

1. Recent (macro-)economic developments

KEPE, *Greek Economic Outlook*, issue 46, 2021, pp. 6-14

1.1. The evolution of the aggregate demand components after the second lockdown

1.1.1. Introduction – Domestic & external demand

Yannis Panagopoulos

In this section, using the existing recorded macroeconomic data, we proceed to the analysis of the current developments of the Greek economy. The first thing we observe, based on the results of Table 1.1.1, is mainly the reversal of the “economic environment” from the first to the second quarter of 2021. More specifically, the recession of the economy, in the first quarter of 2021, was replaced by explosive growth in the second quarter of the same year. Analytically, from -2.3%, the economy grew to 16.2%. On the other hand, on a semi-yearly basis, we also observed a serious reversal in the growth rate of the economy. Thus, from a recession of 7.17%, in the first half of 2020, we moved to growth of 6.97% in the corresponding half of 2021.

As far as the factors that contributed to the evolution of the explosive GDP growth are concerned, in the second quarter of 2021 (16.2%), on an annual basis (y-o-y), we should note the existence of high positive rates of change in all individual macroeconomic factors. More specifically, the biggest positive rate of change was recorded by exports of goods and services (22.6%), followed, in decreasing order, by private consumption (13.2%), fixed capital formation (12.9%) and public consumption (6.1%). Special mention should be made for the high positive sign, over the same period, concerning imports of goods and services (22.5%).

In terms of the semi-yearly period, we have the same positive picture with only smaller rates of change, due to the negative contribution of Q1 2021. More specifically, fixed capital formation (11.8%), public consumption (7.0%), exports of goods & services (5.8%) and private consumption (4.7%) contributed, in diminishing order, to the recorded semi-yearly growth of 2021 (6.97%) (Table 1.1.1.).

Domestic demand also recorded a similar growth for Q2 2021 (Figure 1.1.1). Based on the existing components, in the GDP growth (using seasonally adjusted data), private consumption was the most positive component, with a much higher proportion than those of fixed capital formation and public consumption (8.99 vs. 1.53 and 1.36, respectively).

As far as the external sector is concerned, in relation to the domestic demand, during the second quarter of 2021, the comparatively more important positive role of domestic demand is emphasized compared to the negative international one, which mainly includes the balance of goods and services (11.19 vs. -1.23, respectively) (see Figure 1.1.2). In the same quarter, a positive contribution of the change in inventories is also recorded for the GDP growth (9.76).

Regarding the trend of the Economic Sentiment Index (ESI), as a proxy of future demand, it is known that, like some other leading indices, it offers valuable information from both business and household perspectives. It is also an important indicator for the economy and can be used for the predictions relating to the future of GDP growth. As demonstrated by Figure 1.1.3, in January 2021 and until the latest recorded numbers (August 2021), the ESI moved upwards. More specifically, from 90.7 points in January 2021, it has so far reached 113 points. This is yet another indication of the reversal of the serious negative impact that the Covid-19 pandemic created on business & household expectations last year.

Next, a more detailed discussion follows on the contribution of the trade balance of goods and services (external sector) with respect to the GDP recession, for 2020.

Balance of goods and services

The contribution of the external sector (exports minus imports) to GDP growth, for the second quarter of 2021, as already mentioned above, is generally considered slightly negative (-1.22 points) and to some extent reflects the continuing impact of the Covid-19 pandemic on the economy.

Starting from total exports, it should be noted that they increased in the second quarter of 2021, at a rate of

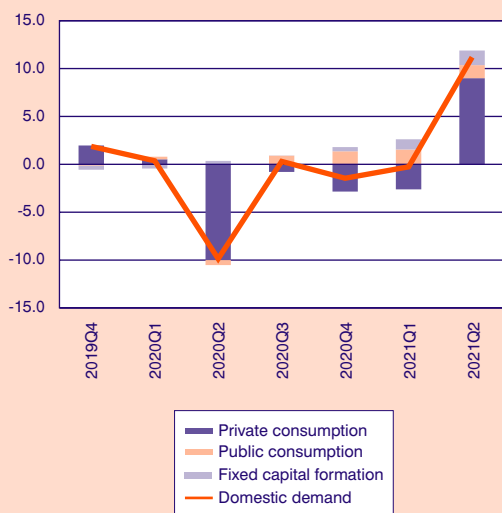
TABLE 1.1.1 Basic macroeconomic figures*(% rates of change with seasonally adjusted data, at constant prices)*

	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	A' semester 2020	A' semester 2021
Private consumption	0.80	1.70	2.80	0.80	-14.60	-1.20	-4.10	-3.70	13.20	-6.91	4.73
Public consumption	7.70	-1.20	-0.80	1.40	-2.60	4.80	7.30	8.10	6.10	-0.61	7.07
Fixed capital investment	-18.70	2.70	-3.90	-4.20	3.60	0.10	4.40	10.60	12.90	-0.31	11.78
Demand*	0.30	-0.20	2.00	1.10	-9.80	4.10	-4.00	-1.40	15.49	-4.37	7.03
Exports of goods and services	6.00	5.90	-1.10	-2.20	-27.60	-25.60	-16.20	-10.90	22.60	-14.91	5.82
Exports of goods	2.60	5.70	-3.00	2.70	-3.30	4.30	13.70	8.70	17.06	-0.27	12.90
Exports of services	8.90	9.60	-0.70	-6.60	-52.80	-52.70	-41.90	-34.40	28.77	-29.66	-2.81
Imports of goods and services	1.90	3.20	2.20	0.90	-15.00	-5.50	-8.00	-3.30	22.50	-7.03	9.59
Imports of goods	2.40	2.70	-1.00	0.90	-12.90	-1.60	-1.70	-2.10	19.71	-6.01	8.78
Imports of services	0.60	5.10	9.20	3.10	-16.00	-18.10	-30.60	-8.48	35.15	-6.43	13.33
GDP	2.30	1.60	1.00	-0.40	-13.90	-10.03	-6.85	-2.26	16.20	-7.17	6.97

Source: National Accounts, ELSTAT.

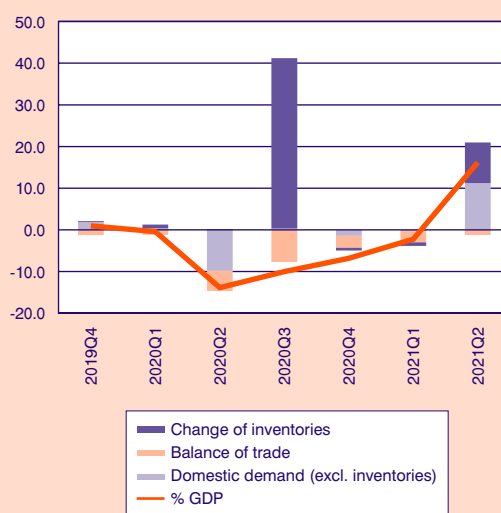
* Without change of inventories.

FIGURE 1.1.1
Components of domestic demand*



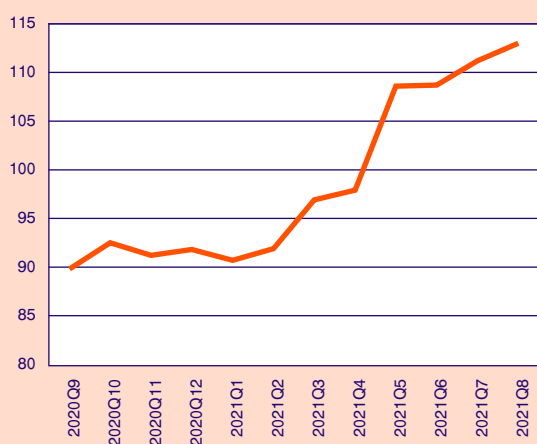
Source: National Accounts, ELSTAT.
* Data processing by the author.

FIGURE 1.1.2
Domestic and net external demand*



Source: National Accounts, ELSTAT.
* Data processing by the author.

FIGURE 1.1.3
Economic Sentiment Index



Source: EUROSTAT.

FIGURE 1.1.4
Sub-components of external demand*



Source: National Accounts, ELSTAT.
* Data processing by the author.

22.6%. More specifically, services, which constitute the relatively smaller part of exports in billions of euros, showed an increase of 28.7%, while goods, which were the larger part of exports, showed a smaller increase of 17.0% for the same period.

As far as imports of goods and services are concerned, in contrast to the structure of exports, they are more balanced as a distribution, recording a corresponding

quarterly increase of 22.5%. More specifically, imported services showed a large increase of 35.7%, while, on the other hand, in imported goods, the quarterly increase was less than that of services, at 19.7%.

The only “positive” element of the contribution of the balance of goods and services to the GDP growth rate,

in Q2 2021, is its recorded decrease compared to Q1 (-1.23 and -2.8, respectively). In fact, as shown by the corresponding histograms of Figure 1.1.4, there is a reversal of the picture of the two components with a positive contribution of exports and a corresponding negative contribution of imports to the GDP growth (7.2 and -8.4, respectively). But this small difference in the size of the two components gives the overall negative contribution of the balance of goods and services to the GDP growth rate for Q2 2021 (-1.23).

1.1.2. Private consumption and investment

Konstantinos Loizos

1.1.2.1. Private consumption

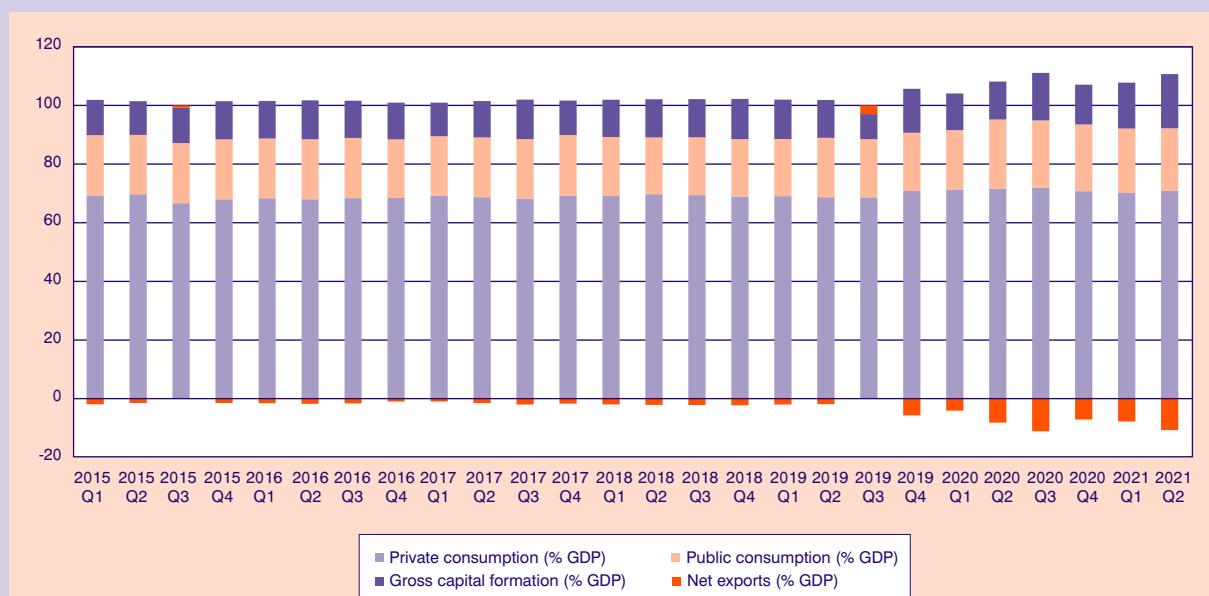
Rising trend in private demand components despite the second lockdown

Based on quarterly, seasonally adjusted *National Accounts*,¹ private consumption of households and

NPISH² increased to 31,763 million euros in current prices during the second quarter of 2021, from 30,470 million euros in the first quarter of the same year and 29,558 million euros in the fourth quarter of 2020. However, in terms of chain-linked volumes (reference year 2015), private consumption fell to 30,525 million euros in the second quarter of 2021 compared to 30,641 million euros in the first quarter of the same year and 30,853 million euros during the last quarter of the previous year. On the other hand, percentage changes³ with respect to the previous quarter, according to seasonally adjusted chain-linked volumes, despite being negative during the last three quarters, fell from -1.9% in the fourth quarter of 2020 to -0.7% in the first quarter of 2021 and -0.4% in the second quarter of the same year. Moreover, with respect to the corresponding quarter of the preceding year, despite negative, but decreasing percentage changes in the last quarter of 2020 and the first quarter of 2021 (-4.1% and -3.7% respectively), we observe a significant positive percentage change of 13.2% during the second quarter of 2021, which coincides with the second lockdown phasing out.

FIGURE 1.1.5

Evolution of private consumption and other components of demand as a percentage of GDP
(expenditure approach) (seasonally adjusted data in current prices)



Source: ELSTAT, data processing by the author.

1. Quarterly National Accounts, Press release, ELSTAT, September 7, 2021.

2. Non-profit institutions serving households.

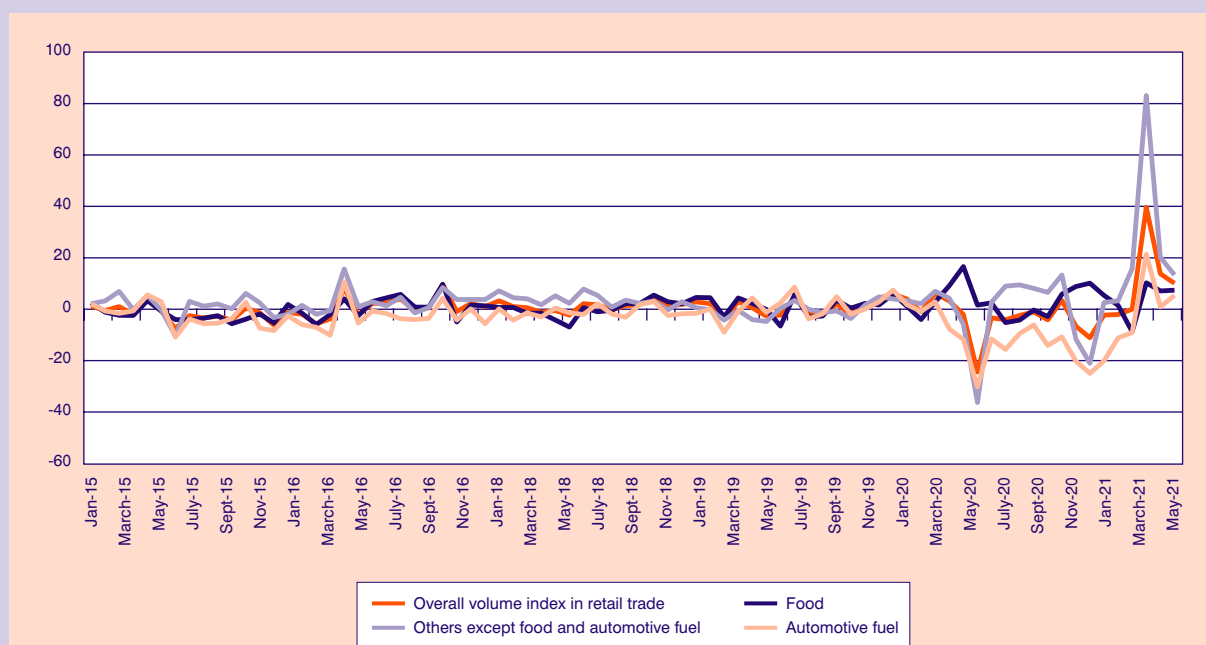
3. Percentage changes are calculated using the formula $\frac{X_t - X_{t-1}}{X_{t-1}}$.

In addition, private consumption as a percentage of Gross Domestic Product, increased in the second quarter of 2021 since, from 70.77% of GDP in the fourth quarter of 2020 and 70.16% in the first quarter of 2021, it rose to 70.87% in the second quarter of this year (Figure 1.1.5 above). On the contrary, public consumption decreased from 22.77% in the fourth quarter of 2020 to 21.98% of GDP in the first quarter of 2021 and 21.34% in the second quarter. Moreover, there was a significant increase in gross capital formation (fixed capital and changes in inventories) as a percentage of GDP between the fourth quarter of 2020 and the second quarter of 2021 (13.56% in the fourth quarter of 2020, 15.65% in the first quarter of 2021 and 18.50% in the second quarter of 2021). However, the negative figure of net exports as a percentage of GDP expanded from -7.10% in the fourth quarter of 2020 to -7.79% in the first quarter of 2021 and -10.70% in the second quarter of 2021. Overall, we observe a recovery of domestic demand, mainly due to the contribution of private consumption and investment, along with a corresponding fall in public consumption, especially during the second quarter of 2021, which is identified with the second lockdown phasing out.

Recovery of retail trade, especially during the second quarter of 2021

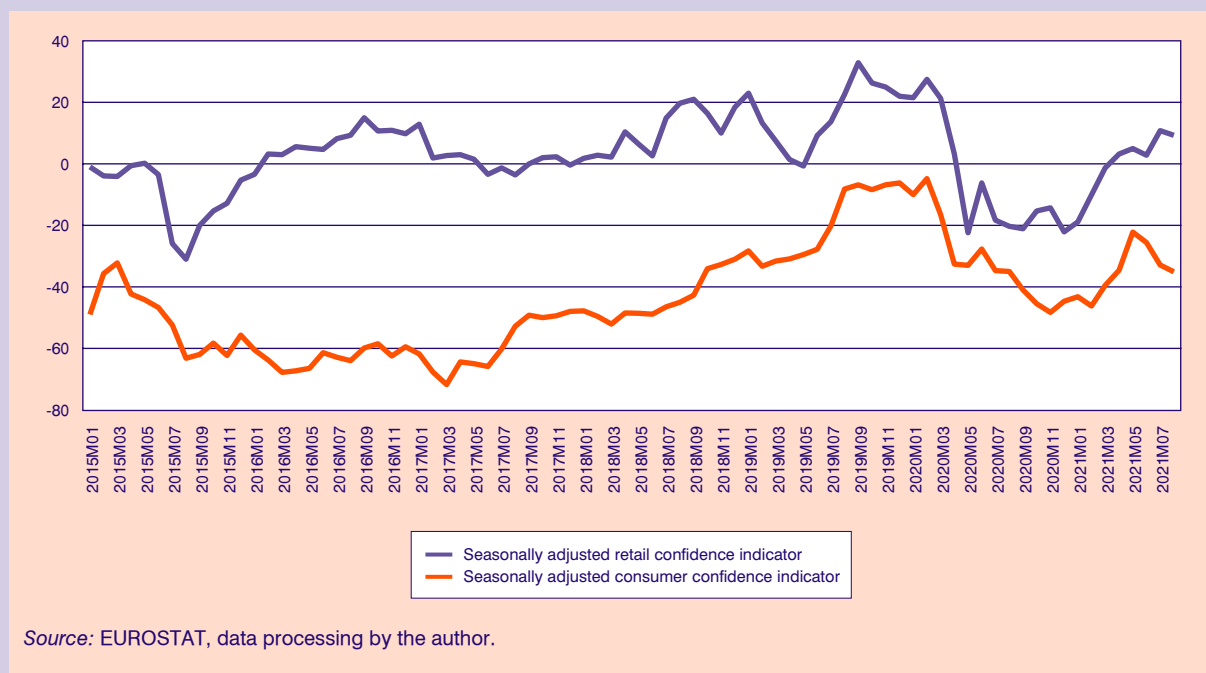
Figure 1.1.6 depicts the evolution of retail trade in terms of percentage changes with respect to the corresponding months of the previous year, according to the monthly data provided by ELSTAT. The overall index exhibited two main trends: During the fourth quarter of 2020 and the first quarter of 2021, negative percentage changes prevailed (-4.78% and -1.44%, respectively, on average) whilst in the second quarter of 2021, there was a clear rising trend (21.18% on average). The same trends are evident in automotive fuel, which present, on average, negative percentage changes in the last quarter of 2020 (-18.65%) and the first quarter of 2021 (-13.45%) and a positive change in the second quarter of 2021 (9.22%). There is a different situation in Food and Other items concerning the first two quarters, but the trend remains positive. Hence, we observe a positive average percentage change in Food during the fourth quarter of 2020 (8.27%), slightly negative in the first quarters of 2021 (-0.62%) and positive again in the second quarter of 2021 (8.27%). To the contrary, Other items except

FIGURE 1.1.6
Percentage changes in the seasonally adjusted overall volume index and the main sector indices in retail trade



Source: ELSTAT, data processing by the author.

FIGURE 1.1.7
Confidence indicators in retail trade



food and automotive fuel presents a negative average percentage change in the fourth quarter of 2020 (-6.46%), but a significantly positive change for the next two quarters, especially for the second quarter of 2021 (7.23% and 38.88%, respectively). This data indicate a recovery in retail trade and, in particular, during the gradual opening up of the economy from April 2021 onwards.

Despite fluctuations in consumer confidence, expectations in retail trade recovered

Confidence indicators published by EUROSTAT (Figure 1.1.7) show evidence of stabilization as of September 2020 for the retail confidence indicator and from November of the same year for the consumer confidence indicator. Secondly, beginning from the first months of 2021, a rising trend appears, which continues at least until July 2021 for the retail confidence index, whilst it reverses itself from June 2021 as far as the consumer confidence indicator is concerned. However, consumer hesitation does not appear to affect significantly retailers' expectations, despite their slight fall in August 2021.

1.1.2.2. Investment

Rising trend in total investment and in most of its components despite the second lockdown

Gross fixed capital formation in current prices increased to 5,355 million euros during the second quarter of 2021 from 5,139 million euros in the first quarter of the same year and 4,433 million euros in the fourth quarter of 2020. Correspondingly, in terms of chain-linked volumes, there is an increase in gross fixed capital formation to 5,281 million euros in the second quarter of 2021 from 5,062 million euros in the first quarter and 4,870 million euros in the last quarter of the previous year. Furthermore, this rising trend is corroborated by mere inspection of percentage changes both with respect to the preceding quarter (2.7%, 3.9% and 4.3% for the fourth quarter of 2020 and the two first quarters of 2021, respectively) and with respect to the corresponding quarter of the preceding year (4.4%, 10.6% and 12.9% for the last quarter of 2020, the first quarter of 2021, and the second quarter of 2021 respectively), according to the seasonally adjusted chain-linked volumes.

Moreover, the evolution of the contribution of investment and its components to GDP (Figure 1.1.8) was

FIGURE 1.1.8
Gross fixed capital formation as a percentage of GDP (overall and by asset)
(seasonally adjusted data in current prices)

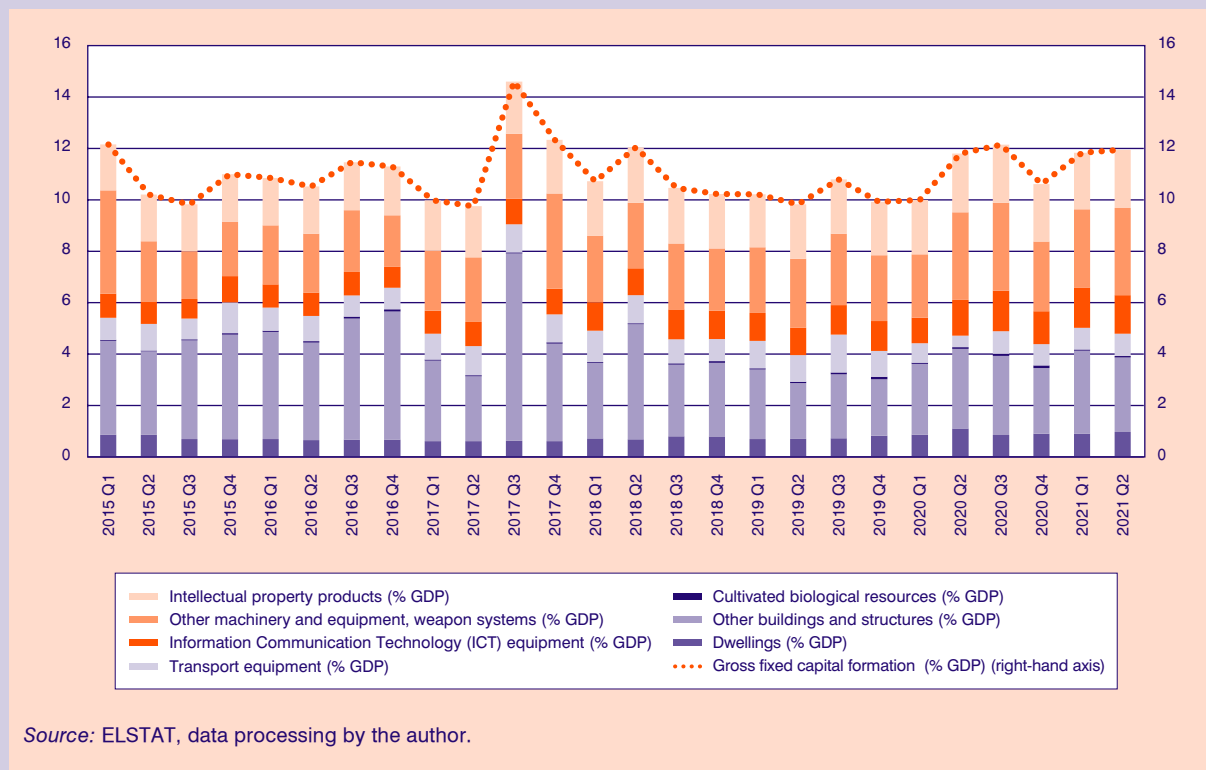
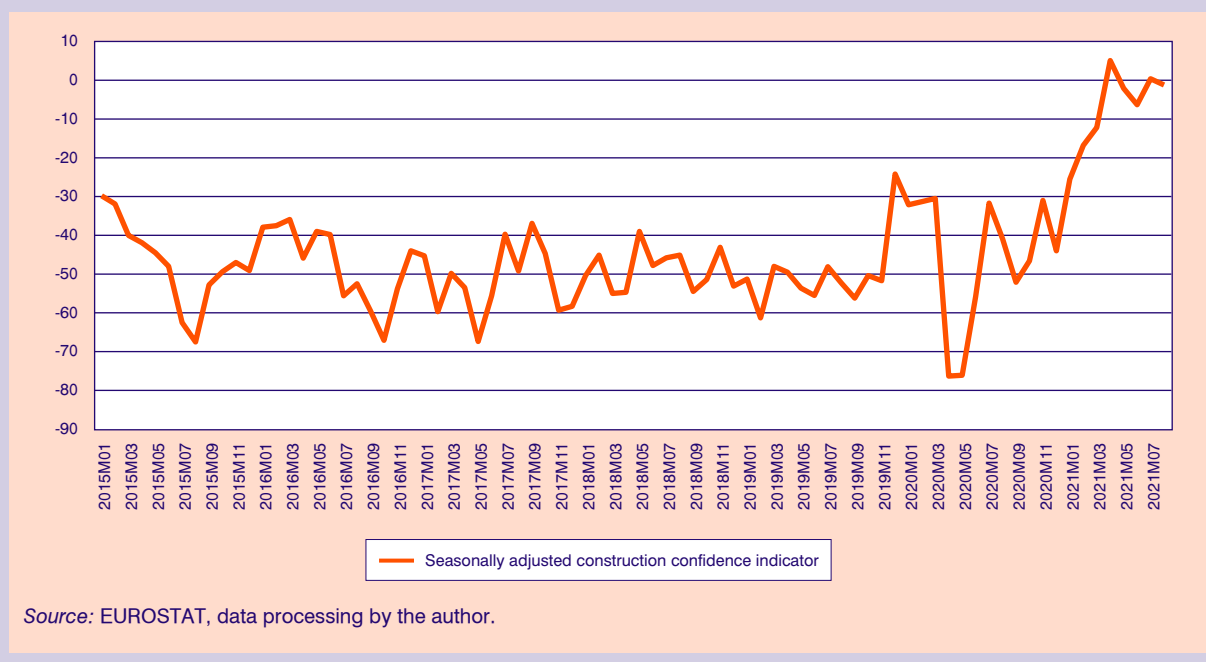


FIGURE 1.1.9
Machinery, transport equipment and buildings as a percentage of gross fixed capital formation



FIGURE 1.1.10
Construction confidence indicator



positive overall during the period under examination, with the only exemption being the negative values in the last quarter of 2020. Gross fixed capital formation as a percentage of GDP exhibited positive percentage changes with respect to the preceding quarter (11.47% and 0.98%) during the first two quarters of 2021, despite a negative percentage change (-12.59%) in the last quarter of 2020. As far as its components are concerned, machinery and transport equipment as a percentage of GDP, despite a negative percentage change of -17.93% in the last quarter of 2020, recovered both in its overall measure (13.15% and 5.55% during the first two quarters of 2021) and in most of its individual components, registering positive percentage changes. On the contrary, the evolution of the overall measure for buildings as a percentage of GDP is not so clear since, regardless of a negative percentage change in the last quarter of 2020 (-11.97%), there appears to be a positive percentage change in the first quarter of 2021 (19.46%), but a negative one in the second quarter (-6.38%), even with a positive contribution of dwellings (6.73%) in this last quarter.

Machinery and transport equipment still predominates buildings

Focusing on the two main components of gross investment, the data verifies the increased weight of machinery and transport equipment as a percentage of

fixed gross capital formation at the expense of buildings, which we observe as of the third quarter of 2018. The share of machinery and transport equipment in total gross fixed capital formation remained higher than that of buildings, both in each one of the last three quarters individually (2020Q4, 2021Q1 and 2021Q2) and on average (46.55% for machinery and transport equipment, as opposed to 33.76% for buildings).

In spite of small fluctuations, expectations in the construction sector remain optimistic

The evolution of business expectations in the construction sector is depicted in Figure 1.1.10. It appears that small fluctuations from May 2021 and after were not able to affect in a significant way the rising trend and the related optimism that prevailed as of the beginning of the current year. It is worth noting that this trend appears in the construction confidence indicator regardless of the falling share of buildings in total gross investment, probably indicating that the construction sector might have a more active role in economic recovery in the immediate future.

1.1.2.3. Conclusions

The preceding analysis showed that the Greek economy both during and at the end of the second lockdown had generally a positive performance. On the one

hand, we observed rising trends in the components of private demand and the corresponding fall in public consumption. Specifically, one must note the positive trend in gross investment along with a significant recovery in retail trade, especially during the second quarter of 2021. On the other hand, confidence in both retail trade and constructions remained at high levels

despite small fluctuations and consumer hesitance. The above, along with the immunity wall built through extended vaccinations, are an asset for the course of the Greek economy in the face of a possible new pandemic wave. However, the preceding analysis has not examined the effect on total demand of the tourist season, which covers the third quarter of the year.