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COVID-19 and Finland: Not good news for fiscal sustainability

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After completing my master's studies at the University of Helsinki in 1988, I started to work as an economist in the Bank of Finland. While working on applied and policy issues, I wanted to pursue my academic studies as well, and by March 1993, I defended my PhD thesis at the University of Helsinki. A year and half later, I found myself and my family in Brussels, where I started my two-year term as a national expert from Finland. After serving that term, I returned to the Bank of Finland's research department, where I worked as a research supervisor all the way until 2005, when my time as head of research started. I had the pleasure and honour to serve the Bank of Finland at that position until end of July 2017, after which I returned to the academia. Currently, I am Professor of Economics at the University of Turku, more specifically, at the Turku School of Economics, Department of Economics. So, I have closed the circle, starting from the academia, going out and finally coming back. I have enjoyed every step of it.

Abstract

COVID-19 is, apart from being a frightening source of a shock, a highly interesting and special source of a shock, at least from an economic point of view. It combines supply and demand shocks. When it enters an economy, it is the supply side of the economy that takes the initial hit. This is particularly so given the restrictions, such as lockdowns, shutdowns and social distancing measures, imposed by the government on, in particular, those sectors of the economy, where humans are in close connection. Demand effects start to emerge once firms start to adjust their operations to these restrictions. The effects of the virus transmutes into an aggregate demand shock, which may be larger in magnitude than the initial effect on the supply side. Hence, the literature has come to call this type of a shock as Keynesian supply shock. This type of a shock poses severe challenges to, in particular, fiscal policy. This report discusses these challenges in the case of Finland from the particular perspective of how the response of the government to contain the economic effects of the pandemic has affected and will affect, given current estimates, fiscal sustainability in Finland. Finland is almost a laboratory example of an economy that faces headwinds to growth that would sustain the welfare state, namely aging population, shrinking labour force, low labour productivity and, I would add, difficulties in transforming internationally acknowledged top research into profitable business ideas.

Key words: COVID-19, pandemic, fiscal policy, structural deficit, long-run unemployment, fiscal sustainability

1. Introduction

The COVID-19 shock is clearly a new frightening source of a shock, but at the same time, it is in terms of economic theory clearly a very interesting type of a shock. Rapidly increasing research on its economic effects is clearly a proof of this. First of all, economists are trained to think and work with the associated assumption that shocks are either demand or supply shocks. Then, more often implicitly, we rely on our aggregate demand – aggregate supply frameworks to try to understand how shocks affect output, employment and inflation. Depending on the model specifics, we may also learn how either type of a shock impinges on consumption, investment, trade balance and so forth.

COVID-19 is challenging our thinking in this respect. It represents a negative supply shock, a truly global on, comparable to e.g. shocks that trigger financial crises. Or maybe even a shock that does more damage to economies than those underlying financial crises. But thinking the pandemic shock solely in terms of a supply shock does not give us the full picture of its ultimate effects in economies. The shock can trigger, and actually it already has triggered, changes in aggregate demand that are larger than the shock itself. Because of lockdowns, shutdowns, firm exits and layoffs, the COVID-19 shock plausibly represents such a trigger. Now, rather than building on Say's law 'supply creates its own demand', Guerrieri et al. (2020, 2) "*… introduce a concept that might be accurately portrayed as 'supply creates its own excess demand'*". Namely, a negative supply shock can trigger a demand shortage that leads to a contraction in output and employment larger than the supply shock itself. We call supply shocks with these properties Keynesian supply shocks. They also show in the article that such shocks are not possible in a one-sector economy and, hence, requires a multisector economy to give a chance for Keynesian supply shocks.

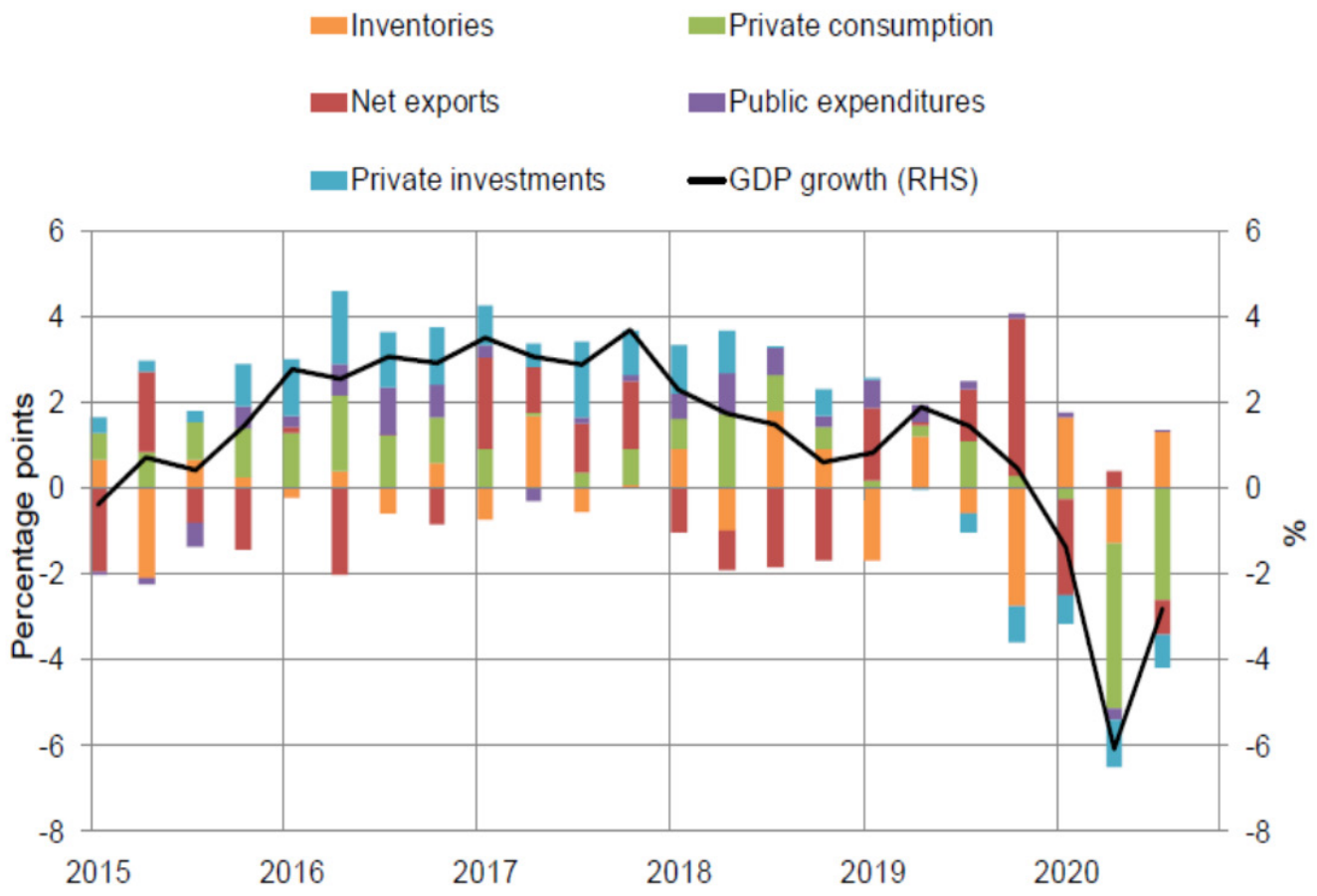
While Guerrieri et al. (2020) clearly help us understanding how structural features of the economy make it possible for 'a supply shock can create its own excess demand', there are other possible channels through with the pandemic can affect economies. One such channel is more behavioural in nature. The pandemic shock can have severe and persistent effects on agent's behaviour, through which the shock can have large long-lived effects on economies. In an interesting article, Kozlowski, et al. (2020) dub the effects of the pandemic through a particular behavioural channel as 'scarring of beliefs' effects. "*Scarring is a persistent change in beliefs about the probability of an extreme, negative shock to the economy*" (Kozlowski et al., 2020, 29). Then again, if we believe in the Keynesian supply shock, i.e. aggregate demand effects are larger the shock itself, then policy measures become increasingly important. For one, it seems reasonable to argue that powerful social distancing measures that are active for a relatively short period of time would be effective in preventing the spreading of the virus and thus minimise the associated economic costs. But as Glover et al. (2020) have shown using a heterogeneous agent model, there may be distributional trade-offs in controlling a pandemic. Particularly during the first wave, "*… for COVID-19 the benefits of slower viral transmission accrue disproportionately to older households, who face much higher risk of serious illness or death from infection. In contrast, the costs of reduced economic activity are disproportionately borne by younger households bearing the brunt of lower employment*" (Glover et al., 2020, 2). I must say that their view that "*thus, different groups in the economy (old versus young, workers in different sectors, healthy versus sick) will likely have very different views about the optimal mitigation strategy*" succeeds in capturing the core of the Finnish policy debate on the order in which the population is inoculated!

In this policy brief, I will approach the effects of the pandemic from the view of the challenges it has created for fiscal policy in Finland. Already before the pandemic landed in Finland, the government was running a structural deficit, this being so even when the country started to grow fairly rapidly in 2019 after experiencing four years of practically no growth. As for the structure of this report, I will first show in Section 2 data and discuss the state and development of the economy, in particular, since the spring of 2020 when the pandemic really started to spread. Section 3 then discusses, how the government has responded to the pandemic since the spring of 2020. Section 4 is reserved for issues on fiscal policy and the sustainability of public finance, both in medium and long run. One of the key issues here is to what extent the pandemic shock has worsened the sustainability problem and what measures the government has planned and/or implemented to address the problem. Finally, Section 5 concludes.

2. The state of the Finnish economy: the initial effects of the shock were large

The COVID-19 pandemic has affected the Finnish economy in the form of weaker export demand and cautious consumer behaviour and investment. It has also led to the closure of certain parts of the service sector, in particular. Restaurants, bars and popular events like mass concerts have perhaps suffered the most from the lockdowns and other restrictions. Since the virus has returned in waves, its economic, social and, importantly psychological and overall health effects have been extended. The capacity of health care system has been tested a couple of times. Since we have great uncertainty about when we have a sufficiently strong defence system against virus – hopefully, we can have one – it can affect economic behaviour and structures over a longer time horizon. Figure 1 shows how the pandemic shock has affected the Finnish economy over the year 2020.

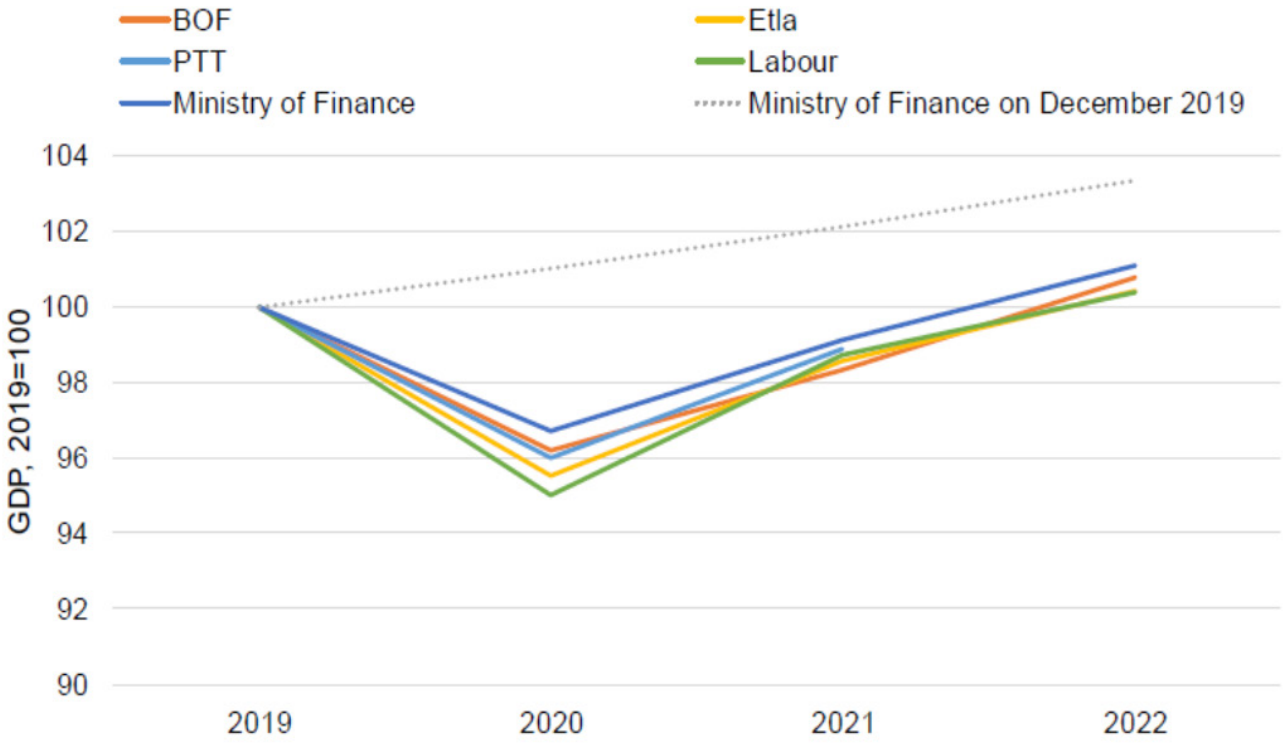
Figure 1. A decomposition of the Finnish GDP growth into its components



Source: Finnish Economic Policy Council, 2021, 15.

As can be seen from Figure 1, the major contribution to the negative GDP growth came from the drop to private consumption. This is very much in line with the idea that 'supply creates its own excess demand'. As can also be seen from Figure 1, the maximum drop in annualised GDP growth took place in the second quarter of 2020, which is the quarter that the virus started to spread quickly and the government increased the gear to fight the virus by introducing measures that basically increased social distancing. As for near term growth scenario, Figure 2 shows the GDP growth forecasts of the major Finnish forecasters. These growth estimates suggest that GDP returns to its pre-crisis level by 2022.

Figure 2. Latest forecasts for the Finnish GDP



Abbreviations: BOF = Bank of Finland, Etla = ETLA Economic Research, Labour = Labour Institute for Economic Research, and PTT = Pellervo Economic Research.

Source: Finnish Economic Policy Council, 2021, 16.

While, as usual, forecaster display some herd behaviour in that they tend to relatively unanimous in their forests, Figure 2 clearly show how big the differences in 2020 are relative to the December 2019 forecast of the Ministry of Finance. Table 1 gives forecast information in terms of numbers.

Table 1. Forecasts of real GDP growth rates, per cent

	2020	2021	2022	2023	2024	2025
Ministry of Finance (Dec 2020)	-3.3	2.5	2.0	1.4	1.4	1.3
BOF (Dec 2020)	-3.8	2.2	2.5	1.5		
OECD (Dec 2020)	-4.0	1.5	1.8			
European Commission (5 Nov 2020)	-4.3	2.9	2.2			
IMF (13 Oct 2020)	-4.0	3.6	2.0	1.8	1.3	1.3
Labour (16 Sept 2020)	-5.0	3.9	1.7			
PTT (15 Sept 2020)	-4.0	3.0				
Etla (14 Sept 2020)	-4.5	3.2	1.9			

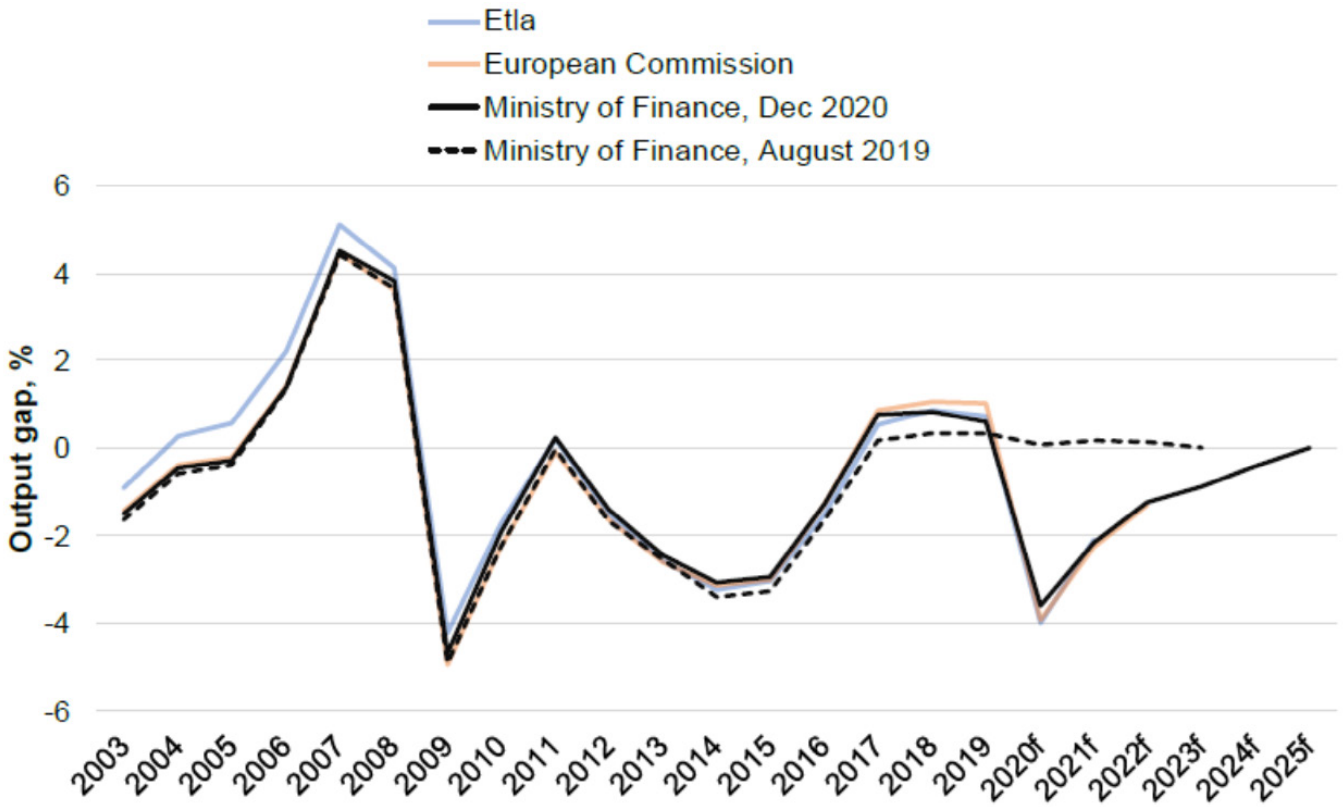
Abbreviations: BOF = Bank of Finland; Etla = ETLA Economic Research, IMF = International Monetary Fund, Labour = Labour Institute for Economic Research, OECD = Organisation for Economic Co-operation and Development, and PTT = Pellervo Economic Research.

Source: Finnish Economic Policy Council, 2021, 16.

There is some variation in these forecasts, but the most interesting aspects are that the forecasters expect the real GDP to bounce back fairly strongly in 2021. Secondly, from 2022 on the growth rate of the real GDP is forecasted to return to the pre-pandemic and post financial crisis levels.

In the introduction, I indicated that the public sector has been structural deficit for some time now despite e.g. good cyclical condition. But if we look at cyclical variation in GDP, there is room for concern, as Figure 3 showing estimates of the output gap suggests.

Figure 3. Estimates of the output gap in Finland by different forecasters



Abbreviation: Etla = ETLA Economic Research.

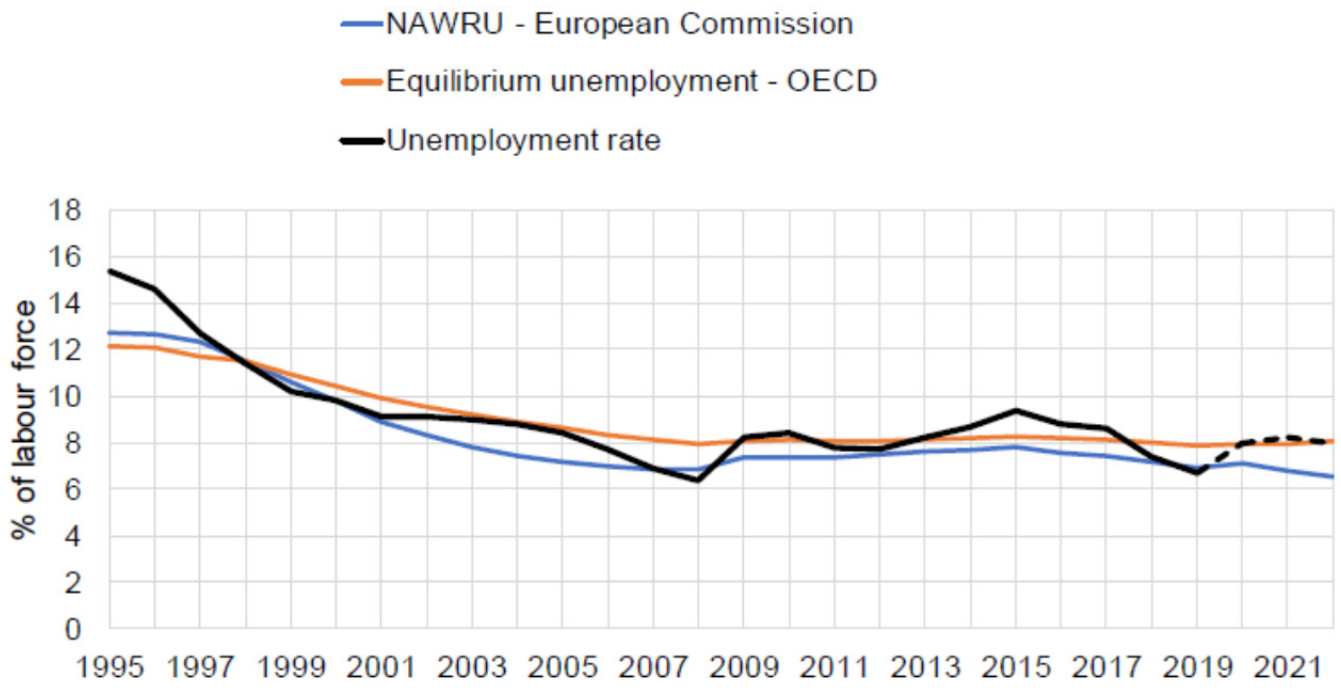
Source: Finnish Economic Policy Council, 2021, 18.

First observation suggest that the different forecast agree on their estimates of the output gap. The differences are practically the same, although once again the estimate from the Ministry of Finance in August 2019 is understandably different. Secondly, these estimates suggest that the output gap will close around 2025. Thirdly, if we take these estimates at face value then cycle variation is much smaller than before the financial crisis. It is as if the Finnish economy has been close to its potential during the period 2011 – 2019. Moreover, the short-run effects of the pandemic shock are not as big as those of the financial crisis, but are more persistent. Finally, latest estimates of the growth of the potential output in Finland (not shown) suggest a slight downward revision. The consensus view seems to be that the annual growth rate of the potential output is close to one percent. Although labour productivity has been procyclical, it has been falling since 2018. In the medium term, growth of the productivity is around one percent on average. If the economy keeps growing close to the potential, it may indicate problems for the public sector finances from the point of the economy's potential for creating tax revenues. I will return to point later.

The final issue that I want to take up in this section is unemployment. The percent of the labour that were unemployed had falling trend all the way till the time the Finnish economy experienced the effects of the financial crisis in 2009. Finland did not have a financial crisis, but the hit came through dramatically falling exports. The year 2009 was surprising in economic terms. GDP fell almost nine percent, but unemployment hardly moved. GDP recovered rapidly, but stalled around 2011 – 2012. From 2010 on, unemployment rate

has hovered in the range of 6.5 – 8.0 percent. During the pandemic crisis, it has increased towards the upper range, as can be seen in Figure 4. What is really worrying, at least for me, is that the unemployment rate is stuck in that range, so that the estimates of the long-run or equilibrium unemployment rate by the European Commission and the OECD tend to agree with realised unemployment rate. During pandemic crisis short-term unemployment (up to three months) has increased sharply, which is understandable, while the increase gets smaller as we climb up the ladder of unemployment spells.

Figure 4. Actual and estimates of equilibrium unemployment rate in Finland



Source: Finnish Economic Policy Council, 2021, 24.

The underlying reason for the persistence of unemployment is bit of mystery and has been debated, occasionally very intensively. Labour market matching is maybe not reason, at least compare the period 2014 – 2020 to the period 2008 – 2014, but we must admit that matching has not improved either. For example in the third quarter of 2020, the estimated beveridge curve tells us that for the unemployment rate of 8.2 percent the corresponding vacancy rate was 19.4 percent.

3. The response of the government to the crisis

The government responded to the pandemic crisis by introducing an extensive recovery package, which consisted of business subsidies, capital injections and funds to finance infrastructure investments and spending in various fields, such as education. The government also increased its support to municipalities. Furloughed workers were helped by extending the coverage and levels unemployment benefits. Firms, on the other hand, were supported with changes in bankruptcy legislation, subsidies mainly using existing channels like through various business subsidies but also with the possibility to postpone tax payments.

In 2020, the Finnish Parliament approved several (seven) supplementary budgets resulting in an increase in government expenditure by EUR 11 billion and a fall in estimated revenue by EUR 6.5 billion. So the (estimated) increase in net borrowing was EUR 17.5 billion

Most of the implemented support measures have been targeted at firms. However, support measures to households have also been extended during the crisis, although most of them have come through automatic changes in social security expenditure. Table 2 summarises the numbers also making the distinction between automatic and discretionary support measures to households.

Table 2. Support measures to firms and households

Firms		Household	
Form of support	**EUR million**	**Form of support**	**EUR million**
Subsidies	2,628	Discretionary measures	561
Loans and capital investments	4,077	Automatic changes in social security expenditure	1,030
Guarantees	11,200		
Changes in taxes and social security contribution	2,350		
Other	32,000		

Source: Finnish Economic Policy Council, 2021, 27.

As for international comparison, Table 3 compares the total amount of different support measures in the Nordic countries relative to 2021 GDP as predicted by the European Commission. It should be noted that 'general' refers to programmes that have been available for generally across countries. This, of course, is a significant restriction, since important support measures have been targeted at certain industries.

Table 3. Support to firms in Denmark, Finland, Norway and Sweden, relative to GDP, percent

	Denmark	Finland	Norway	Sweden
General government guarantee programmes	2.82	4.37	1.81	3.15
General subsidy programmes	2.97	0.75	1.63	0.82
State loans and capital injections	0.61	1.15	1.64	1.64
Sum	6.40	6.27	5.08	5.61

Source: Finnish Economic Policy Council, 2021, 31.

It should be mentioned that state loans and capital injections include the commercial paper purchases by the Bank of Finland, as the corresponding measures in the other Nordic countries are part of their autonomous monetary policy. An interesting observation is tax relief by means of reducing tax rates have largely been absent during the crisis by Denmark, Finland, and Sweden. Tax measures have largely focused on more flexible payment arrangements and temporary refunds of value added taxes already paid. Norway, on the other hand, has included tax rate reducing measures to support firms and the overall economy. Norway has reduced several taxes, including value added tax, fuel tax and employer's tax.

4. Fiscal policy and fiscal sustainability

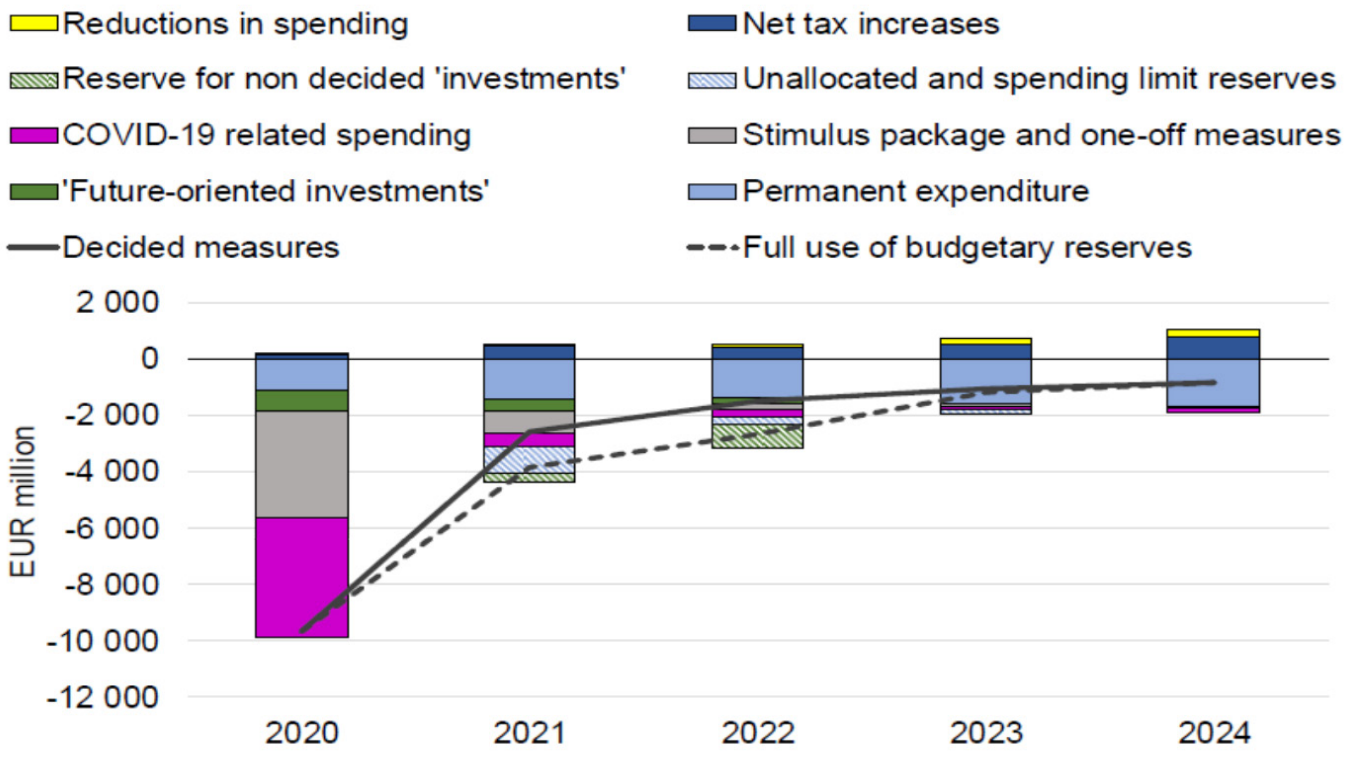
The government has been running budget deficits for the past ten years or so. Not being able to balance budget e.g. over the business cycle or even in the boom suggest that a nontrivial part of the deficits has been structural contributing to the sustainability problem. That is why the government has set employment targets to be reached by the end of its term in 2023. Of course, there are other targets as well, but I will only take note of the employment target of 75 percent, which translates into 60,000 persons. In 2019, the economy reached an employment level of 73 percent, but due to crisis, employment has come down from this level. Because of this, the government has increased the target to 80,000 persons to be reached by the end of the 2020's. The main reason setting the target high is fiscal sustainability,

since higher employment translates into higher tax revenue. This is important, since the population is aging, labour force is shrinking, and there is an increasing pressure on age-related and health-related expenditures. Whether 80,000 persons is enough from this perspective is a good question.

The current crisis and the associated economic decline and recession increased central government deficit in 2020 and will do so in 2021 as well. The crisis is also likely to have a major effect on public finances in the medium term. Until the year 2019, governments generally respected central government expenditure ceilings, but due to the crisis, the government revoked these ceiling to be able to increase spending to support public health and the economy. However, the increase in central government debt, increased structural deficit and lower employment means the government's fiscal targets, as set in October 2019 in the General Government Fiscal Plan for 2020 – 2023 have become more difficult to meet. The current forecast for the structural deficit in 2023 is -2.1 percent of GDP, while the target set by the government in 2019 was -0.5 percent of GDP. Government debt is also expected to be on an increasing trend at the end of the government's term.

Let us first look at the effects of discretionary measures on the budget deficit and compare them to no policy changes. Figure 5 illustrates the effects.

Figure 5. Discretionary policy measures and the budget deficit, EUR million

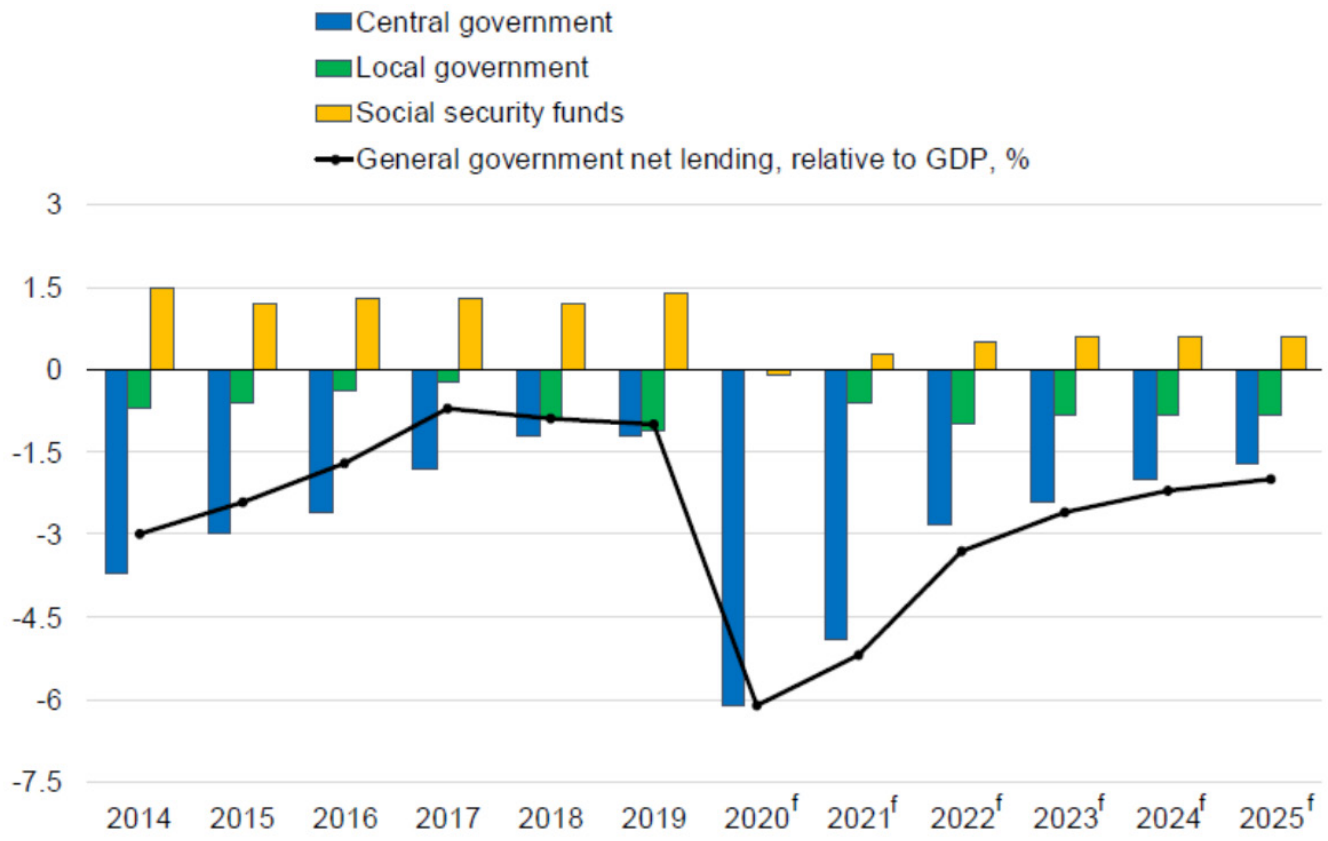


Source: Finnish Economic Policy Council, 2021, 53.

The solid line in Figure 5 shows the net effect of the discretionary measures on the central government budget balance in comparison to a path with no policy change. Discretionary measures had a very large negative effect on the budget deficit in 2020 (EUR 9.7 billion) and will continue to do so also in 2021, although to lesser extent (EUR 3.6 billion). Figure 5 also suggests that the new policy decision will be expansionary throughout 2020 – 2024.

The general government deficit-to-GDP ratio started to deteriorate in 2018 due to increasing deficit at the local government level and due to decline in social security funds' surplus. Due to transfers from the central government local government balances improved in 2020, but this was offset by unfavourable developments in central government and pension funds. The 2020 winter forecast of the Ministry of Finance predicted that the general government debt ratio reach 6.1 percent in 2020 and 5.2 percent in 2021. Figure 6 tells the story.

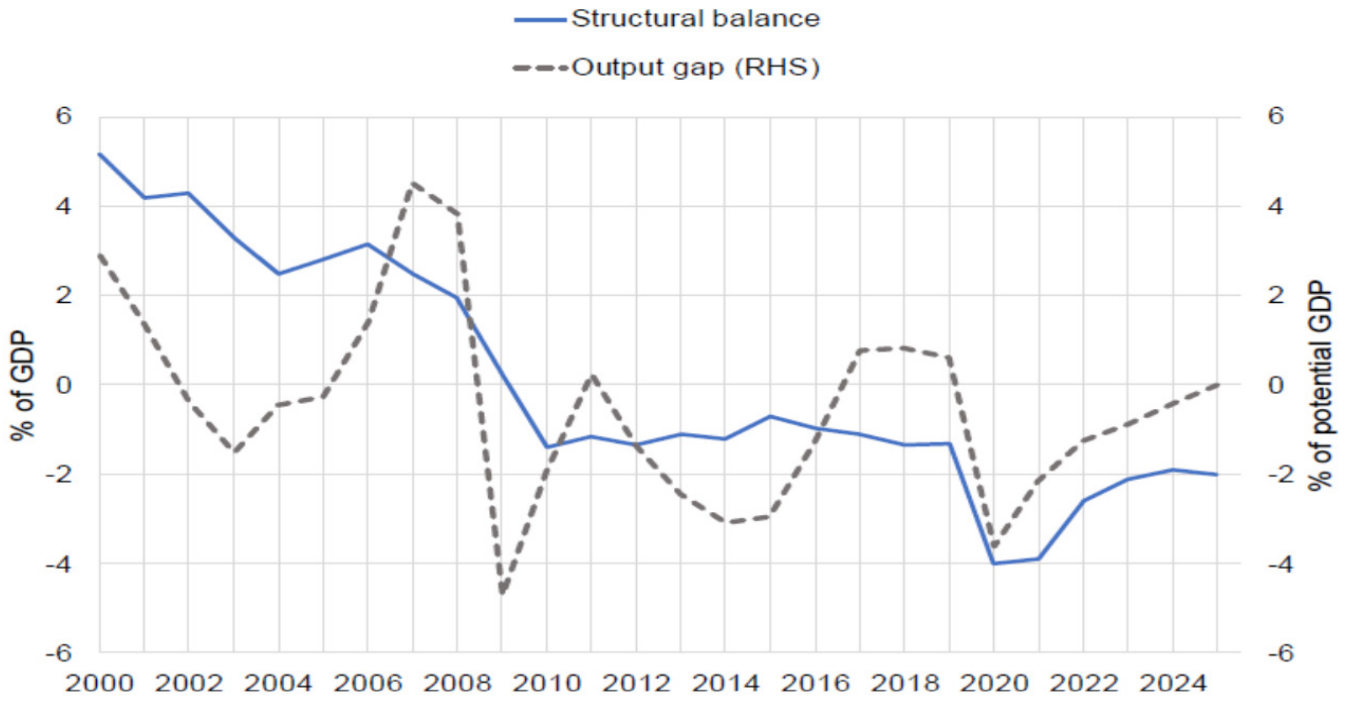
Figure 6. Net lending by the government sector, relative to GDP, percent



Source: Finnish Economic Policy Council, 2021, 56.

Changes in the structural balance is often used as an indicator of the fiscal stance. To derive the measure, one needs to control for the business cycle and one-off revenues and spending. Figure 7 illustrates plot the structural balance and the output gap.

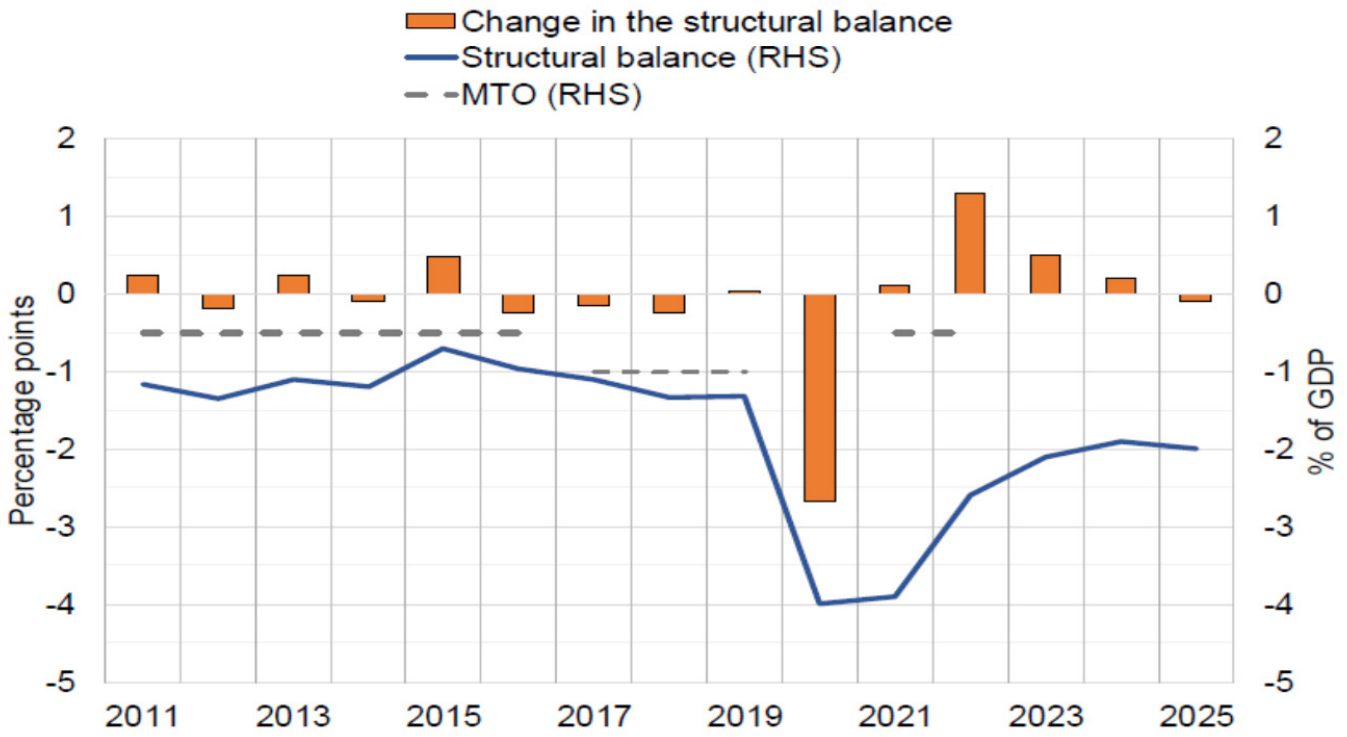
Figure 7. A measure of the structural balance and business cycles



Source: Finnish Economic Policy Council, 2021, 57.

That measuring the fiscal by the change in the structural balance is not straightforward is no surprise. For one, the adjustment that controls for the business is based on an estimate of the output gap. On the other hand, due to data revisions and forecasts, output gap estimates tend to be revised annually, which of course affects estimates of the structural balance. As indicated earlier, the government has set the target for the structural balance at -0.5 percent of GDP. However, estimates of the structural balance suggest that the governments have not met the target during the past ten years. We can consult Figure 8 for the evidence.

Figure 8. General government structural balance and the target



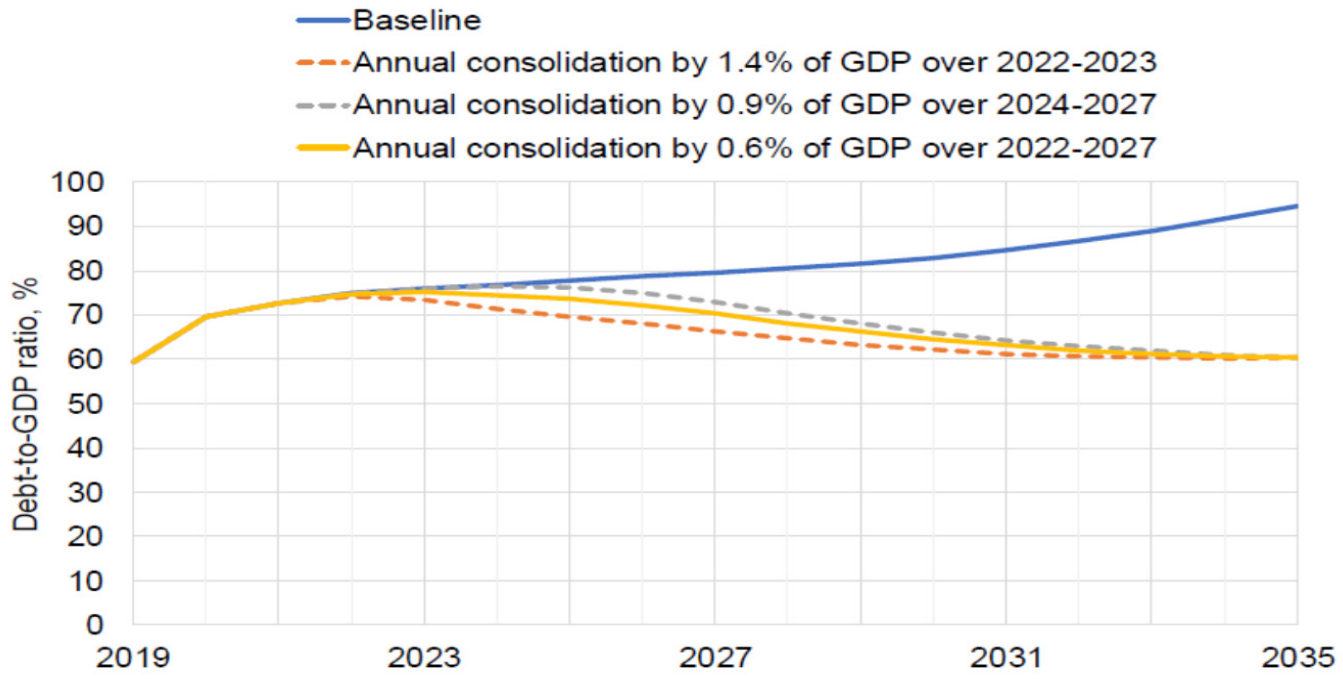
Abbreviation: MTO = medium-term budgetary objective.

Source: Finnish Economic Policy Council, 2021, 62.

The final issue I want to discuss is that of fiscal sustainability. As indicated above the structural deficit of the general government has practically been worsening during the ten years. Fiscal sustainability is broadly defined as the ability of a government to maintain its current spending, taxation and other policies without the threat of insolvency. Understandably, a lack of fiscal solvency is a very serious and immediate problem. Currently public debt-to-GDP ratio has risen, but a lack of fiscal sustainability is not a problem in Finland, since the government has been able to borrow at very low rate. But, for Finland the problem seems to be fiscal sustainability in the long run.

According to an assessment by the Ministry of Finance, a permanent adjustment of the public budget in order of 3.5 percent of GDP is required to balance future expenditures with expected future revenues. The government plans to make up for the shortfall by permanent tax increases and by increasing employment. In order to turn the debt-to-GDP downwards, the government has released a roadmap for sustainable public finances. I will in what follows concentrate on medium- and long-run sustainability of public finances. In this context, Figure 9 is useful.

Figure 9. Painful consolidation



Source: Finnish Economic Policy Council, 2021, 78.

It should be noted that although the medium-term analysis underlying Figure 9 is based on the same prediction of increases in age-related expenditure as the in the sustainability framework of the Ministry of Finance, the consolidation requirements are not fully comparable. The reason is the analysis on which Figure 9 rests takes into account the dynamic effects of the consolidation measures. Anyhow, Figure 9 clearly suggests that consolidation is painful, unless favourable developments emerge.

As for long-term sustainability, the government announced in autumn 2020 that the long-term sustainability gap, or the S2 measure, is approximately 3.5 percent of GDP. S2 has four key elements: (1) future growth in age-related spending, (2) future costs of existing public debt, (3) structural primary deficit in the base year of the calculation, and (4) future changes in property income. This breakdown is presented in Table 4.

Table 4. Decomposition of the S2 sustainability indicator with previous estimates in parenthesis

	2019	2020
Present value of interest expenditure on initial debt	(0.4)	0.5
Primary deficit in base year	(0.7)	2.2
Change in capital income	(-0.1)	-0.2
Changes in age-related expenditure	(3.7)	1.1
S2 sustainability gap	(4.7)	3.5

Source: Finnish Economic Policy Council, 2021, 80.

The S2 sustainability gap measure is extremely sensitive to assumption underlying the calculations. For example, the Bank of Finland estimated in December 2020 that S2 is 5.5 percent of GDP, where the difference to the Ministry of Finance estimate above seems to come from different assumptions about long-term growth with the Bank of Finland assuming lower growth.

5. Conclusions

COVID-19 shock is a very special type of a shock. Initially it affects economies like a supply shock, but over time it transmutes into a demand shock. As economists are traditionally locked into thinking that a shot hitting an economy is either a demand or a supply, COVID-19 clearly challenges that thinking. One perspective to thinking about the effects and perhaps also the transmission of the effects of the shock is the use a "modified" Say's law, namely 'supply creates its own excess demand' implying that demand effect of the shock is larger in size than that of the initial supply effect. It can generate different kinds of effects, including distributional effects. Anyway, the design of aggregate economic policies is, given the nature of the shock, challenging. One additional element in this context is that we do not currently know how long the shock persists.

In this short policy brief, I have discussed how the shock, first, has affected the overall Finnish economy and, secondly, and perhaps more importantly, how it has affected fiscal policy, fiscal policy stance and, most importantly, fiscal sustainability. Government fiscal expansion has been very large by historical standard, resulting in major increase in public indebtedness. For Finland, fiscal sustainability is, given current estimates, a long-run issue and from this perspective the pandemic shock has not been helpful. On the contrary.

References

Finnish Economic Policy Council (2021). Economic Policy Council Report 2020. January 26, 2021.

Glover A., Heathcote J., Krueger D. and Ríos-Rull J-V. (2020). Health versus Wealth: On the Distributional Effects of Controlling a Pandemic. Working Paper. July 21, 2020.

Guerrieri V., Lorenzoni G., Straub L. and Werning, I. (2020). Macroeconomic implications of COVID-19: Can negative supply shocks cause demand shortages?. National Bureau of Economic Research. Working Paper No 26918.

Kozlowski J., Veldkamp L. and Venkateswaran V. (2020). Scarring Body and Mind: The Long-Term Belief-Scarring Effects of COVID-19. Working Paper. August 3, 2020.

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