

Euro Economics Weekly

Grexit — Delayed But Not Cancelled*

- We lower our probability of a Greek exit from the euro ("Grexit") over the next 12-18 months from 90% to 60%, mainly due to a change in the attitude of euro core members towards it. Politicians probably fear its negative effects on upcoming elections (in Germany) and a diminished economic resilience in the rest of Europe to a shock like Grexit. The recent more cooperative Greek stance, together with some timid improvements in the deficit data, may also have helped. We now estimate the additional money needed to keep Greece afloat in 2013 is relatively small and, hence, fairly easy to find without another difficult approval of support needed from core euro countries.
- However, we think this will still prove a temporary solution. In our view, it will become evident once again that the Greek programme remains off track and Greece's debt is still unsustainable. Unless a write-off of official debt is agreed upon – quite unlikely, in our view – we think a stalemate between Greece and its international creditors will eventually lead to a withdrawal of international support leaving Grexit as potentially the only available solution for Greece. We see the most likely timing for this to happen as being H1 2014 (Giada Giani, see page 2).

Figure 1. Citi Market Forecasts

	\$/€	Euro Repo	10-yr Bunds	£/€	U.K. Bank Rate	10-yr Gilt-Bund	SKr/€	SEK Policy Rate	NOK/€	NOK Policy Rate	SFr/€	CHF Policy Rate	CHF Spread vs Bunds
4Q 12	1.27	0.50	1.50	0.79	0.50	20	8.62	1.00	7.37	1.50	1.20	0.00	-89
4Q 13	1.19	0.25	2.00	0.77	0.50	25	8.33	1.00	7.24	2.00	1.20	0.00	-123

Source: Citi Research

Figure 2. Greece — Economic Forecasts, 2011-2014

	2011	2012	2013	2014
GDP	-7.1%	-7.2%	-7.3%	-10.8%
Final Domestic Demand	-9.6	-8.2	-8.6	-13.2
Private Consumption	-7.7	-8.2	-7.4	-14.5
Fixed Investment	-19.6	-11.3	-15.4	-22.3
Exports	0.3	-0.3	-3.8	0.1
Imports	-7.3	-7.9	-9.2	-15.7
HICP	3.1	0.9	2.1	16.9
Unemployment	17.4	23.8	27.9	33.6
Current Account Bn EUR	-21.1	-12.7	-10.2	-0.2
% GDP	-9.8	-6.3	-5.4	-0.1
Public Deficit Bn EUR	-19.6	-18.2	-15.4	-2.9
% GDP	-9.1	-9.1	-7.7	-3.7
Public Debt Bn EUR	355.6	350.6	356.6	351.0
% GDP	170.5	174.6	188.7	445.5

Sources: Hellenic Statistical Authority, Haver Analytics and Citi Research

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

*CORRECTION: The original version of this note incorrectly stated our 2012-2014 forecasts in Figure 2.

Jürgen Michels

+44-20-7986-3294

juergen.michels@citi.com

Giada Giani

+44-20-7986-3281

giada.giani@citi.com

Guillaume Menuet

+44-20-7986-1314

guillaume.menuet@citi.com

Michael Saunders

+44-20-7986-3299

michael.saunders@citi.com

Ebrahim Rahbari

+44-20-7986-6522

ebrahim.rahbari@citi.com

Ann O'Kelly

+44-20-7986-3297

ann.okelly@citi.com

For all distribution enquiries regarding

Citi Economics research, including

access via Citi websites and via

third party distribution channels, please

contact michael.saunders@citi.com

or jan.maguire@citi.com

Grexit — Delayed But Not Cancelled

We reduce the probability of Grexit in the next 12 to 18 months from 90% to 60% and still see it occurring by 2014

We have held the view, since May 2012, that a Greek exit from the euro area (“Grexit”) in the next 12 to 18 months is a high-probability event (90%)¹ which we assume, for the sake of argument, would happen on January 1 2013. We are now cutting the probability of Grexit over the next 12-18 months to 60% and judge that this event will probably happen later than we previously thought, most likely in 1H 2014. The change in our view reflects the change in the attitude of core euro countries towards Grexit, with the German elections getting closer, and the decent PR job done by the new Greek Prime Minister around European capitals. We still believe that increasing austerity fatigue in Greece, continuous missing of deficit targets and the ensuing stalemate in the negotiations between the Greek government and its official lenders will ultimately lead to a suspension of EFSF/IMF funding which, in our view, will eventually lead to Greek banks being cut off from Eurosystem funding. Without virtually any domestic resources available, we believe the only way out for Greece would be to leave EMU and start printing a new currency to fill its funding gaps.

...implying a revision in our Greek forecasts

This change of view around the timing of Grexit obviously implies quite substantial changes in our forecasts. We now see Greek GDP falling by “just” 7.3% in 2013 — less than our previous forecast of -10.7% — but we expect the Greek recession to be more prolonged, with GDP falling in 2014 by 10.8% (compared to our previous forecast of -3.4%). The 2013 general government deficit will likely decline by much less than the government (and the IMF) currently expect — to 7.7% from 9% this year — partly because we do not expect all of the €7.8bn fiscal tightening package included in the 2013 Budget to be implemented and partly because the budget elasticity to GDP growth could continue to prove elevated (as persistent overestimations of the budget performance by the EU/IMF suggest).

German Politics Key For Timing of Grexit

Closer German elections and heightened challenges from Spain prompt a change in core countries’ attitude towards Grexit

We have changed our view on the timing of Grexit mainly because of changes in the attitude of core euro area member states — particularly Germany — rather than any significant improvement on the Greek front. We think the position of German Chancellor, Angela Merkel, with respect to Grexit, has shifted recently as the German elections are getting closer (September 2013, most likely) and she fears the negative economic repercussions of an event like Grexit on her chances of re-election. The rhetoric from other European officials, from Finland or the Netherlands for example, has also changed somewhat recently. Moreover, economic data in core Europe have been suggesting that activity could weaken further in 2013 and the complexity of fiscal, political, economic and financial challenges in Spain has risen — all of which imply less resilience of the European economies in case of an exogenous shock like Grexit. The escalation in the Spanish problems may have also pushed European leaders to realise that this is not an ideal time to deal with Greece leaving the EMU.

Germany seems unwilling to make additional concessions on euro integration, which are probably necessary in case of Grexit

Moreover, almost three years since the beginning of the euro crisis, the German Chancellor may have realised that any major deterioration in the euro periphery (and Grexit would probably be the worse of all seen so far) eventually requires painful concessions to reduce the negative spillovers to other peripheral, and core, euro countries. The Greek debt restructuring and the rising costs of recapitalising Spanish banks have put on the table a new thorny issue such as the euro area banking union. A “coordinated” Grexit would probably require at least some sort of deposit guarantee scheme to be in place to avoid, or at least contain, bank runs throughout Europe — something that Merkel probably does not want to discuss ahead of elections given the strong opposition from large parts of the German public

¹ See [Global Economic Outlook and Strategy - May 2012](#), Willem Buiter et al, 24 May 2012, Citi

opinion. Support for a banking union from the German opposition party SPD is unlikely – support that would be required to get its approval in Parliament.² The Netherlands and Finland have also expressed significant concerns about being forced into a banking union.³ Germany may also be unwilling to see further political turmoil in Greece at a time of ongoing political instability in the Middle East. Overall, we view Angel Merkel's visit to Athens this week as a sign that Germany's willingness to allow Grexit has diminished relative to few months ago.

Greece's Cooperative Mood and Recent Fiscal Trends

Perceptions on Greece's willingness to deliver have improved...

Another reason why we think Grexit may be delayed is that perceptions from official lenders of Greece's willingness to cooperate seem to have improved in the past couple of months. The new Greek PM, Antonis Samaras, has probably done a good PR job around European capitals to convince its creditors that Greece is doing its best to deliver on the fiscal austerity front and that both falling economic activity and the election stalemate have really to be blamed for missing the deficit targets. True, perceptions on Greece have previously shifted, ever since the start of the first bailout, only for them to reverse a few months after. But we reckon a complete stalemate between the Greek government and its lenders is not that likely in the near term.

...as have the fiscal data

Furthermore, there have been timid signs of stabilisation in the Greek fiscal data, despite GDP shrinking faster than envisaged back in March, when the 2nd bailout package was agreed. The general government cash deficit in the first eight months of 2012 came in just below €10bn (€9.9bn), versus €17.4bn in the same period of 2011 and a year-end target for 2012 of €13.3bn. Central government data — which account for the largest bulk of the overall budget and which are available over a longer history — show the 12-month cumulated deficit in September to be the lowest since Feb-09. Part of the improvement stems from lower interest spending, following the debt restructuring in March. But the primary balance has also improved quite substantially: the central government ordinary primary balance (on a 12-month cumulated basis) has been in surplus since June for the first time since Feb-09 (see Figure 3). Primary spending has been on a declining path since the beginning of the year, after essentially remaining unchanged throughout 2011 (see Figure 4).

Figure 3. Greece — Central Government Primary Budget Balance (Pct. of GDP), 2004–Sep 2012

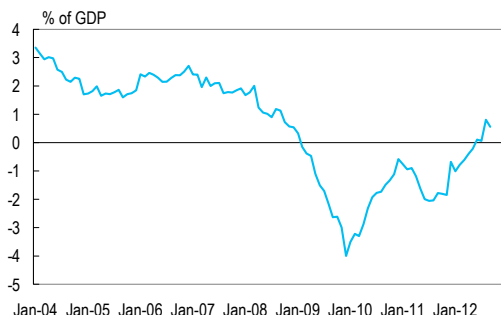
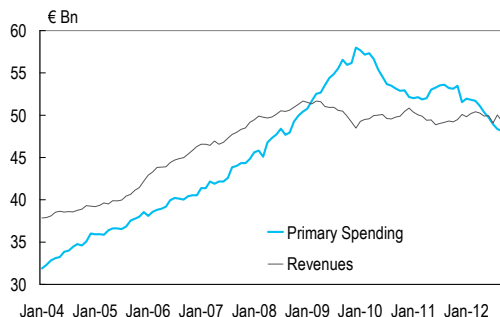


Figure 4. Greece — Central Government Primary Spending and Revenues (€Bn), 2004–Sep 2012



Sources: Hellenic Republic Ministry of Finance, Haver Analytics and Citi Research

Sources: Hellenic Republic Ministry of Finance, Haver Analytics and Citi Research

² See [Euro Economics Weekly - Assessing Germany's Resilience](#), Citi Euro Economics Weekly, 13 July 2012

³ http://www.vm.fi/vm/en/03_press_releases_and_speeches/01_press_releases/20120925JointS/name.jsp

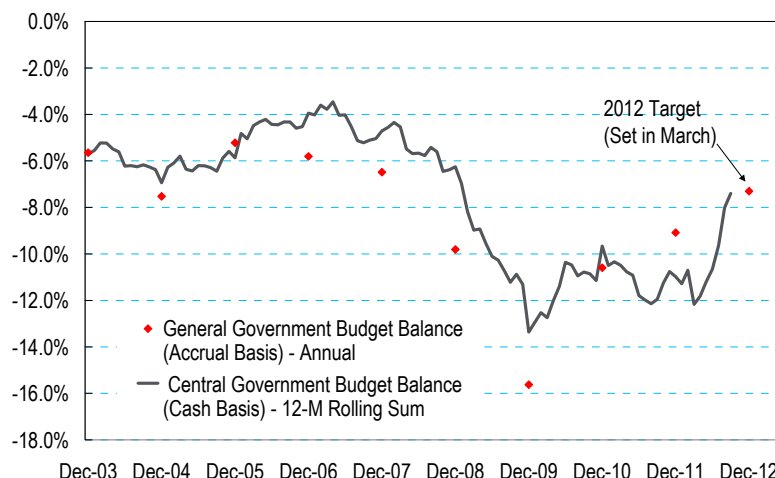
However, arrears continue to accumulate on top of new upward revisions

2012 fiscal deficit may be claimed to be broadly on target at 7.5% of GDP...

Whether these statistics will prove accurate and/or the spending cuts sustainable remains dubious, in our view. Arrears have increased since January (by around €1bn) and the initial stock at the start of 2012 has also been revised up with the release of August data, meaning that arrears now amount to a sizeable €7.9bn (around 4% of GDP). This is €2.2bn above the level of €5.7bn observed in Dec-11. The non-accumulation of arrears is one of the key criteria required for the bailout programme to remain on track. Moreover, even if they do not appear in official arrears data — which account only for payments due by more than 90 days — primary spending cuts recorded in the cash statistics may still be partially reversed as payments have merely been delayed by the lack of liquidity.

However, working with available data suggests that the 2012 general government deficit may not be hugely far off the target of 7.3% of GDP set in the March Troika report (see Figure 5). The IMF WEO report published this week sees it at 7.5%. If we compare this year's developments with 2011 — when a large number of fiscal packages had failed to produce any improvement in the fiscal balances — the slight improvements in the fiscal numbers may support the case for giving Greece some breathing space rather than the alternative of a euro exit in the near future.

Figure 5. Greece — General and Central Government Budget (Pct. of GDP), 2003-2012



Sources: Haver Analytics, Hellenic Republic Ministry of Finance and Citi Research

...although we expect it to eventually come in around 9%, with new revisions to previous deficits

As for our forecasts, however, we think that the recent declining trend in primary spending will likely be reversed — at least in part — in the last few months of 2012 and that some hidden expenditures will eventually push the deficit higher than 7.5% of GDP, probably to around 9% — still implying a downward revision to our previous forecast of 11.2%. We also expect the recent revisions of arrears to probably imply an upward revision of last year's deficit (so far reported as 9.0% of GDP).

Granting More Time Appears a Workable Compromise

The economy continues to shrink...

All that said, it still remains hard for the Troika to argue that the Greek programme is on track and that its fiscal position is sustainable. The economy is shrinking much faster than expected by the Troika just six months ago in the March programme reports. GDP was seen as stabilising in 2013, after falling by 4.8% this year. These numbers have been revised in the IMF's WEO report published this week to -6% for 2012 and -4% for 2013. The Greek government (which updated its economic forecasts last week as part of the 2013 draft budget) foresees a GDP fall of 6.5% this year and of 3.8% in 2013. Adding to this, GDP figures for 2009-2011 have been

...implying the debt ratios continue to rise and the fiscal position is unsustainable, despite the debt write off

revised downward again by the Greek statistical office last Friday, resulting in a 2011 nominal GDP level which is 3pp lower than previous estimates.

Therefore, even before accounting for any lack of policy implementation and slippages in the fiscal deficit, we estimate the debt-to-GDP ratio by end 2013 (seen at 167% in the March Troika report) will be higher by at least 8pp just because of GDP revisions (5pp due to lower 2012-13 growth and 3pp due to a lower starting point). The new IMF forecasts released this week show Greek debt at 181.8% of GDP in 2013 — 20.9pp higher than in the April Fiscal Monitor.⁴ It seems the economy is shrinking at a too rapid pace for debt ratios — even after being slashed in a debt write-off — to show signs of stabilisation. As the public debt is now largely owned by official creditors (around 70% of it is in official hands, including the official loans and the bonds held by the ECB and the Eurosystem), it is therefore perfectly understandable that the IMF is calling for additional debt write offs (official sector involvement (OSI), this time) to make the Greek fiscal position sustainable.

But another debt write-off — this time for the official sector — looks highly unlikely

However, from what has been emerging this week⁵, European policymakers seem still very reluctant to allow for OSI, perhaps considering instead an extension of the bailout programme (without being willing to provide more funding, though) to give more time for Greece to reach its fiscal targets. The Greek FinMin, after the Eurogroup meeting on Monday, said that a two-year extension has been discussed, and IMF's Lagarde said on Thursday that the IMF backs the idea of giving Greece a two-year extension for meeting the fiscal targets. This would imply that the primary surplus target of 4.5% of GDP has to be met by 2016 rather than 2014. This would be also consistent with the new IMF forecasts, which see the primary balance moving from a deficit of 1.7% of GDP in 2012 to a surplus of 4.5% in 2016, with a smooth 1.5pp improvement every year, rather than a jump of 5.5pp over two years (2012-2014) as envisaged in the March report.

An extension of the programme seems a workable compromise at this stage among all parties

Giving a cooperating Greece more time without making any additional effort to reduce its debt burden may seem a workable compromise from the official lenders' point of view with the only — but not negligible — problem that this would imply a funding gap in Greece in the next few years which would not be covered even by the 2nd bailout programme. If Greece were to survive, even for just another year, within the eurozone, additional money would need to be found to fund a higher-than-previously-projected fiscal deficit.

Filling the Gap

Programme extension means finding more money for Greece to fill its higher-than-planned deficit...

How much money? The IMF March report estimated Greece would need €9.4bn to cover its cash deficit in 2013, provided that the primary balance showed a surplus of 1.8% of GDP next year (up from a deficit of -1.0% in 2012). Any percentage point of GDP of extra primary deficit (or less primary surplus) would translate into higher funding needs of around €2.0bn. So, if the 2013 primary balance comes close to zero — as the IMF new forecasts are currently expecting — a financing gap of around €3.5bn would arise in 2013 which would not be covered by the bailout funds agreed in March. A similar amount could stem from the shortfall resulting from the possibility of missing this year's deficit target, if our updated forecast proves correct. If the fiscal slippage relative to the March-2012 targets gets bigger in 2014 — say a primary surplus of 1.5pp of GDP, in line with the IMF estimates, rather than 4.5% — then an additional €6bn would be needed to fill the funding gap.

⁴ See IMF Fiscal Monitor, October 2012.

⁵ See [Euro Area: Sovereign Debt Crisis Update](#), 9 October 2012, Citi

...as well as possibly less than expected privatisation receipts

But the amount required to fill the 2013 funding gap is not huge, probably around €5-10bn

A financing shortfall can also come from lower-than-expected (or lack of) privatisation receipts relative to the estimated €3.2bn for 2012, €4.3bn for 2013 and €4.4bn for 2014. The process is far behind schedule, with virtually no proceeds as yet for this year. Assuming no privatisation receipts at all until the end of 2013, this would add an extra €7.5bn to the deficit-related funding gap to be covered by the end of next year.

It is likely that any additional money required by Greece from its official creditors will encounter huge resistance in any donor country. We think there is little chance that any addition to the already large 2nd Greek bailout programme would obtain parliamentary approval in Germany, or Finland or the Netherlands. However, the order of magnitude of the funding problem is not too large in absolute terms (although it may still be large in terms of Greece's GDP). For example, it is definitely smaller than the funding hole that emerged in mid-2011 when it became clear that the assumption contained in the first bailout programme — i.e., Greece regaining market access by mid-2013 — was not going to work. We think there are alternative ways of finding €5-10bn to cover Greece's financing gap for 2013 that would not involve any parliamentary approval in European capitals.

Figure 6. Greece — Debt Maturity Redemptions (€Bn)

	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	2013	Q1 14	Q2 14	Q3 14	Q4 14	2014
1. Bills	11.0	4.0	-	-	-	4.0	-	-	-	-	-
2. Bonds		0.4	6.5	2.8		9.7	1.9	7.8	5.6	0.0	15.3
of which held by:											
ECB		0.4	5.6	2.3	-	8.3	1.8	4.2	4.0	-	10.0
non-ECB		-	0.9	0.5	-	1.4	-	3.6	1.6	-	5.3
3. Loans		0.2	0.5	0.2	0.1	1.0	0.2	0.7	0.3	0.1	1.3
4. IMF loans		-	-	0.7	1.0	1.7	1.3	1.9	1.9	2.3	7.4
TOTAL (1+2+3+4)	11.0	4.6	7.0	3.7	1.1	16.4	3.4	10.4	7.8	2.4	24.0

Sources: Bloomberg, EU Commission and Citi Research

Debt maturity extensions could save some money, but if ECB/Eurosystem have to be excluded, little is left

Extending the profile of the debt maturing next year would be one obvious solution to the problem. According to our calculations⁶, €12.4bn of medium-to-long term debt is due in 2013 (see Figure 6). Out of this, €1.7bn is the amount of the first IMF loans maturing — very unlikely to be restructured. Of the rest, €8.3bn is held by the ECB and other Eurosystem central banks as the new bonds exchanged ahead of the March PSI. Mr Draghi has made clear more than once that any restructuring of that debt would effectively equate to debt monetisation — pretty much taking this option off the table⁷. The rest of the general government debt maturing in 2013 is made up of €1.4bn of 'hold-outs' from the PSI agreement — which could be bailed in, although this would not generate a significant amount of saving in 2013 — and €1bn of other non-official loans which could probably be extended, including some easing in short-term financing needs.

Increased t-bill issuance is another option, with consequent increase in the ELA facility

More likely to us, a few billions could be raised from an increase in t-bill issuance which could then be used by Greek banks as collateral to get additional emergency liquidity assistance at the Greek central bank (with the ECB non-vetoing it).

⁶ Calculations are based on Bloomberg data and the March EU Commission report on Greece.

⁷ See "Euro Economics Weekly - ESM And ECB Liquidity Decisions Ahead", Jürgen Michels, 5 October 2012, Citi

Shifting the bank recapitalisation costs to the ESM could be another option, but unlikely to be workable for Greece

Finally, as suggested by the Greek PM last week, part or all of the bank recapitalisation costs (€23.8bn of the next bailout tranche of €31.3bn) could be covered directly by the ESM. Whether the ESM would be able to directly recapitalise banks, bypassing the government, is still a matter of debate, not just for the Greek case, but also and more importantly for Spain (and Ireland). However we see a low probability of ESM being able to take on domestic banks' liabilities directly before 2014. In cases — like the Greek one — where these are 'legacy' liabilities prior to the ECB's supervisory role, it looks very unlikely that the ESM will directly take over the debt retrospectively.

The funding gap is not too large to prevent a compromise to be found on the means to fill it...

Overall, we think Greece's financing gap in 2013 — probably in the range of €5-10bn — is not too large for the Troika and the Greek government to reach a compromise on, without requiring additional lending to be approved by euro members. Equally, the debt sustainability test — required at the release of every new tranche — could be, once again, adjusted with some back-loading of privatisation receipts and/or more optimistic growth assumptions so that the debt-to-GDP target of 120% by 2020 can still be maintained. Alternatively, taking into account the delay in meeting the near term fiscal targets, the Troika might agree to extend the 2020 deadline by two years as well.

...allowing Greece to be granted some more time

Greece, we think, could still be kept liquid for another 6 to 12 months and prevented from leaving the euro, if its international creditors so want. That would probably result in a higher probability of Ms Merkel winning the German elections, and it would allow time for Spain and Italy to likely request precautionary bailout programmes as well as for other small peripheral countries (Cyprus and probably Slovenia) to be added to the list of rescued countries.

Risks of a political meltdown in Greece and a unilateral decision to leave the euro still exist

Against this baseline scenario, we need to highlight the risk that Grexit can happen *despite* this not being the wish of its international creditors: as a unilateral decision taken by Greece. So far, the governing coalition seems to be holding together despite some difficulties in agreeing on the spending cuts. But political turmoil may come back and a breakup of the coalition should not be completely ruled out. Revolts against the austerity measures could also become unmanageable, paralysing both the government and the economy. If this happens, the chances of a Greek exit from the euro decided by Greece alone could become elevated.

Tough Times Prolonged

We expect the Greek programme to remain off track...

Unfortunately, even in our baseline scenario where Greece and its international creditors find a way to buy some time, this will unlikely be a permanent solution for Greece. We reckon it will become clear during the course of 2013 that the Greek adjustment programme remains significantly off track, partly because of a fast-shrinking economy and partly because of the difficulty for Greece to deliver on the fiscal and reform fronts. Political fatigue to implement the still long list of pending structural reforms will likely continue to intensify. Therefore, the risks of the Samaras government failing remain elevated. And such a failure of the government would give the creditor countries, in particular German Chancellor Merkel, who supported Samaras with her recent visit, a good excuse to change their position on Grexit.

...eventually leaving exit from the euro as possibly the only solution available to Greece

Despite the largest private debt restructuring in recent history, the sustainability of the Greek debt will likely be more and more difficult to prove. Unless a write-off of the official debt is envisaged — which we see as a low-probability event given the strong reluctance of international lenders to forgive debt obligations, especially towards a country still perceived as not putting in its best efforts to contain it — we believe the only rational alternative left will be an abandonment of the single currency. Hence, while we cut the probability of Grexit from 90% to 60%, we still

expect this event to happen in the next 12 to 18 months, with the most likely timing being in the first half of 2014.

Key Economic Indicators (15 October – 19 October 2012)

Monday 15 October		Forecast	Last
08:15	Switzerland: Producer and Import Prices, Sep		
09:00	Norway: Trade Balance, Sep		
Tuesday 16 October		Forecast	Last
07:00	EU-27: New Car Registrations, Sep		
08:30	Netherlands: Retail Sales, Aug		
09:00	Italy: Trade Balance, Aug		
09:30	UK: Producer Input Prices, Sep	0.0% MM, -0.7% YY	2.0% MM, 1.4% YY
09:30	UK: Producer Output Prices, Sep	0.0% MM, 1.9% YY	0.5% MM, 2.2% YY
	Ex Tax, Sep	0.0% MM, 1.6% YY	0.5% MM, 1.9% YY
	Ex Food, Drink, Tobacco, Energy, Sep	0.0% MM, 0.9% YY	0.1% MM, 1.2% YY
09:30	UK: Consumer Prices, Sep	0.2% MM, 2.0% YY	0.5% MM, 2.5% YY
	CPI Ex Food, Drink, Tobacco, Energy, Sep	-0.1% MM, 1.8% YY	0.5% MM, 2.1% YY
	Retail Prices, Sep	0.5% MM, 2.6% YY	0.4% MM, 2.9% YY
	RPIX – Excludes Mortgages, Sep	0.5% MM, 2.9% YY	0.4% MM, 2.9% YY
10:00	Euro Area: HICP, Sep Final	0.8% MM, 2.7% YY	0.4% MM, 2.6% YY
10:00	Euro Area: Trade Balance, Aug	€6.7 Billion Surplus	€7.9 Billion Surplus
10:00	Germany: ZEW economic Expectations, Oct	-19.0	-18.2
Wednesday 17 October		Forecast	Last
09:00	Norway: Regional Network Report, 3/12		
09:30	UK: Claimant Count Unemployment, Sep	-5,000 MM, 4.8% Rate	-15,000 MM, 4.8% Rate
	LFS Unemployment, Jun-Aug	+30,000 QQ, 8.2% Rate	-7,000 QQ, 8.1% Rate
09:30	UK: MPC Minutes (4 Oct)		
10:00	Euro Area: Construction Output, Aug		
11:00	Germany: Government economic forecasts		
Thursday 18 October		Forecast	Last
	EU: European Council of Heads of State and Government, Brussels		
07:00	Switzerland: Trade Balance, Sep		
08:30	Sweden: Unemployment Rate, Sep	7.4%	7.2%
08:30	Netherlands: Consumer Confidence, Oct		
08:30	Netherlands: Unemployment, Sep		
09:00	Norway: Bank Lending Survey, 3Q		
09:30	UK: Retail Sales Volumes, Sep	0.1% MM, 2.4% YY	-0.2% MM, 2.7% YY
14:0	Belgium: Consumer Confidence, Oct		
Friday 19 October			
07:00	Germany: Producer Prices, Sep	0.3% MM, 1.6% YY	0.5% MM, 1.6% YY
09:00	Italy: Industrial Orders, Aug		
09:00	Euro Area: Balance of Payments, Aug		
09:30	UK: Public Sector Net Borrowing (Ex Costs of Fin. Intervention), Sep	£13.9 Billion Deficit	£13.4 Billion Deficit
	PSNB, Fiscal Year To Date, Apr-Sep	£44.0 Billion Deficit	£61.9 Billion Deficit
Sunday 21 October			
	Spain: Regional Elections in the Basque Country and Galicia		

Sources: National statistical offices, central banks and Citi Research

Economic Indicators

Euro Area

Oct 16 10:00	HICP, Sep Final	Forecast: +0.8% MM, 2.7% YY	Prior: +0.4% MM, 2.6% YY
London Time	We expect a confirmation of the flash estimate. The increase in the inflation rate mainly reflects higher energy prices and an increase in the VAT rate in Spain. We expect an increase in the core inflation rate (ex food and energy) from 1.5% YY in August to 1.6% YY in September. With the VAT rate hike in October in the Netherlands, a further small increase is likely in October core inflation.		

Oct 16 10:00	Trade Balance, Aug	Forecast: €6.7 Billion Surplus	Prior: €7.9 Billion Surplus
London Time	We expect a second consecutive decline in the euro area trade surplus. Following two very volatile months for exports (June: +2.4% MM, July: -2.0% MM) we expect a further contraction in exports in August (-0.5% MM). Partly due to higher energy prices, we expect a modest increase in imports (+0.3% MM) after the 1.2% MM contraction in July.		

Germany

Oct 16 10:00	ZEW Economic Expectations, Oct	Forecast: -19.0	Prior: -18.2
London Time	Following an improvement in September, we expect a modest deterioration again in October. In addition to downward revisions of global growth, we expect that the recent strengthening of the euro and disappointing incoming orders data contributed to the renewed drop in business expectations. We also expect a fifth consecutive fall in the assessment of the current business situation, by 2.6 points MM to 10.0 in October. The combined ZEW index therefore is likely to decline from -2.8 in September to -4.5 in October, the lowest reading since February 2010.		

Oct 19 07:00	Producer Prices, Sep	Forecast: 0.3% MM, 1.6% YY	Prior: 0.5% MM, +1.6% YY
London Time	While higher energy and other commodity prices, which led to a jump in the YY rate of producer prices in August, will likely continue to feed through into producer prices, we expect an unchanged YY rate of 1.6% in September.		

Sweden

Oct 18 08:30	Unemployment Rate, Sep	Forecast: 7.4%	Prior: 7.2%
London Time	Labour market indicators have deteriorated slowly in 2012 but are still at levels suggesting that employment will rise slightly in the short run. In August, unemployment unexpectedly increased. The details of the report, however, showed that the upturn was explained by an increase in labour force participation. The monthly unemployment data are very volatile, and we reckon that the August reading exaggerates the underlying trend. In other words, we expect a large part of the increase to be reversed over the next couple of months. The Riksbank's seasonally-adjusted forecast for the unemployment rate in 3Q is 7.6% and employment growth is seen at 0.4% YY. For comparison, employment growth was 0.2pp above the Riksbank's forecast in July and August on average, while the unemployment rate was 0.1% pp above.		

Norway

Oct 17 09:00	Regional Network Report, 3/12		
London Time	The latest regional network report suggested that overall activity in manufacturing is expanding at a slightly above-trend rate although the pace of growth appears to be levelling out. Output expectations are consistent with mainland GDP growth of around 3% YY. We expect slightly lower output expectations in the upcoming survey.		
Oct 18 09:00	Bank Lending Survey, 3Q 2012		
London Time	The latest lending survey from Norges Bank pointed to still solid demand for credit, in particularly from households, likely driven by the relatively low levels of interest rates, low unemployment, and increase in house prices. We expect a similar picture in the 3Q survey.		

United Kingdom

Oct 16 09:30	Producer Input Prices, Sep	Forecast: 0.0% MM, -0.7% YY	Prior: +2.0% MM, 1.4% YY
London Time	Base effects from a big rise in input prices a year earlier probably will bring the YY rate for input price inflation sharply lower, and we expect it will fall back into negative territory. Metals prices rose in September, but the inflation boost from this probably will be offset by a dip in agricultural commodity prices and the slight rise in sterling's trade-weighted index over recent months.		
Oct 16 09:30	Producer Output Prices, Sep	Forecast: 0.0% MM, 1.9% YY	Prior: 0.5% MM, 2.2% YY
Oct 16 09:30	Output Prices Ex Tax, Sep	Forecast: 0.0% MM, 1.6% YY	Prior: 0.5% MM, 1.9% YY
London Time	Excluding Food, Drink, Tobacco, Energy, Sep	Forecast: 0.0% MM, 0.9% YY	Prior: 0.1% MM, 1.2% YY
	Surveys suggest that output price inflation is weak, and we expect to see the YY rate fall further, to the lowest level since 2009. Not many items covered by the producer price data are in the CPI, but output prices often provide a useful lead guide to future CPI trends (because both are often driven by the same shocks) and hence the weakness of output price inflation points to further CPI weakness in coming months.		
Oct 16 09:30	Consumer Prices, Sep	Forecast: 0.2% MM, 2.0% YY	Prior: 0.5% MM, 2.5% YY
Oct 16 09:30	CPI Ex Food, Drink, Tobacco, Energy, Sep	Forecast: -0.1% MM, 1.8% YY	Prior: 0.5% MM, 2.1% YY
London Time	Retail Prices, Sep	Forecast: 0.5% MM, 2.6% YY	Prior: 0.4% MM, 2.9% YY
	RPIX – Excludes Mortgages, Sep	Forecast: 0.5% MM, 2.9% YY	Prior: 0.4% MM, 2.9% YY

We expect that CPI inflation fell back in September, reflecting lower air fares and helpful base effects from the high reading a year ago, despite a further rise in petrol prices (the AA report that petrol prices rose by 3.5% MM in September, the biggest MM rise since Jan-11). A figure in line with our forecast would put the YY CPI inflation rate back in line with the 2.0% target after repeated overshoots in every month since Nov-09.

Economic Indicators

United Kingdom Continued

Oct 17 09:30 London Time	Claimant Count Unemployment, Sep LFS Unemployment, Jun-Aug	Forecast: -5,000 MM, 4.8% Rate Forecast: +30,000 QQ, 8.2% Rate	Prior: -15,000 MM, 4.8% Rate Prior: -7,000 QQ, 8.1% Rate
	The single month LFS jobless figure for July rose quite sharply, reaching the highest level since last November, and – assuming a similar level for the August data – we expect that the three-month average will edge up slightly. The broad trend, however, is that the LFS jobless total has been roughly flat over the last year, with gains in employment roughly offset by gains in the workforce.		
Oct 18 09:30 London Time	Retail Sales Volumes, Sep	Forecast: 0.1% MM, 2.4% YY	Prior: -0.2% MM, 2.7% YY
	The level of retail sales has been roughly flat since June and, with weak consumer confidence and lacklustre results from retail surveys, we expect that these data will show little change either way in the level of retail sales. Nevertheless, such a figure would leave Q3 volumes up 1.2% QQ, the best gain of this year and similar to the gain in Q4-11 (1.1% QQ).		
Oct 19 09:30 London Time	Public Sector Net Borrowing, Sep (Figures Exclude Costs of Financial Intervention)	Forecast: £13.9 bn deficit, £44.0 billion deficit fiscal year to date Year Ago: £13.4 bn deficit, £61.9 billion deficit fiscal year to date	
	In the first five months of this fiscal year, the fiscal deficit fell by £20bn YY, but this implies a YY rise of about £8bn adjusting for the one-off £28bn transfer of assets from the state-owned postal service. Revenues are undershooting markedly and we expect this trend will continue in the September data, given the marked shortfall in nominal GDP growth versus the OBR's forecasts.		

Sources: National Statistical Offices, National Central Banks, Bloomberg, and Citi Research forecasts.

Accessing Citi Economic Research

We want to highlight to you that our research is also available for your convenience through the following research distribution providers:

- Bloomberg using CTIR<GO>
- FactSet
- Thomson Reuters
- TheMarkets.com from Capital IQ

You are automatically able to view Citi research if you have entitlement on one of these systems. If you do not currently have Citi entitlement on these systems, please contact your provider representative to request access.

These services are available to you in addition to Citi website access and research email services you may already receive from Citi directly.

If you have any questions or we can be of further assistance please do not hesitate to contact us.

Key Economic Indicators (22 October – 26 October 2012)

During the Week		Forecast	Last
07:00	Germany: Import Prices, Sep (by Oct 30)		
07:00	Germany: Retail Sales, Sep (by Oct 31)		
Monday 22 October		Forecast	Last
10:00	Euro Area: General Government Deficit and Debt, 2011, 2 nd Notification		
Tuesday 23 October		Forecast	Last
07:45	France: Industrial Confidence, Oct		
08:30	Netherlands: Household Spending, Aug		
09:30	UK: BBA Mortgage Advances, Sep		
14:00	Belgium: Business Confidence, Oct		
14:00	Canada: Bank of Canada Interest Rate Announcement		
15:00	Euro Area: Consumer Confidence, Oct Preliminary		
Wednesday 24 October		Forecast	Last
08:15	Sweden: Business and Consumer Confidence, Oct		
09:00	Germany: ifo Business Climate, Oct		
09:00	Italy: Consumer Confidence, Oct		
09:00	Euro Area: Flash PMI, Oct		
10:00	Euro Area: General Government Debt, 2Q		
11:00	UK: CBI Quarterly Industrial Trends Survey, Oct		
17:00	France: Jobseekers, Sep		
19:15	US: FOMC Outcome		
Thursday 25 October		Forecast	Last
08:00	Spain: Producer Prices, Sep		
08:30	Sweden: Riksbank Monetary Policy Outcome		
08:30	Sweden: Producer Prices, Sep		
08:30	Netherlands: Producer Confidence, Oct		
09:00	Euro Area: M3, Sep		
09:30	UK: GDP, 3Q Preliminary		
09:30	UK: Service Sector Output, Aug		
Friday 26 October			
07:00	Germany: GfK Consumer Confidence, Nov		
07:45	France: Consumer Confidence, Oct		
07:45	France: Quarterly Industrial Survey, Oct		
08:00	Switzerland: KOF Economic Barometer, Oct		
08:00	Spain: Unemployment Rate, 3Q		
08:30	Sweden: Trade Balance, Sep		
09:00	Italy: Contractual Wages, Sep		
09:00	Italy: Business Confidence, Oct		
10:00	Italy: Retail Sales, Aug		

Sources: National statistical offices, central banks and Citi Research

Recent Research Publications	Author	Date of Publication
Euro Area		
Euro Area: Sovereign Debt Crisis Update	Jürgen Michels	Oct 12, 2012
Euro Area - Shrinking Populations and Workforces in the Periphery	Michael Saunders	Oct 9, 2012
Pleased With OMT Impact, Unwilling to Reschedule Greek bonds	Jürgen Michels	Oct 4, 2012
European Economic Forecast Highlights - September 2012	Ann O'Kelly	Sep 21, 2012
Euro Economics Weekly		
ESM And ECB Liquidity Decisions Ahead	Jürgen Michels	Oct 5, 2012
ECB – No Action in October, But Lower Rates Are in The Pipeline	Jürgen Michels	Sep 28, 2012
France: Austere 2013 Budget, But Over-Optimistic GDP Baseline	Guillaume Menuet	Sep 21, 2012
Euro Economics Weekly - Ireland — Crucial Period Ahead	Michael Saunders	Sep 14, 2012
Chief Economist Publications		
Global Economics View - Three bits of good and one piece of bad news about Europe	Willem Buiter	Sep 24, 2012
Global Economic Outlook and Strategy - September 2012	Willem Buiter	Sep 19, 2012
Germany		
Germany - Court Gives Green Light for ESM Participation Under Conditions	Jürgen Michels	Sep 12, 2012
France		
France - 2013 Budget: Structurally Austere, But Doubtful Targets	Guillaume Menuet	Oct 1, 2012
Spain		
Spain: 2013 Budget, Structural Reforms and Bank Stress Test -	Ebrahim Rahbari	Oct 1, 2012
Spain: Major Events Ahead -	Ebrahim Rahbari	Sep 25, 2012
Ireland		
Ireland - GDP Flat in Q2, Underperforms Consensus	Michael Saunders	Sep 20, 2012
Ireland - Economy Shrinks Again	Michael Saunders	Jul 12, 2012
Norway		
Scandi Economics Update	Tina Mortensen	Oct 12, 2012
Norway - Inflation Remains Subdued in September	Tina Mortensen	Oct 10, 2012
Norway - About Neutral 2013 Budget Bill	Tina Mortensen	Oct 8, 2012
Sweden		
Sweden - Marked Undershoot in Inflation vs. Target and Riksbank Forecast	Tina Mortensen	Oct 11, 2012
Sweden - Uptick In Industrial Production Suggests Positive 3Q GDP Growth	Tina Mortensen	Oct 10, 2012
Service Production is Moderating	Tina Mortensen	Oct 5, 2012
Denmark		
Denmark - Negative Interest Rates – The Experience So Far	Tina Mortensen	Sep 28, 2012
Switzerland		
Switzerland - SNB Leaves Rates and FX Peg Unchanged	Michael Saunders	Sep 13, 2012
UK		
UK - FLS – Still Little Effect on Interest Rates	Michael Saunders	Oct 9, 2012
UK - The IMF's Economic and Fiscal Warning	Michael Saunders	Oct 9, 2012
UK – Corporate Profitability Edges Down	Michael Saunders	Oct 4, 2012
UK Economics Weekly		
Don't Give Up on QE	Michael Saunders	Oct 5, 2012
Private Savings Remain High: Deleveraging and Offshoring	Michael Saunders	Sep 28, 2012
Further Inflation Decline Ahead	Michael Saunders	Sep 21, 2012
The Labour Market "Miracle"	Michael Saunders	Sep 14, 2012

Source: Citi Investment Research And Analysis

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets Ltd

Jürgen Michels; Giada Giani; Guillaume Menuet; Michael Saunders; Ebrahim Rahbari; Ann O'Kelly

OTHER DISCLOSURES

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers: Morgan Stanley & Co. LLC (Morgan Stanley) research reports may be available about the companies that are the subject of this Citi Research research report. Ask your Financial Advisor or use smithbarney.com to view any

available Morgan Stanley research reports in addition to Citi Research research reports.

Important disclosure regarding the relationship between the companies that are the subject of this Citi Research research report and Morgan Stanley Smith Barney LLC and its affiliates are available at the Morgan Stanley Smith Barney disclosure website at www.morganstanleysmithbarney.com/researchdisclosures.

For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to www.morganstanley.com/researchdisclosures and https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

This Citi Research research report has been reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval was conducted by the same person who reviewed this research report on behalf of Citi Research. This could create a conflict of interest.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in **Australia** through Citi Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in **France** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A., Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Via dei Mercanti, 12, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No. 460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ('FAA') through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian

Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. With the exception of our product that is made available only to Qualified Institutional Buyers (QIBs) and other product that is made available through other distribution channels only to certain categories of clients to satisfy legal or regulatory requirements, Citi Research concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual Citi Research analysts may also opt to circulate research posted on such platforms to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels. Citi Research simultaneously distributes product that is limited to QIBs only through email distribution.

The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints. Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters and Datastream.

© 2012 Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
