

THE COUNTRY RISK REFLECTED IN THE CDS QUOTATIONS

Mădălina Antoaneta RĂDOI*
Alexandru OLTEANU**

Abstract

We know the fact that, with the rapid growth of the economic, political and financial instability, country risk analysis has gained an increasingly important role in the practice of international financial institutions. There have been developed a number of country risk assessment models used by companies that are looking to penetrate new foreign markets or who want to protect and minimize their investment losses, including macro-financial models, econometric models, models developed by the Standard & Poor's and Moody's rating agencies etc. However, one of the indicators that measure the perception of a country among investors is the CDS (Credit Default Swap) price. By using this tool, an investor will be compensated if the debtor goes bankrupt and as such the lower the CDS price is, the lower the perception of that debtor's bankruptcy risk is. The purpose of this article is to present the impact of the increase or decrease of CDS quotations on a country's loan costs.

Keywords: country risk, country rating, derivative instruments, risc de tara, Credit Default Swaps (CDS).

1. Introduction

In order to understand how country risk is reflected in the evolution of CDS prices and, implicitly, on a country's loan costs, we will need to explain the two concepts, namely country risk and Credit Default Swaps (CDS) - a financial derivative instrument used to cover the default risk.

Country risk is defined as "the risk of exposure to a potential loss of an actual asset / business as a result of the occurrence of economic, political or social events that are, from a certain level up, at least partially, under government control in the host country and not under the control of the owner of the asset / manager of the company"¹. If the government cannot control an unfavourable event, but only its impact, then the possibility of the event occurring is a country risk. The country risk concept was originally applied only to government loans and was then extended to government-guaranteed private loans, private non-government guaranteed loans, foreign direct investment, and even foreign portfolio investment.

In order to penetrate an international market, any company needs to know the economic, financial and social-political situation in the host country that will allow it to determine the level of the country risk. In emerging markets, however, there may be major economic or political changes, causing short-term changes in the level of the risk associated with the market or country in question. As such, the country risk assessment will be conducted whenever an event leading to rating degradation occurs in order to adopt those strategies to reduce potential or actual losses.

A worsening of the economic or political situation in the host country does not always lead to a degradation of the country rating. A country is downgraded to an inferior risk class only if the disruptions recorded in the economic or political environment act long-term and the economy of the host country is not able to cope with them.

Uncertainties about global economic growth, the state of the international financial system, and the deepening of geopolitical tensions have led to a deterioration in investors' confidence in emerging economies, which can be reflected in the rapid foreign capital outflows of these economies and the increase in the cost of financing them.

As far as political risks are concerned, they will continue to be a major concern in 2018. Among the areas with advanced economies, Europe is the one facing the greatest political uncertainty. During 2017, the European Coface political risk indicator² increased by an average of 13 points for Germany, France, Italy, Spain and the United Kingdom. If major political turmoil continues, at a scale similar to that of the British referendum, European growth could slow down by an average of 0.5 points.

Political risks in developing countries are higher than ever, driven by so-called "social" dissatisfaction and increased security risks. CIS (because of Russia, with a score of 63% out of 100% in 2016) and the regions in North Africa / Middle East (Turkey and Saudi Arabia both having a 62% score) show the greatest risks among the major emerging economies. The increase in the political and social frustrations in South Africa is partly responsible for downgrading its assessment to Class C, in a very poor growth context.

* Associate Professor, PhD Faculty of Economics and Business Administration, "Nicolae Titulescu" University, Bucharest (e-mail: madaradoi@gmail.com).

** Professor, PhD, Faculty of Economics and Business Administration, "Nicolae Titulescu" University, Bucharest (e-mail: alolteanu@univnt.ro).

¹ Economic Dictionary, 2nd ed., Economica Publishing House, Bucharest, 2001, p. 387

² www.coface.ro (press release 0/202/2017)

Security risks, including terrorist attacks, conflicts and loss of human lives are a new factor in determining the political risk indicator in emerging countries. As expected, they reach the highest ratings in Russia and Turkey.³

Concerning Eastern Europe, Poland is threatened by unprecedented political and possibly economic sanctions on the part of the European Union for erosion of the rule of law, while the billionaire leader of the Czech Republic has failed to form a majority government. In the case of Romania, the ruling party has removed its third prime minister in about a year. One of the risks to Romania's governance indicators is the uncertainty caused by the justice reform, which has attracted public protests and criticism from EU Member States. From this point of view, Romania risks losing some of the allocated European funds and being politically marginalized from the European institutions.

Coface has conducted a country risk assessment for some countries, concluding:⁴

- **Spain** climbed to level **A3**, while **Iceland** and **Cyprus** (where capital control risks are down) are now being assessed at **A2** and **B** respectively.
- Countries in Central Europe continue to improve their ranking among the 160 countries rated by Coface. **Estonia (A2)**, **Serbia (B)** and **Bosnia-Herzegovina (C)** have all experienced improvements in terms of business, and economic growth in these countries is reaching comfortable levels. Bulgaria (A4) has confirmed its recovery, due to moderate growth and further consolidation of the banking sector. Romania is at the A4 level, but according to Coface, some of the weaknesses are slow bureaucratic and legal processes, corruption, low public revenues and tax evasion. The macroeconomic developments in Romania, the improvement of country ratings by the three US rating agencies: Standard & Poor's, Moody's and Fitch Ratings at investment grade (low investment risk), but also the regional risk perception by investors led to the reduction of the CDS quotations of our country to 100 basis points.
- Greece was assessed at B level, its weak points being: high levels of public debt, tax evasion, poor banking portfolios, social tensions fuelled by fiscal austerity, mass unemployment and weak public institutions.

The most accurate assessment and positioning of country risk is very important for a company's decision-making system. Knowing the level of risk of a country and the premises underlying its change in time provide economic operators with greater certainty and the

possibility of adopting adequate measures to reduce the risk exposure of their international operations⁵.

The country risk concept is differentiated as investment or lending risk depending on the system of indicators and the time period. As regards credit risk, according to the ISDA conventions, it takes the following forms: bankruptcy or insolvency, bankruptcy of a company with which the reference entity is in close relationship, non-payment of the interest / coupon at maturity, debt restructuring, debt extinguishing, accelerated repayment of the obligation, downgrading of the rating class, acquisition / merger.

Credit risk transfer instruments include credit derivatives that can be defined as a "class of financial instruments the value of which derives from the market value due to the credit risk of a private or government entity, other than the counterparties involved in the derivatives transaction related to the credit risk"⁶. This definition highlights the role of credit derivative instruments in trading the credit risk of a particular entity by two parties that may not have any commercial or financial relationship with that entity the credit risk of which is being traded.

The term "credit derivatives" was first used in 1992 by the International Swaps and Derivatives Association (ISDA), an institution that developed and published in 1994 the standard form (template) of the Master Agreement, as well as the main regulations regarding these contracts, valid worldwide⁷.

One of the credit risk derivatives traded on OTC (over-the-counter) markets is also the Credit Default Swap (CDS) contract.

Unlike insurance contracts concluded for 1 year (or year fractions), credit derivatives offer protection over longer periods.

The first CDS contract was introduced by JP Morgan in 1997 as a way for the banks to protect themselves against their exposure to large corporate loans they made to their clients.

These contracts are the most used in credit risk management, and are bilateral contracts where regular fixed payments (or only one premium in the credit default option case) are made to the seller for protection in exchange for the payment the seller will make in the event of a credit event specified in the contract. Usually the premium is quoted in base points multiplied by the nominal value. The support asset (reference asset) of the contract may be a single financial instrument (e.g. a bond) or a toolbox.

The credit default swap can be used to transfer credit risk exposure to another party. For example, banks may use this contract to trade the credit spread for bonds issued by private entities or governments without having these instruments.

³ www.coface.ro (press release 0/202/2017)

⁴ www.coface.ro

⁵ http://www.finint.ase.ro/Cursuri%20masterat/Master%20ASE_Management%20si%20marketing%20international/Studiile%20de%20caz/Analiza%20gradului%20de%20expunere%20la%20risc.pdf

⁶ Das S. "Credit Derivatives and Credit Linked Notes", 2nd edition, John Wiley & Sons, Singapore, 2000, page 7

⁷ Tomozei V., Enicov I., Oboroclu. "Risks and Financial Coverage Instruments", Evrica Publishing House, Chişinău, 2002

The maturity of the contract must not be the same as that of the reference asset and in most cases it is not. In case of default, the contract is considered completed and the protection seller will calculate and pay the buyer the default payment.

The flows that take place during the performance of the contract are:

- Regular payments (premium leg) of the protection buyer: base points of the nominal value;
- Payment received by the protection buyer in the case of the occurrence of a credit event (protection leg): the nominal value of the bond \times [100 - the price of the bond after the occurrence of the event specified in the contract].

As a result, the payoff of this tool is binary.

The CDS price on the derivatives market is called spread. Credit default spreads or default risk insurance pricing reflects the perception of the risk associated by the investors with an entity's issued credit, and when it is bought by international investors, it also reflects the perception of the country risk. CDS represents the cost of reinsuring a country's debt against loan restructuring or the cessation of payments. The level of CDS influences the cost of external financing, and if it becomes lower, the state can borrow funds at lower costs, while local banks can attract cheaper credit lines from parent banks.

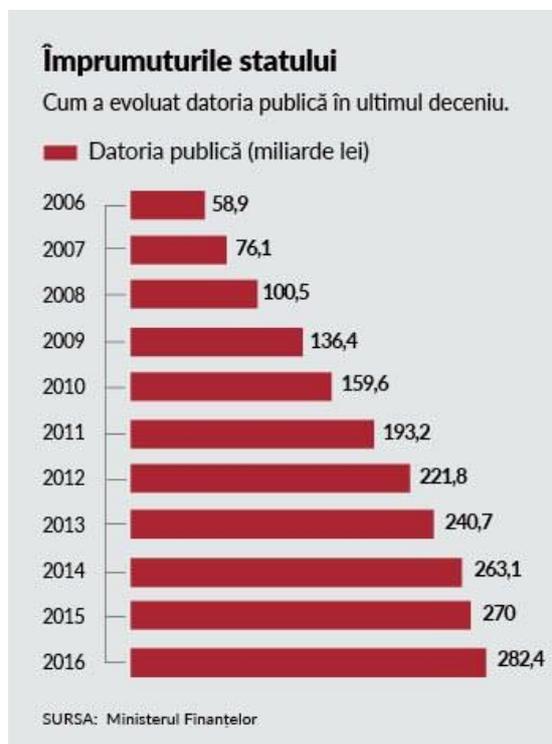
It should be remembered that, although CDS is used by investors to cover against credit risks, speculators use them for risks to which they are not directly exposed. The global financial crisis raised the first questions about the speculative use of CDS. An EU regulation to decrease speculation on debt derivatives, which came into force on November 1, 2012, could affect the borrowing ability of countries with small government debt markets such as Poland, Hungary, Lithuania and the Czech Republic. Hedge funds are extremely present in CDS transactions in these emerging markets, through the so-called "directional transactions". If funds believe that the economic situation will deteriorate, they buy CDS, and they expect an improvement, they sell. These transactions are made without the investor needing to hold bonds for which to sell or buy the CDS.

2. CDS with exposure to Romania

A representative indicator for the country risk analysis is the public debt, which is the direct effect of the cumulative budget deficits from previous periods, which must be financed by loans. In an analysis of the German investment bank Berenberg, Romania was likened to the "Eastern European tiger", as the country's development after the crisis that started in 2008 was remarkable, by reducing the budget deficit from 5.6% of the GDP in 2008, to 2.6% in 2015, 2.41% in 2016 (RON 282.4 billion according to Chart 1), 2.887% in 2017 and with an average annual growth rate of 3.6% from 2000 to this day, while the EU average is 1.2%. In 2017, Romania recorded an economic growth of 6.7%.

However, capital inflows are vital to adequately stimulate the transition from an economic growth driven by the increase in aggregate demand to an economic growth driven by the long-term growth of aggregate supply, by significantly improving the performance of production factors.

Chart 1 - Romania's public debt in 2006-2016



Although 2017 ended, in the case of Romania, with a budget deficit of RON 24.3 billion, or 2.88% of the GDP, under the annual target of 2.96% of the GDP set by the ruling coalition, this was achieved by:

- the significant reduction of investments that were down by 10% in 2017 compared to the previous year;
- the reintroduction, in September 2017, of the excise over-duty of 7 eurocents / litre which generated revenue for the budget;
- blocking the payments of authorizing officers (meaning their exclusion) after December 27, 2017;
- dividends paid to the state budget by state-owned companies that could have been used for investments.

Fitch Ratings financial assessment agency also states that "The budgetary target was reached by realizing only half of the planned capital expenditures. Tax cuts have reduced the ratio between revenue and the GDP to one of the lowest levels in the region, while the gradual increase in the minimum wage, public sector wages and pensions has increased basic spending". Investments, including capital expenditures, as well as expenditures related to development programs financed from domestic and external sources,

decreased by about RON 3 billion, respectively 3.2% of the GDP versus 3.9% of the GDP in 2016.

The December 2017 financial stability report of the National Bank of Romania shows that "the continuation of an expansionary fiscal-budgetary policy is likely to put pressure on the cost of financing the budget deficit and implicitly on the medium-term public debt sustainability. The contribution of the public deficit to financing needs rose to 3% of the GDP in 2017, from 2.4% in 2016 and 1.4% in 2015, amid the deepening of the budget deficit starting in 2016. Continuing this development could put pressure on the level of public indebtedness in the future". According to the European Commission, the structural budget deficit reached 3.3% of the GDP in 2017, rising by 3 percentage points in two years. In 2018, the budget will continue to deteriorate, with Romania risking to return to the EU's excessive deficit procedure, from which it had exited in 2013, according to Fitch estimates, but remains below the 40.9% average of the BSE rating.

Public debt can fuel economic growth only if the total amount of debt-generated income is higher than the total debt balance. If the public debt grows as a result of the financing of the current budgetary expenditures, there will be negative medium and long term effects in the economy. This increased public debt will soon turn into a higher financing cost for our country. The country risk will be felt in the prices of treasury bonds and CDS. An economy that is in great need of financing will face restricted access to primary markets and high interest rates.

Romania's public debt increased in Q3 2017, compared to Q3 2016 by RON 25.4 billion (5.5 billion euros) but decreased as a share of the GDP compared to the reference period, by 0.6% according to Eurostat, the statistical office of the European Union. The ratio between the public debt and the GDP increased to 38% at the end of 2017, from 37.6% in 2016, indeed under the target of 60% of the GDP agreed at the European level by the Maastricht Treaty. Mainly, extending the maturity of the public debt led to a decrease in the refinancing risk. Public debt is mostly contracted in the medium or long term (94% of the total, being equally attracted from the domestic and foreign markets). Although public debt is at a sustainable level of 38% of the GDP, things may worsen in the years to come, given that the state will accrue significant debt as a result of higher public pensions and wages. In any case, a large deficit is not recommended in a period of economic growth, as in a possible recession period, it will increase greatly, which will lead to an exponential increase in public debt. Prior to the crisis, public debt was below 15% of the GDP, but in the years to come, government revenue dropped significantly as the economy was in recession. As such, deficits have reached record levels of over 7% of the GDP (RON 36.4 billion added to public debt in one year - 2009).

At the EU level, there is also a decline in public debt versus the GDP, both in the euro area (from 89.7% to 88.1%) and in the EU28 (from 82.9% to 82.5%)

compared to the third quarter of 2016. At the end of the third quarter of 2017, debt securities accounted for 80.3% of the euro area and 81.4% of government debt of EU28. Credits accounted for 16.5% and 14.5% respectively, and the currency and deposits accounted for 3.1% in the euro area and 4.2% of the government debt of EU28.

In recent years, there has been a gradual improvement in risk perception, with the costs at which Romania contracted loans on the international capital markets decreasing. The cost of insurance against the default risk reflected in credit default swaps quotations has reached 100 basis points, and Romania continues to be seen by foreign markets as a low-risk placement compared to other European countries. The CDS reflects the evolution of investor perception and the degree of mistrust in a particular issuer, becoming one of the most visible indicators of a country's ability to finance its capital markets in the years of crisis. CDS is traded on the financial markets, so its price may have significant fluctuations, depending on the status of the debtor concerned and the international financial environment. It has become the focus of public attention during the peak of the financial crisis in 2008-2009. When the CDS price drops, not only the state can borrow at lower costs, but local banks can also attract cheaper credit lines from parent banks.

The link with bank loans is due to the fact that interest rates at which local banks contract external loans are determined by both the reference interest rates in euro, Swiss dollars or francs (LIBOR and EURIBOR) and by the perception of external financial markets of Romania's country risk, expressed through the CDS quotation the subject of which are the bonds issued by the Government.

As a result, banks increased customer interest rates due to the worsening of the perception of the country risk, thus no longer having access to cheap financing from parent banks. From our point of view, there is no direct relationship between the CDS quotation and bank financing cost, but only a theoretical one.

As a result of the latest financial crisis, the specialized literature the price formation mechanism on public debt instruments markets gained greater attention, which showed that the investors' perceptions of a country's economic status may significantly affect sovereign financing costs. For policy makers, it is important to assess how the prices of government bonds and CDS contracts are being formed, as it allows a good understanding of how the evolution of fundamental factors and investors' perceptions is translated into quotations on the financial markets.

"Traditionally, the assessment of public debt instruments is based on the interest rate and liquidity risk, but the sovereign debt crisis has brought the default risk back into focus, as evidenced by the sustained growth of the trading activity on the market of the CDS associated with securities issued by euro area Member States. Under these circumstances, it is

not surprising that many quantitative analyses come to the conclusion that the pricing of these instruments is closely linked to developments in the CDS markets. However, other authors demonstrate that the causal relationship takes place in the opposite direction”⁸.

According to the financial stability report drafted by the NBR, "during the year 2016 there is a relatively stable dynamics of the CDS quotations in the emerging countries in the CEE region, including Romania, as compared with the development of indices for countries such as Spain or Italy. The impact of the vote on Britain's exit from the European Union has been amplified in the case of CDS quotations for Portugal, Italy, Ireland, Greece and Spain, largely determined by the negative perception of high levels of public debt, given the potential implications on the architecture of the European Union. Thus, on the day of the Brexit referendum, the risk associated with the sovereign exposures of Spain and Italy increased by 29% (29.3 base points) and 25% (35 base points), while the CDS quotations of Hungary and Poland registered increases of 14% (21.2 base points) and 10% (8.3 base points) respectively. Market quotations for the sovereign risk associated with Romania marked a temporary increase of 20% (25.4 base points), returning in the beginning of July 2016 to the average trend recorded this year.

The cost of sovereign debt financing issued by the Romanian state recorded a synchronous evolution with the observed trends in other countries in the region. In this sense, the gap between the yields of the Romanian and German government securities recorded a slight increase between April and June, after which, following the decision of the British citizens to leave the European Union, it decreased significantly. The similar evolution of the region's differences, observed both in terms of level and magnitude of the fluctuations, reveals that the determinants were of a global nature and therefore the effects were similarly felt".

As regards the January-September 2017 period, according to the December 2017 Stability Report of the NBR, "CDS quotations related to sovereign debt instruments issued by the Romanian state remained relatively stable, with the exception of a slight decrease in the first two months of the year. In August and September, there was a slight volatility, caused by the temporary tensions in the domestic political environment, as well as by the US Federal Reserve's announcements on the increase in the monetary policy rate"⁹.

Conclusions

Although the sovereign CDS' market can anticipate the changes of a country's rating, this information is not always conclusive, because on the one hand the spread of CDS with exposure to a country was floating, the rating of the country stood still, and on the other hand CDS can be used for speculative purposes, as was the case of Lehman Brothers.

Lehman Brothers bankruptcy, caused by overexposure to securitized instruments with sub-prime base assets, has created tremendous pressure on AIG (a company that sells CDS for insuring against bankruptcy of banks, funds or companies) both through the clearing channel of CDS' protection on Lehman Brothers and through the destabilization of the securitized real estate market. It was estimated that, in 2008, the total of Lehman Brothers' credit risk swaps amounted to USD 400 billion, while the total of the bonds covered was USD 150 billion, the difference being purely speculative.

In addition, CDS derivatives being traded on the OTC market (the unregulated market OTC – Over the Counter) add even more uncertainty to the system. However, CDS reflect the evolution of investor perceptions and the degree of mistrust in a certain issuer, becoming in the crisis years one of more visible indicators of a country's ability to finance its capital markets.

Deutsche Bank has ranked among the most 49 risky countries in terms of the likelihood of their governments defaulting. According to this ranking, Romania rank 20th with a margin of 130 basis points between selling and buying prices of CDS in the global market. The bigger the difference is between the buying and selling quotations of the CDS, the government securities of that country are considered more risky. It should be remembered that the most difficult year for Romania, in terms of risk of default, was 2009, when our country registered a margin of 626 points.

In the case of Romania, the cost of the default risk insurance reflected in the five-year CDS quotations dropped to 94.88 points in September 2017, our country being perceived as risky as Hungary (94.64 basis points), but more risky than Poland (54.88 basis points) or the Czech Republic (37 basis points). The best borrowers are Norway and Sweden with 14 points.

The general benefits of derivatives are that by securing risk in international or domestic transactions, financial institutions have the opportunity to invest more easily in different assets or markets and thereby benefit from increased leverage. In this way, derivatives contribute to increasing the liquidity and efficiency of markets.

⁸ www.bnr.ro_Financial Stability Report", December 2016, page 89

⁹ www.bnr.ro_Financial Stability Report", December 2017, page 118

References

- Dictionar de economie, editia a 2-a, Editura Economica, Bucuresti, 2001, pag.387
- www.coface.ro (comunicat de presa 0/202/2017)
- www.coface.ro (comunicat de presa 0/202/2017)
- www.coface.ro
- http://www.finint.ase.ro/Cursuri%20masterat/Master%20ASE_Management%20si%20marketing%20international/Studiile%20de%20caz/Analiza%20gradului%20de%20expunere%20la%20risc.pdf
- Das S. "Credit Derivatives and Credit Linked Notes", Editia a 2-a, John Wiley & Sons, Singapore, 2000, pag.7
- Tomozei V., Enicov I., Oboroc Iu. "Riscuri si instrumente financiare de acoperire", Editura Evrica, Chisinau, 2002
- www.bnr.ro "Raportul de stabilitate financiara", decembrie 2016, pag.89
- www.bnr.ro "Raportul de stabilitate financiara", decembrie 2017, pag.118
- <https://www.sfin.ro/recomandari/intre-economia-reala-si-speculatie/>
- http://www.economica.net/care-este-riscul-de-default-al-romaniei-si-cu-cine-se-compara-intr-un-top-global_103621.html#ixzz5CBfBdGZ0