

A Work Project, presented as part of the requirements for the Award of a Masters Degree from the Nova School of Business and Economics

BANCO INVEST'S INTERNACIONALIZATION Selecting Potential Markets

Field Lab – Business Project

A Project carried out on the Masters in Finance course, under the supervision of Ana Albuquerque

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Executive summary

The purpose of this business project is to advise Banco Invest with the internationalization strategy of its Private Customers segment, namely by determining the countries within the EU28 which have the most potential of success for the bank's entry. Thus, an internal analysis of Banco Invest is made, especially relative to its private customers segment, which the bank aims to replicate in another country mainly through the online channel. The bank has an integrated offer of savings, investment and trading products, complemented with advisory, discretionary management and credit services, all of them offered in online and offline channels. Throughout the report, we suggest and develop a methodology to evaluate the attractiveness of the candidate countries, reducing the list of potential countries as each phase is completed.

First, a macroeconomic analysis of the EU28 countries is carried out, with respect to key variables such as GDP growth, interest rates, household investment in financial assets, and internet and online banking usage in order to understand the current environment in which Banco Invest is seeking to expand.

Then, in order to engage in a 1st filtering of the candidate countries, an econometric model is proposed to assess the potential attractiveness of the banking sector of each of the EU28 countries. By building a General Attractiveness Score (GAS), which considers 4 different measures of each banking sector (potential, size, risk and efficiency), the purpose of the model is to determine a set of variables able to explain the movement of this variable in the past, in order to predict the GAS and rank countries according to their forecasted attractiveness. The chosen model is a panel regression, and the explanatory variables tested range from macroeconomic and consumer behaviour to political and regulator barriers. Concluding this stage, the countries considered are 13: the top 10 yielded by the econometric model and 3 other candidates from the group of 9 initially selected by Banco Invest, that were left out of the top 10 countries.

The 2nd stage of filtering consists in analysing factors more specific to Banco Invest's market segment, in spite of the broader view taken in the 1st stage. These include, among others, disposable income, financial literacy, internet penetration and cultural factors. In order to rank the countries, a multivariate analysis is used to compute a Specific Attractiveness Score (SAS), where the weights of each



factor are based on industry experts' opinions. Finally, the GAS and SAS scores of the 13 countries are combined to create a final ranking. The results from this combined ranking yield the top 5, validated by Banco Invest: Germany, France, Netherlands, Spain and Italy.

Finally, the 3rd stage consists in a thorough analysis of the top 5 countries, analysing in detail the demand potential in each of these countries and how this demand is currently being served by supply. Each country's demand is evaluated by assessing macroeconomic and consumers' financial behaviour, while existing supply faced a two-part analysis – first, an overview of each country's banking sector, namely by addressing structure, trends, risks and challenges and second, a detailed analysis of the existing offer of products, services, and distribution channels of three main segments common to all countries that would compete with Banco Invest (commercial banks, investment-focused banks and online brokers). Then, we perform a comparative analysis of all countries relative to these matters, and extrapolate the consequent opportunities and threats for Banco Invest in order to determine the countries with highest demand potential and poorest supply of products and services similar to Banco Invest's.

All considered, our analysis yields a final top 3 composed by France, Germany and Italy. Although these countries differ in terms of risk and positioning strategy, these are the countries that show the highest demand potential and where the bank would be able to compete more fiercely with local competitors, mostly due to its competitive pricing and integrated global offer of products and services. All in all, these countries show the best market characteristics and opportunities for Banco Invest to succeed according to our methodology.

Still, given the resources and scope of our project, in order to validate our results next steps are to be taken, such as analysing more specific market information, addressing taxation and regulation issues, and identifying the countries where the bank can fully leverage its Portuguese infrastructure in support of foreign operations. Once the target is chosen, Banco Invest should focus in addressing more specific aspects of its entry strategy, as well as other business model related issues in order to successfully approach the selected country.



The small size of the Portuguese market limits Banco Invest's growth perspectives, being its internationalization the right track to foster the bank's business volume

Goal of the Business Project

Major Challenge

The Portuguese market lacks both the size and opportunities to reach in the short-term the business volume established by the bank's vision and strategy.

Solution

Internationalization of Banco Invest through the application of the **same business model** and the **same offer of products and services** as in Portugal for private customers in other countries.

Methodology

Select the most attractive countries in Europe for the bank to begin its internationalization according to the it's characteristics and objectives, from a group of 9 potential target countries previously selected by Banco Invest: **Austria, Belgium, France, Germany, Greece, Ireland, Italy, Netherlands, and Spain.** Yet, throughout our study, the attractiveness of other countries belonging to the EU28 was also assessed in order to guarantee there were no better opportunities within the European Union.

Result

Analysis of the most attractive markets that leverage the bank's competitive advantages, in order to reach the most suitable to the bank's business model.



The identification of Banco Invest's internationalization targets relies on 8 macroactivities

Workplan for the identification of Banco Invest's internationalization targets

A Internal analysis of Banco Invest	D Data collection for the selected countries	G	Η
B European macroeconomic and banking analysis	E Development of a general screening model	In-depth analysis of the top 5 countries	Final Proposal Presentation
C Selection of Banco Invest's target segment attractiveness factors	F Market segment analysis based on experts' opinions		



Banco Invest positions itself as a second bank to the client, offering high value added financial solutions to its Private Customers

Strategy, vision, and evolution

Banco Invest positions itself as a **second bank to the client**, offering Private Customers **diversified and innovative savings and investment solutions** that traditional commercial banks are not able to offer. These solutions, available for **savings above €5,000**, are suitable to customers' investment amount, financial knowledge, risk profile and investment time frame. Banco Invest differentiates itself due to its fully integrated offer which is highly supported **by innovative online tools** (Invest Online and Invest Trader platform).

Savings	Investments	Trading	Advisory & Management	Credit
- Term deposits - Indexed deposits - Invest Money Box	- Investment Funds - PPR Retirement Fund - Gold - Financial ssets	- Invest Online - Invest Trader - Prime Brokerage	- Advisory Services - Discretionary Management	 Margin Accounts Loans with precious metals as collateral

% of on	line transactions	20%		> 50%	
	2011	2012	2013	2014	
	 Investment in technology, HR construction of 3 Investment to implement the stragy for th Private Customers segment Launch of the online trading private for the	and centres ne olatform		Clients are five times more active than in 2011 concerning the online management of their deposits	



Banco Invest offers several savings and investment applications, from term and indexed deposits to investment funds and several financial assets

Products and services offered in the Private Customers segment (1/2)

Savings

Term Deposits

Banco Invest offers six types of term deposits, with very competitive returns – in the range of 0.7% to 3% - and different time frames, from 3 months to 2 years: Invest Choice Novos Depósitos, Invest Next, Invest Depósito a Prazo, Super Depósito Invest Crescente, Invest Depósito 2 anos and Invest Depósito USD.

Indexed Deposits

With an indexed deposit the capital subscribed is guaranteed, while the interest it pays is indexed to a financial asset, which allows to have the safety of a deposit and also some of the upside of a financial asset, making it a safe way to diversify savings. **Banco Invest offers one Indexed Deposit every month, and it is one of its most competitive products.**

Investments

Invest Money Box

The **Invest Money Box encourages a saving habit,** by transferring a small amount of the client's regular income into this account, with the periodicity desired. The money can be removed at any time, **while always earning interest** (annualized interest of 1.50% before taxes).

Investment Funds

Banco Invest offers more than 900 investment funds, including two own funds and several others resulting from agreements with international management companies. To assist clients in their investment decision, the bank offers a structured fund selection tool according to the desired asset class, geographical market and level of risk. Clients can also find each fund's Morningstar rating, and the ranking of the most popular funds.

PPR Retirement Fund

The Alves Ribeiro PPR Fund is meant for conservative clients that are willing to take on some market risk. The main advantages of this fund include its global and diversified asset allocation strategy, its fiscal benefits and its positioning as the best in its category among national and international funds. In 2013 its annual return reached **19.9%**.

Gold

The bank offers the possibility to buy, sell, custody and withdraw gold – either gold bars or through ETF's that replicate the price of gold. The bank offers custody of gold bars, upon payment of a fee, and collects a brokerage fee upon transactions of gold.

Financial Assets

Banco Invest offers a set of investment possibilities in all asset classes (stocks, bonds, ETFs, Factor Cerficates, Futures) and in several geographical markets, which customers can trade in different platforms.



Clients can manage their applications in sophisticated platforms, as well as resort to advisory, discretionary management and specialized credit services

Products and services offered in the Private Customers Segment (2/2)

Trading

Invest Trader

In the **Invest Trader** platform clients can make **all sorts of transactions and have full control over their account**. The main advantages of this platform include its capacity for parameterization, the diversity of information displayed, and the ease to execute market orders.

Invest Online

Private Customers can access the **Invest Online** site through a desktop, tablet or smartphone **to make simple orders regarding their applications** and monitor their order book at any time.

Telephone & Investment Centres

Alternatively, clients **can contact by telephone** either their **personal account manager** or the **trading room** to execute orders. They can also visit the **Investment Centres** of Lisboa, Porto or Leiria, which have a trading area.

Prime Brokerage

In the **Prime Brokerage** segment, Banco Invest focuses on the **direct relationship of customers with traders**, dynamic investment advice, order management, among others. This service is directed at **very active and demanding clients** that require a more personalized counselling.

Advisory & Management

Advisory Services

For clients that wish greater intervention in the management of their savings, **Banco Invest offers investment and trading recommendations** from its asset management division.

Discretionary Management

Banco Invest offers **Discretionary Management** services, under which **it manages directly the client's savings**, for a certain fee. Given the investor's risk profile and the appropriate strategy, the bank monitors the markets and **manages the client's portfolio** in a perspective of its **appreciation and preservation**.

Credit

Margin Accounts

Margin Accounts are directed at clients who invest in the securities market. These accounts allow clients **to leverage their own funds** (up to five times their capital) under the pledge of their portfolios.

Loans with precious metals as collateral

Loan concession with precious metals as collateral is directed as **customers with a significant share of their savings invested in precious metals**, and that intend to resort to this reserve value to obtain funding.



Banco Invest captures new customers with the attractiveness of its products and retains them with the quality of its services

Interacting with customers

ATTRACTING NEW CUSTOMERS

Throughout time, investors become less risk-averse **and wish to diversify their savings** with more complex products:

Deposits Deposits The bank attracts new clients with a conservative profile by **offering competitive entry deposits** (e.g. *Invest Choice Novos Depósitos*). Structured Products with guaranteed capital Stocks Investment Funds ...

Banco Invest reaches **potential clients** through:

- **Advertising** usually directed at a specific product that is particularly attractive at the time.
- Media awareness reviews of the bank's products in newspapers.

INTERACTING WITH EXISTING CUSTOMERS



- ✓ Fully integrated offer of products and services, available through different platforms in a synchronized way and easily accessible, such that clients' interactions with the bank are always the same.
- ✓ More specialized, more flexible, with high qualified professionals in direct contact with clients.
- ✓ Relevant experience in asset management and brokerage services for highly demanding clients.



Banco Invest's target customer is a diversified investor open to the use of online tools to manage his savings and investments applications

Banco Invest's target customers

Target	 Banco Invest's target customer can be characterized by certain behaviors: Seeks to apply his savings and investments in a way traditional banking is not able to help. In this sense, the bank has a preference for those clients who seek to have a diversified portfolio, as this benefits both the client and the bank. Due to the strong online presence of Banco Invest, the target client must have the tendency to be proficient and confident in using online tools. In terms of revenues, clients who actively trade are interesting as they allow for more brokerage income (off-balance sheet revenues).
	 In terms of growth, the private customer segment has been increasing around 25% a year. The growth of the private customers portfolio was driven mainly by the bank's online platform. In comparative terms, nowadays private customers are 5x more active than in 2011 concerning the management of their deposits. Even though higher value transfers are still made offline, most of private customers' transfers are made online. The current application of private customers' savings is considerably diversified, as on average all products have the same penetration values.

The private customers' portfolio has been growing significantly in the past years and currently meets the bank's target characteristics.



Banco Invest has two main types of revenues: those arising from assets in the balance sheet and those arising from off-balance sheet assets

Revenue discrimination for private customers

Balance sheet

These revenues arise from assets the bank possesses in its own balance, such as credit concession to clients. The difference between the interest received from credit concession and paid on deposits composes the net interest income.

Savings	Credit	Investments	Advisory & Management	Trading
Banco Invest pays interest for term deposits, indexed deposits, and the Invest Money Box account. Indexed deposits include an interest that is invested, which is also charged to the bank.	Banco Invest receives interest from clients, which arise mainly from the credit conceded. The bank also charges a commission for the availability of the credit line.	The bank has two own funds, for which it charges a management and a selling fee. It also resells funds of other asset management companies, earning a brokerage management fee, which is split with the owning bank. As for gold, the bank earns transaction, custody and withdrawal fees.	Advisory services are provided for free, while for discretionary management services, the bank earns a fixed percentage of the invested capital, as well as a variable part, as a percentage of the gains.	As for financial assets, the bank earns commissions and brokerage fees with trading. The bank earns a minimal fee for providing clients with live feed of the financial markets.

Off-balance sheet

The bank does not own the assets from which these revenues accrue. These are essentially brokerage fees, which come from the trading activities carried out on behalf of the clients.



The bank aims at replicating the existing business model for Private Customers, while maintaining its mission and target

Goals and issues to address

Mission	• Implement its vision and mission abroad, as a bank where clients have their savings and investments.
Target	• The foreign target customer is the same as in Portugal – a private customer who seeks to have a diversified portfolio, actively trades, and is open to the use of online tools.
Business model	• Offer the same products and services as in the Portuguese Private Customers segment, leveraging a strong online presence, combined with an investment centre and a customer support line. The existing trading room in Portugal is expected to support the foreign operations, in which case economies of scale can be created. Still, additional staff is required in Portugal, fluent in the target country's language, to interact with international customers.
Challenges	 Banco Invest is a small and relatively unknown bank for Portuguese standards. Additionally, Portugal does not have an exceptionally strong banking tradition to which Banco Invest can attach itself to, leading to a potential initial mistrust for a small Portuguese bank operating abroad. It is necessary to understand whether all current online and offline channels are required to be implemented, and if they are, the customer has to perceive the same experience in all of them. In particular, physical presence is an issue to consider, as the bank can have investment centres, branches, both, or none, depending on how each target market is expected to respond. The demand for investment products in the target market should be suited for the bank's current offer, as it wishes to replicate the existing business model.
Timeframe	• The beginning of the internationalization is set to occur as soon as the bank feels comfortable with the research developed as well as with market conditions.



Even though some periphery economies continue to shrink, the Eurozone recession seems to be over and market conditions are favourable to Banco Invest

Macroeconomic Highlights

	Consumer behaviour	Major Implications for Banco Invest
>	The consumer confidence indicator increased steadily and has surpassed its long-term average, which indicates that consumers are more confident in the economy and willing to take on more risk.	Even though the increase in these two indicators is positive for Banco Invest, as it indicates that consumers are less
>	Over 2014, private consumption gained some strength as nominal disposable income increased, on the back of improved employment prospects and increased wages.	risk averse , an increase in consumption can also be negative for the bank since it might suggest that consumers' savings
	Interest Rates and Deflation	are reduced.
>	In an effort to keep the low inflation from disrupting Eurozone's fragile economy , the ECB surprised financial markets with cuts in interest rates throughout 2014 and announced an asset-backed securities program to fight deflation.	The low level of interest rates is benefic for Banco Invest, since it stimulates consumers to invest in
>	IHICP inflation levels are very low (below ECB's targets), since labor market conditions and commodity prices turned out weaker than expected. As so, the risk of deflation is imminent . However, given the gradually European recovery, the increase in confidence and the ongoing efforts to improve the health of the banking system, risks of deflation decrease .	Deflation discourages investment and expenditure, investment returns fall and there are less incentives for people to invest, thereby undermining the potential
	Fragile Growth	business volume of Banco Invest.
>	Potential growth is still not recovering , being low in most of the periphery countries, while real GDP growth will remain around 1% for the next few years, indicating that unemployment rates might remain high.	For Banco Invest, the fact that GDP growth levels remain at 1%, can be damaging in the sense that the bank's
>	The fiscal drag on growth is amplified in some Eurozone economies , intensifying credit crunch, as undercapitalized banks deleverage by selling assets and shrinking their loan portfolios.	return on its investment is reduced, as people's willingness to risk their savings in financial assets might decrease.



Savings rates in most candidate countries range from 0% to 10% of disposable income – France, Germany and Netherlands have the highest rates of the group

Household net savings rates* of EU9+1



Besides the 9 countries suggested by Banco Invest, in this analysis we decided to include Finland due to its high purchasing power, composing the EU9+1. Aditionally, Portugal is also included for benchmarking purposes.

- After 2009 the household savings rates of all countries experienced a downward trend. However, in the following years some countries were able to recover, namely, Netherlands, Spain, Italy, and Portugal.
- Overall, the 2013 savings rates vary mostly between 0% and 10%. France is the country that saves the most (9.5%), followed by Germany (9.1%), and Netherlands (7.8%). Of these countries, the Netherlands is the only country that experienced an increase of its savings rate since the financial crisis.
- On the other hand, Greece has been highly affected by the recent crisis and its **household savings rate** for the last 5 years **has been significantly negative.**
- Meanwhile, Finland, Portugal and Ireland also have among the lowest saving rates, namely, 0.8%, 1.4%, and 2.7%, respectively.

*Net saving rates are measured after deducting consumption of fixed capital (depreciation)

Source: OECD, Knoema



The European household investment behaviour differs among countries – even though there is some diversification, deposits still take a large share of savings

Household savings distribution among different financial assets



The countries that allocate the most of their investment in shares, other securities, pension funds and mutual Funds are the Netherlands, Italy and Finland, dedicating over 50% of their savings to this kind of financial products.

Greece has the highest percentage of household savings invested in **deposits**, but this value has been decreasing due to the recovery of confidence in the Greek economy.

Mutual funds are preferred in Belgium, Austria and Germany, while Italy is the country with the highest percentage of savings invested in other securities, namely 18.7%, with the average across countries being 5.9%.

Finland has the highest percentage of financial assets in shares and other equity, 33% on average. Still, this value has been decreasing due to the downturn of the Finnish stock market, with the same scenario occurring in Portugal.

Ireland and the Netherlands are the countries where pension funds are significantly more popular, scoring 24.1% and 51.2%, respectively, against a 12% average across countries

A higher investment rate in financial assets other than deposits implicates that these countries are **more likely to be accustomed to riskier investments**, which means that the bank will not face the issue of educating the market. On the other hand **it might indicate a fiercer competition** in a more mature market.



Online banking usage has grown significantly in the EU9+1, currently reaching a penetration rate of 40% - Finland and the Netherlands experience the largest rates

Online Banking in Banco Invest's 9 target countries



Internet usage vs Online banking in EU9+1



Individuals regularly using the Internet

For the **EU9+1** group, on average, the percentage of **regular internet users is 72%** and **online banking usage is about 40%**.

Finland and the Netherlands are the countries where **internet and online banking usage has spread the most**. Meanwhile, Greece falls significantly behind in online banking, although its internet usage is roughly the same as Italy or Portugal.

One in four Portuguese uses regurlarly the internet for online banking. As a small country, the growth opportunities for Banco Invest are limited, since online banking usage in Portugal is not widely spread.

All countries increased their online banking activity, with Ireland, Austria and France with an average growth of 15% since 2009.

On average, **32%** of Europeans in the EU9+1 are **confident in using online banking**, while the **main concerns** include **misuse of personal data** and **security issues**.

Countries like Greece, Spain and Italy, where there is a large discrepancy between internet usage and online banking, present a potential opportunity for Banco Invest, as the trend for online banking is to follow the internet usage.

However, **Banco Invest may face issues** relative to **lack of penetration of online banking**, such as inexperience in using internet for this activity or mistrust in changing sensible information.



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industry analysts.



The country selection process is divided in 3 stages, starting from a broad and quantitative approach, to a more detailed analysis of the most attractive countries

Country analysis stages

	· · · · · · · · · · · · · · · · · · ·				
	1 st Stage General screening model		2 nd Stage Market segment analysis		3 rd Stage In-depth analysis of Top 5 countries
•	Goal In this stage we get a broad perspective of the banking industry potential in each country , without focusing particularly in Banco Invest's market niche.	•	Goal Assess the target countries' attractiveness considering information more focused on the market niche of Banco Invest , including more specific and qualitative variables than in the 1 st stage, and thus complementing the broad view of	•	Goal Analyse in detail the supply and demand in the banking sector of the top 5 countries, as to determine which are the 3 most attractive countries for Banco Invest to enter.
	Countries considered EU 28 member countries.		the banking sector taken before.	►	Countries considered
	Methodology		Countries considered Top 10 countries from the 1 st stage ranking		stages.
	We develop an econometric model that tests the ability of a set of explanatory factors to capture the future attractiveness of our target markets. As so, we construct an attractiveness score for each country that reflects the size, potential, risk		plus those in worse positions but that belong to the group of 9 pre-selected countries by Banco Invest.	•	Methodology Analyse macroeconomic and consumer behaviour to assess demand potential, consulting EU databases and other sources.
and efficiency of its banking sector and as the dependent variable of our regression then test the ability of independent variable	and efficiency of its banking sector and use it as the dependent variable of our regression. We then test the ability of independent variables		determine the relative importance of each of the new variables to be included in this analysis.		Understand the banking sector in each country, namely structure, performance, and main risks,
related to the performance of the banking industry to explain the attractiveness score of the EU28 countries. Finally, we obtain a model that allows us to predict the attractiveness of a country in a certain			Through their weighted average, we construct a specific attractiveness score for each country and rank them. Then, for a more complete outlook we construct a combined score, that takes into		through a research in national central banks' websites and consultancy firms industry reports.
	year, based on data of the explanatory variables relative to the previous year.		account both rankings from the 1 st and 2 nd stages.		existing players, by a thorough analysis of each bank's website and by telephone contact, in the
	Results		Results		perspective of a potential client.
	2015 Ranking of the EU28 banking sectors attractiveness , based on 2014 data estimated by		From this analysis we are able to select the top 5 most attractive countries to be considered in a		Results

more detailed analysis in the following stage.

Top 3 most attractive countries.



In order to build the countries' general screening model for the 1st stage, 4 approaches were analysed, being the panel model considered the most appropriate

Models considered for the 1st stage

Data Envelopment Analysis (DEA)	Multivariate Analysis (Composite Indicators)
 DEA is used for benchmarking, where a set of measures is selected to benchmark the performance and efficiency of countries. In our specific case, DEA would allow us to estimate a country's efficiency at generating returns relative to others, but would not allow us to analyse other measures of attractiveness, such as size, risk or potential. 	 It is used to compare and rank country performance, using the so-called composite indicators (CIs) which aggregate several attractiveness factors, and are then subjectively weighted to compute country scores. The latter are used to rank countries in terms of attractiveness.
Error Estimation	Panel Regression



In order to predict the future attractiveness of each market, we developed an econometric model that assesses the explanatory power of a set of selected factors

Econometric panel model

In order to predict the future attractiveness of the potential target countries, an econometric model was developed where we sought to evaluate the ability of a set of explanatory factors to explain the future attractiveness of our potential target markets, through the general attractiveness score (GAS). As such, we **ran a regression** lagged by 1 year **with data from 2008 to 2013 of the 28 European Union member countries**. In order to obtain more relevant results, we opted to use a panel model which allows us to run a single regression that takes into account all our data, thus increasing the total number of observations to be used. Our model equation goes as following:

$$GAS_{i,t} = \alpha + \beta_1 x_{1_{i,t-1}} + \ldots + \beta_n x_{n_{i,t-1}} + u_t$$

Dependent variable GAS_{i,t}: General attractiveness score built for each country from 2009 to 2013, that takes into account 4 crucial dimensions to assess the attractiveness of a particular country's banking sector in a certain point of time: potential, size, risk, and efficiency. **Independent variables** $\mathbf{x}_{ki,t-1}$: Selection of a set of explanatory factors that might explain and predict the general attractiveness of a particular market in a certain point of time.



The dependent variable is the attractiveness of each potential market at time *t*, which is constructed by addressing four dimensions: potential, size, risk and efficiency

Dependent variable: General Attractiveness Score (GAS)

The **attractiveness score** of a country describes the general attractiveness of its banking sector at a certain moment in time, using **4 dimensions: potential, size, risk and efficiency**. The proxies used to represent these dimensions for each country correspond to the average of the proxies' value for the 3 largest banks in terms of assets of the respective country. The GAS of country *i* at time *t* was computed as follows. Note that each variable was normalized in order to have the same scale, and they all take values in the range [0, 1].



Α	Potential	В	Size	C Risk		D	Efficiency
The we the the rev pe the	the proxy selected was the eight of net commissions relative net revenues. Commissions are e least volatile cash flows of ose which compose net venues. Thus, the bank erceives this as a proxy for otential, as the bigger its weight, e less volatile revenues will be.	Ne the sui big rev	t operating revenues evaluate cash flows which arise from operating activities. It is a table proxy for size, since ger markets have greater enues.	The yield of sovereign bonds translates the risk of the country entering in default, which can b perceived as a proxy for the risk doing business in a certain country. The yields were collect for every country with a maturity 10 years.	of ed of	The the orc effi cos rati net rep gen am	e more efficient the market is, e more profitable it should be. In der to assess a market's ciency, we analysed its average st-to-income ratio, which is the io of operational expenses over t operational revenues. It presents the efficiency of nerating revenues with the least nount of costs, and the lower it the better



The independent variables were chosen based on relevance and quantitative measurability

Variables chosen for significance testing in the model

As mentioned previously, the aim of the model is to **assess the explanatory power of a group of factors to predict the future GAS of potential markets**. Based on their measurability and relevance, the following variables were selected to be tested in regard to their power to explain future attractiveness. Data was collected yearly for the EU28 countries from 2008 to 2012.

Independent variables tested





STATA was used to run the panel regression – the construction of a database that combines the dependent and explanatory variables was the first step

Methodology

In order to regress our model, STATA program was used, as it allows to run **panel regressions**, which combines both the cross-section and time series approaches and allows individual observations to be followed across time.

A Database construction

The first step taken in order to find our final model was the construction of a database that could be used by STATA to regress a panel regression. This database combines the annual GAS from 2009 to 2013 of the 28 EU member countries (Y variable) with the annual value of each of our potential explanatory factors (X variables) from 2008 to 2012 of the same countries. The 1 year time difference between the Y and X variables is explained by the 1-year lag we used in our model, in order to assess the power of a certain year X variable to explain next year's GAS (Y variable). Additionally, it must also be noted that we normalized all the X variables for each year, in order to obtain β coefficients that are comparable between them, using the following formula. As such, all of our X variables are in the same scale and take values within the interval [0, 1].

Normalized
$$x_{i,t} = \frac{x_{i,t} - \min(x_{1,t}, \dots, x_{n,t})}{\max(x_{1,t}, \dots, x_{n,t}) - \min(x_{1,t}, \dots, x_{n,t})}$$



Both fixed and time effects, which seek to account for individual and time heterogeneity, were found to be not significant and were not included in the model

Methodology

In order to regress our model, STATA program was used, as it allows to run **panel regressions**, which combines both the cross-section and time series approaches and allows individual observations to be followed across time.

B Testing for fixed effects

The first step was to run tests for **fixed effects**, which are **effects due to individual heterogeneity among countries that are fixed throughout time**. These are usually correlated with other regressors, and not taking them into account may lead to omitted variable bias. In order to test for these effects one can use the **Hausman Test** for endogeneity in STATA, which tests for correlation between the error term and the regressors. As shown by the output of the test, which can be found in appendix 4.1, **our model does not require the use of fixed effects**, as the p-value of the test is higher than 10%, and as such **we opted to use pure random effects**.

C Testing for time effects

Similarly to fixed effects which account for heterogeneity within countries, one can test for specific **time effects**, which are effects due to the heterogeneity within each year analysed. These can be accounted for using time dummies, and in order to assess whether they are relevant or not one must include them as regressors in the panel regression and test for the significance of their coefficients. As shown by the output of our panel regression in the appendix 4.2, **the time dummies were not significant and therefore were not included in the model.**



Autocorrelation and heteroscedasticity in the data must be corrected, as both can lead to wrong inferences about the explanatory power of independent variables

Methodology

In order to regress our model, STATA program was used, as it allows to run **panel regressions**, which combines both the cross-section and time series approaches and allows individual observations to be followed across time.

D Controlling for autocorrelation and heteroscedasticity

Heteroscedasticity arises when the errors u_t of a model do not have a constant variance, which is usually the case for cross-section data. On the other hand, autocorrelation occurs when the covariance between error terms is not 0, which is usually the case for time-series data. Both conditions should not be ignored since they cause OLS estimators to be inefficient and standard errors to be possibly inappropriate, thus leading to wrong inferences. In order to correct for both of these problems we opted to engage in a robust estimation in STATA, where we correct the standard errors for fairly arbitrary forms of serial correlation and heteroscedasticity.

E Selecting significant explanatory variables

The final step in order to have our model defined was to find which independent variables were significantly able to accurately predict the future GAS (i.e. the dependent variable) of a particular market. As such, we ran our regression several times in STATA, starting with all the independent variables included, and sequentially excluding those that were the least significant (i.e. higher p-value). This procedure was repeated until we ran a regression for which all explanatory variables were statistically significant at a 10% significance level (i.e., p-value < 0.1).



Real GDP growth, gross savings, investment in financial assets, and inflation are the variables that significantly explain the future attractiveness of a country

Results and interpretation

Results and final model

By applying the previous step, we determined that **4 variables had a significant explanatory power** over our independent variable. These are: **real GDP growth** (*gdpg*), gross savings in % of GDP (*gsavings*), investment in financial assets (*invfa*), and inflation (*inf*). For the final regression, which can be found in the appendix 4.3, we obtained a **R**² of 0.663, which indicates that 66.3% of the movement of our future attractiveness score is explained by changes in the independent variables. Ultimately, the final model was as following. Note that even though this analysis excluded several explanatory factors, these will be accounted for in a further analysis.

$$AS_{i,t} = 0.637 + 0.121x_{gdpg_{i,t-1}} + 0.176x_{gsavings_{i,t-1}} + 0.976x_{invfa_{i,t-1}} - 0.154x_{inf_{i,t-1}}$$

Concerning the results for the coefficients, it is important to note their consistency with what would be expected: **the future attractiveness of a certain country increases with** *gdpg*, *gsavings*, and *invfa*, while it decreases for higher inflation rates. Besides this, while *gdpg*, *gsavings*, and *inf* have similar betas (irrespective of the sign) and thus similar relative weight, our model attributes around 4 times more importance to a country's investment in financial assets to predict its future attractiveness. Finally, the standard errors of our estimates are significantly low (all < 10%), which highlights the precision of our model.



Using our panel model and 2013 data to predict attractiveness in 2014, Germany, the UK and France are the countries that score the highest in this year

2014 ranking: using data from 2013 to predict attractiveness in 2014

Using data from 2013 for the 4 statistically significant independent variables, through our model we were able to compute the **2014 GAS** for the 28 countries under analysis. The results can be found in the following graph.



Germany is the country that scores the highest in terms of attractiveness, **followed by the United Kingdom and France**. These countries experienced in 2013 positive values for all the 4 independent variables, which explains their strong positions. It must be noted that the **investment in financial assets values has a strong weight in determining the attractiveness of a country** when compared to the other variables, and thus not surprisingly the top 4 countries in our attractiveness ranking have remarkably high values for this variable. As for Portugal, the country ranks in 19th mainly due to low levels of gross savings and real GDP growth for 2013, leading to the conclusion that this is not a very attractive country according to our model.



ARIMA models were developed to predict the 2014 values of our model inputs – Germany, the UK, and France rank as the most attractive in 2015

2015 Ranking: using predictions for 2014 based in ARIMA model

The 2015 ranking uses explanatory variables from the year 2014. As these are not yet available, one of the methods used to find these values was **using an estimation from an ARIMA model**, using one lag. A different model was calculated for each country and each explanatory variable, which means that they are independent across countries and across variables. A broader sample than the one used to compute the model relating these with the GAS variable was used to estimate the predictions for 2014 variables: 16 observations for each variable, quarterly since 2009 for real GDP growth, and yearly since 1998 for the remaining 3 variables. Then, after computing the predictions for the 2014 explanatory variables, these were used for predicting the attractiveness score for 2015 using the coefficients estimated from the panel model, which yielded the following ranking. It must be noted the consistency of our model, which delivered a **2015 top 5 with the same countries and relevant positions as for 2014.**





2014 analysts predictions, which increase the accuracy of our inputs, were used to predict the GAS 2015 – Germany, the UK, and France remain the most attractive

2015 Ranking: using predictions for 2014 based in analysts' estimates

The 2015 ranking uses explanatory variables from the year 2014. As these are not yet available, the other method used to find these values was using analysts predictions for the uncertain variables. This method, compared to the ARIMA model has the **advantage of referring to reliable sources, and it is a more accurate value**, since a detailed prediction of macroeconomic variables is out of the scope of this project, whereas our sources dedicated many resources into it. This model uses the same coefficients as the 2014 ranking and the ARIMA estimation, the difference in the rankings is explained by the different inputs of explanatory variables, and the result is presented below. The top 5 remains occupied by **Germany, UK, France, Italy and the Netherlands**, mainly due to the great weight of investment in financial assets in our model and these countries' attractiveness regarding this factor.



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Model consistency is reflected in the maintenance of the top 5 countries, which are: Germany, the UK, France, Italy and the Netherlands

Comparison between the 3 rankings

In the following tables, you can find the **rankings of the top 10 countries** and the countries included in our initial pool of 9 potential countries that were not in the top 10. The consistency of our results must be noted, since the top 5 remains constant in the 3 rankings.

	Ranking 2014	Rank	ing 2015 - ARIMA	15 - ARIMA Ranking 2015 - Anal		
Ranking	Country	Ranking	Country	Ranking	Country	
1	Germany	1	Germany	1	Germany	
2	United Kingdom	2	United Kingdom	2	United Kingdom	
3	France	3	France	3	France	
4	Italy	4	Italy	4	Italy	
5	Netherlands	5	Netherlands	5	Netherlands	
6	Sweden	6	Spain	6	Spain	
7	Spain	7	Sweden	7	Sweden	
8	Belgium	8	Belgium	8	Belgium	
9	Denmark	9	Denmark	9	Denmark	
10	Latvia	10	Austria	10	Bulgaria	
11	Austria	11	Latvia	14	Portugal	
19	Portugal	12	Ireland	18	Austria	
22	Ireland	18	Portugal	19	Ireland	
23	Greece	26	Greece	27	Greece	



The 2nd stage consists in a market segment analysis of the top countries, which considers more specific criteria to measure the attractiveness of each country

Market segment analysis of targets' attractiveness

Main Goal

To complement the results obtained from the econometric model developed in the 1st stage, we conducted a more detailed analysis of the most attractive countries considering specific variables that we consider determinant to assess countries' specific attractiveness for Banco Invest, in order to:

- Assess the consistency of the econometric model, i.e. ensuring that the good performers from the first analysis are still well positioned in the (i) new ranking;
- Select the top 5 countries to focus on the in-depth analysis of the 3rd stage. (ii)



See Appendix 3.5 and 5



Financial literacy is considered the most relevant factor by the professionals inquired to determine the specific attractiveness of a country

Determination of weights

Unlike the previous model in which we estimated the weights to assign to each variable, **this model required a subjective approach** in order to compute country scores. Thus, several **experts** of the sector were inquired to answer a survey where they were asked to **rank the variables considered in this analysis according to their importance**, from the most [1] to the least important [9]. The weights attributed to each variable in the model reflect this importance. In the case of the cultural factors variable, it was composed by 4 subcomponents that were also asked to be ranked. Then, by applying the weights of the latter, a final score was obtained for the cultural factors variable for each country, which was later used to compute country scores.

	Average score	10-x	Weight
Average income by age (25-54 years, PPS, €)	4	6	13%
Financial Literacy/Higher education(in thousands)	1.8	8.2	18%
Financial Market Development (ranking)	4.4	5.6	12%
Openess to foreign banks (% total assets)	5	5	11%
Foreign Direct Investment flows (in millions, US\$)	8.6	1.4	3%
Number of Portuguese immigrants	5.8	4.2	9%
Internet Usage (%)	2.8	7.2	16%
Geographic distance (km)	6.6	3.4	8%
Cultural Factors (taken as a whole)	6	4	9%
	45	45	100%

	Average score	5-x	Weight
Cultural cluster (ranking)	2.4	2.6	26%
Citizens able to speak a second language (%)	3	2	20%
Foreign population (% total)	3.6	1.4	14%
Hofstede uncertainty avoidance (ranking)	1	4	40%
Tota	l 10	10	100%

Total

With a total of 5 answers the results came as presented:

According to the survey, **Financial Literacy/Higher Education** is the most valued factor placing on average [1,8], followed by the **Internet Usage** [2,8] and **Average Income by age** [4]. These 3 factors explain 47% of the final result of this model.

Regarding **Cultural Factors** and its components, the variable used to measure general risk aversion, *Hofstede uncertainity avoidance*, is considered remarkably important, representing 40% of the total value for Cultural Factors. However, Cultural Factors contribute only with 9% to the model.



The weights of the inquiries' replies were used to compute a Specific Attractiveness Score (SAS) for the top countries, in order to obtain a finer and consistent ranking

Multivariate analysis and Specific Attractiveness Score (SAS)

vields

The **multivariate analysis** uses the weights obtained subjectively on the inquiries' replies and combines it with the variables they refer to, to compute the Specific Attractiveness Score (SAS), which takes into account more specific data related to the bank's market niche.

SAS = weight1 x variable1 + ... + weightcultural x variablecultural

Variables Treatment

The data collected for the inputs was the more recent one available (i.e. 2013). The variables were normalized in order for them to become comparable between each other.

Cultural Variable

A cultural variable was created, based on the weights given by the experts to the subgroup of cultural aspects. This would then enter the main equation as a new variable.

		Rank	Country	SAS				
		1	UK	1.00				
		2	France	0.99				
		3	Germany	0.87				
Sum of		4	Netherlands	0.74				
weighted		5	Belgium	0.71				
variables			6	Spain	0.68			
violds the		7	Ireland	0.65				
				8	Sweden	0.64		
5A5		9	Denmark	0.62				
ranking						10	Austria	0.60
			11	Portugal	0.37			
		12	Italy	0.37				
		13	Bulgaria	0.16				
		14	Greece	0.00				
		14	Greece	0.00				

- With this approach, It is possible to reach a ranking more specific to Banco Invest segment, and point out some differences in comparison with the previous model.
- Looking at the top 10 countries, there were not significant changes except for Bulgaria that was downgraded, Ireland that stepped in gaining the 7th position and finally **Italy that surprisingly** suffered the biggest change, mainly due to low internet penetration.
- Regarding the remaining countries, there were slight changes in their relative positions even though the top 3 comprises the same 3 countries.



The combined ranking of the GAS and SAS yielded a top 5 ranking containing UK, Germany, France, Netherlands and Spain

Combined ranking results

The specific attractiveness score ranking does not take into account the results of the econometric model, which should be included in order to take into account both perspectives. Therefore, both were aggregated in order to create a **combined** ranking model.

Methodology

The econometric model was developed for the EU28 countries. However, the multivariate model was made only for the 14 countries indicated by the 1st stage as the most attractive. Therefore, the ranking obtained by the econometric model was adjusted for this factor, namely by normalizing the GAS scores only considering that group of 14 countries. By attributing a 50% weight to each of the scores, i.e. GAS and SAS, we were able to combine both and to deliver a final ranking considering both of them.

Results

The combined ranking indicates the UK, Germany, France, Netherlands, and Spain as the top 5 most attractive countries for Banco Invest to enter. In particular, it must be noted the downgrade of Italy in the overall combined ranking, due to its low position in the SAS ranking.

Combined Ranking					
Ranking	Country	GAS Analysts	SAS		
1	UK	0.92	1.00		
2	Germany	1.00	0.87		
3	France	0.85	0.99		
4	Netherlands	0.69	0.74		
5	Spain	0.62	0.68		
$ \begin{array}{c} 1,00\\ 0,80\\ 0,60\\ 0,40\\ 0,20\\ 0,20\\ 0,00$					

GAS Analysts - 50% SAS - 50%



Sensitivity analysis reveals that our combined ranking is robust to changes in weights of the GAS and SAS – top 3 countries are the same for different scenarios

Combined ranking results

The sensitivity analysis of the combined ranking to the weights given to the GAS and SAS scores shows the robustness of our model, since **the top 3 countries are the same for the all the cases**, which indicates that most countries that scored high in terms of general attractiveness also did so in terms of specific segment attractiveness for Banco Invest.

GAS 75% - SAS 25%		GAS	50% - SAS 50%	0% - SAS 50% GAS 25% - SAS	
Ranking	Country	Ranking	Country	Ranking	Country
1	United Kingdom	1	United Kingdom	1	United Kingdom
2	Germany	2	Germany	2	France
3	France	3	France	3	Germany
4	Italy	4	Netherlands	4	Netherlands
5	Netherlands	5	Spain	5	Spain
6	Spain	6	Italy	6	Belgium
7	Sweden	7	Belgium	7	Sweden
8	Belgium	8	Sweden	8	Denmark
9	Denmark	9	Denmark	9	Ireland
10	Ireland	10	Ireland	10	Austria
11	Austria	11	Austria	14	Italy
19	Portugal	12	Portugal	18	Portugal
22	Bulgaria	18	Bulgaria	19	Bulgaria
23	Greece	26	Greece	27	Greece



Due to the sophisticated and highly competitive financial sector, the UK was excluded from the top 5, giving place to Italy

Top 5 countries

Scenario Selection

Considering all the scenarios presented before, the scenario that attributes equal weights to General and Specific Attractiveness Scores was considered the most appropriate since:

- The analysis is not biased towards one of the models;
- · Banco Invest's executive board considered this scenario as the most appropriate.

According our selection model and after considering all the scenarios, the United Kingdom came up as the most attractive country for Banco Invest to start its internationalization strategy.

Nevertheless, after presenting these results to the bank's executive board, it was discussed that the **United Kingdom would not be included in the top 5 countries to be further analysed due to:**

- Its fierce and concentrated competitive environment in this sector;
- · Its sophisticated products and services offering;
- Higher initial investment and establishment cost.

Hence, Banco Invest would not bring any innovation into this market, would not be able to compete with the existing players and would face a high initial investment and operating costs, making this country a risky option.

 Ranking	Country
1	United Kingdom
2	Germany
3	France
4	Netherlands
5	Spain
6	Italy

GAS 50% - SAS 50%

- After dismissing the United Kingdom of the analysis, a new top 5 was formed including Italy that, in this scenario (50%-50%), was the country in the 6th position.
- For the 3rd stage, these 5 countries will be analysed in more detail in order to assess their attractiveness in terms of the alignment of demand and supply for investment products and services in each country.


In the 3rd stage of the project, we analysed the demand and supply in each of the top 5 countries in order to identify opportunities for Banco Invest

3rd stage – In-depth analysis of top 5 countries – Methodology

In the 3rd stage of our project, we sought to assess the demand and the supply in each country's private customers segment in order to identify whether there is demand for the products offered by Banco Invest and to analyse how this demand is being served by the existing supply.

1. Analysis of Demand

In order to characterize demand in each of the top 5 countries, we analysed macroeconomic and consumer behaviour factors that were considered to influence demand in the first stages of our project.

Macroeconomic behaviour

We analysed for each country macroeconomic factors that broadly characterize current and future demand, i.e.: **GDP per capita, GDP growth, population and income per age group.**

Consumer behaviour

We also assessed specific factors of consumer behaviour that drive demand in the private customer segment, and particularly in the online banking niche, i.e.: household savings rate, investment in financial assets, distribution between financial assets, internet penetration, and online banking usage.

2. Analysis of Supply

In order to characterize supply in the top 5 countries, we first sought to describe each country's banking sector to analyse in detail the potential competitors' offer.

Banking sector overview

At this stage, we sought to assess the recent trends and changes of the banking sector of each country, as well as recent performance and other issues which might influence the behaviour of the banking sector (e.g. political, social).

Detailed competition analysis

In this part, we analysed in detail the competition offered by Banco Invest's potential competitors in each country. In all markets, the competition was segmented in 3 clusters:

- Commercial banks: global offer of products and services, including deposits, loans and basic investment products;
- Investment-focused banks: offer focused on investment products and some savings solutions;
- Online brokers: specialized on online trading of financial assets.

Within each cluster, we identified 10 representative banks by a thorough research, and did a checklist of the products and services offered for all of them. The goal was to get an overview of each market segment and, additionally, to identify the 3 or 4 banks that were more sophisticated and disclosed more information to be analysed in more detail. Hence, for each of the latter, we exhaustively analysed the **products and services** offered (including **pricing**), as well as **distribution channels**. The information was collected from the banks' websites and by contacting them directly by telephone.

3. Comparative Analysis of the 5 countries

With all the information gathered, we developed a comparative analysis of the 5 countries in the context of opportunities and threats in Banco Invest's internationalization, which allowed us to assess which ones would be the better markets for the bank to target.



Although German households prefer conservative investments, their high savings rates and disposable income represent a good opportunity for Banco Invest

Germany: Analysis of demand

GERMANY

80 million

MACROECONOMIC BEHAVIOUR

GDP per capita: **€33.3 k** GDP growth 3Q 2014: **1.2%** Average income for 25-54 age group per year: **€23.5 k**

While economic development during the fiscal year was still strongly influenced by the consequences of the euro crisis, the **German economy prospered,** showing **GDP growth of 1.2%** this year and forecasted GDP growth of 1.7% in 2015.

Regarding **savings rates**, they **represent 9.1% of disposable income** and around **€5 trillion are invested in financial assets**, representing 184% of GDP. Having that into consideration, this amount is composed mainly by deposits (40%), life insurance and pension funds (35%) which indicates that in terms of riskier investment products, German households invest, on average, 23% of their savings in shares, other securities and mutual funds. Although a large share of financial investments is dedicated to deposits and long-term products, **German households show some propensity to invest in riskier assets**.

Furthermore, with respect to **online behaviour**, Germany has been improving every year since **internet penetration** already represents **80% of the population**, however, in terms of online banking usage (47%) it is still low compared to other developed countries.

CONSUMER BEHAVIOUR

Consumer habits

Household savings rate (in % of disposable income): **9.1%** Investment in financial assets: **€5.1 trillion** Investment in financial assets (in % of GDP): **184.15%**



Distribution of household investment in financial assets

Online behaviour

Internet penetration 2013 (in % of population): **80%** Online banking usage 2013 (in % of population): **47%**



The German banking sector is quite fragmented and despite the Euro crisis impact, it remains one of the largest in Europe, as confidence and performance improve

Germany: Banking sector overview

STRUCTURE



Germany's banking sector is constituted by 3 main groups:

- 1) Private commercial banks (universal banks);
- 2) Savings banks (public banks that focus on savings deposits and paying interest on those deposits);
- **3)** Cooperative banks (owned by their members, who are at the same time the owners and customers of their bank).
- In addition, there are several **specialized institutions** like mortgage banks, business development banks, building and loan associations, financial services institutions and securities trading banks.
- Regarding overall **market concentration**, the German market is characterized as a more fragmented one, including strong savings and cooperative banking sectors.

CONSUMER CONFIDENCE IN THE BANKING SECTOR

- The evolution of consumer confidence in the banking sector in Germany had a rising trend in the past years, which is in line with the positive expectations regarding the domestic economy.
- However, when comparing with the other sectors, this is the **sector consumers trust the least**..



RECENT PERFORMANCE AND TRENDS

• Interest rate reductions undertaken by the ECB affected negatively both banks' profitability and savers which were dissatisfied with low yields on their savings accounts. As a consequence, investors were pushed towards riskier assets.



- Even with the impacts of the European financial crisis, Germany remains as one of the largest banking sectors in Europe, with a total asset values of €6.7 trillion. **Net interest income** reached €86.4 billion, while **net commissions** amounted to €20 billion.
- In terms of **investors' activity**, although volume of transactions on **equity markets** remained at €1 trillion, there was an **increase on investment funds demand in 2014**, which increased its net sales by 10% (to €123 billion).

MAIN RISKS AND CHALLENGES

- Whereas banks were found to be robust against the majority of shocks derived from the crisis, some challenges remain such as balance sheet weakness and lower profitability, which leads to difficulty on building strong capital buffers.
- In addition, the **new regulatory rules** are based on the assumption that higher capital requirements will **increase operating costs**, **restrict lending** and, as a consequence, **inhibit banking sector growth**.



Although it lacks CFDs, Banco Invest's offering is more complete than that of German clusters, which is poor in terms of advisory and discretionary management

Germany: Clusters comparison (1/2)

				Product	S				Sei	Distribution Channels					
Clusters	lnv. Funds	Indexed Deposits	Stocks & ETFs	Bonds	Futures	CFDs	Markets	Margin Account	Advisory	Discretionary Management	Research	Trading Platform	Online Trading	Mobile/ Tablet	Layout/ Use
BANCO 🔀						\bigcirc									5
Commercial Banks								\bigcirc				\bigcirc			4
Investment Banks		\bigcirc													4
Online Brokers		\bigcirc			\bigcirc					\bigcirc					4

In this anlysis, each cluster was assigned a classification under the form of a circle depending on the number of banks in that cluster offering each type of product, service or distribution channel, in the sample analysed. The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle denotes that no bank offers it. Regarding Layout/Use, a classification in the range 1 - 5 was assigned to each cluster, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least. Apart from the 3 or 4 banks analysed in detail, the 10 banks identified in each cluster were also taken into consideration when attributing the circles classification.

Commercial Banks	Investment-focused Banks	Online Brokers			
• Commercial Banks have a more traditional offer , focusing on current accounts, savings plans and loans, offering the basic investment products.	• This kind of banks has a more diversified offer of investment products, since they also offer futures, warrants, certificates, CFDs, FX, and also	• Online brokers' product range is similar to investment-focused banks, although it tends to be less diversified, being focused on a specific			
• Also, they offer more personalized services, like advisory since their customers tend to be more risk	Regarding services, in Germany advisory and	 In addition, they offer a great diversity of 			
 averse and have less financial awareness. Concerning channels, most do not offer specialized 	discretionary management are not very common, since target customers are informed investors	markets and the possibility to leverage clients' portfolios is also common in this segment.			
trading platforms tailored to active traders, although	that take their own investment decisions.	Moreover, they provide technical charts and			
buy/sell investment products.	more common and developed.	with high-tech developed trading platforms.			
	See Appendixes 8.1 – 8.3	January 2015 Banco Invest Business Project			



Among all clusters, German investment-focused banks pratice the lowest prices, although Banco Invest has the most competitive ones

Germany: Clusters comparison (2/2)



Pricing, Fees and Procedures

	BANCO 🗡	Commercial Banks	Investment Banks	Online Brokers
Minimum Investment	5.000 €	0€	0€	0 €
Maintenance Fee (p.a.)	0€	0-0.1%	0€	0 – 35 €
Custody	0€	0-20€/0-4%	0 – 23€ / 0.1%	0€
Account Opening Online	Yes	•		
Inv. Centres	Yes	•		\bigcirc

- Even though prices vary from bank to bank, it is possible to see that the cluster of **investment-focused banks practices the most competitive prices.**
- Commercial banks and online brokers charge the highest prices.
- Concerning Banco Invest, there are some noteworthy differences both in domestic and European markets, in particular in the European ones, where **Banco Invest is able to practice much lower prices.**

- Whereas in commercial banks clients might pay maintenance and custody fees, in investment-focused banks and online brokers those costs are not so common.
- Concerning account procedures, almost every bank allows to open an account online and does not require a minimum investment amount, whereas there is a clear difference with respect to investment centres.

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



Germany is a market with high savings and income averages, however it shows low levels of online banking and faces new strict regulatory rules

Germany: Adjusted SWOT Analysis

In this Adjusted SWOT Analysis we sought to group the main strengths and weaknesses of each country's market and to extrapolate the consequent opportunities and threats that Banco Invest might seize and face in each one of them.

Strengths of the market

- Germany presents **positive growth prospects**, with GDP growth of 1.2% in 2014 and a forecasted GDP growth of 1.7% next year.
- **Confidence levels** in the banking sector have been **increasing** since 2012, indicating there might be more propensity to invest.
- It is possible to find a **great diversity of sophisticated products** in the market, according to each type of customer's preferences.



Opportunities for Banco Invest

- The high savings rate (9%) and the disposable income for the 25-54 age group (€24k), when compared with the 7.2% and €20.6 k averages of the top 5 countries, are indicators of the potential market size for Banco Invest to capture.
- Germans spent around **187% of national GDP** on financial assets which portraits the target customer profile that Banco Invest wishes to attract.
- The German banking sector is fragmented, making it more easy for a new player like Banco Invest to enter the market.
- The online banking sector is growing, as shown by the increase in **the customer base of direct banks.**

Weaknesses of the market

- Germans invest a large portion of their income in deposits, life insurance and pension funds, indicating a preference for safe, long-term and riskless assets.
- According to the 2014 EY Global Consumer Banking Survey, **consumers** still prefer to buy and sell investment products at branches (60%) than over the internet (using online channels: 32%).
 - Even though internet penetration levels are high (80%), there is still a **discrepancy** regarding **online banking usage (47%)**, indicating that consumers do not have well established habits regarding this matter.

Threats for Banco Invest

- The number of mergers and acquisitions between German banks increased, leading to a **more integrated industry** than before the crisis. In this environment, Banco Invest might find difficulties to enter the market.
- With the **online trend revolutionizing** the **industry**, most of the **big players** are **opening their own direct banks** not to lose market share, which might constitute **a big barrier for smaller banks** like Banco Invest.
- The **regulatory environment** for German banks has become even more demanding.



Demand in France for Banco Invest's products appears to be above average – French consumers are wealthy, slightly diversified, and prone to use online tools

France: Analysis of demand

MACROECONOMIC BEHAVIOUR

FRANCE

64 million

GDP per capita 2013: **€31.3 k** GDP growth 3Q 2014: **0.3%** Average income for 25-54 age group per year: **€22.7 k**

France is a country with a population of 64 million inhabitants, that is **slowly regaining its** economic growth, as GDP growth in the **third** quarter of 2014 was of 0.3%.

In particular the **population aging between 25 and 54 has an average income of €22.7 k,** which is **above the €20.6 k average of the top 5 countries**. Additionally, the savings rate is **9.5%**, which is also **above the 7.2% average** of the top 5 countries.

Even though a large amount of French households' investment in financial assets is dedicated to life insurance and deposits, it must be noted that there **already exists a trend among investors of placing their money in riskier assets**, as in 2012 around **25.3%** of their investment **went to shares and mutual funds**.

Finally, internet penetration is significantly **high**, as well as **online banking usage**, which reaches **58%** of total population. In fact, 2014 studies point that French customers use **6 times more online channels than traditional branches**, being above global average in terms of online banking usage.

CONSUMER BEHAVIOUR

Consumer habits

Household savings rate (in % of disposable income): **9.5%** Investment in financial assets: **€4.4 trillion** Investment in financial assets (in % of GDP): **210.40%**



Distribution of household investment in financial assets

Online behaviour

Internet penetration 2013 (in % of population): **78%** Online banking usage 2013 (in % of population): **58%**



The French banking sector is sophisticated and highly competitive, thus being able to recover from the financial crisis and to face positively its recent challenges

France: Banking sector overview

STRUCTURE

- · The banking sector is dominated by private domestic commercial banks (61%) and credit unions and mutuals (22%).
- · Foreign private banks have a lower weight in the sector (14%), as domestic banks dominate retail



banking, as well as state-owned commercial banks (3%). However, foreign banks have gained strong presence in wholesale banking and securities trading.

• There are 7 large groups that cover most of the retail market, which hold more than 75% of total asset share, thus making it **highly competitive**. In the past decade, there has been a **slight consolidation**, with the total number of banks **reducing** from 451 in 2004 to 390 in 2013.

CONSUMER CONFIDENCE IN THE BANKING SECTOR

- In 2014, 60% of French banking clients stated to have confidence in their bank, with clients of online banks tending to be more confident in their **bank** than those of traditional banks.
- However, confidence in the banking sector has been in historically low levels (34%) for the past two years.



commercial banks

RECENT PERFORMANCE AND TRENDS

- The sector proved resistant to the 2008 financial crisis, as the tight supervision and **efficiency** of the market allowed it to remain profitable.
- Yet, the 2011 EU sovereign debt crisis eroded market perception of French banks mainly due to high leverage and exposure to EU sovereign debt. This led to strengthening and deleveraging trends.



• An increasing trend is **online banking**. Their **ease of use** and **lower fees** have led an increasing number of French inhabitants to seek online banks and they now host **3 million of the 70 million** current accounts existing in France.

MAIN RISKS AND CHALLENGES

- The largest challenge faced by the banking sector was how to adapt to a more challenging environment. Besides from the high risk exposure to wholesale funding, French banks were also pressured by unprofitable business lines, lenders' risk aversion to banks exposed to EU sovereign debt, and Basel III regulatory requirements that demanded banks to hold greater capital positions.
- Besides this, French banks have been subject to government reforms that • have potential impacts on their business models, namely the separation between retail and speculative activities and the creation of a state bank.



French clusters significantly match Banco Invest's offering, although they lack in investment-related services and offer poor distribution channels to clients

France: Clusters comparison (1/2)

				Product	s				Distribution Channels						
Clusters	Inv. Funds	Indexed Deposits	Stocks & ETFs	Bonds	Futures	CFDs	Markets	Margin Account	Advisory	Discretionary Management	Research	Trading Platform	Online Trading	Mobile/ Tablet	Layout/ Use
BANCO 🔀						\bigcirc									5
Commercial Banks												\bigcirc			4
Investment Banks															4
Online Brokers		\bigcirc								\bigcirc					4

In this anlysis, each cluster was assigned a classification under the form of a circle depending on the number of banks in that cluster offering each type of product, service or distribution channel, in the sample analysed. The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle denotes that no bank offers it. Regarding Layout/Use, a classification in the range 1 – 5 was assigned to each cluster, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least. Apart from the 3 or 4 banks analysed in detail, the 10 banks identified in each cluster were also taken into consideration when attributing the circles classification.

	Commercial Banks		Investment-focused Banks	Online Brokers				
•	Commercial banks offer clients a broad range of products to invest in. However, more complex products have a harder accessibility.	•	Investment-focused banks also offer clients a broad range of products, but succeed in making them more easily accessible.	•	Online brokers focus in offering a wide range of products , and in making available tools that support active traders.			
•	Markets' coverage tends to be more limited when compared to other clusters.	•	Besides covering more markets, these banks seek to support clients by offering advisory services	•	They usually lack advisory and discretionary management services that are valued by less			
•	Services to support clients are also less		and research to keep them informed.		informed clients.			
	developed, in particular for active traders.	•	Besides from offering online and mobile solutions,	•	The experience when interacting is positive for			
•	While online and mobile channels are usually available, trading platforms are often not.		they tend to have a trading platform for active traders.		active traders , but beginners can be confused by the large amount of information they are given.			



Prices in France tends to be slightly higher than those practiced by Banco Invest, even though commissions can vary between different banks and clusters

France: Clusters comparison (2/2)

Fees and Procedure



European markets

	BANCO 🗡	Commercial Banks	Investment Banks	Online Brokers
Minimum Investment	5.000 €	10€	1 – 5,000 €	0 - 10,000 €
Maintenance Fee (p.a.)	0€	0-9€	0€	0
Custody	0€	0.1 - 0.3%	0€	0€
Account Opening Online	Yes			
Inv. Centres	Yes			\bigcirc

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it

- Transaction commissions in France are **slightly higher** than those practiced by Banco Invest (**0.075%**). The clusters that offer **more competitive pricing** are **investment-focused banks** and **online brokers**, which contrarily to commercial banks offer competitive commissions both in the domestic market and in other European countries (**0.09 – 0.15%**).
- Within each cluster, banks and online brokers usually have a pricing structure differentiated for each type of client – beginners, intermediate and active traders - and more competitive fees are only available for those who trade the most.
- Although **commercial banks** almost always require a **minimum deposit of 10€**, for investment-focused banks and online brokers **this requirement is not linear**, with values ranging between 0 and 10,000€.
- **Maintenance and custody fees** are **usually not charged** by online brokers and investment banks, while commercial banks sometimes do.
- It is often possible to **open an account via online**, and this modality is usually **complemented with post services**. Finally, **physical presence is not highly valued**, as most investment banks and brokers are purely online.



The French market possesses clients that fit Banco Invest's target – yet, it is highly competitive and has already developed a sophisticated offer to satisfy demand

France: Adjusted SWOT Analysis

In this Adjusted SWOT Analysis we sought to group the **main strengths and weaknesses of each country's market** and to extrapolate the consequent **opportunities and threats that Banco Invest** might seize and face in each one of them.

Strengths of the market

- Due to the high competition of the market, French banks **are highly efficient and diversified**, being thus able to be profitable even in more adverse scenarios.
- Competitors in the 3 clusters analysed are able to offer clients a wide range of products and services through different channels, and overall all types of investor profiles in the market are satisfied.
- French inhabitants are **wealthy**, have above average **saving habits**, and tend to moderately **diversify their portfolios**. Further, they are **prone to use online tools** to manage their savings and investments.

Opportunities for Banco Invest

- The **high savings rate** (9.5%) and **average income** in the 25-54 age group (€22.7 k) indicate that there is potential market size for Banco Invest.
- Online banks are increasingly attractive among the French, who seek easy to use tools, low prices and do not value physical presence of banks.
- Banco Invest offers a user-friendly interaction for both active and beginner traders, which most banks in the French market lack.
- Many banks in Banco Invest's segment **are not asset managers**, which limits their offering. As such, Banco Invest would be able to offer a **more complete set of products and services**, which would allow it to **differentiate from local competitors.**

Weaknesses of the market

- The environment of the banking sector is risky, as it faces several challenges: the need of funding diversification, regulatory capital requirements and reforms that can impact banks' business models.
- Not all banks can combine their large offer with a user-friendly interaction that suits all types of investors. In fact, both the commercial banking and online brokers clusters are **unable** to provide clients with a user experience that pleases different types of investors.
 - The percentage of household's investment in financial assets that goes to riskier assets (25%) is still significantly lower than that of deposits and life insurance reserves (71%).

Threats for Banco Invest

- Consumer confidence in the banking sector has reached historical lows after the financial crisis. French cients are not confident in their banking sector and might be reluctant to place their savings and investments with a new and foreign bank like Banco Invest.
- The sector is **dominated by domestic banks** and the **preference for this type of banks** can harm Banco Invest's entrance in the market.
- As many banks in Banco Invest's segment are subsidiaries of large commercial groups, such as BNP or Société Générale, they have an easier access to a large pool of potential customers and can pose a serious threat to Banco Invest's entry in the French market.



The Netherlands is a country with high GDP per capita and household savings rate – however, Dutch people do not diversify their investments

Netherlands: Analysis of demand

MACROECONOMIC BEHAVIOUR

NETHERLANDS

17 million

GDP per capita: **€35.9 k** GDP growth 3Q 2014: **0.2%** Average income for 25-54 age group per year: **€22.5 k**

With a relatively small population of 17 million people, the Netherlands have one of the highest GDPs per capita among the countries considered.

Dutch people tend to **save 7.8% of their income**, resulting in a remarkable investment in financial assets as a percentage of GDP of 347.97%, against the average of 129% of the 5 countries considered.

The two primary drivers for households investment in financial assets are pension funds and deposits, accounting for almost 70% of the financial assets.

Diversified, professionally run pension funds are deeply rooted in the Netherlands, with about 90% of Dutch workers earning real pensions at their jobs.

Online banking is already done in a daily basis, with 82% of the population using it regularly.

CONSUMER BEHAVIOUR

Consumer habits

Household savings rate (in % of disposable income): **7.8%** Investment in financial assets: **€2.1 trillion** Investment in financial assets (in % of GDP): **347.97%**

2,5 Ψ Trillions 4 2,0 Life insurance Deposits 1,5 Pension Funds Mutual Funds 1,0 Other Securities 0,5 Shares 15.9% 15.6% 4.3% 13.6% 0.0 2009 2010 2011 2012

Distribution of household investment in financial assets

Online Behaviour

Internet penetration 2013 (in % of population): **92%** Online banking usage 2013 (in % of population): **82%**



Dutch banking sector is now less profitable and more concentrated than before the crisis. The consumer confidence towards the sector decreased significantly

Netherlands: Banking Sector Overview

STRUCTURE

- The banking system in Netherlands comprises a relatively large number of credit institutions, about 302 institutions.
- The banking structure in Netherlands is mainly **constituted by 7 major players:** ING Bank, Rabobank, ABN AMRO Bank, SNS Bank, Nederlandse Waterschapsbank, Bank Nederlandse Gemeenten and Royal Bank of Scotland NV, **representing almost 90% of the Dutch banking sector assets.**
- In most cases, **these banks are part of bigger groups** that expand their business to other sectors like insurance and asset management. It is not uncommon for a group to have more than one business offering the same type of financial products.

CONSUMER CONFIDENCE IN THE BANKING SECTOR



• According to the Edelman Trust Barometer 2014, Dutch people trust much less in the banking sector than they used to do in 2009, a decrease of 27% from 53% in 2009 to 26% in 2014, indicating that it may be difficult for banks to capture new clients.

RECENT PERFORMANCE AND TRENDS

- Following the crisis, the Dutch government intervened to rescue the banking sector from collapsing, taking control of the bank ABN AMRO and giving aid to ING Group. As a consequence of this period of nationalizations and acquisitions, there was an increase in the concentration of banks.
- Banks' profitability has fallen since the crisis, mainly because of changes to their business models, with banks undertaking fewer high-risk activities. Nevertheless, the ROE of Dutch banks was around 7%, slightly higher in 2013 than the European median of 5%.
- Dutch banks are very dependent on market funding, evident in the high loan-to-deposit ratio of the sector when compared to other European countries. However, since 2007 there has been an improvement of banks' funding position, with such ratio decreasing from 205% to 170% in the beginning of 2014.





MAIN RISKS AND CHALLENGES

- A vulnerable, large and concentrated banking sector threatens the financing of the economy through lower credit availability and excessive risk aversion which endangers the financial stability of the country.
- The 2008 crisis put in question the **sustainability of pension funds**, resulting in the need for reforms. A particular issue being approached is how these funds are managed, namely concerning risk profile. While older beneficiaries give preference to the current low risk taken, **younger ones want the risk exposure of these funds to increase**. This poses a **challenge to the Dutch banking sector** as to satisfy the needs of both generations.

Sources: Bank of Netherlands, ECB, De Nederlandshe Bank, Eldeman Trust Barometer



Overall, Dutch clusters provide a poorer offer when compared to Banco Invest, in particular in terms of more complex products and distribution channels

Netherlands: Clusters comparison (1/2)

				Product	s				Ser	Distribution Channels					
Clusters	Inv. Funds	Indexed Deposits	Stocks & ETFs	Bonds	Futures	CFDs	Markets	Margin Account	Advisory	Discretionary Management	Research	Trading Platform	Online Trading	Mobile/ Tablet	Layout/ Use
BANCO 🔀						\bigcirc									5
Commercial Banks						\bigcirc					\bigcirc				4
Investment Banks		\bigcirc										\bigcirc			4
Online Brokers		\bigcirc						n/a	\bigcirc	\bigcirc	\bigcirc		\bigcirc		5

In this anlysis, each cluster was assigned a classification under the form of a circle depending on the number of banks in that cluster offering each type of product, service or distribution channel, in the sample analysed. The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle denotes that no bank offers it. Regarding Layout/Use, a classification in the range 1 – 5 was assigned to each cluster, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least. Apart from the 3 or 4 banks analysed in detail, the 10 banks identified in each cluster were also taken into consideration when attributing the circles classification.

	Commercial Banks		Investment-focused Banks	Online Brokers			
•	Commercial banks have a poor range of financial products in general.	•	The range of products is more complete than for commercial banks, with all investment banks offering	•	Online brokers are specialized players that target people with expertise in investing.		
•	There is not much variety in geographical areas to invest in. It is common to exist multiple levels of advisory depending on how much the client wants		products such as funds , stocks , ETFs and bonds . They cover the most important geographical areas such as Europe and the US.	•	Despite offering no services, online brokers focus on a diversified selection of financial products through a large scope of markets.		
	to be involved.	İ۰	Investment related services currently consist more	•	Websites are usually simple to use. In opposition		
•	In-house funds are usually available for bank-	İ	in advisory than discretionary management.	i i	to commercial banks, trading is only done		
	managed portfolios. As these banks do not focus	•	Within their personal online area clients have access	i I	through trading platforms with detailed real-time		
	on complex products, orders are mostly done	į –	to real time information. However, trading	1	information displayed in charts.		
	through the online area or mobile solutions.	1	platforms are not available.	!			



Dutch online brokers offer the most competitive pricing in domestic and European markets. Investment-focused banks' pricing is very close to Banco Invest's

Netherlands: Clusters comparison (2/2)



Fees and Procedures

	BANCO	Commercial Banks	Investment Banks	Online Brokers
Minimum Investment	5.000€	0€	0€	0 – 10,000 €
Maintenance Fee (p.a.)	0€	0 - 15€/0.1% - 0.2%	0 - 25€ / 0% - 0.2%	n/a
Custody	0€	n/a	0 - 0.05%	n/a
Account Opening Online	Yes			•
Inv. Centres	Yes	•		

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it

- In general, it is common for banks and online brokers to charge a fixed fee plus a variable fee in percentage of the transaction value. Still, some investment banks opt to charge only a fixed fee depending on the range of the value of investment.
 - Even though the volume of transaction does not seem to influence the pricing structure for commercial banks and online brokers, investment-focused banks charge slightly lower commissions on high volume transactions, therefore incentivizing clients to invest regularly.
 - Overall, online brokers offer the most competitive fees when compared to the other clusters and are an obvious choice for anyone willing to invest actively.
 - Along with the pricing structure, there are other costs related to opening and maintaining an account. **Usually a maintenance fee is charged** and may be fixed or variable depending on the bank. In some cases, after a certain value of investment, clients do not pay the maintenance fee. In opposition, **minimum investment is normally required by online brokers.**
 - Concerning custody costs, we could only find information for investment-focused banks, possibly meaning they are not commonly charged.
 - In general, **banks have investment centres** to support their activity. Moreover, it is usually possible to open an account via online.



Although in the Netherlands Banco Invest's offering is highly innovative, there is low demand potential as most households' funds are allocated to pension plans

Netherlands: Adjusted SWOT Analysis

In this Adjusted SWOT Analysis we sought to group the **main strengths and weaknesses of each country's market** and to extrapolate the consequent **opportunities and threats that Banco Invest** might seize and face in each one of them.

Strengths of the market

- Netherlands has amongst the **highest average disposable income** (€22.5 k) of the considered, along with a **high savings rate** (7.8%).
- Internet usage and online banking are regularly used by Dutch people to manage their savings and investments.
- In most banks the procedure to **open an account is simple** and possible to be done **online.**



Opportunities for Banco Invest

- Currently, young Dutch people are willing to accept more risk in the management of their retirement pension funds. This implies that they have a riskier profile than older generations, and therefore might be willing to allocate a larger portion of their savings to riskier assets than deposits and pension funds.
- The offering of investment-related products and services is significantly underdeveloped when compared to Banco Invest's, which poses an opportunity for the bank to differentiate itself from existing players.

Weaknesses of the market

- A large portion of households' investments in financial assets is allocated to **pension funds** (51.2%), indicating that Dutch people do not usually invest their savings in assets other than pension funds and deposits.
- Netherlands has a **population of only 17 million people**, the lowest of the 5 countries considered, which can limit the size of the domestic banking sector.
- The banking sector is very vulnerable to the property market, causing **instability in the operating environment**.

Threats for Banco Invest

- Consumer confidence levels decreased from 50% to 26% in the last 3 years, which may be a threat for Banco Invest when trying to attract clients.
- Very poor diversification of investment in financial assets, with only 14% invested in riskier assets means that there may be low demand for Banco Invest's products.
- Considering that **58% of the consumers has never switched their savings account** and that this is a **very concentrated market** (90% share of biggest banks), it may turn difficult for Banco Invest to attract new clients.



The Spanish savings rate and average income are relatively low, but the propensity to invest in riskier assets can be an opportunity for Banco Invest

Spain: Analysis of demand

MACROECONOMIC BEHAVIOUR

SPAIN

46.7 million

GDP per capita PPP: **€22.3 k** GDP growth 3Q 2014: **0.5%** Average income for 25-54 age group per year: **€16.7 k**

CONSUMER BEHAVIOUR

Consumer habits

Household savings rate (in % of disposable income): **5.8%** Investment in financial assets: **€1.8 trillion** Investment in financial assets (in % of GDP): **176.13%**

2,0 Ψ Trillions 1,6 Life insurance Deposits 1,2 Pension Funds Mutual Funds 0,8 35.3% 33.0% 33.7% 32.5% Other Securities 0,4 Shares 0.0 2009 2010 2011 2012

Distribution of household investment in financial assets

Online behaviour

Internet penetration 2013 (in % of population): **66%** Online banking usage 2013 (in % of population): **33%**

Spain is **slowly recovering from the financial crisis**, with a **modest GDP growth of 0.5%** in the 3Q 2014, which is forecasted to reach 1.7% in 2015.

Compared to the average savings rate (7.2%) and average income for the 25-54 age group (\in 20.6 k) of the top 5 countries, Spain has low values for these indicators, namely 5.8% and \in 16.7 k.

Yet, the **investment in financial assets** is 176.13% of GDP, which is mainly **distributed between deposits** (47.8%) **and shares** (24.2%). Although consumers invest almost half of their savings in deposits, **33.7% are invested in other securities, shares and mutual funds, reflecting some propensity to diversify their investments in riskier assets.**

Regarding online behaviour, **only 33% of the population uses online banking services**. In particular, according to 2014 studies, the preferred channels of Spanish customers to buy and sell investments are branches (62%) and internet (25%), which is below global average.



The Spanish banking sector shows positive recovery signs, but still faces challenges such as the low confidence in the sector and new regulatory frameworks

Spain: Banking Sector Overview

STRUCTURE



• After the financial crisis, the Spanish banking sector undergone a deep restructuring and recapitalization program.

As a result, the sector experienced a **significant consolidation**, due to several mergers and acquisitions of savings banks. Consequently, **14 large and medium-size banks currently dominate the market** (88% asset share).

• The **main players** include Santander (18.9%), BBVA (14.9%), Caixabank (12.1%), Bankia (11.9%), Banco Sabadell (5.6%), Banco Popular (5.5%), and Bankinter (2.1%).

CONSUMER CONFIDENCE IN THE BANKING SECTOR

- Consumer confidence in the banking sector has been decreasing since the crisis – from 45% in 2007 to 16% in 2014.
 Confidence in the banking sector 35%
- Within the financial services industry, as of 2014, the segments in which consumers trust the least include banks (21%) and asset managers(28%).



RECENT PERFORMANCE AND TRENDS

- The financial assistance program resulted in improvements in the solvency and liquidity of banks – evident in the decreasing loan-to-deposit ratio - as well as in the regulation and supervision of the banking sector.
- The consolidated net profit in the sector reached €11 b in 2013 and €8 b in the first half of 2014 a significant progress considering the losses in 2012.
- Net interest income and net commissions declined since June 2013, but commissions from securities services and

non-bank financial products increased, due to the increasing demand for these products that compete with deposits. In fact, the assets of investment funds have been rising since 2013.



MAIN RISKS AND CHALLENGES

- The challenges faced by the banking sector include **improving profit margins**, eliminating problematic assets from balance sheets, restoring consumer confidence, and adapting to new regulatory and supervision frameworks (e.g. higher capital requirements under Basel III).
- The sector recovery also depends on the unfold of macroeconomic conditions in the euro area. These include the still weak economic growth, the low levels of interest rates, and therefore, the excessive risk taking on part of investors, which might undermine financial stability.



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Spanish clusters differ the most from Banco Invest in terms of services and distribution channels, while offering a complete set of investment products

Spain: Clusters comparison (1/2)

				Product	S				Ser		Distribution Channels				
Clusters	Inv. Funds	Indexed Deposits	Stocks & ETFs	Bonds	Futures	CFDs	Markets	Margin Account	Advisory	Discretionary Management	Research	Trading Platform	Online Trading	Mobile/ Tablet	Layout/ Use
BANCO 🔀						\bigcirc									5
Commercial Banks						\bigcirc									4
Investment Banks		\bigcirc													4
Online Brokers		\bigcirc													5

In this anlysis, each cluster was assigned a classification under the form of a circle depending on the number of banks in that cluster offering each type of product, service or distribution channel, in the sample analysed. The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle denotes that no bank offers it. Regarding Layout/Use, a classification in the range 1 – 5 was assigned to each cluster, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least. Apart from the 3 or 4 banks analysed in detail, the 10 banks identified in each cluster were also taken into consideration when attributing the circles classification.

	Commercial Banks	Investment-focused Banks		Online Brokers
•	In terms of investment products, commercial banks only offer the most basic ones . Since their focus is not financial products, complementary services such as margin accounts, advisory and research are not widespread . Instead, they focus	Investment-focused banks offer a broad range of financial products in several financial markets, but not all offer the complete set of products. Clients can resort to leverage, advisory and research . These banks offer several means for clients to manage		Online brokers have a very complete offer of investment products and financial markets, and provide sophisticated tools, including advanced trading platforms and similar online and mobile solutions.
•	In terms of distribution channels, although online and mobile platforms are available, they are not as developed as in the other segments.	their portfolios, namely trading platforms, websites and apps . However, most banks opt for either a trading platform or a trading website, and few offer both possibilities.	•	However, most brokers do not offer advisory and discretionary management services , as their targets are active and independent traders.



In Spain, online brokers charge the lowest fees in European markets and investment banks in the domestic one. Still, overall Banco Invest has the most competitive fees

Spain: Clusters comparison (2/2)



European markets

Fees and Procedures

	BANCO 🗡	Commercial Banks	Investment Banks	Online Brokers
Minimum Investment	5.000 €	0€	0€	0 - 5,000 €
Maintenance Fee (p.a.)	0€	0 – 45 €	0 - 36 €	0 – 10 \$
Custody	0€	0.05 – 1%	0 – 1% / 20 €	0 - 0.02%
Account Opening Online	Yes			
Inv. Centres	Yes			•

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it

- Online brokers offer the most competitive fees in European markets, while investment banks lead the way in the domestic market. Commercial banks' pricing is clearly not as competitive, probably because they are not specialized in offering investment products.
- Overall, **Banco Invest has the lowest commissions**, except for investment-focused banks in European markets.
- It is worth noting that **commercial banks charge the same fees regardless of the amount invested and/or volume of orders**, unlike the other types of banks in which investors have an incentive to invest more as commissions tend to decrease.
- Most banks and brokers do not require a minimum investment, and usually do not charge a maintenance fee unless the client does not make transactions for a period of time. Regarding custody, online brokers offer the most competitive fees.
- In terms of accessibility, all investment-focused banks and online brokers allow clients to open an account online and all have investment centres. In the commercial banks segment, not all banks have these possibilities.
- In this context, **Banco Invest has an advantage** since it does not charge a maintenance nor a custody fee, but the minimum investment might be a barrier since it is not usual in Spain.

January 2015 | Banco Invest Business Project



In Spain, Banco Invest could have a competitive pricing advantage, but the low propensity to use online banking and the low savings rate are important threats

Spain: Adjusted SWOT Analysis

In this Adjusted SWOT Analysis we sought to group the main strengths and weaknesses of each country's market and to extrapolate the consequent opportunities and threats that Banco Invest might seize and face in each one of them.

Strengths of the market

- Spain is recovering well from the crisis and a decline of unemployment and a strengthening of the financial position of households and corporations can be expected. Moreover, the low levels of systematic risk reflect a climate of economic stability.
- The **banking sector** is regaining its solvency and profitability and it is **more** resilient to macroeconomic and financial shocks.
- The **sector** is **well developed**, with an **extensive offer**. Banks offer a **good consumer experience** across different channels and prime on ease of use and accessibility.

Opportunities for Banco Invest

- Although the Spanish invest half of their savings in deposits, they already show **propensity to invest in riskier financial assets (33%),** mainly stocks. Thus, there is an **opportunity for Banco Invest,** given that this profile is in line with its target client.
- Overall, Banco Invest has lower prices and a more complete offer of products and services than Spanish banks.
- The **cultural proximity** between Spain and Portugal would **facilitate Banco Invest's entry in this market**, given the similarity in habits and language, and the lower mistrust towards a Portuguese bank.

Weaknesses of the market

- Both the Spanish savings rate and income in the 25-54 age group are among the lowest of the 5 countries. This means that the size of the market in which banks can tap into is fairly limited.
- Although banks have developed and user-friendly websites, online banking usage is still low (33%), and branches are still the preferred channel of Spanish consumers to interact with banks. This implies that Spain is still behind on the global trend of multi-channel use, that results in a higher proximity between banks and its clients, higher efficiency and ease of use.

Threats for Banco Invest

• Confidence in the banking sector has been decreasing and has not shown signs of recovery. This poses a threat for Banco Invest since it would be **more difficult to attract customers** under these conditions.

- The population's **low propensity to use online banking might limit Banco Invest's establishment in the Spanish market,** because it will not have a wide branch network, and it relies on strong online and mobile tools.
- The strong consolidation of the market might pose a barrier to entry and Banco Invest might have some trouble gaining market share in this environment.



Italy has a lower than average savings rate and internet usage, but its population is diversified in financial assets, with a heavy securities component

Italy: Analysis of demand

MACROECONOMIC BEHAVIOUR

ITALY

60 million

GDP per capita: **€25.6 k** GDP growth 3Q 2014: **-0.1%** Average income for 25-54 age group per year: **€17.6 k**

Italy's **GDP decreased 0.1%** in the last year, as of 3Q. However, Italy is **expected to return to positive growth** (0.6% in 2015E).

The **savings rate is 4%**, which is **lower than the 7.2% average** of the top 5 countries, and the **total investment in financial assets** represents 132% of the 2014 GDP, the **lowest** value when compared to the other countries.

Italians diversify their investments, since deposits account for only about a third of the total amount, and invest around 47% in shares, other securities and mutual funds, which is a high value in comparison with the other countries.

Internet penetration is still low, as it only reaches 56% of Italians, as well as online banking usage, with only 22% of the population resorting to it.

CONSUMER BEHAVIOUR

Consumer habits

Household savings rate (in % of disposable income): **3.9%** Investment in financial assets: **€3.6 trillion** Investment in financial assets (in % of GDP): **132.38%**



Distribution of investment in financial assets

Online behaviour

Internet penetration 2013 (in % of population): **56%** Online banking usage 2013 (in % of population): **22%**



The Italian banking sector follows a traditional business model and is suffering from a slowdown in the economy

Italy: Banking Sector Overview

STRUCTURE



- The total number of Italian banks has been decreasing since 1996.
- The market is **dominated** by **limited company banks (71%)**, while the asset share for **foreign banks is 8%**.
- In 2012, there were 706 banks with total assets of about 220% of GDP, of which 169% were part of 75 banking groups.
- There are **7 main banking groups** in Italy, **of which 2** (Unicredit and Intesa Sanpaolo) **have an European dimension**.
- 70% of equity trading activities are made by 9 banking groups.

CONSUMER CONFIDENCE IN THE BANKING SECTOR

- **52% of people lost confidence in the banking system** last year, which is 11% more than the average of western European countries.
- The confidence level in the banking system decreased from 31% to 23% from 2013 to 2014.

RECENT PERFORMANCE AND TRENDS

- The Italian banking sector suffered with the 2008 recession, as well as with the European crisis, as it plunged into a **three-year recession since 2011**.
- In fact, Italian banks follow a **traditional business model**, and although they are **not too exposed to speculative positions**, like most European banks, they **are exposed to the real economy.**
- Recession, along with difficulty in accessing credit lines, threw the profitability of the sector down (€ -20.6 billion in 2013).



• Of the €1,536 b assets under management in 2014 composing the growing Italian asset management industry, 43% are open-ended funds, 3% closed-end funds, 7% are retail portfolio management assets, and 47% are institutional assets under portfolio management.

MAIN RISKS AND CHALLENGES

• The traditional model of the banking industry implies that it **relies heavily on the performance of the economy** as a whole, which is **highly flawed and in need of a reform**. However, on a positive note, it is **expected for the country to leave the recession** it is under, in 2015.



In Italy, investment-focused banks have an offer as complete as Banco Invest's, although other clusters are far behind in terms of investment products and services

Italy: Clusters comparison (1/2)

	Products				Services			Distribution Channels							
Clusters	Inv. Funds	Indexed Deposits	Stocks & ETFs	Bonds	Futures	CFDs	Markets	Margin Account	Advisory	Discretionary Management	Research	Trading Platform	Online Trading	Mobile/ Tablet	Layout/ Use
BANCO 🗡 INVEST						\bigcirc									5
Commercial Banks						\bigcirc									4
Investment Banks															4
Online Brokers	\bigcirc	\bigcirc								\bigcirc					4

In this anlysis, each cluster was assigned a classification under the form of a circle depending on the number of banks in that cluster offering each type of product, service or distribution channel, in the sample analysed. The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle denotes that no bank offers it. Regarding Layout/Use, a classification in the range 1 – 5 was assigned to each cluster, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least. Apart from the 3 or 4 banks analysed in detail, the 10 banks identified in each cluster were also taken into consideration when attributing the circles classification.

	Commercial Banks		Investment-focused Banks		Online Brokers
•	Commercial banks usually offer in-house investment funds, while the offer of third-parties funds is limited.	•	Investment-focused banks offer more complex investment products than commercial banks, more varied markets, more attractive commissions and	•	Although Investment funds are not available, the offer is competitive in terms of other products , trading-related services and channels .
•	Although margin accounts are rarely available , credit lines, when offered, sometimes can be used for investment purposes.	dit • In [.] ge	 different pricing plans. Investment funds cover most types of securities and geographies. Indexed deposits are not common, 	•	No discretionary management is offered, and clients trade independently, solely with advice and research services.
•	All banks offer advisory and discretionary management is frequently offered.	•	despite the existence of similar products. Services and channels are often sophisticated.	•	The websites are fairly easy to use and information regarding fees and commissions is made explicit to customers
•	Websites are remarkably poor and not user- friendly.		See Appendixes 12.1 – 12.3	 	January 2015 Banco Invest Business Project



In Italy, online brokers offer the most competitive fees, as they charge fixed fees regardless of volume, while investment banks charge fees higher than Banco Invest's

Italy: Clusters comparison (2/2)



Fees and Procedures

	BANCO 🔀	Commercial Banks	Investment Banks	Online Brokers
Minimum Investment	5.000€	0 €	0€	0 - 150€
Maintenance Fee* (p.a.)	0€	0 - 40 €	0€	0 €
Custody	0€	0 – 150 €	0 - 90 €	0€
Account Opening Online	Yes			•
Inv. Centres	Yes			

- Online brokers offer fixed fees plans, and thus for high volume transactions their fees are more competitive than Banco Invest's. In terms of pricing for transactions in the domestic market, Italian investment banks are in line with Banco Invest, but are less competitive for those in other European markets.
- Although minimum transaction commissions are quite different between clusters, on average the pricing in Italy is quite homogeneous across all types of banks, as most of them charge a 0.19% fee for all kinds of transactions. However, this is not the case for US and other non-European markets, which are usually not available and have higher commissions when offered.
- Contrarily to Banco Invest, Italian banks tend **not to require a minimum investment** when opening an account. The latter in almost all cases **can be done via online**. Finally, Italian customers tend to **value the physical presence** of their bank, since most competitors provide clients with investment Centres.

* In Italy, there is a tax for accounts larger than 5.000€, which is 34,20€

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



Although Italy still faces many economic challenges, Banco Invest can bring accessibility and a global offer to customers who highly diversify their investments

Italy: Adjusted SWOT Analysis

In this Adjusted SWOT Analysis we sought to group the main strengths and weaknesses of each country's market and to extrapolate the consequent opportunities and threats that Banco Invest might seize and face in each one of them.

Strengths of the market

- The high capitalization of Italian banks implies that no major industry changes will result from the Basel III requirement.
- Household investment in financial assets is well diversified, with the investment in shares, other securities and mutual funds reaching 47%, the highest value of the 5 countries.
- The market of financial products is well developed and the offer is diversified.

Opportunities for Banco Invest

- Internet and online banking usage are low, but the trend is for these metrics to increase. This means that the market will expand in the next years, and tapping into potential new clients is an opportunity.
- Banco Invest has a global offer that individually Italian banks cannot match. Additionally, Banco Invest is able to provide potential customers with more easily accessible information, which might increase its attractiveness.
- High diversification of households investment in financial assets implies that customers are willing to invest in the core products sold by Banco Invest, when given the opportunity.

Weaknesses of the market

- Sector highly dependant on real economy, which is currently in a recession.
- Low confidence in banking sector implies less demand for banking products.
- Households **savings rate is the lowest of the 5 countries** (3.9%) which diminishes the potential of the market.
- Investment in financial assets represents the lowest value of the 5 countries, in percentage of the GDP (132.4%).
 - Both internet penetration and online banking usage are the lowest of the 5 countries, 56% and 22% respectively.

Threats for Banco Invest

- Low online banking usage, low consumer confidence as well as the lowest savings rate (3.9%) of the top 5 countries, implies that there might be low demand for Banco Invest's products.
- **Structural reforms** and consolidation of public deficit may result in higher taxes, both for Banco Invest and potential clients.
- High degree of **institutional bureaucracy.**



Overall, when considering macroeconomic and consumer specific characteristics, France and Germany stand out as the most attractive countries in terms of demand

Countries comparison: Analysis of demand (1/2)



MACROECONOMIC BEHAVIOUR



- Regarding macroeconomic metrics such as average income in the 25-54 age group, household savings rate and population size, the **country that has the most potential is Germany** given its high values in all items.
- France and the Netherlands are also well positioned in these terms, although the Netherlands lacks in population size, only 17 million, which undermines its attractiveness considerably.
- When considering only these macroeconomic characteristics, **Spain and Italy do not show as much demand potential** as the remaining countries, since the household savings rate and average income are relatively low. More precisely, **Spain has the lowest average income**, €16.7 k, while **Italy has the lowest savings rate**, 3.5%. However, both countries have a considerable population size.
- In terms of growth prospects, all countries reveal a positive but still modest outlook for the next two years. Nonetheless, Spain stands out with a GDP growth forecast of 1.7% in 2015 and 2.2% in 2016, although it must be noted that it was one of the most affected countries by the financial crisis.
- Among the 5 countries, **Italy is the one with the least optimistic prospects**, with a GDP growth forecat for 2015 below 1%.



Overall, when considering macroeconomic and consumer specific characteristics, France and Germany stand out as the most attractive countries in terms of demand

Countries comparison: Analysis of demand (2/2)



- Regarding **internet and online banking usage** it is clear that the most attractive country is the **Netherlands, followed by France,** indicating that consumers feel more comfortable to use online tools and platforms when managing their savings, investments and day-to-day banking needs.
- In terms of consumer confidence in the banking sector, Germany and France take the lead, meaning that consumers tend to be less risk averse and have more propensity to trust banks for the management of their savings.
- Concerning the distribution of household **investment in financial assets**, it is possible to notice that **Germany and France** are the countries where households invest the most in financial assets.
- Even though Italy is not the country with the highest investment in financial assets, it is where investors have the **most propensity to invest in riskier assets and are more diversified**, when compared to the remaining top-5 countries.

Sources: Eurostat, OECD, Edelman Confidence Barometer



In terms of offering, France and Italy are the countries where investment-focused banks better combine products and services offering with distribution channels

Countries comparison: products, services and distribution channels in the Investment-focused cluster



- In terms of products offering, France, Italy and Germany are the countries where investment-focused banks provide customers with a set of products more similar to Banco Invest. In general, what can be noticed in all these markets is that overall there is a complete bundle of products, but individually banks fail to cover all categories of products.
- On the other hand, **Netherlands and Spain lack to provide a product offering as complete as Banco Invest's**, namely with respect to more complex products such as futures and structured products.
- Regarding services offering, Netherlands, Italy, Spain and France all offer the same level of services, and usually provide margin accounts, advisory and research. Conversely, Germany stands as the country with poorer service offering, since it is not common to offer advisory or discretionary management services in this particular segment.
- Concerning distribution channels, it is clear that France is the country where banks are most developed in terms of channels used to interact with clients. As for the remaining countries, they usually fail in providing specialized trading platforms.



France is the country with the highest commissions, allowing for more margin for Banco Invest to be competitive in terms of pricing

Countries Comparison: pricing, fees and procedures of the investment-focused cluster



Pricing, Fees and Procedures

	Minimum Investment	Account Opening Online	Investment Centres	•
BANCO 🎽 INVEST	5000€	\checkmark	Yes	
Germany	0 €	\checkmark		•
France	1 – 5000 €	\checkmark		
Netherlands	0 €	\checkmark		•
Spain	0 €	\checkmark	•	
Italy	0€	\checkmark		

- Banco Invest's pricing is the most competitive in comparison with the investment-focused clusters of all the other countries analysed, both for transactions on the domestic and European markets.
- Within the investment-focused bank segment, the **Netherlands** offers the pricing closest to Banco Invest in the European market, closely followed by Italy and Spain.
- However, on the **domestic market**, **Spain and Germany** stand as the countries where commissions are **closest to Banco Invest's**.
- Overall, **France** is the country where **commissions are the highest**, while **Spain and the Netherlands** are those with the **lowest**.
- Concerning minimum investment amounts, France is the only country where certain banks require minimum investments similar to the one asked by Banco Invest, as no other country requires such investment.
- Regarding, the possibility to open an account online, there is no differences between countries in this matter – similarly to Portugal, it is possible to open an account combining online and post services.
- Netherlands, Spain and Italy stand out as countries where investment centres remain valued by clients, while in Germany and France, investment centres are not common, as clients rely highly on the services available online and customer support.

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



France, Italy, and Spain are countries where demand is high but so is competition, while in Germany and the Netherlands the context is the opposite

Countries comparison: Main conclusions

	Opportunities for Banco Invest	Threats for Banco Invest
Germany	 Households display the 2nd highest savings rates (9.1%) and average income (€23.5 k). Investment in financial assets is among the highest (187% of GDP). Banco Invest can differentiate itself through services and pricing. 	 Big players establish new barriers to smaller banks, by opening their own online banks. Compliance with new banking regulations. Large cultural differences might difficult Banco Invest's entry in the market.
France	 Investment in financial assets is among the highest (210% of GDP), and the savings rate is the highest of the top 5 countries (9.5%). High online banking usage (58%) and moderate investment diversification (25% in riskier assets*). Banco Invest has a more complete offering and lower pricing. 	 Confidence in the banking sector has reached historical lows (34%). The banking sector is dominated by domestic banks (61% in asset share). Direct competitors are owned by large commercial groups and have privileged access to a large pool of potential customers.
Netherlands	 Online banking usage is the highest among the top 5 countries (82%). Dutch young people show propensity to accept more risk. Few banks match Banco Invest's offering and distribution channels. 	 Low diversification (14%) and conservative profile of target clients. The banking sector is changing due to consolidation trends, inducing instability for new players. Lowest pricing can undermine Banco Invest's competitiveness.
Spain	 Moderate propensity to invest in riskier financial assets (34%). Banco Invest has a more complete offer than existing players. Cultural and geographical proximity. 	 Lowest average income (16.7 k€) and the 2nd lowest savings rate (5.8%). Confidence in the banking sector is the lowest (16%), and further decreasing. Low propensity to use online banking (33%) and high market concentration.
Italy	 Growth of online penetration. Accessibility and global offer of Banco Invest. High diversification of households' investment in financial assets (47% in riskier assets). 	 Lowest savings rate (3.6%) and 2nd lowest average income (€17.6 k). Low online banking usage (22%) and confidence in the banking sector (23%). High degree of institutional bureaucracy.

*rRskier assets include mutual funds, shares, and other securities.



France, Germany, and Italy were identified as the 3 most attractive targets, although each opportunity differs in terms of nature, risk and positioning strategy

Most attractive countries

	• France is one of the two countries, along with Germany, where demand for Banco Invest's products is the highest – there is large investment in financial assets with considerable weight in riskier instruments, online banking usage is among the highest in Europe, and people are more confident in the banking system when compared to the other top 5 countries.
FRANCE	• As such, France is also among the countries where banks offer the most sophisticated supply . However, contrarily to Banco Invest many banks lack to offer a complete bundle of products and charge commissions significantly higher than Banco Invest's. Thus, we believe the bank can be competitive in the French market and recommend France as one of the most attractive targets.
	• Germany is an attractive country since it is one of the strongest in terms of macroeconomic context , with high savings rates and rising consumer confidence levels in the sector. Besides this, given it is the leading country when considering the total investment in financial assets , it ranks among the two countries with the highest demand for Banco Invest's products .
	• Regarding offering, Banco Invest would introduce a more global product offer opposed to the fragmented one between the 3 clusters, and would introduce services that are yet not offered by German competitors.
GERMANY	• The major challenge when considering Germany is the cultural difference, both in terms of the native language and mentalities.
	 Italian households have a large part of their investments in other securities, shares and mutual funds, which shows potential demand for Banco Invest's products. Negative factors such as low online banking usage can be mitigated by entering the most developed cities, and lose relevance considering there is potential for growth.
	• Banco Invest's offer is new to the market, considering the bank is able to offer a complete set of products and services in user-friendly platforms, contrarily to other competitors in the market.
ITALY	• However, Italy is the target that presents the most risks and challenges, namely at a macroeconomic level, i.e. political uncertainty, economical risk and the institutional bureaucracy existing in the country.



Following our project, there are other issues to be addressed, both in respect to the country selection and the strategy to successfully approach the selected market

Further Issues

	For country selection		ŀ
•	Given the limitations of the project, obtain more specific market information by analysing a larger sample of banks in each country, contacting market leaders in order to get insights of industry dynamics, and by obtaining more detailed information about competitors' offering by, for instance, accessing	•	Further develop the addressing more special joint venture or partrimarket, especially in c
•	Analyse in each of the 3 recommended countries which is the one where Banco Invest can fully leverage its resources and operations in Portugal,	•	Determine the bun market given regulatio in the market.
	i.e. assess whether it is possible or feasible to use the bank's Portuguese infrastructure to manage foreign accounts.	•	Start to build a cu selected country, nar
•	Analyse thoroughly taxation and regulation in each country , which might influence Banco Invest's success in that particular market, i.e. relative to the offer of products and services, pricing decisions, or even dividend repatriation.	•	existing clients with the Consider logistic iss structures (headquar
•	Consider alternative countries with a different risk and attractiveness		structure, along with th
	profile , that were left out of our in-depth analysis due to Banco Invest's specific attractiveness criteria. In particular, Banco Invest could consider European countries where the banking sector is not as developed as in our top 5 countries, but which can experience significant growth in the coming years (e.g. Eastern European countries such as Bulgaria, Slovenia, Poland or Estonia).	•	Address remaining implemented in the ta and operations manag

Analyse the most appropriate entry strategy in each country, i.e. entering the market individually, through a joint venture with another bank seeking to enter the market or through a partnership with a local player lacking a specialised offer in Banco Invest's sector. The latter would not only allow Banco Invest to share the risk of the investment but also to tap into a large pool of existing customers. This analysis allows to assess the different risk and investment profiles of each alternative and identify which fits better the bank's expansion objectives.

After country selection

- **Further develop the entry strategy** chosen in the country selected, addressing more specific issues such as identifying potential partners in case of a joint venture or partnership and defining the key barriers to enter and leave the market, especially in case of approaching the market individually.
- **Determine the bundle of products and services to be offered** in the market given regulation, demand, and the existing supply offered by competitors in the market.
- Start to build a customer base before establishing operations in the selected country, namely by leveraging the relationship with Banco Invest's existing clients with the nationality of the target country.
- **Consider logistic issues**, such as the establishment of the necessary physical structures (headquarters and investment centres) or the respective cost structure, along with the best legal form of establishment in the country.
- **Address remaining topics related to the business model** to be implemented in the target market (among others, marketing, human resources, and operations management).



Given our resources and the scope of the project, our final results are subject to some limitations, namely concerning the data used and the models' construction

Limitations of the project

Across the 3 stages

Some of the data used both in the **construction of our models** and in the **in-depth analysis of the top 5 countries** was **outdated**, which might have led to **misleading conclusions**, since this data does not accurately reflect the current reality of each country.

1 st Stage	2 nd Stage	3 rd Stage
The conclusions taken from the country selection econometric model are subject to type II error , i.e. some explanatory variables might have been considered not statistically significant when in fact they are. Hence, some variables might have been excluded from the model , thereby biasing the ranking of some countries in detriment of others. The timeframe considered for the construction of the ranking model was limited to a span of 5 years , what required us to use a panel regression , instead of other econometric models that could have provide us with more precise results (e.g. individual regression for each country). Some of the variables used in the model had no data available , and for this reason, proxies had to be used which implies that our results could have been different (e.g. number of higher education students as a proxy for financial literacy).	 The model considered was based on the opinion of a small number of experts which might impact the results obtained. The subjective nature of the model used makes it biased to the opinion of those surveyed. Hence, it is not based on objective and quantitative foundations but rather on the expertise of industry professionals. The final ranking combining the GAS and SAS scores is subject to the weights attributed by us (50%-50%), and thus the top 5 countries analysed were biased by this decision. However, the sensitivity analysis performed over the weights revealed the consistency of the model relative to this matter. 	 Regarding the analysis of demand, we were not able to fully cover all the indicators necessary to properly assess the demand potential for Banco Invest's products (i.e. consumers' needs and preferences). In particular, when a specific product was not offered, we were unable to identify whether it was due to lack of demand or to poor supply. Concerning the detailed competition analysis, given our resources, our conclusions are limited in the sense that: The sample of banks and brokers analysed in each market was limited considering the size of the whole population; Some information regarding competitors' offering might not be included in the analysis, either due to language barriers or to lack of full disclosure (e.g. certain information is only available in clients' personal accounts); In pricing comparisons, conclusions were based on minimum commissions charged for high volume transactions of stocks and ETFs, disregarding the fees related to other types of

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products and transaction volumes.



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2014

After two years of recession, Europe is recovering as its growth indicators strengthen, which indicates favourable macroeconomic conditions for Banco Invest

Introduction





- Real GDP growth, which has been decreasing since 2011, is expected to increase 1.2% in 2014, and 1.8% in 2015.
- This **rise** can be explained by **higher** values in domestic and global demand, supported by the ECB's monetary policy and the smaller drag from fiscal consolidation.



- As a result of the recent recovery, the **consumer** confidence indicator increased steadily and has surpassed its long-term average (=100). This indicates that consumers are more confident in the economy and willing to take on more risk.
- This is a positive indicator for Banco Invest, since it points that European consumers are less risk averse, and might be willing to have a more diversified portfolio, taking on more risky assets.
- Over 2014, private consumption gained some strength as nominal disposable income increased, on the back of improved employment prospects and increased wages.
- The recent increase in private consumption is in line with the boost in consumer confidence. Even though it is a **positive** indicator for Banco Invest, as it indicates that consumers are less risk averse, an increase in consumption can also be negative for the bank since it might suggest that consumers' savings are reduced.


The recent European economic spur is fostering disposable income growth, increasing both gross savings and Banco Invest's potential market size

Macroeconomic Indicators





Unemployment continues to be high in spite of the labor market conditions' slight improvement. Unemployment rates started to stabilize in 2014, **being projected to gradually decline** in 2015 from around 12% to 11.4%.

- Regarding inflation, HICP inflation rates in the euro area have been declining from 2.5% (2012) to 1.3% and 0.8% (2013 and 2014E). This downward trend throughout 2013 is the result of both external factors such as volatility in commodity prices and euro's rising exchange rates, and also internal ones, like the fragile European economic environment. Further on, as the recovery gains ground, inflation levels are set to gradually increase, along with falling unemployment rates.
- The decreasing unemployment combined with low but rising inflation rates reflects the economic recovery of the EU. As a result, **disposable income** is expected to increase, driving both gross savings and household investment in a upward trend.

The Savings rate (as a % of disposable income) fluctuated between 15% and 13% in the past 5 years, peaking in 2009 at 15.2%. This shows that regardless of the crisis, well over 10% of gross disposable income of the euro area households is devoted to investment and savings. It must be noted that in the past years, both the savings and household investment rates have remained stable relative to disposable income – a trend that is expected to continue.

• The growth forecasts of European's disposable income, and the consequent expected increase in gross savings point that market conditions are favorable for the banking industry and Banco Invest. In particular, it suggests that the **bank's potential market size is expected to increase**. Nonetheless, the risks of deflation and fragile economic growth must not be underestimated.



Banco Invest benefits from the recent economic comeback, which is reflected in the stock market recovery

Financial Markets







- The EUR has been weakening against other currencies, due to the persistently fragile economic conjuncture, low interest rates and geo-political risk factors.
- The postponement of FED's tapering program resulted in the appreciation of the EUR over the USD. As a result, between July 2012 and May 2014, the EUR rallied from USD1.2 to around USD1.4.
- Nevertheless, since the beginning of 2015, EUR/USD reached 9-year historical lows, which indicates that is very volatile and exposed to the political and monetary uncertainty that predominates in Europe.

- The Euro Area Stock Market (EURO STOXX 50) has been increasing in the last 2 years and it averages around 5% return a year.
- Its positive evolution since 2012 was mostly driven by the fact that the Euro Area has pulled out of its regression and the ECB stimulus and monetary easing have steadied the financial markets, along with the banking systems.
- The reestablishment of positive expectations for the European stock market implies that **investors will be more active and trade more often**. This is **positive for Banco Invest** since not only it indicates investors' sentiment regarding **favorable market conditions** but it also might translate into **higher brokerage revenues for the bank**.
- In an effort to keep the low inflation from disrupting Eurozone's fragile economy, the ECB surprised financial markets with a cut in interest rates and announced an asset-backed securities program to fight deflation. As such, it lowered the main refinancing rate by 10 bps to 0.05% and cut the deposit facility rate to -0.2% from -0.1%. Along with this, the ECB started buying securitized debt and covered bonds to ease the flow of bank funding to the economy.
- In particular, it must be noted that the low level of interest rates is benefic for Banco Invest, since it stimulates consumers to invest in financial assets other than deposits.



Even though banking activity is diminishing, the recent reestablishment of capital flows to MFIs forecasts a favourable outlook for the banking industry

of Monetary Financial Institutions (MFI's) Net Financial Transactions (€ Million) Net Financial Assets (€ Millions) 7603 50 000 888 047 847 046 7129 6788 818 551 6591 40 000 602 098 30 000 447 497 20 000 10 000 0 2011 2012 2013 2014 2009 2010 2011 2012 2013 2009 2010 2011 2012 2013 Net Financial Assets Number of MFIs Net Financial Transactions Source:: BCE Source: BCE Source: BICE

Banking Sector Overview (1/2)

- Banking activity has decreased, both in terms of number of financial institutions and in the amount of financial activity. The number of Monetary
 Financial Institutions (MFIs) in the Eurozone decreased around 14% in the last 5 years, with Cyprus being the most affected (56%), followed by
 Luxembourg (38%).
- Net financial transactions have declined, on average, about 30% between 2012 and 2013, returning to 2009 levels.
- Net financial assets have increased from 2009 to 2013. At the end of 2012, Germany and France remained the countries with the largest banking sectors in the euro area, with total asset values of €7.6 trillion and €6.8 trillion respectively. At the other end of the spectrum, Estonian and Slovenian banking sectors' assets stood at €21 billion and €49 billion respectively.
- Since there is a decreasing tendency in the number of financial institutions,
 Banco Invest is facing a more concentrated market, where the most fragile banks failed to resist.
- The recent decrease in net financial transactions is in line with the reduction of MFIs, which reflect a **slowdown in the European banking activity**. This implies that the banking landscape has not been favorable to Banco Invest.
- The increase in net financial assets reflects the **reestablishment of capital flows to MFIs** and **the recovery of consumers' confidence in the banking sector**, which is definitely beneficial for Banco Invest.



The banking sector remains under pressure, mainly due to the constant changes in regulation, technology and volatility

Banking Sector Overview (2/2)



- The average EU **household saves** about 13% of its disposable income. 1/3 of this is invested in deposit products, accounting for, approximately, a total of €8.5 trillion (one-third of all financial wealth), indicating that the European market shows good potential for Banco Invest to expand and take advantage of this prospects.
- In June 2013, **household deposits** represented €6.2 bn, from which 98.9% were domestic. From this amount, around 40% were overnight deposits, 27% were with agreed maturity and the remaining 33% represented the redeemable at notice deposits.
- Growth in deposits, as a whole, is positive (2% yoy), even though deposits with agreed maturity are losing its attractiveness.
- With regard to **bank's net interest income**, it is clear that margins are declining, mainly due to the shortening of the spread between interest rates paid and received.
- Banco Invest seeks clients with diversified portfolios, hence, the fact that deposits with agreed maturity are decreasing poses an **opportunity for the bank to introduce more diversified financial products.**
- The recent decline in net interest income suggests that conditions in the banking industry are not the most favorable, with regard to this source of revenues.
- However, Banco Invest is not so dependent to commercial bank's spreads, since it also relies in other sources of funding, therefore reducing its exposure to these fluctuations.



Internet usage rate has been steadily increasing over the last 5 years across EU9+1 - more people are using the internet for online banking

Internet usage

\\ the percentage of **regular internet users** across EU9+1 in 2013, accounting for a total of 231 million people

Total growth of the percentage of **internet regular users**



- **Netherlands and Finland** are the countries with the **highest internet penetration rate.** Conversely, only 4 countries score a lower internet penetration than the EU9+1 average: Greece, Italy, Portugal and Spain.
- Nevertheless, these are the countries where internet penetration witnessed a higher growth, with 18%, 14%, 16% and 14% respectively, since 2009.
- The increase of cheaper devices is providing more consumers with the opportunity to access the internet, indicating that Banco Invest business model is more likely to be successful in these markets.



32% of Europeans within the EU9+1 are confident in the use of online banking – main concerns include misuse of personal data and security issues

Survey on Online Banking and Online Shopping





According to a Eurostat survey, when inquired about the main concerns with using the internet for these activities, interviewees answered "Someone taking/ misusing the personal data" and "Security of online payments" the most.

Greece is susceptible in both cases which can explain their low rates for online banking and shopping. 37% of the Greek inquiries using the internet reported to be "Less likely to use online banking".

► Germany is the country where data misusing is the main concern, as pointed by 53% of internet users.

► On average, **76%** of the total sample claims that "**The risk of becoming a victim of cybercrime has increased**" from 2012 to 2013.

► The evolution of online banking and online shopping **are aligned** on average.

► Against to what should be expected according to the graph below, countries such as Germany and Greece have **higher rates for online shopping than to online banking.**

► It is interesting to understand why this happens. In the case of Greece, the lack of trust in the banking sector can be the reason, however for Germany the same reason cannot be applied. **Understanding these reasons might create opportunities in the future.**







Data envelopment analysis was first considered, but discarded as it only allows us to measure efficiency and not other dimensions of country attractiveness

Models (1/4) – Data Envelopment Analysis

Description

Given the nature of the project, several approaches were considered when approaching the construction of the model.

Data Envelopment Analysis (**DEA**) is used to empirically measure the relative efficiencies of decision making units (**DMUs**) with multiple inputs and multiple outputs. In this particular case, DEA is used for benchmarking, where a set of measures is selected to benchmark the performance and efficiency of countries.

Addressed by Farrell and developed by Farrell and Fieldhouse, it focuses on the construction of a hypothetical efficient unit, as a weighted average of efficient units, to act as a comparator for an inefficient unit.

Having this into consideration, DEA assigns weights to the inputs and outputs of a DMU that give it the best possible efficiency. It thus arrives at a weighting of the relative importance of the input and output variables that reflects the emphasis that appears to have been placed on them for that particular DMU.

Afterwards, DEA gives all the other DMUs the same weights and compares the resulting efficiencies with that for the focus DMU. If the focus DMU looks at least as good as any other DMU, it receives a maximum efficiency score. But if some other DMU looks better than the focus DMU, then it will receive an efficiency score less than maximum.

Advantages

DEA can be a powerful tool when used wisely, and there are diverse characteristics that make it an advantageous tool:

- It can handle multiple input and output models;
- It does not require an assumption of a functional form relating inputs to outputs;
- DMUs are directly compared against a peer or combination of peers.

Disadvantages

The same characteristics that make DEA powerful can also create certain issues:

- By a judicious choice of weights a high proportion of units in the set will turn out to be efficient and DEA will thus have little discriminatory power;
- This tool does not provide a general relationship (equation) relating output and input;
- DEA is only good estimating relative efficiency and not "absolute" efficiency;
- In our specific case, DEA would allow us to estimate a country's efficiency at generating returns relative to others, but would not allow us to analyse other measures of attractiveness, such as size, risk or potential.



Multivariate analysis consists in aggregating attractiveness factors in a smaller set of composite indicators and subjectively weighting them to compute country scores

Models (2/4) – Multivariate Analysis

Description

Multivariate statistical analysis refers to advanced techniques for examining relationships among multiple variables at the same time. In this particular case, it is used to compare and rank country performance, using the so-called **composite indicators (CIs)** which provide simple comparisons of countries that can be used to illustrate complex and sometimes elusive issues in wide ranging fields.

Given that the portrayed model is composed by several dependent variables, it would be necessary to build sound composite indicators with the purpose of aggregating some of those variables into groups. To do so, with this type of model it is possible to use one of three possible procedures such as the Principal Component Analysis, Cronbach Coefficient Alpha and/or Cluster Analysis.

Having this in mind, the most appropriated method would be the **Factor Analysis or Principal Component Analysis (PCA)** which is defined as the statistical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components.

Afterwards, indicators are weighted in a subjective way, according to the underlying theoretical framework, giving the final country ranking.

Advantages

- Can summarize complex or multi-dimensional issues in view of supporting decision-makers;
- Easier to interpret than trying to find a trend in many separate indicators;
- Facilitate the task of ranking countries on complex issues in a benchmarking exercise;
- Can assess progress of countries over time on complex issues;
- Reduce the size of a set of indicators or include more information within the existing size limit;
- Place issues of country performance and progress at the centre.

Disadvantages

- In order to give meaningful results, large samples of data are necessary;
- CI may give misleading results if they are poorly constructed or misinterpreted;
- May give simplistic conclusions;
- The selection of the weights are subjective, even if supported by theoretical frameworks, which does not allow to obtain an unbiased first screening.



The error estimation method seeks to assess the number of clients to be captured in each country, by estimating the difference between actual and predicted clients

Models (3/4) – Error Estimation

Description

One of the alternatives, suggested by a professor at Nova SBE, consisted in estimating a simple linear regression for each one of the countries in the analysis, where afterwards, the focus would be the comparison of the errors of each regression.

The spectrum of the analysis would also change compared with the model chosen, since the independent variable would be the number of potential clients in each country, selected by socio-economic characteristics, instead of the attractiveness score and as dependent variables we would have a certain number of factors that directly influenced the number of potential clients in each specific country.

After running the regressions, the ranking would be built by comparing the errors estimated, which were computed by taking the difference of predicted clients minus actual clients. If the errors turned out positive it would mean that, in fact there is a group of potential clients in the market that Banco Invest can expect to attract. If not, it would mean that the number of predicted clients would fall short in comparison with the actual number of clients, meaning there is no margin for new clients to be captured.

Taking both scenarios in consideration, it is possible to obtain a ranking where the best positioned countries would have highest positive values in the error estimation, and thus a higher margin of number of clients to attract.

Advantages

- Easy to compute, as it only requires the use of a simple regression;
- Objectively allows to determine the potential of a certain country, by estimating the consumers in each market to be captured.

Disadvantages

- Is highly subject to estimation error, since if we wrongly estimate the predicted number of clients in a certain market, the comparison with the actual number of clients might point us in the wrong direction.
- There is a low degree of certainty in the results obtained with this model, due to the fact that any result obtained may be the outcome of a poor choice of explanatory variables.



We opted to engage in a panel regression model, which not only allows us to measure country attractiveness at a certain point in time, but also to predict it

Models (4/4) – Panel Regression

Description

"Panel Data" model, or also longitudinal data, is a statistical method that uses the combination of two types of data:

- 1) Cross-sectional data: data collected on several individuals/units at one point in time
- 2) Time series data: data collected on one individual/unit over several time periods

The data is usually collected over time and over the same variables, and, as follows, a regression is run over these two dimensions:

$$y_{it} = \alpha + \beta x_{it} + \varepsilon_{it}$$

This method seeks to explain the future attractiveness of a country (Y variable) using a set of explanatory variables, thus allowing us to predict the most attractive countries in years to come, as explained before.

Between all the alternatives we thought that this model was the most appropriate to capture the relationship between the country's attractiveness and the respective explanatory variables, as it does not require the use of subjective inputs to determine a country's attractiveness at a certain point in time.

Advantages

- Takes heterogeneity into account, getting individual-specific estimates;
- Minimizes bias due to aggregation;
- More accurate inference of model parameters. Panel data usually contains more degrees of freedom and more sample variability than cross-sectional data;
- Allows us to predict attractiveness in the future, and not only measure it at a certain point in time.

Disadvantages

- Some drawbacks include data collection issues (i.e. sampling design, coverage), non-response in the case of micro panels or cross-country dependency in the case of macro panels (i.e. correlation between countries);
- Large parts of panel data might be unbalanced;
- Panel attrition;
- In our specific case, the main disadvantage of this model is that it requires us to construct a Y variable that measures attractiveness at a certain point in time, which requires subjectivity, namely in defining what attractiveness actually is.



Independent variables tested in the 1st stage

1 st Stage: Econometric Model	2 nd	Stage	ge: Qualitative analysis of target 3rd Stage: In-depth analysis of To attactiveness countries		
Variables	\$			Rationale	
Market size and potential - Real G - GDP p	GDP GDP growth per capita		An analysis of standard macroece total market size and poten internationalization success. There variables, including: Brealey and Ka who find a strongly positive relation banking assets; Focarelli and Pozzol present in countries with higher experience who finds that foreign banks are a However, other authors argue the o negative coefficients for per capital banking activity abroad.	onomic variables allows for a global view of the tial, which is determinant for Banco Invest's is extensive literature on the importance of these aplanis (1996), Moshirian and Van der Laan (1998), on between real absolute GDP and FDI or foreign lo (2005), who argue that banks are more likely to be ected economic growth; and Claessens et al. (2000), attracted to markets with high income per capita. opposite, such as Goldberg and Johnson, who state a income when measuring the determinants of US	
Financial behaviour financi - Consu	s savings ehold investment in ial assets umer confidence index		The population's financial behaves save, which indicates the share of captured by Banco Invest, in the this analysis allows for a more appro- tap into. Additionally, it is important it influences the propensity of peop financial assets other than deposits.	viour enables an understanding of its propensity to f households' disposable income that might be form of savings applications or investments. Hence, eximate notion of the market size the bank intends to to analyse the level of confidence in the economy as ple to trust their savings to banks and to invest in	



Independent variables tested in the 1st stage

1 st St Economet	age: ric Model	2 nd Stage	: Qualitative analysis of target attactiveness	3 rd Stage: In-depth analysis of Top 5 countries
	Variables			Rationale
Socioeconomic characteristics	- Average income by ag years) - Higher Education stud	ge (25 - 54 dents*	The discrimination of socioecone the target customer and the d countries. As such, it is possible population has characteristics all someone in the 25 – 54 years age The choice of the latter is suppor banks tend to be present in countri use this variable as a proxy for the financial education tend not to plar fewer assets (Lusardi and Mitchell, (Alessie, Lusardi and van Rooij, 200 to diversify financial portfolios (Abreu	omic characteristics allows for a segmentation of etection of key patterns among these in different to identify the countries where the majority of the ligned with Banco Invest's target : in this case, group, and with a relatively high level of education. ted by Focarelli and Pozzolo (2005), who argue that is with a higher level of education. In our model, we level of financial literacy, since households with low in for retirement (Lusardi and Mitchell, 2007), acquire 2007), participate less in the formal financial system 07; Hogarth and O.Donnell, 1999), and are less likely a and Mendes, 2010; Guiso and Jappelli, 2009).
Online banking potential	- Internet users - Online banking usage		As the bank intends for the online paramount to understand and qua to online tools and are proficient that the lack of internet penetratic development both in EU15 and Ac variable to consider. Similarly, it is in banking to understand the populatic	e channel to play a key role in its new market, it is intify the potential customers who have access in using them. In fact, Centeno (2004) finds evidence on constitutes an entry barrier for internet banking acceding and Candidate countries, making it a crucial important to take into account the adoption of online on's propensity to the use of such tools.



Independent variables tested in the 1st stage

1 st Stage: Econometric Model	2 nd Stage	e: Qualitative analysis of target attactiveness	3 rd Stage: In-depth analysis of Top 5 countries
Variables	3		Rationale
Competitive structure - Herfin for cre	dahl-Hirschman Index edit institutions	The competitive structure of a market share. The more competitive invest to attract a satisfying number and Huveneers (1994), who show tha very concentrated banking sector, is difficult for foreign banks to enter g	a market determines opportunities to capture we the market is, the more difficult it will be for Banco of customers. This opinion is supported by Steinherr mat foreign banking is less common in countries with because although the market might be profitable, it given the dominance of a small number of banks.
Political and regulatory barriers	ical stability icient Government aucracy	Country risk can affect the success the business environment might in important to consider aspects such investment in foreign operation stability and thus low country risk co- including Papi and Revoltella (200 countries, and Yamori (1998), when Furthermore, complying with a cou- procedures are also important far ability to make decisions and op and Pozzolo (2007) noted that patter by explicit regulatory and competition This hypothesis is also supported government barriers are among th foreign banks in developed countries	s of the bank's internationalization, since changes in crease the volatility of returns. In particular, it is as political instability, which might compromise the ns. In fact, various authors suggest that political partribute to a country's attractiveness to banking FDI, 0), in a study of banking FDI inflows to transition n analysing Japanese banking FDI in 44 countries. ntry's legislation and dealing with bureaucratic ctors to consider since all might limit the bank's erate as it sees fit and on a timely manner. Focarelli erns of bank internationalization are affected not only on barriers, but also by implicit government barriers. by Berger (2007) who claims that such implicit e most important reasons for the low presence of a



Independent variables tested in the 1st stage

1 st Stage: Econometric Model	2 nd Stag	ge: Qualitative analysis of target attactiveness3rd Stage: In-depth analysis of Top 5 countries					
Variables			Rationale				
Business environment - Taxes on incom capital gains - Financial marke	e, profits and t development	The inflation rate and taxation d consequently the probability of su studies, including Barro (1995) ind growth and financial system develor evidence that banks are more lik Regarding taxation, Dammon, Spa influence the decision-making pro investment plans, namely, the trace different financial assets such as portfolio. Finally, it is important to a since studies show that a well sustainable economic growth in ge	efine the quality of the business environment , and uccess of the bank's entry in that market. Several icate that inflation has a negative long-run impact on opment. In particular, Focarelli and Pozzolo (2005) find kely to be present in countries with lower inflation. tt and Zhang (2001) argue that taxes on capital gains cess of individuals regarding their consumption and de-off between the two as well as the preference of stocks and bonds when constructing their optimal analyse the financial market development of a country developed financial system is not only crucial for eneral (Levine, 2005; World Bank, 2001), but it is also				

(Demirgüç-Kunt and Levine, 1996).

highly correlated with the development of banks and other financial institutions



In the 2nd stage, we evaluate the most attractive countries using 4 groups of variables in a perspective more specific to Banco Invest, based on experts' opinions

Factors used in the 2nd stage to determine countries' attractiveness

1 st Stage: Econometric Model		2 nd Stage: Qualitative analysis of target attactiveness		3 rd Stage: In-depth analysis of Top 5 countries
	Variables			Rationale
Variables from 1 st stage	 Average income by 54 years) Higher education students Online banking usage usage Ratio Financial market device 	age (25 – udents ge / Internet velopment	Altough the results from the econor these four variables are not statisti decided to consider them in the country's attractiveness as a poten Invest.	netric model developed in the first stage indicate that cally significant at a 10% confidence level, we have next phase since they are crucial to determine a tial target market in the internationalization of Banco
Culture	 Cultural proximity % of population who foreign languages % of non-national p Hofstede uncertaint 	o speaks opulation y avoidance	People are more likely to trust a fore habits, language or legal systems v (2004), Buch and DeLong (2004), ar openness to other cultures, which r percentage of non-nationals and of the level of risk aversion we use reflects how a country's population of	eign bank if there is some similarity in terms of cultural with the country of origin, as shown by Berger et al. and Focarelli and Pozzolo (2008). To capture a society's might facilitate a foreign bank's entry, we measure the people who speaks foreign languages. As a proxy for the Hofstede uncertainty avoindance index, which dislikes uncertainty.
Acceptance of foreign businesses	- Presence of foreign - FDI as % of GDP	banks	Banco Invest is more likely to such might already be less mistrust fro studies show a strongly positive r sector FDI, including Buch and Lapp	ceed in a country with more foreign banks as there population towards foreign banks . Meanwhile, relationship between non-financial FDI and banking to (1998), Buch (2000), and Moshirian (2001).
Other factors to consider	- Geographical distan - Number of Portugue immigrants	ice ese	Grosse and Goldbert (1991) and C between the entry of foreign banks origin, which can be explained by th cultural differences and implement immigrants, this might affect the acc	García Blandón (1996) found a negative relationship into a new market and the distance to the country of he fact the greater geographical distance, the greater tation costs. Regarding the number of Portuguese ceptance of a Portuguese bank.



In the 3rd stage, we evaluate the top 5 countries based on a competitive analysis of their banking sector and executional issues

Factors used in the 3rd stage to determine countries' attractiveness

1 st Stage: Econometric Model	2 nd Stage	e: Qualitative analysis of target attactiveness	3 rd Stage: In-depth analysis of Top 5 countries
Variables			Rationale
Competitive environement - Products and service by competitors in tar	es offered get country	Once the top 5 countries have been products and services offered by Banco Invest is conducted. The goa advantages of Banco Invest in those the bank's entry.	selected, a thorough analysis and comparison of the the main competing banks in those countries and al is to identify potential opportunities and competitive e markets, which will ultimately dictate the success of
Executional issues - Account opening pro	ocedure	Finally, it is important to assess he each country. In particular, this inc requires the client's physical presence more difficult for Banco Invest to throughout the country.	w some aspects of the business are conducted in cludes determining if the regulation of the country ce to open an account in a bank – in which case it is attract new clients without a solid branch network



Hausman Test for endogeneity enables us to rule out the existence of fixed effects, and thus we chose to use random effects

STATA Outputs: Hausman Test for endogeneity

hausman fixed random

	Coeffi	cients		
	(b)	(B)	(b-B)	sqrt(diag(V b-V B))
	fixed	random	Difference	S.E.
gdpcapita				
L1.	.0082056	.0384095	0302038	.0131982
gdpg				
L1.	.1004869	.1221389	021652	.0267585
gdp				
L1.	2.885382	2106214	3.096004	2.216776
gsavings				
L1.	.0613948	.1075068	046112	.034029
invfa				
L1.	.6116115	1.075769	464158	.4201342
avgincome				
L1.	269153	.0906741	3598271	.4664316
politicals~y				
L1.	1423929	.119719	2621119	.106819
hindex				
L1.	6928829	2106524	4822305	.1754822
ccindex				
L1.	1591195	0480476	1110719	.0417297
inf				
L1.	1927674	1757507	0170166	.0156774
tax				
L1.	2586754	2649846	.0063092	.1219723
intpen				
L1.	1703881	0681145	1022736	.2223463
obusage				
L1.	1740136	.1480925	3221061	.2074206
edu				
L1.	.099541	1131129	.2126539	. 488369
fmdev				
L1.	0274211	0117557	0156654	.0415475
bur				
L1.	0393113	0416082	.0022969	.0231784
C21 11				

Testing for fixed effects

The first step in order to run the panel regression correctly was to run tests for **fixed effects**, which are **effects due to individual heterogeneity that are fixed throughout time**. These are usually correlated with other regressors, and not taking them into account may lead to omitted variable bias. In order to test for these effects one can use the **Hausman Test** for endogeneity in STATA, which tests for correlation between the error term and the regressors. As shown by the output of the test, which can be found in this table, our model does not require the use of fixed effects, as the p-value of the test is higher than 10%, and as such we opted to use pure **random effects**.

b = consistent under Ho and Ha; obtained from xtreg B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(16) = (b-B)'[(V b-V B)^(-1)](b-B) = [17.58] Prob>chi2 = 0.3488 (V b-V B is not positive definite)



Time effects were tested by running a regression including time dummies and were rejected as they were all concluded to be insignificant – p-values > 10%

STATA Outputs: Test for time effects

Stata code for testing time effects:

. xtreg AS 1.gdpcapita 1.gdpg 1.gdp 1.gsavings 1.invfa 1.avgincome 1.politicalstability 1.hindex 1.ccindex 1.inf 1.tax 1.intpen 1.obusage 1.edu 1.fmdev 1.bur yeard3-yeard5, re

Stata output:

Random-effects GLS	regression		Numb	er of obs	=	117	ccindex						
Group variable: cou	ntryID		Numb	er of grow	ups =	24	L1.	0558746	.1204749	-0.46	0.643	2920011	.1802519
R-sq: within = 0.	3359		Obs	per group	: min =	2	inf						
between = 0.	6799				avg =	4.9	T.1	- 1863795	0560759	-3 32	0 001	- 2962863	- 0764727
overall = 0.	6521				max =	5				0.02	0.001		
			Wald	chi2(19)	=	69.52	tax						
corr(u_i, X) = 0	(assumed)		Prob	> chi2	=)	0.0000	L1.	2731217	.143303	-1.91	0.057	5539904	.007747
3						<u></u>	intpen						
AS	Coef.	Std. Err.	z	P> z 	[95% Con:	f. Interval]	L1.	0877707	.2626271	- <mark>0.33</mark>	0.738	6025104	.4269691
gdpcapita													
L1.	.0471899	.0514112	0.92	0.359	0535742	.1479541	obusage						
100.000							L1.	.1150775	.2501679	0.46	0.646	3752426	.6053975
gdpg	1200405	0696911	1 05	0.064	- 0074249	2655220							
- 11	.1290495	.0696311	1.85	0.064	00/4249	. 2600239	edu						
db							L1.	115678	.1960291	-0.59	0.555	499888	.2685321
L1.	1736928	.5671528	-0.31	0.759	-1.285292	.9379062							
	In the second second						fmdev						
gsavings	1222 1000						L1.	0274043	0890367	-0.31	0.758	- 201913	1471045
L1.	.0826802	.0936847	0.88	0.377	1009385	.2662989				0.500000000			1.000
	1777 C. 1986						hur						
invfa	10.000000000000000000000000000000000000						Dur	0000077	00/0175	0.04	0 707	1070000	1400054
L1.	1.078865	.5041324	2.14	0.032	.0907834	2.066946	11.	0288977	.0862175	-0.34	0.737	1978809	.1400854
avgincome							veard3	0079666	.0304624	-0.26	0.794	0676719	.0517387
L1.	.1024583	.2424786	0.42	0.673	3727911	.5777076	veard4	0270095	0286193	0.94	0.345	0290832	.0831022
							veard5	0198949	0284886	0 70	0 485	- 0359417	0757316
politicalstability	10000000000		10227222				1	7737043	1904945	4 06	0.000	400342	1 147067
L1.	.1327704	.1562457	0.85	0.395	1734656	. 4390063		. //3/043	.1904945	4.00	0.000	. 400342	1.14/00/
hindex							sigma_u	.23864778					
L1.	1406794	.1772881	-0.79	0.427	4881578	.206799	sigma e	.09095707					
21 - 23							rho	.8731611	(fraction	of varia	nce due t	oui)	
ccindex									1			1 77	



The final regression used for our ranking model only considers the explanatory variables statistically significant at a 10% level in the prediction of the future GAS

STATA Outputs: Model regression

Stata code and output for running the panel regression:

. xtreg AS l.gdpg l.gsavings l.invf	a l.inf, vce(robust)
Random-effects GLS regression	Number of obs = 140
Group variable: countryID	Number of groups = 28
R-sq: within = 0.2469	Obs per group: min = 5
between = 0.6945	avg = 5.0
overall = 0.6627	max = 5
	Wald chi2(4) = 168.20
corr(u_i, X) = 0 (assumed)	Prob > chi2 = 0.0000
<pre>corr(u_i, X) = 0 (assumed)</pre>	Prob > chi2 = 0.0000

(Std. Err. adjusted for 28 clusters in countryID)

AS	Coef.	Robust Std. Err.	Z	₽≻ z	[95% Conf	. Interval]
gdpg L1.	.1211273	.0633735	1.91	0.056	0030824	.2453371
gsavings L1.	.1756824	.0780121	2.25	0.024	.0227816	. <mark>3285833</mark>
invfa L1.	.9762894	.0858603	11.37	0.000	.8080063	1.144573
inf L1.	1537 <mark>4</mark> 97	.055336	<mark>-</mark> 2.78	0.005	2622063	0452932
_cons	. 6368375	.0733631	8.68	0.000	. 4930486	.7806265
sigma_u	.19644942					
sigma_e rho	.09366395 .81478142	(fraction	of varia	nce <mark>du</mark> e t	o u_i)	

Selecting significant explanatory variables

The final step in order to have our model defined was to find which independent variables were significantly able to accurately predict the future GAS (i.e. the dependent variable) of a particular market. As such, we ran our regression several times in STATA, starting with all the independent variables included, and sequentially excluding those that were the least significant (i.e. higher p-value). This procedure was repeated until we ran a regression for which all explanatory variables were statistically significant at a 10% significance level (i.e., p-value < 0.1). The final result can be found in this table.

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The ARIMA model with one lag was used to predict the statistically significant variables of the model – here is shown an example, GDP growth for Austria

STATA Outputs: ARIMA prediction – Austria GDP growth example

Stata code to predict ARIMA models for the gdpg variable for all countries

. by country,	sort: arima (gdpg, ar(l)					
-> country = P	Austria						
(setting optim	nization to Bl	HHH)					
Iteration 0:	log likeliho	ood = -38.838	8067				
Iteration 1:	log likeliho	ood = -38.80	6769				
Iteration 2:	log likeliho	ood = -38.79	4208				
Iteration 3:	log likeliho	ood = -38.79	2187				
Iteration 4:	log likelih	ood = -38.79	1822				
(switching opt	imization to	BFGS)					
Iteration 5:	log likelihe	ood = -38.79	1728				
Iteration 6:	log likeliho	ood = -38.79	1326				
Iteration 7:	log likeliho	ood = -38.79	1313				
Iteration 8:	log likeliho	ood = -38.79	1312				
Sample: 2460 Log likelihood	41 - 2465q4 d = -38.79131			Number Wald ch Prob >	of obs ni2(1) chi2	=	24 63.85 0.0000
-				Inter a			
		OPG					
gdpg	Coef.	Std. Err.	z	P> z	[95%	Conf.	Interval]
gdpg							
_cons	.9358094	1.669617	0.56	0.575	-2.336	581	4.208199
ARMA							¢.
ar							
L1.	.8441591	.1056422	7.99	0.000	. 6371	042	1.051214

Note: The test of the variance against zero is one sided, and the two-sided confidence interval is truncated at zero.

Stata code to predict Austria's gdpg for 2014:

 predict gdpghat1 if country=="Austria" (option xb assumed; predicted values)
 (647 missing values generated)

The 2015 ranking uses explanatory variables from the year 2014. As these are not yet available, one of the methods used to find these values was **using an estimation from an ARIMA model**, using one lag. A different model was calculated for each country and each explanatory variable, which means that they are independent across countries and across variables. A broader sample than the one used to compute the model relating these with the GAS variable was used to estimate the predictions for 2014 variables: 16 observations for each variable, quarterly since 2009 for real gdp growth, and yearly since 1998 for the remaining 3 variables.



Survey

Business Project Banco Invest: Selecting Potential Markets

Fatores chave na determinação de países target para internacionalização de um banco português

O Banco Invest é um banco que se posiciona como o segundo banco do cliente, ou seja, o banco das suas poupanças e investimentos.

O Banco pretende expandir a área de clientes particulares para um novo mercado / país.

Esta expansão irá focar-se na banca online e tentar aproveitar ao máximo os recursos já existentes em Portugal.

O cliente alvo do segmento de "clientes particulares" tem as seguintes características:

Tem preferência por determinados produtos financeiros que os bancos tradicionais normalmente não oferecem. Desta forma, o Banco Invest procura este tipo de clientes, particularmente **clientes que diversifiquem os seus investimentos**, beneficiando tanto o banco como os próprios clientes.

Devido à forte presença online do Banco Invest, o cliente alvo deverá estar confortável em utilizar as ferramentas online

Em termos de receita, os clientes mais atrativos são aqueles que efectuam **transacções de forma mais activa** visto que o Banco Invest recebe comissões de corretagem por esta actividade.

Pretendemos identificar, e ordenar, os fatores mais relevantes para a seleção dos países por onde deve ser iniciado o processo de internacionalização (fatores de atratividade).

Na página seguinte encontram-se duas tabelas que agradecemos que preencha.

Em caso de dúvida sobre algum dos critérios, encontra uma descrição nas páginas 3 e 4.



Survey

Por favor ordene os seguintes critérios por ordem de importância (de 1º - mais relevante; a 9º - menos relevante)

Critério:	Pontuação
Rendimento médio por idade (25 – 54 anos)	
Literacia financeira / Educação	
Sofisticação do mercado financeiro	
Abertura aos bancos estrangeiros (% bancos em termos de número e ativos)	
Investimento direto estrangeiro no país	
Número de emigrantes portugueses	
% Utilizadores de Internet	
Distância geográfica	
Aspetos culturais (como um todo)	

* Em caso de dúvida sobre algum dos critérios, encontra uma descrição nas páginas 3 e 4.

Tendo em conta que os critérios na tabela anterior não são totalmente independentes, se apenas pudesse selecionar 4 fatores manteria a sua escolha?

Por favor ordene os seguintes critérios por ordem de importância (de 1º - mais relevante; a 4º - menos relevante)

Critérios: (Aspectos culturais)	Pontuação
Proximidade cultural	
Pessoas que falam uma língua estrangeira (%)	
População estrangeira (%)	
Hofstede uncertainty avoidance	

* Em caso de dúvida sobre algum dos critérios, encontra uma descrição nas páginas 3 e 4.

Tendo em conta que os critérios na tabela anterior não são totalmente independentes, se apenas pudesse selecionar 2 fatores, manteria a sua escolha?



Survey

Critérios gerais:

- Rendimento médio por idade (25-54 anos)

Traduz a disponibilidade financeira do público-alvo para investir em produtos financeiros do banco.

- Literacia financeira / Educação

Entende-se por literacia financeira/educação a capacidade que o geral da população tem para avaliar a atratividade de diferentes produtos financeiros.

- Sofisticação dos mercados financeiros

Mercados financeiros sofisticados utilizam uma ampla variedade de produtos financeiros na sua atividade de modo a ir ao encontro das necessidades dos clientes. Para desempenhar esse papel, o sector bancário necessita de ser transparente e dinâmico, com uma regulação que proteja os investidores e outros agentes participantes.

- Abertura aos bancos estrangeiros (%bancos em termos de número e ativos)

Pretende avaliar a confiança que as pessoas no país alvo têm em bancos estrangeiros. Quantos mais bancos estrangeiros e maior o seu tamanho, assume-se que mais bem aceite será a entrada do Banco Invest enquanto banco português.

- Investimento estrangeiro no país alvo

O Investimento Estrangeiro pretende medir a atratividade do país para atrair investimento e novos negócios de outros países. Serve de proxy ao agregar fatores como a facilidade em abrir um negócio, acesso a financiamento, eficiência na Justiça, estabilidade do país, entre outros.

- Distância geográfica

Este fator representa os custos monetários e temporários em expandir o banco para outro país. Nestes se incluem os tempos de vôos e despesas associadas das deslocações, logística, comunicação, entre outros.

- Número de emigrantes portugueses

Por ser um banco Português, o Banco Invest tem uma estreita relação de proximidade com os clientes portugueses. A recente crise económica e financeira, juntamente com os polémicos casos do BPN e BES, afetaram severamente a credibilidade externa da banca portuguesa. Tendo isso em conta, o número de emigrantes portugueses poderia facilitar a penetração do banco nesse país.

З



Survey

- Utilizadores de internet / Online Banking

A atividade do Banco Invest é maioritariamente suportada pela sua plataforma online, através da qual os clientes fazem os seus investimentos e mexem no seu dinheiro. Enquanto banco pequeno, o Banco Invest está mais interessado em explorar mercados maduros, com altas taxas de online banking ou, mercados onde esta atividade esteja em franco crescimento.

Aspetos culturais

- Proximidade cultural

Descreve a proximidade cultural entre a cultura portuguesa e a cultura alvo em termos de diferenças linguísticas, normas sociais e hábitos, e ambiente social entre outros. Quanto mais acentuadas forem as diferenças, maior adaptação será necessária por parte do banco em adaptar as suas operações ao país alvo.

- Pessoas que falam uma língua estrangeira (%)

Traduz a percentagem de pessoas residentes no país alvo que fala uma segunda língua além da língua materna. Este fator pretende medir a dificuldade em termos linguísticos com a burocracia e comunicação com pessoas em geral nesse país, ou até que ponto o Banco Invest e a sua subsidiária podem partilhar atividades operacionais.

- População estrangeira (%)

A percentagem total de pessoas imigrantes num determinado país revela a sua multiculturalidade e consequentemente assume-se uma maior aceitação relativamente a novas culturas/marcas estrangeiras.

- Hofstede uncertainty avoidance

Revela até que ponto os membros da cultura são avessos ao risco e sentimento de insegurança. Neste caso, uma maior uncertainity avoidance é negativa para o banco, na medida em que as pessoas tendem a aplicar as suas poupanças em produtos financeiros mais seguros, como são os depósitos.

Nota: outros fatores como a inflação e a taxa de poupança já foram previamente analisados e a sua importância tida em atenção.

4



The decomposition of the SAS shows that the countries with the highest scores are the ones with consistently high values for all the variables

Specific Attractiveness Score (SAS) discriminated per variable





The sensitivity analysis performed demonstrates the robustness of the ranking since the top positions seem to be consistent between scenarios

Combined ranking results





German commercial Banks offer a more traditional range of products and services focusing on current accounts, deposits, loans and basic investment products

Germany: Analysis of representative banks – Cluster Commercial Banks

		Products								Se	ervices		Dis	stribution	Channe	ls
	Inve	stment I	Funds	Indexed	Charles						Discustions		Tradium	Outline	Mahila	1
	In	3rd P	arties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO 🗡	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
Deutsche Bank	557		\checkmark	\checkmark	\checkmark	\checkmark				\checkmark		\checkmark		\checkmark	\checkmark	4
			\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark				\checkmark	\checkmark	4
wüstenrot wwwwwürttembergische	5		\checkmark	\checkmark	\checkmark	\checkmark				\checkmark		\checkmark		\checkmark	\checkmark	5

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fees	& Procedures	S				Stock & ETFs P	ricing
	Account	Minimum	Maintenance	Custody	Inv.		BANCO 💙	Cluster	· Average
	Opening Online	Investment	Fee (p.a.)	Custody	Centres		INVEST	Low volumes	High
BANCO X	\checkmark	5000€	0€	0€	\checkmark	Domestic	0.075 - 0.10%	2€+1%	2€-
Deutsche Bank	\checkmark	0€	0.1%	5 – 20 €	\checkmark	Europe	0.075 - 0.10%	4.5€+1%	4.5€
HypoVereinsbank	\checkmark	0€	0€	7.9 – 10€	\checkmark	US	1.25 - 1.5 cts p/ share	15€+1%	15€
wüstenrot wwwwwirttembergische	\checkmark	0€	0€	0-4%	\checkmark	Others	n/a	29€+1%	29€

Sources: Banco Invest, Deutsche Bank, HypoVereinsbank, W&W Bank

High volumes 2 € + 0.25%

4.5 € + 0.25%

15 € + 0.25%

29 € + 0.25%

Minimum

Commissions

9.90 - 30 €

20 - 40 €

20 - 40 €

20 - 40 €



German investment-focused banks have a sophisticated and diversified offer of investment products and services at more competitive prices

Germany: Analysis of representative banks - Cluster Investment-focused Banks

				P	Products					Se	ervices		Dis	stribution	Channe	s
	Inve	stment I	Funds	Indexed	Stocks				Margin		Discretionary		Trading	Online	Mobile	Lavout
	In 3rd Parties		Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use	
	house	<100	>100													
BANCO 🔀	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
DAB <mark>bank</mark>			\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	4
OnVista Bank			\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark	\checkmark	3
comdirect	15		\checkmark	n/a	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
NG DiB a			\checkmark		\checkmark	\checkmark								\checkmark	\checkmark	4

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fees	& Procedures	6	
	Account Opening Online	Minimum Investment	Maintenance Fee	Custody (p.a.)	Inv. Centres
BANCO 🔀	\checkmark	5000€	0€	0€	\checkmark
DAB bank	\checkmark	0€	0€	0€	
OnVista Bank	\checkmark	0€	0€	0.1%	
comdirect	\checkmark	0€	0€	0 – 23 €	
ING À DiBa	\checkmark	0€	0€	0€	\checkmark

	BANCO 🖌	Cluster	Average	Minimum
	INVEST	Low volumes	High volumes	Commissions
Domestic	0.075 - 0.10%	(1.5 – 4.9 €) + 0.25%	(1.5 – 4.9 €) + 0.08%	4.95 – 12 €
Europe	0.075 - 0.10%	(2.90 – 7.9 €) + 0.25%	(2.90 – 7.9 €) + 0.15%	4.95 - 12 €
US	1.25 - 1.5 cts p/ share	(7.9 – 15 €) + 0.25%	(7.9 – 15 €) + 0.08%	4.95 – 14 €
Others	n/a	24 € + (0.8 – 2.5%)	24 € + (0.8 – 2.5%)	14 – 26 €

Transaction Pricing



Online Brokers in Germany focus on delivering high-tech trading platforms along with a diverse offering of financial products

Germany: Analysis of representative banks – Cluster Online Brokers

				P	Products					Se	ervices		Dis	stribution	Channe	ls
	Inve	stment I	Funds	Indexed	Stocks				Margin		Discretionary		Trading	Online	Mohile	Lavout
	In	3rd P	arties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO 🗡	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
			\checkmark		\checkmark	\checkmark			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	4
maxblue	600		\checkmark		\checkmark	\checkmark			\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	4
broker. Einfach handeln			\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	5

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fees	& Procedures	5			
	Account Opening Online	Minimum Investment	Maintenance Fee	Custody	Inv. Centres		BANCO
BANCO 🔀	\checkmark	5000€	0€	0€	\checkmark	Domestic	0.075 - 0.10%
	\checkmark	0€	0€	0€		Europe	0.075 - 0.10%
maxblue	\checkmark	0€	0€	0€		US	1.25 - 1.5 cts p/ share
s broker. Einfach handeln	\checkmark	0€	0 - 35 €	0€		Others	n/a

		Transaction Pricing	
	BANCO	Cluster Average	Minimum
	INVEST	Low volumes High volumes	Commissions
Domestic	0.075 - 0.10%	2 - 5 € + 0.25%	7.90 - 8.99 €
Europe	0.075 - 0.10%	3.5 - 5 € + 0.25%	7.90 – 8.99 €
US	1.25 - 1.5 cts p/ share	15 – 19.90 € + 0.25%	7.90 – 8.99 €
Others	n/a	24.90 - 29 € + 0.25%	7.90 – 8.99 €



With respect to pricing it is clear that investment-focused banks pratice the most competitive prices, even though Banco Invest presents better account conditions

Germany: Clusters comparison

			Pricing,	Fees and Procedures			
	BANCO 🧹	Commercial	Banks Average	Investment-focus	ed Banks Average	Online Brok	ers Average
Stocks and ETFs	INVEST	Low volumes	High volumes	Low volumes	High volumes	Low volumes	High volumes
Domestic	0.075 - 0.10%	2€+1%	2€ + 0.25%	(1.5 – 4.9 €) + 0.25%	(1.5 – 4.9 €) + 0.08%	2 - 5 € -	- 0.25%
Europe	0.075 - 0.10%	4.5€ + 1%	4.5€ + 0.25%	(2.90 – 7.9 €) + 0.25%	(2.90 – 7.9 €) + 0.15%	3.5 - 5 €	+ 0.25%
US	1.25 - 1.5 cts p/ share	15€ + 1%	15€ + 0.25%	(7.9 – 15 €) + 0.25%	(7.9 – 15 €) + 0.08%	15 – 19.90	€+0.25%
Minimum Investment	5.000 €		0€	0	€	0	€
Maintenance Fee (p.a.)	0€	0 –	0.1%	0	€	0 - 3	35 €
Custody	0€	0 – 20 (€/0-4%	0 – 23€	2/0.1%	0	€
Account Opening Online	Yes						
Inv. Centres	Yes	(((\supset

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



In France, commercial banks offer clients a broad offer of financial assets to invest in, although the way they interact with clients is poorer than Banco Invest's

France: Analysis of representative banks – Cluster Commercial Banks

		Products								Se	ervices		Dis	tribution	Channe	ls
	Inve	stment F	unds	Indexed	Stocks				Margin		Discretionary		Trading	Online	Mobile	Lavout
	In	3rd Pa	arties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO X	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
BNP PARIBAS	22		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark		\checkmark	\checkmark	3
	9	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark	\checkmark	2
	50			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	3

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fees and Procedures											
	Account Opening Online	Minimum Investment	Maintenance Fee (p.a.)	Custody	Inv. Centres								
BANCO 🗡	\checkmark	5,000€	0€	0€	\checkmark								
BNP PARIBAS	\checkmark	10€	0€	0.1 - 0.3%	\checkmark								
		10€	9€	0.1 - 0.3%	\checkmark								
	\checkmark	10€	0€	0.1 - 0.3%	\checkmark								

Transaction Pricing												
	BANCO 💙	Cluster	Minimum									
	INVEST	Low volumes	High volumes	Commissions								
Domestic	0.075 – 0.10%	0.44 – 1.29%	0.09 – 0.44%	7.50 – 15.20 €								
Europe	0.075 – 0.10%	0.48 – 1.50%	0.48 – 1.50%	23.30 – 35 €								
US	1.25 - 1.5 cts p/ share	0.48 – 1.50%	0.48 – 1.50%	16 - 35 €								
Others	n/a	0.48 – 1.50%	0.48 – 1.50%	35 €								



Investment-focused banks in France have a large set of channels to reach clients but offer a limited basket of products and services compared to Banco Invest

France: Analysis of representative banks – Cluster Investment-focused Banks

				Р	roducts				Services				Distribution Channels			
	Inves	stment F	unds	Indexed	Stocks				Margin		Discretionary		Trading	Online	Mobile	Lavout
	In	3rd Pa	arties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use
	house <100 >100															
BANCO 🗡	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\sim	\checkmark	\checkmark	5
*BINCK.FR	0		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	4
CORTAL CONSORS BNP PARIBAS	4		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	5
	0		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
ING 絶 DIRECT	3		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	4

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fees a	and Procedure	es		Transaction Pricing							
	Account	Minimum Investment	Maintenance	Custody	Inv. Centres		BANCO 🖌	Cluster	r Average	Minimum			
	opening enine	investment	100		ochico		INVEST	Low volumes	High volumes	Commissio			
BANCO	\checkmark	5,000€	0€	0€	\checkmark	Domestic	0.075 – 0.10%	1.75– 13 €	0.09 – 0.25%	n/a			
*BINCK.FR		1€	0€	0€									
	•					Europe	0 075 – 0 10%	15€ + 0 15%	15€+0.15%/	23 30 - 35			
CORTAL CONSORS	\checkmark	1€	0€	0€					0.50%				
	\checkmark	100€	0€	0€		US	1.25 - 1.5 cts p/ share	0.20%	0.20 – 0.50%	20€			
ING 絶 DIRECT	\checkmark	10€	0€	0€	\checkmark	Others	n/a	1%	1%	30€			

ns

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French online brokers tend to offer both basic and more complex products that are attractive to active traders, but lack in advisory and support to less informed clients

France: Analysis of representative banks – Cluster Online Brokers

				Р	roducts				Services				Distribution Channels			
	Investment Funds		Funds	Indexed	Stocks				Margin		Discretionary		Trading	Online	Mohile	Lavout
	In	3rd P	arties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
ANCO	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
BOURSE DIRECT	0		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark		4
asy Bourse	0		\checkmark		\checkmark	\checkmark			\checkmark			\checkmark	\checkmark	\checkmark		3
SAXO BANQUE	0				\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	4

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

	Fees & Procedures												
	Account Opening Online	Minimum Investment	Maintenance Fee	Custody	Inv. Centres								
BANCO	\checkmark	5,000€	0€	0€	\checkmark								
Bourse Direct	\checkmark	0€	0€	0€									
eas√BOURSe	\checkmark	500€	0€	0€		Europ							
	\checkmark	10,000 €	0€	0€		US							

Transaction Pricing												
	BANCO 💙	Cluster A	Average	Minimum								
	INVEST	Low volumes	High volumes	Commissions								
Domestic	0.075 – 0.10%	0.09%/ 0.99- 12 €	0.1 – 0.45%	5€								
Europe	0.075 – 0.10%	0.15 – 0.20%/ 35€	0.10 – 0.35%	15 – 18 €								
US	1.25 - 1.5 cts p/ share	8.5 – 15 €/ 2 cts p/ share	0.09 – 0.12%	15 USD								
Others	n/a	0.48%/ 55€	0.48 – 0.55%	10 - 41.90 €								



Prices in France tends to be slightly higher than those practiced by Banco Invest, even though commissions can vary between different banks and clusters

France: Clusters comparison

	Pricing, Fees and Procedures														
Commissions for Stocks and	BANCO 🖌	Commercial	Banks Average	Investment-focus	ed Banks Average	Online Brokers Average									
ETFs	INVEST 🥂	Low volumes	High volumes	Low volumes	High volumes	Low volumes	High volumes								
Domestic	0.075 - 0.10%	0.44 - 1.29% 0.09 - 0.44%		1.75 - 13 €	0.09 - 0.25%	0.09% / 0.99 – 12 €	0.1 - 0.45%								
Europe	0.075 - 0.10%	0.48 - 1.50% 0.48 - 1.50%		15€+0.15%	15 € + 0.15% / 50%	0.15 - 0.20%/ 35 €	0.10 - 0.35%								
US	1.25 – 1.5 cts p.s.	0.48 - 1.50%	0.48 - 1.50%	0.20%	0.20 - 0.50%	8.5 – 15 € / 2 cts p.s.	0.48 - 0.55%								
Minimum Investment	5.000€	1	0€	1 – 5,	000€	0 – 10,000 €									
Maintenance Fee (p.a.)	0€	0 -	-9€	0	€	0€									
Custody	0€	0.1 -	- 0.3%	0	€	0 €									
Account Opening Online	Yes														
Inv. Centres	Yes				D	\bigcirc									

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



Commercial banks in the Netherlands lack the most sophisticated investment products, distribution channels, and services like margin accounts and research

Netherlands: Analysis of representative banks – Cluster Commercial Banks

				Pı	roducts					Se	ervices		Distribution Channels				
	Invest	tment Fu	nds	Indexed	Stocks				Margin		Discretionary		Trading	Online	Mobile	Lavout	
	In	3rd Pa	rties	deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use	
	house	<100	>100														
BANCO 🔀	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5	
ABN·AMRO	22		\checkmark		\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	\checkmark		5	
Rabobank	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark			\checkmark	\checkmark	4	
🏂 SNS	30		\checkmark		\checkmark	\checkmark				\checkmark	1			\checkmark	\checkmark	3	

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fees	& Procedures						
	Account Minimum Maintenance Custody Inv. Opening Online Investment Fee p.a.			Stocks	& ETFs	Minimum			
	opening online	investment	ree p.a.		Gentres		Low volumes	High volumes	commission
BANCO	\checkmark	5000€	0€	0€	\checkmark	Domestic	6.5€+	0.1%	 10 €
ABN·AMRO		0€	15€		\checkmark	Europe	8€+0).12%	10€
Rabobank	\checkmark	0€			\checkmark	US	17€+	0.12%	10 – 15 €
🏇 SNS	\checkmark	0€	0.1 - 0.2%		\checkmark	Others	30€+	0.3%	10-30€



In-house funds, indexed deposits and CFDs are not commonly offered by Dutch investment-focused banks, while trading platforms are non-existent in our sample

Netherlands: Analysis of representative banks – Cluster Investment-focused Banks

				Р	roducts				Services				Distribution Channels			
	Invest	tment Fu	nds	Indexed deposits	Stocks &	Bonds	Futures	CFDs	Margin Account	Advisory	Discretionary Management	Research	Trading Platform	Online Trading	Mobile / Tablet	Layout / Use
	In house	<100	>100		ETFs										,	,
BANCO 🔀	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
alex.			\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	3
* BINCK			\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	4
ING ಖ	73		\checkmark		\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	4
TD Direct Inv			\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	5
	In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the a Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.											ding the comp	oonent of			
				Fees	& Proced	dures				Transaction Pricing						
	Acc Openin	count ng Online	M	linimum vestment	Maintenan Fee p.a.	^{ce} c	Custody	Inv. Centre	s		Stocks & ETFs				М	inimum
BANCO		1	Ę	5000€	0€		0€	\checkmark			Low volumes		High vo	olumes	con	nmission
				0€	0-9€	0 -	- 0.05%	<u> </u>	Dom	iestic	6.5 € + 0.2% / 22.4	- 250 €	6.5 € + 0.15	5% / 0.09%	() – 15 €
				n/a		Euro	pe (6.5 € + 0.2% / 22.4	- 250 €	6.5 € + 0.15%	/ 0.08 - 0.1%	.08 - 0.1% 0 -				
				0€	16 <i>€</i>		n/a		US		6.5 €+0.2% / 19.6 -	 250 €	6.5 € + 0.15% / 0.07 - 0.1%		- 0.1% 0	
TD Direct Inv				0€	0 – 25 €	0	-0.05%	•	Othe	ers	6.5 €+ 0.2% / 38 -	250€ 6	6.5 € + 0.15% / 0.085 - 0.1%		% () – 15 €


Although they offer complex products and developed trading platforms, online brokers in the Netherlands have no in-house funds and lack advisory and research services

Netherlands: Analysis of representative banks - Cluster Online Brokers

				Pr	oducts	_			Services				Distribution Channels			
	Invest	ment Fu	nds	Indexed	Stocks				Margin		Discretionary	_	Trading	Online	Mobile	Lavout
	In	3rd Pa	rties	deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO 🗡	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
DE GIRO		\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	n/a				\checkmark		\checkmark	3
LYNX			\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	n/a				\checkmark		\checkmark	5
SAXO					\checkmark	\checkmark	\checkmark	\checkmark	n/a				\checkmark		\checkmark	5

		Fee	s & Procedure	es					
	Account	Minimum	Maintenance	Custody	Inv. Contros		Stock	s & ETFs	Minimum
	opening online	investment	i ee p.a.		Gentres		Low volumes	High volumes	commission
BANCO	\checkmark	5 000 €	0€	0€	\checkmark	Domestic	2 € + 0.0		5 – 12 €
DE	\checkmark	0€	n/a	n/a	\checkmark	Europe	4 € + 0.0	 D4% / 0.01%	6 – 12 €
LYNX	\checkmark	3 000 €	n/a	n/a	\checkmark	US	10 € + 0.	15% / 0.02%	6 – 11.35 €
SAXO	\checkmark	10 000 €	n/a	n/a		Others	10 € + 0.	15% / 0.07%	6 – 11.35 €



Dutch online brokers offer the most competitive pricing in domestic and European markets. Investment-focused banks' pricing is very close to Banco Invest's

Netherlands: Clusters comparison

			Pricing,	Fees and Procedures				
	BANCO 🖌	Commercial	Banks Average	Investment B	anks Average	Online Brok	ers Average	
Stocks & ETFs	INVEST	Low volumes	High volumes	Low volumes	High volumes	Low volumes	High volumes	
Domestic	0.075 - 0.10%	6.5 €	2+0.1%	6.5 € + 0.2% / 22.4 - 250 €	6.5 € + 0.15% / 0.09%	2 € + 0.02	2% / 0.09%	
Europe	0.075 - 0.10%	8€-	- 0.12%	6.5 € + 0.2% / 22.4 - 250 €	6.5 € + 0.15% / 0.08 - 0.1%	4 € + 0.04	1% / 0.01%	
Minimum Investment	5 000 €		0€	C)€	0 - 10	0000€	
Maintenance Fee (p.a.)	0€	0 – 15 €,	/ 0.1 - 0.2%	0 - 25 €.	/ 0 - 0.2%	n/a		
Custody	0€		n/a	0 - 0),05%	n/a		
Account Opening Online	Yes	6						
Inv. Centres	Yes							

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



Spanish commercial banks usually do not offer many complex investment products nor auxiliary tools and services as trading platforms and discretionary management

Spain: Analysis of representative banks – Cluster Commercial Banks

				Pr	oducts					Se	rvices		Distribution Channels			
	Inves	tment l	Funds	Indexed	Stocks				Morein		Discustion on a	Desserve	Tuodina	Online	Mahila	Louiset
	In-	3rd I	Parties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	h	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO 🔀	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
openbank 🌢			\checkmark	\checkmark	\checkmark		\checkmark		\checkmark					\checkmark	\checkmark	4
ActivoBank [®] S	46			\checkmark	\checkmark	\checkmark				\checkmark		\checkmark		\checkmark	\checkmark	4
bankinter.	39		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5

	Fees & Procedures										
	Account Opening Online	Minimum Investment	Maintenance Fee (p.a.)	Custody	Inv. Centres						
BANCO 🗡	\checkmark	5 000 €	0€	0€	\checkmark						
openbank 🌢	\checkmark	0€	0€	0.15 - 0.6%	\checkmark						
ActivoBank		0€	0€	0.05 – 0.3%	\checkmark						
bankinter.	\checkmark	0€	0 – 45 €	1%	\checkmark						

		Transaction Pri	icing	
	BANCO 💙	Cluster	Average	Minimum
	INVEST	Low volumes	High volumes	Commissions
Domestic	0.075 - 0.10%	0,1 - 0,2%	0,1 - 0,2%	0 – 10 €
Europe	0.075 - 0.10%	0,2% / 20 €	0,2% / 20 €	20 – 45 €
US	1.25 - 1.5 cts p/ share	0,2% / 20 €	0,2% / 20 €	20 – 45 €
Others	n/a	0,2% / 20 €	0,2% / 20 €	20 – 45 €



Most Spanish investment-focused banks do not have a product offering as complete as Banco Invest, and advisory and discretionary management are not widespread

Spain: Analysis of representative banks - Cluster Investment-focused Banks

				Pr	oducts				Services				Dis	tribution	Channel	s
	Inves	tment	Funds	Indexed	Stocks				Margin		Discretionary	Researc	Trading	Online	Mobile	Lavout
	In-	3rd	Parties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	h	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO 🔀	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
renta4banco	44		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		5
ING 鮠 DIRECT		\checkmark			\checkmark							\checkmark		\checkmark	\checkmark	4
Self Bank			\checkmark		\checkmark		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark		\checkmark	3
🔊 Cortal Consors	40		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

	Fees & Procedures										
	Account Opening Online	Minimum Investment	Maintenance Fee (p.a.)	Custody	Inv. Centres						
BANCO 🔀	\checkmark	5 000 €	0€	0€	\checkmark						
renta4banco	\checkmark	0€	36 €	0.033 - 1%	\checkmark						
ING ಖ DIRECT	\checkmark	0€	0€	0−4.84 €	\checkmark						
Self Bank	\checkmark	0€	0€	0-0.1%	\checkmark						
🐔 Cortal Consors	\checkmark	0€	0€	20 €/ 0.05%	\checkmark						

	BANCO 💙	Cluster	Minimum	
	INVEST	Low volumes	High volumes	Commissions
Domestic	0.075 - 0.10%	3-9€	0,07 – 0,15%	0 – 12 €
Europe	0.075 - 0.10%	15 - 50 € / 0,15 – 0,25%	0,15 – 0,25%	15 – 30 €
US	1.25 - 1.5 cts p/ share	15\$	0,125%	15€/25\$
Others	n/a	0,45%	0,45%	15€

Transaction Pricing

Sources: Banco Invest, Renta4banco, ING Direct, Self Bank, Cortal Consors



Online brokers in Spain offer a broad set of financial products and have developed trading platforms and websites, but lack in advisory and discretionary management

Spain: Analysis of representative banks – Cluster Online Brokers

				Pr	oducts				Services				Distribution Channels			
	Investment Funds		unds	Indexed	Stocks				Margin		Discretionary	Besearc	Trading	Online	Mohile	Lavout
	In-	3rd F	Parties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	h	Platform	Trading	/ Tablet	/ Use
	house	<100	>100													
BANCO 🗡	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
InteractiveBrokers			\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	5
NF ahorro.com	20		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark		\checkmark	4
Activotrade	2				\checkmark		\checkmark	\checkmark		\checkmark			\checkmark	\checkmark	\checkmark	5

		Fee	s & Procedure	es	
	Account Opening Online	Minimum Investment	Maintenance Fee (p.a.)	Custody	Inv. Centres
BANCO 🔀	\checkmark	5,000 €	0€	0€	\checkmark
InteractiveBrokers	\checkmark	10 \$	10 \$	0€	
All ahorro.com	\checkmark	0€	0€	0 - 0.02%	\checkmark
Activotrade	\checkmark	5,000 €	n/a	0€	\checkmark

		Transaction Price	cing	
	BANCO 💙	Cluster /	Average	Minimum
	INVEST	Low volumes	High volumes	Commissions
Domestic	0.075 - 0.10%	5 - 9 € / 0.08 - 0.1%	0.1 – 0.15%	1.66 – 8 €
Europe	0.075 - 0.10%	0.1 – 0.15%	0.1 – 0.15%	1.66 – 12 €
US	1.25 - 1.5 cts p/ share	0.005-0.03 \$ p/ share/ ⁻	12-15 € + 0.10 - 0.15%	1 – 15 \$
Others	n/a	0.08 – 0.15%	0.08 – 0.15%	1 – 15 \$



In Spain, online brokers charge the lowest fees in European markets and investment banks in the domestic one. Still, Banco Invest offers more competitive commissions

Spain: Clusters comparison

	Pricing, Fees and Procedures								
	BANCO 🖌	Commercial	Banks Average	Investment-focus	ed Banks Average	Online Brok	ers Average		
Commissions for Stocks & ETFs	INVEST 🥂	Low volumes	High volumes	Low volumes	High volumes	Low volumes	High volumes		
Domestic	0.075 - 0.10%	0,1 - 0,2% 0,1 - 0,2%		3 - 9 € 0,07 - 0,15%		5 - 9 € / 0.08 - 0.1%	0.1 – 0.15%		
Europe	0.075 - 0.10%	0,2% / 20 € 0,2% / 20 €		15 - 50 € /0,15 - 0,25%0,15 - 0,25%		0.1 – 0.15% 0.1 – 0.15%			
US	1.25 - 1.5 cts p.s.	0,2% / 20 € 0,2% / 20 €		15\$	0,125%	0.005-0.03 \$ p/ share/	12-15 € + 0.10 - 0.15%		
Minimum Investment	5.000 €	()€	0	€	0 – 5.000 €			
Maintenance Fee (p.a.)	0€	0 -	45€	0 - 3	36 €	0 – 10 \$			
Custody	0€	0.05	5 – 1%	0 – 1%	/ 20 €	0 - 0.02%			
Account Opening Online	Yes								
Inv. Centres	Yes								

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



Although they provide clients a complete set of services and distribution channels, Italian commercial banks lack more complex products such as futures and CFDs

Italy: Analysis of representative banks – Cluster Commercial Banks

				Pro	oducts					Se	ervices		Dis	stribution	Channe	ls		
	Investment Funds		Investment Funds		nent Funds		Stoc				Margin		Discretionary		Trading	Online	Mohile	Lavout
	In-house	3rd F	Parties	Deposi ts	ks & ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	/ Tablet	/ Use		
	in nouse	<100	>100															
BANCO INVEST	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5		
	49			\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark		\checkmark		2		
UniCredit	318			\checkmark	\checkmark	\checkmark				\checkmark			\checkmark	\checkmark	\checkmark	3		
NTESA 🚾 SANDAOLO	55			\checkmark	\checkmark	\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	3		

_													
		Fe	ees & Procedu	ires		Transaction Pricing							
	Account Opening	Minimum	Maintenance	Custody Inv.			BANCO 💙	Cluster	Minimum				
_	Online	Investment	Fee *	,	Centres		INVEST	Low volumes	High volumes	Commissions			
BANCO	\checkmark	5.000€	0€	0€	\checkmark	Domestic	0.075 - 0.10%	0,18% -0.70%; 8.5 €	0,18% - 0.70%	11,5 €; 40 €			
	\checkmark	0€	0 - 40 €	10€ - 150€	\checkmark	Europe	0.075 - 0.10%	0.10% - 0.25%; 0.70%; 11 €	0.10% - 0.25%; 0.70%; 11 €	11 - 28,5 €			
UniCredit		0€	36€	20€ - 128€	\checkmark		1.05 1.5 etc.p/above	0.100/.11.0	0.100/.11.0	11 00 5 6			
	\checkmark	0€	30€	0€	\checkmark	05	1.25 - 1.5 Cls p/ share	0.10%; 11€	0.10%; 11€	11 - 28,5 €			
INTER IN SPANIAOLO						Others	n/a		_	_			



Italian investment-focused banks have a very complete offering when compared to Banco Invest, only lacking in the offer of indexed deposits

Italy: Analysis of representative banks - Cluster Investment-focused Banks

				Pro	oducts					Se	ervices		Distribution Channels			
	Investment Funds		Index	Stocks				Morgin		Discretionen		Trading	Opline	Mahila (Loveut/	
	In-house	3rd I	Parties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	Tablet	Use
		<100	>100													
BANCO	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
BANCA MEDIOLANUM GRUPPO BANCARIO MEDIOLANUM	20			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark			\checkmark		4
FINECO	318		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
	25		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	4
ING DIRECT La tan banca a cortí fati.	10				\checkmark	\checkmark		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	4

In this analysis, each bank was assigned a tick mark if it offers each type of product, service or distribution channel, and no tick mark if it does not offer/does not provide information regarding its offer. Regarding the component of Layout/Use, a classification in the range 1 – 5 was assigned to each bank, such that 5 indicates that banks have the most user-friendly websites and platforms, and the classification 1 the least.

		Fe	ees & Procedu	ires		Transaction Pricing						
	Account Opening	Minimum	Maintenance	Custody	Inv.		BANCO 💙	Cluster	Minimum			
_	Online	Investment	Fee *	,	Centres		INVEST	Low volumes	High volumes	- Commissions		
BANCO X	\checkmark	5.000€	0€	0€	\checkmark	Domestic	0.075 - 0.10%	0.10% - 0.17% 0.19%; 8 €	0.19%; 6 €	2 - 19.5 €		
MEDIOLANUM		0€	0€	60/90€ semester	\checkmark							
	\checkmark	0€	0€	0€	\checkmark	Europe	0.075 - 0.10%	0.19%	0.19%	2 - 19.5 €		
FINECO Sella.it	\checkmark	0€	0 € - 15 €/tri	0€	1	US	1.25 - 1.5 cts p/ share	0.19%	0.19%; 13 \$	2 - 19.5 €		
	\checkmark	0€	0€	0€	\checkmark	Others	n/a	0.19%	0.19%	2 - 19.5 €		

Sources: Banco Invest, Banca Mediolanum, Fineco, Sella, ING Direct

Ö-1



Italian online brokers offer a complete set of quoted products and sophisticated trading platforms, while lacking in the offer of investment-related services

Italy: Analysis of representative banks – Cluster online brokers

				Pro	oducts					Se	ervices		Distribution Channels					
	Investment Funds		Investment Funds		nds	Index	Stocks				Morain		Discretionen		Trading	Online	Mahila (Lovout/
	In-house	3rd I	Parties	Deposits	& ETFs	Bonds	Futures	CFDs	Account	Advisory	Management	Research	Platform	Trading	Tablet	Use		
		<100	>100															
BANCO	2		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5		
directa trading on line dal 1996					\checkmark	\checkmark	\checkmark		\checkmark				\checkmark	\checkmark	\checkmark	4		
IG					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	5		
*BINCK					\checkmark	\checkmark	\checkmark		\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	4		

Account Opening Online Minimum Investment Maintenance Fee * Custody Inv. Centres BANCO INVEST Cluster Average Investment Minim Commis High volumes			Fe	ees & Procedı	ures		Transaction Pricing							
Online Investment Fee Centres Investment Low volumes BANCO Fee 0.000 0.000 0.1000		Account Opening	Minimum	Maintenance	Custody	Inv.		BANCO 🧹	Cluster	Minimum				
		Online	Investment	Fee ^		Centres		INVEST	Low volumes	High volumes	Commissions	j		
1 = 1 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 =	BANCO	→ √	5.000€	0€	0€	\checkmark	Domestic	0.075 - 0.10%	0.19% - 9€-11€	2.5 € - 7 €	5€			
Image: Contraction Image: Contraction Image: Contraction Image: Contraction 150** € 0 € Europe 0.075 - 0.10% 4-11 € 4-8 € 10 *	directa trading on line dal 1996	a. 🗸	150** €	0€	0€		Europe	0.075 - 0.10%	4-11€	4-8€	 10€			
	IG	\checkmark	-	-	-									
★BINCK - 0 € 0 € 0 €			-	0€	0€		05	1.25 - 1.5 cts p/ share	95-155	9\$-15\$				



In Italy, online brokers offer the most competitive fees, as they charge fixed fees regardless of volume, while investment banks charge fees higher than Banco Invest's

Italy: Clusters comparison

	Pricing, Fees and Procedures								
	BANCO 🖌	Commercial I	Banks Average	Investment-focuse	ed Banks Average	Online Brok	ers Average		
Stocks & ETF's	INVEST	Low volumes	High volumes	Low volumes	High volumes	Low volumes	High volumes		
Domestic	0.075 - 0.10%	0,18% -0.70%; 8.5 € 0,18% - 0.70%		0.10% - 0.17% 0.19%; 8 € 0.19%; 6 €		0.19% - 9 € - 11 €	2.5 € - 7 €		
Europe	0.075 - 0.10%	0.10% - 0.25%; 0.70%; 11 €0.10% - 0.25%; 0.70%; 11 €		0.19%	0.19%	4-11 €	4-8€		
US	0−36€	0.10%; 11 € 0.10%; 11 €		0.19%	0.19%; 13 \$	9\$-15\$	9\$-15\$		
Minimum Investment	5.000€	()€	0 •	€	0 - 150€			
Maintenance Fee (p.a.) *	0€	0 -	40€	0 *	€	0€			
Custody	0€	0 –	150€	0 – 9	00€	0 €			
Account Opening Online	Yes			G					
Inv. Centres	Yes			G					

Note: The full circle indicates that all banks and brokers in the cluster offer the item being considered, while the empty circle detones that no bank offers it



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