Issue 13/3

# ECONOMIC OUTLOOK

## ECONOMICS RESEARCH CENTRE

July 2013

UNIVERSITY OF CYPRUS

## SUMMARY


Recession in the Cyprus economy is forecasted to deepen in the remaining of 2013 and in the first quarter of 2014. Subsequently real GDP growth is also projected to contract but at smaller rates.

- Real GDP growth for the second, third and fourth quarter of 2013 is forecasted at -5.4%, -6.7% and -6.5% respectively. For the whole of 2013 real GDP growth is projected at -5.7%. However, downside risks are dominant and can push this figure down to -7.3%.
- Based solely on the historical relationships between growth and numerous macroeconomic indicators further contraction in activity is forecasted for 2014, with GDP growth for the whole year projected at -4.9%. Downside risks for this year project an even more worrisome negative GDP growth at -9.7%.

In the previous issue of this bulletin the forecasts for 2013 were more pessimistic because they were adjusted to include the effects of the 'bail-in' (reduced liquidity, restriction on transactions) not captured at that time by the historical data on which our forecasts were based. The figures reported in this bulletin do not include such an adjustment, as short-run indicators used in the forecast of these figures (economic sentiment, unemployment, retail sales, etc.) are now beginning to reflect the negative effects of the adverse financial environment. Nevertheless, the short-run indicators used in the forecasts still cover a very short period (mainly April and May 2013) and may not fully capture the deterioration in economic conditions. Hence, there is a risk that the depth of the recession might be underestimated.

In interpreting the results reported in this bulletin, one has to bear in mind that a large part of the economic adjustments will not be completed in 2013, so that the short-term negative effects of these adjustments are likely to be shifted to 2014. This could reflect the slow pace at which the restructuring of the banking sector and the implementation of structural reforms are carried out. Therefore, contrary to indications based on other projections, the economy is likely to remain in deep recession for a longer period, as suggested by the large negative forecast of GDP growth in 2014 which is reported above.

A point worth adding here is that rebuilding the financial system and implementing major structural reforms (public sector pay, pensions, health care, education, tax-benefit system, etc.) are necessary but not sufficient for the economy to be placed in a long-run growth path. Complementing and gauging these reforms must be measures to enhance competitiveness by rewarding activities that enhance productivity and create wealth in a competitive and transparent market environment. So far the public debate is mostly about moral and social issues highlighted by the recession (who is to blame for wrongdoings, high-paid civil servants, excessive bonuses, etc.) that may be important but can do very little to generate policies for the efficient functioning of the economy. Indeed, in some cases the politicians take advantage of the adverse social conditions to divert attention away from the real economic issues, thereby making matters worse. Behind this unreasoned behaviour is possibly the reluctance of the Cypriot society to accept the short-run economic and social cost (and the government's aversion to political cost) which is associated with reform, even though deep down is generally understood that this is the price that has to be paid for sustainable economic recovery and growth.


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## 1. Recent developments

The Cypriot economy deteriorated considerably during the first quarter of 2013 as real GDP growth contracted by 4.3% compared to the same quarter in 2012. All sectors except agriculture and real estate activities registered negative growth rates; a significant decline was recorded in the largest sector of the economy in terms of value added, namely trade, transport, accommodation and food services. The contraction in consumption and gross capital formation in the first quarter was mainly driven by the large reduction in government consumption and the depletion of inventories respectively; while net exports contributed positively to growth.

The worsening of the economic conditions continued in the second quarter of 2013. The political agreement on the economic adjustment programme for Cyprus in March that involved, inter alia, the resolution of the second largest bank and the recapitalisation of the biggest bank via the contribution of uninsured depositors, not only shattered confidence but also resulted in the enforcement of capital controls hampering the smooth functioning of the economy. Thus, the finalisation of the Cyprus programme agreement in April has done little to help the damaged confidence; the Economic Sentiment Indicator has simply returned to the relatively low levels prevailing in the last months of 2012. The consumer confidence and the employment expectations indicator which are constructed by CypERC suggest that consumers and firms intend to reduce further their consumption and employment in the coming months respectively, with subsequent effects on activity and unemployment (Figure 1 and 2).

Other published monthly indicators for the second quarter of 2013 reinforce the grim outlook for the Cypriot economy. The unemployment rate (Eurostat) exceeded 16% in May and registered unemployed increased by over 30% in the second quarter of 2013 compared to the second quarter of 2012. At the same time, vacancies and new company registrations were shrinking rapidly during the first five months of 2013. Considerable deterioration compared to 2012 is also registered in retail sales (value and volume), credit card usage (value), motor vehicle registrations and local sales of cement.

As a result of the recessionary conditions in Cyprus and the easing of oil prices, that begun in the last quarter of 2012, CPI inflation turned negative in the second quarter of the year (from about 1.5% in the first quarter). The positive but very low inflation in May 2013 is mainly attributed to increases in the categories of food and beverages and transport. Moreover, the year-on-year growth rate of average monthly earnings of employees turned negative in the first quarter of 2013 after its slowdown in 2012.

**Figure 1: Consumer Confidence Indicator (CypERC) vs. private consumption growth (y-o-y)**

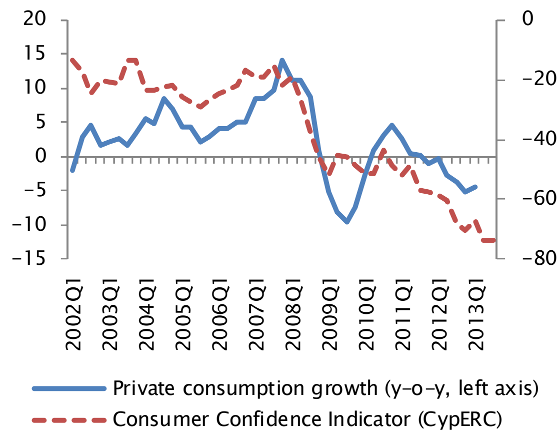
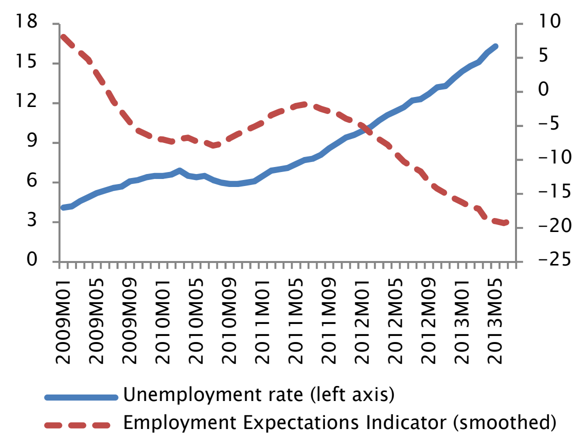



**Figure 2: Employment Expectations Indicator (CypERC) vs. unemployment rate (Eurostat)**




Despite the disappointing picture of tourist arrivals in 2013, the latest data on tourism revenue indicate an improved performance compared to the corresponding months of the previous year. Public finances relating to central government show a reduction in the deficit for the first five months of 2013 compared to the same period in 2012; although this outcome might be due to coincidental factors (e.g. proceeds from the assigning of exploration rights).

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The decline in loans to domestic (non-financial) firms and households in April and May marks the shortage of liquidity in the domestic banking system and, to some extent, the on-going deleveraging. The recent developments in the banking sector (restructuring, transaction restrictions bail-in etc.) have devastated economic confidence and heightened uncertainty, making the task of gauging the outlook of the economy using historical data very difficult. We would, therefore, urge readers to interpret the forecasts reported in this bulletin with caution.

## 2. Forecasts

We construct projections for GDP growth and CPI inflation for 2013 and 2014 using quarterly data available up to 2013Q1 as well as monthly indicators released by 5 July 2013 thus containing information referring to June 2013 at best.

All forecasts presented in this Bulletin are based solely on published data. As such they do not incorporate the likely negative impacts of restrictions on transactions and banking sector restructuring, beyond those already captured by leading indicators used in the estimation of the forecasts.

The forecasts for the year-on-year (y-o-y) growth rate of real GDP for the second, third and final quarter of 2013 and all the quarters of 2014 are shown in Table 1.

- Recession in the Cypriot economy is forecasted to deepen in the remaining of 2013 and in the first quarter of 2014. Subsequently real GDP growth is also projected to contract but at smaller rates. In particular, real GDP growth for the second, third and fourth quarter of 2013 is forecasted at -5.4%, -6.7% and -6.5% respectively. GDP growth for the whole of 2013 is projected at -5.7%.

- Based solely on the historical relationships between growth and numerous macroeconomic indicators further contraction in activity is forecasted for 2014 with GDP growth for the whole year projected at -4.9%. The first quarter of 2014 is projected as the most negative of the year as GDP is estimated to contract by 6.7%.

As pointed out above, these forecasts are accompanied by substantial downside risks, as leading indicators observed up to 5 July 2013 and used in the analysis do not fully capture the effects of the banking sector restructuring to be completed at a later stage.

Table 1 also shows the contribution of different components (groups of models) in shaping the final forecast. *Real economy* factors (domestic and international activity and labour market) and components in the group *other than real economy* have a negligible effect in the formation of the forecast in all quarters (less than 5%). [1] However, *real economy jointly with other* components plays a key role in determining the forecasts.

**Table 1: Contribution of components to y-o-y GDP growth forecast[1]**

| | 2013 Quarters | | | 2014 Quarters | | | |
|---|---|---|---|---|---|---|---|
| | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| FORECAST[2] | -5.4 | -6.7 | -6.5 | -6.7 | -5.0 | -4.3 | -3.5 |
| *COMPONENTS:* | | | | | | | |
| *Real economy* | *-0.0* | *-0.1* | *-0.1* | *-0.1* | *-0.1* | *-0.0* | *-0.0* |
| *Excluding real economy* | *-0.1* | *-0.1* | *-0.2* | *-0.2* | *-0.1* | *-0.1* | *0.0* |
| *Real economy & other* | *-5.2* | *-6.5* | *-6.2* | *-6.5* | *-4.9* | *-4.1* | *-3.4* |
| Fiscal | -0.2 | -0.4 | -0.4 | -0.4 | -0.3 | -0.3 | -0.2 |
| Prices | -0.3 | -0.6 | -0.5 | -0.5 | -0.4 | -0.3 | -0.2 |
| Exchange rates | -0.2 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 | -0.2 |
| Interest rates & spreads | -1.6 | -2.2 | -2.1 | -2.0 | -1.5 | -1.3 | -1.0 |
| Stock markets | -1.6 | -1.7 | -0.9 | -1.2 | -0.9 | -0.7 | -0.7 |
| Economic sentiment | -1.2 | -0.7 | -1.4 | -1.8 | -1.3 | -1.1 | -0.9 |
| Banking | -0.2 | -0.3 | -0.4 | -0.4 | -0.3 | -0.3 | -0.2 |

Notes:
[1] Table 1 is presented in the Appendix (Table A1 and A2) in greater detail by showing the forecast resulting from each component together with the weight assigned in the computation of the final forecast. The weight of each component is determined by the number of relevant models used in the estimation of the final forecast.
[2] Any differences between the forecasts and the sum of the components are due to rounding.

The forecasts in all quarters are mainly formed by models that include interest rates or spreads, economic sentiment or stock market indicators (and their monthly leads); as well as real economy factors and monthly values of series contained in the factors such as unemployment rate, registered unemployed, retail trade indices, etc.

For the second quarter of 2013 the stock market together with real economy points to a slightly more negative forecast than the average forecast from all models, possibly as a result of lagged effects of the deterioration in some foreign and domestic stock exchange indices in the second half of 2012. For the third quarter of 2013 exchange rates

[1] The group other than real economy includes: interest rates and spreads, stock market indicators, economic sentiment indicators, exchange rates, domestic and foreign price (sub)indices, international commodity prices, etc.

and, in particular, euro to pound sterling project larger decline in real GDP than the average forecast, as the strengthening of the euro against the pound in the first half 2013 could have a negative impact on GDP through tourism.

For all of the remaining quarters (2013Q4-2014Q4) public finances (represented by variables such as general government revenue, expenditure and deficit) together with real economy pose risks to the outlook, as they generate more negative forecasts than the average. The negative effects of fiscal consolidation and shrinking government revenues are estimated to weigh down GDP growth especially during 2014.

Banking sector variables such as loans, deposits (as well as broader measures of banks' assets and liabilities) and international reserves, jointly with real economy factors forecast deeper recession for 2014 than that projected by the average of all models. Moreover, predictors relating to domestic residents' loans signal to much more serious downturn in the second half of 2014 than the mean forecasts, although available data does not allow us to distinguish between the impacts of reduced liquidity and deleveraging.

The risks to the forecasts in all horizons appear to be heavily tilted to the downside. Table 2 presents the "extreme scenario" arising from the current analysis, together with the mean forecast from all models. The "extreme scenario" is computed from models that are located at the low-end of the forecast distribution. [2] Even though statistically the probabilities assigned to such realisations are quite low, the "extreme scenario" could form an informative lower bound, given the serious downside risks which are not yet fully reflected in the available data.

The quarterly profiles of the forecasts for both the mean forecast and the extreme scenario suggest that the burden of the adjustment in the Cypriot economy will also be borne in 2014. Furthermore, in both cases recession in 2013 is projected less severe than the macroeconomic scenario in the Cyprus's economic adjustment programme, but the opposite is forecasted for 2014 ([1], [2])

Table 2: GDP growth forecasts, mean and extreme values

| | 2013 Quarters | | | | |
|---|---|---|---|---|---|
| | 1[1] | 2 | 3 | 4 | 1-4 |
| Mean forecast (all models) | -4.3 | -5.4 | -6.7 | -6.5 | -5.7 |
| Extreme forecast | -4.3 | -7.3 | -9.0 | -8.7 | -7.3 |
| | **2014 Quarters** | | | | |
| | 1 | 2 | 3 | 4 | 1-4 |
| Mean forecast (all models) | -6.7 | -5.0 | -4.3 | -3.5 | -4.9 |
| Extreme forecast | -10.4 | -8.7 | -10.2 | -9.4 | -9.7 |

Note: [1] Published data (Quarterly National Accounts, Seasonally Adjusted Data, Statistical Service, 07/06/2013)

As mentioned above there are considerable downside risks for the economic growth forecasts that might not be adequately represented by forward-looking variables. Such downside risks relate to the following:

- The restructuring and recapitalisation of the banking system is likely to have negative effects on the supply of credit (liquidity) in the short-run. The restructuring of the banking sector could also impact negatively on employment via voluntary retirements/redundancies, and, therefore, activity through reduced consumption.
- The restrictive measures on transactions (capital controls) hampering the smooth conduct of trading add to the uncertainty in the economy.
- The bail-in which led to the loss of uninsured deposits or to the freeze on deposits for a number of months resulting in the loss of wealth/income of firms and households; and loss of working capital for businesses with negative effects on employment, consumption and investment.
- The current adverse credit and real economy conditions could also lead to increased (private sector) borrower default rates (non-performing loans) and, consequently, to further capitalisation needs for banks.
- The fragile economic sentiment prevailing in the country and the substantial loss of confidence with respect to the Cypriot banking system pose risks to growth even in the medium term.
- New fiscal consolidation measures for reducing government expenditure such as further cuts in social transfers and allowances and public sector

[2] Extreme forecasts are computed from the model that gives the most negative forecast at each horizon and from those models that give the most negative forecasts for horizons prior to the one in question. The models giving the extreme forecasts relate to the following aspects of the economy: real economy factors (all horizons) and monthly leads of variables relating to the real economy (i.e. registration of motor vehicles, local sales of cement, registered unemployed, unemployment rate), international financial markets (corporate yields), exchange rate of euro to pound sterling, government deficit and international reserves.

wage bill will have negative effects on disposable income and consumer demand.

CPI inflation is projected at 1.0% for 2013 and at about 2.5% for 2014.[3] The forecast for 2014 reflects, to a large extent, base effects of low inflation in the last quarter of 2012 and during the first two quarters in 2013. The recessionary conditions in the economy that are projected to worsen pose considerable downside risks to inflation, especially in 2014. Upside risks to inflation include further increases in indirect taxes and/or increase in regulated prices, increases in international commodity prices and the weakening of euro against the US dollar.

## 3. Comparison with previous forecasts

In the previous issue of this bulletin an analysis of the effects of a shock to deposits on macroeconomic indicators was presented, in an attempt to quantify the impacts of the bail-in as our standard tools and available data at the time did not suffice. Thus the figures given in the previous issue embodied the effects of the *assumed* shock on GDP growth. Using more recent data, in this issue we provide forecasts based on dynamic models and available data without making assumptions about the future path of predictors.

The difference in the estimated contraction of GDP in 2013 between this and the previous issue should not be interpreted as an upward revision, but rather as the result of two different types of analyses. For example, current data on deposits are not fully incorporating the 'haircut'. Nevertheless, some short-run indicators (e.g. economic sentiment, unemployment, retail sales, etc.) for the second quarter of 2013 used in the current forecasts can be viewed as partly reflecting the effects of loss of access to deposits and of transaction restrictions.[4] Moreover, the current forecasts were constructed using published data that cover a very short period (mainly April and May 2013) after the structural change/shock in the Cypriot banking sector. Therefore, the available economic series might not entirely capture the deterioration in the economic conditions. Hence, there is a risk that the depth of the recession might be underestimated.

## 4. Concluding remarks

Quarterly data available up to 2013Q1 and monthly indicators released early in July 2013 are employed together with dynamic econometric models to construct forecasts for GDP growth and CPI inflation. Historical relationships and recent data point currently to GDP growth for 2013 and 2014 at -5.7% and -4.9% respectively. Downside risks however are dominant at present, thus the "extreme scenario" from our analysis should not be disregarded, at least for 2013. According to the "extreme scenario" GDP is projected at -7.3% in 2013 and at -9.7% in 2014.

The available data (until the beginning of July) capture the deterioration in the economic conditions in the second quarter of the year, but yield less negative forecast for 2013 than those recently published by the European Commission and the IMF in relation to the Cyprus economic adjustment programme. Nonetheless, dynamic models and data point to a more severe downturn in 2014 than that originally forecasted by the two organisations ([1], [2]). Our results show that a large part of the economic adjustment will not be completed in 2013 and its short-term negative effects will be shifted to 2014. This could reflect the slow pace at which the restructuring of the banking sector is carried out.

Structural reforms (e.g. public sector, pension, health care, tax-benefit system) to ensure the sustainability of public finances and measures/regulations to enhance efficiency through market competition (e.g. privatisations, removal of unnecessary entry barriers in the services market) should be introduced. These reforms, together with early rebuilding of the financial system, will set the scene for a sound recovery of the Cypriot economy. In contrast, the lack of prompt action to resolve financial issues and implement structural reforms undermines economic confidence, increases uncertainty and prolongs recession.

### REFERENCES

1. European Commission (2013), "The economic adjustment programme for Cyprus", European Economy - Occasional Papers 149, May 2013, Directorate General - Economic and Financial Affairs.
2. International Monetary Fund (IMF) (2013), "Cyprus: Request for arrangement under the extended Fund facility", IMF Country Report No. 13/125, May 2013.

[3] CPI inflation forecasts are constructed from dynamic models that include sub-indices (lags and monthly leads) of CPI and Harmonised Index of Consumer Prices, international commodity prices and factors summarizing real economic activity as well as leads of variables included in the factors (e.g. registered unemployed, retail sales, etc.).

[4] The degree to which deposits subject to 'haircut' belong to non-domestic residents will affect the magnitude of the impact on economic activity.

# APPENDIX

Table A1: GDP growth forecasts, 2013
(components of forecasts, weights and forecast by component)

| | CONTRIBUTION BY COMPONENT | | | WEIGHT | | | FORECAST BY COMPONENT | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2013 Quarter | | | 2013 Quarter | | | 2013 Quarter | | |
| | 2 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | 4 |
| COMPONENT | | | | | | | | | |
| *Real economy* | *−0.04* | *−0.07* | *−0.07* | *0.7* | *1.1* | *1.1* | *−5.2* | *−6.5* | *−6.5* |
| *Other aspects* | *−0.1* | *−0.1* | *−0.2* | *2.7* | *2.2* | *2.9* | *−5.3* | *−6.6* | *−6.1* |
| *Real economy & other aspects* | *−5.2* | *−6.5* | *−6.2* | *97* | *97* | *96* | *−5.4* | *−6.7* | *−6.5* |
| Fiscal | −0.2 | −0.4 | −0.4 | 3.8 | 6.2 | 5.5 | −5.3 | −6.5 | −6.7 |
| Prices | −0.3 | −0.6 | −0.5 | 6.1 | 8.4 | 8.3 | −5.3 | −6.6 | −6.5 |
| Exchange rates | −0.2 | −0.5 | −0.4 | 4.0 | 7.7 | 6.5 | −5.4 | −7.1 | −6.5 |
| Interest rates & spreads | −1.6 | −2.2 | −2.1 | 29.2 | 33.1 | 32.3 | −5.4 | −6.6 | −6.5 |
| Stock markets | −1.6 | −1.7 | −0.9 | 28.7 | 25.2 | 14.4 | −5.5 | −6.8 | −6.4 |
| Economic sentiment indicators | −1.2 | −0.7 | −1.4 | 21.7 | 10.8 | 22.2 | −5.4 | −6.5 | −6.4 |
| Loans, deposits & reserves | −0.2 | −0.3 | −0.4 | 3.1 | 5.2 | 6.8 | −5.2 | −6.5 | −6.6 |
| | FORECAST | | | NUMBER OF MODELS | | | | | |
| | **−5.4** | **−6.7** | **−6.5** | 5073 | 5073 | 5073 | | | |

Table A2: GDP growth forecasts, 2014
(components of forecasts, weights and forecast by component)

| | CONTRIBUTION BY COMPONENT | | | | WEIGHT | | | | FORECAST BY COMPONENT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 Quarter | | | | 2014 Quarter | | | | 2014 Quarter | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| COMPONENT | | | | | | | | | | | | |
| *Real economy* | *−0.06* | *−0.05* | *−0.04* | *−0.03* | *0.9* | *0.8* | *0.8* | *0.8* | *−7.2* | *−6.0* | *−5.0* | *−3.5* |
| *Other aspects* | *−0.2* | *−0.1* | *−0.1* | *0.0* | *2.6* | *2.3* | *2.3* | *2.3* | *−6.1* | *−4.5* | *−3.0* | *−1.9* |
| *Real economy & other aspects* | *−6.5* | *−4.9* | *−4.1* | *−3.4* | *96* | *97* | *97* | *97* | *−6.7* | *−5.1* | *−4.3* | *−3.6* |
| Fiscal | −0.4 | −0.3 | −0.3 | −0.2 | 5.3 | 5.0 | 5.0 | 5.0 | −7.2 | −6.0 | −5.1 | −4.0 |
| Prices | −0.5 | −0.4 | −0.3 | −0.2 | 6.8 | 6.6 | 6.6 | 6.6 | −6.8 | −5.3 | −4.5 | −3.3 |
| Exchange rates | −0.3 | −0.3 | −0.2 | −0.2 | 4.6 | 5.0 | 5.0 | 5.0 | −6.6 | −5.3 | −4.5 | −3.4 |
| Interest rates & spreads | −2.0 | −1.5 | −1.3 | −1.0 | 29.2 | 28.1 | 28.1 | 28.1 | −6.8 | −5.4 | −4.7 | −3.6 |
| Stock markets | −1.2 | −0.9 | −0.7 | −0.7 | 18.1 | 21.5 | 21.5 | 21.5 | −6.5 | −4.1 | −3.2 | −3.3 |
| Economic sentiment indicators | −1.8 | −1.3 | −1.1 | −0.9 | 26.7 | 25.7 | 25.7 | 25.7 | −6.6 | −4.9 | −4.3 | −3.6 |
| Loans, deposits & reserves | −0.4 | −0.3 | −0.3 | −0.2 | 5.7 | 5.0 | 5.0 | 5.0 | −7.2 | −5.9 | −5.1 | −4.1 |
| | FORECAST | | | | NUMBER OF MODELS | | | | | | | |
| | **−6.7** | **−5.0** | **−4.3** | **−3.5** | 7609 | 10146 | 10146 | 10146 | | | | |

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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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