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Financing public investments in the capitalist economy and its economic and social effects: understanding its importance through history and Keynes's theory

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Abstract

The 1930s are historically recognized as the decade of the 1929 Crash and the years of economic non-stagnation for the US government and those of several European countries. The so-called "Keynesian" policies, despite being successful experiences, were continuously "attacked" ever since John Maynard Keynes launched his General Theory (GT). The success of the GT may be attributed to the significant reduction in unemployment at the time, mainly due to an increase in public investment spending. This is because the main device available for public administration to reduce a high unemployment rate, when an economy is in a cyclical state of recession/depression, is public investment, preferably investment in basic social capital. Having made this preamble, the main objective of the article is to discuss the importance of financing public investments in the capitalist economy and its economic and social effects, having as a basis for this the history and the economic theory of John Maynard Keynes. For this, it is crucial to adopt an exploratory, qualitative and bibliographic approach as a methodological procedure. It may be concluded that the only egress to stimulate private investment in times of crises, apart from measures to support consumption through social programs for the unemployed, is government investment. This is because government investments are autonomous investments, i.e., they do not depend on interest, nor on income. Furthermore, autonomous investment decisions, especially in the construction of public works with huge economic (roadways, ports, railways) and social (schools, hospitals and housing) repercussions, tend to break the barrier of distrust in relation to the future and promote a dynamic effect on the economy and society as a whole. Keynes, therefore, emphasizes

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the importance of governmental intervention to stabilize the economy. The importance of Keynes's economic theory lies in the fact that his ideas brought a new perspective to economic theory and helped shape the economic policies implemented in many countries to this day. His contributions paved the way for a better understanding of economic dynamics, whether in the public or private sector, in stabilizing the economy, especially in times of crisis, and in promoting social welfare.

Keywords: unemployment; public administration; basic social capital; financing public investments; government investment.

Financiamiento de inversiones públicas en la economía capitalista y sus efectos económicos y sociales: comprendiendo su importancia a través de la historia y de la teoría de Keynes

Resumen

La década de los 30 es conocida en la historia como la década de la Crisis de 1929 y de los años de no estancamiento económico del gobierno norteamericano, así como de varios países europeos. Las políticas denominadas "keynesianas", a pesar de las experiencias exitosas, siguieron siendo "atacadas" desde el lanzamiento de la Teoría General (TG) de John Maynard Keynes. Es posible atribuir el éxito de la TG a la significativa reducción del desempleo en esa época, principalmente debido al aumento de los gastos en inversiones públicas. Esto se debe a que el principal dispositivo que la administración pública puede utilizar para reducir el alto nivel de desempleo, cuando una economía se encuentra en un estado cíclico de recesión/depresión, es la inversión pública, preferiblemente en capital social básico. Por lo tanto, este artículo pretende discutir la importancia del financiamiento de las inversiones públicas en la economía capitalista y sus efectos económicos, sobre todo sociales, teniendo como apoyo para ello la teoría de Keynes. Para ello, es urgente adoptar un enfoque metodológico exploratorio, cualitativo y bibliográfico. El artículo analizó empíricamente el papel del Estado y la financiación de las inversiones públicas en la recuperación económica "post-crisis de 1929", específicamente para los casos de Estados Unidos, Suecia y Alemania. La conclusión es que la única salida para estimular la inversión privada, además de las medidas de apoyo al consumo a través de programas sociales para los desempleados, es la inversión gubernamental. Esto es así porque las inversiones gubernamentales son inversiones autónomas, es decir, no dependen de los tipos de interés ni de los ingresos. Además, las decisiones sobre inversiones autónomas, especialmente en obras públicas de gran repercusión económica (carreteras, puertos, ferrocarriles) y social (escuelas, hospitales y viviendas), suelen romper con la barrera de la desconfianza hacia el futuro y promover un efecto dinamizador en la economía y la sociedad en su conjunto. Keynes, por lo tanto, enfatiza la importancia de la intervención gubernamental para estabilizar la economía. La importancia de la teoría económica de Keynes radica en que sus ideas aportaron una nueva perspectiva a la teoría económica y ayudaron a dar forma a las políticas económicas implementadas en muchos países hasta el día de hoy. Sus contribuciones abrieron el camino para una mejor comprensión de la dinámica económica, tanto en el sector público como en el privado, en la estabilización de la economía, especialmente en tiempos de crisis, y en la promoción del bienestar social.

Palabras clave: desempleo; administración pública; capital social básico; financiamiento de las inversiones públicas; inversión gubernamental.

Introduction[1]

While the 1930s is historically recognized as the decade of the "Great Depression", the "Big Crash", namely, the "1929 Crisis", it also corresponds to the years of non-stagnation in the economic policies of governments during that period, especially in the US. This fact is of particular interest since the predominant liberal-conservative doctrine of the time invariably denied any type of state intervention in the economy.

When John Maynard Keynes – an influential British economist of the twentieth century – wrote his magnum opus: *The General Theory of Employment, Interest and Money* – the General Theory (GT) – in 1936, the world had already experienced several policies which had been considered unorthodox, including expansionary fiscal policies. This demonstrates that the theory may not even have been very well understood in a broader context, although pragmatic economic policies were applied, as for example the unorthodox measures implemented during the 1930s, which were adopted by four major countries: the USA, Sweden and Germany.

The mainstream wave, which began in the 1970s with Milton Friedman's monetarism and advanced during the 1980s and 1990s with the new classical principles led by Robert Lucas, turned against Keynesian politics mainly because it had legitimized State intervention in the market economy from the 1940s. Indeed, it was during the 1940s, and not in the GT, that Keynes (1980) expounded his recommendations for economic policy regarding public spending. Despite this, studies addressing the economic policy recommendations formulated by Keynes are rare.

The term fiscal policy, in its most general sense, is often used to designate spending, taxing, and borrowing activities in order to finance a country's government debts. The aim of fiscal policy, therefore, is to enable an incentive, directly (and indirectly), to increase production by increasing effective demand. However, the magnitude of the impact of effective demand on the output and employment levels of an economy will depend on the special circumstances of the different states of the cycles of a typically capitalist economy: depression, recession, recovery, expansion and boom.

Under these circumstances, the use of a fiscal policy for expenditure on the construction of public works – an instrument for commanding and controlling cyclical unemployment – should serve as a feasible proposal that finds support in Keynes' GT. Thus, in addition to government spending decisions – whether in investment in public capital works or in current expenses such as pensions – it is necessary to consider the form of public financing.

Indeed, in a capitalist economy in a state of depression, or even an accentuated recession, due to the lack of incentives that induce private investment, if it is required to

1 This article is the result of the research project, entitled: "The Conception of Cyclical Movements in Times of Crisis: "post-pandemic" socioeconomic implications in Brazil", developed within the scope of the Federal University of Pará (also known as UFPA), by the Keynes Economic Theory Research Group (also known as GTEK).

reverse these negative states of business cycles and reduce unemployment, it is necessary for the government to anticipate them and undertake new public investments.

Evidently, the magnitude of cyclical fluctuations may be reduced by progressively raising the average propensity to consume through progressive taxes, although it is the government's investments in public works in new, long-term economic infrastructure, which most intensely triggers the multiplier effect on the income.

Accordingly, the intention is to conduct a historical and theoretical survey on the economic importance of financing public investments and its economic and, especially, social implications, based on Keynes' theory. Thus, it is important to adopt an exploratory, qualitative and bibliographic approach as a methodological procedure.

Having made this preamble, the main objective of the article is to discuss the importance of financing public investments in the capitalist economy and its economic and social effects, having as a basis for this the history and the economic theory of John Maynard Keynes. To achieve this objective, in addition to this introductory section, the article has been organized into five sections, plus the final considerations. The section 2 presents the methodological aspects of the research; section 3 seeks to demonstrate the historical and contemporary importance of Keynes's economic theory and the financing of public investments in the economy, using as a background the 1929 crisis followed by the rapid recovery of the USA through the "War Economy" and similar examples across Europe, with emphasis on Sweden and Germany, especially in the post-1929 crisis period; section 4 demonstrates discussion on the need for a government policy of investment in public works and the importance of this for effective demand in Keynesian terms, plus methods of financing investments in public works; the section 2 debate concerning the financing of investments in public capital for the purposes of economic stabilization and social recovery in times of crisis.

Methodology and research method

Initially, from a methodological point of view, as noted by Silva and Menezes: *"Research is fundamentally and methodologically constructed aiming at solving or clarifying a problem. The problem is the starting point of the research. The development of the research depends on its formulation"* (2005: 79). In these terms, the problem to be investigated in this article can be formulated through the following question: <u>Can the financing of public investments in cyclical states of recession, especially in economic depression, serve as an important instrument of economic policy?</u>

As Silva and Menezes observe: "*The perception of a problem, then, leads to the reasoning that generates research, and in this process, you formulate hypotheses, possible solutions to the identified problem"* (2005: 84). Consequently, the working hypothesis, resulting from the above question, leads to the assumption that the main tool that public administration can use to reduce the high level of unemployment when an economy is in a cyclical state of recession or depression is the financing of public investment, preferably in basic social capital. This requires, therefore, a combination of fiscal and monetary policy as a way to mitigate high levels of unemployment in certain circumstances, as occurred in two historical and decisive moments for capitalism: the 1929 Crash in the USA (and in Europe, primarily) and a World War II.

Thus, for Keynes's economic theory ([1936], 1973), the main tool to stimulate private investment and the dynamic functioning of an economy is government investment. Such action, even in contemporary capitalism, continues to be adopted by various policy makers around the world. Having said that, the intention is to carry out a theoretical and historical review to address the socio-economic importance of financing public investments.

For this, it is urgent to adopt as a methodological procedure an exploratory-bibliographic approach. According to Gil:

> *[...] exploratory research aims to provide greater familiarity with the problem in order to make it explicit or to build hypotheses. It involves a literature review; [...] an analysis of examples that stimulate understanding*[2] (1991, apud Silva and Menezes, 2005: 21, emphasis added).

Regarding bibliographic research, Sousa et al. provide a significant contribution:

> *Scientific research is initiated through bibliographic research, where the researcher seeks already published works relevant to understanding and analyzing the research's problem theme. (...) Bibliographic research is fundamental in the construction of scientific research, as it allows us to better understand the phenomenon under study. The tools used in conducting bibliographic research are: books, scientific articles, theses, dissertations, yearbooks, journals, laws, and other types of written sources that have already been published.* (2021: 65-66, emphasis added)

Finally, as the article in question seeks to gather as much information as possible on the theme through books, journal articles, and other pertinent historiographical sources, it is indispensable to adopt a qualitative methodological approach as well. In the understanding of Silva and Menezes

> *[Qualitative research] considers that there is a dynamic relationship between the real world and the subject, i.e., an inseparable bond between the objective world and the subject's subjectivity that cannot be translated into numbers. The interpretation of phenomena and the attribution of meanings are basic in the process of qualitative research. [...] The process and its meaning are the main focus of the approach.* (2005: 20, emphasis added):

It is evident, therefore, that the present article intends to combine a series of methodological analysis strategies, which is referred to as methodological triangulation. In the words of Jensen and Jankowski: "*Methodological triangulation is adopted when different methods of investigation are used for data collection and the analysis of the object under study"* (1993 *apud* Figaro, 2014: 128). Authors like Denzin and Lincoln further observe that: *"(...) the use of multiple methods, or triangulation, reflects an attempt to ensure a deep understanding of the phenomenon in question*" (2006: 19). In agreement with Flick (1998: 230-231 *apud* Denzin and Lincoln:

> *[Methodological] Triangulation is not a tool or a validation strategy, but an alternative to validation. The best way then to understand the combination of a multiplicity of methodological practices, empirical materials, perspectives, and observers in a single study [;] is as a strategy that adds rigor, breadth, complexity, richness, and depth to any investigation.* (2006: 19, emphasis added)

2 This and all non-English citations hereafter have been translated by the authors.

This demonstrates how timely Keynes's theory is for a better understanding of the use and application of financing public investments in certain cyclical states of the economy.

Keynes's economic theory and the importance of financing public investments in the economy: the case of the 1929 crisis and the "war economy" in the USA

From 1929 to 1932, the most significant event of the 20th century occurred: the Great Depression, which threatened the very existence of capitalism. The epicenter of this phenomenon was the United States. In this environment of panic caused by the financial crisis, neoclassical economists, who constituted the dominant thought of the time, were distant from the events: the neoclassical theoretical model ranged from simply denying the existence of a crisis; or considering this phenomenon as a mere temporary deviation from full employment, which soon the free market forces would restore.

Furthermore, the cause of the 1929 crisis had been attributed to the resistance of unions against wage reductions, i.e., this would be the main cause of high unemployment in the American economy. It is in this environment that John Maynard Keynes writes his most important work: The General Theory of Employment, Interest, and Money, also known as the General Theory, in 1936.

It is important to understand that Keynes's subject of study is what he called the monetary economy of production – a kind of codename for what Karl Marx would call specifically capitalist mode of production –, highlighting the role of money and the inclusion of a decision theory where economic time becomes important in an environment where the decisions of economic agents are subject to risks and uncertainties.

On this subject, Carvalho et al. provide an important clarification:

> *Keynes does not use the term capitalist economy, although he recognizes this mode of social production as his object of investigation, but rather the term monetary economy of production, to highlight the social importance of money in a capitalist mercantile-monetary economy. However, since Keynes's monetary economy of production is a codename for the capitalist economy, it is only appropriate to add the word capitalist so that the economic model in which we live – studied by Marx and Keynes at different times – can be called the capitalist monetary economy of production, or even the capitalist monetary-financial economy of production given the increasing importance of cash flows recorded in the balances and balance sheets – on the asset and liability sides – of companies in the contemporary capitalist economy.* (2018: 243-244)

In this context, it is important to be aware that classical economists view the market economy as always being in a state of full employment equilibrium and, therefore, only acknowledge two types of unemployment: voluntary unemployment, which is the responsibility of the worker for not accepting the real wage in the labor market; and frictional unemployment, considered a short-term, temporary unemployment which results from competition in the labor market, arising from moving from one job to another without affecting full employment.

John Maynard Keynes's theoretical breakthrough was the introduction of a third category of unemployment: involuntary unemployment, that is, a situation of unemployment not dependent on any voluntary position of the unemployed worker. Thus, even a worker who wished to work would not find a position, or work, or employment. In this case, therefore, it would not be the worker who is responsible for being unemployed, but the capitalist system itself.

In other words, there may be workers looking for jobs, but when they find them, the wages offered are so low that they choose not to accept them. In addition to this voluntary unemployment, there is also the involuntary unemployment of those workers who are seeking employment and are willing to accept the current real wage in the market, yet still cannot find a job. This happens, probably, because the economy of that country is in crisis.

For Keynes ([1936], 1973), this means that involuntary unemployment exists not just when the economy is away from full employment, but also even when it is in a state of full employment equilibrium. This is because, although all employees who have accepted the market's real wage rate voluntarily are employed, it does not mean that there cannot be unemployed workers looking for work and yet unable to find it, which would characterize involuntary unemployment even in full employment.

According to Keynes and his Theory, the diagnosis of the crisis in capitalism that led to the Great Depression of 1929 in the USA and then spread to various European countries was not in the labor market, but rather in the goods and services sector. The unemployment in the American economy was a problem of insufficient effective demand that inhibited the animal spirits of the investing entrepreneur in an environment of such uncertainty. The attempt to solve the unemployment problem solely by reducing real wages on the supply side was difficult to implement, as thousands of employment contracts are made between employers and employees, and not unilaterally.

It is thus understood that the main error of classical theory was associated with the belief in Say's Law, which states: "every supply creates its own demand". According to this principle of the market laws, revered by the classics, unemployment could not exist, as every new unit of production created its own employment. However, this hypothesis has never been demonstrated. In fact, stating that every supply creates its own demand is, in other words, to say that every sale corresponds to a purchase. This is a truism, a truth in itself, as it is evident that a sale cannot occur without a purchase and vice versa.

Indeed, Say's Law, when stating that "every supply creates its own demand" is actually suggesting that every supply causes its own demand. Here in lies a logical error in this theory formulated by Jean-Baptiste Say. The oversight by the classics was that for a mercantile-monetary act to be realized, when the buyer and seller confront each other, the final decision never depends on the seller who owns the goods, but on the buyer who possesses the money.

Thus, it is the purchase that determines the sale, or the effective demand that determines the supply, not the other way around. This is the Principle of Effective Demand of Keynes, which opposes Say's Law, marking the divide between Keynes and the classics. Therefore, the issue of unemployment in Keynes, during the Great Depression, could not be resolved by reducing wages, but rather by increasing effective demand.

Keynes's diagnosis in his General Theory was that the high unemployment during the Great Depression was a problem of insufficient effective demand. Insufficient ex-ante effective demand can only be resolved by increasing consumption spending and, especially, productive investments, as these create primary jobs that will stimulate the demand for consumer goods which, in turn, encourage the consumer goods industry to grow again. However, in an environment of uncertainty, the ex-ante marginal efficiency of potential private investments is low, and there is no state of confidence about the uncertain future.

These variables are all expectational, as they are not based on past or present information, but rather on conjectures about unpredictable future scenarios, that is, they do not result from any mathematical, statistical, or probabilistic calculations. Therefore, the meaning of uncertainty implies a lack of knowledge about the future. Thus, investment is an important variable because it is subject to fallible human predictions that generate unexpected fluctuations leading to recurrent crises.

In times of crisis or recession, a fall in aggregate demand could lead to a decrease in production and employment, resulting in an equilibrium below full employment. Keynes sought to emphasize, therefore, the importance of government intervention in the economy, especially through fiscal and monetary policy, to stimulate aggregate demand and promote economic growth. Through his General Theory, he proposed that governments could use measures such as increasing public spending and lowering interest rates as tools to boost effective demand and, consequently, combat recession.

In practice, Keynes and his General Theory sought to provide a varied understanding of the main problems of a capitalist society: the incapacity of the capitalist economic system to provide full employment, and its arbitrary and unequal distribution of wealth and income.

The 1929 Crisis and Its Repercussions on the Market Economy

The Great Depression originated and spread from the USA. The stock market collapse in October 1929 ruined many people who had taken credit with the intention of buying stocks in anticipation of capital gains. However, it was from 1930 to 1933 that the deep recession revealed itself as an extraordinary crisis.

One of the main characteristics of the 1929 Depression was the decline in investment, particularly net investment which became negative, and, most importantly, the significant increase in the unemployment rate in the USA, as shown in Graph 1. According to data sources from the Bureau of Labor Statistics – BLS (1948) and Bureau of Economic Analysis – BEA (2019) *apud* Sicsu (2019: 10): "In 1929, there were 1.55 million unemployed; by 1933, this number had risen to 12.8 million; but in 1943, it dropped to 1.07 million". Sicsu observes that the referenced Graph 1:

> *(...) shows the evolution in the United States of the GDP and the unemployment rate between 1929 and 1947, with emphasis on the year 1936, when the pre-crisis level of GDP was recovered, and the year 1943, when the unemployment rate recovered to a level lower than that of the pre-crisis year*. (2019: 11)

Based on the author

> *The American lesson from the 1930s is as follows: first comes the recovery of output and subsequently comes the recovery of employment; only when both*

variables are quantitatively restored can the economy indicate a consistent trajectory of economic growth sufficient to maintain at least an unemployment rate equal to that of the period before the depression. (2019: 11):

Graph 1 – **Evolution of output and unemployment rate: 1929 to 1947**

Source: BLS (1948) and BEA (2018) *apud* Sicsu (2019: 11).

Definitely, when the crisis reached its critical point in 1929, the Federal Reserve System (FED) did not take any practical measures to curb the dramatic fall in prices and production levels, which ultimately were the causal manifestations of the depression. On the contrary, the FED of the time, seemingly more concerned with the possibility of high inflation than with the depression and, consequently, with unemployment, did nothing to "abort" the imminent crisis.

The main implication of this inertia was a significant increase in the unemployment rate, which eventually exceeded 25% of the American workforce. Additionally, according to the BLS (Bureau of Labor Statistics, 1948), industrial production in 1932 stagnated at 53% of the 1929 level. Carvalho notes that:

(...) the "policy makers", clinging to financial orthodoxy, neither opened the American domestic market to foreign products nor facilitated new credits to countries that needed them to avoid a contraction of their economic activities. Thus, the Federal Reserve, by refusing to act as a lender of last resort, ended up spreading to the rest of the world a 'dollar scarcity' crisis, which manifested in other countries through the incessant search for dollars via exports – which implied a contraction of internal aggregate demand – or via loans on Wall Street – which resulted in the worsening of external debt – to sustain their economic activities. (1994: 15-16)

Galbraith (1988) concludes by pointing out some reasons that aggravated the depression and hampered the economic recovery process, namely: poor income distribution; increasing oligopolization of the economy; weakness of the banking structure; contraction of international trade, and the poverty of the US economic policy. Galbraith adds:

> *From this perspective, the stock market would only be an image of the real economy: causes and effects flow from the real economy to the financial economy (stock market). In 1929, therefore, a crisis was underway that would culminate in the Great Collapse of the Wall Street Stock Exchange.* (1988: 79-80)

When the market fell, many people on Wall Street were apprehensive because they knew the consequences of the stock market collapse on the real economy in terms of declining income and employment. That is why it was necessary for the most illustrious figures to repeat – as a measure of preventive enchantment – that the collapse of the economy would not happen.

These figures "explained" that the stock market was just the "froth of economic life", whose true substance rested in production, employment, and the demand for goods and services – production, employment, and demand that would not be affected by a collapse of the stock exchange. Beaud recalls the following facts of the time:

> *This was the crisis which, in the euphoria of the 1920s, the American economists were convinced could never happen again. For example, Irving Fisher, in 1928: "Nothing resembling a crash can occur."; in 1929: "There may be a recession in the price of stocks, but nothing in the nature of a catastrophe."; in 1930: "For the immediate future, at least, the perspective is brilliant." And the Harvard Economic Society, in November 1929: "severe depression like that of 1920-21 is outside the range of probability." In January: "There are indications that the severest phase of the recession is over.". In November 1930: "We are now at the end of the declining phase of depression." And in October 1931: "A stabilization at [present] levels is clearly possible."* (2001: 183)

Carvalho (1994) concludes that in the decades following the Great Depression of the 1930s, there was a visceral expansion of state monopoly capitalism to almost all advanced countries. From then on, state intervention to address the major difficulties in capital accumulation began to be implemented based on economic policy measures involving government spending, also known as Keynesian policies.

These measures had the effect of engendering a new form of tacit social compromise between the market interests, aimed at an adequate valorization of capital, and the interests of workers focused on sustained full employment supported by social welfare programs and system reform. This was exemplified by the institutionalization of Franklin Delano Roosevelt's New Deal. As stated by Carvalho et al.:

> *After the end of the First World War, the American economy, starting from 1942, entered into a virtuous cycle that lasted until the end of the 1960s. The years of the USA's virtuous cycle were based on two pillars: the expansion of bank credit and the realization of spending on investment goods and consumer goods. The execution of investment spending involved various industries of fixed capital goods and durable consumer goods, as well as investments in highways,*

electric power, and ports. Favorable credit conditions for financing industrial investments were very important. Families faced no restrictions in financing the purchase of their homes, automobiles, and appliances. The reduction in interest rates favored the granting of credit not only to industrial investors but also to professional financial speculators, both national and international. In this environment of economic expansion and ample credit availability, no one was concerned about the increase in debt and signs of price decline until the fateful date. (2012: 09)

Roosevelt's New Deal primarily aimed to provide a countercyclical policy through public investment as a mechanism to reverse the depression cycle in the US economy. The key measures adopted included: abandoning the gold standard and progressively devaluing the dollar against gold, establishing policies for reciprocal trade agreements; providing low-interest loans; implementing a program to recover the national industry; passing the Agricultural Adjustment Act, and a labor reform in favor of the American working class, which, in the view of Beaud "(...) opened the way for a "fruitful cooperation" (2001: 186) between government and businesses.

The macroeconomic indicators in Table 1 reveal the trend of the performance of the American economy up to 1929, the year of the New York stock market crash.

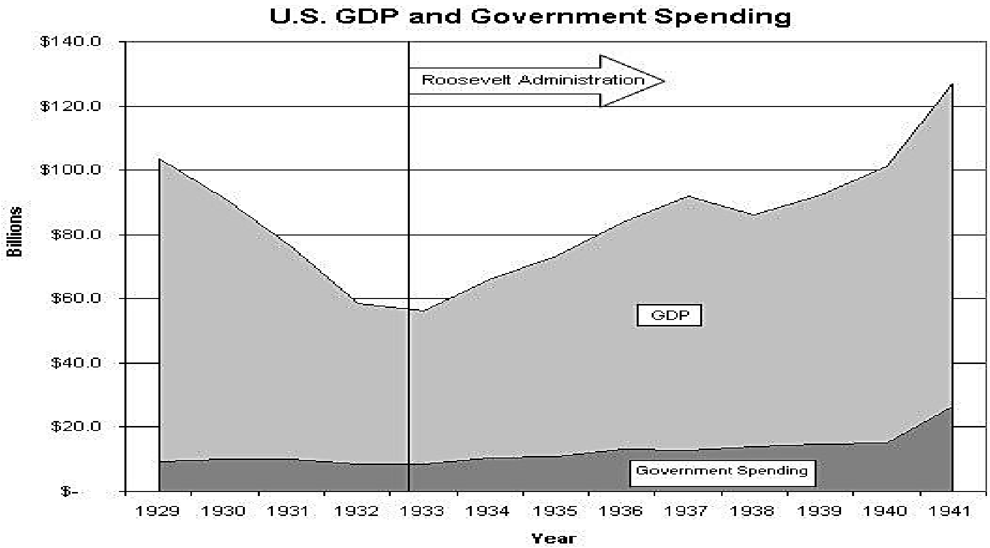
Table 1 – **Indicators of the American Economy: 1921-1929**

Year	GDP Growth Index	Unemployment Rate (%)	Price Evolution of Consumer Goods	Public Revenue (In US$ Billions)	Public Spending (In US$ Billions)	Public Debt Variation (%)
1921	100,00	11,40	100,00	5,6	5,1	-1,3
1922	105,50	7,20	97,60	4,0	3,3	-4,2
1923	119,40	3,00	99,40	3,9	3,1	-2,7
1924	123,10	5,30	99,40	3,9	2,9	-4,9
1925	126,00	3,80	102,40	3,6	2,9	-3,5
1926	134,20	1,90	101,20	3,8	2,9	-4,3
1927	135,50	3,90	98,80	4,0	2,9	-5,8
1928	137,00	4,30	97,60	3,9	3,0	-4,9
1929	145,50	3,10	97,60	3,9	3,1	-3,8

Source: Mazzucchelli (2009: 201 *apud* Carvalho et al., 2012: 08).

Graph 2, in turn, illustrates the curve of increasing product and government spending by over $140 billion, moving side by side in an upward trend post the 1929 crisis until the year 1941. Therefore, as described by Keynes's economic theory ([1936], 1973), the primary management tool that the government can employ to reduce high unemployment levels, when an economy is in a cyclical state of depression (or a deep and prolonged recession), is the adoption of investment in public works, particularly in basic social capital.

Graph 2 – **Growth of GDP and US Government Spending: 1929 to 1941**



Source: "Budget of th United States Government: Fiscal Year 2009" Historical Tables; Bureau of Economic Analysis "National Economic Accounts".

The Role of the State and Public Investment Financing in Post-1929 Crisis Economic Recovery: The Case of Sweden

In Sweden, from 1932 to 1976, the social-democratic government initiated a public investment program to overcome the economic depression and lack of industrial infrastructure. As a result of its fiscal policy of expanding public spending, Sweden came to be seen as an example of state participation through fiscal policies and financing of public works investment. This approach, namely the use of Keynesian policies, was to overcome economic depression without resorting to militarism or excessive state control over the economy. In this context, Mazzucchelli states:

> *In Sweden, under the theoretical inspiration of Gunnar Myrdal's works, the Social Democrats (in coalition with the agrarians) intentionally resorted to government spending and public deficit as circumstantial weapons to combat the depression. The results were promising: industrial production grew about 50% between 1932 and 1936, and the unemployment rate decreased by about 40%. Although public spending – unlike in Germany – was not the main driver of recovery (led, in this case, by private investments and exports), its importance – especially in the biennium 1934-35 – cannot be neglected. Moreover, as these were the result of an innovative theoretical perception – opposed to the deflationary creed of conventional wisdom – they indicated modes of action that would be used in the future. The innovative nature of the Swedish experience is even more significant when we note that, in 1936, Roosevelt was still a proponent of balanced budgets, England paid monotonous reverence to fiscal prudence, and France (until September) remained fervently tied to the strict rules of the gold standard.* (2014: 05)

In Sweden, it was understood that in a cyclical expansion phase, the state should not intervene in the economy, as it would generate its own resources for its “survival”. However, in the phase of recession and depression, it was necessary to accelerate public spending to prevent a contraction in effective demand and the corresponding expenditure.

Initially, the financing of public works investments was managed by economic policy executors in the form of fiscal deficits. Thus, a deficit plan was created to foster public spending for 2 to 3 years; the second part of this plan, after 7 years, executed a fiscal surplus policy to obtain resources and pay off the debt through taxation of large landowners and the Swedish elite with the highest income levels, similar to what Franklin D. Roosevelt did in the USA. In this way, Sweden created the “poison” and the “antidote”.

The Swedish state, supported at the time by a developmental economic model, secured the necessary conditions for its industrialization and the emergence of national capital in the country. Mazzucchelli, however, goes further:

> *However, it was the conscious use of fiscal policy – through a spending program that favored public investment – that was the great innovation of the Swedes. (...) The results were highly satisfactory: GDP grew at an average annual rate of 6.0% between 1934-7, industrial production expanded by 66.0% between 1933-37, the volume of exports increased by 60% between 1932-37, and the unemployment rate – even though it remained at levels close to 10% at the end of the decade – decreased significantly*. (2014: 12)

It is clear that in Sweden the policy was deliberately fiscal, promoting public deficit with the explicit goal of recovering effective demand. The Swedes also carried out major public infrastructure works. Sweden is cited in the specialized literature as the first successful example of Keynesian recovery policies not based on war, as the main idea was to use the public sector as a provider of increased effective demand. Therefore, in practice, the Swedish case may well be the best example of a successfully applied Keynesian policy, even without Keynes ever having been there.

The Importance of Public Investment Financing in the Economic Recovery of Germany Post-1929 Crisis

The decline of the Weimar Republic began with the collapse of the New York stock exchange and the global economic crisis of 1929 – the same year the German politician and Foreign Minister, Gustav Stresemann, passed away. The post-war economic difficulties and the stringent conditions imposed by the Treaty of Versailles, signed in 1919, fueled deep skepticism about the Republic.

The disturbances peaked in 1923 when inflation reached dramatic proportions (one dollar was worth 4.2 billion marks). The French and Belgians occupied the Ruhr region when the Germans defaulted on the war indemnity payments. In this turbulent environment, the leader of one of the small parties, Adolf Hitler of the National Socialist German Workers’ Party (NSDAP, Nazi Party), initially attempted to seize power in Bavaria with the help of General Erich Ludendorff but failed and was imprisoned.

Subsequently, with the creation of a new mark supported by the Anglo-Saxons, the situation stabilized, and a viable Republic emerged. Conforming to Durosolle:

> *The role of the global economic crisis that began in October 1920 in the United States is decisive for the rise of fascism. In the 1930 elections, the Nazis had 107 deputies, and their number of votes increased from 801,090 to 6,409,000. The Communists also made progress, gaining 4,592 votes. The movement intensified in July 1932, the Nazis increased to 230 seats among 607 deputies, with 13.7 million votes. Although they slightly lost in November, the seizure of power that Hitler wished to achieve legally became easy. On January 30, 1933, the President of the Republic, the elderly Marshal Hindenburg, poorly advised by the camarilla surrounding him and by Von Papen, appointed Hitler Chancellor.* (1917: 93)

As Chancellor, Adolf Hitler formed a coalition cabinet with Franz Von Papen, who served as Vice-Chancellor in 1933-1934. Subsequently, the Reichstag reformed the constitution, and in the following weeks, the other parliamentary parties were eliminated. The result of these actions: Hitler became the Führer of the people and the Reich of Germany.

At the time, Germany was experiencing a deep economic depression, which was not only the most severe in Europe but also rivaled that of the USA. In May 1931, the financial system plunged into crisis with the credit collapse of Austria's most important bank.

The insolvency triggered panic among Germany's foreign creditors and precipitated a massive withdrawal of resources. This led to widespread mistrust in German banks, forcing the government to close the banks for several weeks. All this only contributed to transforming the recession into a severe depression. The bottom of the depression was reached in August 1932.

Table 2 demonstrates the transition process from a crisis-ridden economy to an economy with virtuous economic growth, unemployment reduction, and recovery of the industrial sector promoted by the Nazi government.

Table 2 – **German Economic Growth Statistics: 1928 to 1938**

Indicator/Year	1928	1932	1934	1936	1938
GDP*	89.5	57.6	66.5	82.6	104.5
National Income*	75.4	45.2	52.8	65.8	82.1
Industrial Production**	100	58	83	107	122

Source: Crozier (1997: 102 *apud* Sbrocco, 2011: 60). *In billions of marks; ** Reference: 1928 = 100.

Sbrocco notes that: "*As Führer, Hitler began the journey towards a war economy, or Wehrwirtschaft. Investing in infrastructure and the armaments industry, Hitler's primary objective was to eliminate unemployment*" (2011: 16). One of Hitler's key approaches was to treat the German economic system as a means to his political ends. The problems that arose were solved by a bureaucratic state that controlled everything with an "iron fist": prices, wages, foreign trade, and the direction of private investments, i.e., the market.

About this, Mazzucchelli recalls: "In the case of Germany, the results were spectacular: between 1932 and 1936, real product growth was around 40%. The number of unemployed, about 5.6 million in 1932, fell to 1.6 million in 1936, and 430,000 in 1938" (2014, p. 04).

In a few years, productive resources were fully utilized again. By around 1938, industrial production was 25% above the 1929 production level, and the unemployment level had virtually disappeared. As Bleaney

> *The German experience under Nazism was the 'most successful example of a Keynesian response to depression.' It is clear that the Nazis' success in the astonishing recovery of the German economy was inextricably linked to the despotic control exercised over the economy and society, but the crucial role played by state-directed spending cannot be denied.* (1985: 72 apud Mazzucchelli, 2014: 05) states:

As can be seen, when analyzing the case of the rise of the German economy after the events of 1929, the focus is solely on the Nazi armament policy. The method was essentially Keynesian, but they were pursued obstinately because the political motivation was to restore Germany above all and any market logic.

It is Know "Keynesian" economic policies have been continuously "attacked" by the so-called neoclassical economists ever since the General Theory was first launched, despite the success they achieved during the post-World War II period. With regard to this issue, it is possible to attribute this economic success to a significant reduction in unemployment levels, mainly in the aspect related to an increase in public investment spending, with positive implications in terms of stimulating effective demand.

At the turn of the twenty-first century, the neoliberal wave began to lose its ideological strength of conviction in which the market is able to dispense with any form of State intervention. In fact, while recognizing the importance of the market, the great thinkers were also aware of the importance of the State as an important actor capable of avoiding major disasters such as the Great Depression of the 1930s or the Great Inflation of the 1970s.

According to Beaud (2001), there was a historic growth of world capitalism in the period going back to the years 1945-1978. Concomitant with reconstruction and, expanding further afterwards, there was a remarkable growth throughout the major capitalist countries, which may be observed in Table 3, revealing a simultaneous progress of industrial production and employment in the following terms:

Table 3 – **Growth of production, employment, productivity and capital per capita: average annual rates 1950-1975**

Average Annual Rate: 1950-1975	United States	Great Britain	France	West Germany	Japan
Gross Domestic Product*	3.3	2.5	4.9	5.5	8.6
Employment	0.9	0.3	0.9	0.7	1.2
Labor productivity	1.5	2.3	4.6	4.7	8.6
Capital (per capita)	2.7	3.1	4.5	5.2	9.0

Source: Beaud (2001). * In percentage.

The significant economic growth that occurred during the postwar period may be observed in Table 3, which proved to be one of the highest in the whole of the main capitalist countries of the twentieth century. In the words of Beaud:

> *In this period of general growth, inequality on a world scale increased; even when higher growth rates seem to indicate that the third world was beginning to catch up, in absolute values the gap widened between per capita production in the developed countries compared to third world countries. Postwar growth was the greatest that ever been experienced by the capitalist countries as a whole. Slower in Britain, appreciable in the United States (taking into account the high level of production at the end of the 1940s), this growth was especially marked in France and Germany, and still more so in Japan. It was based relatively little on an increase in labor power, and much more on a rise in labor productivity, which itself depended on a increase in the means of production put at the disposal of each worker and which called for an intensification of individual labor.* (2001: 217-218)

In practice, the high investment rates in these countries, although there were variations among them, represented a higher injection of effective demand, which justified the high levels of employment that followed in the postwar period, as Bleaney (1985) indicated. Thus, in the terms of Keynes ([1936], 1973), the main instrument of public policy that the government could have to reduce the high level of unemployment, when an economy was in a cyclical state of depression or deep recession, would be to invest in public works, preferably with investments in basic social capital, i.e., public capital investment in economic infrastructure such as highways, railways, ports, airports, hydropower plants, telecommunications, etc.; and in social infrastructure, such as schools, universities, hospitals, basic sanitation, health centers, etc. - that could provide the multiplier effects of income and of positive externalities for private activities.

Bleaney (1985) conducted a detailed analysis of the distinct actions of the different governments of the main developed countries – the US, Sweden, Germany and France - which had resorted to a fiscal policy in order to escape the great depression of the 1930s. Bleaney (1985) maintained that Keynes's economic policies, applied during World War II, triggered a positive impact on the level of employment in the economies of the countries involved in the war.

The years after World War II, however, provided a self-sustained economic growth boom for the advanced capitalist economies, with low levels of unemployment, which remained until 1973 when the big shock of oil prices occurred, as demonstrated in Table 4.

Table 4 – **Unemployment rate in industrialized nations: 1950-1973 (%)**

Countries	1950-1960	1958-1961	1962-1973
Germany	4.1	-	0.6
Belgium	5.4	-	2.1
Canada	4.4	6.8	5.1
US	4.5	6.1	4.6
France	1.3	-	2.2
UK	2.5	-	3.1
Italy	7.9	-	3.5
Norway	2.0	-	2.0
Sweden	1.7	-	2.1

Source: Organization for Economic Co-operation and Development – OECD, Economic Outlook, N.21, July, 1977.

However, even during the golden years in the history of capitalism, the fact that the US government did not balance its public budget was seen with some discomfort by a portion of economic orthodoxy. Indeed, it seems paradoxical that at the height of applying Keynesian policies that resulted in economic growth and increased employment rate, the issue of public debt once again became the center of attention.

Kregel (1985) noted that in the 1970s and 1980s, the so -called "common man" was much more concerned with major public deficits. However, from a practical viewpoint, it was the monetary and National Treasury authorities who began to discuss the issue of public debt financing.

The next section discusses the government policy of investments in public works and the role of effective demand in the capitalist economy in the light of Keynesian theory.

The government policy of investments in public works and the effective demand: an analysis in the light of Keynesian Theory

Although Keynes did not dedicate a specific chapter to economic policy in his General Theory, there are sufficient theoretical foundations to support consistent macroeconomic policies in order to combat unemployment and inflation. In truth, Carvalho (1999) maintained that there are texts by Keynes (1996) before and after the GT that specifically deal with economic policies.

Keynes (1996) knew that in order to improve the employment rate, in an environment of depression or deep recession, it would be necessary to raise the effective ex-ante demand, not the aggregate demand, which signifies mitigating uncertainties and reversing the short-term expectations of the private agents regarding the unknown future.

In principle, this could either be achieved by reducing Z or increasing D, or combining a Z reduction and a D expansion. In the short term, however, the only way to reduce the price of the aggregate supply of production (Z) would be through reducing salaries, although this action is useless and counterproductive for the previously mentioned reasons.

In the words of Keynes (2018: 23): "The value of D at the point of the aggregate demand function, where it is intersected by the aggregate supply function, will be called the effective demand. Since this is the substance of the General Theory of Employment (...)". Through reading Keynes' GT, the following question arises, accompanied by a peremptory response:

> *How to escape this recessive trap? How then to avoid "unproductive accumulation" and generate effective demand? Thus the state action was legitimized as an integral element and indispensable to the proper functioning of the capitalist economic system. The State would therefore be responsible for eliminating the lack of effective demand in times of recession and unemployment. How? Creating budget deficit and issuing bonds to extract the "unspent income" from the private sector and ensure that the idle machines would once again operate. Here two more myths fall. Until then, savings was viewed as one of the pillars of bourgeois morality. Keynes comes and states that: the cause of depression is "excessive savings" due the future expectation of profit at a time of high preference for liquidity. Crisis, therefore, represents a lack of investment and idleness of machines and men, not, as expounded, a lack of savings. It also*

> *destroys the myth that the State's operation should be based on great financial austerity, not spending more than the collecting of taxes. Thus, it demonstrates that under circumstances of unemployment the tax deficit is an important part for the proper functioning of the economic system.* (1996: 15)

From a theoretical viewpoint, however, there are two ways of increasing ex-ante effective demand expectations (D): improving ex-ante expectations of the propensity to consume; and the expectations of profit from new investments. In the first case, government action could shift toward fiscal policy of income redistribution through progressive taxes.

This type of action, although interesting, is not advisable within an environment of recession or depression, also due to the resistance of entrepreneurs and the lag effect for the results to be manifested on the marginal propensity to consume. Thus, all attention turns toward investment. Hence, there are some manners with which to induce spending on productive investments. For example: raising the marginal efficiency of ex-ante capital, which in fact signifies improving the profit expectations of entrepreneurs; or lowering the interest rate through monetary policy.

This is because in an economic environment of recession or depression, with a high idle capacity of existing capital equipment, where the interest rate is already very low – in the liquidity trap range – there are few chances of increasing the induction of new private investments even through some improvement in expectations. In the short term, the only possibility left to mitigate the uncertainty regarding the future is to fill the gap between output and current demand with autonomous government spending.

The effect of the impact of public investment spending is normally immediately beneficial in raising the level of employment, given the multiplier effect of employment and income on the economy, and also reduces the cost of maintaining the unemployed. In the longer term, it would still be expected that the dynamic multiplier effect would increase the level of aggregate income, so that it would not only improve tax collection, but would also contribute to reverting the expectations of businessmen for a subsequent resumption of private investment. This was the general logic of Keynes' approach to the GT. It is evident that each of its elements would depend on the different characteristics of the economic situation faced by policy makers.

For Keynes (2018), the best option for government spending should fall onto autonomous investments in public works. The expression "public works" suggests government spending under very special circumstances with the countercyclical aim of reversing high levels of unemployment. Investment expenditures on public works are discretionary expenditures, thus distinct from the regular current expenditures of public sector administration.

In his GT, Keynes highlights the importance of a public works policy as a powerful instrument to combat unemployment. While Keynesian economists use the term fiscal policy to involve both government spending – expansionary aggregate demand fiscal policy used to combat unemployment – and taxation, contractionary aggregate demand fiscal policy must sometimes be used to combat inflation. Davidson observed that: *"Government fiscal policy is conceived as the balancing wheel, exogenously increasing aggregate demand whenever private sector spending falls short of a full employment level of effective demand and reducing demand if aggregate demand exceeds the full employment level.* (1994: 79)"

Evidently, the government may contract spending and raise taxation to bring aggregate demand below full employment levels should there be a risk of demand-pull inflation. However, the results arising from the use of a fiscal policy for stabilizing prices are quite different from using a fiscal policy with the intention of reversing the high level of unemployment.

The fiscal policy of public spending is anti-cyclical in the sense of reversing cycles of recession and depression to cycles of recovery and growth of the market economy. In the 1940s and 1950s, "Keynesian" theorists established the criterion that the capitalist economy of a nation could be stabilized, and its economic growth stimulated exclusively through fiscal policies, especially variations in public spending and taxation. – aimed at raising the level of aggregate demand.

In the meantime, contrary to the teachings of Keynes and his GT, monetary policy was simply rejected. Indeed, it took the reaction of monetarist economists in the 1960s, stating that money mattered, for Keynesian economists to discover what was already contained in Keynesian GT, namely, that fiscal policy needs to be combined with monetary policy to succeed in combating high levels of unemployment in certain historical circumstances.

Thus, after the 1960s, the Keynesian economic crisis began, and with it disillusionment with Keynesian fiscal policies seeking stabilization. In conformity with Chick (1993), this disillusionment was caused by the fact that Keynesian fiscal policies were applied to combat inflation in an environment for which they were not designed. Even so, Hansen (1945) sought to highlight the importance of fiscal policy as a stabilizing instrument for recurrent economic cycles.

It is curious that this US economist, a great promoter of Keynes' work, referred to the construction cycles of public works as having a distinct logic from the "broad" economic cycles. This was because in 1913, when Mitchell (1913) published his book, entitled: *Business Cycles*, there was no general awareness of the problem of the business cycle as such. Thus, the possibility of reducing, to a minimum, the fluctuations of the economic cycle – prosperity and depression – was made through monetary policy, at least until the years after World War I.

The fundamental basis of a monetary policy to stabilize economic cycles was the idea that the peak of the boom phase engendered the crisis and, consequently, a recession until the depression phase. In this respect, if it were possible to control the first through currency and credit control, then it would be possible to achieve economic stability of employment and inflation close to a full employment rate.

However, as reported by Hansen (1945), the monetary control policy of the central bank to prevent the boom phase from reaching its peak and the subsequent crisis that would plunge the economy towards depression, proved inadequate. Therefore, historically speaking, what was observed was that the fiscal policy used by policy makers tends to be effective as a countercyclical policy in the depression phase and in the economic recovery phase.

However, the most effective form of public spending was controversial: spending on unemployment benefits, or spending on public works. Hansen (1945), following the teachings of Keynes, agreed that government investments in public works (roads, ports, airports, hydropower plants, basic sanitation, schools and hospitals) was more effective than benefits for the unemployed in order to raise the level of employment and aggregate income when an economy is plunged into depression or recession.

For a long period, this thesis was refuted with the argument that cash transfers to the most needy would be more efficient, since, in addition to being a form of income distribution, the money they received was immediately spent on consumer goods and services which, in turn, would stimulate the propensity to consume and, by extension, raise the levels of employment and output.

In addition, there was the argument that, in the case of public works, there was also a potential risk that this transfer of government money to contracted companies could be used to pay their debts to the banks, or even that part of that money would ultimately be restrained in the form of inactive funds. It should be noted that both arguments lack proof and logical content.

In the case of government cash transfers for the unemployed, the additional purchases of consumer goods made by the unemployed who receive the transfers are relatively small in periods of depression or acute recession, when compared with the huge expenditure on the purchase of new consumer goods by all community members.

Furthermore, the additional expenses of the unemployed, whose purchasing power is increased with government transfers, cannot reach the entire vast field of consumer goods industries to the point of inducing a significant increase in the level of employment. However, expenditure on large public works enables a considerable increase in the employment rate in civil construction and in the heavy industry of capital goods which, through a multiplier effect, also increases employment in the consumer goods industries.

Thus, as Hansen (1945) confirmed, the multiplier effect of a government investment program in public works on employment, considering the repercussions in consumption and private investment, is relatively much more significant than unemployment benefit programs. This does not signify that an investment program in public works cannot be accompanied by a policy of progressive taxes aimed at financing part of current expenses and, concomitantly, a progressive improvement in income distribution.

It may be noted that defending a public works construction policy is justified by Keynes in his GT, when there are idle production factors, not based on the multiplier theory, although this is relevant to assess the positive impact on the economy if public works policies are put into practice, but mainly because it is more rewarding to employ workers who produce a little more in society than if nothing is done. Indeed, this is where the importance of government policy for public investment lies, since for Keynes:

> *Thus public works even of doubtful utility may pay for themselves over and over again at a time of severe unemployment, if only from the diminished cost of relief expenditure, provided that we can assume that a smaller proportion of income is saved when unemployment is greater; but they may become a more doubtful proposition as a state of full employment is approached. Furthermore, if our assumption is correct that the marginal propensity to consume falls off steadily as we approach full employment, it follows that it will become more and more troublesome to secure a further given increase of employment by further increasing investment*. (2018: 113)

Hence, a fiscal policy for spending on public works is more active from the viewpoint of its immediate results in the economy. Not only because the government's autonomous decisions for public investments could immediately create an effective demand for the civil construction industry – the latter being a kind of propelling industry for the capital goods producing sector – but because, via the dynamic effect of the multiplier, it triggers a process of creating new jobs in the capital goods producing industry that soon reaches the consumption goods industry, which then spreads to the economy as a whole.

Meanwhile, the fiscal policy for spending on social assistance, despite being meritorious for providing some transfer of income in the form of aid to unemployed workers, could, in a reduced, inefficient manner, only affect the propensity to consume, without significant propagation effects for the entire sector producing investment goods.

Likewise, if the marginal propensity to consume constantly decreases as the economy recovers toward full employment, this must be in agreement with Keynes' argument on the difficulty of generating new jobs through increasing private investment.

It should be emphasized that, when involuntary unemployment occurs in the capitalist economy, the marginal disutility of labor is less than the marginal utility of the product. Indeed, it may be much less, since any job for a worker who has long been out of work may have positive utility, rather than disutility. Assuming such a plausible hypothesis, the above reasoning demonstrates that "useless" expenses financed by loans – the various types of aid programs for the unemployed, for example – may ultimately raise the aggregate income of the community.

To draw attention to the importance of public investment, Keynes stated that: *"Pyramid-building, earthquakes, even wars may serve to increase wealth, if the education of our statesmen on the principles of the classical economics stands in the way of anything better*" (2018: 114).

With unique examples, Keynes wished to demonstrate that even so-called "useless" public spending, financed through loans, could induce new private investment. With this, Keynes ([1936], 1973) sought to exclude applying a balanced budget fiscal policy, based on a belief in the principles of classical economics, since it is not the most appropriate government policy to mitigate uncertainty about the future, mainly because it inhibits decisions on private investment spending by entrepreneurs.

This is so because in times of high unemployment, the government's autonomous investments in public capital infrastructure, such as constructing roads, ports, railways, schools and hydropower plants, even though they may be considered by some economists to be of dubious direct productive utility, may not only favor the expectations of business investors, but also create new positive externalities that will ultimately be able to boost the economy once again.

However, it is necessary to pay attention not only to the type of public spending, but also to the way in which it is financed, since an active fiscal policy aimed at reducing unemployment, based solely on the multiplier effect of autonomous public investment, could cause unfavorable reactions to private investment in other directions, as Keynes' GT (2018) indicates.

The methods of financing investments in public works for Keynes

The method of financing public spending policy is an important topic that every government must consider before deciding to promote autonomous spending.

Overemphasis on the role of the multiplier effect of employment has led "Keynesian" economists to overlook the importance of financing investments in economic and social infrastructure. In practice, the multiplier effect of public spending in a monetary economy of production[3] depends on how government spending is financed. In his studies, Harrod[4] reinforced this position regarding Keynes' views on financing investments in times of crisis when he stated that:

> *On the domestic side he was still pressing those remedies which he had begun to urge in 1924 – large-scale public works on loan account. (...) which he advocated (...) for unemployment over so many years"* (1958: 506)

Even so, the fiscal policy of public spending through unemployment benefits, financed by taxation, used to be more easily accepted than government investments intended for the construction of new public works financed by borrowing at a lower cost than the current interest rate. Keynes stated:

> *It is curious how common sense, wriggling for an escape from absurd conclusions, has been apt to reach a preference for wholly "wasteful" forms of loan expenditure rather than for partly wasteful forms, which, because they are not wholly wasteful, tend to be judged on strict 'business' principles. For example, unemployment relief financed by loans is more readily accepted than the financing of improvements at a charge below the current rate of interest; whilst the form of digging holes in the ground known as gold-mining, which not only adds nothing whatever to the real wealth of the world but involves the disutility of labour, is the most acceptable of all solutions.* (2018: 114)

Among the factors that explain the difference in results between the two types of public spending is the method of financing. The maximum stimulus for expanding the levels of employment results when a program for constructing new public works, financed through loans, replaces a program of unemployment benefits financed through taxation. Less stimulus results when an unemployment relief program is financed by loans.

Kregel (1985) observed that, despite the explanations adopted by classical economists regarding the failure of public spending policies, this issue had never been the object of a deeper analysis. In fact, there has never been a discussion on the consequences that transfer payments to the unemployed may have on a very large proportion within the federal government's fiscal budget.

The discussion on the efficiency of government public spending – whether on paying transfers from the current account budget, or whether on investment in public works from the capital account budget – has to be addressed within the historical context of applying public policy on government spending: depression or economic stabilization. For example, when the economy is booming, an increase in public capital investment spending may be so efficient that an increase in the productive capacity is able to produce a tendency toward a chronic excess of productive capacity.

3 The monetary economy of production is Keynes' object of study, with due emphasis on the role of money and the inclusion of a decision theory in which economic time becomes important in an environment where the decisions of economic agents are subject to risks and uncertainties.

4 N. B. For direct citations, the English version was used of HARROD, Roy Forbes. **The Life of John Maynard Keynes**. London, Macmillan and Co. Ltd. (1963: 441).

In this case, perhaps, replacing increased capital account public spending with current account public spending could reduce the risk of excess productive capacity, and make the goal of full employment easier to achieve. There are, therefore, a series of logical arguments that, in special circumstances, may also legitimize transfer payments.

Initially, transfer payments, such as unemployment benefits and other forms of social security, are seen by many economists as automatic stabilizers to aid a countercyclical fiscal policy, as advocated by Hansen (1945), who, following the teachings of Keynes, agreed that government investments in the construction of public works (roads, ports, airports, hydropower plants, basic sanitation, schools and hospitals) would be more effective than benefits to aid the unemployed, as they would enable an increase in the level of employment and aggregate income when an economy is plunged into depression or recession.

Financing investments in public capital for economic stability and social recovery in times of crisis

From a historiographical viewpoint, an active fiscal policy, was one of the chief instruments in the arsenal of so-called "Keynesian" economic policies that a national government should use to encourage effective demand by "pushing" aggregate demand upwards – when an economy is in a cycle of depression or recession, with high levels of unemployment; and downwards when an economy is at risk of inflation overtaking the state of full employment.

The aim of Keynes' economic policy was to stabilize investments, which could be achieved in the following terms:

> *If two-thirds or three-quarters of total investment is carried out or can be influenced by public or semi-public bodies, a long-term programme of a stable character should be capable of reducing the potential range of fluctuation to much narrower limits than formerly, when a smaller volume of investment was under public control and when even this part tended to follow, rather than correct, fluctuations of investment in the strictly private sector of the economy. This policy has nothing whatever to do with deficit spending which would be a last resort only to be contemplated if the volume of planned investment fails to produce equilibrium.* (1980: 352)

To put a fiscal policy into action to stabilize long-term investment, which at the time, Keynes estimated as ranging from 7.5% to 20.0% of the net national income, such an intention could be expressed through capital budgeting, which could be balanced in the long-term, and budgeting the current control account in the short-term. Keynes (1980) went on to state that the capital budget of public capital investments was conceived as being financed by long-term borrowing, but without prejudice to the stability of employment and income levels, i.e., capital budgeting, therefore, would be an (outstanding) instrument of economic policy designed to try to "cure" the imbalances in the form of depression or deep recession.

In a monetary economy of production, however, the main variable responsible for fluctuating movements of income and employment is productive investment. The instability of the investment, which manifests itself through major fluctuations in the level of national income, requires state intervention. Regarding this, Garlipp wrote that:

> *State action, a justifiable means for society to exercise conscious control over the economy, is Keynes' response to the incapacity of the capitalist economy for self-regulation, given that operating the "invisible hand" does not produce the proclaimed harmony between private enrichment and the creation of new wealth for society. On the contrary.* (2001: 90)

However, it is important to emphasize that it is not part of the proposals of the public treasury techno-bureaucrats, or even of the norms of the public capital account budget, to facilitate financing the public deficit of the capital account through taxation. Quite the contrary, the purpose of fiscal policy, which aims at economic stabilization, is to present a clear distinction between the government's policy on running costs, on expenditure with personnel and personal transfers from the current budget, financed through progressive taxes, to stimulate spending on private consumption; and the public capital investment spending policy on infrastructure, which will be financed by long-term borrowing, as a tool to stimulate private investment spending.

It is evident, therefore, that there both is a right time and an appropriate occasion for each of these policies. Furthermore, they are essentially different and each policy, to the extent that it is applied, operates as an alternative to the other. Keynes (1980), therefore, suggested that every government should prepare two fiscal budgets: one to meet the ordinary functions of public administration; and the other to meet the government's discretionary spending, mainly investments in public works.

For Keynes (1978), the ordinary budget for current spending should always at least be balanced; while the discretionary, or capital, spending budget would be the instrument of active fiscal policy that the government should use to push the economy either toward full employment or to maintain it somewhere close.

The government's public budget, in times of high levels of employment, should generate surpluses over current expenditures, which could be transferred to finance expenditures on investments in public works from the capital budget.

In Chick's conception (1993), budget deficits of running costs, which automatically arise in periods of high unemployment, could even be useful, although they should not be deliberately generated. In an environment of deep depression, with a high level of unemployment, if there is any need to generate budget deficits, Kregel (1983) argues that these should be in the capital account.

The discretionary budget of the capital account may be in deficit in the short term, although what really matters is not the capital account deficit, but rather the capital investments in public works. Indeed, the capital account deficit itself is not an instrument of active fiscal policy, but rather a result that depends on the behavior (increase or reduction) of tax revenues, which depend on the reaction of entrepreneurs (private investments) and families (private consumption) to the stimulus provided by government spending.

Keynes considered that preserving full employment in the long term requires the socialization of government spending directed towards investments in basic social capital – economic and social infrastructure – through semiautonomous public corporations. Certainly, Keynes had in mind the importance of Bentham's theory of agenda regarding the forms of government that might be required to support actions of economic policy.

In the pursuit of economic stability, the capital budget may only be balanced in the long term, if investments in public capital, through the multiplier effect, promote growth in the gross domestic product and with it tax revenue to the point of covering the short-term capital account deficit with the balance. In this situation, there would be no apparent reason not to use a capital account budget deficit to offset large exogenous fluctuations; even because the current account budget may show both a surplus and a deficit to compensate for certain deficiencies in the capital budget, although it may, in the boom phase, be balanced in the long term.

In Kregel's view:

> *The budget should be divided into a "capital" and current budget: The "capital budget" should be balanced in the long-term but may be adjusted to offset exogenous cyclical changes, the current budget may as a last resort show surpluses or deficits to offset short-term failure of the capital budget but also be balanced over the long-term.* (1983: 38)

A successful active fiscal policy is one that manages to convince private agents that increased investments in public works, with the intention of increasing the aggregate income level of the economy, will be sustained in such a way as to reduce uncertainties and recover State confidence and the optimism of entrepreneurs in order to induce them to carry out their productive investment projects that were shelved.

While it is evident that the government's expectation that a plan (or public investment program) will succeed remains uncertain, however, decision-making by public agents is autonomous, i.e., it does not depend on income or expected future income. The term deficit financing undeniably signifies that the government is spending more than it is receiving through tax collection, leaving the budget unbalanced. Under these conditions, this government budget deficit should only be covered by one or more of the following ways: 1) through discretionary taxes; 2) through loans in the banking system; 3) through loans on the open market; and 4) by issuing currency.

From a historical viewpoint, however, the governments of the main world nations have combined more than one form of public financing of spending policies on public works, when they wish to promote the reversal of their economies from economic states of depression or deep recession or even economic stabilization.

Keynes, however, was not enthusiastic about the deliberate preference for budget deficits outside the economic situations of depression or deep recession. As Kregel cautioned:

> *Keynes viewed budget deficits as the direct result of failure to achieve stable full employment national income growth rather than as an efficient remedy for unemployment. This, of course, only implied that budget balancing measures in a slump could not make either employment conditions or the deficit improve.* (1985: 32)

Thus, in the reversal phase of a boom cycle, followed by an abrupt recession, governments have reacted with balanced budget policies that have even failed to improve employment conditions, or to reduce the public deficit created during the previous period. The question that became of concern, therefore, was just one: under these conditions, how to finance public deficits?

In answer to this question, in the following subsections, three types of financing public expenditures for economic and social purposes will be discussed: financing public spending through taxation; financing public capital spending through loans; and financing public capital through monetary issuance.

Financing public spending through taxation

An active fiscal policy intended to expand the employment rate and aggregate income, when there is a deficiency in regular effective demand, may be achieved by increasing government public capital spending financed entirely through taxation. While it is true to say that all forms of taxation are deflationary, as they limit the potential for private consumption, the money collected in the form of taxes and applied in the form of spending on public works by the government is, in itself, a factor for economic expansion. In agreement with Carvalho:

> *Taxation should be the most appropriate means of financing current spending and thus prevent public deficits in the current account of the regular budget during boom cycles, with high levels of employment, in order not to create inflationary pressure in the economy*. (1999: 273)

It is important to emphasize that a government's fiscal policy may have an affect on effective demand either by changing public spending or by changing taxes. In the latter case, as the entrepreneurial incentive to invest depends on expected future income, it will evidently depend not only on the interest rate but also on the government's tax policy.

The main objection to financing a fiscal policy of public spending with taxes is that, for it to be an effective weapon against unemployment, public spending must be greater than the money received from taxation, giving rise to a budget deficit. If the tax policy for financing public spending is successful, i.e., if economic growth resumes and the level of employment increases and with it aggregate income, it is possible that tax collections may cover the budget deficit.

In three articles in *The Times*, published in October 1939 and reproduced in a booklet entitled: *How to Pay for the War*, Keynes (1972, 1978) presented a compulsory savings plan with deferred payment in which the excess purchasing power of the taxpayer would be withdrawn by a progressive tax on all incomes – with compensation for the poor in the form of family allowances – part of which would be returned in instalments after World War II, in order to counteract the drop in effective demand expected for the postwar period.

Although this plan was only partially adopted, as Skidelsky (1999) and Moggridge (1977) highlighted, in Great Britain, this public finance approach to spending was successful during and after World War II. In practice, Moggridge (1977) sought to highlight that Keynes' suggestions regarding the problem of public finances probably represented his most lasting contribution with regard to the conduct of government macroeconomic policies.

A policy of progressive taxation, for financing certain public spending, also reduces income inequalities in a community because, in the form of cash taxes, it absorbs a proportionately larger share of incomes from the wealthy rather than from the poor. However, a progressive tax policy aimed at distributing income only produces positive effects, in a market economy, if the revenue that the government collects in cash from the rich is spent on benefiting the poor, e.g. pensions, allowances and unemployment benefits, and/or in public works.

There are obvious limitations to the extent in which progressive taxes may be used to promote high levels of economic activity. Furthermore, in order to obtain positive results, the entire tax system must be progressive, which is difficult in modern economies with a variety of taxes on income, wealth and consumption.

One additional limitation concerns the fact that any government that collects money from progressive taxes, for income redistribution, has to expand its public activities in order to provide certain social services – e.g., education, medical care, sport and leisure – to needy low-income social groups; as well as outsourcing the provision of these social services by paying subsidies to private citizens. This, of course, will subtract part of the money collected that should be intended for the poor.

Although these social services are of great importance, and work as a kind of indirect social salary, they do not enable the poor to increase their income in cash to spend on buying their basic needs, such as food, clothing and housing. It is possible that the government would like to provide subsidies for low-cost housing to a section of the poor, but this could be met with strong opposition from certain interest groups.

In any case, within the set of government taxes, progressive taxes have a tendency to restrict consumption spending less than regressive taxes. Likewise, strongly progressive taxes on profits tend to inhibit private investment. Indeed, as business investment decisions ultimately depend on the confidence and optimism regarding the expected future returns, then a high progressive tax may depress business confidence and inhibit optimism for investment purposes.

Taxes generally tend to be deflationary in that the money that reverts from taxpayers to the government, in the form of tax revenue, could be used for spending on consumer goods – if not all, then at least part – if it had remained in the power of the taxpayer. Thus, financing the spending of the unemployed, through unemployment benefits, a type of automatic stabilizer, consists of a cash transfer through the government from a taxpayer to a non-taxpayer, the unemployed.

On the other hand, if government spending on public works can be financed through public funds, through the collection of progressive taxes on income or inheritance, whereby the wealthiest are taxed more heavily, there will not be a great reduction in the total private consumption spending with this form of financing public investment because the consumption spending of the wealthy tends to be more or less stable irrespective of the tax they pay.

Keynes also sought to highlight the influence of public funds on effective demand. For him, the constitution of government public funds to finance certain public spending or to serve as a financial reserve to cover public debts, influences effective demand through the aggregate propensity to consume. Keynes (2018: 84) states: "We must also take account of the effect on the aggregate propensity to consume of Government sinking funds for the discharge of debt paid for out of ordinary taxation".

These public funds, thus constituted, represent a kind of public savings, so that a government policy tending to create large public funds for the amortization of public debts must, under certain circumstances, be considered as a way of reducing the propensity to consume. Keynes (2018: 84) continued "It is for this reason that a change-over from a policy of Government borrowing to the opposite policy of providing sinking funds (or vice versa) is capable of causing a severe contraction (or marked expansion) of effective demand".

It is clear that the worst method of financing public expenditures, during a deep depression or recession, is one in which taxes fall largely onto household cash funds, and which would be spent immediately if left in the taxpayers' own hands. Indirect taxes on consumer spending on goods and services serve to illustrate this less desirable way of raising funds (money) to finance public investment in periods of depression.

Indirect taxes on consumption reduce consumption spending by an amount almost equal to the tax levied. Similarly, an increase in indirect taxes on consumer goods ultimately makes goods more expensive for families. This is why financing public spending through regressive taxes is less effective in reducing high levels of unemployment than public spending financed through progressive taxes, which, in turn, in certain circumstances are less effective than government spending financed through loans.

Financing public capital spending through loans

Broadly speaking, any government that spends more than it collects from its taxes produces an unbalanced budget, i.e., a budget deficit, which may be financed by more taxation and/or by borrowing. Thus, an increase in taxes in an economy with high levels of unemployment is unadvisable since it reduces disposable income and, thus, further reduces private consumption spending, which, in turn, ultimately affects the interest of investors.

Public spending financed by funds raised through taxes mainly represents an imposed substitution of private spending for public spending, i.e., in this type of public financing, new money is not injected into the economy. Government public spending financed through loans basically represents government public spending financed with new money and, as a result, a new increase in effective demand.

That said, for an investment program in the construction of new public works to have expansionary effects on income and employment levels, it must be financed through loans and not through taxation. The excess of public spending over tax revenue covered by loans is known as public deficit financing.

Nonetheless, public deficits are only functional, in special circumstances of high unemployment, to the extent that public spending injects purchasing power into an economy in deep recession or on the brink of depression. Indeed, if the government pays or spends more than it collects in taxes, there will be a net increase in cash income available for society to spend, and this represents a net increase in effective demand.

Financing public deficits is just one way to finance public spending capable of generating more jobs and income. What really matters is that public spending must be financed with new money. Thus, new public spending will increase aggregate income which, in turn, will increase consumption and investment spending.

When the government finances its public deficit through loans, it creates a public debt that implies interest payments and amortization. However, there are important differences between the types of loans taken out by the government to finance its public capital deficit. According to Keynes:

> *It is often convenient to use the term "loan expenditure" to include both public investment financed by borrowing from individuals and also any other current public expenditure which is so financed. Strictly speaking, the latter should be*

> *reckoned as negative saving, but official action of this kind is not influenced by the same sort of psychological motives as those which govern private saying. Thus "loan expenditure" is a convenient expression for the net borrowings of public authorities on all accounts, whether on capital account or to meet a budgetary deficit. The one form of loan expenditure operates by increasing investment and the other by increasing the propensity to consume. (2018: 114)*

In another line of reasoning, public deficits financed by bank loans are more expansive in nature than loans taken out by the government from the public. Government loans from banks result in the creation of new money in the form of demand deposits, whereas government loans made from the public merely transfer a portion of the existing cash flow from the public to the government.

In the case of financing the public deficit of the capital account through government loans from banks, no family needs to restrict its consumption spending and no company its investment spending. The bond is purchased with new money created in the banking system in the form of new checkbook money. The money supply increases with the lending activities of the banking system.

For governments, in this situation, selling public debt bonds to banks or other financial institutions is not difficult, because, in times of deep recession or depression, banks have excess idle monetary reserves that are ready to be used for purchasing public debt bonds, even when the promised interest rate of these public securities is low, as indicated by Hansen (1945) and Dillard (1993).

Government debt financed by borrowing from the public in exchange for the sale of government bonds is stimulating but to a lesser extent than government spending financed by selling government bonds to banks. Effectively, when an individual buys a public debt bond from the government, there is first and foremost a transfer of purchasing power from the individual to the government.

In fact, no new money is created with this method of financing the public deficit. However, this form of borrowing to finance public capital deficits, resulting from financing investments in public works, stimulates the expansion of economic activity, since this money, which was in the form of idle savings in the hands of individuals, will undoubtedly be spent by the government on the construction of new public works that create effective demand.

Nevertheless, government borrowing from the public through the sale of government bond, particularly on a large scale, is likely to undermine private consumption or investment spending. Indeed, in a situation of deep depression, it is preferable for the government to borrow from the banks, but when the pace of activity expands, in a trajectory of a clear phase of economic recovery, and the flow of savings increases, then it is more advisable that the government borrows money from the public rather than from banks. Thus, Hansen (1945) argued that if the expansion trajectory of the level of economic activity reaches full employment, then it is possible to avoid demand-pull inflation by borrowing money from the public, or increasing taxation, instead of taking out new loans from banks.

Financing public capital through monetary issuance

When Keynes began writing the GT, as of 1932, Great Britain had experienced a high level of unemployment for ten years – between the years 1922 to 1927 the unemployment rate was practically 10%. The theory of employment, contained in the GT, postulated that the unemployment rate would fall if private investment spending was increased. However, it was almost impossible to encourage entrepreneurs to carry out new productive investments in a context of deep depression and with gloomy expectations for the future. Indeed, how to sensitize entrepreneurs to invest in an economy with a high productive capacity?

The scenario of the great depression of the 1930s was so alarming that it was worthwhile for the government to believe in any investment projects, even those doomed to default, so that the employees of these projects could spend part of their earned income buying consumer goods. Induced consumption would promote more employment, at least in some non-durable consumer goods industries. The same effect could occur with an increase in public spending in the form of assistance to the unemployed.

However, Keynes was very clear on the high cost of borrowing to maintain government spending for unemployment. Consumer spending by the unemployed, financed through government borrowing in the financial market, would also have a localized effect in terms of employment, as a consequence of induced consumption, only in some segments of the wage-earning consumer goods industry.

This public policy of unemployment benefit, financed by loans, was limited when compared with a public policy for the construction of new public works financed by loans. A famous quote from Keynes serves to illustrate this point and the desperate state of an economy in deep depression:

> *If the Treasury were to fill old bottles with banknotes, bury them at suitable depths in disused coalmines which are then filled up to the surface with town rubbish, and leave it to private enterprise on well-tried principles of laissez-faire to dig the notes up again (the right to do so being obtained, of course, by tendering for leases of the note-bearing territory), there need be no more unemployment and, with the help of the repercussions, the real income of the community, and its capital wealth also, would probably become a good deal greater than it actually is. It would, indeed, be more sensible to build houses and the like; but if there are political and practical difficulties in the way of this, the above would be better than nothing*. (2018: 115)

Public spending financed by loans involves an increase in the public debt and, therefore, annual interest payments on the contracted debt plus the amortization of the principal. However, if the increase in the principal and in the public debt service rate is an important obstacle that prevents the government from financing its public spending with the aim of reducing the unemployment rate, or even stabilizing the economy, then the question arises as to why the government should insist on public debts being covered by loans – which society will have to pay with heavy interest to banks and other creditors – to obtain the necessary money to mobilize productive resources that are idle.

In the quotation above, Keynes suggests the possibility of public financing through the issuance of paper money even for pointless spending, as long as it reduces unemployment, instead of the government doing nothing. In addition, in the presence of excess liquidity, the government may resort to idle money deposited by commercial banks at the Central Bank to finance its investment spending on public works. It is clear that a theoretical increase in the money supply, to be introduced into a monetary economy of production, cannot be achieved by helicopter, as well remembered by Chick (1993).

For Keynes ([1936], 1973), the private initiative to unearth the banknotes would need to obtain the right to do so through concessions on the land where the banknotes would be buried. In this case, interest-free public financing, through monetary issuance, is possible as long as there is a public works construction plan that involves certain concessions for entrepreneurs when the economy is experiencing a high level of unemployment.

In this situation, would it not be opportune for the government to issue National Treasury bonds in exchange for the issuance of currency by the Central Bank, instead of paying public debt bonds to the banks? In a situation of depression or deep recession, a fiscal policy for spending on public works, aimed at a pro-growth recovery of the economy, may be financed with an increase in the money supply without resorting to the issuance of public debt bonds that imply the payment of interest to banks.

The income of the banks, obtained from the interest on the service of the public debt, is a monopoly payment of money that does not compensate for any sacrifice. For commercial banks and other financial institutions, however, the risks resulting from holding government bonds are negligible, as such bonds are seen as a virtually risk-free financial investment for banks due to the government's guarantee of payment through more taxes or compromising its assets.

As a result, there seems to be no economic reason for the government not to waive bank loans. Keynes' GT suggests that, as long as there are productive resources without employment, the increase in cash spending on public works investments will increase the level of employment rather than prices. The technique used to increase the money supply by the Central Bank consisted of issuing interest-free treasury bonds to the monetary authority with instructions to increase government deposits up to the amount of the value of the bonds that it issued. In an environment of depression (deep recession), the government could thus finance its investments in public works and other expenses with this source of funds without paying interest.

Despite this, there are objections to this interest-free public financing policy because it is supposed to be inflationary. Indeed, only beyond full employment could there be such a possibility. Even so, beyond full employment, there is no need for increases in public spending financed through monetary issuance.

Indeed, demand-pull inflation originates only if monetary expansion continues to increase, after reaching full employment. However, this demand-pull inflation is more a consequence of this unnecessary monetary expansion, and not of the way in which the interest-free financing of investment expenses in public works is carried out. Essentially, any mismanagement of the money supply could cause inflation or depression.

However, the objections of the neoclassicals to the policy of financing investments in public works by issuing currency are not due to this form of financing, but to any monetary system. Indeed, such objections denote yet another lack of confidence in the Central Bank's monetary authorities to manage, with competence and prudence, monetary policy. Or, as Chick (1993) pointed out, in the face of uncertainty regarding the behavior of interest rates in the future, sometimes, excessive prudence can delay or decelerate economic growth even when the productive capacity is idle.

Final considerations

The article aimed to highlight the importance of financing public investments during times of crisis in a capitalist economy and to discuss its economic and social effects, drawing on the economic theory of John Maynard Keynes. The methodological core of the research was exploratory, bibliographic, and qualitative.

The article sought to demonstrate that the high unemployment during the Great Depression was caused by a lack of effective demand, which was addressed by increasing consumption spending and, more importantly, productive investments. These investments generate primary jobs and stimulate the demand for consumer goods, in turn, encouraging the consumer goods industry's growth.

Moreover, the article provided an empirical analysis of the role of the state and the financing of public investments in the economic recovery "post-1929 crisis", specifically focusing on the cases of the USA, Sweden, and Germany. Additionally, national governments can affect the levels of output and employment through their fiscal policies, i.e., through autonomous decisions regarding the collection of tax revenues and government spending. Fiscal policy that is only interested in the effects of public spending and government taxation on current employment levels in an economy was termed functional finance.

In reality, Keynes never recommended an economic policy of deliberately creating government deficits as an instrument of economic stabilization – this suggestion came more from Aba Lerner's concept of functional finance – and when he considered such a possibility it was only as an extreme temporary measure. Keynes's preference was always more for investments in public works than for paying out transfers to finance consumer spending through loans.

Those economists in favor of functional finance expect that it is the government that decides on the levels of spending and taxation, which will generate budget deficits or surpluses, sufficient to keep the rate of spending on goods and services in the economy not so high and not so much lower than the rate of effective demand that could buy all the goods and services that it is possible to produce in an economy. Fiscal policy, used for economic stabilization, acts exogenously promoting effective demand to raise aggregate demand when it falls below the level of full employment; or even discouraging effective demand when aggregate demand exceeds the level of full employment, as confirmed by Davidson (1994).

In addition, it was seen that the government has financing alternatives when public spending exceeds its tax revenue. In the economic environment of a deep depression, the government's decision to undertake investments in public works, even though correct, is also subject to uncertainty regarding the expectation of the multiplier effect in the future capable of promoting a recovery of the economy, so that the future tax revenue will grow sufficiently in order to cover initial public expenditures.

However, if this expected increase in tax revenue above public spending is frustrated, then the government has to face the problem of how to finance the public deficit: whether through loans or newly created monetary issuance. With the passage of time and the contradictory position of the mainstream itself, the traditional "Keynesian" policy was discredited with the emergence of the coexistence of inflation with unemployment, which became known as stagflation. Even those considered "old Keynesians" who defended the policy of functional finance recognized the inadequacy of dealing with large fiscal deficits.

This demonstrates that a policy for financing the public deficit must operate with a mix of possibilities defined by the government budget and the income statement. For the "Keynesians", variations in government spending (G) or tax revenues (T) generating deficits, surpluses or balanced budgets characterize fiscal policies; and monetary policies are those that resort to issuing currency, bank loans and/or buying or selling treasury bonds.

Therefore, when the deficit is less than zero, i.e., when there is a surplus, it may be said that the government is practicing a contractionary fiscal policy. In other words, it is restricting demand. When the deficit is greater than zero, then the government is said to be practicing an expansionary fiscal policy. If there is a public deficit, this implies that it must be financed in some way, hence, will be up to the State to intervene in this regard.

Keynes (1996) also suggested that, in addition to measures to support consumption through social programs for the unemployed, the only solution for stimulating private investment was government investment. This is because government investments are autonomous investments, i.e., they do not depend on interest, nor on income. Moreover, autonomous investment decisions, especially in public works of great economic (roads, hydropower, ports, railroads) and social (schools, hospitals and housing) reach, tend to break the barrier of distrust in relation to the future and promote a positive dynamic effect on the economy and society as a whole.

Keynes, therefore, emphasizes the importance of governmental intervention to stabilize the economy and promote full employment. According to him, the government should appropriately combine fiscal and monetary policies to stimulate aggregate demand during periods of recession or depression. These policies include increasing public spending, reducing taxes, and manipulating interest rates.

Finally, the importance of Keynes's economic theory lies in the fact that his ideas brought a new perspective to economic theory and helped shape the economic policies implemented in many countries to this day. His contributions paved the way for a better understanding of economic dynamics, whether in the public or private sector, in stabilizing the economy and, primarily, in promoting social welfare.

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