

## Cyprus at a turning point

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### 1. Introduction

The agreement of 25 March 2013 for a bailout package worth €10bn, accompanied by a draconian Adjustment Programme for the Cypriot economy, constituted a turning point, not only for Cyprus, but for the European Union as a whole. It was the first instance in which the principle of bail-in was implemented in dealing with financial sector problems. As such, it served as the prelude and first experiment for the design of a pan-European bank resolution framework which, in turn, is the most crucial step of the effort for a genuine Banking Union. The proponents of the bail-in implementation advocate that this decision will decisively break the vicious cycle between bank solvency and public debt, since it renders banks' stakeholders, including uninsured depositors, responsible for the institutions' solvency, while minimizing the cost for the taxpayer. Furthermore, the argument was made that the case of Cyprus will act as an illustration that a growth model built around financial services which, in turn, is based on attracting funds via high interest rates, low tax rates and defective controls of the monies' origin cannot be sustained in the long term.

On the other hand, it can righteously be claimed that the choice is unfair to the extent its application is selective. It may even be argued that it constitutes an adulteration of the principle of states' solidarity which lies in the core of the European unification process. This decision was received in the island as a punitive one. While strict implementation of the anti-money laundering EU legislation should be a high priority for all EU states, there is no economic rationale as to why the size of a country's banking sector (as approximated by the ratio of bank assets over GDP) should lie on the EU average. Instead, minimizing chances of financial cost for the taxpayer depends on whether supervision closely scrutinizes risks undertaken by banks and whether regulation imposes prudence. Even more importantly for the future of the European unification process, the installation of doubt as to the integrity of bank deposits is an extremely risky path. Possibility of cascade effects could lead to the destabilization of the –still fragile– European financial sector at large and the flight of capital from the EU as a whole, hence the transformation of the Eurozone into a toxic zone for global assets. Even if capital is retained within the Eurozone but it migrates from the European periphery towards core countries, this would undermine the viability of the Euro project as it would set the ground for a chronic hysteresis of growth in some of the member states. The least that can be said is that the imposition of capital controls in one country member of the Eurozone casts doubt on the founding principle of a Currency Union, the freedom of capital movements. Capital controls will not be easy to unwind and they can leave a lasting scar on confidence.

In any case, the dramatic events of March 2013 force Cyprus to re-evaluate its entire growth model. In the short and medium term, Cyprus faces the challenge of limiting the size of a potentially sharp decline in its GDP and engineering the conditions for a quick and viable economic recovery via implementation of a demanding programme of fiscal, financial and structural reforms. In the longer term, Cyprus will have to seek a more balanced growth path in order to limit its excessive dependence on financial services, and thus on financial markets' volatility. While the aspiration of continuing to operate as a business services hub will not be abandoned, a more diversified model of specializations needs to be pursued which will facilitate the reinstatement of prosperity without the macroeconomic imbalances of the past.

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This article attempts to present a spherical analysis of the condition of the Cypriot economy in the run up to the Adjustment Programme, its medium-term outlook, longer-term prospects and challenges lying ahead. The material is organized as following. Section 2 examines the disequilibria of the Cypriot economy in the period prior to the crisis, namely an outsized banking sector and its exposure to Greece; large indebtedness of the private sector; the gradual loss of competitiveness and the deterioration of the current account; a weak fiscal position of the last 5 years; hidden liabilities of the pension system; and an undiversified and financial services-driven economy. Section 3 presents a brief description of the MoU Programme for the period 2013-2018. This part reviews the objectives of the Programme, associated conditionalities encompassing financial sector policies, fiscal policies and structural reforms, as well as sovereign borrowing needs and sources of funding. Section 4 conducts Debt Sustainability Analysis with a number of sensitivity tests. Section 5 presents an update of our forecast for the evolution of GDP and its components in 2013-2014, along with a more adverse scenario and short-term risks. Section 6 examines the choices available to Cyprus for attaining a new growth model. Proposed pillars are the improvement in quality and width of business services, development and quality competitiveness of the tourist industry, the reinvigoration of the primary sector, and the transformation of Cyprus into an important hydrocarbons exploration center. Section 7 concludes.

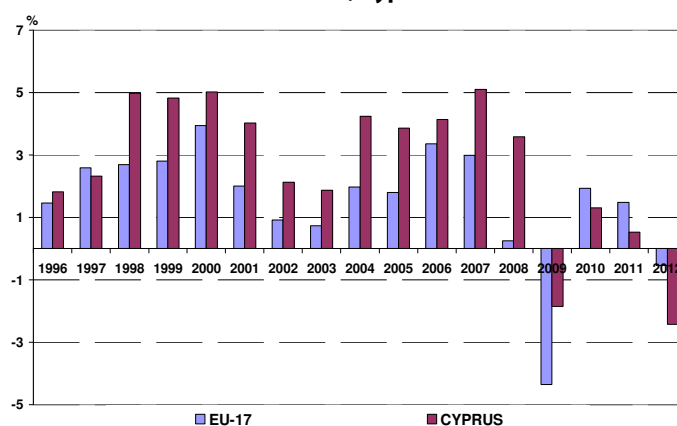
## 2. Internal and external macroeconomic imbalances in the run up to the crisis

This section aims in highlighting the initial macroeconomic conditions under which Cyprus entered the financial assistance program, following the decisions of the Eurogroup on March 25th, 2013. The analysis demonstrates that the Cyprus crisis was the culmination of a gradual deterioration of macroeconomic fundamentals in the aftermath of the international financial crisis of 2008-2009, which accelerated after the eruption of the Euroarea sovereign debt crisis in 2010 and the munitions' blast in the naval base of Mari in July 2011.

For more than a decade and before the Lehman Brothers collapse in 2008, Cyprus enjoyed robust and uninterrupted growth. The two milestone events of that period, EU accession in 2004 and the Euroarea membership in 2008, profoundly affected the Cypriot economy. Initially, the associated decline of sovereign premia and the surge of capital inflows facilitated a rapid expansion in credit. Subsequently, the economy experienced a boom. The annual real GDP growth averaged 2.8% in 2001-2010, against 1.7% in EU-27 (Figure 1), thereby instigating real convergence. The GDP per capita in PPS climbed from 88% of the EU-27 average in 2001 to 100% in 2009. Prosperity lifted up living standards and led to near full employment, with the unemployment ratio declining to as much as 3.8% in 2008. However, the growth model was

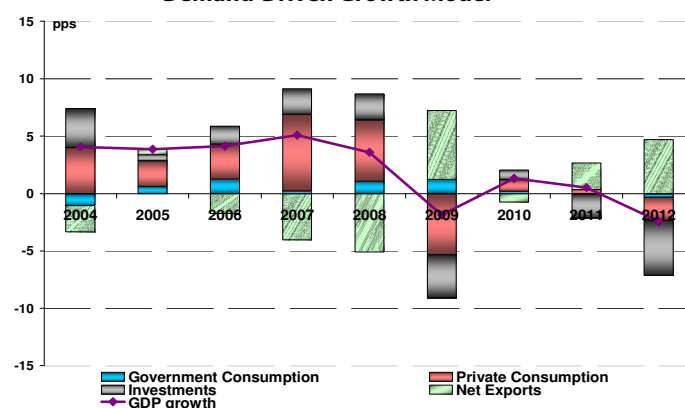
domestic demand-driven driven (Figure 2). From the supply side, economic expansion focused on services, construction and real-estate. Consequently, the strong growth trajectory concealed the accumulation of significant internal and external imbalances, some of which trace their beginnings in the period before Euroarea entry. The remainder of this section reviews these weaknesses; analysis begins with a more detailed discussion of the banking sector, as its hardship lies in the epicenter of the Cypriot crisis, and proceeds to review macroeconomic weaknesses.

**Figure 1**  
Real GDP Growth Rate, Cyprus and EU17



Source: Eurostat, National Statistics

**Figure 2**  
Cyprus, Contributions in GDP Growth Rate: A Domestic Demand-Driven Growth Model



Source: National Statistics, Eurobank Research

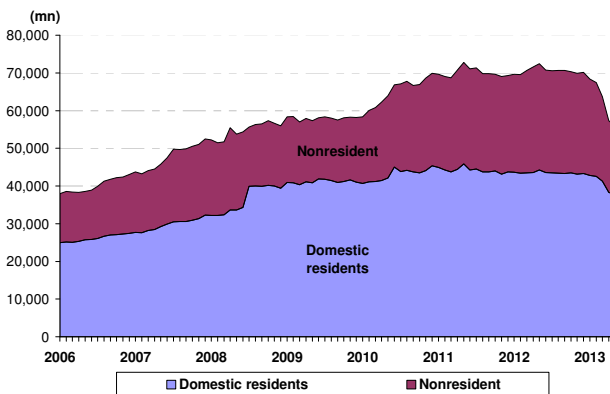
### 2.1 An outsized and weak banking sector with significant exposure in Greece: Features and Chronology of Events

The Cypriot banking system comprised of four distinct types of banks: the domestic commercial banks (Bank of Cyprus, Cyprus Popular Bank, Hellenic Bank), accounting for around 60% of total assets, the subsidiaries of Greek commercial banks, the co-operatives, the subsidiaries & individual branches of foreign banks. The domestically supervised part of the banking sector

includes the domestic commercial banks, the subsidiaries of Greek banks and the co-operative credit institutions.

The banking sector had been identified some time back as a potential threat to the sustainability of the country's position. Already in July 2010, an IMF statement was describing the systemic proportions of the banking sector and implications for the country's position.<sup>1</sup> Integration in the European Union and ultimately in the Euroarea facilitated the attraction of strong capital inflows. The decline of the sovereign premia, the favorable tax and business environment, higher deposit rates, compared to other Euroarea banking systems, as well as the off-shore status of the island,<sup>2</sup> attracted significant deposits from non-residents. Deposits of non-residents expanded strongly from €12 bn in 2005 to reach €27bn in middle 2011 (Figure 3).

**Figure 3**  
**Deposits of non-residents**



Source: Central Bank of Cyprus, Eurobank Research

This resulted in heavy reliance of the banking model on non-residents deposits and thereby on potential swings in financial markets. Equally importantly, the accumulation of non-residents deposits gave banks enough funding capacity, enabling them to expand their activities both at home and overseas. Internally, the abundant liquidity of the banking sector facilitated a domestic credit boom (Figure 4), and a respective boom in the domestic property market. Both corporates and households became among the most leveraged in Europe (Figure 5). Even in January 2013, total private sector debt still stood at 290.1% of GDP, the second highest in EU-27 behind Ireland,<sup>3</sup> with

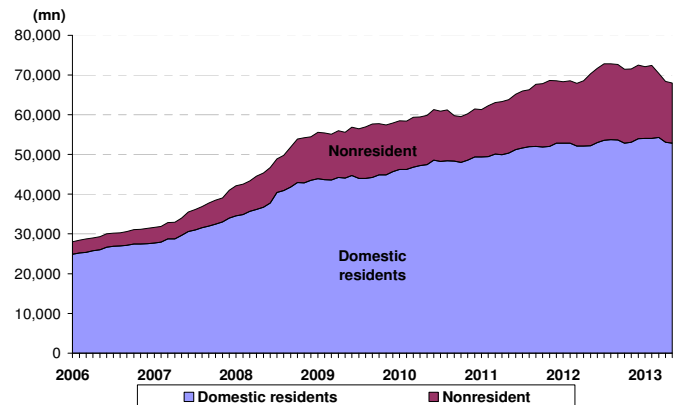
<sup>1</sup> "Given the large size of the banking sector relative to the economy and relatively high concentration ratios, if problems emerged in this sector they could quickly escalate to systemic proportions with serious spillover to the economy and to public finances", <http://www.imf.org/external/np/ms/2010/070510.htm>.

<sup>2</sup> The offshore status of the island could be documented by the number of companies registered, which had foreign ownership. The predominant advantage of setting up an offshore business entity in Cyprus was the low tax rate coupled with the extensive network of double tax treaties that Cyprus has signed with a number of countries, a prominent example being Russia.

<sup>3</sup> EU Alert Mechanism Report on the prevention and correction of Macroeconomic Imbalances, February 2012.

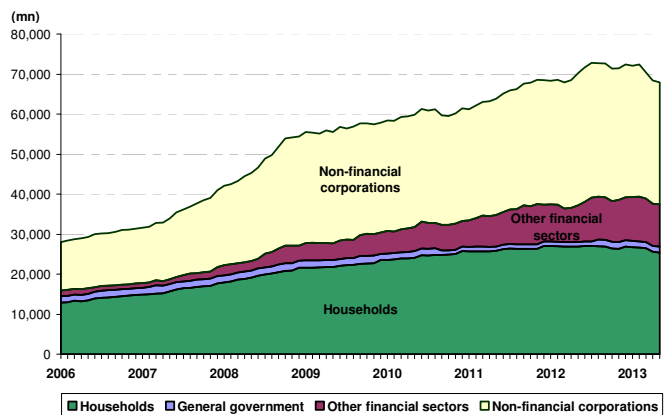
households' and corporates' debt obligations at 136.9% and 153.2% of GDP respectively. Externally, a rapid expansion took place in overseas operations and investments of financial institutions, focused primarily on Greece and secondarily on Eastern Europe (Russia, Ukraine and Romania).

**Figure 4**  
**Cyprus: Total Credit to Residents and Non-Residents**



Source: Central Bank of Cyprus, Eurobank Research

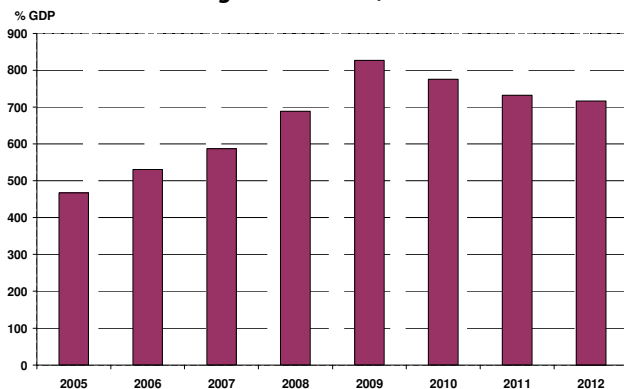
**Figure 5**  
**Cyprus: Debt Obligations of Households, Corporates, Government and Other Financial Sectors, 2006-2013**



Source: Central Bank of Cyprus, Eurobank Research

Overall, the Cypriot banking sector grew to become one of the largest in size -relative to the GDP of the host country- and the most complicated in structure in the EU-27. The financial sector was growing rapidly in the period between EU accession and EU area entry; total assets jumped from €62.5 bn in 2005 to €139bn in 2009. The expansion was even more remarkable if viewed as a percentage of GDP; total banking assets exceeded 800% of GDP in 2009, according to ECB data, and remained at 700% of GDP at the end of 2012, twice as much as the Euroarea average (Figure 6).

**Figure 6**  
**Total Banking Sector Assets, 2005-2009**



Source: ECB, National Statistics, Eurobank Research

The financial soundness indicators of Cypriot banks started to worsen in 2010 in the aftermath of the global financial crisis and the Euroarea crisis. To begin with, the rapid deterioration in the macro outlook of Greece resulted in increasing NPLs for banks. In December 2011, the domestic banks' direct loan exposure to Greece amounted to €21.8bn or 126% of Cypriot GDP. The ratio of NPLs from their Greek operations worsened to 42% of their loan portfolio. More importantly, Cypriot banks suffered huge losses to their holdings of Greek government bonds. PSI+ severely hit the capital base of the two main leading banking institutions, Cyprus Popular Bank (CPB) and Bank of Cyprus (BOC). EC estimates that PSI+ cost Cypriot banks €4.5bn or 20% of GDP.<sup>4</sup>

However, as mentioned, financial weaknesses are not only related to exposure to Greece but to high domestic indebtedness as well. Given the size of domestic private debt, the increase in NPLs for banks at home accruing from the deterioration in the macro outlook of Cyprus itself, is hard to be managed. Corporate indebtedness seems to be of greater concern than that of households. The net financial wealth of households appears to be positive on aggregate, as resident households' deposits still exceed household loans. In contrast, the net financial position of corporate balance sheets is negative. To make things worse, corporates have to face weak profitability and high dependence on bank financing.

As a combined result of aforementioned developments, Cypriot banks' solvency ratios fell below the required supervisory levels. In December 2011, the stress tests conducted by EBA showed that BOC and CPB needed additional capital of €1.5bn and 2bn respectively. The efforts to recapitalize the two main banks were only partially successful. BOC accomplished to increase its capital base by €594 mn through a rights issue and a voluntary exchange of convertible capital securities into shares in March

2012. The government stepped in May 2012 to underwrite a rights issue of €1.8 bn in CPB because of lack of private investors' interest to participate in the rights issue.

The banking system gradually came under increased pressure since mid-2011. Solvency concerns led to steady deposit outflows, which hurt particularly CPB. CPB lost 1/3 of its total deposits between August 2011 and March 2013 (from €12.7bn down to €8bn). As a result, both banks were forced to rely overly on official lending.<sup>5</sup> Allegedly, the amount of official lending had exceeded €10bn at the onset of the crisis in March 2013.

PIMCO was commissioned to deliver an independent evaluation of the capital needs of the banking system. The exercise, which started in October 2012, was performed on 22 institutions which represented approximately 73% of total system assets (as of March 2012). The due diligence report<sup>6</sup> which was delivered in January 2013 identified an overall capital shortfall of €5.9bn in the base scenario (to reach a Core Tier 1 of 9% by the end of the programme) and €8.8bn in the adverse scenario (to reach a Core Tier 1 of 6% by the end of the programme). Another key conclusion in the released PIMCO report was the fact that the Cypriot banking system and its lending practices are characterized by a number of idiosyncratic features that differentiate it from other international banking systems. The prevalence of asset-based lending practices led to excessive reliance on collaterals in the underwriting of loans and high degree of cross-collateralization among loans, instead of the future ability of the borrower to service debt. Different provisioning policies and impairment recognition practices led to under-provisioning on behalf of the Cypriot banks. In addition, a key difference in the definition of NPLs existed as Cypriot authorities defined a loan as non-performing when it is at least 90 days delinquent and is not fully secured.

The Commission on the future of the Cyprus Banking, commissioned by the Central Bank, has just published its interim report<sup>7</sup> containing its recommendations on the long-term recovery of the domestic banking industry. The report identified weak corporate governance, poor bank supervision practices on behalf of authorities at all levels, imprudent business practices and insufficient attention paid to overseas expansion as key internal problems.

<sup>4</sup> EU Commission, European Economy, Occasional Papers 101, Macroeconomic Imbalances-Cyprus, July 2012.

<sup>5</sup> [http://www.centralbank.gov.cy/nqcontent.cfm?a\\_id=12850](http://www.centralbank.gov.cy/nqcontent.cfm?a_id=12850)

<sup>6</sup> [http://www.centralbank.gov.cy/nqcontent.cfm?a\\_id=12750](http://www.centralbank.gov.cy/nqcontent.cfm?a_id=12750)

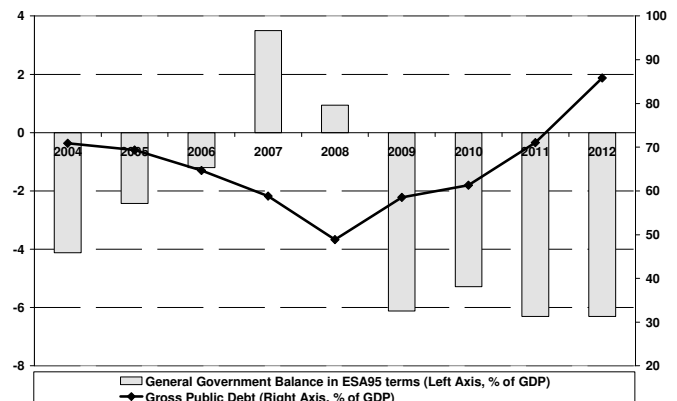
<sup>7</sup> [http://www.centralbank.gov.cy/nqcontent.cfm?a\\_id=12561](http://www.centralbank.gov.cy/nqcontent.cfm?a_id=12561)

## 2.2 Macroeconomic Weaknesses

- An undiversified and financial services-driven economy.** The economic model of Cyprus was heavily reliant on services. The services sector grew over time to account for around 80% of total output in 2012, carrying along a similar proportion in terms of employment (from 67.5% in 1995). This may not be a problem per se as many advanced economies have similar contribution of the tertiary sector in their GDP. However, the weakness emanates from the excessive concentration of the services sector around financial services. The weight of the broad sector of financial and business services in gross value added expanded from 19% in 1995 to 28% in 2012; employment in the broad sector expanded by 63% in the same period. The development of a wide array of business, professional services and activities around the financial sector became the locomotive of the economy. While this transformed Cyprus into an international business and investment hub, it rendered the island more vulnerable in sudden stops in capital flows and financial crises. In addition, it diverted attention from a number of important challenges facing the domestic export-oriented industries, including structural rigidities, red tape and declining cost and price competitiveness.
- Unsustainable public finances.** Driven by a rise in government revenues, the fiscal position improved significantly in 2003-2007. The general government balance switched from a deficit of -6.6% of GDP in 2003 to a surplus of 3.5% of GDP in 2007. However, the fiscal position weakened significantly after 2008 (Figure 7). Faced with an incipient recession as a result of the global financial crisis, the previous administration implemented an overly expansionary fiscal policy. This offered a temporary output boost but at the expense of weakening the domestic state budget. The general government balance switched from a surplus of 0.9% of GDP in 2008 to deficits in excess of 5% of GDP in 2009-2012. That was the combined result of revenue underperformance and the expansion of government expenditure. Driven by higher –and largely untargeted– social transfers, government expenditures expanded by 4pps of GDP, from 42.1% in 2008 to 46.3% in 2012. At the same period, government revenues as a percentage of GDP declined from 43.1% to 40%. As a result, the public debt skyrocketed from 48.8% of GDP in 2008 to 85.9%<sup>8</sup> in 2012. With that fiscal impulse, the recession was contained at -1.9% in 2009, while a feeble rebound was recorded in the following two years (+1.3% in 2010 and +0.5% in 2011).

<sup>8</sup> Including the €1.9 bn capital injection to Laiki by the state in June 2012.

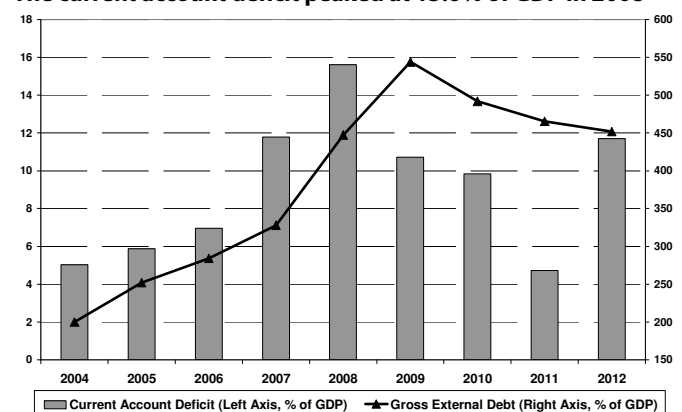
**Figure 7**  
The fiscal position of Cyprus deteriorated sharply in 2008-2012



Source: Central Bank of Cyprus, Eurobank Research

- Significant external position deterioration.** The Cypriot economy recorded persistent current account deficits throughout 1990s-2000s. Driven by buoyant domestic demand, and as a mirror image of increasing public and private indebtedness, the current account deficit widened as much as 15.6% of GDP in 2008 (with CBC data) against only 0.75% in 1999 (Figure 8). Accordingly, the net international investment position (IIP) of the country deteriorated sharply. Cyprus turned from a net creditor to a net debtor for the first time in 2008. The net IIP switched dramatically from a positive 11.5% of GDP in 2007 to a negative 87.7% of GDP in 2012. The decline reflects mainly valuation losses on portfolio securities and bank loans.

**Figure 8**  
The current account deficit peaked at 15.6% of GDP in 2008



Source: Central Bank of Cyprus, Eurobank Research

- Gradual loss of competitiveness.** Alongside the ballooning domestic demand, the current account deterioration was related to sharp losses in price competitiveness throughout the past decade. Nominal unit labor costs (ULCs) increased by a cumulative 36.8% in 2000-2012, a change comparable to that of Greece and much higher than the EA average of 22.9% (Figure 9). The bulk of

the deterioration took place in the run up to EU accession in 2004 and after Euroarea entry in 2008. Unit labor costs in Cyprus have adjusted the least among EU program countries over the last three years. The erosion of price competitiveness was also illustrated in the substantial appreciation of the Real Effective Exchange Rate (REER) in the period 2008-2012. Unlike other Euroarea countries, the REER based on ULC<sup>9</sup> did not register any adjustment post crisis in Cyprus. In fact it increased by a cumulative 8.9% between Q4-08 and Q4-12 compared to an adjustment of 12.5% in the Euroarea.<sup>10</sup> Part of this appreciation may be explained by the wage increases stemming from the introduction of the backward looking Cost of Living Allowance (COLA) wage indexation mechanism in 2009.<sup>11</sup> The application of COLA imposed elements of wage rigidity which may have hampered the adjustment to supply and terms of trade shocks and limited the ability of wages to reflect productivity growth differences across economic sectors.<sup>12</sup>

- **Pension system hidden liabilities:** The current financial crisis is not the only factor putting strain on public finances. According to EU Commission studies,<sup>13</sup> the long term sustainability of public finances in Cyprus also faces considerable challenges due to ageing and the structure of the pension system. Cyprus ranks second (behind Luxembourg) among those EU-27 countries that are going to witness significant fiscal burden from the age-related expenditures increase by 2060. Public pension expenditures are projected to increase by 8.7 pps to reach 16.3% of GDP in Cyprus in 2060. In contrast, the expenditure in the EU27 is projected to increase by 1.5 pps over the same period to a level of 12.9% of GDP.

<sup>9</sup> ECB competitiveness indicator vis-à-vis 35 main trading partners (remaining 16 euro area countries, 10 non-euro area EU Member States, Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States).

<sup>10</sup> [http://www.ecb.int/stats/exchange/hci/html/hci\\_ulct\\_2012-10.en.html](http://www.ecb.int/stats/exchange/hci/html/hci_ulct_2012-10.en.html)

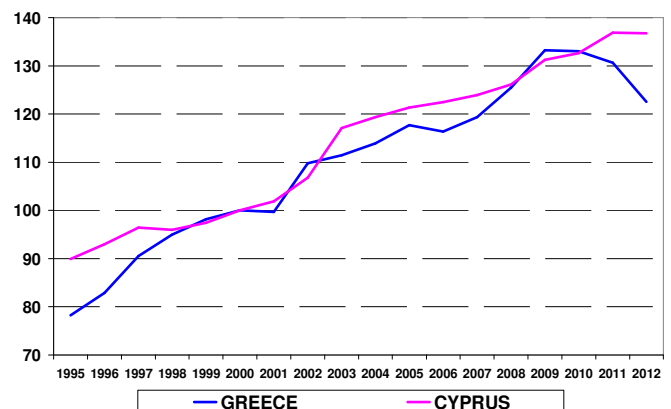
<sup>11</sup> The twice-a-year automatic COLA adjustment was linked directly to the average percentage change in the Consumer Price Index (CPI) over the six months just elapsed compared with the preceding six-month period.

<sup>12</sup> EU Commission, European Economy, Occasional Papers 101, Macroeconomic Imbalances-Cyprus, July 2012, Page 17.

<sup>13</sup> EU Commission, the 2012 Ageing report Economic and budgetary projections for the

27 EU Member States (2010-2060).

**Figure 9**  
**Nominal Unit Labor costs expanded strongly in 2000-2012**



Source: ECB

### 3. The 2013-2018 Adjustment Programme

This Section presents a brief description of the MoU Programme for the period 2013-2018. Objectives of the Programme are reviewed along with programme modalities, i.e. required financial sector policies, fiscal policies and structural reforms. Finally, the evolution of the general government borrowing requirement and sources of funding are detailed.

#### 3.1 Entering an Adjustment Programme

Deteriorating public economics, primarily due to the hidden obligations of the banking sector, but also due to fiscal derailment, undermined perceptions of fiscal sustainability and gradually led Cyprus to lose market access. Despite introducing austerity measures in late 2011, Cyprus was forced to formally request financial assistance from the EU and the IMF in June 2012.

In the meanwhile, after two years of anemic growth following the recession of 2009, full-year GDP declined again by 2.4% in 2012. Apart from the contractionary impact of the austerity measures, several factors contributed to this, including, among others, tightened lending standards in the domestic banking sector and lingering uncertainty emanating from the protracted negotiations with the EC/ECB/IMF troika of official lenders. The domestic labor market also showed visible signs of deterioration, with unemployment reaching a historical-high of 12.1% in 2012. Reflecting the aforementioned developments, Cyprus's gross public debt skyrocketed to 85.9% in 2012, from 71.1%-of-GDP in the prior year and 58.5% of GDP in 2009. After failure to find alternative sources of funding, agreeing an Adjustment Programme with the EC/ECB/IMF troika became unavoidable.

The agreement came in 25 March 2013, hours before the expiration of an earlier ECB deadline to discontinue liquidity assistance to ailing Cypriot banks via the Emergency Liquidity

Assistance (ELA) facility, thereby averting an immediate meltdown of the domestic banking system with severe consequences for the country's euro membership status. Official lenders approved a bailout package worth €10bn (EC €9bn, IMF €1bn), aiming to cover debt service costs and other budgetary needs.

The final agreement came after the rejection by the Cypriot Parliament of the initial agreement on the main parameters of a troika bailout plan reached at an extraordinary Eurogroup on March 15. In the initial plan, and in an effort to contain the expected increase in the public debt ratio post the rescue agreement, the Cypriot side was required to undertake additional measures, including among others, a controversial levy on both insured and uninsured depositors, estimated to raise €5.8bn.

### 3.2 Programme Conditionality

The finally agreed adjustment programme for Cyprus aims in restoring the viability of the domestic financial sector and to facilitate a return to sustainable economic growth and sound public finances over the coming years. The conditionality of the Programme entails extensive interventions in financial, fiscal and structural policies:

- **Financial sector policies:** The political agreements in the Eurogroup (on March 16<sup>th</sup> and 25<sup>th</sup>, 2013) and the subsequent adjustment programme feature a profound restructuring of the domestically supervised part of the banking sector. The implementation of the program is designed to downsize the domestically supervised sector upfront from 550% of GDP to 350%, and to the EU average by 2018. Specific actions to be implemented:

1. Based on a decision by the Central Bank of Cyprus and in compliance with Cyprus's newly adopted Bank Resolution Framework, CBP (Laiki bank) was subjected to immediate resolution. It is split into two entities. One entity including mostly uninsured depositors and non-performing assets is expected to run down over time. The other one, which includes almost the entire Cypriot assets of CBP –priced at fair value–, CBP's insured deposits and €9bn of ELA liquidity will be transferred to Bank of Cyprus (BoC) via a purchase and assumption procedure.<sup>14</sup> Only uninsured deposits (i.e. deposits in excess of €100k) in BoC will remain frozen until the completion of the bank's recapitalisation, and may subsequently be subject to appropriate conditions. BoC will be recapitalised through a

<sup>14</sup> The uninsured deposits of CPB will remain in the legacy entity. The aim is for the value of transferred assets to be higher than that of transferred liabilities. The difference will be folded into the recapitalized BoC so that the recapitalization of BoC by CPB amounts to 9% of the risk weighted assets transferred.

deposit-equity conversion of uninsured deposits with full contribution of equity shareholders and bond holders. The conversion will be such that a capital ratio of 9% is secured by the end of the programme period. On the other hand, all insured deposits in all banks (i.e., deposits below €100k) will be fully protected in accordance with the relevant EU legislation.<sup>15</sup>

2. An agreement between Cyprus and Greece arranged for the absorption of the Greek branches of the Cypriot banks, i.e., of BoC, Laiki and Hellenic Bank, by Greece's Piraeus Bank, which was selected for this operation by the Hellenic Financial Stability Fund (HFSF). Piraeus Bank acquired assets of ca €20bn and liabilities of ca €14bn of these branches.
3. The Eurosystem will continue to provide liquidity to the BoC in line with applicable rules, while the official programme financing earmarked for Cyprus (up to €10bn) will not be used in the recapitalizations of Laiki and BoC.
4. The Eurogroup also endorsed the Cypriot authorities' decision to introduce administrative measures (i.e., capital controls) for a swift reopening of the domestic banks, noting that these measures should be temporary, proportionate, non-discriminatory, and subject to strict monitoring in terms of scope and duration in line with the Treaty.
5. Furthermore, and in relation to earlier calls for a strengthening of Cyprus's anti-money laundering rules, a number of related measures proposed by the troika were legislated in December 2012.

Following the recent resolution of CPB, the recapitalisation of BoC through a debt to equity conversion and the carve-out of the Greek operations of the largest Cypriot banks, the Cypriot banking sector has already been downsized to 350% of GDP from 550% previously (including only domestically supervised financial organizations).

**Fiscal policies:** As part of the conditionality underlying the agreed bailout package, Cypriot authorities committed in the November 2012 draft MoU to implement measures worth 7.25% of GDP for 2013-2015.<sup>16</sup> Measures worth ca 5% of GDP have been already legislated by the Cypriot Parliament in December

<sup>15</sup> A bail-in of junior bondholders of Cypriot banks was also foreseen in the 15 March agreement (no numerical figures were attached to this particular measure).

<sup>16</sup> November 2012 measures included, *inter alia*: (i) scaled reductions of 6.5%-12.5% in the emoluments of public and broader public sector pensioners and employees; (ii) a reduction in public sector headcount via a 3-year hiring freeze to first-entry posts in the broader public sector, the application of a 1:4 hiring rule (only one new entry per four retirements), an enhancement of civil servant mobility within and across line ministries and the implementation of a 4-year plan envisaging the elimination of at least 1,880 permanent posts; (iii) increases in VAT and excise duties on tobacco, energy & alcohol products.

2012 and new fiscal measures worth 2.2ppts-of-GDP through 2013-2015 were undertaken at the onset of the Programme. In addition, a further effort of 4.75% of GDP is to be implemented during 2015-2018. These measures are deemed necessary in order to facilitate fulfilment of a 4%-of-GDP primary surplus target by 2018, which in turn is needed in order to achieve a debt level close to 100% by 2020.<sup>17</sup>

New measures worth 2.2ppts-of-GDP include an increase of the withholding tax rate on capital income from 15 to 30 percent; an increase of the statutory corporate income tax rate to 12.5% from 10%; raising the existing bank levy on deposits from 0.11 to 0.15 percent; rationalizing housing programs; and reforming property taxation.

**Structural reforms:** a number of policy initiatives were agreed to be undertaken with the view of facilitating the process of internal devaluation and increasing the efficiency of the Cypriot economy. Measures envisaged already in the November 2012 draft MoU, *inter alia*, include: i) an extension of an earlier suspension applied to the wage indexation mechanism (COLA); (ii) pension reforms; (iii) the enactment of legislation introducing the provisions of the Treaty on Stability Coordination and Governance (TSCG); (iv) a Medium Term Budgetary Framework; and (v) the endorsement of legislation on Debt Management. Cypriot authorities also committed to step up efforts in the area of privatizations, with estimated proceeds to the tune of €1.4bn including selling stakes in three public enterprises, telecom company Cyta, the ports' authority and the Electricity Authority of Cyprus.

The Cypriot Parliament has legislated, along with the 2013 Budget and the updated medium-term fiscal plan, the main bulk of fiscal and structural measures identified and agreed with the troika, including measures coming into effect in 2014.

### 3.3 The ELA Issue

In general, the implementation of the principle of bail-in and the downsizing of the financial sector has caused frustration in Cyprus. A particular issue where dispute continues even today relates to the transfer to BOC of the €9bn of ELA liquidity disbursed to PBC. This obligation enlarges the losses for both PBC and BOC depositors and it is also thought to make the survival of BOC difficult. Certain analysts in Cyprus argue that this transfer was illegal, on the grounds that: (1) PBC was not solvent and collaterals' value, against which ELA funding was given to PBC, was inadequate; as both these factors are prerequisites for any bank to be given funding from the

Eurosystem, the responsibility to undertake the loss should fall on the Eurosystem itself. Eurosystem officials have rejected this claim on the grounds that at the time when ELA funding was approved, there was a prospect of an official bailout package and therefore PBC was deemed solvent, (2) ELA was given priority over uninsured PBC depositors for the totality of PBC assets and not just for those assets which were used as collateral for receiving ELA funding, and (3) the transfer happened without the agreement of the BOC Board, and given priority over BOC stakeholders, which is against the Cypriot Constitution. While the Cypriot government has not formally disputed the legality of this action, President Anastasiades' letter to the Heads of EC, IMF and ECB<sup>18</sup> claims that part of the ELA liquidity (ca €4bn) was channeled to the PBC's branch in Greece and therefore it should burden Piraeus Bank which acquired those branches. President Anastasiades proposes that solutions ensuring BOC viability would be, either to reverse the merger of BOC with good PBC, or to convert part of Laiki's ELA liability into long-term bonds, which along with corresponding assets should be transferred into a separate vehicle. These arguments and propositions have not up to date been answered by the Troika.

### 3.4 Sovereign borrowing needs and sources of funding

External financial assistance to Cyprus under the bailout package amounts up to €10bn. This will be disbursed over a 3-year period, stretching from Q2 2013 to Q1 2016, subject to the fulfilment of the Programme's quantitative programme targets and structural benchmarks. Additional funding of around €13bn will be secured by a range of burden-sharing measures adopted by the Cypriot side (Table 1). As a result, total financing under the agreed programme will amount to around €23bn compared to an estimated €17.5bn implied by the underlying assumptions of the November 2012 draft MoU. The increase in the required sovereign funding is mainly the result of the worsened domestic macroeconomic environment and the assumption of a more gradual adjustment in the primary balance relative to prior expectations.

As regards **financial sector recapitalization**, no programme funding will be provided for the resolution and restructuring of CPB and BoC. EC estimated the total financing need for the recapitalization of the domestic financial sector at €11.7bn.<sup>19</sup> A contingency buffer of €1.1bn over the programme period will also be formed to cover potential bigger-than-expected increases in system-wide non-performing loans and/or the recapitalization need of Hellenic Bank, in case of lack of private funds. As per the draft adjustment programme, the aforementioned amounts will be covered by the bailing in of junior bank bondholders and unsecured depositors in the

<sup>17</sup> Our understanding is that the troika's new baseline macro scenario for Cyprus assumes an average fiscal multiplier in the vicinity of 1.0 in estimating the short-term contractionary impact of the agreed fiscal programme. Yet, as experienced in other recent bailout cases (e.g. Greece), this assumption may well prove conservative, especially taking into account the unique features of the Cypriot crisis.

<sup>18</sup> <http://offsite.com.cy/aftousia-i-epistoli-me-tin-opia-zita-epemvasi-ekte-dnt-gia-sotiria-tis-ikonomias/>

<sup>19</sup> European Commission, "Assessment of the actual or potential financing needs of Cyprus"; provisional draft, 9 April 2013.



**Table 1**  
**Sources of sovereign funding over the programme period (EUR bn)**

<b>Contribution by Cyprus</b>	<b>13.3</b>
bail-in of junior bondholders & uninsured depositors (CBP & BoC)	10.6
Additional taxes (increases in corporate income tax, taxes on capital income & levy on deposits)	0.6
Gold sales 1/	0.4
Roll-over of marketable debt held by domestic investors	1.0
Privatization	0.6
Change in terms of outstanding Russian loan 2/	0.1
<b>Programme funding</b>	<b>10.0</b>
EFSF	9.0
IMF	1.0
<b>Total financing</b>	<b>23.3</b>

Source: European Commission (April 2013)

1/ subject to principle of central bank independence & provided that such profit allocation is in line with CBC rules and does not undermine the CBC duties under the Treaties and the Statute

2/ calculation implies that the Russian Federation will grant certain concessions to the outstanding €2.5bn loan provided to Cyprus in late 2011

Table 2 details the evolution of Cyprus's general government funding needs over the programme period and beyond. As per the troika baseline scenario, the €10bn overall sovereign funding need over the period Q1 2013 – Q1 2016 (after incorporating Cyprus's contributions) will come from €9bn in ESM funding (€2.5bn in a cashless transaction for the recapitalization of the domestic banking sector and €6.5bn for budgetary financing and debt redemptions) and IMF contribution of up to €1bn under a 3-year Extended Fund Facility. For the post-programme period stretching from Q2 2016 to Q4 2020, the troika's updated baseline scenario envisages a significant decline in the sovereign borrowing need to ca €4bn in cumulative terms.<sup>1</sup>

**Table 2**  
**Sovereign funding needs**

In EURmn	Programme period (Q2 2013 - Q1 2016)*	Beyond programme period (Q2 2016 - Q4 2020)*
<b>I. Amortization of outstanding market debt excl. short-term (I.1 + I.2 + I.3 + I.4 + I.5)</b>	<b>4,119.81</b>	<b>3,642.28</b>
I.1 medium & long-term bonds	4,766.46	1,471.02
I.2 loans (I.2.1 + I.2.2 + I.2.3)	263.94	2,076.26
I.2.1 foreign loans (excl. Russia)	136.84	300.60
I.2.2 Russian loan	0.00	1,500.00
I.2.3 domestic loans	127.10	275.68
I.3 local government loans	60.00	95.00
I.4 saving certificates	29.37	0.00
I.5 bond roll-over by domestic investors	-1,000.00	0.00
<b>II. Amortization of new market debt</b>	<b>0.00</b>	<b>259.75</b>
<b>III. Amortization of official loans (III.1 + III.2)</b>	<b>0.00</b>	<b>335.66</b>
III.1 ESM	0.00	0.00
III.2 IMF	0.00	335.66
<b>IV. Financial sector recapitalization (IV.1 + IV.2 + IV.3)</b>	<b>2,500.00</b>	<b>0.00</b>
IV.1 total recapitalization need	11,700.00	0.00
IV.2 debt-equity swap for uninsured BoC deposits & CPB resolution	-10,300.00	0.00
IV.3 contingency buffer	1,100.00	0.00
<b>V. Fiscal financing need (V.1 + V.2 + V.3 + V.4)</b>	<b>3,360.94</b>	<b>-186.00</b>
V.1 primary balance	1,266.82	-2,979.04
V.2 interest payments	1,794.34	3,108.04
V.3 one-off measures/1	400.00	0.00
V.4 below the line items (V.4.1 + V.4.2 + V.4.3 + V.4.4)	-100.20	-315.00
V.4.1 privatization revenue	-625.00	-775.00
V.4.2 ESM & EIB capital contributions	99.80	0.00
V.4.3 called guarantees	549.00	0.00
V.4.4 future CB profits	-400.00	0.00
V.4.5 capitalised interest on CPB bond/2	276.00	460.00
<b>Net financing needs (I + II + III + IV + V)</b>	<b>9,980.66</b>	<b>4,051.39</b>

Source: European Commission (April 2013)

1/ include compensation for provident & retirement funds in CBP to ensure equal treatment with such funds in BoC following the conversion of deposits into equity.

2/ The statistical treatment of the CPB recapitalization bond is currently under assessment by Eurostat

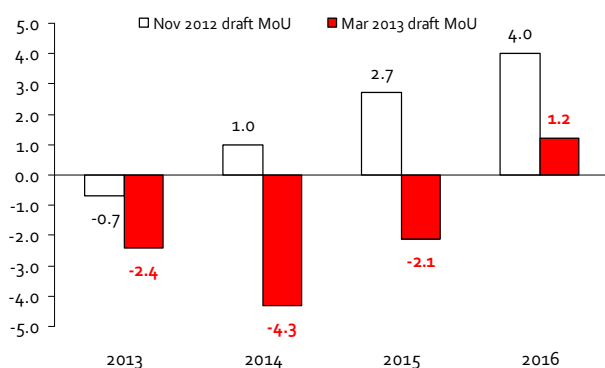
(\*) positive entries correspond to

resolution and restructuring of CPB and BoC (€10.6bn) along with programme funding (up to €2.5bn) earmarked for that purpose.<sup>20</sup>

As regards amortizations of medium- and long-term public debt, some €4.7bn of outstanding medium- and long-term government bonds mature over the programme period, out of which ca €3bn correspond to foreign-law bonds (EMTNs) and the rest to local-law bonds (GRDS). Official funding will cover ca €3.7bn while the remaining €1bn will be secured by the rolling-over of an equiproportional notional amount of GRDS currently held by domestic investors. As regards short-term sovereign debt issuance, our expectation is that the outstanding stock of T-bills (currently at ca €1bn) will increase further during the programme period, reaching as much as €2bn. The implication of such a development would be to secure additional financing over the programme period, however to the cost of some further crowding out of private investment.

With respect to budgetary financing, some €3.4bn of programme funding has been earmarked for covering fully the corresponding funding need over the programme period, provided that the general government primary balance will evolve broadly in line with the projections of the new troika baseline scenario (Figure 10). Any deviation from the agreed fiscal targets due to e.g. a deeper-than-expected output contraction in 2013-2014, a higher than assumed fiscal multiplier and/or lower-than-projected privatization revenue will probably need to be covered by domestic sources.

**Figure 10**  
**MoU Projections: General Government Primary Balance (% of GDP)**



Source: EC (April 2013)

<sup>20</sup> As noted in the 9 April 2013 EC draft report on Cyprus's financing needs, the €1.9bn bond issued by the government in June 2012 to recapitalize CPB will **not** be replaced by an ESM bond.

#### 4. Debt Sustainability Analysis

Troika's preliminary debt sustainability analysis (DSA) for Cyprus is framed around an adverse domestic macroeconomic environment, forecasting a real GDP contraction of 12.6ppts-of-GDP in 2013-2014 vs. a cumulative output loss of 4.8ppts-of-GDP envisaged in the baseline scenario of the November 2012 draft MoU. Furthermore, the new agreement envisages a more gradual adjustment in the general government primary balance, which is now seen reaching 4%-of-GDP no earlier than in FY-2018 vs FY-2016 expected previously. This results in higher-than-earlier-expected funding needs over the programme period. However, the new troika baseline scenario forecasts a peak in the debt ratio in FY-2014 to 126.3%-of-GDP compared to a peak of 142.7%-of-GDP envisaged in the November 2012 draft MoU. Again, that is because the programme agreed at the 25 March 2013 Eurogroup incorporates a much larger financing contribution from the Cypriot side, i.e. around €13bn compared to ca €1.2bn (via the bail-in of junior bank bondholders) assumed in the November 2012 MoU.

Table 3 below draws on the latest European Commission assessment of Cyprus's sovereign outlook to portray the evolution of the country's public debt ratio and its underlying determinants over the projection horizon 2012-2020. Scenario I broadly incorporates the new troika baseline DSA for the period 2012-2016 and extends it to FY-2020, based on our own assumptions/calculations regarding the post-2016 evolution of nominal GDP growth, the primary balance, interest rates and stock-flow adjustments.<sup>21</sup> In this scenario, Cyprus's gross public debt peaks at 126.3%-of-GDP in FY-2015, before embarking on a downward path to reach slightly less than 104%-of-GDP at the end of the projection horizon. Understandably, the sharp increase in the debt ratio over the period 2013-2015 is the result of negative GDP growth expected in 2013-2014, the continuing generation of primary fiscal deficits and other significant debt creating flows that are only partially offset by expected privatization revenue of ca €0.5bn in FY-2015.

Scenario II broadly incorporates the baseline DSA implied by the November 2012 draft MoU. As said, the higher peak of gross public debt at 142.7%-of-GDP in FY-2014 (and the subsequent downward path that reaches around 119%-of-GDP in FY-2020), despite the more benevolent macroeconomic environment assumed in the November 2012 staff-agreement, is due to much larger financing contribution from the Cypriot side in the final agreement.

Scenario III adjusts the new troika baseline for Cyprus (Scenario I) to incorporate higher nominal GDP growth of 1ppts/annum in 2013-2016. Under Scenario III, gross public debt peaks at

<sup>21</sup> For this scenario, as well as the rest of scenarios presented in Table 3, the average nominal interest rate on the overall debt stock in year *t* is calculated as the ratio of nominal interest rate expenditure (in EURs) in year *t* over the overall debt stock (in EURs) at the end of the year *t-1*.

121.4%-of-GDP in FY-2015 and reaches a terminal ratio of 97.2%-of-GDP at the end of the forecasting horizon. Scenario IV adjusts the new troika baseline for Cyprus (Scenario I) to incorporate lower nominal GDP growth of 1ppts/annum in 2013-2016. Under Scenario IV, gross public debt peaks at 131%-of-GDP in FY-2015, before embarking on a downward path to reach around 110% at the end of FY-2020. Both Scenarios I and IV assume an output elasticity of the general government primary balance of around 0.4, with the aim to capture the interplay of automatic fiscal stabilizers. In line with Cyprus's April 2013 draft MoU, Scenario III assumes that any cash revenue above programme projections (as a result of the assumed outperformance of the primary deficit target in 2013-2016) is channelled to retire public debt. On the other hand, Scenario IV assumes that the incremental borrowing gap ensuing from the assumed fiscal slippage (estimated at ca €235mn in 2013-2016) is entirely financed through increased issuance of T-bills at an average interest rate of 4%.<sup>22</sup>

Scenarios V and VI adjust the new troika baseline for Cyprus (Scenario I) to incorporate a lower (higher) primary fiscal balance of 1ppt-of-GDP/annum in 2013-2016. In the higher primary balance scenario, the debt ratio peaks at 122.8%-of-GDP in FY-2015 and declines to sub-100%-of-GDP levels by FY-2020. In the lower primary balance scenario, the debt ratio hits a high of 129.2%-of-GDP in 2015 and eases to ca 107.5%-of-GDP in FY-2020. Again, Scenario V above assumes that the outperformance of programme targets as regards the general government primary balance allows some incremental reduction of public debt, while Scenario VI assumes that the ensuing borrowing gap caused by the underperformance of the primary deficit targets (to the tune of ca €660mn in 2013-2016) is financed entirely by increased issuance of T-bills.

Scenario VII–Adverse modifies Scenario I above to incorporate a steeper output contraction, with cumulative output losses in 2013-2015 approaching 20ppts. There currently exists an extraordinary degree of uncertainty as regards the short-term outlook of the Cypriot economy, especially in view of the financial sector's high value added in domestic GDP in recent years and the distortionary effects of the recently imposed capital controls. The selection of Scenario VII is not entirely arbitrary since: (i) output losses of 20 ppts or more, as a result of a severe balance-of-payments and/or a banking sector crisis, are not unusual in recent economic history (e.g. Argentinean real GDP declined by 19.5ppts cumulatively in 1999-2002, while Greek GDP contracted by around 20ppts) between Q3 2008 and Q4 2012, with a further 4.5ppts decline expected this year); and (ii) a number of Cypriot officials (including Cyprus's new finance minister Harris Georgiadis) and forecasters have lately warned against the risk a steeper initial output contraction than that assumed in the new troika baseline. Scenario VII–Adverse

assumes a cumulative nominal GDP contraction of 20ppts in 2013-2015 (-13% in 2013; -5% in 2014 and -2% in 2015) compared to a cumulative contraction of 8.3% envisaged in the new troika baseline (-8.1% in 2013; -2.8% in 2014; and +2.6% in 2015). As such, the aforementioned scenario can be indeed regarded as an extreme one. Over the period 2016-2020, all key underlying variables are assumed to evolve in line with Scenario I. Furthermore, we again assume an output elasticity of the generally government primary balance of around 0.4 (a rather conservative assumption for this kind of severe output losses) along with increased T-bills issuance as a means of financing the borrowing gap ensuing the underperformance of primary balance targets. Under this exceptionally adverse scenario, gross public debt peaks at 146%-of-GDP in FY-2015 and declines gradually thereafter to reach a terminal ratio of 122.9%-of-GDP in FY-2020.

Analysis above indicates that the future evolution of Cyprus's gross public debt and the attainability of a targeted ratio of 100%-of-GDP in FY-2020 will be mainly determined by the pace of output contraction in the initial post-crisis period and the degree of fulfillment of the agreed quantitative programme targets. If the extremely adverse hypothetical macroeconomic scenario were to materialize, it would negate one of the purported aims of the 25 March 2013 bailout agreement, namely to prevent a more pronounced increase in the debt ratio by securing a significant financing contribution by the Cypriot side.

## 5. Medium-term Macroeconomic Outlook

The implementation of the Euro group decision agreements on March 16 and 25 entails challenges for the domestic economy for both the short- and the long-term. This section and the next address these issues by describing the short- and medium-term GDP outlook and associated risks and, subsequently, exploring Cyprus's choices for the re-calibration of its growth model in the

<sup>22</sup> Troika's new DSA for Cyprus assumes that the nominal short-term interest rate on new/rolled over debt declines linearly from 5% in 2013 to 3% by 2015.

**Table 3**  
**Cyprus debt sustainability analysis**

Scenario I - New baseline scenario (based on the underlying assumptions of the April 2013 draft MoU)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real GDP growth (%)	-2.4	-8.7	-3.9	1.1	1.9	1.9	2.0	2.0	2.0
Nominal GDP growth (%)	-0.5	-8.1	-2.8	2.6	3.7	3.8	3.9	3.9	4.0
Primary balance (% GDP)	-2.2	-2.4	-4.3	-2.1	1.2	3.0	4.0	4.0	4.0
Avg interest rate on debt (%)	3.7	3.8	3.2	3.0	3.0	3.1	3.2	3.2	3.3
Stock flow adjustment (% GDP)	10.2	8.7	2.9	0.7	-2.4	-1.8	0.5	0.5	0.5
Gross public debt (% GDP)	86.5	109.0	123.0	126.3	121.9	116.4	112.1	107.8	103.6
Scenario II - Old baseline scenario (based on the underlying assumptions of the November 2012 draft MoU)									
Gross public debt (% GDP)	86.5	134.6	142.7	141.1	136.1	130.2	126.4	122.5	119.0
Scenario III - New baseline scenario (+1ppt nominal GDP growth/annum in 2013-2016)									
Gross public debt (% GDP)	86.5	107.4	119.7	121.4	115.4	109.9	105.7	101.5	97.2
Scenario IV - New baseline scenario (-1ppt nominal GDP growth/annum in 2013-2016)									
Gross public debt (% GDP)	86.5	110.3	126.0	131.0	128.3	122.7	118.4	114.1	109.9
Scenario V - New baseline scenario (1ppt of GDP lower primary balance/annum in 2013-2016)									
Gross public debt (% GDP)	86.5	109.8	124.9	129.2	125.9	120.4	116.1	111.8	107.5
Scenario VI - New baseline scenario (1ppt of GDP higher primary balance/annum in 2013-2016)									
Gross public debt (% GDP)	86.5	107.7	120.6	122.8	117.4	111.9	107.6	103.4	99.2
Scenario VII - Adverse (cumulative nominal output losses of ca 20ppts in 2013-2014)									
Gross public debt (% GDP)	86.5	116.3	134.5	146.0	141.6	136.0	131.6	127.3	122.9

Source: EC April 2013, Eurobank Research

**Table 4**  
**Eurobank Baseline Macroeconomic Projections 2013-2014**

	2012 €bn, Nominal	Shares in 2012 GDP	2013 %yoy growth, Real	2014 %yoy growth, Real
Private Consumption	11.948,1	66,8%	-17,0%	-8,8%
Government Consumption	3.587,9	20,1%	-8,9%	-3,6%
Total Consumption	15.536,0	86,9%	-15,1%	-7,4%
Gross Fixed Capital Formation	2.294,8	12,8%	-35,2%	-13,4%
Domestic demand	17.876,9	99,9%	-17,7%	-7,9%
Exports	8.136,7	45,5%	-7,5%	-3,2%
Imports	8.126,8	45,4%	-20,4%	-10,6%
Real GDP	<b>17.886,8</b>		<b>-11,9%</b>	<b>-4,7%</b>
GDP deflator			1,5%	0%
Unemployment			18%	20%

longer term, vis-à-vis the serious blow to the all-important domestic financial sector inflicted by recent dramatic events.

### 5.1 Qualitative assessment

As mentioned earlier, the Adjustment Programme foresees a sharp output collapse in 2013-2014 and a modest rebound in 2015-2016. According to the MoU forecasts, real GDP is forecasted to contract by -8.7% in 2013 and another -3.9% in 2014, a cumulative output loss of approximately 12.6pps. Then, a modest rebound of the economy is foreseen in 2015-2016 (1.1% and 1.9% respectively).

Many professional forecasters and policy makers believe that the troika's updated baseline macro scenario is subject to downside risks. However, an unprecedented level of uncertainty currently exists as regards the short-term outlook of the Cypriot economy given the quite unique features of the Cypriot crisis. Notwithstanding the wide dispersion of views, many analysts appear to concur with the view that the domestic macro trajectory may prove a more V-shaped one relative to the troika's updated baseline macro scenario.

The channels through which the Adjustment Programme will impact the domestic macroeconomy<sup>23</sup> are surrounded by uncertainty. At a first glance, the bail-in will cause a loss of wealth and impair business and consumer confidence with profound negative consequences for private consumption and investment decisions. On the positive side, and in contrast to the Greek experience, prices' adjustment seems to have already started taking place according to anecdotal evidence. Corporations from a wide array of retail services have already responded by offering substantial discounts to their customers within a short time after the shock. That provides some comfort that inflation will be subdued in the forthcoming period, offering some support to real incomes and budgets. Equally importantly, it sets the ground for a V-shaped recovery to materialize when growth rebounds do to a speedier reaping of internal devaluation benefits.

However, the restrictive measures imposed on the financial sector are a source of deep concern. The restructuring of the domestic banking sector and the capital controls imposed will severely disrupt economic activity, both directly and indirectly. The enforcement of those restrictive measures within an unforeseen period of time will deprive liquidity from the market and have negative spillovers in other sectors of the economy, at least in the short-term. To make things worse, those measures will also deter new volumes in the area of export-oriented business services. These contractionary impacts come on top of fiscal austerity measures, with a combined harmful effect on disposable incomes and, subsequently, a feed back to growth.

<sup>23</sup> European Commission: Assessment of the public debt sustainability of Cyprus, page 4.

This turns our attention to the question what can policymakers do to support growth in the short-run. Mobilizing EU funds could be considered as part of the policy response and can provide temporary relief. The European Commission Strategic Report on the implementation of 2007-2013 Cohesion Policy Programmes concludes that the EU funds absorption rate in Cyprus is lower than the average for EU member states. According to the Report, Cyprus could utilize a total of €612.4 million for 2007-2013. By January 2013, the Cypriot authorities had absorbed €243.1 million or 39.7% of the total vs. 42.4% in the EU average. Member states must absorb 100% of the funds earmarked for the period 2007-2013 by the end of 2015. Cyprus had absorbed 40% of the €492.6 million from the European Regional Development Fund and the Cohesion Fund until January 2013. 28.4% of the €119.7 million had also been absorbed until January 2013 from the European Social Fund, which funds programmes for employment, combating poverty and social exclusion, and promoting vocational training.

### 5.2 GDP Forecast for 2013-2014

This section offers a forecast for real GDP growth in Cyprus in 2013 and 2014; a quantification of trends in components of GDP is conducted, with economic rationale invoked for each, and total growth is extracted from there. Given the extraordinary nature of developments facing the Cypriot economy, unconventional methodologies had to be utilized to reach a forecast. For this reason, the forecast is subject to unusual risks as the MoU between Cypriot authorities and official lenders is continuously re-detailed and data availability is low. Under the main scenario, which takes into account the expected impact of the latest specification of agreed measures, real growth is estimated at -11.9% for 2013 and at -4.7% for 2014. In a more adverse scenario, with additional impact from the credit crunch, corporate defaults and capital controls, we calculate that real GDP could contract in 2013 by -16.7%.

#### A. **Baseline Real GDP growth forecast for 2013 (-11.9%)**

#### Evolution of GDP Components

- (a) Private consumption (66.8% of GDP): Private consumption predominantly depends on disposable income. AMECO estimates net nominal disposable income in 2012 at €15bn.

A number of strong **contractionary impacts** on economic activity and incomes will operate in the Cypriot economy following the agreement with EC/IMF/ECB for an Adjustment Programme:

1. **Restructuring of the banking sector**: this major shock has both an immediate impact, as well as an impact on expected net credit growth. EC's DSA (Draft 9 April 2013) calculated pre-agreement Cyprus'

domestic banking sector, including the cooperative credit institutions, at 550% of GDP or ca €98.5bn.<sup>24</sup> The same document also calculated that, as a result of actions undertaken for the restructuring, the Cypriot banking sector has been downsized *immediately* to 350% of GDP or ca €62.7bn.

According to Cyprus' MoU, the ratio of bank assets over GDP should be at EU average by 2017; the latter is estimated to be at 300% by then. Following MoU's forecasts, 2017 GDP should be at ca €16,6bn, hence bank assets should reach €49,9bn.

According to IIF,<sup>25</sup> bank assets of Cypriot banks in Greece (loans) in September 2012 amounted to €18,9bn and bank assets in Eastern Europe to €3,6bn. The former are already sold to Piraeus Bank and the latter are expected to be sold soon; these measures are assumed to have no impact on Cypriot disposable incomes (latent hypothesis: no expected profits of these operations). Hence, bank assets in Cyprus are calculated at €76bn. For these to be reduced to €62.7bn immediately, €13.3bn should come from the resolution of Laiki and the debt-to-equity conversion of the Bank of Cyprus. This calculation concurs with the MoU's estimation of Cyprus' contribution in the package but it exceeds the estimate for the bail-in in PBC and BOC (€10.6bn). It constitutes a  $13.3/98.5=13.5\%$  reduction in bank assets.

This **Bail-in** of uninsured depositors will cause a loss of wealth, which will reduce private consumption and business investment. However, the wealth effect on consumption is a contradictory issue.<sup>26</sup> In addition, there are no reliable data as to the exact percentage of deposits that actually belong to Cypriots and to international depositors. Hence, we take the direct route to assume that a reduction in bank assets has an equiproportionate impact on the sector's contribution to GDP. In 2012, the financial and insurance sector contributed 9.2% in Cyprus' Gross Value Added (GVA). Hence, this downsizing should deduce  $9.2*0.135=1.2$  ppts of GDP or 1.5 ppts of net nominal disposable income.

2. **Fiscal consolidation measures.** For 2013, fiscal measures of 4.8 ppts of GDP are projected. Assuming an equal reduction in net nominal disposable income

due to the nature of measures, a reduction of 5.7% in net nominal disposable income will accrue.

3. **Spill-overs** of banks' restructuring on related professional business services and financial services exports. Actually, many economic activities in Cyprus directly depended on the demand created by the financial sector's activities: commerce, transports, hotels and restaurants, real estate, constructions, professional, technical and supporting services, entertainment, other services. All these sectors together account for 51.8% of the Cypriot GVA (€8.4bn). We assume that the reduction in bank assets in 2013 [ $€13.3/98.5=13.5\%$ ] generates an equiproportionate reduction in the contribution of those sectors to GDP (latent assumption: unitary elasticity of financial sector activity to those sectors' demand), i.e.  $0.518*0.135*17.9= €1.3$ bn or 7 ppts of GDP or 8.3 ppts of net nominal disposable income.<sup>27</sup>

In total, net nominal disposable income is projected to decrease by 15.5%. The MoU assumes a GDP deflator of 1.9% yearly for the entire period 2013-2016. However, given the extraordinary GDP contraction and the simultaneous liberalisation of the labour market incurred by the MoU, this is too high. We pencil a GDP deflator of 1.5% for 2013 (due also to the impact of tax rate hikes) and 0% for 2014. Hence, real disposable incomes should be reduced by -17% in 2013.

We assume that the change in consumption will be 100% of the change in disposable income. This means there will be no intertemporal consumption smoothing due to the realization on behalf of households of a lower *permanent* income. Hence, real private consumption will contract in 2012 by 17% (against an EC's projection of -12.3%).

(b) Government consumption: (20.1% of GDP) we maintain the MoU projection for a -8.9% contraction.

Final consumption (86.9% of GDP): -15.1%

(c) Gross Fixed Capital Formation: (12.8% of GDP) Investment is the GDP component which is more sensitive to changes in the economic climate. Furthermore, Cypriot businesses face unprecedented liquidity constraints due to the banking crisis and capital controls. Taking in mind Greece's experience, in

<sup>24</sup> ECB calculated bank assets in Feb 2013 at €126,4bn or 7.1 times the Cypriot GDP; the difference is due to the fact that the MoU definition only takes account of the assets of financial institutions supervised by the CBC.

<sup>25</sup> IIF Research Note, Cyprus: Just The Facts, 19 March 2013.

<sup>26</sup> ECB (WP No 1050, May 2009) estimates that the average wealth effect coefficient is 6-16%. This is compatible with calculations made in this note.

<sup>27</sup> These effects encompass the impact on GDP by the respective increase in unemployment and reduction in profit margins. These are compatible with our projection for a 18% unemployment rate (against 12.1% in 2012), which alone would result in a ca 0.5bn or 3.3 ppts reduction of net nominal disposable income. Abolishment of wage indexation justifies a projection for flat nominal wages at best.

Programme years the fall in investment has been more than three times larger on average than the fall in GDP. In line with this, we project a real decrease of GFCF of 35.2% (against an MoU projection for a -29.5% contraction).

Domestic demand (99.9% of GDP): -17.7% change.

(d) Exports of g&s (45.5% of GDP): Ceteris paribus, a downsizing by 13.5% of sectors representing 61% of the Cypriot economy's GVA would result in a reduction of exports by 8.2%. With flat ULC (i.e. no competitiveness gains) and only marginal increase in international demand (due to near stagnation in EU27 and sluggish growth projected for SE Europe, Cyprus' main export markets), we pencil a real reduction of exports by -7.5%.

(e) Imports of g&s (45.4% of GDP): given that imports comprise, to a large extent, consumer goods of high income elasticity and investment goods, we calculate an income elasticity of imports of 1.2. Hence, a 17% reduction of real disposable income calculated above implies a 20.4% real reduction of imports.

## A2. Adverse Scenario for 2013 Real GDP growth

A number of downside risks to the main scenario for 2013 exist:

**1. Worse domestic credit conditions**, causing further deterioration of confidence in the banking system. A credit crunch could magnify the contractionary effect beyond the amount already accounted for by the spill over to sectors related to the financial sector.

**Household and corporate defaults** propagating through the economy: further banking sector losses, worsening of labour market conditions, stronger than expected fall in house prices and a prolonged loss of business and consumer confidence.

**Difficulty in removing temporary capital controls** and disruptions due to uncertainty hurting international capital flows; this could further reduce business volumes in both domestic and internationally oriented companies. This is extremely difficult to quantify.

A scenario of a combined shock could be described as following:

(a). Deleveraging and defaults cause net nominal disposable income in 2013 to shrink by 20% (instead of 17% in the baseline scenario) and exports to shrink by 10% (instead of 7.5% in the baseline scenario)

(b). Capital controls cause the loss of 20 days of GDP; i.e. a further 6.5% of net nominal disposable income and, correspondingly, a further 5.5% of exports. Then private consumption would shrink by 26.5%, imports by 31.8%, exports by 15.5%. In total, **GDP** would contract in 2013 by **-16.7%**.

**A better-than-the-baseline scenario** would involve, according to the MoU, higher investment activity in the energy sector and improvements in the external outlook, should the Euroarea economic activity strengthen beyond expected. However, the former is a longer-term factor and the latter seems unlikely at the current conjecture; the MoU itself admits that the chances of a better scenario materializing are considerably slimmer.

## B. Baseline Real GDP growth forecast for 2014 (-4.7%)

### Evolution of GDP Components

(b) Private consumption (62.2% of GDP): above mentioned calculations imply that GDP at end 2013 will be ca €16bn and net nominal disposable income will be ca €12.8bn.

Strong contractionary impacts on economic activity and incomes will continue to be at play in 2014. With the same logic as for 2013:

- 1. Restructuring of the banking sector:** as calculated above, bank assets in Cyprus at end 2013 will be €62.7bn and these have to be reduced to €49.9bn by 2017. We assume half of it will be achieved in 2014, i.e. a -10.2% change. This downsizing should further reduce the sector's contribution to GVA by  $(9.2-1.2)*0.102=0.8$  ppts of GDP or 1ppt of net nominal disposable income.
- 2. Fiscal consolidation measures.** For 2014, fiscal measures of 1.7ppts of GDP are projected. Assuming an equal reduction in net nominal disposable income due to the nature of measures, a reduction of 2.1% in net nominal disposable income will accrue.
- 3. Spill-overs** of banks' restructuring on related activities: assuming again that the reduction in bank assets in 2014 generates an equiproportionate reduction in the contribution of those sectors to GDP, the impact will be:  $(0.518-0.07)*0.102*16bn=€0.7bn$  or 4.6ppts of GDP or 5.7ppts of net nominal disposable income

In total, net nominal disposable income is projected to decrease by 8.8%. With a zero GDP deflator for 2014, real disposable incomes should also be reduced by -8.8% in 2014. With an income elasticity of consumption of 1, real private consumption will contract in 2012 by -8.8% (against an EC's projection of -5.5%).

(b) Government consumption: (20.5% of GDP): we maintain the MoU projection for a -3.6% contraction.

Final consumption (82.7% of GDP): -7.4% change.

(c) Gross Fixed Capital Formation: (9.5% of GDP): the development of investment will be contingent on rebalancing happening in 2013 as well as the degree of progress in structural reform. Taking in mind the empirical regularities for investment in crisis countries (threefold decline in relation to GDP) but also mediating for the positive base effect from 2013's steep expected fall, we project a -13.4% fall (against an MoU projection for a -12% contraction).

Domestic demand (92.2% of GDP): -7.9% change.

(d) Exports of g&s (47.2% of GDP): Ceteris paribus, a downsizing by 10.2% of sectors representing 52.8% of the Cypriot economy's GVA (financial sector and sectors related to it), would result in a reduction of exports by 5.4%. With 1ppt improvement in ULC (wage cuts overshooting reduced productivity due to recession) and 1.2% increase in international demand, we pencil a real reduction of exports by -3.2%.

(e) Imports of g&s (40.6% of GDP): With an income elasticity of imports of 1.2, a 8.8% reduction of real disposable income calculated above implies a 10.6% real reduction of imports.

## 6. Attaining a new growth model

The severe banking crisis puts existential questions on the development model of the Cypriot economy and its role as an important business and investment hub. This is reflected in the troika's new baseline scenario, which assumes potential output growth to stay below 2% in the post-crisis period. The next section explores how Cyprus could increase its potential long-run growth by complementing its past norm of specializations and improving the quality and price competitiveness of its key sectors.

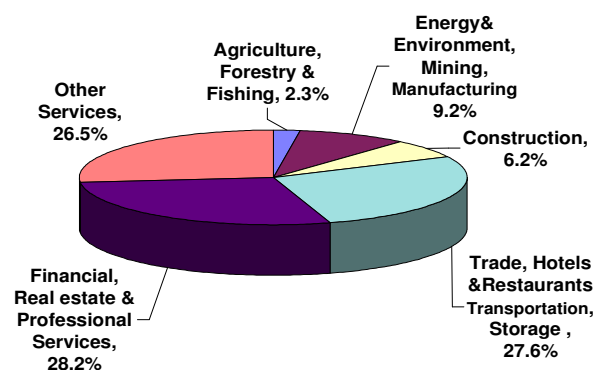
### 6.1 The aftermath of the Cypriot banking crisis: An economic and business model in need of restructuring

As mentioned above, over the last decade, the domestic services sector has been a key pillar of the country's economic development model. In 2012, services represented around 82.3% of total gross value added (GVA) of the economy, while industry (including construction) accounted for 15.4% and agriculture for just 2.3% (Figure 11). Cyprus emerged as an international hub for financial, logistics, offshore and other business activities even before its EU accession in 2004. Financial intermediation in particular (9.2% of total GVA in 2012) has played a prominent role in the domestic economy, acting as a locomotive for the development of a cluster of diverse and interacting business activities and services. These included, among others, real estate (11.6% of GVA), transportation & storage (4.6% of GVA), information & communication (4.4% of GVA) as well as a range of professional services such as accounting, actuarial, legal & administrative support services (7.4% of GVA). Actually, most sectors of the Cypriot economy

have benefited indirectly from the demand created by the flourishing of the financial sector.

The contribution of services to total employment was equally important. In 2012, around 78.9% of total employment came from services vs. 72.2% in EU-27. The broad sector of financial, real estate and professional services was among the key generators of employment in 2003-2012. Employment in the sector increased by 26.7% to reach 43,000 in 2012, compared to 34,100 in 2003. The sector accounted for 11.5% of total employment, second only to that of wholesale & retail trade. Employment in tourism, the second most important source of growth, increased marginally at the same period from 34,400 to 35,800. In turn, the participation in the total employment came down from 9.9% in 2003 to 9.5% in 2012. It is hard to estimate what would be the growth rate of many sectors in the absence of Cyprus' operation as a business and investment hub but certainly the relation has been significant.

**Figure 11**  
Structure of Gross Value Added



Source: National Statistics, Eurobank Research

A question of vital importance for the Cypriot economy in the current trajectory is in what form the -once vibrant- domestic services sector will emerge from the ongoing aggressive downsizing of the banking system, the imposition of capital controls as well as the reputation and confidence trauma inflicted by the bail-in of unsecured depositors in the resolution of the Cyprus Popular Bank (CPB) and the recapitalization of the Bank of Cyprus (BoC).

Notwithstanding the *potentially* profound macroeconomic implications of the recent dramatic developments, the views expressed by a number of prominent foreign business persons interviewed provide some comfort as regards the medium-term prospects of the domestic services sector. By and large, many foreign clients who have been using a range of domestic business services to conduct their international operations express their intention to continue relying on these services. Many argue that there are still some compelling arguments favoring Cyprus's status as an important business services hub.



First, the high caliber and expertise of domestic professionals (lawyers, accountants and others) and their established client relationships are strong disincentives for non-residents to move their businesses outside the island. Secondly, the Cypriot taxation system is still perceived as predictable and friendly, even following the 2.5ppts increase in the corporate tax-rate to 12.5%, in line with the conditionality underlying the bailout package agreed at the 25 March 2013 Eurogroup. Third, the island is still considered as politically stable and more business friendly than the country of origin for the vast majority of non-resident clients.

However, to the extent that the financial sector does not emerge unaffected from the crisis, Cyprus faces the challenge of complementing its contribution to GDP via other sources in order to return to sustainable rates of growth. According to official MoU estimations, bank assets as a percentage of GDP will fall to 300% by the end of the Adjustment Programme, compared to 700% at the eve of the crisis, and it is a declared intention of European policymakers to maintain the size of the banking sector close to these figures in the long term. Therefore, the situation calls for Cyprus to seek a new model of growth with a more diversified pattern of specializations. This would be desirable even without the impact of the crisis for reducing the excessive dependence of the Cypriot economy on financial markets' volatility.

Business services can continue to be an area of excellence but on the condition of further diversification and development of new competencies, which would help the services sector to counterbalance the impact of the current crisis.<sup>28</sup> Structural reforms undertaken as part of the Adjustment Programme aim in a friendlier business environment and setting the level playing field for the private sector to elect activities of comparative advantage for Cyprus.

Undoubtedly, one of the pillars of this future growth model will be tourism. In the present time, tourism is the only other important export-oriented sector of the Cypriot economy, both in terms of value added and employment. Despite their declining share in total output in recent years, tourism revenues amounted to a *still sizeable* 10.8%-of-GDP in 2012.<sup>29</sup> The total contribution of the tourist industry in the Cypriot economy is substantially larger, if one accounts for the secondary effects, i.e. the demand created by tourism for products and services of other sectors. This is especially so since tourism is an activity with a large part of its added value being domestic, i.e. whose multiplicatory effects are deeply dispersed in the domestic economy. The transformation of Cyprus to an international

business and investment hub in recent years has diverted attention from a number of important challenges facing the domestic tourism industry, including structural rigidities (eg. The implementation of COLA in the tourism sector) and red tape as well as declining cost and price competitiveness. Looking beyond the profound short-term implications of the banking sector upheaval, most analysts appear to believe that the current crisis presents an opportunity to fix the tourist industry business model. Tourist industry experts interviewed agree that the main directions of required efforts include emphasis on price competitiveness, the development of niche markets (e.g. medical tourism), the construction of luxury yacht marines and the licensing of a casino. These could provide a strong impetus to medium-term economic growth.

As to the primary sector, there is no reason why the – exceptionally small- contribution of agriculture to the GDP could not be increased. The climate, the population's know-how and marketing advantages related to the Mediterranean nutrition are all advocating for the reinvigoration of agriculture. However, the design of agricultural policy should be careful in order to avoid excessive reliance on EC subsidies or specializations in mass production cultivations, which would expose Cyprus to direct competition by low cost emerging markets. Specialization in high value added niche markets, such as organic and protected origin products would be preferable.

## **6.2 A transition from a business services hub to an important hydrocarbons exploration center?**

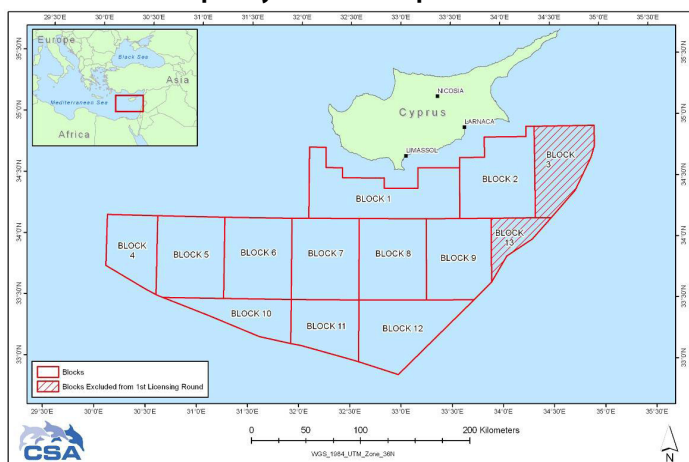
The prospect of hydrocarbon resources exploration in Cyprus's Exclusive Economic Zone (EEZ) and the potential benefits for the domestic economy are a focal point in discussions for the future growth model. The process of hydrocarbon explorations is currently in a developing phase. The first natural gas discovery was announced in December 2011, following the granting of a concession agreement to Noble Energy Inc. to explore Block 12 of the Cypriot EEZ Exclusive Economic Zone (EEZ). Noble Energy reported significant natural gas findings to the tune of 5-8 trillion cubic feet (tcf) with a gross mean of 7tcf (Figure 12).

While identified in the first drilling, these gas reserves are not precisely determined and fully mapped and, thus, are not formally considered as recoverable yet. Under the production sharing agreement signed with the Cypriot Government, Noble Energy has started conducting the 2nd (confirmatory) drilling in Block 12 in June 2013. The new findings from the collected geological data should clear out most uncertainties regarding the natural gas content of Block 12. This second drilling will not finish before the end of September and some additional time will be needed after that for the processing of data and their announcement.

<sup>28</sup> The contribution of the industry of professional services in the economy and the potential for further development is analysed extensively in the PwC Cyprus research report titled "Professional services-Driving jobs and growth in Cyprus", Dec 2012.

<sup>29</sup> Advance bookings and other relevant information suggest that tourism revenue in 2013 may be higher than in 2012.

**Figure 12**  
**Map of hydrocarbon exploration fields**



Source: Cyprus Shipping Association, Ministry of Energy & Industry of Cyprus Republic, KRETYK

Natural gas exploration efforts are not limited to Block 12. In January 2013, the government signed contracts with the ENI/KOGAS consortium for hydrocarbons exploration in Blocks 2, 3 and 9. The first indications from Block 9 point to a bigger reserve than that of Block 12. The government also signed in early February hydrocarbon exploration contracts for Blocks 10 and 11 with French TOTAL. The aforementioned contracts involve exploration related investments on behalf of the companies to the tune of \$2bn plus the licensing fees.

The U.S. geological survey data shows that the Levantine Basin, the easternmost part of the Mediterranean Sea, may contain up to 122tcf of natural gas. Based on these geological data, KRETYK (Cyprus National Hydrocarbons Company) estimates that gas reserves within the Cypriot EEZ could amount up to 60tcf or 1.7 trillion cubic meters (tcm), an amount close to the proven gas reservoirs of Azerbaijan (2.5 tcm).

According to preliminary KRETYK estimates, the six blocks out of the thirteen auctioned thus far (i.e., Blocks 2, 3, 9, 10, 11, 12) may contain a total of 40tcf, which may well translate into total proceeds of around €400bn within a time horizon spanning 20-25 years. Under the assumption of a 25% Cypriot share in total proceeds, as part of the future revenue-sharing agreements with the energy companies, the government direct revenues could average €4bn per year.

Yet, in order for gas reservoirs to become an important source of revenue, significant infrastructure investments will be required. For the time being, there is no final agreement as regards the transportation of gas resources. A plan developed under the previous Cypriot administration foresaw the transportation of gas resources with LNG carriers -ships designed for transporting liquefied natural gas (LNG). A huge advantage of LNG gas is that the former can be exported to any market around the world. In addition, LNG transportation makes the country less dependent

on pipeline networks for transportation and related geostrategic complications.

However, the construction of a gas pipeline to the coast and a liquefied natural gas (LNG) plant plus other gas facilities in the Vasilikos area on the southern coast would cost approximately €10-12 bn. According to KRETYK, a final decision as regards the construction of a liquefaction plant is unlikely before the beginning of 2015, which means that the operation of such a plant can begin no earlier than 2019-2020. Further, Israel's agreement on this option for the transportation of both Cypriot and Israeli gas is not secured.

The energy sector represents a new and potentially lucrative opportunity for the country. The benefits from gas exploitation are not limited to licensing fees, direct sales revenue and related investments but can also span the whole economy due to positive spillover effects. Moreover, transforming Cyprus to an important offshore energy hub will help the country accumulate more geopolitical power within the broader region.

## 7. Conclusion

A combination of structural inefficiencies and macroeconomic imbalances in the previous decade had weakened perceptions about Cyprus' debt sustainability and, eventually, made resort to an EU/IMF bailout package inescapable. Most prominent among them, an oversized banking sector with exposure to Greece, an indebted private sector, deteriorating competitiveness and current account, as well as derailment of public finances in the last 5 years. Official lenders required from Cyprus to undertake a series of fiscal adjustment measures and structural reforms to boost its economy's competitiveness. Most crucially, they demanded that a large part of the cost for the restructuring of the banking sector (resolution of PBC and recapitalization of BOC) will fall on Cypriot bank stakeholders, including uninsured depositors. This decision shocked the island's economy, caused the immediate downsizing of the financial sector by ca 200ppts of GDP and necessitated the imposition of capital controls for containing capital flight and a potential collapse. Apart from the disruption this is already causing in the operation of domestic businesses and households, it has inflicted a serious blow on confidence and will have long-term repercussions for the island's growth model.

Burden-sharing measures adopted by the Cypriot side resulted in the €10bn EC/IMF bailout package largely sufficing to cover Cyprus's funding needs for the programme period, 2013-2016, and limiting the post-programme (2016- 2020) sovereign borrowing need to ca €4bn in cumulative terms. They also resulted in the Debt Sustainability Analysis improving in comparison to the one assumed in the November 2012 draft MoU, despite the more adverse domestic macroeconomic environment and a more gradual adjustment in the general government primary balance. Peak in the debt ratio is now

forecasted to occur at 126.3%-of-GDP in 2014 compared to a peak of 142.7%-of-GDP seen previously. However, our DSA shows that the attainability of a targeted ratio of 100%-of-GDP in 2020 remains sensitive to the pace of GDP contraction in the initial post-crisis period and the degree of fulfillment of the agreed fiscal targets.

The medium-term macroeconomic outlook remains bleak, as a combined effect of the pass through of financial sector problems to the real economy, the fiscal drag and confidence setbacks. According to our updated forecast, which takes into account the expected impact of the latest specification of agreed measures, real growth is estimated at -11.9% for 2013 and at -4.7% for 2014. In a more adverse scenario, with additional impact from the credit crunch, corporate defaults and capital controls, we calculate that real GDP could contract in 2013 by as much as -16.7%. However, anecdotal evidence pointing to an early adjustment in prices offers some hope for a speedier reaping of internal devaluation benefits and hence a more V-shaped recovery relative to the troika's assumptions.

In the longer term, the abrupt downsizing of the financial sector, calls for a recalibration of Cyprus's growth paradigm. While there are still some compelling arguments in favour of Cyprus's status as an important business services hub, Cyprus needs to seek a new, more diversified pattern of specializations in order to complement the financial sector's contribution to GDP and thus return to sustainable rates of growth. Business services can continue to be an area of excellence but on the condition of further diversification and development of new competencies. Undoubtedly, another pillar of this future growth model will be tourism. In this sense, the current crisis presents an opportunity to fix the business model of the tourist industry with an emphasis on price competitiveness and the development of niche markets. The same is true also for the primary sector. Finally, the discovery of gas reserves paves the way for the transformation of Cyprus into an important offshore energy hub. The process of hydrocarbon explorations is currently in a developing phase. If reserves are formally declared recoverable, their exploitation will require significant infrastructure investment in extraction, processing and transportation, as well as taking complex geopolitical decisions. Yet, under certain assumptions, the government direct revenues from hydrocarbons could average €4bn per year within a time horizon spanning 20-25 years. The benefits from gas exploitation expand beyond licensing fees, direct sales revenue and related investments to include economies of scale to other sectors, as well as a drastic upgrade in the country's geostrategic importance.

Overall, the ability of Cyprus to overcome this difficult conjecture will depend on its people's resolve, composure and creativity. Cypriots have proved in even darker moments of history that they possess these qualities.

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