Relationship between Financial Crises and High Levels of Foreign Debt-from the 19th to 20th Centuries

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ABSTRACT
The end of the 19th century and the beginning of the 20th century were the first era of globalization. At this time when global liquidity is high, foreign debt can provide a large amount of funds constantly, and the interest is relatively low, so it prevails among many countries. However, the high level of foreign debt is considered to be the main causation of the financial crises in most countries in the late 19th and early 20th centuries. External debts and borrowing in foreign currency can cause financial fragility and instability hence creating conditions for costly financial crises (Bordo and Meissner, 2008)[3]. This paper adopts empirical evidences to study the causal relationship between foreign debt and financial crises from 19th to 20th centuries.

Keywords: *developing countries, with high level of external debt, case study, high foreign debt and possibility of financial crisis are positively related*

1. INTRODUCTION

Foreign debt refers to amount of money, disbursed and outstanding, borrowed by a government, company or individual from another country's government, commercial banks, or private lenders[2]. When the interest rate of the domestic market is high, or commercial banks of the country is not very willing to lend out, borrowing from other countries becomes an effective substitute. However, according to Bordo and Meissner[1], countries with a high ratio of foreign currency debt to total debt are likely to have higher risks of financial and foreign debt crises. Borrowing foreign debt has some detrimental side effects: slower economic growth, especially in low-income countries, cause financial market turmoil and give rise to debt crises in the borrowing countries. The issue of foreign debt has been increasing from the 19th century until recent decades. The following content is going to study different types of financial crises and whether there is any relations between high levels of foreign debt and these types of financial crises by using empirical examples that happened in the time scale between late 19th century and early 20th century. In this way, this paper proved the relationship between external debt and financial crisis, strengthened the understanding of financial crisis, thus reduce the possibility of financial crisis among countries.

2. EXPLAINATION OF THE FINANCIAL CRISIS IN A HIGH DEBT COUNTRY

Financial crises usually have similar elements and come in an innumerable form. The article by Eichengreen and Portes [10], defines financial crises as barriers to the economy where financial institutions experience a lack of liquidity and businesses cannot finance their debts. The financial crisis is generally linked to the fall in asset prices and default in debtors and intermediaries that extend through financial systems. Financial crises are usually associated with the following phenomena: a large change in credit and asset prices; A serious interruption of financial intermediation and external financing to various participants in the economy;Large scale balance sheet, and large-scale government support[10]. Thus, financial crises are usually multidimensional events that are difficult to describe by using a single indicator. Therefore, it is essential to conduct comprehensive research on the causes of financial crises. Borrowing a large amount of foreign debt is an important factor that could cause a financial crisis. Concretely, it adversely affects the economy.

First, default is the most common factor. According to research by corsecti, pesenti and Roubini[8], most countries with large amounts of foreign financial debt are developing countries. When the country borrows a high level of foreign debt, they must repay a major plus

interest to foreign governments or agencies that provide that debt[8]. in developing countries, without the advanced productivity and sound systems, the possibility of paying debts or insolvency is far higher than developed countries. More specifically, if the total amount of principal and interest exceeds the total tax revenue, the government will not be able to repay its debt, causing a financial crisis.

Moreover, suppose the government or financial institutions of a country are not rational enough to consider the opportunity cost of not paying foreign debt. No domestic policies are enforcing the government to pay off the debt. In that case, they will possibly ignore it and result in a sanction of losing access to external debt. According to Claessnes and Kose[6], the theory of sovereign debt is associated with foreign currency debt and is generally concerned with. Once a country becomes a defaulter, it will not be able to plug the financial deficit by borrowing from international creditors[6]. In addition, the default record negatively affects its international trade activity with other countries.Besides the high levels of foreign debt, some other factors can also incur a financial crisis.

Furthermore, according to Claessens and Kose[6], some of the financial crises experienced across the globe are mainly moved by the limits of the discretionary factors such as contagion and spillovers between financial markets, asset busts emergence, fire sales, credit crunches, and the limits to arbitrage during the period of stress. Those factors may cause egregious influences on economic and financial markets. Nonetheless, this paper mainly concentrates on the relationship between high levels of foreign debt and financial crisis.

3. TYPES OF FINANCIAL CRISES

Financial crises can occur in different forms when it comes to their classification, but generally there are two types of financial crises. There are those classified utilizing just quantitative definitions, and those mainly reply to the qualitative and judgmental analysis. These two are quite different because the first one includes currency and sudden stop crises, while the second type of financial crisis contains debts and banking crises[13]. Regardless of the difference, these two are highly influenced by various theories that explain the financial crisis. The financial crisis as follows is briefly explained.

3.1. Currency crisis

Specifically, the currency crisis refers to a speculative attack on the country's currency whose central bank does not have enough exchange reserves to counter the attack and maintain the exchange rate, thus resulting in a depreciation of the national currency. For several decades, the three-generation models have been used broadly to explain the Currency crisis.

The first-generation models of currency crisis start with the adaptation of the canonical crisis model[20]. The models illustrate that investors' rational behavior may generate sudden speculative attacks on fixed currencies. They successfully anticipate that the government has been using central bank credit to cope with excessive deficits. As long as they expect the exchange rate system to remain unchanged, investors continue to hold the currency, but when they foresee that the exchange rate system is about to end, they begin to sell the currency. This situation causes the central bank to quickly lose its liquid assets or the hard currency that maintains the exchange rate. The currency then collapses.

The second-generation models of currency crisis begin with the paper by Obstfeld and Rogoff [16]. The models show that doubts about whether a government is willing to maintain its exchange rate peg could lead to multiple equilibriums and currency crises[16]. In these models, the self-fulfilling prophecies are possible, and the reason investors attack the currency is simply that they want other investors to attack the currency.

The third-generation models of currency crisis study how the exacerbation of balance sheets interacting with fluctuations in asset prices and exchange rates can incur the currency crisis. Besides, according to Claessens and Kose[6], "This generation of models also considers the roles played by banks and the self-fulfilling nature of crises." McKinnon and Pill[15], suggested that the bank's over-borrowing can be caused by government subsidies such that the governments are unable to bail out the collapsing banks. In turn, this creates loopholes by excessive borrowing that may cause financial and currency crises[15].

3.2. Sudden stops

A sudden stop is a sudden drop in net capital flowing into the economy[18]. The sudden stops are characterized by different factors -- a rapid reversal of international capital flows, declining production and consumption, and asset price adjustments. The models of sudden stops are more closely related to the interruption of the external financing supply. They tend to focus more on the role of international factors, for example, captured by changes in international interest rates or spreads on risky assets, in causing the "sudden cessation" of capital flows. These models can explain the real exchange rate depreciation observed during current account reversals and emerging market crises.

3.3. Foreign and domestic debt

The foreign debt triggered financial crisis is the main focus of this paper. When a country is holding a high level of foreign debt, the potential of economic growth will be weakened, and the probability of financial risk will increase dramatically[5]. Unlike foreign debt,

domestic debt is owed by the country's government to the domestic debt market. For a long time, economists typically assume the government always fulfills the obligations to pay off the domestic debt. However, some governments find ways to manipulate the markets and depreciate the national currency. For instance, reducing the coin's metal content or replacing the current metal in the coin with the cheaper ones. By doing so, they hold down the cost of domestic debt but cause detrimental effects – inflation -- on the economic and financial market.

3.4. Banking crisis

The banking crisis is a fairly common financial crisis. Financial institutions like banks are fragile. When countless customers believe that the banks are non-solvent, they withdraw their money from the bank and transfer cash to other assets such as real estate or national debt. Economists consider this problem as bank runs. Moreover, individual banks' problems usually spread swiftly to the whole financial system and cause a severe banking crisis [12].

All of these four financial crises are not isolated from each other. Most financial crises involve several types of forms. For example, if the borrowed country's currency is depreciated due to the currency crisis, it would be more difficult for borrowers to defend their obligations to repay the debt. After a prolonged time of faulting, the government enters into a debt crisis. By utilizing those different forms of the financial crisis, high levels of foreign debt trigger the financial crisis, and the relation between them could be analyzed more thoroughly.

4. RELATIONSHIP BETWEEN FINANCIAL CRISES AND FOREIGN DEBT

High levels of financial debt are thought to have exacerbated the risk of a financial crisis. This theory is more obvious in developing countries. According to an article done by Bordo, Meissner, and Stuckler [4], the high ratio of foreign debt to the total debt in a country can be associated with the increased debt and currency crises. However, the association of the foreign currency debt and the total debt depends on the size of the country's reserves base and policy credibility. The financial crisis resulting from high foreign debts results in significant permanent output losses [4]. In other words, the probability and severity of the financial crisis are positively correlated with the amount of foreign debt in developing countries. This is because certain foreign liabilities that can be easily managed by developed countries can stimulate the emergence of a financial crisis in lower foreign exchange reserves and poor credibility countries. Latin America has been having the problem of foreign debt. The article by Paolera and Taylor, has analyzed the historical processes of indebtedness, the causes and factors conditioning the origin and rapid growth, the utilization of the loans obtained, and the impact of a default.[21] According to Paolera and Taylor, the 1820s and 1870 crises cemented in the minds of the investors.[21] As foreign investors lose their trust in Latin American countries' governments, Latin American countries will be less likely to get external debt in the future. They will need to pay more interest due to the sanction of default. Without debt borrowed from abroad to offset the deficit in the balance sheet, at the same time, facing the sanctions, the influence of foreign debt crisis is extremely strong in Latin American countries in the 19th century.

5. PREDICTING FINANCIAL CRISIS IN COUNTRIES WITH HIGH FOREIGN DEBTS

Most countries with external debts have high risks of financial crisis [14]. It has been a long-time challenge for economists to predict crises. Correct prediction of the crisis has many benefits to a country since it helps governments to come up with effective measures and strategies to counter the crisis. The financial crisis could be predicted by studying the different types of manifestations of the financial crisis and how they are related to the high levels of external debt.

The debt-to-GDP ratio is one indicator that could be used to predict the crisis in countries with a large amount of debt. For instance, the article by Balassone, Francese, and Pacehas investigated the link between the debt-to-GDP ratio and Italy's per capita income growth since 1861. The effect of public debt on growth appears to work mainly through reduced investment. There is a negative relationship between public debt and the effect of foreign debt in comparison with domestic debt[1]. This phenomenon also applies to foreign debt.

Besides, according to Goldstein, Kaminsky, and Reighart, growth rates in credit, money, and other various variables exceeding certain thresholds are most likely to cause a banking crisis. Suppose the government of the central bank of a country borrows a large amount of foreign debt[11]. In that case, the risk of experiencing a financial crisis will increase since the currency is servicing in foreign currency. When depositors perceive the risk and withdraw their funds, the banking crisis happens. Using these indicators, governments and central banks of different countries could quickly catch the signal of financial crises, then adjust the current situation to counter or avoid the crises.

6. EVIDENCE OF FINANCIAL CRISIS IN COUNTRIES WITH HIGH FOREIGN DEBT

Even before the collapse of Lehman Brothers, economists worldwide had started to show interest in financial crises. The article by Comín provides a

historical overview of the factors that led to Spain's debt crisis and the mechanisms used by the governments to solve the crisis in the 19th and 20th centuries. The debt crisis in a country explodes if it has a huge external debt, mainly in foreign currency, as the country can lack enough currency to pay the debt and the interest. In fact, the level of foreign debt, surpassing 26.8 percent of the total amount of public debt, was extremely high until 1895[7]. The government of Spain then conducted the restructuring of public debt, reduce the proportion of the external debt to counter the severe crisis. However, the proportion of foreign debt increased again and reached the highest point, over 40% of the total debt, in the 1870s. The high-interest payment caused the default and regression in the national economy. The prolonged debt crisis forced the government to follow disciplined fiscal policies and reduce its reliance on external debt.

Most of the countries that have been negatively influenced by high levels of external debt are developing countries. Nevertheless, advanced countries also experienced financial crises due to foreign debt. According to Goldstein, Kaminsky, and Reighart, countries like France, the United Kingdom, and Netherland entered into serious banking crises for over 20 years during the two world wars[11]. Although the cruel war forced those countries to borrow a huge amount of funds to enforce the military and sustain the economy, the severe and long-lasting crises strongly demonstrated the direct relationship between unusually high foreign debt levels and financial crises.

7. CONCLUSION

In conclusion, by studying those countries that borrowed a large amount of foreign debt and result in financial crises in the late 19th and early 20th centuries, the relationship between external debt and financial crisis is obvious. The probability and severity of a financial crisis are proportional to a country's foreign debt, particularly in developing countries. In countries without rational management and adequate exchange reserves, the high levels of foreign debt can trigger the debt crisis and other forms of financial crisis like currency crisis, sudden stop, and banking crisis. After decades of study, economists could predict the probabilities of financial crises in different countries utilizing indicators like debt-to-GDP ratio, growth rates in credit/money and help them to avoid or minimize the loss caused by crises.

REFERENCES

[1]Balassone, F., Francese, M., & Pace, A. (2011). Public debt and economic growth in Italy. Bank of Italy Economic History Working Paper(11).

[2]OCDE/FMI (2004), External Debt Statistics. Guide for Compilers and Users, FMI, Washington D.C., https://doi.org/10.1787/9789264065161-en.

[3]Bordo, M. D., & Meissner, C. M. (2008). Foreign Currency Debt, Financial Crises and Economic Growth: A Long Run Exploration.

[4]Bordo, M. D., Meissner, C. M., & Stuckler, D. (2010). Foreign currency debt, financial crises and economic growth: A long-run view. Journal of international Money and Finance, 29(4), 642-665.

[5]Cecchetti, S. G., Mohanty, M. S., & Zampolli, F. (2010). The future of public debt: prospects and implications.

[6]Claessens, S., & Kose, M. M. A. (2013). Financial crises explanations, types, and implications.

[7]Comín, F. (2012). Default, rescheduling and inflation: public debt crises in Spain during the 19th and 20th centuries.

[8]Corsetti, G., Pesenti, P., & Roubini, N. (1999). Paper tigers?: A model of the Asian crisis.

[9]European Economic Review, 43(7), 1211-1236.
Edo, S., Osadolor, N. E., & Dading, I. F. (2020). Growing external debt and declining export: The concurrent impediments in economic growth of Sub-Saharan African countries.

[10]International Economics, 161, 173-187.
Eichengreen, B., & Portes, R. (1987). The anatomy of financial crises (0898-2937), Nationl Bureau of Economics.

[11]Goldstein, M., Kaminsky, G. L., & Reinhart, C. M. (2000). Assessing financial vulnerability: an early warning system for emerging markets: Peterson Institute.

[12]Ivashina, V., & Scharfstein, D. (2010). Bank lending during the financial crisis of 2008. Journal of Financial economics, 97(3), 319-338.

[13]Krugman, P. (1999). Balance sheets, the transfer problem, and financial crises. In International finance and financial crises (pp. 31-55): Springer.

[14]Manasse, P., Roubini, N., & Schimmelpfennig, A. (2003). Predicting sovereign debt crises.

[15]McKinnon, R. I., & Pill, H. (1999). Exchange-rate regimes for emerging markets: moral hazard and international overborrowing. Oxford review of economic policy, 15(3), 19-38.

[16]Obstfeld, M., & Rogoff, K. (2020). Revisiting speculative hyperinflations in monetary models. Review of Economic Dynamics.

[17]Omodero, C. O., & Alpheaus, O. E. (2019). The Effect of Foreign Debt on the Economic Growth of Nigeria. Management Dynamics in the Knowledge Economy, 7(3), 291-306.

[18]Reinhart, C., & Calvo, G. (2000). When capital inflows come to a sudden stop: Consequences and policy options.

[19]Reinhart, C. M., & Trebesch, C. (2015). The pitfalls of external dependence: Greece, 1829-2015 (0898-2937), National Bureau of Economic Research.

[20]Salant, S. W., & Henderson, D. W. (1978). Market anticipations of government policies and the price of gold. Journal of political economy, 86(4), 627-648.

[21]Della Paolera, G.; Taylor, A. M. Sovereign Debt in Latin America, 1820-1913. Revista de historia económica 2013, 31 (2), 173–217. https://doi.org/10.1017/S0212610913000128.