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Maintaining Sustainable Public Finances: The Role of Fiscal Consolidation

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Abstract

Fiscal consolidation became a very essential process in policymakers' circles and also in academia, especially in the aftermath of the 2008 crisis and it seems that the necessity of fiscal consolidation is back with the post-COVID situation and also with the crisis caused by the war in Ukraine. In literature, fiscal consolidation processes most of the time deal with the main aim to reduce public debt, but do we need fiscal consolidation just in times when the situation with public debt tends to get out of control? Fiscal consolidation can be justified not only in high-level debt situations when there is not enough fiscal space. Some countries, although they have moderate public debt levels, still need to implement fiscal consolidation to reform, structure, and sustain public finances. Such conditions are present in Kosovo, a country in the Western Balkans 6 and this study aims to present the role of the fiscal consolidation process for the sustainability of public finances from the perspective of Kosovo. Using the VAR model and impulse response functions, this study, through analysis at disaggregated levels for major groups of revenues and expenses, will propose an accurate fiscal consolidation process for Kosovo. The study concludes that in the case of Kosovo, in time of fiscal consolidation there is room for interventions in direct taxes, indirect taxes, and transfers & subventions expenses.

Keywords: public revenues, public expense, VAR model, impulse response functions (IRF).

JEL: H21, H30, H53, H62, H68.

Introduction

Fiscal consolidation became a very essential process in policymakers' circles and also in academia, especially in the aftermath of the 2008 crisis and it seems that the necessity of fiscal consolidation is back with the post-COVID situation and also with the crisis caused by the war in Ukraine. As Bexheti (2017) pointed out, fiscal consolidation represents the ability of governments to finance public services and pay the public debt without changing the sustainability of fiscal policies of the future and at this point relies on the importance of the whole process. In literature, fiscal consolidation processes most of the time deal with the main aim to reduce public debt, but do we need fiscal consolidation just in times when the situation with public debt tends to get out of control? Fiscal consolidation can be justified not only

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in high-level debt situations when there is not enough fiscal space. Some countries, even though they have moderate public debt levels, still need to implement fiscal consolidation to reform, structure, and sustain public finances. While most of the studies on fiscal consolidation deal with the main aim to reduce public debt, there is a gap in the literature that treats fiscal consolidation from the perspective of maintaining fiscal sustainability before the situation with public debt achieves critical levels. Such conditions are present in Kosovo, a country in the Western Balkans 6 (WB6)[2], and Uvalic & Cvijanovic (2018) have highlighted this situation. According to the above-mentioned authors, fiscal consolidation in WB6 is not needed just to reduce public debt, but it is also needed to restructure public finances, especially public expenses since most of the public expenses are made for huge pension schemes. While most of the countries in WB6 have high levels of public debt, Kosovo represents a unique case in this region with moderate levels of public debt, but with an urgent need for fiscal consolidation.

According to the quarterly reports of the Ministry of Finance of Kosovo (2008-2022), it appears that indirect taxes contribute to the total revenues of Kosovo by approximately 71%, and the trend has been increasing especially in the post-pandemic period. This situation makes Kosovo and all Western Balkans Countries as well, very much dependent states on indirect taxes, a practice that causes contradiction with uniformity principles. Konxheli (2019) has explained these circumstances based on the fact that Kosovo is a state very dependent on imports and has a large negative trade balance. Regarding public expenses, in Kosovo, approximately 27% of them are spent on transfers and subventions, a category that is made of huge pension schemes, which have increased especially in recent years (Ministry of Finance of Kosovo – Quarterly Reports, 2008-2022). In the last three years only, this category has consumed more than 35% of public expenses (Ministry of Finance of Kosovo – Quarterly Reports, 2019-2022), and this situation seems to be very difficult for the future of fiscal policies. Bearing in mind that the post-pandemic period combined with the energy crisis caused by the war in Ukraine requires smart fiscal decisions, the situation in Kosovo appears to be very challenging since the inflation in July 2022 was recorded at the levels of 14.2% (Trading Economics, 2022), a situation also caused by the extensive increase of transfers of subventions in the framework of support packages implemented by the government to address post-pandemic and high prices challenges. At this point, it is important to mention that the situation in Kosovo seems to be very fragile from the perspective of fiscal sustainability, therefore the main aim of this study is to present the role of the fiscal consolidation process in the sustainability of public finances. Through a deep analysis at disaggregated levels for major groups of revenues and expenses, this study will propose an accurate fiscal consolidation process that will enable Kosovo to have a stable fiscal situation. Radoniqi & Konxheli (2020) have pointed out that the pandemic situation has changed economic trends and has led countries into a new era of economic activities, thus fiscal reforms are a must. Fiscal reforms in Kosovo must be designed in such a way that the volume and structure of public revenues would be in service of the

[2] WB6 includes: Kosovo XK, North Macedonia MK, Albania AL, Serbia SRB, Montenegro MNE, Bosnia & Herzegovina BH

fiscal convergence with the European Union. Meantime structure and volume of public expenses should be oriented to the capital investments especially for a process of energy and ecological transition although in Kosovo there exists an ever-growing need for the increase of expenses in transfers and subventions.

Based on the aim of the study, the most appropriate model to obtain results for this paper is the VAR (vector autoregressive) model. In the VAR model, all variables are endogenous and this study needs this approach because reforming fiscal policies through fiscal consolidation means that a set of variables need to be analyzed from the same viewpoint. Sims (1980) mentioned the fact that if there is a co-occurrence between a set of variables there is no need to treat them in separate groups of exogenous and endogenous variables, but all variables should be treated in the same foot to note the in-between impact of all variables. Another advantage of the VAR model is that it is used by impulse response functions (IRF) analysis to show the response and adaptation of an endogenous variable to changes in the other variables (Gujarati, 2004; Stock & Watson, 2011). Since this paper aims to show the importance of fiscal consolidation for the sustainability of public finances, it is mandatory to show those responses, because changes in one variable are not isolated from the changes to other variables.

The contribution of this study is twofold. First, the study will use a new approach to analyze fiscal consolidation, since it will show the need for fiscal consolidation although the public debt may be at moderate levels and second it will design the roadmap of fiscal consolidation to achieve and maintain fiscal sustainability using disaggregated data for revenues and expenses.

The paper is organized as follows. In the next section, it will review the existing literature on fiscal consolidation. The third section will present the methodology and data analysis, the fourth part will present discussions and the fifth part will provide conclusions.

Literature Review

Even though nowadays fiscal consolidation is considered a process with expansionary effects, back in time consolidations were considered recessionary. One of the biggest debates in the literature and between policymakers was the impact of fiscal consolidation on growth. While Keynesians supported the fact that fiscal consolidations cause recessions, Neo Keynesians empirically have argued that the impact of fiscal consolidation on the economy is expansionary even in the first years of consolidation. The first ones to find that fiscal consolidation can lead to economic growth are Giavazzi & Pagano (1990). Giavazzi & Pagano (1990) have analyzed fiscal consolidation episodes in Ireland and Denmark and their main question was: what is the effect of fiscal consolidation on the economy, contractionary or expansionary? Giavazzi & Pagano (1990), in their study, analyzed fiscal and monetary policy measures in the 80s in Denmark and Ireland, the time when public debt was very high and fiscal consolidation was considered a solution for the recovery of public finances. Bearing in mind that from Keynes' view fiscal consolidation was considered as a process with a shortage in employment and with a slowdown in business investments, the governments of Denmark and Ireland were in big dilemmas to proceed or not with a fiscal consolidation process, but it was a must (Giavazzi & Pagano 1990). Although expectations were directed toward recessions, in reality, the opposite happened. Giavazzi & Pagano (1990) explained the expansionary situation through the analysis of private consumption or as it was called in the study "the consumption puzzle". The consumption puzzle refers to the behavior of consumers after the implementation of new fiscal policies. It was explained that differences in taxes and government expenses are indicators of future changes that will have an impact on consumption too (Giavazzi & Pagano 1990). This is because people will perceive the cut of expenses as lower taxes in the future (Giavazzi & Pagano, 1990). Debates for fiscal consolidation do not end at this point. The study of Giavazzi & Pagano (1990) presents just the beginning of the studies on fiscal consolidation and its dimensions. While until the 80s fiscal consolidations were considered contractionary, the experiences of Denmark and Ireland have changed this view. The experience of the above-mentioned countries and the study of Giavazzi & Pagano (1990), oriented scholars and policymakers toward a new way of thinking and conceiving fiscal consolidation processes. After the study of Giavazzi & Pagano (1990), the debate was not built anymore on how to better manage recession caused by fiscal consolidation, but it was directed at how to make fiscal consolidation expansionary. A constant question that researchers then tried to answer was: to have a successful fiscal consolidation is it better to increase taxes or to cut expenses? There is strong evidence that fiscal consolidations based on expenses cuts are more successful than those based on tax increases (Okwuokei 2014), but at the same time, consolidations need multiple instruments to succeed (Molnar, 2013), so tax increases are not excluded either. Furthermore, the debate has become more intense since authors tend to design the best practices for countries to achieve expansionary fiscal consolidation. Rawdanovicz (2014) mentioned the fact that policymakers should bear in mind that fiscal consolidation represents a multidimensional process and choosing fiscal targets must be done rationally according to the market conditions.

Alesina & Perotti (1995) have analyzed the success of fiscal consolidation in OECD countries in a cross-country analysis and for the first time concluded that expansionary fiscal consolidations are the result of expense cuts, thus fiscal consolidations oriented through tax increases are not expansionary. These findings were then followed by McDermott & Wescott (1996), Alesina & Perotti (1997), Alesina & Ardagna (1998, 2009, 2012), Giavazzi, et al. (2000), Hagen & Strauch (2001), Hagen, et al. (2002), Ardagna (2004), Molnar (2013), Alesina et al. (2014), Alesina et al. (2019), Alesina & Mei (2020), Alesina et al. (2021), Lacalle (2021), and Barnichon et al. (2022). All above-mentioned studies share the same core as they aim to analyze expansionary fiscal consolidation, but as was mentioned earlier, through the years studies have analyzed in more specific ways elements that have an impact on the fiscal consolidation process. The above-mentioned studies during the time have used more advanced models that directed conclusions in specific categories of expenses that have a greater impact on expansionary fiscal consolidation. From the above studies, we can say that there is a consensus regarding the category of expenses that should be cut for fiscal consolidation to be successful. In the above-mentioned studies, it was argued that the greatest positive impacts in fiscal consolidations have cuts in transfers and wages, the lowest impacts have cuts in capital investments and meantime it was mentioned that health expenses and education expenses are those that are not appropriate to be cut in times of fiscal consolidations. The authors mentioned above have also argued that tax increases can weigh down economic activity since businesses and individuals may fear tax increases which can lower consumption.

On the other hand, Bertola & Drazen (1993), Sutherland (1997), Coenen et al. (2008), Bilicka et al. (2012), and Banerjee (2014) represent the group of authors who pointed out that the composition of fiscal consolidation is not neutral, it cannot be directed only to one side, and that even the increase in taxes can lead to a significant generation of revenues, which will produce successful consolidations. Kastrop et al. (2017) stated that governments should carefully choose which taxes to increase and mentioned inheritance taxes and property taxes as the most appropriate taxes to be increased in times of fiscal consolidation.

Recently, studies have started to promote a new design of fiscal consolidations by combining successful elements from both sides, expense cuts and tax increases. Larch & Turrini (2008) point out that the “recipe” for successful fiscal consolidation has already begun to change and that it is policymakers that need to do the best combination for their states regarding the market conditions. Pereira & Roca-Sagales (2011) show the experience of Portugal where, through VAR analysis, it was argued that there is room for an increase in indirect taxes and a reduction of expenses in salaries and goods and services for a successful consolidation.

While fiscal consolidation is treated in numerous papers with a focus on EU countries and in OECD countries, just a few studies have analysed fiscal consolidations and their dimensions from the perspective of WB6 countries. Krajisnik et al. (2019) is the only study in the literature that has analysed the whole process of fiscal consolidation in the Western Balkans. They have analysed the impact of fiscal consolidation on economic growth and have concluded that the impact is positive. Krajisnik et al. (2019) also concluded that in the case of the Western Balkans, expense cuts-oriented consolidations are more effective than tax increase-oriented consolidations. These results about the fiscal consolidation in WB6 represent a very important part of the literature, but the positive impact and spending orientations need to be further analysed. Authors by themselves have pointed out that future analysis needs to have in focus the structure of public expenses and in fact, our study will analyse the composition of revenues and expenses to have a clearer view of the success of fiscal consolidations. Also, it is important to mention that the study of Krajisnik et al. (2019) does not include an analysis of the state of Kosovo, and through our study, we want to fill this gap. Regarding Kosovo, in the literature are found studies that have analysed elements of fiscal consolidation. Rexha et al. (2021) have analysed the impact of fiscal policies on economic growth for the period 2008-2016. The authors mentioned above using the VAR model concluded that in the case of Kosovo, public expenses and economic growth have a positive and significant relationship, while public revenues have a positive, but not a significant relationship in economic growth. Another important study to mention is Konxheli & Mustafa (2018), who have analysed the impact of VAT on the revenues of Kosovo and have concluded, similar to Keen & Lockwood (2010), that VAT is a money machine with a significant role in the public revenues. The conclusions of Rexha et al (2021) and Konxheli & Mustafa (2019) represent very important elements in the road of designing fiscal consolidations because in the case of Kosovo there exists an urgent need to reform fiscal policies, but the strategy should be chosen very carefully since the country is very dependent on indirect taxes and public expenses play a crucial role in economic growth.

Even though this study aims to analyse fiscal consolidation from the perspective of a country with a moderate level of public debt, public debt cannot be excluded, because as Bexheti (2017) pointed out, public debt is an alternative source to finance public expenses. Regarding public debt, this study will mention the studies of Bexheti et al. (2020) and Fetai et al. (2020), who analyzed the impact of public debt on economic growth in WB6. Bexheti et al. (2020) and Fetai et al. (2020) have identified thresholds up to which public debt contributes positively to economic growth, and Bexheti at al. (2020) have presented this threshold in the culmination of 50.87% of GDP, but Fetai et al. (2020) have presented this threshold in the culmination of 58.2% of GDP. This paper is not going to analyse in a critical way the methodology used in both above-mentioned papers, since for this study it is important just to mention the fact that according to the literature, in the case of WB6, there exists a limit of public debt that cannot be elapsed due to the negative impact on economic growth. Therefore, the fiscal consolidation processes for the countries of this region need to be designed in such a way that the public debt would be used up to thresholds that have a positive contribution to the economy.

To summarize, there is a lack of studies that present fiscal consolidation from the perspective of countries with moderate public debt levels. Therefore this study will analyse the case of Kosovo, a country that has fiscal policy circumstances that need fiscal consolidation. While most of the studies explored the impact of fiscal consolidation considering total data for revenues and expenses, this study for the case of Kosovo will design the way to implement fiscal consolidation using disaggregated data for revenues and expenses to maintain fiscal sustainability.

Methodology and data analysis

As was mentioned earlier, this study will employ the VAR model in order to obtain results. The following equations show the form of regressions:

$$\ln GDP = \beta_0 + \boldsymbol{\beta_1 \ln GDP} + \beta_2 \ln DT + \beta_3 \ln IT + \beta_4 \ln CE + \beta_5 \ln TSE + \beta_6 \ln SWE + \mu_1$$

$$\ln DT = \beta_0 + \beta_1 \ln GDP + \boldsymbol{\beta_2 \ln DT} + \beta_3 \ln IT + \beta_4 \ln CE + \beta_5 \ln TSE + \beta_6 \ln SWE + \mu_1$$

$$\ln IT = \beta_0 + \beta_1 \ln GDP + \beta_2 \ln DT + \boldsymbol{\beta_3 \ln IT} + \beta_4 \ln CE + \beta_5 \ln TSE + \beta_6 \ln SWE + \mu_1$$

$$\ln CE = \beta_0 + \beta_1 \ln GDP + \beta_2 \ln DT + \beta_3 \ln IT + \boldsymbol{\beta_4 \ln CE} + \beta_5 \ln TSE + \beta_6 \ln SWE + \mu_1$$

$$\ln TSE = \beta_0 + \beta_1 \ln GDP + \beta_2 \ln DT + \beta_3 \ln IT + \beta_4 \ln CE + \boldsymbol{\beta_5 \ln TSE} + \beta_6 \ln SWE + \mu_1$$

$$\ln SWE = \beta_0 + \beta_1 \ln GDP + \beta_2 \ln DT + \beta_3 \ln IT + \beta_4 \ln CE + \beta_5 \ln TSE + \boldsymbol{\beta_6 \ln SWE} + \mu_1$$

where:
GDP – Gross Domestic Product
DT – Direct Taxes
ID – Indirect Taxes
CE – Capital Expenses
TSE – Transfer and Subventions Expenses
SWE – Salaries and Wages Expenses

This study will use quarterly data from 2008Q1 – 2022Q3 for the above-mentioned variables which represent the major groups of revenues and expenses in Kosovo. Data are retrieved from quarterly reports of the Ministry of Finance of Kosovo and are transformed into the log form (ln variable) to optimize unit roots analysis. Since this study represents an analysis with panel data, it is mandatory to perform some tests before the VAR is implemented. Mccarty & Schmidt (1997) pointed out that data in VAR must be stationary and comparable across time, but before performing stationary tests, the initial phase of each study in this field starts with the lag criteria identification. This study will use the Akaike information criterion (AIC), Schwarz information criterion (SC), and Hannan-Quinn information criterion (HQ) to identify the lags. The results from the three criteria show that the number of lags in this model is 4. The results are presented in Table 1.

Table 1. Lag Order Selection Criteria

Lag	AIC	SC	HQ
0	-2.638485	-2.419503	-2.553803
1	-7.317212	-5.784339	-6.724437
2	-8.098796	-5.252032	-6.997929
3	-9.06328	-4.902626	-7.454321
4	-11.28288*	-5.808332*	-9.165826*

*indicates lag order selected by the criterion

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

Table 2. Stationarity Test Results

Level	Variables	Augmented Dickey-Fuller	Comment
I(1)	ΔlnGPD	-3.915 (-3.497) MacKinnon approximate p-value for Z(t) = 0.0116	H1
I(1)	ΔlnDT	-5.000 (-3.497) MacKinnon approximate p-value for Z(t) = 0.0002	H1
I(1)	ΔlnIT	-3.614 (-3.497) MacKinnon approximate p-value for Z(t) = 0.0287	H1
I(1)	ΔlnCE	-4.493 (-3.497) MacKinnon approximate p-value for Z(t) = 0.0015	H1
I(1)	ΔlnTSE	-4.883 (-3.497) MacKinnon approximate p-value for Z(t) = 0.0003	H1
I(1)	ΔlnSWE	-5.331 (-3.497) MacKinnon approximate p-value for Z(t) = 0.0000	H1

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

Table 3. Johansen Co-Integration Test Results

Rank	Trace Statistics	Max Statistics
0	39.9227* 47.21	19.445* 27.07

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

After the lag order selection, the stationarity test was performed. Through the Augmented Dickey-Fuller test it was concluded that all variables are not stationary at their levels, so then the same test was performed in their first differences. The results of the Augmented Dickey-Fuller test for the first differences of variables showed that variables are stationary at first differences and the results are presented in Table 2.

Since the variables used in this study are not stationary at their levels but at their first differences, before moving on with VAR analysis it is mandatory to check for the co-integration rank between them. This study has employed the Johansen Cointegration test for the above-mentioned procedure and the results are shown in the next table.

From the above table, we can see that variables are not co-integrated, since the trace statistics and max statistics values are lower than the respective critical values at the rank of 0. Fulfilling the requirements from the all above tests, now VAR can be implemented. The interpretation of the VAR analysis is a very long procedure and this is the reason why scholars discuss results from the perspective of impulse response functions. As was mentioned in the introduction part, IRF analyses show the response of variables to the changes in the other variables (Gujarati, 2004; Stock & Watson, 2011), and this is the main reason why we are using this analysis. The graphs obtained from IRF are presented in the next part, but before moving to the interpretation of IRF, we are going to present some VAR diagnostic tests.

The graph below shows that VAR analysis satisfies the stability condition since all roots lie inside the circle.

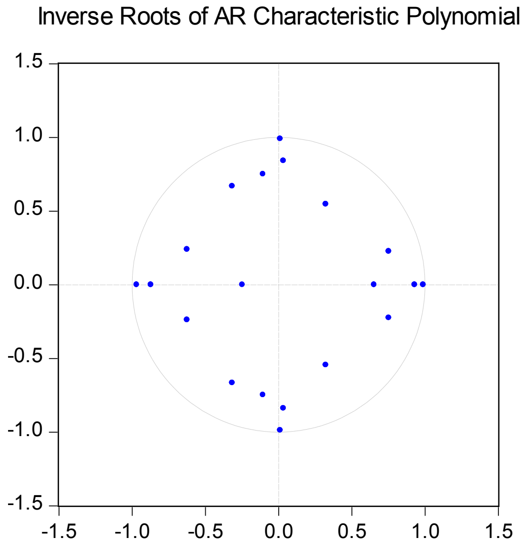


Figure 1. VAR Diagnostic Test – Stability Test

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

The Lagrange multiplier autocorrelation test shows that variables do not possess autocorrelation in time lags since the p-values are not significant. These results are presented in the next table.

From the above diagnostic tests, we can conclude that VAR can be counted as a good model and can be used for further conclusions.

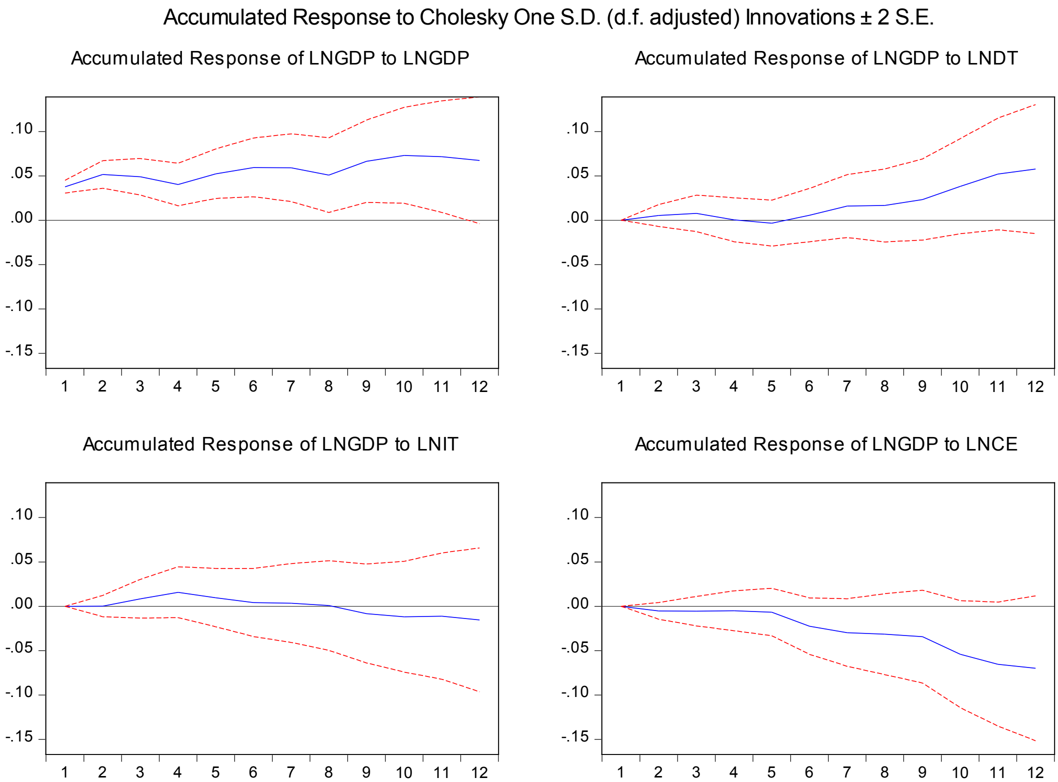
Table 4. VAR Diagnostic Test – Lagrange Multiplier Autocorrelation Test

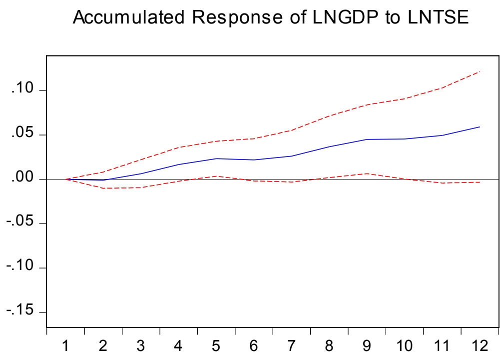
Lag	chi2	Df	Prob >chi2
1	55.6678	36	0.19252
2	42.97.09	36	0.19731
3	53.9595	36	0.20762
4	43.1936	36	0.19091

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

Discussions

As was mentioned above VAR was used to perform impulse response functions to analyze all variables from the same viewpoint. We have analyzed the response for 12 quarters or 3 years. First, we checked for the response of GDP at any changes in direct taxes, indirect taxes, capital expenses, transfers & subventions expenses, and salaries & wages expenses.





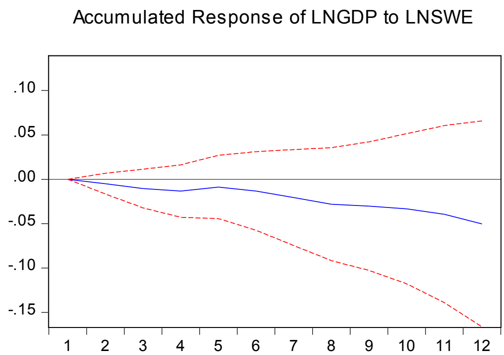


Figure 2. The response of GDP to changes in Direct Taxes (LNDT), Indirect Taxes (LNIT), Capital Expenses (LNCE), Transfers & Subventions Expenses (LNTSE) and Salaries & Wages Expenses (LNSWE)

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

The figure above shows that GDP will be affected by a change in itself but it will stay in the positive region. Changes in direct taxes will not impact GDP in a significant way until the sixth period, but after that, the GDP will increase and the impact will be positive. On the other hand, we cannot say the same thing about indirect taxes. A shock in indirect taxes will lower GDP and from the eighth period, it will remain in the negative region. A significant change in GDP is seen from the shock in capital expenses since from the first period GDP will remain in the negative region and this situation as presented in the figure will get worse with time. A similar situation is shown also in changes in salaries and wages expenses. Changes in transfers and subventions seem more stable since they will increase GDP from the third period. These results just from the viewpoint of GDP are inconclusive for this paper since it is important to show the response of each variable from shocks in other variables to have a better view of the situation in a case of possible consolidation.

Next, as is presented in the figure below we checked for the response of direct taxes on changes in other variables.

The results show that direct taxes will remain positive with smooth rises from shocks in GDP, direct taxes, and also transfers & subventions expenses. We cannot say the same thing for changes in indirect taxes, capital expenses, and of course salaries and wages expenses. While the response of direct taxes to changes in indirect taxes is in the positive region with no significant changes, the response of direct taxes in capital expenses and in salaries & wages expenses shocks will put them in the negative region and the situation will be worse with time, so the fiscal targets should be carefully chosen.

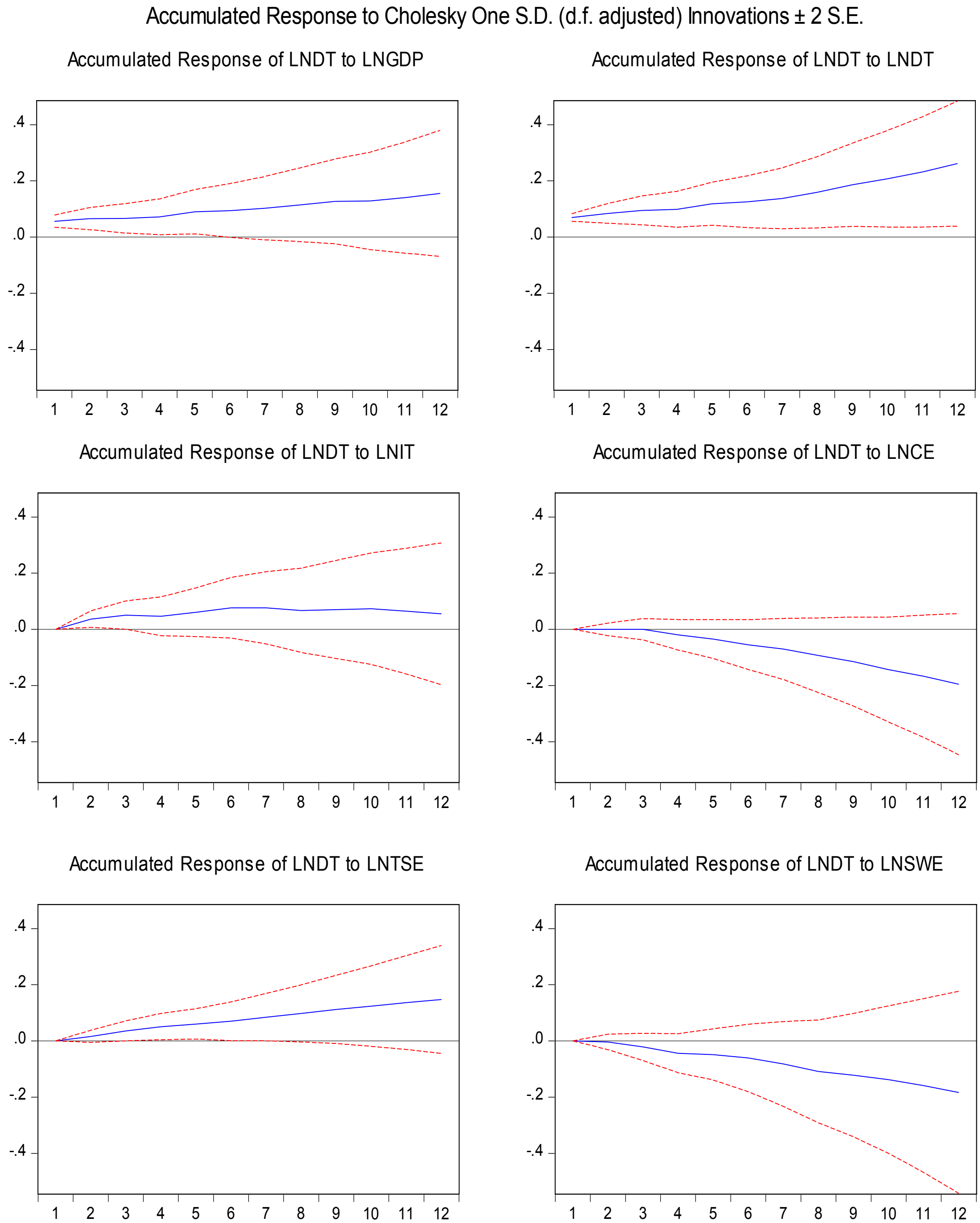


Figure 3. The response of Direct Taxes (LNDT) to changes in GDP, Direct Taxes (LNDT), Indirect Taxes (LNIT), Capital Expenses (LNCE), Transfers & Subventions Expenses (LNTSE) and Salaries & Wages Expenses (LNSWE)

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

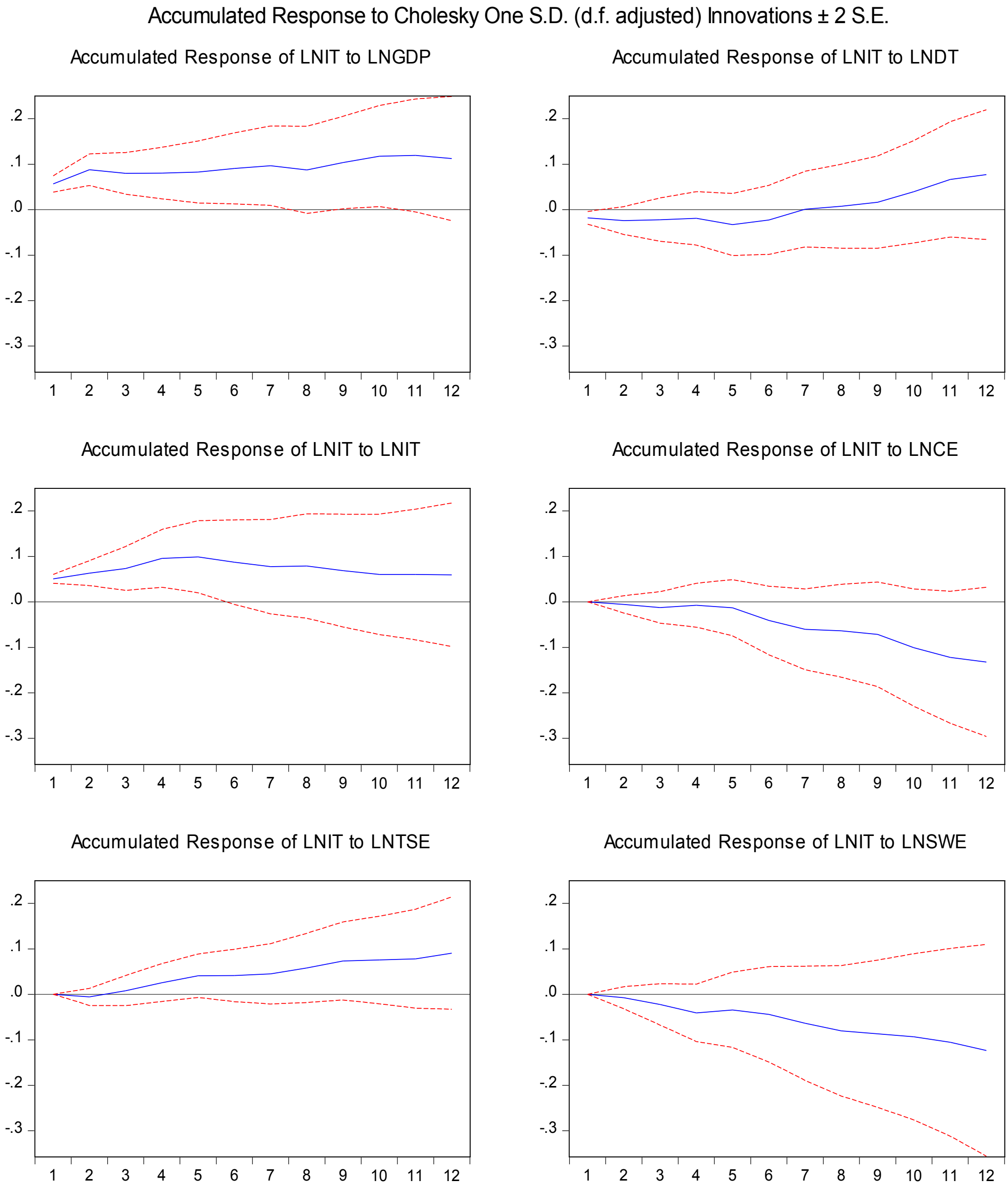


Figure 4. The response of Indirect Taxes (LNIT) to changes in GDP, Direct Taxes (LNDT), Indirect Taxes (LNIT), Capital Expenses (LNCE), Transfers & Subventions Expenses (LNTSE) and Salaries & Wages Expenses (LNSWE)

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

The response of indirect taxes to changes in capital expenses and salaries & wages seems to be similar to the response of GDP and direct taxes to the same mentioned variables. Indirect taxes will be down in the negative region from shocks in the above-mentioned variables. On

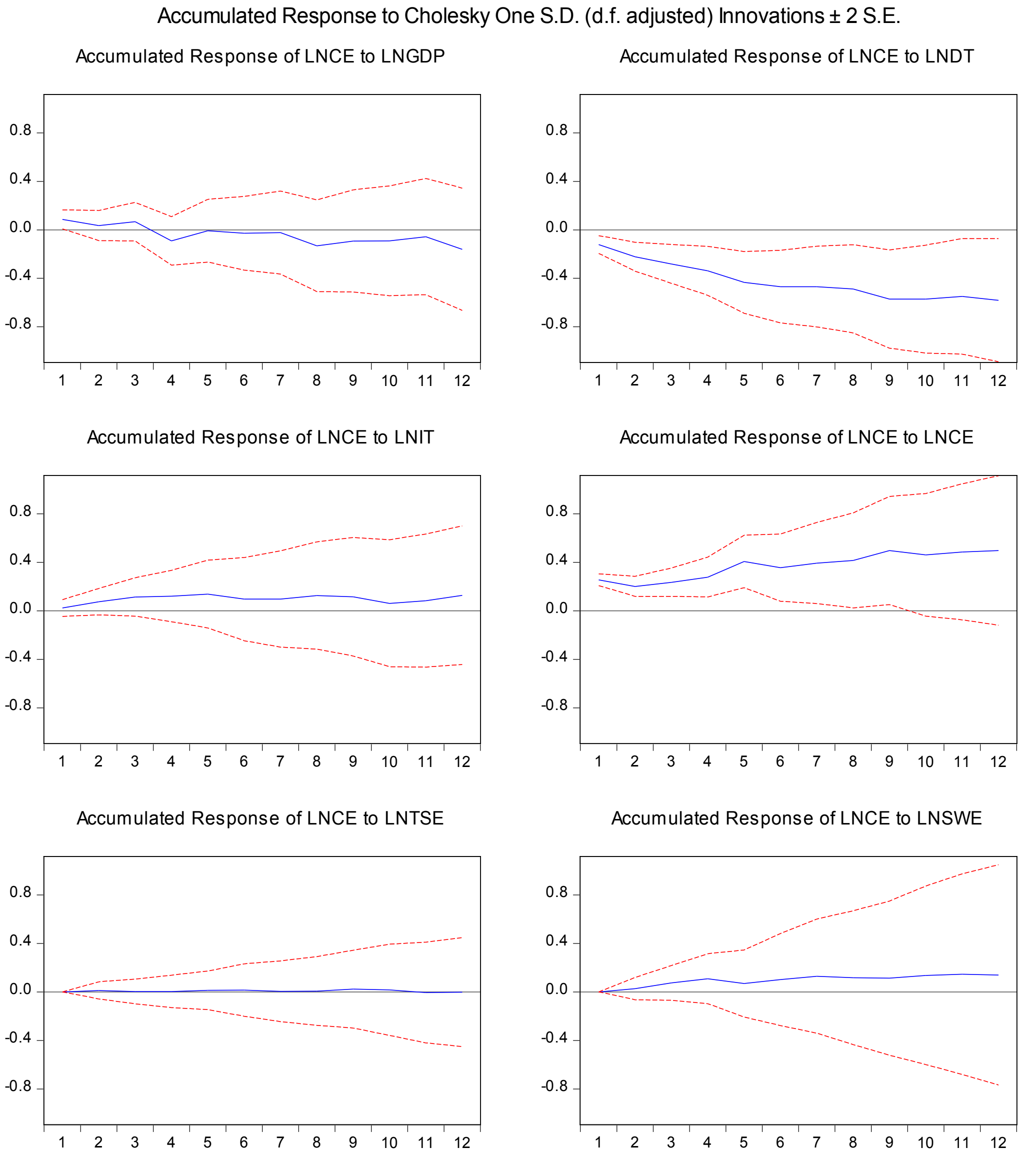


Figure 5. The response of Capital Expenses (LNCE) to changes in GDP, Direct Taxes (LNDT), Indirect Taxes (LNIT), Capital Expenses (LNCE), Transfers & Subventions Expenses (LNTSE) and Salaries & Wages Expenses (LNSWE)

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

the other hand, the response of indirect taxes to changes in GDP, indirect taxes, and transfers & subventions will be in the positive region with an increase during the periods, while the response to shocks in direct taxes is a different one. Until the sixth period, indirect taxes will be in the negative region, and in the seventh period, they will be recovered and experience a rise.

The figure above presents the response of capital expenses to shocks in other variables. Compared to the response of other variables that have been already presented, it seems that capital expenses will not experience a significant rise from shocks in other variables.

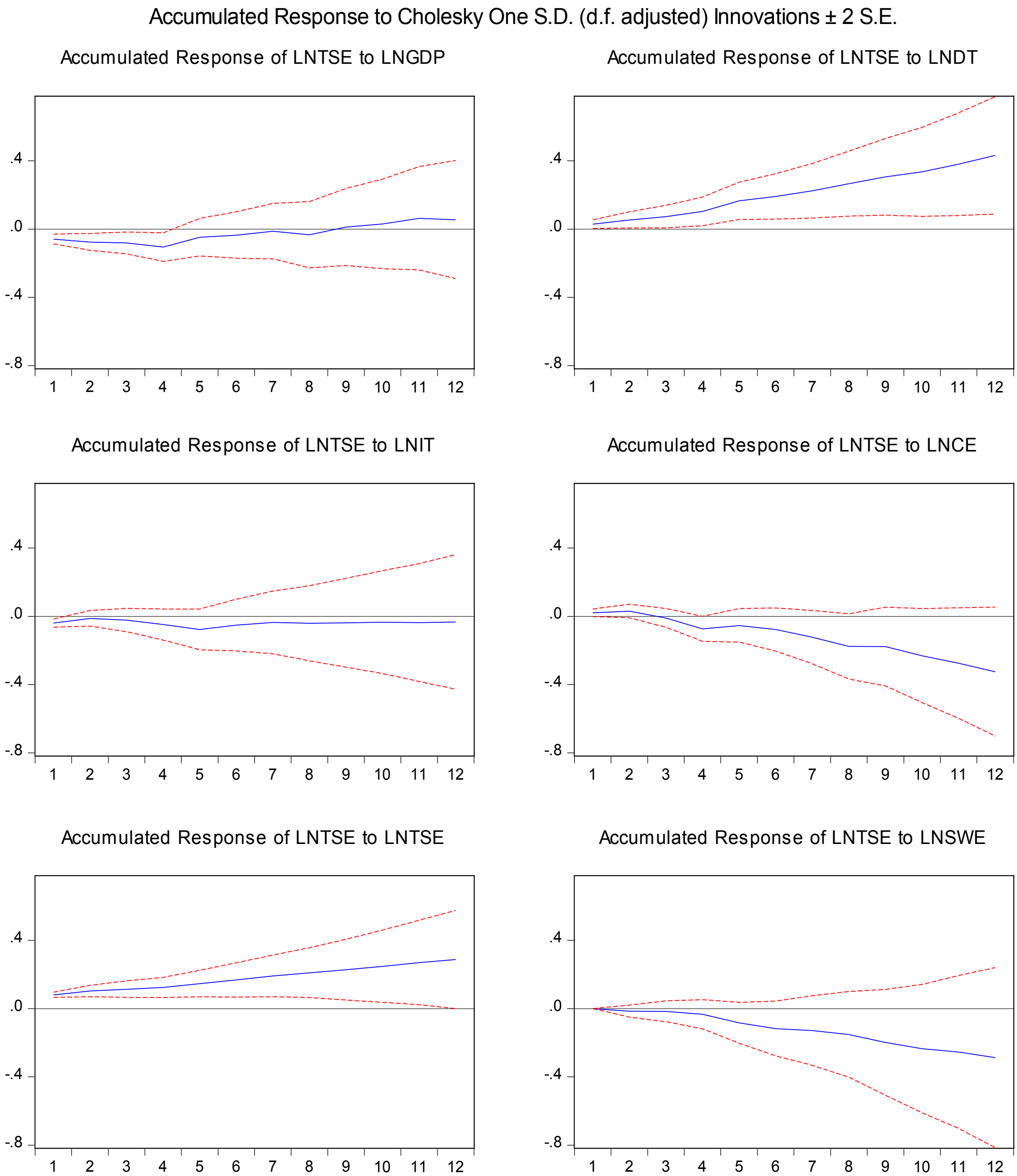


Figure 6. The response of Transfers & Subventions Expenses (LNTSE) to changes in GDP, Direct Taxes (LNDT), Indirect Taxes (LNIT), Capital Expenses (LNCE), Transfers & Subventions Expenses (LNTSE) and Salaries & Wages Expenses (LNSWE)

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

The situation seems to be better from shocks in capital expenses, indirect taxes, and salaries & wages expenses, but still, this improving situation is inconclusive. Capital expenses seem to be most affected by shocks in direct taxes, while shocks in GDP will get them in the negative region but not in a very significant way. Capital expenses are immune from changes in transfers and subventions.

The sixth figure shows the response of transfers and subventions expenses to the changes in other variables and in this case, the results should be seen from another perspective. As was mentioned in the previous parts, transfers and subventions in Kosovo represent a category of expenses that are made of big pension schemes that need to be better managed. The literature has shown that transfers and subventions expenses are the first ones to cut in consolidation plans and cuts in this category have resulted as the most appropriate for successful consolidations. In the case of Kosovo, transfers and subventions seem to experience a rise from shocks in direct taxes and shocks in themselves. On the other hand, changes in GDP and indirect taxes will have a smooth lower impact, but shocks in capital expenses and salaries & wages seem to put into the negative region expenses on transfers and subventions.

The last variable that we analyzed is salaries and wages expenses. Its response to changes in other variables is neutral to direct taxes, and also neutral to GDP in the first year, but after the first year it will get down and almost neutral in capital expenses since in the first period will experience a smooth decline which will be recovered from the sixth period. Shocks in indirect taxes and transfers & subventions expenses will put salaries and wages expenses into the negative region and the decline will be worse with time. A significant positive rise will be experienced just from the shocks in themselves.

From all the discussions above, now we can say that we have a clear view of the situation with the chosen variables in a possible case of fiscal consolidation in Kosovo. Once again we are bringing the focus on the fact that fiscal consolidation requires analyzing all the variables from the same viewpoint because as was mentioned fiscal objectives must be chosen logically according to the market conditions (Rawdanovicz, 2014). From the IRF-s presented above, for the case of Kosovo, we can say that capital expenses are not appropriate to be cut in time of fiscal consolidations. It was presented in graphs that shocks in capital expenses will lower almost all variables including the most important ones such as GDP, direct taxes, and also indirect taxes. Similar to the literature presented, this study has shown that wages and salaries can be cut in times of fiscal consolidation, but the negative impact of changes in salaries and wages in indirect taxes needs to be further analyzed. Since indirect taxes will harm capital expenses and capital expenses are NOT appropriate for cuts, this issue needs to be further analyzed at a more disaggregated level in future studies. Indirect taxes will raise direct taxes after some time and this is a good condition since direct taxes will increase GDP. Transfers and subventions expenses on the other hand have resulted as appropriate expenses to be cut since its response is neutral to shocks in GDP and indirect taxes, it will have a rise from shocks in direct taxes and the impact of shocks in transfers and subventions are neutral to capital expenses, the ones that are not appropriate to be cut. To conclude, we can say that with accumulated

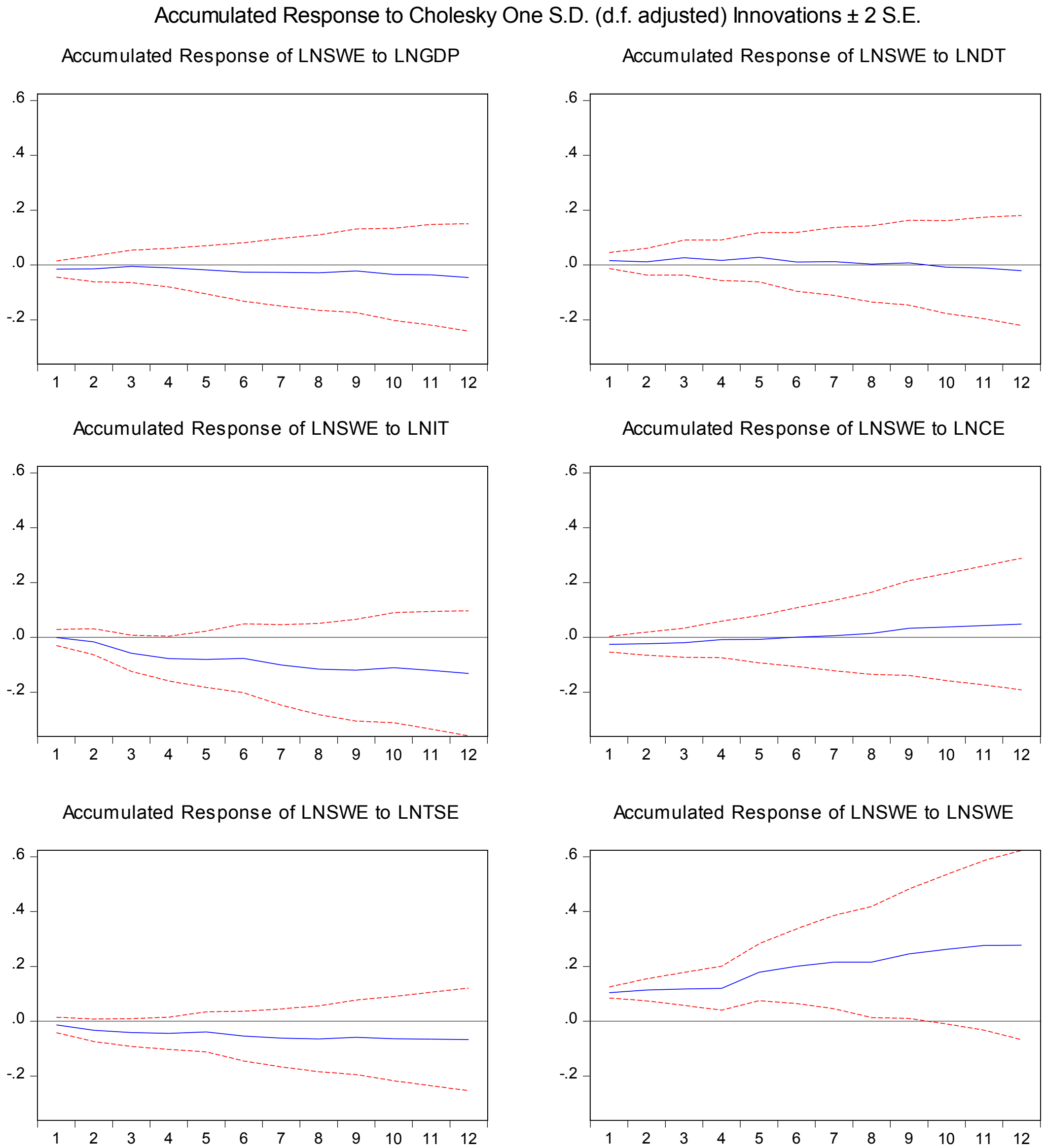


Figure 7. The response of Salaries & Wages Expenses (LNSWE) to changes in GDP, Direct Taxes (LNDT), Indirect Taxes (LNIT), Capital Expenses (LNCE), Transfers & Subventions Expenses (LNTSE) and Salaries & Wages Expenses (LNSWE)

Source: Quarterly Reports of the Ministry of Finance of Kosovo (2008-2022) & Authors' calculations

impulse response functions obtained from the VAR model, in Kosovo to design a successful consolidation plan the most appropriate variables to be changed through fiscal policy reforms are direct taxes, indirect taxes, and transfers and subventions expenses. These conclusions represent a very good starting point for the process of consolidation, but a better view will be obtained from a detailed analysis at the disaggregated level for indirect taxes, direct taxes, and also transfer and subventions expenses. As was mentioned before, the analysis at disaggregated levels for the above-mentioned variables is needed to know the impact of each category of direct taxes, indirect taxes, and transfers & subventions expenses on capital expenses which have resulted in the ones that are not appropriate ones to be cut in times of consolidations.

Conclusions

This paper aimed to analyze the role of fiscal consolidation for fiscal sustainability from the perspective of a country that has moderate public debt levels. While most of the studies in literature such as Giavazzi & Pagano (1990), Alesina & Perotti (1995), Alesina & Ardagna (1998, 2009, 2012), Bilicka et al. (2012) and Barnichon et al. (2022) deal with the fiscal consolidation from the perspective of countries/regions with a high level of public debt there was a gap in the literature that treats the need of fiscal consolidation not just from the necessity to reduce public debt, but from the necessity of reforming public finances as having pointed out Uvalic & Cvijanovic (2018). This study analyzed the case of Kosovo, a country in Western Balkans 6 with moderate levels of public debt, but with an immediate need to reform public finances because as a result of the post-COVID situation, combined with high inflation and the war in Ukraine has put this country in fiscal difficulties. While Rexha et al. (2021) pointed out that in Kosovo public expenses have a significant role in economic growth, and Konxheli & Mustafa (2018) showed the importance of indirect taxes for public revenues in Kosovo, we took the conclusions of the above-mentioned papers in the next level, analyzing from a disaggregated perspective, GDP, direct taxes, indirect taxes, capital expenses, transfers & subventions expenses, and salaries & wages expenses in a possible fiscal consolidation process. This study has employed the VAR model to draw conclusions and the main reason for choosing this model was to analyze all variables as endogenous ones. Our results suggest that in times of fiscal consolidation there is room for intervention in direct taxes, indirect taxes, and transfers & subventions expenses. The results have also shown that capital expenses cannot be reduced due to a negative impact on all other variables including GDP. Bearing in mind the importance of capital expenses for the economy of Kosovo and also for the sustainability of public finances there is also room for increasing public debt levels up to thresholds identified in the literature by Bexheti et al. (2020) and Fetai et al. (2020), for the capital investments. In the end, future studies should focus on categories of direct taxes, indirect taxes, and transfers & subventions to obtain better evidence for the appropriate fiscal consolidation plans in Kosovo.

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