



Issue 13/2

ECONOMIC OUTLOOK

ECONOMICS RESEARCH CENTRE

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SUMMARY

In this issue the effects of the banking sector downsizing on some macroeconomic indicators are investigated. According to estimations conducted at CypERC, a reduction of 20%–30% in total deposits will have the following effects on the Cypriot economy:

- (a) A reduction by 5%–8% in real GDP; as a result the contraction in real economic activity in 2013 is estimated, at least, at 9%–12%.
- (b) A reduction in the Consumer Price Index (CPI) by 1%–2% and therefore CPI inflation in 2013 is expected to remain subdued, around 1%.
- (c) An increase in the unemployment rate (Eurostat) by 5–6 percentage points and thus it could be inferred that unemployment in 2013 could reach 20%.
- (d) Substantial loss of business and consumer confidence as the Economic Sentiment Indicator is estimated to drop significantly during the year (by up to 20 units).
- (e) A reduction in imports of goods (in nominal terms) by up to 22%; a smaller decrease in exports of goods (2%–6%) and a slight increase in tourist arrivals (2%–4%) is also found.

The current analysis, however, considers only the effects of a single negative shock in the form of a drop in total deposits. It does not incorporate the impact of immediate consequences of the deposit reduction or of other shocks, of smaller magnitude, to the economy occurring simultaneously with the deposit reduction, i.e.:

- The enforcement of unprecedented restrictive measures on both domestic and external transactions and the freeze on a proportion of uninsured deposits. Such actions limit liquidity in the market and deprive businesses of working capital with adverse effects on firms' viability and therefore on activity and employment.
- The absence of new inflows in Cyprus through international business activities which have been supported by the banking industry and other business services (e.g. legal, audit, etc.). The loss from international business activities will have negative spillovers in a number of domestic productive sectors.
- Increased uncertainty and loss of confidence in the banking sector as transactions are currently being regulated by decrees.
- The prolonged bank holiday in March impaired economic activity as banking services are essential for the smooth functioning of all the other sectors of the economy.
- Fiscal consolidation measures that have just been or will be legislated in the near future, are expected to have further contractionary effects on economic activity

In view of the above, the risks for GDP growth projections for 2013 are on the downside. Measures to kick-start the economy are in the right direction; they can boost confidence, enhance social cohesion and restrain, to some extent, the drop in consumption, but they are unlikely to reverse the downturn at this point. The prime objective should be the prompt and rigorous implementation of every aspect of the economic adjustment programme which includes structural measures and reforms. Such long-needed reforms could strengthen economic confidence, enhance credibility and improve the long-term prospects of the Cypriot economy.

UNIVERSITY OF CYPRUS



April 2013

1. Recent developments

The Cypriot economy contracted by 2.4% in 2012 as the performance of all sectors deteriorated significantly in the last quarter of the year. Construction activity, the broad industrial sector, information and communication services, trade, transport, accommodation and food services, on the supply side, as well as investment and household consumption, on the demand side, were the main drivers of GDP decline in the last quarter of 2012.

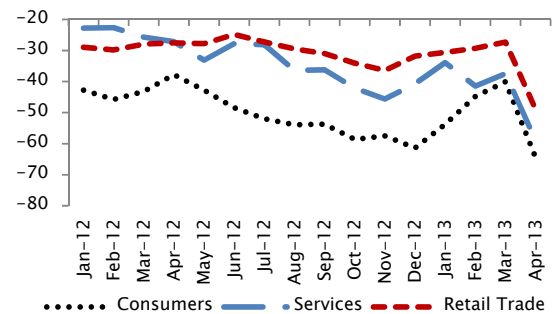
The worsening of the macroeconomic conditions in the first two months of 2013 was reflected in a number of short-run indicators such as the unemployment rate (Eurostat) that reached 14% and retail sales, imports of consumer goods, credit card usage (value), cement sales, building permits, vehicle registrations, tourist arrivals, registration of new companies and vacancies, which all registered large negative growth rates compared to the corresponding months of 2012. Moreover, the adverse conditions in the financial sector during January and February were marked by feeble growth in domestic credit (e.g. below 0.5% in the case of domestic firms) and by a decrease in total deposits by about 2.5% compared to the same period in 2012.

The protracted negotiations of the Cypriot authorities with the Troika (i.e. EC, ECB, IMF) on the finalisation of the economic adjustment programme to accompany the financial aid to Cyprus, heightened uncertainty and led to substantial loss of confidence. At the same time, the continuous deterioration of the real economy and the banking sector increased significantly the financing needs of Cyprus.

The Eurogroup on 16 and 25 March 2013 agreed to the provision of financial assistance to Cyprus which involved the downsizing and restructuring of the banking sector. The required banking sector restructuring includes (a) the sale of Greek operations of the three largest Cypriot banks, (b) the resolution of Cyprus Popular Bank (Laiki) and the transfer of its healthy assets, insured deposits and Emergency Liquidity Assistance (ELA) to the Bank of Cyprus, and (c) the recapitalisation of the Bank of Cyprus through the contribution of junior bondholders and uninsured depositors. The process of reaching a decision on the banking sector issues necessitated a prolonged bank holiday and subsequently the enforcement of capital controls. Consequently, the much-needed but otherwise abrupt restructuring of one of the key sectors of the Cypriot economy causes serious difficulties to the day-to-day

business transactions, threatens the viability of firms and shatters confidence. The drop in the Business and Consumer and Confidence Indicators in April (Figure 1) is indicative of the confidence shock in the Cypriot economy.

Figure 1: Confidence Indicators



The recent developments in the banking sector make the task of forecasting any macroeconomic indicator at this point extremely difficult as historical relationships are of little help. Furthermore, there is a high degree of uncertainty about the effects of the banking sector downsizing and of capital controls, both directly on the real economy and indirectly through business and consumer confidence.

In this issue we attempt to provide some indications about the outlook of the Cypriot economy by estimating the effects of the banking sector downsizing, treated as a shock to deposits, on macroeconomic indicators and some leading indicators.¹

2. A shock to deposits

We attempt to quantify some of the effects of the banking sector restructuring by estimating the dynamic responses of some macroeconomic variables to a shock to total deposits. An econometric model that describes the dynamic relationships between deposits, CPI, real GDP, unemployment rate and a small number of foreign and domestic factors was estimated using quarterly data for the period 1995–2012.² Foreign factors summarise a large number of international/foreign series such as stock exchange indices, interest rates, economic sentiment and activity indicators; domestic factors represent leading

¹ The analysis does not consider the sale of Greek operations of the banks.

² The model is a Factor-Augmented Vector Autoregression (e.g. Bernake B. S., Boivin J., Elias P. (2005), "Measuring the Effects of Monetary Policy: A Factor-Augmented Vector Autoregressive (FAVAR) Approach", Quarterly Journal of Economics 120(1), 387–422.

April 2013

variables of the Cypriot economy such as sales, foreign trade and tourism indicators, stock market and confidence data.

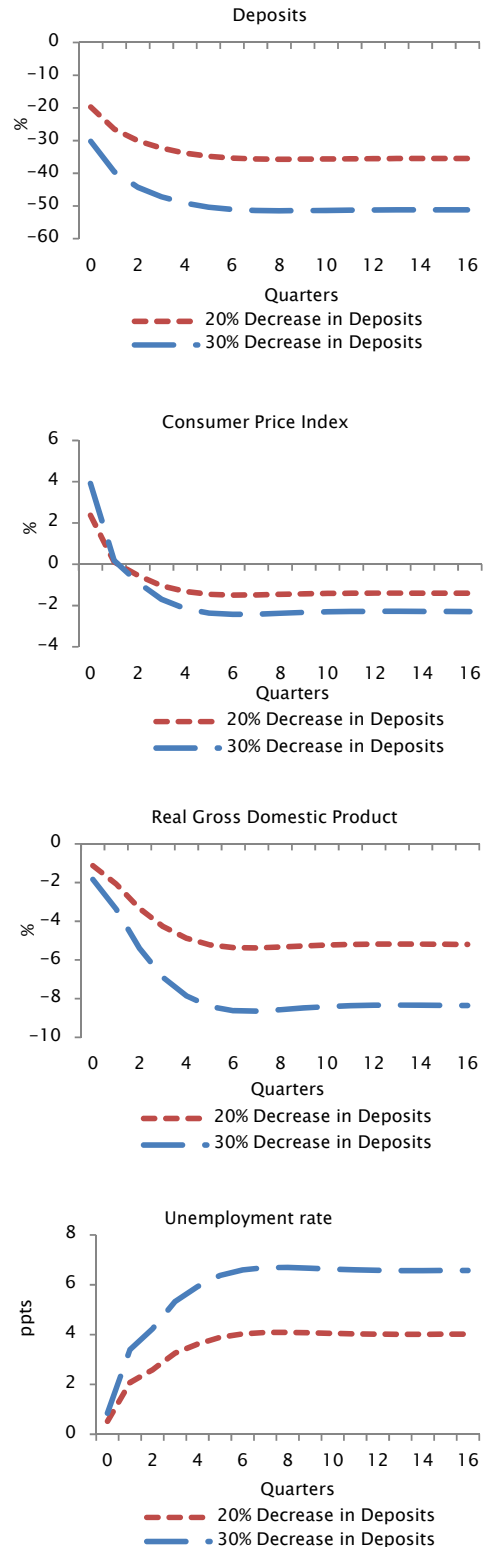
The estimated model is used to simulate the effects of two shocks: (i) 20% and (ii) 30% decrease in total deposits, as the exact magnitude of the reduction in deposits is not known and it can only be roughly gauged.³ Figure 2 shows the percentage change in deposits, CPI and real GDP, as well as the change, in percentage points, in the unemployment rate, triggered by the negative shocks in deposits at period 0. The responses of the variables are plotted over a horizon of four years in the form of cumulative effects.

The dynamic response of deposits to the 20% and 30% shock is a permanent reduction of about 35% and 50% respectively within a year of the shock. The shock exerts downward pressure on the price level which appears with a lag of one – two quarters. Thus, within about a year of the shock, CPI is lower by 1% – 2%, depending on the magnitude of the shock.

The adverse effects of the deposit shock on real GDP and unemployment are apparent on impact. Within about year of the deposit shock, real GDP is estimated to fall by 5% to 8%. The negative response of GDP to the deposit reduction is persistent for up to four years after the shock, i.e. output remains subdued (by 5% to 9%) compared to its level prior to the shock. The unemployment rate is estimated to rise by 5 to 6 percentage points within about one year of the shock as a response to 20% and 30% drop in deposits respectively. Unemployment in the medium term remains elevated as a result of the shock to deposits. The adverse impact of the decrease in deposits on output and unemployment over the whole horizon reflects also the negative consequences of the deposit loss on the wealth of business and households with persistent contractionary effects on consumption and investment in future quarters.

The inclusion of domestic factors in the analysis enables us to estimate the response of leading indicators to a shock to deposits. Figure 3 presents the effects of the two negative deposit shocks (20% and 30%) to the Economic Sentiment

Figure 2: Effects of deposit shocks on macroeconomic indicators



³ The outflow of deposits in January and February 2013 amounts to about EUR 2.7 bn.; the amount of the outflow in March and April (which has not been published yet) and the loss of deposits due to the resolution of Laiki Bank and to the swap of uninsured deposits for equity in the Bank of Cyprus are based on assumptions leading to a reduction in total deposits in the range of 20%–30% compared to the final quarter of 2012.

April 2013

Indicator (ESI), tourist arrivals and nominal imports and exports of goods.

Following a deposit shock, economic confidence weakens as indicated by the reaction of ESI which decreases by about 10 to 20 units at the end of the first year. In subsequent years ESI remains 10 to 15 units below its pre-shock level. Therefore, *ceteris paribus*, confidence does not seem to be restored even in the medium term.

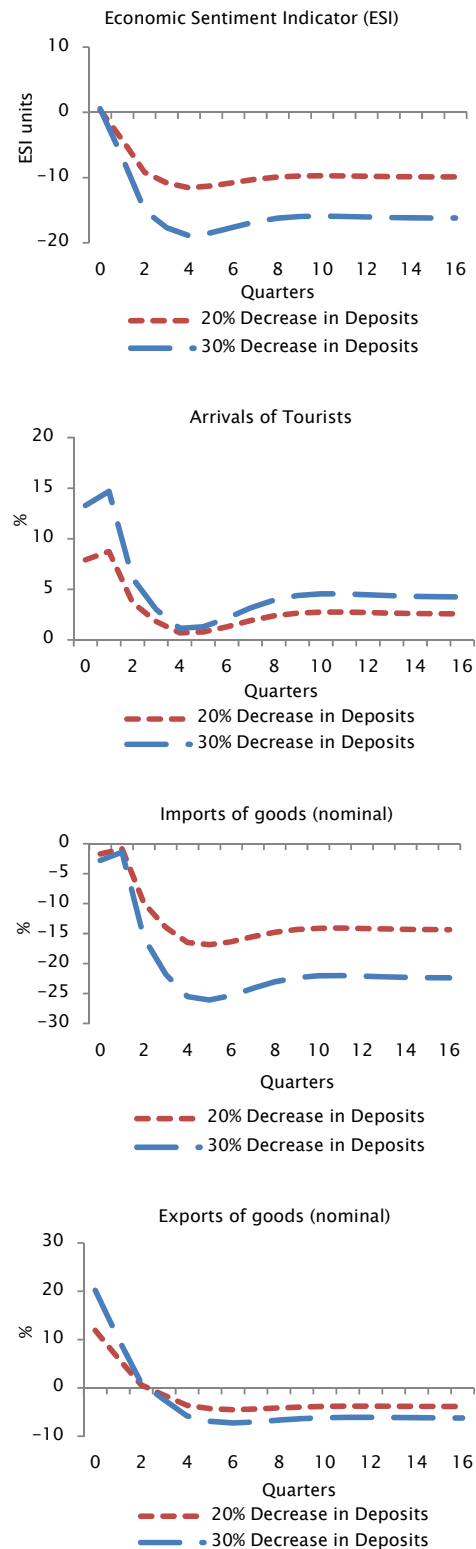
There is evidence of a small positive effect of the deposit shock on tourist arrivals. Within a year of the shock, tourist arrivals are estimated to increase by 2% to 3%, possibly as a result of the decline in the domestic price level. For longer horizons, inflows of tourists can rise by 3% to 4%, most likely due to the absence of inflationary pressures resulting in improved competitiveness of Cyprus as a tourist destination.

By the end of the first year after the shock, imports of goods (in nominal terms) are estimated to contract by 15% and 22% as a response to a negative shock to deposits of 20% and 30%, respectively. The decline continues in the second year after the shock, but afterwards imports stabilise at a new level which is about 14% to 22% lower compared to that prior to the shock. Exports of goods (in nominal terms) react positively to the deposit shock during the first couple of quarters, but by the end of the first year they fall by about 2%. In the following years exports of goods are estimated to decrease by 4% to 6% compared to their pre-shock level.

The responses of imports and tourist arrivals to the deposit shock indicate that the performance of net exports could mitigate to some extent the decline in output. However, tourism depends on the economic conditions in the countries of origin, mainly the UK and Russia where there is some evidence of a slowdown; IMF, for example, revised downwards their GDP growth projections for both countries⁴.

Furthermore, using the available data on about 200 series up to the final quarter of 2012, as well as monthly data covering January and February 2013 (i.e. leads) and a large number of simple dynamic models, we compute forecasts for GDP growth and CPI inflation for 2013. The result of the forecasting exercise, which does not incorporate the changes that have been occurring in the Cypriot banking

Figure 3: Effects of deposit shocks on leading indicators



⁴ International Monetary Fund (2013). World Economic Outlook, April 2013. World Economic and Financial Surveys.

April 2013

sector, can be combined with the estimated effects of the deposit shock to get an idea about the outlook for the economy in 2013. Thus, by taking into account only the direct impact of the deposit shock, but *not* any other immediate consequences of the banking sector downsizing (e.g. capital controls) real GDP growth is estimated to contract by 9% – 12% in 2013. Moreover, due to the recessionary conditions in the economy CPI inflation will remain subdued at around 1%.

Using the estimated effects regarding the unemployment rate from the impulse response analysis above, and given the current rate (by Eurostat) it could be inferred that unemployment for 2013 could reach 20%.

3. Discussion

Overall, the analysis indicates that a reduction in deposits of 20% to 30% results in a severe deterioration of macroeconomic indicators (real GDP, unemployment, etc.), as well as in loss of business and consumer confidence. The analysis described in the previous section, however, considers only the effects of a negative shock in the form of a drop in total deposits. It incorporates neither the impact of immediate consequences of the deposit reduction that cannot be measured by data, nor other shocks (of smaller magnitude) to the economy that can occur instantaneously with the deposit shock. Such instantaneous consequences of the banking sector downsizing relate to the following:

- The enforcement of exceptionally restrictive measures on both domestic and external transactions and the freeze of a proportion of uninsured deposits in the Bank of Cyprus for some months until the recapitalisation needs are fully determined.⁵ Such actions limit liquidity in the market and deprive businesses of working capital with adverse effects on firms' viability and therefore on economic activity and employment.
- The absence of new inflows in Cyprus through international business activities supported by the banking industry and other business services (e.g. legal, audit, etc.), since it is likely that Cyprus is no longer considered an attractive foreign investment destination. The loss from international business activities will have negative spillovers to a number of domestic productive sectors.

⁵ About 10%–20% of uninsured deposits from Laiki Bank will be frozen for even longer.

- Increased uncertainty and loss of confidence in the banking sector as transactions are currently being regulated by decrees that can be altered any time.
- The prolonged bank holiday in March impaired economic activity as banking services are essential for the smooth functioning of all the other sectors of the economy.

At the same time the fiscal consolidation measures that have just been or will be legislated in the near future, for example

- increase in the corporate income and interest income tax rate, increase in the bank levy,
- small reductions in the emoluments and introduction of a health care contribution for public sector employees and pensioners, and
- reduction in housing grants and introduction of an immovable property tax,

are expected to have further contractionary effects on economic activity.

In view of the above, the risks for GDP growth projections for 2013 are on the downside. Furthermore, risks from possible underperformance of tourism due to the slowdown in some clientele countries (e.g. UK) and increased competition from other Mediterranean tourist destinations should not be discounted. Although the measures taken to kick-start the economy can help boost confidence, enhance social cohesion and restrain, to some extent, the drop in consumption, they are unlikely to reverse the downturn at this point.

The prime policy objective should be the prompt and rigorous implementation of all aspects of the economic adjustment programme, including:

- reforms to improve financial regulation and supervision,
- structural reforms to ensure the sustainability of public finances (e.g. public sector, pension, health care and welfare system reforms, improvement of tax collection effectiveness), and
- preparation/implementation of measures/regulations to enhance efficiency through market competition (e.g. privatisations, removal of unnecessary entry barriers in the services market).

Such long-needed reforms could strengthen economic confidence, enhance credibility and increase collective effort towards improving the long-term prospects of the Cyprus economy.



Issue 13/2

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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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