Surviving the Post Silicon Valley Bank Crisis

Dr. Richard Hanna Beainy[1], Dr. Jeanne Kaspard Kamel[2*].

[1,2]*Business School Holy Spirit University of Kaslik, Lebanon; E-mail: jeannekaspard@usek.edu.lb*

Abstracts: In the wake of the sudden collapse of three major financial institutions in the United States (Silicon Valley Bank, Silver Gate, and Signature Bank) the Federal Government intervention was swift and quick and even surpassed regulations by promising a full refund for all bank depositors, yet was the major intervention by the Government and the United States President Joe Biden a sign of strength or weakness? This study analyzes the importance of the financial sector to achieve economic prosperity as well as the readiness of the United States Government to face future challenges that might jeopardize the entire international financial system through alarming World Bank Data.

Keywords: Financial System, Economic Growth, Banks, Debt, Government Reserves, GDP.

1. INTRODUCTION

1.1 Background and Problem Statement

March 8 2023, the leading bank named after Silicon Valley - California “the world’s capital of startup companies and technological firms” collapsed, the fall of Silicon Valley Bank “SVB” was so sudden that its significance was not only due to its large size as second biggest bank to fail in US History, but due to the speed of the fall that highlighted the vulnerability of the financial system and the possibility of a new financial Crisis , the only reason why this event did not cause a complete dramatic domino style breakdown was the involvement of the Federal reserve board, the United States government and President Biden himself (Hockett 2023)

1.2 Purpose and Significance

While banks as individual institutions are important, their collective impact on economic growth, particularly on Gross Domestic Product “GDP”, cannot be overstated. With the recent vulnerability of the financial system, which has not been seen so apparent since the Great Recession of 2008, it was necessary for the Federal Reserve System and the United States Government to provide support for depositors of three financial institutions, SVB, Silver Gate and Signature Bank. However, this raises the question: what if the government itself requires support in the future, and what form of support would financial institutions provide for the economy, furthermore, would a collapse of the former causes a severe retraction in the latter? (Dabrowski 2023)

As stated earlier, the research does not aim to highlight the importance of financial institutions as individual firms even though the study would ultimately benefit, financial institutions, regulators and governments indirectly, but the End Goal is to benefit individuals, by highlighting the collective importance of such institutions for countries to realize economic prosperity measured in this case in terms of Gross Domestic Product Per Capita “GDP”.

Furthermore, highlighting the challenges facing economies in times of financial turbulence would encourage both investors and governments to seek solutions. Risk cannot be eliminated but it definitely can be managed.

Few days After SVB, Silver gate and Signature Bank Collapsed, another Major Bank, the European “Credit Suisse” fell into crisis (Zhang and Huang 2023) but unlike the United States Federal Government approach towards SVB, the Swiss authorities and regulators encouraged another Bank to Buy out Credit Suisse from the fall, different approaches to face challenges yet with one significance, international authorities consider a financial systemic crisis as something to be avoided at all possible costs, and this study argues just why.

1.3. Nature of the Study and Research Question

As per above statements, the main objective of the research is to analyze how significantly do banks impact economic growth, using GDP as a criterion while simultaneously analyzing the impact of banks on supplying the economy with needed resources to achieve growth, thus analyzing a circular relation, in which governments and regulators assist banks while the latter also have an important role in the success of the former in achieving economic stability, thus a failure of one, left untreated would cause the failure of the other and the end results would be negative on the economy as a whole.

Simultaneously, the study analyzes the reserves of the United States Central Government by comparing it other countries in order to assess the readiness of the Government to intervene in case any new additional challenges erupt after the triple collapse of the financial institutions.

Using a fundamental approach through analyzing quantitative secondary Data from the World Bank, the study will use regression analysis to study the impact of different Variables on the independent variable of economic growth through GDP per Capita, and even with the use of quantitative methods and hypothesis testing, results discussion will be exploratory and descriptive in nature, seeking to gain a better understanding of the circular relationship between banks and government/regulatory bodies (Meng 2023), analyze the impact of this relationship on economic growth and financial stability, and to compare reserves in absolute and relative terms to gain a quantitative foresight on future risks (Kamel & Beainy 2023), regarding the stability of the international financial system, thus providing valuable information for decision makers, either individuals, regulators or Governmental bodies to successfully face future challenges and avoid a new period of economic turbulence similar to the 2008 financial Crisis.

2. LITERATURE REVIEW

2.1. Literature and Context

Governments employ fiscal policy to promote strong and enduring expansion, combat impoverishment, and tackle economic and societal disparity (Alston and Reisch 2019). There has been widespread agreement that fiscal policy must be used to prevent recessions since Keynes' foundational paper in 1936 (Lerner 1936, Jalles and Medas 2022). While previous works of literature (Al-Malkawi, Rafferty et al. 2010) had a favorable perspective of debt, seeing it as helping to growth, later studies raised issues about debt overhangs. These were made worse by the developing nations' financial crises in the 1980s and 1990s (Moreno Badia, Medas et al. 2020). After the global financial meltdown, there has been a revived interest in the literature on debt overhang (ADB, Furceri et al. 2016). Many researchers (Reinhart and Rogoff 2010, Baum, Checherita-Westphal et al. 2013) provided proof that debt is linked to slower economic development over a certain threshold. According to Kumar and Woo (2010), initial debt and subsequent growth have the opposite connection. While there is strong evidence suggesting a negative correlation between public debt and economic growth (Panizza and Presbitero 2014, Mencinger, Aristovnik et al. 2015, Elom-Obed, Odo et al. 2017), scholars continue to debate whether high levels of debt actually lead to lower economic growth (Panizza and Presbitero 2013) and the mechanisms by which this connection is established. For instance, Lof and Malinen (2014) discovered no proof of a sturdy impact of government debt on economic expansion, even for elevated debt levels. Similarly, Afonso and Jalles (2016) ascertain an unfavorable impact of the debt size of the government on output. In principle, the consequences of mounting debt are contingent on the overall leverage of the economy. Bornhorst and Ruiz-Arranz (2013) have discovered proof for the Eurozone that a combination of high private sector debt and elevated public debt impedes growth. Alimov (2022) has also found that, for a group of up to 41 emerging and advanced economies, an increase in the proportion of total debt to GDP leads to a decline in the GDP growth rate.

Some empirical literature has acknowledged that bank credits hold significant importance in the development of finance, which ultimately leads to economic growth (Ismail and Masih 2015, Abusharbeh 2017, Hacievliyagil and Eksi 2019, Zıdan 2019). Bank credit to the private sector contributes to the economic growth of a country in various ways (Timsina and Pradhan 2016). It serves as a crucial link for transferring money, financing production,

consumption, and promoting capital formation, all of which contribute to the overall economic activity (Aglietta and Breton 2001, Mallick and Moore 2008). When the banking system is well-managed and regulated, the monetary policy transmission mechanism can be strengthened, and monetary policy objectives can be achieved (Woodford 2001, Obioma and Onyebueke 2018, Duarte 2019). Providing bank credit facilities to the private sector in a disciplined banking environment can significantly enhance the productive potential of the economy, leading to a bright development scenario, job creation, and increased competitiveness of the economy(Duarte 2019). Therefore, bank credits play a vital role in the economic growth of a country. Bist (2018) examined the correlation between bank credits to private sector and economic growth in 16 low-income countries for a span of two decades from 1995 to 2014. The findings disclosed the positive impact of private sector debts on economic growth in most of these nations.

Conversely, certain researches have indicated that bank loans have an adverse impact on the economic growth on countries of Central and Eastern Europe (Dudian and Popa 2013, Petkovski and Kjosevski 2014, Iwanicz-Drozdowska, Bongini et al. 2019). A study conducted by Hasan and Barua (2015) shown that the allocation of credit by financial institutions to private enterprises has not yielded significant benefits and has failed to stimulate economic advancement in developing countries. Bui (2020) verified the influence of banks credits on economic progress, which follows an inverted U-shape. His study shows that the economy benefits from a rise in domestic and private sector credits until it surpasses the optimum threshold, after which the effect becomes adverse on economic growth.

Maintaining an appropriate level of reserves at the Central Bank is crucial for ensuring economic stability (Bank 2021). Economic stability is a condition that enables the growth of the economy and guarantees a satisfactory quality of life for individuals by facilitating ongoing access to resources, assets, innovation, and knowledge (Nier 2009). The reserves held by central banks are crucial in mitigating unpredictable economic events and serve as a safeguard against economic upheavals, thereby facilitating trade, preserving price stability, and encouraging foreign investment (Gray 2011). Effective administration of these reserves strengthens the primary objectives of central banks in relation to regulating unemployment, inflation, and interest rates, which ultimately uphold a prosperous economy with abundant job prospects and favorable circumstances for enterprises and investments (Morahan and Mulder 2013). The role of the central bank is to ensure economic stability during the unpredictable circumstances of a worldwide crisis (Ivanović 2014). With the expansion of reserves, central banks may choose riskier high yield investments to boost their portfolio returns (Conti-Brown 2018). However, it is essential to exercise cautious reserve management while pursuing greater diversification (Conti-Brown 2018). In many emerging and developed countries, the lender of last resort is the central bank of the country (Bank 2021). The primary duty of the central bank is to hinder bank runs or panics from transmitting to other banks owing to insufficient cash flow (Bank 2021). In the United States, the Federal Reserve furnishes cash flow to impacted banks, whose inadequate liquidity may have an impact on the economy (Joutz and Stekler 2000). The most important mission of Federal Reserve is promoting safety in payment and settlement systems (Lall 2018).

2.2 Hypothesis Development

The first of the hypotheses being developed, is that government Debt directly and significantly impact economic growth, thus a decrease in trust in the system would either decrease the ability for governments to finance their investment expenses, or to say the least increase the cost of financing thus negatively impacting economic growth.

The Second of the hypotheses being developed is that financial institutions have a critical role in economic growth, either directly by providing credits to investors or indirectly by increasing trust and stability which encourages innovation. This argument is supported by the actual actions of authorities in the United States and Switzerland who have taken after SVB collapse and Credit Suisse shock severe measures to prevent a potential catastrophe caused by liquidity needs in the global financial system (Acharya, Chauhan et al. 2023).

However, to address the challenges related to the financial system's impact on economic growth, it is necessary to identify the specific variables that need to be addressed, we analyze whether the direct effect of governmental

expenditures and banks financing to private sectors or the indirect effect of safety and trust caused by governmental reserve matters the most in achieving economic growth and successfully avoid a future financial crisis.

The solutions to these challenges may vary from risk mitigation to additional regulations as the financial system continues to evolve (Aquilina, Frost et al. 2023). The goal of this study is to identify these challenges and provide potential solutions to promote economic growth or at least to halt an economic deterioration, as by pinpointing the areas that need improvement, policymakers and regulators can develop tailored strategies to address the issues and promote a more stable and sustainable financial system. This, in turn, can have a positive impact on economic growth, reducing the likelihood of financial crises and enhancing investor confidence (Fernandez-Gallardo 2023).

H_1: Government Debt impacts significantly economic growth

The first hypothesis suggests that government debt significantly impacts economic growth. The decisive actions taken by the United States Government and President, which assured investors of a 100% refund on their deposits, may have been intended not only to help those investors, but also to protect the nation. A collapse of trust could have halted investments in treasury bills, massively impacting the economic growth of a nation heavily reliant on debt.

H_2: Bank Credits to private sector are critical and significantly impact GDP

Hypothesis two aims to directly link bank domestic credits with GDP growth. Banks are known for their ability to mobilize and efficiently allocate resources to productive investments, which drives economic growth, the impact is considered acknowledged as true but it is its significance that we ought to measure.

H_3: in terms of Reserve Ratios to economic output, the United States Government is ready to tackle future economic challenges

Hypothesis three analyzes the readiness of the United States government to address future economic challenges through their available reserves. A Reserve ratios provides liquidity during periods of stress, promoting confidence and trust among individuals and firms. Additionally, reserve ratios can be used to pump money whenever needed. This hypothesis does not analyze the impact of banks, but rather the government's readiness to prevent an economic decline and to take swift actions, similar to the actions taken in the SVB Case, in which government and regulatory intervention literally saved the United States banking sector from a domino scenario. The third hypothesis also compares the reserve ratios of the United States with those of other countries in the study to provide a broader perspective.

In summary, the three hypotheses explore various theories regarding the use of government debt to stimulate economic growth, the important role of financial institutions in increasing GDP per Capita, and the ability of the United States Government to tackle future challenges facing both the United States and the international economy.

According to these theories, increasing government debt may lead to higher investments, particularly in infrastructure, resulting in a rise in GDP and overall economic output.

Moreover, a stable, trustworthy, and efficient financial system and banking sector can directly contribute to increased investments by providing financing for the private sector, which in turn can transform idle savings into productive investments, generate employment, and stimulate economic growth.

Finally, hypothesis three analyzes the theory that central government reserves not only provide assurance for government debtors but also for domestic institutions, thereby promoting a healthy economic cycle. In other words, a well-managed reserve can enhance the confidence of both government and private sector investors, leading to greater economic activity and growth, in the specific case of the United States Government, the study analyzes the ability of the Government to intervene and assist large financial institutions in terms of default, thus protecting both the country and international financial system from a new Crisis.

To properly asses the ability of the United States Government to surpass challenges post to SVB, Silver Gate and Signature Bank collapse, a comparative approach will use World Bank Official Data to compare governmental reserves of the United States to Denmark, Canada, Switzerland, Germany and the United Kingdom, both in absolute value in dollars and in relative value to as a percentage of GDP.

3. RESEARCH METHODOLOGY

3.1. Data Collection And Sampling Method

The study will rely on secondary data sources, particularly data from the World Bank, to analyze various factors such as total reserve ratio, domestic credits by financial sector, and government debt for potential significance on economic growth measured through GDP growth, with a targeted data time frame of 30 years in regression analysis, and 40 years in comparative analysis.

This method would allow us to analyze the impact of a domino effect after similar cases of SVB, Silver gate and Signature bank collapse and verify theories according to which banks and the financial system constitute the essential pillars of economic growth (Manta, Badareu et al. 2023)

The sampling method used will be a stratified purposive sample of countries selected based on their level of economic development as determined by their GDP per capita, countries chosen needs to have an economic development level close to the United States (Beainy, 2023), such as Germany, Denmark, Switzerland, Canada and the United Kingdom.

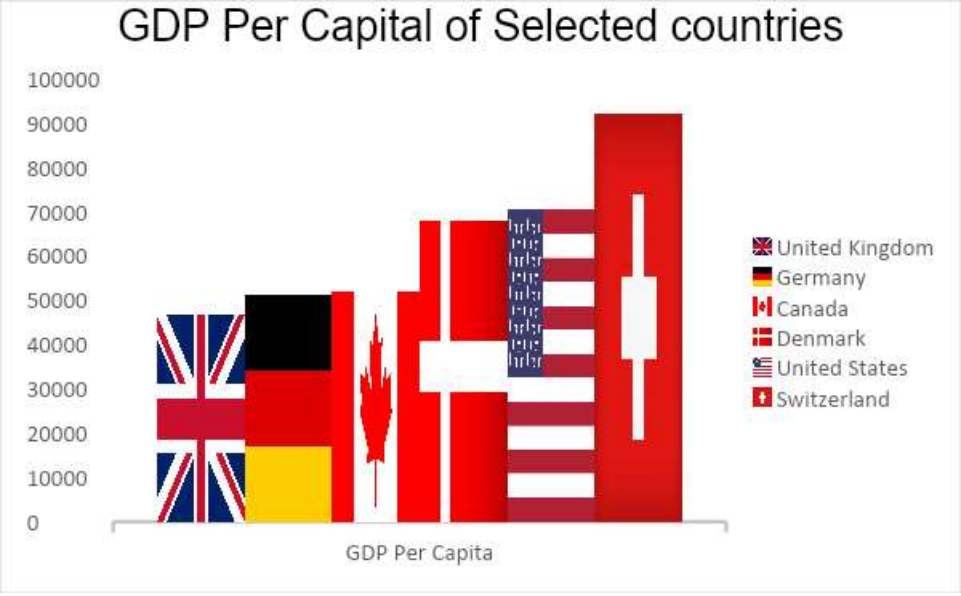

Figure 1: Sample Selection of countries

The Collected data will be analyzed using multiple regression analysis to determine the impact of the independent variables on economic growth (Salloum & Beainy, 2023). This methodology is designed to provide a comprehensive analysis of the relationship between banks and economic growth and to ensure the validity of the study's findings, through a numerical test of significance for the three hypotheses being tested.

Overall, as we set the stage for the study, in addition to Data related to the United States, the use of information related to other countries would provide a solid foundation to understand the results on an international perspective, taken into account the specific case of the US Economy.

3.2 Empirical framework and Data Treatment

To examine the hypotheses, the study will rely on four main variables: government debt, bank credits to the private sector, reserve ratios, and GDP.

Government debt will be measured in domestic currency and will serve as an indicator of the importance of trust, as the degree of riskiness tend to either increase the required return on investment or in some cases stop individual and institutional investors from purchasing treasury shares in case they doubt the government may default.

Bank credits to the private sector will be measured as a percentage of GDP and will serve as an indicator of the banking sector's ability to provide financing for productive investments, thus increasing economic growth by increasing investments of the private sector.

As for Reserve ratios, they will be measured both in absolute value – USD and in relative value – Percentage to GDP and will serve as an indicator of a government's readiness to address future economic challenges, specifically challenges similar to the SVB – Silver gate – Signature Bank triple collapse of 2023.

GDP per Capita will be used as a dependent variable to assess the impact of the independent variables on economic growth.

Overall, the empirical framework for this study aims to provide a comprehensive analysis of the relationship between financial institutions, Governments and economic growth, with a particular focus on the role of banks in promoting financial stability and contributing to economic growth.

Table 1: Variable type and measurement

Variable	Type	Measurement
GDP Per Capita	Dependent	Us Dollars
Government Debt	Independent	Domestic Currency
Domestic Credits	Independent	Percentage of GDP
Central Government Reserves	Independent	Us Dollars

4. Results and Discussions

4.1 Results and interpretation

Table 2: The Case of the United States

USA Anova Table				
Regression Statistics				
Multiple R	0.981093395			
R Square	**0.96254425**		*Significance F*	
Adjusted R Square	0.958531134		**4.55422E-20**	
Standard Error	2644.836226			
Observations	32			
	df	*SS*	*MS*	*F*
Regression	3	5033357822	1677785941	239.8495905
Residual	28	195864442.6	6995158.664	
Total	31	5229222265		
	Coefficients	*Standard Error*	*t Stat*	*P-value*

Intercept	-5599.087437	4793.411165	-1.168079942	0.252624643
Government Debt	0.000000001	2.28199E-10	**4.658561185**	**7.05146E-05**
Domestic Credit	**191.584758116**	27.8657861	**6.875268382**	**1.79825E-07**
Reserve	-0.000000004	7.86058E-09	-0.492260434	0.626372956

Based on a 32 years' time frame in the case of the United States, beginning with a top down analysis from R Square which equals to 0.9625, the variables chosen describe 96.25% of GDP per capita change, the high R Square signifies promising results, supported by a Significance F of almost 0, which allow us to deduct that the variables have a significant impact on the economic growth of the United States.

Taking into consideration specific variables, with a P-Value of 0.00007 regarding government debt, we successfully reject Null Hypothesis One $H_{0.1}$ according to which government debt has no significant impact on economic growth, however a very small coefficient decreases the significance of the results related to Government Debt.

Similarly, with an even lower P-Value for domestic Credit, we successfully reject Null Hypothesis two H0.2 according to which Domestic credits by financial institutions have no significant impact on Economic Growth.

Finally, in the third Variable related to Government reserve, with P-Value of 0.626 above 0.05, the high P-value is alarming, which can signify that the United States reserves are not growing proportionally with economic growth, Hypothesis three is therefore further elaborated with Data compared to other Sample countries.

Furthermore, the coefficients of both government Debt and reserves are almost Zero, as if governments play a passive role in achieving economic growth, only through regulations, encouraging innovation and supporting firms and through stabilization of the system.

According to the research findings, Banks and financial institutions seem to play a critical role, with a coefficient of 191 it is no wonder that United States authorities and President Joe Biden himself attributed such importance to the banking sector after the Silicon Valley Bank, Silver gate and Signature Bank triple Crisis.

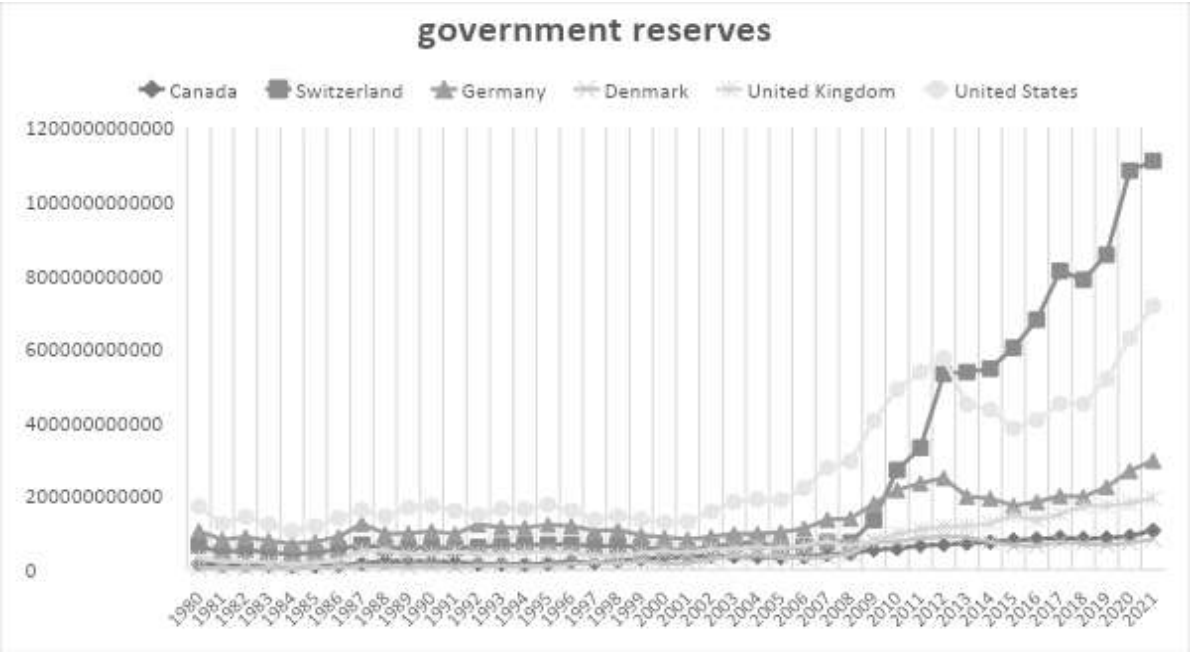

Figure 2: Reserves by Country

Further investigating Hypothesis three that analyzes the ability of the United States Government to avoid a new financial crisis, the figure above compares reserves of different central governments in absolute value, from being the central government with most reserves from the late 1970^{s} to have declining reserves starting 2012, the United States even after the reserve increase beginning 2015 was surpassed by Switzerland, a much smaller country, results are remarkable but not yet significant, so to be able to better compare reserves and the readiness of the United States Government to face upcoming challenges that might face the economy, a common size analyzes is used in the next figure.

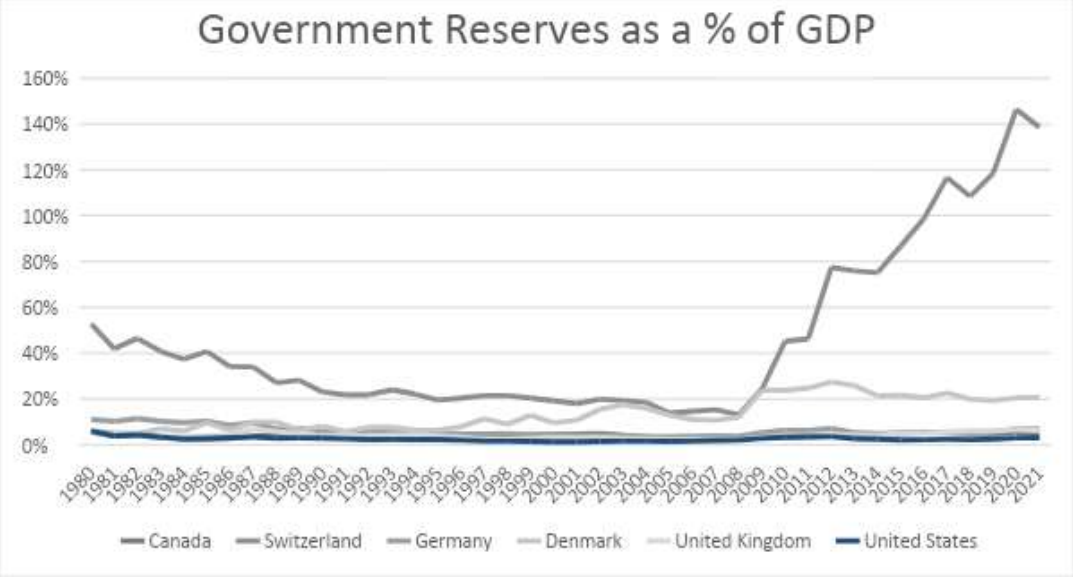

Figure 3: Reserves to GDP

After comparison in absolute value earlier, when the Central Government reserves are divided by GDP to make a common size analysis using percentages, the actual reserves of the United States Government in blue, are actually the lowest among all countries in the sample, the previous Rejection of Hypothesis three according to which in terms of Reserve Ratios to economic output, the United States is ready to tackle future economic challenges is therefore further supported, in summary, reserves may not significantly impact economic growth but the alarming results of the relatively low amount of reserves in the United States raise doubt about the ability to tackle future challenges.

4.2 Limitation and Further research

In terms of analyzing more challenges to come, researchers ought to analyze the Government Reserves to Debt Ratio which was not analyzed in this study, as it might be significant in either supporting or rejecting the research findings of the inability of the United States Government to tackle future economic challenges Post SVB collapse.

In terms of analyzing more solutions, using the Occam's Razor theory, according to which the simplest solution is always the best, unexperienced researchers can argue that the best solution to upcoming challenges of liquidity, in the aftermath of Silicon Valley bank, Silver Gate and Signature Bank triple collapse is simply printing money, but such a response policy would definitely need a further research, because increasing monetary supply may have devastating effects on the economy that surpasses the current challenges, effect that include but are not limited to inflation, currency devaluation and a possible total economic catastrophe (Turi 2023).

CONCLUSION

Contributions, Findings and Implications

The study provides several contributions and findings related to the relationship between financial institutions and economic growth, the use of comparative common size analyzes magnified the importance and the theoretical implications of the findings.

Firstly, the study shows that government debt and domestic credit by financial institutions have a significant impact on economic growth, as evidenced by the low p-values in the regression analysis. This finding supports the argument that banks and the financial system play a crucial role in promoting financial stability and contributing to economic growth.

How Crucial is the role of banks and the financial system? A coefficient of over 196 for the impact of domestic financing on economic growth justified the intervention of the federal government to protect bank depositors after Silicon Valley Bank, Silver Gate and Signature Bank sudden collapse.

However, the study also reveals a concerning trend regarding government reserves, with the use of absolute values, no significant findings were spotted, but once a common size percentage analysis was initiated the results where alarming and may have severe practical and theoretical implications.

These findings highlight the need for governments to address potential future economic challenges, such as the collapse of financial institutions, by building up adequate reserves.

Overall, the study's findings have significant implications for policymakers, financial institutions and more importantly, investors. Policymakers should prioritize promoting domestic credit by financial institutions as a mean of promoting economic growth. Financial institutions, on the other hand, should focus on providing financing for productive investments to support economic growth, while considering severe risk management policies because Government intervention may not be as effective as it was in the SVB Case in future challenges.

Finally, investors should be informed about the results to take informative decisions regarding their investments, the Ratio of Reserves to GDP in the United States is significantly lower than all the sample countries in the study based on World Bank Data, the study provided quantitative results, but practical implications are based on investors and potential investors attitude towards Risk and Return.

REFERENCES

[1] Abusharbeh, M. T. (2017). "The impact of banking sector development on economic growth: Empirical analysis from Palestinian economy." Journal of Emerging Issues in Economics, Finance and Banking 6(2): 2306-2316.

[2] Acharya, V. V., et al. (2023). Liquidity Dependence and the Waxing and Waning of Central Bank Balance Sheets, National Bureau of Economic Research.

[3] ADB, A. A., et al. (2016). "The macroeconomic effects of public investment: Evidence from advanced economies." Journal of Macroeconomics 50: 224-240.

[4] Afonso, A. and J. T. Jalles (2016). "Economic performance, government size, and institutional quality." Empirica 43: 83-109.

[5] Aglietta, M. and R. Breton (2001). "Financial systems, corporate control and capital accumulation." Economy and society 30(4): 433-466.

[6] Al-Malkawi, H.-A. N., et al. (2010). "Dividend policy: A review of theories and empirical evidence." International Bulletin of Business Administration 9(1): 171-200.

[7] Alimov, B. (2022). "The dynamic effects of debt and equity inflows: Evidence from emerging and developing countries." The Journal of Economic Asymmetries 26: e00259.

[8] Alston, P. and N. Reisch (2019). Tax, inequality, and human rights, Oxford University Press.

[9] Aquilina, M., et al. (2023). "Decentralised finance (DeFi): a functional approach." Available at SSRN 4325095.

[10] Bank, W. (2021). Central Bank Reserve Management Practices: Insights into Public Asset Management, World Bank.

[11] Baum, A., et al. (2013). "Debt and growth: New evidence for the euro area." Journal of international money and finance 32: 809-821.

[12] Beainy, Richard Hanna. "Economic Growth, the Case of Developed and Developing Economies." PhD diss., Holy Spirit University of Kaslik,

2023.

[13] Bist, J. P. (2018). "Financial development and economic growth: Evidence from a panel of 16 African and non-African low-income countries." Cogent Economics & Finance 6(1): 1449780.

[14] Bornhorst, F. and M. Ruiz-Arranz (2013). Indebtedness and deleveraging in the euro area.

[15] Bui, T. N. (2020). "Domestic credit and economic growth in ASEAN countries: A nonlinear approach." International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies 11(2): 1-9.

[16] Conti-Brown, P. (2018). The power and independence of the Federal Reserve, Princeton University Press.

[17] Dabrowski, M. (2023). Macroeconomic Vulnerability, Monetary, and Fiscal Policies. The Contemporary Russian Economy: A Comprehensive Analysis, Springer: 313-334.

[18] Duarte, C. B. (2019). "Alternative monetary targets, instruments and future monetary policy frameworks." Review of Political Economy 31(4): 582-601.

[19] Dudian, M. and R. A. Popa (2013). "Financial development and economic growth in Central and Eastern Europe." Theoretical and Applied Economics 20(8): 59-68.

[20] Elom-Obed, F. O., et al. (2017). "Public debt and economic growth in Nigeria." Asian Research Journal of Arts & Social Sciences 4(3): 1-16.

[21] Fernandez-Gallardo, A. (2023). "Preventing financial disasters: Macroprudential policy and financial crises." European Economic Review 151: 104350.

[22] Salloum, C. & Beainy R. (2023). Growth, Evidence from Developing Countries.

[23] Gray, M. S. (2011). Central bank balances and reserve requirements, International Monetary Fund.

[24] Hacievliyagil, N. and I. H. Eksi (2019). "A micro based study on bank credit and economic growth: Manufacturing sub-sectors analysis." South East European Journal of Economics and Business 14(1): 72-91.

[25] Hasan, R. and S. Barua (2015). "Financial development and economic growth: Evidence from a panel study on South Asian countries." Asian Economic and Financial Review 5(10): 1159-1173.

[26] Hockett, R. C. (2023). "The Federal Deposit Insurance Completion Act of 2023: A Simple System of Universal Deposit Insurance." Available at SSRN.

[27] Ismail, M. A. M. and M. Masih (2015). "Causality between financial development and economic growth, and the Islamic finance imperative: A case study of Indonesia."

[28] Ivanović, V. (2014). "Financial independence of central bank through the balance sheet prism." Journal of Central Banking Theory and Practice 3(2): 37-59.

[29] Iwanicz-Drozdowska, M., et al. (2019). "The role of banks in CESEE countries: exploring non-standard determinants of economic growth." Post-Communist Economies 31(3): 349-382.

[30] Jalles, J. T. and P. A. Medas (2022). "Economic Growth After Debt Surges."

[31] Joutz, F. and H. O. Stekler (2000). "An evaluation of the predictions of the Federal Reserve." International Journal of Forecasting 16(1): 17-38.

[32] Kumar, M. and J. Woo (2010). "Public debt and growth."

[33] Kamel, J. K. and Beainy, R. H (2023). Importance of Technology, R&D and AI in the Us Economy.

[34] Lall, A. (2018). "The Federal Reserve and retail payments: a historical review." Journal of Financial Regulation and Compliance 26(1): 58-71.

[35] Lerner, A. P. (1936). "Mr. keynes general theory of employment, interest and money." Int'l Lab. Rev. 34: 435.

[36] Lof, M. and T. Malinen (2014). "Does sovereign debt weaken economic growth? A panel VAR analysis." Economics Letters 122(3): 403-407.

[37] Mallick, S. and T. Moore (2008). "Foreign capital in a growth model." Review of Development Economics 12(1): 143-159.

[38] Manta, A. G., et al. (2023). "Does Banking Accessibility Matter in Assuring the Economic Growth in the Digitization Context? Evidence from Central and Eastern European Countries." Electronics 12(2): 279.

[39] Mencinger, J., et al. (2015). "Revisiting the role of public debt in economic growth: The case of OECD countries." Engineering Economics 26(1): 61-66.

[40] Meng, X. (2023). Research on China's financial risk prevention efforts and legal system support. SHS Web of Conferences, EDP Sciences.

[41] Morahan, A. and M. C. B. Mulder (2013). Survey of reserve managers: lessons from the crisis, International Monetary Fund.

[42] Moreno Badia, M., et al. (2020). "Debt is not Free." Available at SSRN 3524324.

[43] Nier, E. W. (2009). "Financial stability frameworks and the role of central banks: lessons from the crisis."

[44] Obioma, J. and C. Onyebueke (2018). "Bank asset quality performance among Nigerian banks-the role of monetary policy." IIARD International Journal of Banking and Finance Research 4(1): 1-31.

[45] Panizza, U. and A. F. Presbitero (2013). "Public debt and economic growth in advanced economies: A survey." Swiss Journal of Economics and Statistics 149: 175-204.

[46] Panizza, U. and A. F. Presbitero (2014). "Public debt and economic growth: is there a causal effect?" Journal of Macroeconomics 41: 21-41.

[47] Petkovski, M. and J. Kjosevski (2014). "Does banking sector development promote economic growth? An empirical analysis for selected countries in Central and South Eastern Europe." Economic research-Ekonomska istraživanja 27(1): 55-66.

[48] Reinhart, C. M. and K. S. Rogoff (2010). "Growth in a Time of Debt." American economic review 100(2): 573-578.

[49] Timsina, N. and R. S. Pradhan (2016). "Effects of Bank lending on economic growth in Nepal." Journal of Advanced Academic Research 3(3): 53-75.

[50] Turi, A. N. (2023). Financial Technologies and DeFi: A Revisit to the Digital Finance Revolution, Springer Nature.

[51] Woodford, M. (2001). Monetary policy in the information economy, National Bureau of Economic Research Cambridge, Mass., USA.

[52] Zhang, H. and Z. Huang (2023). "Credit Suisse, The Next Lehman Brothers?" The Next Lehman Brothers.

[53] Zıdan, K. (2019). "The Impact of Banking Sector on Economic Growth: Empirical Analysis from Palestinian Economy." International Journal of Economics and Financial Issues 9(1): 1-6.

[54] Kaewsaeng-on R, AL-Takhayneh SK, Jam FA, Chang B-L, Pradana M and Mahmood S (2022) A three wave longitudinal study of school innovation climate and entrepreneurship teachers' acceptance to technology: Moderating role of knowledge sharing and knowledge hiding. Front. Psychol. 13:1028219. doi: 10.3389/fpsyg.2022.1028219

[55] Khan, T. I., Jam, F. A.., Anwar, F., Sheikh, R. A., & Kaur, S. (2012). Neuroticism and job outcomes: Mediating effects of perceived organizational politics. *African Journal of Business Management*, *6*(7), 2508-2515.

[56] Jam, F. A., Rauf, A. S., Husnain, I., Bilal, H. Z., Yasir, A., & Mashood, M. (2014). Identify factors affecting the management of political behavior among bank staff. *African Journal of Business Management*, *5*(23), 9896-9904.

DOI: https://doi.org/10.15379/ijmst.v10i3.1598