International analysis of the dynamics of public expenditure in modern society

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Abstract

In this article is a brief analysis of the evolution of public expenditure. Data available for analysis starting from eighteenth century to 1980. The main objective of this article is to highlight the quality of determinant but also factor determined of public spending in history.

Keywords: public spending, nominal growth rate

JEL: H50 - General H53 - Government Expenditures and Welfare Programs

1. Introduction

At the end of the fifteenth century and the beginning of the Western European countries are beginning to make its presence felt symptoms of the disintegration process feudal mode of production and the emergence of capitalism. General developments, political, economic and social, which found expression in the increasing complexity of public sector activity, and has directly influenced the dynamics and structure of public spending, which is a general trend of diversification and growth. In particular, concerns the state to increase the degree of civilization, education or culture of citizens increasingly costistitoare wars and the Great Depression generation will have a significant impact in the field of public expenditure budget. According to some views expressed in earlier literature specialist, early capitalism coincide with more direct approach to the problem of global dimensions of public expenditure in relation to resources covering, claiming that state revenues are targeted spending to create a balance. More specifically, "the state needs if they are poorly understood by those entrusted with public household will go too far, or over payment whenever possible".

Rational sizing aspect buegtare expenditure was, however, not a matter of a particular historical moment, this concern today is one of great importance given that it is generally recognized that the size and composition of public expenditure budget is closely correlated with economic and social developments of various communities.

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2. Brief analysis of the dynamics of public expenditure and impact factors

To start the analysis, we decided to take the issue of public spending growth in the French State, the economic liberalism was established relatively early, the bourgeois revolution of 1789. In England, the evolution of the old conceptions of liberalism permanently defeated only at mid-century nineteenth century and in some countries in Eastern Europe, the first signs of economic liberalism emerged in the late nineteenth century and beginning of the next.

Although classical economic liberalism associated with the state's role intangible activities and strives to maintain its minimum limit functions, considering public expenditure budget definitive resource consumption, equivalent to a loss which would determine their size need to maintain strictly necessary to the proper functioning of state institutions from the data summarized in table 1, following public spending for the French state from 1798 until 1914, there is a strong trend growth. Viewed from the perspective of their relative nominal growth, the government expenditure recorded an increase of almost 600% over 100 years, which is explained in the context of demographic and political-military time. Analyzing the data in the table, we find that we can extract a few times when there were more substantial increase, in the period 1798-1810, as the first wave of growth (with 34.26%) during 1850-1860, over which is an increase of 41.74% and the last decade of remarkable growth in public spending, nearly 46.06%, is between 1901-1914, a period which precedes the First World War.

Table 1 Nominal relative growth rate of spending in French state during 1798 - 1914

Reference			
year	Public spending	Nominal relative growth	Nominal relative
	(milion francs)	rate	growth rate (%)
		(%)	Cp₀ – year t-1
		Cp ₀ – year 1798	
1798	750	-	-
1810	1.007	34,26	34,26
1830	1.095	46,00	8,73
1850	1.473	96,40	34,52
1860	2.084	177,86	41,47
1880	2.760	268,00	32,43
1892	3.343	345,73	21,11

1901	3.554	373,86	6,31
1914	5.191	592,13	46,06

Source: own calculations - Leon George - *Elemente de ştiinţa financiară* - Institutul de arte grafice Publishing, "Cartea Românească" SA, volum I, Cluj, 1925, p.127

We can say without reservation that a first important generator of these increases of public expenditure budget recorded by French State was represented by population growth, which, since the mid nineteenth century saw an explosion. Increase their population size has a direct impact on public expenditure, provided that individuals should be protected from the perspective of individual safety should be educated (being introduced free primary schooling), ensure that individual and public health, etc. army modernized. More so, proclaiming the idea of fraternity as a fundamental value to be pursued legally consecrated by the French Revolution, foreshadows basis state involvement in social activities with direct effects in terms of growth of public spending budget. It should be noted, however, in this context, in addition to importance (influence) or social factors increased the military presence and particularly the impact of political factors (by resizing the administrative, but also that the design and sizing options for public spending are filtered the ideology of the government, who decide to take more consistent public tasks), as well as the economic factor, the need for infrastructure is increasingly making itself felt with the development of production, trade, transport etc later, and the general need urbanization, modernization of living space.

This strong increase in public spending is found in almost all developed countries in the nineteenth century. Two other examples that can be considered representative (UK and Belgium), shown in Table 2, supporting the identification of trends almost explosive growth in public spending budget states many European countries during the end of the nineteenth century and early twentieth century. This increase in public spending was caused largely by quantitative increase of the state, which now involves increasingly more in areas such as health, education, social protection, etc.. However, it is noted that the municipalities have made great progress in the field of public lighting, construction and street cleaning and so on, which indicates the important influence of the economic factor. It is undeniable, however, that increasing the quality of public interventions and had a substantial impact of changes in public spending budget, something confirmed by the views expressed in earlier literature, claiming that "it is not enough to recognize that has increased the number of schools because education has improved and that is directly related to increased costs." An expression of increasing complexity and quality impact on the level of public spending state budget can be considered and equipping the army with war machines and equipment, which are now becoming more sophisticated, requiring thus, the allocation of resources for this purpose Financial bulkier.

Table 2 Nominal Relative growth rate of government expenditure in England and Belgium in the period 1832-1904

Year	England			Belgium		
	Cp (lei)	Nominal realtive growth rate (%) Cp ₀ - year 1832	Nominal realtive growth rate (%) Cp ₀ – year t-1	Cp (lei)	Nominal realative growth rate (%) Cp ₀ – year 1832	Nominal realtive growth rate (%) Cp ₀ – year t-1
1832	1.229.000.000	-	-	87.104.005	-	-
1859	1.633.000.000	32,87	32,87	146.926.212	68,67	68,67
1874	1.858.211.000	51,19	13,79	256.000.000	193,90	74,23
1904	4.612.092.600	275,27	148,20	529.372.871	507,74	106,78

Source: own calculations - Aslan Th. - Finanțele României de la Regulamentul Organic până astăzi 1831-1905, Institutul de Arte grafice "Carol Gobl" Publishing, București, 1905, p.250

Data analysis summarized in the table in terms of nominal relative growth index of public expenditure shows that in both countries discussed, over a period of about 70 years, public expenditure have multiplied about five times in Belgium and three times in England. Although these developments are largely explained by the same set of generators and stimulating factors identified in France, we must acknowledge that the timing was different.

It is necessary to note, beyond the already identified causative factors for these developments, that the spectacular growth of public expenditure budget in developed countries of the world, from the late nineteenth and early twentieth century, were determined and the manifestation of techno-scientific revolution, after which the economy and society have evolved tremendously. Late nineteenth century and early twentieth century were characterized by cardinal changes in the economic. Industrial production concentrated in Western European countries and the U.S. increased three times. Towards the end of this period the world has created a unique economic system emerged global market. During the rapid development of industry, transport and trade ended the industrial revolution: in Germany - in the 1870s, Russia and Austria-Hungary - in the 1890s (in England, France and the U.S.

- before). All these things have created favorable conditions for countries to increase their budgets and to assume new tasks under further development.

In another plan during this period, in developed countries have strengthened political and constitutional arrangements, which contributed to the expansion of citizens electoral rights, strengthening the socio-political formations and parties, campaigning to ensure social rights and economic (but not only) ever wider those they represent a direct impact on the amount financed public spending budget.

During World War brought a significant increase in public spending due to costs (military) support its huge from each state involved, something which can be seen from the data in Table 3 analysis. Direct military spending accounted for \$ 331.6 billion belligerents, war damage estimated at \$ 36.9 billion and the debt war belligerents amounted to 225 billion dollars. However, the biggest expenses that followed were caused, in particular, the implications of social, in terms of human costs of the First World War. They were huge: 13 million dead or missing soldiers, civilians dead and over 20,000,000 14,000,000 wounded, for which the states involved were forced to take general assistance, mainly medical and social.

The negative consequences of World War were directly impacted and economic development of the countries involved, so that between 1919 and 1922 there was an ample economic recovery and rehabilitation of the economy to normal life. During this period, states were directly involved increased government spending for infrastructure reconstruction. From 1924 until 1929 there was an economic boom that was cut short by the outbreak in October 1929 economic crisis, the crisis that lasted until 1933 and affected all countries.

Table 3 The evolution of public expenditure in GDP during 1910-1930

Year	Canada	Switzerland	England
1910	11,4	-	12,7
1920	16,1	-	26,2
1930	18,9	15,9	26,1

Source: Rosen, H – *Public Finance*, seventh edition, McGraw Hill Publishing, 2005, p.133

After the great crisis of overproduction in the 30s, finances were marked by interventionist tenets of Keynes and, later, of the neokeynesiste. Since that time, the state was involved in more than economic sectors in the economy by investing directly and indirectly, involving increased public spending budget as investments, benefits, subsidies, grants etc.. By using financial categories as economic and

financial levers (including public expenditure budget plays an extremely important), the prosecution moved to a more equitable redistribution of income and wealth, the imposition of social security systems, the orientation of industries or to help certain social categories.

Unlike classical liberal optics in public expenditure were final consumption of resources, which should be limited to what is necessary and financed solely to income typically deployed on budget balance under budget, Keynesian interventionist theses gave a great impetus state involvement in the economy and society, rethinking public spending and highlighting their nature resource reallocation processes of economic and financial levers that have the ability to influence the course of the economy and society, positioning them as particularly important quantitative variable in the equation general equilibrium. In the context of financial policies aimed at offsetting cyclical economic, public spending should be increased during stagnation or economic decline may exceed the ordinary income (the solution is even recommended), a state budget deficit now being accepted.

Starting from the idea that aggregate demand is the fundamental economic mechanism, having the ability to rise to offer, and its influence is to reach the desired state through proper handling quantitative variable "government spending" Keynesian thesis that did not exclude fully the importance of taxation, especially structural employment occasioned by the states of increased government spending and deficits growing acceptance of large, financed by public funding extraordinary, who have a chronic in the contemporary period.

An overview of the impact of the adoption of Keynesian thesis and exploit them through financial policies of developed countries (but not only) in the last century, can be obtained from data in Table 4., which the public spending budget from the Great economic crisis of 1937, and by the year 1980.

Table 4 Evolution of public spending budget* of some states in the period 1937-1980 (percent of GDP)

Countries	Year		
	1937	1960	1980
Australia	14,8	21,2	34,1
Austria	20,6	35,7	48,1
Canada	25,0	28,6	38,8
France	29,0	34,6	46,1
Germany	34,1	32,4	47,9
Italy	31,1	30,1	42,1
Ireland	25,5	28,0	48,9
Japan	25,4	17,5	32,0

New Zealand	25,3	26,9	38,1
Norway	11,8	29,9	54,9
Sweden	16,5	31,0	60,1
Switzerland	24,1	17,2	32,8
Great Britain	30,0	32,2	43,0
USA	19,7	27,0	31,4
Belgium	21,8	30,3	57,8
Holland	19,0	33,7	55,8
Spain	13,2	18,8	32,2
Average	22,8	27,9	43,1

Source: own calculations after IMF * values of consolidated budgets

Based on data processed and summarized in the table it can be seen that the share of public expenditure budget, considered as a percentage of gross domestic product in the period under review has seen a substantial increase for all countries considered. Among these, the highest growth was recorded in Sweden, where, from a rate of 16.5% as a percentage of GDP, it was more than triple the amount in 1980 speaking of a value of 60, 1%, over half of gross domestic product. Remarkable is the case of Norway, which also saw a huge increase in public spending during this period (approximately 3.7 times the amount taken as a basis, registered in 1937, 11.8%), reaching is that in 1980, their share is well over half of the product made (54.9%). Being in the same general upwards trend we identified it, but at rates less high, other countries (such as Australia, Austria, Spain, Belgium, Netherlands) were more than double the share of public expenditure budget domestic product gross, confirming the widening concerns states to meet various needs of society.

In the last category we fit group of countries that have experienced an upward trend slowed the share of public expenditure in twice the amount of the early period in which they find Great Britain, Germany, Italy, USA, France, Canada, Japan, Switzerland, Italy and New Zealand.

As already looming figure presented, based on the data presented in Table 4 can be found dividing groups of the analyzed countries, depending on the intensity increased public spending as a share of GDP. Considering that development spending is an expression of the willingness and ability of those states reform becomes possible integration into several categories of "reformers" as we have done in the table below.

Table 5 Classification of countries according to the size of the share of public spending in GDP growth for the period 1937-1980

Category	Country	Growth (+ x%) versus year
		1937
Less roformer countries	Japan	6.60
< 10%	Awitzerland	8.70
Moderate reformer countries	Italy	11.00
10% - 30%	USA	11.70
	New Zealand	12.80

	Average	+21.01
	Sweden	43.60
	Norway	43.10
>30%	Holland	36.80
Strong reformer countries	Belgiium	36.00
	Austria	27.50
	Ireland	23.40
	Australia	19.30
	Spain	19.00
	France	17.10
	Germany	13.80
	Canada	13.80
	Great Britain	13.00

Source: own calculations after IMF

According processed and summarized in Table 5, we find that most countries have increased significantly over the period under review the share of public expenditure in GDP budget (except Japan and Switzerland, but here it should be noted that in the year 1937 these countries already registered a share of public spending in GDP rather high), this trend signifying therefore a growing assumption of responsibility by the state in socio-economic development. Noteworthy is the case of Norway, but also that of Sweden, which increased by approximately 40% share of public expenditure in GDP, and today is among the countries with the highest human development index (HDI)³.

3. Conclusions

Analysis of the dynamics and structure of public expenditures in the development of modern society, start, in this paper, the situation in the French public spending, the economic liberalism was established relatively early, the bourgeois revolution of 1789. The research revealed that the first factor, generating the increase in public expenditure budget for the French state, population growth (within only 100 years, since 1800, the world population nearly doubled from 978 million to 1650

2. education level reflected a combined indicator report literacy and level of enrollment at all levels;

³ The new concept of sustainable human development presupposes, therefore, with economic conditions (considered until recently to be the only ones that had the primary role in ensuring the development of the individual) and social circumstances, cultural, political favor, all considered essential

The methodology for calculating the human development index (HDI) of UNDP established requires consideration of the following three elements:

^{1.} Life expectancy at birth - longevity;

^{3.} living standar (living standards) as measured by the GDP per capita expressed in U.S. dollars at purchasing power parity.

Are also established a set of rules and steps. For example, the above minimum and maximum values are specified as follows:

⁻ Life expectancy is between 25 and 85 years.

⁻ The literacy rate is between 0% and 100%;

⁻ The degree of inclusion in education is between 0% and 100%;

million). In this framework, broke away and finding that proclamation idea of fraternity as a fundamental value to be pursued legally consecrated by the French Revolution, foreshadows basis state involvement in social activities with direct effects in terms of growth of public spending budget.

A strong performance was highlighted public spending based on research conducted for almost all developed countries in the nineteenth century, when considering England and Belgium representative, confirming as causes of increased public spending quantitative increase of the state, which implies now becoming more in areas such as health, education, social protection, plus the fact that the municipalities have made great progress in the field of public lighting, construction and street cleaning and so on, which indicates the influence important economic factor. It was found that the early twentieth century, the nominal relative growth rate of public spending we showed an almost threefold increase (275.27%) compared to the values recorded at the beginning of the nineteenth century in England and almost five times (504.74 %) in Belgium.

Starting from the idea that aggregate demand is the fundamental economic mechanism, having the ability to rise to offer, and its influence is to reach the desired state through proper handling quantitative variable "government spending". In turn, supported employment Keynesian thesis by states of increased government spending and budget deficits acceptance financed from public funding extraordinary, who have a chronic in the contemporary period.

4. References

Leon G., Elemente de știința financiară, Institutul de arte grafice Publishing, "Cartea Românească" SA, volum I, Cluj, 1925

Lalumière, P., Les Finances Publiques, "Librairie Armand Colin" Publishing, Paris, 1989

Aslan Th., Finanțele României de la Regulamentul Organic până astăzi 1831-1905, Institutul de Arte grafice "Carol Gobl" Publishing, București, 1905

Rosen, H., Public Finance, seventh edition, McGraw Hill Publishing, 2005, *Richard Musgrave* si Peggy Musgrave, *Public Finance in the Theory and Practice*, Fourth Edition, Mc Grow-Hill Book Company New-York, 1984

Nuță, A.C., A theoretical approach of fiscal and budgetary policies, Acta Universitatis Danubius. Œconomica, Vol 7, No 6 (2011)

Richard J. A., Public Finance, Edit. "Mc. Graw-Hill, Book Company", New-York, St. Louis, San Francisco, 1985

William J. Shultz, Lowell C. Hariss, American Public Finance, 6-edition, New York, 1974

www. imf. org - FMI

http://www.economicswebinstitute.org/glossary/pubexp.htm#data