

The Meaning of Taxation: Effects of Various Taxes (Labor, Capital, Consumption) on the Economy



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As Thomas Jefferson once said, taxes along with the death are inevitable. We know that scientists are trying to challenge the inevitability of death. Avoiding taxes is, like death, one of the biggest problems most people face. And I do not mean as the problem for the government in raising money for spending, which is obvious, but for the economy as a whole. Put differently, taxes are problematic for the economy because they are *avoidable*.

Taxation is an involuntary payment levied on various entities in order to finance the state budget¹. Clearly, the tax burden is heavily influenced by the philosophy of the role of the state in the public life, as well as quantity and quality of public services rendered. Here, the level of corruption, cronyism, and efficiency of the bureaucracy constitute important factors. As a result, how much money is available for public policy is dependent on not only the sheer amount of taxes collected, but also on how much is going to be stolen or wasted along the way. As such, it is not so much about the philosophy of public spending and how large the budget should be.

According to some schools of economic thought, like Modern Monetary Theory, this is completely irrelevant as budget could be financed with created money, whereas taxation is only a means of stabilizing money supply². Leaving such ideas aside, let us take revenue needs of the government as given

¹ The state is understood here broadly, including the local government as well as various state and state related agencies (such as social security and health insurance). Therefore, all such contributions are included under the term "taxes". As such, any academic debate on whether social security and similar contributions are technically taxes or not will not be discussed.

² In fact, MMT relies heavily on an untypical but a very common tax, which is inflation. Also, it leads to distortion of the structure of the economy and, therefore, is not advisable in any real-life policy.

and discuss only the means of taxation – not its level.

WHAT IS TAXED AND WHY?

The governments can be very creative as regards taxes and what is the base of taxation. From the economic point of view, taxation concerns mostly two categories: stocks and flows.

Taxation of flows concerns transactions or exchanges including purchases, donations, earning income, etc. Taxation of stock is done chiefly through property taxes with the most important being real estate tax and inflation. There are many other variations of stock taxes where any other type of property is taxed including: dogs, horses, TVs, wells, fruit bearing trees, chimneys, or



THE TAX BURDEN IS HEAVILY INFLUENCED BY THE PHILOSOPHY OF THE ROLE OF THE STATE IN THE PUBLIC LIFE, AS WELL AS QUANTITY AND QUALITY OF PUBLIC SERVICES RENDERED



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even one's own head³. Here, we will deal mostly with the taxation of labor and capital. Taxation of labor is an income tax, which constitutes a flow. Taxing capital might be more difficult to classify, as government sometimes taxes flow (income) and in other cases stock.

The effect of taxation on the economy is driven by two main factors. The major one is due to its influence on people's behavior. In other words, the main problem with taxes is that they can be avoided – not only by means of illegal or bordering on illegal activities as an attempt to decrease the tax bill⁴. Actually, the most common tax avoidance strategy is based on avoiding doing whatever is taxed. Levying the tax on dogs causes a decrease in the number of dogs; the poll tax does not induce suicides but tends to curb birth rate; and the personal income tax reduces incentives to work.

³ The poll tax is also called a "head tax", as everybody in a possession of a "head" needed to pay it.

⁴ See: Landsburg, S. E. (2007) "The Armchair Economist", Revised and updated in May 2012, *Economics & Everyday Life*, New York: Simon and Schuster.

MISUNDERSTOOD LAFFER

The best description of the effects of taxation on economic activity is given by Laffer's curve, described as early as the 16th century, and misunderstood since then. The idea is quite simple: as we start taxing something, our revenues increase with the increase of the tax rate. However, every increase gives less than a proportional increase in revenues as people start avoiding the tax – either by limiting their activities, or hiding them.

At some tax rate one may encounter a tipping point at which revenues actually tend to fall with the increase of the tax rate. Going beyond this point is counterproductive from the point of view of the government⁵. Moreover, it is detrimental to the economy due to an increase in the shadow economy, illegal activities, and transaction costs. From the governmental perspective, if the required revenue is less than the maximum obtainable, it can be collected at two tax rates; but in terms of efficiency, it is always better to realize it at the lower rate.

WHY TAXES MATER

In most areas of the economy the influence of taxation on the tax base tends to be negative from the economic point of view, as it discourages human activity and, hence, dampens economic growth. However, one needs to understand that this is not always the case. The situations when free market

⁵ Misunderstanding of Laffer's curve is common both on the liberal and socialist side. Socialists propose funding extra spending by increasing tax rates, and their simulations are based on applying a new tax rate to the existing tax base, ignoring people's response to the increased rates. Hence their refusal to accept the existence of the tipping point despite the existing evidence. In Poland, for instance, it was proven to exist at least three times in the last 30 years in terms of excise and income taxes. Liberals often propose decreasing tax rates, promising an increase of tax revenues, assuming the tax rate is on the right side of the tipping point. This might happen, but, actually, is equivalent to increasing taxation – which is rarely an effect, desired by liberals.

gives an optimal economic allocation are quite well described and, clearly, real life rarely ticks all of the boxes. If the discrepancies between theory and reality are small then it is not a problem, but the problem of externalities is a major one.

Externalities are effects of our activities that are borne by others without their consent or compensation. Nearly any activity people perform causes some externalities: if I wear clothes that do not match in color, I may be causing some discomfort to others, hence they will be paying (miniscule) price for my lack of taste. Again, as long as these costs are small, this not a problem. However, as their scale grows, the distortions to the market become severe. For example, burning trash as the means to heat the house may be an economically sound choice for an individual. However, the price of this cheap fuel is actually paid by neighbors, who are forced to breath in the smoke. Similarly, on a larger scale, there are other activities in the economy causing similar effects not limited to pollution⁶.

One way of dealing with such problems is banning behavior-causing externalities. In many cases, however, this is not an optimal solution and sometimes it raises controversy – as was the case, for example, of children-free restaurants.

“GOOD” TAXES

Another solution is the Pigovian tax, which is a tax that is designed so that a person or a corporation is forced to pay for these external expenses borne by others and, therefore, is likely to modify its own behavior so that all expenses are included in a cost-

⁶ It is worth noting that the external effect may sometimes be a positive one. By vaccinating myself, I deliver to society the benefit of herd immunity that is immaterial to me as I am vaccinated. Hence, in this case the Pigovian tax should actually be paid to me. Providing vaccines at a reduced cost or no charge whatsoever actually sometimes does this.



TAXATION OF LABOR IS AN INCOME TAX, WHICH CONSTITUTES A FLOW

benefit analysis of its actions. In principle, this should improve the way the economy performs. In fact, such a tax is imposed quite frequently – including the excise tax on alcohol and tobacco, carbon tax, sugar tax, as well as various payments made by companies for use of natural resources (including polluting water and air). New ones are also currently being considered – including a meat tax in the European Union⁷.

In practice, however, such an approach faces many challenges. Firstly, how should we estimate how much our neighbor should pay for each kilo of trash burned? Calculation of the value of externalities is notoriously difficult and often based on very subjective or political factors. Therefore, the market distortion may be not fully eliminated, or, even worse, may be increased if the levied tax is far too high.

Secondly the tax is influencing only perpetrators, but gives little benefit to the victims of their actions other than limiting their appetites for harmful activities. From the perspective of neighbors, the tax should

⁷ <https://www.theguardian.com/environment/2020/feb/04/eu-meat-tax-climate-emergency>

See also: Ripple, W. J., Smith, P., Haberl, H., Montzka, S. A., McAlpine, C., and D.H. Boucher (2014) “Ruminants, Climate Change, and Climate Policy”, [in]: *Nature climate change*, 4(1), pp. 2-5.

be high enough to force the perpetrator to switch to a fuel that is not inducing cancer. However, such an opinion is mostly based on the fact that my neighbor is now facing full costs of his actions, whereas still, next to none of these benefits are transferred to the neighborhood. Therefore, the community will likely support a total ban on the actions causing externalities, which may not always be the optimal choice⁸.

Finally, since almost all of our actions cause externalities, selection of which ones should be taxed is usually quite an arbitrary political decision. As mentioned above, in the EU, the meat tax is now on the agenda – despite large controversies. Still, nobody is proposing a “children’s tax”, while, clearly, having children leaves a much larger carbon footprint than that of the meat industry. Meanwhile, a number of developed countries (including Germany, Poland, and the United Kingdom) often propose subsidies in order to boost fertility rates. As we can see, the approach to taxation has more to do with values shared by societies than economic calculations.

The partial solution to these problems is introducing markets wherever possible as externalities are mostly the effect of too little market. Pollution arises mostly because there is no owner of air or water that could claim damage to his or her property at a fair price. Unfortunately, introducing the market is often not feasible for political or even practical matter. It is hard to imagine being charged for air we breathe; also, the supplier would have to be a global monopoly. Hence, it seems that in certain cases the imperfect Pigovan tax in the form of arbitrary payments for pollution is the best available alternative. Still, governments sometimes manage to induce a certain level



THE MAIN PROBLEM WITH TAXES IS THAT THEY CAN BE AVOIDED

of market mechanisms, e.g. in the shape of permit auctions or secondary market (like in the case of CO₂ emissions). This allows for a more objective market discovery of a proper tax rate.

INFLUENCE OF TAXES

Now we turn to the second set of taxes: ones that have no influence on the economy. These are the ones that do not influence the behavior of people and, therefore, do not distort the way people allocate their property and effort. Still, it seems that such taxes are hard to find.

The poll tax is often given as an example: other than going into hiding, people cannot avoid it. It is true that few would commit suicide to avoid paying the tax; nevertheless, it seems that implementation of such a tax leads to a decrease in birth rate⁹. In other words, despite the current tax base being relatively constant, the tax has an impact on the future supply of taxpayers¹⁰. Similarly, the

⁹ Mirrlees, J. (1972) “Population Policy and the Taxation of Family Size”, [in]: *Journal of Public Economics*, Vol. 1, pp. 169-198.

¹⁰ This is a hotly debated issue in politics and such effects seem to be very small. In fact, the negative poll tax (or subsidy) has little to no effect on increasing fertility – as observed for example in Poland, where the 500+ program (a subsidy of about EUR 125 per month for each child) had some effect in the first two years, but now, the fertility rate is regressing towards a long-term mean.

⁸ In no way is the author implying that burning trash is a valid option.



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real estate tax – also seemingly inescapable – leads to abandonment of ownership and under utilization of land, which is a valuable resource by all accounts. Still, research shows that the impact of the real estate tax on economic growth seems to be the least problematic¹¹ – likely due to inelastic supply of and difficulty in its avoidance.

A positive or neutral effect of taxes on economy is, however, a rare exception. Most popular taxes limit productive activities of people – such as working or investing – since it is extremely easy to avoid pay-

ing them. At the same time, the wealthiest have enough resources to avoid taxation via complicated mechanisms. This creates an uneven playing field for their smaller competitors, who cannot obtain similar benefits, which then increases the problems that the introduction of the taxes brought in the first place. Fighting tax avoidance is an obvious way to limit the negative effect of taxation on the economy. Nonetheless, although liberal thought is skeptical towards taxation in general, such skepticism should not be combined by looking at tax avoidance with leniency.

DEADWEIGHT COST OF TAXES

The impact of taxation on the economy is not limited solely to its effect on corporate and human behavior. The transactional costs of tax collection are usually quite substantial, as compared to the total tax bill. On the side of payers, these costs include: costs of tax data gathering and processing (including calculation of tax liability, money transfer expenses, and liquidity management). In fact, such costs may be very substantial: the time spent to comply with taxes goes from over 1,500 hours per year in Brazil (that is 4 hours every single day, including holidays and weekends) to 50 hours in Estonia¹². As we can see, there is a large room for potential improvement in many countries.

In some jurisdictions, the largest cost is that of tax law uncertainty. It arises from the fact that a badly written tax law may be subject to various interpretations. Therefore, when paying taxes, taxpayers are exposed to the litigation from the tax authorities – even if the tax liability was calculated to the taxpayer's best effort.

¹¹ Johansson, Å., et al. (2008) "Taxation and Economic Growth", *OECD Economics Department Working Papers*, No. 620, Paris: OECD Publishing.

¹² <https://www.pwc.com/gx/en/services/tax/publications/paying-taxes-2020.html>



THE APPROACH TO TAXATION HAS MORE TO DO WITH VALUES SHARED BY SOCIETIES THAN ECONOMIC CALCULATIONS

Finally, in some companies, transaction costs include expenses for developing and executing tax avoidance schemes. All this is time, effort, and money wasted, which could have been used for more productive purposes. At the same time, the existence of thousands of tax officers is an expense on the side of the government.

In opposition to the previous case, there is no way that this effect could be positive for the economy, and, therefore, it should be minimized. Clearly, this is also a task for the government, as it is in charge of setting tax rules. Unfortunately, for various reasons, the trend is quite opposite, and despite advances in digitization the tax collection burden is not decreasing. In part, it has to do with a growing complexity of the globalized world, as well as new tax avoidance schemes. However, sometimes, the level of difficulty of a tax code arises from the incompetence of legislators, or is introduced in a given form on purpose in order to maintain power over entrepreneurs. Defiance to comply with wishes of politicians can be swiftly countered with tax controls

that, using unclear law, will easily bring anybody to their knees with fines and penalties. This is the story of Mikhail Khodorkovsky, who was swiftly turned from the wealthiest man in Russia to an inmate in a penal camp as soon as he challenged President Vladimir Putin.

BUDGET ALWAYS WANTS MORE

The observation of government revenues shows that the taxes that deliver positive or even neutral effect to the economy are not sufficient to provide tax revenues to fit the spending bill. Therefore, the state must decide to reach for more harmful ways to tax citizens. The three most popular ones are consumption, labor, and capital. Here, let us discuss the impact on the economy of the latter two.

Labor and capital are the two main inputs into the production process. The taxation on any of them leads to less production, and hence harms economic growth. However, the exact extent and severity of the harm is quite different in each case.

TAXATION OF LABOR

In the case of labor, in principle, every period citizens face a decision on how much to work and time use for leisure. On the other hand, companies look at their opportunities to employ people in order to create profits. Both of these forces lead to market equilibrium, where supply and demand of labor meet with the optimal price. Taxation puts a wedge between demand and supply, leaving less for workers and forcing companies to pay more. Lower wages discourage people from working, while higher costs for companies render certain positions unprofitable. Hence, these effects and the level of unemployment increases diminish the amount of production. The good news is that whenever the tax burden is decreased, the production will return to normal.

So much for theory – the practice is a little bit more troublesome. The said wedge eliminates jobs with the smallest value added – usually performed by the least skilled workers. Elimination of their jobs leads to an increase in poverty and lengthy unemployment. As low skilled workers are eliminated from the job market for prolonged time period, their (already low) human capital degrades, and the probability of returning to job market is falling.

Reversing such effects requires more effort than elimination of labor taxes. One of the biggest challenges of social workers is making their clients go back to work and the cost of success may be tremendous. Moreover, such damage is lasting, as the lack of work of parents is often passed on to future generations.

In order to counter this problem, the government often introduces progressive tax schemes, where the poor pay less, not only in absolute terms, but also as a proportion of their wages. This alleviates the problem to a degree, but soon introduces a new one. Workers mostly in high added-value industries achieve higher income. High taxes

decrease incentives to work there. Even worse, it discourages workers from obtaining valuable skills, which is harmful for human capital in the nation at large. It also often encourages the most skilled employees to emigrate, thus creating a brain drain, at the same time burdening the state with the cost of educating these workers.

Such problems are clearly visible in developing countries that are integrated into global economy. This is why the intended increase of social security burden for specialists in Poland was postponed three times already in response to a high level of resistance from businesses, which were afraid of losing skilled workers in IT which are already a scarcity.

TAXATION OF CAPITAL AND INEQUALITIES

Taxation of capital has much better press. Since the revelations of Thomas Piketty¹³ were released, there is a widespread belief that inequalities are rising, and that decreasing them would be good for society. This is somewhat of a bold statement, as optimal inequality is clearly not the minimal one (not the maximal one either), hence decreasing it is not always a good move.

According to the initial findings of Piketty (now heavily contested even by the author himself), the rise of inequality occurs because the return on capital is, in a long run, higher than the return on labor (famous $r > g$). Taxation of capital and larger redistribution is supposed to fix this problem.

The taxation of capital takes many forms. The most popular one is taxation of various capital gains – be it corporate income tax or interest/dividend income tax. Tax rates tend

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¹³ Piketty, T. (2014) *Capital in the 21st Century*, Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

to be lower than in the case of labor income tax, but capital gains are often taxed twice.

Another option is taxing the stock of capital. The most common explicit form in this respect is the real estate tax. We hear more and more frequently about the taxation of wealth above certain limit, which is proposed both by left wing parties (including democrats in the US, like Bernie Sanders – a likely presidential nominee for the 2020 election) and billionaires, like Bill Gates and Warren Buffett¹⁴.

Even a more common implicit form is inflation. The state is usually quite heavily in debt, mostly issued with fixed interest. Inflation decreases the real value of the debt and the cost of servicing it, hence indirectly contributing to the budget. This tax, however, impacts the poor the most since they keep the largest portion of their assets in cash. Therefore, this type of a capital tax is clearly not helping to diminish inequalities.

Finally, the stock of capital is quite often taxed when changing hands, mostly through inheritance or donations. Such a tax is probably the most problematic. The taxes mentioned earlier are in most cases paid using current capital gains as income tax is just a fraction of those gains. Stock taxes are mostly set at a level that may be normally sustained using the current gains – otherwise holding capital would not be sustainable, and the general trend would lead to wide nationalization of assets.

However, in the case of inheritance tax, usually a large one-time payment that often forces the beneficiary to liquidate some assets is required. If inheritance takes the form of liquid assets (like cash, liquid bonds, or shares of public companies), then it is not

a problem. Nevertheless, if it comes in the form of a private company or real estate, then the problem is much larger. In many cases, accepting such an inheritance requires liquidation of certain assets that disrupt operations of the companies, which may significantly weaken or even liquidate them. Trying to a differentiate tax rate depending on a type of inheritance usually creates loopholes allowing the avoidance of such taxes altogether.

INVESTMENT MISSED IS BENEFIT LOST FOREVER

Even putting these disruptive effects aside, the consequences of taxation of capital on the economy are more complex than is for the case of labor. In the short run, my decision to work less due to taxes can be easily reversed if taxes fall. The negative results are only visible in the longer run due to the fall in human capital. This is not the case when we talk about capital that is subject to depreciation and accumulation. The meaning of depreciation is that if we do not keep investing, a certain amount of capital is used up every year, and with it, our ability to produce. Accumulation means that investment stacks and our current stock of capital is a sum of all investments from the past.



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¹⁴ <https://www.cnbc.com/2019/02/25/warren-buffett-and-bill-gates-the-rich-should-pay-higher-taxes.html>

Oftentimes, how much people are willing to invest is paired with how much they plan to consume. If we are discouraged from investment, we spend. Reduction of taxes will bring our investment rate back up, but the years when we have been investing less will forever be reflected in the stock of capital. Put differently: since labor is used up in one production cycle, its temporary shortage has a temporary effect, while capital lasts longer and its shortage is felt much longer.

Imagine we are building one factory per year. If in one year we do not have enough workers for one of the factories, we will lose its yearly output. It is troublesome, but as soon as we have more workers, this is just a one-time event, and normal production will resume – the loss is limited to one-year production. On the other hand if, due to taxes, we will not build a factory in a given year, we will lose output from this factory forever. Even if we return to normal investment policies the following year, still, unlike in the previous case, the total production will be lower than it could have been, given the disruption never happened as the factory from the fatal year will be forfeited forever. To make up for it, we would have to invest more than usual.

This observation is especially important for the countries that have low stock of capital and want to develop faster. It is potentially slightly less important for well-developed states. However, implementation of this quite simple economic principle faces serious political problems. Labor is the means of obtaining income by most of the people, while income from capital is a significant factor only for top bracket of wealth.

Large discrepancy in taxation levels of labor and capital creates tensions and may lead to a rise in power of the forces calling for larger redistribution. This, in turn, often leads to escape of the capital to countries



THE TAXATION OF CAPITAL TAKES MANY FORMS

with lower taxation and employment of aggressive tax avoidance schemes by the wealthiest persons. At the same time, people at the early stages of capital accumulation are heavily penalized by these taxes, as they cannot afford tax optimization yet. Adding insult to injury, such taxation schemes do not only decrease inequalities, but also decrease social mobility and remove motivation for innovation and hard work.

BEST WAY FORWARD: RECOMMENDATIONS

In this light, the best practices of taxation arising from economic theory are quite obvious. Firstly, as much as possible should be raised from Pigovan taxes, which alleviate problems of free market inefficiencies in certain situations. They should be set up in such a way that people behaved as if the conditions for effective asset allocation were met. This is, however, not an easy feat, since setting tax rates and related mechanisms are not obvious. Centralized attempts at offsetting market imperfections suffer from the same pitfalls like any central planning, as described by Hayek¹⁵: it is impossible to gather all necessary, accurate, and up to date information in the hands of a central planner.

¹⁵ F. A. Hayek (1948), *Individualism and Economic Order*, Chicago: University of Chicago Press, pp. 86-87.

Aside from the Pigovan taxes, taxes shall have as limited an impact on people's behavior as possible, because such a mechanism distorts their decisions and harms the economy. One of the main ways to do it is to make taxes unavoidable. Again, it is not an easy task and one that requires international cooperation. Tax havens exist closer than we expect – with three major ones being Ireland, Luxembourg, and the Netherlands¹⁶.

Moreover, relying on very subjective categories of cost or profit for taxation becomes more and more problematic. Therefore, certain new solutions rely on more objective categories – such as revenue – to be used as a tax base. Of course, this idea has its own problems¹⁷, but compared to corporate income tax (that is paid by multinational corporations only if they wish to do so) and VAT tax (that is actually used to pump money out of budgets), its simplicity is refreshing. Still, tax systems worldwide are quite conservative, so we will most likely not observe any major shift towards a turnover tax anytime soon, despite its appeal. What we may observe, though, is its implementation in specific cases – as is the case of the digital tax.

Tax systems should take advantage of digitization and AI. Such moves are increasing in number – e.g. with Standard Audit File for Tax (ASF-T), which is currently implemented in Portugal, Luxembourg, France, Austria, Poland, Lithuania, and Norway. Such files allow for a quick analysis of complicated data using standardized tools, or even make it possible to apply machine learning to detect fraud. Despite being cumbersome entrepreneurs at the start,



RELYING ON VERY SUBJECTIVE CATEGORIES OF COST OR PROFIT FOR TAXATION BECOMES MORE AND MORE PROBLEMATIC

they become standards that allow for the reduction of other transaction costs, unifying EDI standards across a given country. They also sometimes replace traditional filling methods, as is scheduled to happen in Poland in 2020.

Finally, governments need to decide how to balance the negative effect of taxation between various groups, and this is no easy decision. Shielding the poor often heavily dampens economic growth, which in turn, is needed to escape from poverty. But usually, few care about the long run.



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¹⁶ Tørsløv, T. R., Wier, L. S., and G. Zucman (2018) *The Missing Profits of Nations*, No. w24701, Cambridge: National Bureau of Economic Research.

¹⁷ More about them in this issue of *4Liberty.eu Review*.

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