

# **PORTUGAL'S FISCAL POLICY CHOICES DURING THE PANDEMIC: A PRELIMINARY EVALUATION**

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# Portugal's fiscal policy choices during the pandemic: a preliminary evaluation

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## Abstract

In this paper I document the fact that, compared to the other EU-countries, the Portuguese government made relatively cautious budgetary policy choices during the pandemic. Most EU-countries decided to take more expansionary budgetary stances than Portugal. I also find empirical evidence suggesting that countries that used more fiscal stimulus managed to reduce the negative effects of the pandemic on GDP. This raises the question of whether the Portuguese government made the right fiscal policy choice during the pandemic. I argue that other factors than the budgetary policy stance matter in explaining growth performances. In addition, it is probably too early to tell whether the Portuguese government made the right fiscal policy choices.

JEL classification: E60, E62, E65

Keywords: pandemic, fiscal policies, fiscal stance, policy choice

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# 1 Introduction

In this article we analyze fiscal policy choices of Portugal in the face of the shock produced by the pandemic. We will compare these choices with those made by the other EU-countries.

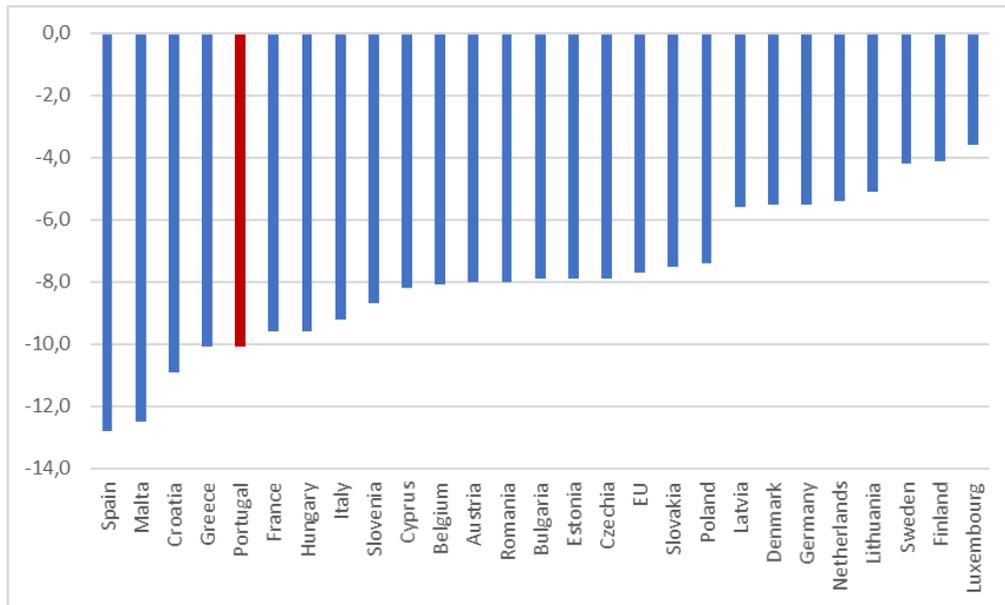
The pandemic has created a huge shock in the growth rates of GDP leading to large changes in the budget balances of all EU-countries. We will focus on the changes in the budget balances from 2019 to 2020 and compare these with the changes in the growth rates of GDP from 2019 to 2020. In doing this, we take into account the different starting positions of budget balances and growth rates in the EU-countries.

The economic impact of the pandemic on the different member countries of the EU has been large but also very divergent. Some, mostly Northern member countries, have managed to contain the negative impact of the pandemic on their GDP in 2020 (see Figure 1) while others, mostly Southern member countries, have seen their GDP decline by much higher percentages. Portugal has seen its GDP decline by a substantial 7.6 % in 2020. Given that it had a growth rate of +2.5% in 2019, the turnaround in growth rates from 2019 to 2020 amounted to -10.1%, which however is a better record than many other Southern countries, in particular Spain, which experienced a turnaround in its growth rates of almost 13% from 2019 to 2020.

Figure 2 presents the changes in the government budget balances of the same member countries during 2020. We observe again large differences among EU countries. Surprisingly, Portugal now seems to have moved to the group of Northern EU countries in managing to contain the negative effects of the pandemic on the government budget position.

In this note I analyze this surprising position of Portugal and I study the possible implications of the fiscal policy choice made by the Portuguese government.

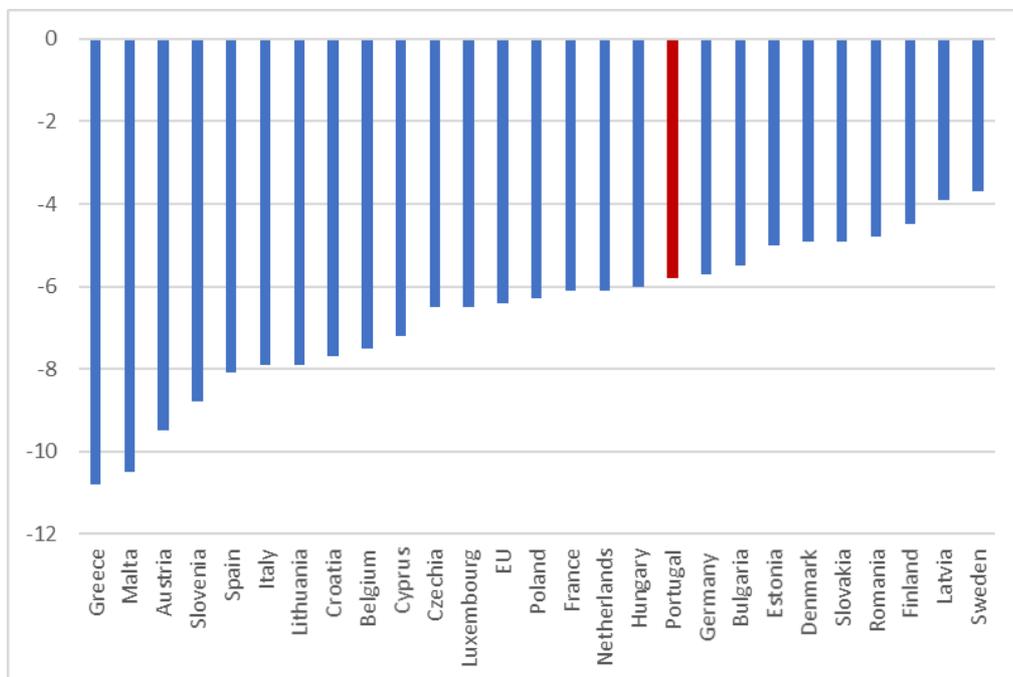
Figure 1 - Decline GDP growth rates 2019-20, EU



Source: Eurostat.

Note: We do not include Ireland in the analysis. In 2020 Ireland experienced a GDP growth rate of 3.4%. It is well-known that the Irish GDP data are notoriously unreliable. In 2015 Irish GDP increased by 25% mainly due to “phantom” FDIs.

Figure 2 - Change budget balance 2019-20, EU



Source: Eurostat.



## 2 Portuguese fiscal policies compared to the EU during the pandemic

In Figure 3 we bring together the changes in the GDP growth rates (horizontal axis) and in the budget balances (vertical axis) of EU countries from 2019 to 2020. We observe a strong positive correlation, i.e. countries that experienced the strongest declines in GDP-growth during 2020 also experienced the strongest declines in their budget balances. A one percent decline in the growth rate led to a decline in budget balances by approximately 0.81% of GDP, on average<sup>2</sup>. Most of this positive correlation comes from the automatic stabilizers but there could also be a discretionary component. We note that Portugal is significantly above the regression line. This indicates that Portugal (and a few other countries) are the countries which have been most cautious in allowing automatic stabilizers and/or discretionary policies to increase the budget deficit.

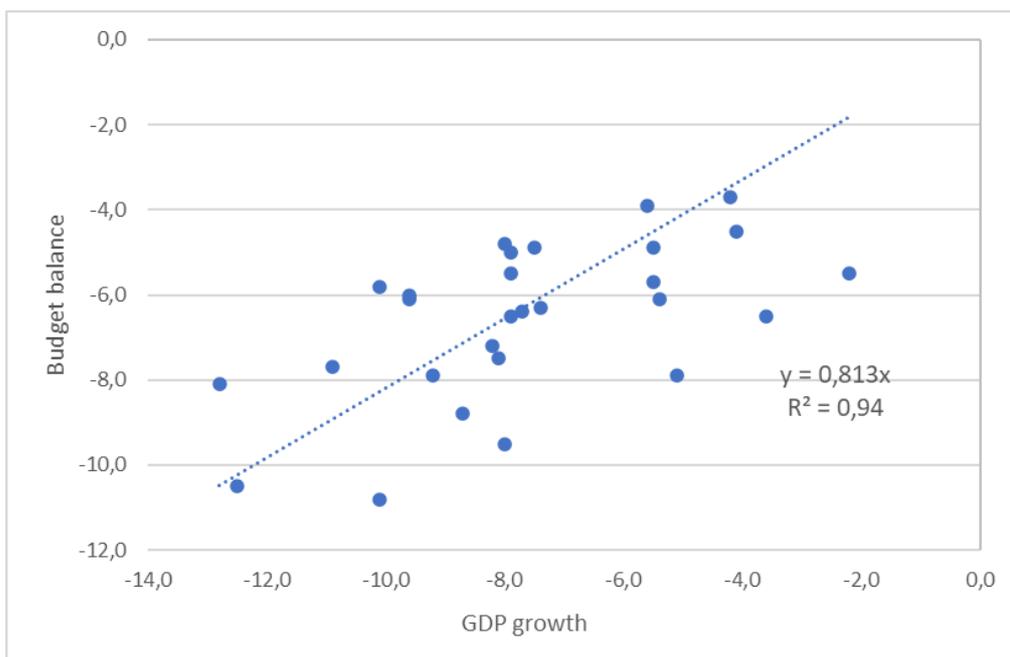
A similar information is obtained from Figure 4. In that figure we present a measure of “fiscal activism”. This is the ratio of the changes in the budget deficit and in the growth rate of GDP in the same EU-countries during 2019-2020. When this ratio is above 1, the countries involved allowed the budget deficit to increase (in percentage points) by more than the percentage decline in GDP. Most EU-countries’ measures of fiscal activism are below 1, suggesting a relatively cautious fiscal stance in the EU. Among all EU-countries, Portugal appears to have been the most cautious in using fiscal policies to stabilize the economy.

A note on the policy stance of the EU-countries as a whole is appropriate here. We observe that our measure of fiscal activism for the EU as a whole is 0.83. This compares with 1.84 for the US during the same period. Thus, it appears that the US has been much more active in its policy stance than the EU during the pandemic. It allowed its budget deficit to increase by 1.84% as a reaction to a 1% decline in its GDP. The EU appears to have been less than half as reactive. This difference in fiscal policy stance has been noted by others (see Erik Nielsen (2021), IMF, Fiscal Monitor (2021)).

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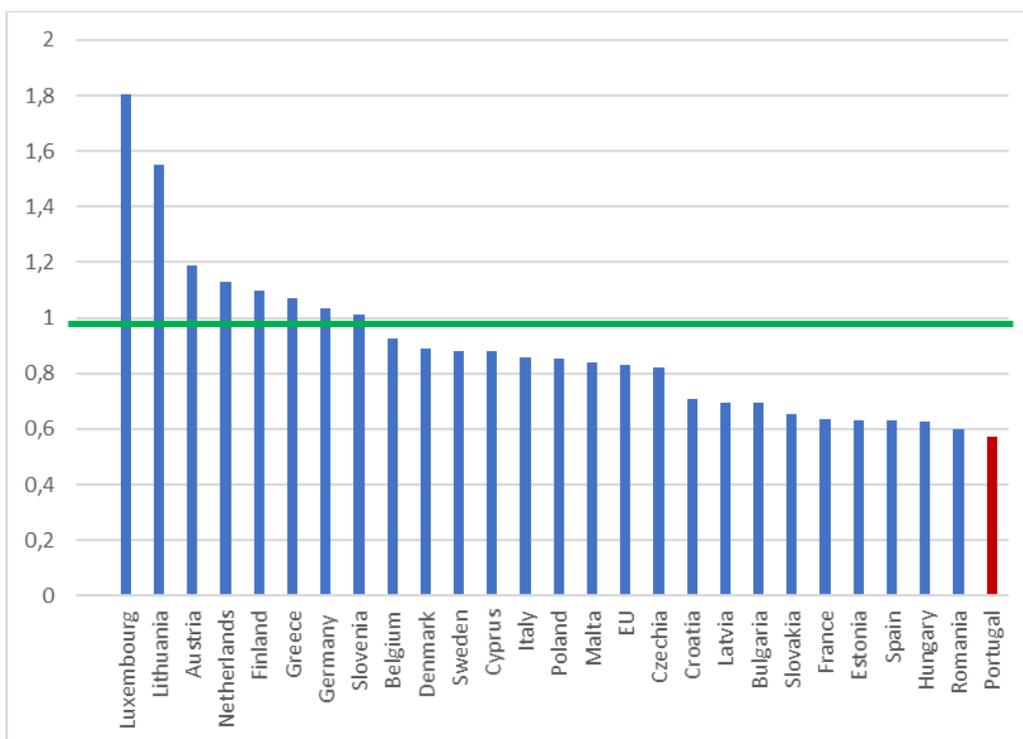
<sup>2</sup> In appendix we present the regression results in more detail, including the significance t-test on the coefficient of  $x$ . It turns out that this coefficient is statistically highly significant.

Figure 3 - Change GDP growth and change budget balance, EU, 2019-20



Source: Eurostat and own calculations.

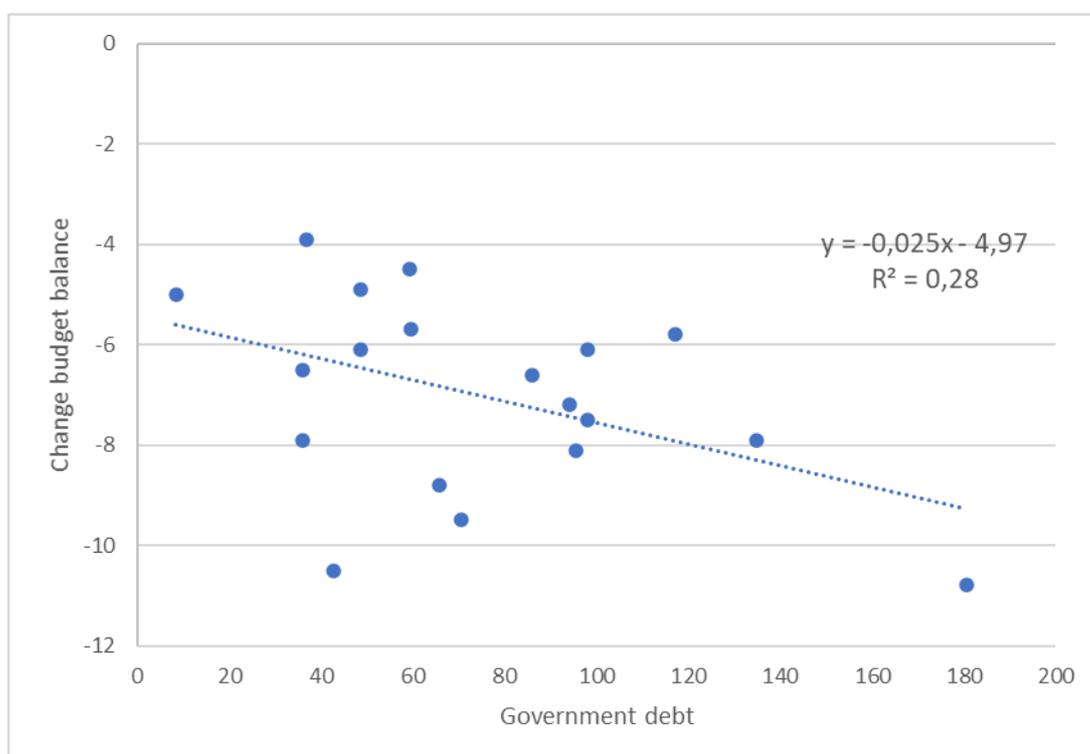
Figure 4 - Ratio change budget balance/Change GDP growth



Source: Eurostat and own calculations.

Why do we observe this? One possible answer is that countries with high initial debt levels felt constrained in using fiscal policies as a tool of output stabilization. I checked this hypothesis of a “fear of debt” by plotting the relation between government debt levels in 2019 (prior to the pandemic) and the subsequent changes in the budget balances from 2019 to 2020. This is shown in Figure 5. We observe that the relationship between these two variables is not particularly strong. The regression line has a negative slope which is statistically significant (see appendix). This, however, goes counter to the hypothesis of a “fear of debt”. Thus, countries did not seem to be particularly constrained by the initial debt levels.

Figure 5 - Government debt ratios (2019) and change budget balance (2019-20), EU



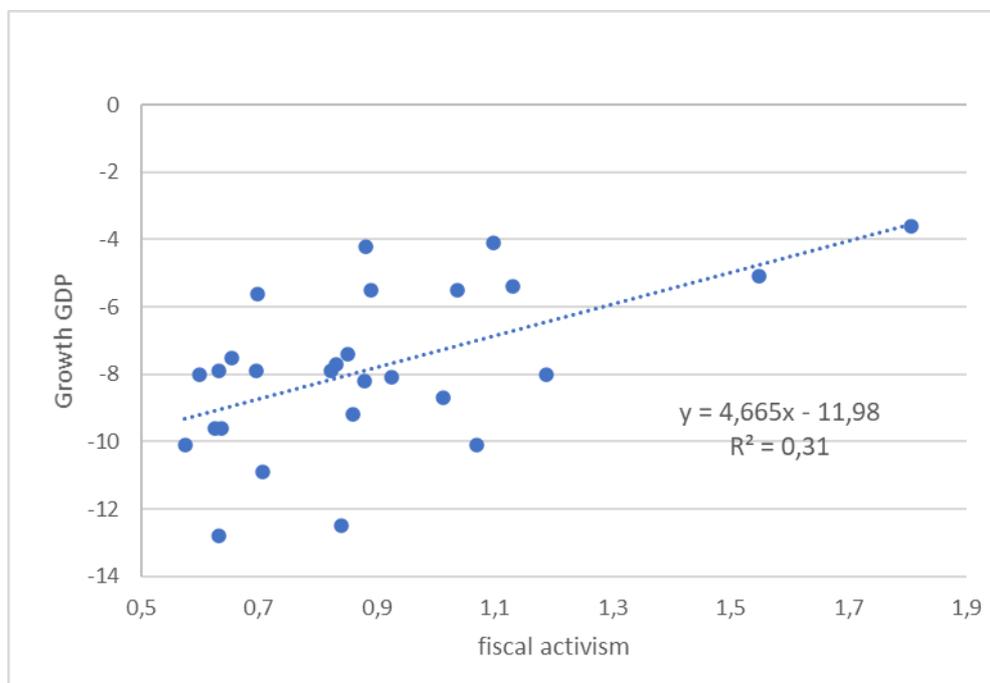
Source: Eurostat and own calculations.

The preceding analysis suggests that the Portuguese government, probably more than other EU-countries, was very much concerned about containing the ballooning budget deficit resulting from the pandemic. As a result, more than other EU-countries it followed a cautious budgetary policy.

Was this the right choice? It will be difficult to answer this question, especially since the full effects of the pandemic have not yet been realized. Nevertheless, some empirical evidence can be obtained. We do this in two ways. First in Figures 6 we plot the “fiscal activism” variable, defined earlier, on the horizontal axis, and the change in GDP growth rates of the EU-countries on the vertical axis. We find a positive correlation and a statistically significant coefficient of the fiscal activism variable (see appendix), suggesting that countries that used their fiscal policies in an intense way also tended to

experience a weaker decline in their growth rates of GDP during 2020.

Figure 6 - Fiscal activism and change growth GDP, 2019-20, EU



Source: Eurostat and own calculations.

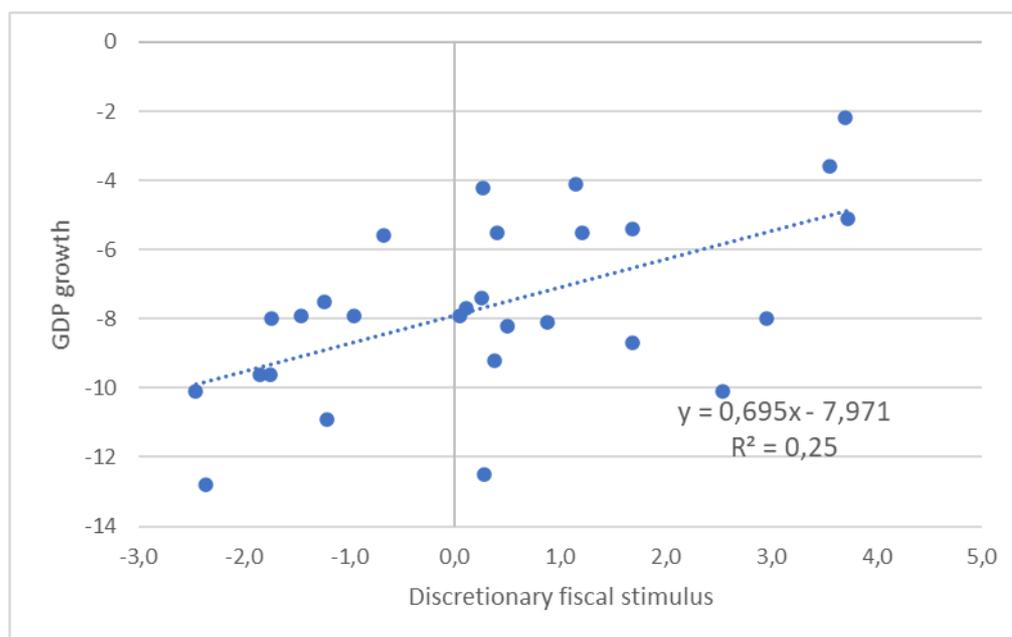
A second way is a little more complex. We use a Two-Stage-Least-Square method. We first use the regression between budget balances and growth rates from Figure 3 and retrieve the residuals from that regression. These residuals measure the changes in the budget balances that are unrelated to the changes in GDP. They are to be interpreted as discretionary changes in the budget balances and are truly exogenous. We then regress the changes in the growth rates of GDP (dependent variable) on these residuals (independent variable). This procedure eliminates a potential reverse causality going from GDP growth rates to budget balances.

We show the results of this procedure in Figure 7 (see also appendix). We find very similar results as in Figure 6<sup>3</sup>. These can now be interpreted as follows. Countries that tended to engage in more discretionary fiscal stimulus tended to experience a lower drop in the growth rates of their GDPs during 2020. Portugal stands out as the country having been most cautious in applying discretionary fiscal policies and therefore seems to have foregone the possibility of reducing the negative impact of the pandemic by more expansionary fiscal policies.

<sup>3</sup> This is not really surprising. Our measure of fiscal activism in Figure 6 takes out the influence of GDP on the government balance. As a result, it is also to be considered as an exogenous variable in the regression reported in Figure 6. The close resemblance of the two procedures is also made clear by the very strong correlation between them. We found that the correlation coefficient between these two measures amounted to 0.94.

This conclusion, however, should be qualified. Although the coefficients of fiscal activism and fiscal stimulus are statistically significant) the positive correlation we find in Figures 6 and 7 is relatively weak ( $R^2 = 0.31$  and  $0.25$ ). This suggests, not surprisingly, that other factors than fiscal policies affected the growth performance of EU-countries. In addition, one may claim that it is still “too early to tell”. Fiscal policies operate with considerable lags and the full effects (positive and negative) may take time.

Figure 7 - Fiscal stimulus and change GDP growth, 2019-20, EU



### 3 Conclusion

The Portuguese government made relatively cautious budgetary policy choices during the pandemic, at least when compared to other EU-countries. Most of these countries decided to take more expansionary budgetary stances than Portugal. Given the empirical evidence of a positive correlation between fiscal activism and economic growth, one might be tempted to conclude that this may have led to a loss of GDP in Portugal. It is unclear, however, whether this is the right conclusion. I argued that other factors than the budgetary policy stance matter in explaining growth performances. In addition, it is probably too early to tell whether the Portuguese government made the right fiscal policy choices. Finally, in our measures of fiscal response to the pandemic we have only incorporated the headline budgetary implications of the pandemic, not those that will have budgetary consequences in the future, i.e. the loans, guarantees, and equity positions made by governments. The Portuguese government engaged in these, but so did all the EU-countries' governments. Today, it is unclear whether the Portuguese government has done more of these activities than the other EU-countries.

## 4 References

International Monetary Fund, (2021), Fiscal Monitor, April, Washington, DC.

Nielsen, Erik, The mind-boggling difference in approach to the crisis, UniCredit Research, [https://www.research.unicredit.eu/DocsKey/economics\\_docs\\_2021\\_179203.ashx?EXT=pdf&KEY=C814QI31Ejqlm\\_1zIJDBJCC3OXQzGqAGssjxCuE8B4U=&T=1](https://www.research.unicredit.eu/DocsKey/economics_docs_2021_179203.ashx?EXT=pdf&KEY=C814QI31Ejqlm_1zIJDBJCC3OXQzGqAGssjxCuE8B4U=&T=1)

## 5 Appendix: Regression results

Figure 3 - Change GDP growth and change budget balance (2019-20)

Source	SS	df	MS	Number of obs	=	27
Model	1190.16936	1	1190.16936	F(1, 26)	=	389.82
Residual	79.3806545	26	3.0531021	Prob > F	=	0.0000
				R-squared	=	0.9375
				Adj R-squared	=	0.9351
Total	1269.55002	27	47.020371	Root MSE	=	1.7473

y	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
x	.8130572	.0411801	19.74	0.000	.7284103	.8977041

Figure 5 - Government debt ratios (2019) and change budget balance (2019-20)

Source	SS	df	MS	Number of obs	=	27
Model	25.2194873	1	25.2194873	F(1, 25)	=	9.64
Residual	65.4071808	25	2.61628723	Prob > F	=	0.0047
				R-squared	=	0.2783
				Adj R-squared	=	0.2494
Total	90.6266681	26	3.48564108	Root MSE	=	1.6175

y	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
x	-.0254083	.0081837	-3.10	0.005	-.0422629	-.0085536
_cons	-4.968587	.6045953	-8.22	0.000	-6.213775	-3.7234

Figure 6: Fiscal activism and change growth GDP, 2019-20

Source	SS	df	MS	Number of obs	=	27
Model	46.9983538	1	46.9983538	F(1, 25)	=	11.42
Residual	102.902395	25	4.11609581	Prob > F	=	0.0024
				R-squared	=	0.3135
				Adj R-squared	=	0.2861
Total	149.900749	26	5.76541343	Root MSE	=	2.0288

y	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
x	4.664731	1.380473	3.38	0.002	1.821593	7.50787
_cons	-11.98551	1.29351	-9.27	0.000	-14.64955	-9.321482

Figure 7: Fiscal stimulus and change GDP growth, 2019-20

Source	SS	df	MS	Number of obs	=	27
Model	37.8016871	1	37.8016871	F(1, 25)	=	8.43
Residual	112.099062	25	4.48396248	Prob > F	=	0.0076
				R-squared	=	0.2522
				Adj R-squared	=	0.2223
Total	149.900749	26	5.76541343	Root MSE	=	2.1175

y	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
x	.6955948	.2395696	2.90	0.008	.202192 1.188998
_cons	-7.970638	.4108741	-19.40	0.000	-8.81685 -7.124427