

Portuguese Telecoms

The Birth of 'Zonae'

- **Event** — On 14 December, Zon's major shareholder (Isabel Dos Santos) and Sonaecom agreed to pursue a merger of Sonaecom's Optimus into Zon. Sonaecom will end up with a 40% stake in Zon, though the final breakdown will be subject to further discussions. The exchange ratio is in line with the respective market caps; though details around the balance sheet are still pending. This is likely to take time and is subject to regulatory approvals. We think completion is unlikely before 2H13.
- **Over to Vodafone?** - Based on the support of the controlling shareholders of both companies, we expect the merger proposal to be successful, unless a competing offer is tabled. However, the market's focus will likely shift to Vodafone Portugal, as it is the only pure mobile player left, and which was also linked as a potential acquirer of Zon by local press at the start of 2012, although it has made no comment on any such moves. This is likely to be closely watched as it may have wider implications regarding Vodafone's Europe strategy. However, we believe Vodafone is unlikely to get involved due to strategic and practical barriers that we discuss later.
- **Clear rationale** — The merger has been well-flagged in the press and welcomed by the market as evidenced by the 23% and 21% respective re-rating of Zon and Sonaecom shares in the past three months. The aim is to prepare for rival Portugal Telecom's push into quad bundles and other converged products. We see scope for cost savings from the merger: leased line and network rent from PT; sales channels; back office functions and headcount; but that will depend on execution. **Convergence is coming:** PT has highlighted its vision to drive convergence especially as mobile communities break down from the cuts in MTRs. PT aims to reduce churn (TKA saw 75% reduction in mobile churn from bundles).
- **Operationally negative for PT...** — An alternative converged player with strong network presence will limit PT's convergence advantage. PT is likely to see some of its wholesale revenues from Sonaecom disappear: We estimate c.€25m is at risk; though its retail business will likely benefit from the churn caused by migration to Zon's cable. **But supportive of PT's valuation:** The proposed merged entity is valued at a 50% EV/EBITDA premium vs. our valuation of PT's domestic operations.
- **Stock Implications** — While Zon stock may benefit in the short-term from market speculation regarding a potential counteroffer, we continue to rate the stock Neutral. Our TP moves to €2.60 (€2.40). The deal should not affect Sonaecom's fundamental value but as it is transformed into a holding vehicle for Zon shares, we see a negative medium-term impact and cut our rating to Sell. We believe the market may view this initially as a negative for Buy-rated PT, but will likely see the implied upside to PT's valuation as an offset. Small estimate adjustments for all three stocks.

Georgios Ierodiaconou

+44-20-7986-4086

georgios.ierodiaconou@citi.com

Simon Weeden

+44-20-7986-4204

simon.weeden@citi.com

Tania Valiente

+44-20-7986-4140

tania.valiente@citi.com

Company	Ticker	Rating		Target Price		Current Year Earnings Estimates	
		Old	New	Old	New	Old	New
Portugal Telco	PTC.LS	1	1	€4.70	€4.70	€0.44	€0.43
Sonaecom	SNC.LS	2	3	-	€1.30	EU¢16	EU¢20
Zon	ZON.LS	2	2	€2.40	€2.60	EU¢12	EU¢13

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.

Zon + Sonaecom= Zonae

We believe the proposed combination of Zon and Optimus is likely to lead to a more effective competitor in the Portuguese market, which will be well positioned to compete with PT on convergence in c.2/3rds of the country. Assuming the merger is completed, the market will move to two main converged groups, with PT the market leader in fixed (voice/broadband/TV) and mobile; the newly establishing 'Zonae' will be the only other main fixed operator and the third mobile player in the market. This will leave Vodafone as the only pure mobile player in Portugal (Vodafone has a negligible fixed presence and has been unsuccessful in establishing an attractive offer). Vodafone may have to compete more aggressively on price to offset its product disadvantage. We believe the proposed merger is negative for PT operationally (through it is largely expected and a better outcome than a potential scenario where Vodafone and Zon would merge). But it has positive implication for PT's valuation, in our view, as PT remains more attractively valued than the newly emerged 'Zonae' and better diversified.

What is being proposed?

Zon and Sonaecom announced on 14 December that Sonaecom and the holding vehicles owned by Isabel Dos Santos (Kento Holding Limited and Jadeium BV), which control 28.8% of Zon's share capital, have reached an agreement that will be proposed to the respective boards of Zon and Optimus (Sonaecom's telecom assets) to merge the two companies through the incorporation of Optimus into Zon. The management teams of both companies will be tasked to evaluate the benefits of the transaction and arrive at an exchange ratio to be subsequently presented to the respective shareholder meetings. The exchange ratio currently agreed values Zon at 150% of the value of Optimus and, therefore, Sonaecom will effectively take a 40% stake in Zon. Assuming all of Sonaecom's debt is also transferred to Zon (which has not been confirmed), the exchange ratio is in-line with current market valuations. Sonaecom's other operations (ex Optimus) will not be part of this deal and Sonaecom will remain a separately listed entity, though it will effectively become a holding company, with Zon shares being the main assets.

The structure of the deal is somewhat more complex, as it aims to balance the influence of the two controlling shareholders. Isabel dos Santos's 28.8% stake in Zon (held through Kento and Jadeium) will be diluted to 17.3%. Sonaecom and Kento/Jadeium have agreed to incorporate a vehicle owned in equal parts subject to the implication of the merger. Based on the current ownership, it will imply that the vehicle will own 34.6% of the share capital, while Sonaecom will also own 22.7% of Zon's shares directly.

The process is likely to take time and be subject to regulatory approvals. We estimate that completion is unlikely before 2H13.

While we stress that Vodafone has given no indication it intends to launch a counteroffer, the market is likely to focus on this possibility. Despite this, we see three reasons that mean it is unlikely Vodafone would from launch any counteroffer: a) increasing exposure to Portugal is undesirable, given macro conditions; b) not a major market and any such move would have implications for Vodafone's strategy in bigger markets; but mainly because c) Isabel Dos Santos would likely want a premium if she could not participate as a major shareholder, as is the case with the proposed Optimus merger agreement.

In light of the newsflow, we downgrade Sonaecom to Sell from Neutral as we believe that at best it will be transformed into a holding vehicle for Zon shares. While Zon stock may benefit in the short-term from market speculation regarding a potential counteroffer, we continue to rate the stock Neutral, as we believe the valuation already reflects some of the positive drivers arising from the merger.

Pro-forma estimates

We look at the profile of the proposed combination of Zon and Sonaecom. There will be some changes in revenue recognition if the merger goes through that primarily has to do with elimination of interconnection payments between the two operators. However, these items are likely to have a marginal impact on numbers and on EBITDA.

We believe there is scope for cost savings, mainly from the combination of fixed line assets. Sonaecom's fixed base could be migrated over time to Zon's cable network, reducing the ULL fees paid to PT. There is also the option to switch off Sonaecom's FttH network, through we believe that may be difficult to execute, as it would leave PT with a network advantage. These synergies will largely depend on execution and may take time to materialise if 'Zonae' is to limit subscriber churn to PT.

Figure 1. Pro-forma estimates for combination of Zon and Sonaecom (€m)

	1Q11	2Q11	3Q11	4Q11	1Q12	2Q12	3Q12	4Q12E		2011	2012E	2013E	2014E
Revenues	406	407	420	413	399	401	405	398		1,646	1,604	1,569	1,554
Zon	214	212	214	216	214	214	215	223		855	868	868	882
Optimus mobile	137	143	150	141	131	131	137	128		571	528	498	473
Optimus fixed	55	52	57	57	53	55	53	47		220	209	203	199
EBITDA	129	134	137	120	138	142	146	126		520	552	545	542
Zon	80	79	80	74	80	79	80	76		311	314	317	322
Optimus mobile	48	53	54	45	55	60	62	50		200	227	217	208
Optimus fixed	1	3	3	2	3	4	4	0		10	11	12	12
Capex	- 63	- 62	- 58	- 83	- 55	- 71	- 67	- 55		- 266	- 256	- 255	- 252
Zon	- 39	- 36	- 35	- 41	- 30	- 28	- 25	- 41		- 150	- 130	- 130	- 132
Optimus	- 24	- 27	- 23	- 43	- 26	- 43	- 42	- 15		- 116	- 126	- 125	- 119
OpFCF (Headline)	66	72	79	37	83	71	79	71		254	297	291	290
Zon	41	43	45	33	50	51	55	35		161	184	187	190
Optimus	26	29	34	4	33	20	24	36		93	113	104	101

Source: Company reports, Citi Research

Implied valuation

We assume that Sonaecom's remaining assets (mainly IT and newspapers) have negligible value and therefore the combination of Optimus and Zon will account for almost the entirety of the combined value of the two groups. Based on that, we estimate the pro-forma multiples: EV/EBITDA and EV/OPFCF. The net debt of the combined entity will stand at 1.9x EBITDA in 2012e, assuming all of Sonaecom's debt moves to Zon; or 2.1x adjusting for Zon's long-term contracts.

Figure 2. Pro-forma valuation multiple for Zonae

	2011	2012E	2013E	2014E
Ev/EBITDA	4.7	4.5	4.4	4.3
Ev/OpFCF	9.7	8.4	8.3	7.9
Adj EV/EBITDA	5.6	5.0	4.7	4.6
Adj EV/OpFCF	21.2	10.4	9.6	9.2

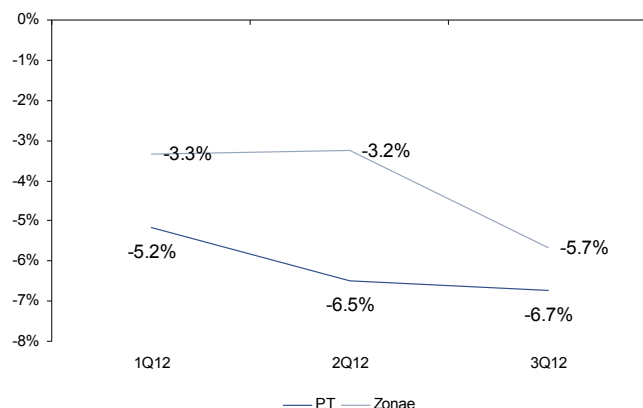
Source: Company reports, Citi Research

The valuation is a premium vs the sector, which we believe can be justified by the heavy weight of cable revenues and the premium multiples of the cable industry. Having said that, we believe that such a premium to the implied valuation of Portugal Telecom's domestic business is hard to justify. We value PT's Portuguese operations at €4.75bn or 3.8x 2012e EV/EBITDA in our sum of parts. The implied EV/OpFCF multiple is 7.2x. We value PT at €4.7/share.

Zonae has better trends, but unsustainable margin improvement

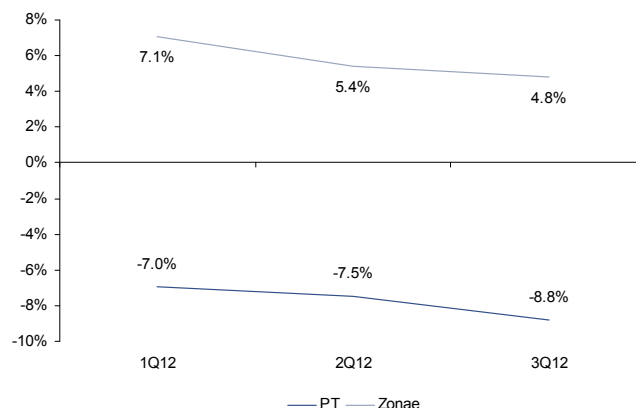
In terms of trends, PT's revenue decline is only marginally worse than that of the combined entity, at -6.7% vs -5.7% respectively, after excluding Zon's international assets and other domestic operations. The main driver of PT's weaker performance is the extra weight of mobile to the revenues and the underperformance of TMN vs Optimus in the mobile segment, which are partly down to temporary effects as TMN has stabilized its market share in recent quarters but is still suffering from the migration of its base to its new tariffs. By contrast, PT is winning share in fixed residential at the expense of Zon, both in terms of subscriber trends and service revenue performance (+4.4% growth for PT vs -3.1% for Zon).

Figure 3. Revenue growth comparison between PT and Zonae (YoY)



Source: Company reports, Citi Research

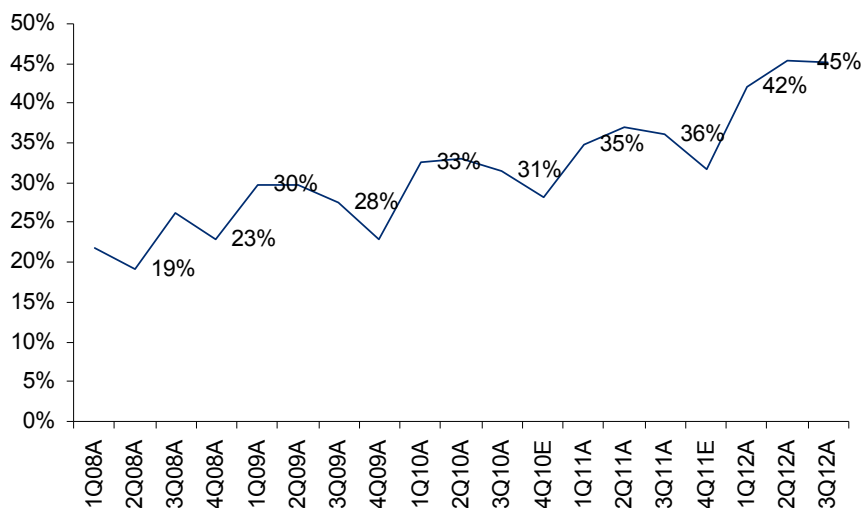
Figure 4. EBITDA growth comparison between PT and Zonae (YoY)



Source: Company reports, Citi Research

Even though PT has inferior EBITDA growth to Zonae, on our forecasts, we highlight that the latter's momentum is likely to change in the coming years as the main improvement in margins has been exhausted. Optimus' profitability has improved dramatically mainly due to the benefit from MTR cuts and also through impressive underlying cost cutting. But mobile margins have already reached 45% in 3Q12 and further room for further improvement is limited.

Figure 5. Optimus' reported mobile margins have more than doubled in recent years



Source: Company reports, Citi Research

PT's elevated capex levels also means that its OpFCF generation is likely to improve, even if we see some pressure on EBITDA as capex continues to decline. On the other hand, Zon has cut capex dramatically in recent years to improve its OpFCF generations and we see limited scope for further decline. Capex to revenues is expected to average 16% for Zonae in 2012E; below European average capex levels for cable (21%) and subscale mobile operators like Optimus cannot run significantly below the capital intensity of Vodafone (16%). By contrast PT is spending significantly more than its peers on capex: 20% of sales in 2012E, down from 22.5% in 2011.

PT has the advantage in 2/3rds of Portugal: The Portuguese fixed market can be roughly divided into three main areas. Around 1/3 of all homes and the bulk of the value of the market are the competitive areas. PT has FttH for 1.6m homes competing against Zon's cable and has a clear advantage as evidenced by its strong commercial momentum. There are also around 1/3 of homes, where Zon's cable network has an advantage over PT's ADSL2+ network. Finally, for c. 1/3 (low economic value) homes, PT's network is the only option.

Pricing: No direct risk to market remaining rational

The Portuguese market is broadly rational in fixed and mobile. We do not expect the move to quad play to have a direct impact on pricing, but see indirect risk from Vodafone. In fixed, Zon has already announced that it plans to pass on close to a 3% price increase from 1 January, in line with inflation. That should improve ARPL by 1%, though promotions and ongoing disconnection of premium services may moderate the reported ARPU improvement. PT's Meo is set to follow as in the past.

In mobile, all three MNOs have broadly similar offers and Optimus is a rational player that has increased market share very gradually and even pushed through significant price increases in early 2011, when mobile demand started to deteriorate. But if quad play proves to be successful, Vodafone will be at a significant competitive disadvantage, which it may seek to offset by shifting competition to price; as has been the case in the tribal segment in 2H12.

Company Focus

- Company Update
- Estimate Change

Buy	1
Price (14 Dec 12)	€3.82
Target price	€4.70
Expected share price return	22.9%
Expected dividend yield	8.5%
Expected total return	31.4%
Market Cap	€3,349M
	US\$4,409M

Price Performance
(RIC: PTC.LS, BB: PTC PL)



Portugal Telecom (PTC.LS) Updating Numbers for BRL Weakness

- **Real Depreciation** — The BRL has depreciated materially in the past few months and currently trades at BRL2.75/€. There have been occasions in the past where sharp movements have been reversed, but there is potentially further downside risk, given recent measures imposed by the Brazilian authorities. We also update our estimates for other and international again mainly on forex.
- **PT's exposure to Brazil is highest in European telcos** — approximately 46% of reported group revenues; 40% of EBITDA; 33% of OpFCF comes from Oi. We see the currency weakness as a key headwind to estimates, but not so significant in terms of value given high levels of debt in Brazil. PT's stake in Oi only accounts for 18% of its EV, while PT's stake in Contax (call center business in Brazil) accounts for a further 1.4% of EV.
- **Forecast changes** — We update our estimates to reflect lower forex assumptions for 2013-14 on the back of weaker forex at Oi and Other. We leave our estimates for Portugal unchanged vs our post 3Q12 update and we are not factoring any changes due to the proposed merger of Optimus into Zon, as the timing and the success of the merger proposal remain uncertain.
- **PT is our top Southern European pick** — We continue to believe that PT's strong liquidity position sets it apart from its Southern European peers. As a result, we see no imminent risk to PT's three-year dividend commitment. We expect PT to be one of the main beneficiaries of any changes to EU regulation over NGA investments as it will shift investor focus towards its structural advantages. PT has the liquidity and therefore the option to potentially extend its fibre coverage further. We believe that may come in 2014, after the uptake in the existing footprint has reached critical scale and subject to macro conditions.
- **Next events** — We believe 4Q results will be critical in demonstrating progress in Brazil, where we expect Oi will continue to gain share in mobile and reduce its churn as well as improve ARPL in fixed residential. We see the Brazilian telecoms regulator, Anatel's, investigation of broadband speeds as the biggest risk to Oi in the medium term. We believe that it is likely that Anatel will demand commitment for investment (which Oi has already budgeted), but it may take it a step further and impose a ban on sales of new broadband connections. Finally, we believe that the potential sale of non-core assets, like Macau, as has been recently reported in the press, would be welcomed by the market and demonstrate that PT's headline leverage is overstated by insufficient recognition of the value of its associates. PT has always stated that Brazil and sub-Saharan African are the core focus of the group.

Portugal Telecom (EUR)

Year to 31 Dec	2010A	2011A	2012E	2013E	2014E
Sales (€M)	3,742.2	6,146.8	6,556.2	6,158.2	6,275.5
Net Income (€M)	426.3	457.7	374.2	376.9	481.7
Diluted EPS (€)	0.49	0.52	0.43	0.44	0.58
Diluted EPS (Old) (€)	0.49	0.52	0.44	0.45	0.59
PE (x)	7.8	7.3	8.9	8.6	6.6
EV/EBITDA (x)	5.7	4.3	6.2	7.6	8.3
DPS (€)	0.65	0.65	0.33	0.33	0.33
Net Div Yield (%)	17.0	17.0	8.5	8.5	8.5

Forecast revision summary

We reduce our estimates mainly on the back of weaker forex assumptions as we capture the steep depreciation of the BRL/€ in recent months. We also slightly increase our organic estimates for Oi on revenues, but keep EBITDA estimates unchanged in BRL. We also slightly reduce our estimates for 'other', again mainly on forex moves.

Figure 6. Portugal Telecom forecast revision table (€m)

Year to Dec	Current				Prior			Δ%		
	2011	2012E	2013E	2014E	2012E	2013E	2014E	2012E	2013E	2014E
Revenue	6,147	6,556	6,158	6,275	6,473	6,277	6,360	1.3%	(1.9%)	(1.3%)
growth, yoy		6.7%	(6.1%)	1.9%		5.3%	1.3%			
Operating costs	(3,959)	(4,323)	(3,979)	(3,997)	(4,225)	(4,063)	(4,054)	2.3%	(2.1%)	(1.4%)
growth, yoy		9.2%	(7.9%)	0.4%		6.7%	(0.2%)			
EBITDA	2,188	2,233	2,179	2,279	2,248	2,215	2,305	(0.7%)	(1.6%)	(1.1%)
growth, yoy		2.1%	(2.4%)	4.6%		2.8%	4.1%			
margin	35.6%	34.1%	35.4%	36.3%	34.7%	35.3%	36.3%	(67bp)	10bp	6bp
EBIT	862	898	876	992	909	890	1,004	(1.2%)	(1.6%)	(1.2%)
Net income	458	374	377	482	382	387	490	(2.1%)	(2.6%)	(1.8%)
EPS	0.52	0.43	0.44	0.58	0.44	0.45	0.59	(2.1%)	(2.6%)	(1.8%)
DPS	0.7	0.33	0.33	0.33	0.33	0.33	0.33	0.0%	0.0%	0.0%
Capex	(1,224)	(1,446)	(1,136)	(1,072)	(1,450)	(1,156)	(1,084)	(0.3%)	(1.7%)	(1.2%)
FCF pre min divs	533	194	552	700	204	566	712	(4.9%)	(2.5%)	(1.6%)
FCF post min divs	533	159	513	636	169	527	647	(5.8%)	(2.7%)	(1.7%)
Net debt & pensions		8,093	7,802	7,382	8,208	7,903	7,472	(1.4%)	(1.3%)	(1.2%)
Net debt/EBITDA		3.6x	3.6x	3.2x	3.7x	3.6x	3.2x	(0.0x)	0.0x	(0.0x)

Source: Company reports, Citi Research

Company Focus

- Company Update
- Rating Change
- Target Price Change
- Estimate Change

Sell	3
from Neutral	
Price (14 Dec 12)	€1.54
Target price	€1.30
from -	
Expected share price return	-15.4%
Expected dividend yield	3.3%
Expected total return	-12.1%
Market Cap	€563M
	US\$740M

Price Performance (RIC: SNC.LS, BB: SNC PL)



Sonaecom (SNC.LS) Becoming a Holding Vehicle

- **Downgrade to Sell** — We cut our recommendation to Sell from Neutral. While the deal should not affect Sonaecom's fundamental value, it transforms the company into a holding vehicle for Zon shares, and we see a negative medium-term impact as a result. With some details of the proposed merger agreement still pending, we believe an exchange ratio valuation of 40% of the new entity will be a best case scenario for Sonaecom.
- **Only see downside from here** — Assuming the deal goes through then Sonaecom will effectively be transformed into a holding vehicle for Zon shares and therefore we believe a discount to peers is warranted. Also, even through we believe it is a remote possibility that there will be a counteroffer, this is another potential risk for Sonaecom as it would be left as the only MNO with weak fixed presence, while lacking Vodafone Portugal's scale.
- **Shares have done well** — Deal upside has already been priced into Sonaecom shares, which have rallied more than 20% in the past three months, as press reports of a potential tie up with Zon have been appearing since late summer.
- **Forecast revisions** - We cut our estimates for Sonaecom to reflect weaker mobile demand mainly driven by the impact of austerity measures in Portugal. Though recharging activity has picked up in October, following weakness in late 3Q, we believe that mobile will continue to suffer from macro headwinds. We also see limited scope for market share gains or further margin improvement. See table on following page.
- **TP of €1.30** – We introduce a DCF-based target price of €1.30, based on an 8-year DCF, with a 9.6% cost of capital, and 0.5% terminal growth. We assign a price target as Friday's announcement and the reduction in Portuguese bond yields make it possible to employ DCF for small cyclical operation with no diversification.

Sonaecom (EUR)

Year to 31 Dec	2010A	2011A	2012E	2013E	2014E
Sales (€M)	920.7	863.6	815.1	776.8	753.7
Net Income (€M)	45.4	72.6	73.4	56.3	58.1
Diluted EPS (¢)	12	21	20	15	16
Diluted EPS (Old) (¢)	12	21	16	15	16
PE (x)	12.4	7.5	7.7	10.0	9.7
EV/EBITDA (x)	4.4	4.0	3.7	4.1	4.0
DPS (¢)	5	5	5	5	5
Net Div Yield (%)	3.2	3.2	3.2	3.2	3.2

Figure 7. Sonaecom forecast revision table (€m)

Year to Dec	Current			Prior			Δ%		
	2012E	2013E	2014E	2012E	2013E	2014E	2012E	2013E	2014E
Revenue	815	777	754	829	807	788	(1.7%)	(3.7%)	(4.4%)
growth, yoy	(5.6%)	(4.7%)	(3.0%)	(4.0%)	(2.7%)	(2.3%)			
Operating costs	(575)	(546)	(530)	(589)	(569)	(556)	(2.4%)	(4.1%)	(4.6%)
growth, yoy	(12.5%)	(5.1%)	(2.9%)	(10.4%)	(3.4%)	(2.3%)			
EBITDA	240	231	224	239	237	232	0.2%	(2.7%)	(3.8%)
growth, yoy	16.3%	(3.7%)	(3.3%)	16.1%	(0.8%)	(2.1%)			
margin	29.4%	29.7%	29.7%	28.9%	29.4%	29.5%	54bp	31bp	18bp
EBIT	102	88	86	99	88	88	3.0%	(0.4%)	(2.1%)
Net income	73	56	58	60	56	59	22.9%	(0.3%)	(2.1%)
EPS	20.03	15.37	15.86	16.30	15.42	16.19	22.9%	(0.3%)	(2.1%)
DPS	5.00	5.00	5.00	5.00	5.00	5.00	0.0%	0.0%	0.0%
Capex	(126)	(125)	(119)	(128)	(130)	(126)	(1.8%)	(4.1%)	(4.9%)
FCF pre min divs	(43)	72	76	(45)	73	78	(6.0%)	(1.5%)	(2.8%)
FCF post min divs	(43)	72	76	(45)	73	78	(6.0%)	(1.5%)	(2.8%)
Net debt & pensions	344	274	222	347	275	221	(0.8%)	(0.5%)	0.4%
Net debt/EBITDA	1.4x	1.2x	1.0x	1.4x	1.2x	0.9x	(0.0x)	0.0x	0.0x

Source: Company reports, Citi Research

Figure 8. DCF: model assumptions for Unlevered FCF

Year to Mar	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
EBITDA	234	227	223	219	215	211	204	197
Mvt in working capital	0	0	0	0	0	0	0	0
Capex inc spectrum	(125)	(119)	(116)	(113)	(110)	(107)	(104)	(101)
Dividends from associates	0	0	0	0	0	0	0	0
Dividends to minorities	0	0	0	0	0	0	0	0
Tax paid	(5)	(21)	(21)	(21)	(21)	(21)	0	0
Interest paid	(35)	(15)	(15)	(15)	(15)	(15)	(15)	(15)
Other	0	(15)	(15)	(15)	(15)	(15)	(15)	(15)
FCF	69	55	55	54	53	53	70	66
Adjustments								
Interest & dividends	35	15	15	15	15	15	15	15
Tax shield on interest	(10)	(4)	(4)	(4)	(4)	(4)	0	0
Unlevered FCF	94	66	66	65	64	63	85	82

Source: Citi Research

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Neutral	2
Price (14 Dec 12)	€2.81
Target price	€2.60
from €2.40	
Expected share price return	-7.6%
Expected dividend yield	5.7%
Expected total return	-1.9%
Market Cap	€870M
	US\$1,145M

Price Performance (RIC: ZON.LS, BB: ZON PL)



Zon (ZON.LS) Fundamental Upside Looks Limited

- **Proposed merger with Optimus-** Even though the terms of the proposed merger agreement would suggest that the relative exchange between Sonaecom and Zon is line with their market caps and therefore current share prices, we believe Zon will be the main beneficiary. We increase our price target to €2.60 from €2.40 to reflect small upgrades to estimates for international.
- **Market will likely price in potential counteroffer** — While Zon stock may benefit in the short-term from market speculation regarding a potential counteroffer, we do not think this is likely.
- **But we see no fundamental upside** — Zon is losing market share to PT and we believe this trend is set to accelerate in 2013. Even if the merger with Optimus is successful, PT has a first-mover advantage on convergence and is already building on its triple play momentum. We also see scope for further FttH deployment from the incumbent, if the EC gives enough incentives for investment. Therefore, we continue to rate the stock Neutral
- **Cable no match for fibre** — We believe that Zon will be unable to regain any customers lost to FttG, both because of quality disadvantage, but also because of practical costs of moving the cable wiring to reconnect the customer.
- **Angola is very interesting** — We see good momentum as Zon is building a valuable asset. That is likely to be a source of support to an otherwise underperforming cable asset.
- **Forecast revisions** — We increase our revenues and EBITDA estimates on the back of better trends in International as Zapp continues to gain traction, particularly in Angola. We reduce our estimates for Portuguese revenues, following further weakness in topline but do not expect significant deterioration, given the pending price increases (of c.3%) from the start of 2013.

Zon (EUR)

Year to 31 Dec	2010A	2011A	2012E	2013E	2014E
Sales (€M)	872.3	854.8	867.6	868.0	881.8
Net Income (€M)	35.9	33.9	40.6	46.6	55.0
Diluted EPS (¢)	12	11	13	15	18
Diluted EPS (Old) (¢)	12	11	12	14	16
PE (x)	23.3	25.6	21.4	18.6	15.8
EV/EBITDA (x)	5.1	5.0	5.0	4.8	4.6
DPS (¢)	16	16	16	16	16
Net Div Yield (%)	5.7	5.7	5.7	5.7	5.7

Figure 9. Zon forecast revision table (€m)

Year to Dec	Current				Prior			Δ%		
	2011	2012E	2013E	2014E	2012E	2013E	2014E	2012E	2013E	2014E
Revenue	855	868	868	882	858	853	860	1.2%	1.8%	2.5%
growth, yoy		1.5%	0.0%	1.6%	0.3%	(0.5%)	0.9%			
Operating costs	(544)	(554)	(551)	(560)	(547)	(542)	(546)	1.2%	1.8%	2.5%
growth, yoy		1.8%	(0.4%)	1.6%	0.7%	(1.0%)	0.9%			
EBITDA	311	314	317	322	310	311	314	1.2%	1.8%	2.5%
growth, yoy		0.9%	0.9%	1.6%	(0.2%)	0.3%	0.9%			
margin	36.4%	36.2%	36.5%	36.5%	36.2%	36.5%	36.5%	(0bp)	0bp	(0bp)
EBIT	93	99	107	117	95	101	109	3.8%	5.4%	7.2%
Net income	34	41	47	55	38	43	49	6.8%	9.2%	11.4%
EPS	11.1	13.24	15.18	17.88	12.41	13.91	16.07	6.8%	9.1%	11.3%
DPS	16.0	16.00	16.00	16.00	16.00	16.00	16.00	0.0%	0.0%	0.0%
Capex	(210)	(160)	(160)	(162)	(159)	(158)	(159)	0.9%	1.4%	2.0%
FCF pre min divs	54	80	91	92	79	90	90	1.4%	1.9%	2.7%
FCF post min divs	54	80	91	92	79	90	90	1.4%	1.9%	2.7%
Net debt & pensions		794	754	713	795	757	718	(0.1%)	(0.4%)	(0.7%)
Net debt/EBITDA		2.5x	2.4x	2.2x	2.6x	2.4x	2.3x	(0.0x)	(0.1x)	(0.1x)

Source: Company reports, Citi Research

Portugal Telecom

Company description

Portugal Telecom (PT) is the incumbent Portuguese operator, with leading market shares in wireline and mobile. PT sold its stake in Brazilian mobile operator Vivo to Telefonica in July 2010 for €7.5bn. PT plans to reinvest c.€3.8bn of the proceeds into a 22.38% stake in Telemar, a wireline and mobile Brazilian operator.

Investment strategy

We have a Buy rating on PT. PT's dividend yield is the highest in Europe and we do not expect a dividend cut in 2012. Uncertainty remains over the Telemar deal details but the next 6 months will provide more clarity. In domestic wireline, we think business exposure will pressure the top-line and costs associated with IPTV will not moderate until mid-2011 at the earliest. In domestic mobile top-line pressure from an aggressive MTR schedule is compounded by falling billing revenues due to economic weakness.

Valuation

Our valuation of PT and €4.7 fair value are based on our 25-year DCF, which fades the ROCE close to the cost of capital in the longer term. We use a WACC of 10.8% and 1% perpetuity growth rate from year 25. The perpetual growth in cash flow implied from year four from these assumptions is -1.0%. We set our price target at €4.7, based on a 20% discount to Portuguese cash flows. We believe such a discount is justified, given the significant macro risks. Such fears could continue to drive PT's borrowing costs up and market concerns could also affect the short-term performance of the shares

Risks

We see the following risks to our target price. Sovereign risk could continue to be the main driver for the shares during 2012, particularly if Portugal restructures its debt. Operationally, competition in Portugal may become tougher than we expect. In Brazil assuming the Telemar transaction proceeds, PT will not have complete control of Telemar and so risks of poor performance exist outside of PT management's control. If the impact on the company from any of these factors proves to be greater or less than we anticipate, the stock will either likely have difficulty achieving our financial and target prices or materially outperform our target.

Sonaecom

Company description

Sonaecom is the third operator in the Portuguese telecoms market. It generates c.65% of its revenues from mobile division (95% of EBITDA) and c.20% from Fixed (1% EBITDA). It is 53% owned by Sonae Group, 20% owned by France Telecom, the remainder is free float.

Investment strategy

We have a Sell rating. Sonaecom's mobile outperformance is coming to an end and margin improvement is now limited. The proposed merger with Zon could transform Sonaecom into a holding vehicle for Zon shares. Sonaecom is also sub-scale in its

fixed line business. The company has lost all momentum and the competitive nature of the market shows no signs of slowing and we see Sonaecom as the most challenged player in the market.

While the telecoms sector has proven broadly resilient to the economic downturn, we are concerned about the impending austerity measures in Portugal as well as next year's VAT rises. These factors reinforce our cautious stance. Sonaecom may become an M&A target in time, and this is the key upside risk to our investment case.

Valuation

We have a €1.30 target price on Sonaecom. We use DCF to set our target price. Our fair value of €1.30 is based on an 8-year DCF, with a 9.6% cost of capital, and 0.5% terminal growth. We cross reference this valuation of peer multiples. We prefer earnings multiples to cash flow multiples as they provide a cross check to the cashflow approach of DCF.

Risks

Risks include 1) Competition remains high in Portugal by European standards in both fixed and mobile telecoms. In mobile, Sonaecom is competing well, but its principal competitors have greater resources available should they choose to invest further. In fixed, while competition is unlikely to get much more aggressive, the longer price competition continues, the less likely that Sonaecom will gain traction with its fibre investment. 2) Macro risks remain a concern in Portugal. Almost all Sonaecom's revenue comes from Portugal, split between business and consumer end customers. The Portuguese government has announced austerity measures to combat the country's budget deficit and the implications for the country are uncertain. If consumer confidence is significantly affected, telecoms spend could decline. Sonaecom is also exposed to industry-specific risks such as technological risk, regulatory risk and weakening of demand.

Zon

Company description

Zon is Portugal's leading pay-TV company, spun out of Portugal Telecom in November 2007. It is the incumbent operator in cable TV and is cross-selling broadband and voice into its base; triple-play at 49% (2Q10). It also offers TV services via satellite. Growth is high single digit, with expanding margins.

Investment strategy

We have a Neutral rating on Zon. We forecast that capex is expected to fall dramatically as one-off projects complete and customer-related capex declines, leading to material improvements in FCF. However we capture this improvement in our DCF and following a re-rating valuation no longer looks compelling. Our earnings forecasts remain below consensus in 2012 due to depreciation, however the gap is closing.

Valuation

Our valuation and €2.6 target price are based a 7-year DCF. We use a WACC of 9.5% and 3.0% perpetuity growth.

Risks

Negative risks to our investment case include:

- Zon operates in an overcrowded market and one of the toughest in Europe. Portugal Telecom is aggressively moving into IPTV and as the incumbent operator, Zon's base is a prime target. It has done a good job defending to date but PT continues to compete fiercely.
- We expect, and the company guides, that a period of higher capex on network spend and customer premises equipment comes to a close by end-2010. If this is not the case, our FCF forecasts will fall short.
- The company's growth has proven resilient to the economic backdrop, but should consumers be hit by more aggressive austerity measures than we are expecting in 2011, Zon may suffer the consequences.

Positive risks include: faster share take from Portugal Telecom.

If the impact of these risk factors is more or less negative than we anticipate, then the share price could fail to reach or rise above our target price.

Vodafone Group PLC

(VOD.L; £1.61; 1)

Valuation

Our valuation of Vodafone and £1.90 target price are based on our 25-year DCF, which fades the ROCE close to the cost of capital in the longer term. We use a WACC of 7.8% and 1.5% perpetuity growth rate from year 25. The perpetual growth in cash flow implied from year four from these assumptions is nil.

Risks

Risks that could prevent the shares from reaching our target price include: competition, regulation, technological obsolescence, translation impacts from exchange rates, M&A and spectrum costs. In addition, the discretionary dividend from Verizon Wireless may be skipped or a lower amount paid than our forecast from time to time.

Appendix A-1

Analyst Certification

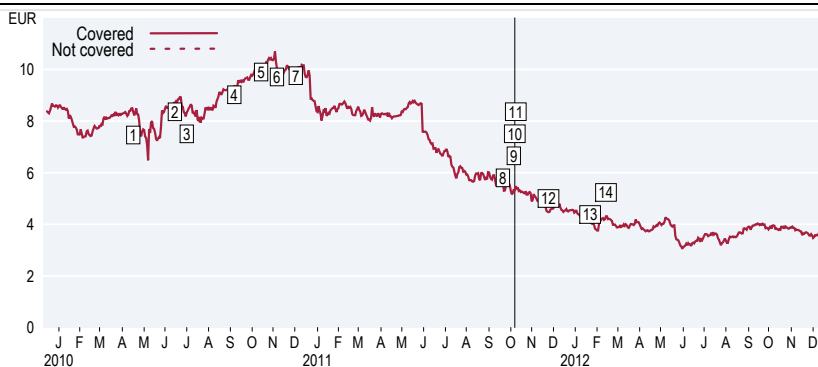
The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each 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

Portugal Telecom (PTC.LS)

Ratings and Target Price History Fundamental Research

Analyst: Georgios Ierodiasconou
Covered since December 10 2010



	Date	Rating	Target Price	Closing Price
1	16-Apr-10	*2H	*8.50	8.35
2	15-Jun-10	2H	*9.20	8.70
3	1-Jul-10	*1H	*9.50	8.34
4	7-Sep-10	1H	*10.10	9.38
5	14-Oct-10	*1M	*11.00	10.05

* Indicates change

	Date	Rating	Target Price	Closing Price
6	5-Nov-10	*2M	11.00	10.03
7	2-Dec-10	2M	*8.50	9.93
8	21-Sep-11	2M	*5.50	5.60
9	6-Oct-11	2M	*5.25	5.36
10	7-Oct-11	Stock rating system changed		

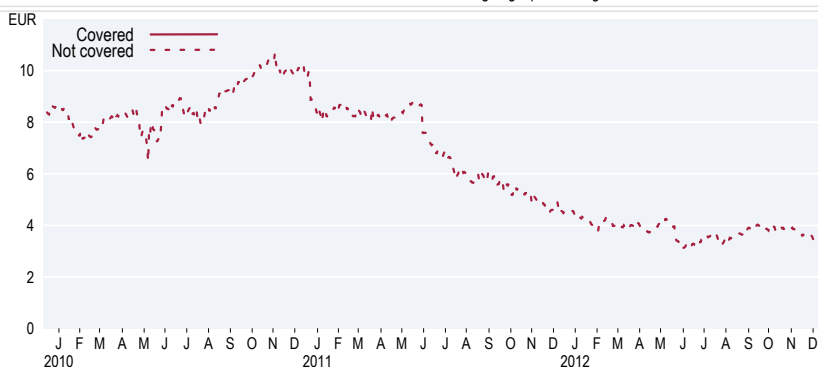
	Date	Rating	Target Price	Closing Price
11	8-Oct-11	*2	5.25	5.29
12	24-Nov-11	2	*5.00	4.47
13	23-Jan-12	2	*4.15	4.15
14	14-Feb-12	*1	*4.70	4.31

Rating/target price changes above reflect Eastern Standard Time

Portugal Telecom (PTC.LS)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Georgios Ierodiasconou
Covered since December 10 2010



* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Sonaecom (SNC.LS)

Ratings and Target Price History

Fundamental Research

Analyst: Georgios Ierodiaconou
Covered since February 2 2011



	Date	Rating	Target Price	Closing Price
1	16-Apr-10	2H	*1.90	1.59
2	14-Oct-10	2H	*1.50	1.44

	Date	Rating	Target Price	Closing Price
3	7-Oct-11	Stock rating system changed		
4	8-Oct-11	*2	-	1.17

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

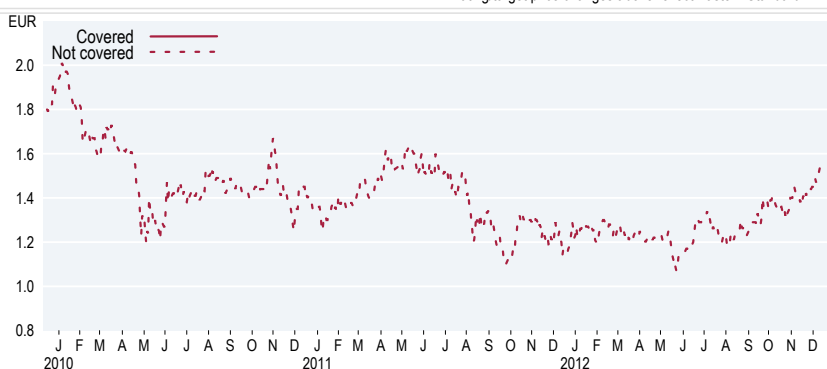
Sonaecom (SNC.LS)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Georgios Ierodiaconou
Covered since February 2 2011



* Indicates change

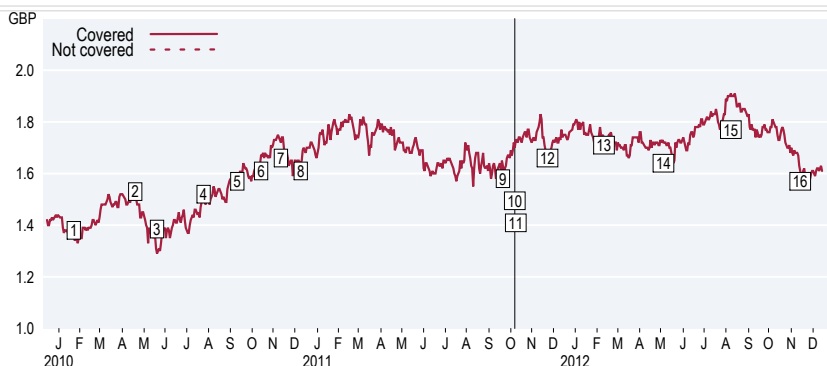
Rating/target price changes above reflect Eastern Standard Time

Vodafone Group PLC (VOD.L)

Ratings and Target Price History

Fundamental Research

Analyst: Simon Weeden



	Date	Rating	Target Price	Closing Price
1	22-Jan-10	1M	*1.65	1.36
2	20-Apr-10	1M	*1.70	1.50
3	20-May-10	1M	*1.60	1.29
4	26-Jul-10	1M	*1.65	1.52
5	10-Sep-10	1M	*1.70	1.60
6	14-Oct-10	*1L	1.70	1.67

	Date	Rating	Target Price	Closing Price
7	11-Nov-10	1L	*1.85	1.72
8	9-Dec-10	1L	*1.95	1.64
9	21-Sep-11	1L	*1.80	1.63
10	7-Oct-11	Stock rating system changed		
11	8-Oct-11	*1	1.80	1.70
12	23-Nov-11	1	*2.05	1.66

	Date	Rating	Target Price	Closing Price
13	10-Feb-12	1	*1.95	1.73
14	4-May-12	1	*1.90	1.72
15	8-Aug-12	1	*2.10	1.91
16	14-Nov-12	1	*1.90	1.61

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

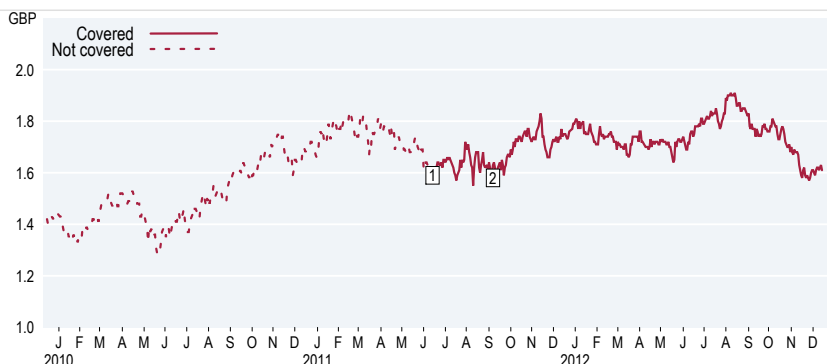
Vodafone Group PLC (VOD.L)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Simon Weeden



	Date	Rating	Target Price	Closing Price
1	14-Jun-11	*ADD MP	-	1.61

* Indicates change

	Date	Rating	Target Price	Closing Price
2	7-Sep-11	*REM MP	-	1.63

Rating/target price changes above reflect Eastern Standard Time

Zon (ZON.LS)

Ratings and Target Price History

Fundamental Research

Analyst: Georgios Ierodiaconou

Covered since February 2 2011



	Date	Rating	Target Price	Closing Price
1	16-Apr-10	1H	*5.00	3.87
2	13-Jul-10	*2H	*3.85	3.38
3	14-Oct-10	*1H	3.85	3.09

* Indicates change

	Date	Rating	Target Price	Closing Price
4	2-Nov-10	*2H	*4.00	3.85
5	21-Sep-11	2H	*2.40	2.47
6	7-Oct-11	Stock rating system changed		

	Date	Rating	Target Price	Closing Price
7	8-Oct-11	*2	2.40	2.40

Rating/target price changes above reflect Eastern Standard Time

Zon (ZON.LS)

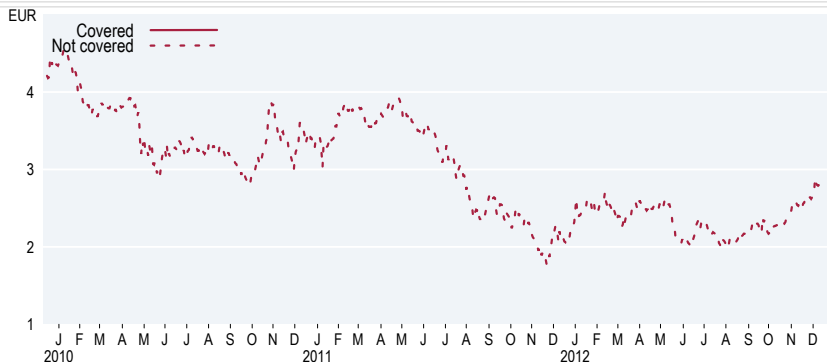
Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Georgios Ierodiaconou

Covered since February 2 2011



* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Vodafone Group PLC

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Portugal Telecom.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Portugal Telecom, Vodafone Group PLC.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from Vodafone Group PLC.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Portugal Telecom, Vodafone Group PLC in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Portugal Telecom, Vodafone Group PLC.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: Portugal Telecom, Vodafone Group PLC.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: Portugal Telecom, Vodafone Group PLC.

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.

The Firm is a market maker in the publicly traded equity securities of Vodafone Group PLC.

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.

Citi Research Equity Ratings Distribution

Data current as of 4 Oct 2012

	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Research Global Fundamental Coverage	51%	38%	11%	7%	85%	7%
% of companies in each rating category that are investment banking clients	50%	47%	45%	59%	47%	50%

Guide to Citi Research Fundamental Research Investment Ratings:

Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.

Risk rating takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

Investment Ratings: Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and, thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation.

Relative three-month ratings: Citi Research may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings**, which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of the Citi Research expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

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

Georgios Ierodiaconou; Simon Weeden; Tania Valiente

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 14 December 2012 04:30 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Vodafone Group PLC. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citiVelocity.com.)

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.

Citigroup Global Markets Inc. or its affiliates acts as a corporate broker to Vodafone Group PLC.

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 Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 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 Büyükdere 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, redissemiated 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
