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Abstract

The objective of this dissertation is to value one of the biggest Portuguese banks. A detailed valuation methodology was done based on the light of the most reliable academic literature. Inside the theme, was done also a detailed review of the business and the sectors where the bank operates. In the end, it was achieved an accurate equity valuation.

Preface

This assignment was really challenging because it was the first time that I'm trying to deep analyze a bank in this actual economic scenario.

I picked this specific topic because I was really curious about the bank's challenges nowadays. During the work I realized that presently it is not easy to be a financial institution, all the regulatory framework that banks are subject, its important role in the economy and crucially, the new demanded issues that they are trying adapt to its business models. Also, I had the opportunity to become more present with this type of industry.

It was really challenging to moderate all the future estimated value in the financial statements to in the end achieve a plausible price target.

Acknowledgements

First of all, I would like to thank to my godmother, that financed all my master fees and without her I couldn't do it.

Thanks to my family for all the support and inspiration, to my mother and father, thanks for giving me always more than they could, thanks to create me in what I am and most important thanks for the family they built; to my brother and sister, thanks for the inspiration and brotherhood, thanks for the availability and friendship.

After, I would like to thank to my friends Gonçalo Brito, from Deloitte, who support me in my model. Your availability and documents were crucial to my dissertation.

Resumo

O grande objetivo deste trabalho prende-se com a avaliação de um grande banco Português neste período de crise. Os bancos são considerados a principal razão da crise essencialmente pela sua falha de avaliação de risco e pela forma alavancada com que seguiam a sua atividade e negocio. Nesta óptica, os bancos portugueses têm sido forçados a remodelar todo o seu negócio para de certa forma conseguirem sobreviver nos tempos de hoje e por outro lado, tentar mover e alimentar a economia portuguesa.

Falando do BPI, este é um banco que sempre teve políticas de negócio muito conservadoras no que toca a cedência de crédito daí, nos tempos de hoje ser o banco com melhor índice de qualidade de ativos. No entanto, esta rubrica, vê-se ainda sem tempos de mudança, visto que anualmente se mantem em declínio.

É difícil escolher qual o melhor método de avaliação nestes tempos adversos, visto que o momento é de tal incerteza, que tentar prever o futuro se pode tornar errado. Contudo, o autor escolher três formas de avaliação, onde obteve resultados distintos. Nas três assumiu de forma coerente e ponderada os drivers para chegar aos resultados finais. Dentro dos resultados obtidos, o autor escolheu o método dos múltiplos como a melhor forma atual para chegar ao preço da ação do BPI para 2013, considerando o valor refletido na ação o mais plausível e real. No que toca aos outros métodos, foram encontrados valores um pouco discrepantes daquilo que é a realidade, os motivos por trás do mesmo, prendem-se com o que o autor referiu anteriormente que, de certa forma, afetaram as estimativas e diluíram o valor da ação.

Index:

1. Introduction

Portugal is living under adverse economic conditions where banks are considered the biggest cause of it. Nowadays, financial institutions are pressured by governments and by the authorities to rebuild their strategies to restart a new economic cycle.

In this sense, the greatest purpose of this dissertation is to value a Portuguese bank named; Banco Portugues do Investimento - BPI, aiming to achieve a possible price target for the 2013 financial year.

The analysis is divided in five major chapters:

1. Literature review, where it is made a review of all the historic methodologies regarding valuation of companies, how and where to better allocate each method. All of this research is applied and discussed during the dissertation and becomes crucial to the final results.

2. It is done and discussed a sector analysis where is presented the past, present and future issues regarding the sector where BPI operates. Inside of it, it is present an economic detailed analysis, crucial for the last results and interpretations.

3. In the third group is presented a company presentation where it is described all BPI's history, business, activity and actual financial performance.

4. The fourth group is related with the valuation. The author designed a model to estimate the 2013 BPI's price target. In this section, it is presented and explained all the assumptions assumed by the author to his valuation models.

5. The next group presents all the results and choices made by the author regarding his model.

6. The final part is for the overall conclusion of the dissertation.

2. Literature Review

2.1 Valuation

The valuation of a business is done with the major purpose of creating shareholder value and helping managers to make wiser decisions as Copeland et. al (2000) pointed out. However, the valuation exercise becomes subjective because it always depends from the standpoint of the evaluator (Carabias and Fernandez 2006a).

Fernandez (2007) stated that valuation can be used for a wide variety of purposes, such as, buying and selling operations, public offerings, valuing listed companies or identifying value drivers.

Therefore, valuation can be reflected in many financial areas of business, such as, corporate finance, portfolio management or merger and acquisitions. As referred before the main purpose of valuation is the creation of shareholder value overtime thus, a good corporate finance decision is dependent of a good valuation exercise. According to Damodaran (2006), every asset has a value and it is necessary to find where does it come from and how to measure it to finally achieve a good decision.

Valuation is also crucial in merger and acquisitions analysis since the investors when aiming to take over another company, must determine whether the purchase will be beneficial to them or not.

In portfolio management, valuation's importance is related with investor's profile. If the investor is active, the role of valuation is critical to provide the best information to create and manage the best portfolios, on the other side, if a passive investor, valuation becomes meaningless.

In conclusion, valuation is crucial to help managers and investors to make their decisions. Valuation methods and empirical studies were developed to better evaluate a specific company, in other words, adapting or adjusting the company to the valuation method to achieve the most feasible valuation result

2.2 Methodologies

As mentioned above, valuation can be performed by different methods, aiming to better evaluate the company.

Damodaran (2002) argues that there are three types of valuation approaches and in each one of them there are different valuation models we can use:

- absolute valuation or discounted cash flow valuation (DCF models)
- relative valuation (market multiples model),
- contingency claim valuation (option pricing models)

Discounted cash flow valuation	Relative valuation	Contingent claim valuation
Free cash flow	Price to earnings – PER	
Equity Cash flow	Price to book value ratio – P/B	
Capital cash flow	Price to sales ratio – P/S	
Dividend discount model	Enterprise value to EBITDA – EV/EBITDA	Black & Scholes
Adjusted present value model	Enterprise value to EBIT – EV/EBIT	
Economic Profit	Enterprise value to Sales – EV/Sales	
Dynamic ROE		

Fig.1 Valuation approaches – Source:Damodaran

2.3 Definition of Bank

By the Oxford dictionary, a bank is defined as "an establishment for custody of money which it pays out on customer's order". In other words, it is a financial institution which deals with money deposits and other related services.

Bank's activity is to receive money from customers in the form of deposits and lend it to those who need it. Damodaran (2009) describe the bank's activity as " a bank makes money on the spread between the interest it pays to those from whom it raises funds and the interest it charges those who borrow from it, and from other services it offers it depositors and its lender."

2.3.1 Types of Banks

The majority of banks can be described as:

- **Commercial Banks**: banks whose main activity is deposit taking and capital provider through loans. Commercial banks make their profits by taking small and short term deposits and transforming them into larger and long term loans.
- **Investment Banks**: banks with a major purpose to help other institutions like corporations, governments or individuals to raise capital, being the client's agent in the issuance of securities, or even financial advisor, for example, helping a client to better allocate their capital.

There are also other banks, like HSBC or Citigroup, with both of those characteristics, investment and commercial.

2.3.2 How to value a bank

Damodaran (2009) classifies banks as financial service firms. Those types of companies have certain specifications and characteristics which make their valuation peculiar, as the same author points out. First of all, banks business is highly levered which make their valuation hard to predict with changes in regulatory environment. Second, some rubrics of reinvestment, such as the value of capital expenditures and working capital, are insignificant and the big portion of the operations derives from debt hence, the value of the cash flows are hard to predict. Third, banks operate under different regulations which control where they allocate capital or invest to grow, and thus, imply a higher level of uncertainty about the future which can affect their value. At last, the accounting rules used to measure earnings and the record book value are different for banks. The majority of the assets are financial instruments that have an active market place which make them being accounted by a mark to market calculation.

For most of the reasons referred above, the most consistent way to value a bank is through equity valuation models; hence, for the purpose of this dissertation the literature review is focused on those models, and thus, disregarding firm valuation models. However, due to the nature of operations and the adverse economic environment, it is relevant to pass though contingency valuation and also by cross-border valuation.

2.4 Equity Valuation Models

Damodaran (2002) states that there are two ways to value a company; one is by equity valuation, where we value the company by the equity stake of the business and the other one is by firm valuation that values the company as the entire business.

Main DCF Models	Absolute valuation	Returns based valuation
Firm valuation	Free cash flow to the firm (FCFF)	Economic value added (EVA)
	Adjusted present value (APV)	
	Capital cash flow (CCF)	
Equity valuation	Dividends model (DDM)	Dynamic ROE
	Free cash flow to equity (FCFE)	

Fig.2 Valuation models - Source:Damodaran

As referred before, a bank is better valued by equity and, for that reason, for the purpose of this dissertation, the attentions are centered on this three equity discounted cash flows: dividend discount model (DDM), free cash flow to equity (FCFE), and Dynamic ROE.

2.4.1 Dividend discount model (DDM)

The DDM is a type of equity cash flow valuation. Damodaran (2006) argues that the main concept behind this model is that investors, when buying a stock from a company, are always expecting to receive dividends, where the dividends are the cash flows which investors expect to receive directly from the investment.

The simple dividend discount model assumes that the stock value is a function of its expected dividends next year, the cost of equity and the expected growth rate in dividends remains constant, named, Gordon Growth Rate.

Where,

$$Value\ of\ Stock = \frac{Expected\ Dividends\ next\ period}{(Cost\ of\ equity\ -\ Expected\ growth\ rate\ in\ perpetuity)}$$

<div align="right">(1)</div>

However, this model is limited, because it only attempts to deal with companies with a stable growth rate.

This model can go from simple through a complex dividend discount model, named Gordon Growth 2 (or even) stage model, which assumes that the stock's value is a function of the expected dividends in a non-stable growth period, where the payout ratios and the growth rates change over time.

$$Equity's\ Value\ per\ Share = \sum_{t=1}^{t=n} \frac{DPS_t}{(1+K_e)^t} + \frac{DPS_{n+1}}{(K_e-g)(1+K_e)^n}$$

Where,

DPS_t = Estimated dividends per share in period t

K_e = Cost of equity

g = growth rate

Terminal Value $= \frac{DPS_{n+1}}{(K_e-g)(1+K_e)^n}$

<div align="right">(2)</div>

Theorically, the simple DDM can be considered better for financial service firms since, analyzing historically and with normal economic conditions, banks are considered stable companies with earnings patterns and return on investment constant over time.

Taking it to a real perspective, considering the actual economic scenario in Portugal, we cannot rely on this model, since bank's health is very volatile, with different growth patterns, hence, we need a more complex method to estimate the equity value.

Despite the present economic scenario, which makes the free cash flow to the firm being hard to estimate and reinvestment rubrics such as, CAPEX and working capital difficult to compute, DDM can still be used for financial service firms, since dividends, as cash flows, are easy to calculate.

2.4.2 Free Cash Flow to Equity (FCFE)

The FCFE is another equity valuation method that basically consists in discounting the expected cash flows by the shareholders, at a required rate of return, taking in account the level of risk of the firm.

The FCFE is achieved by:

Net Income

+ Depreciation and Amortization

-Capital Expenditures

-Variation of working capital

-(New debt issued – Debt repayments)

= FCFE

Or, in financial service firms:

Net income

-Reinvestment in regulatory capital

= FCFE

To finish the computation of the equity value we just need to discount at the cost of equity K_e:

$$Equity\ Value = \frac{FCFE_1}{1 + Ke} + \frac{FCFE_2}{(1 + Ke)^2} + \frac{FCFE_n + TV_{n+1}}{(1 + Ke)^n}$$

$$TV_{n+1} = \frac{FCFE_n \times (1 + g)}{Ke - g}$$

Where,

FCFE, is the free cash flow to the equity

K_e, is the cost of equity

TV, is the terminal value

g, the growth rate that CF are expected to grow during the TV

(3)

2.4.3 The dynamic ROE

The dynamic ROE is an excess return valuation model. In this type of approach we basically separate the normal return cash flow (investors receive the required cost of equity) from excess return cash flow (investors receive a greater or lower required cost of equity).

The idea behind the computation of Dynamic ROE is that the excess return derives from the difference between the return and the cost of equity. Hence, the value of equity should follow this formula:

$$Dynamic\ ROE = Equity\ BV + \frac{(ROE - K_e) \times Equity\ BV}{(K_e - g)}$$

Where,

BV = book value of equity

So, to verify if the managers are creating value to the shareholders, the ROE should be higher than the cost of equity.

(4)

2.5. Main inputs of DCF valuation

2.5.1 The Capital asset pricing model (CAPM)

The CAPM is a model used to determine the firm's cost of capital, or basically, allows us to estimate the expected returns. CAPM describes the relationship between stock's or portfolio risk and his sensitivity against the stock or portfolio market, and is expressed by:

$$E(R_p) = r_f + \beta_i \times \left[E(R_m) - r_f \right]$$

Where,

R_f , is the risk free rate

B , is the stock's or portfolio sensitivity to the market

$E(R_m)-r_f$, is the market premium or market expected return

(5)

The key idea of CAPM relies on the fact that investors need to be compensated by the time value of money and by the risk they are exposed to. Thus, splitting the equation, the first half of the formula represents the time value of money over a period of time, which is represented by the R_f , the second half represents the asset's risk exposure, using a risk measure, beta, that compares the returns of the asset to the market over a period of time to the market premium ($R_m - r_f$).

2.5.1.1 The cost of equity (K_e)

The cost of equity can be described as the return that stockholders require for a company. CAPM is the best model to estimate it. Basically, on its calculation, the first side of the equation is replaced by, expected return, $E(R_p)$, for, cost of equity(K_e).

And thus, the equation goes like this:

$$K_e = r_f + \beta_i \times [E(R_m) - r_f]$$

(6)

Damodaran (2008) argues that, beta does not include all the country risk in developed countries. This is even clearer when facing an economic crisis where the risks behind every business increase. For that reason, an additional risk should be taken into account when we estimate the cost of equity using the CAPM, named, country risk premium, hence:

$$K_e = r_f + \beta_i \times \left[E(R_m) - r_f\right] + CRP$$

Where,

CRP, is the country risk premium

(7)

2.5.1.2 The risk free rate (R$_f$)

The term risk free is related with "no risk or zero risk". According to Damodaran (2008), *"the only securities that have the chance of being risk free are government securities, not because governments are better run than corporations, but because they control the printing of currency."*, in other words, we can compare a risk free rate to the expected return of government securities (treasury bond or treasury bill).

However, Damodaran (2008) points out that short term securities like treasury bills (six months for example) imply a reinvestment risk that is impossible to achieve in a short period of time, which makes them a bad estimator for the risk free rate. For that reason the author considers the long term securities, like treasury bonds, as the best estimators for risk free rates.

2.5.1.3 The beta (β$_i$)

Beta represents the sensitivity of an asset (security) in relation to a benchmark (market) of this same asset. By the Fama & French (2004) formula, the asset's market beta, results by the division of the covariance of its return with the market, with the variance of market return:

$$\beta_{i,m} = \frac{Cov\ (R_i, R_m)}{\sigma^2(R_m)}$$

(8)

In accordance to that, beta can be described as the systematic risk, or market risk, which is the risk impossible to eliminate since it includes the risk of all market.

Damodaran (2002) suggests that, we can estimate betas by making the regression of the asset's historical returns against stock's index returns and from the slope of this regression results the asset's beta.

We can achieve three possible results and three different interpretations when computing the beta of an asset: beta equal to 1, it means that the asset follows the same movements of the market and thus, has the same risk of the market; beta higher than 1,

it means that the asset follows the same direction of the market but is more volatile, in other words, is more riskier than the market; beta lower than one implies an asset's beta lower than the market.

2.5.1.4 The equity risk premium (ERP)

Damodaran (2008) admits that there are several facts influencing the value of the ERP, such as, the investor risk aversion (the more averse investor is to risk, the higher the premium he demands for his investment), country risk (ERP will be higher under economic risk conditions and lower with stable conditions), the liquidity of the market (the higher the liquidity of the market, the higher premium investors demand) and information available (more accurate and precise information lead to a lower equity premiums).

Also according to Damodaran (2011), there are various ways to estimate the equity risk premium. The first one consists in analyzing the investors' expectations about the premiums they required to invest in a certain country regarding the risk free rate. The second one, and the most common, is to infer from historical returns relative to riskless investments. The last one, named forward looking approach, consists in estimating the premiums in assets today, to achieve a future value prevision.

There is no consensus about the certain value of the equity premiums on developed countries, where Portugal is inserted, however, the most used by the analysts, was given by Damodaran (2002) and it ranges by 5 and 5.5 percent.

2.6 Relative valuation

Based on Damodaran (2002), in relative valuation, the value of an asset is compared to the values in the market of comparable assets or, peer group. It makes sense that, using relative valuation, we must know how the market behaves in order to achieve a credible value of the asset.

Damodaran (2002) argues that there are three steps that we must follow regarding relative valuation: first, we need to identify comparable assets and obtain market values for them; second, we need to convert these market values into standardized values to

create price multiples; third and finally, we need to compare the value of the multiple with the standardized value of the peer group.

2.6.1 Market multiples

Multiples can be very good instruments when using relative valuation, since they are easy to calculate, most of the times they provide us accurate values and information about the asset and its comparable. Moreover multiples avoid possible distortions created by historical events.

Goedhart et al. (2005) pointed out the importance of choosing companies with comparable characteristics, such as, growth rate, ROIC or expected cash flows, to achieve a better accurate value using multiples.

There are several types of multiples that can be used to value firms, such as, book value multiples, earnings multiples or revenue multiples. The figure bellow shows a resume of the main types of multiples used in relative valuation.

Enterprise Value multiples	Equity value multiples
EV/EBITDA	P/E
EV/INESTED CAPITAL	P/BV
EV/SALES	P/S

Fig.3 Relative valuation – multiples Source:Damodaran

As referred before, equity valuation is the best way to value a financial service firm, hence and according to Damodaran (2009), enterprise value multiples such as, value to EBITDA or value to EBIT are not accurate to value banks since, reinvestment rubrics like CAPEX and working capital are hard to estimate or inexistent thus, equity multiples, such as, price earnings, price to book value and price to sales ratio are those that best fit to these firms analysis. However, revenues or sales cannot be really measured in financial service firms, thus price to sales ratio is not a good estimator for this type of companies.

To conclude and for the purpose of this dissertation, the author are focused on Price Earnings ratio and Price to Book Value ratio.

2.6.1.1. Price Earnings ratio (PER)

As an earnings multiple PER, shows how much investors are willing to pay per dollar of earnings. The general formula of PER is:

$$\text{PER} = \frac{\text{Price per Share}}{\text{Earnings per Share}} = \frac{Payout\ Ratio \times (1+g)}{K_e - g}$$

(9)

As pointed out in the equation the value of the PER becomes dependent of three variables – expected growth rate in earnings, the payout ratio and the cost of equity. Hence, from financial service firms with higher expected rates in earnings, higher payout ratio and lower cost of equity should result a higher PER.

Another issue the author points out, results from the type of management adopted from each bank, meaning that conservative earnings strategies will result in higher PER's, because of the way they categorize provisions (considered bad loans), which affect the reported earnings (decreasing) and consequently affect PER (increasing).

The credibility regarding the use of earnings multiples is dependent from the business' diversification of this specific type of firms, since they are exposed to different risks, growth and return characteristics, thus it becomes hard to find real comparable firms. According to Damodaran (2009) to better solve this issue, "it makes far more sense to break the firm's earnings down by business and asses the value of each business separately"

2.6.1.2 Price to Book Value ratio (PBV)

Price to book value ratio or price-equity ratio it's used to compare the current stock's market value to its book value, by the formula can be described by:

$$PBV = \frac{Market\ Value\ per\ Share}{Equity\ BV} = \frac{ROE \times Payout\ Ratio \times (1+g)}{K_e - g}$$

Where,

Equity BV, Total Assets – Total liabilities

(10)

The only difference in the equation against PER is the inclusion of ROE, which becomes determinant on the value of this ratio. Thus, a higher PBV, becomes dependent of a higher ROE, high expected growth rates, high payout ratio and low cost of equity

For Damodaran (2009) the relationship between ROE and PBV is stronger and highly correlated for banks compared to other type of firms, much because of banks assets being reported through mark to market, where the equity book value reflects equity market value.

2.7 Contingency Valuation

Contingency valuation is crucial when using options, or when the value of a firm's asset is dependent from the occurrence of an event. Therefore, this model is better used to value projects or small businesses (single product company) than to value big or entire companies, since we can't incorporate options when using discounted cash flows models because we tend to misprice the value of the asset.

For the reasons referred before, it is easy to understand that this type of valuation model doesn't fit when valuing a bank, and thus, this topic is not further developed.

2.8 Cross-Border Valuation

The increasing globalization of capital markets around the planet put us in contact everywhere. Therefore, new types of valuation methodologies have been created and example of that is the cross-border valuation, crucial when valuing a company with international operations.

Koller et al. (2005) alerts for the main issues arising from an international presence, such as: the choice of the currency to use and the appropriate tax rate to discount the cash flow (home versus foreign discount rate, which affect the value of cash flows), the value of WACC (the extra risks we are facing by investing abroad, such as political risks or foreign exchange that should be taken into account when calculating the cost of capital) and even the timing of cash-flow calculation (should we discount them when they're earned or when remitted back home).

Related with all those issues, Harvard Business Review points out the steps we should carry when using cross-border valuation: firstly, we should forecast foreign-currency cash flows, specifically, attach the appropriate foreign currency inflation rate with the effective tax rate and terminal value.

After that, we should follow one of two approaches:

- depending on the beta and capital structure of the project, determine the foreign-currency discount rate to achieve the present value in foreign currency and finally using the spot exchange rate, the discounted cash flow is converted into home currency;
- depending on the beta and capital structure of the project, convert cash flows to home currency by forecasting future exchange rates using parity relationships and after determining the home currency discount rate to finally, achieve the PV in home currency;

To conclude, the author suggests doing a sensitive analysis to foreign-currencies spot variations in order to achieve a most feasible result on the valuation.

3. Sector Analysis

Historical facts

In 2007 an epidemic financial and economic crisis started to spread all over the major economies, first on the US and after Europe. Nowadays, this crisis is spread globally provoking a deceleration of the global economy and a huge uncertainty inside the financial markets.

Most are the issues to design a model to balance the economy globally on the future.

In 2008, Portugal's economy was highly dependent on debt, living with huge leverage levels and low growth perspectives which make the country pay for the type of management that was following, specifically on the access to debt markets. That fact and others made Portugal achieve the bottom line and forced to a international financial rescue, which was accepted on the 6th May 2011 by the Troika (composed by European Union, International Monetary Fund and European Central Bank), receiving a €78bn

bailout, where all the financial and economic decisions after that will move towards "memorandums" to revitalize and improve Portugal's economy and financial sector.

To achieve this contract, Portuguese government implemented two main packages for the next three years; first, a package of austerity with the aim to preserve the financial sector stability and liquidity; second, a package of competitiveness, promoting entrepreneurship, innovation and the development of companies, with the aim to achieve economic wealth.

3.1 Portugal

3.1.1 Macroeconomic overview

After the financial rescue, severe measures are being gradually implemented, most of them, regarding the flexibility on credit lines to adjust the leverage level of Portuguese banks, specifically, the conditions on loan contracts - lower amounts, shorter maturities and high collateral to customers.

Due to all these causes referred before (locally and globally), debt markets are closed to Portugal, the main rating agencies are valuing Portugal "financial garbage", which increased the skepticism around the uncertainty on the "capacity or not" to revitalize the country's economy and contributed to a great dependence on government programs and use of ECB funds - See the evolution of ECB funding usage in Portugal from 2008 until November 2012, where the ECB act as a "liquidity provider" through a three year liquidity injection (LTRO), which basically allows for a reduction in credit and sovereign spreads for the Southern European entities.

On the opposite, deposits are declining over the last years, which have increased bank's efforts regarding the deleveraging process, namely the Troika's measure on Loans-to-Deposits ratio below 120% until the end of 2014.

In terms of solvency, European Banks are facing higher capital needs result of the EBA's increase of capital requirements. These recapitalization requirements were also defined on Portuguese banks in the Financial Assistance Program which have consisted in:

- EBA requirements: national banks that participate in EU banks should raise their Core Tier I to 9%, after reflecting an additional buffer for the sovereign debt holdings;

And later in the same year, as a measure of austerity, this requirement was updated to:

- Troika requirements: Core Tier I should reach 10% until the end of 2012, not considering the mark-to-market of sovereign holdings;

To achieve this capital needs, Portuguese banks decided to follow two different ways, use or not of pubic capital, where BES opted not to use public capital and BPI and BCP partially using public capital.
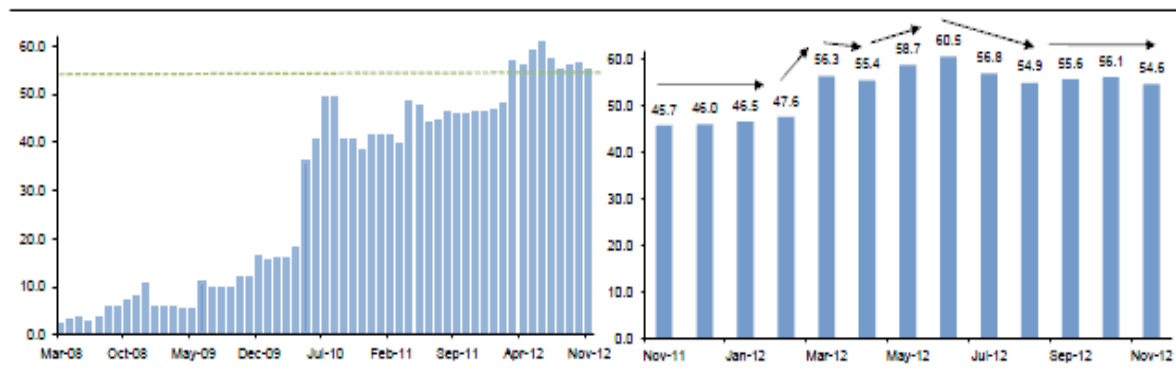
Fig. 4, Portuguese banking system: use of ECB funding. Data expressed as EUR bn; Source: ECB and CaixaBI Equity Research

Finally, in terms of profitability, the global macroeconomic slowdown is affecting the asset's quality, due to higher credit risk provisions, which is reflected in lower level of profitability of Portuguese banks.

Many solutions are trying to be adopted to increase the market's confidence and the attraction of external investment, such as, the expansion of firms operations, where they are trying to improve their performance operating internationally in emergent markets, or even, diversification on products offered, in order to stimulate and promote the efficiency of the economy.

Portuguese Economy in 2012

Portugal was the second worst European country in what regards economic growth. In the first half of 2012, the economy contracted 2.7% in real terms, and the previsions are to stand by 3%. Despite the results, there's a slight improvement against what were the expectations for the macroeconomic forecasts. The good results were achieved thanks to first, exportations improvements to countries outside the EU; second, the slight deleveraging process and measures around it, namely in areas based on the household and corporate sector where debt levels dropped; third, by the scoop of Troika, Portuguese Government is doing well in what regards the fiscal consolidation measures to achieve the goals of its commitment. This austerity had negative signal in the labor market, which was reflected in the unemployment rate that has reached records, 14.5%. Finally, the inflation is expected to increase by 3.2%, according to INE, the main reason behind it was the fluctuations in the fuel prices, due to tax increases in the beginning of 2012.

Portugal – Macroeconomic Outlook – Comparative forecasts (August 2012)

	2011¹	Ministry of Finance		Banco de Portugal		European Commission		IMF	
		2012F	2013F	2012F	2013F	2012F	2013F	2012F	2013F
Real GDP change (%)	-1.7	-3.0	0.6	-3.0	0.0	-3.0	0.2	-3.0	0.2
Private consumption	-4.0	-6.3	-0.7	-5.6	-1.3	-6.0	-0.5	-6.3	-0.7
Public consumption	-3.8	-3.2	-2.9	-3.8	-1.6	-3.4	-2.7	-3.2	-2.6
Investment	-11.3	-9.8	-0.6	-12.7	-2.6	-12.2	-0.5	-12.2	-0.5
Exports	7.6	3.4	5.6	3.5	5.2	3.5	3.5	3.5	5.0
Imports	-5.3	-6.4	1.6	-6.2	1.5	-6.2	0.9	-6.2	0.9
Average Inflation Rate	3.6	3.2	1.3	2.6	1.0	2.7	1.1	2.7	1.1
Unemployment	12.7	14.5	14.1	-	-	15.4	15.8	15.5	15.9
Budget Balance (% GDP)	4.2	-4.5	-3.0	-	-	-4.5	-3.0	-4.5	-3.0
Current and capital balance (% GDP)	-5.2	-2.5	-0.4	-1.7	0.8	-3.4	-1.4	-3.9	-3.4

Sources: Portuguese Institute for National Statistics, Ministry of Finance (Fiscal Strategy Document 2012-16), Banco de Portugal, European Commission, IMF

Fig.5 Macroeconomic outlook; Source: Banco de Portugal

3.1.2 Angola

Since BPI operates internationally in Angola, it's relevant to refer the actual economic state and the major issues regarding this market.

Angola is living a period of transformation over the last years, becoming one of the fastest growing powerful emergent economies, supported by the most desirable natural resources, such as, oil (the major economy driver), gas and diamonds, which made them a very attractive country for external investment. Reason for that, Angola is having a

more or less sustainable growth over the last years, which is reflected in the GDP evolution – See the image below.
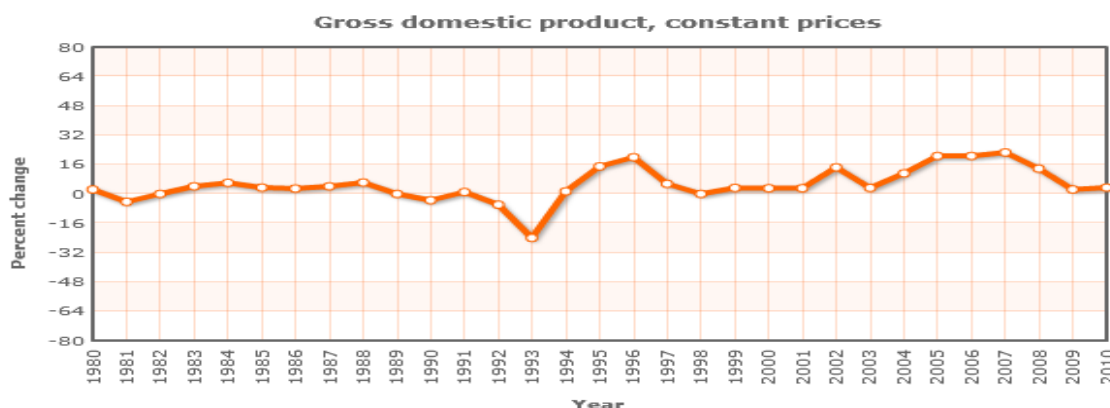
Fig.6 Evolution of Angola's GDP   Source Bloomberg

It is perceivable that Angola is also suffering with the financial crisis; however, the economy is still sustained by oil businesses, which correspond to 90% of the country's exportations, with China, USA and EU representing the major clients.

Since the end of civil war, the national bank of Angola (BNA) is putting its effort, trying to rebuild the trust in the national currency (kwanza) and diversifying the national economy. Several measures were adopted, passing by the creation of legislation with the intent to promote economic growth, reduce the amount of foreign currency outstanding, and improving the transparency of the financial system.

Result of that, Angola's financial sector has been growing rapidly, the competition among financial institutions has increased, private investment increased, the number of private banks increased (predominantly state-owned banks) and consequently, there's a steady evolution, not only in credit granted but on deposits in national currency over the last periods as it is possible to see on the figure below.
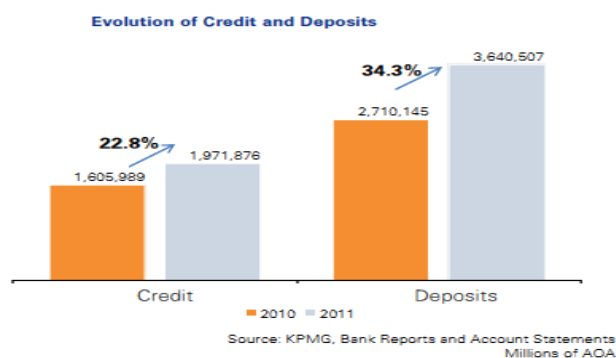

Fig.7 Angola's Credit and deposit evolution; Source: KPMG

In Angola, BPI is one of the leaders in commercial banking, through a 51.1% stake in Banco Fomento de Angola (BFA). Despite the high volatility of BFA results and activity, Angola's business, is being a core element on BPI's balance and a big reason for its liquidity.

3.1.3 Measures of Troika

- *Regulatory Framework*

As referred before, Portugal was living under unsustainable economic conditions, from internal low growth prospects to high levels of external debt, all of this, mixed with structural problems on its government.

Hence, on 6th May 2011 a request for financial assistance was accepted by Troika, concerning a period of three years, mainly aiming to restore the confidence and the return of the economy at a sustainable level, moreover, to protect the financial stability in the European Union.

Regarding the banking sector, Troika planned a couple of procedures and measures to be adopted by banks aiming at a gradual deleveraging process, promoting bank's capitalization and supervision.

The main measures regarding the financial sector will pass through:

- *Capitalization and liquidity*

Regarding the capitalization, the main challenge is to increase the solvency and liquidity of the banking system. Supervised and monitored by the BdP, the main goal is to reinforce the bank's capital ratios to minimum Core Tier 1 of 9% until 2011 and 10% until the end of 2012. To achieve these values banks must start a recapitalization process helped by the EUR 12 billion recapitalization facility available to Portuguese banks, provided by the financial assistance.

The national authorities are also committed to facilitate the issuance of government bank bonds up to EUR 35 billion in order to stabilize the bank's levels of liquidity.

- *Deleveraging*

The deleveraging process should be gradual and controlled by BdP in collaboration with Troika. The biggest banks are forced to reduce their leverage level, specifically their Loan-to-Deposits ratio to a maximum of 120% in the next two years.

3.1.4 Future regulation and prospects

Based on the huge economic uncertainty around the global markets, worldwide banks are putting their efforts to design new business models to rebuild the confidence with investors. The old models based on high leverage and lower liquidity levels, with low capital ratios seem to have their time. The actual conjuncture needs a safe business model to work with different states of the economy.

The future prospects for the Portuguese financial sector are dependent from unpredictable factors such as, the evolution in the global regulatory framework/conjuncture and good management decisions, which are always crucial to achieve better results.

The new bank's regulation present in the BASEL III, is about to change the sector's business models. The new regulation predicts a step back in some business areas or markets and an increase of the costs for banks and clients.

3.1.4.1 Implications of BASEL III in the financial sector

BASEL III represents a deep change in what regards bank regulation, implying a change in their business models. The majority of changes are focused in capital needs versus costs and the results derived from this equation, aiming to increase bank's liquidity and asset's quality.

As a result, banks will have to increase their equity needs, for some of their activities, like in operations or capital – some of their client's capital negotiations will demand three times higher minimum capital. Banks will be obliged to increase their asset's reserves, what will demand higher costs in all of their operations.

Capital ratios will have to rise up to 10%, as it happens actually in Portugal, as a Troika demand, which will result in a reduction of bank's risk exposure and leverage level, and capital increases.

According to specialists and transversely to the situation, banks will need to update their forecasting tools in what regards the strategy to adopt, since a good and efficient forecasting is fundamental to achieve profitability. Also, specialists defend that banks will have to focus their operations in high margin markets, that cover all the costs and even remunerate capital. Banks will also have to increase their charges for deposits or credit granted, with a specific client's risk description, in what regards to credit granted.

3. Company presentation

Historical review

BPI was created in 1981 as Sociedade Potuguesa de Investimentos, intending to finance investment projects of the private sector, to achieve a position in the capital markets and contribute for the modernization of the Portuguese industrial sector. In 1985 changed its name for Banco Português do Investimento and become a commercial bank, with a possibility to receive deposits, concede short term loans and even participate in foreign currency exchange market. In 1986 started to be listed on Lisbon and Oporto stock's exchange. In 1991, BPI group bought another bank, BFA – Banco Fonsecas & Burnay, which allowed consolidating a great position in the Portuguese financial sector and a partnership with Itaú group that later in 1993 became one of the major shareholders. In 1995, BPI was transformed into a holding, BPI SGPS which later in 1998, was splitted in BPI Investimentos, responsible for the bank's investment area and Banco BPI for the commercial area, respectively. Since then it's been growing, with mergers and strategic partnerships, reinforcing their shareholder structure and position in its market.

Present situation

BPI group is actually the third biggest Portuguese private financial group, dividing its operations between the commercial and the investment area.

Domestic activity

Regarding domestic operations, BPI focus its activity in the commercial area, holding 10% market share in what respects to loans and resources and serving more than 1.7million clients (BPI's website), operates in competition with individuals and small to individual businesses banking, private finance and corporate projects and offers also products related with life and non-life insurance, thanks to the partnership with the Allianz group.

In what regards the investment area, BPI offers a wide range of services and products in these four areas: equities, corporate finance, private equity (investing mainly through venture capital) and private banking.

In asset management, BPI is the country's third biggest investment fund manager, owning a market share of 16.2% (BPI's annual report), with active participation in pension funds or life insurance-capitalization.

International activity

BPI held strategic positions in Africa, specifically in Angola, owning 50.1% of Banco Fomento de Angola(BFA) and 30% of Banco Comercial e de Investimentos(BCI) in Mozambique, respectively.

It is important to refer that great part of the activity and business of BPI's group is allocated domestically, where an actual financial crisis is inserted, therefore, the biggest challenge for the bank is figuring out how to better operate and allocate the resources to, in one hand help the national economy and, in other hand, to keep the financial institution competitive.

BPI's operational layout is described in the figure above:
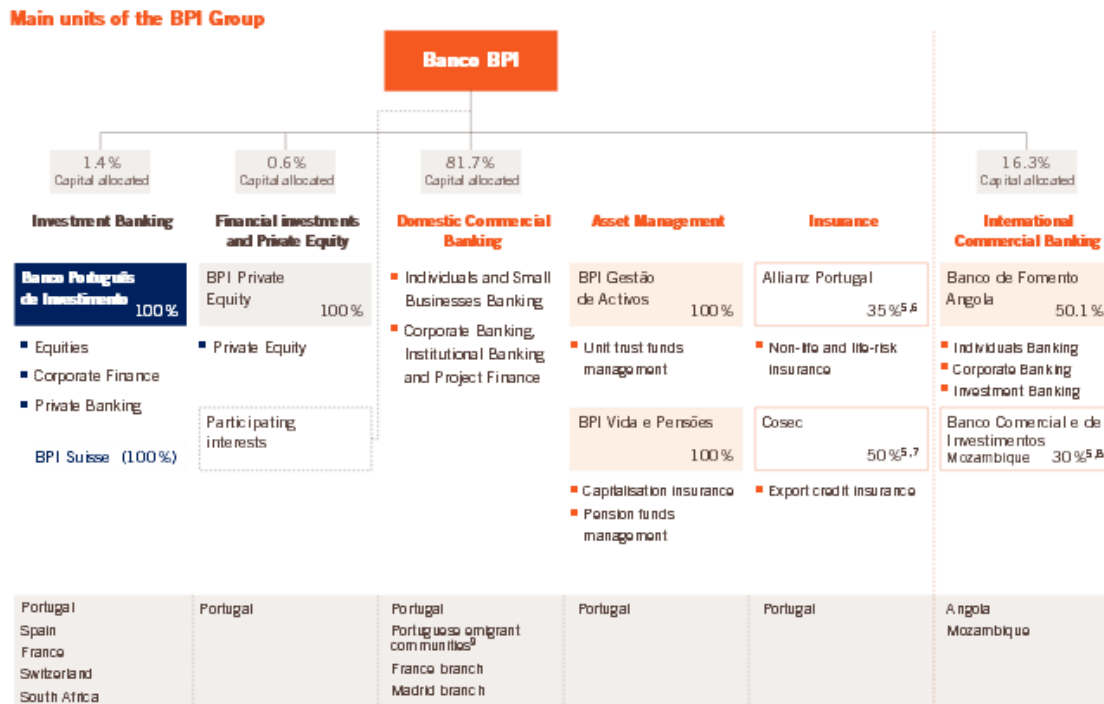
Fig.8 2012 BPI company's structure; source: BPI's website

Shareholder structure

BPI's capital, at June 2012, was held by 21.522 Shareholders, of whom 21.040 were individuals owning 15,6% of the capital and 482 institutional/corporate investors holding 84,4% of share capital. The biggest shareholders are presented in the figure below:
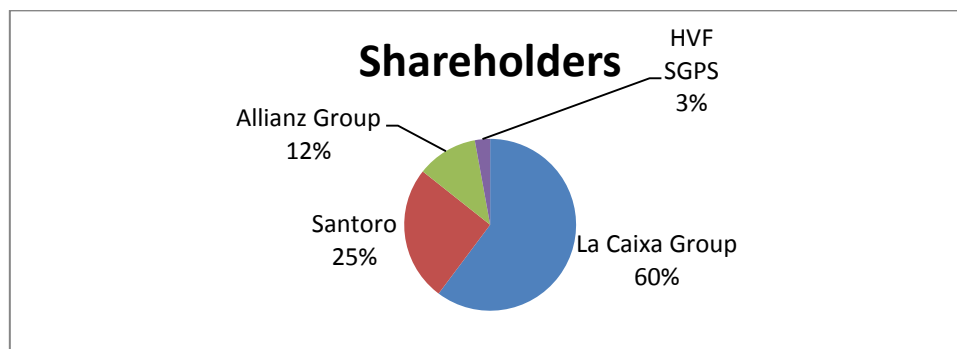
Fig.9 2012 Biggest shareholders structure; Source: BPI's 2012 report

Economic and operating performance

It's very clear that the finantial crisis is deeply affecting the finantial institutions. However, the recent results show that maybe the worst days were gone due to the great recovery over the last year.

ROE and ROA

	2009	2010	2011	2012
Credit at risk/ Loan customers (%)	2,4	2,7	3,2	4,2
Net credit loss (%)	0,5	0,4	0,4	0,9
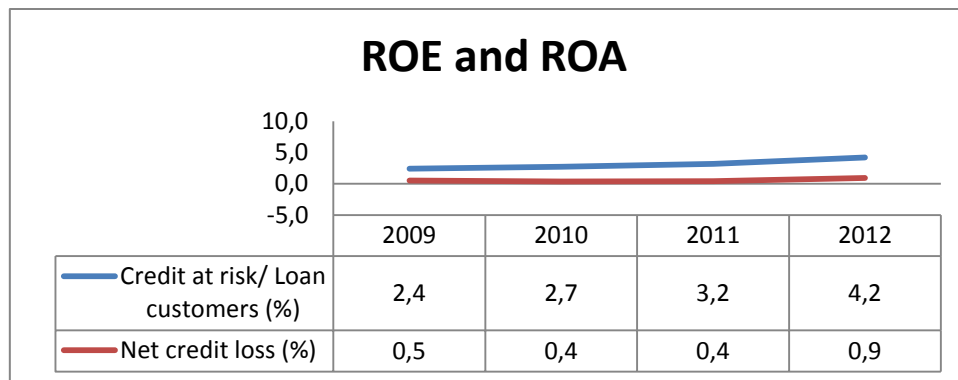
Fig.10 Consolidated ROE and ROA ; Source: BPI's 2012 Report

The return on shareholders' equity (ROE) assumed a very volatile trend over the last four periods. First of all, it's important to refer that most of those abnormal changes occurred domestically thus, the negative variation between 2010 and 2011 can be explained by abnormal economic conditions and changes in BPI's domestic business model, which had affected operations and net income (see the figure below). However, in the next period BPI had a significant recovery in what regards its operations and net income leading to a recovery also in its ROE from -29,5% to 0,6%.

Regarding ROA, it's observable that in the last four periods followed a stabilized trend between 0,4% and 0,6%, assuming an inefficient value of -0,6% in 2011, mainly due to the reasons referred before.
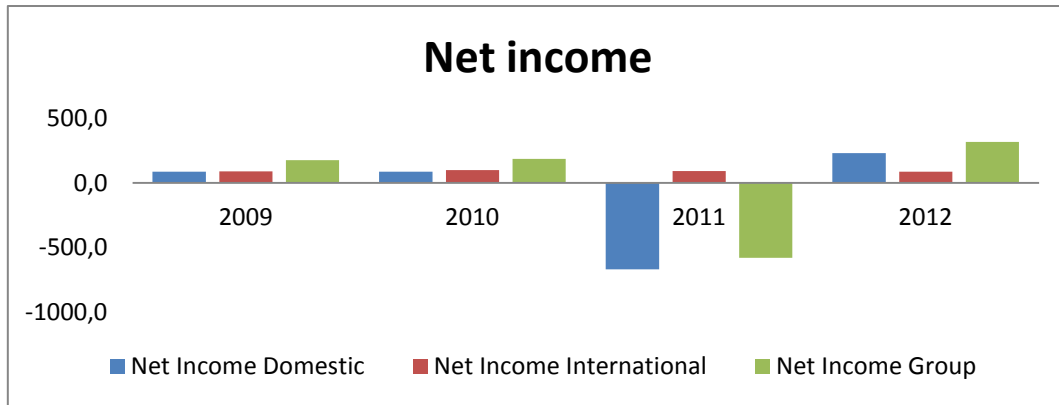
Fig.11 Net income Group BPI; Source: BPI's 2012 Report and Bloomberg
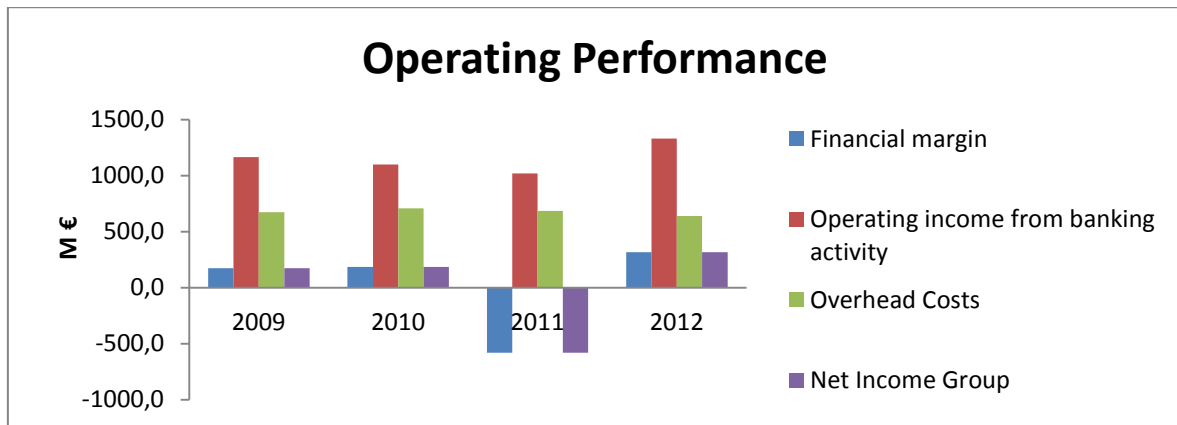

Fig.12 Operating Performance Group BPI ; Source: BPI's 2012 Report and Bloomberg

Detailing the operating indicators, it is observable that, disregarding 2011, that the financial margin is following a stabilized pattern, increasing in 2012 which can be explained by new business strategies, passing by new credit lines offered or new products, not even domestically but internationally where the bank is expanding its operations. The operating income behavior is also a result of these new business lines and strategies of the bank to compete in the market. In what respects to operational costs, is perceivable that BPI is making an effort to reduce them, as a cost efficiency strategy. These cuts are more present domestically since, internationally the bank is continuing to expand its operations. Finally and as a result of all the rubrics detailed above, the group net income, again disregarding 2011FY, is following a stabilized pattern over the years.

Overall and despite the financial year 2011, its observable that BPI's operating performance is following a sustainable trend. This can be explained by a conservative

business strategy with a good trade off in operating income versus operating costs, contradicting the market results and demands meaning, the ongoing deleveraging process reflected in lending growth and on the other side the higher costs of resources.

Asset quality

BPI is facing one of its biggest challenges meaning, the control of asset quality. The deterioration of asset's quality is being present over the past years and the turning point is still to be achieved. There's still a visible deterioration of asset quality, perceivable with the increase of the credit risk ratio and the credit impairments, resulting from the financial crisis and for the austerity measures going on. Despite that and assuming this "crisis scenario", BPI, relatively against its peers, is keeping its quality indicators at relatively good levels of risk.
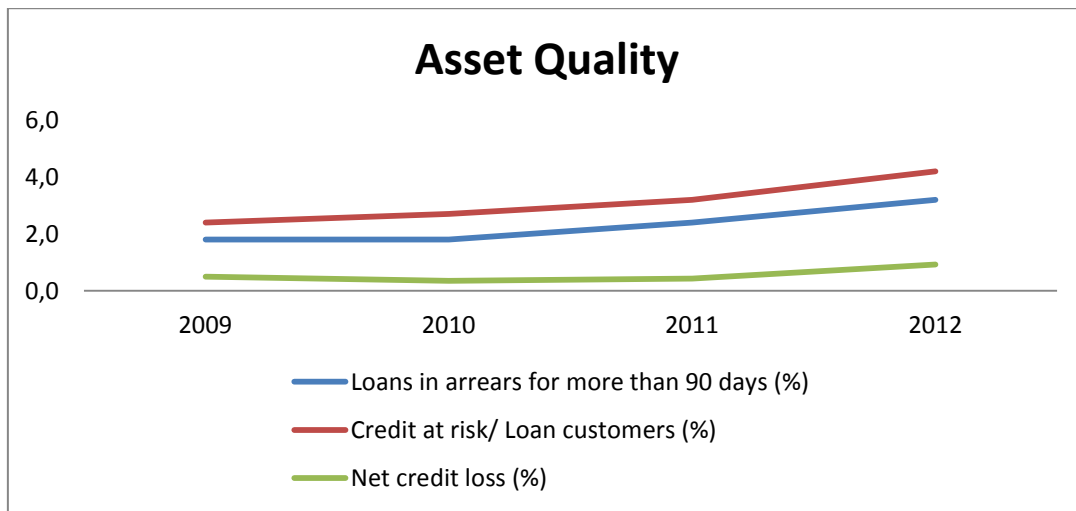
Amounts in MM€.

Fig.13 Asset quality; Source: BPI's 2012 Report

Liquidity

In accordance with asset quality and the actual crisis scenario, BPI and the other Portuguese banks were demanded by Troika to reduce their loans-to-deposits ratio to 120% until 2014, in a deleverage measure to promote liquidity of financial institutions

in other words, banks were forced to reduce the loans granted, by increasing the deposits.

It is perceivable that BPI since 2010 is following Troika's requisites and even reduced the ratio from 2011 to 2012 in 3 percentage points, from 109% to 106%.

Loans to deposit Ratio (%)

	2009	2010	2011	2012
Loans to deposit Ratio (%)	132,0	122,0	109,0	106,0
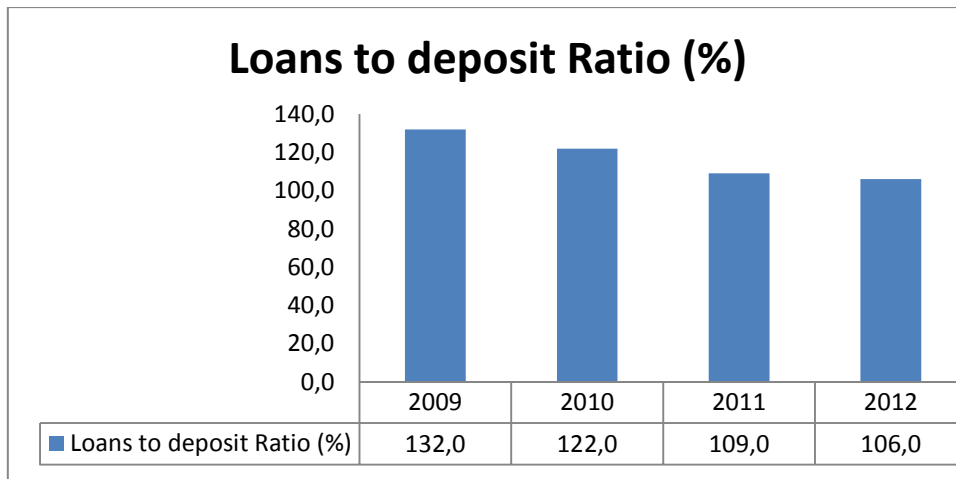
Fig.14 Loans-to-deposits Ratio; Source. BPI's 2012 Report

Capital and solvency

The core tier I capital ratio is situated at 15% at the end of 2012, an increase of 4 percentage points compared to 2009 and 5% above what is the minimum ratio for Portuguese banks, 10%. Compared to the last period, the core tier increased 5.7%, mainly result of a 200M.€ capital increase subscribed by the shareholders and a contingent subordinated convertible bond issue subscribed by the state in the amount of 1300M.€ with a early repayment of 100M.€, and finally a dilution in risk weighted assets (RWA) motivating the increase in tier I capital ratio.

In what respects solvency, BPI as a measure of austerity and also as a new requisite of the new regulatory framework were demanded to increase its solvency ratios. Result of this, the bank is making a big effort to fulfill the requisites of the authorities with substantial capital reinforcements to achieve the demanded value of these ratios.

Solvency Ratios

(%)	2009	2010	2011	2012
Tier 1 Capital Ratio (%)	8,6	9,1	9,0	14,9
Total Capital Ratio (%)	11,0	11,1	9,3	15,0
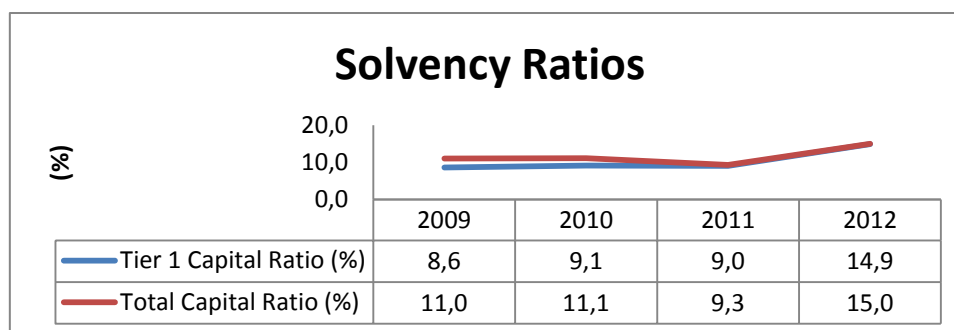
Fig.15 Solvency Ratios; Source. BPI's 2012 Report and Bloomberg

Rating

Rating BPI *(Credit Rating LT / ST)*	2009	2010	2011	2012
Fitch	A+ / F1	A- / F2	BB+ / B	BB+ / B
S&P	A / A-1	A- / A-2	BB- /B	BB- /B
Moodys	A1 / P-1	A2 / P-1	Ba2/ Not prime	Ba3 / Not prime
Rating Portuguese Republic *(Credit Rating LT / ST)*				
Fitch	AA / F1+	A+/ F1	BB+ / B	BB+ / B
S&P	A+ / A-1	A- / A-2	BB / B	BB / B
Moodys	Aa2 / P-1	A1/ P-1	Ba3/ Not prime	Ba3 / Not prime

Fig.16 Historical Credit Quality Rating; Source: BPI's 2012 Report

Regarding the credit valuation of the major rating agencies, it is perceivable that BPI's credit is deterring, explained by financial crisis inserted Portugal. Since 2009 to 2012, the rating ranged from "A+" to "BB+", in other words, and according for instance with Fitch, the credit rating "AA" meaning that Portugal in 2009 had very high quality credit rating with very low default risk, and passed to a "BB+", in 2011, meaning that the credit quality rating passed to speculative or with an elevated vulnerability of default risk. In the last periods, it is perceivable that BPI's, as a primer financial institution has, in the majority of the rating agencies' valuation, the same risk pattern of the Portuguese republic.

4. Valuation

Introduction

As referred before in the literature review, BPI as a financial institution should be valued by equity valuation models. In this context, the author picked the most pertinent models to value the bank, namely, the dividend discount model and the use of multiples.

To justify the first choice and adding to what was referred before, dividends can be seen as the potential gains that the investors can earn thus, represents a feasible and very transversal model to value this institution against what is the economic reality where the bank operates.

Second, relative valuation, using multiples, the author picked the most important and comparable peers and analyzed reliable ratios to estimate the value of the bank.

Also, as pointed out before, BPI held a strategic position in Africa, Angola (in majority), respectively, which year after year creating a greater impact in the consolidated results since, it is actually, an emergent economy. For this reason, the author, in his analysis, separated the domestic and international activities, to basically achieve more accurate results and also a better perception where the numbers come from. Finally and related with that, the author took into account different economic assumptions, domestic and international, respectively to better estimate the risk and cash flows.

Regarding the financial model, the author took in consideration historical data from 2009 to 2012, resulting in a four years forecast from 2013 to 2016, considering that BPI will grow at a steady state from there on. The financial data were provided by BPI's reports and Bloomberg.

It is also relevant to point out that the author, dismissed the 2011 domestic financial year, for being totally abnormal; completely influencing the forecasts (since most of them were made on a historical average base), result of peculiar strategic decisions and for the adverse regulatory framework in Portugal this year.

Finally, the most accurate model is dependent on some detailed information that the author could not get, therefore to predict or estimate some of this rubrics, he relied on some other relevant parameters to achieve those values.

4.1 General model assumptions

As referred before in the introduction, the author took some estimators based on future macroeconomic indicators namely, the GDP and the inflation. All these data was downloaded from the international monetary fund (FMI). The information can be seen in the figure above:

Domestic Assumptions

Portugal	2012	2013F	2014F	2015F	2016F
GDP	-3,17%	-2,32%	0,64%	1,54%	1,82%
Inflation	2,78%	0,70%	1,03%	1,54%	1,47%
Nominal Growth	-0,48%	-1,64%	1,68%	3,10%	3,32%

Source:International Monetary Fund, World Economic Outlook Database, April 2013

International Assumptions

Angola	2012	2013F	2014F	2015F	2016F
GDP	8,41%	6,18%	7,27%	7,02%	6,68%
Inflation	10,28%	9,40%	8,43%	7,58%	7,18%
Nominal Growth	19,56%	16,16%	16,31%	15,13%	14,34%

Source:International Monetary Fund, World Economic Outlook Database, April 2013

Regarding tax assumptions, the author assumed two different estimators for both, domestic and international activities, due to the ambiguous economic scenario around the different countries. Therefore, for domestic activity the author focused in what is present in the "Orçamento de Estado 2012" to calculate the tax value of financial institutions.

- For a net profit under M 1,5 €, there is a tax of 25%

- For a net profit between M 1,5 € and M 10 €, there is a tax of 28% (25% from the IRC and 3% from the "derrama estadual")

- For a net profit higher than M 10 €, there is a tax of 30% (25% from the IRC and 5% from the "derrama estadual")

For international activity, the author did not find reliable tax information or formula to compute the net profit's value, therefore, assumed a 4 year historic average to estimate it.

4.1.1 Balance sheet assumptions

The author will only focus and justify the estimators for the major balance sheet rubrics; loans and resources (deposits).

Regarding this, the serious estimating issues come domestically, where an adverse economic scenario is present. As referred before, Portuguese economic is striving to achieve break point and finally stabilize the economy, according to the authorities, this breakeven is coming in 2014 however, the numbers and the global financial situation are postponing this goal. Banks will have to adapt to new regulations and create new business strategies to better stimulate the economy.

These strategies pass for more conservative models; deposits will have to increase to achieve liquidity and on the other side, bank will have to be more conservative when granting loans, in a deleveraging measure or also as risk perception. Regarding risk, new strategies will have to be implemented in what regards client's risk valuation.

Finally, in the future, it is predictable that the ECB exposure to reduce, since the banks are recovering and increasing liquidity.

Balance sheet rubrics - Assets

Loans

Taking into account this scenario, the author assumed that loans will grow at the same rate of the domestic GDP, indicating more or less savings from the Portuguese population. Therefore the predictions are presented in the figure below:

Amounts in MM€

Fig.17 Total domestic credit evolution Source: Author

Finally, regarding the total credit compositions, the author assumed a decrease in the credit granted to customers, 1% per year, due to the deleveraging process ongoing; and an increase 1% per year to credit institutions, as a measure to stimulate the investment and support to economic growth.

Regarding, international activity, the author assumed the same credit estimating pattern but assuming the all credit composition to grow at the economy evolution; therefore the predictions are presented below:
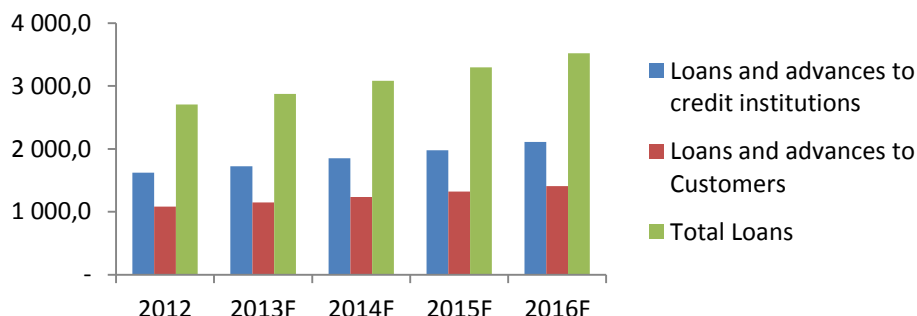
Amounts in MM€

Fig.18 Total international credit evolution Source: Author

Other assets

For the other balance sheet components estimations the author followed three assumptions:

- Interbanking rubrics: accompanying economic growth, or GDP; basically the country's economic state reflects the country's health, resulting in more or less future applications near the central bank;

- Financial assets, hedging derivatives, tax assets and other assets: accompanying _total loans_ performance, as a percentage where the estimated value result from a percentage's historical average;

- Investments in associated companies and jointly controlled entities and tangible/intangible assets: following inflation, in other words, those are rubrics more or less dependent on the price increase of the products therefore, it is reasonable to estimate them as an inflation accompaniment.

Regarding international activity, the same assumptions were taken into account.

Balance sheet rubrics - Liabilities

Resources

Following what was referred before, as the actual economic scenario, the author applied the same logic with loans, following GDP evolution, however with some differences. The total resources are dependent, in the last years, from ECB credit. The author considered with the forecasted economic stabilization, that this exposure is expected to decrease or even disappear in the next 3/4 years

The international activity is expected to follow the same pattern of the domestic. Therefore, the predictions are presented in the graphs below:

	2012	2013F	2014F	2015F	2016F
Resources of central banks	4270,9	2202,4	91,2	46,5	0,0
Resources of other credit institutions	3690,87	3605,2	3628,2	3683,9	3750,9
Resources of Customers and other loans	19307,0	18858,7	18979,2	19270,5	19621,2
Total resources	27.269	24433	24498	24828	25807
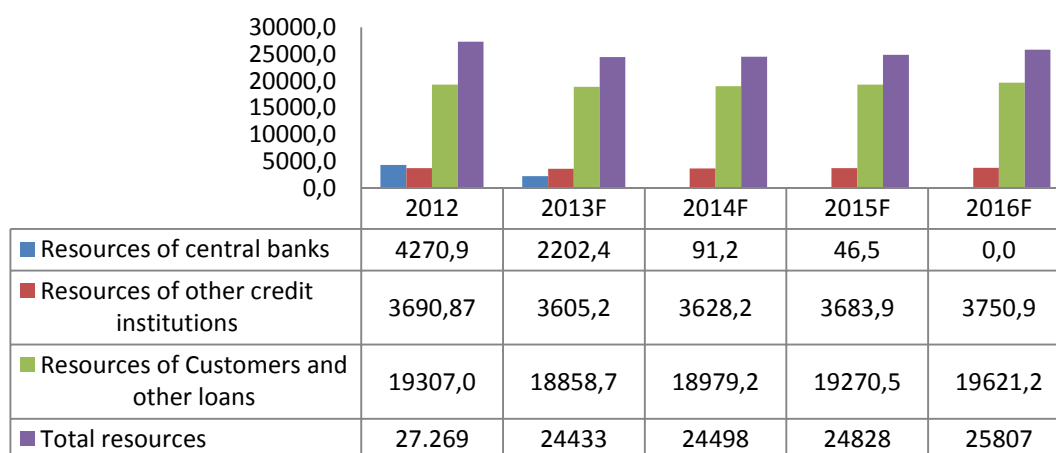
Amounts in MM€

Fig.19 Total domestic resources evolution Source: Author
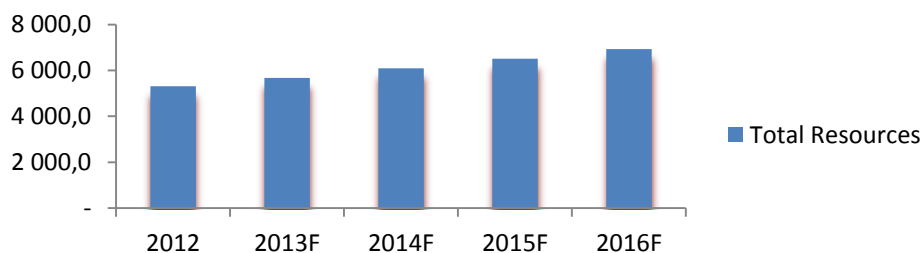
Amounts in MM€

Fig.20 Total domestic resources evolution Source: Author

Other liabilities

For other liabilities rubrics the author assumed once again inflation as the best estimator for future values, meaning, that most of its values follow more or less a pattern dependent on inflation.

The only exception is the rubric respecting BPI's capitalization plan, namely, contingently convertible subordinated bonds; subscribed by the Portuguese state with a five year maturity of 1.5bn€ with early repayment of 100MM€ in December 2012 and 200MM€, in March 2013, respectively. Therefore, the rubrics value stands for 1.2bn€ in 2012 and from 2013 until the end of 2017, 1bn€, respectively.

Regarding international activity, once again, the same assumptions were taken into account.

Capital - Shareholders' Equity

Regarding shareholders equity, the author only relied in the major rubric presented on the reported balance sheet therefore, dismissing shareholders' components. The reason behind this choice can be explained by the great volatility motivated by the great uncertainty, example of that are the capital results presented on 2011 financial year. To estimate these values, the author relied on historical averages, dismissing the 2011 financial year considered totally abnormal.

Finally, in what regards minority interests, the same choice was taken, again dismissing the 2011 financial year.

Regarding international activity, once again, the same assumptions were taken in account.

It is relevant to point out that, despite relying only in major capital rubrics; the author picked other specific capital components, to estimate and compute the share value on the dividend discount model.

4.1.2 Income statement rubrics

Financial Margin

Banks are constantly adapting its business models to new environments. One of the biggest actual challenges relies on creation and optimization of financial products management, essentially, how to best optimize the commissions or margins around them, for example, commissions from asset management or corporate finance. Most of the commissions can be seen as an asset for the bank, which motivated the author to estimate the financial margin as an average of total historical assets.

Based on that, the author relied on the estimated total assets' behavior to achieve the financial margin trend, which also implicitly reflects the actual economic scenario. The domestic financial margin values range between 1.03% - 1.06%, as it is present in the figure below:

	2012	2013F	2014F	2015F	2016F
Financial Margin	401,28	392,38	395,05	395,71	407,76
% ATA	1,05%	1,06%	1,05%	1,03%	1,05%

ATA – Average total assets; Financial Margin amounted in MM€ Source: Author

Fig.21 Estimated Domestic Financial Margin

For international activity, the author followed the same logic, but assuming as an estimator, the total asset's percentage found in 2012, 2.9%, respectively. From one side, BPI is increasing its international activity, motivating the creation of new financial products, not only in retail banking activity but in investment banking, which is becoming pretty much more present there. On the other side, Angola (major international activity spot) is continuing to grow at a faster rate, acting as an emergent market where competition is increasing every period. Following this scenario, for international activity, the author followed the same logic, but assuming as an estimator,

the total asset's percentage found in 2012. The estimated financial margin values are presented below:

	2012	2013F	2014F	2015F	2016F
Financial Margin	181,3	195,0	209,5	224,3	231,7
%ATA	2,9%	2,9%	2,9%	2,9%	2,9%

ATA – Average total assets; Financial Margin amounted in MM€   Source:Author

Fig.22 Estimated International Financial Margin

Commissions received

Commissions received result from the spread that bank earns when granting its loans. The new regulations going on, BASEL III, and the weak state of the economy, motivate authorities to demand higher funding costs near banks. Therefore, the author expects an increase of these commissions, which can be reflected as an estimated percentage increase (+1% per forecasted year) in the financial margin over the next periods. The author's estimations are presented below:

	2012	2013F	2014F	2015F	2016F
Commissions received	300,45	297,71	303,69	308,16	321,62
%Finantial Margin	75%	76%	77%	78%	79%

Commissions received amounted in MM€

Fig.23 Domestic estimated Commissions received. Source: Author

Internationally, the ongoing economic evolution is motivating the increase of the competition, which is making BFA to create cost-effective products to compete against its peers. That fact and others motivated the author to estimate commissions as the flat percentage of the 2012 financial margin of, 17%.

	2012	2013F	2014F	2015F	2016F
Commissions received	31,17	33,15	35,62	38,12	39,50
%Finantial Margin	17%	17%	17%	17%	17%

Commissions received amounted in MM€

Fig.24 International estimated Commissions received. Source: Author

Commissions paid

Commissions paid result from the deposits spreads offered by banks. Following what was referred before, banks are also demanded to increase the attraction for their deposits, as a measure of economy stimulation and deleveraging, in other words, in the future, banks will have to capture more deposits offering better conditions. Hence, the author expects an increase of these commissions, which can be reflected as an estimated percentage increase (+1% per forecasted year) in the financial margin over the next periods. The author's estimations are present below:

	2012	2013F	2014F	2015F	2016F
Commissions paid	-38,64	-43,16	-47,41	-51,44	-57,09
%Finantial Margin	10%	11%	12%	13%	14%

Commissions paid amounted in MM€

Fig.25 Domestic estimated Commissions paid. Source: Author

Internationally, the author defends the same arguments referred for "commissions received" since they motivate more or less the same decisions, hence he assumed a flat percentage of the 2012 financial margin of, 4%.

	2012	2013F	2014F	2015F	2016F
Commissions paid	-6,89	-7,41	-7,96	-8,53	-8,81
%Finantial Margin	4%	4%	4%	4%	4%

Commissions paid amounted in MM€

Fig.26 International estimated Commissions paid. Source: Author

The author dismissed the other commission rubric, "other net income", since its value is insignificant.

Overhead costs

The overhead costs represent an ongoing cost of operating a business. Regarding BPI's annual report, includes personnel costs, general administrative costs and depreciation and amortization costs.

Domestically, due to the abnormal economic scenario, BPI is striving to reduce these types of costs, as a measure to promote efficiency and cost reduction. As it is

perceivable in the figure graphic below, since 2011, a big effort is being made in this direction; there was a significant decrease of 18% ap. from 2011 to 2012 on personnel costs as it is possible to check in the graph below.

Overhead Costs

	2011	2012	2013F	2014F	2015F	2016F
■ Personnel costs	-365,1	-310,0	-279,0	-251,1	-255,0	-258,7
■ General administrative costs	-182,6	-179,9	-181,2	-183,0	-185,9	-188,6
■ Depreciation and amortization	-25,6	-20,4	-20,5	-20,8	-21,1	-21,4
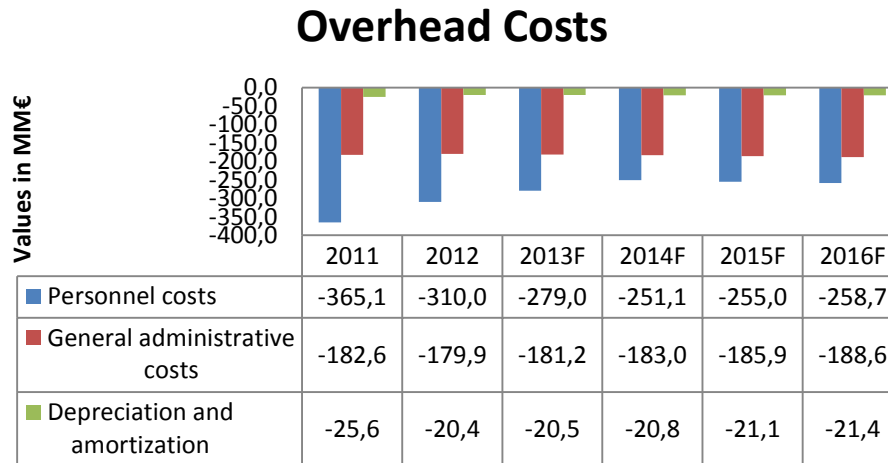
Fig.27 Domestic overhead costs. Source: Author and BPI's annual reports

To estimate future values of these rubrics, the author assumed domestic inflation as the estimator. The only exception was done with the personnel costs, respecting the ongoing "cutting strategy", since there is no mismatching regarding the actual business strategy the author estimated a 10% decrease until 2014 and from there on accompanying inflation.

Regarding international activity, as referred before, there is a consistent expansion going on, which can be seen as a major reason for the 30% increase on overhead costs since 2009, since BPI through BFA, is increasing its retail branches and consequently its staff. For these reason, the author considered Angolan inflation, as the best estimator for these rubrics.

Overhead Costs

	2012	2013F	2014F	2015F	2016F
■ Personnel costs	-62,8	-68,7	-74,5	-80,1	-85,9
■ General administrative costs	-53,5	-58,5	-63,5	-68,3	-73,2
■ Depreciation and amortization	-12,7	-13,9	-15,0	-16,2	-17,3
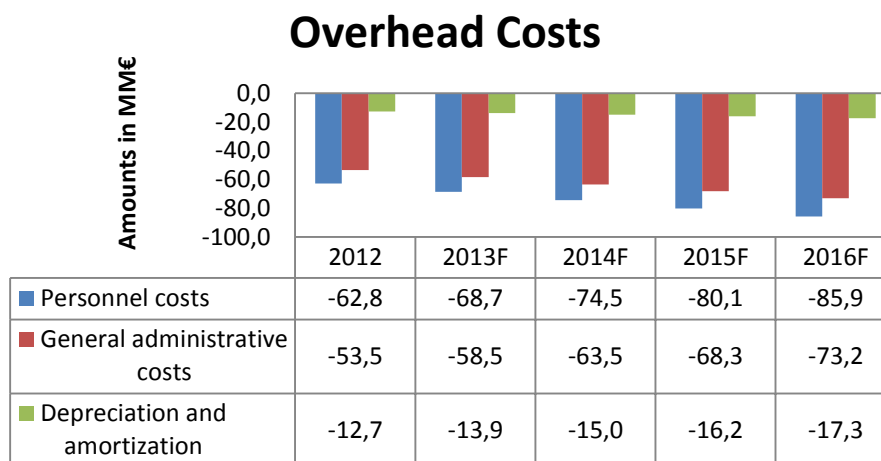
Fig.28 International overhead costs. Source: Author and BPI's Annual report

Other income statement rubrics

For less weighty income statement rubrics, the author assumed, domestically and internationally, the following growth assumptions present in the table below:

Other income statement rubrics	Growth Assumption
Technical result of insurance contracts	Average between 2009 - 2012, dismissing 2011[1]
Earnings of associated companies (equity method)	
Income attributable to minority interest	
Other income, net	Same value achieve in 2012[2]
Net operating expenses	
Net income on financial operations	Same % of 2012 financial margin[3]
Recovery of loans, interest and expenses	% of loans to customers[4]
Impairment losses and provisions for loans and guarantees, net	
Impairment losses and other provisions, net	

Fig.29 other income statement rubrics. Source:Author

(1) *The author considered 2011 as an abnormal financial year, totally diverting the historical values.*
(2) *Remain more or less constant during the past financial years.*
(3) *Rubric more or less dependent from the financial margin values*
(4) *Rubrics related with loans performance which therefore, is totally dependent from the balance sheet rubric, loans to customers.*

Cost of capital (Ke)

As referred before, in the literature review, the most feasible and reliable discount rate that the author picked to its valuation was the cost of equity which, is crucial in the author's valuation model. CAPM was the method to estimate it. Due to the adverse domestic economic conditions, was added an adjustment, the country risk premium, to achieve a most realistic estimative of this value. Internationally, was also added the

country extra risk, for being a very young and volatile market. In the table below it is present the resumed CAPM assumptions:

Domestic Ke	2012	2013F	2014F	2015F	2016F
Beta[1]	1,24	1,24	1,24	1,24	1,24
Risk Free Rate[2]	1,32%	1,32%	1,32%	1,32%	1,32%
Market Risk Premium[3]	8,81%	7,81%	6,81%	6,81%	6,81%
Country risk premium[4]	4,13%	3,63%	3,13%	3,13%	3,13%
Domestic Ke[5]	12,23%	10,99%	9,76%	9,76%	9,76%
Ke Adjusted[6]	16,36%	14,62%	12,89%	12,89%	12,89%

International Ke	2012	2013F	2014F	2015F	2016F
Beta[1]	1,24	1,24	1,24	1,24	1,24
Risk Free[2]	6,56%	6,56%	6,56%	6,56%	6,56%
Market Risk Premium[3]	4,32%	4,32%	4,32%	4,32%	4,32%
Country Risk Premium[4]	4,88%	4,88%	4,88%	4,88%	4,88%
Domestic Ke[5]	11,91%	11,91%	11,91%	11,91%	11,91%
Ke Adjusted[6]	16,79%	16,79%	16,79%	16,79%	16,79%

Fig.30 Thesis cost of equity results. Source:Author

(1)Beta resulted from the relation of Std.deviations of BPI 10 year's returns and PSI-20 10 year's return times their correlation;

(2)Risk Free Rate: Domestically - 10 year's German Treasury Bond; source: Bloomberg 31/082012; internationally - 10 year's South African Treasury Bond; source: investing.com 1/09/2012

(3)Market Risk Premium represents the difference between Total Risk Premium and Risk Free Rate

(4)Country Risk Premium sourced by the Damodaran website

(5)Domestic Ke resulted from the CAPM equation

(6)Adjusted Ke: CAPM + Country Risk Premium

The author assumed the same beta for domestic and international purposes. The reason behind it derives from the absence of stock exchange market in Angola, making the information impossible to achieve. Hence, it was impossible to estimate the international beta.

The domestic risk free rate used was the 10 year's German Treasury Bond from 31/08/2012, which, as referred in the literature review, the most reliable for a risk free

investment. Internationally was used the 10 year's South African Treasury bond for being a peer country with similar economic behavior and perspectives.

For domestic purposes, the author assumed the future market risk premiums to decrease 1% per year until 2014 and after that stabilize. The reason behind it relies on the expected improvement in the Portuguese economic/financial wealth which generates a market risk dilution. Internationally the author admitted a flat pattern for this rubric.

Regarding domestic country risk premium, the author assumed a 0.5% decrease per year until 2014 and after stabilizes more or less near the 2 percentage points above the risk free rate. Internationally, once again, the author assumed a flat pattern for this rubric.

Finally, BPI's weighed cost of equity was achieved by multiplying the domestic and international Ke's for the referent equity weight in domestic and international activities, respectively. These values are present below:

Year	2012	2013F	2014F	2015F	2016F
BPI Weighted Cost of Equity (Ke)	16,5%	15,3%	14,2%	14,2%	14,3%

Fig.31 Thesis weighted cost of equity. Source: Author

5. Valuation Results

It is significant to remember that for all the forecasts on BPI's financial statements, the author dismissed the 2011 financial year for being a total abnormal year regarding results, with numbers that totally affect the historic average, crucial to the author's expectations.

5.1 Dividend discount model (DDM)

Despite the limitations, DDM is a useful method when valuing financial services firms, which very easily allows the investors to predict future cash flow values with an acceptable level of precision.

The actual economic scenario is reflected in the limitations of this model since presently Portuguese banks are not distributing dividends which in fact, dilute the equity value achieved by the author. In this sense and according to author economic expectations,

BPI will restart distributing dividends in 2014. The future payout ratio assumed was 30%, 10% lower compared to past values 40%, respectively; this lower value is demanded by the new regulation, where the banks will have to be more cautious when distributing dividends in the future.

In its model, the author started to achieve the dividend value based on the product of the dividend payout and BPI's net profit. Then, the author computed the appropriate discount rate to finally achieve the updated present share value.

For terminal value, it was assumed 2%, which is the average estimated future inflation value, achieved by computing the expected average inflation, 1,85%, considered 2% as a more accurate value. For more detailed information, see the exhibit – DDM in the excel.

After the computations, the DDM results are the following:

Equity Value (M)	865
#Shares (M)	1190
Share Value	**0,73 €**

Fig.32 Thesis DDM results. Source:Author

The share value is the lowest one achieved by the author since there are no dividend distributions in the first year which, as referred before, diluted it. This fact and others, like the overall economic state or the uncertainty around the financial markets make the author dismiss this methodology.

5.2 Equity discount model

The use of the equity discount model has two steps to compute the present share value. The first related with the calculation of the FCFE and second the computation of the appropriate discount factor to achieve the share value.

To achieve FCFE, the author started by estimating the future risk weighted assets as a percentage of the future total assets behaves. As referred before, the authorities are also forcing banks to reduce its risky assets, BPI's is known by being a conservative bank hence, the author opted by reducing the RWA over time. These values affect the future

BPI's capital needs which, by the author predictions, reach a positive value in 2015. Finally, FCFE represents the difference between BPI's net income and its capital needs.

By these calculations, it is perceivable that this model is highly dependent on banks' capital, core tier more precisely, and what comes around this, meaning the regulatory framework that it is subject to.

The final results of this model are:

Enterprise Value (M)	2863
# shares (M)	1190
Share Value	2,41 €

(M) - Amounts in million €

Fig.33 Thesis Equity discount model results Source:Author

For further details, see the exhibit – Equity discount model in the appendixes.

5.3 Relative valuation - Multiples

The last method used by the author is relative valuation. The use of this method is really useful nowadays, since it is really easy to compute and give the investors a great perception of what is the way that company is following inside its industry. However, the method also brings some disadvantages meaning, companies are becoming more and more global, operating in many countries and are exposed to different risks which makes it difficult when trying to select a potential comparable, which is crucial for a good valuation using multiples. Another fact relies on the fact that the use of multiples fail to attempt long term predictions in a cyclical industry. Despite that, the author considered this method in his analysis.

The peer group selection was based on similar market capitalization values against BPI's comparable banks. The reason behind it can be explained by accuracy of the results demanded by the author. Result of that, the author picked three comparable of his sample:

Name	Market Capitalization 2012
BPI	1.304.588.416,00 €
BCP	1.478.037.504,00 €
BANCO SANTANDER SA	62.958.100.480,00 €

BANCO PASTOR	1.093.360.256,00 €
BANKINTER SA	1.770.351.232,00 €
BES	3.586.748.672,00 €
BANCO DE SABADELL	5.827.355.648,00 €

Amounts in million €

Fig.34 Thesis Multiples sample Source: Bloomberg

Despite the adverse economic scenario the author picked the last public data to his analysis since, all the other models and calculations are based on the same presumption. As it is possible to check in the figure above, the author's comparable are Iberic banks that have pretty much the same perspectives/strategies and operate under the market conditions.

As it is referred before in the literature review, the author's picked the most used equity multiples to value the banks, the price-to-book value (P/B) and price-earnings multiples (P/E) and apply them, using an average and weighted average to achieve BPI's share price.

The author also relied on other financial indicators namely, ROE, that is crucial for potential investors to verify if the bank is creating value over time or not. BPI's ROE is performing really well on average compared to its peers.

Other ratios valued were Core Tier I and RWA which allow understanding if a bank follows a conservative or risky strategy. In case of BPI's it is perceivable that it is very conservative when compared to its peers.

The core results of BPI's multiples analysis are:

Name	Market Capitalization 2012	Weights
BPI	1.304.588.416,00 €	23,11%
BCP	1.478.037.504,00 €	26,18%
BANCO SANTANDER SA	62.958.100.480,00 €	
BANCO PASTOR	1.093.360.256,00 €	19,36%
BANKINTER SA	1.770.351.232,00 €	31,35%
BES	3.586.748.672,00 €	
BANCO DE SABADELL	5.827.355.648,00 €	
Average	**1.411.584.352,00**	
Total comparable	**5.646.337.408,00 €**	

Name	P/E 2012	P/B 2012
BANCO BPI SA	**4,37 x**	**0,76 x**
BCP		0,46 x
BANCO SANTANDER	26,44 x	0,84 x
BANCO PASTOR	2,94 x	0,50 x
BANKINTER SA	9,14 x	0,55 x
BES	29,83 x	0,52 x
BANCO DE SABADELL	65,83 x	0,66 x
Average	**5,48 x**	**0,57 x**
Multiples weighted average	**4,44 x**	**0,57 x**

Multiples	M(€) P/E	P/B
Min	930	951
Max	2892	1574
Valuation	1.405,91	1.167,21
#Shares	1.190,00	1.190,00
Value per share	**1,18 €**	**0,98 €**

Amounts in million €

Fig.35 Thesis multiples analysis,Source: Bloomberg and author

For further details, see the exhibit – Multiples, in the appendixes.

From this valuation the author achieved a price ranging between the two multiples of [0,98€;1,18€]. The author considered the share value computed with base on P/B a more accurate value since, for all reasons referred in this dissertation, it is more realistic to opt by a lower share value.

5.4 Final results

After the computations of the valuation methodologies there are three highlights that the author has to choose between:

Methodology	Price target
DDM	**0,73 €**
Equity Discount Model	**2,41 €**
Multiples	**0,98 €**

Fig.36 Thesis model results

The choice of the right method is very relative, all methods have their pros and limitations and even adding the "crisis scenario", it becomes harder to pick the final price target.

Plugging this issue into the real world, it is perceivable that the real share value is growing over last 6 months from 0,35€ to 1,25€ (see the figure below) in the beginning of January 2013. This value rise will have to stabilize, since the markets are oscillating and the authorities will for sure demand to raise the skepticism of the investors affecting negatively the share value. Another fact is related with the epidemic crisis that in 2013 will probably arise in countries like Spain or Italy which may motivate global skepticism around Europe that, even more will affect debt and the general financial markets. This unpredictable external dependence makes it hard to achieve the best way to act in a crisis period.

Fig.37 2012 BPI's stock's price Source.Google finance

According to these issues and all the methodology used, the author considered the multiples analysis the best choice and value, to reach the final BPI's price target.

Methodology	Price target
Multiples	0,98 €

Source:Author

Despite all the limitations of the method, the author thinks that this "peer analysis" describes better the share value than any other used method in this actual adverse

scenario. There are more counter reasons related with the other models that in fact, pros of multiples analysis.

The reasons are spread all over the dissertation, but in resume:

- The uncertainty around external aspects and Portuguese dependence on Troika's demanding makes it hard for the author to rely on future prospects, that are present on DDM and equity discount model.

- Banks in general, nowadays are all demanded and affected by the authorities to update business strategies, since they are trying to create a model to balance the global economy;

- Another fact relies on the actual country's economic state and the way that this is affecting Portuguese banks meaning, their financial restrictions, their asset quality and solvency that are reflected in their financial statements. Those facts and others affected the values obtained in the DDM and equity discount model, specifically, BPI's actual dividend policy, that is inexistent and dilutes the share value on DDM;

- The deterioration of the asset quality makes it hard to estimate the level of RWA that affects the FCFE on equity discount model; besides being something mandatory from the authorities (deleveraging process) the estimate is uncertain, and in this case, in the author's opinion has overestimated the share value.

By the author opinion, the results obtained on DDM and equity discount model are not connected with the reality, besides being in his opinion, well valued, all the rubrics affected by the crisis effect, cause this result's discrepancy.

Based on these core issues, the author picked the multiples as the best estimator to BPI's price target.

6. Conclusion

The crisis is a speech very present in this dissertation; Portugal is living under Troika's orders and demands, however, the author expectations are that Portugal under this uncertainty environment can make an economic turnover and in 2014, we can assist a recession's turnover and from there on start to recover and growing. Also, the exposure to Africa, specifically in fast growing countries, can be a strategic upside potential to feed this recovery and growing.

Regarding national financial industry, it is expectable to continue these hard times, with the ongoing deleveraging process and all the variables around it namely, the solvency and asset quality. Particular talking about BPI, it was perceivable that the bank always had a conservative strategy, which is reflected in their asset quality compared to its peers; also BPI is progressively opting by capital reinforcements to improve its liquidity.

Based on this scenario, the valuation was done based on three methodologies, DDM, where the author achieved a share value of 0,73€/share; Equity discount model, 2,41€/share and finally relative valuation where the author suggested a value between 0,98€ and 1,18€/share.

It is important to argue that this valuation is done based abnormal circumstances which for that reason, we cannot achieve an accurate value that can change with updates on regulations, political issues or external demanding.

To conclude, the author's recommendation is to **Buy (or Hold)**, besides being a minimal margin the author expects a upside potential value in the short term, hence, the price on 2-1-2013 is 0.99€/share and the price that the author think to be more accurate is 0,98€/share.

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Banco BPI, SA (26th June 2012) – Announcement related with the emission Core Tier I Capital instruments.

Banco BPI, SA (8th August 2012) – Announcement related with the BPI's 200 million euros rebuy of capital instruments.

8.Appendixes

Exhibit 1 – Domestic Balance Sheet

	2009	2010	2011	2012	2013F	2014F	2015F	2016F
Interbanking								
Cash and deposits at central banks	601,10	475,80	223,90	233,22	227,80	229,26	232,78	237,01
Amounts owed by credit institutions repayable on demand	262,40	260,80	340,70	378,38	369,59	371,95	377,66	384,53
Loans								
Loans and advances to credit institutions	2.343,70	1.437,10	2.081,20	1.191,48	1.340,86	1.619,31	1.918,19	2.232,12
%total loans	**8%**	**5%**	**7%**	**4%**	**5%**	**6%**	**7%**	**8%**
Loans and advances to Customers	28.739,90	28.865,80	27.297,70	26.263,16	25.476,29	25.369,20	25.484,59	25.669,39
%total loans	**92%**	**95%**	**93%**	**96%**	**95%**	**94%**	**93%**	**92%**
Total loans	**31.083,60**	**30.302,90**	**29.378,90**	**27.454,64**	**26.817,15**	**26.988,51**	**27.402,78**	**27.901,51**
Financial assets								
Financial assets held for dealing	1.388,00	1.168,70	926,00	957,83				
Financial assets available for sale	7.761,70	6.114,00	4.586,50	8.393,22				
Financial assets held to maturity	803,10	1.043,60	766,20	445,30				
Total Financial assets	**9.952,80**	**8.326,30**	**6.278,70**	**9.796,35**	**7.813,83**	**7.669,31**	**7.851,43**	**8.502,17**
%total loans	*32%*	*27%*	*21%*	*36%*	*29%*	*28%*	*29%*	*30%*
Hedging derivatives	316,50	250,30	279,80	280,74	256,05	257,68	258,16	269,34
%total loans	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*
Investments in associated companies and jointly controlled entities	140,90	171,70	144,30	163,36	164,51	166,21	168,77	171,25
Other tangible assets	153,40	136,10	97,40	80,49	81,05	81,89	83,15	84,37
Intangible assets	9,20	5,80	7,80	11,89	11,97	12,09	12,28	12,46

Tax assets	213,50	430,60	903,40	617,59	602,98	681,28	641,44	661,60
%total loans	*1%*	*1%*	*3%*	*2%*	*2%*	*3%*	*2%*	*2%*
Other assets	916,00	908,50	670,40	642,46	708,44	712,97	707,19	696,77
%total loans	*3%*	*3%*	*2%*	*2%*	*3%*	*3%*	*3%*	*2%*
Total assets	**43.649,40**	**41.268,80**	**38.325,30**	**39.659,12**	**37.053,37**	**37.171,15**	**37.735,63**	**38.921,02**
Liabilities and shareholders' equity								
Liabilities								
Resources of central banks	2.773,40	1.245,50	2.499,20	4.270,92	-0,03	0,03	0,00	-0,01
Resources of other credit institutions	4.963,10	5.142,50	2.913,70	3.690,87				
Resources of Customers and other loans	19.032,60	19.026,10	19.871,30	19.306,99				
Total resources	**26.769,10**	**25.414,10**	**25.284,20**	**27.268,78**	**24.633,20**	**24.698,20**	**25.027,72**	**26.007,13**
Debt securities	9.083,60	7.782,30	6.692,00	3.787,63	3.814,25	3.853,66	3.912,92	3.970,52
Technical provisions	2.139,40	2.991,90	2.625,20	2.255,36	2.271,22	2.294,68	2.329,97	2.364,27
Financial liabilities associated to transferred assets	1.764,60	1.570,40	1.414,60	1.590,98	1.602,17	1.618,72	1.643,61	1.667,81
Hedging derivatives	423,80	499,40	661,90	814,98	820,71	829,19	841,94	854,34
Provisions	63,60	79,10	92,90	104,67	105,41	106,49	108,13	109,72
Tax liabilities	36,20	29,70	24,50	112,08	112,87	114,03	115,79	117,49
Contingently convertible subordinated bonds	11,80	7,20		1.200,28	1.000,30	1.000,30	1.000,30	1.000,30
Other subordinated loans	652,40	640,40	214,50	156,33	157,43	159,06	161,50	163,88
Other liabilities	795,00	794,00	1.077,90	925,26	931,76	941,39	955,87	969,94
Total liabilities	**41.739,50**	**39.808,50**	**38.087,70**	**38.216,36**	**35.449,32**	**35.615,72**	**36.097,77**	**37.225,40**
Shareholders' equity								
Shareholders' equity attributable to the shareholders of BPI	1.647,10	1.189,20	163,10	1.383,75	1.406,68	1.326,54	1.372,32	1.387,59
Minority interests	262,60	270,40	74,50	59,02	197,34	228,92	265,54	308,03
Shareholders' equity and minority interests	**1.909,70**	**1.459,60**	**237,60**	**1.442,77**	**1.604,02**	**1.555,46**	**1.637,87**	**1.695,61**
Total liabilities and shareholders' equity	**43.649,20**	**41.268,10**	**38.325,30**	**39.659,13**	**37.053,34**	**37.171,18**	**37.735,63**	**38.921,01**

Exhibit 2 – Internacional Balance Sheet

	2009	2010	2011	2012	2013F	2014F	2015F	2016F
Interbanking								
Cash and deposits at central banks	842,20	852,40	921,20	1.036,15	1.100,18	1.180,12	1.262,92	1.347,23
Amounts owed by credit institutions repayable on demand	57,10	98,80	66,80	94,47	100,31	107,60	115,15	122,84
Loans								
Loans and advances to credit institutions	285,40	470,90	1.075,80	1.623,29	1.723,61	1.848,84	1.978,56	2.110,65
Loans and advances to Customers	1.215,70	1.189,20	1.020,60	1.082,31	1.149,20	1.232,70	1.319,18	1.407,25
Total Loans	**1.501,10**	**1.660,10**	**2.096,40**	**2.705,60**	**2.872,80**	**3.081,54**	**3.297,74**	**3.517,90**
Financial assets								
Financial assets held for dealing	403,10	73,00	11,50	153,81				
Financial assets available for sale	1.173,20	2.042,40	2.191,60	1.859,66				
Financial assets held to maturity	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total financial assets	1.576,30	2.115,40	2.203,10	2.013,47	2.202,64	2.388,32	2.569,38	2.753,89
Hedging derivatives	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Investments in associated companies and jointly controlled entities	18,10	22,60	35,00	38,89	42,54	46,13	49,63	53,19
Other tangible assets	100,20	116,00	127,70	130,19	142,42	154,43	166,14	178,07
Intangible assets	0,60	0,60	1,70	2,13	2,33	2,53	2,72	2,92
Tax assets	0,00	0,00	0,10	0,10	0,10	0,10	0,10	0,10
Other assets	8,30	15,30	20,70	26,85	29,38	31,85	34,27	36,73
Total assets	**4.103,90**	**4.881,20**	**5.472,70**	**6.047,86**	**6.492,71**	**6.992,62**	**7.498,04**	**8.012,86**
Liabilities and shareholders' equity								
Resources of central banks	0,00	0,00	0,00					
Resources of other credit institutions	43,70	73,50	0,00	1,01				

Resources of Customers and other loans	3.585,30	4.214,80	4.800,00	5.314,15				
Total Resources	**3.629,00**	**4.288,30**	**4.800,00**	**5.315,16**	**5.685,33**	**6.102,63**	**6.516,49**	**6.929,03**
Debt securities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Technical provisions	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Financial liabilities associated to transferred assets	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Hedging derivatives	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Provisions	26,10	31,50	35,30	33,73	36,90	40,01	43,04	46,13
Tax liabilities	25,00	8,00	8,40	8,10	8,86	9,60	10,33	11,07
Contingently convertible subordinated bonds	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other subordinated loans	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Other liabilities	30,90	49,00	44,40	73,01	79,87	86,60	93,17	99,86
Total liabilities	**3.711,00**	**4.376,80**	**4.888,10**	**5.429,99**	**5.810,96**	**6.238,84**	**6.663,03**	**7.086,09**
Shareholders' equity attributable to the shareholders of BPI	199,90	257,40	306,20	324,23	372,87	428,80	493,12	567,09
Minority interests	193,00	247,00	278,50	293,64	308,91	324,97	341,87	359,65
%y0y		22%	11%	5%				
Shareholders' equity and minority interests	**392,90**	**504,40**	**584,70**	**617,87**	**681,78**	**753,77**	**834,99**	**926,73**
Total liabilities and shareholders' equity	**4.103,90**	**4.881,20**	**5.472,80**	**6.047,87**	**6.492,73**	**6.992,61**	**7.498,02**	**8.012,83**

Exhibit 3 – Consolidated Balance Sheet

	2009	*2010*	*2011*	*2012*	*2013F*	*2014F*	*2015F*	*2016F*
Interbanking								
Cash and deposits at central banks	1.443,30	1.328,20	1.145,10	1.269,37	1.327,98	1.409,38	1.495,69	1.584,24
Amounts owed by credit institutions repayable on demand	319,50	359,60	407,50	472,85	469,90	479,55	492,81	507,37
Loans								
Loans and advances to credit institutions	2.629,10	1.908,00	3.157,00	2.814,77	3.064,46	3.468,15	3.896,75	4.342,77
Loans and advances to Customers	29.955,60	30.055,00	28.318,30	27.345,47	26.625,48	26.601,89	26.803,77	27.076,64
Total loans	***32.584,70***	***31.963,00***	***31.475,30***	***30.160,24***	***29.689,95***	***30.070,05***	***30.700,52***	***31.419,41***
Finantial assets								
Financial assets held for dealing	1.791,10	1.241,70	937,50	1.111,65				

Financial assets available for sale	8.934,90	8.156,40	6.778,10	10.252,88				
Financial assets held to maturity	803,10	1.043,60	766,20	445,30				
Total Finantial assets	**11.529,10**	**10.441,70**	**8.481,80**	**11.809,83**	**10.016,47**	**10.057,63**	**10.420,81**	**11.256,06**
Hedging derivatives	316,50	250,30	279,80	280,74	256,05	257,68	258,16	269,34
Investments in associated companies and jointly controlled entities	159,00	194,30	179,30	202,26	207,06	212,34	218,40	224,44
Other tangible assets	253,60	252,10	225,10	210,68	223,48	236,32	249,29	262,44
Intangible assets	9,80	6,40	9,50	14,02	14,30	14,62	15,00	15,37
Tax assets	213,50	430,60	903,50	617,69	603,08	681,38	641,54	661,70
Other assets	924,30	923,80	691,10	669,32	737,82	744,82	741,45	733,50
Total assets	**47.753,30**	**46.150,00**	**43.798,00**	**45.706,97**	**43.546,08**	**44.163,77**	**45.233,67**	**46.933,88**
Liabilities and shareholders' equity								
Liabilities								
Resources of central banks	2.773,40	1.245,50	2.499,20	4.270,92				
Resources of other credit institutions	5.006,80	5.216,00	2.913,70	3.691,88				
Resources of Customers and other loans	22.617,90	23.240,90	24.671,30	24.621,14				
Total resources	**30.398,10**	**29.702,40**	**30.084,20**	**32.583,93**	**30.318,53**	**30.800,83**	**31.544,21**	**32.936,16**
Debt securities	9.083,60	7.782,30	6.692,00	3.787,63	3.814,25	3.853,66	3.912,92	3.970,52
Technical provisions	2.139,40	2.991,90	2.625,20	2.255,36	2.271,22	2.294,68	2.329,97	2.364,27
Financial liabilities associated to transferred assets	1.764,60	1.570,40	1.414,60	1.590,98	1.602,17	1.618,72	1.643,61	1.667,81
Hedging derivatives	423,80	499,40	661,90	814,98	820,71	829,19	841,94	854,34
Provisions	89,70	110,60	128,20	138,40	142,30	146,50	151,17	155,86
Tax liabilities	61,20	37,70	32,90	120,18	121,72	123,64	126,12	128,57
Contingently convertible subordinated bonds	11,80	7,20	0,00	1.200,28	1.000,30	1.000,30	1.000,30	1.000,30
Other subordinated loans	652,40	640,40	214,50	156,33	157,43	159,06	161,50	163,88
Other liabilities	825,90	843,00	1.122,30	998,27	1.011,64	1.027,99	1.049,04	1.069,80
Total liabilities	**45.450,50**	**44.185,30**	**42.975,80**	**43.646,35**	**41.260,28**	**41.854,57**	**42.760,80**	**44.311,49**

Shareholders' equity								
Shareholders' equity attributable to the shareholders of BPI	1.847,00	1.446,60	469,30	1.707,98	1.779,55	1.755,34	1.865,44	1.954,67
Minority interests	455,60	517,40	353,00	352,66	506,25	553,89	607,41	667,68
Shareholders' equity and minority interests	**2.302,60**	**1.964,00**	**822,30**	**2.060,64**	**2.285,80**	**2.309,23**	**2.472,86**	**2.622,35**
Total liabilities and shareholders' equity	**47.753,10**	**46.149,30**	**43.798,10**	**45.706,99**	**43.546,08**	**44.163,80**	**45.233,65**	**46.933,84**

Exhibit 4 – Domestic income statement

	2009	2010	2011	2012	2013F	2014F	2015F	2016F
Financial margin (narrow sense)	**420,31**	**417,22**	**345,35**	**368,66**				
Gross margin on unit links	3,25	4,14	3,80	2,67				
Income from equity instruments	4,91	3,73	1,64	3,48				
Net commission relating to amortised cost	24,67	30,27	28,00	26,47				
Financial margin	**453,14**	**455,36**	**378,80**	**401,28**	**392,38**	**395,05**	**395,71**	**407,76**
% ATA	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**
Technical result of insurance contracts	11,80	16,08	-30,12	23,01	16,97	16,97	16,97	16,97
Commissions received	273,26	285,67	274,65	300,45	297,71	303,69	308,16	321,62
%Finantial Margin	**60%**	**63%**	**73%**	**75%**	**76%**	**77%**	**78%**	**79%**
Commissions paid	-37,19	-42,83	-43,09	-38,64	-43,16	-47,41	-51,44	-57,09
%Finantial Margin	**8%**	**9%**	**11%**	**10%**	**11%**	**12%**	**13%**	**14%**
Other income, net	26,40	24,55	22,01	20,06	20,06	20,06	20,06	20,06
Net commission income	**262,46**	**267,38**	**253,57**	**281,87**	**274,61**	**276,34**	**276,77**	**284,59**
Gain and loss on operations at fair value	50,50	24,83	133,96	153,63				
Gain and loss on assets available for sale	46,12	13,88	0,31	169,00				
Interest and financial gain and loss with pensions	-3,93	12,20	8,55	3,07				
Net income on financial operations	**92,70**	**50,90**	**142,81**	**325,71**	**259,79**	**254,99**	**261,04**	**282,68**
%Finantial Assets	**1%**	**1%**	**2%**	**3%**	**3%**	**3%**	**3%**	**3%**
Operating income	30,68	15,72	107,02	10,72				
Operating expenses	-17,08	-23,90	-130,51	-19,73				
Other taxes	-4,00	-5,59	-6,18	-4,65				
Net operating expenses	**9,61**	**-13,77**	**-29,67**	**-13,66**	**-13,66**	**-13,66**	**-13,66**	**-13,66**

Operating income from banking activity	**829,71**	**775,95**	**715,38**	**1.018,22**	**930,09**	**929,69**	**936,84**	**978,34**
Personnel costs	-356,74	-381,85	-365,10	-309,99	-278,99	-251,09	-254,95	-258,70
General administrative costs	-181,31	-186,33	-182,60	-179,91	-181,18	-183,05	-185,86	-188,60
Depreciation and amortization	-39,47	-33,97	-25,65	-20,40	-20,54	-20,75	-21,07	-21,38
Overhead Costs	**-577,52**	**-602,15**	**-573,35**	**-510,30**	**-480,71**	**-454,89**	**-461,89**	**-468,69**
Net operating income before provisions	**252,19**	**173,80**	**142,04**	**507,92**	**449,38**	**474,80**	**474,95**	**509,65**
Recovery of loans, interest and expenses	18,22	13,75	17,47	12,83	12,44	12,39	12,45	12,54
% loans to customers	**0,06%**	**0,05%**	**0,06%**	**0,05%**	**0,05%**	**0,05%**	**0,05%**	**0,05%**
Impairment losses and provisions for loans and guarantees, net	-135,32	-99,95	-203,79	-254,45	-246,83	-245,79	-170,45	-128,05
% loans to customers	**0%**	**0%**	**1%**	**1%**	**1%**	**1%**	**1%**	**0%**
Impairment losses and other provisions, net	-34,61	-22,39	-492,03	33,67	32,67	32,53	32,68	32,91
% loans to customers	**0,1%**	**0,1%**	**1,8%**	**0,1%**	**0,1%**	**0,1%**	**0,1%**	**0,1%**
Net income before income tax	**100,48**	**65,22**	**-536,31**	**299,97**	**247,66**	**273,93**	**349,62**	**427,05**
Income tax	-18,89	5,32	-147,60	-81,89	-77,77	-86,04	-109,89	-134,28
Earnings of associated companies (equity method)	12,74	23,02	21,51	13,55	16,44	17,67	15,89	16,66
Global consolidated net income of Domestic activity	**94,33**	**93,55**	**-662,40**	**231,64**	**186,33**	**205,56**	**255,62**	**309,44**
Income attributable to minority interest	-8,84	-7,02	-7,67	-1,67	-5,84	-4,84	-4,12	-4,93
Consolidated net income of BPI Group	**85,48**	**86,54**	**-670,07**	**229,97**	**180,49**	**200,72**	**251,50**	**304,51**

Exhibit 5 – International Income Statement

	2009	2010	2011	2012	2013F	2014F	2015F	2016F
Financial margin (narrow sense)	**164,00**	**209,17**	**197,98**	**180,26**				
Gross margin on unit links	0,00	0,00	0,00	0,00				
Income from equity instruments	0,00	0,00	0,00	0,00				
Net commission relating to amortised cost	0,00	0,00	0,00	1,05				
Financial margin	**164,00**	**209,17**	**197,98**	**181,31**	**194,97**	**209,51**	**224,26**	**231,70**
%ATA	**4%**	**4%**	**3%**	**3%**	**3%**	**3%**	**3%**	**3%**
Technical result of insurance contracts	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Commissions received	25,51	23,98	22,99	31,17	33,15	35,62	38,12	39,50
%Finantial Margin	**16%**	**11%**	**12%**	**17%**	**17%**	**17%**	**17%**	**17%**
Commissions paid	-5,71	-4,87	-5,34	-6,89	-7,41	-7,96	-8,53	-8,81
%Finantial Margin	**3%**	**2%**	**3%**	**4%**	**4%**	**4%**	**4%**	**4%**
Other income, net	29,16	27,38	25,77	26,15	26,15	26,15	26,15	26,15

Net commission income	**48,96**	**46,50**	**43,42**	**50,43**	**51,88**	**53,80**	**55,75**	**56,84**
Gain and loss on operations at fair value	122,33	68,24	63,40	75,66				
Gain and loss on assets available for sale	0,00	0,01	0,01	0,01				
Interest and financial gain and loss with pensions	0,00	0,00	0,00	0,00				
Net income on financial operations	**122,33**	**68,25**	**63,41**	**75,67**	**97,05**	**85,20**	**93,84**	**105,91**
%Finantial Assets	**8%**	**3%**	**3%**	**4%**	**4%**	**4%**	**4%**	**4%**
Operating income	2,12	0,73	1,61	5,86				
Operating expenses	-1,35	-1,26	-0,73	-0,45				
Other taxes	-0,96	-0,58	-0,93	-1,03				
Net operating expenses	**-0,19**	**-1,11**	**-0,04**	**4,38**	**4,38**	**4,38**	**4,38**	**4,38**
Operating income from banking activity	**335,10**	**322,81**	**304,76**	**311,80**	**348,29**	**352,89**	**378,24**	**398,84**
Personnel costs	-43,55	-49,67	-52,91	-62,79	-68,69	-74,48	-80,13	-85,88
General administrative costs	-40,70	-45,81	-48,25	-53,50	-58,53	-63,46	-68,27	-73,17
Depreciation and amortization	-13,25	-11,21	-11,20	-12,68	-13,87	-15,04	-16,18	-17,34
Overhead Costs	**-97,50**	**-106,69**	**-112,36**	**-128,97**	**-141,08**	**-152,98**	**-164,58**	**-176,39**
Net operating income before provisions	**237,61**	**216,11**	**192,41**	**182,83**	**207,20**	**199,91**	**213,66**	**222,45**
Recovery of loans, interest and expenses	2,95	2,12	2,85	2,70	2,73	2,91	3,31	3,43
% loans to customers	**0,2%**	**0,2%**	**0,3%**	**0,2%**	0,2%	0,2%	0,3%	0,2%
Impairment losses and provisions for loans and guarantees, net	-31,03	-21,17	-9,37	-14,94	-19,05	-17,68	-17,77	-20,47
% loans to customers	**3%**	**2%**	**1%**	**1%**	2%	1%	1%	1%
Impairment losses and other provisions, net	-8,97	-6,11	-6,03	-3,10	-6,12	-5,93	-6,24	-6,24
% loans to customers	**1%**	**1%**	**1%**	**0%**	1%	0%	0%	0%
Net income before income tax	**200,55**	**190,95**	**179,85**	**167,50**	**184,76**	**179,22**	**192,96**	**199,17**
Income tax	-26,50	0,53	-6,41	-6,41	-6,41	-6,41	-6,41	-6,41
Earnings of associated companies (equity method)	5,52	6,11	6,91	10,26	7,20	7,62	8,00	8,27
Global consolidated net income of International activity	**179,57**	**197,60**	**180,35**	**171,35**	**185,56**	**180,43**	**194,55**	**201,03**
Income attributable to minority interest	-90,02	-98,72	-90,36	-84,84	-90,98	-91,22	-89,35	-89,10
Consolidated net income of BPI Group	**89,55**	**98,88**	**90,00**	**86,51**	**94,57**	**89,21**	**105,20**	**111,93**

Exhibit 6 – Consolidated Income Statement

	2009	2010	2011	2012	2013f	2014f	2015f	2016f
Financial margin (narrow sense)	584,3	626,4	543,3	548,9				
Gross margin on unit links	3,3	4,1	3,8	2,7				

Income from equity instruments	4,9	3,7	1,6	3,5			
Net commission relating to amortised cost	24,7	30,3	28,0	27,5			
Financial margin	**617,1**	**664,5**	**576,8**	**582,6**	**587,4**	**604,6**	**620,0**	**639,5**
Technical result of insurance contracts	11,8	16,1	-30,1	23,0	17,0	17,0	17,0	17,0
Commissions received	298,8	309,6	297,6	331,6	330,9	339,3	346,3	361,1
Commissions paid	-42,9	-47,7	-48,4	-45,5	-50,6	-55,4	-60,0	-65,9
Other income, net	55,6	51,9	47,8	46,2	46,2	46,2	46,2	46,2
Net commission income	**311,4**	**313,9**	**297,0**	**332,3**	**326,5**	**330,1**	**332,5**	**341,4**
Gain and loss on operations at fair value	172,8	93,1	197,4	229,3	0,0	0,0	0,0	0,0
Gain and loss on assets available for sale	46,1	13,9	0,3	169,0	0,0	0,0	0,0	0,0
Interest and financial gain and loss with pensions	-3,9	12,2	8,5	3,1	0,0	0,0	0,0	0,0
Net income on financial operations	**215,0**	**119,2**	**206,2**	**401,4**	**356,8**	**340,2**	**354,9**	**388,6**
Operating income	32,8	16,4	108,6	16,6	0,0	0,0	0,0	0,0
Operating expenses	-18,4	-25,2	-131,2	-20,2	0,0	0,0	0,0	0,0
Other taxes	-5,0	-6,2	-7,1	-5,7	0,0	0,0	0,0	0,0
Net operating expenses	**9,4**	**-14,9**	**-29,7**	**-9,3**	**-9,3**	**-9,3**	**-9,3**	**-9,3**
Operating income from banking activity	**1164,8**	**1098,8**	**1020,1**	**1330,0**	**1278,4**	**1282,6**	**1315,1**	**1377,2**
Personnel costs	-400,3	-431,5	-418,0	-372,8	-347,7	-325,6	-335,1	-344,6
General administrative costs	-222,0	-232,1	-230,8	-233,4	-239,7	-246,5	-254,1	-261,8
Depreciation and amortization	-52,7	-45,2	-36,8	-33,1	-34,4	-35,8	-37,2	-38,7
Overhead Costs	**-675,0**	**-708,8**	**-685,7**	**-639,3**	**-621,8**	**-607,9**	**-626,5**	**-645,1**
Net operating income before provisions	**489,8**	**389,9**	**334,4**	**690,7**	**656,6**	**674,7**	**688,6**	**732,1**
Recovery of loans, interest and expenses	21,2	15,9	20,3	15,5	15,2	15,3	15,8	16,0
Impairment losses and provisions for loans and guarantees, net	-166,4	-121,1	-213,2	-269,4	-265,9	-263,5	-188,2	-148,5
Impairment losses and other provisions, net	-43,6	-28,5	-498,1	30,6	26,5	26,6	26,4	26,7
Net income before income tax	**301,0**	**256,2**	**-356,5**	**467,5**	**432,4**	**453,1**	**542,6**	**626,2**
Income tax	-45,4	5,9	-154,0	-88,3	-84,2	-92,4	-116,3	-140,7
Earnings of associated companies (equity method)	18,3	29,1	28,4	23,8	23,6	25,3	23,9	24,9
Global consolidated net income of BPI Group	**273,9**	**291,2**	**-482,0**	**403,0**	**371,9**	**386,0**	**450,2**	**510,5**
Income attributable to minority interest	-98,9	-105,7	-98,0	-86,5	-96,8	-96,1	-93,5	-94,0
Consolidated net income of BPI Group	**175,0**	**185,4**	**-580,1**	**316,5**	**275,1**	**289,9**	**356,7**	**416,4**

Exhibit 7 – Equity discount model

	2009	2010	2011	2012	2013F	2014F	2015F	2016F	G
Net income	175	185	-580	316	275	290	357	416	424,14
RWA	26.059,90	26.035,80	25.152,40	24.511,84	24.446,15	24.290,07	24.878,52	25.625,90	26.099,98
%total assets	**54,6%**	**56,4%**	**57,4%**	**56,1%**	**56,1%**	**55,0%**	**55,0%**	**55%**	**55%**
Own Funds Requirement	2.084,79	2.082,86	2.012,19	1.960,95	1.955,69	1.943,21	1.990,28	2.050,07	2.088,00
Capital Needs		-1,9	-70,7	-51,2	-5,3	-12,5	47,1	59,8	37,9
FCFE		187,35	-509,40	367,73	280,32	302,41	309,63	356,65	386,22
BPI Ke					16,5%	15,3%	14,2%	14,2%	14,3%	14,3%
Discount Factor					0,92	0,81	0,71	0,62	4,98
23-05-2013									
Present value					257,11	244,40	218,97	220,34	1.921,77

g	2%
Explicit period value	940,8
Terminal Value	1921,8
Enterprise Value	2862,6
# shares	1190
Share Value	**2,41 €**

Multiples Analysis	2013F	2014F	2015F	2016F
P/E	10,41	9,87	8,03	6,87
P/BV	1,25	1,24	1,16	1,09

Exhibit 8 – Dividend discount model

	2009	2010	2011	2012	2013F	2014F	2015F	2016F	G
Dividend Payout		**41%**				**30%**	**30%**	**30%**	**30%**
Net Profit					275,06	289,92	356,70	416,44	424,77
Dividend					0	86,98	107,01	124,93	127,43
BPI Ke					**15,3%**	**14,2%**	**14,2%**	**14,3%**	**14,3%**
Discount Factor					0,92	0,81	0,71	0,62	5,04
23-05-2013									
Present Value					**0,00**	**70,29**	**75,68**	**77,19**	**641,83**

G	2%
Explicit Period Valuation	223,16
Terminal Value	641,83
EV (M)	864,99
#Shares (M)	1190
Share Value	**0,73 €**

Multiples	2013F	2014F	2015F	2016F
P/E	3,14	2,98	2,42	2,08
P/BV	0,38	0,37	0,35	0,33

Exhibit 9 – Multiples analysis

Name	Market Cap 2012	Weights	EPS growth 2012 (%)	P/E 2012	ROE 2012 (%)	Tot Assets 2012	P/B 2012	ROA 2012 (%)
BANCO BPI SA.- REG SHS	1.304.588.416,00 €	23,11%		4,37	22,88	44.564.582.400,00 €	0,76	0,57
BCP	1.478.037.504,00 €	26,18%	-13,63		-35,56	89.744.039.936,00 €	0,46	-1,33
BANCO SANTANDER SA	62.958.100.480,00 €		-61,74	26,44	2,92	1.269.628.010.496,00 €	0,84	0,17
BANCO PASTOR	1.093.360.256,00 €	19,36%	16,62	2,94	18,61	87.606.534.144,00 €	0,50	0,37
BANKINTER SA	1.770.351.232,00 €	31,35%	-31,19	9,14	3,95	58.165.891.072,00 €	0,55	0,21
BANCO ESPIRITO SANTO-REG	3.586.748.672,00 €			29,83	1,57	83.690.831.872,00 €	0,52	0,12
BANCO DE SABADELL SA	5.827.355.648,00 €		-78,82	65,83	1,12	161.547.091.968,00 €	0,66	0,06
Average	**1.411.584.352,00**		**-9,40**	**5,48**	**2,47**	**70.020.261.888,00 €**	**0,57**	**-0,05**
Total comparable	**5.646.337.408,00 €**							
Multiples weighted average				**4,44**			**0,57**	

EPS 2012	DPS 2012	Assets growth 2012 (%)	Total Loans 2012	Loans/Deposits 2012 (%)	RWA 2012	NPL 2012	Tier 1 Capital Ratio 2012 (%)
0,22	0,00	3,74	28.128.630.784,00 €	115,32	24.511.838.208,00 €	891.900.032,00 €	14,90
-0,10	0,00	-4,00	66.861.236.224,00 €	135,37	53.270.999.040,00 €	4.175.000.064,00 €	11,70
0,23	0,60	1,45	745.986.981.888,00 €	119,05	557.029.982.208,00 €	36.100.001.792,00 €	11,17
1,80	0,00	4,27	54.094.020.608,00 €	154,77	65.044.000.768,00 €	1.634.328.064,00 €	10,20
0,15		-2,23	44.719.149.056,00 €	181,55	25.424.252.928,00 €	1.947.442.944,00 €	10,77
0,03	0,00	4,30	50.398.732.288,00 €	146,94	61.651.001.344,00 €	4.758.000.128,00 €	10,40
0,03	0,11	60,84	115.392.389.120,00 €	142,46	75.314.315.264,00 €	19.589.070.848,00 €	10,42
0,52	**0,00**	**0,45**	**48.450.759.168,00 €**	**146,75**	**42.062.772.736,00 €**	**2.162.167.776,00 €**	**11,89**

BPI	
Earnings	316
Equity book value	2061

Multiples	P/E	P/B
Min	2,94	0,46
Max	9,14	0,76

	M(€)	
Multiples	**P/E**	**P/B**
Min	930	951
Max	2892	1574

Valuation	1.405,91	1.167,21
#Shares	1.190,00	1.190,00
Value per share	**1,18 €**	**0,98 €**

Exhibit 10 – Economic data

Country	Subject Descriptor	2011	2012	2013F	2014F	2015F	2016F	2017F	2018F	Units
Portugal	Gross domestic product, constant prices	-1,55%	-3,17%	-2,32%	0,64%	1,54%	1,82%	1,82%	1,82%	%change
Portugal	Inflation, average consumer prices	3,56%	2,78%	0,70%	1,03%	1,54%	1,47%	1,53%	1,51%	%change
Portugal	Nominal Growth	1,95%	-0,48%	-1,64%	1,68%	3,10%	3,32%	3,37%	3,36%	%change
Average Inflation Predictions		1,85%								

Country	Subject Descriptor	2011	2012	2013F	2014F	2015F	2016F	2017F	2018F	Units
Angola	Gross domestic product, constant prices	3,92%	8,41%	6,18%	7,27%	7,02%	6,68%	2,77%	6,04%	%change
Angola	Inflation, average consumer prices	13,48%	10,28%	9,40%	8,43%	7,58%	7,18%	7,00%	7,00%	%change
Angola	Nominal Growth	17,93%	19,56%	16,16%	16,31%	15,13%	14,34%	9,96%	13,46%	%change
Average Inflation Predictions		9,39%								

Source:International Monetary Fund, World Economic Outlook Database, April 2013