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Flash Update

Aid package for Greece finalized but medium-term risks to solvency still large

Generali Investments Research

Yesterday, the eagerly awaited details of the EU/IMF bailout package for Greece were revealed. In exchange for € 110 bn in loans over a three-year time period, Greece has to implement tough austerity measures amounting to 13% in terms of GDP.

In this Flash Update we take a quick look at the terms and conditions of the package. More importantly, we ask the question how the medium-term sustainability of public finances in Greece has changed on the basis of the new program.

We conclude that the near-term risks of default have fallen significantly as a result of the bailout package but see large challenges on a medium-term view. Key risk is the political will in Greece to implement the consolidation "marathon" required. A debt restructuring, while politically difficult for the euro area as a whole, remains a possibility on a longer-tem view.

The eagerly awaited details of the EU/IMF bailout package were released yesterday. In total, Greece will receive loans worth € 110 bn over the next three years from the EU (€ 80 bn) and the IMF (€ 30 bn) with the euro area member countries contributing in line with their respective capital holdings at the ECB. The average interest rate to be paid will be around 5% for the euro part of the loan and slightly less for the IMF part which is way below current markets rates (10-year GGBs are still trading at roughly 9%). Some market participants had feared a debt restructuring to be part of the package. This is not the case.

In exchange, Greece has agreed to tough additional austerity measures. In total, they amount to 13% in terms of GDP, with most of the adjustment taking place in 2010 already (about 8%). Among other things, pensions and salaries in the public sector will be cut further (amounting now to a total of roughly 30%). The retirement age, now 65 years for men and 60 years for women, will be lifted (i.e. "linked" to the average life expectancy), and early retirement will be curtailed. The value added tax will be raised to 23%. It had already been raised in March from 19% to 21%.

The forecasts underlying the new program are given in the table below. In contrast to the earlier March package, the Greek government now expects the deficit to fall to less than 3% in terms of GDP in 2014. This is up from the year 2012 before but the earlier program was never deemed realistic by markets. Likewise, the growth trajectory now included, with real GDP dropping 4% in 2010 and 2.6% in 2011 seems a lot more realistic in light of the recession the austerity measures will bring about.

Forecasts under Greece's new fiscal adjustment programme

	2010	2011	2012	2013	2014
GDP	-4.0	-2.6	1.1	2.1	2.1
Deficit (% of GDP)	-8.1	-7.6	-6.5	-4.9	-2.6
Debt (% of GDP)	133.3	145.1	148.6	149.1	144.3

Source : Greek finance ministry document

A final go ahead for the loans is expected this week from both the IMF Board and the euro area. This Friday on May 7th, the heads of state of the euro group will meet to approve the package. Euro area member states are expected to agree with the bailout plan, including Germany, where both the lower and the upper house will vote on the aid this Friday. While some lawmakers may have clenched teeth, we have little doubt that the bailout package will be approved, now that the austerity measures were strengthened again.

Near-term risk of default significantly lower…

With the bailout package finalized this week, first payments will come in time to meet the € 8.2 bn redemptions due on May 19. Moreover, since loans were made available for the next three years, the near-term risk of default has fallen significantly. Finally, the ECB has announced that – in recognition of the consolidation efforts and the coming aid package - it will continue to accept all Greek government bonds as collateral in its refinancing operations, even if the credit rating continues to fall (the BBB- rating continues to apply for all other government debt), thereby additionally taking off pressures from GGBs.

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In contrast, we are a bit concerned that the total package falls short of the € 130 bn envisaged originally. This is due to the assumption of the Greek government to be able to return to the capital markets as early as next year. Whether this is feasible, depends above all on the progress being made over the next year. Greece's new fiscal adjustment program is quite challenging. It has penciled in a return to growth in 2012 and a reduction of the deficit to a level in line with the stability pact in 2014. In 2014, the debt-to-GDP ratio is forecast to fall again after having climbed to a peak-level of almost 150%.

This scenario implies a huge swing in the primary balance from minus 8.2% in 2009 to a plus of around 8% in 2014. In the past, the highest primary balance achieved in Greece was 3.8% in 1994 and 1998. Moreover, the growth assumptions could prove too optimistic in light of the fiscal adjustments needed. Finally, prices are most likely to fall in response to the deep recession now likely. These deflationary tendencies could aggravate the situation as they would inflate total public debt in real terms. In sum, there is still a considerable risk that the debt situation will turn out to be more severe than envisaged now.

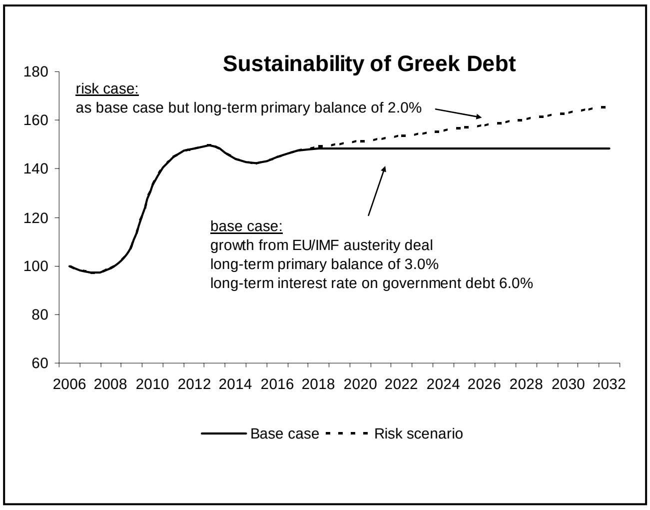
… but longer-term solvency risks still large

Longer-term, the situation is even more challenging. To see this, we have conducted a simulation for the Greek debt trajectory on the basis of the new information which has arrived. The mathematics involved to describe long-term sustainability of public finances is simple. In equilibrium, the critical level of debt must be equal to the ratio of the primary surplus divided by the difference between the nominal interest rate and nominal GDP growth. Formally,

$$\mathbf{d_{crit} = m / (i-g)},$$

where d_{crit} is the critical debt-to-GDP ratio (in terms of GDP), m equals the primary surplus (budget balance net of interest payments on existing debt), i is the nominal average interest rate on the debt, and g is the nominal growth rate. This formula describes the sustainability of a situation for a given point in time.

In 2009 the average interest rate on Greek government debt was 5.0%. Over the coming years it should roughly stay constant due to the credits provided by the EU and the IMF. Beyond 2013, Greece will have to return to the capital market and definitely has to pay a higher average rate on its debt. We assume 6.0%. As important is the average expected real GDP growth rate for Greece. Here, there are two conflicting forces at work: On the one hand, the various measures from the austerity plan will boost efficiency and hence tend to increase overall productivity (see table "Greek austerity measures"). On the other hand, the labor force in Greece is shrinking fast. According to the EIU it should fall by a yearly average of 0.4% in the current decade, gaining even momentum towards the end. On balance, we deem a potential growth rate of 1.6% likely. Furthermore, we expect the ECB to pursue a policy of benign neglect with respect to inflation so that the Greek inflation rate should average slightly above 2% over the longer term. **With these assumptions, a primary surplus of 3.0% would be sufficient to stabilize the debt-to-GDP ratio at around 150%** (see chart). A return towards 100% until 2032 appears out of reach as this would imply an average primary balance of 6%. If the long-term sustainable primary balance would be only 2%, the debt burden would already continue to rise again. If this were the case, a restructuring of the debt would become inevitable.



What "haircuts" needed if Greek fails to deliver

The simulation above shows how big the fiscal task for Greece is. There were successful fiscal adjustments of this size in the past, but the situation was alleviated by the fact that the economies tended to grow again in response to a strong depreciation of the home currency. This route is closed for any euro area member country, just like the monetization of debt. The heavy lifting to be done must rely entirely on savings and higher taxes. What makes the specific case of Greece a bit more hopeful to us is the fact that there is considerable room for improvement if Greece manages to crack down on widespread tax evasion. To restore international price competitiveness quickly, there is no other option but to lower wages, either directly or indirectly via longer working hours or late retirement. Public support for these measures is, of course, small. Hence, there remains quite a risk that Greece will fail to deliver on the promises made today. In this section, we ask the question, how big a restructuring of the debt would be needed in order to stabilize the situation with lower primary surpluses than the ones assumed above.

For this, we employ the formula above again, but this time we solve for the maximum debt level which combinations of primary balances, interest rates and growth rates would sustain. For a debt-to-GDP ratio of 150% (target of the stability program), a primary surplus of 3.0% is needed, if the long run difference between the nominal interest paid on the debt and the real growth rate is, as we assume, 200 bps. However, this simple computation rests on the assumption of a constant spread between lending rate and growth. The case of a haircut constitutes a credit event and would certainly cause the spread to widen, e.g. to 250 bps. For this case, the grey bar shows levels of debt which are sustainable in the long-run given different primary surpluses. For instance, if the government were to achieve “just” a 2% surplus, a haircut of around 50% would already be needed (from 150% to 80% debt/GDP). Against this backdrop, we see a risk that a restructuring of Greek debt could take place at a later point in time, not least because the general level of government bond yields is extremely low at present. If yields in the core euro area markets were to rise, this would aggravate the situation in the peripherals as well.

Assessing the threat of a Greek debt trap

debt/GDP ratio above which a stabilization is impossible in % of GDP

	average spread between interest rate and growth rate in bps						
primary surplus	**100**	**150**	**200**	**250**	**300**	**350**	**400**
0.00	0	0	0	0	0	0	0
0.25	25	17	13	10	8	7	6
0.50	50	33	25	20	17	14	13
0.75	75	50	38	30	25	21	19
1.50	150	100	75	60	50	43	38
2.00	200	133	100	80	67	57	50
2.50	250	167	125	100	83	71	63
3.00	300	200	**150**	120	100	86	75
3.50	350	233	175	140	117	100	88
4.00	400	267	200	160	133	114	100

base case restructing case

Historical average of primary balances

	US	**EA**	**Greece**
1991 - 2008	-0.5	0.5	0.8
1970 - 2008	-0.8	n.a.	-0.9
1970 - 1990	-1.1	n.a.	-2.3
maximum value	4.1	3.5	3.8

Conclusions

The recent bailout package Greece has agreed on with the EU and the IMF has reduced the near-term risk of default. Longer-term, questions remain. We have shown that the primary surplus required to stabilize the debt to GDP ratio is quite large. It remains to be seen if the political will in Greece is large enough to stick to this austerity “marathon”. If Greece fails to maintain the austerity measures, a debt restructuring is inevitable. We have shown that the “haircuts” needed to get back to a stable equilibrium are potentially quite large. That said we are convinced that markets have just started to focus on the issue of sovereign debt sustainability. With Greece the focus is on one of the weakest links among the industrialized countries. Further countries will follow, not only within the euro area. Thereby the importance of public finances as a determinant of government bond yields should generally rise.

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Greek austerity measures

Fiscal Policies
- Fiscal consolidation will total 11% of GDP over three years aiming to get the general government deficit under 3% by 2014

Public sector spending cuts
- Spending measures will yield savings of 5.25% of GDP through 2013
- Public sector pay freeze extended until 2014
- Public sector Christmas, Easter and summer holiday bonuses abolished for those earning above € 3000 a month and capped at € 1000 for those earning less
- Public sector allowances to be cut by an additional 8% (already cut by 12% in March)

Additional tax measures and government revenues
- Revenues measures and expenditure savings from structural reforms expected to yield 5.8% of GDP
- Government to strengthen tax collection and safeguard revenue from the largest tax payers
- Strengthened budget control
- Main VAT rate hike by 2 pp to 23% (already raised from 19% to 21% in March)
- Increase of excise taxes on fuel, cigarettes and alcohol by a further 10%
- Additional revenues through one-off tax on highly profitable companies, new gambling and gaming licenses, more property taxes and green taxes

Private sector
- Revision of laws which bar companies from laying off more than 2% of their work force per month
- Introduction of a minimum wage, applying to the young and long-term unemployed

Financial stability
- Financial Stability Fund being set up to ensure a sound level of bank equity (funded from the external financing package)

Entitlement programs
- Government entitlement to be curtailed
- Selected social security benefits to be cut, while maintaining benefits for the most vulnerable

Pension reform
Comprehensive pension reform proposed, including by curtailing provisions for early retirement

Structural policies
- Government to modernize public administration, strengthen labor markets and income policies, improve business environment, and divest state enterprises

Military spending
- Significant reduction in military expenditure during the period

Source: IMF; Reuters

Imprint

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