

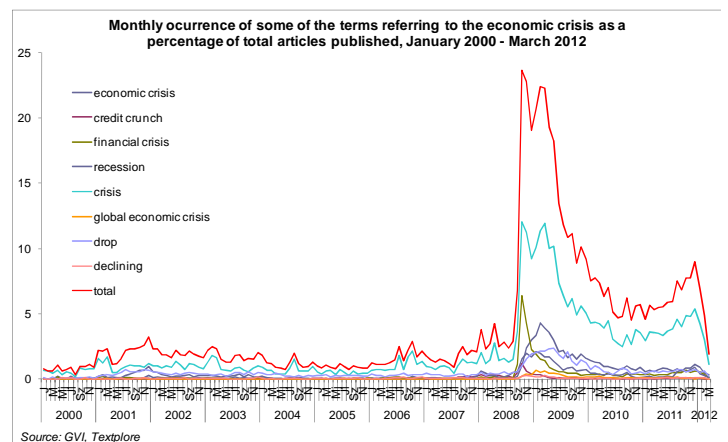
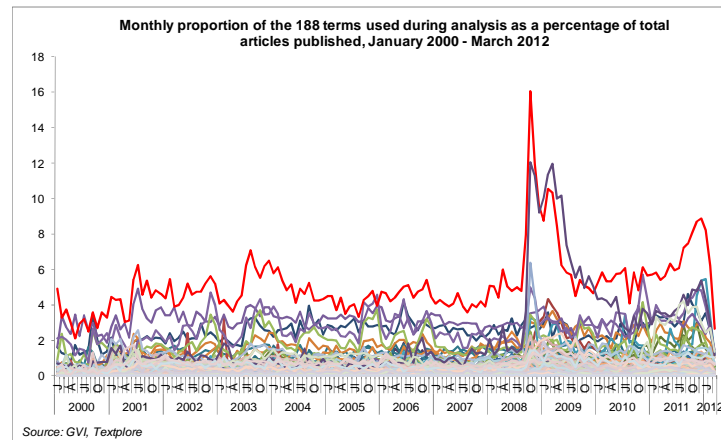
The following study, prepared under the auspices of the IEER ad-hoc business climate research project, proposes to answer the question of how economic processes can affect the appearance of this topic in the mass media. In our research, we examined whether the 2008-09 economic crisis changed the way in which Hungarian journalists used terms, employed new terms in the daily press, or went through a learning process which revealed a more informed and attentive form of journalism regarding economic processes and their relationships.

The results show that the economic crisis changed the vocabulary in use by Hungarian online media: during the crisis and the years since, economic subjects received more attention than before 2008. Terms related to economic policy, corporate topics, and the financial crisis increased significantly, while in the case of the foreign trade word group, this change was negative. Along these lines, it can be said that the economic crisis represented a real break point regarding the occurrence of economic issues in the media.

The global economic crisis of 2008-09 brought about dramatic changes in the economies of the developed countries, including the economic processes in Hungary which fell sharply as measured by almost all macroeconomic indicators (GDP, industrial production, foreign trade volume etc.). We can clearly see the imprint of these turbulent times in the media as well. Economic news increasingly became the leading news stories in the press. As the importance of information about the economy increased, economic forecasts were no longer only for researchers and government decision makers, but for various economic players also who had a significant material interest in obtaining the most current information possible. During the first decade of the Third Millennium – in parallel with the spread of Internet penetration – online media went through explosive growth which, in turn, helped to fulfil these needs. Our study is to find the answer of how real processes affect the thinking about these processes; that is, has the economic crisis of 2008-09 changed the vocabulary of Hungarian journalists, have new expressions appeared in the daily press, or has a learning process started that may lead to a more informed and attentive form of journalism concerning economic processes and their relationships.

Methodology

The database upon which our research was based was created using Textplore, an online content and text analysis software developed by IEER. Textplore allows for the text analysis of various documents that can be found on the internet (e.g., journal articles, newspaper articles, studies) in addition to the user's own documents. The software has its own articles database that allows for the analysis of almost two million articles. In terms of our research, we tried to examine how the weight of news about the economy changed in the online media following the economic crisis of 2008-09. For this, 217 words and expressions related to the economy were selected. With the help of Textplore, we examined articles published from January 2000 to March 2012 in the largest Hungarian online news portals (index.hu, origo.hu, hvg.hu, vg.hu, nol.hu, mno.hu, fn.hu, and hetivalasz.hu) for the occurrence of at least one of the



given words. Those words which appeared less than 50 times in the articles were deleted as test words, resulting in 188 words that were taken into account when creating the database. From these words we formed groups, which comprised of 11 broad topics. An analysis of prevalence rates was taken into account. The database was compared to real economic data in order to find out whether the terms used by the press moved together with that of the changing economy.

Results

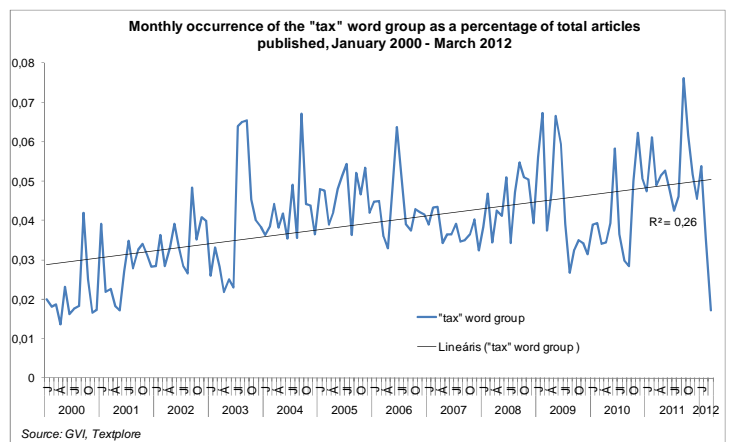
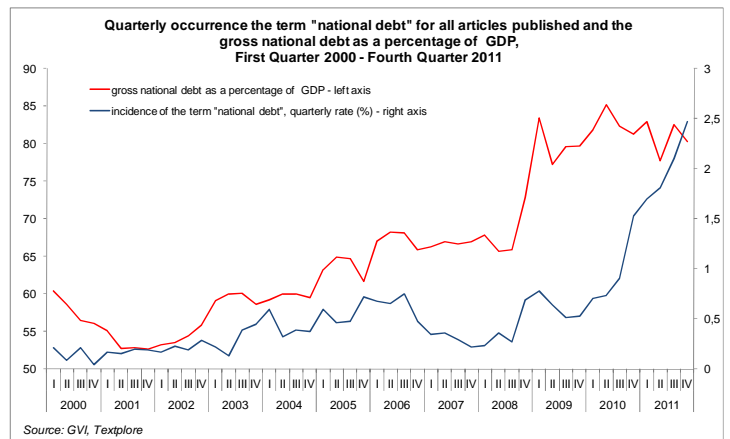
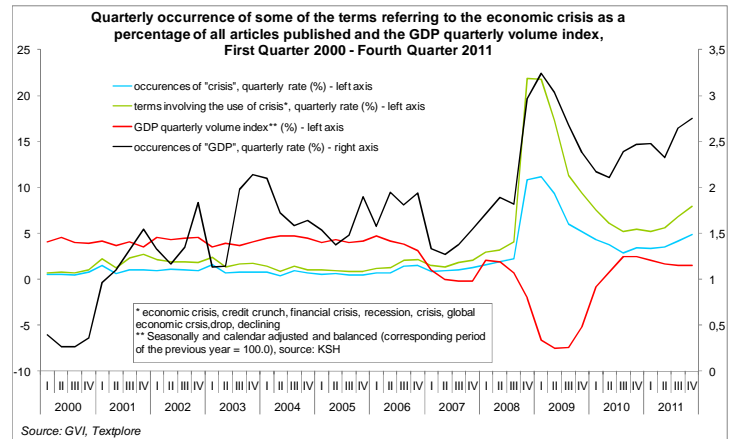
Sequential changes can be seen in the share of both the absolute occurrence of the 188 words examined as well as the overall occurrence of items within an article, and while a significant number of words more or less moved together, the appearance of a few (e.g., "financial", "crisis") dramatically increased during the economic crisis (mid-2008 until mid-2009). The reason for this is that the economic crisis period was a "hit theme" in the media. The research reveals another "explosion" in the frequency of words related to the economy took place in 2011. This is due both to the large number of articles referring back to the original economic crisis, on the one hand, and the fact that in addition to the global economic environment some internal government shocks had a strong influence on the Hungarian economy in the period under review, on the other.

If we compare the word "crisis" and the occurrence of all the terms related to crisis with that of quarterly GDP growth, we see that for the period from mid-2008 until mid-2009 a significant decline in GDP was accompanied by an increase in word use frequency. When the GDP index again reached pre-crisis levels at the end of 2010, crisis-related expressions also receded into the background in the press. In 2011 Hungary's GDP once again started to decline and crisis-related terms once again showed a slight increase, but this can be explained by the appearance of topics about the euro crisis and the crisis in Greece.

The use of the word "GDP" was insignificant compared to that of the word "crisis". The frequency of its occurrence shows a significant fluctuation from 2000, which does not move with the GDP volume index. In times of crisis, however, it shows a significant increase in the incidence rate, and although subsequently there was a small decline, in 2010-11 a positive tendency in its use could be observed.

If the occurrence of "government debt" is compared to the corresponding real data series (i.e. quarterly data on the proportion of gross government debt), we can see that the term occurs at a very steep rate in the second half of 2008 and during the period of 2010 to 2011, thus it moves along relatively with the increase in gross government debt.

From the 188 test words 11 word groups were established, with the words all classified into the following topics: tax,

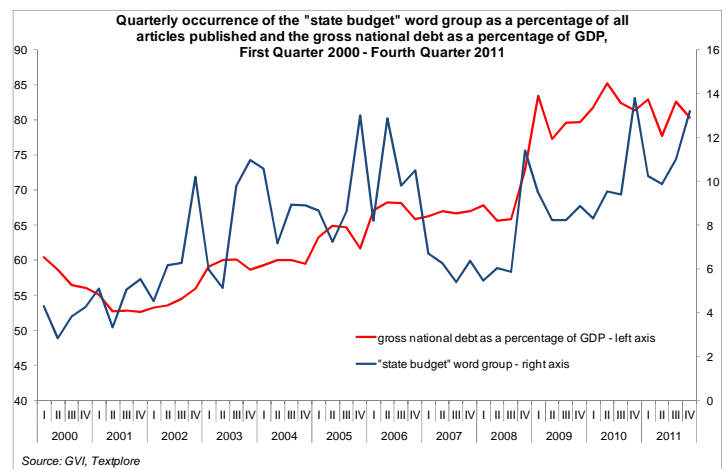
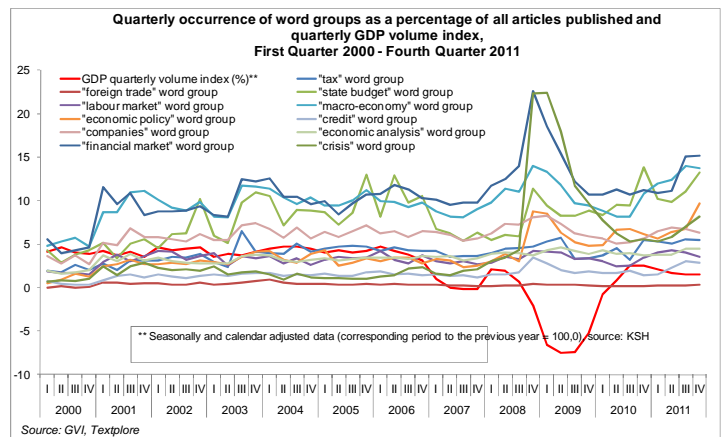
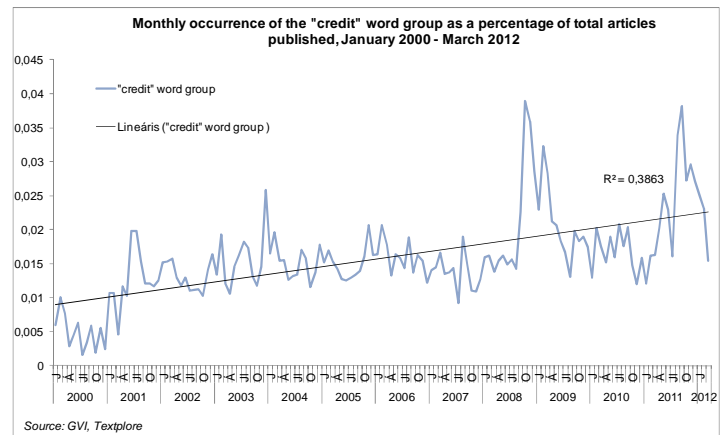


foreign trade, public finance, labour market, macroeconomics, economic policy, credit, companies, economic analysis, financial markets and crisis. If the occurrences of word groups are considered separately, in most cases we can see a positive sequential trend in the data. A relatively strong temporal correlation can be observed in the case of the "tax", "government", "economic policy", "credit", "economic analysis", "financial market" and "crisis" word groups, while a weaker correlation is seen in the "trade", "labour", "macroeconomics", and "companies" word groups.

If the occurrence of word groups is compared to the quarterly GDP index, we can see that for the most part the "crisis" and "financial market" groups moved in contrast to the GDP index during the economic crisis. In addition, the frequency of word usage for topics containing "macroeconomics" and "government debt", along with "companies", increased as a result of the crisis.

Observing the incidence rate of the "government debt" group over time with gross government debt as a percentage of GDP, the two series can be seen to move more or less together. Words belonging to the "government debt" group have been on an almost continuous upward trend from the very beginning, i.e. since 2000, while the level of gross government debt began its steady growth in 2001. From mid-2006 until the third quarter of 2008, however, the word occurrence data showed an ample decline in the incidence of the term, yet when the crisis broke out we again experienced rapid growth, followed by a surge in government debt in the following quarter. Then both sets of data showed a relative decline, and then again at the end of 2010 the use of the word increased at high rates. In early 2011 we experienced a small reduction in both the terminology and the extent of the debt, but both indicators remained very high throughout the year.

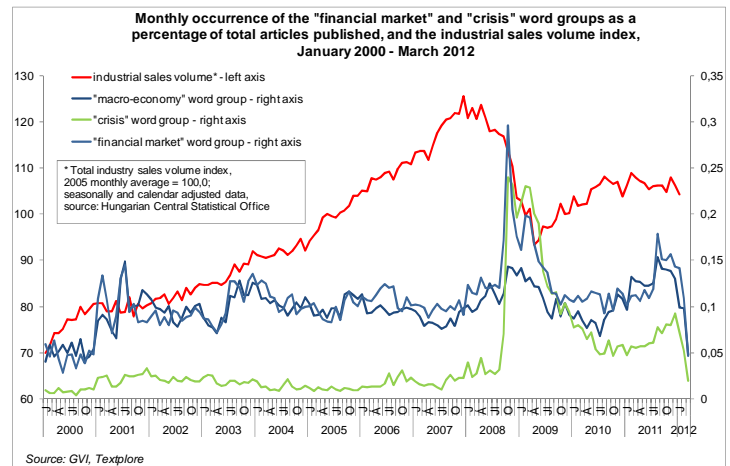
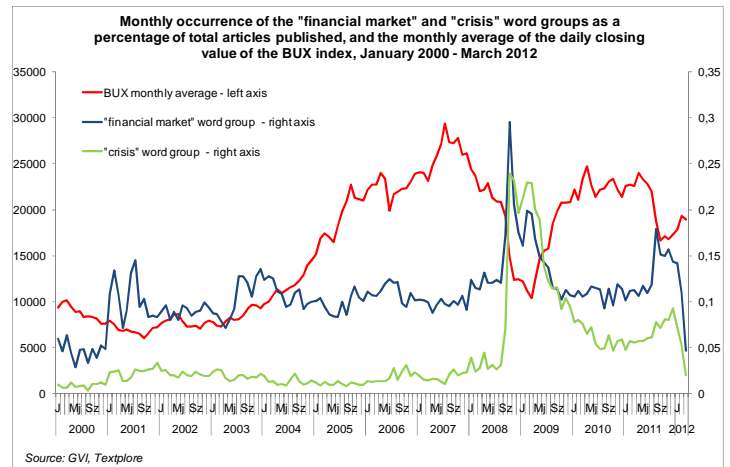
If the monthly average daily closing values of the Budapest Stock Exchange Index (BUX) are compared to the rate of the occurrence of word groups, we can see it is mostly the "financial market" and "crisis" groups which move together with it. As a result of the economic crisis – and other factors – the BUX index suffered a huge decline from July 2007 to March 2009. This was followed by the appearance of hitherto unseen high rates of words related to "financial market" and "crisis" in the online media. From mid-2009 until spring 2010 the Budapest Stock Exchange Index showed a relatively steady increase and the use of these words dropped. Between April 2010 and April 2011 the BUX index showed relatively minor fluctuations but remained at high levels, and the use of the terms "financial market" and "crisis" stagnated at a rate well before the crisis. From April to November in 2011 the BUX index showed a further significant drop, and the word indicators again began to rise.



Conclusions

In our study real economic processes and related online media coverage were examined. Based on the results of our analysis, it can be said that our initial assumption was justified since the vocabulary of the Hungarian online media changed as a result of the economic crisis: economic-related topics received more attention during the crisis and the years since than at any time before 2008. The "economic policy", "companies", and "crisis" word groups significantly increased, while change for the "foreign trade" group was negative. In this way, the economic crisis represented a real break point regarding the presence of economic issues in the online media.

It remains to be seen to what extent this effect will be lasting, that is, whether this interest in economic phenomena remains during a hopefully calmer period in the future. The answer to this question can only be determined with further research and a 5-10 year post-crisis analysis of the data. This research is important because a large share of the population look to online media as their primary source of information, thus if this source is accurate, professionally informed and frequently provides relevant information then this may contribute to an increase in the economic and financial awareness of the population. Such an increase in financial awareness, in turn, can affect real processes, through changes in such things as savings, borrowing, and consumption behaviour.



Macro-economic trends: the economic situation in Spain

In the second quarter of 2012 Spanish GDP again fell 0.3 percent, which means the economy is technically in a recession. The decline was mainly due to falling consumer demand. It is projected that for this year GDP is expected to decline between 1.3 to 1.5 percent. Industrial production fell by 7.5 percent annually, while Spain has the highest unemployment rate in Europe (24.3 percent). The bursting of the 2008 real estate bubble is a major cause of the very bad economic situation.

Spain is increasingly in a difficult position on the financial markets: yields for government bonds at a June auction rose to very high levels. In addition, overdue loan payments at Spanish banks increased to their highest level since April 1994. Spain still needs to refinance 82 billion Euros in debt this year, and the entire banking system needs to be recapitalized. Therefore, the government on June 25 officially requested assistance from the European Union so that it can consolidate the bank sector. The rescue package amounts to nearly 100 billion Euros.

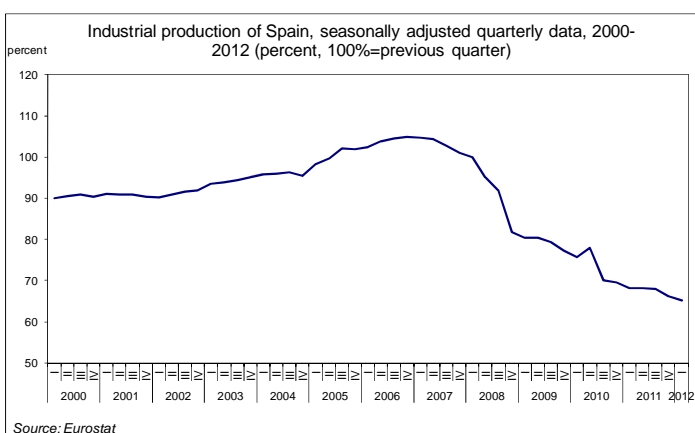
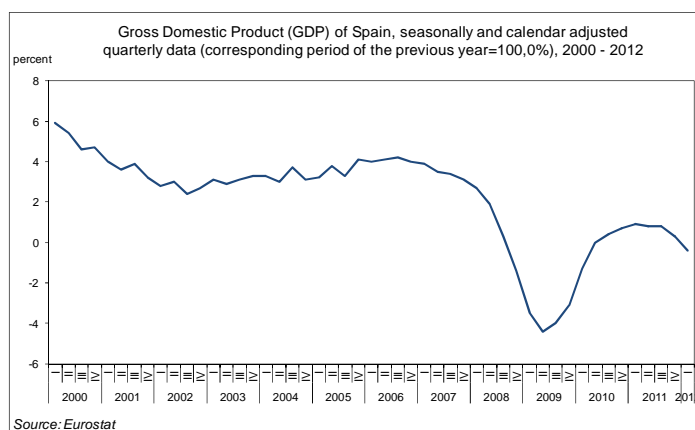
Economic Situation

According to data from the Spanish statistical office in May of this year, Spanish gross domestic product (GDP) fell 0.3 percent in the first quarter. As GDP also declined 0.3 percent in the previous three months, the economy is officially in a recession. This is mainly the result of declining consumer demand which is partly due to austerity measures and also partly due to the negative effects of the European debt crisis. Household consumption and consumer confidence in the first quarter dropped to their lowest level since 2010. The Spanish central bank expects a 1.5 percent drop in GDP for the current year as a whole. The BBVA financial analyst group forecasts that the Spanish economy will shrink 1.3 percent this year, but will increase 0.6 percent next year.

The Spanish Minister of Economic Affairs stated that the country will meet this year's deficit, even though the GDP in the second quarter declined and the 2011 deficit is larger than previously calculated. However, the Madrid Government has revised the budget twice within five months, which further increased the lack of confidence of investors and also raised concerns in the union.

According to May data from the Spanish statistical office, industrial production significantly declined by an annual 7.5 percent in March 2012. This is the largest decline since October 2009, exceeding the 5.3 percent expected by analysts. Spanish industrial output fell steadily since the autumn of 2011. Investment goods production declined by 11 percent, the sharpest decline yet, while the production of durable consumer goods declined by more than 10 percent.

In addition, Spain has the highest unemployment rate in Europe (24.3 percent), which is double of the EU average, whereas in 2006 it was just 8.5 percent, the same as the EU average. Young people across the country struggle to find jobs, with the unemployment rate for those less than 25 years of age at 51.5 percent.



Real Estate Market History

A major cause of the very bad economic situation is the bursting of the Spanish real estate bubble in 2008. The problem is that many Spanish families are heavily into debt because of cheap real estate loans, and the overheated pace of various real estate investments. Along with domestic demand, Irish, German and other foreign investors were also motivated; therefore prices between 2004 and 2008 grew fast at an unhealthy 44 percent. With the onset of the crisis, however, the real estate bubble burst. Speculative real estate buyers disappeared from the market, interest rates soared, a growing number of people found it difficult to make their loan repayments, and with the loss of customers new construction projects stopped. Thousands of people in the construction sector suddenly lost their jobs. State tax revenues dwindled, with the economy steadily shrinking (the previous increase of 3-4 percent of GDP was replaced from 2008 onwards by an average decline of 1 per cent), and in just a few years homes lost 25 percent of their value.

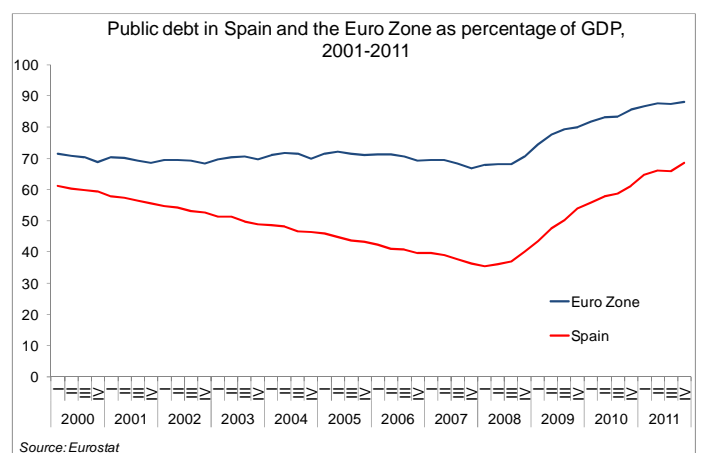
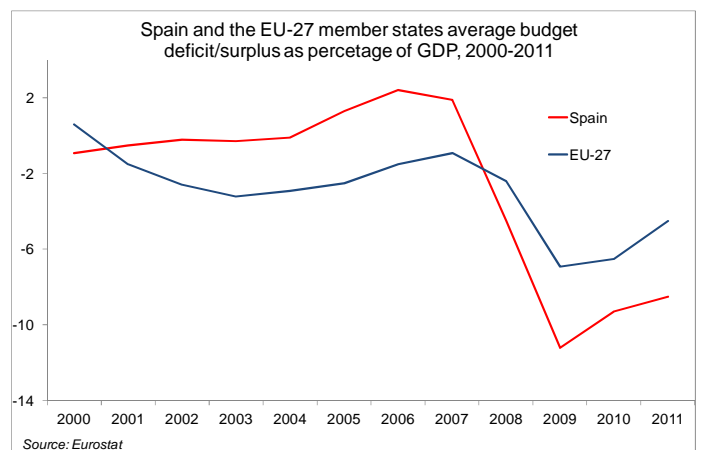
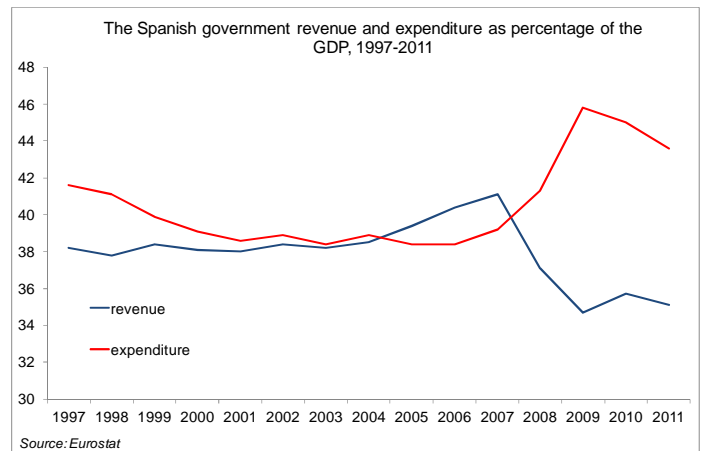
Financial difficulties

In April 2012 the number of bad loans relative to the total number of loans held by Spanish banks increased to their highest level since 1994. The Spanish central bank said in a statement in March that overdue loan payments rose by 4.7 billion Euros to 153 billion Euros, which is 8.72 percent of all loans. Late loans payments are now ten times as large as in 2007, before the crisis hit Spain. The loan portfolio of Spanish banks is 1.75 trillion Euros, roughly the same as the year before the crisis. In total, this represents 175 percent of Spain's total domestic product.

Spain is finding itself in an increasingly difficult position in the financial markets as the short-term yields at a June 19 auction of government bonds rose dangerously high. The three billion Euros of bonds on offer saw the yields for 12 month and 18 month maturities at 5.074 and 5.107 percent respectively, while in May they were 2.9 and 3.3 percent. Experts contend that such yields for such short periods are unsustainable in the longer term.

In mid-June Spanish newspapers reported that according to the Oliver Wyman and the Roland Berger consulting companies that were mandated to audit the Spanish banking system, the banks were in need of a capital injection of nearly 150 billion Euros, much more than the 100 billion expected to be available from EU funds.

In mid-June, the international rating agency Fitch Ratings downgraded eighteen Spanish banks; and even the debt-rating of the Spanish government was significantly downgraded. Fitch referred to, among others, the estimate that in order to put the Spanish banking system in order, it will consume 9 percent of GDP from the budget. The rating



agency anticipates that the Spanish economy will be in recession for both this year and next.

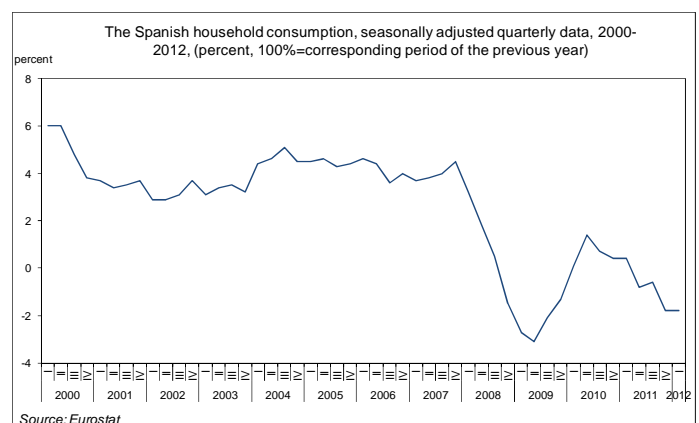
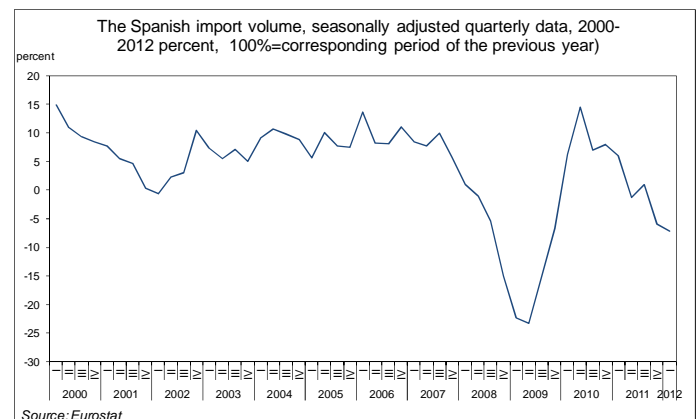
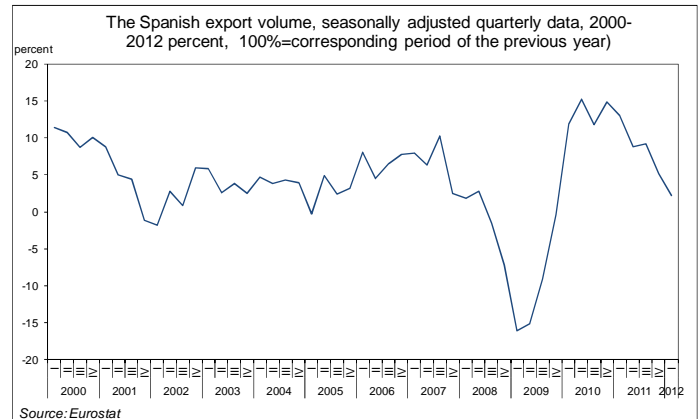
Getting Help

Spain needs 82 billion Euros this year to refinance its debt, and virtually the entire banking system needs to be recapitalized. Therefore, the government on June 25 formally requested assistance from the European Union so it can consolidate the banking sector. The amount of the rescue package has been known in advance to be 100 billion Euros, which also includes a significant safety margin. Spanish Finance Minister Luis de Guindos feels that the amount will be sufficient to settle the capital needs of Spanish financial institutions. Reports from financial and government sources note that the bulk of the sum will go to four partially nationalized banks: Bankia, the CatalunyaCaixa, the NovaGalicia, and the Banco de Valencia will receive the funds, thus by July a 40 billion euro cash injection is needed. As for the additional capital requirements required by the Spanish banking sector, the consulting firm Oliver Wyman sees 51 to 62 billion Euros in the case of a stress test scenario, while the Roland Berger estimated 51.8 billion Euros. The three major Spanish banks surveyed proved to be fiscally stable, so they are not yet in need of fresh capital.

The Madrid government wants the money to be paid to the Spanish bank rescue fund in order to avoid having the loan increase the sovereign debt of Spain, thereby further eroding the country's financial position and making the country's borrowing costs more expensive. Lengthy negotiations can still be expected on this issue. German government sources at the beginning of June, however, suggested that they are working on a compromise solution. The Spanish banks have 298 billion Euros of outstanding mortgages, which represents around 30 percent of Spanish gross domestic product. The repayment on half this amount is in arrears with debtors, and with the deterioration of the economic situation this proportion will increase. The banks have already written down 54 billion Euros in debt since the real estate market crisis erupted in 2008. With the bursting of the real estate bubble, there was an explosive rise in the number of bad loans after 2008 because people were unable to repay their mortgages as a result of the recession and rising unemployment. Data from the Spanish central bank show that the banking system's bad debts to be 175 million Euros.

According to the rescue package declaration, the future terms of the agreement will be determined by EU state aid rules and restructuring programs, and so-called horizontal structural reforms.

Source: index.hu, hvg.hu, napi.hu, portfolio.hu



International trends

The Ifo Index, Germany's industry and trade confidence index of the Institute for Economic Research in Munich showed a significant drop in May 2012. The current business situation assessment deteriorated significantly compared to April and the expectations for the near future became pessimistic. According to the IEER asynchrony index, the Ifo business confidence index shows greater uncertainty than in the past month. Researchers see uncertainty from the euro zone affecting the German economy. The May survey results from the French statistical office (INSEE) showed a continued deterioration in the French business climate. In the opinion of business leaders, the business confidence index fell two points and is well below its long-term average. The economic turning point indicator again shows a negative business climate. The general outlook index sharply declined and remains well below its long-term average.

Germany (Ifo)

The Ifo Business Climate Index for industry and trade in Germany fell significantly in May. Assessments of the current business situation deteriorated clearly. The business situation nevertheless remains above the long-term average. Companies also expressed greater pessimism about their business outlook. The recent surge in uncertainty in the Eurozone is impacting the German economy.

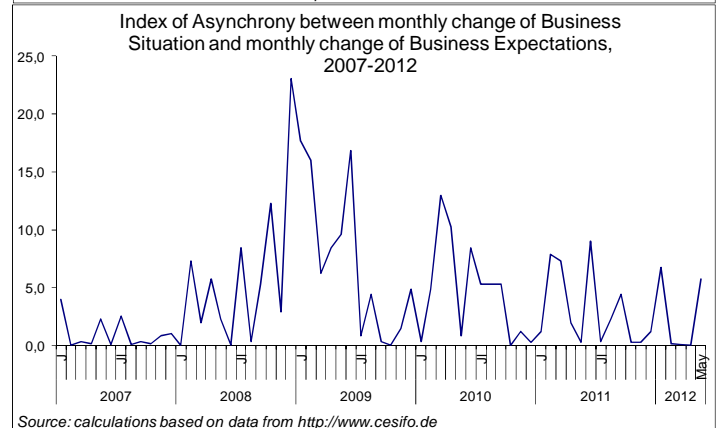
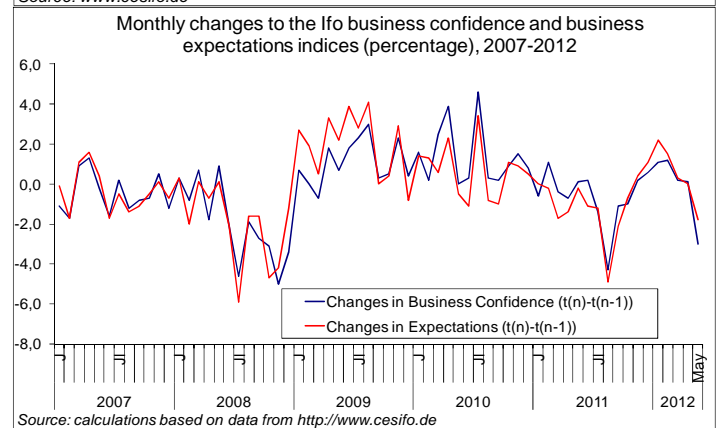
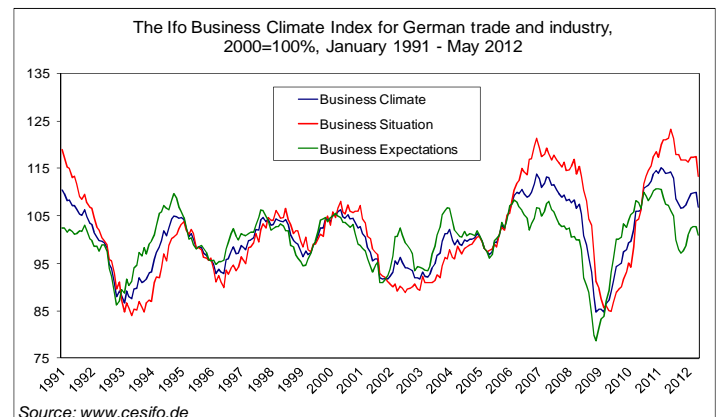
Measuring the gap between the business situation and expected developments, the asynchrony index calculated by IEER rose in May, thus the business confidence index showed a higher level of uncertainty compared to last month.

The business climate index in manufacturing dropped sharply. This is primarily due to much poorer assessments of the current business situation. As far as the six-month business outlook is concerned, positive and negative expectations roughly balance each other out. The majority of manufacturers reported defensive recruitment plans for the first time in months. However, they expect further stimulus from exports.

The business climate clouded over significantly at both levels of trade. Assessments of the current business situation slumped in retailing and the majority of expectations are pessimistic. In wholesaling the downturn was relatively small. The wholesalers surveyed saw deterioration in their current business situation and are less optimistic about their six-month business outlook.

The business climate indicator also dropped in construction. While the current business situation showed a slight improvement, the constructors surveyed were less optimistic about future business developments.

Source: Ifo (<http://www.cesifo-group.de>)



France (INSEE)

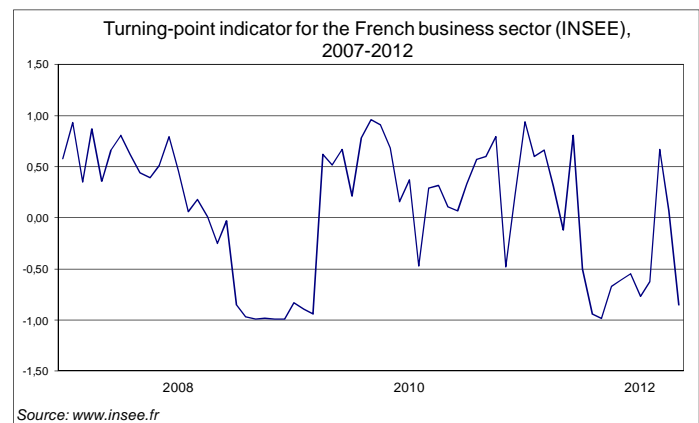
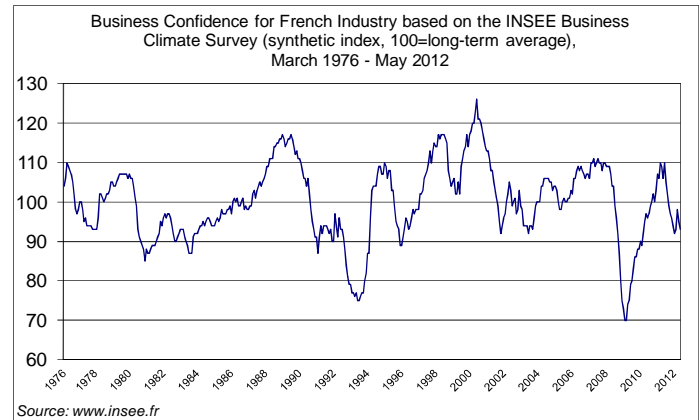
In the view of business leaders interviewed in May for the French statistical office (INSEE) survey, the business climate in France worsened again last month compared to the previous month: the INSEE business confidence index fell two points, and is well below its long-term average.

The economic turning point indicator has moved to the unfavourable economic situation zone.

Business leaders remain unsatisfied with their output from the previous period. As for stocks of finished products, company managers believe they increased slightly and reached the long-term average level. The total stock orders index decreased significantly and is currently at very low levels. The export orders index remained stable, and the balance ratio is well below its long-term average.

French economic growth in the coming months is expected to lose momentum: the individual business operations forecast of company executives (which summarizes the business prospects of the coming months) remained stable in May compared to the preceding month. The general business outlook index – which reflects the sum of opinions related to the business activity of respondents – decreased sharply compared to last month and is well below its long-term average.

Source: INSEE (<http://www.insee.fr>)



Written by: Ágnes Makó (analyst, IEER)
E-mail: agnes.mako@gvi.hu

In case of publication please acknowledge the source
as follows:

IEER: Monthly Bulletin of Economic Trends,
June / 2012, Budapest,
2012-06-26