

Levy Economics Institute of Bard College

Strategic Analysis

March 2022

IS GREECE ON THE ROAD TO ECONOMIC RECOVERY?

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The world economy is still struggling with the COVID-19 virus after more than two years since it surfaced. Countries in Europe, one after another, started reimposing lockdowns and other restrictions, causing large disruptions in domestic and intra-European economic activity and straining their health systems. Relaxation of both fiscal and monetary policy continues to be in play even though the voices of concern suggesting that it is time to begin reversing course have become louder. The European Central Bank (ECB) seems to have decided to accept the rationale that the European economy is "still in a phase where the economy is reopening, and the effects of the pandemic have not yet fully played out" (Lagarde 2021). ECB watchers, however, strongly believe that the increasing price level will strengthen the case for a gradual increase in interest rates, most probably in the second or third quarter of 2022, following the US Federal Reserve's similar moves expected during the same time, and discontinuing the net asset purchases under its pandemic purchase program in March of this year (ECB 2021). The main concern focuses on the increase of the price level, even though the increase is well understood to be caused by energy prices, supply chain disruptions, and lockdowns, all likely to continue increasing until the end of the year. The increases in prices, most ECB economists agree, are not drivers for permanent effects on inflation. Annual inflation estimates for the current year and next are to be still within the acceptable target range, which is seemingly higher than 2 percent.

The Greek economy, in particular, has been hard hit with a third and fourth wave of the pandemic since our last Strategic Analysis report (Papadimitriou et al. 2021). The strong rebound in GDP growth in the second and third quarters of 2021 and other positive statistics notwithstanding, it is doubtful the underlying drivers of the rebound would continue in the long run, especially beyond 2023. The European Commission's (2022) recently revised forecast for Greece raised the GDP growth rate in 2021 to 8.5 percent from 7.1 percent, but lowered its forecast for 2022 to 4.9 percent from 5.2 percent (and 6 percent in the previous report). Similarly, the International

Monetary Fund's (IMF 2021) latest growth estimates show GDP increasing by 6.5 percent in 2021 and lowering the 2022 rate to 4.6 percent. Another growth forecast, from the Bank of Greece (BoG), shows GDP expanding by 7.2 percent in 2021, growing by 5 percent in 2022, and decreasing to 3.9 percent in 2023 (Reuters 2021). The main sources of the budget deficit improvements are from increased revenues emanating from the stronger-than-originally-anticipated economic growth. The government growth projections assume increases in investments and significant contribution from the Next Generation EU (NGEU) funds, especially in 2022–23. The projected growth rates from 2020 and on are expected to contribute to the improvement in the country's public-debt-to-GDP ratio. Nevertheless, Greece will still be left with the highest level of public debt, in both absolute numbers and debt-to-GDP ratio, among eurozone member states.

This carries a serious risk, since servicing it will put pressure on the government budget after the ECB's tapering, discontinuation of mass purchases of government bonds, and subsequent interest rate increases. The Greek problem will remain on the European Stability Mechanism (ESM) and Eurogroup's radar despite the possible revision of Maastricht rules. Discussions related to the rules reform by ESM economists still consider controlling debt-to-GDP ratios by establishing a ceiling of 60 percent, 80 percent, or 100 percent. In all cases Greece will not comply for some time to come, increasing the odds for renewed austerity and new budget cuts.

The stronger growth components of GDP in the second and third quarters of 2021 were the result of reversing the negative levels of private consumption, exports of goods and services, and investment and instead showing rather large increases as compared to the corresponding quarterly numbers in 2020, while government expenditures, which fell in 2021Q1, increased at an annual rate of 5 percent in the second and third quarters of 2021. Figure 1 documents the changes in the components of GDP over the corresponding quarterly levels in 2020, while Figure 2 shows the components of exports and imports in goods and services.

Exports of goods picked up in 2021, going above their pre-COVID level of 2019, and balance of payments data for October and November show that the trend has continued in the last quarter of the year. Exports of services also experienced a strong recovery, with transportation services exceeding their 2019 level. Tourists came back in 2021, after the collapse of 2020, but uncertainty connected to the pandemic prevented a complete

Figure 1 Components of GDP: Changes over Previous Year (€ billion)

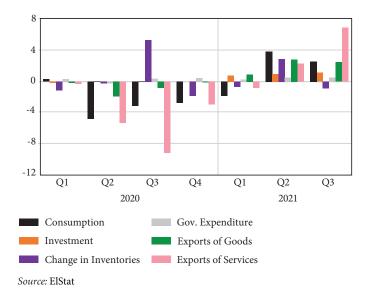
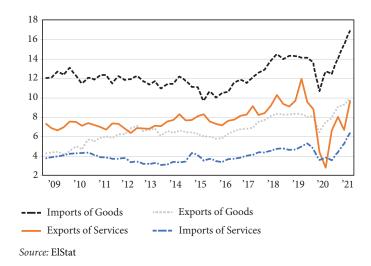


Figure 2 Components of Trade at Constant Prices (€ billion)



recovery, so that the recovery in exports of travel-related services was still insufficient to restore the prepandemic situation.

The strong recovery in exports implied, however, an even stronger increase in imports. On the one hand, Greece has increased its specialization in refining oil: exports of oil were about 6.6 percent of exports of goods in 2002 (the first year for which BoP monthly data are published) and were almost 26 percent in 2021, as well as being between 60 to 70 percent of oil imports. The recovery in exports of oil in 2021 went along with

a substantial deterioration in the oil balance. On the other hand, investment also relies on imported goods, as tourism-related activities do, and therefore the overall recovery in exports was largely offset by an even larger increase in imports.

In November 2021 (the latest statistic available), the cumulated trade deficit for the year was $\in 10.1$ billion, slightly worse than the $\in 9.9$ billion deficit in the same time span for 2020. In the same 11-month period, the current account balance was slightly better in 2021 compared to 2020, but still at a deficit of almost $\in 9$ billion. The increase in 2021 in current and capital transfers to the Greek government from foreign institutions helped reduce the overall deficit.

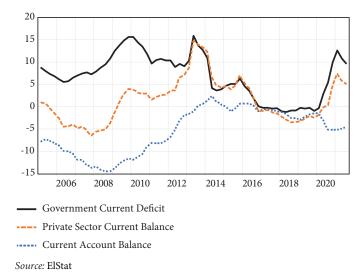
As we have discussed in previous reports, the current account balance, along with the net lending position of the government, implies an increase or a decrease in the financial assets of the private sector. In symbols, the increase in financial assets of the private sector, net of the increase in liabilities (net acquisition of financial assets, or NAFA), must be equal to the deficit of the government sector (DG) plus the current account balance (CAB):

NAFA = DG + CAB

The three flows are represented in Figure 3. A negative NAFA means that the private sector is either running down its stock of financial assets or increasing its stock of debt. In both cases, the process is likely to generate financial instability and a crisis. Notice that the NAFA became negative around 2005 and remained there until the Great Recession of 2009, a period of increasing private and public sector borrowing associated with a deterioration in the current account balance. The severe recession that started in 2009 and intensified beginning in 2011 helped reduce the current account deficit and bring the NAFA back to positive territory. The austerity policy aimed at reducing government debt brought the NAFA back to negative territory, and only the collapse of demand due to the pandemic—together with the increase in government deficit—restored a positive NAFA in 2021, even in the face of an increase in the current account deficit. The effects on the current account deficit are witnessed from the recent BoG report showing, on an annual basis, the widening of the current account deficit in December 2021 by €1,067 million.

This analysis suggests that, in the near future, policies aimed at balancing the external account should be implemented, or else when the effects of the NGEU funds disappear and the government has to cut its deficit and pay back the borrowed part

Figure 3 Sectoral Balances (four-quarter moving average)



of the NGEU, the private sector will again be put under severe financial stress, implying stagnation or another round of recessions.

Growth in exports of goods is also reflected in indicators of industrial production. The industrial production index shows an increase of 9.8 percent in 2021 over the previous year. Production in manufacturing increased by 9 percent, particularly for clothing, leather products, computers, and electrical equipment, which all had a growth rate exceeding 20 percent year over year.

In relation to industrial production, the HIS Markit Greece manufacturing purchasing managers' index (PMI) in January 2022 decreased to 57.9, representing a six-month low down from 59.0 in December 2021. It still recorded an 11-month expansion in the manufacturing sector, as output, employment, and new orders continued to increase. Increased demand appears to be driving a rise in sales, influencing firms to increase employment and production; material shortages and supply chain disruptions are pushing costs up with firms and, accordingly, raising prices (Trading Economics 2022).

Investment increased dramatically in the first three quarters of 2021. Gross capital formation measured in current prices (including the change in inventories) increased by almost 26 percent over the same period of 2020, but a notable part of such an increase depends on high figures for the change in inventories, which are likely to be revised. Fixed investment had a remarkable increase of 21 percent over the same period in 2020.

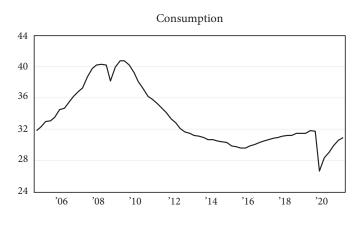
In Figure 4 we break down the components of private sector demand. Household consumption had a major fall during 2020 and has not yet recovered its 2019 level. By contrast, investment does not seem to have suffered from the lockdowns of the last two years. In particular, investment in dwellings—which was the largest component of investment before the Great Recession, and had fallen dramatically—seems to be increasing in the final part of 2021. The number of permits in October 2021—the last month for which data are available—shows an increase of 19 percent over the same month of 2020, and the total number of permits issued in the first ten months of 2021 already exceed those of the whole of 2020.

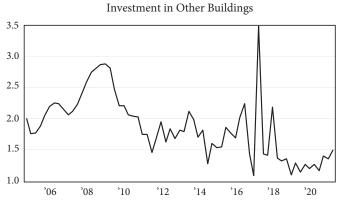
Investment in dwellings could have also been stimulated by the increase in the market price of dwellings, which in 2021Q3 was up by 8.3 percent over the same quarter of 2020, and both are possibly associated with the increase in foreign direct investment in real estate: according to the BoG, the latter increased by 34 percent in the first three quarters of 2021 over the same period of 2020.

As the bottom two charts of Figure 4 show, other categories of investment also increased during 2021, exceeding their 2019 level.

The seasonally adjusted unemployment rate in December 2021 reached its lowest level in 11 years, although at 12.8 percent it is still the highest in the eurozone (after Spain). Employment increased steadily in 2021, but it is still far below the previous peak reached in 2008. The overall unemployment rate, however, hides the asymmetry that exists among age groups. The jobless rate, for instance, among individuals aged 15–24 was 27 percent. The decline in unemployment is encouraging, but a troubling signal is the steady decline in the population of working age individuals, which must be due to net migration, at a pace

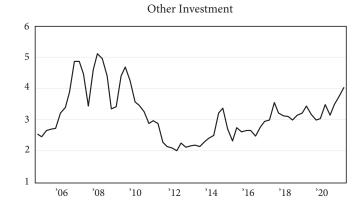
Figure 4 Components of Private Demand (€ million)





Investment in Dwellings

10
8
6
4
2
0
'06 '08 '10 '12 '14 '16 '18 '20



Source: ElStat

that has now slowed down to about 30,000 people per year (from above 70,000 in 2012). Finally, the number of individuals outside the labor force rose by 11,900, reaching a total of 3.2 million.

The Economic Sentiment Indicator, according to Eurostat, was 114 percent in February 2022, down from a record high of 114.2 percent in the previous month, but still showing a higher confidence in increased economic activity.

According to ElStat data, retail sales advanced 15 percent year over year in November 2021, with growth that turned positive since April, after months of decline. Sales have been rising sharply: by 83 percent for clothing and footwear, 52 percent for furniture and household appliances, and 47 percent for books, stationery, and other goods. Sales, however, fell for grocery stores by -4.5 percent and in the more general food sector by -3.9 percent.

Projections for 2021-23

Fiscal Policy

Government collective consumption at constant prices has increased from its trough in 2019Q3, going back to its average value for the 2014–17 period. We will assume it will remain stable in the projection period. Government individual consumption has increased more rapidly in the second and third quarters of 2021. Again, we will assume it will increase at a more moderate pace of 1 percent in our projection period.

Government investment has been more volatile, and increased somewhat in 2020 as well as in the first half of 2021, and even more in the third quarter. We project it will remain at its higher 2021Q3 level, with an additional boost from NGEU funds starting in 2022Q1.

Expenditure on social benefits increased in the first half of 2021, but only because of the increase in the share of retired people. Real average expenditure, divided by the population over 65, has remained stable, and we project it will remain so in the projection period.

Current net transfers from the government to the private sector remained relatively stable in 2020 and the first three quarters of 2021, and we project they will remain stable. By contrast, net capital transfers to the private sector increased substantially in 2020Q4, and were higher in the first half of 2021 relative to the previous year. Government total "grants and capital transfers" were about €9 billion in 2020, compared to €2.8 billion in 2019, and already reached €3.2 billion in the first half of 2021. We therefore project they will remain above average in 2021Q4 and revert back to more "normal" values from 2022 onwards.

Government support to the private sector during the pandemic has therefore mainly operated through taxation and subsidies.

The average ex post indirect tax rate decreased in 2020 to a low of 15.6 percent, from 17.9 percent in 2019Q2. It has increased modestly to 16.2 percent in 2021Q3, and we project it will slowly be brought back to its 2019 level starting in 2022.

Government subsidies were around 1 percent of GDP in 2019, increased to more than 4 percent by the end of 2020, and have remained high in the first three quarters of 2021. We assume they will slowly return to prepandemic levels. Subsidies received from abroad also increased in 2020, by 0.3 percent of GDP, and were already back to prepandemic levels in 2021Q3, so that we will project them to remain stable in our projection period.

The average ex post direct tax rate was momentarily low in 2020Q3, but was brought almost back to its prepandemic level. We assume it will complete its recovery to the 2019 level starting in 2022.

The ex post average rate of social contributions collapsed at the height of the pandemic in 2020Q2, but was already back to its average value in the next quarter and has remained relatively stable. We therefore project this ex post rate to remain stable in our projection period.

Current transfers from abroad to the government are expected to follow the same 2019–21 trend in the projection period. This implies that the government will receive about ϵ 6.5 billion in 2021 and the following years, compared to ϵ 4.9 billion in 2019 and ϵ 6 billion in 2020.

Interest Rates

We expect interest rates to remain at the current historically low level: the ex post implicit interest rate on government debt with foreign institutions is around 1.5 percent, while that with domestic institutions is around 2.5 percent.

Stock Market

The Athens stock market price index has recovered in the last year, going back to its prepandemic (2019Q4) level. This index (1980=100) collapsed from a peak of 5,189 in 2007 to a low of 525 in 2012, and has fluctuated between 500 and 900 in the last five years. We therefore expect that it will remain relatively stable in the coming quarters.

Housing Market

The price of housing, as measured by the index price of dwellings published by the BoG, has consolidated its upward trend in the last year. The index (1997=100) peaked at 261 in 2008 and collapsed in 2009, reaching a low of about 150 in 2017. It has recovered since that year, reaching 187 in 2021Q3.

The increase in the price of dwellings does not seem to have had any effect on investment in dwellings, as published by ElStat, which has remained essentially flat in the last few years.

The increase in prices reported by the BoG must therefore be the consequence of an increase in demand for existing dwellings, which is not followed by increased construction activity of the same magnitude.

For 2022, we assume that the price of housing will keep increasing at a more moderate annual rate of 2 percent, and that in 2023 it will grow in line with the general price level.

Inflation and Foreign Prices

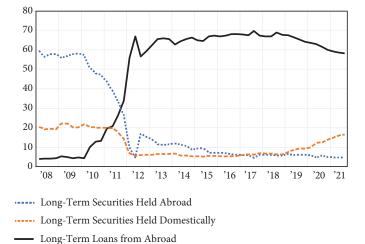
Import prices increased dramatically during 2021 because of supply chain disruptions and an increase in transportation costs due to the pandemic. The deflator for imports of goods was 20 percent higher in 2021Q3, compared to the same quarter of the previous year. The deflator for imports of services increased by a smaller 4 percent over the same period. The increase in prices of imported goods has not translated yet into a sizeable increase in domestic prices: the consumer price index (CPI) for 2021Q3 was only 1.8 percent higher than in the same quarter of the previous year, and the deflator for consumption increased only by 0.5 percent over the same period. However, the monthly CPI shows an increase of 4.4 percent in 2021Q4 on an annual basis and a further increase in January 2022. We will therefore assume a similar increase in the deflator for consumption, but will optimistically assume that the increase in international and domestic prices will die out in 2022Q1 and return to the previous average in the second quarter.

Foreign Sector

The share of government debt held abroad started to decline in 2018Q4.

As is now well-known, after the Great Recession foreign markets lost confidence in the sustainability of the Greek public debt, and foreign financial institutions abandoned Greek government securities, which fell from 57 percent of total government liabilities in 2010 to 5 percent in 2012 (Figure 5). During

Figure 5 Components of Government Debt



Source: Bank of Greece

the same period, Greece had to accept the Troika's "rescue plan," which translated into an increase in foreign long-term loans from 5 percent of total liabilities in 2010 to 67 percent in 2012.

In 2018 this trend started to revert slowly, with the share of debt held by Greek financial institutions slowly increasing. We will assume that this new trend will continue over our projection period.

Tourism

The number of tourists dropped dramatically with the COVID-19 pandemic in 2020, from 34 million in 2019 to only 7.4 million in 2020. The number has not increased in the first half of 2021, compared to the same period in the previous year, but more than doubled in 2021Q3 compared to the same quarter in 2020. Our model projects that exports of services will continue to recover.

Results for the NGEU Baseline Scenario

At the time of writing, the first tranche of NGEU disbursement was announced, calling for $\[\in \]$ 3.56 billion, which naturally does not show up in the data for 2021, and we can therefore assume it will not be spent. On this basis, in our baseline scenario we assume that only a fraction of the NGEU disbursement for 2022 ($\[\in \]$ 5.3 billion) and 2023 ($\[\in \]$ 5.2 billion) will translate into an increase in government investment. More specifically, we assume a progressive increase in government spending, such that in 2022 it will be $\[\in \]$ 1.7 billion higher than in 2021, and $\[\in \]$ 2.3 billion higher in 2023 over 2022.

Results are reported in Table 1, which shows that the high GDP growth rate in 2022 will also be conditional on a strong recovery in tourism. Our assumption of a less optimistic scenario for deployment of NGEU funds is based on the delays observed in projects being approved for reimbursement and in turn having an impact on the economy's output. As we will show below, the government's more optimistic scenario minimizes the delays in the reimbursement of funds. We question, however, their confidence in getting the EU's processing approvals to become more efficient.

Optimistic Alternative Scenario

We turn next to a more optimistic view of the Greek institutions' ability to translate NGEU funds into timely expenditure, assuming a boost of €3.5 billion in 2022 and €7 billion in 2023. No other assumptions are changed from those in the baseline. The real GDP growth rate is higher than in the baseline scenario, but the trade balance deteriorates, as additional government investment implies an increase in imports. The execution of most of these planned projects requires material and other intermediate goods that are not domestically produced and rely on imports, usually with no delays. Given the observed supply chain disruptions, timely importation is uncertain, adding to the duration of project completion, which, in turn, can cause a feedback that affects output.

Table 1 Greece: Key Indicators under Alternative Scenarios

| | 2020 | 2021 | 2022 | 2023 |
|---------------------------------|------|------|------|------|
| Baseline | | | | |
| Real GDP (growth rate) | -8.8 | 8.8 | 5.8 | 2.6 |
| Gov. total surplus (% of GDP) | -9.9 | -8.0 | -2.3 | 2.1 |
| Gov. primary surplus (% of GDP) | -6.9 | -5.3 | 0.7 | 5.1 |
| Current account (% of GDP) | -8.9 | -9.0 | -4.9 | -2.6 |
| External balance (% of GDP) | -5.2 | -5.5 | -0.7 | 2.6 |
| Scenario 1: Optimistic | | | | |
| Real GDP (growth rate) | -8.8 | 8.8 | 7.0 | 4.7 |
| Gov. total surplus (% of GDP) | -9.9 | -8.0 | -1.9 | 3.2 |
| Gov. primary surplus (% of GDP) | -6.9 | -5.3 | 1.0 | 6.1 |
| Current account (% of GDP) | -8.9 | -9.0 | -4.0 | -0.4 |
| External balance (% of GDP) | -5.2 | -5.5 | 0.1 | 4.6 |

Inflation Scenario

We finally consider the question of what would happen if international prices keep rising in 2022, and possibly accelerate on account of the tense situation around the Russian and Ukrainian conflict that could push energy prices upward. In this third alternative scenario we assume domestic inflation to remain at around 6 percent in 2022 and decline to 2 percent in 2023, with import prices rising half a percentage point more than domestic inflation. We assume, furthermore, that interest rates will increase as expected, following the inflation rate, from 2022Q2 to the end of the year, but will gradually fall in 2023.

Under these assumptions, and reverting to the baseline assumptions for the use of NGEU funds, our model exercise does not reveal a dramatic impact on the GDP growth rate, but, as expected, shows a substantial increase in the government deficit due to increased net interest payments, which may undermine the expansionary policy Greece badly needs.

Conclusions

In this report we analyze how Greece started to recover from the shock of the pandemic and the prospects of continuing and sustaining its recovery. We noted the most important role is played by expansive fiscal policy in allowing households to weather the pandemic-caused crisis and maintain their consumption expenditures in addition to an increase in public investment, a strategy all EU member states followed. Greece showed a significant growth rate in the first three quarters of 2021 as compared to negative growth in 2020 and we have every reason to expect that all of 2021, when the results are officially reported, will show a GDP growth rate above 8 percent. The accommodative monetary policy promoted by the ECB provided an extra stimulus to governments (including Greece) by enabling them to borrow at unprecedented low interest rates to realize their expenditure plans. The newly established pandemic NGEU funds, if implemented and expensed in a timely manner, especially in Greece, would give a real boost to its economy.

As is customary with our Strategic Analysis reports, we present a few scenarios of the GDP growth path the economy would follow based on reasonable assumptions. This report shows three scenarios: a baseline and two alternative ones. Our baseline scenario, in which we consider the most "realistic" outcome for the two-year period (2022–23), is predicated on reasonable conditions based on what has been experienced in 2021

and a more plausible utilization of the NGEU's reimbursable project funds. The first alternative scenario, a more optimistic scenario, differs from the baseline in employing a more aggressive NGEU utilization and a higher reimbursable level, and thus provides a higher level of output growth for this year and the next. The third scenario builds on the baseline by taking into consideration a higher inflation rate regime during the projection period and shows a rather small deviation in output growth from the baseline, but a very significant deterioration of the current account deficit. Moreover, the inflation scenario, should it come to pass, will increase the burden of servicing the country's public and private debt.

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