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GREECE'S ECONOMY AFTER COVID-19

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Last year marked the third year in a row that Greece's GDP grew by 1.9 percent, surpassing the corresponding EU-28 average of 1.5 percent and the eurozone's 1.2 percent. The fourth quarter of 2019 was lower than the Greek government and European Commission's (EC) forecasts, but in line with our own projection (Papadimitriou, Nikiforos, and Zezza 2020). The unemployment rate did not improve in the last quarter, remaining at 16.4 percent, but still recorded the lowest rate of the previous 105-month period—after recovering significantly from the job losses in the last crisis period, especially in the important sectors of tourism and exports, manufacturing, and public administration. Inflation was also kept in check, decreasing in 2019 from 2018 due to falling oil prices and reductions in indirect taxation. There were other positive signs registered in 2019 in both the business and consumer confidence indices, which marked their highest values since 2001, while public sector borrowing—post–credit rating agency reviews—was dramatically decreased. The sole disappointing sign was noted in investment: despite the improved economic climate, both gross and net fixed capital formation remained in negative territory.

The COVID-19 pandemic has severely affected the global economy, but has disproportionately impacted Greece's recovery, which is still struggling to cope with the austerity measures imposed by its international creditors, as well as facing an escalation in the number of refugees fleeing from war zones in Syria and elsewhere. Given Turkey's hostile stance toward Europe in general and Greece in particular, surveillance of the porous borders of a few islands in the Eastern Aegean near Turkey has been a formidable task for the Greek government. The living conditions in refugee "hot spots" are frequently in the headlines of the foreign press. These challenges do not bode well for Greece's economic prospects and they have negatively affected the business confidence level that is crucial to the country's continuing economic recovery.

Greece implemented the lockdown strategy followed by many other countries to slow the COVID-19 contagion. The country's first case was registered on February 26, 2020 (WHO 2020) and the government imposed a total ban on public movement on March 23rd, acting rather quickly after the first death was reported on March 12th. The restrictions imposed from the lockdown

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have now been relaxed and are scheduled to end by mid-July, though this does not mean that activities will return to the pre-lockdown "normal."

There are some "known unknowns," such as the impact of the lockdown, the extent of the government and the EU's economic support measures, and business and consumer behavior post-COVID. Thus, providing an estimate of the lockdown's economic impact is a hard task, since the crisis is unprecedented—unless we go back to the Spanish flu epidemic of 1918–20, which, in our view, would not be fruitful given the transformational social and economic changes that have taken place since then, and the overlap with the First World War. What is important to recognize in the case of a pandemic is that the resultant pause of economic activities implies a simultaneous shock to supply—as nonessential production activities are halted—as well as to demand, when workers in such businesses stop earning any income. In economists' jargon, this amounts to a severe structural break, which is likely to change the behavior of consumers and entrepreneurs—noted in the declines in business and consumer confidence levels—so that any economic models (including the LIMG in use at the Levy Institute [Papadimitriou et al. 2013]) need to be used with caution until sufficient time series data are available for estimating the size and impact of the structural break.

The Organisation for Economic Co-operation and Development (OECD) has provided[1] the first of such estimates: their approach is based on the relative size of the sectors that are expected to be impacted most severely by the lockdown, such as those related to travel (including tourism) and services to households. Following this approach, they found that Greece would take the biggest hit among OECD countries, estimated at almost 35 percent of GDP. Their report also mentioned an alternative way to evaluate the crisis's consequences by looking at the impact of the drop in private consumption for some member countries, but provided no such estimates for Greece.

More recently, the International Monetary Fund (IMF 2020) and the European Commission (EC 2020a, 2020b) have released their latest forecasts for Greece, showing that real GDP growth in 2020 was expected to drop by 10 percent and 9.7 percent, respectively, compared to the previous year, registering the largest fall among developed and EU economies. The IMF and EC forecasts show the 2020 unemployment rate rising to 22 percent and 19.9 percent, respectively, then decreasing in 2021 to 19 percent and 16.8 percent. Both the IMF and EC projections assume a U-shaped recession, with output recovering in all countries in 2021 by a smaller amount than the fall projected in 2020. The projections are based on the following assumptions: (1) the COVID-19 pandemic will fade in the second half of 2020, with a gradual lifting of containment measures, and (2) there will not be a second wave. Greece's real GDP, according to the IMF and EU, is expected to grow in 2021 by 5.1 percent and 7.9 percent, respectively, implying that by the end of next year output will not yet have returned to its 2018 level.

All three institutions project a relatively more severe impact on Greece because of its reliance on tourism. Indeed, in 2019 the country registered an inflow of more than €18 billion—almost 10 percent of GDP—under the heading "travel" in its balance of payments, 90 percent of which was obtained between May and October. It is reasonable, then, to assume that most of these receipts will not materialize in 2020, even if the pandemic had started to fade in May. The government recently announced the easing of travel restrictions from Europe's Schengen countries and Israel, effective July 1st, monitoring incoming travelers using random sample COVID-19 testing. However, based on authoritative and cautionary pronouncements coming from various quarters, one cannot assume people will be particularly eager to enjoy the sun and go swimming in the Greek islands this summer, knowing that the country's health system has been under severe stress, not only from COVID-19, but also due to the austerity measures implemented in the last few years (Nikiforos 2020).

Moreover, the monetary inflow from tourism is only the starting point of a multiplier process: employment in tourism-related activities[2] is a significant share of total employment (9.8 percent in 2019), with a strong seasonal increase in the second and third quarter of each year. The revenues from the sale of services to tourists become both wages for Greek workers and profits for the tourism industry; a fall in such revenues, in turn, decreases consumption and investment according to the standard Keynesian multiplier effect.

Projections

Projecting the likely impact of the current crisis on the Greek economy is a complex task, given the overwhelming degree of uncertainty regarding future events and the behavior of economic agents under the new "normal." This is confirmed by comparing the magnitude of the changes in the major international institutions' projections for the euro area. In March, when the crisis had already developed in China and was spreading to Europe, the OECD (2020) only projected a small slowdown for the eurozone in 2020, still hoping for a positive GDP growth rate (see the bottom of Table 1). In April the IMF updated its projections for their World Economic Outlook Database (IMF 2020), estimating a fall in real GDP of 7.5 percent for the euro area. The EC (2020a), a few days later, was already more pessimistic, reporting a fall in real GDP of 7.7 percent.

In our projections exercise, we explore the consequences of different assumptions about the fall in the different sources of aggregate demand.

In our model, GDP is determined from the demand side, according to the traditional Keynesian approach (the roles of financial markets and the stocks of real and financial assets are also considered). This implies that the ultimate drivers of demand are the exports of goods and services—which are determined separately—along with fiscal and monetary policy. Particular attention has been given to modeling tourism, which, as mentioned above, constitutes a large share of Greek exports of services.

In our baseline scenario, we assume a 90 percent drop in the number of tourists coming to Greece in the first three quarters of 2020, and a 25 percent drop in the last quarter of the year. We assume that tourism will resume in 2021 but remain at around 80 percent of the level it reached in 2019. We follow the EC's latest GDP forecast to project the income growth of Greece's trading partners, which, along with relative prices, determines the exports of goods.

Next, we assume a drop in consumption across different categories of goods and services in the first two quarters of 2020. More precisely, we assume that while demand for food and beverages, communication, health, and education will not drop significantly because of the lockdown, the demand for clothing, gas, etc., will fall substantially. From our calculations, we estimate a combined fall in consumption and investment of almost 7.5 percent of 2019 GDP compared to the level they would have reached.

We have assumed a moderate increase in the government's current expenditure on goods and services (a €600 million increase in 2020 compared to 2019) and an increase of about €600 million in social benefits in the first two quarters of 2020. We also assume that the payment of direct taxes and social contributions is postponed until 2021. Following recent government announcements, we included an additional stimulus that we assume will start in September and run through the first two quarters of 2021, for an overall amount of €4.5 billion. We also considered the announcement of a decrease in the value-added tax (VAT) rate.

Results for key macroeconomic indicators are reported in Table 1.

In our baseline scenario, public debt is expected to increase to 207 percent of GDP in 2020 and, as the economy recovers, to decline to 192 percent of GDP by the end of the simulation period in 2022.

The private sector had been deleveraging before the COVID-19 crisis started. In December 2019 (the last period for which data are available), the household sector had reduced its stock of overall liabilities, including long-term loans, through both reduced borrowing and defaults on existing debt. Nonfinancial corporations had also reduced their end-of-period stock of loans outstanding—this time because debt write-offs exceeded new borrowing, which increased in 2019. The net financial position of households improved in 2019. This was due to the appreciation in the market price of listed and unlisted shares, most of which are on the liability side of nonfinancial corporations, so that the nonfinancial private sector's net financial position as a whole improved, albeit marginally. It is interesting to note that the increase in the market price of Greek shares was also mirrored by an increase on the asset side of the rest of the world, reflecting the growing financial investment in the Greek private sector from abroad. The Greek household sector therefore entered the COVID-19 crisis in a weak financial position and with a declining stock of liquid assets: at the end of 2019, deposits were somewhat below their 2018 level.

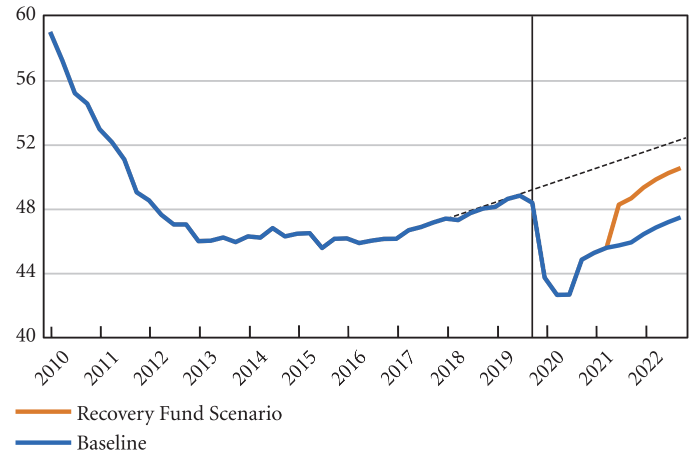
This was expected, since the lockdown and the implied fall in income forced households to increase their consumption out of their stock of liquid assets, reducing their bank deposits. However, data up to March 2020 show a moderate increase in household deposits, possibly implying that—in the face of the uncertainty generated by the health crisis—households, on average, reduced their consumption relative to income.

We also consider a more optimistic scenario, in which the EC's recent Recovery Fund proposal materializes, allowing the government to increase public consumption and investment through EU grants and loans. We assume the plan takes effect from the third quarter of 2021, with €2 billion of additional expenditure per quarter. This enables the economy to achieve a much faster growth rate, contributing to the decline of the public-debt-to-GDP ratio, which falls to 177 percent by the end of 2022.

As Figure 1 shows, without the additional intervention from the Recovery Fund, the trajectory of Greek real GDP would be L-shaped. This would entail a recovery insufficient to fill the gap in income generated by the COVID-19 health crisis, and a growth rate insufficient for restoring GDP to its precrisis trend. The additional stimulus from the Recovery Fund that is directed to public investment, which has a much larger multiplier, would change the recession–recovery pattern into a U-shaped one, although a robust recovery requires a further boost if it is to return to the previous trend, as can be seen clearly in Figure 1.

It remains to be seen if the stimulus expenditure will translate into a structural increase in government expenditure (i.e., an increase in employment in health services, education, etc.) or will mainly be aimed at sustaining firms and workers that have

Figure 1 **Greece: Real GDP under Alternative Assumptions (€ billion, 2010 prices)**



Policy Initiatives

What can the government do to alleviate the shock's impact and help put the economy back on track when the epidemic has died out?

Some appropriate measures have already been taken by the government.[3] They include:

- Late payment fees, interest, and/or surcharges for tax liabilities/payments have been suspended.
- Taxpayers have been granted an immediate refund of debts due from the Tax Administration for amounts up to €30,000.
- If paid on time, tax and social security contribution (SSC) obligations (excluding VAT) have been reduced by 25 percent for employees of idled firms, as well as for the self-employed, freelancers, and firms affected by the coronavirus crisis (where the latter is determined by the firm's Statistical Classification of Economic Activities in the European Community [NACE] code).
- The state will cover the SSCs of both the employees whose labor contracts have been suspended and the self-employed (considered as employees) affected by the coronavirus crisis (based on specific NACE codes).
- Firms can reduce their employees' work time to a minimum of two weeks per month for at least 50 percent of all employees within a firm, on the condition that they do not dismiss any workers. The measure can be applied for up to six months.
- Regular unemployment benefit payments, as well as long-term unemployment benefits and the unemployment benefits given to freelancers and self-employed workers, have been extended for two months (March to May)—a recent government announcement indicated the possibility of extending these benefits to the end of July.
- An allowance (€800 covering mid-March to the end of April, then the monthly equivalent [€534] thereafter, with the possibility of extending to July) will be given to the self-employed, employers with up to five employees, freelancers, and individual businesses affected by the coronavirus crisis (based on specific NACE codes). The allowance will also be granted to employees of firms affected by the coronavirus crisis whose labor contracts have been suspended. This covers 1.7 million private-sector workers (or 81 percent of all private-sector employees).
- A 40 percent reduction in rent for primary residences for March and April for employees of firms affected by the coronavirus crisis (based on specific NACE codes).
- A three-month extension of the deadline for firms' payment of scheduled tax and contribution debt installments due on March 31, 2020 and subsequent months. (The deadline has since been extended further.)
- Suspension of VAT and other tax obligation payments that were due between March 11th and April 30th until August 31st for businesses, self-employed persons, and sole proprietorships affected by the coronavirus crisis (based on specific NACE codes).
- Suspension of SSC payments due by the end of March until October 31st for businesses, self-employed persons, and sole proprietorships affected by the coronavirus crisis (based on specific NACE codes). Suspended payments will be paid in four installments of equal amounts without interest and surcharges.
- Interest payments for April, May, and June on performing loans of corporates affected by the coronavirus crisis will be paid by the state (conditional on firms maintaining their job positions).
- Approval of a scheme for supporting the economy through the issuance of guarantees by the Hellenic Development Bank under the EU's temporary framework for state aid. The scheme will partially guarantee eligible working capital loans, with the Hellenic Development Bank's total exposure capped at 40 percent of the volume of loans issued by a financial intermediary. The total size of the scheme will amount to €2 billion.
- A 40 percent reduction in rent for commercial premises for March and April for firms affected by the coronavirus crisis (based on specific NACE codes).
- Suspension of loan repayments (for the principal amount) until September for firms affected by the coronavirus crisis.

In addition, the European Central Bank (ECB) has lowered the credit rating standards on bonds that are accepted as collateral, so that Greek government debt can now be purchased by the ECB on the secondary market. This should help lower the cost of borrowing for the government.

lost income because of the health crisis. In the latter case, public debt sustainability will return to the top of the EC's priorities as the emergency period ends, with a new period of austerity to follow.

Conclusion

Greece's fragile economic recovery was thwarted by the COVID-19 pandemic that reversed all positive economic trends. The only support has come from the public sector, which intervened with various programs funded either by the EC or the European Stability Mechanism's loan reserves—although these support programs have thus far been too limited in magnitude and implemented with much delay compared with those in Denmark, Ireland, France, Germany, and other EU member states. Greek GDP, employment, exports (including the vital sector of tourism and related activities), and investment—both domestic and foreign—are expected to record significantly negative trends. The projections of many institutions, including the IMF, OECD, bank research departments, European think tanks, and our own simulations, are discouraging for 2020, and more so for Greece than any other EU country. Most of the projections for GDP growth in 2021 over 2020, however, show a quick V-shaped recovery with positive growth rates of 5 percent to 8 percent, which is rather improbable given the economy's structural inefficiencies. Such recovery is not in the cards even for the larger European economies and the United States. Our simulations for 2021 are less optimistic and can be achievable only with the rapid implementation of all the announced government support programs immediately after the lockdown restrictions are lifted. We are, therefore, expecting the recovery to be much more of a U-shaped one that will take at least three years to return to pre-COVID-19 GDP and employment levels. We draw this conclusion from our belief that consumer behavior, including by tourists visiting Greece, will be modified by all the extra protection, random-sample virus testing, and social distancing designed to keep the virus in check and avoid a second wave. These factors may result in a slower, L-shaped recovery.

The recently announced €750 billion EC Recovery Fund, made up of grants (€500 billion) and loans (€250 billion), consists of an approximately €32 billion share for Greece (€22.5 billion in grants and €9.5 billion in loans) to be disbursed over a four-year period, giving us the opportunity to simulate an alternate scenario ("Recovery Fund Scenario"), as shown in Table 1 and Figure 1. The simulations of this scenario do indeed show that it can be a game changer for Greece. If these funds are used properly, as discussed above, the real GDP growth rate will accelerate for both 2021 and 2022—and even though it will still fall short of reestablishing the trend growth shown in Figure 1, it will at least come closer than the baseline scenario.

We hope that the Recovery Fund receives definitive approval in June and that disbursements are not subjected to strict conditionalities. This fund offers an opportunity for implementing a European Marshall Plan or a European Green New Deal—to reconstruct what has been lost in the fight against the common enemy of COVID-19 and repair the damage that remains from the crisis that began more than a decade ago. In addition, the serious discussions around an increased EU budget are a step in the right direction—and may indicate that European leadership recognizes that concerted action from all countries is required, instead of each member country adjusting her budget. The former will create a union of growth, the latter a union of austerity.

Table 1 Greece: Key Indicators under Alternative Scenarios

	2019	2020	2021	2022
Baseline				
Real GDP (growth rate)	1.9	-10.4	5.0	3.0
Gov. total surplus (percent of GDP)	1.5	-10.0	-2.3	-4.1
Gov. primary surplus (percent of GDP)	4.4	-6.7	1.0	-0.9
Current account (percent of GDP)	-1.6	-3.6	-3.5	-4.5
External balance (percent of GDP)	0.7	-1.6	-1.7	-2.7
Scenario 1: Recovery Fund				
Real GDP (growth rate)	1.9	-10.4	8.0	6.5
Gov. total surplus (percent of GDP)	1.5	-10.0	-1.4	-2.1
Gov. primary surplus (percent of GDP)	4.4	-6.7	1.8	0.9
Current account (percent of GDP)	-1.6	-3.6	-1.7	-1.0
External balance (percent of GDP)	0.7	1.6	0.1	0.6
Real GDP projections from other sources				
Greek government (May 2020)	1.9	-10.0	5.0	n.a.
IMF WEO (April 2020)	1.9	-10.0	5.1	n.a.
EC (May 2020)	1.9	-9.7	7.9	n.a.
Real GDP projections from other sources for the euro area				
IMF WEO (April 2020)	1.2	-7.5	4.7	n.a.
OECD (March 2020)	1.2	0.8	1.2	n.a.
EC (May 2020)	1.2	-7.7	6.3	n.a.

Notes

1. See OECD (2020), which evaluates the initial impact of COVID-19 containment measures on economic activity.
2. As measured by employment in "accommodation and food service activities," according to ElStat, Labour Force Survey, Table 3a.
3. This list is based on information obtained from EC (2020c).

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