Citi Research
Economics

6 March 2015 | 20 pages

Developed Markets
Western Europe

Euro Economics Weekly

Euro Area: Fiscal Policy Turning More Supportive Too

- After fiscal tightening of unprecedented scale was put in place in the euro area in 2011-12, the amount of fiscal consolidation effort has reduced progressively in 2013 and 2014. We expect this trend to continue, and anticipate fiscal policy to be slightly loose in coming years.
- The activation of a large asset purchase programme by the ECB will result in further financial savings for governments across the EA, while reduced political pressure from the EU institutions is likely to lead to countries being granted more time to meet fiscal targets. Hence, we expect headline fiscal deficits to continue to decline only modestly in coming years.
- Structural problems still persist, including high public debt levels and slow structural reform implementation. We expect fiscal policy to play only a modest role in supporting the EA economy in coming years, implying that most of the policy support will continue to fall on the ECB's shoulders through its conventional and unconventional monetary policy stimulus.

Antonio Montilla
+44-20-7986-3282
antonio.montilla@citi.com

Guillaume Menuet
+44-20-7986-1314
guillaume.menuet@citi.com

Michael Saunders
+44-20-7986-3299
michael.saunders@citi.com

Ann O'Kelly
+44-20-7986-3297
ann.okelly@citi.com

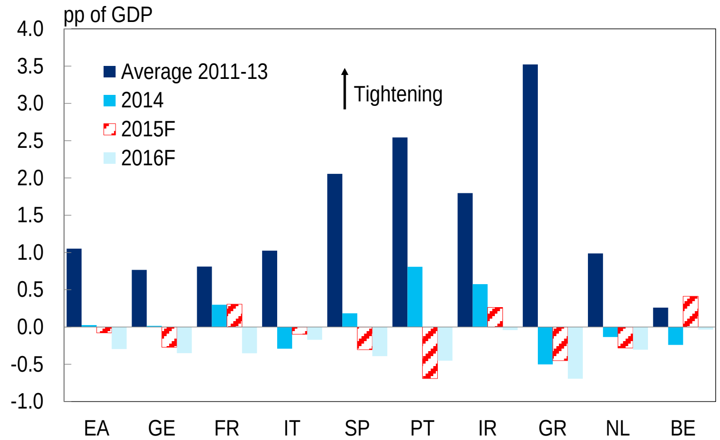
Click to Play Video

Figure 1. Citi Forecasts

	$/€	Euro Repo	10-Yr Bunds	£/€	UK Bank Rate	10-Yr Gilt Bund
2Q 15	1.07	0.05	0.15	0.74	0.50	141
4Q 15	0.99	0.05	0.20	0.75	0.50	161

Source: Citi Research

Figure 2. Selected Euro Area Countries — Fiscal Stance (Change in the Structural Primary Balance as % of GDP), 2011-2016F



Sources: European Commission and Citi Research

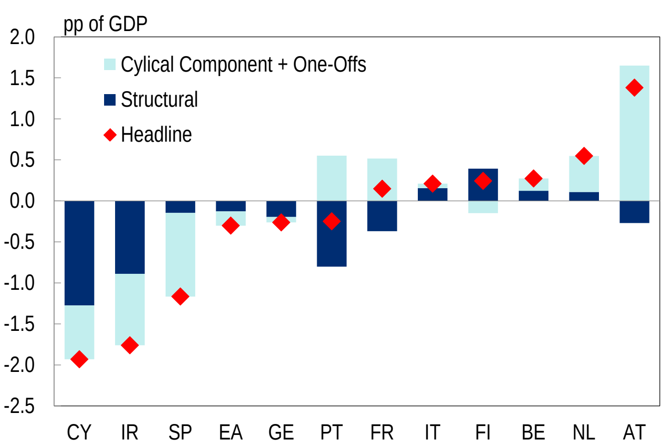
Fiscal Policy Turning More Supportive Too

Monetary policy in the EA is about to become a lot more expansionary, following Thursday's announcement by the Governing Council that the ECB will officially start its expanded asset purchase programme (worth €60bn a month) next Monday. In this piece we focus on the outlook for fiscal policy in the EA. In particular, we present the revised EU Commission (EC) fiscal framework, document the change in fiscal policy in 2014, and discuss prospects for fiscal easing in 2015 and beyond.

A broadly neutral fiscal policy in 2014…

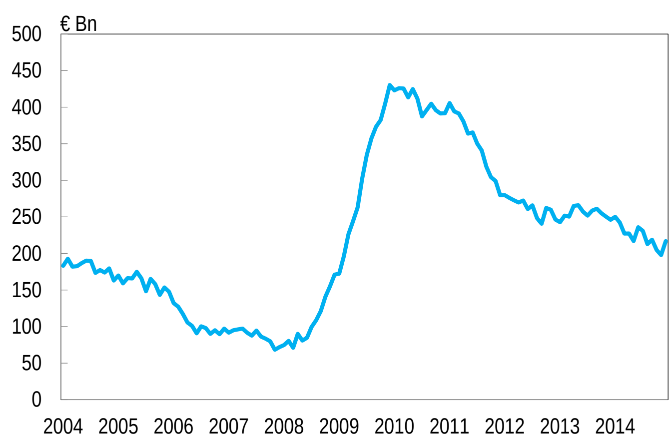
According to the latest forecast update by the EC released on Feb 5, the pace of fiscal consolidation (i.e. measured by the change in the primary structural balance) in the EA fell from about 1pp of GDP on average in 2011-13 to essentially *zero* in 2014 (see Figure 2). **Across countries, the largest swings in fiscal policy in 2014 took place in the periphery**, namely Greece (4pp of GDP reduction in the pace of fiscal consolidation vs. 2011-13 average, i.e. from 3.5pp in 2011-13 to -0.5pp in 2014), Spain (-1.9pp), Portugal (-1.7pp), and Italy (-1.3pp) — all the countries where the size of the tightening had been the most extreme in previous years. Slower adjustments took place in core countries, although still accounting for about 0.8pp of GDP reductions in 2014 relative to 2011-13 in Germany and the Netherlands, and -0.5pp of GDP in France and Belgium. We reckon these sizable swings in the fiscal stance explain a large part of the improvement in domestic demand (in particular in periphery countries) observed in 2014.

Figure 3. Selected Euro Area Countries — Annual Change in Headline Fiscal Deficit (pp of GDP), 2014E



Sources: European Commission and Citi Research

Figure 4. Euro Area — Proxy for Central Government Budget Deficit in Cash Basis (12M sum, € bn), 2004-2014



Note: 12-mothn sum. Our EA proxy includes central government budget deficit in cash basis for Germany, France, Italy, Spain, Netherlands, Portugal, Greece, and Ireland.
Sources: National Sources and Citi Research

Taking the latest EC data, only Portugal, Ireland, and Cyprus complied with the Stability and Growth Pact (SGP) benchmark rule of a 0.5pp of GDP reduction on the structural deficit in 2014 (see Figure 3). Relative to the fiscal adjustment measures announced in the 2014 budgets (using information from the 2014 stability programmes), out of the eight countries[1] subject to an Excessive Deficit Procedure (EDP) five countries failed to hit their headline deficit target, while six countries (out of the remaining ten) did not comply with the agreed objective required to reach their medium-term budgetary objective (MTO). We estimate that the fiscal deficit overshooting was the result of lower-than-planned structural adjustment rather than a further contraction in the cyclical component.

[1] France, Spain, Greece, Ireland, Portugal, Malta, Cyprus and Slovenia.

Indeed, YTD monthly data suggest some cyclical improvement in the budgetary positions is underway. Central government (cash basis) budget balances improved considerably in 2014 in most EA countries. Our euro area proxy, which aggregates monthly data on 12-months sums of central government cash deficits across the eight largest euro area members, fell by €30bn YY in December 2014, and it is around half the average level in 2009-10 (see Figure 4). We expect government headline and primary deficits to continue to fall in nominal terms over the next few years reflecting the cyclical improvement in the economy, although we note that the structural adjustment (and hence the degree of fiscal tightening and fiscal drag) should continue to be reversed.

…to be followed by a mild loosening in fiscal policy in 2015

Based on the fiscal plans submitted to the EU Commission in late 2014, fiscal policy in the EA is likely to be modestly expansive in 2015. Based on data from the budget plans of the ten EA largest countries,[2] we estimate the announced fiscal tightening measures to amount to 0.3% of GDP in 2015 in the EA aggregate level. However, we expect that (as in previous years) there will be a substantial gap between the announced fiscal efforts and the actual change in the structural deficit (for which we expect a 0.1pp increase to 1.1% of GDP). In nominal terms, however, we estimate the EA headline deficit will fall from 2.5% of GDP in 2014 to 2.1%, helped by a smaller cyclical component (including one-offs), falling from 1.5% of GDP in 2014 to 1% of GDP in 2015. The European Commission expects the EA structural deficit will be 1% of GDP in 2015, unchanged from 2014, while the OECD and IMF expect a drop to 0.9% of GDP (see Figure 5).

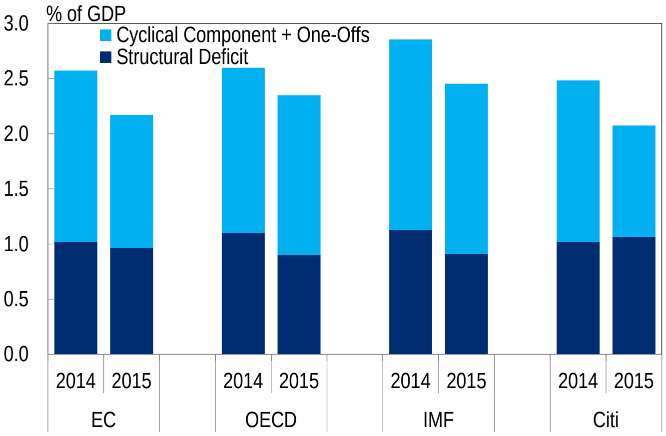
Once again, **fiscal efforts (and the underlying change in the structural balance) will vary significantly across countries**. In **Germany** the government targets a balanced headline budget in 2015, although a better-than-expected starting position (we estimate a fiscal balance surplus of 0.3% of GDP in 2014) is likely to leave some room for modest fiscal easing this year (we reckon by 0.2pp of GDP). In **Spain** we expect the government to deliver a modest fiscal expansion in 2015 (worth 0.1pp of GDP vs. a 0.1pp decline in the structural deficit targeted in the budget) resulting from the income tax cuts introduced as part of the fiscal reform this year (worth around 0.5pp of GDP). The headline fiscal deficit however is likely to exceed slightly the government target of 4.2% of GDP from an estimated 5.6% of GDP in 2014, with tax revenues supported by the ongoing recovery in domestic demand and lower social security spending due to the continued decline in unemployment. In **Italy**, the government revised up its planned structural adjustment to 0.3pp of GDP in 2015 from 0.1pp announced in the first draft of the 2015 budget, although still well below the 0.5pp agreed previously in the 2014 Stability programme. We remain sceptical that the government will fully implement the additional €3.4bn fiscal consolidation measures announced in late-November and expect fiscal policy to remain broadly neutral again in 2015 and for the headline deficit to remain close to the 3% of GDP threshold. In **France**, we estimate that a stronger-than-expected cyclical recovery (we estimate real GDP growth at 1.2% vs. official target of 1%) and savings in debt service costs will allow the government to meet its 2015 budget deficit objective. Although the €3.6bn last-minute consolidation measures will be detailed to meet the EC requirements, we doubt that they will be fully delivered ex-post, and expect the structural effort to be '*only*' 0.3pp of GDP (vs. 0.5pp targeted by the government).

In its opinion on the 2015 budgets, the EC concluded that only nine countries were compliant with the demanded fiscal efforts. We expect that out of the nine EA

[2] Germany, France, Italy, Spain, Netherlands, Belgium, Austria, Portugal, Ireland and Finland.

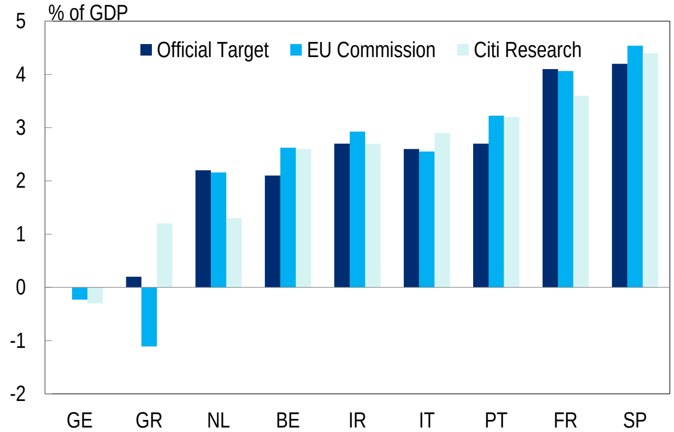
countries for which we produce forecasts, five will overshoot the headline fiscal deficit target this year (see Figure 6).

Figure 5. Euro Area — Headline Fiscal Deficit Projections (% of GDP), 2014-2015



Sources: European Commission, IMF, OECD and Citi Research

Figure 6. Selected Euro Area Countries — Headline Fiscal Deficit Projections (% of GDP), 2015



Note: Greece deficit target taken from 2015 budget passed on Parliament in Dec-14.
Sources: National Draft Budgets, European Commission and Citi Research

Reduced political pressure from Brussels…

Political pressure for additional fiscal consolidation is unlikely to build any time soon, in our view. The new flexibilities under the existing rules published by the EC in January (see Appendix) made it clear that EU officials are willing to provide as much fiscal leeway as possible as long as countries continue to make some progress on structural reforms. Indeed, recent progress in passing key structural reforms by the Italian government (labour market reform, electoral reform, product market reforms, and plans to pass a constitutional reform, among others), together with a continuation of very weak economic dynamics, were cited by the EC last week as the main factors to allow the Italian government to deviate from the agreed pact (i.e. implying a 0.3pp of GDP decline in the structural deficit for 2015).[3] For Belgium, the EC also cited the expected implementation of ambitious growth-enhancing structural reforms, together with unfavourable economic conditions and the expected compliance with the required budgetary adjustment, as reasons not to open an Excessive Deficit Procedure (EDP), despite the fiscal deficit being estimated to have reached 3.2% of GDP in 2014.

In France, the EC proposed to extend the deadline to bring the fiscal deficit below the 3% of GDP threshold by two years (to 2017) "*in order to give France sufficient time to implement ambitious structural reforms.*" First elements of a structural reform plan (i.e. the so-called '*Macron law*') were made public by the French government in December. These outlined initial steps to introduce some flexibility in the labour market (e.g. reform of Sunday working practices and regulated professions) among other key measures (e.g. reforming industrial tribunals, simplifying employee share ownership and saving schemes, and selling minority shares in listed companies).[4] The Macron law was adopted in Parliament on February 18 through a blocked vote. In addition, PM Manuel Valls recently announced plans for fresh labour reforms targeting moves to ease worker representation rules and reduce bureaucratic hurdles that hamper company growth once they hire 50 or more workers. We

[3] See http://ec.europa.eu/economy_finance/economic_governance/sgp/corrective_arm/index_en.htm

[4] See Euro Economics Weekly - France: Rejecting Austerity, For Now, 10 October 2014, Citi

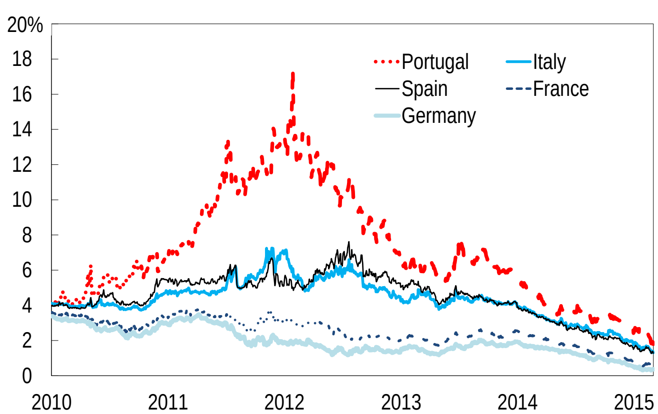
suspect these measures, together with the likely announcement of more details on both the €50bn plan to reduce public spending in 2015-17 as well as the €3.6bn additional measures announced in late 2014, will provide enough evidence to the EC that compliance with the Council recommendations is likely to be met.[5]

More broadly, we suspect that EU officials will be willing to make use of the existing provisions to reduce the amount of structural tightening that several EA countries are expected to do. For instance, using the new guidelines regarding cyclical conditions, the implied fiscal adjustment requirement in 2015 will fall to 0.5pp of GDP in France (vs. 0.8pp agreed previously), and to 0.3pp of GDP in Italy (vs. 0.5pp) and Portugal (vs. 0.9pp). Part of this relaxation may again also simply be that countries that have overshot either the structural or nominal budget target may not need to compensate with more austerity measures in coming years.

…coupled with very supportive market funding conditions

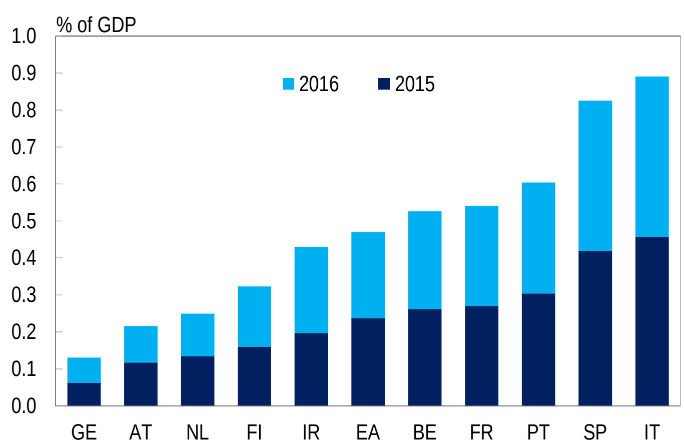
Very loose market funding conditions will provide additional room for some fiscal easing. Sovereign bond yields have already fallen substantially over the last few years (see Figure 7), and we expect funding costs to compress further following the announcement of a large quantitative easing (QE) programme by the ECB on Jan 22. We believe that QE will indirectly contribute to fiscal easing by reducing interest rates. We suspect that the implied lower expenditure path (and implicitly smaller deficit or larger surplus) will not mainly be used for debt reduction.

Figure 7. Selected Euro Area Countries — Nominal 10Y Government Bond Yields (%), 2010-2015



Sources: Bloomberg and Citi Research

Figure 8. Selected Euro Area Countries — Estimates of Funding Cost Savings From QE Activation by the ECB (% of GDP), 2015-16



Note: funding cost savings equal to the difference in interest spending using our latest 10Y sovereign yield forecasts and the average levels in Q2 14. See footnote 6.
Sources: Bloomberg and Citi Research

We estimate financial savings from lower interest costs to amount to around 0.2% of GDP annually in the EA in 2015-16. We compute the implied general government interest spending in 2015-16 using our latest sovereign yields forecasts and general government funding needs (see Global Economic Outlook and Strategy February 2015) and compare it with the implied interest spending if yields had remained at the average Q2 2014 levels.[6] Financial savings from lower funding

[5] The French government is required by the EC to specify measures by June 10 to deliver a structural adjustment of 0.5pp of GDP in 2015 (in line with the government's revised budget), 0.8pp of GDP in 2016 (vs. 0.3pp) and of 0.9pp of GDP in 2017 (vs. 0.5pp targeted).

[6] We estimate financial savings as the difference of the two. Interest spending is computed by taking the general government financing needs (i.e. gross redemptions + fiscal deficit forecasts) in 2015 and 2016 multiplied by the average interest rate (proxied by the 10Y sovereign bond yield). We produce

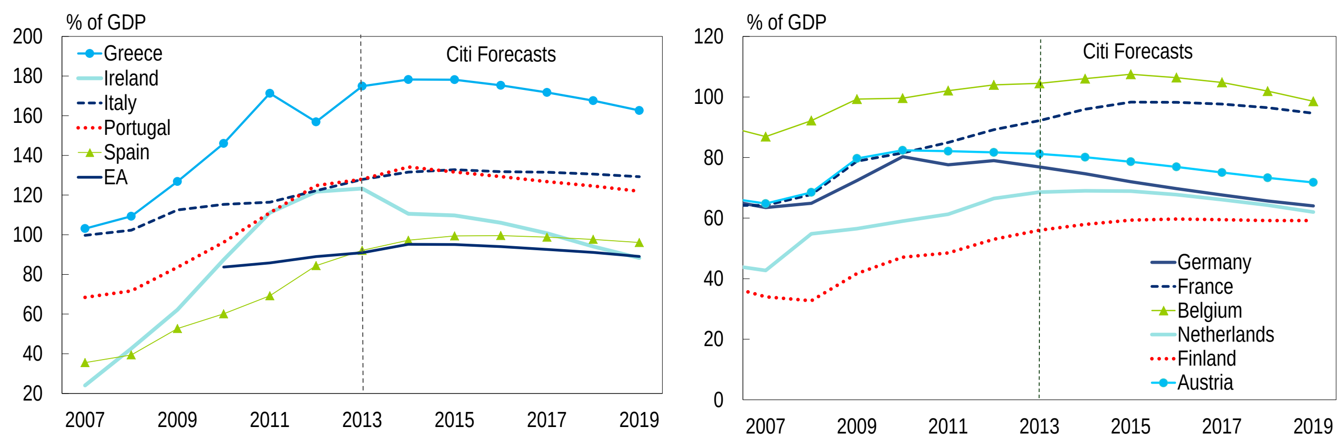
costs for the ten EA countries in our sample add to around €23.4bn (0.2% of GDP) in 2015 and €22.9bn (0.2% of GDP) in 2016 (see Figure 8). Funding cost savings will vary across countries, with the periphery likely to benefit the most (totaling 0.9% of GDP in Italy and around 0.7% in both Spain and Portugal in 2015-16) against somewhat more modest savings in core countries (0.1% of GDP in Germany). Note that, as we highlighted before, there is plenty scope for the ECB to expand government bond purchases in the future, and we expect this to be the primary instrument for further monetary policy easing in coming years. This implies that liquidity will most certainly remain abundant enough to allow for further funding cost savings beyond 2016.[7]

A more supportive fiscal policy — a result of lower-than-announced fiscal consolidation measures and our expectation that most of the funding cost savings are unlikely to be used for debt reduction — is one of the main factors behind our above-consensus real GDP forecasts for the EA in 2015-16.

Policy Implications

Fiscal policy is likely to become more supportive for growth in 2015 and coming years. We estimate the fiscal stance at the EA aggregate level to be slightly expansionary (i.e. 0.2-0.3pp of GDP increase in the structural primary deficit) in 2015-17. Assuming a fiscal multiplier of one (i.e. elasticity of GDP growth to any pp of GDP change in fiscal stance), we estimate the fiscal drag will move from 1pp of GDP per year in 2011-13 to a fiscal boost of around 0.2pp per year in 2015 and beyond.

Figure 9. Selected Euro Area Countries — General Government Gross Debt (% of GDP), 2007-2019F



Note: Data for 2014-19 correspond to Citi Research forecasts except for Austria and Finland (taken from the IMF).
Sources: Eurostat, IMF and Citi Research

estimates for 10 EA countries (Austria, Belgium, Finland, Ireland, Italy, Spain, Portugal, France, Germany, and the Netherlands) summing to 98% of EA GDP. We selected Q2 2014 for our non-QE average yield period as it coincided with the time when we incorporated QE into our baseline scenario as well as with the announcement of monetary policy actions by the ECB (rate cuts, TLTROs announcement, and plans to start preparatory work related to outright purchases in the ABS market).

[7] Estimates correspond to our base case scenario which rules out Greece EA exit (Grexit). A 200bp rise relative to baseline in 10Y sovereign yields (as a result of a negative shock, e.g. Grexit) would increase interest spending in the EA aggregate to 0.8% of GDP in 2015-16 (vs. 0.5% in baseline).

However, some of the underlying issues that caused the EA sovereign debt crisis still remain, and these are likely to limit the degree of fiscal policy expansion across the EA in years ahead. Public debt levels continue to rise in most periphery countries, and in 13 out of the 19 member states the public debt-to-GDP ratio remains above the threshold of 60% envisaged by the EU treaties (see Figure 9). While government budgetary positions are healthier than they were in 2010, headline fiscal deficits remain large (and subject to sudden changes in market environment), while risks still remain that the cyclical recovery could fail to reduce fiscal deficits as much as expected. Falling inflation rates and the prospects of negative HICP annual rates in most of H1 2015 could add to both headline deficits and public debt-to-GDP ratios.[8] In addition, while there has been some progress in terms of structural reforms, in particular in the periphery countries, implementation risks remain high while additional reform efforts to secure the long-term sustainability of public finances (i.e. pension and public administration reforms) are certainly still needed.

We therefore see limited prospects for a significant loosening in fiscal policy in the near future and expect fiscal policy to continue to play only a modest role in supporting the EA economic recovery. In our view, fiscal policy in the near term will continue to be characterised by some tolerance for budget deficit overshoots in countries under the EDP and modest easing in countries with fiscal buffers (e.g. Germany). QE activation by the ECB will indirectly contribute to modest fiscal easing by reducing interest rates further. However, we would not expect much fiscal loosening from Germany after the launch of QE. In addition, the outlook of a modest fiscal loosening could well change following a large negative shock (e.g. Grexit), prompting governments to increase fiscal efforts amid a likely deteriorating economy. With fiscal policy remaining only modestly expansionary, the onus for supporting growth in the Eurozone will mostly continue to fall on the ECB and its (unconventional) monetary policy.[9]

Appendix

Flexibilities under the SGP: EC update January 2015

On Jan 13 2015, the EU Commission presented a document entitled "making the best use of the flexibility within existing rules of the Stability and Growth Pact",[10] spelling out what leeway EU countries can count on when it assesses their fiscal efforts. In particular the guidance clarifies the link between fiscal consolidation efforts and i) structural reforms, ii) public investment, and iii) cyclical conditions.

i. Clarifications regarding structural reforms:
   a. Countries could deviate from their medium-term budgetary objective (MTO) as long as they approve and implement major structural reforms.
   b. Deviations should not exceed 0.5% of GDP and must assure that the 3% of GDP reference for fiscal deficit is respected.
   c. For countries subject to an Excessive Deficit Procedure (EDP), the EC may recommend giving a longer period to meet targets.

[8] The IMF estimates that if inflation were to remain very low (i.e. less than 1% YY) over a period of five years, the EA general government debt-to-GDP ratio would increase by 5 ¾ pp by the end of 2019 (relative to baseline). See http://www.imf.org/external/pubs/ft/fm/2014/02/pdf/fm1402.pdf

[9] For more see our Euro Economics Weekly - QE(1) Is Here — What Else Could The ECB Do?

[10] See http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/2015-01-13_communication_sgp_flexibility_guidelines_en.pdf

d. Flexibility applies ex-ante (by submitting a structural reform plan).

ii. Clarifications regarding investments (i.e. investment clause):

a. Contributions to the European Fund for Strategic Investments (EFSI) will not be counted for deficit calculations.

b. Investment clause: a member state could deviate from their MTO in order to accommodate investment if (for non-EDP countries):

i. Negative GDP growth or output gap < -1.5% of GDP

ii. 3% of GDP reference value for fiscal deficit is respected

iii. Clarifications regarding cyclical conditions:

a. For countries not subject to an EDP, the required structural adjustment will be determined based on:

Figure 10. Euro Area — Annual Fiscal Adjustment Towards the Medium-Term Objective, 2015

GDP (% YY)	Output Gap (% Potential GDP)	Required Annual Fiscal Adjustment: Gross Debt > 60% of GDP		Required Annual Fiscal Adjustment: Gross Debt < 60% of GDP	
		Real GDP Growth < Potential	Real GDP Growth > Potential	Real GDP Growth < Potential	Real GDP Growth > Potential
< 0	<-4	No adjustment needed		No adjustment needed	
≥ 0	-4 ≤ output gap <-3	0.25	0.25	0	0
≥ 0	-3 ≤ output gap < -1.5	0.25	0.5	0	0.25
≥ 0	-1.5 ≤ output gap < 1.5	> 0.5	> 0.5	0.5	0.5
≥ 0	output gap ≥ 1.5	≥ 0.75	≥ 1	> 0.5	≥ 0.75

Sources: European Commission and Citi Research

b. For countries subject to an EDP, the EC could extend the deadline for correction by one year if “effective” action has been taken to deliver the structural fiscal effort recommended.

The clarification regarding cyclical conditions implies the following required fiscal tightening across countries in 2015:

Figure 11. Euro Area Countries — EU Commission Forecast and Implied Fiscal Tightening, 2015

	Real GDP (% YY)	Potential Output (% YY)	Output Gap (%)	Gross Debt (% of GDP)	Fiscal Deficit (% of GDP)	Required fiscal Adjust (pp of GDP)
Ireland	3.5	2.7	0.7	110.3	2.9	>0.5
Slovenia	1.8	0.7	-1.4	83.0	2.9	>0.5
Belgium	1.1	0.9	-1.0	106.8	2.6	>0.5
Malta	3.3	3.0	0.4	68.0	2.0	>0.5
Austria	0.8	0.8	-1.2	86.4	2.0	>0.5
Germany	1.5	1.5	-0.8	71.9	-0.2	>0.5
France	1.0	1.0	-2.3	97.1	4.1	0.5
Finland	0.8	0.3	-2.6	61.2	2.5	0.5
Netherlands	1.4	0.4	-2.0	70.5	2.2	0.5
Lithuania	3.0	2.8	0.6	41.8	1.2	0.5
Latvia	2.9	2.6	1.4	36.5	1.1	0.5
Estonia	2.3	2.7	0.9	9.6	0.6	0.5
Spain	2.3	-0.1	-3.9	101.5	4.5	0.3
Portugal	1.6	-0.3	-3.1	124.5	3.2	0.3
Slovakia	2.5	2.4	-2.5	54.9	2.8	0.3
Italy	0.6	-0.3	-3.5	133.0	2.6	0.3
Luxembourg	2.6	1.9	-1.6	24.4	0.4	0.3
Cyprus	0.4	-1.5	-4.3	115.2	3.0	0.0
Greece	2.5	-2.1	-6.1	170.2	-1.1	0.0

Note: Required fiscal adjustment calculated by Citi Research based on cyclical conditions in Figure 10.
Sources: European Commission and Citi Research

Figure 12. Key Economic Indicators (9 March – 13 March 2015)

		Forecast	Last
Monday 9 March		Forecast	Last
07:00	Germany: Trade Balance, Jan		
07:30	France: Bank of France Business Sentiment, Feb	98	98
08:30	Sweden: Household Consumption, Jan	0.7% MM	-1.3% MM
09:30	Euro Area: Sentix Investor Sentiment, Mar		
11:00	Ireland: Industrial Production, Jan		
	Euro Area: Eurogroup Meeting of EA Finance Ministers, Brussels		
Tuesday 10 March		Forecast	Last
06:45	Switzerland: Unemployment Rate, Feb		
07:45	France: Industrial Production, Jan	-0.3% MM, 0.1% YY	1.5% MM, -0.1% YY
	Manufacturing Production, Jan	0.2% MM, 0.0% YY	1.2% MM, 0.3% YY
08:00	EU: EcoFin Meeting of EU Finance Ministers, Brussels		
08:00	Spain: Retail Sales, Jan	6.4% YY	6.7% YY
09:00	Italy: Industrial Production, Jan	0.2% MM	0.4% MM
09:00	Norway: Consumer Prices, Feb	0.8% MM, 2.3% YY	-0.1% MM, 2.0% YY
	CPI-ATE, Feb	0.8% MM, 2.6% YY	-0.1% MM, 2.4% YY
10:00	Greece: HICP, Feb		
Wednesday 11 March		Forecast	Last
06:30	France: Nonfarm Payrolls, 4Q Final	0.0% QQ, -0.4% YY	-0.3% QQ, -0.4% YY
07:00	Germany: Labour Costs, 4Q		
07:00	Germany: Insolvencies, Dec		
07:00	Sweden: Registered Unemployment Rate, Feb	4.3%	4.4%
07:45	France: Current Account, Jan		
08:30	Sweden: Consumer Prices, Feb	0.5% MM, -0.1% YY	-1.1% MM, -0.2% YY
	CPIF, Feb	0.7% MM, 0.8% YY	-1.0% MM, 0.6% YY
09:30	UK: Industrial Production, Jan	0.1% MM, 1.3% YY	-0.2% MM, 0.5% YY
	Manufacturing Output, Jan	0.2% MM, 2.6% YY	0.1% MM, 2.4% YY
Thursday 12 March		Forecast	Last
00:01	UK: RICS House Price Survey, Feb		
07:00	Germany: HICP, Feb Final	0.9% MM, -0.1% YY	-1.3% MM, -0.5% YY
	National CPI, Feb Final	0.9% MM, 0.0% YY	-1.1% MM, -0.4% YY
07:45	France: HICP, Feb	0.9% MM, -0.1% YY	-1.1% MM, -0.4% YY
	Consumer Prices, Feb	0.9% MM, -0.1% YY	-1.0% MM, -0.4% YY
	CPI Ex Tobacco Index, Feb	125.62	124.53
08:00	Spain: HICP, Feb Final	-1.2% YY	-1.5% YY
08:30	Netherlands: Industrial Production, Jan		
08:30	Sweden: LFS Unemployment Rate, Feb	8.3% NSA, 7.8% SA	8.4% NSA, 7.9% SA
09:30	UK: Trade Balance – Goods & Services, Jan	£-2.0 Billion	£-2.9 Billion
10:00	Euro Area: Industrial Production, Jan	0.2% MM	0.0% MM
10:00	Greece: Industrial Production, Jan		
10:00	Greece: Unemployment Rate, 4Q		
11:00	Ireland: GDP, 4Q 14		
11:00	Ireland: Balance of Payments, 4Q14		
11:00	Ireland: Consumer Prices, Feb		
Friday 13 March		Forecast	Last
08:30	Netherlands: Trade Balance, Jan		
09:00	Italy: HICP, Feb Final		
09:30	UK: Construction Output, Jan		
09:30	Italy: General Government Debt, Jan		
11:00	Ireland: Goods Trade Balance, Jan		
	UK: Liberal Democrat Spring Conference, Liverpool, to March 15		

Sources: National statistical offices, central banks and Citi Research

Figure 13. Economic Indicators – Comments: Euro Area, Germany, France, Italy and Spain

Euro Area			
Mar 12 10:00 London Time	*Industrial Production, Jan*	Forecast: 0.2% MM	Prior: 0.0% MM
	We anticipate IP to have accelerated modestly in January. The 0.2% MM uptick that we pencil in would likely represent the largest gain in four months. Estimates from Germany and Spain did not suggest that output recovered much at the start of 2015. But the underlying drivers of industrial production continue to suggest that some improvement is under way. We continue to expect industrial production to increase by around 0.5% QQ in 1Q-15, in line with the improvement in new orders and the positive contribution from a lower exchange rate.		
Germany			
Mar 12 07:00 London Time	*HICP, Feb Final* *National CPI, Feb Final*	Forecast: 0.9% MM, -0.1% YY Forecast: 0.9% MM, 0.0% YY	Prior: -1.3% MM, -0.5% YY Prior: -1.1% MM, -0.4% YY
	We expect the final estimate to confirm the flash readings and continue to believe that the trend in headline inflation rates is likely to be upward sloping throughout the remainder of 2015. Our preliminary forecast is that the annual rate of inflation will increase to 0.2% in March and average around 0.4% in 2Q-15. Generous wage settlements in the metal industry should gradually find their way into a higher core inflation trajectory.		
France			
Mar 9 07:30 London Time	*Bank of France Business Sentiment, Feb*	Forecast: 98	Prior: 98
	We expect business sentiment to have been stable at 98 (-0.2SD) in February despite indications of modest declines in both the INSEE manufacturing sentiment survey and a noticeable drop in the manufacturing PMI. The main reason behind our slightly more constructive forecast is the expectation that the BdF survey is slowly closing the 'confidence gap' with the other series. We believe that the steady weakening in the euro since the start of 2015 and the renewed slide since the announcement of QE on Jan 22, together with more indications of the government delivering on its pro-reform agenda (with a clear focus on boosting competitiveness and corporate profits) should support business confidence.		
Mar 10 07:45 London Time	*Industrial Production, Jan* *Manufacturing Production, Jan*	Forecast: -0.3% MM, 0.1% YY Forecast: 0.2% MM, 0.0% YY	Prior: 1.5% MM, -0.1% YY Prior: 1.2% MM, 0.3% YY
	After a bumper gain in IP in December, we look for industrial production to decline by 0.3% MM in January (expecting some reversal in energy production) but still begin the first quarter on a solid footing, up 0.6% on 4Q-14. On balance, the improvement in the ratio of new orders to stocks of finished goods points to further acceleration in the rate of industrial production growth during 2015. Capacity utilisation is improving gradually, having climbed to a 29-month high in January. Together with indications of a rebound in consumer spending, we are confident of some improvement in the rate of GDP growth in 1Q (around 0.4% QQ, or 1.5% annualised) after a very modest 0.1% QQ uptick in 4Q-14.		
Mar 11 06:30 London Time	*Non-Farm Payrolls, 4Q Final*	Forecast: 0.0% QQ, -0.4% YY	Prior: -0.3% QQ, -0.4% YY
	The flash estimate of non-farm private payrolls had shown a very small decline of 5,100 jobs in 4Q, meaning that over the course of 2014, some 67,600 jobs had been lost, an outcome very similar to the 69,000 job losses of 2013. Employment in the construction sector continued to contract at the fastest rate (-3.1% YY), while the rate of decline is slowing in the industrial sector. Turning to the services sector, the 0.1% YY gain masks a 0.2% QQ uptick, driven by a rebound in firms' demand for more temporary workers. Looking ahead to 2015, we look for the rebound in business confidence to translate into a modest increase in private sector non-farm employment.		
Mar 12 07:45 London Time	*CPI – EU Harmonised, Feb* *Consumer Prices Index, Feb* *CPI Ex Tobacco Index, Feb*	Forecast: 0.9% MM, -0.1% YY Forecast: 0.9% MM, -0.1% YY Forecast: 125.62	Prior: -1.1% MM, -0.4% YY Prior: -1.0% MM, -0.4% YY Prior: 124.53
	Prices are expected to have rebounded noticeably in February, particularly in the energy segment (+1.4% MM, unwinding 2/3 of the January drop), but also in the services sector where we anticipate that the monthly change will slightly exceed the seasonal norm. Both food and industrial goods prices are forecast to have been relatively stable on a YY basis. Core inflation is unlikely to trend up in February according to our estimates, but we expect a modest uptrend to be confirmed in coming quarters, mainly due to base effects. We expect French inflation to average 0.5% in 2015, a similar outcome to 2014.		
Italy			
Mar 10 09:00 London Time	*Industrial Production, Jan*	Forecast: 0.2% MM	Prior: 0.4% MM
	The turnaround in survey data suggests industrial output continued to rise in January: we estimate by 0.2% MM, following expansions of 0.4% MM in December and 0.3% MM in November. We estimate this will translate into the YY growth rate falling to -1.3% YY in January from -0.2% YY in December, affected by base effects. Further improvements in survey data (e.g. export orders in February rising at the fastest pace since June 2014) suggest industrial production is likely to resume positive QQ growth in 1Q (after a flat QQ reading in 4Q).		
Spain			
Mar 10 08:00 London Time	*Retail Sales, Jan*	Forecast: 6.4% YY	Prior: 6.7% YY
	We expect real retail sales (SA) to continue rising in January (by 2% MM), after growing by 1.2% MM in December and by 2% MM in November. We estimate this will translate into a +6.4% YY growth rate (WDA) in January, slightly down from 6.7% YY in December, affected by base effects. Consumer spending is likely to be supported by the decline in oil prices seen in previous months as well as the introduction of cuts in personal income tax from Jan 2015.		
Mar 12 08:00 London Time	*HICP, Feb Final*	Forecast; -1.2% YY	Prior: -1.5% YY
	According to the flash estimate, HICP inflation rose to -1.2% YY in February from -1.5% YY in January, rising above market expectations (-1.5% YY). We expect the split to confirm that the increase in HICP inflation was mainly driven by higher fuel prices (bringing energy inflation to -10% YY in February after -11.5% YY in January) as well as some pick-up in food inflation (after -0.1% YY in January). In addition, we project core inflation (i.e. excluding fresh food and energy) to have remained broadly unchanged at 0% YY in February. Overall we expect HICP inflation to remain in negative territory in coming months.		

Source: Citi Research

Figure 14. Economic Indicators – Comments: Sweden, Norway and United Kingdom

Sweden			
Mar 9 08:30 London Time	*Household Consumption, Jan*	Forecast: 0.7% MM	Prior: -1.3% MM
	The monthly indicator of household consumption increased by a meagre 0.1% QQ in the final quarter of 2014, following a 0.3% QQ decline in the previous quarter. Ahead, strong income growth, a gradually improving labour market and higher asset prices should support consumption. Note here that the indicator for household consumption is based on retail sales, consumption of services, car sales, use of energy, housing etc. (consumption abroad, though, is not included), and hence is the most reliable indicator for GDP. Following a 1.3% MM drop in December, we expect household consumption to rebound in January.		
Mar 11 07:00 London Time	*Registered Unemployment Rate, Feb*	Forecast: 4.3%	Prior: 4.4%
	Short-term indicators point to ongoing improvement in the labour market ahead. In line with the seasonal pattern, we expect the registered unemployment rate to fall slightly in February.		
Mar 11 08:30 London Time	*Consumer Prices, Feb* *CPIF, Feb*	Forecast: 0.5% MM, -0.1% YY Forecast: 0.7% MM, 0.8% YY	Prior: -1.1% MM, -0.2% YY Prior: -1.0% MM, 0.6% YY
	In January, core inflation (CPIF) overshot the Riksbank's forecast for a third consecutive month. In coming months, we expected CPIF to stay slightly higher than the Riksbank's projections due to the rebound in the crude oil prices. Although overshooting expectations, inflation continues to run well below the 2% target, which is likely to weigh on inflation expectations. Pressure on the Riksbank to do more will remain high going forward and we think there is a high probability that the Riksbank will ease monetary policy further during the spring by either cutting rates more or increasing bond purchases.		
Mar 12 08:30 London Time	*LFS Unemployment Rate, Feb*	Forecast: 8.3% NSA, 7.8% SA	Prior: 8.4% NSA, 7.9% SA
	The LFS unemployment rate has trended gradually lower throughout 2014. Labour market indicators have strengthened heading into 2015 and employment growth is set to accelerate from the already firm growth rate seen during 2014. However, due to rapidly increasing labour supply, we see the jobless rate falling only very slowly ahead. In line with the seasonal pattern, the jobless rate (unadjusted) is seen quite markedly in January.		
Norway			
Mar 10 09:00 London Time	*Consumer Prices, Feb* *CPI-ATE, Feb*	Forecast: 0.8% MM, 2.3% YY Forecast: 0.8% MM, 2.6% YY	Prior: -0.1% MM, 2.0% YY Prior: -0.1% MM, 2.4% YY
	Core inflation was stable at 2.4% YY in January, 0.2pp above Norges Bank's forecast. In turn, this leaves underlying inflation basically in line with the 2.5% inflation target. In its latest MPR (from December), Norges Bank lifted its CPI-ATE forecast by 0.3pp for this year (to 2.5% YY) due to the recent substantial weakening of the NOK. However, Norges Bank has temporarily "suspended" the inflation target in favour of supporting the real economy – recall that it pre-emptively cut rates in December despite inflation being on target, citing increased risk of a sharp downturn in the economy (amid lower oil prices). Despite the overshoot in January inflation and indications that inflation likely will overshoot in February too (Norges Bank sees CPI-ATE at 2.49% Y/Y), this should not prove sufficient to prevent another interest rate cut in March, in our view; oil prices are still trading USD 10/barrel below Norges Bank's December forecast, and the trade-weighted NOK is close to its projection.		
United Kingdom			
Mar 11 09:30 London Time	*Industrial Production, Jan* *Manufacturing Output, Jan*	Forecast: 0.1% MM, 1.3% YY Forecast: 0.2% MM, 2.6% YY	Prior: -0.2% MM, 0.5% YY Prior: 0.1% MM, 2.4% YY
	Surveys suggest that manufacturing output continues to expand at a solid pace, but oil and gas output has fallen sharply in recent months with the erosion of profitability of North Sea output, and hence the overall level of industrial production may show only modest growth this month.		
Mar 12 09:30 London Time	*Trade Balance – Goods & Services, Jan*	Forecast: £-2.0 Billion	Prior: £-2.9 Billion
	The sharp drop in oil prices will probably reduce the trade deficit this month. Within the split, export volumes showed quite strong growth in 4Q and it will be interesting to see whether this is maintained, given that surveys suggest that export orders have weakened somewhat.		

Sources: National statistical offices, national central banks, Bloomberg, and Citi Research forecasts

Figure 15. Key Economic Indicators (16 March –22 March 2015)

Monday 16 March		Forecast	Last
08:15	Switzerland: Retail Sales, Jan		
08:15	Switzerland: Producer and Import Prices, Feb		
08:30	Netherlands: Retail Sales, Jan		
Tuesday 17 March		**Forecast**	**Last**
07:00	EU-27: New Car Registrations, Feb		
08:00	Spain: Labour Cost Survey, 4Q		
09:00	Norway: Trade Balance, Feb		
10:00	Germany: ZEW Economic Expectations, Mar		
10:00	Euro Area: Employment (National Accounts), 4Q		
10:00	Euro Area: HICP, Feb Final		
Wednesday 18 March		**Forecast**	**Last**
09:00	Italy: Trade Balance, Jan		
09:30	UK: LFS Unemployment, 3-M Average, Nov-Jan	-130,000 QQ, 5.6% Rate	-97,000 QQ, 5.7% Rate
	LFS unemployment Rate, Single Month, Jan	5.6%	5.6%
	Claimant Count Unemployment, Feb	-30,000 MM, 2.4% Rate	-38,600 MM, 2.5% Rate
	Average Earnings Ex Bonus, Jan	1.8% YY, 1.8% 3-M YY	1.6% YY, 1.7% 3-M YY
09:30	UK: MPC Minutes of Mar 5 Meeting		
09:30	UK: BoE Agents' Summary of Business Conditions, Mar		
10:00	Euro Area: Trade Balance, Jan		
10:00	Euro Area: Construction Output, Jan		
c. 12:30	UK: 2015 Budget Presented to Parliament		
18:00	US: FOMC Outcome		
Thursday 19 March		**Forecast**	**Last**
06:45	Switzerland: SECO Economic Projections		
08:30	Switzerland: Swiss National Bank's Monetary Policy Assessment and Press Conference		
09:00	Norway: Norges Bank Outcome and Monetary Policy Report		
08:30	Netherlands: Consumer Spending, Jan		
08:30	Netherlands: Consumer Confidence, Mar		
08:30	Netherlands: Unemployment, Feb		
09:00	Euro Area: ECB's *Economic Bulletin*		
10:00	Euro Area: Labour Cost Index, 4Q		
	EU: European Council to 20 March		
Friday 20 March		**Forecast**	**Last**
	EU: European Council Continued		
07:00	Germany: Producer Prices, Feb		
09:00	Euro Area: Monthly Balance of Payments, Jan		
09:30	UK: Public Sector Net Borrowing (ex Banks), Feb	£9.3 Billion Deficit	Year Ago: £9.9 Billion Deficit
	Fiscal Year To Date, Apr14-Feb15	£83.3 Billion Deficit	£90.0 Billion Deficit
10:00	Italy: Current Account, Jan		
	Spain: Trade Balance, Jan		
Sunday 22 March		**Forecast**	**Last**
	France: Local Elections, First Round		
	Spain: Regional Election, Andalusia		

Sources: National statistical offices, central banks and Citi Research

Figure 16. Recent Research from the European Economics Team. To subscribe please email jan.maguire@citi.com

Euro Area - Sovereign Debt Update		
ECB Public Sector Purchase Programme Starts Monday	European Economics Team	Mar 6, 2015
ECB Meeting: Focus on QE Details and Staff Forecasts	European Economics Team	Mar 5, 2015
Eurogroup's Dijsselbloem Dismisses Reports of Third Greek Bailout	European Economics Team	Mar 4, 2015
Third Greek Bailout of €30-€50bn On The Cards; t;	European Economics Team	Mar 3, 2015
ECB QE: Likely Start Date Monday 9 March;	European Economics Team	Mar 2, 2015
Euro Area		
Euro Area - ECB Turns More Optimistic on Economic Outlook	Guillaume Menuet	Mar 5, 2015
Italy - Economic Growth To Turn Positive, Underperformance To Persist	Antonio Montilla	Mar 5, 2015
Global Economic Forecasts - February 2015	Michael Saunders	Feb 27, 2015
European Economic Forecast Highlights - February 2015	Ann O'Kelly	Feb 26, 2015
Greece Extension Agreement Provides Temporary Relief	Ebrahim Rahbari	Feb 23, 2015
Greek Extension Request Raises Chance of Interim Deal This Week;	Ebrahim Rahbari	Feb 19, 2015
ECB - First Set Of ECB Minutes	Ebrahim Rahbari	Feb 19, 2015
Euro Area - Greece — After The Feb 16 Eurogroup Meeting	Ebrahim Rahbari	Feb 17, 2015
ECB decision to lift waiver puts more pressure on Greek banks and Greek government	Ebrahim Rahbari	Feb 5, 2015
Greek Election: Clear Syriza Win, Difficult Negotiations Ahead	Ebrahim Rahbari	Jan 26, 2015
Greek Election Update: Clear Syriza Win, Difficult Negotiations Ahead;	Ebrahim Rahbari	Jan 25, 2015
Euro Area - ECB Launches QE, Removes Balance Sheet Constraint	Guillaume Menuet	Jan 22, 2015
Euro Area - ECB QE: A Done Deal, Uncertainty is Over Details	Guillaume Menuet	Jan 15, 2015
Euro Area - ECJ's Preliminary Green Light for OMT Also Opens Door for QE	Ebrahim Rahbari	Jan 14, 2015
Euro Economics Weekly		
Measuring the ECB's Inflation Targeting Credibility	Guillaume Menuet	Feb 27, 2015
Ireland — Will The Recovery Continue?	Michael Saunders	Feb 20, 2015
Is the Credit Cycle Turning?	Guillaume Menuet	Feb 13, 2015
Rising Risks: What's Next For Greece?	Ebrahim Rahbari	Feb 6, 2015
Further FCI Improvement Needed To Underpin Growth	Guillaume Menuet	Jan 30, 2015
QE(1) Is Here — What Else Could The ECB Do?	Ebrahim Rahbari	Jan 23, 2015
Is Grexit Risk Back?	Ebrahim Rahbari	Jan 9, 2015
2015 Year Ahead: Low-flation, Politics And QE	Guillaume Menuet	Jan 6, 2015
Will Political Risk Matter in 2015?	Guillaume Menuet	Dec 12, 2014
The Eurozone Investment Collapse And The Juncker Plan	Ebrahim Rahbari	Dec 5, 2014
ECB QE: Stacking Up The Evidence	Guillaume Menuet	Nov 28, 2014
Spain: Improving Economy, Politics The Main Risk	Antonio Montilla	Nov 21, 2014
Will Germany Let the ECB Do QE?	Ebrahim Rahbari	Nov 14, 2014
Door Open to QE, Favouring January over December	Guillaume Menuet	Nov 7, 2014
Credit And The Eurozone Malaise	Ebrahim Rahbari	Oct 31, 2014
Will the Euro Area Suffer from Oil Blues?	Guillaume Menuet	Oct 24, 2014
How Much Will the Weaker Euro Boost Eurozone Growth?	Ebrahim Rahbari	Oct 17, 2014
France: Rejecting Austerity, For Now	Michael Saunders	Jan, 21, 2015
Chief Economist Publications		
Global Economic Outlook and Strategy — February 2015	Willem Buiter	Feb 25, 2015
Scandi and Swiss		
Scandi Economics Update	Tina Mortensen	Mar 6, 2015
Norway - Investment Survey Confirms Drop in Oil Investments This Year, But 2015 Estimate Stable from December Survey;	Tina Mortensen	Mar 5, 2015
Sweden - Strong Production Data In January	Tina Mortensen	Mar 5, 2015
UK		
UK - PMIs Point to Continued Solid Growth	Michael Saunders	Mar 4, 2015
UK - YouGov Report Further Drop in Inflation Expectations;	Michael Saunders	Mar 3, 2015
UK - BoE and PMI Data	Michael Saunders	Mar 2, 2015
UK Economics Weekly		
Fiscal Trends Improving, Fiscal Risks are Modest	Michael Saunders	Feb 28, 2015
Why Has Housing Slowed? Will It Rebound?	Michael Saunders	Feb 20, 2015
Is the IR Hawkish or Dovish?	Michael Saunders	Feb 13, 2015
The Surge In Pension Deficits — Causes and Implications	Michael Saunders	Feb 6, 2015
What Will The Inflation Report Say?	Michael Saunders	Jan 30, 2015

Source: Citi Research

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	Antonio Montilla; Guillaume Menuet; Michael Saunders; 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 Bell Potter Customers: Bell Potter is making this Product available to its clients pursuant to an agreement with Citigroup Global Markets Australia Pty Limited. Neither Citigroup Global Markets Australia Pty Limited nor any of its affiliates has made any determination as to the suitability of the information provided herein and clients should consult with their Bell Potter financial advisor before making any investment decision.

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 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. 399 Interchange 21 Building, 18th Floor, Sukhumvit Road, Klongtoey Nua, Wattana ,Bangkok 10110, 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 by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA. This material may relate to investments or services of a person outside of the UK or to other matters which are not authorised by the PRA nor regulated by the FCA and the PRA 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 authorised by the PRA and regulated by the FCA and the PRA.

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 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.

Citi Research generally disseminates its research to the Firm's global institutional and retail clients via both proprietary (e.g., Citi Velocity and Citi Personal Wealth Management) and non-proprietary electronic distribution platforms. Certain research may be disseminated only via Citi's proprietary distribution platforms; however such research will not contain changes to earnings forecasts, target price, investment or risk rating or investment thesis or be otherwise inconsistent with the author's previously published research. Certain research is made available only to institutional investors to satisfy regulatory requirements. Individual Citi Research analysts may also opt to circulate published research to one or more clients by email; such email distribution is discretionary and is done only after the research has been disseminated.

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 Thomson Reuters. The printed and printable version of the research report may not include all the information (e.g., certain financial summary information and comparable company data) that is linked to the online version available on Citi's proprietary electronic distribution platforms.