



Announcement | Lisbon | 21 February 2014

## Additional information on the combination of PT and Oi businesses

Portugal Telecom, SGPS, S.A. ("PT") informs that, as an update to the press release dated February 20, 2014, the Euro/Brazilian Real exchange rate for purposes of determining the amount in Brazilian Reais equivalent to Euro 1.9979, as at February 20, 2014, is 3.2628. Therefore, for each PT share held, shareholders will receive: Brazilian Reais 6.5188 shares of CorpCo (at the same price per share of Oi's capital increase), plus 0.6330 shares of CorpCo. In addition, and subject to approval by the General Meeting, PT shareholders will receive, prior to the completion of the Business Combination, a dividend of Euro 10 cents per share.

Additionally, the valuation report ("Valuation Report"), prepared by an independent entity, Banco Santander (Brazil) SA, which will support PT's assets valuation and will be submitted for the approval of Oi's shareholders at the Extraordinary General Meeting, scheduled to take place on March 27, 2014, is attached hereto.

### IMPORTANT NOTICE

This communication is not an offering document and does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval in any jurisdiction in which distribution of an offering document or such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of that jurisdiction.

This communication contains information with respect to (1) the proposed capital increase and related public offering of common shares and preferred shares by Oi, (2) the proposed merger of shares (*incorporação de ações*) between Tpart ("CorpCo"), on the one hand, and Oi, on the other hand, and (3) the proposed merger (*incorporação*) of PT with and into CorpCo (these transactions, together with any other transactions related thereto, the "Business Combination").

Oi may file a registration statement (including a prospectus) with the U.S. Securities and Exchange Commission (the "SEC") for the offering of its common shares and preferred shares to be issued in connection with its proposed capital increase. Before you invest, you should read the prospectus in that registration statement and other documents Oi has filed with the SEC for more complete information about Oi and this offering. You may get these documents for free by visiting EDGAR on the SEC Web site at [www.sec.gov](http://www.sec.gov). Alternatively, Oi will arrange to send you the prospectus after filing if you request it by calling toll-free 1-855-672-2332.

In connection with the proposed merger of shares between CorpCo and Oi and the proposed merger of PT with and into CorpCo, CorpCo or one of its affiliates plans to file with the SEC (1) one or more registration statements on Form F-4, containing a prospectus or prospectuses which will be mailed to shareholders of Oi and/or PT, as applicable (other than non-U.S. persons as defined in the applicable rules of the SEC), and (2) other documents regarding the proposed Business Combination.

**Portugal Telecom, SGPS, SA**  
Avenida Fontes Pereira de Melo, 40  
1069-300 Lisbon  
Portugal

Public company  
Share capital Euro 26,895,375  
Registered in the Commercial  
Registry Office of Lisbon  
and Corporation no. 503 215 058

Portugal Telecom is listed on the NYSE  
Euronext Lisbon and New York Stock  
Exchange. Information may be  
accessed on the Reuters under the  
symbols PTC.LS and PT and on  
Bloomberg under the symbol PTC.PL.

Nuno Vieira  
Investor Relations Director  
[nuno.t.vieira@telecom.pt](mailto:nuno.t.vieira@telecom.pt)  
Tel.: +351 21 500 1701  
Fax: +351 21 500 0800



**We urge investors and security holders to carefully read the relevant prospectuses and other relevant materials when they become available as they will contain important information about the proposed Business Combination.**

Investors and security holders will be able to obtain the documents filed with the SEC regarding the proposed mergers, when available, free of charge on the SEC's website at [www.sec.gov](http://www.sec.gov) or from PT, Oi or CorpCo.

This communication contains forward-looking statements. Statements that are not historical facts, including statements regarding the beliefs and expectations of PT, Oi or CorpCo, business strategies, future synergies and cost savings, future costs and future liquidity, are forward-looking statements. The words "will," "may," "should," "could," "anticipates," "intends," "believes," "estimates," "expects," "plans," "target," "goal" and similar expressions, as they relate to PT, Oi or CorpCo, are intended to identify forward-looking statements and are subject to a number of risks and uncertainties. There is no guarantee that the expected events, tendencies or results will actually occur. Such statements reflect the current views of management of PT, Oi and CorpCo, and are subject to a number of risks and uncertainties. These statements are based on many assumptions and factors, including general economic and market conditions, industry conditions, corporate approvals, operational factors and other factors. Any changes in such assumptions or factors could cause actual results to differ materially from current expectations. All forward-looking statements attributable to PT, Oi, CorpCo or their affiliates, or persons acting on their behalf, are expressly qualified in their entirety by the cautionary statements set forth in this paragraph. Undue reliance should not be placed on such statements. Forward-looking statements speak only as of the date they are made. Except as required under the U.S. federal securities laws and the rules and regulations of the SEC or of regulatory authorities in other applicable jurisdictions, PT, Oi, CorpCo and their affiliates do not have any intention or obligation to update or to publicly announce the results of any revisions to any of the forward-looking statements to reflect actual results, future events or developments, changes in assumptions or changes in other factors affecting the forward-looking statements. You are advised, however, to consult any further disclosures PT, Oi or CorpCo makes on related subjects in reports and communications PT, Oi and CorpCo file with the SEC.

# Portugal Telecom

## Valuation Report

February 21, 2014

This document is a free translation of the “Laudo de Avaliação” (in Portuguese) furnished by Banco Santander (Brasil) S.A. on February 21, 2014

1. Banco Santander (Brasil) S.A. (“Santander”) was contracted by Oi S.A. (“Contracting Party” or “Oi”) to draw up an economic and financial valuation (the “Valuation”) of (i) the operational assets of Portugal Telecom, SGPS S.A. (“Portugal Telecom”, “PT” or “Company”) contemplated within the non-audited managerial financial statements drawn up by the Company, that exclude the effects of direct or indirect equity holdings on Oi’s and Contax Participações S.A.’s capital stock, and (ii) PT liabilities ((i) and (ii), hereinafter jointly referred to as “Contributed Assets” or “PT Ex-Brazil”), which shall be subject to being contributed towards the paying up of a publicly issued capital increase of new shares of Oi’s capital stock (the “Transaction”), performed under the Industrial Alliance between Oi and PT (*Aliança Industrial entre Oi e PT*) publicly disclosed to the markets on October 2, 2013.
2. The Valuation was drawn up independently, with the purpose of assessing the Equity Value of the Contributed Assets in the reference date set forth by the Contracting Party, considering the contribution of the Contributed Assets in the paying up of the shares issued in Oi’s capital increase and subscribed by PT, and shall be submitted to Oi’s general shareholders’ meeting, pursuant to the terms set forth in article 170, §3º, and in article 8 of Law No. 6.404, dated of December 15, 1976, as altered from time to time (“Corporation Law”).
3. The economic and financial criteria utilized for the valuation of the Contributed Assets was defined by the Contracting Party’s management, whereas Santander’s responsibility, based upon its expertise and specialization, was to define the valuation methodology that, in its opinion, adequately reflects the value of the Contributed Assets in accordance with the abovementioned criteria set forth by the Contracting Party.
4. The Valuation is Santander’s intellectual property and was prepared by Santander, at the Contracting Party’s request, exclusively for the resolution of Oi’s general shareholders’ meeting within the Transaction’s scope, and for no other purpose whatsoever. The valuation shall not be utilized, by the Contracting Party, the Company or any third parties, for any other purposes, and shall not be disclosed or made available to third parties or distributed, reproduced or utilized for any other purposes without prior written consent by Santander, except for the Valuation’s disclosure to the shareholders and investors of the Contracting Party and the remittance of the electronic version of the Valuation to CVM and the Stock Markets (*Bolsas de Valores*) in which securities issued by the Contracting Party are listed, pursuant to the respective applicable laws.
5. The Valuation was prepared exclusively in Portuguese, and if it is translated to another language, the Portuguese version shall always prevail.
6. Santander did not and does not render any recommendation, or express any opinion, either explicitly or implicitly, regarding the terms and conditions of the Transaction.
7. Pursuant to the Contracting Party’s instructions, the reference date utilized for the Valuation is of December 31, 2013, in accordance with the date utilized in the non-audited managerial financial statements drawn up by the Company, that exclude the effects of direct or indirect equity holdings on Oi’s and Contax Participações S.A.’s capital stock, and that was made available by the Contracting Party. Santander did not perform a comparative analysis between the non-audited managerial financial statements utilized in the Valuation and the audited financial statements dated as of December 31, 2013, assuming, for the purposes of the Valuation, that there are no relevant differences in the audited financial statements dated as of December 31, 2013.
8. The Contributed Assets were valued as a stand-alone valuation and the potential success or failure of any transaction, including the Transaction regarding the Company, or any of its controlled or affiliates entities, were not considered in the Valuation’s results. Santander does not express any opinion regarding the effects that potentially may be generated to the Company upon the consummation of any transactions regarding the Company or any of its controlled or affiliate entities. This Valuation does not consider any previous valuations of the Company, or of its controlled or affiliate entities or even of any securities issued by these entities, drawn up by Santander or by any other institution, within the scope of any past transactions, offers or negotiations involving the Company, or any of its controlled or affiliate entities. In drawing up this Valuation, Santander performed an exclusively economic and financial valuation of the Company, considering, for the purposes of this analysis, solely the contingencies and accruals indicated in the Financial Statements (as defined herein below), and due to this, all other contingencies of any nature, including, without limitation, contingencies of corporate or judicial natures, were not analyzed, reviewed or considered for the purposes of this Valuation.

9. The Contributed Assets were valued utilizing the discounted cash flow method and the trading multiple method. For the purposes of calculation of the equity value of the Contributed Assets ("Equity Value"), and of the total economic and financial value ("Enterprise Value") of the Contributed Assets, the net debt, net contingencies, actuarial liabilities, estimates of dividends regarding the fiscal year of 2013 to be declared and the accrued dividends stated in the Company's Financial Statements (as defined herein below) dated of 31/12/2013 ("Net Debt") were discounted.
10. The Valuation was drawn up by Santander based upon the information drawn up or made available by the Company and submitted to Santander by the Contracting Party or discussed with the representatives of the Contracting Party and/or the Company, as indicated by the Contracting Party ("Indicated Representatives"), as well as other publicly available information, and projections, estimates and analysis arising from Santander's expertise and experience. No information utilized in the Valuation was considered inconsistent by Santander.
11. The Valuation performed by Santander was based on, amongst others, the following information or documents that were made available by the Contracting Party to Santander until 02/18/2014, these which, jointly with the public information, estimates, projections, business plans, budgets, discussions and other information referred to in the items set forth herein below and utilized in the Valuation, are hereinafter jointly referred to as "Information":
  - (a) Company's audited financial statements dated of 12/31/2012 and non-audited managerial financial statements dated of 12/31/2013, consolidated and adjusted, by the Company, in order to proportionally reflect the contribution of the Contributed Assets (the "Financial Statements"). Santander did not perform a comparative analysis between the non-audited managerial financial statements utilized in the Valuation and the audited financial statements dated as of December 31, 2013, assuming, for the purposes of the Valuation, that there are no relevant differences in the audited financial statements dated as of December 31, 2013;
  - (b) Public information regarding the business sector that the Company, and its controlled and affiliate entities, have activities;
  - (c) Public information regarding the macroeconomic parameters in the places in which the Company possesses relevant business presence;
  - (d) Company's business plan for the transactions regarding the Contributed Assets for the periods from 2014 to 2018, drawn up by the Company ("Business Plan");
  - (e) Historical financial and operational information of the Company;
  - (f) Company's Net Debt consolidated value, proportionally adjusted with the respective equity stakes held; and
  - (g) Discussions with the Indicated Representatives regarding past performances and expectations for the future business of the Company.
12. In drawing up the Valuation, Santander contemplated other financial and market studies and analysis and considered other aspects it deemed necessary, including evaluating economic, monetary and market conditions.
13. The demographic, macroeconomic and regulatory Information of the markets in which the Company, and its controlled and affiliate entities mentioned in the Valuation have activities, when these were not supplied by the Contracting Party, by the Company or by the Indicated Representatives, were based, amongst others, in publicly renowned sources, considered trustworthy (class entities, governmental authorities and specialized publications) such as Bloomberg, Thomson Reuters, International Monetary Fund and Santander's Economic Department.

14. The Valuation reflects the financial and accounting conditions of the Company and of the Contributed Assets, pursuant to Information received until 02/18/2014, therefore any alteration in these conditions or regarding any Information arising in a posterior date may alter the results presented herein. Santander is not obliged to, at any time, update, review, correct or restate any information contained in the Valuation, or supply any additional information regarding the Valuation.
15. Santander assumes and trusts the preciseness, truthfulness, integrity, consistence, sufficiency and precision of all Information, being these in written form, by means of discussions with the Indicated Representatives, or because they are publicly available, and does not undertake any liability for the preciseness, truthfulness, integrity, consistence, sufficiency and precision of the Information, nor regarding the manner in which they were elaborated. Santander assumes that all Information supplied to Santander or, in any form, made available by the Contracting Party or discussed between Santander and the Indicated Representatives are complete, correct and sufficient for the purposes of the Valuation, and that, as of the date the Information was supplied until the present date, there were no material alterations in the business, financial situation, assets, liabilities, business perspectives, commercial transactions or in the number of shares of the Company's capital stock, as well as there were no other significant facts that could potentially alter the Information, or caused the Information to become incorrect or imprecise in any material aspects or that could potentially have a material effect upon the results of the Valuation.
16. Based on the Contracting Party's, the Company's and its Indicated Representatives' statements, Santander adopts the following premises: (i) the financial projections that were supplied by the Contracting Party to Santander were the best existing estimates on the date thereof, and were the best business judgments of the Company's management, regarding the expectations of the Company's future performance, and (ii) the estimates and projections that were supplied by the Contracting Party to Santander or discussed between Santander and the Contracting Party and/or the Company and its Indicated Representatives, especially those of which occurrence depend on future and uncertain events (including incomes, expenses, investments, operational profit or net profit projections) were based on the best business judgment of the Company's management.
17. Santander did not undertake the responsibility of conducting, and did not conduct, (i) any valuation of the assets and liabilities (contingents or not) of the Company, its controlled or affiliate entities; (ii) review or due diligence of the Company's financial statements, or its controlled or affiliate entities; (iii) technical due diligence of the Company's, or its controlled or affiliate entities', operations; (iv) valuation of the Company's, or its controlled or affiliate entities', solvency, in accordance with the terms set forth in any legislation related to bankruptcy, insolvency, judicial or extrajudicial restructurings, or any similar matters; or (v) any physical inspections of properties, installations or assets of the Company or of its controlled or affiliate entities.
18. Santander does not, and shall not, expressly or implicitly, represent, declare or warrant, in any way, the Information, including studies, projections or predictions of the Company, or of its controlled or affiliate entities, or premises or estimates in which these projections or predictions were based upon, utilized for the drawing up of the Valuation, and does not undertake any responsibility or obligations to indemnify due to the content, preciseness, truthfulness, integrity, consistence, sufficiency and precision of these Information, these which the Contracting Party is solely liable. Santander does not render accounting or legal due diligence services, and the drawing up of the Valuation, by Santander, does not include any services or consulting of this nature.
19. Santander is not liable for any direct or indirect losses or losses of profits eventually incurred due to the Valuation.
20. The Valuation does not constitute a judgment, opinion or recommendation to the management of the Contracting Party, the Company, its shareholders or any third party regarding the convenience and opportunity, or regarding the decision to perform any transaction involving the assets and liabilities of the Company, including, without limitation, the Transaction, as well as is not destined to fundament any investment or divestment decision.
21. The drawing up of economic and financial valuations is a complex process that involves subjective judgments and is not susceptible to a partial analysis or an abstract description. Santander does not attribute specific importance to certain factors contemplated in the Valuation, on the contrary, it performed a qualitative analysis of the importance and relevance of the totality of the factors considered herein. In this sense, the Valuation must be analyzed as a whole and the analysis of selected parts, summaries or specific aspects of the Valuation, without the knowledge and analysis of the Valuation as a whole, may result in an incomplete and incorrect understanding of the analysis performed by Santander and the conclusions contained in the Valuation.



22. The estimates and projections contemplated in the Valuation are intrinsically subject to the uncertainties and various events or factors that are beyond the control of the Contracting Party, the Company, as well as Santander, especially regarding those estimates and projections that depend on future and uncertain events. There is no manner to assert that the estimates and projections utilized in the Valuation will be effectively reached. The real results verified in the future may diverge significantly from those suggested in the Valuation. In this sense, Santander does not undertake any responsibility or obligation to indemnify in case any of the future results are different from the estimates and projections presented in the Valuation and does not represent or warrant, in any manner, the above referred estimates and projections. Santander does not undertake responsibility regarding the referred estimates and projections, including the manner in which these were drawn up.
23. Other valuations of companies or markets also drawn up by Santander may treat market premises in a different manner than the treatment contemplated in the Valuation, in the sense that the research departments and other departments within Santander and related companies may utilize in its analysis, reports and publications, estimates, projections and methodologies different from those utilized in the Valuation, it being possible that these analysis, reports and publications may contain conclusions diverging from those contained in the Valuation.
24. Santander has rendered, directly or by means of related companies, certain financial services and investment banking services to the Contracting Party, the Company, its controlled and affiliate entities, as well as to its controlling companies, by means of which it received remuneration, continues to render the referred services and may, at any moment, render them again. Santander, directly or by means of related companies, is or may become a creditor of the Contracting Party, the Company, its controlled or affiliate entities, as well as its controlling companies, in certain financial transactions, as well as may increase or reduce the volume of the financial transactions with these entities.
25. In its ordinary course of business, Santander may negotiate, directly or by means of related entities, securities issued by the Contracting Party, the Company, its controlled and affiliate entities, as well as its controlling companies, on its behalf or on behalf of its clients and, consequently, may, at any time, hold equity positions, bought or sold, of the above referred securities.
26. Santander declares that it does not have interest, directly or indirectly, in Oi, PT, its related parties or in the Transaction, that decreases the necessary independence for the performance of its obligations regarding the drawing up of the Valuation.
27. Santander shall be remunerated by the Contracting Party for the rendering of services regarding the drawing up of this Valuation. The fees owed by the Contracting Party to Santander are in no way subject to the results of the Valuation. The Contracting Party has agreed to indemnify Santander for certain obligations and liabilities that may arise from the retaining of the services regarding the rendering of services that resulted in this Valuation, except for cases of proven fault, negligence or willful misconduct provided for in article 8, §6 of the Corporation Law.
28. Santander declares that it received, from the Contracting Party or the Company, as remuneration for the consulting, valuation, advising and similar services rendered in the last twelve (12) months, excluding the fees owed for the Valuation, the total amount of one million, eight hundred and seventy five thousand Brazilian Reais (BRL 1,875 thousand), owed as fee for the structuring of a Revolving Credit Facility operation.
29. The controlling entities and the managers of the Contracting Party and/or the Company did not direct, limit, hinder or practice any acts that had or may have had compromised the access, the utilization or the acknowledgement of information, assets, documents or work methodologies relevant for the quality of the respective conclusions set forth in the works herein.

<b>1</b>	<b>Executive Summary</b>	<b>6</b>
<b>2</b>	<b>Santander Credentials</b>	<b>9</b>
<b>3</b>	<b>Scope of the Valuation</b>	<b>13</b>
<b>4</b>	<b>Valuation of PT Ex-Brazil</b>	<b>18</b>
	<b>a. Discounted Cash Flow</b>	<b>20</b>
	<b>b. Trading Multiples</b>	<b>28</b>
<b>5</b>	<b>Appendix</b>	<b>32</b>



# 1. Executive Summary

---

- According to the material fact publicly disclosed to the markets on October 2, 2013 (“Material Fact”), Oi S.A. (“Oi” or “Contracting Party”) informed its shareholders and the market in general that, on that date, Portugal Telecom SGPS S.A. (“Portugal Telecom”, “PT” or “Company”), AG Telecom Participações S.A. (“AG”), LF Tel S.A. (“LF”), PASA Participações S.A. (“PASA”), EDSP75 Participações S.A. (“EDSP 75”) and Bratel Brasil S.A. (“Bratel Brasil”), and also some shareholders of Portugal Telecom, signed a memorandum of understanding (“MoU”) with the objective of establishing the bases and principles that shall regulate negotiations for a potential transaction involving Portugal Telecom, Oi, and some of its controlling shareholders for the creation of a company (“CorpCo”).
- Also according to the Material Fact, the CorpCo will concentrate the shareholders of Oi, Portugal Telecom and Telemar Participações S.A. (“TelPart”) and combine the businesses and activities conducted by Oi in Brazil and by Portugal Telecom in Portugal, Africa and East Timor, in order to consolidate the Industrial Alliance between Oi and Portugal Telecom, initiated and developed since 2010.
- Santander was contracted by Oi to draw up the Valuation Report of Portugal Telecom’s operating assets and liabilities to be contributed on Oi within the Industrial Alliance described in the Material Fact. Once the Contractor defined the financial and economic criteria, Santander, based on its expertise and specialization, defined the valuation methodologies which, in its view, adequately reflect the value of the contributed assets and liabilities in accordance with the criteria established by the Contractor
- This Valuation Report accesses the value of (i) the operational assets of Portugal Telecom, except the effects of direct or indirect equity holdings on Oi’s and Contax Participações S.A.’s capital stock and (ii) PT’s liabilities ((i) and (ii) hereinafter jointly referred to as “Contributed Assets” or “PT Ex-Brazil”), which shall be subject to being contributed on Oi under the industrial alliance between Oi and PT, based on the following methodologies:
  - ✓ Economic value calculated by the methodology of Discounted Cash Flow (DCF);
  - ✓ Trading Multiple valuation methodology.

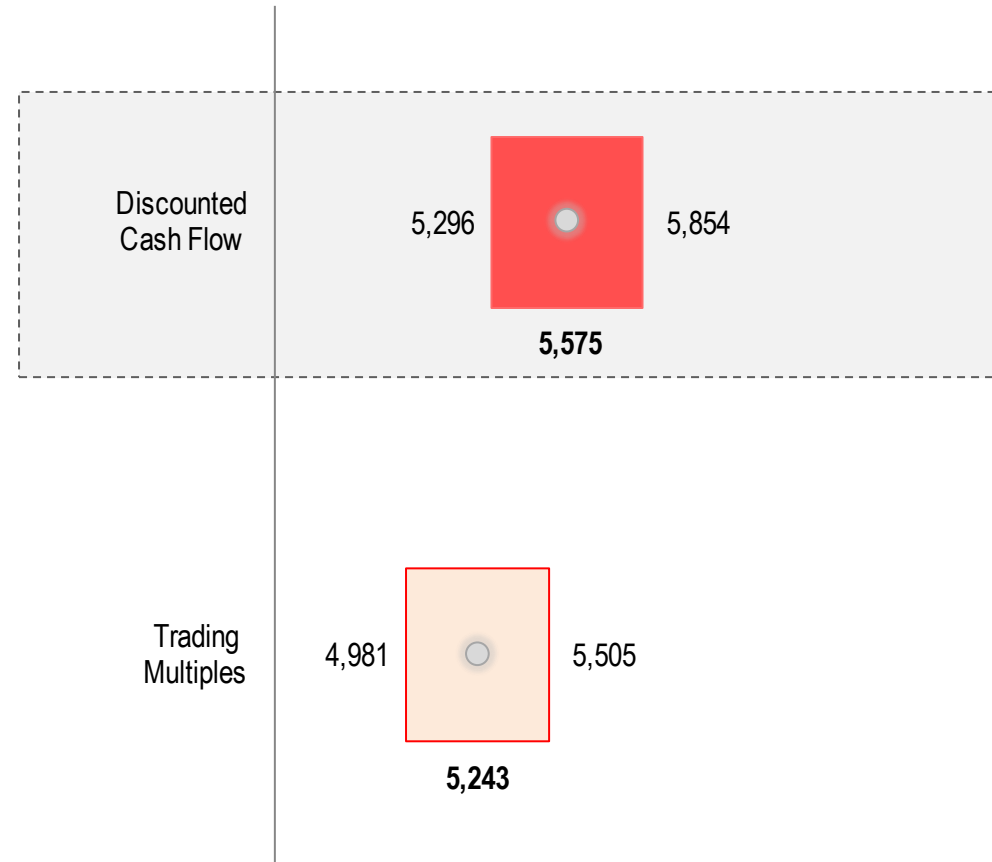
# Executive Summary

The Equity Value of PT Ex-Brazil ranges between BRL 5.3 billions and BRL 5.9 billions, based on the discounted cash flow methodology, the most appropriate according to Santander's understanding

## Methodologies

- The preparation of the Valuation Report was based on the following methodologies and criteria:
  - Discounted Cash Flow (DCF);
  - Trading Multiples.
- We understand that the DCF methodology allows the analysis of future results from the Company's operations, being this the most appropriate methodology for determining the economic and financial value of the Contributed Assets
- The DCF took into consideration:
  - Business Plan for the 2014 – 2018 period (5 years), which was prepared and reviewed by the management and approved by the board of directors of the Company and its subsidiaries;
  - Public information on the market, the sector and comparable companies;
  - Nominal Euro discount rate of 9.11%;
  - Exchange rate Real/Euro in February 20, 2014 of 3.2628 <sup>1</sup>.

## Valuation Summary (BRL MM)



(1) Average of closing bid and ask FX rates published by Bacen (PTAX-800)

## 2. Santander Credentials

---

# Santander Credentials

Santander, through its Corporate Finance division, has extensive experience in the market, acting as financial advisor in several transactions involving the preparation of Valuation Reports

- The internal approval process for Valuation Reports issued by Santander involves external legal advisors with the purpose of assisting in its review, discussion and approval by an internal committee composed by professionals from the Corporate Finance, Corporate Banking, Compliance and Legal Department, in which the main assumptions and methodologies are discussed and explained







## TMT Sector Valuation Reports Prepared by Santander in Brazil

<p>Março 2011</p>  <p>Incorporação das ações da Vivo Participações Telesp</p>  <p><b>R\$ 33.200.000.000</b></p> <p>Assessor Financeiro da Telesp</p>	<p>Agosto 2010</p>  <p>Laudo de avaliação para OPA de até a totalidade das ações da Tivit Terceirização de Processos, Serviços e Tecnologia S.A.</p>  <p><b>US\$ 441.400.000</b></p> <p>Assessor Financeiro dos Compradores</p>	<p>Janeiro 2010</p>  <p>Emissão de fairness opinion para aquisição da Carso Global Telecom e Telmex Internacional pela America Movil</p>  <p><b>US\$ 27.387.000.000</b></p> <p>Assessor Financeiro dos Compradores</p>	<p>Novembro 2007</p>   <p>Oferta Pública de Aquisição de ações preferenciais da Telemar Norte Leste S.A.</p> <p><b>US\$444.912.005</b></p> <p>Assessor Financeiro do Comprador</p>	<p>Novembro 2006</p>  <p>Oferta Pública de Aquisição das ações da Embratel Participações S.A.</p> <p><b>US\$782.832.663</b></p> <p>Assessor Financeiro do Comprador</p>	<p>Março 2006</p>  <p>Assessor da TIM Celular S.A. na venda para a TIM Participações S.A.</p> <p><b>US\$ 7.143.084.379</b></p> <p>Assessor Financeiro do Vendedor</p>	<p>Maio 2005</p>  <p>Assessor da TIM Participações S.A. na aquisição de participação minoritária na TIM Sul S.A.</p> <p><b>R\$ 324.734.263</b></p> <p>Assessor Financeiro</p>	<p>Maio 2005</p>  <p>Assessor da TIM Participações S.A. na aquisição de participação minoritária na TIM Nordeste Telecomunicações S.A.</p> <p><b>US\$ 302.758.704</b></p> <p>Assessor Financeiro</p>	<p>Agosto 2004</p>  <p>Assessor na fusão entre Tele Celular Sul Participações S.A. e Tele Nordeste Celular Participações S.A.</p> <p><b>US\$ 408.000.000</b></p> <p>Assessor Financeiro</p>	<p>Janeiro 2004</p>  <p>Assessor na reestruturação da Tele Nordeste Celular Participações S.A. e Telp Celular S.A. por meio de cinco fusões</p> <p><b>R\$ 742.000.000</b></p> <p>Assessor Financeiro</p>
--	---	--	--	--	---	--	---	--	---

## TMT Sector Valuation Reports Prepared by Santander in Europe

<p>Junho 2013</p>  <p>Venda de stake de 16% para abertis</p> <p><b>€ 173.000.000</b></p> <p>Assessor financeiro do Estado</p>	<p>Junho 2013</p>  <p>Venda de stake de 61% para altice</p> <p><b>Confidencial</b></p> <p>Assessor financeiro de Riverside</p>	<p>Fevereiro 2013 - 2007</p>  <p>Valuation da IMPRESA &amp; OTHER GROUP COMPANIES</p> <p><b>Confidencial</b></p> <p>Assessor financeiro da Imprensa</p>	<p>Janeiro 2013</p>  <p>Fusão com ZON</p> <p><b>€ 1.450.000.000</b></p> <p>Assessor financeiro da Optimus</p>	<p>Fevereiro 2012</p>  <p>Aquisição da ANTENA 3</p> <p><b>€ 269.000.000</b></p> <p>Fairness Opinion para Antena 3</p>	<p>Janeiro 2010</p>  <p>AMX Oferta de compra de ações</p> <p><b>US\$ 27.388.000.000</b></p> <p>Assessor financeiro da Carso Global Telecom</p>	<p>Abril 2010</p>  <p>Aquisição de 100% da Cuatro e 22% da Digital +</p> <p><b>€ 1.050.000.000</b></p> <p>Fairness Opinion para Telecom</p>	<p>Abril 2010</p>  <p>Capital Partners Aquisição de 35% da R</p> <p><b>€ 236.000.000</b></p> <p>Assessor financeiro da CVC</p>	<p>Novembro 2008</p>  <p>Valuation da TELECOM</p> <p><b>Confidencial</b></p> <p>Assessor financeiro da Telecom Italia</p>	<p>Outubro 2008</p>  <p>Valuation da SPANISH IT COMPANY</p> <p><b>Confidencial</b></p> <p>Assessor financeiro da Endesa</p>	<p>Fevereiro 2008</p>  <p>Valuation da Chilean BPO</p> <p><b>Confidencial</b></p> <p>Assessor financeiro da Telefónica</p>
---	---	--	--	--	--	--	---	--	--	---

## Other recent Valuation Reports prepared by Santander in Brazil

<p>Agosto 2013</p>  <p>Venda de 20% do capital social votante da Companhia Energética Potiguar S.A. para a GPE</p> <p><b>R\$ 38.000.000</b></p> <p>Assessor Financeiro da Petróbras</p>	<p>Junho 2013</p>  <p>Venda das ações na Brasil PCH, equivalentes a 49% das ações ordinárias, para a CEMIG</p> <p><b>R\$ 650.000.000</b></p> <p>Assessor Financeiro da Petróbras</p>	<p>Fevereiro 2013</p>  <p>Laudo de Avaliação da San Antonio Brasil (SAB) para a Petros no Processo de Incorporação da SAB pela Lupatech</p> <p><b>Confidencial</b></p> <p>Assessor Financeiro</p>	<p>Dezembro 2012</p> <p>Elaboração de Relatório de Avaliação da invepar para PETROS</p> <p><b>Confidencial</b></p> <p>Assessor Financeiro</p>	<p>Dezembro 2012</p>  <p>Fairness Opinion para a Braskem no âmbito da venda de 54,2% da Cetrel e 100,0% da UTA para a Foz do Brasil</p> <p><b>R\$ 652.000.000</b></p> <p>Assessor Financeiro</p>	<p>Junho 2012</p>  <p>Laudo de Avaliação para a OPA de cancelamento de registro de companhia aberta e saída do Novo Mercado da CCDI - Camargo Corrêa Desenvol. Imobiliário SA</p> <p><b>R\$ 210.372.311</b></p> <p>Assessor Financeiro</p>	<p>Junho 2010</p>   <p>Fusão entre Açúcar Guarani e Tereos International</p> <p><b>R\$ 6.400.000.000</b></p> <p>Assessor Financeiro da Guarani</p>	<p>Abril 2010</p>  <p>Fusão entre a Dufrey AG e a Dufrey South America Ltd.</p> <p><b>US\$ 2.695.000.000</b></p> <p>Assessor Financeiro</p>	<p>Dezembro 2009</p>  <p>Laudo de Avaliação da Usina Estreito para a Tractebel Energia no Processo de Aquisição de 40,07% da Usina</p> <p><b>R\$ 1.420.770.622</b></p> <p>Assessor Financeiro</p>	<p>Dezembro 2009</p>  <p>Fusão entre Bertin e JBS, criando o maior produtor mundial de proteína animal</p> <p><b>US\$14.645.693.183</b></p> <p>Assessor Financeiro da Bertin</p>	<p>Novembro 2009</p>  <p>Fusão dos negócios de distribuição e centros de serviços de aço controlados pela Usiminas</p> <p><b>Confidencial</b></p> <p>Assessor Financeiro da Usiminas</p>
---	---	--	---	---	--	--	--	--	---	---

**Flávio Tavares Valadão**  
*Managing Director, Head  
of Corporate Finance*

- Flavio Valadão joined Santander in 2008 as Head of Corporate Finance for the Americas. Mr. Valadão joined the Corporate Finance team of Banco Real in 1998 and in 2006 was appointed Head of M&A for Latin America. Before joining Banco Real, worked for 8 years at Paribas Bank, originating and leading the advisory of several public offerings, privatizations and mergers and acquisitions projects in Latin America, mainly in the Energy & Resources, Water & Sanitation, Telecom, Transportation & Distribution of Gas and Financial Services.
- BS in Electrical Engineering from the Escola de Engenharia Mauá and Masters in Electrical Engineering at the Université de Lille in France

**Luis Enrique Devis**  
*Managing Director,  
Corporate Finance*

- Luis Enrique Devis joined Santander in 2007 and is currently responsible for Agribusiness, TMT, Healthcare and Industrial sector within the Corporate Finance team, as well as M&A in Brazil. Mr. Devis has 18 years of experience in mergers and acquisitions in Brazil and Latin America, having successfully completed over 50 transactions for a value of approximately \$ 90 billion. Prior to working at Santander, Mr. Devis worked for ABN AMRO with a focus on the TMT sector for Latin America, based in São Paulo, New York and Bogota. Previously, Mr. Devis worked at Morgan Stanley, Deutsche Morgan Grenfell and Corfivalle in Colombia.
- Mr. Devis holds a degree in Industrial Engineering from Universidad de los Andes and worked as a professor of corporate finance and Roman history at the Universidad de los Andes and the Colegio de Estudios Superiores de Administración - CESA. He is fluent in English, Portuguese, French and Spanish (native)

**Bruno Lima**  
*VP,  
Corporate Finance*

- Bruno Lima joined the Corporate Finance team at Santander in late 2009 with a focus on M&A. and since 2012, also started to work on the origination and execution of Equity Capital Markets transactions (IPOs and follow-ons). Previously, Bruno worked for three years as an analyst at BES Investimento in the Corporate Finance division (M&A). Prior to that he also worked as an intern in the Latam Risk Analysis Unit of Citigroup.
- BS in Business Administration from the Fundação Getulio Vargas.

**Gustavo Duarte**  
*Associate,  
Corporate Finance*

- Gustavo Duarte joined the team of Corporate Finance at Banco Santander in Brazil in 2013. Previously, Gustavo worked as associate in the Integra Associados Reestruturação Empresarial and as an analyst in the Corporate Development team at Banco Santander in Brazil. Gustavo Duarte is fluent in Portuguese and English.
- BS in Business Administration from the Fundação Getulio Vargas.

**Rodrigo Teixeira**  
*Executive Director,  
Corporate Finance*

- Rodrigo Teixeira is the Executive Director of the M&A TMT team in Madrid, where he has been working for the last 6 years. The last transaction advised by Rodrigo was to Telefónica in the sale of a 40% stake in its operations in Central America; he was also involved in the IPO of O2 Germany, in the sale of telecom towers from Movistar to Abertis, incorporation of Teles and Vivo in Brazil, and Carso Global tender offer for AMX. Previously, Rodrigo worked for 5 years as Associate at Mercer Management Consulting, advising various clients, mostly in the TMT sector, but also Industrial, FMCG and FIG. Rodrigo worked in Brazil for 6 months on a project for a steel company in Minas Gerais. While at Mercer, Rodrigo worked in Portugal, Spain, France, the UK and Brazil
- Rodrigo holds a degree in Economics from Universidade Nova de Lisboa and has an International MBA from Instituto de Empresa Business School. He is a member of Beta Gamma Sigma Honor Society. He has proficiency in Portuguese, Spanish and English, and basic knowledge in French

**Renato Alves**  
*VP,  
Corporate Finance*

- Part of the Spanish team of Santander Global Banking & Markets since July 2007, Renato is currently VP of the TMT team. Renato has over 12 years experience in Investment Banking, having previously worked for 5 years for CGD's investment bank. Renato worked on transactions involving clients such as Bain Capital, Schneider Electric, Telefónica, PT, RCS MediaGroup, Telecinco, Vocento, Impresa and Cofina, among others, on M&A, ECM and other financial advisory transactions.
- Mr. Alves holds a degree in Economics from Universidade Nova de Lisboa and also is a Chartered Financial Analyst (CFA) charter holder



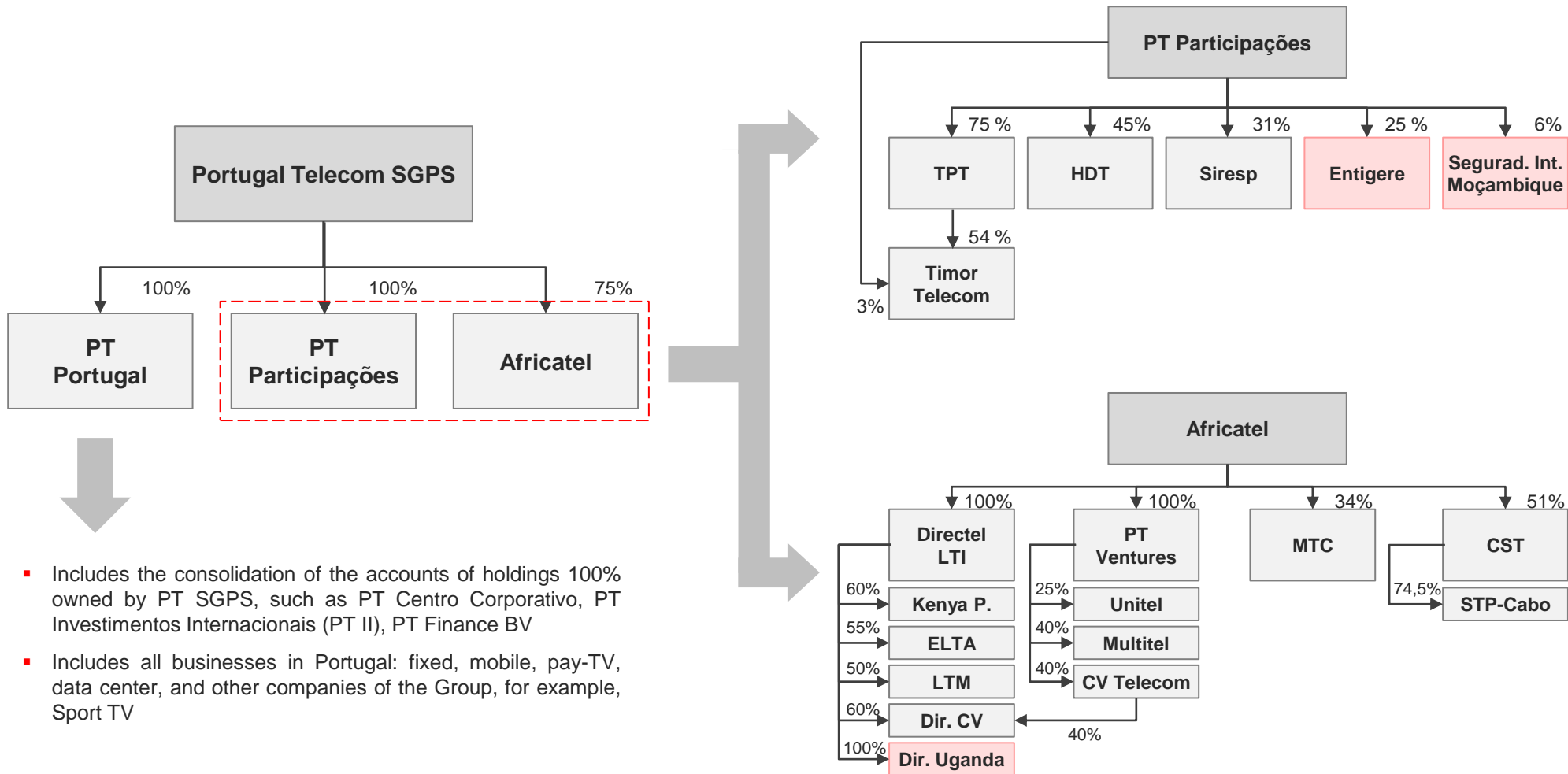
# 3. Scope of the Valuation

---

# Scope of the Valuation

The scope of the valuation of this Report includes the assets and liabilities of Portugal Telecom that will be contributed to Oi (Contributed Assets / PT Ex-Brazil)

## PT Ex-Brazil Structure



- Includes the consolidation of the accounts of holdings 100% owned by PT SGPS, such as PT Centro Corporativo, PT Investimentos Internacionais (PT II), PT Finance BV
- Includes all businesses in Portugal: fixed, mobile, pay-TV, data center, and other companies of the Group, for example, Sport TV

Source: provided by Oi and prepared by PT

Companies valued at book value or without activity

# Scope of the Valuation (cont'd)

Overview of the companies included in the Business Plan and being valued by the Discounted Cash Flow methodology

Company	Country	Interest (%)	Activities	2013 Sales <sup>1</sup> (EUR MM)	2013 EBITDA <sup>1</sup> (EUR MM)
<b>PT Portugal</b>				<b>2,612</b>	<b>1,040</b>
Portugal Telecom	Portugal	100.00%	Fixed and Mobile	2,571	1,033
Sport TV	Portugal	25.00%	TV Channel	41	7
<b>PT Participações</b>				<b>38</b>	<b>18</b>
TT - Timor Telecom	East Timor	44.17%	Fixed and Mobile	23	11
HDT - Hungaro Digitel	Hungary	44.62%	Satellite Data Transmission	3	1
Siresp	Portugal	30.55%	Network Operator	12	6
<b>Africatel</b>				<b>394</b>	<b>212</b>
Unitel	Angola	18.75%	Mobile	312	176
Multitel	Angola	30.00%	Communication Services	5	2
ELTA - Empresa Lista Telefónicas Angola	Angola	41.25%	Yellow Pages	3	1
CVT - Cabo Verde Telecom	Cape Verde	30.00%	Fixed and Mobile	21	10
DCV - Directel Cabo Verde	Cape Verde	57.00%	Yellow Pages	2	0
MTC - Mobile Telecommunications Limited	Namibia	25.50%	Mobile	41	20
CST - Companhia Santomense de Telecomunicações	São Tomé and Príncipe	38.25%	Fixed and Mobile	5	1
KPD - Kenya Postel Directories	Kenya	45.00%	Yellow Pages	3	0
LTM - Listas Telefónicas de Moçambique	Mozambique	37.50%	Yellow Pages	3	1

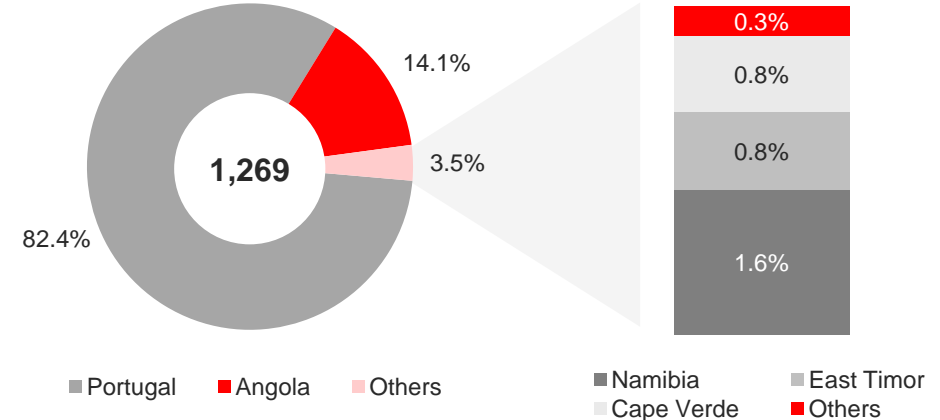
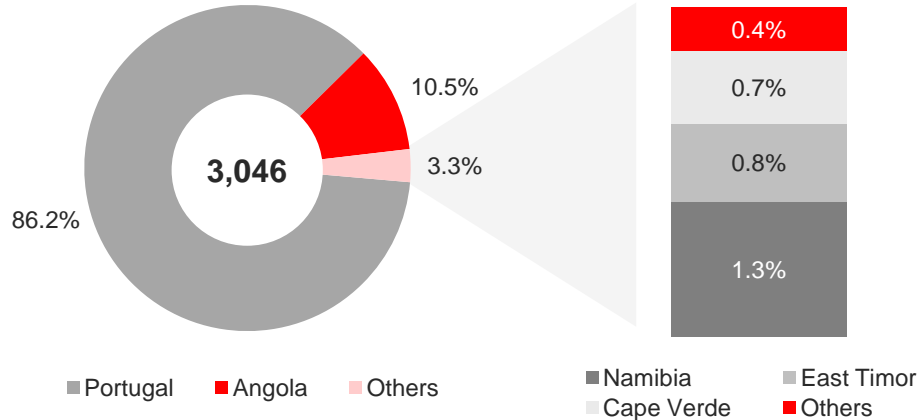
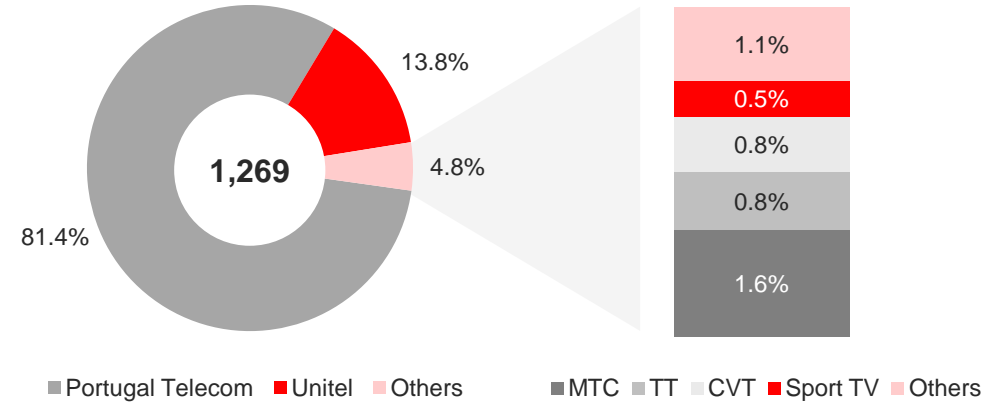
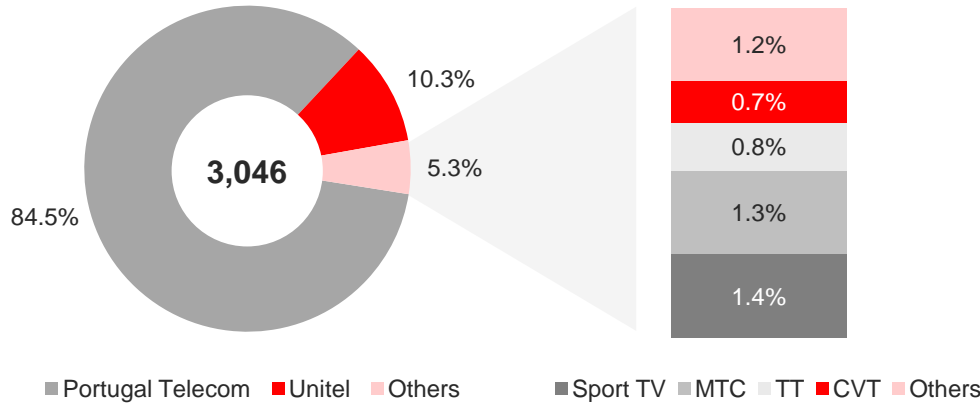
(1) Proportional Consolidated Pro-Forma  
Source: provided by Oi and prepared by PT

# Financial Highlights of the Companies Being Valued

Portugal and Angola represent approximately 97% of the proportionally consolidated pro-forma revenues and EBITDA

**2013 Revenues – Consolidated Pro-Forma (EUR MM)**

**2013 EBITDA – Consolidated Pro-Forma (EUR MM)**



Source: provided by Oi and prepared by PT

# Financial Statements of PT Ex-Brazil

## Income Statement - Proportionally Consolidated Pro-Forma

EUR MM	2012	2013
<b>Operational Revenue</b>	<b>3,188</b>	<b>3,046</b>
Europe	2,771	2,627
Residential	701	712
Personal	612	561
Corporate & PME	869	759
Wholesale & Other	405	397
Sales	114	123
Other	71	74
Africa and East Timor	415	417
Mobile	365	366
Fixed	13	13
Other	37	38
<b>Opex</b>	<b>(1,797)</b>	<b>(1,776)</b>
Wages&Salaries	(301)	(294)
Direct Costs	(489)	(487)
Commercial Costs	(359)	(371)
Support Services	(203)	(209)
Maintenance and Repairs	(118)	(112)
Supplies and External Services	(228)	(210)
Taxes and Provisions	(13)	(12)
Other Operating Costs	(86)	(81)
<b>EBITDA</b>	<b>1,391</b>	<b>1,269</b>
<i>EBITDA Margin</i>	<i>43.6%</i>	<i>41.7%</i>

Source: provided by Oi and prepared by PT

## 4. Valuation of PT Ex-Brazil

---

# Valuation Methodologies

Description of valuation methodologies used in this valuation report

Methodology	Description and Information Used	Considerations
<p><b>Discounted Cash Flow (DCF)</b></p>	<ul style="list-style-type: none"> <li>▪ Fundamental analysis based on long-term financial projections of the Company</li> <li>▪ Analysis supported by long-term business plan prepared by the Company and approved by the Board of Directors</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reflects the best estimates of the Company's management as to the expected future financial performance of the Contributed Assets</li> <li>▪ Capture prospects for long-term growth</li> <li>▪ Identifies key value creation factors and allows to evaluate the sensitivity of each of these factors</li> <li>▪ Projections may be affected by subjective considerations</li> </ul>
<p><b>Trading Multiples Valuation</b></p>	<ul style="list-style-type: none"> <li>▪ Valuation based on the implied multiples of comparable listed companies</li> <li>▪ Market prices reflect investors' expectations about the future performance of the industry</li> <li>▪ Multiples applied on historical results and/or projected by the Company</li> </ul>	<ul style="list-style-type: none"> <li>▪ Simplest and widely used methodology</li> <li>▪ Assumes that the company to be valued presents growth prospects, operating efficiency, capital cost, etc. similar to the selected comparable companies</li> <li>▪ Difficulty to obtain truly comparable companies</li> </ul>

**Santander favored the discounted cash flows methodology for believing that this is the one that best captures the future performance of PT Ex-Brazil, in line with best estimates of the management of the Company**



# 4. Valuation of PT Ex-Brazil

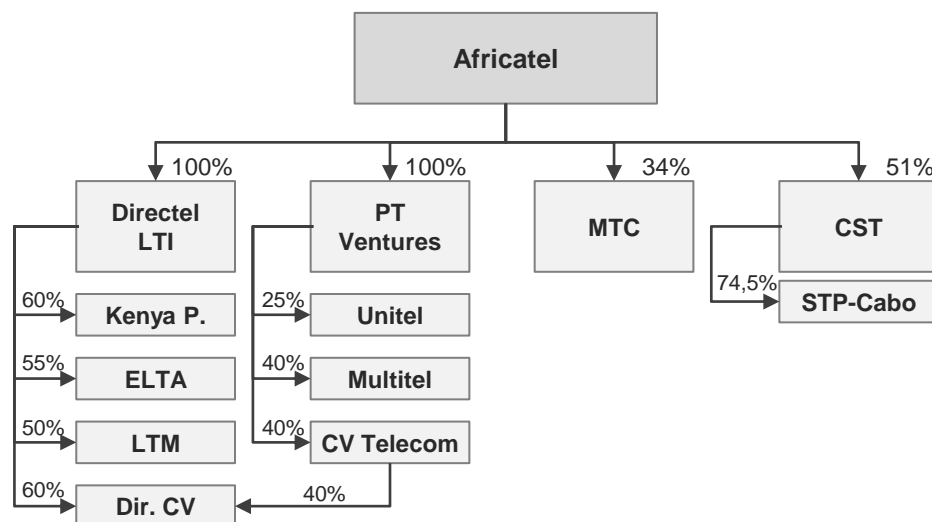
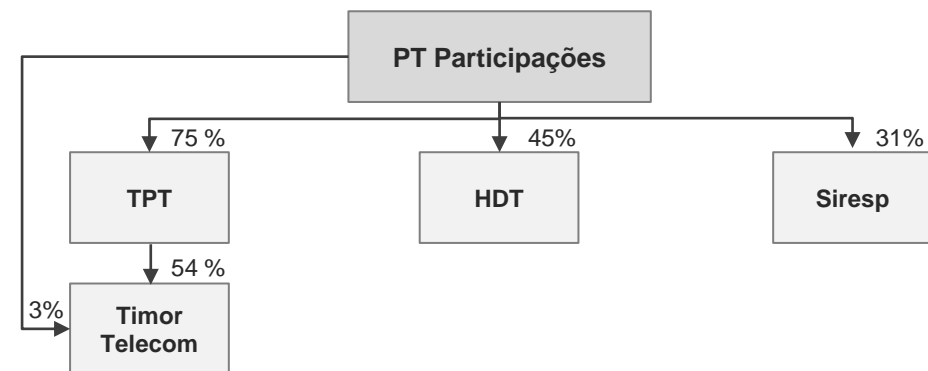
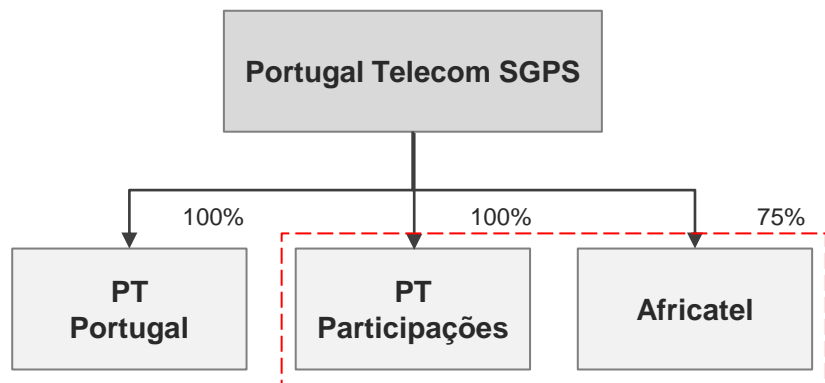
---

Discounted Cash Flow

# Assets Valued by the Discounted Cash Flow Methodology

For the DCF analysis, Santander used financial projections for each of the operations of the Contributed Assets in proportionally to the stake held by the Company

## Operations of PT Ex-Brazil Valued by the Discounted Cash Flow Methodology



Company	Country	Interest (%)
<b>PT Portugal</b>		
Portugal Telecom	Portugal	100.00%
Sport TV	Portugal	25.00%
<b>PT Participações</b>		
TT - Timor Telecom	East Timor	44.17%
HDT - Hungaro Digitel	Hungary	44.62%
Siresp	Portugal	30.55%
<b>Africatel</b>		
Unitel	Angola	18.75%
Multitel	Angola	30.00%
ELTA - Empresa Lista Telefónicas Angola	Angola	41.25%
CVT - Cabo Verde Telecom	Cape Verde	30.00%
DCV - Directel Cabo Verde	Cape Verde	57.00%
MTC - Mobile Telecommunications Limited	Namibia	25.50%
CST - Companhia Santomense de Telecomunicações	São Tomé and Príncipe	38.25%
KPD - Kenya Postel Directories	Kenya	45.00%
LTM - Listas Telefónicas de Moçambique	Mozambique	37.50%

Source: provided by Oi and prepared by PT

# Valuation by the Discounted Cash Flow Methodology

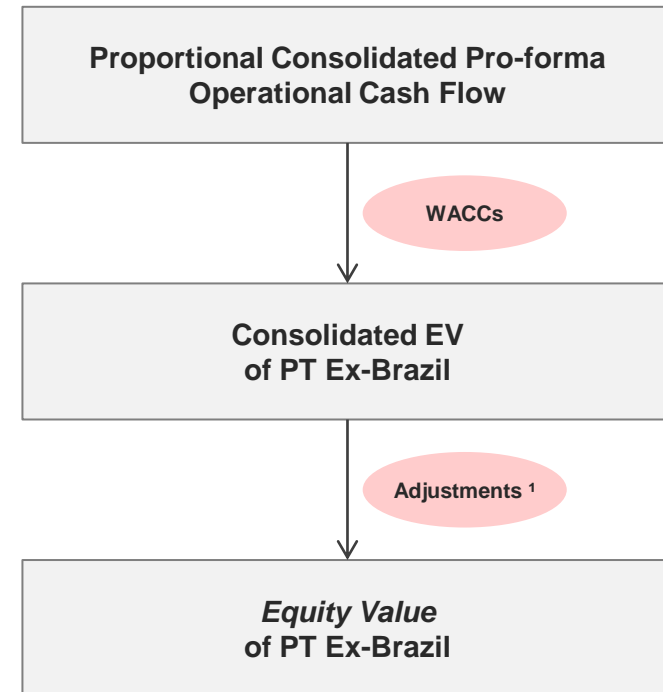
## Overview of the valuation methodology

### Description

- The DCF methodology consists in calculating the value of a company as the present value of its future free cash flows, discounted at a rate that represents its weighted average cost of capital
- For the DCF analysis, Santander used financial projections for each operation of PT Ex-Brazil:
  - The free cash flows to the firm were obtained from the business plan ("Business Plan") prepared by the Company and provided by the Contracting Party for the period between 2014 and 2018
  - The Business Plan is based on the proportional consolidation of annual cash flows projected for each of the major business units, according to the table shown on the previous page
  - The assumptions adopted in the Business Plan of the Company were discussed with its executives
- To calculate the midpoint of the valuation, a specific discount rate (weighted average cost of capital - "WACC"), in nominal Euros, was calculated to each country where the Company has operations, based on market parameters and derivatives from comparable companies
- The cash flows were discounted to the base date of December 31, 2013

### Cash Flows Being Valued

- For the DCF valuation we consolidated the projections provided in the Company's Business Plan
- Each asset was valued proportionally to the stake held by the Company, considering a specific discount rate



(1) Adjustments from Enterprise Value to Equity Value, as described on page 27

# Discount Rate - WACC

WACC in nominal Euros, calculated for each country where PT Ex-Brazil operates

		EUROPE		AFRICA & EAST TIMOR							
		Portugal	Hungary	Angola	Namibia	Cape Verde	East Timor	São Tomé and Príncipe	Kenya	Mozambique	
<b>Cost of Equity (Ke)</b>											
Risk free rate	[%]	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	- Average return (last 24 months) of the 10-year German Bond
Market risk premium	[%]	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	- Spread between the return on the S&P-500 and the return of long-term bonds of the US government (1926 to 2012)
Unlevered Beta	[unit]	0.61	0.61	0.98	0.98	0.98	0.98	0.98	0.98	0.98	- Average of the unlevered betas of comparable companies
Leverage (D/E)	[%]	52.5%	52.5%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	- Average leverage of comparable companies
Leverage (D/(D+E))	[%]	34.4%	34.4%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Taxes	[%]	26.7%	11.9%	35.0%	33.0%	25.0%	10.0%	25.0%	30.0%	32.0%	- Local income tax rate for legal entities
Levered Beta	[%]	0.84	0.89	1.02	1.02	1.02	1.03	1.02	1.02	1.02	
Country risk premium	[%]	3.6%	3.8%	5.4%	3.3%	8.3%	11.3%	5.4%	6.8%	6.8%	- Average spread based on sovereign bonds and adjusted by the volatility of equity markets in emerging countries
<b>Ke</b>	<b>[%]</b>	<b>10.8%</b>	<b>11.3%</b>	<b>13.8%</b>	<b>11.7%</b>	<b>16.7%</b>	<b>19.7%</b>	<b>13.8%</b>	<b>15.2%</b>	<b>15.2%</b>	
<b>Cost of Debt (Kd)</b>											
EuroSwap 10-year	[%]	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	- Average return (last 24 months) of the 10-year EuroSwap
Spread - Portugal Telecom	[%]	2.5%	2.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	- Estimated spread for long-term securities issued by PT in Europe and by subsidiaries in Africa
Gross cost of debt	[%]	4.4%	4.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	
Taxes	[%]	26.7%	11.9%	35.0%	33.0%	25.0%	10.0%	25.0%	30.0%	32.0%	- Local income tax rate for legal entities
<b>Kd</b>	<b>[%]</b>	<b>3.2%</b>	<b>3.9%</b>	<b>5.5%</b>	<b>5.6%</b>	<b>6.3%</b>	<b>7.6%</b>	<b>6.3%</b>	<b>5.9%</b>	<b>5.7%</b>	
<b>Capital Structure</b>											
Leverage (D/E)	[%]	52.5%	52.5%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	- Average leverage of comparable companies
E / (D+E)	[%]	65.6%	65.6%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	
D / (D+E)	[%]	34.4%	34.4%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
<b>WACC</b>	<b>[%]</b>	<b>8.2%</b>	<b>8.7%</b>	<b>13.4%</b>	<b>11.4%</b>	<b>16.2%</b>	<b>19.1%</b>	<b>13.5%</b>	<b>14.7%</b>	<b>14.7%</b>	
<b>Stake in Total EBITDA 13'</b>	<b>[%]</b>	<b>82,4%</b>	<b>0,1%</b>	<b>14,1%</b>	<b>1,6%</b>	<b>0,8%</b>	<b>0,8%</b>	<b>0,1%</b>	<b>0,0%</b>	<b>0,1%</b>	
<b>Stake in Total OCF 13 1</b>	<b>[%]</b>	<b>80,4%</b>	<b>0,1%</b>	<b>16,0%</b>	<b>1,7%</b>	<b>0,9%</b>	<b>0,6%</b>	<b>0,0%</b>	<b>0,1%</b>	<b>0,2%</b>	

(1) OCF = EBITDA (-) Capex  
Source: Santander, Bloomberg, Ibbotson 2013, Damodaran, Aswath

# Main Assumptions Considered in DCF Valuation

## Macroeconomic assumptions

### Macroeconomic Assumptions

	2013	2014	2015	2016	2017	2018	Perp.
<b>Inflation</b>							
Europe	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%
Portugal	0.7%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%
USA	1.4%	1.5%	1.8%	2.0%	2.0%	2.0%	2.0%
Angola	9.2%	8.5%	7.7%	7.2%	7.2%	7.2%	7.2%
Namibia	6.4%	6.3%	5.9%	5.7%	5.7%	5.7%	5.7%
Cape Verde	3.3%	2.7%	2.8%	2.5%	2.5%	2.5%	2.5%
East Timor	10.6%	9.5%	8.1%	7.1%	7.1%	7.1%	7.1%
São Tomé and Príncipe	8.6%	7.5%	5.0%	3.5%	3.5%	3.5%	3.5%
Hungary	2.4%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Kenya	5.4%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Mozambique	5.5%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
<b>Conversion Rate for EUR</b>							
EUR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USD	1.33	1.33	1.33	1.34	1.35	1.35	1.36
NAD	12.82	13.42	14.02	14.59	15.18	15.80	16.45
CVE	110.27	110.27	110.27	110.27	110.27	110.27	110.27
KES	114.42	118.40	122.57	126.78	131.14	135.65	140.32
MZN	40.04	41.68	43.40	45.15	46.96	48.86	50.82
HUF	296.84	301.32	305.99	310.48	315.03	319.66	324.35
STD	24,500.00	24,500.00	24,500.00	24,500.00	24,500.00	24,500.00	24,500.00
<b>Taxes</b>							
Portugal	25.0%	29.5%	27.5%	25.5%	25.5%	25.5%	25.5%
Angola	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Namibia	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Cape Verde	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
East Timor	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
São Tomé and Príncipe	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Hungary	10.0%	10.0%	10.0%	11.9%	11.9%	11.9%	12.1%
Kenya	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Mozambique	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%

Source: IMF, KPMG, E&Y, PwC and Deloitte

# Main Assumptions Considered in DCF Valuation (cont'd)

## Operational assumptions

### Operational Assumptions

Units	2012	2013	2014	2015	2016	2017	2018	CAGR 13-18	Unidade	2012	2013	2014	2015	2016	2017	2018	CAGR 13-18
<b>PT Portugal</b>									<b>CVT (Cape Verde)</b>								
<b>Clients ('000)</b>									<b>Fixed</b>								
Residential	3,841	3,893	3,894	3,804	3,744	3,770	3,795	-0.5%	Subscribers ('000)	72.3	68.2	65.0	64.0	64.6	65.3	65.9	-0.7%
Personal	5,978	6,173	6,238	6,237	6,353	6,405	6,426	0.8%	Avg ARPU/mth (CVE)	4,320	4,278	4,428	4,582	4,708	4,804	4,861	2.6%
Corporate & PME	2,532	2,555	2,615	2,663	2,676	2,691	2,714	1.2%	<b>Mobile</b>								
<b>Avg ARPU/mth (EUR)</b>									Subscribers ('000)								
Residential	31.6	31.8	32.0	32.6	33.2	33.6	33.7	1.2%	Avg ARPU/mth (CVE)	920	861	794	753	728	715	711	-3.8%
Personal	8.7	7.6	7.2	7.1	6.9	6.8	6.9	-1.9%	<b>DCV (Cape Verde)</b>								
Corporate & PME	28.6	24.7	22.0	20.6	19.7	19.2	18.7	-5.4%	Advertisers	2,210	2,301	2,547	2,735	2,814	2,859	2,886	4.6%
<b>HDT (Hungary)</b>									Avg ARPA/year (CVE)								
Clients ('000)	4,117.5	4,086.5	3,942.5	3,795.7	3,757.3	3,766.7	3,795.0	-1.5%	Avg ARPA/year (CVE)	94,735	172,245	232,965	256,262	269,075	279,838	288,233	10.8%
Avg ARPU/mth (HUF)	82.0	135.8	145.0	146.2	150.3	155.2	161.1	3.5%	<b>MTC (Namibia)</b>								
<b>Unitel (Angola)</b>									<b>Mobile</b>								
<b>Mobile</b>									Subscribers ('000)								
Subscribers ('000)	8,217	9,442	10,316	11,064	12,001	13,233	14,529	9.0%	Avg ARPU/mth (NAD)	73.9	74.7	76.3	77.9	79.2	80.3	81.0	1.6%
Avg ARPU/mth (USD)	19.8	18.4	17.9	17.7	17.7	17.5	17.2	-1.3%	<b>CST (São Tomé and Príncipe)</b>								
<b>Multitel (Angola)</b>									<b>Fixed</b>								
Clients ('000)	1,158.0	1,456.0	1,734.0	1,955.1	2,144.1	2,310.4	2,435.4	10.8%	Subscribers ('000)	8.0	7.5	6.4	6.0	6.1	6.2	6.3	-3.5%
Avg ARPU/mth (USD)	1,424.6	1,367.2	1,337.5	1,346.2	1,384.2	1,388.3	1,414.1	0.7%	Avg ARPU/mth (STD)	760,765	749,969	780,085	745,204	733,655	739,536	753,928	0.1%
<b>ELTA (Angola)</b>									<b>Mobile</b>								
Advertisers	3,392	3,446	3,628	3,792	3,900	3,976	4,024	3.1%	Subscribers ('000)	118.6	124.8	128.1	129.5	131.9	135.9	140.9	2.4%
Avg ARPA/year (USD)	3,149	3,100	3,099	3,086	3,072	3,054	3,045	-0.4%	Avg ARPU/mth (STD)	148,974.1	149,429.4	138,802.5	130,390.4	123,097.2	116,676.4	110,584.2	-5.8%
<b>KPD (Kenya)</b>									<b>TT (East Timor)</b>								
<b>Fixed</b>									<b>Fixed</b>								
Advertisers	6,158	5,135	4,975	5,028	5,095	5,164	5,223	0.3%	Subscribers ('000)	3.1	3.5	3.8	3.9	4.0	4.1	4.2	3.3%
Avg ARPA/year (KES)	126,707	127,270	118,429	113,289	109,593	107,693	106,683	-3.5%	Avg ARPU/mth (USD)	148	163	160	173	193	206	219	6.1%
<b>LTM (Mozambique)</b>									<b>Mobile</b>								
Advertisers	5,972	6,055	6,313	6,650	6,897	7,068	7,166	3.4%	Subscribers ('000)	615.6	627.2	625.4	630.3	648.7	680.4	715.8	2.7%
Avg ARPA/year (MZN)	51,883	50,911	50,501	49,931	49,170	48,193	47,053	-1.6%	Avg ARPU/mth (USD)	9.3	8.2	7.3	7.1	6.8	6.6	6.3	-5.0%

Source: provided by Oi and prepared by PT

# Discounted Cash Flow of PT Ex-Brazil

The Enterprise Value of PT Ex-Brazil based on the DCF methodology was valued at EUR 8.4 billion

PT Ex-Brazil								
EUR millions	2012	2013	2014	2015	2016	2017	2018	Perp.
Net Revenue	3,186.1	3,045.6	2,923.5	2,898.0	2,921.8	2,958.6	3,001.4	3,046.7
Opex	(1,795.5)	(1,775.9)	(1,721.8)	(1,667.8)	(1,645.4)	(1,655.8)	(1,672.8)	(1,698.0)
<b>EBITDA</b>	<b>1,390.7</b>	<b>1,269.7</b>	<b>1,201.7</b>	<b>1,230.2</b>	<b>1,276.3</b>	<b>1,302.7</b>	<b>1,328.7</b>	<b>1,348.7</b>
Depreciation	(756.1)	(712.8)	(676.5)	(634.5)	(575.8)	(520.1)	(475.3)	(482.5)
<b>EBIT</b>	<b>634.5</b>	<b>556.9</b>	<b>525.2</b>	<b>595.7</b>	<b>700.5</b>	<b>782.7</b>	<b>853.4</b>	<b>866.2</b>
(-) Taxes			(162.5)	(175.8)	(194.5)	(216.5)	(235.5)	(239.0)
(+) Depreciation			676.5	634.5	575.8	520.1	475.3	482.5
(-) Capex			(460.5)	(386.5)	(378.3)	(371.4)	(368.2)	(482.5)
(-) Changes in Working Capital			34.0	13.6	9.8	9.8	11.4	-
(+) Non-cash items			0.7	1.5	1.5	1.5	1.5	1.5
<b>FCFF</b>			<b>613.4</b>	<b>683.0</b>	<b>714.8</b>	<b>726.1</b>	<b>737.8</b>	<b>628.7</b>
Discount Factor			1.04	1.14	1.24	1.36	1.48	1.48
<b>PVFCFF</b>			<b>587.2</b>	<b>599.3</b>	<b>574.8</b>	<b>535.1</b>	<b>498.3</b>	<b>5,584.2</b>

Implied WACC	9.11%	
Perpetuity Growth	1.51%	
Present Value of the Projected Flo	2,794.7	33.4%
Present Value of the Perpetuity	5,584.2	66.6%
<b>Proportional Consolidated EV</b>	<b>8,378.9</b>	<b>100.0%</b>

<b>Implied Multiples Analysis</b>	<b>2013</b>	<b>2014</b>
EV/ EBITDA	6.6X	7.0X

- The cash flow presented above is the proportional consolidation of cash flows for each of the operations, converted to Euro
- The Enterprise Value of PT Ex-Brazil was calculated from the present value of the cash flows of each of the operations (sum of the parts). Based on this value and on the consolidated cash flow, the implied WACC for PT Ex-Brazil was calculated
- The perpetuity considers the assumption that, in the long run, the WACC is equal to the ROIC, thus the growth rate does not create value. In this sense, it was considered the maintenance of the invested capital (Depreciation = Investment in CAPEX and Working Capital) and constant cash flows in real terms (Inflation = g)
- Taking into account that the disputes between the shareholders of Unitel have caused constant delays in the payment of dividends to PT, an 18 months delay was applied over the cash flows generated by Unitel. This adjustment impacts the implied WACC of PT Ex-Brazil



# Equity Value of PT Ex-Brazil

Performing all necessary adjustments of net debt, post retirement benefits, companies not considered on the DCF and other contingencies, the equity value of PT Ex-Brazil was valued at BRL 5.3~5.9 billion

Summary of PT Ex-Brazil Valuation	
<b>Proportionally Consolidated EV</b>	<b>8,378.9</b>
(-) Proportional net debt adjusted for minority interests	(6,097.1)
(-) Post Retirement Benefits post-tax	(774.9)
(+) Companies not considered in the DCF and valued at book value	21.4
(-) Other adjustments	180.5
<b>Equity Value (EUR MM)</b>	<b>1,708.7</b>
FX BRL/EUR (02/20/2014) <sup>4</sup>	3.2628
<b>Equity Value (BRL MM)</b>	<b>5,575.1</b>

- 1 Pro-forma net debt of PT Ex-Brazil on 12/31/2013 <sup>1</sup>
- 2 Present value of the post retirement benefits' cash flow <sup>2</sup>
- 3 Companies not considered in the DCF and valued at book value <sup>2</sup>
- 4 Other adjustments <sup>3</sup>

Range of Values	Bottom Range (-5%)	Midpoint	Top Range (+5%)
Equity Value (EUR MM)	1,623.3	1,708.7	1,794.1
Equity Value (BRL MM)	5,296.4	5,575.1	5,853.9

**Based on the Business Plan of the Company, Santander evaluated the Equity Value of PT Ex-Brazil between BRL 5.3 billion and BRL 5.9 billion using the Discounted Cash Flow methodology**

(1) Pro-forma net debt reported by the Company  
 (2) Details in the appendix  
 (3) Compensation relative to the early termination of wireline concession agreement, dividends payable by Unitel to PT (prior to 2013), and amount to be paid for the acquisition of 25% of Sport TV (under approval)  
 (4) Average of closing bid and ask FX rates published by Bacen (PTAX-800)

# 4. Valuation of PT Ex-Brazil

---

## Trading Multiples

# Trading Multiples: Europe

Benchmarking key financial indicators and multiples of selected comparable companies

Company	Country	Mkt Cap (EUR MM)	Sales Growth			EBITDA Margin			Capex / Sales		
			2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E
KPN Adjusted	Netherlands	11,397	(4.7%)	(32.0%)	(4.2%)	36.5%	34.1%	33.4%	14.3%	15.5%	17.1%
British Telecom <sup>1</sup>	Britain	37,326	(5.5%)	0.1%	(0.1%)	32.6%	33.2%	34.3%	13.6%	13.1%	13.5%
Belgacom	Belgium	7,185	0.8%	(1.2%)	(1.0%)	27.8%	26.8%	26.0%	12.0%	14.0%	13.0%
Telekom Austria	Austria	3,012	(2.8%)	(3.0%)	(1.8%)	33.6%	30.8%	31.1%	16.8%	16.7%	16.7%
Elisa	Finland	3,310	1.5%	0.1%	1.0%	32.2%	32.4%	33.3%	12.2%	14.2%	12.9%
TDC	Denmark	5,582	(0.7%)	(5.1%)	(2.9%)	39.9%	40.1%	40.5%	9.8%	14.4%	15.3%
OTE	Greece	5,835	(7.1%)	(14.3%)	(4.3%)	33.1%	32.7%	36.3%	11.8%	14.0%	13.6%
Swisscom	Switzerland	21,305	(0.7%)	0.6%	0.2%	36.9%	37.4%	37.6%	22.5%	20.9%	20.6%
Telecom Italia	Italy	15,290	(1.5%)	(10.5%)	(11.3%)	39.5%	39.4%	40.1%	10.8%	18.1%	18.3%
<b>Average</b>			<b>(2.3%)</b>	<b>(7.3%)</b>	<b>(2.7%)</b>	<b>34.7%</b>	<b>34.1%</b>	<b>34.7%</b>	<b>13.8%</b>	<b>15.7%</b>	<b>15.6%</b>

Company	Country	EV (EUR MM)	EV / Sales			EV / EBITDA			EV / OCF <sup>2</sup>		
			2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E
KPN Adjusted	Netherlands	12,743	1.0X	1.5X	1.6X	2.8X	4.4X	4.7X	4.6X	8.1X	9.6X
British Telecom <sup>1</sup>	Britain	46,811	2.1X	2.1X	2.1X	6.5X	6.4X	6.2X	11.2X	10.6X	10.2X
Belgacom	Belgium	9,177	1.4X	1.4X	1.5X	5.1X	5.4X	5.6X	9.1X	11.3X	11.3X
Telekom Austria	Austria	6,343	1.5X	1.5X	1.5X	4.4X	4.9X	5.0X	8.7X	10.7X	10.7X
Elisa	Finland	4,260	2.7X	2.7X	2.7X	8.5X	8.5X	8.1X	13.7X	15.1X	13.3X
TDC	Denmark	8,573	2.4X	2.6X	2.7X	6.1X	6.4X	6.6X	8.2X	10.0X	10.5X
OTE	Greece	7,889	1.7X	2.0X	2.1X	5.1X	6.0X	5.7X	7.9X	10.5X	9.0X
Swisscom	Switzerland	27,814	3.0X	3.0X	3.0X	8.1X	7.9X	7.9X	20.7X	18.0X	17.4X
Telecom Italia	Italy	49,222	1.7X	1.9X	2.1X	4.2X	4.7X	5.2X	5.8X	8.7X	9.6X
<b>Average</b>			<b>2.0X</b>	<b>2.1X</b>	<b>2.1X</b>	<b>5.7X</b>	<b>6.1X</b>	<b>6.1X</b>	<b>10.0X</b>	<b>11.5X</b>	<b>11.3X</b>
<b>Most Comparable Peers Average<sup>3</sup></b>			<b>2.4X</b>	<b>2.5X</b>	<b>2.5X</b>	<b>7.1X</b>	<b>7.1X</b>	<b>7.0X</b>	<b>11.0X</b>	<b>11.9X</b>	<b>11.4X</b>

(1) Value of the year "n" corresponds to the value of "n +1", once the fiscal year ends in March

(2) OCF = EBITDA (-) Capex

(3) Most comparable peers average include peers with more than 80% sales and EBITDA from domestic operations and no key controlling shareholder (with more than 25% interest). Also excludes companies under corporate activity

Source: Bloomberg on 02/10/2014. Comparable's selection: fixed or mobile telecom companies in Europe, excluding companies with more than 50% of EBITDA outside the country of origin

# Trading Multiples: Africa and East Timor

Benchmarking key financial indicators and multiples of selected comparable companies

Company	Country	Mkt Cap (EUR MM)	Sales Growth			EBITDA Margin			Capex / Sales		
			2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E
MTN	South Africa	24,338	10.9%	0.8%	10.1%	42.6%	43.0%	43.3%	16.7%	19.3%	16.3%
Vodacom <sup>1</sup>	South Africa	11,637	4.5%	8.6%	6.8%	36.4%	36.9%	37.2%	11.1%	12.7%	13.9%
Maroc Telecom	Morocco	7,592	(3.2%)	(3.5%)	0.2%	53.2%	57.1%	57.0%	17.1%	18.3%	17.7%
Safaricom <sup>1</sup>	Kenya	4,030	16.2%	15.3%	12.1%	38.6%	41.5%	41.5%	20.0%	18.8%	17.3%
<b>Average</b>			<b>7.1%</b>	<b>5.3%</b>	<b>7.3%</b>	<b>42.7%</b>	<b>44.6%</b>	<b>44.7%</b>	<b>16.2%</b>	<b>17.3%</b>	<b>16.3%</b>

Company	Country	EV (EUR MM)	EV / Sales			EV / EBITDA			EV / OCF <sup>2</sup>		
			2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E
MTN	South Africa	25,721	2.9X	2.8X	2.6X	6.7X	6.6X	6.0X	11.1X	12.0X	9.6X
Vodacom <sup>1</sup>	South Africa	12,360	2.7X	2.5X	2.3X	7.3X	6.7X	6.2X	10.5X	10.2X	9.9X
Maroc Telecom	Morocco	8,819	3.3X	3.4X	3.4X	6.2X	6.0X	6.0X	9.2X	8.9X	8.7X
Safaricom <sup>1</sup>	Kenya	3,963	3.7X	3.2X	2.9X	9.7X	7.8X	7.0X	20.1X	14.3X	11.9X
<b>Average</b>			<b>3.1X</b>	<b>3.0X</b>	<b>2.8X</b>	<b>7.5X</b>	<b>6.8X</b>	<b>6.3X</b>	<b>12.7X</b>	<b>11.3X</b>	<b>10.0X</b>

(1) Value of the year "n" corresponds to the value of "n +1", once the fiscal year ends in March

(2) OCF = EBITDA (-) Capex

Source: Bloomberg on 02/10/2014. Comparable's selection: fixed or mobile telecom companies that operates mainly on the African continent

# Summary of Trading Multiples Valuation

Results of the use of trading multiples on the valuation of PT Ex-Brazil

## Referencias de avaliação

		Enterprise Value (EUR MM) <sup>1</sup>	Equity Value (EUR MM) <sup>2</sup>			Implied multiples on the '14E central value		Comments			
			Bottom	Midpoint	Top	EV / EBITDA	EV / OCF				
1	EV / EBITDA Multiples	2013E		8,833 8,947	9,061	2,163	2,277	2,391	7.4X	12.1X	<ul style="list-style-type: none"> <li>Methodology based on trading comparable companies</li> <li>EV results on applying the EV / EBITDA and EV / OCF multiples from selected comparables on estimates for each of the years referenced                             <ul style="list-style-type: none"> <li>British Telecom, Elisa e TDC were used for Europe</li> <li>MTN, Vodacom, Maroc Telecom e Safaricom were used for Africa and East Timor</li> </ul> </li> <li>Average range reached from the average of the midpoints of EV</li> </ul>
	2014E	8,143 8,221	8,299	1,473	1,551	1,628	6.8X	11.1X			
2	EV / OCF Multiples	2013E	7,664 7,717	7,769	994	1,047	1,099	6.4X	10.4X		
	2014E	8,146 8,223	8,301	1,476	1,553	1,631	6.8X	11.1X			
Average of Midpoints (EUR MM)		8,197 8,277	8,357	1,527	1,607	1,687	6.9X	11.2X			
Average of Midpoints (BRL MM)				4,981	5,243	5,505					

(1) Equity Value range built by applying variations of + / - 5% on the Equity Value derived from the midpoint of EV / EBITDA and EV / OCF multiples valuation

(2) Considers a total adjustment from Enterprise Value to Equity Value of EUR 6,670 million

# 5. Appendix

---

## a) Weighted Average Cost of Capital (WACC)

# Discounted Cash Flow (cont'd)

## Cost of Equity (Ke)

### Description

---

- The WACC is determined as the weighted average of a company's costs of equity and debt
- Such costs are weighted by the respective proportion of equity and debt in the Company's capital structure, according to the following formula:
- We estimate the WACC of the Company by geography, reflecting the country risk, the cost of debt and borrowing capacity in order to determine an optimal capital structure

$$WACC = \left( \frac{E}{D + E} \right) \times Ke + \left( \frac{D}{D + E} \right) \times Kd$$

**D** : Net Debt Amount  
**E** : Equity Amount  
**Ke** : Cost of Equity  
**Kd** : Cost of Debt

- Our calculations of cost of equity are derived from the CAPM formula:

$$Ke = Rf + \beta \times (Rm - Rf) + Z$$

**Ke** : Cost of Equity  
**Rf** : Risk Free Rate  
**Rm - Rf** : Market Risk Premium  
**β** : Estimated beta for the non-diversifiable risk of a company measured by the correlation of its return versus market return  
**Z** : County Risk



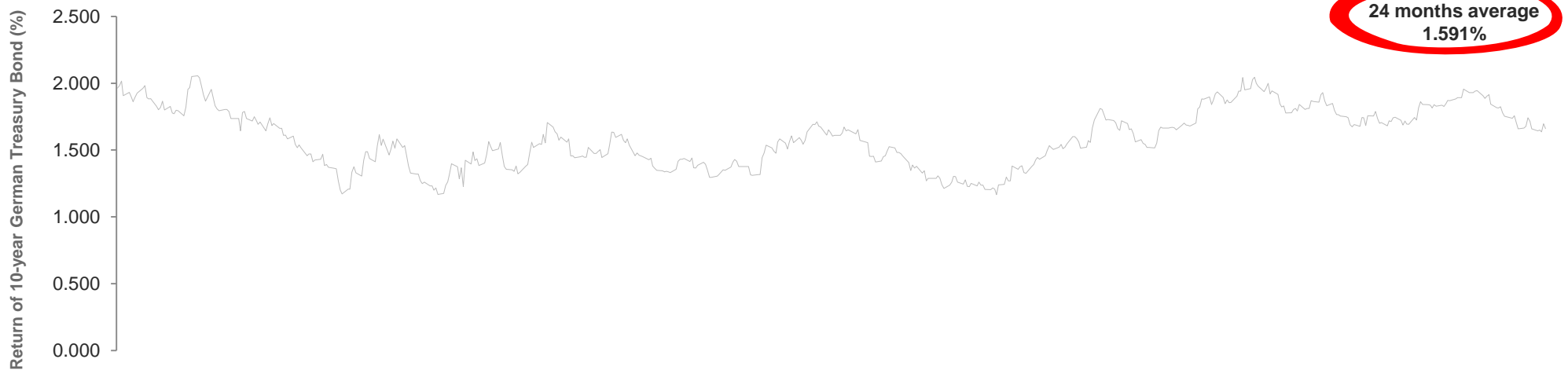
# Discounted Cash Flow (cont'd)

## Risk Free Rate (Rf)

### Description

- We believe the yield of the German government bond is the best estimate for the risk-free rate of return in Euros. We use the 10-year German Treasury Bond because:
  - It is a fixed income security whose long-term yield reflects investors' expectations about future expected returns
  - The 10-year Bond, unlike short-term rates, it is not used as an instrument of monetary policy
- Reference date: 02/10/2014

### Return of the German Bond – 10 years (%)



### Description

- To determine the Country Risk Premium, we use as a base the rating calculated by independent agencies (Moody's and S&P) to sovereign bonds issued by each of the countries
- Based on the rating, the incremental return required by investors compared to sovereign bonds issued by countries with "risk free" profile (AAA rating) is determined
- In case of emerging countries, a volatility index is applied over the spread of sovereign risk. This volatility index is calculated from the ratio of [Standard Deviation of the Equities Market / Standard Deviation of Sovereign Bonds]. This index in emerging countries is approximately 1.5x
- This spread is the best representation of the perceived risk of the international investor community on any given date. This assumption is aligned with the fact that the cost of capital of a company should reflect, at any time, the opportunity cost of the investor to invest in assets with similar risk
- Source: *Country Default Spreads and Risk Premiums, January 2013 – Damodaran, Aswath*

### Country Risk Premium (%)

	Portugal	Hungary	Angola	Namibia	Cape Verde	East Timor	São Tomé and Príncipe <sup>2</sup>	Kenya	Mozambique
Moody's Sovereign Rating	Ba3	Ba1	Ba3	Baa3	n.a.	n.a.	n.a.	B1	B1
S&P Sovereign Rating	BB	BB	BB-	n.a.	B	n.a.	n.a.	B+	B+
<b>Country Default Spread (%)</b>	<b>3.6%</b>	<b>2.5%</b>	<b>3.6%</b>	<b>2.2%</b>	<b>5.5%</b>	<b>7.5%</b>	<b>3.6%</b>	<b>4.5%</b>	<b>4.5%</b>
Volatility index for Equity Markets on Emerging Countries	1.0x	1.5x	1.5x	1.5x	1.5x	1.5x	1.5x	1.5x	1.5x
<b>Country Risk Premium (%)</b>	<b>3.6%</b>	<b>3.8%</b>	<b>5.4%</b>	<b>3.3%</b>	<b>8.3%</b>	<b>11.3%</b>	<b>5.4%</b>	<b>6.8%</b>	<b>6.8%</b>

(1) Moody's and S&P do not publish a rating for East Timor. Considering the risk rating published by EKN of 6 (7), we assume the equivalent spread of Caa1 by Moody's

(2) Moody's and S&P do not publish a rating for São Tomé and Príncipe. We assumed the same rating as Angola

Source: Country Default Spreads and Risk Premiums, January 2013 – Damodaran, Aswath

# Discounted Cash Flow (cont'd)

## Market Risk Premium ( $R_m - R_f$ )

### Description

---

- The Market Risk Premium refers to the additional return required by investors to compensate for the higher risk involved in equities vis-à-vis investments in US Treasury bonds (risk free investment)
- An estimate of the Market Risk Premium is the historical average of the spread between the return of the Standard & Poors – 500 index (S&P-500) and the return on long-term bonds of the US government during the period between 1926 and 2012
- We prefer a historical approach rather than predictions of future behavior, since we do not believe that the Market Risk Premium is predictable beyond a period of three to four years. As the Market Risk Premium presents a random behavior, historical information are considered the best estimates of the future
- We use historical data since 1926 because:
  - This period reflects events that impacted the economic environment, such as wars, depressions and “booms”, which would not be reflected if we use shorter periods
  - Variations in the risk premium are random. Thus, using historical long-term data is considered the best way to estimate the future behavior
- We used Market Risk Premium of **6.70%** (arithmetic average of the period 1926-2012, source: Ibbotson)

# Discounted Cash Flow (cont'd)

## Beta definition ( $\beta$ )

### Description

---

- Beta measures the market risk / systematic risk / non-diversifiable risk. It is a coefficient that attempts to indicate to what extent the volatility of a company's share price may be explained by the volatility in the market portfolio
- It is calculated through a linear regression between the series of variations in the share price and the series of variations in the market portfolio (Index)
- Beta is composed of operational and financial risk. In order to factor the operational risk of the business, the “full” beta ( $\beta_L$ ) is unlevered based on the selected companies debt/equity structure and income tax
- The average unlevered beta ( $\beta_U$ ) of the set of comparable companies is then levered according to the estimated target capital structure and income tax of the assessed company

$$\beta_U = \beta_L / [1+(1 - \text{Tax Rate})*(\text{Debt}/\text{Equity})]$$

$$\beta_L = \beta_U * [1+(1 - \text{Tax Rate})*(\text{Debt}/\text{Equity})]$$

# Discounted Cash Flow (cont'd)

## Beta calculation ( $\beta$ )

### Description

- Santander believes that the most appropriate methodology to determine the non-diversifiable risk of the Company is to use the Beta of comparable companies that operate in the telecoms market in selected geographies, since, in the opinion of the appraiser, (i) these companies are those that better reflect the characteristics and particularities of operating market of PT ex-Brazil and represent a sufficiently relevant and diverse sample universe (9 and 4 companies)

Comparables	Country	Market Cap Local Currency	Net Debt Local Currency	ND / Equity	Beta	
					Levered	Unlevered
<b>Europe</b>						
KPN	Netherlands	11,602	9,718	83.8%	1.06	0.65
British Telecom	Britain	31,015	7,881	25.4%	0.83	0.70
Belgacom	Belgium	7,078	1,801	25.4%	0.72	0.61
Telekom Austria	Austria	2,880	3,329	115.6%	1.02	0.54
Elisa	Finland	3,240	949	29.3%	0.76	0.63
TDC	Denmark	41,047	22,317	54.4%	0.57	0.40
OTE	Greece	5,724	1,660	29.0%	1.07	0.87
Swisscom	Switzerland	25,953	7,940	30.6%	0.73	0.59
Telecom Italia	Italy	15,554	30,572	196.6%	1.08	0.46
<b>Average</b>				65.6%	<b>0.87</b>	<b>0.61</b>
<b>Africa and East Timor</b>						
MTN	South Africa	372,783	16,732	4.5%	1.05	1.02
Vodacom (Cal.)	South Africa	178,182	10,432	5.9%	0.74	0.72
Maroc Telecom	Morocco	85,272	9,596	11.3%	1.18	1.09
Safaricom (Cal.)	Kenya	474,529	-7,809	-1.6%	1.10	1.10
<b>Average</b>				5.0%	<b>1.02</b>	<b>0.98</b>

Source: Bloomberg e Audited Financial Statements of the companies

Note: Beta for the period of 2 years considering weekly change

# 5. Appendix

---

## b) Supporting Information to DCF Valuation

# Post Retirement Benefits

## Cash flow of post retirement benefits

Year	Cash Flows Pre-Tax (EUR Thousand)	Cash Flows Post-Tax (EUR Thousand)
2013	188,127	128,867
2014	202,839	143,001
2015	191,564	138,884
2016	172,291	128,357
2017	141,920	105,730
2018	128,484	95,721
2019	111,710	83,224
2020	100,055	74,541
2021	88,515	65,944
2022	77,855	58,002
2023	66,334	49,419
2024	56,539	42,122
2025	50,901	37,921
2026	45,145	33,633
2027	40,964	30,518
2028	35,599	26,521
2029	26,276	19,576
2030	5,770	4,298
2031	1,268	945
2032	862	642
2033	772	575
2034	728	543

Year	Cash Flows Pre-Tax (EUR Thousand)	Cash Flows Post-Tax (EUR Thousand)
2035	553	412
2036	488	364
2037	398	296
2038	366	273
2039	347	258
2040	332	248
2041	304	227
2042	295	220
2043	232	173
2044	214	160
2045	165	123
2046	132	98
2047	146	109
2048	142	106
2049	126	94
2050	143	106
2051	119	89
2052	78	58
2053	64	48
2054	17	13
2055	7	5

# Minority Stake Valued at Book Value

Companies not considered in the DCF and valued at book value

PT Portugal	Country	Shareholders	PT's Stake	Book Value (EUR mm)
ADRAL	Portugal	PTC	1.00%	0.1
APOR	Portugal	PT	1.37%	0.0
Auto Sapo Venda Já	Portugal	PTC	50.00%	0.2
BROADNET	Portugal	PT	21.27%	0.0
Caixanet	Portugal	PTC e PT SI	15.00%	0.1
Capital Criativo	Portugal	PTC	20.00%	0.1
CoimbraVita	Portugal	PTC e PT Inovação	4.48%	0.0
Eurescom	Germany	PT	2.46%	0.0
Fibroglobal	Portugal	PTC	5.00%	10.6
IEP	Portugal	PTC	32.00%	0.0
INESC	Portugal	PT e PTC	35.89%	0.9
ITEXAMPLE ACE	Portugal	PT Inovação	4.41%	0.0
Janela Digital	Portugal	PTC	50.00%	2.2
Multicert	Portugal	PT e PTC	20.00%	0.8
NP	Portugal	PT e PTC	6.66%	0.0
Parkubis	Portugal	PTC	2.00%	0.1
PCI-Parque Ciência Tecnologia SA	Portugal	PT Inovação	5.00%	0.1
PT P&F ACE	Portugal	PTC	49.00%	0.0
Startec Global Communication	USA	PTC	0.07%	0.0
Tagusparque	Portugal	PT	5.98%	3.1
Vantec	Portugal	PT	25.00%	0.0
Vortal	Portugal	PT	8.54%	0.0
Vortal SGPS	Portugal	PT	8.54%	0.1
Yunit Serviços ("Yunit")	Portugal	PT	33.33%	2.2
<b>Total</b>				<b>20.7</b>

PT Participações	Country	Shareholders	PT's Stake	Book Value (EUR mm)
Entigere	Portugal	PT Part.	25.00%	0.0
Seguradora Inter. de Moçambique	Mozambique	PT Part.	5.84%	0.6
<b>Total</b>				<b>0.6</b>

<b>Minority Stake Valued at Book Value</b>				<b>21.4</b>
--	--	--	--	-------------



# 5. Appendix

---

## c) Glossary

ARPA	Average Revenue per Advertiser
ARPU	Average Revenue per User
Bacen	<i>Banco Central do Brasil</i> , it is the Brazilian Central Bank
BRL	Acronym for values in Brazilian Real
CAPEX	Capital Expenditures
CVE	Acronym for values in Cape Verdean Escudo
CVM	<i>Comissão de Valores Mobiliários</i> , it is the Brazilian Securities and Exchange Commission
DCF	Valuation methodology based on Discounted Cash Flow
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
EUR	Acronym for values in Euro
FCFF	Free Cash Flow to Firm
PV	Present Value
HUF	Acronym for values in Hungarian Forint
Kd	Cost of debt
Ke	Cost of equity
KES	Acronym for values in Kenyan Shilling
Mkt Cap	Market Capitalization
MZN	Acronym for values in Mozambican Metical
NAD	Acronym for values in Namibian Dollar
OCF	Operating Cash Flow
Opex	Operational Expenses
ROIC	Return on Invested Capital
STD	Acronym for values in Sao Tomean Dobra
USD	Acronym for values in US Dollar
WACC	Weighted Average Cost of Capital