

# 1. Macroeconomic analysis and projections

KEPE, *Greek Economic Outlook*, issue 36, 2018, pp. 4-10

## 1.1. Recent developments and prospects in the main demand components

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According to the latest seasonally adjusted data of the quarterly National Accounts (ELSTAT, March 2018), the rate of change of Greece's GDP reached 1.4%

in 2017. This development reflects a continuous improvement of economic conditions in the country, with a gradual acceleration of GDP growth from 0.4% in the first quarter of the year to 1.9% in the fourth quarter, as compared to the corresponding quarters of 2016. Crucial positive contributions to developments in GDP during 2017 came from the side of exports of goods and services, which increased consistently and substantially, but also from the side of fixed capital investment, which at times expanded strongly. On the other hand, an inhibiting factor against a more dynamic recovery of the GDP was the evolution of private con-

**TABLE 1.1.1 Main macroeconomic data**

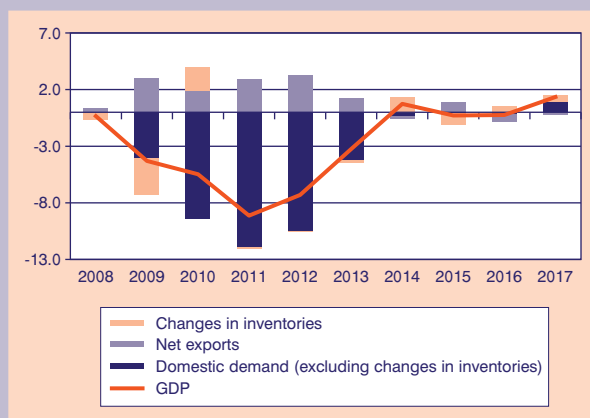
	Billion EUR		% change compared to the previous period	
	Current prices		Constant prices	
	2017	2016	2016	2017
Private consumption	123.3	0.0	0.1	
Public consumption	35.5	-1.5	-1.1	
Gross fixed capital formation	22.5	1.6	9.6	
of which				
Dwellings	1.0	-12.5	-8.8	
Domestic demand*	181.3	-0.1	1.0	
Exports of goods and services	59.0	-1.8	6.8	
Exports of goods	31.7	3.7	5.5	
Exports of services	27.4	-7.7	8.3	
Imports of goods and services	61.0	0.3	7.2	
Imports of goods	53.0	2.6	6.8	
Imports of services	8.0	-13.1	9.7	
Balance of goods & services (% of GDP)	-1.1			
GDP	177.7	-0.2	1.4	
Contributions to the change of real GDP				
Domestic demand*		-0.1	1.0	
Balance of goods & services		-0.7	-0.2	
Change in inventories		0.5	0.5	

Source: *National Accounts*, ELSTAT (March 2018).

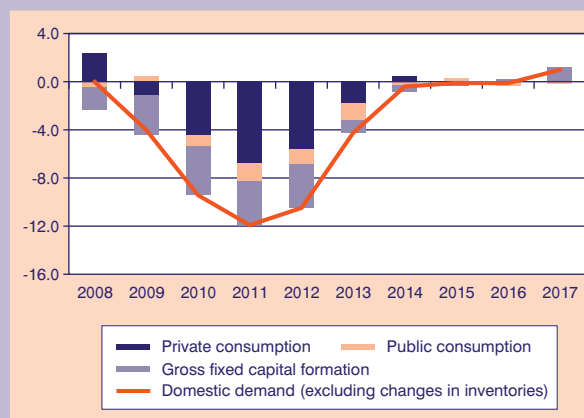
\* Excluding inventories.

**FIGURE 1.1.1**  
Contributions to the rate of change of the real GDP

*Domestic and net external demand*



*Individual components of domestic demand*



Source: National Accounts, ELSTAT, own calculations.

sumption, which took a negative turn in the second quarter of the year.

More particularly, concerning the course of the main domestic demand components, gross fixed capital investment recorded a dynamic recovery in the first and fourth quarters of 2017 (by 16.5% and 28.9%, respectively), with its performance, however, being weak in the two intermediate quarters of the year (rate of change of 1.8% in the second quarter and -6.5% in the third quarter). On the other hand, the mild increase in private consumption in the first and second quarters of 2017, (0.9% and 0.8%, respectively, year-on-year), gave turn to a marginal decrease in the third quarter (-0.2%), and a further decline in the fourth quarter of the year (-1.0%). In parallel, public consumption moved downwards from the first to the third quarter of 2017, and increased in the fourth quarter of the year (2.1%). On the basis of these developments, it appears that the benefits from the gradual improvement of the economic environment were limited mostly to the side of fixed capital investment, with pressures on household disposable incomes having clear consequences for consumption, particularly during periods of property and income tax installment payments. On the whole, these developments led to significant fluctuations in the contribution of domestic demand to the rate of change of the GDP, with this contribution finally reaching 1.0 percentage point for the whole year 2017, from -0.1 point in 2016 (see Table 1.1.1 and Figure 1.1.1).

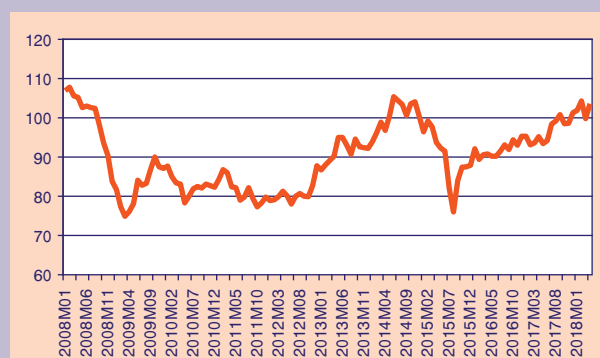
Concerning the course of the external sector in 2017, the improvement of domestic economic conditions, in combination with a number of favourable external factors, contributed towards strong export growth in

all four quarters of the year. In parallel, despite the observed decline in private consumption during the second half of 2017, the at times significant recovery of fixed capital investment and the overall positive expectations on the prospects of the economy appear to have contributed towards a continuing rise in imports. On the whole, these developments led to a positive contribution to the rate of change of GDP from the side of exports (2.1 percentage points) and a slightly higher negative contribution from the side of imports (-2.2 points), the result being a contribution of the external sector to the rate of change of the GDP amounting to -0.2 percentage points in 2017, from -0.7 points in 2016.

From the aforementioned evolution in the figures of domestic demand and the external sector, it is evident that developments in inventories played a crucial role in shaping positive GDP growth in 2017. On the basis of the data available, the contribution of the change in stocks to the rate of change of the GDP for 2017 as a whole amounted to 0.5 percentage points, a level similar to that of 2016. The accumulation of stocks is indicative of a certain weakness of domestic demand to sufficiently absorb produced and imported goods, and it may also affect, to a certain degree, the rate of change of the GDP in subsequent quarters, through the coverage of future demand through the consumption of existing stocks.

With respect to the recent course of economic conditions in the country, positive indications are provided by the significant improvement of the economic sentiment indicator from November 2017 to February 2018 (Figure 1.1.2). In March 2018, the indicator recorded a

**FIGURE 1.1.2**  
Economic sentiment indicator



Source: EUROSTAT.

decrease, while in April 2018 the indicator increased once again. The temporary decrease of the indicator in March may perhaps be connected, on one hand, to geopolitical tensions in the wider area of the eastern Mediterranean, and, on the other hand, to a precautionary stance in view of new economic measures and developments related to the completion of Greece's financial assistance programme.

Regarding the main factors shaping the recent developments in the GDP and its main components, next follows a more detailed analysis of their evolution and prospects, on the basis of National Accounts data and selected short-term indicators.

### 1.1.1. Private consumption

The annual rate of change of private consumption amounted to 0.1% in 2017 from -0.0% in 2016, and as a result the contribution of private consumption to the rate of change of the GDP amounted to 0.1 percentage points in 2017, from 0.0 points in the previous year. On a quarterly basis, private consumption recorded, as already mentioned, a mild increase up until the second quarter of 2017, and a decline in the second half of the year.

Additional indications regarding the recent path of private consumption are provided by the evolution of the monthly volume index in retail trade. Following the mostly positive changes of the general index during the period from January to August 2017, the rate of change of the index was negative in September (-0.8%), October (-1.0%) and November 2017 (-2.6%), then again recovering in December 2017 (1.7%). Posi-

tive contributions to the development of the general index during the second half of 2017 came from the side of one out of the three main retail sector categories, namely the *non-food* sector (Figure 1.1.3). In contrast, negative developments were recorded in the case of the indices of the *food* sector and the *automotive fuel* sector, with the exception of October.

Regarding the relevant developments during the first months of 2018, the general volume index in retail trade recorded an increase in January (0.9%), followed by a marginal decrease in February (-0.1%)<sup>1</sup>, as compared to the corresponding months of 2017. The respective course of the general index is further mirrored in the developments in the three main retail categories. More particularly, in the case of the *food* sector, the negative change observed in January (-1.7%) was followed by a milder decrease in February (-0.4%), while in the case of the *automotive fuel* sector, the positive change recorded in January (2.1%) was reversed in February (-0.2%). In the *non-food* sector, the preceding positive trend in the index was preserved, with positive changes recorded both in January (4.8%) and February 2018 (1.0%).

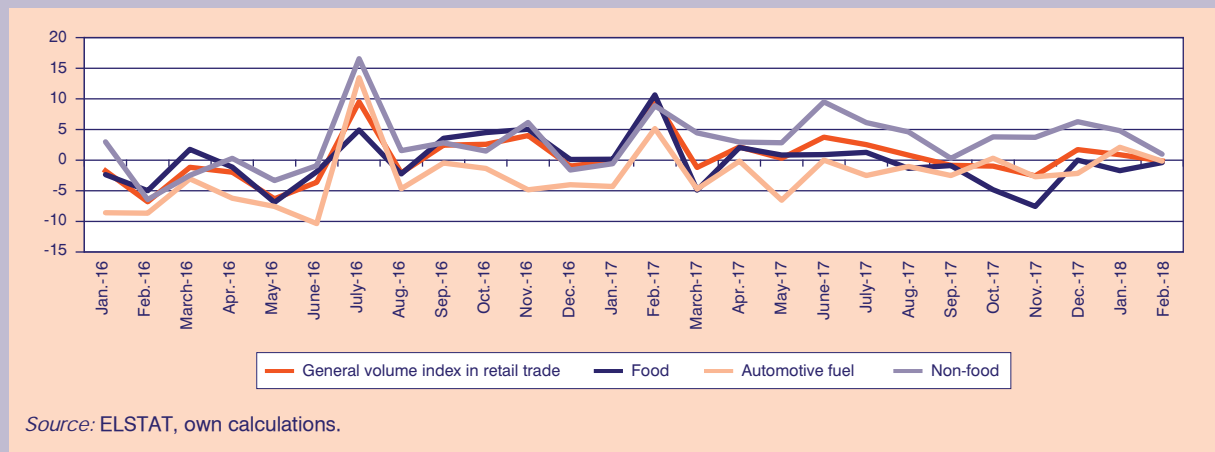
With reference to the evolution of the indices in the eight individual retail store sub-categories, it seems that in the second half of 2017 favorable developments –as compared to the corresponding period of 2016– were mainly related to *furniture-electrical equipment-household equipment* (8.0%), *books-stationery-other books* (5.6%), *pharmaceuticals-cosmetics* (2.5%), *clothing-footwear* (2.3%) and *department stores* (0.4%). On the contrary, adverse developments took place on average over the same period in the indices of the *food-beverages-tobacco* (-2.8%), *automotive fuel* (-1.8%) and *supermarket* (-1.1%) sub-categories. With respect to the corresponding developments in early 2018, in January positive rates of change were recorded in five out of the eight sub-categories (*automotive fuel*, *pharmaceuticals-cosmetics*, *clothing-footwear*, *furniture-electrical equipment-household equipment*, *books-stationery-other books*), while in February upward trends were observed in four out of the eight sub-categories (*supermarkets*, *pharmaceuticals-cosmetics*, *clothing-footwear*, *furniture-electrical equipment-household equipment*).

On the basis of the above data, it is evident that, from mid-2017 and until recently, private consumption has been under the influence of opposing forces, which may prevail one over the other depending not only on the conjuncture, but also depending on the consum-

1. The data for February are provisional.

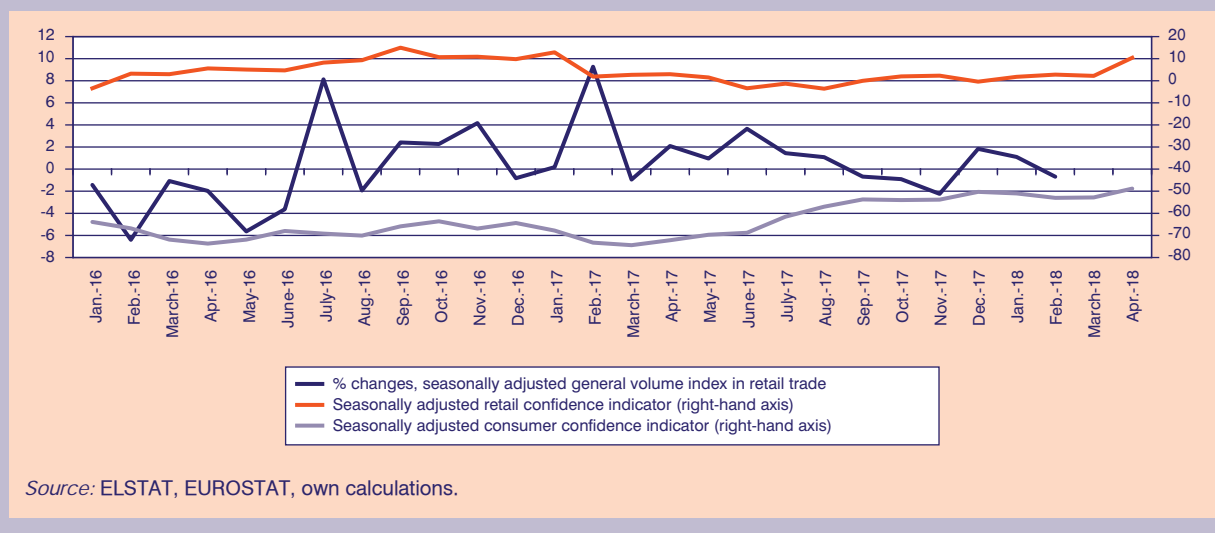
**FIGURE 1.1.3**

Percentage changes in the general volume index and the main sector indices in retail trade



**FIGURE 1.1.4**

General volume index in retail trade and confidence indicators



er good category in question. On the one hand, the further stabilization of the economic environment, the slow but consistent improvement of the main labour market figures and the related recovery in the compensation of employees gradually dissolve the apprehension of consumers and create more favourable conditions for the recovery of private consumption. On the other hand, the margins of households to consume continue to be negatively influenced by the persisting pressures on their disposable incomes, in the framework of the implementation of fiscal adjustment measures. Under these conditions, a certain degree of uncertainty with respect to the prospects of private consumption continues to prevail, although the wider positive economic prospects seem to point to a poten-

tial for a mild recovery of private consumption in the course of the current year. This assessment is in line with recent developments in the consumer confidence and the retail confidence indicators, which reflect an improvement in the expectations of consumers and retailers with respect to the future course of private consumption expenditure (Figure 1.1.4).

### 1.1.2. Investment

The annual rate of change of gross fixed capital formation amounted to 9.6% in 2017, versus 1.6% in 2016, and as a result the contribution of investment expenditure to the rate of change of the GDP reached 1.1 percentage points in 2017, from just 0.2% in the

previous year. On a quarterly basis, investment exhibited, as already mentioned, considerable fluctuations in the course of 2017, recording a dynamic recovery in the first and last quarters, a weak increase in the second quarter and a decline in the third quarter of the year.

More particularly, with regard to investment other than construction, developments in 2017 were, on the whole, positive, with expenditure in three out of the four relevant categories recording, on average, an increase. More specifically, investment recorded a large increase in the transport equipment category (83.2%), while small increases were also observed in the metal products and machinery category (2.8%) and the agriculture-forestry-fisheries category (0.8%). In contrast, a marginal decrease was observed in the case of investment in other products (-0.3%).

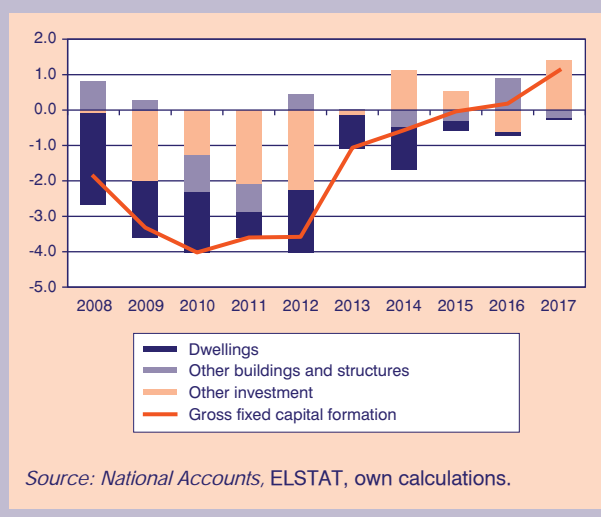
With respect to investment in constructions, 2017 was characterized by a further deceleration of the decline in housing investment (-8.8%). In parallel, the rate of change of expenditure in other constructions turned negative (-5.4%), due to the completion of major construction projects (e.g. highways) which contributed decisively to investment figures in previous years.

Additional information on developments in the construction sector as a whole is derived from the available statistical data on the course of the general

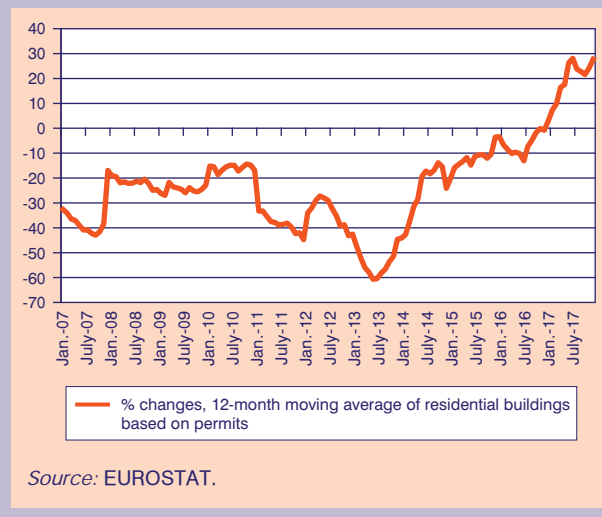
production index in construction during the fourth quarter of 2017.<sup>2</sup> As it appears, the index decreased by -21.5% as compared to the corresponding quarter of 2016, thus remaining on the downward track resumed since the second quarter of the year. This development was due both to the decline in the sub-index of production of civil engineering (-28.3%), due to the aforementioned completion of large infrastructure projects, and to the decrease of the sub-index of production of building construction (-13.0%), which reflects developments in the construction of dwellings, industrial and commercial buildings and other buildings.

More particular information with regard to the recent developments in residential investment is derived from the residential buildings indicator with respect to square meters of useful floor area, based on building permits. Both the individual monthly observations of the residential buildings indicator and the estimated private building activity<sup>3</sup> exhibited improvement in the most recent reference period. More specifically, the monthly percentage changes of the indicator on a year-on-year basis were positive in October and November 2017 (42.3% and 41.0%, respectively, as to the corresponding months of 2016), while, in parallel, the rates of change of the estimated private building activity remained positive (24.2% in October and 27.7% in November) (Figure 1.1.6). However, as men-

**FIGURE 1.1.5**  
Contributions to the rate of change of the GDP  
*Individual components of investment*



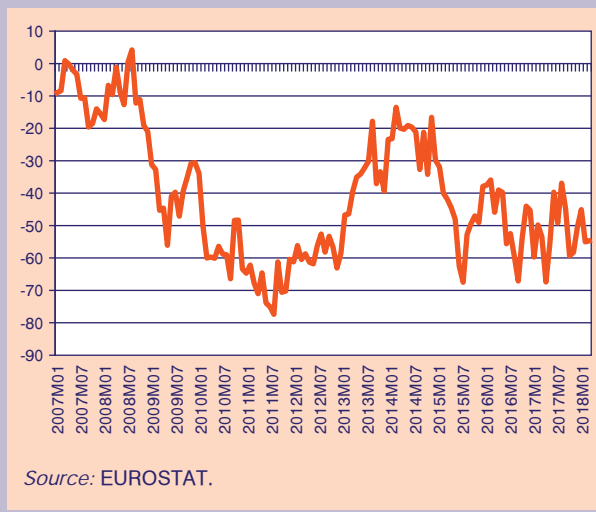
**FIGURE 1.1.6**  
Estimated residential building activity based on permits



2. Note that the reference concerns the indicator adjusted for the number of working days while data for the fourth quarter of 2017 are provisional.

3. A twelve-month moving average and the related percentage point changes are calculated.

**FIGURE 1.1.7**  
Construction confidence indicator



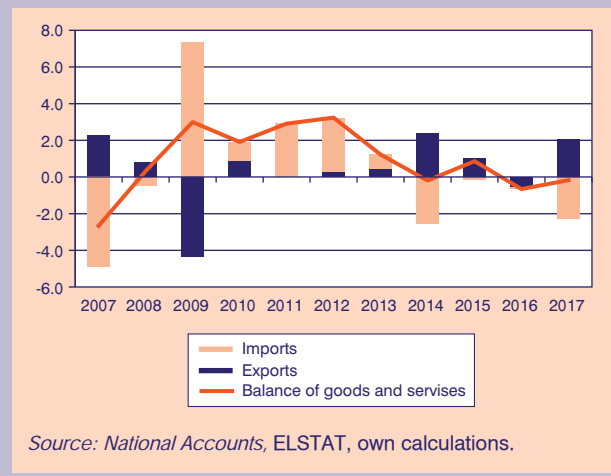
tioned in the previous issue of the *Greek Economic Outlook*, caution is recommended with respect to the interpretation of these developments as a sign of positive trends in residential building investment, as according to market sources the increase in residential permits reflects to a considerable extent an increase in the issuing of new permits for the fencing of plots of land, an activity related to the process of the posting of new forest maps.

Overall, the favourable developments in investment for 2017 as a whole, and particularly the rapid recovery observed in the final quarter of the year, point to a gradual establishment of positive investment dynamics in the economy. Nevertheless, the fluctuations of the rate of change of investment in the course of 2017, and also the volatility still characterizing the constructions confidence indicator (Figure 1.1.7), underline the need for a continuous effort to facilitate and encourage investment, through the further stabilization of the economic environment and the implementation of major investment projects that are either in waiting or in progress, as well as the improvement of financing and liquidity in the market through the achievement of stability in the banking system. The prospect of progress in these crucial areas in the course of the current year supports a positive outlook for investment growth over the short term.

### 1.1.3. External balance of goods and services

Developments in the external sector of the Greek economy in the course of 2017 were favoured considerably by the progressive stabilization of the domestic economy, the growth of international trade, the positive

**FIGURE 1.1.8**  
Contributions to the rate of change of the GDP  
*Individual components of external demand*



developments in Greece's main export markets and the increasing preference of tourists for holidays in Greece.

More particularly with respect to exports, in the case of services there was a significant increase in all four quarters of 2017. According to data of the Bank of Greece, this development is related not only to the increase in tourism receipts, but also to the rise in receipts from transportation and other services. In the case of goods exports, developments remained positive in all four quarters of the year, with the relevant rate of change being comparatively higher in the second and third quarters. Overall, for the year 2017 as a whole, exports recorded an increase of 5.5% in the case of goods and 8.3% in the case of services; the result being a positive contribution of 2.1 percentage points to the rate of change of the GDP (see Figure 1.1.8).

With respect to imports, a steady upward trend in the course of 2017 was observed both in the case of goods and in the case of services. Thus for the year 2017 as a whole, imports presented a considerable increase in goods (6.8%) and in services (9.8%); the result being a negative contribution of -2.2 percentage points to the rate of change of GDP.

Concerning the outlook for the external sector, the indications thus far available, together with the positive prospects for international trade and for developments in European economies, point to the prospect for a continuation of the rising trend in goods and services exports. In parallel, a rising trend is expected to prevail in the case of imports, due to the foreseen recovery of domestic demand. Under these

circumstances, the contribution of the external sector to the rate of change of GDP will depend critically upon the scale of export growth, as well as upon the degree to which an increase in internal demand will be covered by domestically produced goods. In the current conjuncture, a decisive role in the country's performance in the above fields will be played by the implementation of the new investment necessary for the strengthening of the country's productive capacity.

#### 1.1.4. Conclusions

The above analysis of developments in the main demand components provides signs of positive growth dynamics for fixed capital investment and exports in the Greek economy, together with a prospect of a mild recovery in private consumption over the short term. This picture is in support of a positive outlook of accelerating recovery in Greece's GDP during 2018, in line also with the forecasts derived on the basis of the KEPE dynamic factor model (see Section 1.3).