Portugal's GDP, a Note on the 2020 Unknowns

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Key Messages

■ This paper provides a simple exercise for the real growth rate of GDP in 2020 in Portugal, with three alternative scenarios, with the range for real growth between -5.8% and -3.9%

■ Of particular relevance is private consumption and investment, with households cutting spending significantly, and government spending that will need to cover some of the lacking domestic demand

■ Tentatively, a budget deficit of around 3% or 4% of GDP might then be a possibility for 2020, implying a break and not a fiscal regime switch

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Portugal's GDP, a note on the 2020 unknowns

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Abstract

We provide a simple exercise for the real growth rate of GDP in 2020 in Portugal, with three alternative scenarios: pessimistic, baseline, and optimistic, with the range for real growth between -5.8% and -3.9%. Of particular relevance is private consumption and investment, with households cutting spending significantly, and government spending that will need to cover some of the lacking domestic demand. The increase in the budgetary imbalances would also be inescapable.

1. Nominal and real GDP in Portugal ended 2019, according to Portugal Statistics' provisional numbers, respectively at 212 313 and 202 392 million EUR. Figure 1 illustrates the developments of both magnitudes.
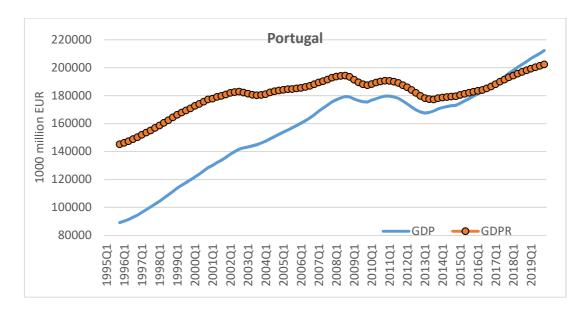
Figure 1 – Nominal GDP and real GDP (GDPR)

Source: Statistics Portugal, Base 2016; seasonally and calendar effects adjusted data; chain-linked volume data (reference year=2016).

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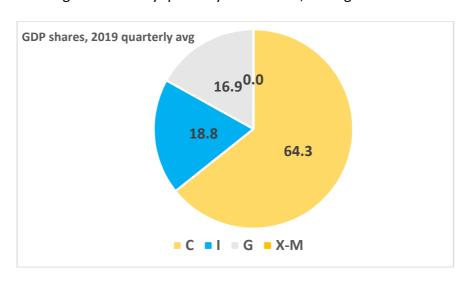
2. Table 1 reports the shares of GDP components. Considering the yearly end of quarter shares during 2019, and Figure 2 depicts those shares, where it is possible to confirm the relevance of Private Consumption with a contribution of around 2/3 to GDP.

Table 1 – Shares of GDP components

	GDP	C	I	G	X	M	X-M
2018Q1	100	64.4	17.6	17.1	43.0	42.1	0.9
2018Q2	100	64.4	17.6	17.1	43.5	42.6	0.9
2018Q3	100	64.5	17.8	17.0	43.8	43.0	0.8
2018Q4	100	64.6	18.1	16.9	43.7	43.3	0.4
2019Q1	100	64.4	18.5	16.9	43.7	43.6	0.2
2019Q2	100	64.4	18.8	16.9	43.7	43.8	-0.1
2019Q3	100	64.3	19.1	16.9	43.6	43.9	-0.3
2019Q4	100	64.1	18.9	16.9	43.9	43.8	0.1

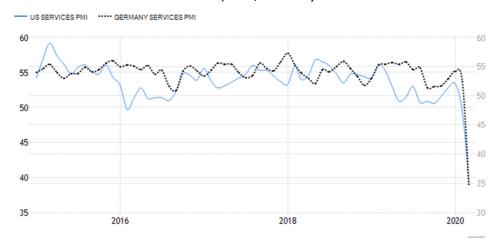Source: Statistics Portugal and own calculations.

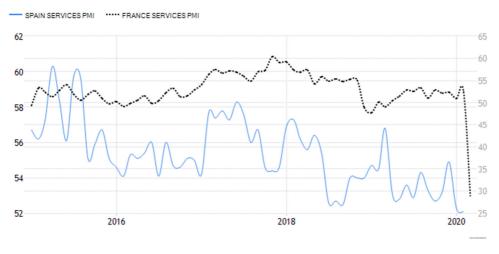Figure 2 – Yearly quarterly GDP shares, averages of 2019

Source: Statistics Portugal and own calculations.

3. A good and simple indicator of economic sentiment is the Purchasing Managers' Index (PMI). Hence, looking at the recent numbers of the PMI for a few economies highlights the dire times ahead (Figure 3), signalling an extremely fastest contraction in business activity in March 2020 for such countries as US, Germany, Spain, France, China, and Japan.
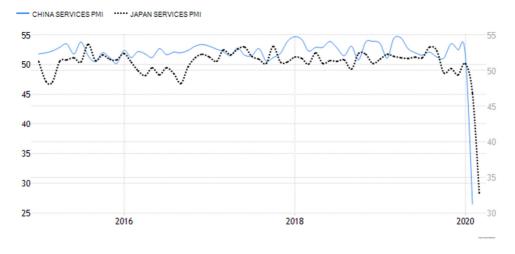
Figure 3 – PMI, selected economies
a) US, Germany

b) Spain, France

c) China, Japan

Source: Trading Economics (https://tradingeconomics.com/), IHS Markit.

4. Taking into account that a recession is building up, both in the World, and particularly in the case of the main trading partners of Portugal, it is rather foreseeable that a decline in real growth will necessarily take place in 2020. Therefore, we provide an exercise for the real growth rate of GDP in 2020 in Portugal. The exercise is a simple one, considering a range of several real growth rates for the GDP components and some rational for each of them.

5. For instance, depending on the severity of the contraction in Private Consumption, and on how households will retrench consumption (and eventually increase savings), the projection uses a bracket between -5% and -3% for the respective real annual growth.

6. It is important to bear in mind that in the aftermath of the 2008-2009 Global and Financial Crisis (GFC), consumers in Portugal (and in other euro area countries) ended up reducing consumption, and increasing their saving rates in spite of a decrease in disposable income. In fact, the private savings as percentage of GDP stood at around 18.8% in 2012, while the initial forecasts pointed to 12.8% (as reported by the Ameco database). Hence, households reacted differently from the initial expectation.

7. During the period 2012-2013 the annual real growth rate of Private Consumption was negative, averaging around -3.2%, and reaching -4% in some quarters (see Figure 4). This outcome contradicted, in practice, the expectation at the time of some scholars and institutions that one would witness some expansionary fiscal consolidation effects.[1] Therefore, it is quite probable to observe an even more substantial retrenchment of Private Consumption this time around, given that the uncertainty is both more fundamental and incisive, particularly for households.

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[1] Regarding the presence (absence) of expansionary fiscal consolidation see, notably :
- Afonso, A., Martins, L. (2016). "Monetary Developments and Expansionary Fiscal Consolidations: Evidence from the EMU", *International Journal of Finance and Economics*, 21, 247-265.
- Afonso, A., Jalles, J. (2014). "Assessing Fiscal Espisodes", *Economic Modelling*, 37, 255-270.

Figure 4 – Private consumption, real terms

C real

Source: Statistics Portugal, Base 2016, and own calculations.

8. Regarding Investment, the interval used is rather more pessimistic, between -14% and -10%. However, even the more pessimistic scenario for Investment can turn out to be cautious. Indeed, looking at the period 2012-2013 the annual real growth rate of Investment was on average around -15.8% (see Figure 5).

Figure 5 – Investment, real terms

I Real

Source: Statistics Portugal, Base 2016, and own calculations.

9. In terms of Government Consumption, the more pessimistic scenario would imply a higher government intervention of +3% while a more optimistic scenario is then less demanding for government expenditure, at around +2% in terms of real growth. The

main hypothesis here is that governments will increase their spending. Indeed, the fiscal contraction that occurred in the period 2012-2013 in Portugal, where Government Consumption declined on average around 6%, is not a valid guideline now (see Figure 6).
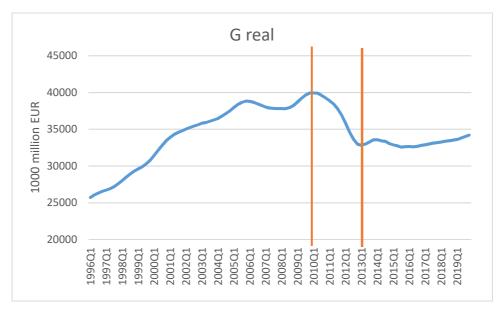
Figure 6 – Government consumption, real terms

Source: Statistics Portugal, Base 2016, and own calculations.

10.   Regarding the net effect of external demand, this has been rather small in the recent past, and therefore the alternative scenarios use comparable brackets. While imports in real terms declined, around 3% in the period 2012-2013 that is not a reasonable indicator for the current case, since the economic activity will decline in both sides of the Current Account (see Figure 8 below for the developments in the Current Account-to-GDP ratio).

Table 2 – 2020 GDP scenarios, real growth rates

2020	GDP	C	I	G	X	M	X-M	Pessimistic
Growth rate	-5.8	-5.0	-14.0	3.0	-15.0	-14.0		
1000 million euro	190670	123339	32834	35235	75443	76181	-738	
2020	GDP	C	I	G	X	M	X-M	Baseline
Growth rate	-4.9	-4.0	-12.0	2.5	-12.0	-11.0		
1000 million euro	192566	124637	33598	35064	78105	78839	-733	
2020	GDP	C	I	G	X	M	X-M	Optimistic
Growth rate	-3.9	-3.0	-10.0	2.0	-9.0	-8.0		
1000 million euro	194462	125935	34362	34893	80768	81496	-728	

Source: Statistics Portugal and own calculations.

11.   Therefore, Table 2 offers some alternative scenarios for the real growth rate of GDP in 2020, with three alternative scenarios: pessimistic, baseline, and optimistic. The range for the change in real growth would then be between -5.8% and -3.9%

12.   Several unknowns are difficult to take into account. For instance, one issue has to do with the cost of sovereign funding to face the increase in government spending, and the likely reduction in tax revenues. Definitely, in capital markets, a negative clear historical correlation tends to exist between budget balances ratios and the 10-year sovereign yields.

13.   Figure 7 plots such relationship for Portugal, with a historical simple correlation of around -0.60. Whether the continued quantitative easing measures implemented by the ECB (see ECB´s €750 billion *of the Pandemic Emergency Purchase Programme* (PEPP)) will be sufficient to provide low cost funding to periphery countries such as Portugal remains at this stage a question mark.[2] Indeed, in the past, the euro area sovereign yields of non-core countries profited from the presence in the secondary market of the ECB, via notably the several enacted Purchases Programmes.
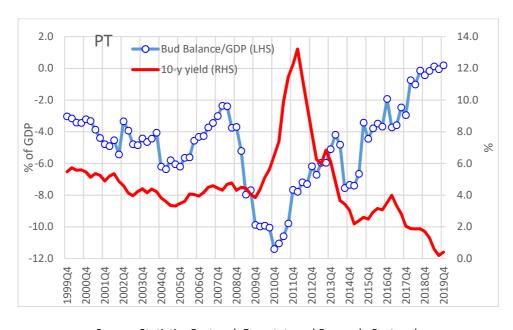
Figure 7 – Budget balances and 10-year yields

Source: Statistics Portugal, Eurostat, and Banco de Portugal.

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[2] This effect between sovereign yields and budgetary balances has nevertheless been documented in the recent past. See for instance:

- Afonso, A., Jalles, J. (2019). "Quantitative Easing and Sovereign Yield Spreads: Euro-Area Time-Varying Evidence", *Journal of International Financial Markets, Institutions & Money*, 58, 208-224;
- Afonso, A., Arghyrou, M., Gadea, M., Kontonikas, A. (2018). ""Whatever it takes" to resolve the European sovereign debt crisis? Bond pricing regime switches and monetary policy effects", *Journal of International Money and Finance*, 86, 1-30;
- Afonso, A., Kazemi, M. (2018). "Euro Area Sovereign Yields and the Power of Unconventional Monetary Policy", *Finance a úvěr-Czech Journal of Economics and Finance*, 68 (2), 100-119.

14. Another topical question has to do with the potential relationship between the budget balance and the current account balance. Such Twin Deficit Hypothesis (TDH) has been present and reported in several studies, to some extent in several economies and in Portugal.[3] In a context of deteriorating fiscal balances and a mitigated positive (to say the least) balance in terms of the current account, additional negative spillovers can arise for Portugal.

15. Figure 8 illustrates such TDH for the case of Portugal, where we find that a mild simple correlation of 0.32 is present.
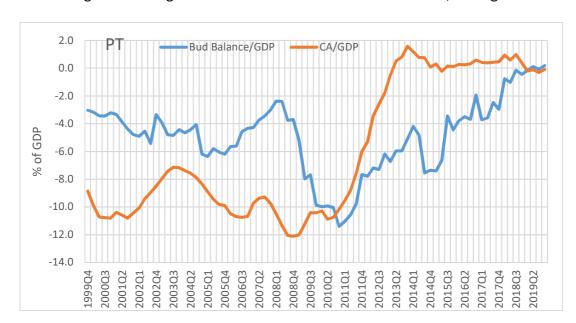
Figure 8 – Budget balances and Current Account Balances, Portugal

Source: Statistics Portugal, Eurostat, and Banco de Portugal.

16. Finally, and taking into account the abovementioned scenarios for GDP, one can make a crude attempt to what might be the impact of the recession on public finances. We can consider, on the one hand, the extremely high relationship between past development of GDP and government revenues (notably via the main direct and indirect tax items), and on the other hand, the expected required effort of the government in terms government consumption.

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[3] See for instance:
- Afonso, A., Huart, F., Jalles, J., Stanek, P. (2020). "Twin Deficits Revisited: a role for fiscal institutions?" *forthcoming*.
- Afonso, A., Opoku, P. (2018). "The Relationship between Fiscal and Current Account Imbalances in OECD Economies ", REM Working Paper 061-2018.
- Afonso, A., Rault, C., Estay, C. (2013). "Budgetary and external imbalances relationship: a panel data diagnostic", *Journal of Quantitative Economics*, 11 (1-2), 45-71.

17.   Therefore, and quite tentatively, a budget deficit of around 3% or 4% of GDP might then be a possibility for 2020.[4] Such fiscal developments can imply a break and not a fiscal regime switch, as it occurred some times in the past in Portugal.[5] Moreover, such break might not imply necessarily a negative impact on the sustainability of public finances since that can still be present, once such breaks are accounted for.[6] In addition, the European Council enabled flexibility in the application of European Union rules on public finances and fiscal policies, in order to "accommodate exceptional spending".

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António Afonso,
30-03-2020
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[4] The use of a budgetary semi-elasticity of around 0.506 for the budget balance, vis-à-vis the output gap, in the case of Portugal, as reported notably by the European Commission, would also point to a similar scenario:

- Mourre, G., Astarita, C., Princen, S. (2014). "Adjusting the budget balance for the business cycle: the EU methodology", Economic Papers 536, Economic and Financial Affairs, EC.

[5] See for instance, regarding the case of Portugal:

- Afonso, A., Claeys, P., Sousa, R. (2011). "Fiscal Regime Shifts in Portugal", *Portuguese Economic Journal*, 10 (2), 83-108.
- Afonso, A., Sousa, R. (2011). "The Macroeconomic Effects of Fiscal Policy in Portugal: a Bayesian SVAR Analysis", *Portuguese Economic Journal*, 10 (1), 61-82.

[6] Some examples of evidence on fiscal sustainability are:

- Afonso, A., Jalles, J. (2017). "Euro area time varying fiscal sustainability", *International Journal of Finance and Economics*, 22 (3), 244-254.
- Afonso, A., Rault, C. (2010). "What do we really know about fiscal sustainability in the EU? A panel data diagnostic", *Review of World Economics*, 145 (4), 731-755.

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