# КРИВАТА НА ЛАФЪР: МЕЖДУ ИКОНОМИЧЕСКАТА ТЕОРИЯ И ИКОНОМИЧЕСКАТА ДЕЙСТВИТЕЛНОСТ

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# THE LAFFER CURVE: BETWEEN THE ECONOMIC THEORY AND ECONOMIC REALITY

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#### Abstract

At the end of the 70s and the beginning of the 80s the Laffer hypothesis quickly gained popularity not only in policymaking, but also in the economic theory. The main reasons for that are that it sounds logical and is easily understood even by the common people. The empirical data, though, as well as the deeper analysis do not provide much support for the hypothesis. A new hypothesis is proposed here, which might be closer to the real economy.

Key words: Laffer curve, tax rate, tax revenue.

### Introduction

In 1974, in a restaurant in Washington DC, the economist Arthur Laffer sketched a curve on a cloth napkin. The curve, later known as "the Laffer curve", is **supposed** to present the relationship between the taxation rates and taxation revenue.

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Source: The National Museum of American History.

### Fig. 1. Laffer curve napkin

The text on the napkin reads as follows: "If you tax a product less results / If you subsidize a product more results. / We've been taxing work, output and income and subsidizing non-work, leisure and un- / employment. / The consequences are obvious! / To Don Rumsfeld / at our Two Continents / Rendezvous / 9/13/74/Art B. Laffer (The National Museum of American History)".

### The Hypothesis

The idea behind Laffer's hypothesis is relatively simple. Laffer states that two effects are observed determining the tax rates: 1) arithmetic effect and 2) economic effect. The arithmetic effect consists of the idea that if tax rates are raised, the tax revenues will also be raised by the amount of the increase in the rate and vice versus. The economic effect comprises of the expected negative impact of the higher tax rates on work, employment and output. According to Laffer, the higher the tax rate, the greater the negative economic effect by "penalizing participation in the taxed activities (Laffer, 2004, p. 2)". The arithmetic effect is represented by the Normal range, whine the economic effect – by the Prohibitive range (See Figure 1 and Figure 2). The two effects work in the opposite directions from one another. The Laffer curve also implies that the taxation revenues will be the same both at higher and lower tax rates. It seems that it does not matter whether economic system applies taxation rates *a* or *b*, where *a* is much greater than *b*, the taxation revenue will be the same  $TR_I$ . The same is supposed to apply for points *c* and *d*, with c > d, and taxation revenue  $TR_2$ . At point *E* the maximum taxation revenue is achieved, namely  $TR_E$  – the two effects equalize.

Laffer states that his drawing is *only* "...a graphic illustration of the concept... [and] not the exact levels of taxation corresponding to specific levels of revenue (Laffer, 2004, p. 2)".



*Source:* Author's drawing summarizing various representations and concepts of the curve.



This idea, represented by Laffer, is not new to the economics as John M. Keynes stated, more than 40 years before the napkin date, that "Nor should the argument seem strange that taxation may be so high as to defeat its object, and that, given sufficient time to gather the fruits, a reduction of taxation will run a better chance, than an increase, of balancing the Budget (Keynes, 1933, p. 7)". We have to point out that Keynes expressed this idea *before* the publication of "The General Theory of Employment, Interest and Money" in 1936, where his views on taxation are much more different.

In a relatively confident way, Laffer also states that tax cuts, by creating incentives, "...help balance the budget by reducing meanstested government expenditures. A faster-growing economy means lower unemployment and higher incomes, resulting in reduced unemployment benefits and other social welfare programs (Laffer, 2004, p. 3)".

Laffer tries to support his hypothesis by several statements, which raise more questions that the answers they provide:

1. President Kennedy reduced the highest federal marginal tax rate by 23% (from 91% to 70%), which led to 233% increase in the incentives (from \$0.09 to \$0.30 per \$1) (Laffer, 2004, p. 3), *but increase in the incentives is not like having advantage of them.* 

2. The Harding–Coolidge tax cuts led to the increase of GDP, fall in unemployment and improvement of the average person's life (Laffer, 2004, p. 4), *but the mentioned period ended with the Great Depression and namely the Keynesian model helped the American economy*.

3. The Kennedy's tax cuts led to an increase in the federal government income tax revenue (Laffer, 2004, pp. 3-4), but the American economy was on the same positive trend 5 years before the policy implementation.

4. "Prior to the tax cut, the economy was choking on high inflation... (Laffer, 2004, p. 8)" – this implies that there is a direct positive relationship between taxes and inflation, it also contradicts the monetarists theory on the causes of inflation and contradicts the Keynesian theory on consumption and income, and hence inflation.

5. Laffer *presupposes* that there is a direct connection between tax rates and taxes paid by the rich (Laffer, 2004, p. 9).

6. "Just after a capital gains tax-rate cut, there is a surge in revenues: Just after a capital gains tax-rate increase, revenues take a dive (Laffer, 2004, pp. 10-11)." *The provided examples, though, show preexisting trends and cycles, which is indicative of the effect of other factors. Apart from that, tax changes are seldom announced years before their implementation, so people could not be able to plan their activity as Laffer states.* 

7. "Reducing income and capital gains tax rates in 1981 helped to launch what we now appreciate as the greatest and longest period of wealth creation in world history (Laffer, 2004, p. 10)." *The recent data of numerous researches show that this has led to the concentration of wealth in the hands of few, which has a strong negative effect on the economic growth (the PhD Thesis of the author).* 

8. Laffer states that "if you tax rich people and give the money to poor people, you are going to have more poor people and less rich people (Al Jazeera English, 2014)", but the statistics show that during the period of higher taxation, the poverty rate in the US dropped sharply till the beginning of the Reagan era and the applied tax cuts for the rich, which led to sharp rise in the poverty rate and fluctuation around a higher level (Gabe, 2015).

9. Laffer presents a figure of few countries in order to support the statement that lower taxes lead to budget surplus (Laffer, 2004, p. 15), but the neither analyses, nor provided information present the structure and the causes of the government expenditure.

So the question arises: What made the Laffer hypothesis so influential, that the curve found its way even into *the economic theory books*? Well, first, the hypothesis *sounds logical*. Second, it is *simple*, which makes it easier to be explained to and by the politicians. And third, *the economic situation in the late 70s* in the USA and the UK. As a result of these, many countries worldwide, starting with the United States and the UK, applied taxation cuts at several steps, expecting the hypothesized results.

There are hardly any empirical data supporting the Laffer hypothesis. As Mankiw and Taylor pointed out "...the UK... top marginal rate of income tax was cut from 83 per cent to 60 per cent in 1980 and then again to 40 per cent in 1988. Economists have... found it hard to trace any strong incentive effects of these tax cuts leading to increases in total tax revenue as the Laffer curve would suggest. A study by the UK Institute for Fiscal Studies (IFS)... concluded that *at most about 3 per cent of the increase in tax revenue* between 1980 and 1986 *could be attributed to* the 1980 *income tax cut*. In the USA, President Reagan also cut taxes aggressively, but the result was less tax revenue, not more. *Revenue* from personal income taxes in the United States... *fell by 9 per cent from* 1980 to 1984, even though average income... grew by 4 per cent over this period. The tax cut, together with policymakers' unwillingness to restrain spending, began a long period during which the US government spent more than it collected in taxes. Throughout Reagan's two terms in office, and for many years thereafter, the US government ran large budget deficits (Mankiw and Taylor, 2014, p. 752, italics mine)."

What is more, the expected economic growth did not occur as a result of the tax cuts. However, we can say that it occurred *despite* the tax cuts. The US GDP growth was about 5 times during the higher marginal tax rates in the country for the period 1937-1979, while the GDP growth for the lower tax rates period, namely 1980-2013 is about 2 times (US Bureau of Economic Analysis). The UK GDP growth for the same periods is respectively about 3 times and 2 times (A millennium of macroeconomic data). Considering the income and wealth distribution analyses (the PhD Thesis of the author), tax cuts redistribute income towards the higher income groups (increase in the Gini coefficient), which does not create incentives, but leads to an economic growth well under the potential one, higher poverty rates, higher uncertainty for the business, etc.

The Laffer hypothesis shows one thing for sure: the taxation revenues at 0% and 100% tax rates will be 0. However, it does not say much about the taxation revenues in between these end points. According to Laffer in order for the tax cuts to have effect, the taxation rates has to be so high that they *fall* into the Prohibitive range of the curve (Laffer, 2004, p. 3). But considering the above stated empirical data about the USA and the UK, another question arises: Where does the Prohibitive range start? Is it somewhere above the 83<sup>rd</sup> percentage point for the UK and above the 70<sup>th</sup> for the USA (See Figure 3a), or above the top margin

of 98<sup>th</sup> percentage point for the UK for 17 years and 94% for the USA (See Figure 3b)?



Source: Author's drawing.

Fig. 3. Hypothesized Laffer curves

The Laffer curve might represent a real situation only if the wage rise is due to additional hours worked, or additional qualifications gained. Such a situation is observed predominantly, but not always, in the lower income group and the lower section of the middle income group. Since this situation is not the dominant one and the wages rise due to various other factors, such as: *changes in economic situation*, *changes in and elasticity of labor demand and supply, consumption*, *trade unions market power and activities*, *government interventions*, etc., the Laffer hypothesis does not reflect the real economy. Considering the higher middle and especially the top income groups, their wage rise is not as a result of the substitution effect, described in microeconomics. It is, more or less, due to their bargaining abilities, power and position in the companies. Therefore, there are no substitutions and disincentives whatsoever for these groups, and what counts in the end is the potential rise of the *net income*.

Another thing could also be added here – *the economy does not tolerate vacuum*. If a given person sees the after tax income increase as non-stimulating one, another person will value the income more. Therefore, considering the data about the UK and the USA, *we might propose another curve*, which might be much closer to a real economic situation (see Figure 4). As the progressive taxation rates rise from 0, so does the taxation revenues, but initially at a higher rate. A point will be reached, after which higher tax rates will provide relatively lower revenue rates, until taxation revenue maximization (TR<sub>M</sub>) is reached probably somewhere around 90+ percent. The curve will *not* bend backwards, and the 100% tax rate will *never* be applied.





## Fig. 4. Author's proposed tax rate / tax revenue curve

We also have to point out that people would usually try to avoid paying taxes regardless of their income and taxation rates if they have the chance. Of course, this will depend on their *moral philosophy, education, understanding how the economy works, and on the strictness and the severity of the punishments for breaking the law.* This is well observed in Bulgaria with a flat taxation rate = 10%. Laffer not only advocates for considerable tax reduction, but he goes beyond that by lobbying for the implementation of a flat tax system. He provides examples from the former socialist countries in Europe, stating that the implementation of the flat taxation system led to energetic economic growth (Laffer, 2004, pp. 13-6). As we know, the economic growth is a multifactor phenomenon, and such a statement might be considered, more or less, unscientific, especially when there are so many contradicting data about the countries, including Bulgaria.

### Conclusion

The Laffer hypothesis, though sounding logical, needs a great set of prerequisites in order to represent the real economy. As we know, the real economy does not function under the condition: "other things being equal". The empirical data supporting the hypothesis are scarce, if any, which leads to dropping it out of the theory. Nowadays, the Laffer curve is termed "the Economics of wishful thinking (Al Jazeera English, 2014)" at Oxford University. A survey of the top 40 US economists from Princeton Yale, MIT, Harvard, etc. in 2012 showed that none of them agree with the Laffer curve (Al Jazeera English, 2014). As Bruce Bartlett, who worked with Laffer on the 1981 tax cuts put it "[Laffer has] got a shtick where he's able to get right-wingers, wealthy people, investment managers to pay him a lot of money to be an entertainer and tell them what they want to hear — that they are vital to the economy and their taxes must be reduced (Institute on Taxation and Economic Policy, 2013)". Warren Buffet, the 2<sup>nd</sup> richest person on the planet (Forbes, 2017), stated "I have worked with investors for 60 years and I have yet to see anyone... shy away from a sensible investment because of the tax rate on the potential gain. People invest to make money, and potential taxes have never scared them off (Buffet, 2011, italics mine)."

Since the Laffer hypothesis is so much questioned by the leading economists and experts, and considering the lack of empirical support, there has to be *another relationship* between the taxation rate and taxation revenues, presenting the real economy, which might be the one suggested above.

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