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The Wagner's Law as a mirror picture of market failures?

Prawo Wagnera jako odzwierciedlenie niedoskonałości rynku?

Abstract

The main aim of this paper is to present theoretical concept of Wagner's Law of Increasing State Activity (WL) in a broader context of his views on role of the state and subordinating economy to political and military goals of the state. In majority of research works published the area of his political views and influence on economic policy of the state is not presented. It is also important to notice that narrow analysis focused on comparison between economic growth and budgetary or governmental spending may not necessarily lead to concluding whether the WL is confirmed or not in particular countries. Some parts of public expenditure can be invisible and hard to count, like for instant tax exemptions and remissions. In order to demonstrate the complexity of the discussed issues and the ambiguity of conclusions drawn from the available data, this study uses descriptive statistics, which was accompanied by an analysis of less "conventional" literature describing the career and political views of Adolf Wagner, which so far has been largely omitted in studies focusing on attempts to verify actuality of these rather narrowly understood theses formulated over 140 years ago. Analysis of available statistical data and observations from the literature, presented in this paper, due to the increasing number and variety of publications falling within the discussed issue, is incomplete and requires further analysis.

Keywords

Wagner's Law, economic thought

Streszczenie

Celem artykułu jest przedstawienie teoretycznej koncepcji wagnerowskiego prawa wzrostu aktywności państwa w szerszym kontekście poglądów A. Wagnera na rolę państwa i podporządkowanie gospodarki i rynku celom politycznym i militarnym państwa. W większości opublikowanych prac badawczych nie przedstawiono obszaru jego poglądów politycznych i ich wpływu na politykę gospodarczą państwa. Należy zauważyć, że wąska analiza skupiona na porównaniu wzrostu gospodarczego z wydatkami budżetowymi lub rządowymi niekoniecznie musi prowadzić do stwierdzenia czy Prawo Wagnera jest nadal aktualne, potwierdzone w poszczególnych krajach. Niektóre z wydatków publicznych mogą być bowiem niewidoczne i trudne do policzenia, na przykład w przypadku natychmiastowych zwolnień podatkowych czy umorzeń. W celu wykazania złożoności omawianych zagadnień i niejednoznaczności wniosków wynikających z dostępnych danych w artykule wykorzystano statystykę opisową, której towarzyszyła analiza mniej „konwencjonalnej” literatury opisującej karierę i poglądy polityczne A. Wagnera, które dotychczas były w dużej mierze pomijane w badaniach skupiających się na próbach weryfikacji aktualności tych dość wąsko rozumianych tez sformułowanych ponad 140 lat temu. Ze względu na rosnącą liczbę i różnorodność publikacji z omawianego zakresu przedstawiona w artykule analiza dostępnych danych statystycznych i obserwacji z literatury jest niepełna i wymaga dalszych badań.

Słowa kluczowe

Prawo Wagnera, myśl ekonomiczna, historia myśli ekonomicznej

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Introduction. Wagner's views on political and economic role of state

The broadly known Wagner's law was formulated within the system of his views on political economy and political role of the state. He assumed that state control would continue to

increase, because this is a natural and necessary consequence of increasing national might, a sign of the growth of "*Kulturstaat*". In result of increased expenditures and taxation for a greater army, navy, diplomatic wars, permanent war staffs, munitions, factories, the State becomes a state of functionaries and as the military organ it exercises a dominant

control over national economy and finances. In his opinion the State is to control the whole organic structure of the political, economic, social and spiritual life of the nation and evolve a social or public law, a true Germanic law, instead of Roman law of Individual rights and private property (Clark, 1940). E.A. Clark summarized Wagner's political, social and Economic views as: fiscal, juridical, agrarian, Christian Socialistic, State Socialistic, anti-Semitic, and Pan-Germanic. He performed influential political roles as: economic adviser to Bismarck, deputy to the Prussian Landtag, leader of the Christian Social Party and of the Evangelical Social Congress, Member of the Prussian House of Lords) (https://en.wikipedia.org/wiki/Adolph_Wagner). He worked also for the development of the monetary and credit systems in Germany and substantially influenced the central bank policy and financial practice before World War I. Owing to Evalyn A. Clark opinion, Adolf Wagner can be treated as one of political fathers of Adolf Hitler's political views, including antisemitism.¹ Wagner believed that the state has its purpose national power, which includes national political and economic unity, wealth, welfare and culture, and the maintenance of the nation against other nations. The state must be equipped with instruments of power and compulsion necessary to control the evolution of the nation and development of its national economy. In his opinion the army is itself productive, and since it guarantees the independence of the nation, it is the basis of the national economy. He thought that the state must take preventive measures to weaken its internal enemies, political and economic liberalism and democratic socialism, and to strengthen its internal unity and national economy (Clark, 1940).

The Wagner's Law popularity throughout the world

Amid its long history, it still attracts interest of numerous researchers and there is steadily increasing long list of countries covered by such analyses. For instance, during last 20 years Wagner's law in China was analyzed at least 14 times in published analyses, and 3 times for Iran. Majority of research analyses formulate its purpose as a test of Wagner's Law validity for a given country or group of countries in selected intervals. The increasing popularity of this research area comes also from the intellectual temptation to test correctness of observations made at the end of 19th century. In this paper I present my understanding of Wagner's law, but it should be rather treated as introduction to further discussion based on more comprehensive statistical data. I am not going to

reject or confirm discussed Wagner's hypothesis, but to indicate that analysis of statistical data of public expenditure and rate of economic growth in selected countries is not sufficient to reject or confirm regularity formulated by Wagner 140 years ago in quite different circumstances of Bismarck's progressive policy to establish leading European superpower by instruments of power and compulsion necessary to control the evolution of the nation and its national economy. Nevertheless, the real and aggregated effects of public sector activities can be treated as a mirror picture of market failures can be still described thanks to the WL analytical approach.

Wagner's Law of Increasing State Activity (WL hereafter) was formulated thanks to the observation of processes taking place in the XIXth century Prussian/German vividly expanding economy. There was also significant expansion of government spending (GS from now on) devoted to establishing administrative and military infrastructure in order to put in motion the drift of capital sources — for example to Silesia and to regions gained by Prussia thanks to the partitioning of Poland and annexation of Alsace and Lorraine. A. Wagner was very satisfied with these territorial conquests of Germany saying that: "As morning gifts to the bride Germania in the new union, the Prussian State brings the redeemed provinces of East Prussia, Pomerania, Schleswig-Holstein and Alsace-Lorraine. Danzig and Strasburg are the jewels which deck the imperial crown of the Hohenzollerns."²

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Despite its long history, still attracts interest of numerous researchers. It is difficult to describe the real role of public sector in modern economy when making use of conventional approach based on the narrow input-output accounting. Although quite interesting analysis of generalized theory approach was done for instance by West (1991), Peacock and Forte (1985), Gemmel et al. (1993).

But there are difficulties in developing comprehensive analyses within the WL frameworks stem from statistical data noise, especially pointed out by Atkinson and Stiglitz (1980). The statistical data noise appears because usually GDP is measured at market prices and it is difficult to reverse calculation of this aggregate into factor cost values. On the contrary — data on Government Spending is usually aggregated at factor cost base and it is also difficult to be transposed into at market price one. Nevertheless, the real and aggregated effects of public sector activities treated

as a mirror picture of market failures can be still described thanks to the WL analytical approach. This almost 140 years long tradition of approach is a very good starting point for describing aggregated role of the public sector in the economy.

Following the tradition of WL, let us focus our interest on the role of GS in the performance of the economy. GS have not to be allocated directly in the public sector but they should be used in a way supporting economic activity of the country; for example when GS are used to develop railway roads network, it allows to shift necessary economic resources into new regions and then to reach more effective "mixture" of capital, manpower and raw materials supplies, what could be described as a "better" production function.

Starting from this point of views, it is possible to avoid rather embarrassing procedure coming from the comparison of statistical data partially aggregated at market prices — showing the aggregate production and partially aggregated at factor cost — in accordance to the GS level. But there are also other factors causing statistical noise in comparisons of GS share throughout countries. Usually statistical data concerning so called tax subsidies and availability of credit sources at diminished cost (reduced bank rate) is hardly available.

This embarrassing procedure of statistical data collecting causes some misinterpretations and misunderstandings as concerns the role of the public sector in the economy, what usually is the uncomfortable feature of discussions on that subject (Baumol, 1967; Kau & Rubin, 1981). The most important and clarifying assumption is that GS create advantageous conditions for the economic activity aggregated in accordance to the whole economy as production function.

Government Spending role within the WL approach

The real cost of GS is:

$$GS + BS + PDC \quad (1)$$

where:

BS — budgetary spending

PDC — public debt costs (interests and instalments repaid)

The real benefits of GS are included in the production function reached by the economy:

$$PF(K, L, t, n) + (A - D) = y \quad (2)$$

But part of K and L absorber within production process is determined by GS what can be written:

$$PF[(K_m + K_g), (L_m + L_g), t, n] + (A - D) = y \quad (3)$$

where:

PF — production function (y),

K — capital (x),

L — labour (z),

A - D — advantages and disadvantages of government policy, regulation and procedures (a - d)

t — time

n — external factors

K_m, L_m — sources of capital and labour absorber by the economy thanks to the market or x_m and z_m respectively

K_g, L_g — sources of capital and labour absorber obtained thanks to government spending or x and z respectively

Equation (2) can be also written as:

$$Y = a^*x + bz + (a - d) + ct + n \quad (4)$$

where:

a*, b, a - d, c are respectively the parameters of capital resources available (a*), labour resources available (b), effects of government policy, regulation and procedures (a - d), time effects (c); and equation (3) respectively as:

$$y = a^*(x_m + x_g) + b(z_m + z_g) + (a - d) + et + n \quad (5)$$

The same parameters of a* and b for public and private sector must show assumed equal availability of economic sources of both sectors.

Following the idea of WL approach, we shall treat GS as effect of politically, socially and economical accepted level of labour force employment. Illustrates WL is based on general idea of interdependence between the share of GS in GDP and the level of employment. The economy must pay for increasing employment level with increased share of GS in GDP.

Hypothetically there is an extreme situation when employment is created exclusively by private sector of the economy. But usually a given employment level is created by both private and public sectors of the economy. It can also happen the hypothetical situation of full employment reached for the price of almost all economic resources governed by the government.

Let us assume that government tends to increase the level of employment in order to obtain possibly high production function and thanks to that fact — electoral support in future election.

Hypothetically in accordance to the level of development, the same degree of employment can be obtained for the price of different GS burden in GDP.

The cost of increased employment level is relatively higher in less developed countries and on the reverse — the society must pay relatively less for increasing employment level in more developed countries. "The price" or "the cost" of increased employment level means that the society is determined to increase the part of national income to be at the governmental disposal.

There are at least two kinds of reasons why the same share of GS in GDP has differentiated outcome on employment level in distinguished groups of countries in Table 1.

First one relates to the level of development measured in terms of national income per capita. The effect of development level on the demand in distinguished groups of countries in Table 1. It is much easier to explain when GS are increased marginally by 1 per cent in these 3 groups of countries. Table 1 shows figures for developed, "medium" and less developed countries and presents results of increased GS share in GDP by 1 per cent from the hypothetically base case scenario of GS/GDP = 40%.

The relatively low impact of GS on the demand for labor in less developed countries relates to the level of efficiency represented by the whole economy. Both factors, i.e. low level of economic development and inferior efficiency should be treated as important, as they determine shape of economic policy — especially in countries of relatively low level of development. It is clear that claims for GS increase do not have economic rationality. Therefore, when they occur they may be rather treated as an effect of rent-seeking behaviors or as fallacy of economic policy.

In order to simplify our analysis, let us assume that there are no effects of foreign trade deficit or surplus and the analysis concerns closed economy.

Although, in small open economies of less developed countries with foreign trade deficit the deteriorated effect of GS may be reinforced by relatively strong demand for imports.

WL and production function

Following formerly adopted assumptions, we can interpret WL as a choice of GS level made in order to achieve "desired" production function.

It should be noticed that the structure of GS matters. Probably some parts of GS are more important for the rise of production function and some of them — are less meaningful. Consequently, some changes of GS internal structure at stable share in GDP could have the similar (the same directions) consequences as increased share of GS in GDP. Of course, it is an open question what is easier to change: the total share of GS in GDP or its internal structure?

Let us assume that the total share of GS in GDP is not changed But the structure of GS is more advantageous for production growth. Presumably it could happen in the same country after GS reform or it could illustrate situation in another country. There are additional effects as concerns the comparison between GS share and production level. These are additional effects of WL ore diminishes market failure "losses". Presumably the GS structure is more "production increasing advantageous". The same GS rate of growth enables to get relatively higher level of production. But rational economic incentives to increase GS share in GDP may not exist. Presumably there are other than economic pressures, which enforce relatively high GS share to the economy³. This situation could be caused by strong political pressure to keep up with overburdening the economy by relatively high GS share. For example, strong involvement in the arms race, war or strong social pressures could cause overburdening economy with relatively too high GS share in GDP. This kind of situation was typical for former communist countries in late 1980s. and it is also characteristic for LDC (for example in the Middle East where the rate of armament spending is very high and overburdens the economy with GS rate much higher than the national income growth) which represent significantly higher GS expansion than the growth rate. The market failure gap in these countries

Table 1. Potential level of economic development and GS share increase

Level of development in US\$ per capita	GS share = 40% in US\$ per capita	GS share + 1% in US\$ per capita	Net outcome (3) – (2)
(1)	(2)	(3)	(4)
20000	8000	8800	800
10000	4000	4400	400
2000	800	880	80

tends to expand as the economy rather tend to the path of degenerated market mechanism pattern like in former centrally planned.

Concluding remarks

This very simple way of Wagner's Law interpretation should allow to see more precisely interrelations between GS share and the level of economic activity. Usually the economy reaches obtainable level of production thanks to its stage of development and to the existing "burden" of government spending. WL interpretation presented above enables to avoid narrowly counted and widely interpreted analysis tending to the comparison of government spending with the performance of public sector. It should be also useful to make use of this approach when trying to describe the appropriateness of government spending share in the economy.

Statistical data presented in Table 2 seems to be reliable, although there is no information on tax subsidies as well as on the public sector borrowing policy in these countries. Public Consumption data represents information on GS trend also because of availability of other reliable statistical sources for the author.

Following the public consumption and national income trends of growth we can observe that exclusively in Italy there is a strict connection between these two factors. We can see that in another four most developed countries the public expenditure growth rate was decreased in second period presented in Table 2, but growth rate fell in one of them. One country increased public consumption expenditure rate of growth, but it was accompanied by falling rate of economic growth. Another two countries did not change public consumption rate of growth, but it had opposite "consequences" in each of them.

Summing up, the comparison of the statistical data concerning seven highly developed countries it could be stated than in six of them the interrelations between public consumption rate of growth and economic growth were inconsistent with Wagner's Law. But lack of statistical data on other government spending than public consumption and unavailability of information concerning tax subsidies and public sector borrowing policy do not allow to conclude whether the WL is still consistent with observed performance of "top seven" countries.

When looking for some "growth reserves" for the economy one should know whether the existing level of development and of efficiency allow to have desired positive outcomes of pushing further GS outlays. And it should be also observed whether the GS share still pulls economic expansion.

The outcome of a-d expression is potentially very

important factor accelerating the rate of economic growth. This expression represents general outcome of public sector efficiency and it gives also information concerning results of existing administrative procedures and regulations. The European Monetary Union significantly limits possibilities to develop vicious race of bank rate rising among countries. But privatization, deregulation, liberalization, hampering bargaining power of trade unions, diminishing disadvantages of bureaucratic procedures as well as successful political and economic stabilization policy of central government seem to be still underexploited sources of economic development.

Moreover, it should be concluded that increase in public spending, and in public employment, depends on other determinants, both from the demand side (population growth and ageing, unemployment, and growth of the welfare state) and the supply side (Jaén-García, 2018). The study of these possible determinants could constitute the focus of future research.

The statistical data is presented in Statistical Appendix in order to illustrate complexity of aggregated data analysis accompanying discussion of WL continuity.

In Table 3 we can see that average budgetary deficit in selected 15 countries amounted to 7%, public debt 104% of GDP in year 2020. Switzerland was the only one country with budgetary surplus amounting to 1.4% of GDP and presented the lowest public debt to GDP ratio at 39%. Great Britain presented the highest budgetary deficit (-13%), but Japan had the highest public debt to GDP ratio at 235%. France presented the highest proportion of budgetary expenditure to GDP amounted to 62%.

In Table 4 there is data presenting manufacturing and GNP growth in years 2014–2018. 6 out of 15 countries presented decline of both items, but the overall picture is mixed and more complicated, because Italy and Japan presented decline of GNP despite positive manufacturing growth. And on the contrary — Switzerland had positive GNP growth despite the decline of manufacturing. The above presented statistical data cannot be used to "confirm or reject" Wagner's Law, and on the contrary — it can lead to the conclusion that we should rather relinquish formulating such oversimplified conclusions.

Some countries present negative growth rate, despite growth of other macroeconomic aggregates, like manufacturing production and budgetary spending. These phenomena show that there is need to introduce more detailed analyses of factors influencing economic growth nowadays. But will it still be economic analysis in line with the Wagner's Law formulated almost 140 years ago?

Table 2. Differences between average public consumption and average real GDP growth in periods: 1985–1992 and 1975–1984 in seven developed countries

	Average public consumption growth (1985–1992)–(1975–1984)	Average real GDP rate of growth (1985–1992)–(1975–1984)
USA	+0.8	–0.3
Japan	–2.0	+0.1
Germany*	–0.5	+1.2
France	–0.6	+0.5
Italy	–0.6	–0.6
United Kingdom	0	+0.6
Canada	0	–0.6

*Average for period of 1985–1992 calculated.

Source: IMF World Economic Outlook, May 1993, Washington DC.

Table 3. Budgetary deficit and public debt in selected 15 countries in year 2020

Country	Deficit (mln.\$)	Deficit (%GDP)	Debt (mln.\$)	Debt (%GDP)	Debt per capita	Total expenditure (mln.\$)	Education exp. (%bud.)	Gov. health exp. (%bud.)	Defence exp. (%bud.)	Total exp. (%GDP)
USA	–121 858	–5.69%	2 318 859	108.19%	70 598	76 475 000	13.40%	22.55%	9.43%	35.68%
United Kingdom	–364 471	–13.43%	2 812 412	103.66%	41 960	13 639 880	13.83%	18.74%	4.54%	50.27%
Germany	–159 469	–4.20%	2 656 144	69.80%	31 941	19 446 777	10.93%	19.88%	2.83%	51.10%
France	–24 154	–9.20%	3 026 963	115.70%	44 964	16 252 558	9.66%	15.47%	3.34%	62.10%
Japan	–15 988	–3.11%	12 091 355	234.86%	95 819	19 160 515	8.38%	23.64%	2.52%	37.22%
Spain	–140 573	–10.97%	1 536 761	119.90%	32 454	6 697 735	9.97%	15.28%	2.98%	52.30%
Italy	–179 165	–9.50%	2 939 321	155.80%	49 283	10 807 713	7.81%	13.42%	2.77%	57.30%
Portugal	–13 137	–5.70%	308 956	133.60%	30 034	1 120 358	10.15%	13.01%	4.41%	48.40%
Ireland	–21 035	–5.00%	24 918	59.50%	50 193	1 189 893	13.41%	20.04%	1.15%	28.40%
Austria	–37 971	–8.90%	359 975	83.90%	40 442	2 483 257	10.95%	15.31%	1.51%	57.90%
Australia	–53 264	–3.83%	660 541	47.47%	25 853	5 327 330	13.77%	17.80%	5.12%	38.29%
Belgium	–48 336	–9.40%	588 193	114.10%	51 050	3 090 443	12.33%	15.31%	1.79%	60.00%
Canada	–175 378	–10.66%	1 938 183	117.84%	50 998	8 626 458	12.22%	19.33%	3.15%	52.45%
Switzerland	10 393	1.40%	288 675	39.22%	33 785	2 393 397	15.51%	11.02%	2.24%	32.70%
China	–908 971	–6.34%	8 181 205	57.05%	5 844	48 921 010	12.63%	9.07%	5.40%	34.12%
Average	–150 225	–6.97%	2 648 831	104.04%	43 681	15 708 822	11.66%	16.66%	3.55%	46.55%
Median	–53 264	–6.34%	1 938 183	108.19%	41 960	8 626 458	12.22%	15.47%	2.98%	50.27%
Minimum	–908 971	–13.43%	24 918	39.22%	5 844	1 120 358	7.81%	9.07%	1.15%	28.40%
Maximum	10 393	1.40%	12 091 355	234.86%	95 819	76 475 000	15.51%	23.64%	9.43%	62.10%

Note:

Deficit is the negative difference between revenues and expenditures of the state, ie, expenses are higher than revenues. As in the case of debt, to measure the importance of the deficit in an economy is compared to GDP, to calculate the percentage of deficit to GDP. Government debt is the total financial obligations incurred by the government of a nation. Also is known as public debt, national debt or sovereign debt, and other definition is money owed by a national government. Public debt is the sum of the debts owed by a state, and can be expressed: a) as amount (in million US dollars), b) as a percentage of GDP: $(\text{Public Debt})/(\text{GDP})$ and is the percentage of GDP a country should spend to pay its debt.

Source: World Bank Data: <https://countryeconomy.com/deficit>; <https://countryeconomy.com/national-debt>; <https://countryeconomy.com/government/expenditure>

Table 4. Manufacturing and GNP growth in selected countries in years 2014–2018

Countries	2014–2018 manufacturing growth	2014–2018 GNP growth
1 USA	13.46%	16.06%
2 United Kingdom	–11.98%	–3.11%
3 Germany	1.33%	1.15%
4 France	–5.95%	–3.96%
5 Japan	7.41%	–6.91%
6 Spain	2.22%	1.45%
7 Italy	4.03%	–3.61%
8 Portugal	9.75%	2.89%
9 Ireland	140.56%	34.55%
10 Austria	4.98%	0.80%
11 Australia	–11.13%	–13.11%
12 Belgium	–1.51%	–1.67%
13 Canada	–10.75%	–9.82%
14 Switzerland	–1.46%	0.58%
15 China	21.49%	30.50%
Average	10.83%	3.05%
Median	2.22%	0.58%
Minimum	–11.98%	–13.11%
Maximum	140.56%	34.55%

Note :

Manufacturing refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC) revision 3. Data are in current U.S. dollars.

Source: World Bank Data. <https://www.macrotrends.net/countries/ranking/gnp-gross-national-product> <https://www.macrotrends.net/countries/ranking/manufacturing-output>

The Wagner's Law of Increasing State Activity should be analyzed in a broader context of his political views. Steadily increasing and strengthening role of state in the economy was aimed at development of a nationalist state seeking to subjugate other countries and nations.

Comparing a nowadays macroeconomic aggregates like budgetary expenditures, outlays on collective consumption and national income growth cannot be used for testing the truthfulness of this law. It should be also noted that Adolf Wagner, as a state socialist, did not favor the free development of market economy.

The Law of Increasing State Activity" known as Wagner's Law (WL) was firstly generalized thanks to the observation of processes taking place in the XIX century Prussia economy, which was vividly expanding. There was also significant expansion of government spending devoted to establishing administrative and military infrastructure in order to put in motion the drift of capital sources to conquest territories, which A. Wagner treated as "redeemed provinces of East Prussia, Pomerania, Schleswig-Holstein and Alsace-Lorraine". He also

mentioned that: "Danzig and Strasburg are the jewels which deck the imperial crown of the Hohenzollerns".

He observed an increase in the activity of both the Central Government and Local Governments, which undertake new functions. He assumed that the old and the new functions are performed more efficiently than before. In result economic needs of the people to an increasing extent and in a more satisfactory fashion, could be satisfied by the Central and Local Governments. Though Wagner studied the economic growth of Germany, but his observation applied to other "Progressive" countries too. WL states that as the economy develops over time, the activities and functions of the government increase. The increase in government activities is both extensive and intensive. This expansion and intensification of government function and activities lead to increase in public expenditure.

I have presented some aspects of Wagner's law, but this paper should be rather treated as introduction to further discussion based on more comprehensive statistical data. Some countries present negative growth rate, despite growth of

other macroeconomic aggregates, like manufacturing production and budgetary spending. These phenomena show that there is need to introduce more detailed analyses of factors influencing

economic growth nowadays. But will it still be economic analysis in line with the Wagner's Law formulated almost 140 years ago?

Notes/Przypisy

¹ In his opinion Mitteleuropa and Osteuropa should be dominated by German and Russian "national states". And he indicated that the Czechs, the Poles, Danes and French are dangerous wedge driven into German natural territories and must therefore be destroyed or assimilated by the Germans (p. 389).

² Quotation from Clark, 1940, p.392.

³ See Balatsky, 2012, p. 12: "we believe it is quite sufficient to determine how quickly "communism" sets in if Wagner's law is fulfilled. In this case, by communism we mean the point (...), when all of the GDP that is created is confiscated in the form of taxes and then redistributed in the form of government spending."

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