

IZA COVID-19 Crisis Response Monitoring  
**Portugal (June 2020)**

Priscila Ferreira  
João Cerejeira  
Miguel Portela

## IZA COVID-19 Crisis Response Monitoring Portugal (June 2020)

**Priscila Ferreira**  
University of Minho

**João Cerejeira**  
University of Minho

**Miguel Portela**  
University of Minho

### ABSTRACT

---

Portugal declared the State of Emergency over coronavirus on March 18 and strict lockdown measures were imposed. To sustain the effects of the shock the government implemented a set of exceptional measures, which have cost June 780 million euros until June. Although the social climate is quiet, the measures do not fully address the income loss suffered by agents and the effects of the economic slowdown. Recent forecasts by the EC suggest that the Portuguese GDP will fall by 6.8% in 2020, but will recover (5.8%) in 2021. If this happens, this cycle may in fact be closer to the “V” shape.

---

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

This series often represents preliminary work and is circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

Cite as:

Ferreira, Cerejeira, Portela (2020): IZA COVID-19 Crisis Response Monitoring: Portugal (June 2020).

## Labor market impact of COVID-19

Portugal declared the State of Emergency over coronavirus on March 18. According to data provided by the Portuguese Institute of Employment and Professional Training (IEFP, 2020), in May (March) 2020 the number of registered unemployed in mainland Portugal increased by 4.2% (9.6%) comparing to April (February) and by 36.2% (3.7%) comparing to May (March) 2019. This increase is mainly due to the increase of registered short-term unemployed (less than 12 months). Amongst the registered unemployed in May, 45% were males and 55% females. However, despite the greater share of females in the group of unemployed, the observed increase between May 2020 and May 2019 was larger for males (39.5%) than for females (33.7%).

Workers without a higher education degree were the most affected at this initial stage of the crisis, for whom we observe an average increase in registered unemployment of 38.3% between May 2020 and May 2019 – which contrasts with an increase of 22.8% for workers with a university degree. There are no significant differences by gender across levels of educational attainment.

Considering occupations, the worst hit groups were: Plant and machine operators and assemblers (62% increase comparing to May 2019); Sales and services workers (50% increase); Craft and related trades workers (42% increase); and Clerks (36% increase).

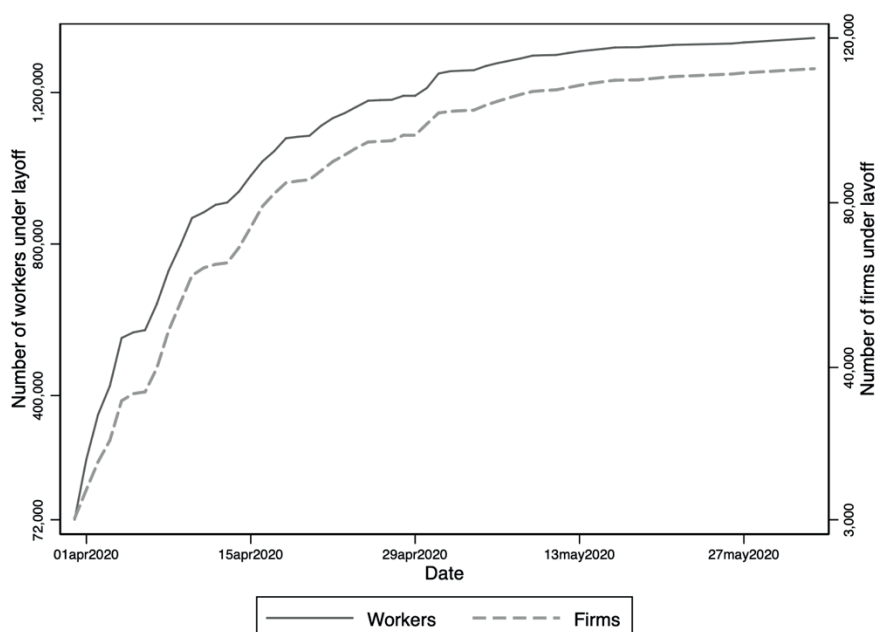
Unemployment increased by 10% between February and March 2020 in the three main sectors of economic activity. This initial situation changed during May 2020 (full month in lockdown). Compared to May 2019 the number of registered unemployed increased by 13.5% in the primary sector, by 27.8% in the secondary sector, and by 44.7% in the tertiary sector. These averages, however, hide great differences across the activities that compose the sectors. For example, within the manufacturing sector the worst hit activities were: Motor vehicles (45.9% increase, comparing to May 2019); Manufacture of basic metals and of fabricated metal products (45.4% increase); Textile, clothing and leather industries (43% increase); and Petroleum, chemical and rubber manufacturing (34.5% increase). Amongst the services sector the worst hit activities were: Lodging, restaurants and hotels (89.3% increase compared to May 2019); Transports and storage (62.8% increase) and Real estate (57.5% increase). Furthermore, the number of job offers fell by 39% when comparing May 2020 to May 2019 (although the number of job offers increased between April and May 2020 by 5%). Which makes finding a new job a difficult task for existing and newly unemployed as well as for labour market entrants. In Table 1 we provide a summary of the labour market impacts of this crisis in Portugal.

**Table 1:** Labour Market Impact of COVID-19 in Portugal (as of April 2020) – Registered Unemployment, Job Offers and Placements

	2020			2019	Change in May			
	May	April	March	May	Previous month		Previous year	
					Abs.	%	Abs.	%
Registered unemployment (stock)	384 504	368 925	321 164	282 292	+15 579	+4,2	+102 212	+36,2
< 12 months	258 368	244 142	200 082	157 146	+14 226	+5,8	+101 222	+64,4
>= 12 months	126 136	124 783	121 082	125 146	+1 353	+1,1	+ 990	+0,8
Registered un-employment (inflow)	44 718	63 643	51 432	36 209	-18 925	-29,7	+8 509	+23,5
Employed job seekers	36 056	37 729	37 390	42 104	-1 673	-4,4	-6 048	-14,4
Job offers (stock)	11 235	10 668	12 000	18 434	+ 567	+5,3	-7 199	-39,1
Job offers (inflow)	6 761	3 040	7 356	12 984	+3 721	+122,4	-6 223	-47,9
Job placements	4 287	2 233	5 773	7 496	+2 054	+92,0	-3 209	-42,8

Source: Institute of Employment and Professional Training [IEFP].

The State of Emergency was replaced by a State of Calamity on May the 3rd. However, despite expectations and incentives for the economy to parsimoniously get back to business, labour market conditions continued to deteriorate, albeit at a slower rate, during May. On May 27th 1,332,114 workers worked in firms that implemented partial or full-time layoff (which contrasts with only 72,507 on March 31st), more than half of these workers worked in Manufacturing, Gross and retail trade, and Restaurants and hotels (MTSS, 2020). Therefore, the effort to make is to prevent these laid-off workers from being made redundant and dismissed permanently. Otherwise, unemployment is likely to increase in the medium term (not immediately because of the ban on dismissals associated with the layoff regulations) because of large-scale redundancies (see Figure 1).

**Figure 1:** Requests by firms to implement temporary layoff


We do not have information on the type of contract of employment of newly unemployed workers, however it is likely that firms will adjust their employment levels by dismissing the least permanent workers first. In fact, most of the extraordinary and temporary measures

aimed at tackling this crisis (e.g. the simplified layoff scheme and the credit lines for firms) require that firms do not dismiss permanent workers and that they do not proceed with collective dismissals for some time (for 60 days after the layoff ends, and until December 2020 for those who take up credit lines). Self-employed workers account for 12% of total employment (14% male and 9% female), and 5% were business owners in 2019. We expect this crisis to have a significant impact on the activity and earnings of these workers. The SURE program by the EC may be an essential tool to help this group of workers.

## Orientation and targeting of adopted measures

The OECD listing of measures is an appropriate summary of the government actions to tackle the impact of the health crisis over the National State of Emergency period (March 18th – May 2nd). However, since May 3rd Portugal started to ease the lockdown restrictions (and entered a National State of Calamity). New guidelines were issued, which include measures to reduce workers' exposure to COVID-19 in the workplace, such as a recommendation for telework when and as much as possible during May, and partial telework with lagged schedules or shadow teams from June.<sup>1</sup>

According to a report by the Portuguese Minister of Labour and Social Solidarity (Godinho, 2020), as of 16 June 2020 the set of exceptional support measures to families, workers and firms had already benefited 1,222,000 people, 144,464 firms, and 778 million euros had been paid to recipients. Employment protection measures were by far the most expensive component of the measures adopted. The simplified layoff involved, thus far, an investment of 580 million euros (this measure was extended until July 2020). Income support for self-employed and members of statutory bodies cost 104 million euros. Exceptional support measures to families, such as subsidies for prophylactic isolation, for sick leaves, and to care for children aged under 12 (schools were closed at the start of the State of Emergency) cost 43 million euros. The automatic extension of unemployment benefits and of social inclusion income (for those who were receiving these subsidies in March 2020) cost 18 million euros. Furthermore, credit lines for financial support to firms involved an investment of 6,2 billion euros. To access these credit lines, however, firms have to declare that they assume the responsibility of not dismissing permanent workers and of not initiating any collective dismissal process before the end of December 2020.<sup>2</sup>

All political parties approved the tools adopted to sustain the effects of the nationwide lockdown. It is difficult to sort the measures according to their relevance in social terms – all are important and each tackles a different issue. However, albeit costly, the temporary layoff scheme is arguably one of the most important measures adopted. This tool not only sustains the transition from employment to unemployment (at least for permanent workers), but can also be taken as a signalling device from the government to ensure that this is a temporary exogenous shock. In fact, the government appears to be in an active effort to avoid a shift in expectations amongst the economic agents, which could have severe consequences for the recovery phase. Therefore, the feeling is that it is “worth it” to help the labour market keep its structure and allow it to come back to business as the shock subsides. Since schools were closed during the lockdown (and will not open before the next academic year), income support for parents to stay home and look after their children is also a tool of utmost importance.

<sup>1</sup> See plan for lifting lockdown measures: <https://covid19estamoson.gov.pt/plano-desconfinamento-medidas-gerais/>

<sup>2</sup> [https://www.spgm.pt/fotos/produtos\\_documentos/declaracao\\_compromisso\\_manutencao\\_postos\\_de\\_trabalho\\_5669791165ea16f8c56821.docx](https://www.spgm.pt/fotos/produtos_documentos/declaracao_compromisso_manutencao_postos_de_trabalho_5669791165ea16f8c56821.docx)

Although the social climate is quiet, the measures do not fully address the income loss suffered by all economic agents. Furthermore, temporary workers, the self-employed, small business owners and labour market entrants are particularly vulnerable groups (both in terms of income loss and of labour market status). Media also reported that the number of requests to the national network of food banks tripled in April when compared to the previous month. <sup>3</sup>

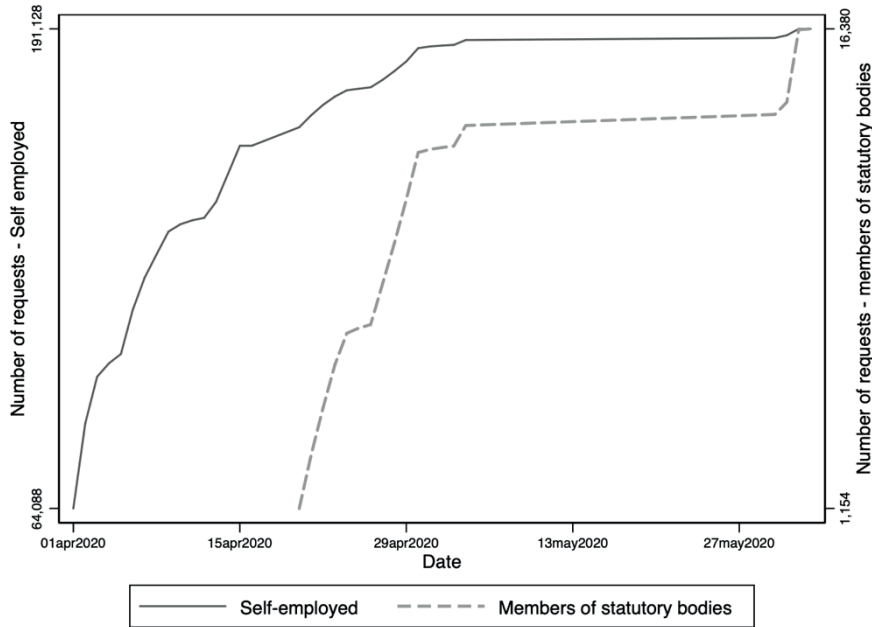
## Immediate liquidity support to businesses

There have been plenty of initiatives aimed at supporting the labour market (supply and demand sides). Exceptional support measures for include: (i) extraordinary support to maintain employment contracts (credit lines and simplified layoff rules); (ii) creation of an extraordinary training plan; (iii) a temporary exemption from payment of the social security contributions payable by the employer; (iv) an extraordinary financial incentive to support the normalisation of the company's activity; and (v) a ban on dismissals. According to a report by the Bank of Portugal there is a non-linear relationship between the percentage of firms without liquidity to face the fixed costs and the number of days of reduced activity. This percentage is larger amongst large firms and firms within the restaurants and hotels industry. The simplified layoff rules help alleviate this problem. Under layoff the share of firms with liquidity issues from reduced activity is similar to the share that we would observe in normal circumstances. Therefore, it is expected that the implemented measures will help preserve firms' solvency in the long term and avoid firm closures. As mentioned previously (Figure 1), as of May 27, 111,536 firms had applied for layoff (involving 1,332,114 workers, about 1/4 of the active population in February 2020). Given the scale of the task, however, some concerns arise as financial support takes time to reach its recipients (Bank of Portugal, 2020).

The self-employed and the members of statutory bodies were also targeted by ALMP by being allowed to request support for reduced economic activity (from April 1). On May 8th, the income support eligibility conditions for self-employed and small business owners were enlarged in order to cover individuals not eligible for unemployment benefits. In Figure 2 we present the cumulative number of requests for financial support by the self-employed (from April 1) and by members of statutory bodies (from April 20). During April 186,000 self-employed and nearly 12,500 members of statutory bodies (of firms without registered employees) requested support.

<sup>3</sup> <https://rr.sapo.pt/2020/04/30/pais/pedidos-ao-banco-alimentar-triplicam-sem-emprego-muitos-dependem-de-apoios-para-comer/noticia/191287/>

**Figure 2:** Requests for support measures by self-employed and members of statutory bodies



During April the Office for National Statistics and the Bank of Portugal implemented a weekly short survey (Inquérito Rápido e Excepcional às Empresas) aimed at assessing the impact of the Covid-19 outbreak on firm activity. The report from the last week of April shows that the group of microenterprises, with less than 10 employees, was the one with the largest share of firms that considered the simplified layoff the most relevant factor to explain the decrease in working hours.

### Support of dependent workers

Official data reports an increase of 91,488 registered unemployed workers between February and May 2020, which corresponds to 36% compared to May 2019 (see Table 1). We also know that 111,536 firms joined the simplified layoff scheme (thus 1,332,114 workers are at risk of being at least partially out of work, whilst still keeping their jobs). The magnitude and the conditions of access to the simplified layoff suggests that should there not be any ALMP such as those implemented to tackle the crisis, labour market outcomes could be very different.

The suspension of employment contracts (layoff) is predicted in the General Labour Law. On March 15 the government defined new conditions of access to this tool (in particular, it clarified/ adjusted the meaning of “entrepreneurial crisis” which is a necessary condition to implement layoff) and simplified the procedures for requesting layoff, e.g. firms are exempted from presenting some documental proofs, but may be subject to inspection in the future and penalties can be applied. Under layoff, workers receive  $\frac{2}{3}$  of their gross pay, up to a maximum of €1,905. 70% of the workers’ pay is paid by Social Security and 30% is paid by the employer. Usually, layoff lasts for a month and can be extended monthly up to a maximum of 6 months (Order 71-A/2020, March 15). During the layoff period, and for 60 days after it has ended, employment contracts cannot be terminated under collective dismissal or by reasons of extinction of the job for workers who were under layoff (Article 13, Decree-Law 10-G/2020, March 26).<sup>4</sup>

<sup>4</sup> Exceptions include the end of temporary employment contracts and fair cause for dismissal.

Another measure aimed at supporting the income of dependent workers relates to the extraordinary extension of unemployment benefits and all benefits of the Social Security system. For example, a person for whom the period of entitlement to unemployment benefits ended from March onwards, had that period automatically extended until June 30 (Decree-law 10-F/2020, March 26).

We do not have much information on support for job-seekers, which is understandable because the economy came to a halt during the State of Emergency and did not improve much during May. What we do know, however, is that the duty to actively search for a job while unemployed was suspended on March 19 (Dispatch 3485-C/2020, March 19). Once the lockdown measures are progressively lifted, and firms restart their activity, it is likely that a discussion about measures aimed at creating jobs will surface. At this moment, the government and social partners are more focussed on trying to stop the bleeding rather than on healing the wound.

## Working conditions and work organization

The major novelty over this period is the shift into tele(home)work, where possible. There are some potential positive effects of such work practices on (i) workers (improving the work, family and private life balance), (ii) employers (increasing productivity and efficiency) and (iii) society at large (higher labour force participation for women and reduction in traffic congestion). 58% of the firms have workers in telework arrangements, mainly in large (93%) and medium size (73%) firms. Only 30% of micro firms have at least one worker in telework (INEa, 2020).

However, flexible working time arrangements and new working practices are not gender, age and household type neutral. The main shortcomings associated to flexible working times relate to: (i) the blurring boundaries between working and family time, which may worsen working and living conditions for workers, especially in the case of tele(home)working, with the risks of longer working hours, as well as the personal costs due to isolation, loss of visibility and lower career perspectives; and to (ii) the reduced predictability of working time, which is particularly negative for workers with care responsibilities. Workers with school-age children, who were themselves experiencing the novelty of tele(home) schooling, have reported feeling overwhelmed with the whole situation. There has been a specific subsidy aimed at financially support workers with children under age 12 who have to stay at home because of school closures. Not all eligible workers applied to this subsidy. One can guess two reasons for that: (i) it implies a loss of income (loss of 1/3 of the base pay) and (ii) people are afraid of losing their jobs. It is hard to tell if Portugal is experiencing a reactivation of traditional gender roles. Official sources do not, as yet, report how care responsibilities were organized by gender. However, a survey conducted by Catholic University Lisbon (CESOP, 2020) concluded that “*Women, more than men, are caring for the family, in lay-off and without activity. Men, more than women, have kept their jobs in the same venue.*”<sup>5</sup> Apart from this subsidy, to the best of our knowledge, there have been no other tools to respond to this new situation.

Sectors that report an increased or normal workload are health and ICT sectors.

5 “Elas, mais do que eles, na assistência à família, em lay-off e sem atividade. Eles, mais do que elas, a manter as mesmas funções nos mesmos locais” online at: <https://visao.sapo.pt/atualidade/economia/2020-05-14-covid-19-mais-mulheres-que-homens-em-assistencia-a-familia-lay-off-ou-sem-atividade-estudo/>



## New labor market entrants

Nationwide, there has not been much discussion of this topic, which is a bit worrying. After the Recent Great Recession, the EU used structural funds to tackle youth unemployment. But nothing, as yet, has been presented as a policy envisaging the integration of young people in the labour market (both at the EU and the national level).<sup>6</sup> We do sense some concerns in public opinion about young workers in their 30s who are now experiencing the second recession. For labour market entrants, however, discussions are mostly focused on how and/or when they will finish their degrees (national exams, university admissions, university graduations). It seems that uncertainty on the type of recession/recovery (L, U, V, W, Nike Swoosh) helps confusion and fosters the lack of action. For the optimistic, who foresee a V shape recession, the problem is only temporary – therefore the market will pick up quickly. However, we know that for recent graduates it is urgent to enter the market shortly after graduation, otherwise they will be competing with the class of 2021, and compared to these the 2020 graduates will be a rotten apple. Overall, the issue with new labour market entrants is similar to that of job-seekers: the government and social partners are mostly focussed on preventing the economy from collapsing during/after the lockdown. We can also guess that it is difficult to design any policy that fosters employment while the economy is shut-down, time stands still and everyone is asked to be at home waiting for better days.

Applications for a job by employed job-seekers decreased during this period. Applications for a job by employed job seekers represented 7% of the total requests for a job in May 2020, which contrasts with 7.6% (8.2%) in April (March) 2020 and 9.7% in May 2019. Overall, the number of employed job seekers decreased by 14.4% between May 2019 and May 2020 (IEFP, 2020).

## Policy innovations and labor market trends

The simplified layoff rules, although common in other European countries, were the most important and innovative policy measure. The main concern reported by the employers was the administrative and bureaucratic burden, despite the procedures being “simplified”, which implied additional costs and uncertainty regarding the eligibility conditions and the time frame to get the support.

Local authorities have also tried to ameliorate the conditions of their businesses and citizens. For example, some municipalities have exempted business from fees, others have changed regulations to allow business to operate in wider outdoor areas. We are also observing a fast digitalization of the economy. Besides tele-work and tele-school, actions are being taken to support local producers and businesses and platforms are being created to ease the communication between producers and consumers. Since local and family businesses can be an important source of support for the economy, any strategy that helps these firms to survive during the crisis are welcome. Some sectors and firms adjusted quickly, the textile sector and some tech firms are now producing all sorts of gear needed to tackle this disease (protective gear, ventilators, etc). Some firms producing canned food and cereals and its derivatives (pasta, flour) have more than tripled their production. Will these expanding sectors compensate for all other losses? The future will tell.

Most of our economic activity relies on manufacturing and services. It is possible that some change may happen in some services, e.g., employers may be less reluctant to allow

<sup>6</sup> [http://www.bollettinoadapt.it/old/files/document/19711youth\\_action\\_tea.pdf](http://www.bollettinoadapt.it/old/files/document/19711youth_action_tea.pdf)

working from home in some sectors and workers may be more open to new work practices. Over this crisis, it has also become apparent that long supply chains may be a problem in particular when the world shuts its doors. Will this suffice to induce structural change in what we do and how we do it? We will see.

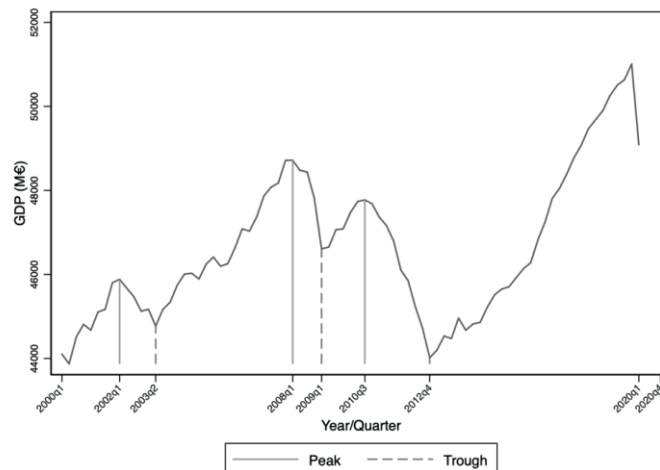
Recent forecasts predict a sharp decrease in Portuguese exports, following the global economic downturn. This shock will mainly affect export manufacturing branches, in particular Metal working, Automotive components industry, and Textiles, clothing, leather and footwear sectors, that showed an impressive recent export performance, not only due to quality improvements but also due to cost competitiveness, with export prices relative to Portugal’s competitors depreciating by around 6% since 2009 (OECD, 2019). The reallocation of global value chains can benefit these industries, as they compete closely with eastern Asia producers. On the other hand, since Portugal is a small open economy, any significant increase in barriers to international trade can reverse the export growth to non-European countries.

### Next steps and fiscal viability

The strict lockdown measures and support from the government are not a long run equilibrium and cannot be sustained for a long period of time. This becomes apparent when we consider that most initiatives have an exceptional and temporary nature.

Overall, government actions tried to sustain the impact of the shock and avoid mass job destruction and firm closures. For the near future, it is important not to let the market adjust their expectations to the disrupted lockdown scenario. Instead, it is important that a majority trusts that “all we be well” and uses this positive expectation to rapidly adjust to a new way of living. If this happens, our recovery may in fact be closer to the “V” shape. Recent forecasts by the European Commission seem to lie on this scenario. The unemployment rate in Portugal is expected to rise by 3.2 percentage points in 2020 (6.5% in 2019 to 9.7% in 2020, and 7.4% in 2021). The same projections suggest that the Portuguese GDP will fall by 6.8% in 2020 (below the EU average of -7.7%), but will recover in 2021 (expected growth of 5.8%). Using data from the Office for National Statistics (INE b, 2020), I Figure 3 we plot the Portuguese GDP in million Euros (chained volume series, reference year 2016) and date the phases of the cycle. During the first quarter of 2020 the Portuguese GDP fell by 3.8% compared to the previous quarter and by 2.3% compared to the same quarter in 2019. The future will tell the shape of this cycle.

**Figure 3:** Portuguese GDP



Since Portugal was one of the countries involved in the European Sovereign Debt Crisis it is important to also note the projections made for the Public Budget Balance (as a percentage of GDP): -6.5% in 2020 and -1.8% in 2021.<sup>7</sup> The high public debt (118% of the GDP in 2019, 132% in 2020 and 124% in 2021) prevents a more effective public support, not only to keep interest rates below 1%, but also to prevent the transmission to the banking sector, which remains fragile in spite of recent improvements. This raises questions on what the European response to the economic crisis that followed the outbreak of the COVID-19 disease, and support to member countries, will be. So far, the SURE (Support to mitigate Unemployment Risks in an Emergency) program has been approved by the Council of the EU (which will be running, at least, from June 2020 to December 2022). This program provides loans at favourable rates to the member states to “cover the costs directly related to the creation or extension of national short-time work schemes, and other similar measures they have put in place for the self-employed, as a response to the current crisis” (EC, 2020). It is difficult to foresee the effects of this program in Portugal both in terms of its effectiveness on labour market outcomes (since it is focussed on short-term work and on self-employment) and in terms of the balance of national accounts (since it is a loan).

---

<sup>7</sup> [https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-performance-country/portugal/economic-forecast-portugal\\_en](https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-performance-country/portugal/economic-forecast-portugal_en)

## References

- Bank of Portugal (2020) Boletim Económico: A economia portuguesa em 2019. Online at [https://www.bportugal.pt/sites/default/files/anexos/pdf-boletim/be\\_mai2020\\_p.pdf](https://www.bportugal.pt/sites/default/files/anexos/pdf-boletim/be_mai2020_p.pdf)
- CESOP (2020) Estudo sobre o Impacto da COVID-19 na Sociedade Portuguesa: A saída do Confinamento (survey implemented between 6-11 May, 2020), online at: <https://cesop-local.ucp.pt/noticias/cesop-catolica-sondagens-realiza-segunda-parte-do-estudo-sobre-o-impacto-da-covid-19-na>. Catholic University, Lisbon.
- EC [European Commission] (2020) SURE – factsheet. Online at [https://ec.europa.eu/info/sites/info/files/economy-finance/sure\\_factsheet.pdf](https://ec.europa.eu/info/sites/info/files/economy-finance/sure_factsheet.pdf)
- Godinho, Ana Mendes (2020). Intervenção da Ministra do Trabalho, Solidariedade e Segurança Social, Ana Mendes Godinho, em audição, no âmbito da apreciação, na generalidade, da Proposta de Lei n.º 33/XIV/1.<sup>a</sup> (GOV) - “Orçamento Suplementar para 2020” - Comissão de Orçamento e Finanças (16-06-2020). Online at <https://www.portugal.gov.pt/pt/gc22/comunicacao/documento?i=apresentacao-da-ministra-do-trabalho-solidariedade-e-seguranca-social-na-apreciacao-na-generalidade-do-orcamento-suplementar>
- IEFP [Portuguese Institute of Employment and Professional Training] (2020). Estatísticas Mensais do Mercado de Emprego. Online at: <https://www.iefp.pt/estatisticas>
- INE a [Office for National Statistics] (2020) Inquérito Rápido e Excepcional às Empresas – COVID-19 (Semana de 27 de abril a 1 de maio de 2020).
- INE b (2020). Contas Nacionais Trimestrais. Online at: [https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_indicadores&contexto=pi&indOcorrCod=0009886&selTab=tab0](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&contexto=pi&indOcorrCod=0009886&selTab=tab0)
- MTSSS [Ministry of Labour, Solidarity and Social Security] (2020) Monitorização COVID-19 MTSSS. Online at: <http://www.gep.mtsss.gov.pt/indicadores-covid-19-mtsss>
- OECD (2019). Economic Survey of Portugal: 2019. OECD Economic Surveys. Online at: <https://www.oecd.org/economy/surveys/Portugal-2019-economic-survey-overview.pdf>