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Potential Introduction of Flat Tax on Personal Income in the United States of America in 2007 and a Distribution of Revenue

Key words: *tax system, flat tax, distribution of revenue*

Abstract: Article presents the effects of the potential introduction of the flat tax for the United States economy in 2007. The USA is labelled as the most capitalist economy worldwide[1]. This is confirmed by a lot of economic indicators and ideological bases which rule in the USA. Nevertheless, all over the history progressive income taxes have functioned in the American economy against the views of extreme capitalist theorists. Even that hasn't protected America from huge income inequality. Lots of inequality indicators for the USA are the worst among other developed countries. As statistical data reveal, the introduction of the flat taxation in personal taxes would result in the increase of the population income inequality. The aim of this paper is to present direct and static effects of the introduction of the flax tax on personal taxes in the Unites States in 2007. The main emphasis is on income and inequality effects of that change. The analysis is carried out with descriptive and statistical methods.

Introduction

The economy of the Unites States of America is described as the most familiar economy in the world with the theoretical conception of capitalism. It means that the smallest possible participation of the state in the economy, both as a business and an economic play regulator. Nevertheless, the country is involved in both of these two roles, hence it needs financial resources. The USA government in 2007 administrated the budget surpassing 2.5 billion dollars. Above 40% of this amount comes from individual income tax .

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[1] The United States of America for the capitalism is a biblical Kanaan land – promised land. Here, for the first time, it has met all necessary conditions required for the complete and undisturbed development. There, as nowhere else, country and people were created to lead the capitalism to the most advanced level (Sombart, 2004, p. 19).

The history of individual income tax in the United States dates back to 1913, when the Internal Revenue Service[2] was founded by the 16th amendment. Although the USA have the purest capitalism among other countries, individual income taxes have always had a progressive form. The progressive scale of the income tax (although it can have various forms) is a solution postulated rather by interventionists than liberals. Among the latter group ideologically and economically, the flat tax is postulated.

Although progressive forms of taxes on individual incomes are in use, the United States are still a country with significant and continuously increasing income inequality. The aim of this article is to present the effects of possible implementation of a flat tax on individual incomes and its consequences for distribution of households revenue in the United States in 2007. The main method used is a descriptive method with statistic indexes and coefficients, with emphasis on the Lorenz concentration coefficient and indexes which show the share of aggregate individual income.

Flat tax – theory

The flat tax is characterized by a constant relation of tax rate to taxation base. That ratios are called proportional by A. Komar, because the amount of tax increases in proportion (not faster or slower) to income increase (Komar, 1996, p. 122). In the case of the introduction of the flat tax in relation to the individual income, the base of taxation is the total income received throughout the year. It eliminates a tax-free, which in this case is abolished. It is necessary to mention that two economists, Robert Hall and Alvin Rabushka, proposed in the eighties broad tax reforms, which included the flat tax (with a rate of 17%), but their proposal included numerous tax relief, tax-free amounts and tax allowances (W. G. Gale). Joseph Stiglitz takes yet note, that a tax, even if it is of proportional rate (the same for all taxation amounts), which is accompanied by, for example, tax allowances[3], is in fact a graduated tax. It results from inequality of the average tax rate and marginal tax rate, which is the result of the tax allowances occurrence[4].

Why is the flat tax without any relief, tax-free amount and tax allowances in question? The answer is related to the theoretical capitalism conception, that has to do with the statement from the very beginning of this paper – the United States of America are the economy, which is the nearest to the theoretical capitalism conception (Kowalik, 2005, p. 93). Running of graduated individual income

[2] Until the fifties of the 20th century it was named The Bureau of Internal Revenue.

[3] For four children family according to Hall-Rabushka conception it was 25,500$ yearly.

[4] For „pure” flat tax its marginal tax rate is equal with its average rate (Stiglitz, 2004, pp. 665–667).

tax system in the USA, constitutes a significant distant from the theoretical assumption of that social-economic system. According to them, every economic decision of every citizen should be free from any economic encouragement and should be his/her independent decision, which is taken only on the basis of market. Only this kind of decisions can ensure an optimal allocation of resources, and any encouragements could lead to distortion of economic decisions. The only tax, which can be imposed by government and which does not lead to distortions, is a lump-sum tax. The lump-sum tax eliminates any actions which permit avoiding paying the tax. In practice, all taxes acting now in the USA deform every people's decisions. Even the lump-sum tax distorts, but elimination from its structure all the allowances, relief and tax-free amount causes that tax is very close to lump-sum tax. It does not distort the entity's decision concerning for example number of children in family, because regardless of their number, a taxpayer must pay the same tax amount. Therefore, the flat tax is a conception, which causes few distortions in entity's decisions, so it theoretically enlarges the efficiency of resources allocation. Hence, it is the solution postulated by theoreticians of capitalism.

Researchers of the flat tax indicate also other advantages brought from that form of taxation. That are:

– significant simplification of the tax system;

– economic incentives have more intensive effect;

– possible limitation of tax avoidance (Hall, Rabushka, 1996, p. 41);

– reduction of tax collection costs;

– substitution of the tax burden on individual income tax for consumption tax (Gale).

Dariusz Rosati divides growth mechanisms into short and long term which are the consequences of the introduction of a flat tax. The short-term mechanism is to increase the propensity to work and make the economic effort. This increases the supply of labour at certain wages, and this causes an increase in production and income growth (Rosati, 2003). Z. Gilowska expressed similar views opting for a flat tax on personal income, saying: 'Tax progression is destroying the roots of human activity, discourages effort and is stifling the economy' (Gilowska 2003). However, W. Sztyber claims it is wrong to think that economic activity is dependent on whether the income of individuals is taxed at a flat or progressive rate. The error arises from the understanding of the operator as an isolated actor playing field in which the environment has no effect. W. Sztyber argues that the behaviour of employees in the market is shaped by the general rule prevailing in the market, and their activity depends on many other factors (Sztyber 2003).

The long-term effect of the flat rate tax introduction, according to D. Rosati is the acceleration of economic growth. This, in turn, leads to the increase in the income of the rich end of the society, thus, the increase in the savings and investment. (Rosati, 2003). The action of this effect does not convince K. Łaski who supposes that it may even have a negative impact on the economic growth. According K. Łaski's point of view, a too high rate of savings could have a negative impact on the value of the global demand and the dynamics of growth (Łaski, 2009, p. 46). Also, B. Wyżnikiewicz brings up the possibility of the lack of impact of the flat tax rate introduction on the economic growth. He mentions that the additional means that will remain in the wealthiest taxpayers' pockets can be used for: consumption, savings in the country, investments in job creation and transfer abroad. If that money was spent on one of the first three listed ways it would work for growth. If it was used in a fourth, it would not contribute to the growth of wealth in the country (Wyżnikiewicz 2003).

The undoubted advantage of the introduction of a pure flat tax (that does not include the tax-free amount, all the relief and allowances) is to simplify the clearing procedures. Congressman Dick Armey in 1994 proposed broad tax reforms. One of the elements of the tax return was in a form resembling a postcard. It is the only possible form of settlement in the case of a really simple tax system. This form also allows for considerable savings from reduced maintenance costs of the apparatus for collecting the tax. The flat tax, which does not include tax exemptions, tax reductions and tax-free amount, is very easy to calculate. Another advantage of this is the difficulty in its avoidance - every citizen receiving income is required to pay it. Moreover, it is not possible to reduce the marginal rate.

The above-mentioned authors also ascribe a very important ideological advantage to the flat tax: its fairness. That form of taxation is fair, because it does not punish for additional work by the application of the higher marginal tax rate. Consideration whether the mentioned features of the flat tax are correct, is not the aim of this article. It would be a very extensive analysis, and would require a whole research team. As said before, the aim of this paper is to analyze direct and static effects of the introduction of the individual income flat tax on distribution of society's income. It seems to be a particularly crucial issue because, as it would be proven, that impact is really substantial.

Flat tax – practice

As it was said, a flat tax was proposed in the eighties by Robert Hall and Alvin Rabushka. The original concept of a flat tax is based on the proposal of these two economists. They developed a comprehensive reform program of the American tax system which included changes in a personal income tax, corporate tax, depreciation deduction schemes, capital gains tax, inheritance and consumption taxes; moreover the reform proposed the solution of the double taxation issues. As the authors of the reform mention, they presented their program repeatedly, both to the members of Congress and its committees, as well as at many scientific conferences and in media. Although, as R. Hall and A. Rabushka claimed, the irrefutable evidence of the superiority of the flat tax over the applied tax system in the USA, their reform agenda has never come into force (Hall, Rabushka, 1998, pp. 9–11). Until today, the United States of America have remained a country with a progressive tax scale.

Table 1. Countries that have adopted the flat tax

State of the flat tax	Year of introduction	Tax rate
Jersey	1940	20%
Hong Kong	1947	15%
Guernsey	1960	20%
Jamaica	1986	25%
Estonia	1994	21%
Latvia	1995	25%
Lithuania	1996	24%
Russia	2001	13%
Slovakia	2004	19%
Ukraine	2004	15%
Iraq	2004	15%
Romania	2005	16%
Georgia	2005	12%
Pridnestrovie	2006	10%
Iceland	2007	35,7%
Mongolia	2007	10%
Kyrgyzstan	2007	10%
Macedonia	2007	10%
Montenegro	2007	15%
Mauritius	2007	15%
Kazakhstan	2007	10%
Albania	2008	10%
Czech Republic	2008	15%
Bulgaria	2008	10%

Source: D. J. Mitchell, *Podatek liniowy – globalna rewolucja*, Wydawnictwo PROHIBITA, Warszawa 2008, p. 11.

However, the flat tax has recently become a popular form of creating the tax systems in various countries. Daniel J. Mitchell even talks about a flat tax as a global revolution. According to him, tax competition would lead to this revolution, a competition which was particularly intensified as a result of the transformation to market economies in former communist countries in the nineties. Up to 1994 a flat tax had operated only in Hong Kong, in Jamaica and in little-known British territories, Jersey and Guernsey. Today, this form of taxation is already operating in 24 countries (Mitchell, 2008, p. 11). The full list of countries that have adopted the flat tax, along with the year of their introduction and the tax rate are summarized in Table 1.

According to D.J. Mitchell, this is the tax competition that would determine the continuation of the flat tax revolution.

The experience of the countries that have adopted the flat tax is different as the tax systems that these countries have introduced are different. The experiences of Estonia, Latvia, Lithuania, Russia, Ukraine, Slovakia, Romania and Georgia are presented in the International Monetary Fund report (Keen, Kim, Varsano, 2006). However, the authors admit that the consideration of a dynamic, non-static impact of a flat tax on income distribution is problematic. The reforms introduced by individual countries are very complex. They include changes in any taxes, income (personal and corporate income, as well as capital gains), excise duties and consumption taxes. The impact of tax changes is very complex, and it requires many years to be properly assessed (Keen, Kim, Varsano, pp. 23–24). Therefore, an analysis of what is presented in this article was conducted from a static rather than dynamic perspective.

Methodology of the research

Dedication of a separate subchapter to describe all details of the assumed methodology seems to be justified, because there are a lot of points in which it is easy to create some misunderstanding. Firstly, there was an assumption made that only direct effects for some economic variables, caused by introduction of flat tax, will be analyzed. In this case, the analysis doesn't include forecast dealing with possible accelerated economic growth caused by the change of tax, labour supply increase, changes of budget revenue. Hence, the analysis which is carried out in this article can be called static, because it does not take into consideration changes in the economy caused by the introduction of the flat tax on individual income, which could take place in the course of time. This assumption leads to the second one: the budget revenue must be at the same level as the revenue received as a result of individual income taxation of households in the United States of America in 2007[5]. Revenues to American budget received in the way of

[5] Dynamic analysis could take into consideration views of supply-side economics, which claims that with time, it would reach higher tax revenues, as an effect of tax rates decreases. As it was marked above, this article does not take this prospect into consideration. It is a conscious action, because dynamic depiction of these phenomenon requires much larger research, appearance and strength of these effects of flat tax introduction are controversial.

individual income tax in 2007 amounted to1,168.8 billion dollars. They were obtained as a result of the taxation by the graduated tax with the following rates[6]:

Table 2. Tax rates and brackets in 2007 for Married Filing Jointly

Married Filing Jointly		
Tax Brackets		
Marginal Tax Rate	Over	But Not Over
10%	$0	$15,650
15%	$15,650	$63,700
25%	$63,700	$128,500
28%	$128,500	$195,850
33%	$195,850	$349,700
35%	$349,700	-

Source: Tax Foundation,
http://www.taxfoundation.org/files/federalindividualratehistory-200901021.pdf.

This analysis concerns the ideal flat tax: any relief, allowances or tax-free amount are not applied. If the above assumptions are accepted, the flat tax rate should be at the rate of 15%.

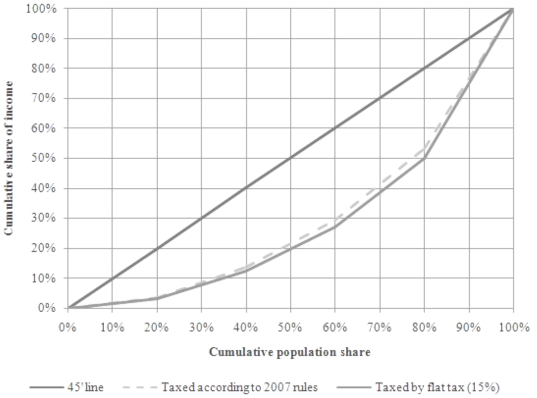
Results

The received results of the carried analysis will be presented in a graphic method and by appropriate indicators. The graphic method is to draw the Lorenz concentration polygon . The larger the area between the Lorenz curve and 45' line, the larger income inequality in the society. If the Lorenz curve covers 45' line, that means the income is distributed perfectly equally (Sobczyk, 2002, pp. 60–61).

The following picture is presenting two curves, the first has been drawn for household incomes in 2007 which had been taxed according to the then applied rules (the broken line), and the second for the same households, but taxed with the flat tax rate of 15% (the continuous line). There is a visible difference between the polygon according to the rate from 2007 and the polygon which is the picture of income taxed with flat tax (15%). This shows that taxation of individual income with flat tax influences the income distribution between individual quintiles of household.

[6] In the United States in individual income taxation occurs in four groups of tax entities: Married Filing Jointly, Married Filing Separately, Single and Head of Household. Married Filing Jointly is a group which is the base of analysis. It is an example to show the impact of the flat tax introduction, because the tax amounts and brackets are proportional.

Chart 1. Lorenz curves for household income in the United States in 2007



Source: own study on the basis of Census Bureau and Internal Revenue Service data http://www.irs.gov/taxstats/indtaxstats/article/0,,id=133521,00.html

The graphic method does not sufficiently present the scale of these changes. Table 3. covers them.

Table 3. Share of aggregate income of individual quintiles of households

Share of income						
Quintiles	taxed according to 2007 rules	taxed by flat tax (15%)	Change	taxed according to 2007 rules -accumulated value	taxed by flat tax (15%) -accumulated value	change of accumulated value
20%	3.48%	3.13%	-9.95%	3.48%	3.13%	-9.95%
40%	10.10%	9.32%	-7.78%	13.58%	12.45%	-8.33%
60%	15.79%	14.75%	-6.58%	29.37%	27.20%	-7.39%
80%	23.72%	22.82%	-3.78%	53.09%	50.02%	-5.78%
100%	46.91%	49.98%	6.54%	100.00%	100.00%	0.00%

Source: own study on the basis of Census Bureau and Internal Revenue Service data.

Firstly, the output data should be quoted. The share of the first twenty percent of households in income taxed according to tax rates in force in 2007 in the United States (presented in Table 2.) was 3.48%. The share of the second twenty percent amounts to 10.10%, the third – 15.79%, the fourth – 23.27% and the fifth 46.91%. The Lorenz concentration coefficient, for incomes taxed according to rules in force in 2007, amounts to 0.402. Despite of the application of the graduated tax rate, income inequalities in the United States are one of the highest and still rising in the fastest pace. *Human Development Report 2007/2008* divides countries into three groups: High human development, Medium human development and Low human development. The United States are assigned to the first group, but with regard to income inequalities there are only few countries ahead of the USA: HongKong, Singapore, Argentina, Chile, Uruguay, Costa Rica, Mexico, Panama, Malaysia and Brazil[7].

The same indicators which were calculated for the income with the flat tax rate of 15% are the following: the share of first quintile in the total income amounted to 3.13%, the second – 9.32%, the third – 14.75%, the fourth 22.82% and the fifth 49.98%. The most significant are the indicators of change in taxation rules:

– only the last quintile of households (20% households which received the highest incomes) had an increase of the share in the total sum of people's incomes; that income amounts to 6.54%;

– all the other quintiles of households had a decrease of the share in the sum of incomes;

– the lower the quintile, the bigger was the decrease;

– the decrease of share for the first quintile amounts to 9.95%; in comparison, the share in the total income sum of households in the United States decreased by 8.82% in years 1995–2003;

– the same index for the second quintile amounted to 7.78%; in comparison, the share of the second quintile decreased by 6.82% in the total income sum in ten years (1992–2002);

– the share of fifth quintile decreased by 6.54%; a comparable increase in the share of the same quintile in the total income sum took place in years 1992–2001[8].

To have a complete picture of these statistics it should be added that the Lorenz concentration index for the income received in 2007, taxed by flat tax with 15% rate amounted to 0.429. In the face of 0.402[9] it is the increase of about 6.716%. In comparison, historical data for households in the United States could be quoted: change in the Lorenz concentration index by 6.928% took place throughout fifteen years (1992–2007).

[7] This group includes 70 countries and only 10 of them have higher value of Gini index (United Nations Development Programme, 2008, pp. 281–282).

[8] Own calculations on the basis of Census Bureau data, www.census.gov

[9] The Lorenz concentration coefficient for the income taxed with the graduated tax rates according to 2007 rules.

Conclusions

The carried out analysis presented clearly how the introduction of the flat tax with 15% rate influences the distribution of household incomes. The share in the total income sum decreased for four quintiles (almost 93,200 thousand of households out of 116,783 thousand), but increased only for the households with the highest incomes. Also the increase in the Lorenz concentration coefficient shows undoubtedly that the introduction of the flat tax instead of the graduated taxation leads to a shift of share in incomes from lower quintiles to the highest quintile. The importance of these changes is depicted by the description of the pace of those changes: the introduction of the flat tax would have the same results shortly after, as the comparable changes which had been shaped sometimes through a dozens of years.

On the basis of the conclusions we can formulate further questions. One of them could be named as cardinal[10]: how does the income distribution influence the economic growth? Further: should governments aim to decrease the inequalities of incomes in society by applying the graduated taxes, or, maybe by market income allocation? (This allocation is only to a small degree deformed by flat tax) Which is optimal?

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[10] There are some questions which are really important for economics.

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Potencjalne skutki zmiany opodatkowania dochodów osobistych w Stanach Zjednoczonych w 2007 roku

Słowa kluczowe: *system podatkowy, podatek płaski, rozkład dochodów*

Abstrakt: Artykuł przedstawia skutki, jakie dla rozkładu dochodów miałoby wprowadzenie podatku liniowego w USA. Stany Zjednoczone są określane mianem najbardziej kapitalistycznej gospodarki na świecie, ponieważ wszelkie wskaźniki oraz ideowe podstawy stawiają ją najbliżej teoretycznego modelu kapitalizmu[11]. Przez całą historię w gospodarce amerykańskiej funkcjonowały jednak progresywne podatki od dochodów osobistych ludności, wbrew teoretykom skrajnie wolnego rynku. Mimo to USA są krajem, w którym nierówności dochodowe należą do najwyższych, spośród krajów wysoko rozwiniętych. Jak wskazują dane statystyczne i obliczenia przytoczone w artykule bezpośrednim skutkiem wprowadzenia podatku liniowego, postulowanego przez ekonomistów neoliberalnych, byłby dalszy znaczący wzrost nierówności dochodowych. Celem artykułu jest przedstawienie bezpośrednich i statycznych skutków, jakie wywołałoby wprowadzenie podatku liniowego w Stanach Zjednoczonych w 2007 roku. Analizę przeprowadzono metodą opisową i odpowiednimi operacjami na danych statystycznych.

[11] „Stany Zjednoczone są dla kapitalizmu biblijną krainą Kanaan – ziemią obiecaną. Tutaj bowiem po raz pierwszy zostały spełnione wszystkie warunki potrzebne mu dla pełnego i niezakłóconego rozwoju. Tam, jak nigdzie indziej, kraj i ludzie byli stworzeni do tego, by rozwój kapitalizmu doprowadzić do najbardziej zaawansowanej postaci". W. Sombart, *Dlaczego nie ma socjalizmu w Stanach Zjednoczonych?*, przeł. K. Krzemieniowa, Wydawnictwo IFiS PAN, Warszawa 2004, s. 19.