

TESTING THE POSSIBLE OCCURANCE OF A CURRENCY CRISIS IN THE SECOND DECADE OF THE 21ST CENTURY

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Abstract: Typically, currency crisis is linked with situation as ruined credibility of domestic economic policies. Monetary authorities must be careful in maintaining stable exchange rate regime. This means falls in real incomes, losses in output, decreases in employment, shocks which are reasons for outflow of investment and capital. In order to provide adequate explanations of disorders that occur in a financial system and collapse of the currency regime, the aim of this research is to analyze (theoretical and empirical) the possibility of currency crisis occurrence in Serbia in pre-pandemic period, from 2010 to 2019. Through empirical analyzes are used some indicators which are a sort of toolbox that may contribute for early revelation of a currency crisis.

Keywords: currency crisis, *exchange market pressure index*, misery index, Serbia.

1. INTRODUCTION

In the economic literature there is consensus that the early warning systems for currency crisis, no matter how high it is, the existence of the conditions for a currency crisis couldn't be predict in a whole. However, the economic losses that the currency crisis carries with it, such as: fiscal cost of restructuring the financial sector, the decline in economic activity, the income distortion and decline in credibility, underlines the importance of prevention from currency crises. The first plan should emphasize the use of all available methods that can help in early detection of malignant and highly permeable parts of the economic system subject to a currency crisis.

During the last fifteen years, with the development of many theoretical models of currency crises, in order to provide adequate explanations of disorders that occur in a financial system and collapse of the currency regime, there is an explosion of empirical analyzes that attempt to signal, predict and anticipate the possible existence of a currency crisis. Regarding this, the aim of this research is to analyze (theoretical and empirical) the possibility of currency crisis occurrence in Serbia in pre-pandemic period, from 2010 to 2019. Through empirical analyzes are used some indicators which are a sort of toolbox that may contribute for early detection of a currency crisis. So, the research considers two questions: were disorders in Serbia that could cause a currency crisis for the estimated pre-pandemic period, and which generation currency crises would be the closest for Serbia?

2. LITERATURE REVIEW

The economic literature recognizes various definitions for the term currency crisis. But one thing is certain, the currency crisis is an association for the outflow of capital, the escape of investors, the danger of currency depreciation.

The currency crisis can turn into a financial crisis, when the currency loss its stability, and thus confidence, as the amount of foreign exchange reserves is not so sufficient. Depending of the type of distortions that occur, the economic literature offers various theoretical models of currency crisis. Also, these crises reflect the distortions occurring in the financial system and the exchange rate.

Generally, the literature distinguishes three generations models of currency crisis.

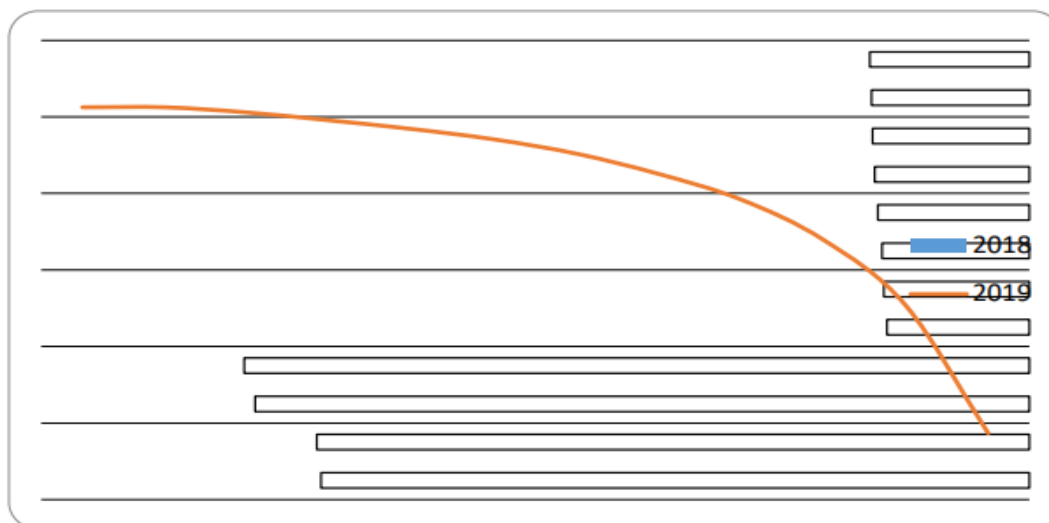
The first generation model is called "speculative attack models". It explains the reasons for the occurrence of a currency crisis in Mexico and Argentina for the period from 1973 to 1982. The main reason is the conduct of an inadequate macroeconomic policy.

"Exit clause models" is the second generation model of currency crisis. According to this model, a country must have a fixed exchange rate that will be stable. But in situation with disturbances in the financial system, this is not a case for the exchange rate (Boshkov, 2018). This generation of currency crisis model reflects the disruption with the Exchange Rate Mechanism. The reason for this was the increase in the interest rates with the presence of a very low employment rate. In such a scenario, an economy considers abandoning the current exchange rate, for example, due to the benefits arising from an optimal currency area or the costs that alert the way of implementing an appropriate macroeconomic policy (Boshkov, 2018).

The possibility of transmission of the currency crisis is shown as a model of the third generation of the currency crisis. Explanations are in focus on a negative exogenous shock. Namely, the crisis is transmitted through trade as

This result we show also in a Figure 2 below:

Figure 2. Exchange market pressure index for Serbia



Source: Authors' estimations.

6. CONCLUSION

A currency crisis is known as a capital outflow crisis. Capital outflow occurs when investor confidence is broken. In this kind of situation there is an expectation to flow money out of that country. They will sell the investments denominated in the foreign exchange rate and then change those investments into foreign currency. This scenario determines disturbance of the exchange rate regime.

This paper has shown that in order to predict whether a country is at risk of a currency crisis, multiple variables are examined and multiple analyzes are performed. The most common factors that are indicated as the cause of a currency crisis are excessive current account deficits, rapid growth of the currency, excessive speculative attacks, exogenous shocks that cause distortions in the foreign exchange market.

It is important to underline that many authors consider that Serbia in one period of time was actually on the border between the second and third model of currency crises. Due to the occurrence of "hot money" and foreign direct investment, capital structure review which enters in the country and its purpose, is one of the priorities of the economic policy makers, in order to determine the appropriate measures in stabilizing the economy. Expected changes in exchange rates will act on those variables whose change increases the cost of maintaining the exchange rate. When these costs become too high, policy makers may decide for devaluation and thus ex post confirm the expectations of a currency crisis for market participants. The research results indicate that the *ipdt* for Serbia was highest in 2011 and 2014, which suggests the existence of a currency crisis of the second generation. An important feature of the second generation currency crises (exit clause models) are the expectations of private investors, which are formed on the basis of economic policy. But the results for 2018 to 2019 showed that there was not possibility for currency crisis.

Political instability in Serbia has undoubtedly acted decisively to the growth of the negative expectations of investors regarding the sustainability of the achieved level of macroeconomic stability and prospects for development of the country. Intervention on the foreign exchange market, selling the euro and raising the benchmark interest rate, the National Bank of Serbia has managed to curb the increasing depreciation of the dinar. However, one should not have illusions that the system is stabilized and that the negative expectations deflated. It should be added before starting the process of accumulation of risks of instability which is reflected in a growing current account deficit, and recently significant budgetary imbalances. Therefore, it appears that the poor results are trigger for the financial crisis. However, the potential crisis bears some features of the first generation of the model, which explain the crisis of unsustainable movement of some fundamental macroeconomic variables, for example, expressed real appreciation of the currency or large current account deficit (Krugman, 2000).

REFERENCES

- Agénor, P., McDermott, C. J., & Prasad, E. S. (2000). Macroeconomic Fluctuations in Developing Countries: Some Stylized Facts. *The World Bank Economic Review*, 14(2), 251–285.
- Boskov, T. (2019). *Egypt Currency Crisis: Analysis of the Causes*. IJIBM International Journal of Information, Business and Management, 11 (1). pp. 1-9. ISSN 2076-9202 (Print)/2218-046X (Online)
- Boskov, T. (2018). *Mexican Currency Crisis: Overview and Lessons*. IJIBM International Journal of Information, Business and Management, 10 (4). pp. 83-90. ISSN 2076-9202 (Print)/2218-046X (Online)
- Boskov, T. (2018). *Venezuela Currency Crisis: Analysis Of The Causes*. IJIBM International Journal of Information, Business and Management, 10 (4). pp. 119-125. ISSN 2076-9202 (Print)/2218-046X (Online)
- Budsayaplakorn, S. et al (2010). Can Macroeconomic Indicators Predict a Currency Crisis? Evidence from Selected Southeast Asian Countries. *Emerging Markets Finance & Trade*, November–December 2010, Vol. 46, No. 6, pp. 5–21.
- Bulatović, M. (2011). *Ekonomija i demokratija: Držati glavu iznad*. Cetinje: Centralna narodna biblioteka Crne Gore.
- Claessens, S. & Ayhan Kose, M. (2013). Financial Crises: Explanations, Types, and Implications. *IMF Working Paper*, WP 13/28, pp. 1-65.
- Dietrich, D et al. (2011). Central and Eastern European countries in the global financial crisis: atypical twin crisis? *Post-Communist Economies* Vol. 23, No. 4, December 2011, 415–432.
- Dimitras, Augustinos I., Maria I. Kyriakou, and George Iatridis. 2015. Financial crisis, GDP variation and earnings management in Europe. *Research in International Business and Finance* 34: 338–54.
- Dornbusch, R., Werner, A., Calvo, G., & Fischer, S. (1994). Mexico: Stabilization, Reform, and No Growth. *Brookings Papers on Economic Activity*, 1994(1). 253-315. doi:10.2307/2534633
- Eichengreen, B., Rose, A., & Wyplosz, C. (1996). Contagious Currency Crises: First Tests. *Scandinavian Journal of Economics*, 98(4), 463-484. doi:10.2307/3440879
- Feridun, M. (2004). Brazilian Real Crisis Revisited: A Linear Probability Model. *International Journal of Applied Econometrics and Quantitative Studies*. Vol. 1-1(2004), pp. 81-96
- Feldkircher, M. (2014). The Determinants of Vulnerability to the Global Financial Crisis 2008 to 2009: Credit Growth and Other Sources of Risk, *Journal of International Money and Finance*, Vol. 43, pp. 19–49
- Forbes, K. and F. Warnock (2012), “Capital flow waves: Surges, stops, flight, and retrenchment”, *Journal of International Economics*, Vol. 88/2, pp. 235-251
- Giese, J, and Haldane, A. (2020), “COVID-19 and the Financial System: A Tale of Two Crises”, *Oxford Review of Economic Policy*, 36(Supplement), S200–S214.
- IMF (2015): *Global Financial Stability Report. Navigating Monetary Policy Challenges and Managing Risks*, Washington, DC: IMF Publications Services.
- Krugman, P. (2000). *Currency Crisis*. London: The University of Chicago Press, National Biro of Economic Research Conference Report.
- Lestano, & Jacobs, J. P. A. M. (2007). Dating currency crises with ad hoc and extreme value-based thresholds: East Asia 1970–2002. *International Journal of Finance and Economics*, 12(4), 371–388. doi:10.1002/ijfe.316
- Narodna banka Srbije. (2020). <http://www.nbs.rs/internet/cirilica/index.html>.
- Obstfeld, M. (1994). The Logic of Currency Crisis, Banque de France/The bank of France. *Cahiers économiques et monétaires/Economic and currency notebooks*, no. 43, pp. 189 – 213.
- Republički zavod za statistiku Republike Srbije. (2020). <http://webrzs.stat.gov.rs/WebSite/>.
- Sachs, J. D., Tornell, A., & Velasco, A. (1996). Financial Crises in Emerging Markets: The Lessons from 1995. *Brooking Papers on Economic Activity*, 1, 147–215.