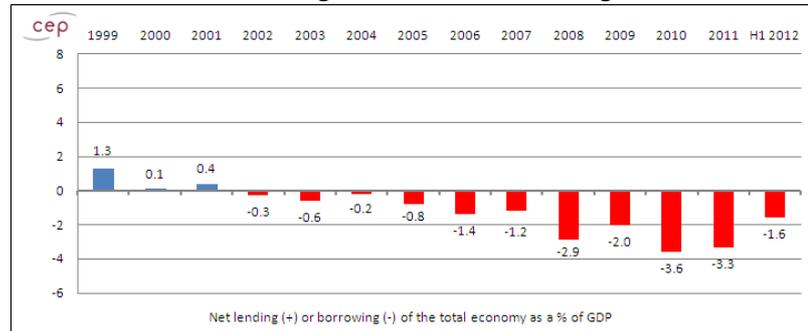


For Italy's creditworthiness to improve, net borrowing would have to come down much further and at the same time capacity enhancing capital formation would have to rise.

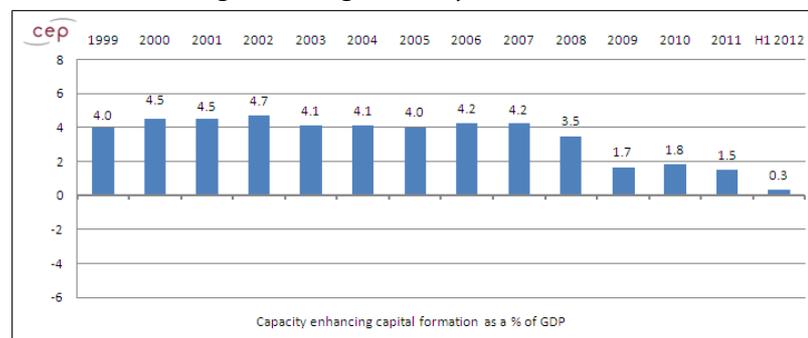
<sup>56</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat.

<sup>57</sup> The graphic shows the development of the NTE, CECF and Italy's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

**Net lending or borrowing of the total economy (NTE):** Although Italian net borrowing did fall in the first half of 2012, the country continued to incur foreign debt. Net borrowing has resulted in the Italian economy's foreign debt increasing nearly fourfold since the launch of the Euro. In 2011 it stood at 20.6% of GDP.<sup>58</sup>

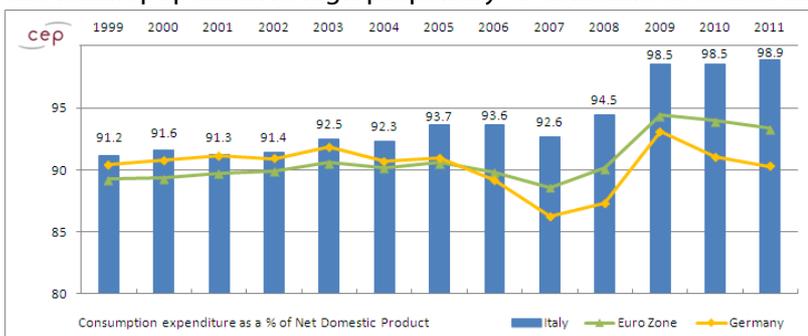


**Capacity enhancing capital formation (CECF):** Italy's capacity enhancing capital formation plummeted in 2009 and has never recovered.<sup>59</sup> It again fell significantly in the first half of 2012 and is now among the lowest in the Euro Zone. Only Greece, Portugal and Ireland show lower investment quotas.



### 7.3.2 Key factors for the trend in creditworthiness

**Consumption expenditure:** One reason for the continuous net borrowing and the accompanying increase in Italian foreign debt is the Italian population's high propensity to consume. It soared in 2009.<sup>60</sup> Since then, the Italian population has consumed almost 99% of the net domestic product. Only Greece and Portugal show higher values. Since almost the entire net domestic product is used for consumption purposes, there is a lack of funds to finance additional capacity enhancing capital formation. To prevent Italy's creditworthiness from falling further and, if possible, for it to start increasing once again, demand for consumption must fall.

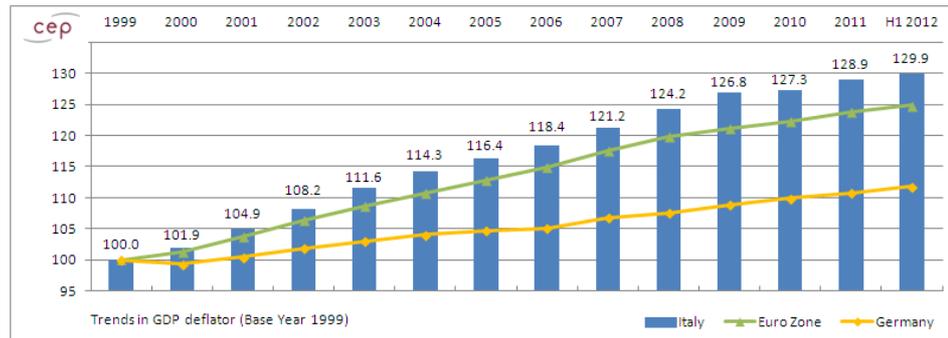


<sup>58</sup> Source: Eurostat, own calculations.

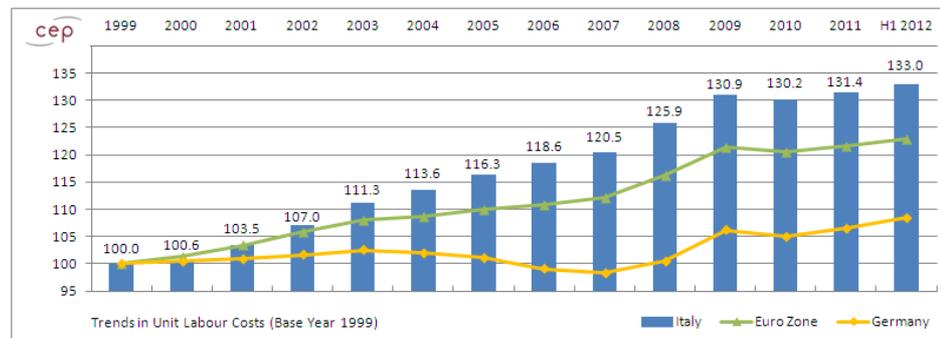
<sup>59</sup> Source: Eurostat, own calculations.

<sup>60</sup> Source: Eurostat, own calculations. Figures are unavailable for the first half of 2012.

**Competitiveness on world markets:** The main cause for Italy's falling creditworthiness is the erosion of the price competitiveness of Italian companies in the international trade in goods and services. If we accept the GDP deflator as an empirical measurement of competitiveness,<sup>61</sup> the result shows that, in the first half of 2012 too, the Italian economy was unable to reduce the gap in competitiveness, particularly as compared with Germany.<sup>62</sup> For this the Italian GDP deflator would have had to rise more slowly or even fall as compared with Germany's, as happened in Ireland for example.



**Production costs:** The fall in the competitiveness of Italian companies on world markets is ultimately due to the rise in production costs in Italy. If we accept unit labour costs in the total economy as an empirical measurement of the development of production costs and thereby ultimately of competitiveness, it gives the following result<sup>63</sup> for Italy:



By contrast with most of the other crisis countries, production costs have continued to rise in Italy.<sup>64</sup> Next to Cyprus, Italy is the only crisis country where unit labour costs have not yet fallen: In Ireland they have fallen by 13.2 percentage points, in Spain by 7.3 and in Portugal by 6.9. And even Greece saw a slight fall of 2.6 percentage points. For production costs to decrease, thereby allowing the competitiveness of Italian companies to grow, Italian unit labour costs would have to be significantly reduced.

The continued rise in both the GDP deflator and unit labour costs, observed since the start of the crisis, is an indication that Italy's competitiveness on world markets, has declined further over the last few years which has substantially contributed to an intensification of the more fundamental problem of the fall in the country's creditworthiness.

### 7.3.3 Reforms

The rise in Italian government bond yields in 2011 forced the resignation of the then Prime Minister, Silvio Berlusconi in November 2011. The impartial Mario Monti was appointed as Prime Minister on an interim basis. The aim of the expert government which he led was, firstly, to restructure public finances. Secondly, structural reforms were supposed to restore the competitiveness of the Italian economy.

<sup>61</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>62</sup> Source Eurostat, own calculations.

<sup>63</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>64</sup> Source Eurostat, own calculations.

At the beginning of his term of office, Monti announced numerous measures for reform which were then only partially implemented. Measures which stalled, or never got under way, include, in particular an administrative reform to reduce the number of provinces, the reform of employment protection and the deregulation of professions protected from competition.

In December 2012, Mario Monti announced his resignation because he no longer commanded majority support for his policies in the Italian Parliament. It remains to be seen what effect the result of the parliamentary elections on 24 and 25 February will have on the ability and willingness of Italian policy-makers to bring about reform.

#### Measures to restructure public finances

- ▶ Public sector employees will not receive any salary increases until 2014. In addition, holidays, holiday allowances and food vouchers have been cut, which is supposed to lead to annual savings of seven billion Euro. The civil service has been banned from procuring and leasing new staff cars. The purchase and leasing of new buildings has been forbidden. In addition, payments to the regions have been cut.
- ▶ The statutory retirement age for men and women has been raised to 66. For men this applies immediately, for women from 2018. In addition, pensions were not increased by the rate of inflation in 2011 and 2012. The only exemptions were minimum pensions of € 467. Pension payments are now more directly linked to the pension contributions which have been paid. Previously they were determined by the most recent earnings.
- ▶ The attempt to reduce administration expenditure by merging smaller provinces with each other or with larger provinces failed due to opposition from the provinces.
- ▶ To increase revenue, the property tax on first homes has been reinstated, having been abolished in 2008, and a solidarity charge on annual income over € 300,000 and a luxury tax have been brought in. The luxury tax applies to cars with large-displacement engines, yachts and private jets. Value added tax will increase in June 2013 by one percentage point to 11% or 22% as applicable. Petroleum tax has been increased and tax relief abolished.
- ▶ In order to combat black-market labour, tradesmen's invoices can be set off against tax.

#### Measures to improve competitiveness

- ▶ The high level of employment protection, in conjunction with case law which is very favourable towards the employee, means Italian companies are reluctant to take on employees on a permanent basis. In particular, the right to be reinstated and to receive payment of all arrears of salary in the event of an unfair dismissal, has proved to be a hindrance. In order to make new appointments easier, a reform of employment law was passed in April 2012. Claims proceedings were shortened and severance payments capped. The attempt to remove the right to reinstatement and repayment of all arrears of salary in the event of an unfair dismissal and replace it with compensation failed however. Nevertheless, payments of arrears were limited to a maximum of twelve months' salary where dismissal was for disciplinary reasons which should have been punished by a less stringent sanction. Where an employee waives the right to reinstatement, he/she has the right to additional compensation amounting to 15 months' salary. In the case of unfair dismissal for economic reasons, no reinstatement is possible, instead there is a compensation payment amounting to between twelve and 24 months' salary unless dismissal was "obviously" unfair. In this case, reinstatement is still stipulated. In addition, the duty to reinstate and pay all arrears of salary was extended to cover companies with fewer than 15 employees where the dismissal was discriminatory. A failure to comply with formalities in

relation to dismissals will, in future, only result in compensation payments of between six and twelve months' salary.

- ▶ In November 2012, the Italian Parliament passed a "Productivity Package". This provides for tax incentives for companies who have increased their productivity and allows working hours to be more flexible.
- ▶ Fixed-term employment contracts of up to twelve months are possible without stating a reason. Fixed-terms for which no reason is given may not, however, be extended. The maximum duration for fixed-term contracts for which a reason is provided remains at 36 months.
- ▶ The deregulation of certain professions announced in January 2012 has not yet been fully implemented. So, although longer shop-opening hours are now permitted and the minimum charges for lawyers and notaries have been lifted, deregulation of petrol-station operators and taxi businesses has not yet been achieved.

### **7.3.4 Conclusion and outlook**

- ▶ Mario Monti has brought about some reforms, even if the employment market changes, in particular, have not come up to expectations. There is also some doubt whether the reforms passed under Monti will in fact be implemented or pursued after the elections. This applies, for example, to the reductions in expenditure for the civil service, the property tax and the planned increase in value added tax.
- ▶ The CEP Default Index trend shows that further reforms are urgently required to stop the fall in Italy's creditworthiness.
- ▶ Italy's future depends on whether Italian politics will be willing and able to properly implement the reforms which have been passed and take further measures after the parliamentary elections in February 2013.

## 7.4 Portugal

### 7.4.1 CEP Default Index<sup>65</sup>

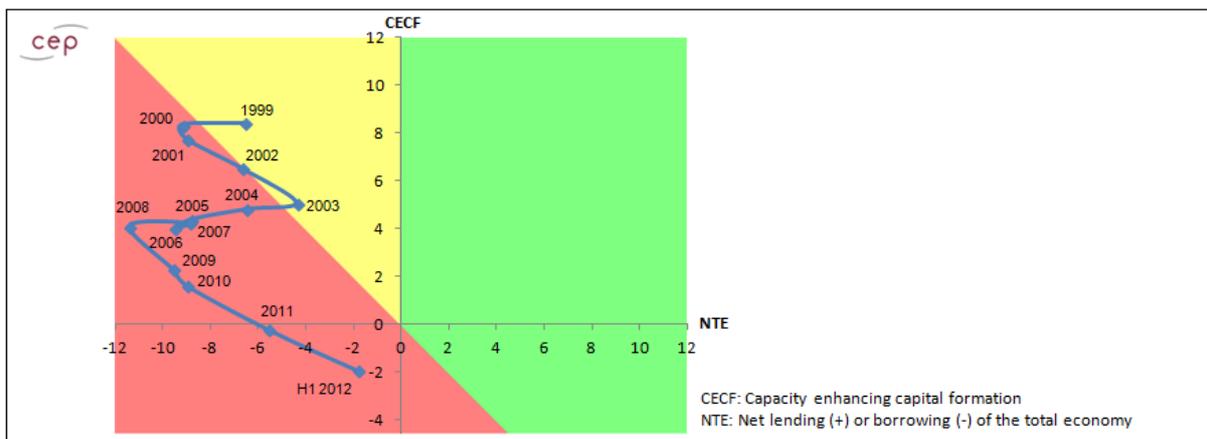
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-6.6	-9.2	-9.0	-6.7	-4.4	-6.5	-8.8	-9.5	-8.9	-11.4	-9.6	-9.0	-5.6	-1.9
CECF	8.4	8.3	7.7	6.5	5.1	4.8	4.4	4.0	4.2	4.1	2.3	1.6	-0.2	-1.9
CEP Default Index	1.8	-0.9	-1.3	-0.2	0.7	-1.7	-4.4	-5.5	-4.7	-7.3	-7.3	-7.4	-5.8	-3.8
Risk category	2	3	3	4	2	3	3	4	4	4	4	4	4	4

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

**Trend in the CEP Default Index:** The trend which began in 2009 also continued – as the above table and following graphic<sup>66</sup> show – in 2011 and in the first half of 2012: Although the CEP Default Index is still negative, thus indicating falling creditworthiness, the tendency is significantly reduced. At –3.8, the Index value was virtually halved in the first half of 2012 by comparison with 2010. This clear relative improvement is mainly due to the fact that the demand for foreign credit has been drastically reduced since 2009. This positive effect, however, was partially undermined by a fall in capacity enhancing capital formation to below zero in 2011 and the first half of 2012.

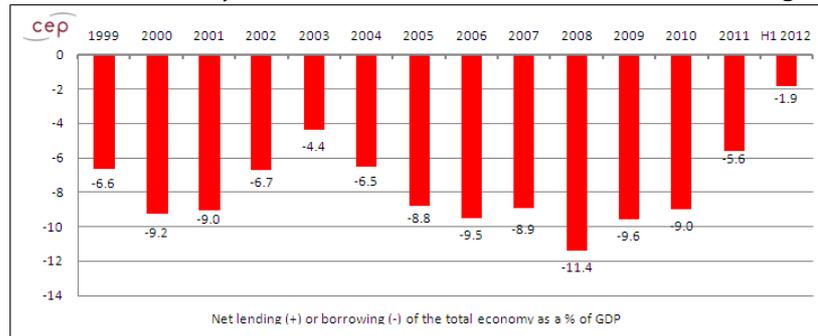


Portugal differs substantially from Greece whose Index value for 2011 and the first half of 2012 fell even below those of previous years, i.e. reached record lows: Firstly, Portugal has succeeded in bringing the demand for foreign credit down towards the zero mark, which is out of the question in Greece. Secondly, the drop in capacity enhancing capital formation in Portugal, caused by the recession, was much smaller than in Greece.

<sup>65</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

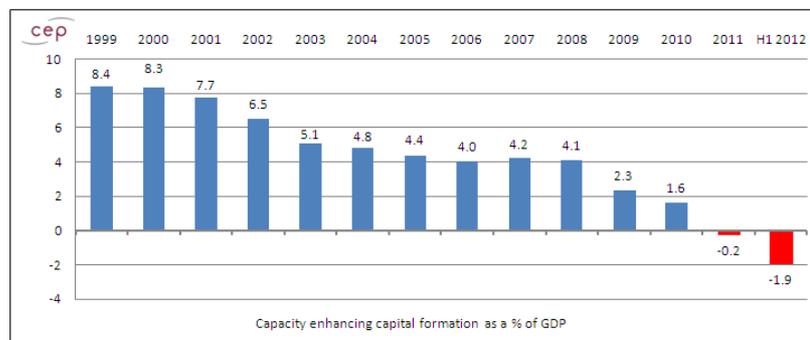
<sup>66</sup> The graphic shows the development of the NTE, CECF and Portugal's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

**Net lending or borrowing of the total economy (NTE):** Portuguese net borrowing fell significantly once again in the first half of 2012 – by more than 80% since 2008 –, because Portugal is importing less and at the same exporting more.<sup>67</sup> In order to service or reduce its foreign debt of 105% of GDP<sup>68</sup>, Portugal also needs capital export surpluses.



**Capacity enhancing capital formation (CECF):** Capacity enhancing capital formation was negative both in 2011 and in the first half of 2012.<sup>69</sup> The country's capital stock therefore shrank.

This reduced Portugal's future production potential which will make servicing foreign debt in the long term more difficult. In the Euro Zone, apart from Portugal, only Greece showed a negative CECF-value, although, at -4.4 in the first half of 2012, the Greek value was significantly

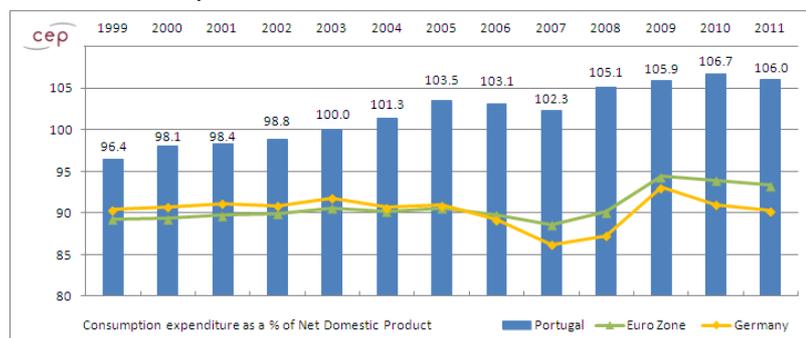


lower. Portugal's dwindling capital stock is a consequence of the recession which will continue in 2013. The recession is in turn a consequence of the necessary fiscal and structural reforms which the country must undertake to reduce its persistent demand for foreign credit. Irrespective of this, the Portuguese government should take measures to create additional investment incentives.

#### 7.4.2 Key factors for the trend in creditworthiness

**Consumption expenditure:** The main cause of the country's persistent demand for foreign credit is the Portuguese population's excessive consumption. In 2011, it consumed 106% of the available

net domestic product.<sup>70</sup> Together with Greece (113%), Portugal is the only Euro country with a consumption quota above 100% of the net domestic product. The excessive consumption means, on the one hand, that the country is incurring foreign debt for the purpose of consumption. On the other hand, it also results in Portugal having to use foreign credit to



finance capital formation. Since this credit has to be serviced, the revenue from such investments is then, to a large extent – if not entirely – channelled abroad.

<sup>67</sup> Source: Eurostat, own calculations.

<sup>68</sup> Source: Eurostat, own calculations.

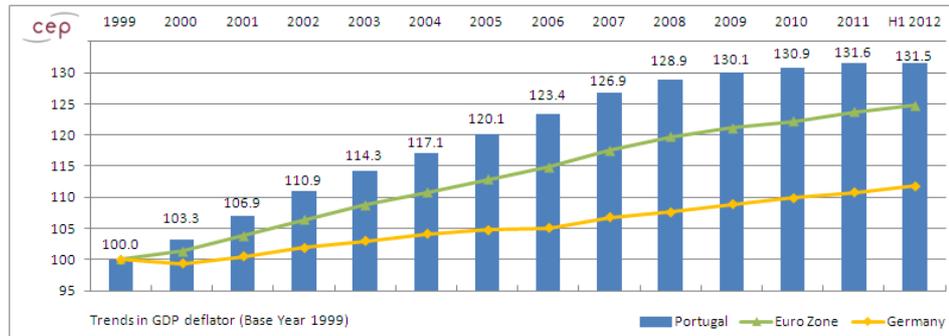
<sup>69</sup> Source: Eurostat, own calculations.

<sup>70</sup> Source: Eurostat, own calculations.

In order to get out of falling creditworthiness, consumption in Portugal must be significantly reduced and savings increased which will enable domestic capital to be accumulated and used for investment. This is the only way to increase capacity enhancing capital formation without incurring additional foreign debt.

**Competitiveness on world markets:** Loss of price competitiveness by Portuguese companies in the international trade in goods and services is the main cause for the country's lack of creditworthiness.

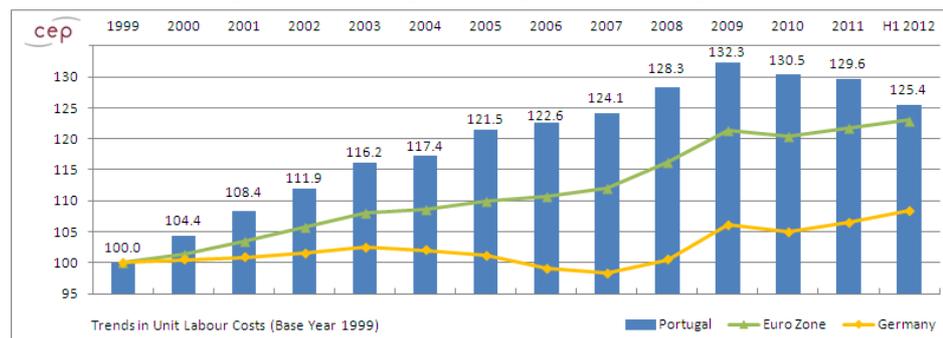
If we accept the GDP deflator as a measurement of competitiveness<sup>71</sup>, the trend in the Portuguese GDP deflator since 1999 shows: Portugal's competi-



tiveness fell starkly prior to 2009.<sup>72</sup> Since then, the GDP deflator has risen more slowly than the average for the Euro Zone, falling slightly for the first time in the first half of 2012. Relative competitiveness has therefore improved somewhat, if not to the extent required.

**Production costs:** The main key factor for the loss of competitiveness by Portuguese companies is an increase in production costs in Portugal which is significantly above average. If we accept unit

labour costs in the total economy as an empirical measurement of the development of production costs and thereby ultimately of competitiveness<sup>73</sup>, it gives



the following result for Portugal: since 2009, unit labour costs have fallen by almost seven percentage points and are thus approaching those for the whole Euro Zone.<sup>74</sup> By comparison with the trend in Germany they are still high however. For Portuguese companies to regain their international competitiveness, the unit labour costs must come down still further. In the short term, this will only be possible by a reduction in the compensation of employees.

For Portugal, the values for the GDP deflator and those for unit labour costs – as indicators of the competitiveness of a country – contradict each other: although unit labour costs have fallen, the price of goods is stagnating. These measurements do not therefore give any clear indication of whether or not the Portuguese economy has regained international competitiveness since the outbreak of the crisis. The CEP Default Index provides a more accurate picture of what is in any case a more fundamental problem, the trend in creditworthiness: Even though the Index continues to be negative, Portugal is on the right track.

<sup>71</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>72</sup> Source: Eurostat, own calculations.

<sup>73</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>74</sup> Source: Eurostat, own calculations.

### 7.4.3 Reforms

Portugal has undertaken to implement fundamental reforms in return for the promised financial aid. So far the country has consistently implemented the reforms. In the last few months, however, the public's willingness to accept reforms has somewhat declined. The recession in Portugal is also forcing additional savings.

#### Measures to restructure public finances

- ▶ In order to restructure public finances, the 13th and 14th additional monthly salaries for employees in the public sector and for retired employees with pensions exceeding € 1100 per month were withdrawn in 2012. The extent to which this will be continued in the future is unclear, however, as the Portuguese constitutional court considered the principle of equal treatment to have been violated. The 13th additional monthly salary will therefore be reinstated in future. In order to compensate for the expenses linked thereto, income tax has been raised to a maximum of 48% and a general surcharge of 3.5% passed on all types of income.
- ▶ The 2013 budget will also be examined by the constitutional court because President Cavaco Silva is uncertain whether the taxes which it contains are distributed equally. He fears that civil servants and pensioners will have to accept larger cuts than other sections of the population. Thus all pensions above € 1350 per month are to be cut by at least 3.5%, "golden pensions" of over € 7500 per month by 40%.
- ▶ Numerous public companies were privatised last year. This includes the electricity supplier EDP, the energy network operator REN and ten previously state-run airports. Soon to follow will be the Portuguese postal service CTT, the television channel RTP and parts of the Portuguese railway company. The sale of the airline TAP failed in December 2012 because the sole bidder was unable to provide the necessary guarantees. The finance ministry's supervisory powers over public sector companies have been extended.
- ▶ Despite these measures, the consolidation targets agreed with the troika could not be achieved because government revenues were lower than expected due to the recession. The troika has therefore given Portugal an additional year to restructure public finances. Portugal now has until 2014 to reduce the public deficit to 3%. The deficit requirements for 2012 and 2013 have been relaxed accordingly: for 2012 from 4.5% to 5.0% and for 2013 from 3.0% to 4.5%. In 2012, Portugal was able to comply with the relaxed deficit target of 5.0%.
- ▶ In order to achieve the targets in future, government expenditure is to be reduced further by halving public sector allowances for public holidays and overtime. In addition, the number of public employees is to be further reduced. These and other reductions in expenditure, particularly in the social area, are intended to give rise to savings of about € 4 billion in 2013 and 2014. Tax on petrol, cars and property is also going to be increased.

### Measures to improve competitiveness

- ▶ In order to increase flexibility in the labour market, the statutory requirements for redundancy payments have been reduced: from 30 days' salary for each year of service to 20 days' salary per year of service, up to a maximum of 12 months' salary. A further reduction to 12 days' salary is planned. The conditions under which employees can be dismissed have been extended. Thus employers no longer have to try to allocate an employee to another job in the company if his/her actual job ceases to exist. In addition, in the case of such dismissals, they no longer have to take account of seniority insofar as another appropriate criterion is applied. The dismissal of unsuitable employees has also been made easier. Until now, this was only possible where a new technology had been introduced or there had been some other change in the affected employee's area of work. This requirement no longer applies.
- ▶ The statutory provisions on wage negotiations have been relaxed. Thus the economic situation of individual companies, particularly small and medium-sized companies, can now be better taken into consideration. Declaring collective agreements to be generally binding is now only possible where the agreement has been concluded by an employers' association covering at least 50% of the affected employees.
- ▶ The minimum period for receiving unemployment benefit has been reduced from 270 to 120 days. The maximum period has also been reduced but varies greatly from person to person depending, in particular, on the age of the recipient. The level of unemployment benefit has also been reduced.
- ▶ The reform bill to reduce the social insurance contributions of employers from 23.75% to 18%, whilst increasing that of employees from 11% to 18%, was abandoned following a public outcry.

### **7.4.4 Conclusion and outlook**

- ▶ Portugal is on the right track. To get back onto the path of growth, exports must be further increased because the reduction of debt levels in private households and the consolidation of public finances mean that there are unlikely to be any domestic growth impulses in 2013. A reduction in the high propensity to consume in favour of an increase in savings is required. In order to achieve the deficit target in 2013 as well, additional measures need to be taken because the economic recession has proven to be worse than expected.
- ▶ In the last few years, the public widely supported the government's reforms but, with unemployment at over 15%, support for the government has waned in recent months. In order to successfully implement the remaining reforms and thereby regain the confidence of international investors, however, the support of the public is essential.

## 7.5 Spain

### 7.5.1 CEP Default Index<sup>75</sup>

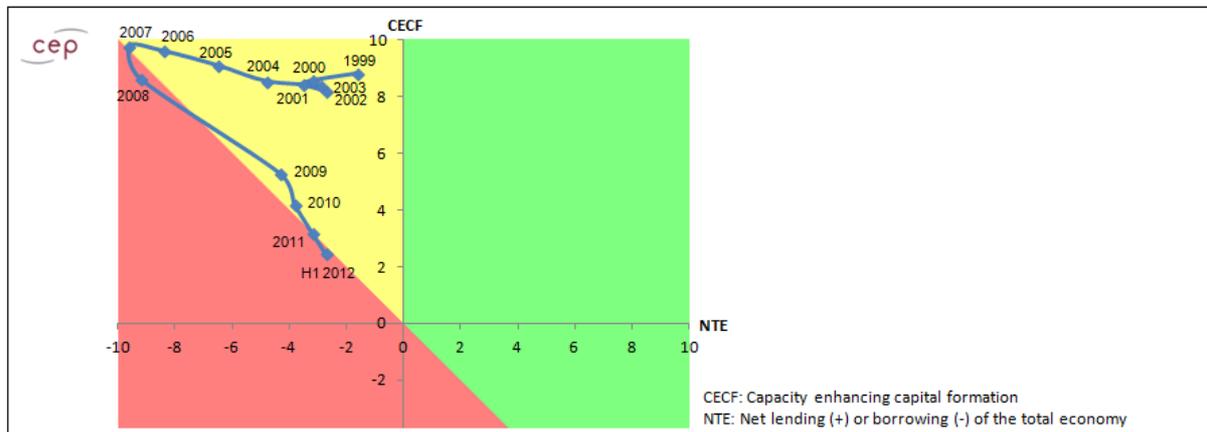
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-1.6	-3.2	-3.5	-2.7	-2.9	-4.8	-6.5	-8.4	-9.6	-9.2	-4.3	-3.8	-3.2	-2.7
CECF	8.8	8.6	8.5	8.2	8.4	8.6	9.1	9.6	9.8	8.6	5.3	4.2	3.2	2.5
CEP Default Index	7.2	5.4	5.0	5.5	5.5	3.8	2.6	1.2	0.2	-0.6	1.0	0.4	0.0	-0.2
Risk category	2	2	2	2	2	2	2	2	2	3	2	2	2	3

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

**Trend in the CEP Default Index:** At  $-0.2$ , Spain showed a negative Index value in the first half of 2012 for the second time since the introduction of the Euro, the first time being in 2008, because net borrowings exceeded – if only slightly – capacity enhancing capital formation. This indicates falling creditworthiness. As the above table and the following graphic indicate<sup>76</sup>, Spain took on an increasing amount of foreign debt in the first years following introduction of the Euro. Initially, foreign credit was balanced by a still high level of capacity enhancing capital formation. Since 2008, both the demand for foreign credit and capacity enhancing capital formation have fallen. Since 2009, however, the former has fallen more slowly than the latter.



In Spain, high levels of credit-financed investments in the construction sector had led to a real estate bubble thereby triggering a banking crisis. Supporting the banks had placed too great a burden on the Spanish state so it applied for European financial aid for this on 25 June 2012. The CEP Default Index deliberately only represents this situation to the extent that it leads to a demand

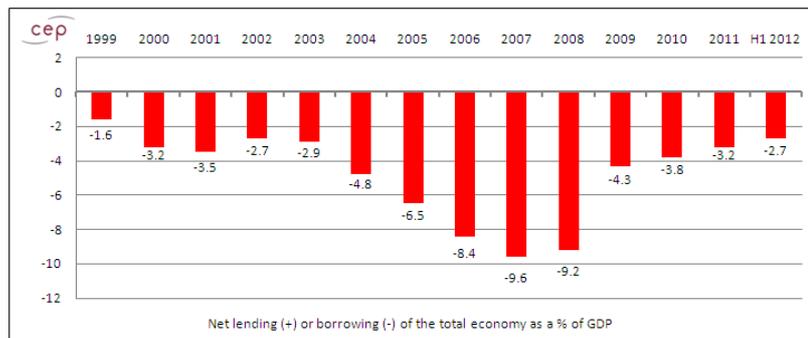
<sup>75</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. For the first half of 2012, the CEP Default Index was calculated based on the period from Q3 2011 to Q2 2012 because no seasonally adjusted or daily adjusted data was available.

<sup>76</sup> The graphic shows the development of the NTE, CECF and Spain's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

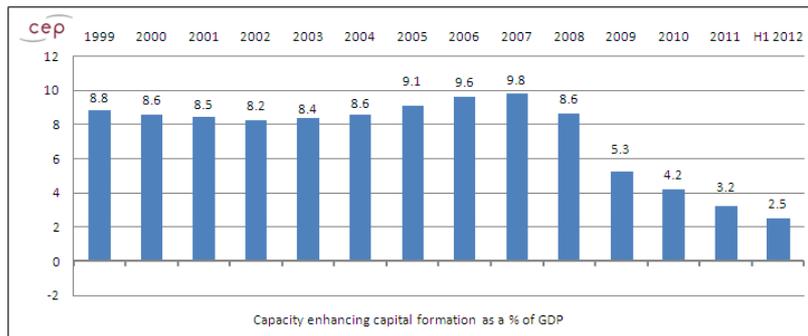
for foreign credit. In addition, these are "one off" burdens which – by contrast with a country's competitiveness problems – do not return or get worse each year.

Spain's creditworthiness trend is characterised by the fact that the fall in the demand for foreign credit, which has arisen since 2009, is being slightly outweighed by a larger decline in capacity enhancing capital formation.

**Net lending or borrowing of the total economy (NTE):** The Spanish economy's net borrowing fell significantly both in 2011 and in the first half of 2012.<sup>77</sup> On the one hand, this is due to the high level of unemployment and the accompanying reduction in demand for imports. On the other hand, exports have noticeably increased. The country nevertheless continues to incur foreign debt. In the Euro Zone, only Greece and Cyprus showed a higher level of demand for borrowing in the first half of 2012. As a result of the borrowing, Spain's foreign debt, which stood at 92% of GDP at the end of 2011<sup>78</sup>, continues to rise.



**Capacity enhancing capital formation (CECF):** Capacity enhancing capital formation has been falling continuously since 2008.<sup>79</sup> This trend continued in the first half of 2012. At 2.5% of GDP, capacity enhancing capital formation is, however, still above the Euro Zone average of 2.1%. As a proportion of GDP, the Spanish government also continues to invest more than the German government despite the austerity programme.



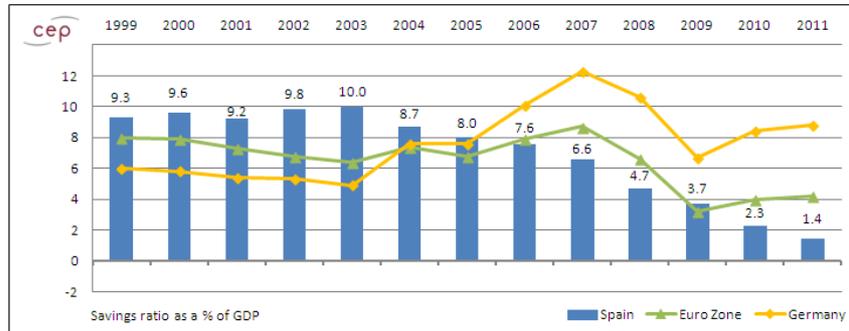
<sup>77</sup> Source: Eurostat, own calculations.

<sup>78</sup> Source: Eurostat, own calculations.

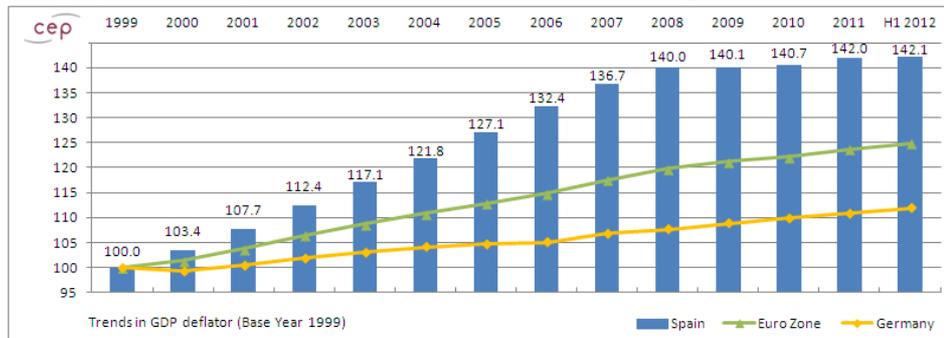
<sup>79</sup> Source: Eurostat, own calculations.

### 7.5.2 Key factors for the trend in creditworthiness

**Accumulation of savings:** In order to get out of falling creditworthiness, the Spanish economy must increase its tendency to save. That is the only way to obtain more domestic capital for investment and the only way to reduce the take-up of foreign credit. The savings ratio, based on the country's GDP, has fallen year on year since 2003, and stood at only 1.4% of GDP in 2011.<sup>80</sup> Only Greece, Portugal and Italy show lower values. The Euro Zone average for the savings ratio was 4.2%.

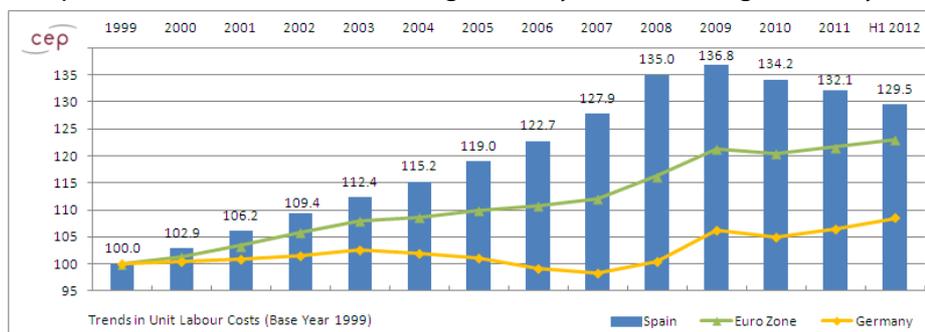


**Competitiveness on world markets:** In addition to the bursting of the real estate bubble, the loss of price competitiveness by Spanish companies in the international trade in goods and services is the main cause of the erosion of the country's creditworthiness. If we accept the GDP deflator as a measurement of competitiveness<sup>81</sup>, the trend in the Spanish GDP deflator since 1999 shows: Spain's competitiveness compared with the rest of the Euro Zone, and particularly with Germany, fell significantly prior to 2008.<sup>82</sup> Since then, the GDP deflator has remained moderate and, more importantly, has risen more slowly than the Euro Zone average. Relative competitiveness has therefore improved somewhat but, in order to regain international competitiveness quickly, the GDP deflator has to come down in absolute terms.



Spain's competitiveness compared with the rest of the Euro Zone, and particularly with Germany, fell significantly prior to 2008.<sup>82</sup> Since then, the GDP deflator has remained moderate and, more importantly, has risen more slowly than the Euro Zone average. Relative competitiveness has therefore improved somewhat but, in order to regain international competitiveness quickly, the GDP deflator has to come down in absolute terms.

**Production costs:** The main key factor for the loss of competitiveness by Spanish companies comes from an increase in production costs which was significantly above average in the years prior to 2009. If we accept unit labour costs in the total economy as an empirical measurement of the development of production costs and thereby ultimately of competitiveness<sup>83</sup>, it gives the following result: By reference to 1999, when the Euro was introduced, unit labour costs in Spain have seen a rise far above the average as compared with Euro Zone as a



<sup>80</sup> Source: Eurostat, own calculations.

<sup>81</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>82</sup> Source: Eurostat, own calculations.

<sup>83</sup> For the weaknesses of this measurement see Chapter 4.4.

whole, and in particular with Germany.<sup>84</sup> Since 2009, however, they have fallen by over seven percentage points. The gap which opened up previously is thus – slowly – closing up again. For Spanish companies to regain their international competitiveness, the unit labour costs must come down still further. In the short term, this will only be possible by a reduction in the compensation of employees.

For Spain, the values for the GDP deflator and those for unit labour costs – as indicators of the competitiveness of a country – contradict each other: although unit labour costs have fallen, the price of goods is stagnating. These measurements do not therefore give any clear indication of whether or not the Spanish economy has regained international competitiveness since the outbreak of the crisis.

### 7.5.3 Reforms

In June 2012, Spain applied for European financial aid to recapitalise its banks. Since then there has been speculation as to whether the country will make a full application for financial aid.

#### Measures to restructure public finances

- ▶ In order to restructure public finances, Spain decided to reduce the number of high-level civil servants at central government level by 20%. In addition, the government raised the working week in the public sector from 35 hours to 37.5 hours, cut salaries by 5%, froze them until 2013 and cancelled the 14th additional monthly salary for 2012. In future, the civil service will be able to make employees redundant, particularly where the budget is insufficient or where it asserts "technical or organisational reasons".
- ▶ Spain has cut the allocation of funds to political parties and raised the maximum class-size in public secondary schools by 20%.
- ▶ The autonomous regions have undertaken to reduce their deficits. The new deficit requirements allow for a maximum deficit of 0.7% and 0.1% of regional GDP in 2013 and 2014 respectively. In 2015, the regions must achieve a budget surplus of 0.2% of regional GDP. Regions that fail to achieve these targets will be subject to sanctions. In addition, it has been stipulated for all levels of government that expenditure must not grow more than GDP. In return, a fund has been set up to provide credit to regions with liquidity problems. Similar to the IMF credit schemes, such credit is subject to conditions.
- ▶ Spain has incorporated a debt brake into its constitution which, as from 2020, will, as a rule, only permit budgets which are structurally balanced. In addition, the servicing of debt has been given precedence over all other expenditure.
- ▶ In order to reduce the costs of the health system, Spain has brought in a patient surcharge on medicines and generic drugs must be prescribed more often. Packaging sizes have also been adjusted and the purchasing of medicines centralised.
- ▶ In December 2012, it was also decided not to adjust pensions for inflation. Instead, pensions will only go up by one per cent in 2013. This does not include pensioners whose pension is less than €1000 whose pension will go up by 2%. It is probable, however, that the Spanish constitutional court will have to decide whether this is in breach of the right of pensioners to maintain their purchasing power, as laid down in the Social Insurance Code.

<sup>84</sup> Source: Eurostat, own calculations.

- ▶ In order to increase revenue, the Spanish government has increased the rate of value added tax from 18% to 21% and the reduced value added tax rate from 8% to 10%. A surcharge of up to 7% has been added to income tax. Tax on tobacco and property tax have also been increased.
- ▶ Despite these measures, the consolidation targets set by the EU were not achieved. The EU finance ministers have therefore given Spain an additional year to restructure public finances. Spain now has until 2014 to reduce the public deficit to 2.8%. The deficit requirements for 2012 and 2013 have been relaxed accordingly: for 2012 from the original -4.4% to -6.3% and for 2013 from -3.0% to -4.5%.

#### Measures to improve competitiveness

- ▶ In order to increase the international competitiveness of Spanish companies, employees and employers have agreed that wages and salaries will only go up by 0.5% and 0.6% in 2012 and 2013 respectively. In addition, works agreements on working hours and pay take precedence over other collective agreements.
- ▶ In order to increase the flexibility of companies, a law has been passed to make dismissals easier. It limits severance payments, in the case of an unlawful dismissal, to 33 days' pay per year of service, up to a maximum of 24 months' pay. Previously, it had been 45 days' pay per year of service, up to a maximum of 42 months' pay. Payment of wage arrears have also been dropped. The law only applies to new contracts.
- ▶ The requirement of official authorisation for mass redundancies and temporary lay-offs has been removed. Overtime for part-time employees is now permitted.
- ▶ To combat youth unemployment whilst at the same time encouraging free enterprise, small businesses and self-employed people who take on an employee for the first time have been granted a tax rebate of € 3000. This is based on the proviso that the employee is no older than 30 and is given a permanent full-time contract. Where the employee was previously unemployed, the business will be granted an additional tax rebate, for a maximum of one year, amounting to 50% of the unemployment benefit which the employee was receiving when he/she was taken on.
- ▶ Companies with fewer than 50 employees have to pay lower social insurance contributions when they take on either younger or older unemployed people: if the unemployed person is between 16 and 30 and is given a full-time position, the company's social insurance contributions for this employee are reduced in the first year by € 1000, in the second year by € 1100 and in the third year by € 1200. Where a full-time position is given to an unemployed person who is over 45 and has been unemployed for at least a year, the rebate is € 1300 p.a. for a period of three years.

#### **7.5.4 Conclusion and outlook**

- ▶ The fall in Spain's creditworthiness is not as dramatic as that of Greece, Portugal and Cyprus and is less pronounced than in Italy.
- ▶ Nevertheless, Spain must further reduce its demand for foreign credit. For this, the public deficit must come down still further. In order to actually get it back down to 2.8% of GDP until 2014, efforts to restructure public finances at all levels must be kept up. The autonomous regions, in particular, must stick to their deficit targets. The measures intended to ensure this, do not seem to be enough as some regions are still exceeding their deficit targets.
- ▶ In order to reduce Spain's demand for borrowing, Spain's economic structure must also become more geared towards exports. The Spanish government has already initiated appropriate measures to increase flexibility and inter-sectoral mobility on the labour market. In the long-term, these measures will reduce unemployment. In the short-term, though, they may increase the already high level of unemployment.
- ▶ The high levels of unemployment, particularly among young people, are jeopardising the success of the Spanish reforms. If the resulting social tensions increase further, future reforms and the reforms which have already been undertaken will be cast into doubt. Thus the success of Spain's efforts to reform will depend on how quickly labour market reforms can bring about a positive effect on employment levels.

## 7.6 Cyprus

### 7.6.1 CEP Default Index<sup>85</sup>

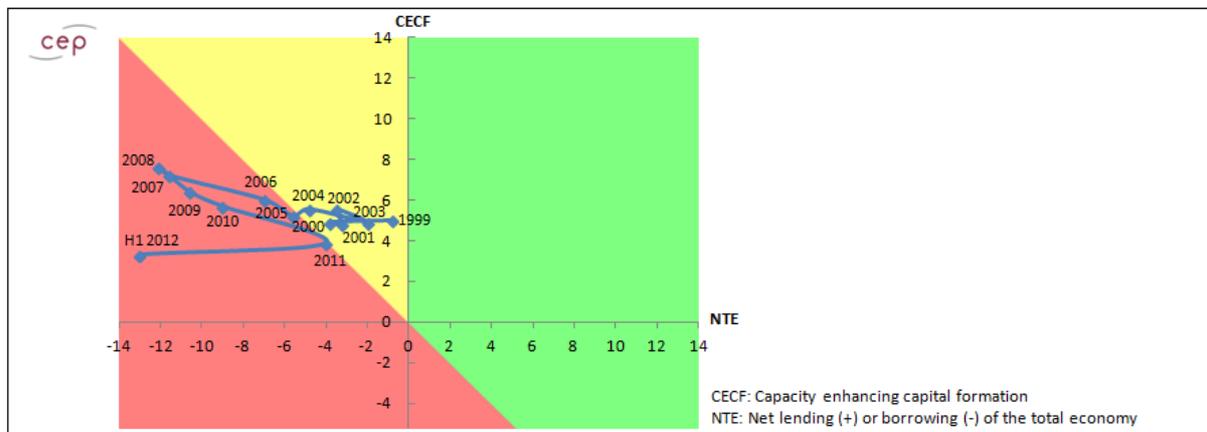
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
<b>NTE</b>	-0.8	-3.8	-3.2	-3.5	-2.0	-4.8	-5.6	-7.0	-11.6	-12.1	-10.6	-9.0	-4.0	-13.0
<b>CECF</b>	5.0	4.9	4.8	5.5	4.9	5.5	5.2	6.0	7.2	7.7	6.4	5.7	3.9	3.3
<b>CEP Default Index</b>	4.2	1.1	1.6	2.0	2.9	0.7	-0.4	-1.0	-4.4	-4.4	-4.2	-3.3	-0.1	-9.7
<b>Risk category</b>	2	2	2	2	2	2	3	3	4	4	4	4	4	4

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

**Trend in the CEP Default Index:** Cyprus' creditworthiness – as the above table and the following graphic show<sup>86</sup> – fell continuously between 2005 and 2011. Following a marked slow-down in the deterioration in 2011, the first half of 2012 saw a dramatic setback. The Index fell to a new low of -9.7. Of all the Euro countries, only Greece, with -10.9 shows a lower value. It is no surprise therefore that Cyprus has had to apply for European financial aid.

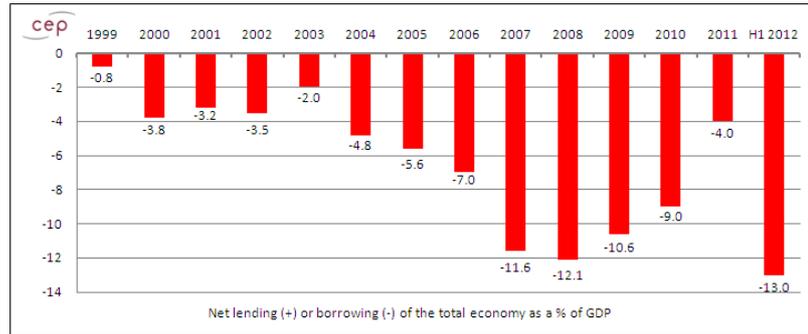


The trend in Cyprus' creditworthiness is largely due to net borrowing and, to a lesser extent, to the continued decline in capacity enhancing capital formation.

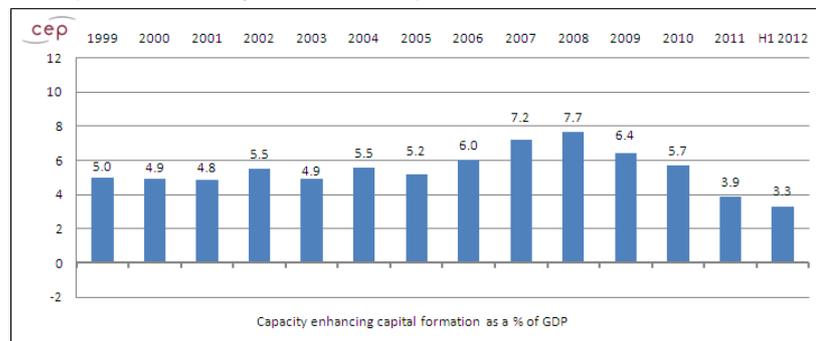
<sup>85</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>86</sup> The graphic shows the development of the NTE, CECF and Cyprus' creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

**Net lending or borrowing of the total economy (NTE):** Between 2008 and 2011, Cyprus' net borrowing fell from 12.1% to 4.0% of GDP.<sup>87</sup> In the first half of 2012 it soared to 13% of GDP exceeding even its previous all-time negative high of 2008. This was also the highest net borrowing figure of all the Euro countries. The country's already high level of foreign debt of 71.3% of GDP increased further as a result.<sup>88</sup>

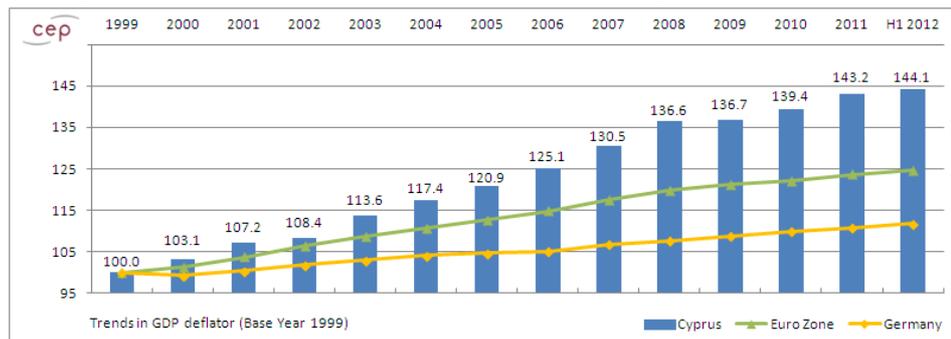


**Capacity enhancing capital formation (CECF):** Although capacity enhancing capital formation was always positive, it has been falling continuously since the highpoint of 2008.<sup>89</sup> The fall stems exclusively from a decline in private investment which dropped by 72% between 2008 and 2011. Public investment increased in the same period by 13%.<sup>90</sup> Capacity enhancing capital formation is, however, still above the Euro Zone average of 2.6%.



### 7.6.2 Key factors for the trend in creditworthiness

**Competitiveness on world markets:** The loss of price competitiveness by Cypriot companies in the international trade in goods and services is the main cause of the erosion of the country's creditworthiness. If we accept the GDP deflator as a measurement of competitiveness<sup>91</sup>, the trend in the Cypriot GDP deflator since 1999 shows: Cyprus' competitiveness has fallen starkly.<sup>92</sup> The rise of 44.1 per cent in the GDP deflator not only exceeds that of



Greece but also Ireland, Italy, Portugal, Spain and France. Compounding the problem is the fact that Cyprus' GDP deflator has also seen an above-average rise over the last year and a half as compared with the entire Euro Zone. Even by comparison with the other crisis countries, Cyprus has lost ground: Although the GDP deflator has also risen for Greece, Portugal, Spain, Italy and France it

<sup>87</sup> Source: Eurostat, own calculations.

<sup>88</sup> Source: Eurostat, own calculations.

<sup>89</sup> Source: Eurostat, own calculations.

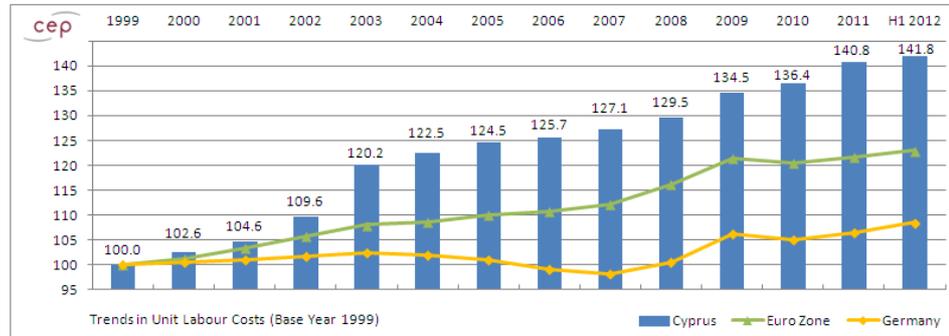
<sup>90</sup> Source: Ameco, own calculations.

<sup>91</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>92</sup> Source: Eurostat, own calculations.

has done so to a significantly lesser degree than in Cyprus, Ireland's even fell. Cyprus' relative competitiveness therefore also continued to worsen in 2011 and in the first half of 2012.

**Production costs:** The main key factor for the loss of competitiveness by Cypriot companies is an increase in production costs in Cyprus which is significantly above average. If we accept unit labour costs in the total economy as an empirical measurement of the development of production costs and thereby ultimately of competitiveness<sup>93</sup>, it gives the following result for



Cyprus: Unit labour costs have risen since 1999 by almost 42%; this is the largest rise of all the crisis countries.<sup>94</sup> 7.3 of those percentage points apply to the more recent period since the start of the crisis in 2008. By contrast with this development in Cyprus, the unit labour costs in other crisis countries have – with the exception of Italy – significantly fallen since 2008. For Cypriot companies to regain their international competitiveness, the unit labour costs must rise more slowly than those of its main competitors or even fall. In the short term, the latter will only be possible by a reduction in the compensation of employees.

The continued rise in both the GDP deflator and unit labour costs, observed since the start of the crisis, is an indication that Cyprus' competitiveness on world markets, has declined further over the last few years which has substantially contributed to an intensification of the more fundamental problem of the fall in the country's creditworthiness.

### 7.6.3 Reforms

At the end of June 2012, Cyprus applied for financial aid from the European bailout fund. The negotiations with the troika, made up of the European Commission, ECB and IMF, as to whether and under what conditions Cyprus is to be granted aid from the ESM, are still on-going. Since a large part of the money held by Cypriot banks comes from Russia, Russia granted Cyprus a loan of € 2.5 billion as early as the end of 2011. The high level of Russian capital is consistently put down to the fact that Cyprus has not been effectively combating money laundering. Cyprus' application to the European bailout fund, coincided with its making a further request to Russia for financial support.

<sup>93</sup> For the weaknesses of this measurement see Chapter 4.4.

<sup>94</sup> Source: Eurostat, own calculations.

### Measures to restructure public finances

- ▶ In 2011, a reduced value added tax rate of 5% on food and medicines was brought in; prior to this, these products had been exempt from value added tax. Socially deprived groups received compensation payments in the first year, 2011. In 2012, the general rate of value added tax was increased from 15% to 17%.
- ▶ In 2011, tax on the interest paid on bank deposits was increased from 10% to 15%, tax on dividend pay-outs from 15% to 20%. In addition, a charge on bank accounts amounting to 0.095% of customer deposits was brought in. This money was channelled into a fund to support banks at risk of insolvency.
- ▶ In 2012, an additional charge of 3.5% of gross income was introduced for employees and pensioners which is to be imposed for a period of two years.
- ▶ Public sector salary bonuses have been reduced.
- ▶ Since 2012, only one in four public sector jobs which come available can be filled. This is intended to save 5000 jobs over the next five years.

### Measures to improve competitiveness

- ▶ In order to reduce salary costs, wage indexation will be suspended for a period of two years.
- ▶ In order to bring the education system into line with the requirements of the labour market, schools have been provided with new teaching material since 2011 which concentrates on the development of key qualifications.

## **7.6.4 Conclusion and outlook**

- ▶ Cypriot banks have to be recapitalised by the government. They are closely linked to the Greek economy and, as a result of the Greek crisis, they experienced a significant loss of accounts receivable. The future of Cyprus depends not least on whether Cypriot banks can successfully be recapitalised.
- ▶ Flight capital or the influx of funds which only serve the purpose of money laundering, can lead to distortions of the real economy. This is also why Cyprus should use every means to combat money laundering.
- ▶ Until now, Cyprus has not implemented any noteworthy reforms in order to regain the competitiveness of the Cypriot economy. The central requirement for regaining creditworthiness is therefore missing.
- ▶ The reforms so far carried out to restructure public finances are also insufficient. They are largely restricted to increasing revenues. In order to reduce the budget deficit, however, additional reductions in expenditure are necessary.
- ▶ It is not currently possible to judge whether the public will be willing to accept fundamental structural reforms.

## 8 Other European countries and Euro Zone as a whole

### 8.1 Belgium<sup>95</sup>

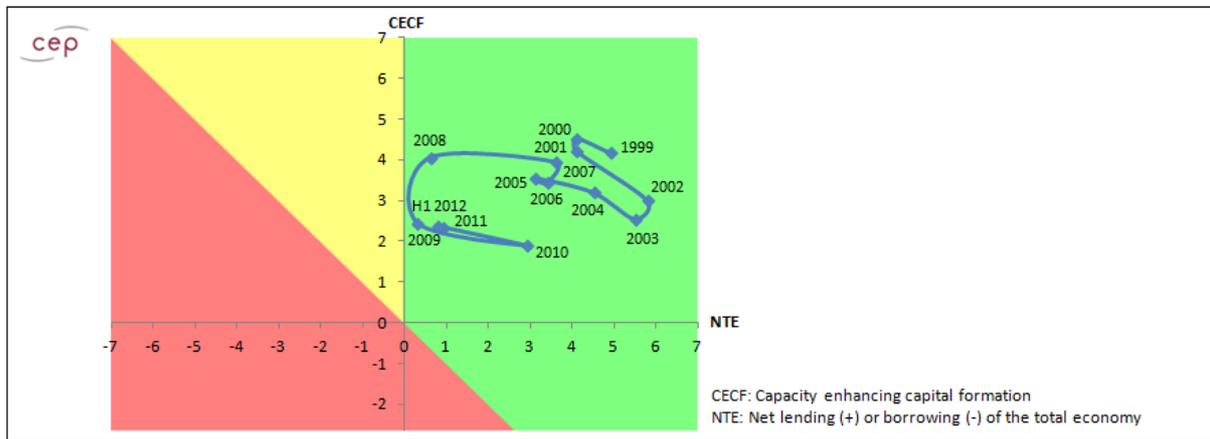
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	4.9	4.1	4.1	5.8	5.5	4.5	3.1	3.4	3.6	0.6	0.3	2.9	0.9	0.8
CECF	4.2	4.5	4.2	3.0	2.5	3.2	3.6	3.4	3.9	4.1	2.4	1.9	2.3	2.4
CEP Default Index	9.1	8.6	8.3	8.8	8.0	7.7	6.7	6.8	7.5	4.7	2.7	4.8	3.2	3.2
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

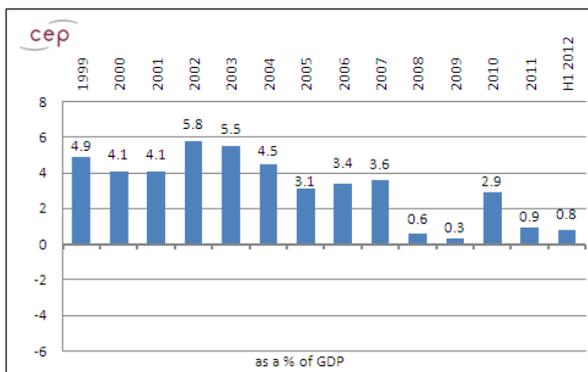
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

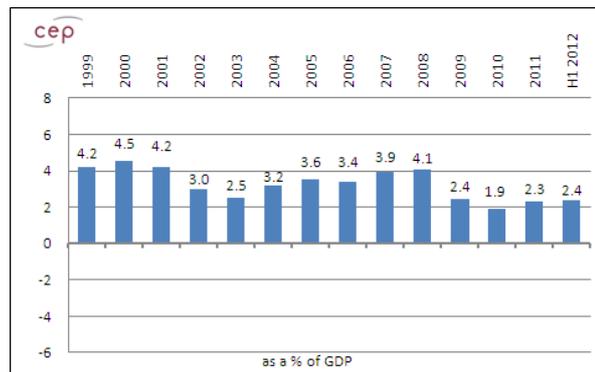
#### Trend in the CEP Default Index<sup>96</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>95</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. The figures for net capital investment in residential buildings, required for calculating capacity enhancing capital formation (CECF), have been estimated for the first half of 2012 on the basis of an annual prognosis from the Commission.

<sup>96</sup> The graphic shows the development of the NTE, CECF and Belgium's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

## 8.2 Germany<sup>97</sup>

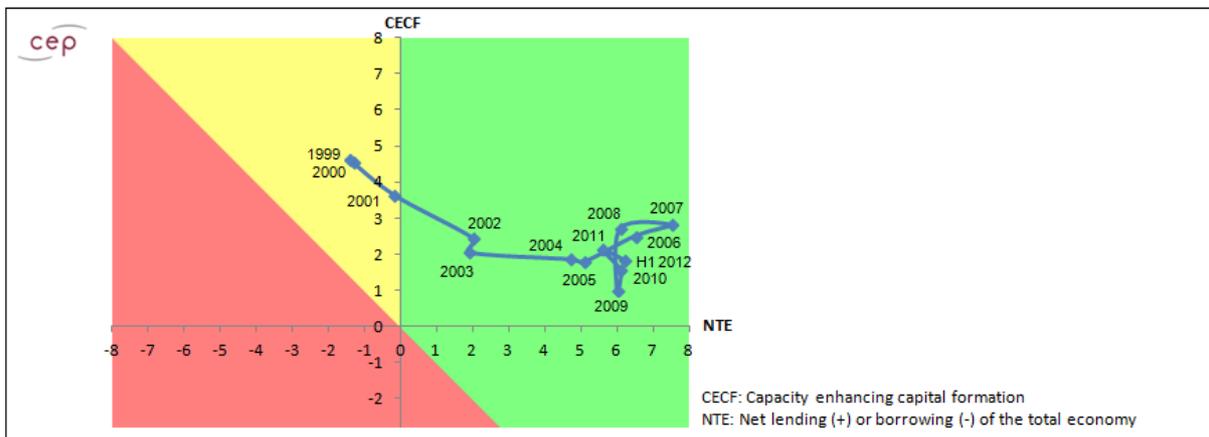
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-1.3	-1.4	-0.2	2.0	1.9	4.7	5.1	6.5	7.5	6.1	6.0	6.1	5.6	6.2
CECF	4.6	4.6	3.6	2.4	2.0	1.9	1.8	2.5	2.8	2.7	1.0	1.5	2.1	1.8
CEP Default Index	3.3	3.2	3.4	4.4	3.9	6.6	6.9	9.0	10.3	8.8	7.0	7.6	7.7	8.0
Risk category	2	2	2	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

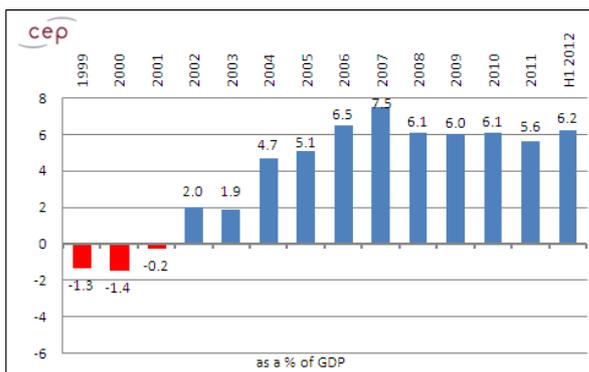
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

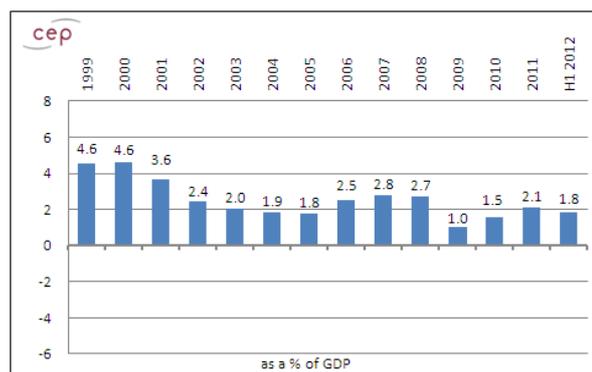
### Trend in the CEP Default Index<sup>98</sup>



### Net lending or borrowing of the total economy



### Capacity enhancing capital formation



<sup>97</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>98</sup> The graphic shows the development of the NTE, CECF and Germany's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 8.3 Estonia<sup>99</sup>

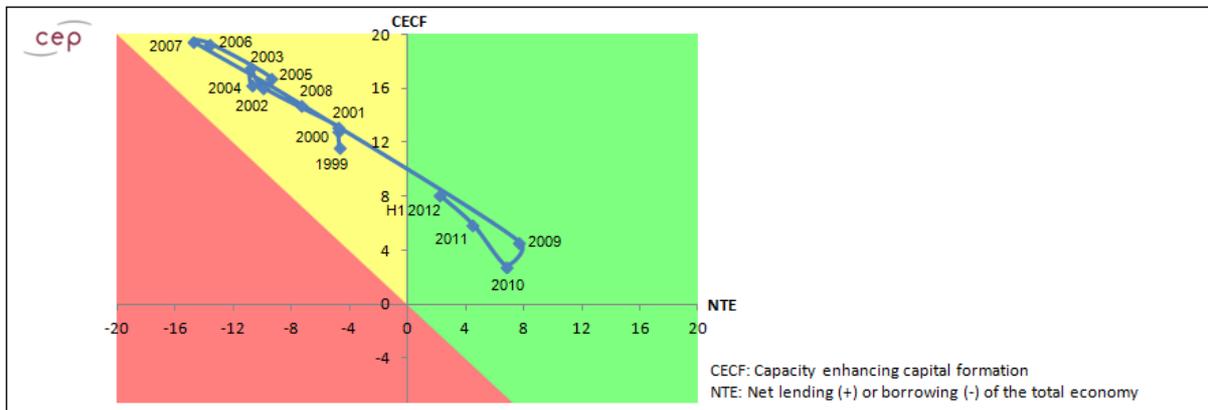
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-4.7	-4.8	-4.8	-9.9	-10.8	-10.7	-9.4	-13.6	-14.7	-7.3	7.7	6.8	4.5	2.2
CECF	11.6	12.8	13.2	16.0	17.6	16.2	16.8	19.3	19.4	14.8	4.6	2.8	5.9	8.1
CEP Default Index	6.9	8.0	8.4	6.1	6.8	5.5	7.4	5.7	4.7	7.5	12.3	9.6	10.4	10.3
Risk category	2	2	2	2	2	2	2	2	2	2	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

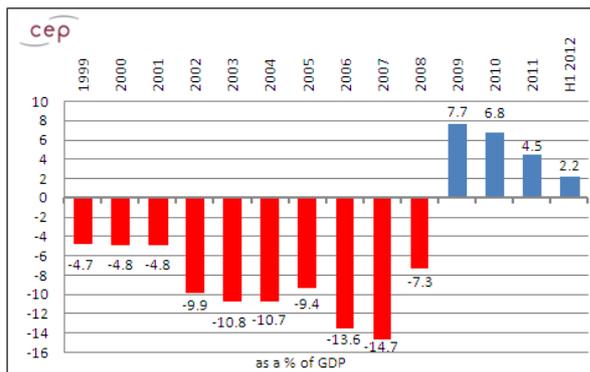
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

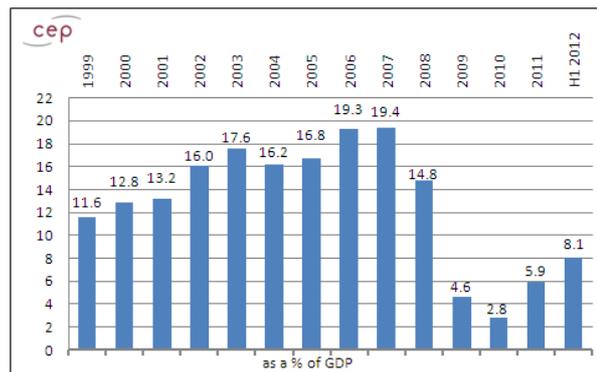
#### Trend in the CEP Default Index<sup>100</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>99</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>100</sup> The graphic shows the development of the NTE, CECF and Estonia's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 8.4 Finland<sup>101</sup>

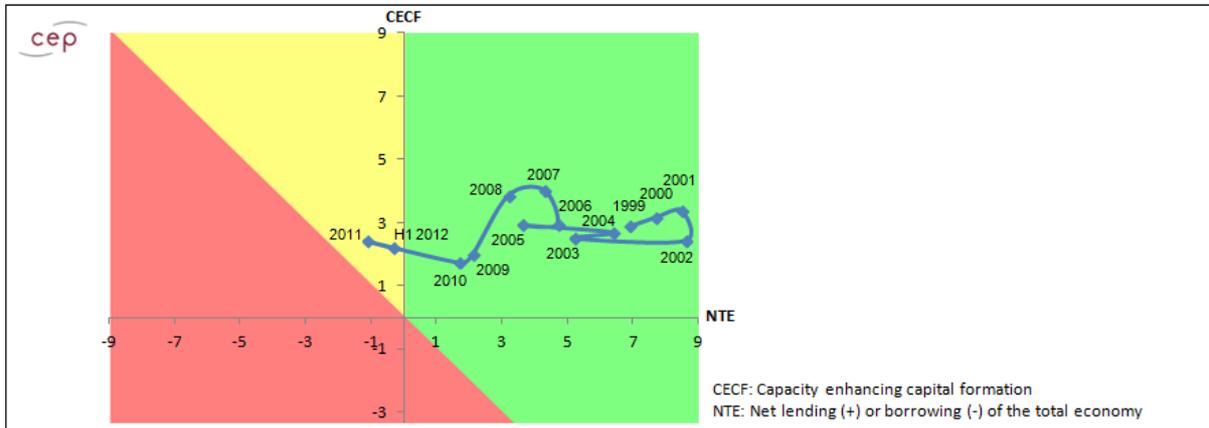
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	6.9	7.7	8.5	8.6	5.2	6.4	3.6	4.7	4.3	3.2	2.1	1.7	-1.1	-0.3
CECF	2.9	3.2	3.4	2.4	2.5	2.7	2.9	2.9	4.0	3.8	2.0	1.7	2.4	2.2
CEP Default Index	9.8	10.9	11.9	11.0	7.7	9.1	6.5	7.6	8.3	7.0	4.1	3.4	1.3	1.9
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	2	2

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

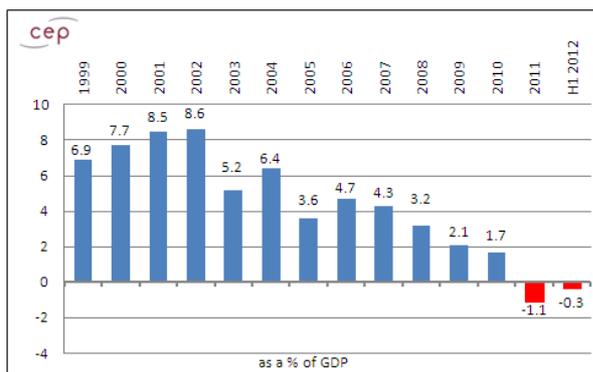
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

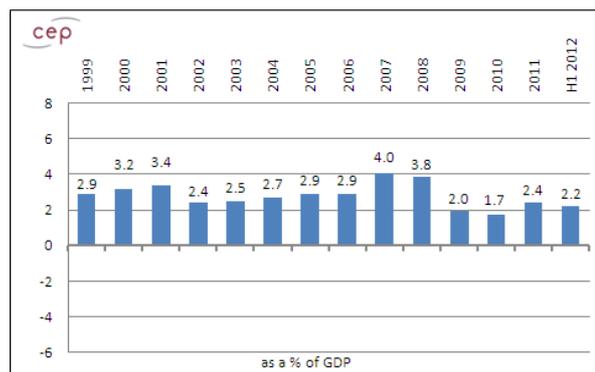
#### Trend in the CEP Default Index<sup>102</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>101</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>102</sup> The graphic shows the development of the NTE, CECF and Finland's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 8.5 Luxembourg<sup>103</sup>

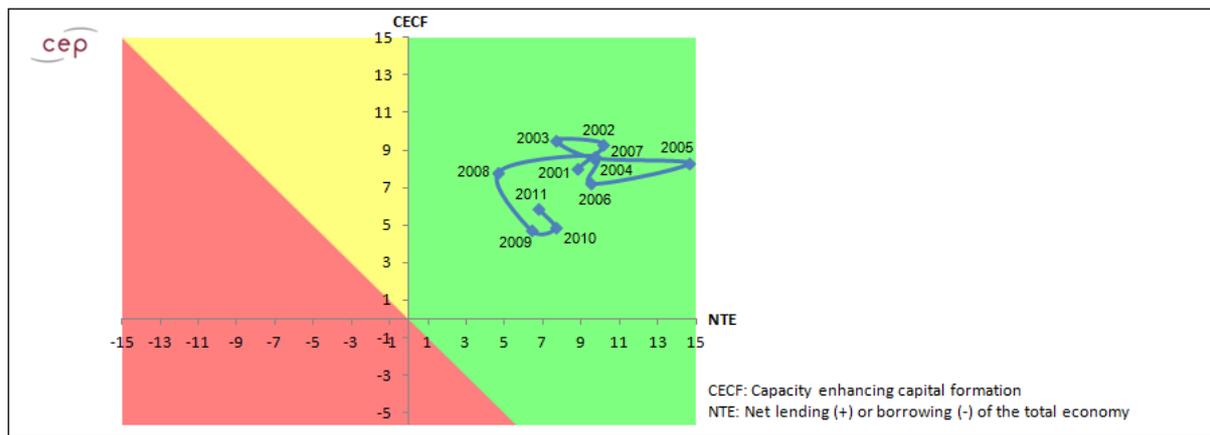
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	8.8	10.1	7.7	9.6	14.6	9.5	9.7	4.7	6.4	7.6	6.8
CECF	8.0	9.3	9.5	8.6	8.3	7.2	8.7	7.8	4.7	4.8	5.9
CEP Default Index	16.8	19.4	17.2	18.2	22.9	16.7	18.4	12.5	11.1	12.4	12.7
Risk category	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

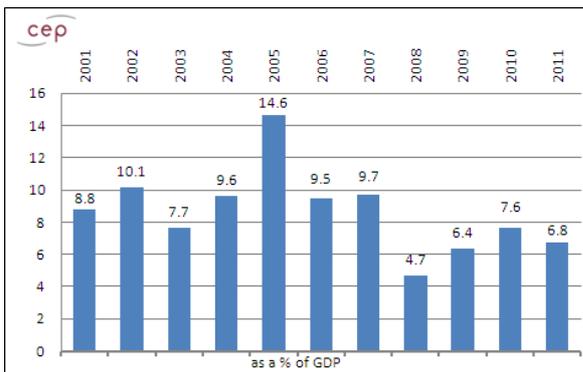
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

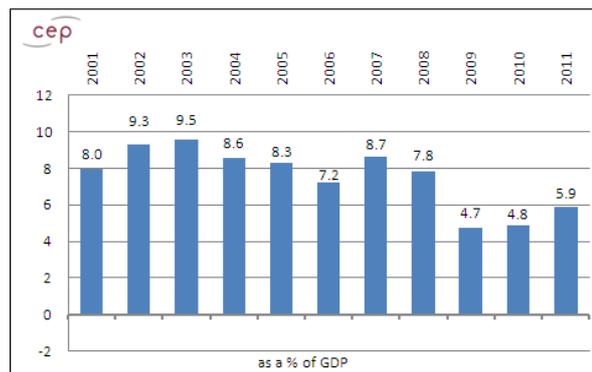
#### Trend in the CEP Default Index<sup>104</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>103</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. There is not enough data available to calculate the CEP Default Index for 1999, 2000 and the first half of 2012.

<sup>104</sup> The graphic shows the development of the NTE, CECF and Luxembourg's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 8.6 Malta<sup>105</sup>

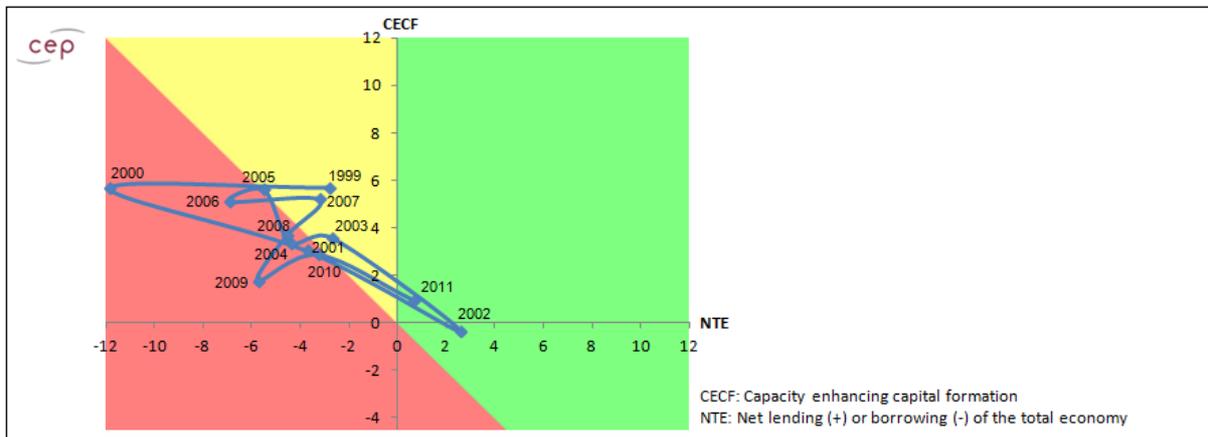
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	-2.8	-11.8	-3.7	2.6	-2.7	-4.4	-5.5	-6.9	-3.2	-4.6	-5.8	-3.3	0.7
CECF	5.7	5.7	3.0	-0.4	3.6	3.4	5.6	5.1	5.2	3.7	1.8	2.9	0.9
CEP Default Index	2.9	-6.1	-0.7	2.2	0.9	-1.0	0.1	-1.8	2.0	-0.9	-4.0	-0.4	1.6
Risk category	2	3	3	1	2	3	2	3	2	3	3	4	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

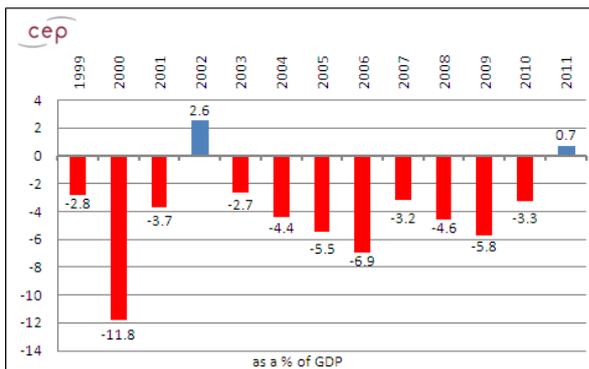
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP), that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

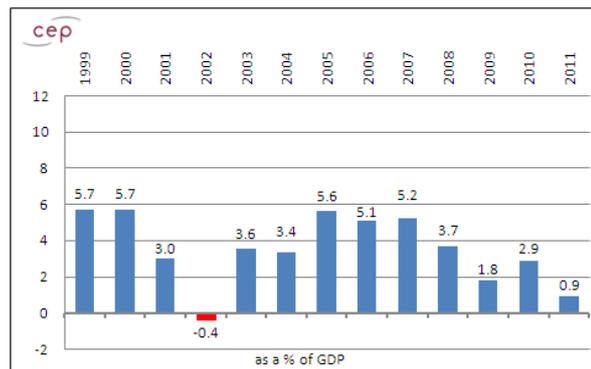
#### Trend in the CEP Default Index<sup>106</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>105</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. There is not enough data available to calculate the CEP Default Index for the first half of 2012. Maltese net lending or borrowing of the total economy (NTE), particularly for 2011, has been extensively corrected in recent months. Further corrections cannot be ruled out at this time.

<sup>106</sup> The graphic shows the development of the NTE, CECF and Malta's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 8.7 Netherlands<sup>107</sup>

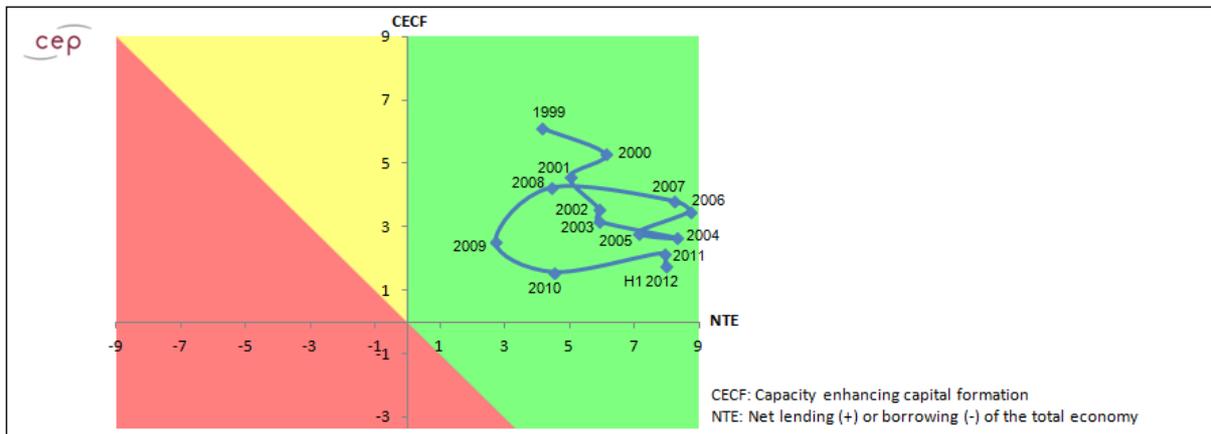
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	4.1	6.1	5.0	5.9	5.9	8.3	7.1	8.7	8.2	4.4	2.7	4.5	7.9	7.9
CECF	6.2	5.3	4.6	3.6	3.2	2.6	2.8	3.5	3.8	4.2	2.5	1.6	2.2	1.8
CEP Default Index	10.3	11.4	9.6	9.5	9.1	10.9	9.9	12.2	12.0	8.6	5.2	6.1	10.1	9.7
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

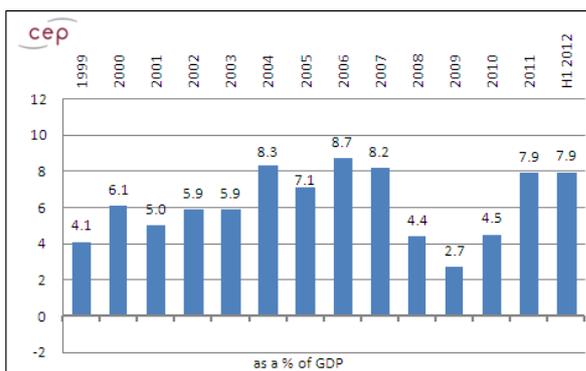
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

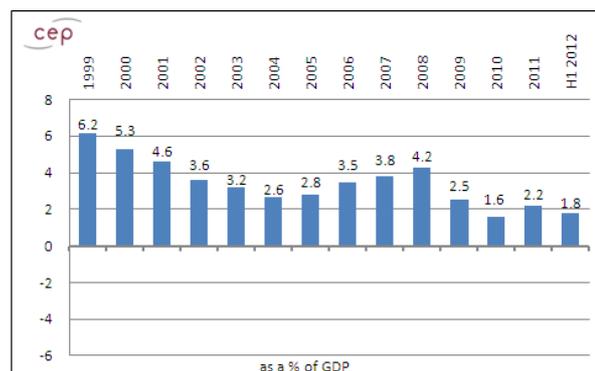
#### Trend in the CEP Default Index<sup>108</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>107</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. For the first half of 2012, the CEP Default Index was calculated based on the period from Q3 2011 to Q2 2012 because no seasonally adjusted or daily adjusted data was available.

<sup>108</sup> The graphic shows the development of the NTE, CECF and the Netherlands' creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 8.8 Austria<sup>109</sup>

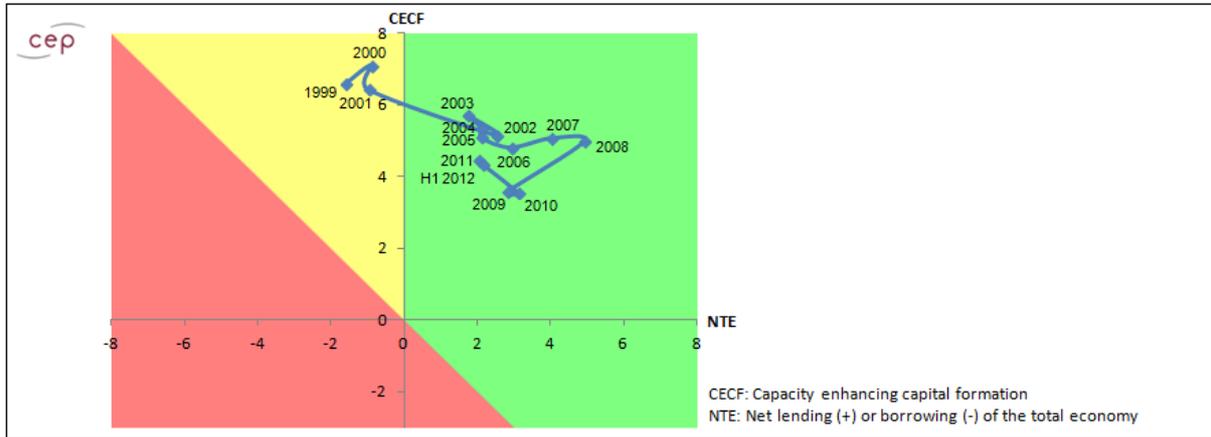
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-1.6	-0.9	-1.0	2.5	1.7	2.1	2.1	2.9	4.0	4.9	2.8	3.1	2.0	2.1
CECF	6.6	7.1	6.4	5.2	5.7	5.4	5.1	4.8	5.1	5.0	3.6	3.5	4.5	4.4
CEP Default Index	5.0	6.2	5.4	7.7	7.4	7.5	7.2	7.7	9.1	9.9	6.4	6.6	6.5	6.5
Risk category	2	2	2	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

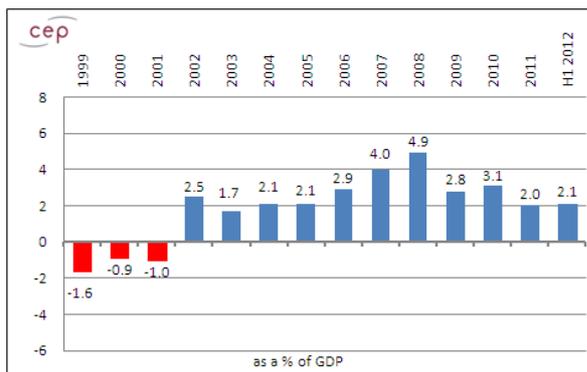
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

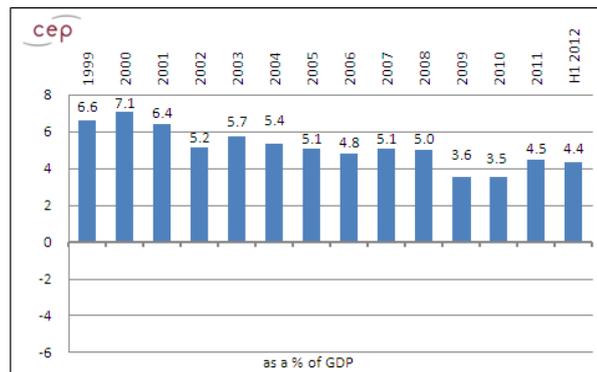
#### Trend in the CEP Default Index<sup>110</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>109</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>110</sup> The graphic shows the development of the NTE, CECF and Austria's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 8.9 Slovakia<sup>111</sup>

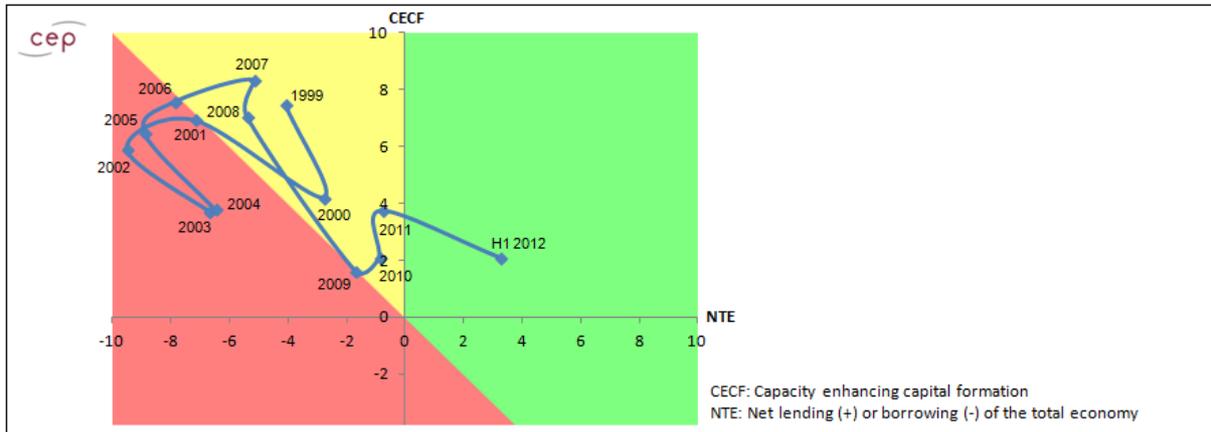
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-4.1	-2.8	-7.2	-9.5	-6.7	-6.5	-8.9	-7.9	-5.2	-5.4	-1.7	-0.9	-0.8	3.2
CECF	7.5	4.2	6.9	5.9	3.7	3.8	6.5	7.5	8.3	7.0	1.6	2.1	3.7	2.1
CEP Default Index	3.4	1.4	-0.3	-3.6	-3.0	-2.7	-2.4	-0.4	3.1	1.6	-0.1	1.2	2.9	5.3
Risk category	2	2	3	3	4	4	4	4	2	2	3	2	2	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

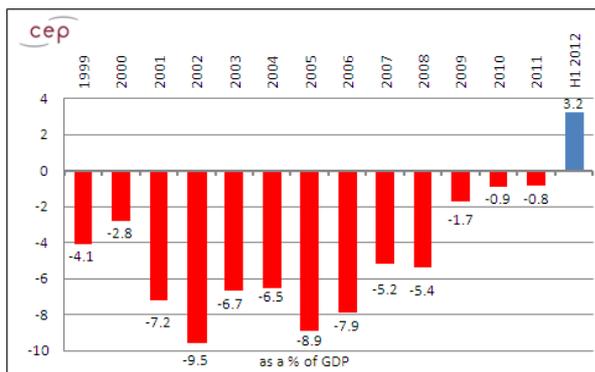
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

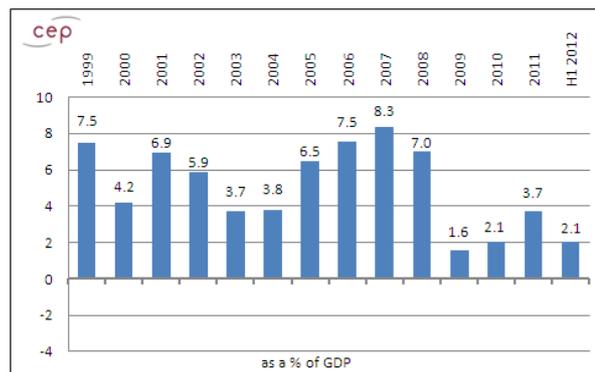
#### Trend in the CEP Default Index<sup>112</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>111</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>112</sup> The graphic shows the development of the NTE, CECF and Slovakia's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 8.10 Slovenia<sup>113</sup>

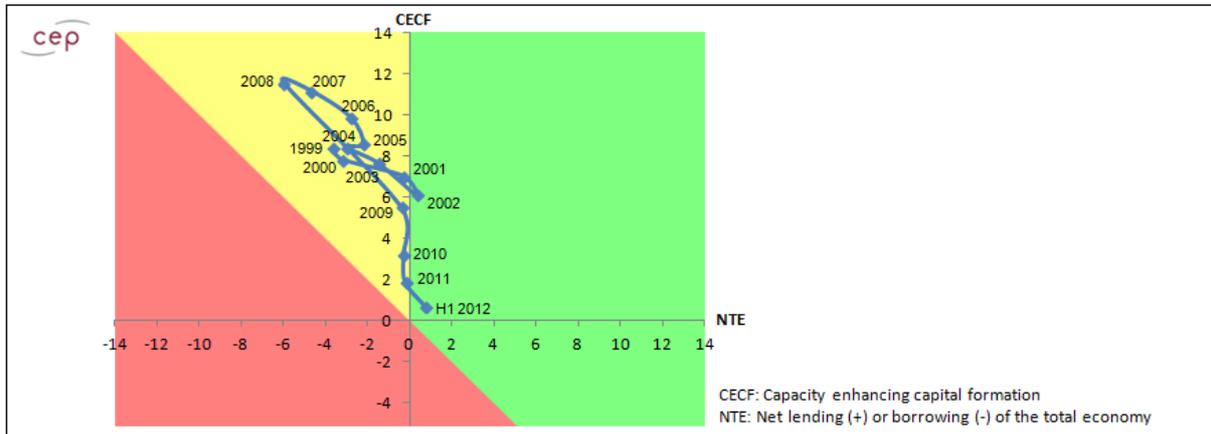
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-3.7	-3.2	-0.3	0.3	-1.5	-3.0	-2.2	-2.8	-4.7	-6.0	-0.4	-0.3	-0.2	0.8
CECF	8.4	7.8	7.0	6.1	7.7	8.4	8.6	9.9	11.2	11.6	5.5	3.2	1.9	0.7
CEP Default Index	4.7	4.6	6.7	6.4	6.2	5.4	6.4	7.1	6.5	5.6	5.1	2.9	1.7	1.5
Risk category	2	2	2	1	2	2	2	2	2	2	2	2	2	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

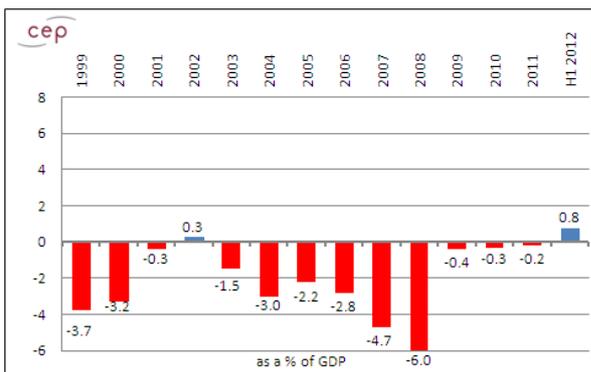
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

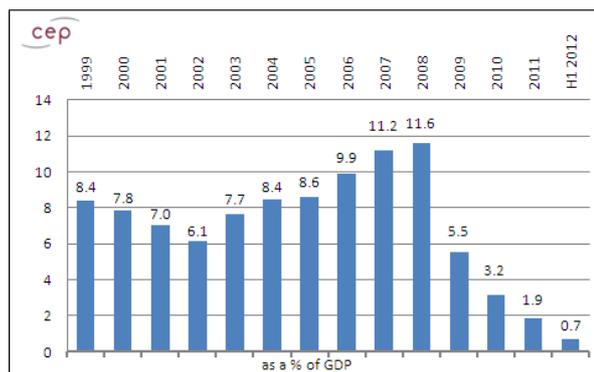
#### Trend in the CEP Default Index<sup>114</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>113</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>114</sup> The graphic shows the development of the NTE, CECF and Slovenia's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 8.11 Euro Zone as a whole<sup>115</sup>

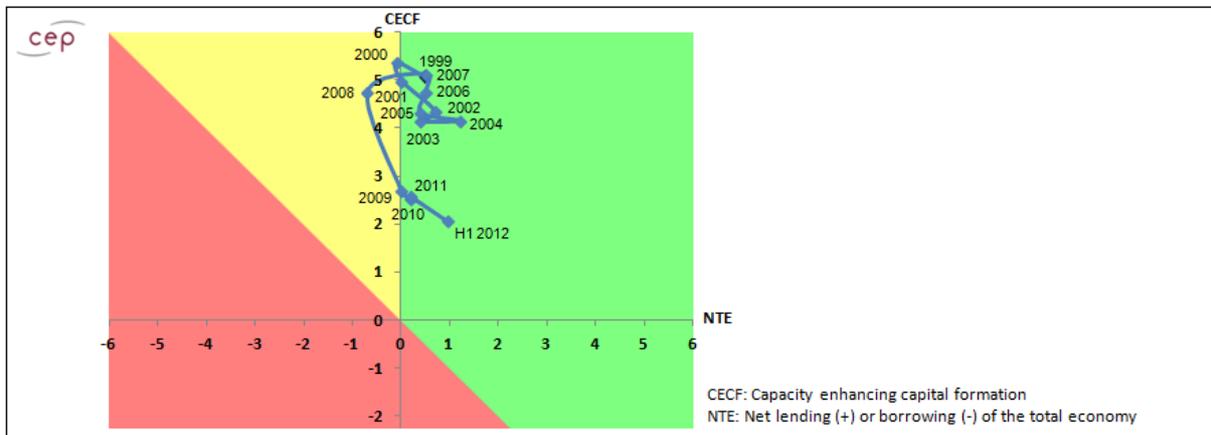
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	0.5	-0.1	0.0	0.7	0.4	1.2	0.4	0.5	0.5	-0.7	0.0	0.2	0.2	1.0
CECF	5.1	5.4	5.0	4.3	4.1	4.2	4.3	4.7	5.1	4.7	2.7	2.5	2.6	2.1
CEP Default Index	5.6	5.3	5.0	5.0	4.5	5.4	4.7	5.2	5.6	4.0	2.7	2.7	2.8	3.1
Risk category	1	2	1	1	1	1	1	1	1	2	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

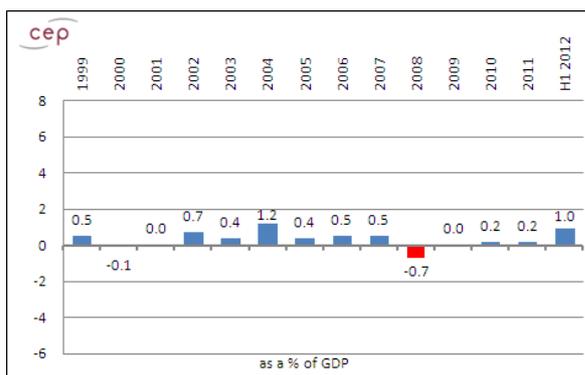
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

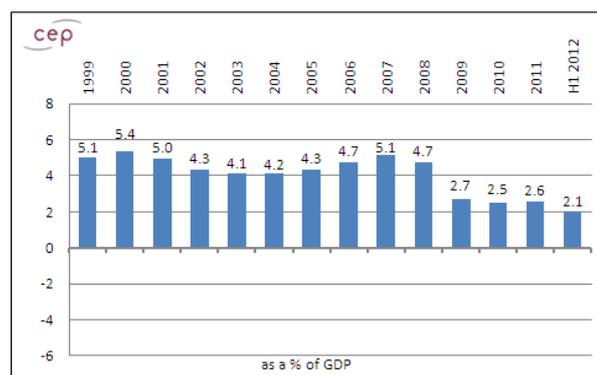
#### Trend in the CEP Default Index<sup>116</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>115</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>116</sup> The graphic shows the development of the NTE, CECF and the Euro Zone's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.



## 9 Other EU Countries

### 9.1 Bulgaria<sup>117</sup>

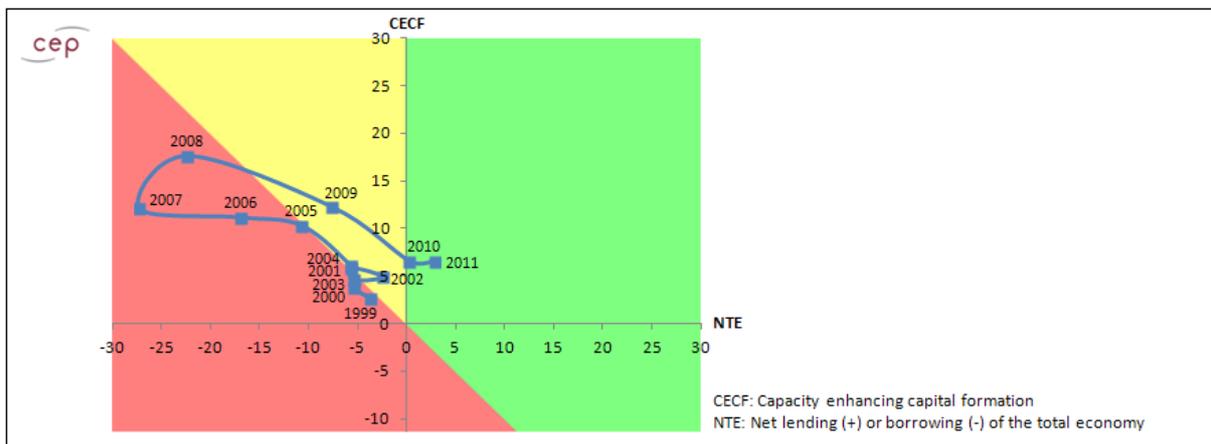
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	-3.6	-5.3	-5.6	-2.4	-5.3	-5.7	-10.7	-16.9	-27.2	-22.4	-7.6	0.3	2.9
CECF	2.6	3.8	5.8	4.9	4.6	6.1	10.3	11.2	12.1	17.7	12.3	6.6	6.6
CEP Default Index	-1.0	-1.5	0.2	2.5	-0.7	0.4	-0.4	-5.7	-15.1	-4.7	4.7	6.9	9.5
Risk category	3	3	2	2	3	2	3	3	4	4	2	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

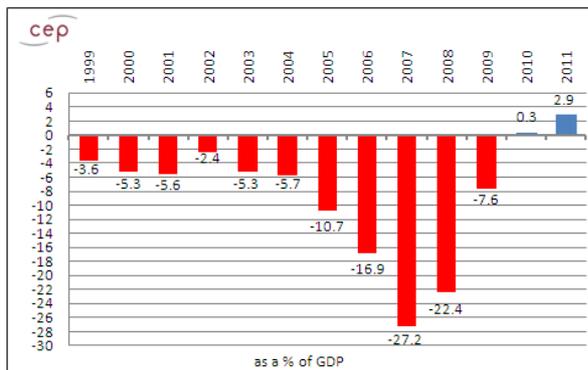
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

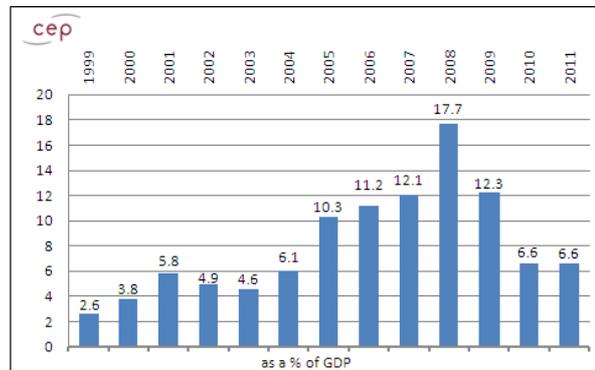
#### Trend in the CEP Default Index<sup>118</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>117</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. There is not enough data available to calculate the CEP Default Index for the first half of 2012. The figures for net capital investment in residential buildings, required for calculating capacity enhancing capital formation (CECF), have been estimated for 2011 by extrapolating from earlier data.

<sup>118</sup> The graphic shows the development of the NTE, CECF and Bulgaria's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

## 9.2 Denmark<sup>119</sup>

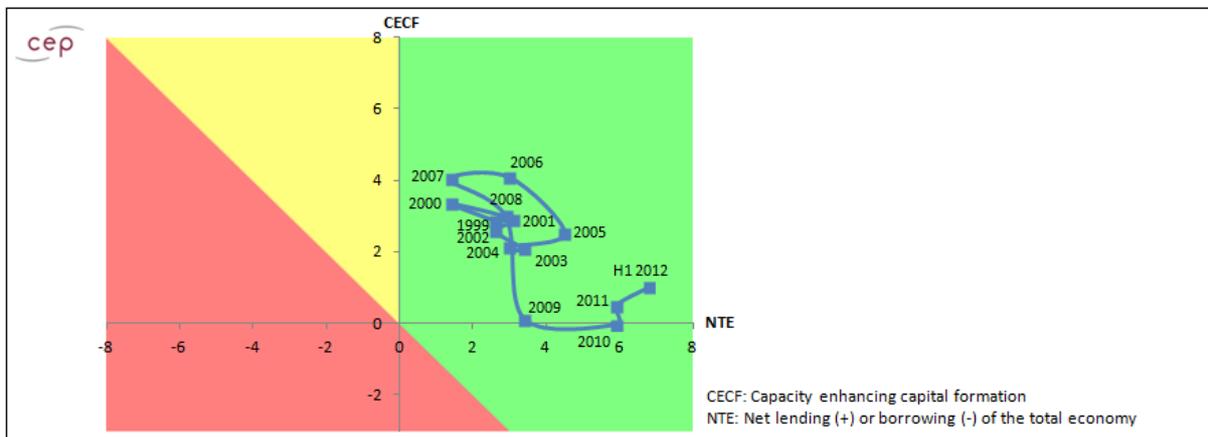
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	2.6	1.4	3.1	2.6	3.4	3.0	4.5	3.0	1.4	2.9	3.4	5.9	5.9	6.8
CECF	2.9	3.4	2.9	2.6	2.1	2.1	2.5	4.1	4.0	3.0	0.1	0.0	0.5	1.0
CEP Default Index	5.5	4.8	6.0	5.2	5.5	5.1	7.0	7.1	5.4	5.9	3.5	5.9	6.4	7.8
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

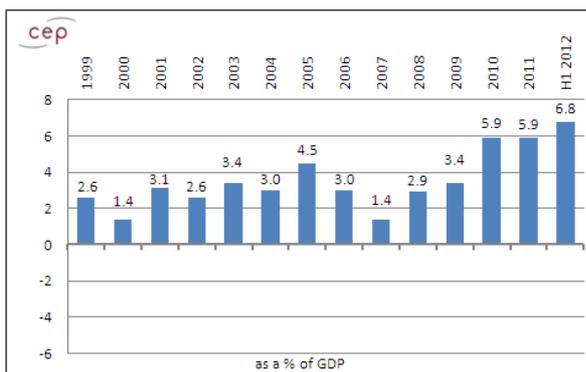
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

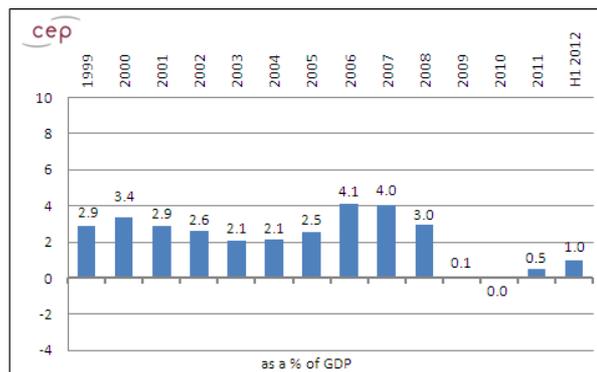
### Trend in the CEP Default Index<sup>120</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>119</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>120</sup> The graphic shows the development of the NTE, CECF and Denmark's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 9.3 Latvia<sup>121</sup>

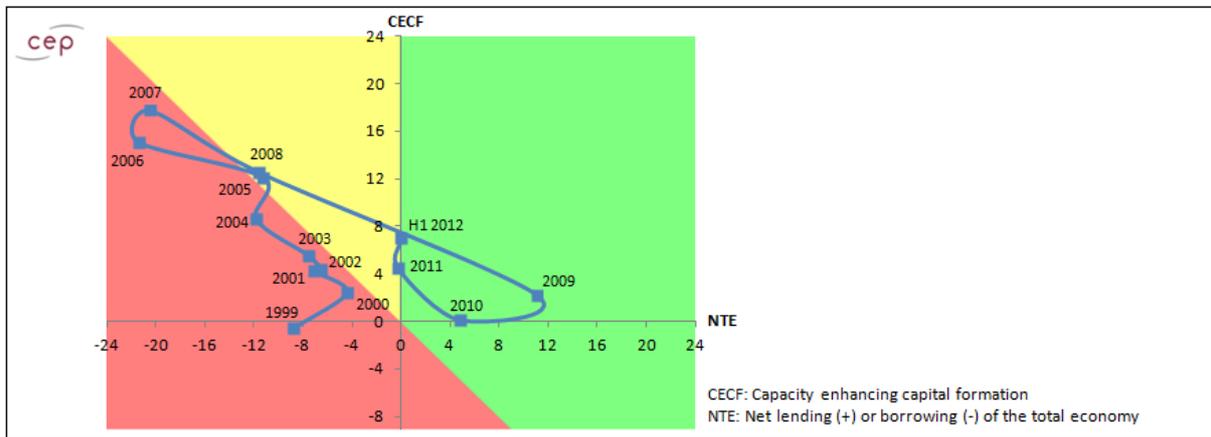
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-8.7	-4.4	-7.1	-6.5	-7.5	-11.8	-11.2	-21.4	-20.4	-11.6	11.1	4.9	-0.2	0.1
CECF	-0.6	2.4	4.2	4.3	5.5	8.6	12.1	15.1	17.7	12.5	2.2	0.0	4.4	7.0
CEP Default Index	-9.3	-2.0	-2.9	-2.2	-2.0	-3.2	0.9	-6.3	-2.7	0.9	13.3	4.9	4.2	7.1
Risk category	3	3	4	4	4	4	2	3	3	2	1	1	2	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

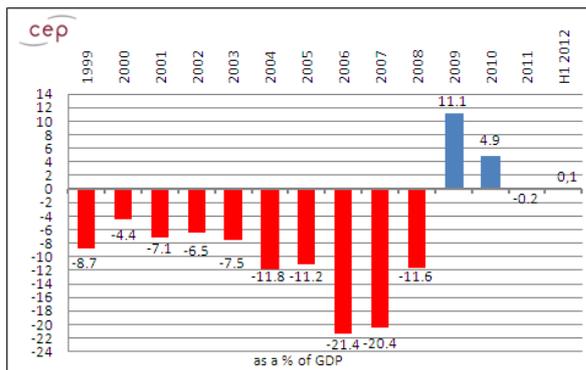
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

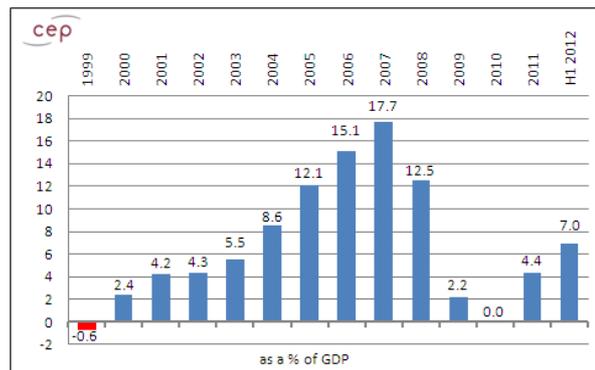
#### Trend in the CEP Default Index<sup>122</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>121</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>122</sup> The graphic shows the development of the NTE, CECF and Latvia's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 9.4 Lithuania<sup>123</sup>

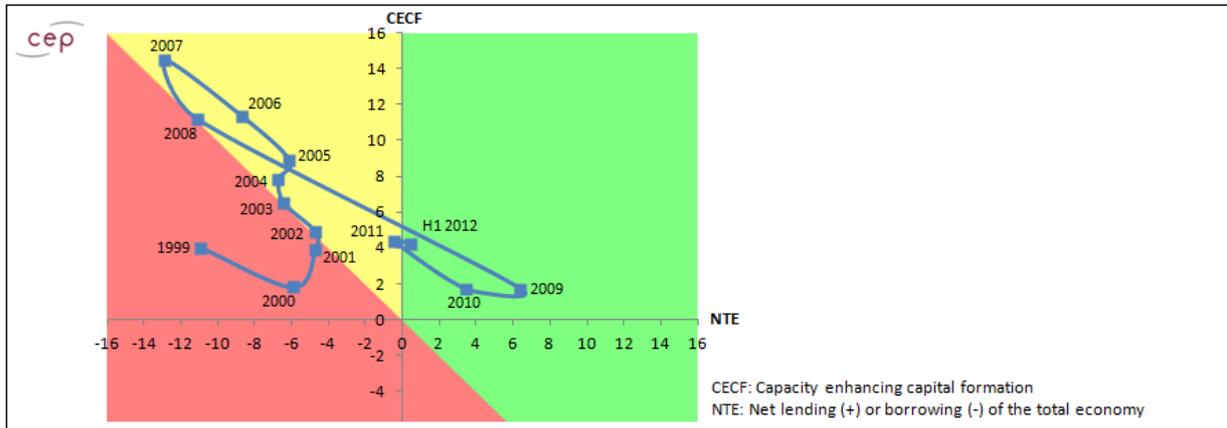
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-10.9	-5.9	-4.7	-4.7	-6.4	-6.7	-6.1	-8.7	-12.9	-11.1	6.4	3.5	-0.4	0.4
CECF	4.0	1.8	3.9	4.9	6.5	7.8	8.9	11.4	14.5	11.2	1.7	1.7	4.4	4.3
CEP Default Index	-6.9	-4.1	-0.8	0.2	0.1	1.1	2.8	2.7	1.6	0.1	8.1	5.2	4.0	4.7
Risk category	3	3	4	2	2	2	2	2	2	2	1	1	2	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

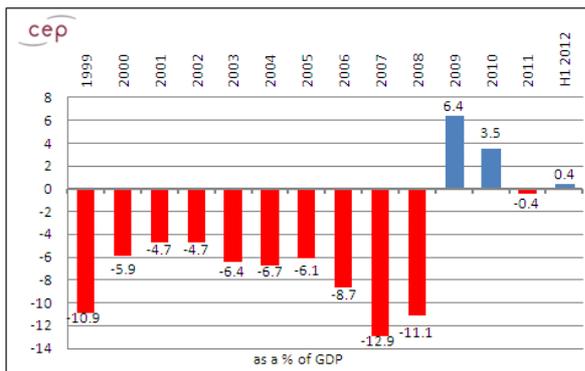
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

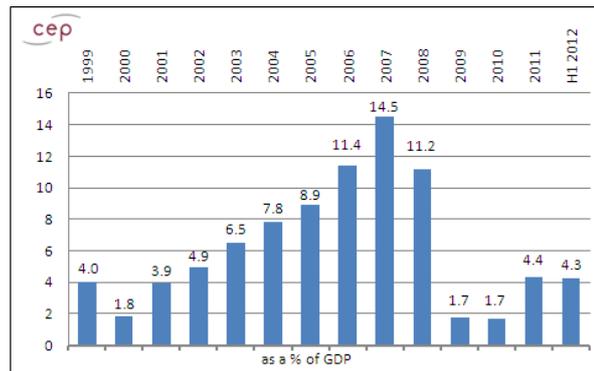
#### Trend in the CEP Default Index<sup>124</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>123</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>124</sup> The graphic shows the development of the NTE, CECF and Lithuania's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 9.5 Poland<sup>125</sup>

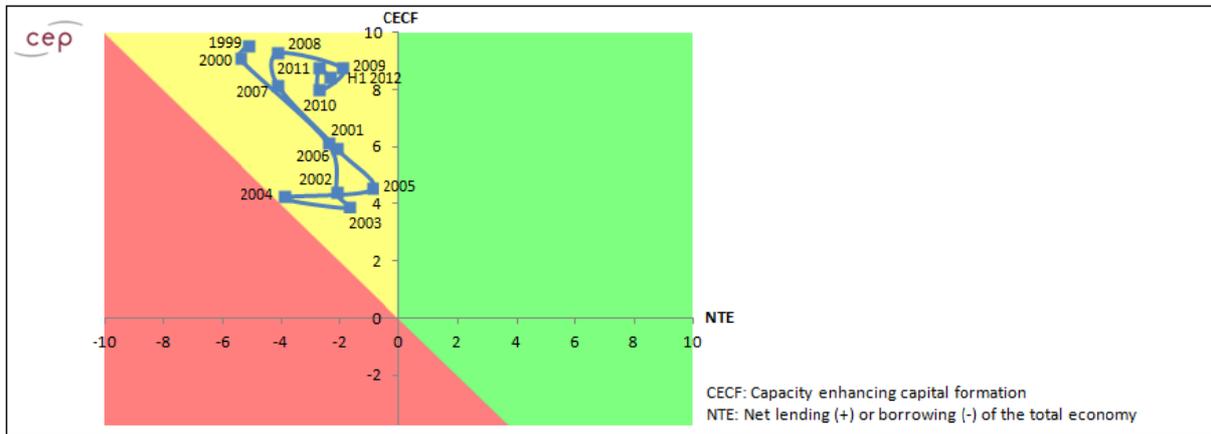
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-5.1	-5.4	-2.4	-2.1	-1.7	-3.9	-0.9	-2.1	-4.1	-4.1	-1.9	-2.7	-2.7	-2.3
CECF	9.5	9.1	6.1	4.4	3.9	4.2	4.5	5.9	8.1	9.3	8.7	8.0	8.7	8.4
CEP Default Index	4.4	3.7	3.7	2.3	2.2	0.3	3.6	3.8	4.0	5.2	6.8	5.3	6.0	6.1
Risk category	2	2	2	2	2	2	2	2	2	2	2	2	2	2

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

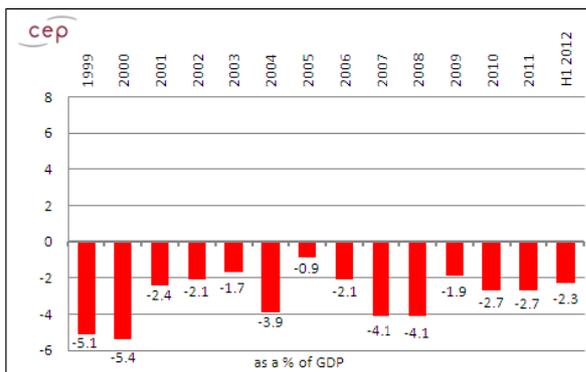
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

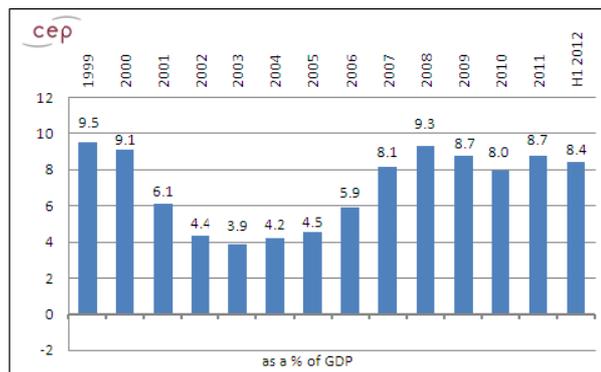
#### Trend in the CEP Default Index<sup>126</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>125</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. For the first half of 2012, the CEP Default Index was calculated based on the period from Q3 2011 to Q2 2012 because no seasonally adjusted or daily adjusted data was available.

<sup>126</sup> The graphic shows the development of the NTE, CECF and Poland's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 9.6 Sweden<sup>127</sup>

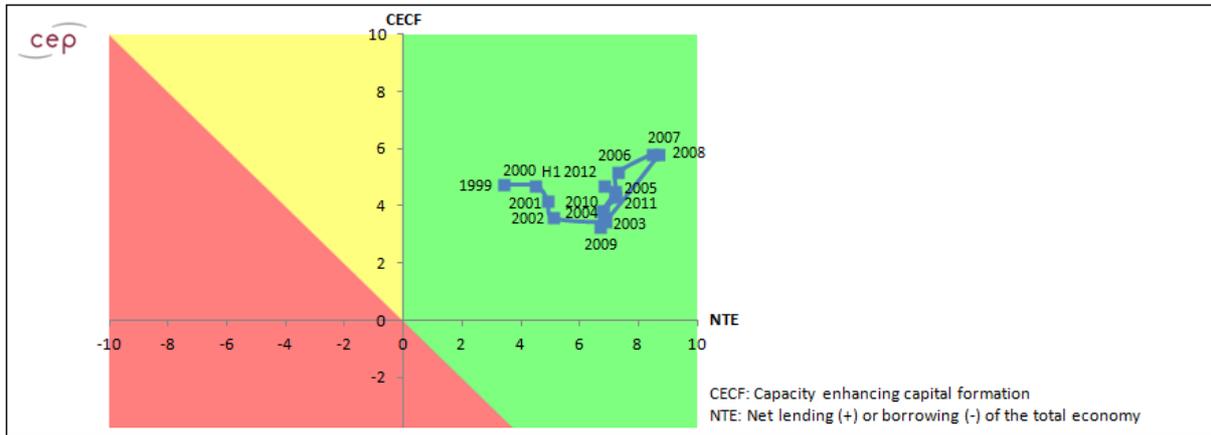
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	3.4	4.5	4.9	5.1	6.9	6.8	7.2	7.3	8.5	8.7	6.7	6.8	7.2	6.9
CECF	4.7	4.7	4.2	3.6	3.5	3.8	4.5	5.2	5.8	5.8	3.3	3.8	4.3	4.7
CEP Default Index	8.1	9.2	9.1	8.7	10.4	10.6	11.7	12.5	14.3	14.5	10.0	10.6	11.5	11.6
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

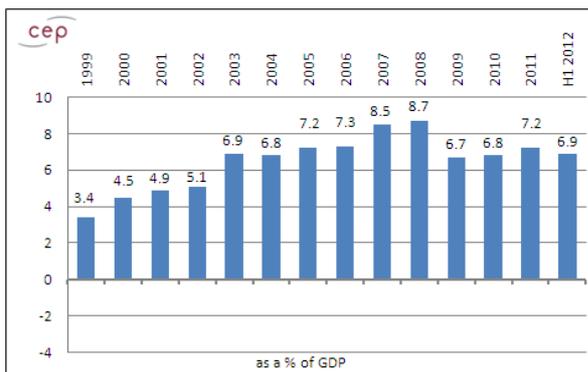
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

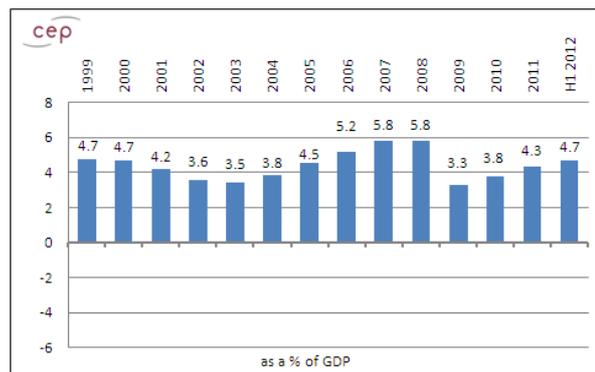
#### Trend in the CEP Default Index<sup>128</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>127</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. For the first half of 2012, the CEP Default Index was calculated based on the period from Q3 2011 to Q2 2012 because no seasonally adjusted or daily adjusted data was available.

<sup>128</sup> The graphic shows the development of the NTE, CECF and Sweden's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 9.7 Czech Republic<sup>129</sup>

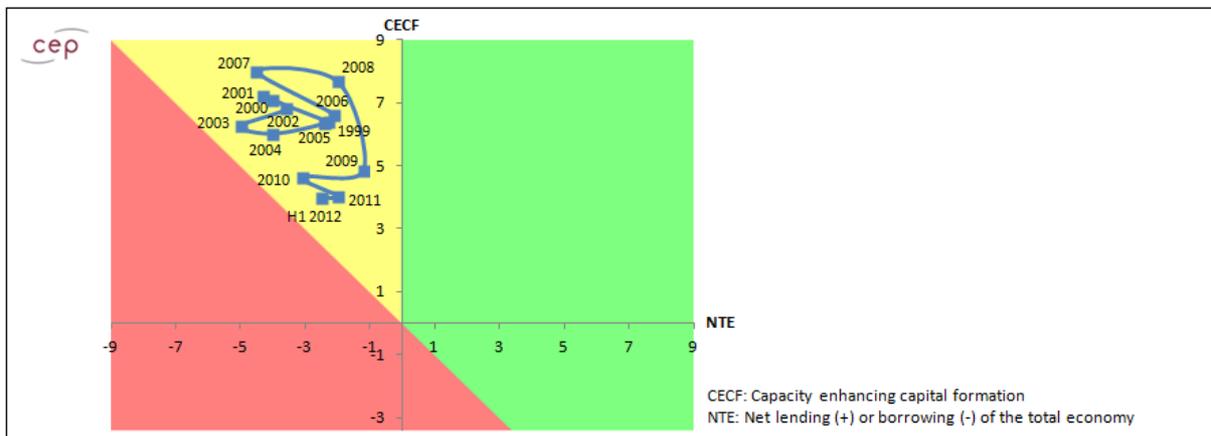
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-2.3	-4.0	-4.3	-3.6	-5.0	-4.0	-2.4	-2.1	-4.5	-2.0	-1.2	-3.1	-2.0	-2.5
CECF	6.4	7.1	7.2	6.8	6.3	6.0	6.3	6.6	8.0	7.7	4.8	4.6	4.0	4.0
CEP Default Index	4.1	3.1	2.9	3.2	1.3	2.0	3.9	4.5	3.5	5.7	3.6	1.5	2.0	1.5
Risk category	2	2	2	2	2	2	2	2	2	2	2	2	2	2

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

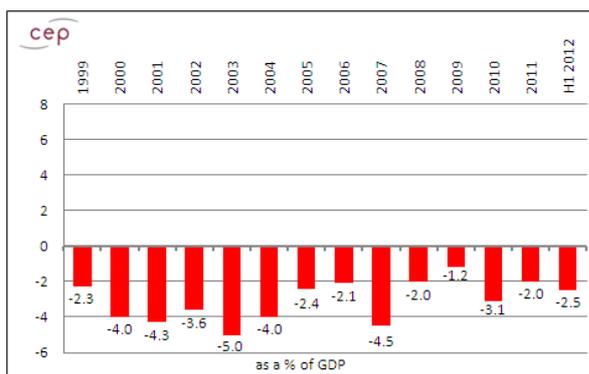
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

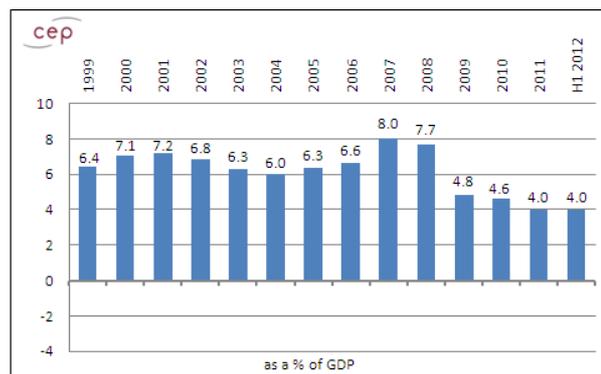
#### Trend in the CEP Default Index<sup>130</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>129</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. For the first half of 2012, the CEP Default Index was calculated based on the period from Q3 2011 to Q2 2012 because no seasonally adjusted or daily adjusted data was available.

<sup>130</sup> The graphic shows the development of the NTE, CECF and the Czech Republic's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 9.8 Hungary<sup>131</sup>

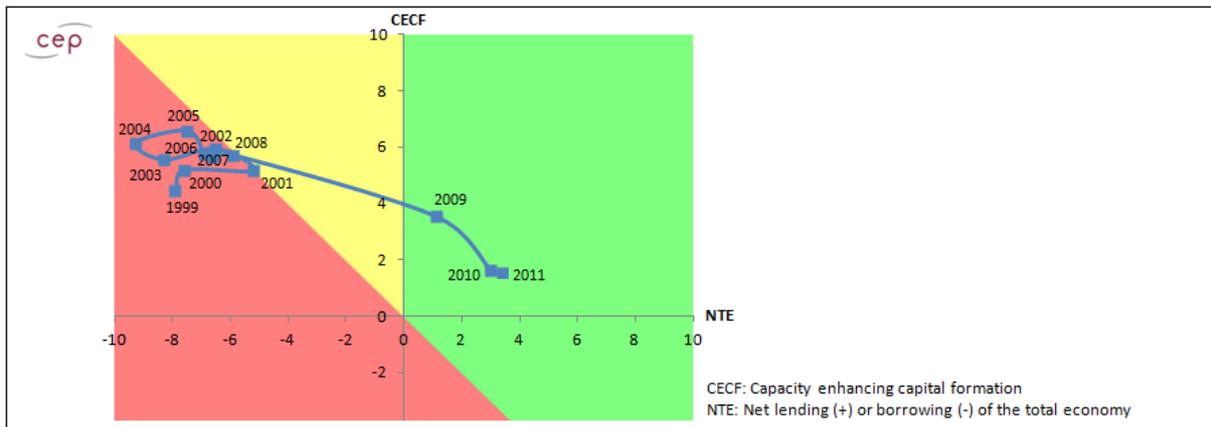
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	-7.9	-7.6	-5.20	-6.5	-8.3	-9.3	-7.5	-6.9	-6.6	-5.9	1.1	3.0	3.4
CECF	4.5	5.2	5.16	5.9	5.5	6.1	6.6	5.7	5.6	5.7	3.5	1.6	1.5
CEP Default Index	-3.4	-2.4	-0.04	-0.6	-2.8	-3.2	-0.9	-1.2	-1.0	-0.2	4.6	4.6	4.9
Risk category	3	3	4	4	4	4	4	4	4	4	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

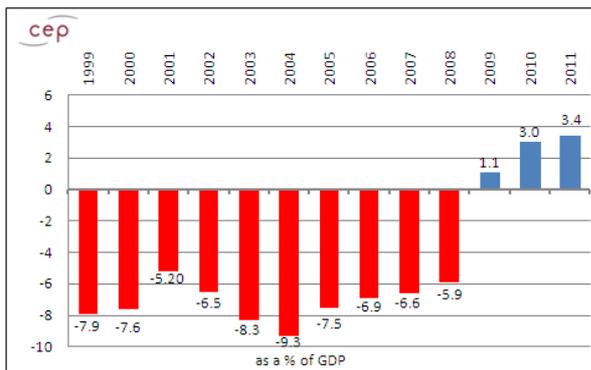
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

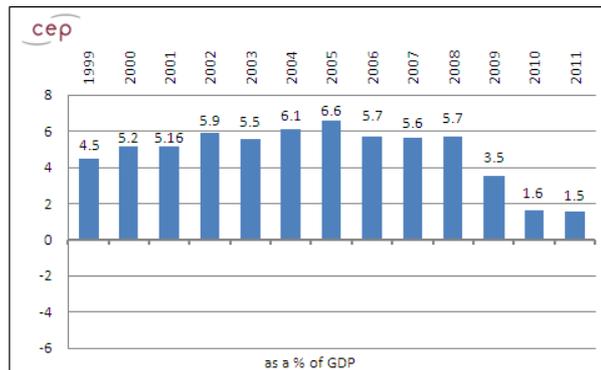
#### Trend in the CEP Default Index<sup>132</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>131</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. There is not enough data available to calculate the CEP Default Index for the first half of 2012.

<sup>132</sup> The graphic shows the development of the NTE, CECF and Hungary's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 9.9 United Kingdom<sup>133</sup>

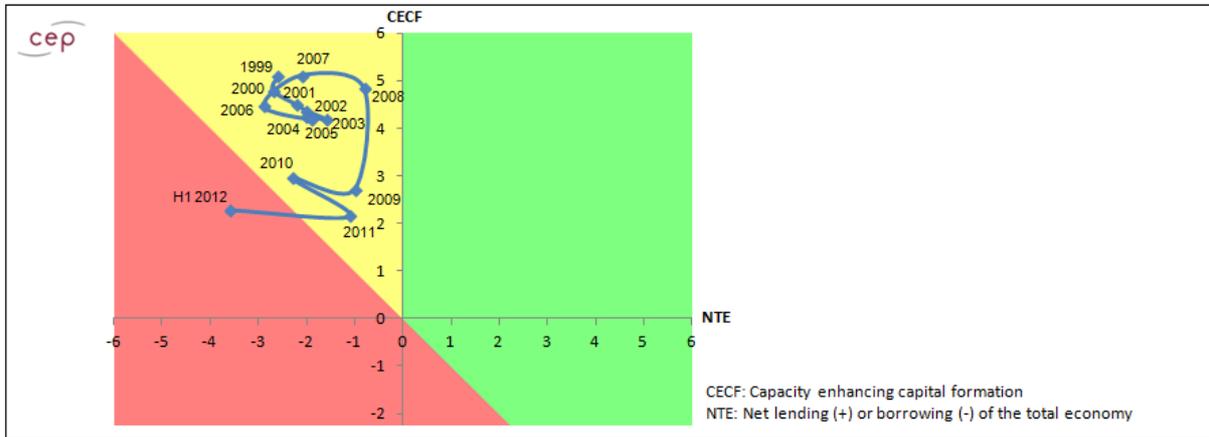
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	-2.6	-2.7	-2.2	-2.0	-1.6	-2.0	-1.9	-2.9	-2.1	-0.8	-1.0	-2.3	-1.1	-3.6
CECF	5.1	4.8	4.5	4.4	4.2	4.2	4.2	4.5	5.1	4.8	2.7	3.0	2.2	2.3
CEP Default Index	2.5	2.1	2.3	2.4	2.6	2.2	2.3	1.6	3.0	4.0	1.7	0.7	1.1	-1.3
Risk category	2	2	2	2	2	2	2	2	2	2	2	2	2	3

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

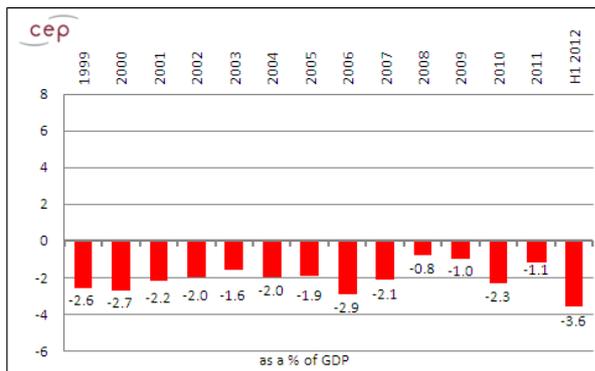
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

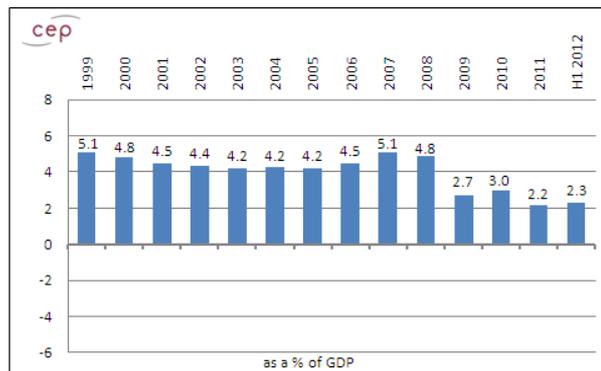
#### Trend in the CEP Default Index<sup>134</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>133</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat.

<sup>134</sup> The graphic shows the development of the NTE, CECF and the United Kingdom's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.



## 10 Countries outside the EU

### 10.1 Iceland<sup>135</sup>

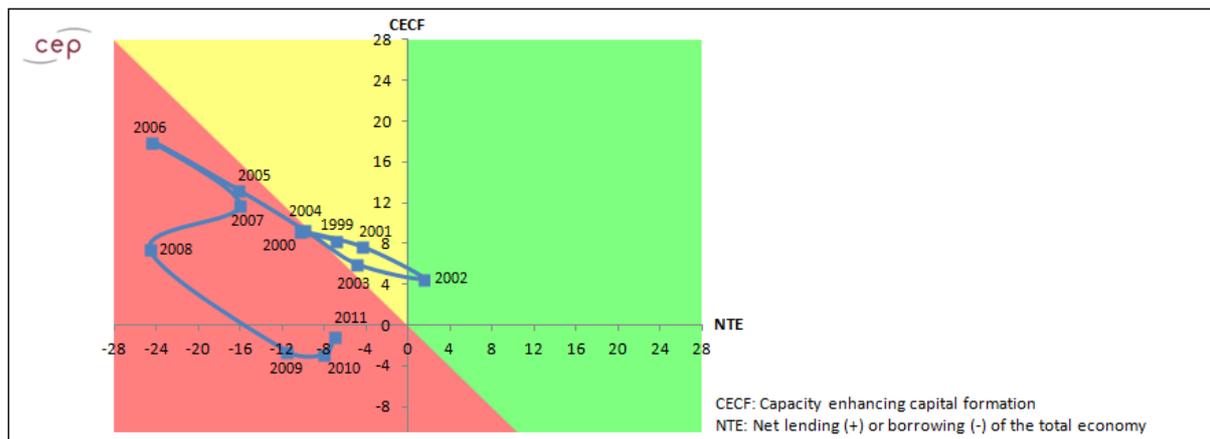
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	-6.8	-10.2	-4.3	1.5	-4.8	-9.8	-16.2	-24.4	-16.0	-24.6	-11.6	-8.0	-7.0
CECF	8.3	9.2	7.6	4.5	5.9	9.3	13.3	18.0	11.7	7.4	-2.6	-2.9	-1.2
CEP Default Index	1.5	-1.0	3.3	6.0	1.1	-0.5	-2.9	-6.4	-4.3	-17.2	-14.2	-10.9	-8.2
Risk category	2	3	2	1	2	3	3	4	4	4	4	4	4

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

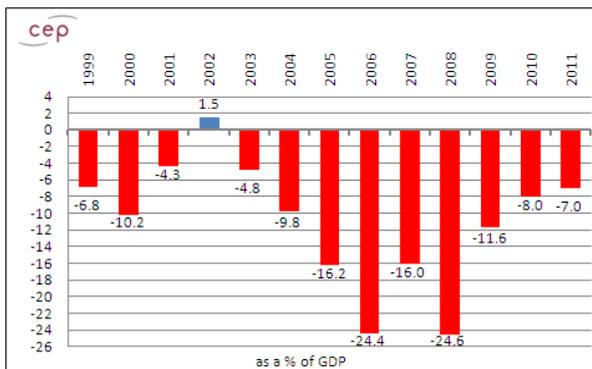
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

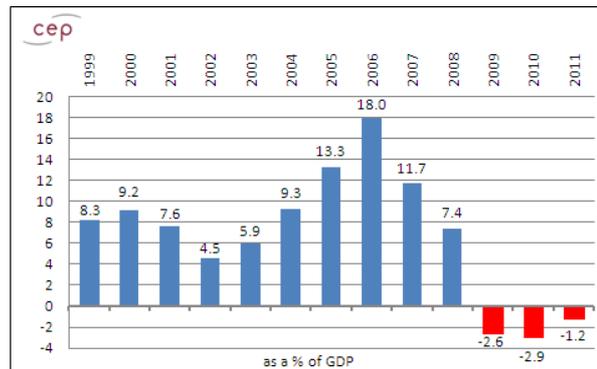
#### Trend in the CEP Default Index<sup>136</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>135</sup> The data used to calculate the CEP Default Index has been taken from the EU database, Eurostat. There is not enough data available to calculate the CEP Default Index for the first half of 2012.

<sup>136</sup> The graphic shows the development of the NTE, CECF and Iceland's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

## 10.2 Japan<sup>137</sup>

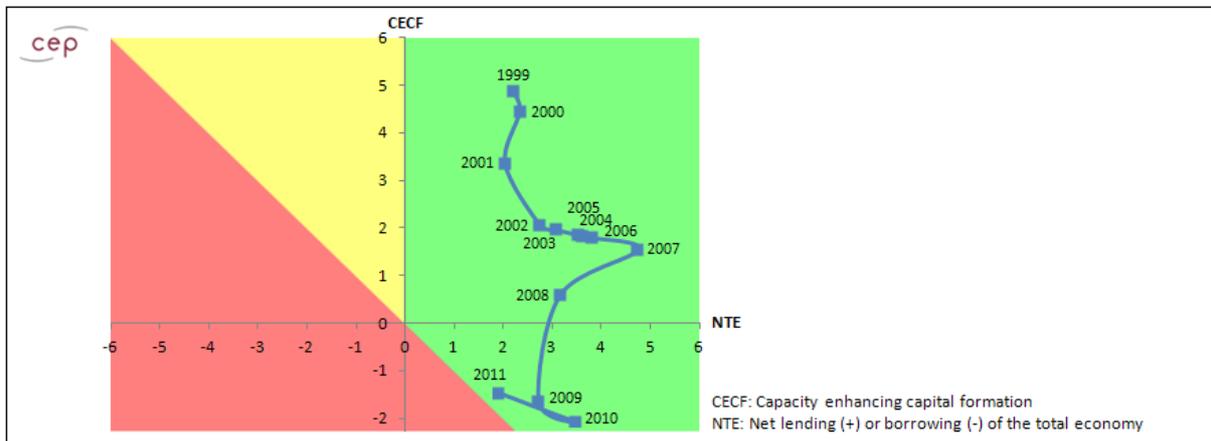
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	2.2	2.3	2.0	2.7	3.1	3.6	3.5	3.8	4.7	3.2	2.7	3.5	1.9
CECF	4.9	4.5	3.3	2.1	2.0	1.8	1.9	1.8	1.5	0.6	-1.6	-2.1	-1.5
CEP Default Index	7.1	6.8	5.3	4.8	5.1	5.4	5.4	5.6	6.2	3.8	1.1	1.4	0.4
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

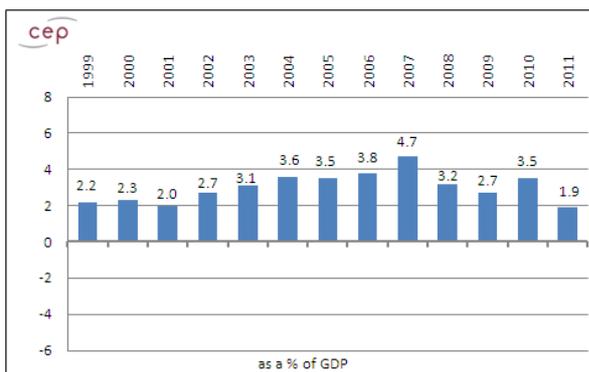
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

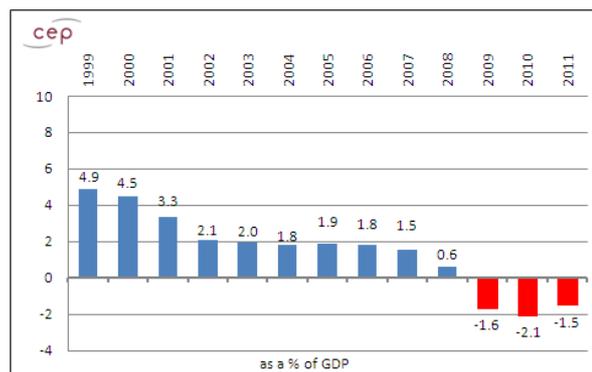
### Trend in the CEP Default Index<sup>138</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>137</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. There is not enough data available to calculate the CEP Default Index for the first half of 2012.

<sup>138</sup> The graphic shows the development of the NTE, CECF and Japan's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.

### 10.3 Switzerland<sup>139</sup>

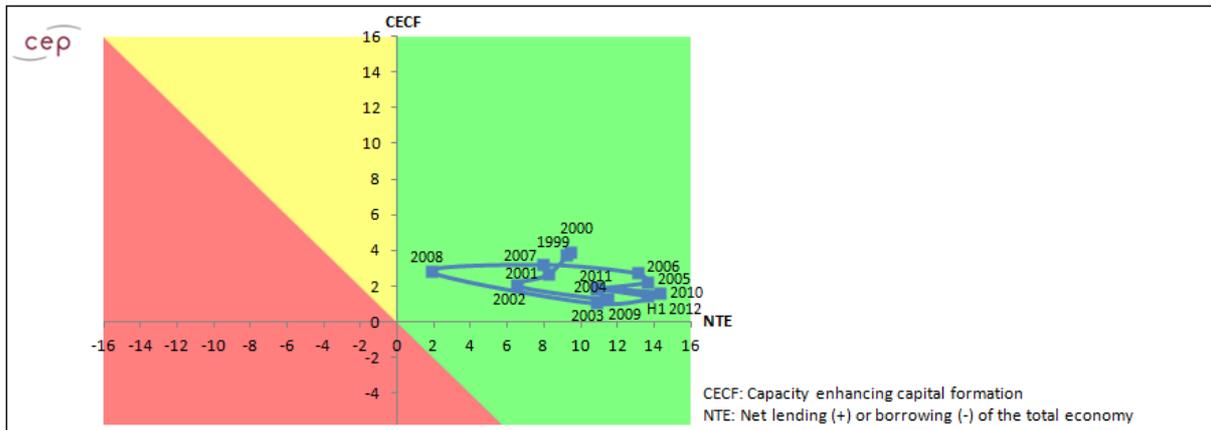
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	H1 2012
NTE	9.2	9.4	8.2	6.5	11.4	10.8	13.6	13.1	7.9	1.8	10.8	14.3	10.8	13.6
CECF	3.7	3.9	2.7	2.0	1.3	1.8	2.2	2.7	3.2	2.8	1.0	1.6	1.9	1.5
CEP Default Index	12.9	13.3	10.9	8.5	12.7	12.6	15.8	15.8	11.1	4.6	11.8	15.9	12.7	15.1
Risk category	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

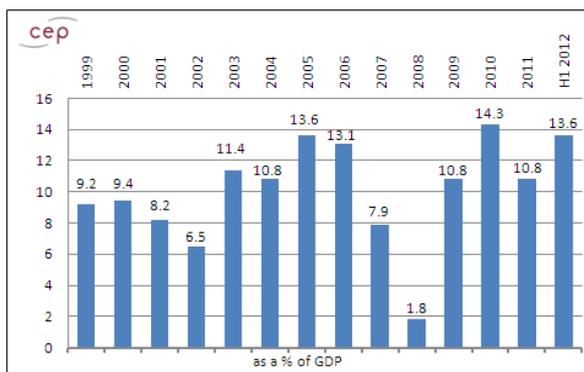
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

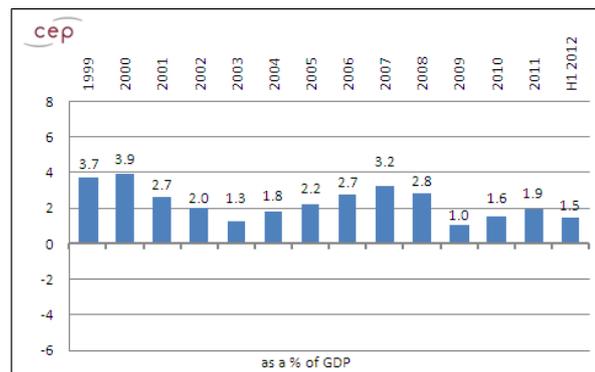
#### Trend in the CEP Default Index<sup>140</sup>



Net lending or borrowing of the total economy



Capacity enhancing capital formation



<sup>139</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. The figures for net capital investment in residential buildings, required for calculating capacity enhancing capital formation (CECF), have been estimated for the first half of 2012 on the basis of an annual prognosis from the Commission.

<sup>140</sup> The graphic shows the development of the NTE, CECF and Switzerland's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 10.4 South Korea<sup>141</sup>

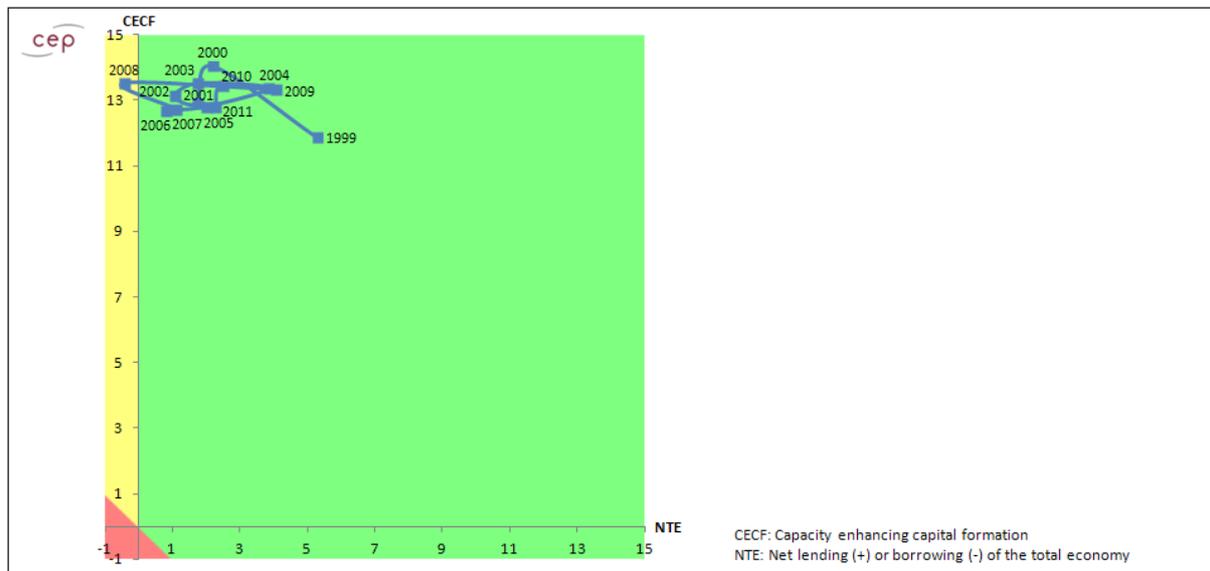
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	5.3	2.2	1.7	1.1	1.7	3.9	2.0	0.8	1.1	-0.5	4.1	2.5	2.3
CECF	11.9	14.0	12.9	13.1	13.5	13.4	12.8	12.7	12.7	13.5	13.3	13.4	12.8
CEP Default Index	17.1	16.2	14.6	14.2	15.2	17.2	14.8	13.5	13.8	13.1	17.4	15.9	15.1
Risk category	1	1	1	1	1	1	1	1	1	2	1	1	1

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

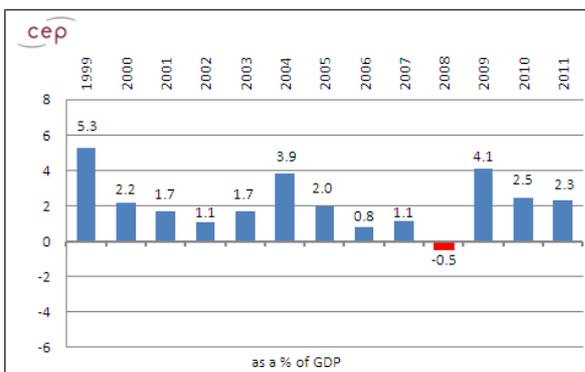
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

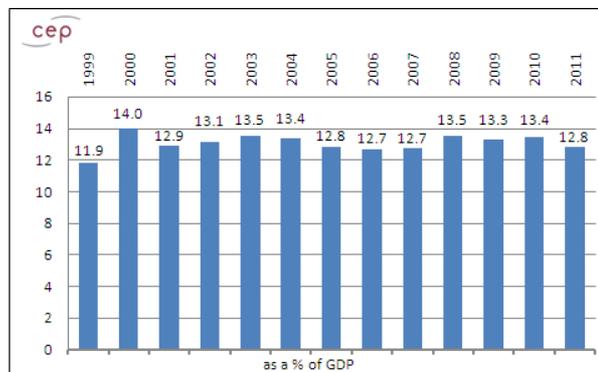
#### Trend in the CEP Default Index<sup>142</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>141</sup> The data used to calculate the CEP Default Index have been taken from the Commission's database, Ameco. There is not enough data available to calculate the CEP Default Index for the first half of 2012.

<sup>142</sup> The graphic shows the development of the NTE, CECF and South Korea's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is increasing.

### 10.5 USA<sup>143</sup>

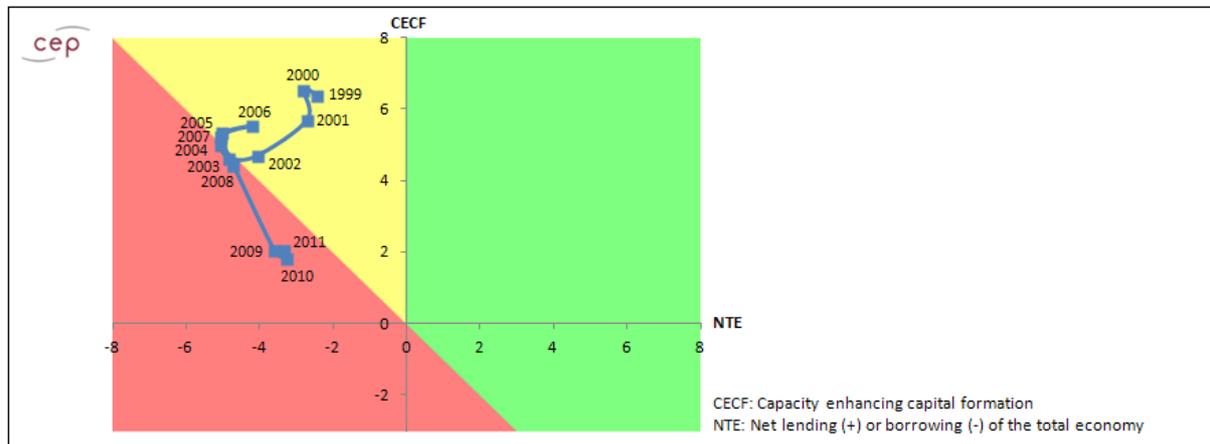
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NTE	-2.4	-2.8	-2.7	-4.1	-4.8	-5.1	-5.0	-4.2	-5.0	-4.7	-3.6	-3.3	-3.3
CECF	6.4	6.5	5.7	4.7	4.6	5.0	5.3	5.5	5.2	4.4	2.1	1.8	2.0
CEP Default Index	4.0	3.7	3.0	0.6	-0.2	-0.1	0.3	1.3	0.2	-0.3	-1.5	-1.5	-1.3
Risk category	2	2	2	2	3	3	2	2	2	3	3	4	4

**NTE** (Net lending or borrowing of the total economy): The NTE constitutes the net borrowing of an economy (as a % of GDP). Economies that incur foreign debt or reduce existing foreign assets show net borrowing. Economies that increase foreign assets or reduce foreign debt show net lending.

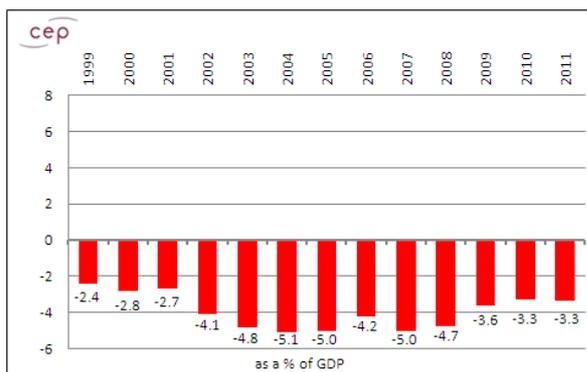
**CECF** (Capacity enhancing capital formation): CECF records the proportion of capital formation (as a % of GDP) that leads to an increase in value added. The additional value added thus generated may, where appropriate, be used to pay off the foreign credits.

**CEP Default Index:** A negative value indicates that creditworthiness is falling. In particular, the following indicate: Green = increasing creditworthiness. Yellow = uncertain trend in creditworthiness. Red-yellow = falling creditworthiness. Red = fall in creditworthiness is firmly established.

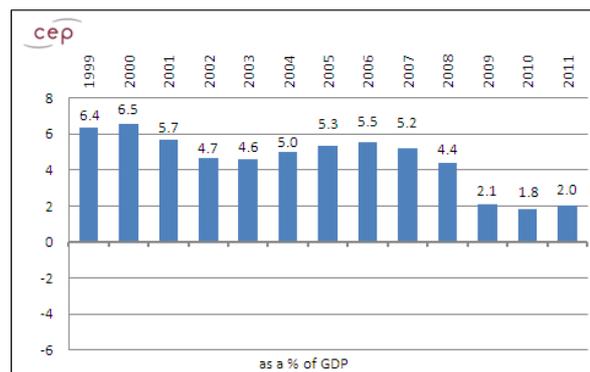
#### Trend in the CEP Default Index<sup>144</sup>



#### Net lending or borrowing of the total economy



#### Capacity enhancing capital formation



<sup>143</sup> The data used to calculate the CEP Default Index have been taken from the EU database, Eurostat, and the Commission's database, Ameco. There is not enough data available to calculate the CEP Default Index for the first half of 2012.

<sup>144</sup> The graphic shows the development of the NTE, CECF and USA's creditworthiness over time. In the red area creditworthiness is falling. In the yellow area the trend is uncertain. In the green area it is in increasing.



## Annex: Database

Country	Database	Special features
Belgium	Eurostat	The figures for net capital investment in residential buildings for the first half of 2012 are based on the halved annual prognosis from Ameco.
Bulgaria	Eurostat	None
Denmark	Eurostat	None
Germany	Eurostat	None
Estonia	Eurostat	None
Euro Zone	Eurostat	None
Finland	Eurostat	None
France	Eurostat	None
Greece	Eurostat	None
Ireland	Eurostat	The figures for net capital investment in residential buildings for the first half of 2012 are based on the halved annual prognosis from Ameco.
Iceland	Eurostat	None
Italy	Eurostat	None
Japan	Eurostat	Net lending or borrowing of the total economy, write downs and net capital investments in residential buildings are based on data from Ameco.
Latvia	Eurostat	None
Lithuania	Eurostat	None
Luxembourg	Eurostat	Net lending or borrowing of the total economy is based on data from Ameco.
Malta	Eurostat	Net lending or borrowing of the total economy is based on data from Ameco.
Netherlands	Eurostat	None
Austria	Eurostat	None
Poland	Eurostat	None
Portugal	Eurostat	None
Sweden	Eurostat	None
Switzerland	Eurostat	The figures for net capital investment in residential buildings for the first half of 2012 are based on the halved annual prognosis from Ameco.
Slovakia	Eurostat	None
Slovenia	Eurostat	None
Spain	Eurostat	None
South Korea	Ameco	None
Czech Republic	Eurostat	None
Hungary	Eurostat	None
USA	Eurostat	Net lending or borrowing of the total economy and net capital investments in residential buildings are based on data from Ameco.
United Kingdom	Eurostat	None
Cyprus	Eurostat	None

**The Authors**

Prof. Dr. Lüder Gerken is President of the Centrum für Europäische Politik.

Dr. Matthias Kullas is head of the department "Economic and Stability Policy" at the Centrum für Europäische Politik.

Iris Hohmann, LL.M. Eur., is Policy Analyst at the department "Economic and Stability Policy".

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