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from: Mr Andreas D. Mavrogiannis, Ambassador, Permanent Representative of  
Cyprus to the European Union

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to: Mr Carsten Pillath, Director-General, Council of the European Union

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Subject: Updated Stability Programme of the Republic of Cyprus, 2009-2013

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Please find attached the Stability Programme of the Republic of Cyprus for 2009-2013, as required under the Council Regulation (EC) 1055/2005 in the content of the Stability and Convergence Programmes.

(Complimentary close)

(s.) Andreas D. Mavrogiannis

Encl.:



**STABILITY PROGRAMME**  
**OF THE**  
**REPUBLIC OF CYPRUS**  
**2009-2013**

**Ministry of Finance**



**March, 2010**

**STABILITY PROGRAMME  
OF THE  
REPUBLIC OF CYPRUS**

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## **INTRODUCTION**

Two years after the adoption of the euro by Cyprus, and in the midst of the worse recession to hit the world economy since the 1930s, in accordance with the Council's Regulation (EC) 1055/2005, Cyprus submits its Stability Programme (SP) for the period 2009-13. The SP has been prepared in line with the updated guidelines set out in the "Guidelines on the format and content of the Stability and Convergence Programmes (2005 Code of Conduct)".

The Stability Programme is the product of consultations with political parties and social partners. From these consultations it emerges that there is broad consensus to take measures to reduce the deficit in a sustainable manner. The Government of the Republic of Cyprus ("the Government") will remain engaged in a continuous dialogue with political parties and social partners with the view to agree additional measures which are required, in order to safeguard the achievement of the targets set in the SP.

With the adoption of the euro, the policy framework in Cyprus has changed fundamentally. Decision making on monetary policy has been transferred from the Central Bank of Cyprus to the European Central Bank (ECB). Monetary policy decisions made by the ECB are based on considerations about the euro area economy as a whole. At the same time, fiscal policy is guided by the Stability and Growth Pact, and by the national fiscal framework, which aims at safeguarding fiscal discipline, the quality of public finances and long-term fiscal sustainability.

Undoubtedly, the biggest challenge facing policy makers at the current juncture is to address the economic slowdown, which has affected Cyprus considerably through falling external demand. The Government, in line with the European Economic Recovery Plan, has implemented several policy measures during the past 18 months, aimed at aiding the worst-affected segments of the economy. These measures have helped to partly offset the weak demand conditions and to minimise the negative repercussions of the downturn, particularly those in the labour market.

Going forward, a key policy aim of the Government, especially against the background of the ensuing deep economic crisis, which is affecting the world economy, is to promote growth and to maintain and strengthen further social cohesion. In the first instance, policies aim at addressing the unemployment problem, which has particularly affected the tourism and construction sectors. Additionally, the Government aims at re-directing available resources in favour of growth-enhancing expenditure categories, improving physical infrastructure in various segments of the economy and social expenditures while, at the same time, safeguarding macroeconomic stability, reducing the fiscal deficit and stabilizing the debt level.

Growth has decelerated in 2009, from very high levels the previous year. It is estimated that GDP has contracted in 2009 by about 1.7 % compared to the previous year, mainly owing to poor export performance, falling investment, particularly in construction and a significant negative stock adjustment. The SP envisages stabilisation in 2010 with a modest growth of some 0.5% compared with 2009. The slowdown, combined with a composition of growth which has been unfavourable to tax revenue, has resulted in a widening of the general government deficit to around 6% of GDP in 2009. It is clear now that the turnaround in revenues will not materialise in the short term, and consequently without any corrective measures the deficit would widen further in 2010. The aim is to prevent this unwarranted deterioration in public finances, and to bring about a timely consolidation, as required by the Treaty.

The deterioration of the fiscal position is, mainly, attributed both to cyclical and structural factors, specifically falling revenues and to a lesser extent to higher expenditures related to the emergency support measures, and social transfers. Notwithstanding the challenging economic environment, which Cyprus is facing, the overriding aim of fiscal policy, as set out in this SP, is to stabilise the deficit in nominal terms as a percentage to GDP and reduce it by about ½ percentage point in structural terms in 2010 and to continue with the correction thereafter, bringing the fiscal deficit below 3% of GDP by 2013. At this juncture, all Member States, including Cyprus, face a difficult balancing act between continuing with the fiscal support measures which are needed to support the recovery, and at the same time planning and implementing a fiscal exit strategy over the medium term.

The Government will introduce a number of measures that aim at increasing revenues and curtailing expenditures, and thereby achieving the needed consolidation. The broad policy framework has been decided by the Government, while the details are being discussed with the social partners, in order to reach a broad consensus, which is essential for a successful reform. Notwithstanding the challenging economic environment, these measures include an amnesty on the issuance of title deeds for buildings with minor irregularities (a measure that will clear a substantial backlog of title deed issuances), specific actions to tackle tax evasion and tax avoidance, a systematic attempt to curtail current expenditures, public sector reforms which will address the growing size of the civil service and bring about a bridging of the benefit gap with the private sector, and a careful reform of the system of social transfers, in order to target benefits better and help more those in greater need.

Although the world economy appears to be stabilizing, the uncertainties concerning growth in 2010 remain considerable. The SP envisages positive but low growth of the order of 0.5% in 2010 and a subsequent gradual recovery during the programme period to around 3% by 2013. This is considered to be the potential growth of the economy, from a high of 3¾–4% prior to the financial crisis, taking into account the

new environment following the world financial crisis and severe downturn and its effects on investment and employment growth in Cyprus in the medium term.

The central scenario of this SP is based on the assumption that the current international economic crisis has primarily affected the construction, real estate and tourism sectors. Moderate effects due to tight borrowing conditions, gradual deleveraging, possible confidence effects have also affected private consumption.

However, given the increased degree of uncertainty, more pronounced effects on economic growth can not be excluded in 2010. Tentative alternative scenario estimates indicate that growth in 2010 could range between -1% and +1%.

An important change compared to last year is a new long-term projection for public finances which is based on pension reforms enacted in April 2009. The reforms include increases in social insurance contributions to be implemented gradually until 2035, as well as reforms on the expenditure side, mainly involving tightening of eligibility criteria for social insurance pensions. Taken as a whole, these reforms reverse the negative trend of the reserve position of the Social Security Fund, and maintain broadly the reserve's balance to today's level amounting to some 40% of GDP in 2050 compared with a deficit of some 90% of GDP in the same year based on the pre-reform actuarial projection. Notwithstanding the deterioration of the fiscal position over the medium-term, these reforms, therefore, imply a significant improvement in the long-term sustainability of public finances. Further reforms are being pursued in the area of healthcare provision, and these will also play an important role in containing public expenditures in the long term. A series of structural reforms in public finances are also being undertaken, centred around the gradual introduction of a Medium-Term Budgetary Framework. These reforms will constitute an important ingredient of the policy framework of the Government. Moreover, the framework for debt and cash management which has been upgraded in the past year, will be strengthened further, resulting in significant savings.

Additionally, and irrespective of specific measures which may be taken to address the current slowdown, policies will have to support investment and private sector development, and contribute towards enhancing further productivity and competitiveness of the economy and the advancement of a "green economy". The Government is actively involved in reducing the administrative burden of laws and regulations, upgrading public infrastructure, promoting R&D and innovation and, at the same time, playing a role in guiding wages determination in the economy as a whole, through public sector wage setting. These priorities are incorporated in the National Reform Programme for Lisbon strategy. Accordingly, the expenditures related to the implementation of the National Reform Programme have been taken into account in the SP.



The Government considers the fiscal targets set out in the SP as feasible and credible. The Ministry of Finance will be monitoring closely on a monthly basis the timely implementation of the SP and will be ready to adopt additional measures, if deemed necessary.

## 1. OVERALL POLICY FRAMEWORK AND OBJECTIVES

The overriding medium and long-term objective of Cyprus economic policy is to enhance long-term growth and the standard of living of all citizens, in particular of low income groups, to maintain macroeconomic stability, implement structural reforms, which improve the functioning of the market mechanism, and ensure that the government sector provides, adequately and efficiently, services to the public. Within the overall government finance constraints and targets, fiscal policy will focus on growth and social cohesion, through the redirection of resources to growth-enhancing activities and prioritization of expenditure programmes. A more efficient and leaner government, that can tackle effectively these challenges, will be important in this process. Structural reforms must be implemented in various areas including healthcare, labour markets, fiscal policy and to boost the “green economy”.

In the short-term, the Government must address the consequences of the economic slowdown, which has affected the economy of Cyprus with some time lag compared to the rest of the euro area. The expansionary fiscal policy, in line with the European Economic Recovery Programme, has helped to contain the negative consequences of the crisis. Other policies, particularly those in the labour market, have been particularly important and have helped to minimize the social repercussions. The Government stands ready to support further these vulnerable segments of the economy.

### *Fiscal Policy*

Undoubtedly, the biggest challenge facing policy makers at the current juncture is to address the economic slowdown, which has affected Cyprus considerably through falling external demand:

- The Government must put in place the elements for a sustainable recovery of growth, and the creation of new jobs in the medium term; and
- At the same time, prepare a strategy to reverse the deteriorating public finances and allow for the fiscal correction in the following years as required by the Stability and Growth Pact.

Particular emphasis is placed on the need to curtail current expenditure and restructure public spending, in favour of capital expenditure and education, which can boost the economy’s growth potential. Redirecting resources towards infrastructure is particularly important at this point due to the expected negative growth of the construction sector. Emphasis is also attached to targeted social spending.

The overall strategy for fiscal policy is to consolidate public finances, with a view to reducing public debt and thus ensuring the long-term sustainability of public finances.

It is clear now that the turnaround in revenues will not materialise in the short term, and therefore without any corrective measures the deficit could widen further in 2010. Thus, the overriding priority of the Government is to contain the deficit in 2010 to around 6% of GDP – an ambitious goal taking into consideration the difficult environment that Cyprus is facing – and proceed with the fiscal consolidation thereafter, according to the requirements of the Stability and Growth Pact. To achieve this, the Government intends to introduce a number of policy measures which are necessary in view of the deteriorating revenue situation in 2009:

- Town planning amnesty for buildings constructed with minor irregularities opening the way for the issuance of a backlog of outstanding title deeds;
- A systematic attempt to curtail current expenditures;
- Public sector reforms that will address the growing size of the civil service and bring about a bridging of the benefit gap with the private sector. A modernization of the public sector is key and can result in leaner and more productive public services. Such a policy will limit expenditure growth and raise overall productivity;
- A reform of the system of social transfers in order to target benefits better and help more those in greater need.

Additionally, a number of structural fiscal reforms are underway which should lead to better planning of spending, easier control of expenditures and lead to considerable savings on interest expenditure:

- The implementation of a Medium-Term Budgetary Framework (MTBF), which will institutionalize expenditure rules, give more independence to spending ministries and, at the same time, increase their accountability;
- Further improvement of tax collection by addressing tax evasion and avoidance and strengthening tax administration;
- Enhancement of public debt and cash management systems.

In spite of the economic crisis and slowdown of economic activity—and conscious of the need to safeguard the important achievements so far in reducing public debt—this SP reaffirms its ambitious Medium-Term Objective of a balanced budget. This represents a cautious approach taking into account the uncertain economic period, in the coming years.

### *Monetary and Exchange Rate Policy*

Historically, monetary and exchange rate policies in Cyprus have been geared towards maintaining macroeconomic stability and low inflation, mainly through the pegging of the Cyprus pound to an anchor currency, be it a basket of currencies until 1992 or a single currency, the ECU from 1992 to 1998 and the euro in the period 1999-2007. As from 1<sup>st</sup> of January 2008 the euro has been adopted as the official currency.

As of 1/1/2008 the setting and implementation of monetary policy has shifted to the ECB. The Central Bank of Cyprus is represented in all relevant bodies and committees of the ECB and ESCB. Interest rate policy is determined by the ECB taking into account the conditions prevailing in the euro area as a whole and the banking system has full access to all liquidity facilities provided by the ECB.

### ***Structural Reforms***

During this difficult time internationally, and domestically, it is especially important to continue with the implementation of structural reforms which will help maintain long-term growth at satisfactory levels and boost the economy's agility and competitiveness. This is more pressing now given that the economy's potential growth has been affected by the crisis.

Cyprus has already submitted an elaborate outline of structural reforms in its National Reform Programme (NRP). The implementation of these measures is an important pillar of this SP, and the funding constitutes an important element of the proposed budget.

- Implementation of policies aimed at upgrading the physical infrastructure and improving the functioning of network industries will be intensified, taking into account environmental concerns. This “Green Agenda” will pave the way for growth in the longer term, but also boost economic activity in the short and medium term. A number of infrastructure projects will be accelerated in particular as part of the EU-led initiative to boost demand in view of the weakening economic activity especially in the construction sector;
- Reforms are being undertaken in the labour market, especially to boost supply of labour among females and address the high gender pay gap, increase employability and labour force adaptability—particularly through lifelong learning—and raise the employment rate. Enhancing human capital is also key in increasing productivity and boosting the economy's potential growth. Development of human capital is especially important in an economy, dominated by the services sector;
- Furthermore, reforms are being carried out, aimed at strengthening competition, especially in the area of professional services, improving the overall business climate;

- Special emphasis will be put on streamlining the regulatory framework and cutting red tape;
- Another important area is reform of the healthcare system, in particular the re-organisation of public hospitals and the gradual introduction of the National Health Insurance Plan. This, together with the recent reform of the social security system, are crucial for tackling the long-term sustainability of public finances;
- Finally, it is widely accepted that R&D and innovation and the wider utilisation of information technology and the attraction of foreign direct investment are important vehicles for boosting productivity and growth. A particular effort is being undertaken to coordinate more effectively government-funded academic and private sector research programmes, so as to encourage innovation. EU structural funds will finance a large part of the budget for Research, Technological Development and Innovation, while the institutional framework for R&D and innovation will be further enhanced. These efforts have been boosted by the special efforts coordinated by the Cyprus Investment Promotion Agency, aiming at attracting foreign direct investment in Cyprus.

## **2. ECONOMIC OUTLOOK**

### *World Economy in 2009 and prospects for 2010*

The uncertainty surrounding the global economic outlook has been exceptionally high, in view of the rapidly-unfolding events in the financial markets and the world economy during the past two years. However, following a period of a precipitous fall in economic activity in major industrial and emerging economies, economic activity appears to have stabilized in the second half of 2009. Uncertainty remains quite elevated, though, and most analysts expect anemic growth in 2010 and continued negative developments in labour markets.

It is widely recognized that the decisive and timely interventions by governments and central banks have helped to stabilize the economic situation and prevent a meltdown of the financial system. Interventions both to recapitalize banks and to boost demand have been sizable in many cases. Deficit and debt levels soared in the USA and the EU and countries are now facing the daunting task of gradually withdrawing the support measures and fiscal stimulus from the economy. This is a delicate exercise, which can have repercussions in the recovery prospects in the medium term. This is of particular importance for Cyprus and the prospects for a sustainable recovery, given its small economy and reliance on foreign demand.

On the positive side, inflation has ebbed in line with the recent fall in commodity prices. Oil prices fluctuated sharply in 2008-09, amid the financial turbulence and growth slowdown, declining first steeply below the \$45 per barrel, before rising again in the second half of 2009 toward the \$70-80 per barrel level. Over the medium term, market participants expect modest increases of oil prices.

Prospects for the global economy are exceptionally uncertain and markets are likely to remain under strain throughout 2010. The latest IMF (January 2010) and the European Commission (Autumn Forecast, 2009) projections show the global economy recovering from a major downturn. A gradual recovery is projected in 2010, but global growth is not expected to return to trend until 2011-12. Important determinants for the eventual recovery will be the unwinding of stimulus measures both from the fiscal and monetary side, exchange rate and oil price developments, the situation in labour markets, and the behavior of the financial system once support measures are gradually withdrawn. Confidence effects are also key for a sustainable recovery.

On an annual basis, global growth is estimated to have declined from around 3% in 2008 to -0.8% in 2009. Moreover, world trade growth is estimated to have dropped from 7.3% in 2007 and 2.8% in 2008 to -12.3% in 2009. The magnitude of these

declines in world output and trade are extraordinary, when one compares with historical evidence, essentially due to the high degree of synchronization of this particular cycle. For 2010, the IMF expects the recovery of the world economy to gather steam and for growth to reach 3.9% and world trade to expand by 5.8%. Due to the significant decline in the level of GDP and world trade, the envisaged recovery in 2010-11 will not be sufficient to ensure a return to the previous levels of economic activity.

In the EU27, GDP fell by an estimated 4.2% in 2009. Similarly, in the euro area GDP fell by around 4.1% over the same period. The decline was more pronounced in the first half of the year, particularly the first quarter, while a small positive increase was registered in the third and fourth quarter. The fall in GDP in the first half of 2009 followed big drops in economic activity of some 2% in the fourth quarter of 2008. Among euro area Member States, GDP in Germany is estimated to have declined by 4.9%, 3.6% in Spain, 2.2% in France and 4.8% in Italy. For 2010, GDP is forecast to expand by 0.7% in the EU27 and the euro area. Among the largest Member States, GDP in 2010 is expected to decline in Spain by 0.8% and Ireland by 1.4%, and to expand by 1.2%, 1.2% and 0.7% in France, Germany and Italy, respectively. To address the weakening economic activity the ECB has lowered its main policy rate by 250 basis points since October 2008 and the main refinancing rate stands now at 1% since May 2009.

Economic activity in the UK, by far the most important economic partner of Cyprus, is estimated to have declined by some 5% in 2009. The unemployment rate increased from 5.6% in 2008 to 7.6% in 2009, and further job losses are expected in 2010. Against this background, the Bank of England cut interest rates by 400 basis points since October 2008, with a view to alleviate, as much as possible, the problems faced by the financial system in the UK and the adverse repercussions for the real economy. For 2010 the outlook is expected to improve slightly according to the Autumn Projections, with GDP growth forecast to turn positive reaching 0.6% for the year. The situation is clearly improving in the UK, but prospects are nevertheless uncertain both due to the considerable size of the financial services sector in the country, as well as the difficult conditions in the labour market, which continue to weigh heavily on the confidence of individuals. The significant depreciation of the sterling has, on the other hand, boosted export performance, though it has, at the same time, significantly affected the purchasing power of Britons. Indeed, this has resulted in a sizeable decrease in the number of British tourists visiting Cyprus and to a significant fall in property demand by UK nationals in Cyprus.

In the US, real GDP contracted by some 2½% in 2009, following some 2% decline of GDP in the fourth quarter of 2008. Financial market strains eased in the second half of the year following the volatility experienced during the past years, especially since the collapse of Lehman Brothers. In this context, the US authorities have lowered the

basic interest rate to 0 – 0.25%, in order to restore confidence in the financial system. For 2010 the outlook is expected to improve considerably in the US according to the autumn projections, with GDP growth forecast to reach 2¼% for the year. The unemployment rate increased from 5.8% in 2008 to 9.3% in 2009, and further job losses are expected in 2010. The situation in the labour and financial markets will be key for the recovery which is unfolding.

In Russia, the economic situation deteriorated much faster than previously envisaged. In 2009, GDP fell by some 8% compared with 5.6% increase in the previous year. This contraction was the result of the two shocks that affected the Russian economy. Firstly, the financial shock affected access to international capital flows and the domestic banking system. Secondly, the real shock linked to the sudden and sharp fall in commodity prices and of external demand. Both these factors have eased significantly and it is forecast that the Russian economy will return to growth in 2010 and onwards. According to the latest Autumn Forecast by the European Commission, growth will reach some 2¼% in 2010 and 2¾% in 2011.

In Japan, economic activity declined significantly, reflecting sluggish domestic demand and a precipitous fall in exports. In the first three quarters of 2009 real GDP fell by 6½%, following a decline of 4½% in the fourth quarter of 2008. For the whole 2009, GDP fell by 5% following a decline of 1.2% in 2008. For 2010, growth is forecast to turn positive and reach 1.1%.

Overall, the external economic environment has deteriorated markedly in 2009 and a slow recovery is envisaged in the short and medium term. Considerable uncertainties lie ahead, particularly concerning the exit strategies for fiscal policies and in the financial sector.

### *Cyclical Developments and Current Prospects in Cyprus*

Despite the negative external environment, the economy of Cyprus contracted at a lower pace compared with the rest of the EU. According to preliminary estimates of the Statistical Service of Cyprus, GDP contracted by 1.7% in 2009 compared with previous year. The slowdown was particularly noticeable in the second, third and the fourth quarters with GDP estimated to have declined by 1.7%, 2.7% and 2.8% respectively on a yearly basis.

Overall, the external shock spilled over to the economy of Cyprus via two channels: exports and investment. Confidence effects have also been important, given the size of the observed external shock.

In constant prices, total exports are estimated to have declined by 11.8% in 2009; both exports of goods and services registered large falls compared to the previous year.



Exports were significantly affected by a 11% fall in tourist arrivals and 17% fall in revenue income for the sector, as well as, by a large decline in income from shipping services. Other services such as financial services and other business services (legal, consultancy, accountancy etc) registered, in some cases, positive growth, offsetting partly the poor export performance elsewhere.

Gross fixed capital formation, is estimated to have declined by 12% in real terms, owing to significant falls in construction investment (8.5%), investment in transport equipment (55.2%), and investment in machinery and equipment (12.6%). The decline in investment in construction was mainly due to the economic slowdown in the UK and Russia, which were the main source countries for investment in secondary residences, in coastal areas. Considerable stock adjustment was also evident, which further weighed negatively on growth in 2009.

Consumption, on the other hand, was relatively less affected considering the depth of the slowdown, especially in some segments of the economy. In 2009, private consumption is estimated to have declined by some 3% compared with the previous year, influenced via the overall change of confidence but supported mainly by continued growth of credit and a relatively unscathed labor market. Public consumption expanded by 5.8% in 2009 compared to 2008, thus providing a needed boost to the economy.

Imports fell overall by nearly 20% in constant prices, owing to declines in most categories of goods, as well as, services. This implies that low consumption and investment demand were reflected mainly in lower imports. More significant adjustments have been registered in imports of intermediate inputs, transport equipment as well as consumer goods whereby the decrease in value terms was 26.9%, 42.8% and 5.9% respectively over 2009.

From a sectoral viewpoint, the agricultural sector continued to stagnate and output is estimated to have contracted in 2009, in part also due to the severe drought of the past few years and its effects on production. Construction has shown signs of a sizeable slowdown, with output estimated to have declined by 6.8% in 2009. Sales of cement which were down by 25.8% in 2009 point to depressed construction activity in several areas, and building permits in volume have decreased noticeably (15% for the year), thereby implying a further slowdown in the following months. The tertiary sector has continued to experience weak, but nevertheless positive, growth as a result of growth in financial intermediation and other business services, as well as in the health and education sectors. However, the hotels and restaurants sector, which has been operating below potential for a number of years due to, in particular, intense competition from other near-by destinations, experienced a precipitous fall in tourist arrivals in 2009 of some 11% compared to the previous year. Revenue was also under considerable strain, declining by almost 17% for the year.

**Table I: Selected Economic Indicators 2007-2009**

<i>annual % change</i>	<b>2007</b>	<b>2008</b>	<b>2009 (est.)</b>
GDP growth (constant prices)	5.1	3.6	-1.7
<i>Private consumption</i>	9.4	8.4	-3.0
<i>Gross Fixed Capital Formation</i>	13.4	8.6	-12.0
<i>Exports</i>	6.1	-2.1	-11.8
<i>Imports</i>	13.3	8.0	-19.8
<i>GDP deflator</i>	4.6	4.8	0.0
Tourist arrivals (000's)	2.416,1	2.403,8	2.141,2
Tourist arrivals (%)	0.6	-0.5	-10.9
HICP	2.2	4.4	0.2
Productivity growth	2.0	0.8	-1.1
Employment growth	3.1	2.8	-0.7
Nominal Earnings (%)	3.7	7.4	4.9
Unemployment rate (Labour Force Survey)	3.9	3.7	5.3
Trade balance of goods (% of GDP)	-29.7	-32.2	-28.2
Trade balance of services (% of GDP)	23.1	20.4	21.9
Current account balance (% of GDP)	-11.7	-17.7	-8.5

Following many years of tight labour market conditions and very low unemployment, even with a significant inflow of foreign workers, the slowdown of economic activity has visibly affected employment growth. In 2009 employment (in full time equivalent terms) is estimated to have contracted for the first time in many years by some ¾% compared with the previous year, after growing by an average 2½% annually since 2000. Consequently, the unemployment rate increased steadily in the past quarters reaching 5.3% in 2009.

Inflation, as measured by the Harmonized Index of Consumer Prices (HICP), decelerated significantly in 2009. After having accelerated to 4.4% in 2008, owing mainly to rising energy and commodity prices, and, to a lesser extent, to buoyant credit conditions domestically, inflation decelerated to 0.2% in 2009 as oil prices fell and economic activity weakened. Despite persistent upward pricing pressures in the non-traded sector (restaurants, health and education, for example) other food categories included in the basket – such as meat, fruit and vegetables – contributed significantly in keeping inflation low. These factors are nevertheless temporary and cannot be considered as the main drivers of inflation. Excluding food and energy, inflation is estimated to have remained within the 2–2½ % range.

The current account deficit which soared to 17.7% of GDP in 2008, has narrowed markedly in 2009 to an estimated 8.5% of GDP. Excluding the income outflows relating to investment income results in a deficit of 6.2 % of GDP in 2009. Despite the

abrupt fall in exports of goods and services, imports also adjusted significantly, thus allowing for a narrowing of the external imbalances. Firstly, imports of fuels and lubricants which in 2008 reached €1244.6 million, decreased to €880.6 million in value terms in 2009. Secondly, imports of transport equipment also fell sharply following several years of elevated imports of motor vehicles. In 2009 imports of transport equipment declined in value terms by €414.6 million, or 42.8% compared with the previous year. Thirdly, as a result of the economic slowdown other important categories of imports registered important adjustments in 2009, especially imports for intermediate goods and investment goods by 26.9% and 8.8% respectively in value terms. From the export side the biggest adjustments were in the services account, particularly in transport services (-19.4%), travel services (-16.5%), while, as was mentioned before and other financial services registered positive growth (23.7%) in value terms in the first nine months of 2009. In the income account, it is estimated that the income outflows related to profits of foreign companies continued to register a large negative outflow in the last quarter of the year, albeit smaller compared to the previous year due to the tighter economic situation.

In the credit markets, and while the financial system in Cyprus remained highly liquid and healthy over the past couple of years, credit growth decelerated as a result of lower demand and also tighter credit standards by banks. From a very high level in 2007-08, credit growth decelerated to some 9.7% in December 2009 compared with 32.1% in December 2008. Similar profiles have been observed in credit to the private sector, particularly to households. Bank credit to the private sector which had been expanding by some 33.5% in December 2008, increased by 10.4% on average in 2009, while credit for housing loans which had been growing by 28.5% in December 2008 expanded by 10.9% on average in 2009. From the deposit side, the growth of deposits decelerated to 3.8% in December 2009 compared with 6.8% in December 2008.

### *Medium-term Scenario 2010-2013*

Notwithstanding the high degree of uncertainty for the short-term and medium-term prospects of the economy of Cyprus, the medium-term scenario incorporated in the SP envisages a gradual recovery towards a lower potential GDP growth. In the short term, the scenario takes a conservative stance with regards to the prospects for a rebound in 2010, and in particular the recovery of key sectors of the economy such as tourism and construction.

Overall, the SP assumes that economic activity will not attain its previous levels over the programming period. This profile is reflected in key determinants of demand, particularly imports, exports and investment. However, in a number of key categories the SP envisages a rebound in 2010, for example in imports and for some components of investment, owing to the substantial correction which took place in 2009.

Elsewhere, including exports, a gradual recovery is foreseen in line with the envisaged rebound in foreign demand. Finally, for other key components of demand, primarily investment in construction, the SP assumes a further downward correction, which will likely carry on throughout the programming period. On the other hand, the SP assumes that private consumption will grow in line with disposable income, thus allowing for some rebalancing of household balance sheets, especially compared with the past few years when consumption expanded briskly. Against this background, the current account deficit will widen in 2010 and will continue to register a small negative trend thereafter.

**Table II: External Growth Assumptions 2010-2011**

	2010	2011
<b>EU</b>	<b>0.7</b>	<b>1.6</b>
<i>UK</i>	<i>0.9</i>	<i>1.9</i>
<i>Germany</i>	<i>1.2</i>	<i>1.7</i>
<i>Greece</i>	<i>-0.3</i>	<i>0.7</i>
<b>Euro area</b>	<b>0.7</b>	<b>1.5</b>
<b>Russia</b>	<b>2.3</b>	<b>2.7</b>
<b>USA</b>	<b>2.2</b>	<b>2.0</b>

For the preparation of the underlying macroeconomic framework presented here, the following key assumptions have been made for 2010-13, which are based on information available up to December 30, 2009:

- The EU, USA and Russia will return to positive growth in 2010 (see Table II with External Growth Assumptions) and continue their recovery in 2011 and thereafter.
- The price of crude oil (Brent crude) will average \$76.5 per barrel in 2010. In subsequent years, crude oil prices are assumed to remain at \$80.5 per barrel.<sup>1</sup>
- The euro dollar exchange rate will average around 1.48 in 2010 and 2011.
- Based on the external assumptions for growth it follows that tourist arrivals will increase by 0.3% in 2010, 2.8% in 2011 and slightly above 3% thereafter. Revenues will decline by 1.6% in 2010 and grow by 1% in 2011 and slightly above 3% thereafter.
- Nominal earnings will rise by about 4.5% on average per annum and real earnings by 2% on average during 2010-2013. Hence, real unit labour costs are projected to increase by some 0.8% per annum over the same period.

<sup>1</sup> Assumptions are based on the Autumn Economic Forecast, October 2009, of the European Commission.

- Employment will expand by 0.9% on average per annum over 2010-13, in line with the assumption that the inflow of foreign workers will decline over the medium term.

From the demand side, private consumption growth is projected to exhibit a moderate gradual increase over the medium term, as households continue to correct their balance sheets following consumption growth far exceeding the growth of disposable income in recent years. The SP assumes that private consumption will grow in line with disposable income, or by some 3.3% over the period 2010-13, compared with 4.7% in the period 2005-09. The key drivers are employment growth, which is projected to average the same period by 0.9%, and real wage growth of some 2%.

Public consumption growth is expected to moderate somewhat in the medium term, as a result of the consolidation assumed in the SP. Compared with an average growth of 4.6% over the period 2005-2009, public consumption is set to moderate over the medium term to 1.1% per annum over 2010-13.

Investment is expected to continue to contract over the medium term owing mainly to the projected correction of the construction sector. The envisaged correction is assumed to affect mainly the market for residences, and to a much smaller effect infrastructure or non-residential construction which are assumed to exhibit continued growth over the medium term. Overall, gross fixed capital formation will contract by 1.2% over the period 2010-13, compared with a 4.9% increase during 2005-09. Investment in machinery and equipment is also assumed to decline in 2010 and recover thereafter while investment in transport equipment will exhibit positive growth over the short and medium term, as the significant correction experienced in 2009 is reversed. Specifically, during 2010-13 investment in machinery and equipment will contract on average by around 2% per annum, while investment in transport equipment will expand by around 7½% over the same period, following a very large adjustment in 2009 estimated at 55% decrease in constant prices. The considerable negative stock adjustment which took place in 2009, implies a positive contribution to growth in 2010.

**Table III: Medium Term Framework, 2010-2013**

<i>annual % change</i>	<b>2005-09</b>	<b>2010-13</b>
GDP growth (constant prices)	3.0	2.1
<i>Private consumption</i>	4.7	3.3
<i>Gross Fixed Capital Formation</i>	4.9	-1.2
<i>Exports</i>	0.1	3.5
<i>Imports</i>	2.4	5.3
GDP deflator	3.0	2.0
Tourist arrivals (000's)	2366	2246
Tourist arrivals (%)	-1.7	2.4
HICP	2.2	2.2
Productivity growth	1.0	1.1
Employment growth	1.9	0.9
Nominal Earnings (%)	4.9	4.5
Unemployment rate (Labour Force Survey)	4.5	6.1
Trade balance of goods (% of GDP)	-28.5	-30.4
Trade balance of services (% of GDP)	22.2	21.0
Current account balance (% of GDP)	-10.1	-12.3

Imports are assumed to rebound in 2010 following the precipitous fall witnessed in 2009 when imports of goods and services are estimated to have declined by around 20%. It is forecast that imports will increase by 5% in 2010 and by 5.4% thereafter. In contrast, export growth is projected to remain subdued in 2010 and to gradually recover in 2011-13 in line with the rebound of foreign demand: exports are assumed to expand by 1.2% in 2010 and 4.3% over 2010-13. The subdued export performance assumed in the SP masks differences among various sectors. For example, it is assumed that receipts from tourism will decline by 1½% in 2010, as the world economy wrestles with the ongoing recovery. Of particular importance will be developments in the United Kingdom where following a contraction of some 5% in 2009, GDP is forecast to grow by a mere 1% in 2010. A similarly modest growth is projected in transportation services, following a steep fall in exports in 2009. On the other hand, financial services and other business services are assumed to continue exhibiting more robust growth rates over the medium term. This central scenario implies a widening of the current account deficit to around 11½-12% in 2010 and 2011 and a small deterioration thereafter to 12½-13% by 2013.

Based on this scenario real GDP will expand by some ½% in 2010 and gradually recover to some 3% by 2013.

From a sectoral perspective, the picture is mixed as some sectors are forecast to perform poorly, relative to trend, while others are expected to continue performing satisfactorily. Table IV provides growth rates by sector. The growth rates take into

account the adjusted potential growth rates consistent with the downward revision of the growth potential of the economy. The baseline scenario included in this SP envisages growth significantly below trend in agriculture, construction, hotels and restaurants and to a lesser extent to financial intermediation. A number of rapidly growing sectors, such as other business activities, are assumed to gradually converge to their trend growth levels over the medium term.

**Table IV: Sectoral growth rates**

<i>(annual % change)</i>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Agriculture	-1.5	-2.2	-2.2	-2.2	-2.2
Construction	-6.8	-10.1	-6.5	2.6	2.7
Retail Sector	-6.3	-1.1	0.9	1.6	2.1
Hotels and Restaurants	-7.0	2.4	2.8	3.2	3.2
Financial Intermediation	4.9	2.0	2.0	4.5	4.8
Real Estate and Other Business Activities	-0.1	0.6	1.0	2.5	2.7

The inflation rate constitutes a major uncertainty given the large swings in the price of oil and other commodities. Based on the harmonized definition, inflation averaged 0.2% in 2009 owing to the lower oil prices, as well as the price of food and other imported consumer goods. Based on the external assumptions presented in Table 8 in the Appendix, oil prices will average \$76.5 per barrel in 2010 and \$80.5 per barrel in 2011. The dollar/euro exchange rate is assumed to be around 1.48 \$/€. Inflation is forecast to increase to 2.7 % in 2010 and to stay around 2-2½ % in the medium term.

In the labour market, the medium-term scenario envisages further, albeit relatively smaller, employment gains compared to recent years, mainly resulting from increased participation of foreign workers and a gradual increase in the participation rate of female and old-aged workers. However, a small increase in the unemployment rate is forecast as a result of below-potential growth over the programme period. Thus, while employment growth will remain positive in some sectors, in other sectors more directly exposed to the external sluggish growth, such as hotels and restaurants and construction, some increase in unemployment will be observed. Overall, the gainfully employed population is forecast to continue increasing slightly at around 0.9% on average per annum, albeit at significantly slower pace compared to the past five years. The unemployment rate will rise somewhat to 6.5% in 2010 and decline thereafter to 5.5% as growth resumes in 2013. Productivity growth is expected to average 1.1% per annum over the medium term, which is below the performance recorded over the period 2004-2008. Real earnings are forecast to rise in 2010-2013, and nominal unit labour costs will increase by 3.3% over the same period.



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### **Box 1. Risks to medium-term forecasts**

The risks to growth over the medium term are more balanced than one year ago, though overall risks weigh on the downside.

#### ***External Environment***

- The ongoing economic recovery of the world economy relies heavily on the extraordinary support measures which several countries introduced as the crisis deepened, and particularly in the aftermath of the Lehman Brothers collapse. These measures both to stimulate the economy and to support the banking, and more generally the financial, system will be gradually withdrawn. The precise exit strategy to be followed can play a decisive role in minimizing the possible negative repercussions to the economy;
- While the ongoing recession has partly ameliorated the large imbalances in the world economy, it is feared that policy actions have even exacerbated such imbalances in a number of countries or regions. Once these policy measures are reversed, as expected, over the next few months these countries could be severely affected. Most likely to be affected are those countries which intervened heavily both fiscally, but also in the financial sector, including major trading partners of Cyprus in the EU;
- More volatility of commodity prices, especially oil prices.

#### ***Domestic Economy***

- A deeper correction in the construction sector;
  - Weaker export markets;
  - The vulnerabilities associated with competitiveness losses in recent years could prove more critical, especially as the recovery unfolds and competition for market shares becomes more intense in the short and medium term.
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### **3. KEY ISSUES RELEVANT FOR POLICY**

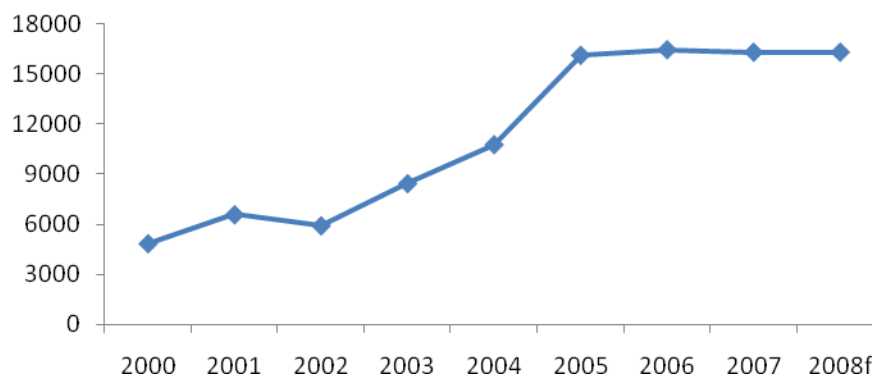
The analysis of the current outlook and medium-term prospects, and the conditions prevailing in the international economy, raises a number of important issues which are relevant for policy. Among these key issues, this section focuses on four areas: (i) the construction sector in Cyprus (ii) potential GDP growth post crisis (iii) competitiveness challenges in the medium term, and (iv) structural reforms.

#### **Construction Sector: Evolution and Outlook for the Private Residences Segment of the Market**

##### *Past developments*

During the period 2000-2007, the number of new residences was on an increasing trend, with the exception of 2002. More specifically, whereas 4800 new houses were built in 2000, the number increased to around 16500 in 2006 and 2007.

**Figure 1: Number of new residencies**



Note: For 2008 the numbers shown are estimates.

The increased significance of the construction sector for the economy of Cyprus is reflected in the share of this sector in the nominal GDP, which rose from 6.3% in 2000 to 8.2% in 2008.

### *Determinants of the boom*

A number of factors are behind this rapid growth of the sector:

- The gradual abolition of restrictions in the movement of capital since 1999, resulted in a considerable increase in the interest of foreigners for residences in Cyprus. These were mainly British, and to a lesser extent Germans and Russians.
- The rise in the confidence for the Cypriot economy, due to the accession of Cyprus in the EU and the ERM II, which gave a very clear signal about macroeconomic stability.
- The interest rate liberalisation in Cyprus, which resulted in a significant decrease in the cost of capital and led to an expansion of credit.

It is important to note that the annual rate of change of stock of residences in Cyprus in 2003 was only 1.9%. Since then, it followed an upward trend, reaching around 5% in 2006. On the other hand, during the period 2000-2006, the annual rate of increase of the population and the number of households, was 1.7% and 2.6% respectively. These observations reveal that during this period, the increased construction activity with regard to new residences was mainly a result of higher external demand.

### *The downside of boom*

The significant growth of the construction sector has been negatively linked by many with an “abnormal” rise of housing prices. In a recent study, Pashardes and Savva<sup>2</sup> calculated a “House Price Index”, which represented an average for all housing types and observed the following:

**Table V: House Price Index and percentage annual change: 1989-2008**

<b>Year</b>	<b>Index 1988=100</b>
1990	116
2000	232
2005	410
2008	649

From this table, one can observe that the average annual increase in house prices between 2000 and 2008 was around 20%, with significant increases in 2000, 2003 and 2008. Using multiple regression analysis for the period 1988-2008, the authors found

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<sup>2</sup> “Factors affecting House Prices in Cyprus: 1988-2008”, Panos Pashardes and Christos Savva, Cyprus Economic Policy, March 2009

that population has the largest effect on house prices<sup>3</sup> and that on average, house prices appear to increase in proportion to construction costs (materials and labour). Moreover, the same study found that house prices also increase with per capita GDP at a ratio 0.6 to 1<sup>4</sup>. An increase in the value of sterling against the euro is also associated with increase in house prices; e.g. an increase in the value of sterling from 1.1 to 1.2 euro is associated with an increase in house prices by around 2.5%. It is important to note that according to the authors, around 40% of variation in house prices in Cyprus during the period under investigation, is not explained by the chosen variables-determinants of this study<sup>5</sup>. Nevertheless, the study still provides a useful explanation of the evolution of housing prices, and especially the role of demand. From the above we can conclude that the increase in housing prices during the past decade, can be attributed mainly to demand factors (population, per capita GDP, foreign demand due to sterling) but also to rising costs including that of land itself.

### *What to expect in the future?*

The continuing international economic crisis and, particularly, the dramatic deterioration of economic environment in key countries for the secondary-residence market (United Kingdom and Russia), will most probably continue to limit the construction of new residences over the next years. This sector has recently experienced a significant slowdown which is expected to continue in the short term, albeit in a more moderate way.

A second important element evident from this analysis is that the construction sector will undergo an adjustment in the medium term, due to the fall in demand and the existence of a considerable backlog of residences available for sale. This adjustment is further complicated by the significant depreciation of the sterling over the past few years.

In the medium term, we expect the domestic and external demand to pick up again, although at significantly lower levels than the pre-crisis levels. Similarly, we expect the housing prices to grow at lower than previously experienced rates, as also pointed out by Pashardes and Savva. In their words: “the rate of increase of two of the four most important factors that fuelled house price increases in the past, the rate of population and GDP growth, are expected to slow down considerably. It is also expected that construction costs will not continue to increase with the previously observed fast pace. Adding the fact that lending institutions are likely to follow a conservative mortgage policy, at least until the damage incurred in their balance-sheet from the economic crisis is repaired, it is unlikely for house prices to increase fast in the foreseeable future”. Without a doubt, the depressed demand worldwide, will have

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<sup>3</sup> An increase in population by 1% is associated with an increase of 3.37% in house prices.

<sup>4</sup> 1% increase in per capita GDP is associated with 0.6% increase in house prices.

<sup>5</sup> A possible additional determinant can be the improvement in the quality of construction.

a dampening effect on construction material prices and therefore house prices in Cyprus.

To conclude, the construction sector which experienced a remarkable performance prior the crisis, will go through a correction over the medium term, and we expect that after an extended adjustment it will continue to expand at more “normal” rates in the future. Similarly, for the reasons stated above, the growth in housing prices will stay at moderate levels.

***Potential GDP Growth: How has it been affected by the crisis?***

The recent financial crisis has affected not only the economic activity but possibly also the potential output (the output level consistent with full utilization of all the available production factors, labor capital and technology) with implications for the long-term economic outlook. According to a Commission’s analysis, unless policies address the new challenges, potential GDP in the EU could fall to a permanently lower level. Firstly, high unemployment tends to lead to a permanent loss of skills. Second, the stock of equipment and infrastructure will decline and become obsolete due to lower investment. Third, innovation may be hampered as spending on research and development is one of the first outlays that businesses cut back on during a recession. [European Commission, DGECFIN, 7/2009]

Projections for potential economic growth prior to the crisis typically predicted a slowdown in potential growth in the European Union from 2% per annum in the next decade to just over 1% from 2020 onwards, due to ageing populations. Projections after the crisis would imply a very dramatic reduction of potential GDP. This is also true for short and medium term estimates of potential GDP: most international organizations have revised downwards their estimates of potential GDP for the period 2010-13.

**Table VI: Potential Growth (Output Gap Autumn 2008 & 2009 estimates)**

	EA	EE27	UK	PT	DE	GR	FR	ES	NL	IT	CY
<b>Pre crisis</b>											
2005-2009	1.7	-	2.0	1.0	1.2	3.6	1.7	2.9	1.9	1.1	3.7
2010-2013	-	-	1.6	1.4	1.5	2.8	1.2	2.1	1.7	1.2	3.3
<b>Post crisis</b>											
2005-2009	1.3	1.5	1.7	0.6	0.9	3.0	1.6	2.1	1.5	0.5	3.0
2010-2013	1.2	1.3	1.3	1.2	1.5	1.3	1.3	0.9	1.0	0.8	1.3

Source: Output Gap Working Group, November 2009

According to the European Commission, a persistent impact on EU’s growth potential might occur as a result of:

- (i) a possible shift in the attitude to risk and higher cost of capital;
- (ii) a slower growth in total factor productivity in the short term and medium term, induced by the reduction in ICT investment and knowledge-based investment such as R&D;
- (iii) a permanent destruction in human capital caused by a surge in long-term unemployment induced by a protracted recession.

### ***Potential GDP methodology and estimates for Cyprus***

One way of calculating potential GDP is using the production function methodology. The production function approach makes assumptions based on the economic theory and focuses on the supply potential of an economy. Potential GDP can be represented by a combination of factor inputs, total capital stock (K) and labor in hours (L), all multiplied with the total factor productivity (TFP). The parameters of the production function essentially determine the output elasticities of the individual inputs.

The “Labour” factor is calculated from the working age population based on some assumptions about participation rates, unemployment and on the net migration. A significant share of the increase in population, and thus labor force, comes from net migration. Over the period 2000-2008 the natural increase in population was about ½% while total population increased by 1½%. The primary reason was an important increase in the net migration (see Table VII). During 2000-2008 net migration increased by an average 8,300 persons per annum while the natural increase of population was of the order of 3,600 persons.

**Table VII: Population Increase (000’s)**

<b>Year</b>	<b>Total</b>	<i>Natural</i>	<i>Migration</i>
<b>2000</b>	<b>6,8</b>	3,5	3,3
<b>2001</b>	<b>7,8</b>	3,8	4,0
<b>2002</b>	<b>9,4</b>	3,1	6,4
<b>2003</b>	<b>15,7</b>	3,3	12,3
<b>2004</b>	<b>19,1</b>	3,5	15,7
<b>2005</b>	<b>17,0</b>	3,2	13,8
<b>2006</b>	<b>13,3</b>	4,0	9,3
<b>2007</b>	<b>10,0</b>	3,6	6,4
<b>2008</b>	<b>8,0</b>	4,4	3,6

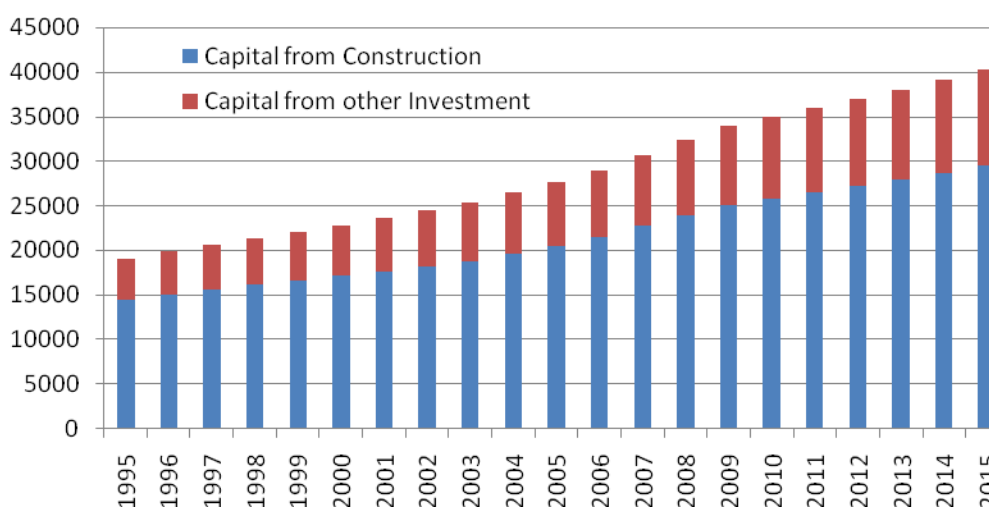
For the measurement of “Capital” the perpetual inventory method can be used, which makes an assumption regarding the initial stock and accumulates annually total

investment (Gross Fixed Capital Formation) while allowing for a depreciation of a fraction of the existing stock. Traditionally all types of capital goods are aggregated.

A close examination of the historic data after 2000 reveals that potential growth was around 4-4½%, with contributions from labor, capital and TFP of 1.8%, 1.7% and 0.8% respectively; during this period the average growth of the capital stock was 4.4% and of labour 2.5%.

What can one say about potential GDP going forward?

**Figure 2: Capital Stock (Constant Prices, €mil)**



A number of issues need to be taken into account when estimating potential GDP in Cyprus:

- The capital stock in Cyprus is primarily made of residential and non-residential buildings, as the chart above reveals. The estimate is of course a crude one, based on a set of simplifying assumptions, though it is still telling of the picture, which emerged over the past two decades.<sup>6</sup> It is clear that the rapid growth of investment in construction undertaken in recent years has tilted the balance in the distribution of capital towards buildings. This implies first that the growth of the capital stock will be affected to the extent that investment in construction will be lower in the future.

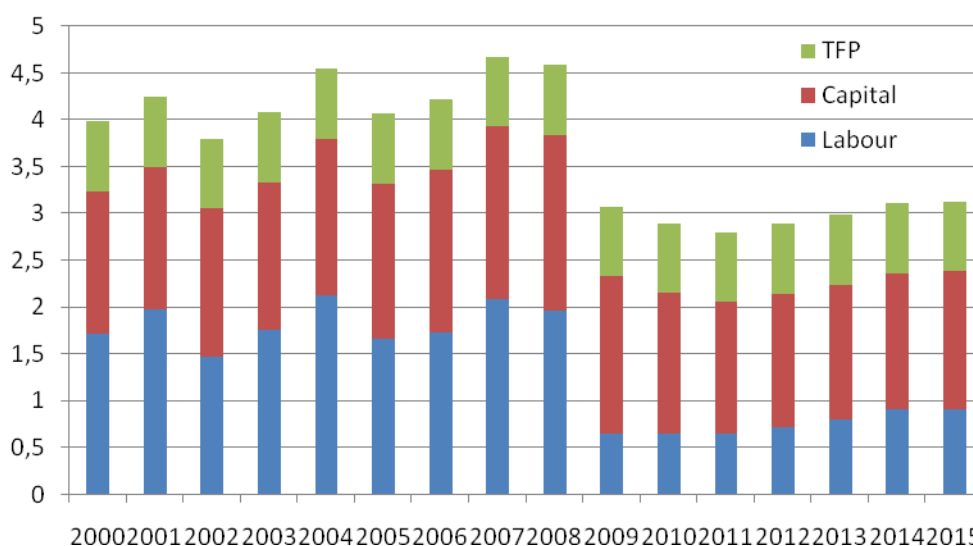
<sup>6</sup> Capital stock was calculated using the perpetual inventory method for the construction part of investment and other investment separately. Construction and other investment depreciation rates are 5% and 7% respectively. Initial capital stock is two times the 1995 GDP and was distributed by 76% in construction and 24% in other investment.

- On the other hand, buildings depreciate at a much lower rate compared with machinery and transport equipment, therefore the decay of the capital stock will be slower.
- In terms of labour, it is evident, although still highly uncertain, that employment growth will be lower in the future, especially as immigration flows slow down. However, with lower contribution from low-skill immigrant workers, overall productivity could be expected to be higher. Similarly, we expect the flow of inactive female workers in the labour force to continue.
- Concerning TFP growth, Cyprus is a services-based economy where most of the TFP growth is derived from factors other than innovation, R&D spending and the like. Indeed, in the case of Cyprus education is the primary driver of productivity, something that cannot be expected to change significantly in the aftermath of the crisis. Thus, the growth of TFP cannot be expected to change significantly over the medium term.
- Note also that the stock of capital continues to grow even when investment falls on a yearly basis. This implies a slower decay of potential GDP in the immediate aftermath of a shock in investment.

What are the likely effects of the crisis on potential GDP growth in Cyprus? According to the latest estimates by the European Commission, potential growth in Cyprus is estimated at 1.3% on average over the period 2010-13, with contributions from labor, capital and TFP of 0.6%, 1.0% and -0.3% respectively. These compare with significantly higher potential GDP, estimated one year ago at some 3.3 percent with contributions from labor, capital and TFP of 1.2%, 1.6% and 0.5% respectively.

While the overall direction of the revision by the European Commission may be in the right direction, the implied composition seems problematic. Specifically, TFP growth is expected to remain at around  $\frac{1}{2}$  -  $\frac{3}{4}$ %, thus broadly unaffected by the crisis since in Cyprus as was argued before, being a services-based economy, is not likely to be affected by cuts in R&D. In terms of the labour force and employment, the estimate for net migration will need to be revised downwards to reflect the changes that are taking place in the economy, and particularly in the tourist and construction sectors. From an average 8,500 thousands net immigrants the SP assumes that, the number will decline to about 4,000-5,000 in the medium term. A more significant fall is assumed for 2009-11. This implies a growth of population of some 0.8% over 2010-15 compared with 1½% before. Finally, for investment and the capital stock, it is assumed that after the programme period, both investment in construction and other investment will return to growth; for construction, it is assumed that growth will reach 2¾%, while for other investment 5½% is consistent with the long-term average. This implies a growth for investments of 3¼% over the 2010-15.

Figure 3: Potential GDP Growth



These assumptions allow us to estimate an average potential GDP growth of around 2¾–3% with contributions from labour, capital and TFP of ½–¾%, 1½% and ¾% respectively. The analytic breakdown is shown on the figure above: this shows a step decline of the growth of potential GDP after 2009, mainly attributed to a lower contribution from labour.

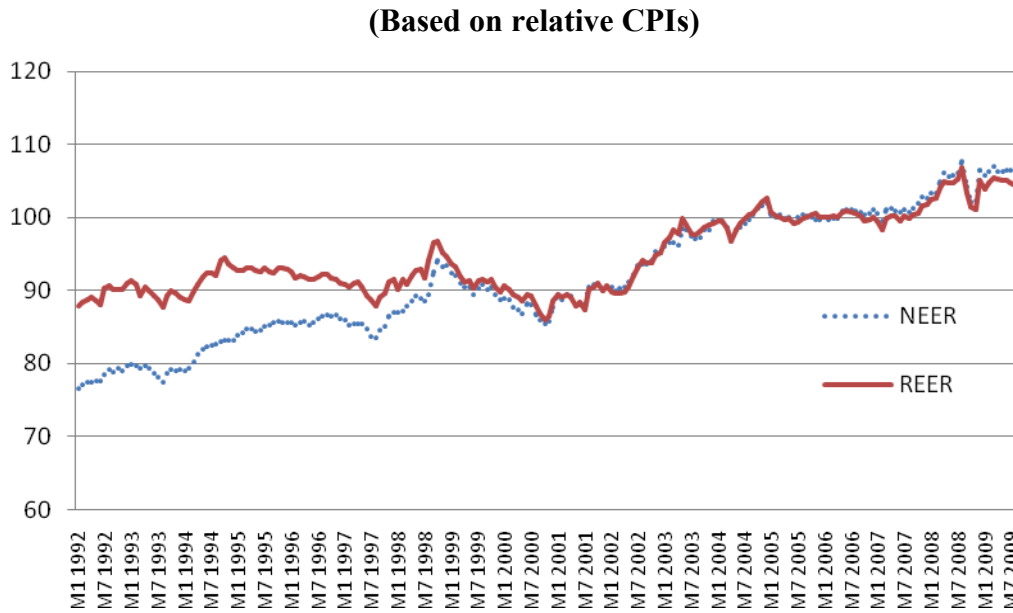
### Competitiveness Challenges in the Medium Term

Almost throughout its recent history, Cyprus has followed a policy of fixed or quasi-fixed exchange rates. Since, 1992 the Cyprus pound has been literally pegged to the ECU and then the euro, and this followed many years of a basket-based peg system. The figures below shows the evolution of the nominal and real effective exchanges rates during this period. The nominal exchange rate shows a continuous appreciation. However, looking at the real exchange rate one distinguishes four discrete periods. Between 1992 and 2000 the real effective exchange rate remained broadly unchanged, fluctuating around the initial level. Between 2001 and 2003, the exchange rate appreciated by just over 10 percent and remained more or less at that level until the end of 2008. Since then, the exchange rate appreciated again by another 5-6% by the end of 2009.

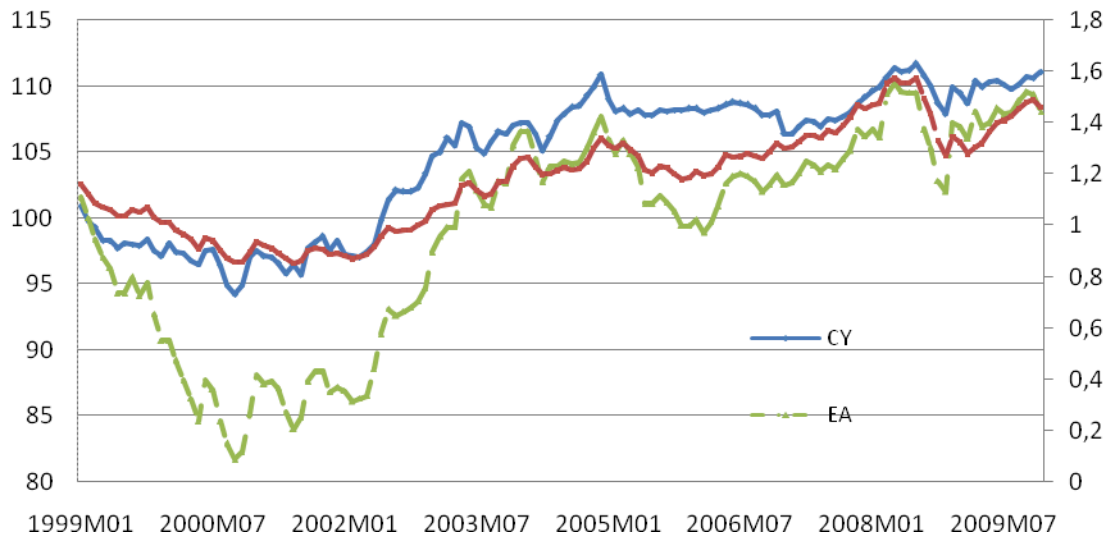
Focusing on the most recent post-euro period, figure 4 reveals that the appreciation of the exchange rate is largely due to movements in the nominal exchange rate, particularly the euro/sterling exchange rate.

Figure 4: The Nominal and Real Effective Exchange Rates





**Figure 5: Harmonized Competitiveness Indicator (1999=100) and \$/€**



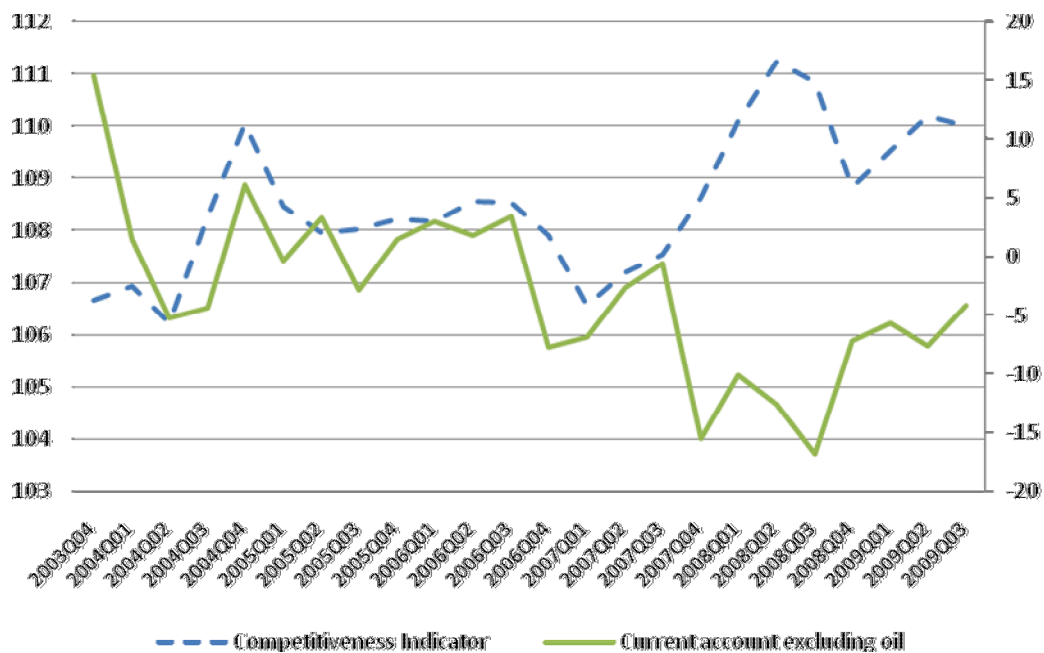
Another piece of information is provided in the figure above, which shows the ECB's competitiveness indicator that takes into account also the intra-euro exchange rates. Specifically, these indicators are constructed using the same methodology and data sources that are used for the euro effective exchange rate. However, while the competitiveness indicator of a specific country takes into account both intra and extra-euro area trade the euro effective exchange rate is based on extra-euro area trade only. The figure which compares Cyprus with the euro area, also plots the euro/dollar exchange rate for comparison for the period after 1999 only.

The same overall picture emerges except that this indicator shows almost no change in competitiveness since 2005. Comparing, however, the indicator for Cyprus with the

euro/dollar exchange rate, one can clearly see the strong correlation between the two series, a finding that suggests that movements in the real exchange rate, and therefore competitiveness are, to a large degree, influenced by nominal exchange rate movements. Overall, it is evident that competitiveness pressures have arisen essentially owing to changes in nominal exchange rates, and are not due to relative price differentials. This implies that profit margins are being squeezed and profitability is falling.

Nevertheless, the current account increased considerably in recent years, due to an increase in commodity prices. Is there any evidence that competitiveness pressures have been behind this deterioration of the external balance?

**Figure 6: Non-oil current account and competitiveness**



The evidence is not clear at all yet, though the effects may be more lagged. The figure above plots the non-oil current account with the ECB’s competitiveness indicator. It is evident that there is no particular correlation, especially after 2008.

**Table VIII: Cyprus: Export Margins and Relative Profitability, 2005-2009**

	(Year-on-year rate of change)				
	2005	2006	2007	2008	2009
<b>Export Margin</b>	0.5	-0.1	1.8	-3.1	-8.0
Export Deflator	2.6	2.9	3.5	3.5	-2.0
Unit labor costs	2.1	3.0	1.7	6.6	6.0
<b>Relative Profitability of Exports</b>	0.2	-0.1	-1.1	-1.3	-2.0
Export deflator	2.6	2.9	3.5	3.5	-2.0
GDP deflator	2.4	3.0	4.6	4.8	0.0

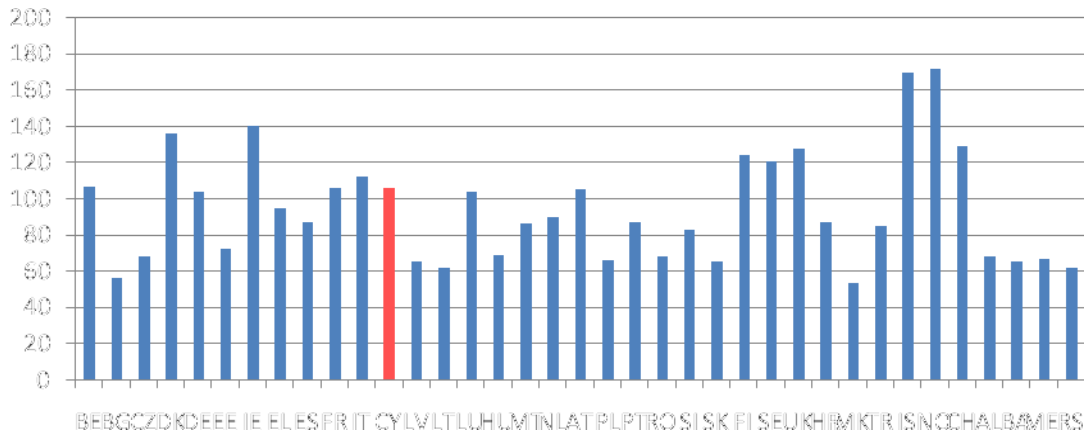
Table VIII shows indicators, which very crudely summarize the relative profitability of exports. Indeed, it is evident that after 2008 export margins have come under pressure, and profitability of exports has been on a declining trend.

These broad, aggregated, figures mask important differences across the different sectors in Cyprus. Clearly, some are lagging behind others in terms of performance and gains in market shares. For example, while tourism is clearly experiencing intense competition and its share in world markets is shrinking, other business services are rapidly expanding and gaining shares. In terms of the tourism sector, the pressures are not so much domestically generated but are the result of the entry, into the world market of new cheaper competitors which Cyprus is unlikely to be able to compete with, even if it managed to keep costs flat.

What are the implications of these and the likely policy lessons?

- Clearly, the environment within a common currency area is challenging both since the exchange rate is exogenously determined and it therefore determines competitiveness vis-à-vis third countries (e.g. the UK), but also because it exposes competitiveness divergences among the members of the zone themselves (e.g. Cyprus versus Spain or Greece).
- Cyprus has indeed become an expensive destination as it is seen below in the chart comparing price levels in 37 European countries, where it is ranked 13<sup>th</sup>. Although controlling cost is crucial, what is more important is to upgrade the tourist product itself. This can be achieved either by upgrading existing facilities, or building new ones. More importantly, given its high cost, the focus of policies should turn towards the development of ancillary infrastructures that, in combination with the private sector, can attract higher income tourists.

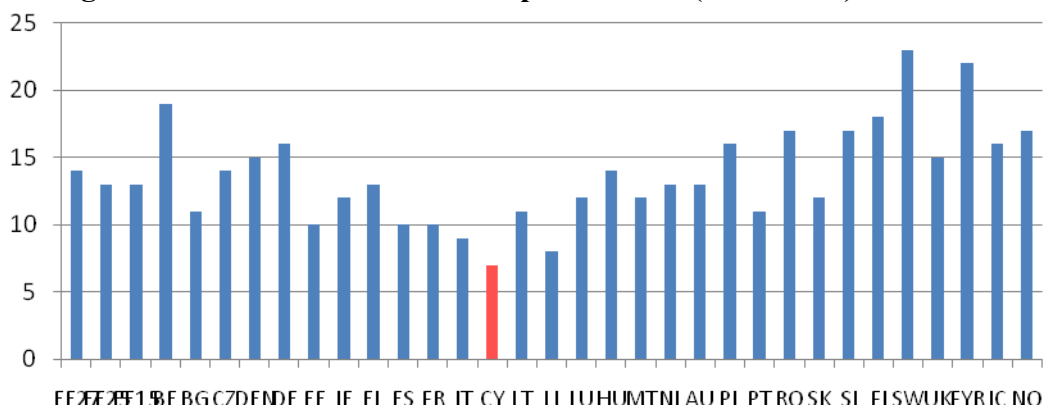
**Figure 7: Comparative Price Levels (EU27=100) - 2009**



Source: Eurostat

- It is further evident that it is crucial to develop further comparative advantages, which lie in business and other services. There again, to stay competitive, Cyprus must continue to supply skilled labour and IT infrastructure which are essential in this sector. The role of the Government is key, and should focus on strengthening further the education system, and enhancing IT spending which can help maintain this comparative advantage, which Cyprus has acquired. For example, while education attainment is very high compared with other countries, especially university education, Cyprus lags in a number of other areas, which should be important to strengthen; for example, comparative data shows computer skills are lower in Cyprus compared with other EU countries.

**Figure 8: Individual's level of computer skills<sup>7</sup> (EU27=100) - 2009**



Source: Eurostat

<sup>7</sup> Percentage of the total number of individuals aged 16 to 74. Level of basic computer skills are measured using a self-assessment approach, where the respondent indicates whether he/she has carried out specific tasks related to computer use, without skills being assessed, tested or actually observed.

- Put simply, enhancing competitiveness requires focus on a number of qualitative factors that are important, in addition to the usual quantitative indicators, which need to be monitored.
- Improving the productivity and efficiency of public services is also of paramount importance, as is keeping public sector wage growth under control, since developments in the public sector affect the private sector.

### **Structural Reform Challenges**

The challenging economic environment, as a result of the international financial crisis, required a co-ordinated approach by the Cypriot authorities in order to implement the national recovery plan and at the same time to push forward with the structural reforms under the Lisbon Strategy.

Under these circumstances, priority was given to promoting the measures of the Recovery Plan, which many of them were consistent with the Lisbon Strategy. In this respect, the progress achieved in the implementation of the National Reform Programme (NRP) of Cyprus is considered satisfactory.

#### **(a) People**

In the evaluation of Cyprus's progress on the implementation of the NRP 2008-2010, the EU has set a country specific recommendation with respect to lifelong learning as follows:

*“Cyprus should continue with the efforts to expand lifelong learning opportunities, especially for the low skilled, unemployed and disadvantaged groups by proceeding further with the implementation of actions within the approved Lifelong Learning National Strategy, including the reforms of the vocational, education, training and the New Modern Apprenticeship Scheme”.*

With respect to the lifelong learning recommendation, a significant effort has been made in the implementation of the lifelong learning strategy by all relevant authorities. The progress made with respect to some education and training indicators is shown below:

- The lifelong learning participation rate (% of 25-64 years old) increased from 8,4% in 2007 to 8,5% in 2008 decreasing the gap with the EU27 lifelong learning rate that was 9,7% in 2007 and 9,6% in 2008 respectively.
- The youth educational attainment measured by the percentage of graduates who completed the upper secondary education level (% of 20-24 years old) was 85,1% in 2008 compared to 85,8% in 2007 and is much higher than the EU27 average

which was 78.5%. The Cyprus educational attainment has also exceeded the EES target of 85% by 2010 (Statistics of Education, 2007/2008).

- The flow of upper secondary education graduates to tertiary education was 80% (36% in Cyprus and 44% abroad) in 2007 compared to 82% in 2006.

With respect to employment indicators, Cyprus has exceeded all targets set by the Lisbon Strategy for 2010 and in some cases even exceeded the national targets which are more ambitious:

- The overall employment rate reached 70.9% in 2008 only 0.1% below the national target and exceeding both the Lisbon target of 70% and the EU27 of 65.9%.
- The employment rate for women reached 62.9% compared to 59.1% of EU27 being above the Lisbon target of 60% and almost reaching the national target of 63%.
- The employment rate for the elderly reached 54.8% in 2008 exceeding both the national target of 53%, the Lisbon target of 50% and the EU27 of 45.6%.

#### ***(b) Business***

The conditions for enhancing competition in the Cypriot economy showed signs of overall progress. The role of the Competition Protection Commission (CPC) has been strengthened, as this is evident from the significant number of decisions concerning anti-trust matters and notified mergers issued, as well as the imposition of fines for infringements in the market. The legal framework for the introduction of energy from Renewable Energy Sources (RES) and of natural gas is at an advanced stage. With respect to reducing the administrative burden, the pilot project in the real estate market was completed and the results were presented to both the public and the private sector. Within the framework of enhancing the procedures relating to the management and absorption rate of EU funds, the new Management Information System (MIS) for the Structural Funds was set in full operation in September 2009. In October 2009, a study was completed by expert consultants on the level of competition obstacles in the professional services and the results will be evaluated by the CPC.

An important development is the further liberalisation of the energy sector. Following Cyprus' accession to the EU, 35% of the electricity market was opened to competition. With effect from 1<sup>st</sup> January 2009, the market has been further liberalised for all "non domestic" consumers (a percentage of 65%) and with effect from 1<sup>st</sup> of January 2014 all consumers of electrical energy will be able to select their supplier according to their best interest. Another important development in the energy sector is the actions promoted to complete the Natural Gas Sector in Cyprus.

The efforts for reducing the regulatory and administrative burden are continued. A central specialised unit set up in the Ministry of Finance is coordinating and monitoring the actions included in the National Action Plan (NAP) for Better Regulation (BR) which was approved by the Council of Ministers in July 2007.

### *(c) Energy and infrastructure*

Reforms in the energy sector are promoted intensively, given the almost exclusive dependency of the economy on oil imports (oil constituted 95.9 % of primary energy consumption in 2008) with very negative impacts on the competitiveness, given the surge in the oil prices. Indicative to this, is the increase in the energy imports to €1,4 bln in 2008 compared to about €1 bln in 2007 (corresponding to 19% of total imports or to a 33% increase), when the electricity demand increased by about 10% only in the same period.

Renewable energy sources contributed to only 4.5% of final energy consumption in 2008, being mainly solar energy used for heating water in households and hotels, a practice which is extensive in Cyprus.

The key challenge of the energy sector is the promotion of sustainable energy production and consumption which can be achieved by:

- Security and Diversification of Energy Supply through actions like the increase of the level of security stocks of petroleum products, the diversification of energy supply and the establishment of the Vasilikos Energy Center for the importation/storage/ regasification of LNG and the importation/storage of petroleum products.
- Promotion of utilisation and production of renewable energy sources through actions like the provision of financial incentives.

### *(d) Research and Innovation*

During the last year, there was satisfactory progress in almost all priorities set in the research sector, including the increase of investment in R&D, the development of research infrastructure, the enhancement of human capital in research and the development of international cooperation. On the other hand, the contribution of industry to R&D expenditure remained at low percentage levels, even though it showed an increase in absolute terms. The main progress is as follows:

- Gross domestic expenditure on R&D increased to €70,1 mln in 2007 from €61,3 mln in 2006, an increase of 14.2%, which is amongst the highest in EU27. Despite

the high increase in absolute terms, the percentage increase was only 0.02%, reaching 0.45%. The main reason for this was the high GDP growth, which was 6.6% in nominal terms.

- The number of human resources employed in research (full-time equivalent) increased by 1.5%, from 1.226 in 2006 to 1.244 in 2007. In particular, the number of researchers increased by 7%, whilst the percentage of women participating in research activities remained at 38% of the total number of researchers.

In the field of innovation, according to the European Innovation Scoreboard 2008 (Strengths and Weaknesses Report), Cyprus improved its position since 2008 considerably, moving from 24<sup>th</sup> to 13<sup>th</sup>.

Two measures, namely “Research and Technology Mediation System” and the “Thematic and Innovation Networks” are expected to significantly improve cooperation links between research organizations and enterprises. The establishment of the Science and Technology Park is progressing the feasibility study was completed, the necessary land has already been expropriated and the access road to the Park has been constructed.

#### *(e) Other Structural Reforms*

With respect to the Reform of the Pension System, the Social Insurance legislation was amended in order to safeguard the long-term financial sustainability of the Social Security Fund, at least until the year 2048. The Ministers of Finance and Labor and Social Insurance will submit to the House of Representatives, during the course of 2010, a draft legislation concerning the upgrading of the investment framework and policy of the Social Insurance Fund, ensuring the effective management of the Fund.

The overall progress regarding the reform of the Health Care System remains slow, due to vested interests that will be affected by the reform, thus prolonging its implementation. According to a study by McKinsey, the reform is expected to have a significant positive budgetary impact.



#### **4. GENERAL GOVERNMENT BALANCE AND DEBT 2009-2013**

##### *Policy Strategy*

The biggest challenge facing policy makers at the current juncture is to address the economic slowdown, which has affected Cyprus considerably through falling external demand. Against this background, the Government must put in place the elements for a sustainable recovery and the creation of new jobs in the medium term and prepare a strategy to reverse the deteriorating public finances and allow for the fiscal correction in the following years, as required by the Stability and Growth Pact. This requires a delicate policy mix, which aims at supporting the ongoing recovery but, at the same time, allow for a gradual withdrawal of support measures and a fiscal consolidation in the medium term. During these challenging times, the key policy objective of the Government is to promote growth and further enhance social cohesion while, at the same time, safeguarding macroeconomic stability through a sound budgetary strategy. A key objective is controlling the public debt and, thus, addressing the long-term sustainability of public finances.

The general government nominal budget balance turned negative in 2009 and is currently estimated to have reached a deficit of around 6% of GDP, compared with a surplus of some 1% in 2008. The deterioration in public finances is mainly attributed to the economic downturn and the precipitous adjustment of the real estate and construction sectors and of public revenues linked to these activities. Expenditure developments also contributed to the deterioration of public finances, mainly owing to higher social transfers and higher investment spending, in line with the European Economic Recovery Plan, as well as compensation of employees.

It is clear now that the turnaround in revenues will not materialise in the short term, and therefore without any corrective measures the deficit would widen further in 2010. The budget balance is estimated to widen reaching 7% of GDP based on an unchanged-policy scenario. Thus, the overriding priority of the Government is to contain the deficit in 2010 to around 6% of GDP – an ambitious goal taking into consideration the challenging environment that Cyprus is facing – and proceed further with the fiscal consolidation thereafter according to the requirements of the Stability and Growth Pact. To achieve this, the Government intends to introduce a number of policy measures, which are necessary in view of the deteriorating revenue situation in 2009, including:

- Town planning amnesty for buildings constructed with minor irregularities opening the way for the issuance of a backlog of outstanding title deeds; a proposal is to be submitted to Parliament in April;

- A systematic attempt to curtail current expenditure; in line with this a Council of Ministers decision was taken on the 1<sup>st</sup> April, 2010;
- Public sector reforms that will address the growing size of civil service and bring about a bridging of the benefit gap with the private sector. A modernization of the public sector is key and can result in leaner and more productive public services. Such a policy will limit expenditure growth and raise overall productivity;
- A reform of the system of social transfers in order to target the needy i.e. the lowest income households.

The achievement of the fiscal targets set by the Government necessitate the adoption of additional measures both on the revenue and on the expenditure side. To this end Government will continue the dialogue with political parties and social partners.

Having regard to the social impact of some of the envisaged fiscal measures, consensus building among all stakeholders will be a challenge. Furthermore, risks are also associated with the timely implementation of the fiscal consolidation measures under review. Notwithstanding these challenges, based on these reforms the cyclically and the structural budget balance is projected to gradually converge to a close to balance budgetary position by 2013.

In parallel, a number of structural fiscal reforms are underway, which should lead to better planning of spending, easier control of expenditures and lead to considerable savings on interest expenditure:

- The implementation of a Medium-Term Budgetary Framework (MTBF), which will institutionalize expenditure rules, give more independence to spending ministries and, at the same time, increase their accountability;
- Enhancement of public debt and cash management systems;
- Further improvement of tax collection by addressing tax evasion and avoidance and strengthening tax administration.

In spite of the economic crisis and slowdown of economic activity—and conscious of the need to safeguard the important achievements so far in reducing public debt—this Stability Programme reaffirms its ambitious Medium-Term Objective of a balanced budget. This represents a cautious approach taking into account the uncertain economic period which we are now entering.

The achievement of the MTO target will imply the facilitation of a sufficient safety margin against the reference value; and allow scope for the automatic stabilizers to operate, thus helping to dampen cyclical fluctuations. Prudent fiscal policies should be framed within a Medium Term Budgetary Framework, and institute a policy

response during “good times”, when cyclical conditions are favourable and unemployment low, thus providing the fiscal room necessary for manoeuvre.

In view of the challenging economic environment, the implementation of sound macroeconomic policies, especially in the area of public finances and income policies, becomes even more important. The responsibility of Cyprus as a euro area member state is to make the right strategic choices and take advantage of the merits of monetary union. Addressing firmly deteriorating public finances, as well as, any imbalances vis-à-vis other euro area member states is of paramount importance especially for a small open economy like Cyprus.

### *Medium-Term Objective*

The country-specific MTO, that is, the cyclically-adjusted balance net of one-off and other temporary measures, of a balanced budget, is expected to be achieved by the end of the programming period. The country-specific MTO has been respected over the period 2006-2008; in 2009 the structural balance turned negative reaching 4% of GDP compared with a surplus of 0.9% of GDP the year before, thus exhibiting a deterioration of the order of 4.9 percentage points of GDP. This is due to the counter-cyclical policies adopted in line with the European Economic Recovery Plan and the dramatic decline in revenues associated with the real estate and construction sectors.

According to the central reform scenario of this Programme, the structural budgetary position is projected to gradually improve, from a projected deficit of 3.5 percent of GDP in 2010 to a deficit of 1.6 percent in 2011, subsequently projected to decline to 0.6 percent in 2012 and reaching a marginal surplus of 0.2 percent by the end of the programming period. The total adjustment over the period 2010-2013 is estimated at 3.7 percent points of GDP, with an average adjustment of the order of 0.9 percentage points of GDP annually. The projected trend of the structural fiscal position is adversely affected by a downward adjustment of potential GDP growth.

**Table IX: Components of Fiscal Adjustment and the Medium-term Objective**

<i>in percent of GDP</i>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total Adjustment 2010-2013</b>
<i>Expenditure developments</i> <sup>8</sup>	-1.3	0.4	3.8	1.2	-0.4	-0.2	-0.3	0.3
<i>Revenue developments</i> <sup>9</sup>	3.3	-2.0	-3.2	1.3	1.1	0.9	0.5	3.8
<b>General Government Balance</b>	<b>3.4</b>	<b>0.9</b>	<b>-6.1</b>	<b>-6.0</b>	<b>-4.5</b>	<b>-3.4</b>	<b>-2.5</b>	<b>3.5</b>

<sup>8</sup> The figures represent the difference from one year to the next as a percentage to GDP.

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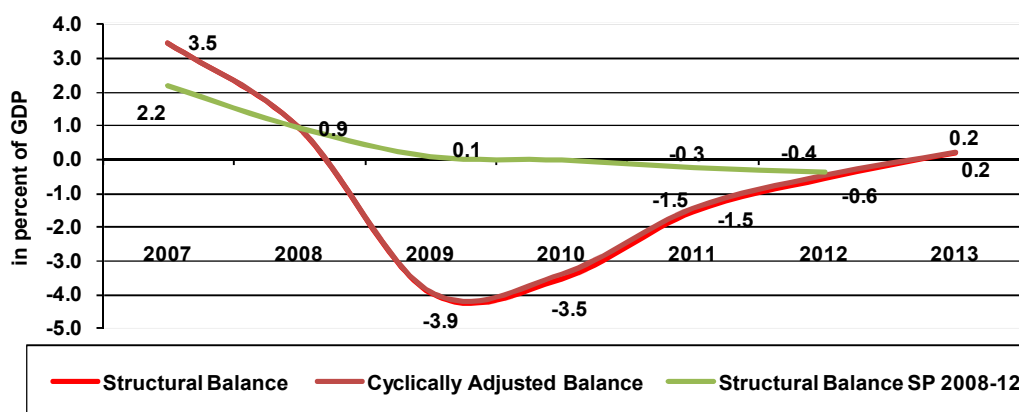
<i>Cyclical Component</i>	-0.1	0.0	-2.1	-2.6	-3.0	-2.9	-2.7	
<b>Cyclically Adjusted Balance</b>	<b>3.4</b>	<b>0.9</b>	<b>-4.0</b>	<b>-3.4</b>	<b>-1.5</b>	<b>-0.5</b>	<b>0.2</b>	<b>-3.6</b>
<i>One-off revenue measures</i>	-	-	-	0.1	0.1	0.1	-	
<b>Cyclically Adjusted Structural Balance</b>	<b>3.4</b>	<b>0.9</b>	<b>-4.0</b>	<b>-3.5</b>	<b>-1.6</b>	<b>-0.6</b>	<b>0.2</b>	<b>3.7</b>

*Note: The figures may not add up to the total due to rounding effects.*

Over the programming period 2010-2013 expenditure is forecast to increase by 0.3 percentage points of GDP. This is due to increased outlays in a number of key areas, including on interest payments, health and education and other social transfers in line with the priorities of the Government, as well as, rising pension outlays<sup>10</sup>.

Following an estimated cumulative decline of revenues by 5.2 percentage points of GDP in the last two years, owing to a decline in current taxes on income and wealth (mainly lower revenues related to the real estate sector), as well as, in taxes on production and imports associated with subdued consumption growth in level and volume terms, revenue is forecast to rebound and rise by 1.3 percent of GDP in 2010 and then gain on average approximately 0.8 percent of GDP annually over the period 2011-2013.

**Figure 9: Cyclically Adjusted and Structural Balance**



*Note: The structural balance and cyclically adjusted balance lines coincide over the period 2007-2010*

### **Nominal Fiscal Balance in 2009**

The public finances deteriorated markedly in 2009 in the midst of the worst economic crisis to affect the world economy since the post second world-war period; the general

<sup>10</sup> Following the gradual increase of the retirement age of civil servants, introduced in 2005, pension outlays declined significantly during the period of adjustment and began to increase again [2009] as the adjustment was completed.

government balance is estimated to have reached a deficit of some 6.1% of GDP compared to a surplus of 0.9% the year before.

On account of a primary budget deficit of some 3½ percent of GDP – the first since 2004 – the general government gross debt is estimated to have reached 56.2% of GDP at the end of 2009, compared with 48.4% at the end of 2008.

The fiscal performance in 2009 reflects significant changes in both expenditures and revenues. Total expenditure is estimated to have increased by 3¾ percentage points, to 46.4% of GDP, while revenue is expected to have contracted by 3.2 percentage points, to 40.3% of GDP.

On the expenditure side, the measures introduced in line with the European Economic Recovery Plan led to a surge in gross fixed capital formation by 1.1 percent of GDP, while the redemption of farming loans accumulated over the period 1974-1998 added to the estimated increase a further 0.2 percent of GDP.

Concurrently, social transfers are anticipated to have risen by around 1.7 percent points of GDP, owing to the implementation of social measures for enhancing social cohesion and increased pension spending (this was due to the expected increase in the number of retirees following the legislated gradual extension of the retirement age in 2005 by three years).

Compensation of employees also contributed to the rise of expenditures, as a percentage to GDP, attributed mainly to a higher employment increase and cost of living allowance (2.8%), as well as, to the granting of salary increases (1.5%) and annual increments (1.2%), leading to 1½ percentage points of GDP increase.

**Table X: General Government Consolidated Accounts**

<i>in percent of GDP</i>	<b>2008</b>	<b>2009</b>	<b>2010 proj.</b>	<b>2011 proj.</b>	<b>2012 proj.</b>	<b>2013 proj.</b>
Current Revenue	43.5	40.3	41.6	42.8	43.6	44.2
Current Expenditure	39.6	42.3	43.5	43.2	43.0	42.7
<i>Interest Payments</i>	2.8	2.5	2.3	2.4	2.5	2.6
Current Balance	3.9	-2.0	-1.9	-0.4	0.6	1.4
Capital Expenditure	3.0	4.1	4.1	4.1	4.0	4.0
<b>General Government Balance</b>	<b>0.9</b>	<b>-6.1</b>	<b>-6.0</b>	<b>-4.5</b>	<b>-3.4</b>	<b>-2.5</b>
Primary Balance	3.7	-3.6	-3.7	-2.1	-1.0	0.1
<b>Government Gross Debt</b>	<b>48.4</b>	<b>56.2</b>	<b>61.0</b>	<b>63.2</b>	<b>63.1</b>	<b>62.3</b>

The negative performance on the revenue side is, mainly, attributed to a decline in the activity of the real estate sector and the significant deceleration of the growth of corporate profits in the financial sector, following the exceptionally buoyant activity of the pre-crisis period. In particular, depressed real estate activity has led to significantly lower receipts from capital gains taxes and land and survey fees estimated to amount to just 1.2% of GDP in 2009 compared with 3.3% the year before, having an impact of 2.1 percentage points of GDP on the budget balance. Similarly, taxes on production and imports exhibited a marked decline, owing to an unfavourable composition of growth towards tax revenue having a particular impact on private consumption amid lower commodity prices.

### *Revenue*

Overall, for 2009 total revenue is estimated to have exhibited a decline by 8.9% falling to 40.3% of GDP compared with 43.5% the year before.

More analytically, total taxes are estimated to have declined at a rate of 17.8%, reducing their share to 26.2% of GDP as compared with 31.3% in 2008.

Taxes on production and imports are estimated to have shrunk by approximately 3.4 percentage points of GDP falling to 15% of GDP, exhibiting a decline of the order of 20%. The negative rate of growth, occurring for the first time, is attributed to a subdued consumption and declining import growth coupled with a fall in commodity prices both in volume and level terms. These were amplified by the temporary application of the reduced VAT rate (from 8% to 5%) on hotel accommodation introduced to address the negative repercussions of the crisis on the tourism sector, combined with a sharp decline in the demand for intermediate inputs for the construction sector both in volume and level terms. Furthermore, the House of Representatives on their own initiative extended the application of the reduced VAT rate to include restaurant services. The relevant law was then referred by the President of the Republic on grounds of unconstitutionality to the Supreme Court to decide accordingly. The Supreme Court upheld the proposed law, paving the way for the approval of legislation by the House of Representatives, with a detrimental impact on public revenues. The relevant bill came into effect as from October 2009.

Furthermore, excise duty receipts declined significantly in 2009, following a subdued performance in 2008 owing to a sharp decline in the demand for motor vehicles. More specifically, registration of motor vehicles fell by 25.7% during 2009 compared with an increase of 5.2% and 33.1% in 2008 and 2007 respectively thus leading to a fall in excise duty receipts by some 8½ % in 2009, equivalent to 0.2% of GDP.

The surge in the activity in the real estate sector, during the period 2006-2007, has led to a significant re-pricing of the value of the assets contributing to an exceptional rate

of growth of land and survey fees over the specific two year period. The activity in real estate, during 2008, began to show signs of decline and these were exacerbated further in 2009. As a result land and survey fees are estimated to have fallen further in 2009 to around 0.8% of GDP in 2009 compared with 1.6% the previous year and 2.6% in 2007.

Taxes on income and wealth are estimated to have exhibited a decrease of some 15% for the year, down to 11.2% of GDP compared with 12.9% in 2008. The decline by 1¾ percentage points of GDP, is attributed to lower receipts derived from capital gain taxes on the sale of immovable property, as the number of properties sold declined by 44.3% in 2009. More specifically, capital gains tax receipts in 2009 are estimated to have fallen, as a percentage to GDP, to 0.4% compared to 1.7% in 2008.

In parallel, corporate tax receipts exhibited a decline of 10%, owing to lower profits of financial corporations, as well as, tourist and construction sector corporations, falling to 4.7% of GDP in 2009 compared with 5.1% the year before.

Following, the base effects in 2008 from the extension of the tax-free income for individuals and of the alignment of the tax brackets, retroactively, as from 1.1.2007, income tax receipts from physical persons in 2009 are estimated to have accelerated and increased marginally as a percentage to GDP, to 2.9% in 2009 compared with 2.6% the year before.

Property income is estimated to have shown a marginal decrease reaching 0.9% of GDP in 2009 compared with 0.8% the year before as dividends from semi-governmental organizations stagnated.

### *Expenditure*

Total public expenditure is estimated to have exhibited an increase at a rate of 7% in 2009 reaching 46.4% of GDP compared with 42.6% the year before. The increase in total expenditure in 2009 can be attributed, mainly, to increased investment expenditure and higher than targeted social payments, as well as compensation of employees.

Social payments are estimated to have risen, as a percentage to GDP, to 13.8% compared with 12.1% the year before, due to an increased emphasis on social cohesion, in line with the objectives of the National Reform Programme. Specifically, social security payments are estimated to have exhibited an increase some 9.5% due to an increase in the level of pensions, in line with wage growth, the number of recipients, as well as, an increase in unemployment, or by some 0.6% GDP compared to 2008.



An important component of the policies aimed at strengthening social cohesion was the introduction of an increased supplementary allowance to be provided to low income households with at least one pensioner, in order to reduce the percentage of these households living under the relative poverty threshold.<sup>11</sup> The fiscal impact of this measure is estimated to be of the order of 0.3 percent points of GDP. The full year impact of this measure will be realised in 2010, as this was introduced in December 2009.

Additionally in 2009, government pensions and gratuities for civil servants exhibited an acceleration, rising at a rate of 20.7%, reaching 2.5% of GDP in 2009 compared with 2% the year before. This is attributed to the fact that the gradual extension of the retirement age from 60 years of age to 63 years introduced in mid 2005 was completed in 2008, leading to a surge in the number of retirees in 2009.

Furthermore, in mid-2008 the Government approved an increase of some 6½% of monetary allowances provided to social assistance recipients, estimated to have an annual impact of 0.2 percent points of GDP.

The rate of growth of compensation of employees and intermediate consumption expenditure has accelerated in 2009 and is estimated to have risen at a rate of 7.5%, increasing as a percentage to GDP to 21.2% in 2009 from 19.3% the year before. This accelerated growth is attributed, on the one hand, to a higher inflation rate that feeds in through the automatic indexation mechanism, also known as the Cost of Living Allowance, and on the other hand to the provision of higher contractual salary increases of 1.5 percent, as well as, to an increase in employment and the automatic annual increments granted to civil servants.

Owing to a falling stock of debt, as well as, to the lower cost of borrowing, interest expenditure is anticipated to have been reduced to 2.5% of GDP in 2009, falling by 0.3 percentage points, compared to the previous year.

In line with the European Economic Recovery Plan and amid a declining economic activity, the Government has decided to increase investment expenditure in order to boost falling demand. This is estimated to have led to a substantial increase in public gross fixed capital formation, increasing at a rate of 37%, and rising to 4.1% of GDP in 2009 compared with 3% the year before.

### *Features of the 2010 Budget*

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<sup>11</sup> Very few pensioners live in absolute poverty in Cyprus, but the risk of elderly people having incomes below 60% of the relatively high median income in Cyprus is high by EU standards; in 2005 relative poverty for households with at least one pensioner was estimated at 52%.



The Budget for 2010 was prepared based on a three-year forecasting period taking into consideration the Medium Term Budgetary Framework of 2010-2012.

The Budget envisages the continuation of the temporary support measures introduced in 2009 for the tourism sector, as well as, of the aforementioned social cohesion measures. The Budget also places emphasis on the reallocation of government expenditures towards growth-enhancing activities and other policy priorities, established in the National Reform Programme for Cyprus.

More analytically, the main changes incorporated in the Budget for 2010 are:

- *Revenue reducing:*
  - Application of the reduced VAT rate on hotel accommodation of 5% instead of 8% for the period 1.1.2010-31.12.2010. Estimated fiscal impact of 0.1 percent of GDP.
  - Temporary suspension of overnight stay fees levied by local authorities on hoteliers for the period 1.1.2010-31.12.2010. Estimated fiscal impact of 0.05 percent of GDP.
  - Reduction of airport taxes levied on airline companies for the period 1.1.2010-31.12.2010. Estimated fiscal impact of 0.1 percent of GDP.
  - Application of the minimum excise duty, prescribed by the *acquis*, on heating oil of €0.02 cent per liter for the period 1.1.2010-31.03.2010. Estimated fiscal impact of 0.1 percent of GDP.
- *Revenue enhancing:*
  - Full year impact from the application of parametric reforms to the Social Security Funds. Estimated fiscal impact of 0.1 percent of GDP.
- *Expenditure increasing:*
  - Introduction of a means tested scheme targeted towards low income households with at least one pensioner aiming at raising their level of income vis-à-vis relative poverty. Eligible households of two must have an annual income less than €15.597. Estimated fiscal impact of 0.3 percent of GDP.
  - Introduction of an island-wide public transportation scheme. Estimated fiscal impact of 0.2 percent of GDP.
  - Introduction of a means tested scheme for tertiary education students' care. Estimated fiscal impact of 0.1 percent of GDP.
- *Expenditure reducing:*
  - Suspension of the creation of permanent posts in the civil service and the employment of temporary personnel for the next eighteen months. Estimated fiscal impact of 0.05 percent of GDP.

The Budget for 2010, which was prepared during the summer of 2009 and approved by the Council of Ministers on the 11<sup>th</sup> of September 2009, was based on a realistic macroeconomic scenario which is consistent with the macroeconomic projections included in this SP and which implies a GDP growth of ½% in 2010 and inflation of some 2¾% for the year.

### *Revenue*

In accordance with the central reform scenario, growth of total revenue is forecast to accelerate to 5.5%, that is, above nominal GDP growth, and thus rising as a percentage to GDP to 41.6% in 2010 compared with 40.3% the year before. The accelerated rate of growth is mainly attributed to the assumed application of the fiscal consolidation measures described below (Table XI), as well as to the assumed reversal of the negative trend of revenues associated with real estate and construction activity. Land and survey fees and capital gains taxes are forecast to exhibit growth of some 4%, following a cumulative loss amounting to 77 percent since 2008.

It is noted that, the increase of the excise duty on petrol, originally envisaged to be introduced in the course of 2009 due to the expiration of the derogation granted upon EU accession, is envisaged to be introduced in the course of 2010. The fiscal impact in 2010 of this measure is estimated at 0.3% of GDP. The application of the minimum VAT rate on building land also envisaged to be introduced in the course of 2010, due to the expiration of a derogation, has not been taken into account in the revenue forecast for 2010, as it is estimated to be negligible.

More specifically, taxes on production and imports are forecast to exhibit an increase of 5.6%, thus rising to 15.5% of GDP in 2010 compared with 15% the year before.

Similarly, current taxes on income and wealth are forecast to exhibit an increase of 6.7%, thus rising to 11.6% of GDP in 2010 compared with 11.2% the year before.

### *Expenditure*

Total government expenditure is projected to increase by 4.9%, slightly above nominal GDP growth, and increase, as percentage to GDP, to 47.6% in 2010 compared with 46.4% the year before.

Subsidies are projected to exhibit an increase in 2010 as a result of the implementation of an action plan to eradicate scrapie neurodegenerative disease among sheep and goat, in line with Council Regulation (EC) 103/2009. As a percentage of GDP, subsidies are forecast to increase to 0.4% in 2010 compared with 0.1% the year before.

Similarly, the declining trend in interest payments are projected to be maintained in 2010, falling to 2.3% of GDP compared with 2½% the year before. This is attributed to a fall in the cost of debt as debt maturing is replaced with new debt at lower interest rates. .

In addition, pressure on expenditures is likely to be exerted from a further increase in the public wage bill and of social transfers. In particular, compensation of employees and intermediate consumption is projected to rise at a rate of 5.5%, reaching 21.4% of GDP in 2010 compared with 21.2% the year before. This is mainly attributable to the automatic indexation of wages and salaries and annual increments provided to public sector employees, offset partly by the reduction of specific operational expenditure items as outlined in the fiscal consolidation plan.

Concurrently, social payments are projected to increase by 6.8%, reaching 14.4% of GDP in 2010 compared with 13.8% the year before. This increase is attributable to the full-year application of the social measures introduced in the second half of 2009 namely the targeted increase of incomes of households with at least one pensioner and the means-tested scheme for tertiary education students; these will be partly offset by the envisaged targeting of existing social schemes as envisaged in the fiscal consolidation plan.

Gross fixed capital formation is forecast to exhibit a moderate increase of 2.4%, remaining at 4.1% of GDP in 2010 compared with 3% in 2009.

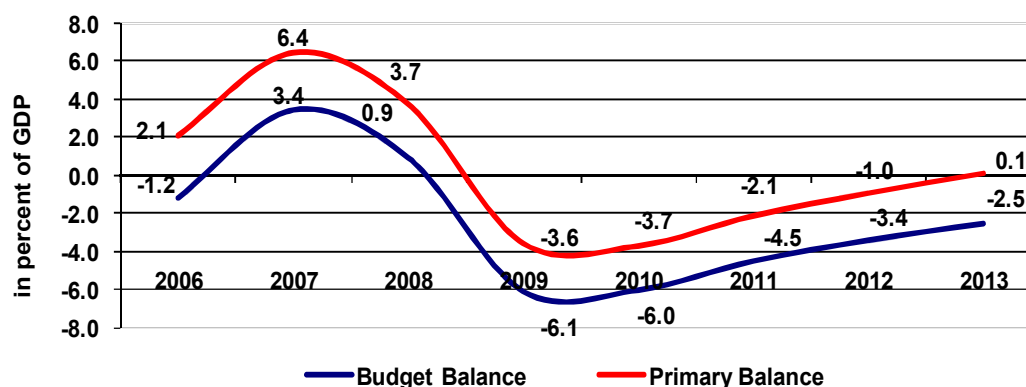
### *Fiscal Consolidation Plan*

The Government is committed to meet its obligations stemming from the revised Stability and Growth Pact and which essentially require Member States to maintain sound public finances and address the issue of long-term fiscal sustainability. The achievement of the country-specific medium-term objective (MTO) will create sufficient safety margin against breaching the Treaty reference value and thus provide room for the full operation of automatic stabilisers. These actions will ensure that the debt-to-GDP ratio remains broadly stable and close to the reference value throughout the programming period and thereafter.

Taking into account the aforementioned measures, the general government balance is projected to be contained in 2010 broadly at the 2009 level of 6% of GDP. The projected budgetary position implies a consolidation effort, against a no policy change scenario, of the order of 1 percentage point of GDP.

The fiscal consolidation measures envisaged for 2010 rely on the containment of expenditure growth, the introduction of the minimum excise duties on petroleum products, as well as, on measures to tackle tax evasion and tax avoidance.

**Figure 10: Overall Nominal and Primary Balance**



As already emphasised, there are significant downside risks to this central reform scenario. These downside risks stem from the timely implementation of the fiscal consolidation measures as consensus building may prove challenging especially for certain measures. Risks also stem from the envisaged impact of the consolidation measures associated with combating tax evasion and tax avoidance, as well as town planning amnesty. Last but not least, downside risks associated with the macroeconomic scenario, which are analysed in Chapter 5 of this Stability Programme, may also materialise. Overall the risks associated with the central reform scenario presented in this Programme are significant.

The fiscal consolidation measures, envisaged to be implemented when consensus is reached among social partners include a town planning amnesty on the issuance of title deeds for buildings constructed with minor irregularities (a measure that will clear a substantial backlog of deed issuances), specific legislative actions to tackle tax evasion and tax avoidance, a systematic attempt to curtail current expenditures, public sector reforms, which will address the growing size of civil service and bring about a normalization of benefits compared with the private sector, and a careful reform of the system of social transfers in order to target better benefits and help more those in greater need thus contributing to an improved social cohesion.

More analytically, the fiscal consolidation measures under review with the envisaged year of adoption and an estimated fiscal impact are presented in the table below. The said table includes also the additional amounts that are required to be agreed in the ongoing dialogue process with political parties and social partners in order to reach the fiscal targets set by the Government.

**Table XI: Fiscal Consolidation Measures**

Measure	Planned year of adoption	Direct budgetary impact <sup>12</sup>			
		2010	2011	2012	2013
<i>I. Public Sector Personnel Expenditure</i>					
1. Reduction in the overall number of employees in the broad public sector (target 1000 per annum) through inter alia minimal creation of new posts in the civil service and termination of the practice of employing temporary personnel. The measure covers both permanent, as well as, hourly paid positions	2010-13	0.05	0.05	0.05	0.05
2. Containment of the rate of growth of total wage bill in the public and broader public sectors	2010-13	-	-	-	-
3. Reduction by 10% of emoluments of State Officers including the President of the Republic, Ministers and Members of Parliament	2010	<0.05		-	-
<b>Impact of Public Sector Public Sector Personnel Measures</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>
<i>II. Targeting of Social Schemes</i>					
1. Introduction of the concept of targeting of social transfers (child benefit allowance, university grant, housing schemes) Eligibility based on income criteria – i.e. high income households will be excluded	2010	0.05	0.2	-	-
2. Termination of the policy of reducing the excise duty on heating oil during the winter season	2010	<0.05	0.05	-	-
<b>Impact of targeting social measures</b>		<b>0.05</b>	<b>0.25</b>	<b>-</b>	<b>-</b>
<i>III. Reduction of Operational and Other Expenditures</i>					
Operational Expenditures - Reduction of administrative expenditures	2010	0.2	0.3	0.2	0.2
Reduction of current transfers	2010	0.1	0.1	-	-
<b>Impact of reduction of operational and other expenditures</b>		<b>0.3</b>	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>

<sup>12</sup> The direct budgetary impact presented is based on the additional impact, in percent of GDP, of each measure compared to the preceding year.

<i>IV. Investment Policy Measures</i>					
Prioritisation of infrastructural projects	2010-12	0.1	0.1	-	-
<i>V. Combating Tax Evasion and Tax Avoidance</i>					
Approval of legislations enabling the Inland Revenue Department to better enforce tax legislation and improving tax compliance. The legislative measures include, among other, the extension of powers of the Inland Revenue Director with a view to empowering him to perform investigations among taxable entities including self employed, the obtaining of financial information of permanent taxable residents provided certain conditions are met and incentives for electronic submission of tax returns for physical and legal persons.	2010	0.1	0.1	0.2	0.2
<i>VI. Town Planning Amnesty</i>					
Town planning amnesty for buildings constructed with minor irregularities and accelerating deed issuances from a substantial backlog created over the years. Town planning amnesty is promoted through the amendment of five laws. The amendments intend to simplify and expedite the complex procedures, that begin from the licensing of the development and end-up with the issuance of title deeds for specific units or development projects and registering them to specific buyers or owners. Additionally, through the proposed amendments buyers unable to obtain a title deed for property purchased, mainly due to the fact that the development was completed with minor irregularities, will under certain provisions be able to do so.	2010-12	0.1	0.1	0.1	-
<i>VII. Other Measures</i>					
1. Application of the minimum excise duties prescribed by the acquis on petroleum products	2010	0.2	0.1	-	-
2. Application of the reduced VAT rate on foodstuffs and pharmaceuticals as prescribed by the acquis.	2011	-	0.2	-	-
3. Reform of the pricing policy of water usage as prescribed by the acquis	2011	-	0.05	<0.05	<0.05
4. Dividend Income from various semi-governmental organisations	2010	0.5	0.5	0.3	0.2

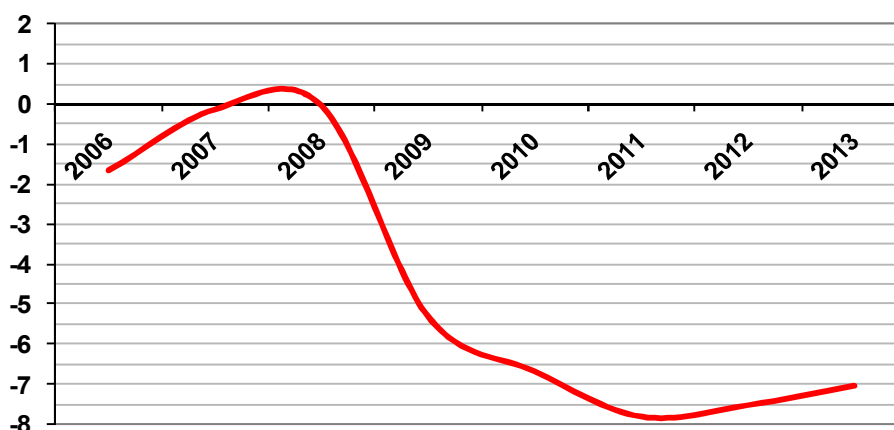
<i>Total Impact of Other Measures</i>	<i>0.7</i>	<i>0.85</i>	<i>0.3</i>	<i>0.2</i>
<b><i>Subtotal as a percentage to GDP</i></b>	<b><i>1.4</i></b>	<b><i>1.85</i></b>	<b><i>0.9</i></b>	<b><i>0.65</i></b>
<i>Of which:</i>				
<i>Revenue Measures</i>	<i>0.9</i>	<i>1.1</i>	<i>0.6</i>	<i>0.4</i>
<i>Expenditure Measures</i>	<i>0.5</i>	<i>0.75</i>	<i>0.3</i>	<i>0.25</i>
<i>VIII. Additional Measures</i>				
<i>Additional measures to be agreed with stakeholders</i>	<i>0.1</i>	<i>0.65</i>	<i>0.6</i>	<i>0.85</i>
<b><i>Total Impact as a percentage to GDP</i></b>	<b><i>1.5</i></b>	<b><i>2.5</i></b>	<b><i>1.5</i></b>	<b><i>1.5</i></b>

### ***Structural Balance and Fiscal Stance***

Following a period of robust economic activity, during which the output gap was almost closed, the economy contracted in 2009 for the first time since 1974. The downturn led to a considerable fall in the utilisation rate of the economy and a re-opening once again of a sizeable output gap. Economic activity is forecast to remain below potential, and is expected, according to the estimates presented in the Stability Programme, to remain below potential over the medium term. Specifically, the output gap which widened to around -5.3% in 2009 from close to zero the year before is expected to deteriorate further in view of the expected subdued economic activity of 2010-2011. In 2010 output gap, as a percent of potential, is forecast to widen to -6.7% in 2010, subsequently peaking at 7.8% in 2011 and then falling somewhat to 7% at the end of the programming period.

Based on this analysis of the cyclical position of the economy, and to provide a clear picture of the underlying fiscal position, the following analysis disentangles trend, cyclical, and one-off fiscal effects.

**Figure 11: Output Gap**



### One-off measures

The substantial improvement in the fiscal position of Cyprus economy in nominal terms during 2006-2008 was achieved without the introduction of any one-off measures, in contrast to the earlier 2002-2005 period<sup>13</sup>. However, during 2009 following a period of exceptional revenues, brought by the boom in the real estate sector during the period 2004-2008, construction and real estate activities stagnated and capital gains tax receipts and land and survey fees exhibited sharp declines. The direct loss of revenue attributed to a slowdown in the real estate sector is estimated to amount to 2.2 percent of GDP in 2009 on top of the 2.1 percent in 2008.

The Stability Programme relies mostly on the implementation of structural measures over the programming period. Specifically, one-off and other temporary measures, envisaged to be implemented over the period of 2010-2012 are estimated to have an annual impact of 0.1% GDP. Budgetary projections are based on the current macroeconomic scenario and the envisaged implementation of the fiscal consolidation measures described above. Owing to the implementation of the fiscal consolidation measures, the tax buoyancy ratio (that is the change in the ratio of revenue to GDP) is forecast to rise to 2.7 in 2010 and subsequently falling at 2.1 in 2011, above historical levels, declining by the end of the programming period to an average of 1.3, slightly below historical levels.

**Table XII: Cyclical Developments and one-off measures**

<i>as a percent of GDP</i>	2008	2009	2010	2011	2012	2013
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<sup>13</sup> One-off revenue measures as a percentage to GDP amounted to 0.3%, 1.7%, 1.1% and 0.9% for 2002, 2003, 2004 and 2005, respectively.



			<b>proj.</b>	<b>proj.</b>	<b>proj.</b>	<b>proj.</b>
GDP growth at constant prices	3.6	-1.7	0.5	1.5	3.0	3.2
<b>General Government Balance</b>	<b>0.9</b>	<b>-6.1</b>	<b>-6.0</b>	<b>-4.5</b>	<b>-3.4</b>	<b>-2.5</b>
Net Interest payments	2.8	2.5	2.3	2.4	2.5	2.6
Potential GDP growth, % change	3¾	2	2¾	2¾	2¾	2¾
GDP output gap <sup>14</sup>	-0.1	-5.3	-6.7	-7.8	-7.5	-7.0
Cyclical budgetary component	0.0	-2.1	-2.6	-3.0	-2.9	-2.7
<b>Cyclically-adjusted balance</b>	<b>0.9</b>	<b>-4.0</b>	<b>-3.4</b>	<b>-1.5</b>	<b>-0.5</b>	<b>0.2</b>
Cyclically-adjusted primary balance	3.7	-1.5	-1.1	0.9	2.0	2.8
One-off revenue measures	0.0	0.0	0.1	0.1	0.1	0.0
<b>Cyclically-adjusted balance net of one-off and other temporary measures</b>	<b>0.9</b>	<b>-4.0</b>	<b>-3.5</b>	<b>-1.5</b>	<b>-0.6</b>	<b>0.2</b>
Structural Improvement	-2.5	-4.9	0.5	2.0	0.9	0.8
Cyclically-adjusted primary balance net of one-off and other temporary measures	3.7	-1.5	-1.2	0.8	1.9	2.8

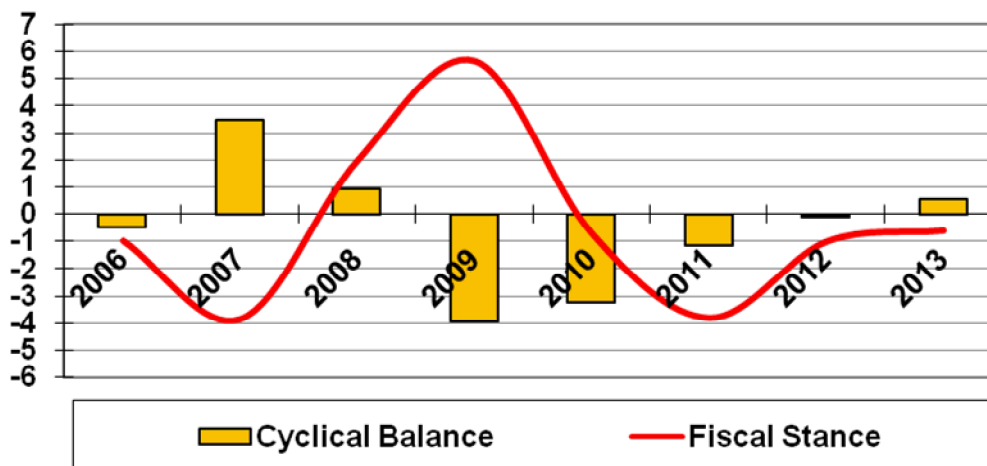
*The cyclically-adjusted balance and structural balance*

Similarly to last year's Stability Programme, indicators of cyclically-adjusted budget balances have been incorporated in the compilation of the Stability Programme 2009-2013, in order to take into account cyclical variations. The cyclically adjusted budget balance is estimated to have declined from a surplus of 0.9% of GDP in 2008 to a deficit of 4% in 2009, and is projected to decline reaching a deficit of 3.4 percent of GDP in 2010 and then exhibit an improvement over the programming period, reaching a closed to balance position by 2013 (Table XII), implying a negative annual fiscal stance averaging 1.1 percent of GDP over the programming period 2010-2013.

Following the negative levels exhibited over the period 2004-2007 peaking at -3.8 percent of GDP in 2007, fiscal stance is estimated to have turned positive in 2008 reaching 2% of GDP, rising further in 2009 and reaching 5.7%. In 2010, fiscal stance is projected to turn negative again reaching approximately -0.7 percent of GDP. Subsequently it is forecast to peak at -3.8 percent of GDP in 2011 and subsequently falling to -1 percent in 2012 and approach -½ percent by the end of the programming period. This is considered appropriate given the deteriorating fiscal position.

**Figure 12: Cyclical Balance and Fiscal Stance  
(in percent of GDP)**

<sup>14</sup>In percent of potential GDP.



A similar picture is also presented for the cyclically-adjusted balance net of one-off measures (Table XII). The cyclically-adjusted balance net of one-off measures, as a percent of GDP, declined in 2008 falling to 0.9% of GDP, exhibiting a further deterioration of 2½ percent points of GDP, compared to the previous year. The exceptional, and hence temporary, revenue, attributed to the real estate boom began to dissipate in 2009, leading to a deterioration of the structural position by 4.9 percent points, resulting in an estimated structural deficit, net of one-off measures, of around 4% of GDP in 2009. The structural balance in 2010 is projected to exhibit an improvement of 0.5 percent points of GDP, thus falling to 3.5% of GDP. The structural adjustment effort is positive over the programming period, as the cyclically adjusted balance, net of one-off measures, is forecast to improve gradually to a deficit position of 1.5 percent of GDP in 2011 declining by the end of the programming period to a marginal surplus of some 0.2 percent of GDP.

## Debt Management

### Debt Levels and Developments

The revised Stability and Growth Pact (SGP) specifies that, in light of the increased economic and budgetary diversity in the EU, “*the medium-term budgetary objectives (MTOs) should be differentiated for individual Member States to take into account the diversity of economic and budgetary positions and developments as well as the diversity of risks to the sustainability of public finances*”.

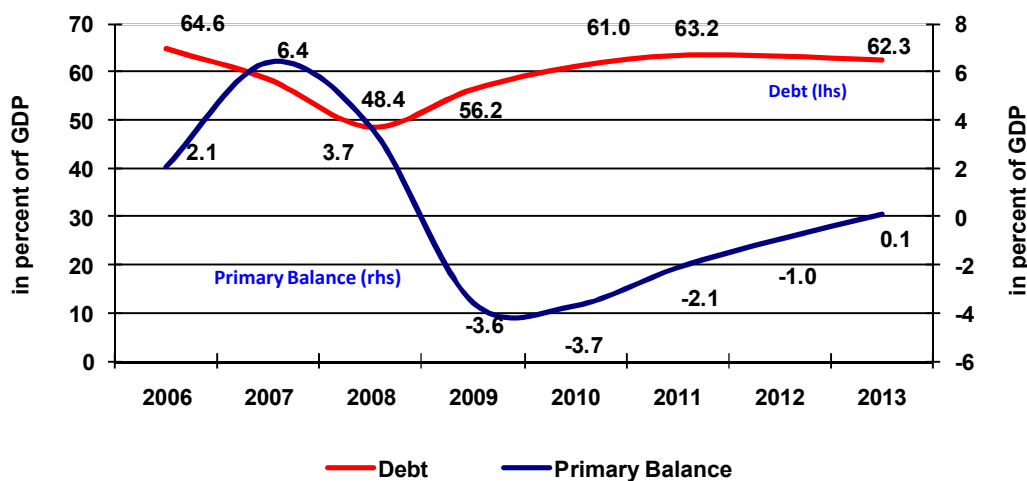
The European Council on the 20<sup>th</sup> of March, 2005 indicated that “*the long-term sustainability of public finances would be supported by the convergence of debt ratios towards prudent values*”. The 'Code of Conduct' also stresses “*the need to ensure the*

*convergence of debt ratios towards prudent levels taking into account the economic and budgetary impact of ageing populations".*

In light of the above, the evolution of public debt has been brought to the forefront of fiscal surveillance. Countries with higher-than-average debt levels are subject to stricter consolidation requirements, while low public debt countries are allowed to sustain small scale fiscal deficits and set relatively less ambitious MTOs.

Following a period of debt consolidation, as a ratio to GDP, the ongoing economic downturn and the worsening fiscal position will inevitably reverse this positive development, at least until the fiscal situation stabilises by the end of the Programme period. The debt-to-GDP ratio is forecast to have risen to 56.2% of GDP compared to 48.4% in 2008, or by some 8 percentage points of GDP. The increase of the debt-to-GDP ratio is attributed to the large primary deficit, as well as, to the stagnation of nominal GDP. This is projected to continue its upward path and rise to around 61% of GDP in 2010 exhibiting a further increase of approximately 4 percent points of GDP.

**Figure 13: Government Gross Debt and Primary Balance**



Based on the central reform scenario, the primary balance as a percentage to GDP, is projected to continue to be in deficit over the remainder of the programming period. It is nevertheless forecast to narrow from 3.7% of GDP in 2010 to 2.1% in 2011 and gradually falling to a close to balance position by 2013.

In accordance, the path of debt-to-GDP ratio is projected to exhibit an increase at the beginning of the programming period and then stabilize declining marginally at the end of the programming period. More specifically, debt-to-GDP ratio is forecast to

rise from 56.2% in 2009 to 61% in 2010, subsequently rising further to around 63.2% over the period of 2011-2012 and falling somewhat to 62.3% by the end of the programming period.

### *Stock-Flow Adjustment*

The Stock-Flow Adjustment (SFA) analyses the factors contributing to changes in government debt, other than government deficits/surpluses. The main items include the accumulation or running down of financial assets. The use of government assets in 2008, equivalent to 4.4% of GDP, reflect the running down of sinking fund deposits accumulated over the years to meet future loan repayment obligations of the government. This was followed in 2009 by an accumulation of government assets, equivalent to 0.9% of GDP, reflecting an over financing at the end of the year in order to meet debt maturity obligations arising early in January of 2010, as well as, differences between cash and accruals.

The contribution of SFA is projected to reach zero in 2010 and forecast to turn slightly negative, in 2011, reaching 0.1% of GDP. In 2012, the SFA is forecast to peak reaching a negative contribution of ½ percent of GDP declining to a negative contribution of 0.1 percent by the end of the programming period.

Table XIII below presents the gross debt level, according to the central reform scenario, and the contribution to change in gross debt for the period of 2007-2009, and projections covering the period 2010-2013.

**Table XIII: General Government – Debt Developments**

<i>as a percent of GDP</i>	<b>2008</b>	<b>2009 est.</b>	<b>2010 proj.</b>	<b>2011 proj.</b>	<b>2012 proj.</b>	<b>2013 proj.</b>
Gross Debt Level	48.4	56.2	61.0	63.2	63.1	62.3
Change in Gross Debt	-9.9	7.8	4.7	2.3	-0.2	-0.8
<b><i>Contributions to Change in Gross Debt</i></b>						
Primary Balance	3.7	-3.6	-3.7	-2.1	-1.0	0.1
Interest Payments	2.8	2.5	2.3	2.4	2.5	2.6
Nominal GDP Growth	8.6	-1.7	2.2	3.5	5.1	5.4
Stock-flow adjustment	-4.4	0.9	0.0	-0.1	-0.5	-0.1
Net Financial debt	46.2	53.3	58.1	60.6	60.9	60.2
Implicit interest rate	5.2	5.1	4.2	4.0	4.1	4.4

### *Debt Management*

Following a challenging environment in the international financial markets in 2008, the situation stabilised in the second half of 2009, thereby improving considerably the financing opportunities of the Government.

The main financing instrument in 2009 was the issue of a €1.5 billion 4-year eurobond (EMTN), which covered more than 50% of total borrowing requirements for the year. The remaining borrowing requirements were met through the issue of a 5-year domestic bond (€315 million) and short-term debt both in the domestic market (€300 million) and foreign market (€628 million).

Borrowing costs were kept at relatively low levels due to a combination of a general reduction of interest rates in 2009 and the use of short-term debt to finance part of the borrowing requirements. During 2009, short-term debt increased as a percentage of net total debt to 9.7% compared to 5.7% the previous year. The level of short term debt, however, is forecast to hover around 9% over the programming period.

With the introduction of the euro as of January 1<sup>st</sup>, 2008 foreign currency debt has virtually been eliminated, as debt issued in other than the euro currency amounted to less than 1% of total debt.

Out of net total debt outstanding at the end of 2009, floating rate issuances amounted to just over €1 billion and consisted mainly of bilateral loans between the Republic of Cyprus and supranational institutions like the EIB and CEB. The majority of market based debt is issued at fixed rate which is forecast to remain the dominant form of debt issuance during the programming period.

The present debt management system is being reformed, so as to be able to adapt better to changing market conditions, including the introduction of the euro. The reforms underway include:

- Setting up a Primary Dealers System (PDS) for the Government bond market, with the use of an electronic trading platform.
- Putting in place procedures and tools that will help in tackling unforeseen contingencies. The options available to the Government are now under consideration.
- Increasing the technical competence of staff in the area of debt management, especially with respect to risk management techniques.
- Improving decision-making mechanisms and the monitoring of the structure and terms of debt so as to better respond to the changing market conditions.

For 2010 the Republic of Cyprus will resort to the international market to finance most of its borrowing requirements and use the domestic market where and if necessary. For 2010 the Government intends to lengthen the maturity profile of the government debt, following considerable issuance of short-term debt during the period 2008-2009. The stabilization of the international markets will allow the

fulfilment of this objective without any significant increase of borrowing costs. This objective is to be achieved by the issuance of longer term securities, in the 7 to 10 year range, and a reduction in outstanding short term debt.

In this framework, the Republic of Cyprus issued in February 2010, through syndication, a nominal amount of € 1 billion in the form of a 10-year EMTN.

The options for covering the remaining financing requirements include mainly the issue of a new 5-7 year EMTN during the second half of 2010.

### ***Balance by Sub-Sector of General Government***

The General Government sector in Cyprus comprises of the central government, the local authorities and the social security funds. The central government accounts for the bulk of the general government deficit, with the local authorities responsible for a small share of some 0.1% of GDP, as a substantial part of their operations and investment programmes are financed by transfers from the central government (Table XIV).

The Central Government deficit is estimated to have increased from a deficit of the order of 2.6% of GDP in 2008 into a deficit amounting to 8.8% of GDP in 2009. In contrast to the above, the Social Security Fund, which is based on a pay-as-you-go system, recorded a surplus of 2.7% of GDP in 2009 compared with a surplus of 3.6% the year before, thus contributing to the improvement in the overall budget balance.<sup>15</sup>

During 2010, it is projected that the Central Government budget balance will stabilize at last year's level of some 8.6% of GDP. The surplus of the Social Security Fund is projected in 2010 to remain at last year's level of 2.7% of GDP, bringing the overall balance of the General Government to a deficit of around 6% of GDP.

The sizeable surplus of the Social Security Funds is linked to the newly introduced parametric reforms and the still-favourable demographics, but also is due to the fact that the Social Security System will continue its maturing phase for another few years, after which the people who are entitled to full benefits will start to retire.

The projected fall in the surplus of the Social Security Fund is mainly due to worsening demographics, and an unchanged social security contribution rate over the period. Specifically, the surplus of the social security funds is projected to decline from a forecast of 2.7% of GDP in 2009 gradually to 1.7% by 2013.

### **Table XIV: General Government Budgetary Developments by Sub-Sector**

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<sup>15</sup> The Government as an employer and as a contributory party to the whole scheme contributes annually approximately 3 percent of GDP.

<i>in percent of GDP</i>	<b>2008</b>	<b>2009 est.</b>	<b>2010 proj.</b>	<b>2011 proj.</b>	<b>2012 proj.</b>	<b>2013 proj.</b>
<i>Net lending by sub-sectors</i>						
<b>General Government</b>	<b>0.9</b>	<b>-6.1</b>	<b>-6.0</b>	<b>-4.5</b>	<b>-3.4</b>	<b>-2.5</b>
Central Government	-2.6	-8.8	-8.6	-6.8	-5.4	-4.2
Local Government	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Social Security Funds	3.6	2.7	2.7	2.4	2.0	1.7

### *Budgetary implications of “major structural reforms”*

The projects and measures promoted within the framework of the implementation of the Lisbon Programme are financed through:

- National resources;
- EU funds; and
- Public Private Partnerships.

The necessary budgetary appropriations for the actions included in the microeconomic and employment section have been provided in the Budgets. The net budgetary expenditure of the microeconomic and employment actions is estimated at 2% of GDP in 2008; this estimation rises to 2.7% in 2009 and 2010.

Furthermore, a number of infrastructure projects in the area of transport and the environment will be co-financed by the Cohesion Fund, whereas a number of measures and actions aiming at enhancing and utilising the production potential of disadvantaged areas and increasing the employability possibilities for targeted groups will be co-financed from the EU Structural Funds under the current EU programming period. During the current programming period of the EU (2007-2013), it will be the objective to co-finance a number of infrastructural projects mainly in the areas of maritime transport and the environment, as well as, measures and actions in other areas via the various instruments of the EU Cohesion Policy. Moreover, it is noted that important infrastructural projects, such as marinas, storage depots for petroleum products and a terminal for importation, storage and vaporisation of liquefied natural gas will be undertaken through public private partnerships.

## **5. SENSITIVITY ANALYSIS OF THE GENERAL GOVERNMENT BALANCE AND DEBT**

### *Alternative Scenarios and Risks*

Notwithstanding the high degree of uncertainty for the short and medium term prospects of the economy of Cyprus, the medium-term scenario incorporated in the SP envisages a gradual recovery toward a revised-downwards potential GDP growth. In the short term, the scenario takes a conservative stance with regards to the prospects for a rebound in 2010, and in particular the recovery of key sectors of the economy such as tourism and construction.

The SP assumes that economic activity will not attain its previous levels over the programme period. This profile is reflected in key determinants of demand, particularly imports and exports and investment. However, in a number of key categories the SP envisages a rebound in 2010, for example in imports and for some components of investment, owing to the observed substantial correction which took place in 2009. In others, including exports, a gradual recovery is foreseen in line with the envisaged rebound in foreign demand. Finally, for other key components of demand, primarily investment in construction, the SP assumes a further downward correction, which will likely carry on throughout the programme period. On the other hand, the SP assumes that private consumption will grow in line with disposable income, thus allowing for some rebalancing of household balance sheets, especially compared with the past few years when consumption expanded briskly, certainly faster than disposable income.

Overall, the risks to growth over the medium term are more balanced than one year ago, though overall risks weigh on the downside. In particular, the ongoing recovery of the world economy relies heavily on the extraordinary support measures, which several countries introduced as the crisis deepened, and particularly in the aftermath of the Lehman Brothers collapse. These measures both to stimulate the economy and to support the banking, and more generally the financial, system will be gradually withdrawn. The precise exit strategy to be followed can play a decisive role in minimizing the possible negative repercussions to the economy. Additionally, while the ongoing recession has partly ameliorated the large imbalances in the world economy, it is feared that in some cases policy actions have even exacerbated such imbalances in a number of countries or regions. Once these policy measures are reversed, as expected, over the next few months these countries could be severely affected. Mostly likely to be affected are those countries, which intervened heavily both fiscally, but also in the financial sector, including major trading partners of Cyprus in the EU. Another risk stems from the high volatility of commodity prices, especially oil prices. In the domestic economy the risks are linked to a deeper



correction in the construction sector, weaker export markets and the vulnerabilities associated with competitiveness losses in recent years could prove more critical, especially as the recovery unfolds and competition for market shares becomes more intense in the short and medium term.

***Sensitivity of Budgetary Projections to Different Scenarios and Assumptions***

To assess the sensitivity of the projected general government balance and debt ratios, alternative assumptions for real GDP growth rates and interest rates have been incorporated in three distinct scenarios. All simulations assume that, while automatic stabilisers would be allowed to operate fully, expenditure targets will not be altered with the exception of the impact on interest payments due to an assumed different interest rate forecast.

***Assumption 1:*** *A more sluggish external recovery that could lead to a subdued demand for exports lowering annual growth by 1 percentage point of GDP over the programming period of the central reform scenario.* Other things being equal, the budget balance is projected to deteriorate by some 0.4 percent of GDP at the beginning of the programming period to a deficit of 6.4 percent of GDP in 2010; the resulting deficit path follows an upward trend reaching 4.2% of GDP by the end of the programming period. The public debt-to-GDP ratio is projected to remain on an upward trend decreasing marginally at the end of the programming period, peaking at 64.3% of GDP at the end of 2012 and then falling slightly to 63.9% at the end of the programming period, 1.6 percentage points of GDP higher compared with the central reform scenario.

**Table XV: Scenarios for Public Finances**

<i>in percent of GDP</i>	2010	2011	2012	2013	2010-2013 4– year average
<b><i>Central Scenario</i></b>					
GDP	0.5	1.5	3.0	3.2	2.0
General Government Balance	-6.0	-4.5	-3.4	-2.5	
General Government Debt	61.0	63.2	63.1	62.3	
<b><i>More sluggish external recovery</i></b>					
GDP	-0.5	0.5	2.0	2.2	1.0
General Government Balance	-6.4	-5.3	-4.7	-4.2	
General Government Debt	61.4	64.0	64.3	63.9	

***Assumption 2:*** *Interest rates remain some 100 basis points above baseline each year during 2010-2013.* In this case, the government deficit would be some 1 percent of GDP higher at the end of the programming period, and the government debt-to-GDP

ratio would be higher by 2.7 percent points of GDP at the end of the programming period.<sup>16</sup>

**Table XVI: Scenario with Higher Interest Rates Cumulative Differential**

<i>in percentage points of GDP with respect to the reference scenario</i>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
General Government Net Borrowing	+0.28	+0.56	+0.82	+1.06
General Government Gross Debt	+0.28	+0.84	+1.66	+2.72

The sensitivity analysis presented here confirms the importance of growth assumptions in affecting the outcome of the general government deficit and debt figures. Accordingly, the envisaged path for the government finances is highly dependent on the realisation of the projected growth rates of real GDP. Also, higher than anticipated borrowing costs can have a considerable cumulative impact on debt over the medium term.

#### *Comparison with Previous Update*

Compared with the forecast presented in the first Stability Programme 2008-2012, and mainly as a consequence of deteriorating macroeconomic conditions, a continued unfavourable external environment and confidence effects from a slowdown in the real estate and tourist sectors, GDP growth has been revised downwards over the programming period. Similarly, the general government budget balance as a percent of GDP and the government debt-to-GDP ratio forecasts, are projected to exhibit a deterioration relative to the last Stability Programme's projections. The deterioration in the projections for public finances is relatively larger than the implied budgetary sensitivity due to the disproportionate impact on public revenues of the decline in the real estate and construction sectors.

The general government balance as a percentage of GDP is estimated to have reached a deficit of 6% in 2009, exhibiting a divergence from last year's estimate of around 4.5 percentage points of GDP. This divergence is mainly attributed to the base effects from the extraordinary decline in revenues of 2009, mainly emanating from the drastic slowdown of the activity in the real estate and financial sector, partly compensated by higher social expenditures and investment expenditures in line with the European Economic Recovery Plan. The general government balance is projected to exhibit a deficit in 2010, amounting to around 6% of GDP, compared to last year's forecast of a deficit of 1.4% of GDP; the deficit is projected to gradually decline and deviate from last year's forecast by approximately 1.2 percent points of GDP by 2012.

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<sup>16</sup> In this scenario real GDP growth is assumed to remain unchanged even though higher interest rates could be expected to have a negative effect on real economic growth.

The general government debt-to-GDP ratio is estimated to exhibit an increase in 2009 reaching 56.2% and then rising further to 61% in 2010, as a result of high primary deficits. The estimate for 2009 and the forecast for 2010 are higher compared to last year's projection, which were reported in the Stability Programme of 2008-2012. The deviations are attributed to the appearance of high primary deficits projected during the beginning of the programming period and their carry over effects, in conjunction with a revised set of projections for GDP levels. Public debt-to-GDP ratio forecast remains above last year's forecast at the beginning of the programming period being higher by 15.6 percentage points of GDP at the end of 2010 and then rising to 18.9 percentage points by 2012, resulting in a gross debt level of 62.3% of GDP in 2013.

**Table XVII: Divergence from Previous Update**

<i>as a percentage of GDP</i>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b><i>GDP Growth</i></b>						
Previous Update	3.8	2.1	2.4	3.0	3.2	n/a
Latest Update	3.6	-1.7	0.5	1.5	3.0	3.2
Difference	-0.2	-3.8	-1.9	-1.5	-0.2	
<b><i>General Government Balance</i></b>						
Previous Update	1.0	-0.8	-1.4	-1.9	-2.2	n/a
Latest Update	0.9	-6.1	-6.0	-4.5	-3.4	-2.6
Difference	-0.1	-5.3	-4.6	-2.6	-1.2	
<b><i>Debt-to-GDP Ratio</i></b>						
Previous Update	49.3	46.8	45.4	44.2	44.2	n/a
Latest Update	48.4	56.2	61.0	63.2	63.1	62.3
Difference	-1.0	9.4	15.6	19.0	18.9	

## **6. QUALITY OF PUBLIC FINANCES**

### *Policy Strategy*

Improvement in the quality of public finances is an important element of fiscal policy for realizing the growth potential and, at the same time, countering the spending pressures that arise from an ageing population, as well as ensuring of long-term sustainability of public finances. Considerable attention is been paid to the quality aspects of public expenditure to ensure that growth enhancing budgetary items are not squeezed out by uncontrolled expenditure costs or by growth in inefficient expenditure categories.

The spending priorities include infrastructural investment, IT-development, research, education and health. On the revenue side, Government policies aim at preserving the current system, characterized by low marginal tax rates and a wide tax base. These are important elements of the Lisbon Strategy for promoting growth and jobs, while simultaneously meeting the objectives of the Stability and Growth Pact.

### *Policy Framework and Structural Reforms*

A number of structural reforms will assist in the development of strong and flexible public finances, in order to resist any external shocks. The phased introduction of a Medium Term Budgetary Framework (MTBF), which commenced in 2006, has helped in containing expenditures by line ministries and, at the same time, promoted the reallocation of expenditure in favour of growth - enhancing activities, consistent with the priorities set by the National Reform Programme.

More specifically, budgetary reforms require that ministries and other government spending agencies redesign and prepare their annual budgets, using new Medium-Term Budgetary Framework (MTBF) and Programme and Performance Budgeting (PPB) methods.

These new methods have been introduced progressively from 2007, with all spending agencies being required to prepare rolling over three-year budget. The first steps for introducing the new PPB framework were taken during 2007, with the implementation of pilot projects, covering three ministries. In 2008, the number of ministries and spending agencies, adopting this approach, increased and it is expected that all agencies will prepare their FY 2011 budgets according to both the traditional (input-based) budget method and the new PPB/MTBF format. This will enable all spending agencies to have at least two “trial” years (FY 2010 and FY 2011), in which the new methods can be developed, tested and refined.

During this trial period, the Treasury Department of the Ministry of Finance has been upgrading the accounting software Financial Management Accounting System (FIMAS) to a newer version that is capable of supporting the new budgetary methods and classifications. The new MTBF/PPB approach will become the official (and only) budget method from FY 2012 onwards.

Overall, the MTBF budgeting should enable managers to plan activities more effectively, by incorporating the amount of financing required to sustain a particular government policy, budget activity or expenditure project over several years.

It is noted that, the budgetary process for 2010, required line ministries to provide forecasts of their expenditure needs for 2011 and 2012. These forecasts were split between current obligations and future needs. The additional available resources were allocated to the high priority areas, such as research and technology, education and health all in line with the objective of redirecting public expenditure to growth-enhancing categories. The areas with marginal or no growth are those of agriculture, security and defence and road transportation.

The policy for reallocation of government expenditure evidently leads to the decline, as a percent to GDP, of expenditures functions such as Defence, and General Public Services, while high priority functions such as Education, Housing and Community Amenities, Health and Social Protection exhibit a rising trend.

**Table XVIII: Functional Classification of Expenditure**

<i>in percent of GDP</i>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. General public services	9.6	10.1	9.9	10.1	9.8
2. Defence	1.8	1.9	2.0	1.8	1.7
3. Public order and safety	2.2	2.1	2.2	2.1	2.1
4. Economic affairs	5.1	4.8	4.7	4.2	4.2
5. Environmental protection	0.3	0.3	0.3	0.3	0.3
6. Housing and community amenities	2.4	2.2	2.5	2.4	2.5
7. Health	3.1	3.0	3.1	2.9	3.0
8. Recreation, culture and religion	1.1	1.2	1.2	1.3	1.2
9. Education	7.1	7.2	7.2	7.3	7.8
10. Social protection	10.0	10.7	10.4	9.8	9.9
<b>11. Total expenditure</b>	<b>42.8</b>	<b>43.6</b>	<b>43.4</b>	<b>42.2</b>	<b>42.6</b>

### *High priority areas*

Total expenditure for *infrastructure*, in the Budget for 2010 and in projects financed through Private Public Partnership agreements, exceed 4% of GDP. Considerable progress has been achieved in the expanding and upgrading of basic infrastructure including the completion of important projects in the area of transport. Newer priorities in the area of transportation and infrastructure are reflected in the Council of Ministers approving a programme of action for the enhancement of public transport on the Island, and in the signing of the final Concession Agreement between the Government and Hermes Airports Ltd, launching the redevelopment of the two airports in Cyprus, using the BOT method. In addition, contracts have been signed for the construction the new Limassol Marina, using the BOT method also.

Total expenditure on *education* is budgeted to increase by approximately 3% in 2010 compared to 2009, reaching approximately 8% of GDP. Expenditure on education is focused mainly on the continuation of computerisation of all primary and secondary schools, the construction and extension of school buildings, the creation, for financing arrangements between Harvard University and the Republic of Cyprus on Public Health and the Environment and upgrading of new research and academic institutions (University of Cyprus, Cyprus University of Technology, Open University). Progress in improving the quality and extension of education in these areas in 2009 was considered satisfactory.

Total expenditure on *health* is budgeted to increase by approximately 4.2% in 2010 compared to 2009, reaching 3.1% of GDP. The Budget for 2010, allocates considerable funds for the operation of two new general hospitals, and for the promotion of the National Health Scheme. The improvement of the quality of the health care system and the effective tackling of the anticipated increases in public health expenditure constitutes a significant challenge. This will be accomplished through the restructuring of public hospitals into autonomous establishments under the wider public sector and the implementation of the National Health Insurance System (NHIS). The main goal of the reform of the health care system is to improve effectiveness via regulated competition and to contain costs.

As in the annual Budget for 2009, the Budget for 2010, shows negligible increases or even decreases in certain cases in the areas of agriculture, security and defence and public administration.

### *Revenue Side*

Improving the quality of public finances from the revenue side has represented an important challenge to the Cyprus authorities covering different aspects. As levels of government revenue and tax structures have macroeconomic and microeconomic consequences, their impact will shape many aspects of the Cyprus economy.

Firstly, the macroeconomic consequences of taxation are materialized by its stabilization, redistribution and (dis)incentive effects. Tax systems must contribute to ensuring budgetary discipline. With the entry of Cyprus to the EMU and the loss of the monetary policy instrument, a better functioning product, labour and capital markets, as well as, the enhanced automatic stabilization potential of fiscal policy have been required. Moreover, with tax policy impacting on both, the authorities are closely monitoring the macroeconomic effects of the tax system.

Secondly, taxes are the main source of financing desirable policies and expenditure priorities. Over the medium-term the Government will require a level of revenue to adequately fund its spending priorities. The tax structure must not only produce such a level of revenue, but in the Cyprus context the introduction of the MTBF places a greater premium on improving the accuracy and sensitivity of revenue forecasts over the medium-term so as to provide a more realistic resource envelope for formulating medium-term expenditure plans. Given the volatility of tax elasticities in recent years, the Ministry of Finance makes cautious estimates of tax bases and tax elasticities, taking account of the impact of asset price changes and the composition of GDP growth in their government revenue projections for the medium term.

Thirdly, taxes – by altering relative prices – distort economic choices. In this connection, the Cyprus authorities are constantly monitoring the tax/benefit system to ensure that “work pays”, without jeopardizing needed support to vulnerable groups in society, in the process enhancing the flexicurity system in this direction. Also, in view of the challenge of globalization consideration is also being given to the equitable taxation of immobile tax bases, while limiting taxation of mobile tax bases within the confines of the EU acquis and tax directives.

## **7. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES**

On March 6, 2009 the House of Representatives adopted a package of reform measures aimed at addressing the long-term sustainability of the Social Insurance Fund (SSF). The new law which came to effect on April 1<sup>st</sup>, 2009, includes a set of parametric reforms which are to be phased in gradually, but also a set of principles to be followed by the Government with regards to the investment policy of the SSF.

Nevertheless, the fiscal position has deteriorated significantly in 2009 due to the recession, which has affected Cyprus' economy and public finances. Accordingly, while the parametric reforms have improved substantially the long-term finances of the SSF, the deterioration of the initial budgetary situation has more than offset this improvement. To return to a sustainable path for public finances it is therefore essential to consider structural reforms, which can permanently reduce expenditures for the general government.

This chapter illustrates the overall situation concerning the sustainability of public finances, looking in more depth at the projections on the evolution of the SSF and other age-related expenditures, and the evolution of the general government expenditures and revenues. In what follows, it is assumed that the budgetary situation evolves in line with the Stability Programme targets for 2010-13. Thereafter, the impact of age related expenditures and the increased revenue are only taken into account, while fixed revenue and expenditure ratio are held constant to their 2013 level.

### **Ageing Working Group Report (Pre-reform scenario)**

According to the last-published actuarial projections for Cyprus, based on the commonly agreed assumptions of the AWG and Eurostat (EUROPOP 2008), a significant rise in pension spending was projected over the next 50 years, with the most dramatic increase occurring from 2030 onwards. Old-age and early retirement pension expenditure were projected, under the unreformed scenario, to increase from 4.7% of GDP in 2007 to 14.7% of GDP in 2060, and other pension expenditure from 1.3% to 2.8% of GDP over the same period.<sup>17</sup>

In total, all age-related expenditure including spending on healthcare and education were projected to rise from around 17% of GDP in 2007 to 27% in 2060. The assets of the Social Security Fund were projected to decline from 36.8% of GDP in 2007 to

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<sup>17</sup> The figures are in current prices calculated as share of nominal GDP (further details are included in the Stability Programme, 2008-2012). The results are therefore different from the Ageing Working Group Projections which are presented in constant prices over the entire horizon.



-182.1% of GDP by 2060.

As a result total general government expenditure was set to increase from 42.9% of GDP in 2007 to 61.7% in 2060 while revenue would remain broadly stable at around 46½% of GDP throughout the period. This would result in a significant increase in public debt by 2060.

### **Adopted Reform Package – 1<sup>st</sup> April 2009**

In view of this, the Government of the Republic of Cyprus, with the social partners, agreed on a set of reform measures for social security, with the basic aim of restoring the long-term sustainability of the SSF, and consequently of the public finances. On March 6, 2009 the House of Representatives adopted a reformed package of expenditure and revenue measures most important of which is the proposed gradual increase of the social security contribution rate. The adopted package included actions with immediate effect as of April 1, 2009, but also measures to be introduced over the next 30 years. In particular:

1. Gradual increases in contribution rates – seven increases by 1.3 percentage points every five years – first increase in April 2009 and last increase in January 2039.
2. Stricter eligibility conditions to old-age pension introduced gradually over the period until January 2012 - increase of the minimum contribution requirement to 10 years of paid contributions (pre-reform - the minimum requirement was 3 years).
3. Maximum limit of 6 years on credits granted to an insured person in the lower band for any period of full time education or approved training after the age of 16 (pre-reform - there was no maximum limit imposed), introduced as of January, 2010.
4. Stricter eligibility conditions for the payment of old-age lump sum at age 68, for those who are eligible for old-age pension at 65 - 6 years of paid contributions (pre-reform - the minimum requirement was for 3 years), introduced gradually over the period until January 2012.
5. Abolition of the right, as of January 2010, to receive unemployment benefit for all those insured persons who take early, or normal retirement, and are eligible for pensionable benefits from a non-contributory occupational pension plan.

Table 7 of the Appendix shows the aggregate results of the projections for social security pensions. The pension expenditure is expressed in percent of GDP. The

results are based on a new set of slightly revised underlying assumptions that take into account the reforms.<sup>18</sup> The revised assumptions – essentially the new participation rates – are driven by the new eligibility conditions to old-age pension to be introduced gradually over the period until January 2012 and the imposition of a ceiling of 6 years on credits granted to an insured person in the lower band for any period of full time education or approved training after the age of 16. These changes are estimated to increase participation rates (Table XIX), especially of females in the age group 55-64, due to the fact that with the new requirements pensions would otherwise decline substantially as females, more so than men, rely more on unpaid contributions and other credits. Overall, this change affects the total female and male participation rates (ages 15-64) respectively by some 2 and 0.2 percentage points respectively by 2060.

**Table XIX: Participation rates for age group 55-64**

<b>Participation rates (Males, age 55-64)</b>						
	<b>2008</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
Pre-reform	75.0	75.8	75.7	76.3	75.1	74.7
Post- reform	75.0	76.7	76.6	77.1	76.0	75.3
<b>Participation rates (Females, age 55-64)</b>						
	<b>2008</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
Pre-reform	41.9	50.3	54.2	56.9	55.5	55.3
Post- reform	41.9	58.4	63.7	66.5	65.6	65.4

With these new assumptions, and taking into account of the recently-adopted parametric reforms, it is estimated that pension spending will continue increasing considerably over the next 50 years, albeit by around 1 percentage point of GDP less than before the reforms, with the most dramatic deterioration occurring from 2030 onwards (Table 7 in Appendix). Both old age and early pension as well as other pensions (which include invalidity and survivor's pension benefits) increase during the period. Specifically, social security pensions are projected to increase from 4.6% of GDP in 2008 to some 15.3% of GDP in 2060. In addition, the pension expenditure of the government employees' pension schemes is projected to increase from 2% to GDP in 2008 to 2.4% in 2060.<sup>19</sup> Health spending is also projected to rise by 0.7 percentage points over the same period, in contrast to education expenditures which are projected to decline by 1½ percentage points of GDP. Overall, all age-related expenditure will rise from 18.7% GDP in 2008 to 29.7% in 2060.

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<sup>18</sup> These have been worked out in collaboration with the European Commission, to reflect as much as possible the new parameters of the SSF.

<sup>19</sup> All these numbers are in current prices calculated as a percentage of nominal GDP. The results are therefore different from the Aging Working Group Projections which are presented in constant prices over the entire horizon.

The aforementioned significant increase in pension expenditure in Cyprus over the period 2007-60 is explained almost exclusively by the deterioration of the dependency ratio during this period, and to a much lesser extent by the increased coverage ratio. The latter is due to the expected increase in the percentage of female insured persons who meet the qualifying conditions for receiving an old-age pension at the age of 63.

This is because of the expected increase in the female labour force participation rates and longer contribution periods. Offsetting this positive contribution is a negative contribution stemming from a small increase in the employment rate as a result of the high expected employment growth, particularly for females, in the first decade; and a marginal decrease in the benefit ratio, primarily due to the price indexation on benefits in the longer-term – in the first couple of decades as the supplementary part of the social insurance scheme matures, the average level of new pensions is expected to increase at a rate higher than that of productivity.

However, revenues will also increase substantially in line with the phased increase of the social security contribution rates: under the post reform scenario, total annual contributions will increase by 3½ percent points of GDP. Therefore, the financial position of the social security fund improves considerably (Table XX). By 2060 under the post reform scenario, the Fund will still hold assets amounting to over 10.1% of GDP, compared with liabilities of 182.1% of GDP under the pre reform scenario.<sup>20</sup>

**Table XX: AWG 2009 and current baseline scenario, % GDP**

<i>in percent of GDP</i>	<b>2007</b>	<b>2008</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
<b>Social Security Fund Pensions (post reform)</b>	4.5	4.6	7.0	8.9	10.6	13.2	15.3
2009 AWG Projections (pre reform)	4.7	4.9	6.7	8.7	10.3	12.7	14.7
<b>Contributions (post reform)</b>	4.1	4.0	5.8	6.8	7.8	7.7	7.7
2009 AWG Projections (pre reform)	4.2	4.3	4.3	4.4	4.5	4.6	4.6
<b>Assets of the SSF (% GDP) (post reform)</b>	36.2	35.2	45.1	48.4	50.9	42.5	10.1
2009 AWG Projections (pre reform)	36.9	37.4	30.9	9.9	-27.2	-88.0	-182.1

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<sup>20</sup> The size of this fund in 2009 was of the order of 40.4% of GDP.

Offsetting this positive development is the deterioration of the short-term fiscal situation. By the end of the Programme period the general government deficit is targeted at 2½% of GDP. The negative balance together with the deteriorating net position of the SSF especially after 2040 leads to ever-larger deficits, and an increase in the gross debt of the general government. The projected accumulation of debt by the central government leads to a significant increase of interest payments, from 2.8% GDP in 2008 to 14.5% in 2060. Based on this scenario the general government debt is projected to increase to around 320% of GDP by 2060.

It emerges from the above analysis that this negative development, which is largely the result of the deterioration of the initial budgetary position, implies that fiscal structural reforms are needed to ensure a permanent correction in expenditures and the overall deficit. It is estimated that with a balanced budget in 2013 the debt level in 2060 will be around 200% of GDP, while a surplus of some 2¾% of GDP is needed to stabilize the debt level at around 60% of GDP.

APPENDIX

**Table 1a: Macroeconomic prospects**

	ESA Code	Year 2008 € million	Year 2008 rate of change	Year 2009 rate of change	Year 2010 rate of change	Year 2011 rate of change	Year 2012 rate of change	Year 2013 rate of change
<b>1. Real GDP</b>	B1*g	15,270	3.6	-1.7	0.5	1.5	3.0	3.2
<b>2. Nominal GDP</b>	B1*g	17,249	8.6	-1.7	2.2	3.5	5.1	5.4
<i>Components of real GDP</i>								
<b>3. Private consumption expenditure</b>	P.3	10,794	8.4	-3.0	0.5	3.5	4.5	4.6
<b>4. Government consumption expenditure</b>	P.3	2,775	6.2	5.8	1.0	1.2	1.2	1.2
<b>5. Gross fixed capital formation</b>	P.51	3,529	8.6	-12.0	-9.0	-3.3	3.5	4.2
<b>6. Changes in inventories and net acquisition of valuables (% of GDP)</b>	P.52 + P.53	117.0	0.8	-3.3	0.4	0.5	0.5	0.5
<b>7. Exports of goods and services</b>	P.6	6,998	-2.1	-11.8	1.2	3.9	4.3	4.8
<b>8. Imports of goods and services</b>	P.7	8,943	8.0	-19.8	5.0	4.6	5.6	6.0
<i>Contributions to real GDP growth</i>								
<b>9. Final domestic demand</b>		17,098	8.1	-3.4	-1.2	1.9	3.7	3.9
<b>10. Changes in inventories and net acquisition of valuables</b>	P.52 + P.53	107	1.0	-4.5	3.6	0.2	0.3	0.4
<b>11. External balance of goods and services</b>	B.11	-1,945	-5.5	6.2	-1.9	-0.7	-1.0	-1.1

**Table 1b: Price developments**

	ESA Code	Year 2008	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
		Level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
<b>1. GDP deflator</b>		113.0	4.8	0.0	1.7	2.0	2.1	2.1
<b>2. Private consumption deflator</b>		111.0	4.8	0.3	3.0	2.3	2.3	2.3
<b>3. HICP<sup>1</sup></b>		109.0	4.4	0.2	2.7	2.0	2.0	2.0
4. Public consumption deflator		111.4	5.3	2.9	2.5	2.3	2.3	2.3
5. Investment deflator		114.0	5.8	-1.8	-0.1	0.3	0.5	0.5
<i>5a. Gross Fixed Capital Formation Deflator</i>		114.1	5.9	-2.2	0.2	0.3	0.5	0.5
<b>6. Export price deflator (goods and services)</b>		110.3	3.5	-2.0	1.8	1.8	1.8	1.8
<b>7. Import price deflator (goods and services)</b>		108.5	4.4	-1.7	3.5	1.8	1.8	1.8
<sup>1</sup> Optional for stability programmes.								

**Table 1c: Labour market developments**

	ESA Code	Year 2008	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
		Level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
<u>1. Employment, persons<sup>1</sup></u> (000's)		379,1	2.8	-0.7	0.0	0.5	1.5	1.5
<u>2. Employment, hours worked<sup>2</sup></u> (thousands)		732,1	2.4	-1.6	0.0	0.5	1.5	1.5
<u>3. Unemployment rate (%)<sup>3</sup></u>		14,5	3.7	5.3	6.5	6.5	6.0	5.5
<u>4. Labour productivity, persons<sup>4</sup></u> (€, 2005 prices)			0.8	-1.1	0.5	0.9	1.5	1.7
<u>5. Labour productivity, hours worked<sup>5</sup></u> (€, 2005 prices)			1.2	-0.1	0.5	0.9	1.5	1.7
<b>6. Compensation of employees (€ million)</b>	D.1	7569,1	9.9	4.9	4.4	4.0	4.6	4.8
7. Compensation per employee (€)		19,966	6.9	5.6	4.3	3.5	3.1	3.3
<sup>1</sup> Persons with occupation, domestic concept, national accounts definition.								
<sup>2</sup> National accounts definition.								
<sup>3</sup> Harmonised definition, Eurostat; levels.								
<sup>4</sup> Real GDP per person employed.								
<sup>5</sup> Real GDP per hour worked.								

**Table 1d: Sectoral balances**

<i>% of GDP</i>	ESA Code	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
<b>1. Net lending/borrowing vis-à-vis the rest of the world</b>	B.9	-17.7	-8.5	-11.5	-12.2	-12.6	-12.9
<i>of which:</i>							
<i>- Balance on goods and services</i>		-11.7	-6.2	-8.5	-9.0	-9.7	-10.4
<i>- Balance of primary incomes and transfers</i>		-5.9	-2.3	-2.9	-3.1	-2.9	-2.5
<b>2. Net lending/borrowing of the private sector</b>	B.9	-18.6	-2.4	-5.5	-7.7	-9.2	-10.4
<b>3. Net lending/borrowing of general government</b>	EDP B.9	0.9	-6.1	-6.0	-4.5	-3.4	-2.5
<b>4. Statistical discrepancy</b>							



**Table 2: General government budgetary prospects**

	ESA Code	Year 2008	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
<i>Net lending (EDP B.9) by sub-sector</i>								
<b>1. General government</b>	S.13	157.6	0.9	-6.1	-6.0	-4.5	-3.4	-2.5
<b>2. Central government</b>	S.1311	-447.3	-2.6	-8.8	-8.6	-6.8	-5.4	-4.2
<b>3. State government</b>	S.1312	M	M	M	M	M	M	M
<b>4. Local government</b>	S.1313	-8.6	-0.0	-0.1	0.0	0.0	0.0	0.0
<b>5. Social security funds</b>	S.1314	613.5	3.6	2.7	2.7	2.4	2.0	1.7
<i>General government (S13)</i>								
<b>6. Total revenue</b>	TR	7,503.3	43.5	40.3	41.6	42.8	43.6	44.2
<b>7. Total expenditure</b>	TE <sup>1</sup>	7,345.7	42.6	46.4	47.6	47.2	47.0	46.7
<b>8. Net lending/borrowing</b>	EDP B.9	157.6	0.9	-6.1	-6.0	-4.5	-3.4	-2.5
<b>9. Interest expenditure</b>	EDP D.41	484.2	2.8	2.5	2.3	2.4	2.5	2.6
<b>10. Primary balance<sup>2</sup></b>		641.8	3.7	-3.6	-3.7	-2.1	-1.0	0.1
<b>11. One-off and other temporary measures<sup>3</sup></b>		0.0	0.0	0.0	0.1	0.1	0.1	0.0
<i>Selected components of revenue</i>								
<b>12. Total taxes (12=12a+12b+12c)</b>		5,395.8	31.3	26.2	27.1	28.2	28.9	29.4
<b>12a. Taxes on production and imports</b>	D.2	3,168.9	18.4	15.0	15.5	16.1	16.6	16.7
<b>12b. Current taxes on income, wealth, etc</b>	D.5	2,220.3	12.9	11.2	11.6	12.1	12.4	12.7
<b>12c. Capital taxes</b>	D.91	6.6	0.0	0.0	0.0	0.0	0.0	0.0
<b>13. Social contributions</b>	D.61	1,332.5	7.7	9.3	9.6	9.7	9.8	9.9
<b>14. Property income</b>	D.4	131.0	0.8	0.9	0.9	0.4	0.4	0.4
<b>15. Other<sup>4</sup></b>		644.0	3.7	3.9	3.9	4.4	4.4	4.5
<b>16=6. Total revenue</b>	TR	7,503.3	43.5	40.3	41.6	42.8	43.6	44.2
<b>p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)<sup>5</sup></b>		6,721.7	39.0	35.4	36.8	37.9	38.8	39.3
<i>Selected components of expenditure</i>								
<b>17. Compensation of employees + intermediate consumption</b>	D.1+P.2	3,336.6	19.3	21.2	21.4	21.5	21.1	20.8
17a. Compensation of employees	D.1	2,426.9	14.1	15.6	15.8	15.9	15.8	15.7
17b. Intermediate consumption	P.2	909.7	5.3	5.6	5.6	5.6	5.4	5.2

<b>18. Social payments</b> (18=18a+18b)		2,079.3	12.1	13.8	14.4	14.9	14.9	14.9
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	21.4	0.1	0.2	0.2	0.2	0.2	0.2
18b. Social transfers other than in kind	D.62	2,057.9	11.9	13.6	14.2	14.7	14.8	14.7
<b>19=9. Interest expenditure</b>	EDP D.41	484.2	2.8	2.5	2.3	2.4	2.5	2.6
<b>20. Subsidies</b>	D.3	70.0	0.4	0.1	0.4	0.4	0.4	0.4
<b>21. Gross fixed capital formation</b>	P.51	508.9	3.0	4.1	4.1	4.1	4.0	4.0
<b>22. Other<sup>6</sup></b>		866.7	5.0	4.7	5.0	4.1	4.1	4.0
<b>23=7. Total expenditure</b>	TE <sup>1</sup>	7,345.7	42.6	46.4	47.6	47.2	47.0	46.7
p.m.: Government consumption (nominal)	P.3	3,015.8	17.5	19.1	19.4	19.4	19.1	18.8
<sup>1</sup> Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.								
<sup>2</sup> The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41, item 9).								
<sup>3</sup> A plus sign means deficit-reducing one-off measures.								
<sup>4</sup> P.11+P.12+P.131+D.39+D.7+D.9 (other than D.91).								
<sup>5</sup> Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.								
<sup>6</sup> D.29+D4 (other than D.41)+ D.5+D.7+D.9+P.52+P.53+K.2+D.8.								

**Table 3: General government expenditure by function**

<i>% of GDP</i>	COFOG Code	Year 2007	Year 2012
1. General public services	1	10.1	10.0
2. Defence	2	1.8	1.7
3. Public order and safety	3	2.1	2.1
4. Economic affairs	4	4.2	4.3
5. Environmental protection	5	0.3	0.5
6. Housing and community amenities	6	2.4	3.4
7. Health	7	2.9	3.3
8. Recreation, culture and religion	8	1.3	1.4
9. Education	9	7.3	8.4
10. Social protection	10	9.8	11.9
<b>11. Total expenditure (=item 7=23 in Table 2)</b>	<b>TE</b>	<b>42.2</b>	<b>47.0</b>

Table 4: General government debt developments

<i>% of GDP</i>	ESA Code	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
<b>1. Gross debt<sup>1</sup></b>		48.4	56.2	61.0	63.2	63.1	62.3
<b>2. Change in gross debt ratio</b>		-9.9	7.8	4.7	2.3	-0.2	-0.8
<b>Contributions to changes in gross debt</b>							
<b>3. Primary balance<sup>2</sup></b>		3.7	-3.6	-3.7	-2.1	-1.0	0.1
<b>4. Interest expenditure<sup>3</sup></b>	EDP D.41	2.8	2.5	2.3	2.4	2.5	2.6
<b>5. Stock-flow adjustment</b>		-4.4	0.9	0.0	-0.1	-0.5	-0.1
<i>of which:</i>							
- Differences between cash and accruals <sup>4</sup>		0.2	0.2	0	0	0	0
- Net accumulation of financial assets <sup>5</sup>		-4.6	0.7	0.0	-0.1	-0.5	-0.1
<i>of which:</i>							
- privatisation proceeds		0.3	-	-	-	-	-
- Valuation effects and other <sup>6</sup>		0	0	0	0	0	0
<b>p.m.: Implicit interest rate on debt<sup>7</sup></b>		5.2	5.1	4.2	4.0	4.1	4.4
<b>Other relevant variables</b>							
6. Liquid financial assets <sup>8</sup>		2.2	2.9	2.8	2.7	2.2	2.1
7. Net financial debt (7=1-6)		46.2	53.3	58.1	60.6	60.9	60.2
<sup>1</sup> As defined in Regulation 3605/93 (not an ESA concept).							
<sup>2</sup> Cf. item 10 in Table 2.							
<sup>3</sup> Cf. item 9 in Table 2.							
<sup>4</sup> The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.							
<sup>5</sup> Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.							
<sup>6</sup> Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.							
<sup>7</sup> Proxied by interest expenditure divided by the debt level of the previous year.							
<sup>8</sup> AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).							

**Table 5: Cyclical developments**

<i>% of GDP</i>	ESA Code	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
<b>1. Real GDP growth (%)</b>		3.6	-1.7	0.5	1.5	3.0	3.2
<b>2. Net lending/borrowing of general government</b>	EDP B.9	0.9	-6.1	-6.0	-4.5	-3.4	-2.5
<b>3. Interest expenditure</b>	EDP D.41	2.8	2.5	2.3	2.4	2.5	2.6
<b>4. One-off and other temporary measures<sup>1</sup></b>		0.0	0.0	0.1	0.1	0.1	0.0
5. Potential GDP growth (%)		3.70	2.00	2.75	2.75	2.75	2.75
contributions:							
- labour		2.0	0.7	0.7	0.8	0.8	0.8
- capital		1.0	0.6	1.5	1.5	1.5	1.5
- total factor productivity		0.7	0.7	0.7	0.7	0.7	0.7
6. Output gap		-0.1	-5.3	-6.7	-7.8	-7.5	-7.0
7. Cyclical budgetary component		0.0	-2.1	-2.6	-3.0	-2.9	-2.7
8. Cyclically-adjusted balance (2 - 7)		0.9	-4.0	-3.4	-1.5	-0.5	0.2
9. Cyclically-adjusted primary balance (8 + 3)		3.7	-1.5	-1.1	0.9	2.0	2.8
10. Structural balance (8 - 4)		0.9	-4.0	-3.5	-1.5	-0.6	0.2

<sup>1</sup> A plus sign means deficit-reducing one-off measures.

**Table 6: Divergence from previous update**

	ESA Code	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
<b>Real GDP growth (%)</b>							
<b>Previous update</b>		3.8	2.1	2.4	3.0	3.2	n/a
<b>Current update</b>		3.6	-1.7	0.5	1.5	3.0	3.2
<b>Difference</b>		-0.2	-3.8	-1.9	-1.5	-0.2	
<b>General government net lending (% of GDP) EDP B.9</b>							
<b>Previous update</b>		1.0	-0.8	-1.4	-1.9	-2.2	n/a
<b>Current update</b>		0.9	-6.1	-6.0	-4.5	-3.4	-2.5
<b>Difference</b>		-0.1	-5.3	-4.6	-2.6	-1.2	
<b>General government gross debt (% of GDP)</b>							
<b>Previous update</b>		46.8	45.4	44.2	44.2	n/a	46.8
<b>Current update</b>		56.2	61.0	63.2	63.1	62.3	56.2
<b>Difference</b>		9.4	15.6	19.0	18.9		9.4

**Table 7: Long-term sustainability of public finances (Reform Scenario)**

<i>% of GDP</i>	<b>2008</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
Total expenditure	<b>42.6</b>	<b>47.7</b>	<b>52.6</b>	<b>56.0</b>	<b>61.8</b>	<b>68.1</b>
<i>Of which: age-related expenditures</i>	<b>18.7</b>	<b>19.8</b>	<b>22.1</b>	<b>23.8</b>	<b>26.6</b>	<b>29.1</b>
Pension expenditure	6.6	9.4	11.3	13.0	15.6	17.7
Social security pension (1)	4.6	7.0	8.9	10.6	13.2	15.3
Old-age and early pensions (A)	3.3	5.1	6.6	8.0	10.4	12.2
Other pensions (disability survivors) (B)	1.3	1.9	2.3	2.6	2.9	3.1
Occupational pensions (if in general government) (2)	2.0	2.4	2.4	2.4	2.4	2.4
Health care (3) <sup>1</sup>	3.0	3.0	3.2	3.3	3.5	3.7
Long-term care (4)( <i>this was earlier included in the health care</i> ) <sup>1</sup>	0.006	0.006	0.007	0.008	0.010	0.011
Education expenditure (5) <sup>1</sup>	7.8	6.0	6.2	6	5.9	6.2
Other age-related expenditures (6)	1.3	1.4	1.4	1.5	1.5	1.5
Interest expenditure	2.8	3.6	5.3	7.5	10.3	14.5
Total revenue	<b>43.5</b>	<b>44.9</b>	<b>45.9</b>	<b>46.9</b>	<b>46.8</b>	<b>46.8</b>
<i>Of which: property income</i>	<i>1.3</i>	<i>0.7</i>	<i>0.7</i>	<i>0.7</i>	<i>0.7</i>	<i>0.7</i>
<i>Of which: from pensions contributions (or social contributions if appropriate)</i>	<i>5.5</i>	<i>7.7</i>	<i>8.9</i>	<i>10.2</i>	<i>10.1</i>	<i>10.1</i>
Pension reserve fund assets	<b>35.2</b>	<b>45.1</b>	<b>48.4</b>	<b>50.9</b>	<b>42.5</b>	<b>10.1</b>
<i>Of which: consolidated public pension fund assets (assets other than government liabilities)</i>	<i>0.4</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
Labour productivity growth (hours)	1.2	2.7	2.0	1.8	1.7	1.7
Real GDP growth	3.6	3.9	2.6	2.3	1.8	1.8
Participation rate males (aged 15-64)	81.4	84.2	83.4	83.0	83.0	82.9
Participation rates females (aged 15-64)	65.8	74.4	75.2	75.1	75.2	75.2
Total participation rates (aged 15-64)	73.5	79.3	79.3	79.1	79.2	79.1
Unemployment rate	3.7	3.4	3.4	3.4	3.4	3.4
Population aged 65+ over total population	12.4	15.0	17.9	20.0	23.2	26.2

<sup>1</sup> Ageing Working Group calculations

**Table 8: Basic assumptions**

	<b>Year 2008</b>	<b>Year 2009</b>	<b>Year 2010</b>	<b>Year 2011</b>	<b>Year 2012</b>	<b>Year 2013</b>
<b>Short-term interest rate (annual average)</b>	4.5	1.25	1.0	1.5	2.0	2.5
<b>Long-term interest rate (annual average)</b>		4.0	4.1	4.4	4.5	4.5
<b>USD/€ exchange rate (annual average)</b>	1.47	1.39	1.48	1.48	1.48	1.48
<b>Nominal effective exchange rate</b>	3.6	0.8	1.0	0.0	0.0	0.0
<b>World growth excluding EU</b>	3.3	-0.25	4.25	5.0	5.0	5.0
<b>EU GDP growth</b>	0.8	-4.1	0.7	1.6	2.3	2.4
<b>Growth of relevant foreign markets [UK]</b>	0.5	-4.8	0.9	1.9	2.9	2.9
<b>World import volumes. excluding EU</b>	4.6	-12.6	4.6	5.0		
<b>Oil prices (Brent. USD/barrel)</b>	98.5	61.3	76.5	80.5	80.5	80.5