



# ECONOMIC OUTLOOK

## ECONOMICS RESEARCH CENTRE

Issue 18/1

January 2018

Summary

*Real economic activity in Cyprus is expected to continue to expand at robust rates in 2018. In 2017, real GDP is estimated to have increased by 3.8%. In 2018, growth is forecasted at 3.6%. While real GDP growth is predicted to reach 3.7% in the first half of 2018, it is subsequently projected to ease to 3.5% in the second half of the year.*

*The main factors driving the strong growth rates forecasted in the next five quarters include: the solid improvements in domestic activity and labour market indicators in recent quarters, the steady upward trend in the level of the domestic economic sentiment indicator, the favourable external economic environment and the subdued inflation rates. Other positive domestic developments, such as the strong fiscal performance, the low levels of lending interest rates, the rise in deposits and the ongoing deleveraging, have also contributed to the strong outlook for 2018.*

*Downside risks to the growth forecasts include: a sluggish progress in the management of non-performing exposures on banks, ineffective resolution of problematic loans, and lack of momentum in completing pending and launching new structural reforms. These risks, which stem from the high levels of private debt and non-performing loans, and the high public debt relative to the size of the economy, could limit growth prospects by undermining economic confidence, financial stability and fiscal sustainability. Slower-than-expected growth in the UK, the uncertainty effects of Brexit and a weaker pound could also have adverse effects on growth. Upside risks to the outlook are associated with public investment in infrastructure and private investment, especially in the sectors of energy, tourism and real estate, as well as with better-than-anticipated growth outturn in the EU and Russia.*

*The more optimistic outlook in this bulletin, vis-a-vis the November issue, is mainly the result of upward revisions of the GDP data (constant prices) for the period between the first quarter of 2015 and the second quarter of 2017. The positive developments in domestic macroeconomic and leading indicators, and the favourable external economic conditions during the second half of 2017 have also contributed to the upward revision of the forecast.*

Ιανουάριος 2018

Περίληψη

*Η πραγματική οικονομική δραστηριότητα στην Κύπρο αναμένεται ότι θα συνεχίσει να αυξάνεται με σταθερούς ρυθμούς κατά το 2018. Το 2017, το ΑΕΠ (σε σταθερές τιμές) εκτιμάται ότι αυξήθηκε κατά 3,8%. Το 2018, η αύξηση του πραγματικού ΑΕΠ προβλέπεται σε 3,6%. Η ανάπτυξη κατά το πρώτο και δεύτερο εξάμηνο του 2018 εκτιμάται σε 3,7% και 3,5% αντίστοιχα.*

*Οι κυριότεροι παράγοντες που συμβάλλουν στην προβλεπόμενη άνοδο του ΑΕΠ περιλαμβάνουν: τη σταθερή βελτίωση που καταγράφεται τα τελευταία τρίμηνα σε δείκτες της οικονομικής δραστηριότητας και της αγοράς εργασίας, τα ψηλά επίπεδα εγχώριας οικονομικής εμπιστοσύνης, το ευνοϊκό εξωτερικό οικονομικό περιβάλλον και οι σχετικά χαμηλοί ρυθμοί πληθωρισμού. Άλλες εγχώριες εξελίξεις, όπως η βελτιωμένη δημοσιονομική επίδοση, τα χαμηλά επίπεδα δανειστικών επιτοκίων, η αύξηση των καταθέσεων και η απομόχλευση έχουν, επίσης, συνεισφέρει στη διαμόρφωση αισιόδοξων προβλέψεων.*

*Κίνδυνοι για χαμηλότερη από την προβλεπόμενη ανάπτυξη περιλαμβάνουν: την αργή πρόοδο στη διαχείριση των μη εξυπηρετούμενων δανείων, την αναποτελεσματική επίλυση προβληματικών δανείων και την απουσία δυναμικής στην ολοκλήρωση παλιών και στην εισαγωγή νέων διαρθρωτικών μεταρρυθμίσεων. Αυτοί οι κίνδυνοι, οι οποίοι πηγάζουν από τα ψηλά επίπεδα ιδιωτικού χρέους και μη εξυπηρετούμενων δανείων καθώς και από το ψηλό δημόσιο χρέος, ενδέχεται να περιορίσουν τις προοπτικές ανάπτυξης υπονομεύοντας την οικονομική εμπιστοσύνη, τη χρηματοπιστωτική σταθερότητα και τη βιωσιμότητα των δημόσιων οικονομικών. Κίνδυνοι που πηγάζουν από το εξωτερικό περιβάλλον σχετίζονται με χαμηλότερους ρυθμούς ανάπτυξης από τους αναμενόμενους στο Ηνωμένο Βασίλειο, την αβεβαιότητα που σχετίζεται με το Brexit και την υποτίμηση της στερλίνας. Παράγοντες για καλύτερες προοπτικές από τις προβλεπόμενες σχετίζονται με δημόσιες επενδύσεις σε υποδομές και ιδιωτικές επενδύσεις, κυρίως στους τομείς της ενέργειας, του τουρισμού και των κτηματομεσιτικών, καθώς και με καλύτερη οικονομική επίδοση από την αναμενόμενη στην ΕΕ και στη Ρωσία.*

*Οι προοπτικές που παρουσιάζονται σε αυτό το δελτίο είναι πιο αισιόδοξες συγκριτικά με αυτές στο τεύχος Νοεμβρίου, λόγω της προς τα πάνω αναθεώρησης των στοιχείων για το ΑΕΠ (σταθερές τιμές), κυρίως για την περίοδο 2015 (1<sup>ο</sup> τρίμηνο) - 2017 (2<sup>ο</sup> τρίμηνο). Η συνέχιση της θετικής πορείας εγχώριων δεικτών και το ευνοϊκό εξωτερικό οικονομικό περιβάλλον, επίσης, συνέβαλαν στην προς τα πάνω αναθεώρηση των προβλέψεων.*





### January 2018

#### 1. Recent developments

The Cypriot economy grew briskly in the third quarter of 2017 as real GDP increased by 3.9%, year-on-year (y-o-y). Real economic activity has been increasing at robust rates of about 4% for four consecutive quarters. In the third quarter of 2017, most sectors of economic activity performed strongly in terms of their real gross value added. Financial and insurance services have contracted further, albeit at a considerably slower rate compared with previous quarters. The sectors of information and communication, and real estate activities slowed in the third quarter of 2017. Private consumption increased vigorously in the third quarter, while government consumption rose marginally over the same period. Net exports resulted in a positive contribution to growth as exports expanded faster than imports (y-o-y) in the third quarter. In spite of a sharp contraction in investment in transport equipment, gross fixed capital formation registered double-digit growth in the third quarter, driven by investment in construction, metal products and machinery.

Many domestic leading indicators (e.g. credit card use, retail trade volume index, index of industrial production, tourist arrivals, registrations of motor vehicles, property sale contracts and building permits) continued to pick up during the second half of 2017. Following the decline in the third quarter of 2017, the Economic Sentiment Indicator (ESI) strengthened in the final quarter of the year, reaching a historical peak since 2008. The recent rise in economic sentiment resulted mainly from confidence improvements in services, (particularly in the sub-sectors of financial activities, and accommodation and food services), retail trade and industry. Overall, the ESI continues to grow at a steady upward trend after the 2013 economic crisis.

Over the second half of 2017, the decline in the number of registered unemployed accelerated and the unemployment rate (Eurostat) stood just below 11%. Nevertheless, unemployment in Cyprus is still above the euro area average.

The fiscal outcome during the period January – November 2017, was more favourable compared to the outturn in the same period in 2016. The increase in government revenue far exceeded the rise in expenditure, leading to a sizeable budget balance. Public debt decreased to €18.9 billion in November and the long-term interest rate on government bonds declined further in the last quarter of 2017.

Deposits held in Cyprus by domestic and other euro area residents have been rising throughout the period January – November 2017. Over the same period, interest rates have declined to historically low levels. As a result of the ongoing deleveraging and subdued new lending, the stock of loans decreased further in the second half of 2017, although at slower rates compared with the first half of the year. Loans to non-financial corporations registered a weak increase during the period September – November 2017. The stock of non-performing exposures relative to the size of the economy remains high by international standards, despite the downward trend recorded in 2016 and during the first nine months of 2017.

Inflation (measured by the Consumer Price Index – CPI) turned positive in 2017 (0.5%), after four years in negative territory, as a result of increases in the price level in the first half of the year. In the last quarter of 2017, CPI inflation was marginally negative at -0.1% compared with -0.4% in the third quarter. The negative inflation in the second half of the year was mainly driven by price declines in the categories of food, household equipment, communication and miscellaneous goods and services.

#### 2. Forecasts

Projections for GDP growth and CPI inflation are constructed using quarterly data available up to the third quarter of 2017. Monthly indicators released by 17 January 2018 that contain information covering all the months in the final quarter of 2017 at the most, are also used. All forecasts presented in this bulletin are based solely on published data; thus, they only incorporate effects captured by the quarterly series and the monthly leading indicators used in the estimations. The forecasts are based on a large number of domestic and foreign indicators and an even larger set of dynamic forecasting models.

The forecasts for the y-o-y growth rate of real GDP for the final quarter of 2017 and all the quarters of 2018 are shown in Table 1; the projections for the whole of 2017 and 2018 are also provided.<sup>1</sup>

<sup>1</sup> The forecasts for the y-o-y growth rate of real GDP in Table 1 are obtained via the estimation of a large number of alternative models. The final forecast for each quarter is computed as the weighted average of all model forecasts using weights based on the historical forecasting performance of each model, evaluated by the Root Mean Square Forecast Error (RMSFE).

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- Based on the historical relationships between growth and numerous macroeconomic indicators, the expansion of real economic activity in Cyprus is estimated to continue at robust rates in 2018. Real GDP growth is estimated to have increased by 3.8% in 2017. In 2018, growth is forecasted at 3.6%.
- Real GDP is estimated to have increased by 3.6% (y-o-y) in the fourth quarter of 2017.
- Growth is estimated to continue at solid rates in 2018. Real GDP growth is projected to reach 3.7% in the first half of 2018 and subsequently to ease to 3.5% in the second half of the year.

**Table 1: GDP growth forecasts, forecast errors and contribution of components to forecasts <sup>1</sup>**

YEAR	2017		2018		
<b>FORECAST <sup>2</sup></b>	<b>3.8</b>		<b>3.6</b>		
QUARTER	4	1	2	3	4
<b>FORECAST (y-o-y)</b>	3.6	3.8	3.6	3.6	3.4
Forecast error <sup>3</sup>	0.7	1.1	1.9	2.7	3.1
<b>COMPONENTS <sup>4</sup></b>					
<b>A. Real economy</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.01</b>
<b>B. Excluding real economy</b>	<b>0.04</b>	<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>
<b>C. Real economy &amp; other indicators:</b>	<b>3.54</b>	<b>3.74</b>	<b>3.60</b>	<b>3.53</b>	<b>3.34</b>
Fiscal	0.30	0.31	0.27	0.29	0.26
Prices	0.62	0.65	0.60	0.59	0.60
Exchange rates	0.12	0.11	0.10	0.10	0.09
Interest rates, spreads	0.87	0.94	0.95	0.92	0.93
Stock markets	0.63	0.68	0.63	0.65	0.58
Economic sentiment	0.74	0.79	0.80	0.74	0.60
Loans, deposits	0.26	0.26	0.25	0.25	0.28

<sup>1</sup> Table 1 is presented in the Appendix (Table A1) in greater detail by reporting the forecast resulting from each component together with the weight assigned to the component forecast for the computation of the final forecast.

<sup>2</sup> For the first, second and third quarters of 2017 the y-o-y growth rates of GDP obtained from published data are used (Quarterly National Accounts, Seasonally Adjusted Data, Statistical Service, 08/12/2017).

<sup>3</sup> Pseudo out-of-sample root mean squared forecast error of the forecast method.

<sup>4</sup> Differences between the forecasts and the sum of the components are due to rounding.

Table 1 also presents the forecast errors associated with the estimated y-o-y growth rates in each quarter. As expected, the errors are larger for quarters closer to the end of the forecast horizon. Furthermore, Table 1 shows the contribution of different components (groups of models) towards shaping the final forecasts. Real economy factors estimated from domestic and international real activity and labour market indicators (shown in panel A, Table 1), as well as indicators which exclude real economy factors and focus mainly on financial and leading indicators (reported in panel B), have a minor contribution to the actual GDP growth forecasts in all quarter (of about 1.4%).<sup>2</sup> However, combining the information from real economy factors (from panel A) jointly with certain groups of economic indicators (as listed in panel C of Table 1) plays a key role in determining the overall GDP growth forecasts.

Indeed, as shown in the last panel of Table 1, the forecasts for all quarters are mainly formed by models that include (one at a time), for example, interest rates, spreads, economic sentiment indicators, domestic or foreign/international prices and stock market indices.<sup>3</sup> Real economy factors and monthly leading values of series contained in the factors (e.g. unemployment rate, registered unemployed, arrivals of tourists, registrations of motor vehicles) are also included in the models.

The main drivers of the growth forecasts are discussed below:

- *Solid activity and employment growth in Cyprus.* The growth rate of real GDP picked up further in the second and third quarters of 2017 and employment growth accelerated in the third quarter of 2017. Domestic leading indicators suggest that economic activity and labour market conditions continued to improve in the final quarter of 2017.

<sup>2</sup> Factors refer to a small number of principal components extracted from a large dataset of series relating to real domestic and foreign activity, and the labour market. The group which excludes real economy factors includes: interest rates and spreads, stock market indicators, economic sentiment indicators, exchange rates, domestic and foreign price indices, international commodity prices, as well as fiscal and banking sector series (loans, deposits).

<sup>3</sup> Economic sentiment indicators refer to data obtained through the Harmonised Business and Consumer Surveys Programme conducted by the Directorate General for Economic and Financial Affairs. The Economics Research Centre acknowledges funding from the European Commission and the Ministry of Finance for conducting the Business and Consumer Survey Project in Cyprus.



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- *High levels of domestic economic confidence.* In spite of monthly fluctuations, economic sentiment in Cyprus has reached historically high levels in 2017. Confidence gains, particularly in services and among consumers, are expected to continue to facilitate growth, but their effect wanes towards the end of the horizon.
- *Favourable external economic conditions.* In the third quarter of 2017, growth in the EU and the euro area accelerated further, the UK economy grew, albeit at a slower rate compared with the first half of the year, and the recovery of the Russian economy continued. In the second half of 2017, economic sentiment in the EU and the euro area improved further and the performance of international stock markets remained positive, reflecting a favourable external economic environment. Interest rates in the euro area remain at very low levels and continue to point towards an optimistic but slightly more conservative outlook for 2018 compared to other indicators.
- *Strong fiscal performance.* The fiscal outturn in 2017, marked by vigorous revenue growth and higher surpluses compared to those in 2016, contributes to the favourable outlook in 2018.
- *Subdued domestic and foreign inflation.* The absence of significant upward price pressures to the general price level in the second half of 2017 are supportive of demand and activity growth in the following quarters.
- *Improving domestic financial conditions.* Growth is supported by increasing deposits, deleveraging, the low levels of lending interest rates and the pickup of the Cyprus stock market.

Downside risks to the projections stem from domestic weaknesses and external factors:

- Sluggish progress in the management of non-performing exposures and ineffective resolution of problematic loans, given the high private indebtedness and the large stock of non-performing loans in the economy, could undermine confidence in the domestic banking system and pose risks to financial stability and outlook.
- Lack of momentum in completing pending and launching new structural reforms (e.g. public administration, privatizations, judicial system, local authorities), given the the high level of public debt, may weaken business and investor confidence, the sustainability of public finances and growth prospects.

- Slower-than-expected growth in the UK, the uncertainty effects of Brexit and a weaker pound, due to uncertainty regarding the post-Brexit relations between the UK and the EU, could negatively affect the outlook for the Cypriot economy.

Upside risks to the outlook are associated with public investment in infrastructure and private investment, especially in the sectors of energy, tourism and real estate. Moreover, higher-than-anticipated growth in the EU, stronger-than-expected economic recovery in Russia and the rebound of the rouble may lead to faster growth rates than the current forecasts.

In 2018, CPI inflation is forecasted to remain muted at about 1.0%, as a result of mild deflation in the second half of 2017 driven by declines in international food prices, no significant changes in employee earnings in recent quarters, and only modest increases in oil prices.<sup>4</sup> Upside risks to the forecast relate to stronger demand and faster wage growth, more rapid increases in international commodity prices and the weakening of the euro against the US dollar. Downside risks to the projections are associated with a demand shortfall.

### 3. Concluding remarks

Quarterly data available up to the third quarter of 2017, and monthly indicators relating to the final quarter of 2017 released until 17 January 2018, are employed in dynamic econometric models to construct forecasts for growth and inflation.

The forecast for real GDP growth in 2018 has been revised from 3.3% in the November issue to 3.6%. The more optimistic outlook in this issue is mainly the result of upward revisions to the GDP data (constant prices) for the period between the first quarter of 2015 and the second quarter of 2017. The positive developments in domestic macroeconomic and leading indicators, and the favourable external economic conditions during the second half of 2017 have also contributed to the upward revision.

The CPI inflation projection for 2018 has been revised from 1.8% in the previous issue to 1.0%. The large downward revision was mainly driven by the absence of significant upward price pressures in second half of 2017.

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<sup>4</sup> CPI inflation forecasts are constructed using a methodology similar to that for GDP growth forecasts (see footnote 1).



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Based on our forecasting methodology, the analysis presented in this issue shows that real activity will continue to improve in the following quarters. Our forecasts are based on complementary methods compared to those of other institutions. Comparing the growth forecast for 2018 in this bulletin we find that it is in line with the growth rate projected by the IMF (3.6%) and close to that of the Central Bank (3.4%). Yet, our current forecast for 2018 is more

optimistic than the outlook forecasted for Cyprus by the European Commission (2.9%) [1] – [3]. Based on historical, published data available so far (17/1/2018), our preliminary results suggest that growth is expected to edge down to around 3% in 2019.

#### REFERENCES

1. Central Bank of Cyprus, “Economic Bulletin – December 2017”, Nicosia – Cyprus (in Greek), December 2017.
2. European Commission, “Post-Programme Surveillance Report: Cyprus, Autumn 2017”, European Economy, Institutional Paper 067, December 2017.
3. International Monetary Fund (IMF), “IMF Executive Board Concludes 2017 Article IV Consultation with Cyprus”, Press Release No. 17/494, December 2017.

#### APPENDIX

Table A1: GDP growth (y-o-y) forecasts, components of forecasts, weights and forecasts by component

YEAR	CONTRIBUTION BY COMPONENT					WEIGHT					FORECAST BY COMPONENT				
	2017		2018			2017		2018			2017		2018		
QUARTER	4	1	2	3	4	4	1	2	3	4	4	1	2	3	4
COMPONENTS															
A. Real economy	0.02	0.02	0.02	0.02	0.01	0.54	0.53	0.48	0.47	0.43	3.5	3.7	3.4	3.2	3.1
B. Excluding real economy	0.04	0.04	0.03	0.03	0.03	1.01	0.95	0.90	0.94	0.93	3.5	3.7	3.6	3.5	3.4
C. Real economy & other indicators	3.54	3.74	3.60	3.53	3.34	98.4	98.5	98.6	98.6	98.6	3.6	3.8	3.6	3.6	3.4
Fiscal	0.30	0.31	0.27	0.29	0.26	8.20	8.21	7.52	7.53	6.91	3.6	3.8	3.6	3.8	3.7
Prices	0.62	0.65	0.60	0.59	0.60	17.32	16.98	16.55	16.67	17.42	3.6	3.8	3.6	3.5	3.4
Exchange rates	0.12	0.11	0.10	0.10	0.09	3.28	2.92	2.84	2.86	2.86	3.6	3.7	3.5	3.4	3.3
Interest rates, spreads	0.87	0.94	0.95	0.92	0.93	24.62	25.87	27.68	28.21	31.65	3.5	3.6	3.4	3.2	2.9
Stock markets	0.63	0.68	0.63	0.65	0.58	17.66	17.58	16.78	17.68	16.18	3.6	3.8	3.7	3.7	3.6
Economic sentiment	0.74	0.79	0.80	0.74	0.60	19.98	20.06	20.48	19.03	16.31	3.7	3.9	3.9	3.9	3.7
Loans, deposits	0.26	0.26	0.25	0.25	0.28	7.39	6.89	6.76	6.60	7.32	3.6	3.8	3.7	3.9	3.9
<b>FORECAST</b>	<b>3.6</b>	<b>3.8</b>	<b>3.6</b>	<b>3.6</b>	<b>3.4</b>										



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## ECONOMICS RESEARCH CENTRE

**January 2018**

The Economics Research Centre (CypERC) of the University of Cyprus is an independent, non-profit organization with the aim of promoting scientific knowledge in economics, especially in matters concerning Cyprus.

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