A Comparative Analysis of Recovery Strategies And Their Impact On The USA And Brazil During The Great Depression

Muhammed Azhar Usmani

Kings' School Al Barsha, 41 B Street Villa 38, Umm Suqeim 2, Dubai, 00000, UAE; azhar.usmani@outlook.com

ABSTRACT: This empirical research paper conducts a comparative analysis of the recovery strategies implemented and their significance on countries with different economic affluence such as the US and Brazil, during the Great Depression. The most significant measures included the New Deal for the US and coffee valorization for Brazil. This study focuses on examining the recovery strategies adopted by these countries and comparing them which is scarce. The hypothesis for this research is: "The more affluent country (US) has more effective recovery strategies than the less affluent country (Brazil)." By shedding light on the differing experiences of 'rich' and 'poor' nations during the Great Depression, this research provides valuable insights into the challenges faced by countries with varying economic statuses. Prior research papers and Figures were used to calculate the rise in GDP of both countries during the 1929-1939 period, which resulted in Brazil having a 44% increase in GDP and the US 40%, proving the hypothesis incorrect. However, this can be attributed to the importance of tailored recovery approaches based on a nation's development level and specific circumstances exhibiting Brazil's massive economic success. However, The US's more general strategies might have broader applicability than Brazil's specific measures.

KEYWORDS: Behavioral and Social Science; Coffee Valorization; New Deal; Recovery Strategies; Other.

Introduction

The Great Depression of the 1930s is one of the most significant crises in history, affecting not only the United States but the globe as well.[1] asserts that this event ranks second to the Civil War as the gravest crisis in American history, emphasizing its profound impact on the nation and the global economy. This paper aims to delve into the Great Depression, focusing on a crucial research question: "Assessing the Economic Impacts of the Great Depression: A Comparative Analysis of its Effects on 'Rich' Countries like the United States and 'Poor' Countries like Brazil". The U.S. and Brazil were the chosen nations in this study for their popular recovery strategies and Brazil's independence from the US economy compared to other nations. The U.S. was selected as the 'rich' country due to the abundant data available on their economy during the great depression. Likewise, Brazil was chosen to spearhead the 'poor' country as compared to other relative 'poor' countries such as Egypt and South Africa; Brazil's unorthodox methods were popular, so they became well documented. leading to credible data, unlike other nations in this period.

Brazil is representative of a 'poor' nation in this study due to its relative GDP in the world during the great depression. In this study GDP is the chosen metric for identifying economic success and status. When Brazil's GDP is compared to economic powerhouses such as the U.S., China, Russia, etc, countries can be simplified into 2 categories where 'rich' nations are categorized as the upper echelon of the GDP ranking and countries such as Brazil, with a relatively lower GDP than these nations, are classified as 'poor' nations. However, in no way was Brazil a 'poor' country on its own, but it is seen as a 'poor' country when applied to the broader world.

The Great Depression resulted from the fabled stock market crash on October 29, 1929, known as "Black Tuesday", when stock values plummeted dramatically. This disaster set off a chain reaction of economic uncertainty that affected countries worldwide.[3] Factors that contributed included wealth inequality, overproduction of goods, and lack of effective government regulations to name a few. As a result, businesses failed leading to high unemployment rates, where millions lost their occupations, causing widespread poverty.[2] This paper examines the economic impacts on 'rich' countries like the United States and 'poor' countries like Brazil. While the Great Depression's effects have been extensively studied, a detailed comparative analysis between these two categories of nations remains scarce. By analyzing the differences in strategies and impacts, this paper seeks to shed light on the effectiveness of these strategies by comparing them, leading to a more comprehensive understanding of the Great Depression.

The aftermath of the Great Depression saw governments implement various policies to combat the economic recession. However, their effectiveness varied across different nations. In this study, the United States, classified as a 'rich' country, employed more substantial recovery strategies, while 'poor' countries like Brazil faced unique challenges with limited resources. These differences in recovery approaches and outcomes hold vital lessons for shaping future economic policies and regulations to prevent similar crises. This paper draws upon existing research on the Great Depression, including works by [1] which discuss the effects and recovery strategies of the crisis on the United States, respectively. However, what distinguishes this study from existing research lies in its emphasis on the comparison between 'rich' and 'poor' countries, such as the United States and Brazil. This approach is critical as it

DOI: 10.36838/v6i6.6

proclaims valuable insights into the varying impacts and responses to economic crises among nations with different levels of wealth, development, and geographical location.

The central hypothesis of this research paper posits that 'rich' countries, like the United States, employed more significant recovery strategies than 'poor' countries like Brazil. By examining the findings from existing literature and conducting further analysis using economic knowledge and judgment, this paper aims to logically answer the hypothesis and provide valuable insights into the economic dynamics during the Great Depression. Ultimately, this research seeks to contribute to the existing knowledge on the Great Depression by shedding light on the comparative strategies and outcomes between 'rich' and 'poor' countries. The findings can be instrumental for governments in crafting effective policies during economic crises, drawing from historical experiences to yield the most efficient recovery methods and mitigate the impact on their economies.

The rest of the paper will be as follows: The next section will discuss the methods and materials used to support this paper. This is the phase of testing the hypothesis. Then, the following section includes the results from the technique. This is where the data observed is analyzed and structured for use and can be interpreted into graphs, tables, etc. This also allows reflection on any problems with the method/hypothesis. The 5th section is the discussion phase where the data is interpreted and applied to the hypothesis and research question, and the hypothesis will be confirmed either true or false. The final section of the paper is the conclusion. In this section, the paper is summarized, and other questions that have arisen are discussed. Acknowledgments are added following the decision, as high-school students can only publish with a professor's assistance. An esteemed professor approved this paper, granting credibility. Finally, the Bibliography and short autobiography are presented.

■ Methods

This methodology aims to comprehensively gather essential information required to address the hypothesis. This encompasses a thorough analysis of prior literature, approached from an economic standpoint, to arrive at a conclusive hypothesis in the discussion. This study will delve into recovery strategies adopted by the 2 countries, along with evaluating the effectiveness and significance of their implementation. The findings will be visually depicted through textual explanations and graphical representations. Upon collecting and analyzing all pertinent data, a comparative assessment will be conducted between the 'rich' and 'poor" nations, scrutinizing the nature of their recovery approaches, identifying similarities or differences, and assessing their relative degrees of success. Additionally, Figures will be used for data to calculate the rise in GDP in % with calculations fully shown. GDP is the chosen metric for this study and all data will be converted to GDP. Brazil is initially referenced in GDP per capita as the studied period is almost 100 years old meaning there needs to be more data about the topic, especially surrounding Brazil. Hence, the GDP per capita graph is the closest to valid GDP data available, and the source is listed.

■ Result and Discussion

The United States of America (US)- The recovery strategies used by the US to address widespread unemployment, poverty, and economic instability included the New Deal by President Franklin D. Roosevelt which introduced a series of programs to stimulate economic activity. Such stimulants were programs like the Civilian Conservation Corps and the Works Progress Administration. These programs initiated jobs, infrastructure, and assistance to the unemployed. The US also used monetary policy by increasing the money supply and lowering interest rates to incentivize spending.[2] To increase consumer confidence the US established the Federal Deposit Insurance Corporation, which insured individual's bank deposits and restored confidence in the banking system. Along with the New Deal, infrastructure projects created jobs and income for people. Through the implementation of the new deal, the GDP of the US grew by 10%/annum from 1934-1936. Due to the increased incentives of spending and large infrastructure projects", there was a gradual decline in unemployment until 1940 when it stood at 14% from its peak of 25% in 1933".[4] Though the many government plans greatly impacted the economy, the factor that was subsequently the most effective was later WW2, which revitalized the US economy.[1]

Figure 1: US GDP 1929-45

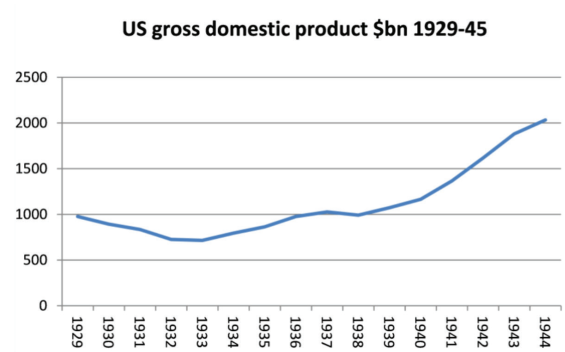

Figure 1: GDP of US every year in graphical form from 1929-1945. (Collected from the US Department of Commerce, Bureau of Economic Analysis.)

The US GDP is shown in (Figure 1) from 1929-1944. During the great depression and when the recovery strategies were implemented in 1933-1940, the GDP grew. However, when observing around WW2 (1939-1945) the GDP spiked from around 10 to 20 around 1945. This represents the significance of WW2 in the recovery of the US economy compared to the recovery strategies implemented by the government which was not as effective. Therefore, to produce a fair comparative analysis the period 1931-39 will be used in this study.[1]

Brazil- Brazil's main source of income was exporting and due to the great depression exports had fallen greatly, to resolve the economic crises unfolding many recovery strategies such as Coffee valorization:[5] purchasing excess coffee stock to control the prices and protect a crucial source of foreign exchange whilst supporting local farmers were employed. Brazil also diversified its product line from specializing in coffee: it diversified into exporting other products such as cocoa and rubber similar to less affluent countries. A product line is a group

DOI: 10.36838/v6i6.6

of related products being sold by the same company. Brazil also invested in infrastructure development creating jobs and inflows into the economy. Brazil was struggling in the great depression though not as much as Western countries as can be seen in (Figure 1), where the “real GDP fell by 29%”[6] at the peak of the great depression.[5]

Figure 2: Brazil GDP per capita 1929-1939

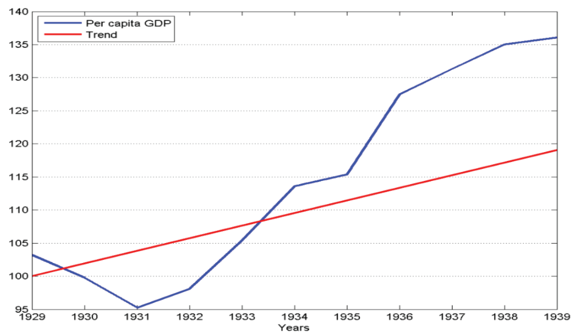

Figure 2: GDP per capita of Brazil with a trend line from 1929-1939. (Collected from IBGE (2006).)

Brazil wasn't severely affected by the great depression. They were still losing money and GDP. This meant they had to find a new method of retaining and increasing GDP. Brazil saw an unconventional method of burning coffee stock to raise its value and then selling it at this higher price. When exporting the goods, Brazil charged high export taxes as well, capitalizing on its monopoly of coffee in the global market. This was explicitly apparent at the peak of the great depression as seen in (Figure 2).

Figure 3: Brazil share of burned coffee over 1930-1944

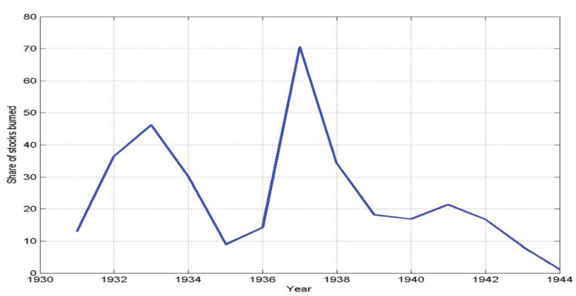

Figure 3: Brazil’s share of stock burned over total population from 1930-1944. (Collected from Peláez (1972).)

(Figure 3) shows the first peak of burnt stock in 1933 while engaged in recovery. And the other peak in 1937 was 70% of the burned coffee stock. Altogether ‘the Brazillian government burned 26.96% of total coffee production for the 1931-1944 period’.[5] This aided in Brazil’s financial recovery as they could charge higher prices and compensate for the loss in the long term. This was a unique approach by the Brazilian government; furthermore, the degree of effectiveness can be represented through an economic metric known as price elasticity of demand (PED) for the coffee market. In this case, the market was price-inelastic, so the PED was ‘0.5, meaning that every 1% rise in prices would lead to a 0.5% drop in consumption’. 5 This is beneficial to Brazil as it enables them to increase their profits with their strategy of coffee valorization that aims to increase prices, thus increasing GDP.

Another strategy was import substitution industrialization as this adopted 2 strategies into one. This is when a country focuses on increasing the variety of goods/services they sell, where this action leads to a need for more employees and factories/ firms to operate and manage these goods leading to injections into the economy. Not only does this recover Brazil from the great depression but also assists them long-term as they have a more expansive source of income as they rely more on domestic goods/industries and inflow money through exports pertaining to a sustainable and growing economy.

Overall, it is apparent in (Figure 3) that when 70 shares of coffee stock were burnt in 1937, there was a substantial spike in GDP as seen in (Figure 2) at approximately 132.5$, a 4.5$ GDP per capita increase from 128$ in 1936. “The coffee trade alone accounted for more than 50% of the total value of exports. At this stage we are not able to present empirical evidence on the foreign sector as a share of GDP. However, multiple historical studies point to the significance of this activity to the Brazilian economy”.[5] This results in confidently stating that the coffee valorization used by Brazil was their most effective strategy.

Discussion:

Figure 4: Brazil GDP per capita and population 1889-1929

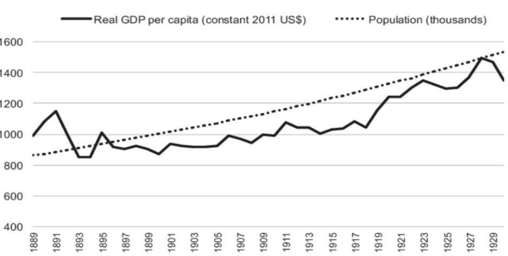

Figure 4: Comparison of Brazil’s GDP per capita with population over 1889-1929. (Collected from the Maddison project database.)

The hypothesis concerning this paper is that "The ‘rich’ countries (US) have more effective recovery strategies than the ‘poor’ countries (Brazil)". This is proven incorrect when discussed in the upcoming paragraphs.

To substantiate this assertion, this paper employs Gross Domestic Product (GDP) as a comparative metric to assess the effectiveness of both diverse and similar recovery strategies adopted by 2 countries. Focusing on the period from 1929 to 1939, the study excludes World War II's influence, which later intervened and significantly altered economic dynamics. However, GDP has several limitations such as not including externalities and non-market transactions, which were more common in the less affluent countries, causing inaccurate GDP. This paper utilizes GDP as it is a world-renowned method of comparison between countries and is easy to understand for economists and non-economists alike.

The United States spearheaded a significant recovery effort known as the 'New Deal'[1] in 1933, consequently allowing GDP data from 1933 to 1939 to gauge the New Deal's effectiveness—serving as the foundation for recovery strat-

DOI: 10.36838/v6i6.6

egies employed. Examining (Figure 1), the recession in the 1932/33 period is evident. However, a prompt impact of the New Deal is discernible, reflected in a 6.7% increase ((800-750)/750 x100) within a year and an impressive 40% rise ((1125-800)/800x100) from 1933 to 1939. This surge in GDP underscores the efficacy of the recovery strategies undertaken. Nonetheless, a decline in effect towards the late 1930s suggests that these measures were predominantly short-term solutions to address the depression.

The U.S. embraced conventional strategies involving job creation, infrastructure investment, and monetary policy to mitigate the crisis. Despite their simplicity, these measures were remarkably successful. In contrast, Brazil adopted coffee valorization and import substitution industrialization as its primary strategy, sharing parallels with the U.S. concerning infrastructure investment and job creation. We will calculate the GDP for Brazil from 1931-39 which is from their lowest peak to their highest from (Figures 2 and 4) yielding an increase of 44% to the Brazillian GDP, [In 1929 on (Figure 4) the GDP per capita is estimated at 1,485$ USD and this is at 103% meaning 1%=14.4. The 2 points that will be calculated is 1931/39. To obtain the GDP per capita we have to account for percentage change which can be seen in (Figure 2) where in 1931 it was 95%=1,368$ and in 1939 136%=1,958$ GDP per capita. The population remains constant at 35,400,000. Therefore, 1,368x35,400,000=4.8x10^{10} and 1,958x35,400,000=6.9x10^{10} and finally to get the % change: (6.9x10^{10}-4.8x10^{10})/4.8x10^{10} x100=44%)]

Comparing the rise in GDP of the US and Brazil we can see that Brazil was more successful, with a 4% larger GDP rise.

This discrepancy can be attributed to Brazil's innovative strategies, differentiating from the U.S. Brazil embraced an export-led approach, augmenting its product line with high-demand goods, thus bolstering its current account and GDP. The current account is the record of all imports and exports of a nation; Brazil is employing an export-led strategy and new manufacturing facilities are being built through import substitution industrialization. Thus, more domestic goods/services are available, leading to fewer imports by Brazil, and an increase in exports results in a better current account. As GDP increases the current account increases proportionally, as Brazil's main economic injection is exporting, meaning the 44% GDP increase correlates to a large increase in the current account. Although specific to Brazil's context, this strategy underscores the potential for other nations to replicate this approach. The emphasis on expanding their product offerings, particularly for more affluent nations with quality goods for trade, could be a viable pathway to increase GDP. Both Nations engaged in monetary policy and infrastructure investment to quell the unemployment and flow of money in the economic issues occurring. US's main strategy was the 'New Deal' which comprised acts that helped unemployment. Brazil replicated this, however, more ingeniously as they invested in their product line. They had to create factories for these products to be manufactured, which required people for the task; this cycle creates a flow of money into the economy, which can't be seen in the US recovery.

However, given Brazil's less-developed status compared to the U.S., the effectiveness of product line expansion would be limited. The U.S. already possessed diverse manufacturing facilities, impeding significant investment money flow. The development level of a nation must be considered when implementing such measures. Brazil's unique approach to coffee valorization—burning stock to enhance value—offered another avenue to increase GDP. This tactic might prove less applicable to the U.S., given Brazil's coffee dominance.

Overall, the paper highlights the significance of GDP as a comparative tool in assessing recovery strategies. The U.S. and Brazil pursued diverse paths to recovery, with Brazil's unique approaches yielding a notable advantage. However, the intricacies of each nation's economic development and unique circumstances underline the necessity of tailored strategies for optimal recovery outcomes. Though, generally, the US's methods may be more effective, as Brazils's measures were too specific and unable to be replicated by most other nations to the same degree of success.

Conclusion

In conclusion, the US implemented the 'New Deal' in 1933, resulting in a GDP surge of 40% from 1933-1939. Brazil adopted an export-led approach with product line expansion, yielding a 44% GDP increase from 1931 to 1939. Brazil's strategy was innovative, leveraging exports and coffee valorization. However, its effectiveness was context-specific, and less applicable to the US due to development differences- Brazil had less developed secondary industry so they invested in constructing manufacturing facilities. However, these facilities are already present in the US, and Coffee valorization is a unique approach for Brazil, inapplicable to the US as Brazil held most shares of coffee stock. The paper concludes that GDP is a valuable tool for comparing recovery strategies, highlighting Brazil's successful approach, but also emphasizing the need for tailored strategies based on unique economic circumstances. The US's more general strategies might have broader applicability compared to Brazil's specific measures.

Further research can be compiled on these specific questions:

Would less-developed countries in the same region have similar strategies to those of Brazil? And would they have a larger rise in GDP than the U.S., such as Brazil?

Would results be similar if a less-developed country that relied more on the US and its currency were examined instead?

Acknowledgments

I want to acknowledge my mentor Ceyhun Elgin, for this economic research paper, a renowned and credible professor who guided me in producing this paper, and my family who supported me throughout my research journey.

References

1. Romer.; Christian, D.; Richard, H.P.; Forthcoming in Encyclopedia Britannica. Now and Futures (Online) 2003, 16, 1-8.
2. Clamoris.; Charles, W. Financial Factors in the Great Depression. Economic Perspectives 1993, 26, 1-3/16-20.
3. Lionel, R. The great depression. Transaction Publishers 2011, 203,

1-42/125-193.
4. Keynes, L. US unemployment in the 1930s. Socialdemocracy-21century 2013, Article.
5. Eduardo, S.A. The Great Depression in Brazil. Universidable de São
Paulo 2012, 52, 19-43
6. David, W. How bad was the great depression? Gauging the economic impact, stlouisfed.org 2013, Article/video.
Figures:
Figure 1- Michael, R. The Great Depression and the War. WordPress 2012, Article.
Figure 2-Eduardo, S.A. The Great Depression in Brazil. Universidable de São Paulo 2012, 52, 22-24.
Figure 3-Eduardo, S.A. The Great Depression in Brazil. Universidable de São Paulo 2012, 52, 19-21.
Figure 4-Doré, N.; Teixeria, A.A.C. Brazil's economic growth and real (div)convergence from a very long-term perspective (1822-2019): An historical appraisal. Brazilian Journal of Political Economy 2022, 956, 936-939.

Author

Muhammed Azhar Usmani is a senior planning to pursue a career in finance and economics. He finds interest in topics surrounding major crises or economic events where the economy is unpredictable and uses his current understanding to evaluate the situation. This is where the inspiration for this paper is rooted.

DOI: 10.36838/v6i6.6