BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine

www.businessperspectives.org

Božena Chovancová (Slovakia), **Peter Árendáš** (Slovakia),
Patrik Slobodník (Slovakia), **Iveta Vozňáková** (Czech Republic)

COUNTRY RISK AT INVESTING IN CAPITAL MARKETS – THE CASE OF ITALY

Abstract

Given the current turbulences on the European capital markets, as well as the expectations of a new recession, it is possible to expect that the risk of individual countries and their capital markets will increase significantly. This is particularly the case of those countries, which have long-term problems with economic instability and imbalances. The basis for country risk quantification is the country credit rating and credit risk of the government bonds. The market-based methods react often differently, as their reactions to the actual market developments are more flexible. The purpose of this paper is to compare various methods of country risk measurement. The study is focused on the country risk of Italy, a country that experienced a turbulent economic development over the last two decades. The results show that the CPFER method and sovereign ratings show a similar level of country risk, while the market-based methods show a higher level of country risk.

Keywords bond market, stock market, sovereign rating, equity risk premium, risk spread

JEL Classification G12, G19, E00

Received on: 22nd of April, 2019
Accepted on: 28th of May, 2019

Božena Chovancová, Ph.D., Professor, Department of Banking and International Finance, University of Economics in Bratislava, Slovakia.

Peter Árendáš, Ph.D., Associate Professor, Department of Banking and International Finance, University of Economics in Bratislava, Slovakia.

Patrik Slobodník, Doctoral Student, Department of Banking and International Finance, University of Economics in Bratislava, Slovakia.

Iveta Vozňáková, Ph.D., Associate Professor, Institute of Entrepreneurship and Marketing, University of Entrepreneurship and Law Prague, Czech Republic.

INTRODUCTION

The problematics of capital market risks is in the center of attention of many economists. In the past, the majority of studies assumed that government bonds are a risk-free (or almost risk-free) benchmark of the capital markets. And that the other asset classes carry some risks that are reflected by the risk spread in comparison to the risk-free benchmark. Over the last decade, the developments on the capital markets (especially the global financial crisis and subsequent European debt crisis) have shown that the old theoretical concepts must be reevaluated. It is important to analyze the recent developments and set some more exact criteria for risk spreads and country risk evaluation.

1. LITERATURE REVIEW

Many authors pay attention to the problematics of country risk. For example, Bouchet et al. (2003) have already warned that country risk can be understood and measured like sovereign risk, political risk, country risk or cross-border risk.

At present, the authors examine not only economic, but also political and financial risks. Howell (2013) in cooperation with the PRS Group created the methodology for measuring country risk, based on the score acquired in three categories: economic, financial and political risk.

On the other hand, some working papers and researches are focused only on political risk. Busse and Hefeker (2007) focused mainly on emerging

http://dx.doi.org/10.21511/ppm.17(2).2019.34

countries and handled the issue of political risk in 83 emerging countries. They especially examined the role of foreign direct investment and activities of multinational corporations.

Beirne and Fratzscher (2013) used economic indicators such as public debt-to-GDP, real GDP growth, or GDP-to-CDS spread as a key indicator for measuring country risk. They examined 31 developed countries, concluding that there is a "wake-up call" contagion, as financial markets have become more sensitive to country risks.

Similarly, Maltritz and Molchanov (2013) analyzed various determinants of country default risk in emerging markets, reflected by sovereign yield spreads. According to them, the main drivers of yield spreads are the recent history of defaults, total level of debt, the growth rate of foreign currency reserves, the currency depreciation and the market sentiments.

Afonso, Arghyrou, and Kontonikas (2015) also examined the bond yield spread determinants in the EMU and found that since March 2009, the range of macroeconomic and fiscal risks priced by markets has been significantly enriched, including liquidity risk and international financial risk.

Silvapulle, Fenech, Thomas, and Brooks (2016) investigated the contagion effects in the daily bond yield spreads between Germany and five peripheral EU countries. They found evidence of financial contagion effects.

Aristei and Martelli (2014) analyzed the impact of behavioral factors on sovereign bond yield spreads in the Eurozone. They discovered that the behavioral indicators considered, such as proxies of consumer and market expectations and sentiment, strongly affect the behavior of bond yield spreads, especially during the crisis periods.

Eichler (2014) paid attention to political determinants of sovereign bond yield spreads and came to conclusion that political determinants have a more significant impact on sovereign bond yield spreads in autocratic than in democratic regimes.

The working paper from Haugh, Ollivaud, and Turner (2009) focused on the development of government bond risk spreads in the Eurozone countries during the financial crisis of 2008–2009. They compared government bond yields of individual countries to German government bond yields. They concluded that the problem of high spreads is based on the inefficient and deficit economy of some countries, as well as higher investor risk aversion during the crisis periods.

Bernoth, Hagen, and Schuknecht (2012) stated that interest rate differentials between bonds issued by the EU countries and Germany or the USA contain risk premiums that grow along with fiscal imbalances and depend negatively on the relative size of issuer's bond market.

Much attention was given to this issue, especially in connection with the insolvency of Greece. Chionis, Pragidis, and Schizas (2014) examined the impact of major macroeconomic indicators on government bond yields and growth of risk margins in Greece. They found that the most significant factor during the crisis era was the government deficit. On the other hand, debt-to-GDP ratios do not play any significant role.

Sgherri and Zoli (2009) also examined specific problems across Europe in association with the problem of country risk. The attention is given to the relationship between the financial crisis and its impact on the individual countries.

Reusens and Croux (2017) compared the importance of various sovereign credit rating determinants, using a sample of 90 countries during the period 2002–2015. After the European debt crisis, the importance of factors such as external debt, financial balance or economic development increased substantially. Moreover, the effect of Eurozone membership switched from positive to negative. For highly indebted countries, GDP growth became more important, and, on the other hand, government debt became more important for countries with lower rates of GDP growth.

However, credit rating agencies are often criticized. The problem is that issuers pay for the required rating, so it can be assumed that the agency is too optimistic when evaluating the issuer. If one of the agencies changes the rating of the state, other agencies will do the same, so we cannot talk about agency independ-

ence. Another disadvantage is the too long rating process. According to Damodaran (2015), credit rating agencies are reacting too late to a rating change, exposing the investors themselves to risk.

At the time of a crisis, it is assumed that credit rating agencies will overreact and aggravate credit ratings for issuers who would not otherwise undermine the rating, which will have market feedback and will only deepen the problem. Bhatia (2014) lists several of the following reasons why credit rating agencies are failing: information problems, limited human resources, revenue bias and other incentive problems.

Among other authors that deal with the problematics of risks on financial markets there are Chiu and Lee (2019), Augustin et al. (2018), Cayon (2018), Kresta and Tichy (2012) or Cipovova and Belas (2012).

The publications of foreign and domestic authors currently encounter the fact that specifically examines the country risk separately for the bond market and the stock market. The country risk associated with the bond market is mainly focused on credit risk or the insolvency of the country. On the other hand, the country risk on the stock market can be understood as a potential threat to investors who are investing in this market, as well as the companies that want to enter the market. Sovereign ratings are used to evaluate the credit risk of the country. The rating considers, in particular, the factors that affect a country's ability to fulfil its obligations of the issued bonds in time and in full. These are primarily financial indicators like the level of debt, deficit, debt or deficit to GDP, etc. On the other hand, bond spreads are used to measure the country risk not only on the bond market, but also on the stock market. These spreads are more sensitive to market changes and are characterized by higher volatility.

2. AIMS AND METHODOLOGY

The aim of this contribution is to use various methods to measure the country risk of a selected country, in this case Italy, separately on the bond and the stock market, and to compare the results provided by these methods. To reach the aim of this contribution, we will verify the following hypotheses:

1) sovereign ratings are usually much better in comparison to the market situation and sovereign ratings react slower than the bond market;

2) due to the higher risk on the stock market, the stock market risk spreads have a higher value in comparison to the bond market risk spreads.

In the beginning, we used the methodology of the International Country Risk Guide (ICRG). In this method, 22 variables divided into three subcategories are evaluated:

1) economic risk – 50 points;
2) financial risk – 50 points;
3) political risk – 100 points.

The economic risk reflects macroeconomic indicators such as GDP per capita, economic growth (GDP growth in %, annual inflation rate, government budget deficit and debt ratio relative to GDP) or balance of payments. Financial risk measures a part of country risk through indicators such as foreign debt (% of GDP), foreign debt in relation to exports, exchange rate, and so on. Every indicator has its own specific evaluation criteria, however, given the limited size of this paper, we present only the GDP growth evaluation criteria.

Table 1. Economic growth

Source: PRS Group.

GDP change (%)	Points
6	10
5-5.9	9.5
4-4.9	9
3-3.9	8.5
2.5 to 2.9	8
2.0 to 2.4	7.5
1.5 to 1.9	7.0
1.0 to 1.4	6.5
0.5 to 0.9	6.0
0.0 to 0.4	5.5
–0.1 to –0.4	5.0
–0.5 to –0.9	4.5
–1.0 to –1.4	4.0
–1.5 to –1.9	3.5
–2.0 to –2.4	3.0
–2.5 to –2.9	2.5
–3.0 to –3.4	2.0
–3.5 to –3.9	1.5
–4.0 to –4.9	1.0
–5.0 to –5.9	0.5
–6.0 below	0

http://dx.doi.org/10.21511/ppm.17(2).2019.34

The Political Risk Rating includes 12 weighted variables. Political risk reflects the stability of the government, the internal and external conflicts, the level of corruption, the level of judiciary and law, the level of international relations and external conflicts.

Table 2. Political risk components

Source: PRS Group.

Sequence	Component	Points (max)
A	Government stability	12
B	Socioeconomic conditions	12
C	Investment profile	12
D	Internal conflict	12
E	External conflict	12
F	Corruption	6
G	Military in politics	6
H	Religious tensions	6
I	Law and order	6
J	Ethnic tensions	6
K	Democratic accountability	6
L	Bureaucracy quality	4
Total		100

The following formula is used to calculate the aggregate political, financial and economic risk:

$$CPFER\left(country\ X\right)=0.5\left(PR+FR+ER\right), \quad (1)$$

where *CPFER* – composite political, financial and economic risk ratings, *PR* – total political risk indicators, *FR* – total financial risk indicators, *ER* – total economic risk indicators.

The total points from the three indices are divided by two to produce the weights for inclusion in the composite country risk score. The composite scores are ranging from 0 to 100, then we can conclude:

- very high risk of 00.0 to 49.9 points;
- high risk of 50.0 to 59.9 points;
- moderate risk of 60.0 to 69.9 points;
- low risk of 70.0 to 79.9 points; and
- very low risk of 80.0 to 100 points.

Subsequently, we will compare score-based method of measuring country risk, which we described above, with the sovereign rating-based method and also with the market risk spreads.

We will also use the market-based method using mathematical-statistical methods and models. The simplest method is to calculate bond spreads as the difference between yield to maturity of a 10-year bond of a risky country and the yield to maturity of a 10-year bond of a risk-free country. Here we use the following formulae:

The risk premium on the bond market is calculated based on the yield to maturity (YTM):

$$\begin{aligned} &Spread\ \ YTM = \\ &= YTM\ \ of\ \ 10Y\ \ Bond\ \ of\ \ risky\ \ country - \\ &- YTM\ \ of\ \ 10Y\ \ Bond\ \ of\ \ risk - \\ &- free\ \ country, \end{aligned} \quad (2)$$

We used the following relationships to quantify the stock market premiums:

$$\begin{aligned} &RSD_{\ country\ X} = \\ &= \frac{Standard\ \ Deviation_{\ country\ X}}{Standard\ \ Deviation_{\ country\ risk\ \ free\ rate}}, \end{aligned} \quad (3)$$

$$\begin{aligned} &ERP\,country_{\ X} = Risk\ Premium_{\ risk\ \ free\ rate} \times \\ &\times Relative\,Standard\ \ Deviation_{\ X}, \end{aligned} \quad (4)$$

$$\begin{aligned} &CRP\,country_{\ X} = Equity\,risk\ \ premium_{\ X} - \\ &- Equity\,risk\ \ premium_{risk\ \ free\ rate}, \end{aligned} \quad (5)$$

where *RSD* – Relative Standard Deviation, *ERP* – Equity risk premium, *CRP* – Country Risk Premium.

We used the official data of the ECB, Eurostat, the International Monetary Fund and the PRS Group to make the calculations.

3. EMPIRICAL RESULTS AND DISCUSSION

The macroeconomic development in Italy shows considerable instability and high volatility over the past two decades, largely influenced by too frequent shifts of governments. After the crisis, the development (from 2008 until 2013) is associated with a decline of the GDP growth and rise of the government debt of Italy. Although a moderate recovery has occurred after 2014, further signals indicate a reappearance of risks and the onset of a

Table 3. Italy macro-economic indicators in 2017

Source: OECD data.

GDP growth, %	Unemployment, %	Fiscal balance, % of GDP	Public debt, % of GDP	Inflation rate, %	Current account, % of GDP	Long-term interest rate, %
1.6	11.3	–2.3	132	1.3	2.8	2.6

new recession. Since 1999, when the common currency (the euro) was adopted, Italy has failed to reduce the government debt-to-GDP ratio below 100%. Quite the contrary the level of indebtedness has increased. Table 3 shows the basic macroeconomic indicators of Italy.

According to the methodology by Howell (2013) and the PRS Group, we can calculate the country risk of Italy in 2017 based on the quantification of economic and financial variables.

$$\begin{aligned} &CPFER\ (country\ X) = 0.5(PR + FR + ER), \\ &CPFER\ (Italy\ X) = 0.5(75.0 + 34.0 + 41.5), \\ &CPFER\ (Italy\ X) = 75.2. \end{aligned} \quad (6)$$

The resulting risk score equals to 75.2, which means that Italy belongs to the low-risk range of 70-79.9 points. This score can be compared to the sovereign rating of Italy (Table 4).

From the Table 4, we can see that Italian credit rating keeps on worsening and it is approaching the danger zone (rating C) that represents a really high risk for investors. This situation is mainly due to the high unemployment rate associated with the rising public debt and relatively low level of the GDP growth. These indicators are the main reason for the bad rating of Italy when compared to the other European countries. Moreover, also the political situation in Italy weighs negatively on its credit rating outlook.

Despite of it, both *CPFER* (*Italy X*) = 75.2 and the Baa2 negative rating, which is still in investing grade, indicate that the Italian country risk is relatively low. The CPFR score rating largely corresponds to the sovereign rating by Moody's. Damodaran (2018) has created a methodology that attributes to each level of the sovereign rating an exact risk spread (Table 5). According to Table 5, Italian rating of Baa2 has a risk spread of 195 basic points. After adding this risk spread to the yield of a government bond of a "risk-free" country (e.g. USA or Germany), an objective yield of the Italian government bond can be estimated.

Country ratings focus mostly on the macroeconomic factors that would affect a country's ability to repay its debt and avoid defaults. On the other hand, bond spreads reflect the current market situation. So, we assume that the market can react in advance to potential threats. It is possible to assume that a market-based method can forecast changes in sovereign rating.

If we take a look at the real market situation, we will find out that the risk spreads are sometimes below, but more often well above the levels warranted by the credit ratings. This can be seen also in Figure 1.

Table 4. Changes in sovereign rating of Italy (Moody's)

Source: Own processing based on www.tradingeconomics.com

October 4, 2011	February 13, 2012	July 1, 2013	February 1, 2014	December 1, 2016	January 1, 2018
Aa2	A3	Baa2	Baa2	Baa2	Baa2
Negative	Negative	Negative	Stable	Negative	Negative

Table 5. Rating and risk spreads (January 2018)

Source: Own processing based on www.stern.nyu.edu

Investment grade										
Rating	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3
Spread	0	41	51	62	72	87	123	164	195	226
Speculative grade										
Rating	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca
Spread	256	308	369	462	564	667	769	923	1025	1230

http://dx.doi.org/10.21511/ppm.17(2).2019.34

Source: Own processing based on ec.europa.eu/Eurostat

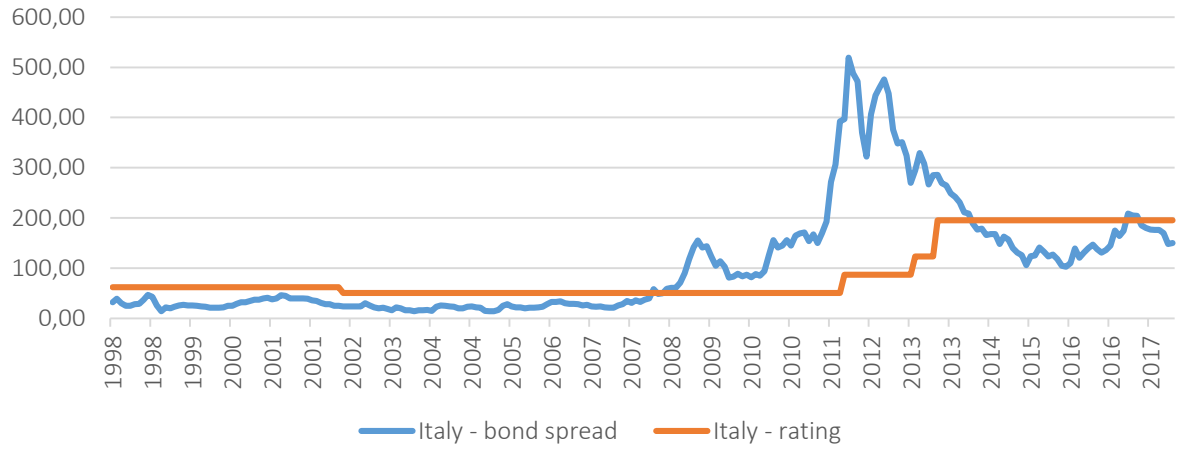

Figure 1. Bond market spread and rating-based spread (in BP) of Italian government bonds (1998 and 2018)

From the late 1990s, until the global financial crisis of 2008, Italy had a relatively high rating and as table outlook. This was also reflected in the development of bond risk spreads that were at a lower level than the rating warranted. In 2008, the risk spreads began to rise sharply, whereas the rating remained at the same level until 2011. In particular, this situation has escalated in the so-called European debt crisis, when the Italian bond spreads began to rise sharply, while the rating was declining only gradually. While the risk spreads should have been below 100 basis points, based on the sovereign credit rating, the market spread was over 500 basis points. On the other hand, we can see a decline in Italian bond risk spreads from 2014 while the rating remained stable. In 2018, we could see a slight increase in the bond risk spreads, which is was related to the growth of the Italian political risk.

We used the following equation to calculate the expected Italian government bond yields, based on the Italian sovereign credit rating:

$$bond\ spread\ YTM = \\ = YTM\ of\ 10Y\ bond_{country\ X} - \\ -YTM\ of\ 10Y\ bond_{risk\ free\ country},$$

$$YTM\ of\ 10Y\ bond_{Italy} = \\ = YTM\ of\ 10Y\ bond_{risk\ free\ Germany} + \\ + bond\ spread\ YTM\ Italy.$$

In 2011, the 10-year German bonds had a yield of 2.8%. Adding to it a 90 basis points risk spread (based on Italian 2011 credit rating), the yield on the Italian 10-year bond should have been 3.7%. In fact, the actual yield of Italian government bonds was 7.8 -8%. Similar results would be reached also if the USA instead of Germany was used as a risk-free country.

This situation has further complicated the Italian debt service. It is possible to conclude that the growing Italian government debt in the following years was partially caused by the problems experienced during the period 2011–2013.

The country risk affects also the stock markets. The benchmark of the Italian stock market is the FTSE MIB stock index that involves companies like Enel, Uni Credit, Intesa, Telecom Italia, Fiat Chrrysler and others. Also for the analysis of the Italian stock market, we used Germany as a risk-free country.

The following charts show the development of the German stock market represented by the DAX index and the Italian stock market represented by the FTSE MIB index. As can be seen, the development of the German stock market has a rising tendency, following the significant decline during the global financial crisis of 2008–2009. While in 1999 it reached 5,180 points, at the beginning of 2018, despite slight corrections, it exceeded the threshold of 10,559 points. We can say that it more than

Source: Own processing based on investing.com

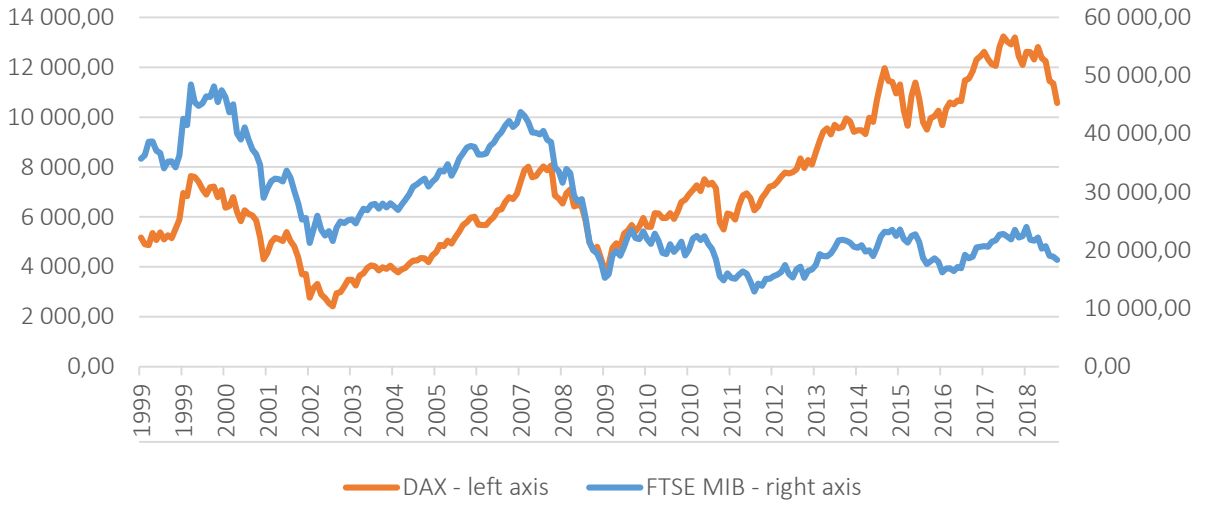

Figure 2. Stock indices DAX and FTSE MIB in 1999–2018

Source: Own processing.

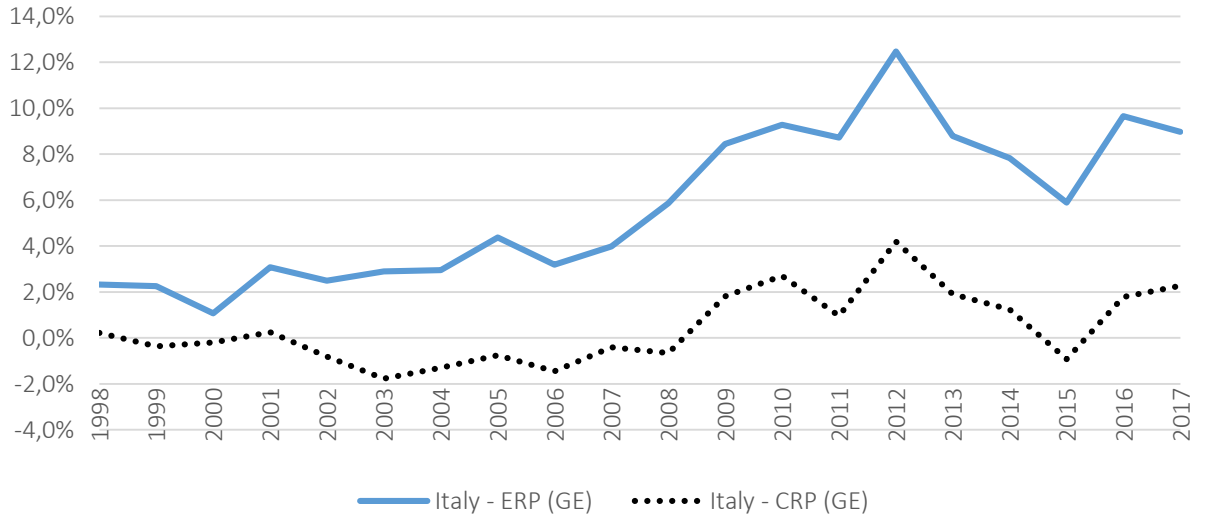

Figure 3. Equity risk premium and country risk premium of Italy in 1998–2017

doubled its value. The Italian FTSE MIB stock index, following a decline in 2008, is showing stagnation or only moderate growth. The stock index has not reached the 1999 levels yet. Back then, it peaked at when it climbed almost to 50,000 points. However, at the end of 2018, its value reached was below 20,000 points. This development trend is reflected in the risk margin of the Italian stock market, but also the rise in the country-wide risk margin.

First of all, we will calculate the risk premium of the Italian equity market (*ERP*), then we will calculate the country risk premium of Italy (*CRP*). Following steps for calculating *ERP* and *CRP* of Italy in 2017 are used:

$$RSD_{Italy} = \frac{Standard\ Deviation_{Italy}}{Standard\ Deviation_{Germany}} =$$

$$= \frac{13.58}{10.15} = 1.34,$$

$$ERP_{Italy} = Risk\ Premium_{Germany} \times$$

$$\times Relative\ Standard\ Deviation_{Italy} =$$

$$= 6.71 \cdot 1.34 = 8.98\%,$$

http://dx.doi.org/10.21511/ppm.17(2).2019.34

$$CRP_{Italy} = Equity\,risk\,premium_{Italy} -$$
$$-Equity\,risk\,premium_{Germany} =$$
$$= 8.98 - 6.71 = 2.27\%.$$

As can be seen from our calculations, the Italian stock market was more volatile than the German one, with a resulting *RSD* of 1.34. The equity market risk premium (*ERP*) of Italy is 8.98%, and compared to the German stock market, the country risk premium of Italy is 2.27%.

The development of the equity risk premium on the Italian stock market and the country risk premium of Italy in comparison to Germany during the period 1998–2017 can be seen in the following chart.

The chart clearly shows that the growth of the equity risk premium in Italy reached values above than 12.4% in the period 2012–2013. Consequently, the country risk of investing in the stock market in comparison to Germany increased by more than 4.2%. As can be seen in the chart, after 2014, there has been a more pronounced decline in these margins, and in recent years they have seen an upward trend.

CONCLUSION

Country risk quantification, using different approaches and models, is addressing issues not only in theory, but also in economic praxis nowadays. That is why we used a more comprehensive approach to this problem, and we separated the bond and equity markets so that we can compare their level of risk.

In this working paper, we measured the risk on the bond market using different methods. We came to the conclusion that the CPFER method by Howell (2013), as well as the sovereign rating, have some common features and, thus, they also lead to very similar results. Moreover, the risk spreads based on the rating method are significantly lower than the risk spreads calculated using market-based methodologies. We assume that these risk spreads are affected not only by the economic, financial and political situation in the given market, but also by the behavior of investors and their rational expectations.

If the new credit rating of Italy is lower than the current one, it will be the result of a negative development of Italian GDP in 2019, which raises the risk for investors, and the rating only confirms what investor have long anticipated.

It is possible to accept our first hypothesis that the scoring method or the rating associated with an exact value of the spread plays merely an indicative role for the investor.

When observing and quantifying the risk margin on the stock market, we can clearly accept also the second hypothesis, because the quantification of ERP and CRP has confirmed that higher risk spreads exist on the stock market.

ACKNOWLEDGEMENT

This contribution is the result of the project VEGA (1/0009/17) "The making of the Capital union in Europe and its impact on individual member countries" and ITMS 26240120032 supported by the Research and Development Operational Program funded by the ERDF.

REFERENCES

1. Afonso, A., Arghyrou, M., & Kontonikas, A. (2012). The Determinants of Sovereign Bond Yield Spreads in the EMU. *SSRN Electronic Journal.* http://dx.doi.org/10.2139/ssrn.2223140
2. Aristei, D., & Martelli, D. (2014). Sovereign bond yield spreads and market sentiment and expectations: Empirical evidence from Euro area countries. *Journal of Economics and Business, 76,* 55-84. http://dx.doi.org/10.1016/j.jeconbus.2014.08.001
3. Augustin, P., Boustanifar, H., Breckenfelder, J., & Schnitzler, J. (2018). Sovereign to Corporate Risk Spillovers. *Journal of Money, Credit and Banking, 50*(5), 857-891. http://dx.doi.org/10.1111/jmcb.12497
4. Beirne, J., & Fratzscher, M. (2013). The pricing of sovereign risk and contagion during the European sovereign debt crisis. *Journal of International Money and Finance, 34,* 60-82. http://dx.doi.org/10.1016/j.jimonfin.2012.11.004
5. Bernoth, K., Hagen, J., & Schuknecht, L. (2012). Sovereign risk premiums in the European government bond markets. *Journal of International Money and Finance, 31*(5), 975-995. http://dx.doi.org/10.1016/j.jimonfin.2011.12.006
6. Bhatia, V. (2014). *Worlds of Written Discourse: A Genre-Based View.* London: Bloomsburry Publishing.
7. Bouchet, M., Clark, E., & Groslambert, L. (2003). *Country Risk Assessment: A Guide to Global Investment Strategy.* Chichester: John Wiley & Sons.
8. Busse, M., & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. *European Journal of Political Economy, 23*(2), 397-415.
9. Cayon, E. (2018). Determinants of Credit Default Swap (CDS) Spreads in Latin America: An Empirical Analysis of Corporate Debt in Public and Private Companies. *Journal of International Studies, 11*(4), 57-68.
10. Chionis, D., Pragidis, I., & Schizas, P. (2014). Long-term government bond yields and macroeconomic fundamentals: Evidence for Greece during the crisis-era. *Finance Research Letters, 11*(3), 254-258. http://dx.doi.org/10.1016/j.frl.2014.02.003
11. Chiu, Y.-B., & Lee, C.-C. (2019). Financial development, income inequality, and country risk. *Journal of International Money and Finance, 93,* 1-18. http://dx.doi.org/10.1016/j.jimonfin.2019.01.001
12. Cipovova, E., & Belas, J. (2012). Assessment of Credit Risk Approaches in Relation with Competitiveness Increase of the Banking Sector. *Journal of Competitiveness, 4*(2), 69-84. http://dx.doi.org/10.7441/joc.2012.02.05
13. Damodaran, A. (2015). Country Risk: Determinants, Measures and Implications – The 2015 Edition. *SSRN Electronic Journal.* http://dx.doi.org/10.2139/ssrn.2630871
14. Damodaran, A. (2016). Equity Risk Premiums (ERP): Determinants, Estimation and Implications – The 2016 Edition. *SSRN Electronic Journal.* http://dx.doi.org/10.2139/ssrn.2742186
15. Haugh, D., Olluvaud, P., & Turner, D. (2009). *What Drives Sovereign Risk Premiums? An Analysis of Recent Evidence from the Euro Area* (OECD Economics Department Working Papers). http://dx.doi.org/10.1787/222675756166
16. Kresta, A., & Tichy, T. (2012). Some Results on Foreign Equity Portfolio Risk Backtesting via Lévy Ordinary Copula Model. *Journal of Competitiveness, 4*(2), 85-96. http://dx.doi.org/10.7441/joc.2012.02.06
17. Howell, L. D. (2013). *The Handbook of Country and Political Risk Analysis* (5th ed.). PRS Group Inc.
18. Howell, L. D. (2014). Evaluating political risk forecasting models: What works? *Thunderbird International Business Review, 56*(4), 305-316.
19. Maltritz, D., & Molchanov, A. (2013). Analyzing determinants of bond yield spreads with Bayesian Model Averaging. *Journal of Banking and Finance, 37*(12), 5275-5284. http://dx.doi.org/10.1016/j.jbankfin.2013.07.007
20. Reusens, P., & Coux, C. (2017). Sovereign credit rating determinants: A comparison before and after the European debt crisis. *Journal of Banking and Finance, 77,* 108-121. http://dx.doi.org/10.1016/j.jbankfin.2017.01.006
21. Sgherri, S., & Zoli, E. (2009). *Euro area sovereign risk during the crisis.* Washington, D.C.: International Monetary Fund.
22. Silvapulle, P., Fenech, J. P., Thomas, A., & Brooks, R. (2016). Determinants of sovereign bond yield spreads and contagion in the peripheral EU countries. *Economic Modelling, 58,* 83-92. http://dx.doi.org/10.1016/j.econmod.2016.05.015
23. Toksöz, M. (2014). *Guide to country risk: how to identify, manage and mitigate the risks of doing business across borders.* New York: Public Affairs, Perseus Books Group.
24. Wagner, D. (2012). *Managing country risk: a practitioner's guide to effective cross-border risk analysis.* Boca Raton, FL: CRC Press.

http://dx.doi.org/10.21511/ppm.17(2).2019.34