

1.3. Factor model forecasts for the short-term prospects in GDP

Factor Model Economic Forecasting Unit
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The current section presents the forecasts of KEPE concerning the evolution of the rate of change of real GDP in Greece in the fourth quarter of 2023 and in year 2024.¹ The forecast is conducted using KEPE's dynamic structural factor model.² The underlying time series database used to estimate the model and produce the forecasts includes 126 variables,³ covering the main aspects of economic activity in the country on a quarterly basis and spanning the period from the first quarter of 2000 up to the third quarter of 2023.

According to the revised provisional data of the quarterly *National Accounts*, in the first and second quarters of 2023, the rate of change of the Greek economy's GDP reached 1.9% and 2.6%, respectively, on an annual basis, while in the third quarter of the year, the country grew at a rate of 2.1%. These rates were among the highest among EU member-countries, the majority of which recorded weak or even negative growth, having been affected significantly by the increased cost of living, continued pressures on the prices of basic goods, the gradual withdrawal of fiscal support measures, the lack of impetus from the side of international demand, high interest rates and inflated production costs. In the case of Greece, these factors have a visible imprint on the course of several important economic variables, with the overall growth rate of the economy showing, however, remarkable resilience, finding support in the rise in investment, the increase in employment and the upward trend of demand in key sectors such as tourism and construction.

As in the year 2023, in the year 2024, the EU economy is confronted with significant challenges in relation

to inflation and interest rates, while, at the same time, geopolitical tensions and the climate crisis continue to pose serious risks. According to the estimates so far, the return of inflation to desirable levels is expected to be delayed, and therefore pressures on household purchasing power will continue, while any de-escalation in interest rates will be gradual. At the same time, new significant uncertainties and risks arise due to the crisis in the Middle East, which affects, among others, the prospects of international trade, the smooth functioning of value chains and transport costs. On the other hand, recent forecasts for the course of the European economy in the year 2024 point in the direction of a mild strengthening of the average growth rate in the EU, a prospect which favors the Greek economy, and may contribute to the recovery of Greek exports of goods. Moreover, although at the present time Greece is significantly affected by the uncertainties and instability in the international environment, the country continues to show a positive outlook in key sectors of activity (e.g., construction, tourism), while it also has at its disposal important tools for maintaining a consistently positive course. The expected inflow of significant financial resources through the Recovery and Resilience Facility within the year and the recent upgrade of the country's credit rating present major opportunities for strengthening investment and improving the outlook in key sectors of the economy.

The volatile conditions in terms of international developments, as well as the uncertainties regarding the economic impact of the extreme natural phenomena that Greece faced last year, raise the difficulty of forecasting the course of real GDP in subsequent quarters. Having noted this reservation, Table 1.3.1. presents the econometric estimates for the rate of change of Greece's GDP up to the fourth quarter of year 2024.

According to estimates for 2023, a growth rate of 2.2% is forecasted both for the fourth quarter of the year and for the annual average of year 2023 as a whole. It is noted that the current estimate for the annual average growth rate is slightly lower compared to the corresponding previous forecast of KEPE (2.4%), a

1. The date of the forecast is January 19, 2024.

2. A detailed description of the model can be found in Issue 15 (June 2011, pp. 19-20) of KEPE's scientific journal entitled *Greek Economic Outlook*. See https://www.kepe.gr/images/oikonomikes_ekselikseis/issue_15enb.pdf.

3. The database incorporates both real economy and nominal variables, as well as a considerable number of variables reflecting expectations and assessments of economic agents, as reported in earlier issues of the *Greek Economic Outlook*. The seasonal adjustment of the time series is carried out by use of the Demetra+ software, using the TRAMO/SEATS filter.

TABLE 1.3.1 Real GDP rate of change (% , y-o-y)

Quarters	2023		2024		
	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Quarterly rate of change	2.20 [2.03 , 2.37]	3.36 [3.04 , 3.68]	1.78 [1.33 , 2.22]	2.05 [1.49 , 2.62]	1.45 [0.94 , 1.96]
Mean rate of change, 1 st half *	-	2.57 [2.19 , 2.95]	-	-	-
Mean rate of change, 2 nd half **	2.14 [2.06 , 2.23]	-	-	1.75 [1.21 , 2.29]	-
Mean annual rate of change ***	2.20 [2.16 , 2.25]	-	2.16 [1.70 , 2.62]	-	-

Notes: * The mean rate of change is not reported for the 1st half of 2023, since it does not incorporate a forecast. ** The mean rate of change for the 2nd half of 2023 incorporates the officially available (provisional) data for the 3rd quarter of 2023, on a seasonally adjusted basis. *** The mean annual rate of change for 2023 incorporates the officially available (provisional) data for the first three quarters of 2023, on a seasonally adjusted basis.

modification reflecting a small downward revision of ELSTAT's⁴ provisional figures for the growth rate of GDP in the first half of the year.

Moving into the year 2024, quarterly forecasts continue to show a positive sign, with GDP growth estimated at 2.6% for the first half and 1.8% for the second half of the year. For the year 2024 as a whole, the forecast for the average annual growth rate of the Greek economy stands at 2.2%, an estimate according to which the country is expected to remain on an upward trajectory, maintaining a satisfactory GDP growth momentum. This outlook stems from the favourable development of several of the economic figures included in the forecast, in combination with the visible impact of the conditions mentioned above on the course of certain important variables.

More specifically, for the third quarter of 2023, the quarterly data of the National Accounts at constant prices compared to the corresponding quarter of 2022, show an increase in private consumption and a strengthening of fixed capital investment, along with a slowdown in their rates of change compared to previous quarters. At the same time, the data reflect, on the one hand, a decline in general government consumption, which is consistent with the gradual return of fiscal policy to normality, and, on the other hand, mixed trends regarding the course of external demand. Specifically, while exports of services increased, due to the sig-

nificant strengthening of tourism receipts, exports of goods came under pressure, due to the weakening of the economic environment in Europe.

Regarding the course of indicators reflecting the activity of key sectors of the economy, developments varied considerably from case to case. First, in the industry sector, the overall industrial production index registered a marginal decline compared to the corresponding quarter of 2022, as the rise in the categories of *durable* and *non-durable consumer goods* was offset by a decline in the categories of *energy* and *intermediate* and *capital goods*. At the same time, the turnover index in industry registered a significant decrease, with this development being, however, partly due to the de-escalation of the prices of energy products. In the retail trade sector, the volume index showed a decline in six of the eight relevant subcategories, with the exceptions being *department stores* and *food-beverages-tobacco*, while a downward trend was also recorded in the turnover index in wholesale trade. On the other hand, a significant boost was observed for yet another quarter in travel receipts, which increased by 9.5% compared to the corresponding quarter of the previous year, while developments were also favourable with regard to the production index in construction and the relevant two sub-indices referring to *building construction* and *civil engineering*. Concerning the course of the domestic labour market, in the third quarter of 2023, a further improvement in conditions

4. According to the most recent ELSTAT *Quarterly National Accounts* publication, dated December 6, 2023.

was observed, as the number of persons employed increased by 1.0% compared to the third quarter of the previous year and the number of unemployed persons decreased by 7.4%, respectively.

With respect to price data for the third quarter of 2023, developments were indicative of a relative stability in energy costs, with the European harmonized energy price index for Greece remaining roughly at the same level compared to the preceding quarter. In addition, a further small improvement was recorded in relation to average inflation, with inflationary pressures remaining, however, high in key categories of consumer goods and services, such as *food and beverages*, *hotels-café-restaurants* and *health services*. In terms of the yield of Greece's ten-year government bond, which is linked to the levels of uncertainty in the economy, no noticeable change was observed in relation to the second quarter of 2023, with the spread against the corresponding German bond showing, at the same time, visible improvement. In relation to the indicators

reflecting agents' expectations and assessments regarding the economic climate in the country, developments in the third quarter of 2023, compared to the second quarter of the year, demonstrate a strengthening of the economic climate in Greece, a further deterioration of the economic climate in Europe and a rise in business expectations in Greece in the retail trade sector.

Based on the risks highlighted above, which mainly concern geopolitical developments, inflation, interest rates, the impact of extreme weather phenomena caused by the climate crisis and the effects of the adjustment of fiscal policy, forecasts for the evolution of Greece's real GDP are subject to a significant degree of uncertainty. Nevertheless, the country presents at the moment significant potential to achieve a more favourable development of the GDP, making use of the opportunities arising from the recovery of investment grade and resources available through the Recovery and Resilience Facility and the new NSRF.