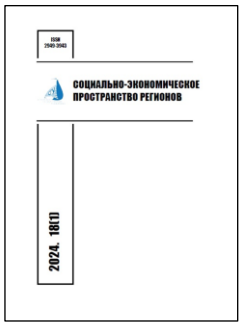
Издается в Российской Федерации с 2007 г.
Социально-экономическое пространство регионов
Все права защищены
ISSN: 2949-3943
2024. 18(1): 5-18

www.vestnik.sutr.ru



Статьи

UDC 33

Scenario Analysis of Laffer Curve (LC) for the Republic of Moldova in Context of 2020's COVID-19

Denis Vintu [a, *]

[a] Moldova Academy of Economic Studies (MAES), Republic of Moldova

Abstract

This paper aims to describe the economy of the Republic of Moldova from a neo-classical perspective, with an emphasis on the opening of the economy in a neo-Keynesian context. It was concluded that from the point of view of different indicators, the optimal model of accumulations to the state budget based on the Laffer curve is different: GDP-25 %, Inflation 30 %, Interest rate 20 %, unemployment rate 35 %, budget deficit 40 %, public debt 15% and exchange rate 44 % (maximum, which corresponds to the Nordic model of economic development).

The research methods used by the author include identifying the trend of economic development, diagnostic analysis, scientifically based economic forecasting, ARIMA technique, extrapolation as regression analysis of time series

The scientific and methodological approaches described in this work will serve as scientific support in the process of developing the scenarios of economic evolution.

Keywords: Laffer curve, GDP, inflation, interest rate, unemployment rate, budget deficit, public debt, exchange rate, extrapolation, ARIMA technique, Student test, Fisher.

1. Introduction

The purpose of this paper is to describe the Laffer Curve for a small and open economy, in accordance with the medium-term development priorities of the Republic of Moldova. Achieving the proposed goal required the drawing of some tasks, among which:

- The conceptual approach to time series, with reference to the use of the Laffer curve for the estimation of time series
- Economic analysis, GDP, inflation, interest rate, unemployment rate, budget deficit, public debt and exchange rate.
- The study of time series using the Laffer curve method, based on the rate of growth of the GDP and public debt indicators, the structure of the inflation indicators, the interest rate, the unemployment rate and the budget deficit, the degree of influence of the exchange rate indicator.
- Using the extrapolation technique
- The use of the Eviews econometric package for estimating and developing the optimal econometric model of Maxim of accumulations to the state budget.

* Corresponding author
E-mail addresses: denis.vintu@hotmail.com (D. Vintu)

As scientific novelty, the paper aims to redefine the level of accumulations at the state budget in the context of COVID-19, through analytical simplification using the scenario method. Scenario analysis is the process of estimating the expected value of budget accumulation after a given period of time, assuming specific changes in the values and priority key factors take place, such as a change in the interest rate, inflation rate etc..

There are historical precedents other than those cited by Laffer. Ferdinando Galiani wrote in Della Moneta (1751) that "It is an enormous error ... to believe that an impost always yields more revenue as it becomes heavier". He gave the example of a toll on late-night entry to a town which would be less remunerative if set unreasonably high. David Hume expressed similar arguments in his essay Of Taxes in 1756, as did fellow Scottish economist Adam Smith twenty years later.

American financial specialist Arthur Laffer fostered a ringer bend examination that plotted the connection between changes in the public authority charge rate and expense receipts, known as the Laffer Curve (Laffer, 1974). It recommends that expenses could be excessively low or excessively high to create most extreme income and both a 0 % personal duty rate and a 100 percent personal assessment rate produce $0 in receipts. Arthur Laffer contended that tax reductions twoly affect the government spending plan, both number-crunching and monetary. The math impact is prompt and each dollar in tax breaks makes an interpretation of straightforwardly to one less dollar in government income as well as diminishes the stimulative impact of government spending by precisely one dollar. The financial impact is longer-term and has a multiplier impact (Wanniski, 1974). As a tax reduction increments pay for citizens, they will spend it. The expansion popular makes more business action, prodding an expansion underway and work. The Laffer curve understands specific rationale, as duty income doesn't necessarily in every case increment at whatever point the expense rate increments. Obviously, when the duty rate is 0%, the public authority gathers no pay. In any case, envision what is happening where the public authority gathers 100 percent charge income. However all income will then be transmit to the public authority, there is no motivation for laborers to be utilized. For this situation, however the rate is most noteworthy (for example further along the x-pivot), complete income real falls as shown by the lessening piece of the bend. Thusly, however it might feel outlandish, charge income is most frequently not augmented when duty rates are most noteworthy because of special conditions. The Laffer Bend's hypothesis is that it is more proficient and generally great for an administration to set a rate somewhere close to 0 % and 100 percent. However this might appear to be oversimplified, finding the specific place where all out income is amplified is dependent upon incredible political discussion. However the graphical portrayal above shows it some place in the center, the genuine ideal rate might be slanted one course or the other. Furthermore, various conditions for various nations will yield various results.

Arthur Laffer introduced his thoughts in 1974 to staff individuals from President Gerald Passage's organization. At that point, most accepted that an expansion in charge rates would increment charge income. Laffer countered that taking additional cash from a business as expenses, the less cash it will actually want to contribute and a business will track down ways of shielding its capital from tax collection or to move all or a piece of its tasks abroad. At the point when laborers see a more noteworthy part of their checks taken for tax collection, they lose the motivation to work harder. Laffer contended that this implies less complete income as duty rates rise and that the financial impacts of diminishing motivators to work and contribute by raising expense rates would harm an economy. Laffer's discoveries impacted President Ronald Reagan's financial arrangement known as Reaganomics, in view of supply-side and stream down financial matters, bringing about one of the greatest tax reductions ever. In any case, during his time in office, yearly national government current assessment receipts actually developed. In 1980, complete Government charge income was $517 billion; in 1988, absolute Administrative assessment income had almost multiplied to $909 billion.

2. Materials and methods

As method firstly we used extrapolation. It is assumed that the economy is subject to a budget constraint and a maximum allowed in terms of accumulations to the state budget. Each value that passes the maximum point would generate a decrease in income accumulation, encouraging the perpetuation of the phenomenon of the underground black economy.

The Laffer Curve is a relationship which suggests there is an optimum tax rate which maximises total tax revenue. For extrapolation method we used Monte Carlo simulation and Agent-Based Modeling.

The Laffer Curve is a useful idea to bring into analysis and evaluation when looking at the impact of tax changes on government finances. Whilst plausible, there is limited empirical evidence that an optimum tax rate for maximising tax revenue actually exists

A second method we used, is about Laffer Curve evaluation using Monte Carlo simulation. We used the Monte Carlo simulation, based on economic policy scenarios based on the agent based modeling. I answered the following question based on the income declarations of the citizens of the Republic of Moldova for the period 2010-2020.

Why might total tax revenues fall if the tax rate increases?

- Increased rates of tax avoidance – greater incentive to seek out tax relief, make max use of tax allowances
- Greater incentive to evade taxes (illegal) – i.e. non–declaration of income and wealth
- Possible disincentive effects in the labour market – depending on which taxes have been increased
- Possible "brain drain" effects – loss of highly skilled, high income taxpayers

The evaluation of the Laffer curve takes into account the optimistic and pessimistic scenario of the policy of accumulations at the state budget.

Evaluating the Laffer Curve

1. Supporters of the Laffer Curve are often those pushing for lower tax rates on higher income earners.
2. Lower top rate taxes might increase income inequality.
3. Little strong evidence that top rate income tax is a major barrier to inward migration of skilled labour.
4. Many people are on fixed hours/zero hours contracts – so tax rates have little bearing on work incentives.
5. Tax rates not the only factor affecting work incentives – we must also consider the impact of the benefits system.
6. For some people, tax cuts will cause them to take more leisure time instead of work – a backward bending labour supply curve effect – especially at higher wages/earnings.
7. There is a solid Keynesian explanation for some aspects of the Laffer Curve – cuts in direct and indirect taxes increase real disposable income and therefore lead to higher consumer spending and aggregate demand.

3. Literature review

The Laffer curve has been used over the years, especially in specialized literature speculating on the phenomenon of fiscal federalism, especially with regard to the economies of the Scandinavian countries that constitute the Nordic model of development. In Denmark, in the first decade of the 21st century, values of 44 % were recorded in terms of accumulations to the state budget, followed by Sweden 38 % and Norway 41 %. The foundation by which the economies of these countries are guided emerges from the control of the black economy through the VAT taxation channels and the progressive one generated on various categories of the population.

Utilization of the Laffer Curve in U.S. Financial aspects and Political Talk Government officials intensely banter the most ideal way to change the compelling expense rate. Conservatives will quite often incline towards lower corporate and high-worker charges with the contention that these gatherings make occupations for the less rich. They frequently incline towards shedding public arrangement for low-pay people, including limiting or killing tax reductions or rates for the most minimal workers. Leftists will generally incline towards rearranging abundance from high-workers to low-workers. Regardless, each party endeavors to arrive at top proficiency along the Laffer Bend, however they utilize altogether different techniques. This is finished by expanding charge rates for higher assessment sections and laying out tax reductions for lower charge sections. Despite which approaches win, each side of the path is endeavoring to do their thought process is best for their country. Notwithstanding, each have an alternate methodology with respect to the Laffer Bend. Conservatives most frequently accept legislatures ought to have negligible obstruction with business, consequently their ideal Laffer Bend frequently has a more modest pinnacle. Leftists most frequently accept states have a significant impact in producing programs that advantage low-workers, in this way their ideal Laffer Bend is higher. Reactions of the Laffer Bend.

The Single Expense Rate. The duty framework is complicated and raising the pace of one expense can effect or counterbalance the advantages or negatives of decreasing another. The Laffer bend excessively improves on the connection between charges by dispensing a shortsighted single expense rate.

The T* or Ideal Assessment Rate Changes. The Laffer Bend sets the ideal assessment rate anyplace somewhere in the range of 0 and 100. Notwithstanding, this rate might change because of monetary conditions.

Tax reductions Expected for the Rich. The Laffer bend accepts a precise T* for amplifying government income and requires tax breaks for the rich.

Presumptions of People and Organizations. The Laffer bend accepts that higher charges bring about lower incomes since companies might leave and representatives will work less hours. Notwithstanding, representatives might work harder or longer for profession movement. Organizations don't depend exclusively on the duty rate for navigation yet in addition search for a talented labor force and foundation, the two of which offset an expanded expense rate. What Can Forestall Tax reductions from Animating Financial Development? Tax reductions and their impact on the economy rely upon the timetable for development, accessibility of an underground economy, accessibility of assessment escape clauses, and the economy's efficiency level. What Is Stream Down Financial aspects? Arthur Laffer's thought that tax reductions could support development and expense income was immediately named "stream down." Both President Herbert Hoover's upgrade endeavors during the Economic crisis of the early 20s and President Ronald Reagan's utilization of annual tax reductions were portrayed as "stream down," where tax cuts and advantages for companies and the well off will stream down to people and lift the economy. What Is Deficient in the Laffer Bend? Genuine numbers are absent from the bend, so the real recommended charge rates and the rate expansion in income produced are missing, passing on policymakers to figure which rates work and backing Laffer's hypothesis. The Primary concern The Laffer Bend shows the connection between charge rates and expense income gathered by states and is frequently used to represent the contention that reducing government expenditure rates can bring about expanded all out charge income. Arthur Laffer guaranteed that tax reductions significantly affect the government spending plan, notwithstanding, the bend expects both a solitary duty rate and the way of behaving of organizations and people.

4. Results

4.1. The Model

We assume a standard Laffer Curve (LC), with adaptive-structural rational expectations.

We consider a Laffer model that is characterized by the maximum point of accumulations in the state budget coupled with a budget deficit that must not exceed the value of 3 %.

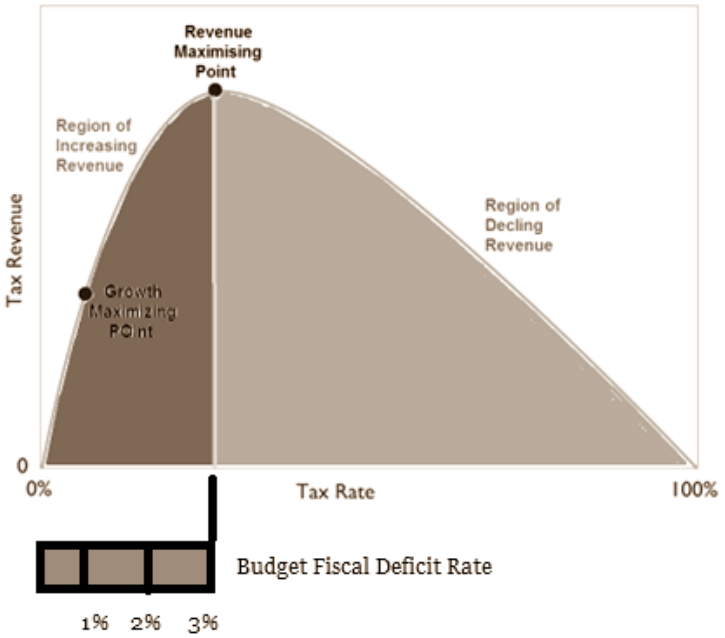


Fig. 1. Classical Laffer Curve and Budget Fiscal Deficit; Source: Author’s calculation

The Laffer Curve concept infers that a tax rate cut could lead to an increase in tax revenue, or a decrease in tax revenue, depending whether you have already passed the 'optimal tax rate' (whatever % that may be)

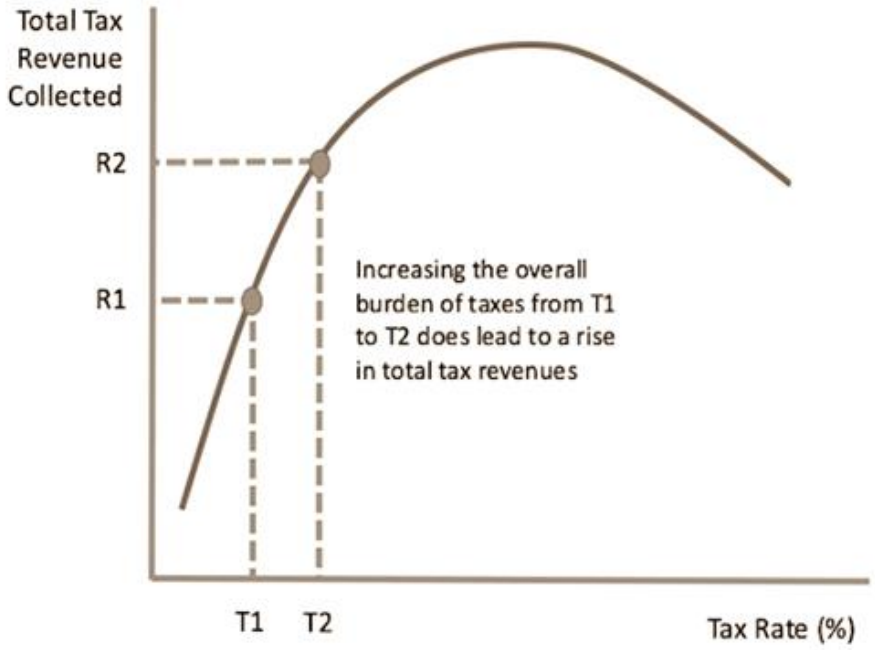


Fig. 1. Classical Laffer Curve and Increasing of taxes
Source: Fiscal Policy

Tax rate T3 might be considered optimal if the objective is to maximise total tax revenues

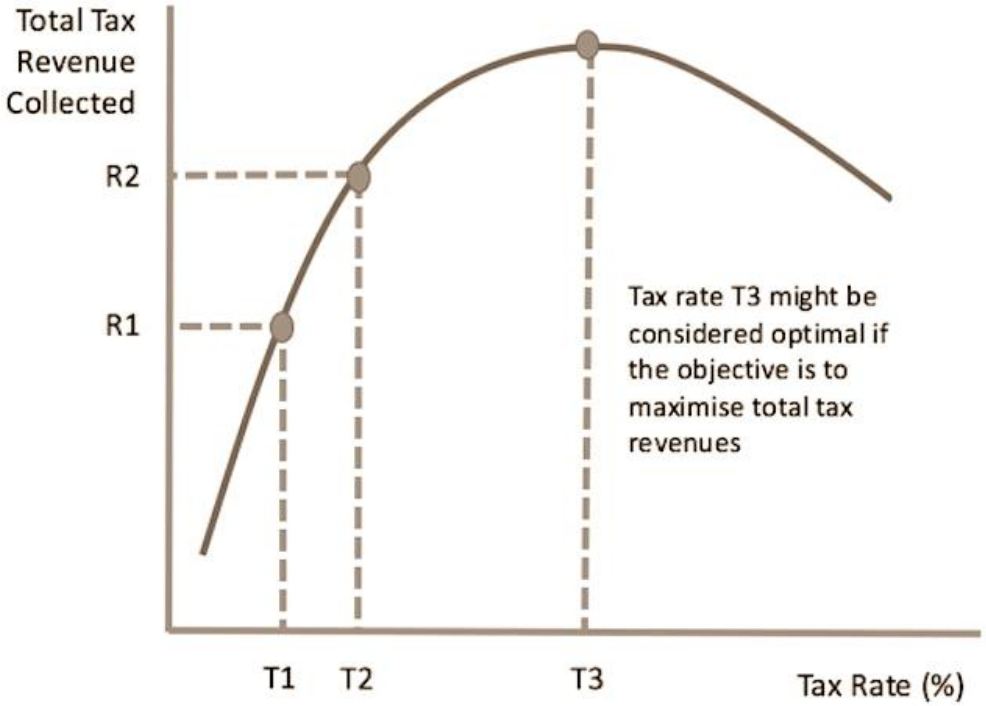


Fig. 2. Classical Laffer Curve and optimal taxation
Source: Fiscal Policy

Under certain circumstances, lifting the tax rate to T4 might lead to a reduction in tax revenues.

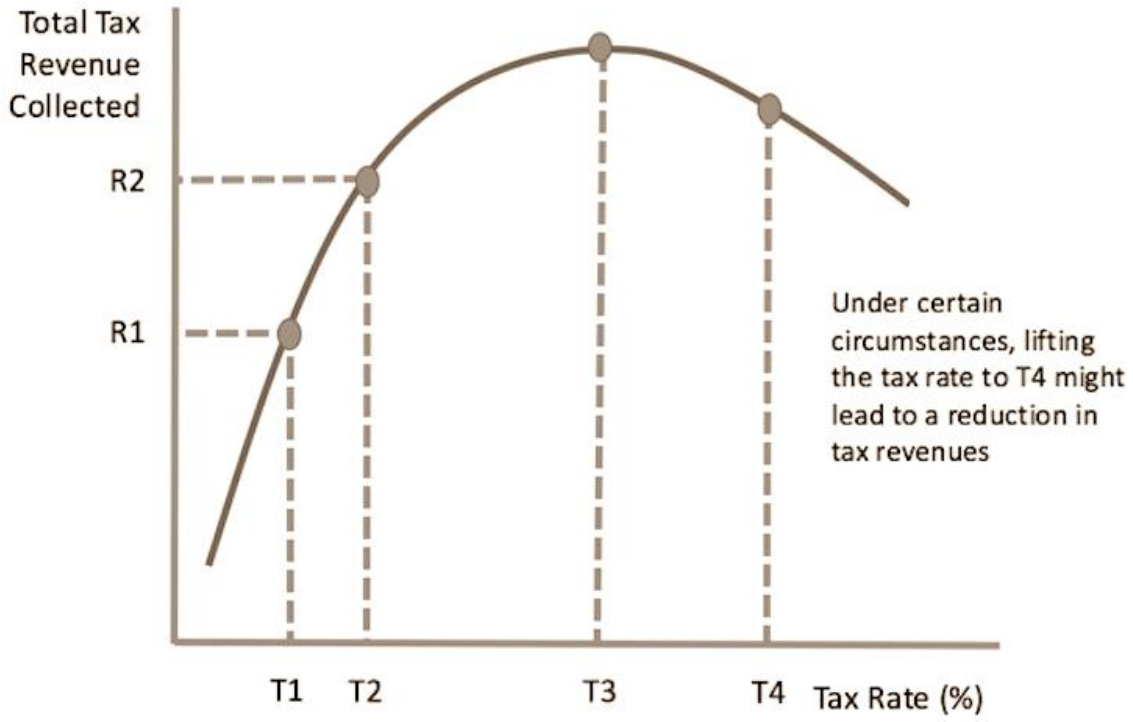


Fig. 3. Classical Laffer Curve and suboptimal taxation
Source: Fiscal Policy

4.2. The Dynamics of the Model

Scenario I: Output impact on State Budget Accumulation (25 % of GDP)

Economic growth represents an aggregate indicator that takes into account the production level of an economy. Even if it is not a qualitative value, like economic development, it helps us to understand the degree of development of an economy, by branches of activity. We proposed to redefine production from the point of view of the Laffer whore, which is an illustrative point of the accumulations in the state budget. Of course, economic growth influences accumulations through different transmission channels. We considered 14 branches of the gross domestic product, data taken into consideration in the interval 1995–2024. I showed that there are divergences in the understanding of the calendar series simulated by the Eviews 8 program. I noticed that the best solution for the Laffer Curve would be at the level of 25 % – accumulations to the state budget from the GDP. From the series described in the figure below, it can be seen that the industry branch best matches the initial model described in the previous section. We can say that the industry branch is characterized by the presence of a sustainable economic growth, around 3-5 % annually and which could bring the Republic of Moldova back among the countries with positive economic growth. The second branch that fits the basic model is the communication series. A branch that is characterized by an annual growth of 10-14 %, is the one that promises a boom in the context of the aggregate GDP indicator. In the Republic of Moldova, economic growth is described as moderate, with values between 3-5 % annually.

The Environment and Economic Growth

Normal assets, contamination, and other ecological contemplations are missing from the Solow model. Yet, essentially since Malthus (1798) suggested his exemplary viewpoint, many individuals have accepted that these contemplations are basic to the opportunities for long-run financial development. For instance, the measures of oil and other regular assets on earth are fixed. This could imply that any endeavor to leave on a way of ceaselessly rising result will ultimately exhaust those assets, and must thusly fizzle. Likewise, the decent stock of land might turn into a limiting requirement on our capacity to deliver. Or on the other hand steadily expanding result might create a consistently expanding supply of contamination that will stop development. This part resolves the issue of what natural constraints mean for long-run development. In pondering this issue, it is vital to recognize ecological variables for which there are clear cut property privileges eminently regular assets and land and those for which there are not strikingly contamination free air and water. The presence of property freedoms for an ecological decent has

two significant ramifications. The first is that markets give significant signs concerning how the great ought to be utilized. Assume, for instance, that the most ideal that anyone could hope to find proof shows that the restricted stockpile of oil will be a significant impediment on our capacity to create from here on out. This implies that oil will order an exorbitant cost from now on. Yet, this thus infers that the proprietors of oil would rather not sell their oil efficiently today. Consequently oil orders an exorbitant cost today, thus current clients have a motivation to preserve. So, proof that the proper measure of oil is probably going to restrict our capacity to create in the future wouldn't be justification for government mediation. Such a circumstance, however sad, would be tended to by the market. The second ramifications of the presence of property privileges for an ecological decent is that we can utilize the great's cost to get proof about its significance underway. For instance, since proof that oil will be a significant imperative on future creation would make it have an exorbitant cost today, financial specialists can utilize the ongoing cost to gather what the most ideal that anyone could hope to find proof proposes about oil's significance; they don't have to freely evaluate that proof. With ecological products for which there are no property privileges, the utilization of a decent has externalities. For instance, firms can contaminate without remunerating individuals they hurt. In this way the case for government mediation is a lot more grounded. Furthermore, there is no market cost to give a convenient synopsis of the proof concerning the great's significance. Thus, financial experts intrigued by natural issues should endeavor to survey that proof themselves. We will start by considering ecological products that are exchanged business sectors. We will dissect both a straightforward gauge case and a significant entanglement to the pattern. We will then, at that point, go to natural products for which there is no well-working business sector.

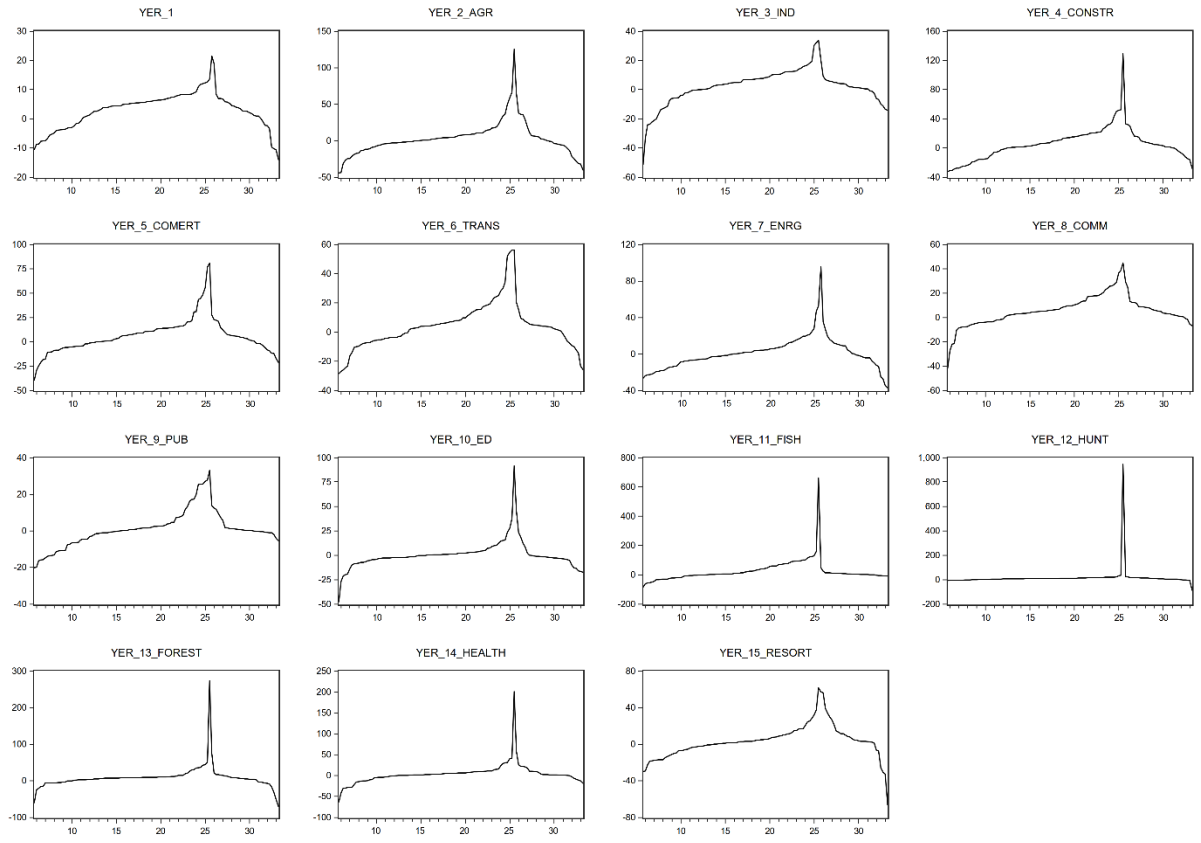


Fig. 2. Laffer Curve and State Budget Accumulation (Max 25% OF GDP), x-axes; based on GDP AR-MA processes Autoregressive and Moving Average
Source: Author's calculation in Eviews 8

Scenario II: Inflation impact on State Budget Accumulation (30 % of GDP)

Inflation is a monetary phenomenon but not always a monetary indicator. In the Republic of Moldova, the inflation rate is a social index, which is used in the evaluation of the pension and social insurance system. We took into consideration a scenario of 7 time periods, from the

independence of the state in 1991 to the present, i.e. 2024. It can be seen that the time series function for the years 2003–2008 best fits the Laffer curve model. The division into different time intervals allows us to elucidate the phenomenon of disinflation, which has increased in the last 10 years, but at the same time to illustrate a section dedicated to the inflationary spiral. Inflation in the Republic of Moldova is between 5-10 %, well above the western countries' limit of 2-4 %. This is largely due to the dependence on imports and renewable resources, including energy, which the country acquires from abroad. The ever-increasing openness of the economy in recent years, especially compared to the countries of the European Union, also puts inflationary pressures in context. Even if the Republic of Moldova is a relatively small economy, the degree of vulnerability to the outside world is quite high.

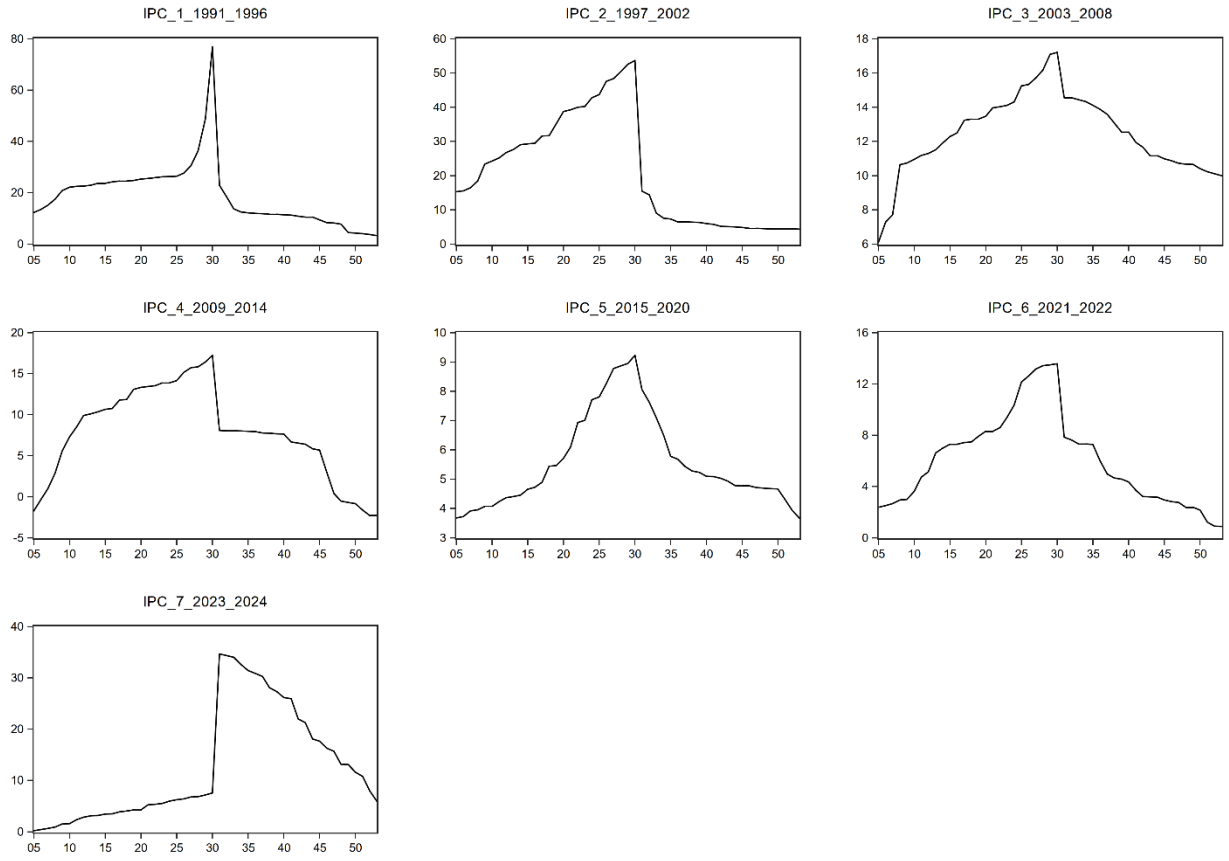


Fig. 3. Laffer Curve and State Budget Accumulation (Max 30 % OF GDP), x-axes; based on Consumer Price Index divided in different intervals
Source: Author's calculation in Eviews 8

Scenario III: Interest rate impact on State Budget Accumulation (20 % of GDP)

The interest rate is a monetary indicator that takes into account the investment level of the economy. A low rate can lead to economic stimulation, if the inflation level is low. Banca Nationale regularly publishes the main interbank interest rates, which are used by the banking system. In the Republic of Moldova, the banking system consists of 11 banks, and the degree of banking development is one represented by the oligopoly phenomenon, where a relatively tight group of companies controls most of the shares. From the graph below it can be seen that compared to the basic model of the Laffer curve, the interest rates are characterized by a relatively high discontinuity, which explains the lack of competitive phenomenon and a low degree of trust of the population in the banking phenomenon.

Scenario IV: Unemployment rate impact on State Budget Accumulation (35 % of GDP)

Unemployment is an indicator that describes the degree of employment of the labor force. We considered 4 levels of education in the analysis, such as secondary, high school, university and lifelong learning. If we take into account the comparison with the basic Laffer model, levels 2

and 3 fit best. In the Republic of Moldova, unemployment is relatively low, representing approximately 4 %.

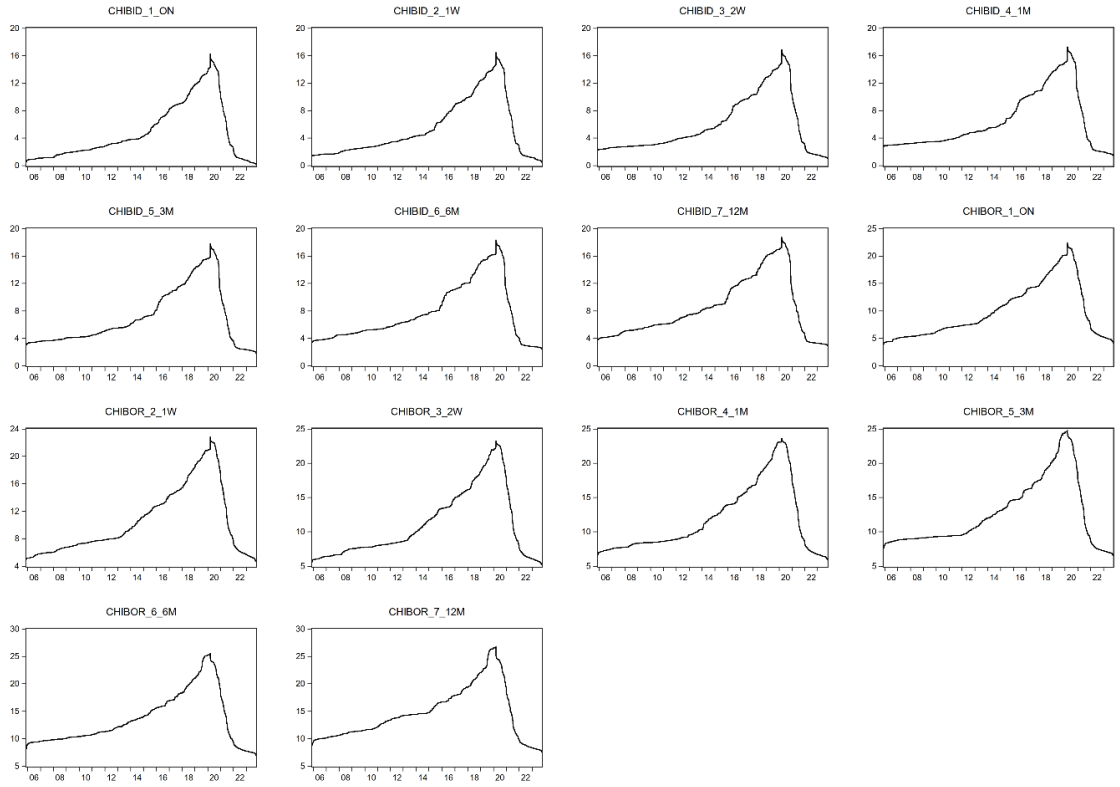


Fig. 4. Laffer Curve and State Budget Accumulation (Max 20 % of GDP), x-axes; based on Inter-banking interest rate, y-axes; Source: Author's calculation in Eviews 8

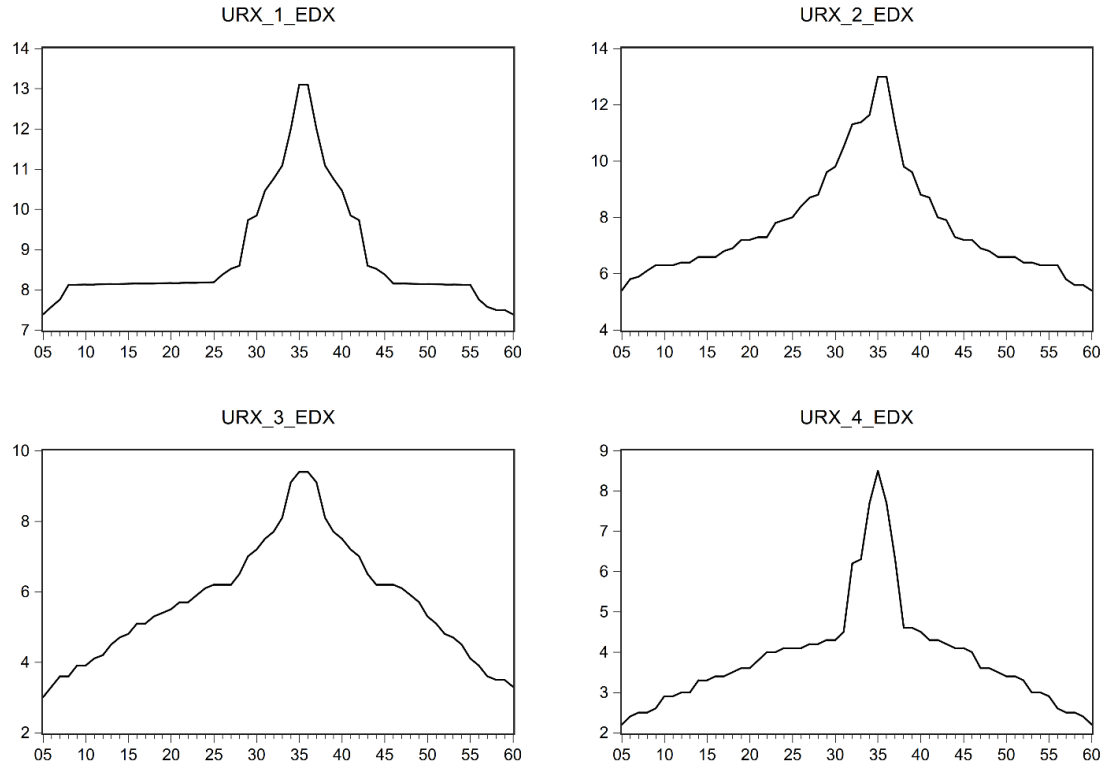


Fig. 5. Laffer Curve and State Budget Accumulation (Max 35 % of GDP), x-axes; based on Unemployment Rate, y-axes at different level of education: secondary (1); high school (2), university (3) and life-long education (4)
Source: Author's calculation in Eviews 8

Scenario V-A: Budget Fiscal Deficit impact on State Budget Accumulation (40 % of GDP)

The budget deficit is approved by the government and voted in the parliament. In the Republic of Moldova, the budget deficit is around 5 % annually.

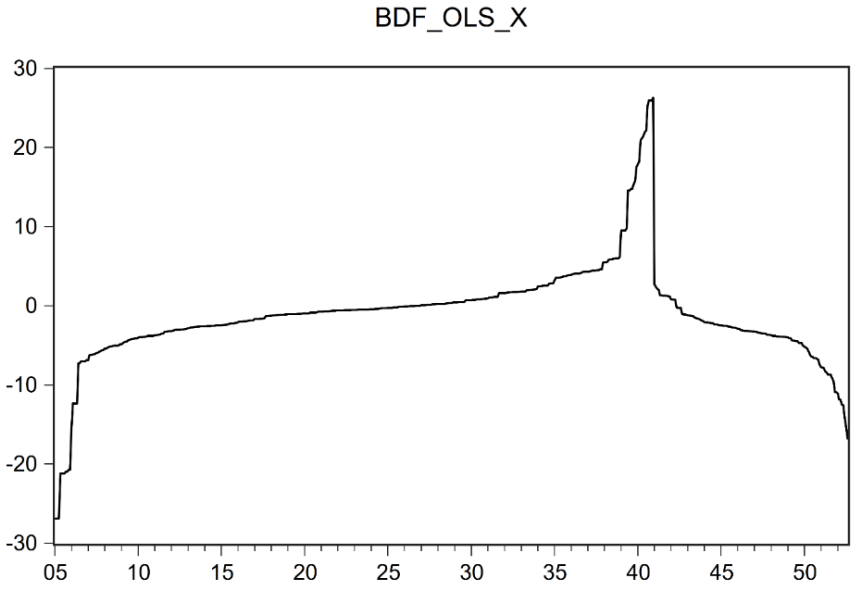


Fig. 6. Laffer Curve and State Budget Accumulation (Max 40 % of GDP), x-axes; based on method Ordinary Least Square of Budget Fiscal Deficit Rate, y-axes
Source: Author's calculation in Eviews 8

Scenario V-B: Public Debt impact on State Budget Accumulation (15 % of GDP)

Public debt is a relatively new indicator, established based on the Maastricht criteria, it must not exceed the value of 60 % of GDP. An increase in debt is largely due to the budget deficit that accumulates over the years, usually established at the end of the year.

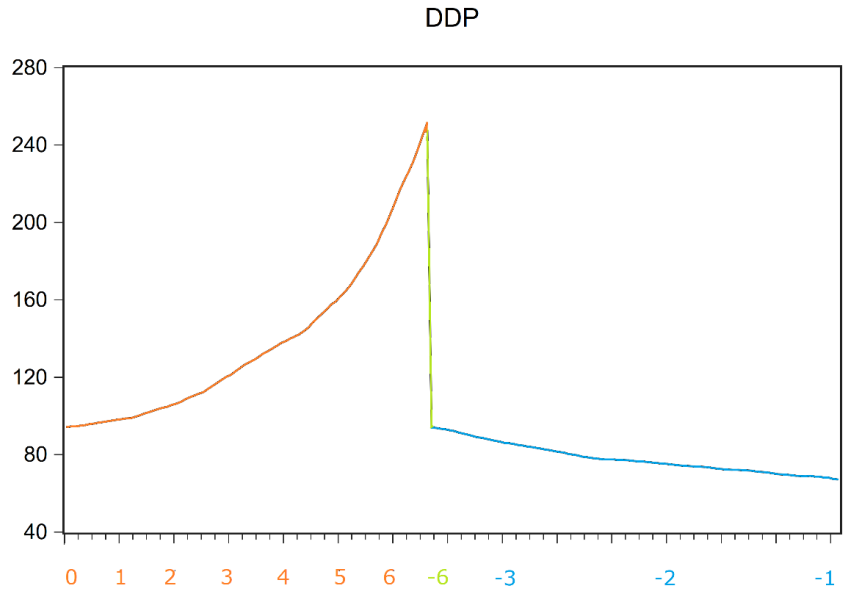


Fig. 7. Public Debt and State Budget Accumulation (Max 15 % of GDP), x-axes; based on Budget Fiscal Deficit Rate, y-axes
Source: Author's calculation in Eviews 8

Scenario VI: Exchange Rate impact on State Budget Accumulation (44 % of GDP)

The foreign exchange rate, which represents the currency value of the national currency, records discrepancies when compared with the basic model of the Laffer Curve. Based on a Monte Carlo simulation, medium-term fluctuation values are established, usually 1-3 years.

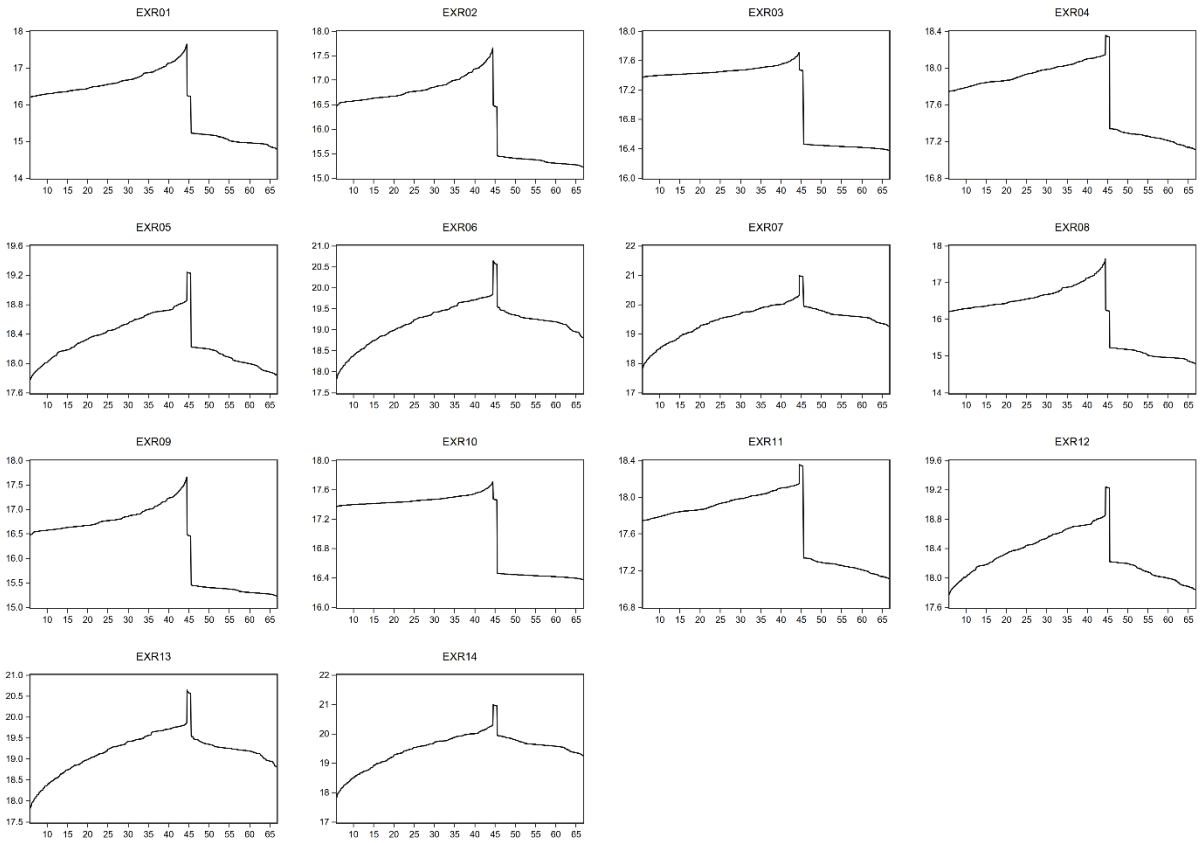


Fig. 8. Laffer Curve and State Budget Accumulation (Max 44 % of GDP), x-axes; based on Monte Carlo Quantiles of Exchange Rate, y-axes
Source: Author's calculation in Eviews 8

Special case: The Possibility of Dynamic Inefficiency

The one significant contrast between the fair development ways of the Precious stone and Ramsey Cass Koopmans models includes government assistance. We saw that the harmony of the Ramsey Cass Koopmans model augments the government assistance of the delegate family. In the Jewel model, people brought into the world at various times achieve various degrees of utility, thus the proper method for assessing social government assistance isn't clear. In the event that we determine government assistance as some weighted amount of the utilities of various ages, there is not an obvious explanation to anticipate that the decentralized harmony should boost government assistance, since the loads we relegate to the various ages are erratic. An insignificant measure for proficiency, in any case, is that the harmony be Pareto effective. Incidentally, the balance of the Precious stone model need not fulfill even this norm. Specifically, the capital stock on the fair development way of the Precious stone model might surpass the brilliant rule level, so an extremely durable expansion in utilization is conceivable.

The following results can be listed as:

- The Laffer Curve is a tax theory suggesting an inverted U-shaped relationship between tax rates and the amount of tax revenue collected by governments.
- The ideal, or optimal, rate of taxation for an economy is the one that falls right at the top of the inverted U.
- The theory argues if tax rates are too high they will discourage taxed activities, like consumption and investment, while rates that are too low fail to generate sufficient revenue.
- The Laffer curve and other theories of taxation are hotly debated topics among policymakers and have a profound impact on the wealth of the working population.
- The optimal scenario for budget accumulations/state intervention in the economy is the one that took into account the currency exchange calculated by the Monte Carlo method (44 %, Nordic Model)

- Suboptimal scenario for state budget accumulations/state intervention in the economy is the one that takes into account the interest rate calculated based on the inflation rate. (20 %, Southern Model)

5. Conclusion

The paper determines monetary cutoff points, comprehended as pinnacles of the Laffer Curve, in a model with sectorial priority: gross domestic product, inflation rate, interest rate, unemployment rate, budget fiscal deficit and public debt, exchange rate. For this reason, the model is reached out to remember a financial and money related area for the type of capital creation. The paper finds that fiscal limits for labour within education level and budget accumulation in the benchmark model are relatively high (44 %, exchange rate base model) compared to actual (20 %, interest rate base model). No limit is found for the consumption tax, for which tax revenues are monotonically increasing with the tax rate (Romer, 2010). Results change with higher substitutability between market and home production, i.e. in economies where the official and the informal sector are closer substitutes (Stockman, 2023).

Higher substitutability between the official and the informal sector flattens the Laffer curves for labour and corporate taxation (Frankel, 2022).In the most extreme case considered here, with high substitutability between market and home goods in consumption and constant return to scale in home production, the revenue-maximising labour tax corresponds practically to the actual EU-average implicit labour tax rate (Moore, 2020). This case introduces also a revenue limit for the consumption tax. Total tax receipts are practically flat for consumption tax rates of 40 % and above, owing to the crowding out of official sector wage and corporate income and associated tax revenues.

Although higher tax rates increase tax revenues in the benchmark model, the economic costs of increasing distortionary taxation are substantial. Increasing total tax revenue by 5 %, which is the maximum fiscal space for labour and budget accumulatuon reduces total output by 12 % in the case of the labour tax increase, 9 % in the case of the corporate tax increase, and 1 % in the case of an equivalent increase in the consumption tax (Maugham, 2020). The result also illustrates that among the three alternative taxes, the consumption tax is the least distortive one. Taken at face value, the results suggest that the capacity to create additional tax revenue does not appear to be the first binding constraint on using tax increases for fiscal consolidation, because not many countries are likely to be located on the downward sloping part of the Laffer curve (Laffer, 1974). This is particularly true with regard to the consumption tax.

On the other hand, the model misses important aspects of tax competition, such as portfolio and profit shifting across jurisdictions. Neither does the model incorporate sources of domestic tax avoidance or evasion other than migration to the shadow economy (Expert-Grup, 2020).

6. Acknowledgements

This article is a result of the grant (general budgetary fund) “ASEM doctoral grants for the period 2019–2023” – contract number: ASEM-2019/11/05/NR/89/ST; financing from the state budget during the doctoral studies, but also value-added as an post-planned activity I carried out as a scientific researcher at the National Institute for Economic Research (NIER) in Chisinau, Moldova – between May 2019 and December 2019.

References

Akerlof et al., 1996 – Akerlof, G.A., Dickens, W.T., Perry, G.L. (1996). ‘The Macroeconomics of Low Inflation. *Brookings Papers on Economic Activity*. 1: 1-76.

Allais, 1947 – *Allais, M.* (1947). Économie et Intérêt. Paris: Impremerie Nationale.

Andersen, Jordan, 1968 – *Andersen, L.C., Jordan. J.L.* (1968). Monetary and fiscal actions: A test of their relative importance in economic stabilization. *Federal Reserve Bank of St. Louis Review*. 50: 11-24.

Ball et al., 1988 – *Ball, L., Gregory Mankiw, N., Romer, D.* (1988). The New Keynesian Economics and the Output-Inflation Tradeoff. *Brookings Papers on Economic Activity*. 1: 1-65.

Barro, Xavier Sala-i-Martin, 2003 – *Barro, R.J., Xavier, Sala-i-Martin* (2003). Economic Growth, 2d ed. Cambridge, MA: MIT Press. Bean, Charles R. 1994. European Unemployment: A Survey. *Journal of Economic Literature*. 32: 573-619.

Bennett, Loayza, 2000 – *Bennett, H., Loayza, N.* (2000). Policy biases when the monetary and fiscal authorities have different objectives. *Central Bank of Chile Working Papers*. P. 66.

Bhattacharya, Kudoh, 2002 – *Bhattacharya, J., Kudoh, N.* (2002). Tight money policies and inflation revisited. *Canadian Journal of Economics*. 35(2).

Blanchard, 1985 – *Blanchard, O.J.* (1985). Debts, Deficits, and Finite Horizons. *Journal of Political Economy*. 93: 223 247.

Blinder, 1998 – *Blinder, A.S.* (1998). Asking about Prices: A New Approach to Understanding Price Stickiness. New York: Russell Sage Foundation.

Buiter, Panigirtzoglou, 1999 – *Buiter, W., Panigirtzoglou, N.* (1999). Overcoming the Zero Bound on Nominal Interest Rates with Negative Interest on Currency. Bank of England.

Clarida et al., 2000 – *Clarida, R., Galí, J., Gertler, M.* (2000). 'Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory. *Quarterly Journal of Economics*. 115: 147 180.

Cochrane, 1998 – *Cochrane, J.H.* (1998). 'What Do the VARs Mean? Measuring the Output Effects of Monetary Policy. *Journal of Monetary Economics*. 41: 277-300.

Darnaut, Kutos, 2005 – *Darnaut, N., Kutos, P.* (2005). Poland's policy mix: Fiscal or monetary leadership? *ECFIN Country Focus*. 2(1): 1-6.

Fiscal Policy – Fiscal Policy – The Laffer Curve. Economics. [Electronic resource]. URL: www.tutor2u.net

Frankel, 2022 – Frankel, J. (2022). A Lesson from the South for Fiscal Policy in the US and Other Advanced Countries. *Comparative Economic Studies*. 53 (3): 407-430.

Galí, 1992 – *Galí, J.* (1992). How Well Does the IS-LM Model Fit Postwar U.S. Data? *Quarterly Journal of Economics*. 107: 709-738.

Hughes Hallett, A., Libich, J., & Stehlik, P. (2014). Monetary and fiscal policy interaction with various degrees of commitment. Czech Journal of Economics and Finance, 64(1), 2–29.

Koopmans, 1965 – *Koopmans, T.C.* (1965). On the Concept of Optimal Economic Growth. In The Economic Approach to Development Planning. Amsterdam: Elsevier.

Kydland, Prescott, 1982 – *Kydland, F.E., Prescott, E.C.* (1982). 'Time to Build and Aggregate Fluctuations. *Econometrica*. 50 (November): 1345-1370.

Laffer, 2016 – *Laffer, A.* (2016). The Laffer Curve: Past, Present, and Future. The Heritage Foundation. Retrieved May 2, 2016.

Libich, Stehlik, 2010 – *Libich, J., Stehlik, P.* (2010). Incorporating rigidity in the timing structure of macroeconomic games. *Economic Modelling*. 27(3): 767.

Ljungqvist, Sargent, 1998 – Ljungqvist, L., Sargent, T.J. (1998). 'The European Unemployment Dilemma. *Journal of Political Economy*. 108 (June): 514-550.

Lucas, 1987 – Lucas, R.E., Jr. (1987). Models of Business Cycles. Oxford: Basil Blackwell.

Lupuşor et al., 2023 – Lupuşor, A., Fală, A., Rusu, E., Soloviova, M., Madan, S. (Expert-Grup). MEGA, ediția a XXIC-a "Relansarea economică din 2023: prognoze, riscuri și priorități de politici."

Mankiw, 1989 – *Mankiw, N.G.* (1989). Real Business Cycles: A New Keynesian Perspective. *Journal of Economic Perspectives*. 3: 79-90.

Maugham, 2020 – *Maugham, J.* (2020). How George Osborne's policies have lost the country £2.4bn in tax. *The Independent*. Retrieved September 10, 2017.

Moore, Pecoraro, 2020 – Moore, R., Pecoraro, B. (2020). Macroeconomic Implications of Modeling the Internal Revenue Code in a Heterogeneous-Agent Framework. *Economic Modelling*. 87: 72-91.

Nordhaus, 2013 – *Nordhaus, W.D.* (2013). The Climate Casino: Risk, Uncertainty, and Economics for a Warming World. New Haven, CT: Yale University Press.

North, 1981 – *North, D.C.* (1981). Structure and Change in Economic History. New York: W.W. Norton.

Romer, Romer, 2010 – Romer, C.D., Romer, D.H. (2010). The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks. *American Economic Review*. 100(3): 763-801.

Stockman, 2023 – *Stockman, D.* (2023). The Triumph of Politics: Why the Reagan Revolution Failed. PublicAffairs. P. 289. ISBN 978-1-61039-277-8.

Tobin, 1972 – *Tobin, J.* (1972). Inflation and Unemployment. *American Economic Review*. 62: 1-18.

Wyplosz, 2002 – *Wyplosz, C.* (2002). Fiscal discipline in EMU: Rules or Institutions? [interactive] Mimeo. [Electronic resource]. URL: http://www4.fe.uc.pt/jasa/m_i_2010_2011/fiscaldisciplineinemu rulesorinstitutions.pdf

УДК 33

Сценарный анализ кривой Лаффера (КЛ) для Республики Молдова в контексте распространения COVID-19 в 2020 году

Денис Винту [a, *]

[a] Молдавская экономическая академия (MAES), Республика Молдова

Аннотация. Цель данной статьи – описать экономику Республики Молдова с неоклассической точки зрения, с акцентом на открытость экономики в неокейнсианском контексте. Автором был сделан вывод, что с точки зрения различных показателей оптимальная модель отчислений в государственный бюджет, основанная на кривой Лаффера, отличается: ВВП – 25 %, инфляция – 30 %, процентная ставка – 20 %, уровень безработицы – 35 %, дефицит бюджета – 40 %, государственный долг – 15 %, обменный курс – 44 % (максимум, который соответствует скандинавской модели экономического развития).

Методы исследования, используемые автором, включают выявление тенденций экономического развития, диагностический анализ, научно обоснованное экономическое прогнозирование, метод ARIMA, экстраполяцию в виде регрессионного анализа временных рядов.

Научно-методологические подходы, описанные в данной работе, послужат научной поддержкой в процессе разработки сценариев экономической эволюции.

Ключевые слова: кривая Лаффера, ВВП, инфляция, процентная ставка, уровень безработицы, дефицит бюджета, государственный долг, обменный курс, экстраполяция, метод ARIMA, тест Стьюдента, Фишер.

* Корреспондирующий автор
Адреса электронной почты: denis.vintu@hotmail.com (Д. Винту)