

---

---

# Acquisition of new Spanish customers through German Commercial Banks

**Master Thesis**

Jordi Basco Carrera | 2520106

Rechts- und Wirtschaftswissenschaften



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

---

---

Jordi Basco Carrera  
Matrikelnummer: 2520106  
Studiengang: Diplom Rechts- und Wirtschaftswissenschaften

Master Thesis  
Thema: "Kundengewinnung in Spanien durch Deutsche Universalbanken"

Eingereicht: 21. Juli 2013

Betreuer: Dipl.-Wirtsch.-Ing. Daniel Maul

Prof. Dr. Dirk Schiereck  
Fachgebiet Unternehmensfinanzierung  
Fachbereich Rechts- und Wirtschaftswissenschaften  
Technische Universität Darmstadt  
Hochschulstraße 1  
64289 Darmstadt

---

---

## **Ehrenwörtliche Erklärung**

---

Ich erkläre hiermit ehrenwörtlich, dass ich die vorliegende Arbeit selbstständig angefertigt habe. Sämtliche aus fremden Quellen direkt oder indirekt übernommenen Gedanken sind als solche kenntlich gemacht.

Die Arbeit wurde bisher keiner anderen Prüfungsbehörde vorgelegt und noch nicht veröffentlicht.

Darmstadt, den 21. Juli 2013

---

---

## Abstract

---

The global economic crisis has led Spain into a dramatic spot. This macroeconomic scene has had negative consequences in terms of the increase in unemployment, loss of confidence in the Spanish banking system, capital flight and the increasing number of evictions, amongst others. This MSc thesis aims to analyse the effects that this economic crisis has had on people's attitudes and feelings with regard to the Spanish banking sector and the identification of potential clients that German banks could gain by entering the Spanish banking market.

The research was carried out using data collected through a written survey given to over 120 people living in Spain. A review of literature on the topic was made to analyse people's perceptions and impressions regarding the current banking sectors both in Spain and Germany. Literature research shows a variety of parameters that play an important role when analysing peoples' attitudes, including age, amount of capital invested, type of client, and trust in the banking system, amongst others. The results of the research show that people within the working age group from 18 to 65 years would be more likely to invest their money in a German bank. Therefore, the German banks' target group could be clients in this age range. They could also target particular clients with a small amount of savings. The main challenges that German banks need to face, if they intend to enter the Spanish market, are that Spaniards are unlikely to travel to Germany to invest their savings and the issue of language. Both of these variables have been identified from the statistical analysis as the two main reasons that deter Spaniards from investing in German banks.

**Key words:** banking system industry, economic crisis, client perceptions

---

## Table of Contents

---

Ehrenwörtliche Erklärung	iii
Abstract	i
Table of Contents	ii
Acknowledgments	iv
1. Introduction	1
2. Goal and Research questions	5
2.1. Goal	5
2.2. Research questions	5
3. Problem analysis and the banking industry	6
3.1. Loss of confidence in the Spanish banking industry	6
3.1.1. Evictions	9
3.1.2. Preferential shares	12
3.2. Client attitude	13
3.3. Banks in Spain	14
3.4. Capital flight	19
4. Main Activities and the methodological approach to research	22
4.1. Analysis of people's feelings and perceptions	22
4.2. Main activities	24
4.3. Data collection methods	26
4.4. Limitations of the study	29
5. Assessment methodology - Survey	30
5.1. Filter questions	31
5.1.1. Age range	31
5.1.2. Type of client	31
5.1.3. Capital invested	33
5.1.4. Assets	34
5.2. Specific questions – Spain	35
5.2.1. Level of trust	35
5.2.2. Relationship between Spanish banks and their clients.	35
5.2.3. Social questions	36
5.2.4. Financial questions	36
5.2.5. Fear about the safety of savings	37

---

5.3. Specific questions – Germany . . . . .	38
5.3.1. Trust in German banks . . . . .	38
5.3.2. Investment in German banks. . . . .	39
5.3.3. Transferring capital out of Spain . . . . .	40
5.4. Specific questions – Spain & Germany . . . . .	41
6. Results and Statistical Analysis . . . . .	42
6.1. Analytical variables . . . . .	42
6.2. Survey results . . . . .	48
6.3. Multinomial regression . . . . .	62
6.3.1. The multinomial regression . . . . .	62
6.3.2. Variables and assumptions . . . . .	62
6.3.3. Case evaluation . . . . .	63
6.3.4. Evaluation of Results . . . . .	65
6.3.5. Variable Analysis summary . . . . .	67
6.3.6. Predictions . . . . .	72
7. Conclusions and recommendations . . . . .	73
List of figures . . . . .	75
List of tables . . . . .	76
References . . . . .	77
Key terms . . . . .	79
Annex 1 . . . . .	82

---

---

## **Acknowledgments**

---

I would like to thank my supervisor Daniel Maul for his valuable support and advice during the period of the development of this MSc Thesis and throughout my time at the university. I would also like to thank Dr. Schiereck for giving me the opportunity of working on this Msc Thesis with him and for the valuable discussions and support during the preparation of this thesis. Thank you to my other supervisor Julian Trillig for allowing me the opportunity to carry out the work for my MSc Thesis at Technische Universität Darmstadt and for his support.

I would like to thank my family, specially my sister Laura, for their permanent support and for encouraging me in moments of despair. I am very pleased and proud to belong to such a family.

---

## 1. Introduction

---

Since 2007 the world economy is considered to be in a phase of marked instability<sup>1</sup>. The Spanish economy has been affected by this instability mainly because of vulnerability to changes in macroeconomic factors and the financial conditions of the imbalances amassed during the 'Boom period' which were also vulnerable. The international financial crisis precipitated the need to correct the real estate debt excess in both state and the private-sector debt; which marked the growing phase which preceded the recession. The deterioration of the macroeconomic scene and increasing unemployment has directly damaged the public finances and the position of financial institutions, whose balance sheets showed exposure to real state risk.

Spain went into recession in 2008 Q2, and remained there until 2010 Q1, when a little recovery appeared but in the second half of 2011 the recession appeared again. The trend of the Spanish GDP is displayed in Figure 1<sup>2</sup>. This relapse was caused because the sovereign debt crisis intensified and spread to an increasingly large number of countries.

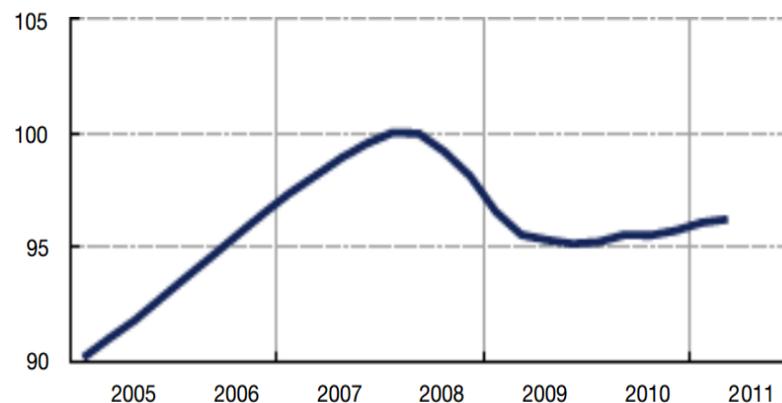


Figure 1: Spanish GDP

As a consequence of the recession, the Spanish population started to lose their homes and their jobs, unemployment started to rise and there was an increase in banking defaults. Figure 2 reports the dramatic increase of banking default during the last few years<sup>3</sup>. In 2004

---

<sup>1</sup> Ortega E. and Peñalosa J., 2012

<sup>2</sup> Ortega E. and Peñalosa J., 2012

<sup>3</sup> Banco de España, 2012

the default tax was around 0,8%. This tax increased abruptly in 2008 to 3,4% and has continued rising, reaching 9,9% in 2012.

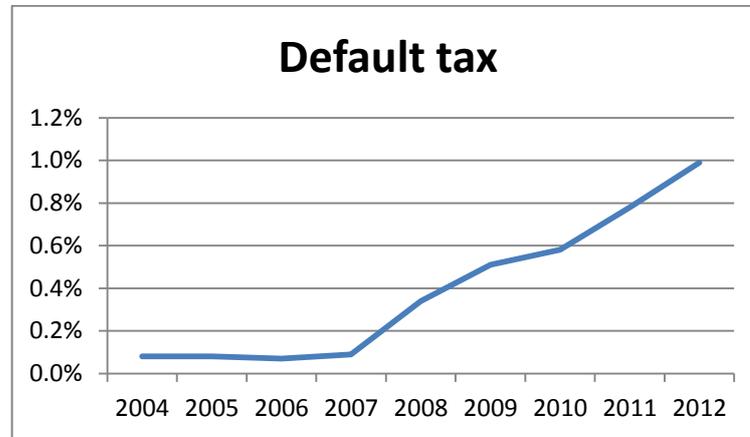


Figure 2: Evolution of banking defaults (Source: Ortega E. And Peñalosa J., 2012)

Unemployment is also rising to critical levels (see Figure 3). The current unemployment rate reaches approx. 27% in 2013<sup>4</sup>. The graph shows that this rate has been increasing dramatically since 2007. Moreover, the number of people unemployed for more than 2 years has increased to almost a 27% during the last few years.

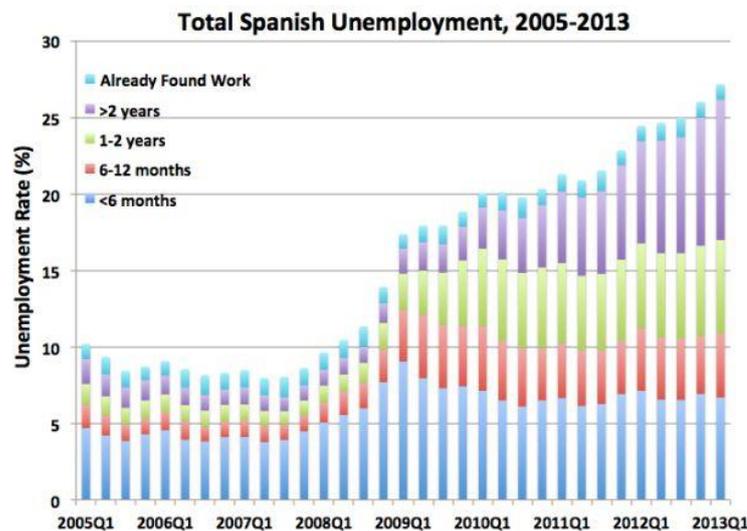


Figure 3: Total Spanish unemployment 2005-2013(Source: Izquiero Juárez P., 2013)

Due to both of these factors, a number of foreclosures and evictions were carried out during the last few years. According to Pablo Izquierdo Juárez<sup>5</sup>, in 2012 alone, 38.976 houses were

<sup>4</sup> Montero C., 2013

<sup>5</sup> Izquiero Juárez P., 2013

---

foreclosed and the people who lived there were evicted. Another consequence of the recession was the need for bank rescues. The total rescue bill came to 92.500 million euros in 2010<sup>6</sup>. The population's reaction to this fact was that they were being defrauded. Thus, people's thinking about banking has changed and evolved. The new perspective can be summarized in a Warren Buffett phrase "**Banks are guilty**"<sup>7</sup>. Based on these facts, the following question could be formulated by the reader: *Why is this information useful for this MSc thesis?*, the answer is simple: the information given reveals the two main points that might help to construct an opportunity for German banks.

Although some uncertainties may exist regarding the role that foreign banks have played in the Spanish economy, the importance of foreign banks in financing the Spanish economy is assumed by some economists<sup>8</sup> as the critical solution for improving the current economic crisis.

***'The role of foreign banks in financing the Spanish economy is critical. To prevent further capital flight, the Spanish and European authorities should act fast, drawing on the main lessons learned from the crisis.'***

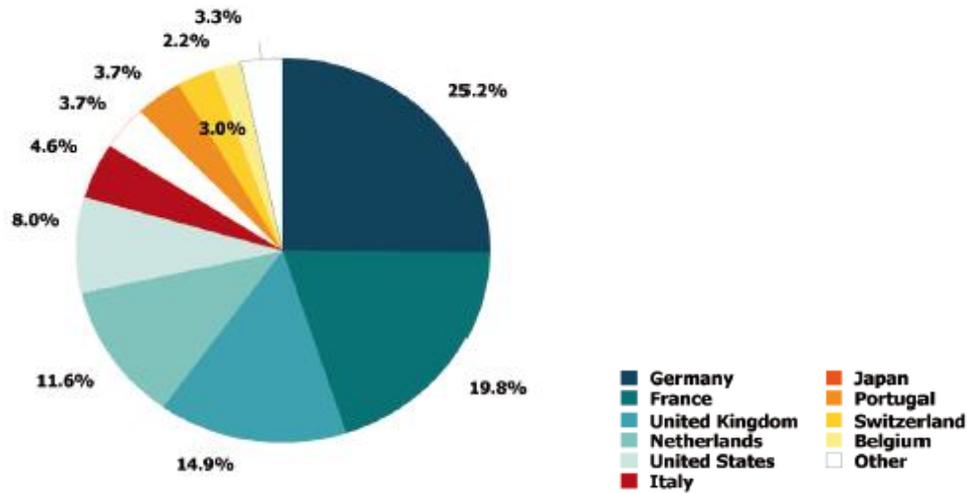
According to professor Joaquín Maudos it is important that German banks invest in the Spanish market, because if they invest all the lessons learned about the existing crisis can be applied. It must be also noted that gaining this part of the market will not hurt the Spanish economy; for it will help to prevent flying capital out of the country. Figure 4 displays the Spanish exposure in 2011 and aims to explain the way this connection between foreign countries and the Spanish economy could be built.

---

<sup>6</sup> Europa Press, 2012

<sup>7</sup> Huffington Post, 2010

<sup>8</sup> Maudos J., 2012



**Figure 4: Foreign countries - Spanish exposure in percentage terms 2011**  
 (Source: Maudos J., 2012)

Figure 4 reports that the exposure from German banks to the Spanish economy reaches 25.2%, being the foreign country with the highest exposure. Although this rate has been reduced since 2011, the percentage is still around 20%, indicating the existing close relationship between both countries in their financial environment. Thus, this research study assumes that instead of eliminating this exposure, one of the best ways of rescuing the Spanish economy is that German banks become a part of the Spanish market.

---

## 2. Goal and Research questions

---

This chapter deals with the main purpose of the paper, what is going to be looking for and in what way is going to be done the research.

---

### 2.1. Goal

---

The goal of this research is to discover all the potential clients that German banks could gain if they move into the Spanish banking market. In order to achieve this purpose, the confidence and trust of Spanish citizens in the banking sector is analyzed. This goal can be summarized by phrasing a simple question:

***Is there a market opportunity for German banks in Spain?***

---

### 2.2. Research questions

---

Three research questions have been addressed throughout this Master thesis. A brief description of the questions used in the written survey has been carried out in Chapter 5. Chapter 6 documents the results obtained. This chapter aims thus, to answer the three research questions listed below.

- *What is the level of trust in the Spanish and German banking sectors?*
- *What is the level of concern of Spanish inhabitants regarding the likelihood that a Bailout will become real?*
- *Does the location of bank offices play a relevant role in people's intention to invest their money?*

---

### 3. Problem analysis and the banking industry

---

This chapter focuses on problem analysis, which includes loss of confidence in the Spanish banking industry by inhabitants, the analysis of the banks in this country and capital flight. Moreover, a brief description of the banking sector is presented.

---

#### 3.1. Loss of confidence in the Spanish banking industry

---

The loss of confidence in banks by the global population is quantified by a decreasing rate of trust which amounts to approx. 40%<sup>9</sup>. This percentage is lower than that found by the studies carried out in Spain which show a decreasing rate of 76%. The current status of trust level in banks is 36%. The 58% decrease suffered in 2011 also shows the continued decreasing of trust that Spain has been suffering for the last 5 years. Figure 5 shows the impact that the actual economic crisis has on the levels of trust in banking. The level of trust has decreased by 50%, whereas the increase only reaches 7%.

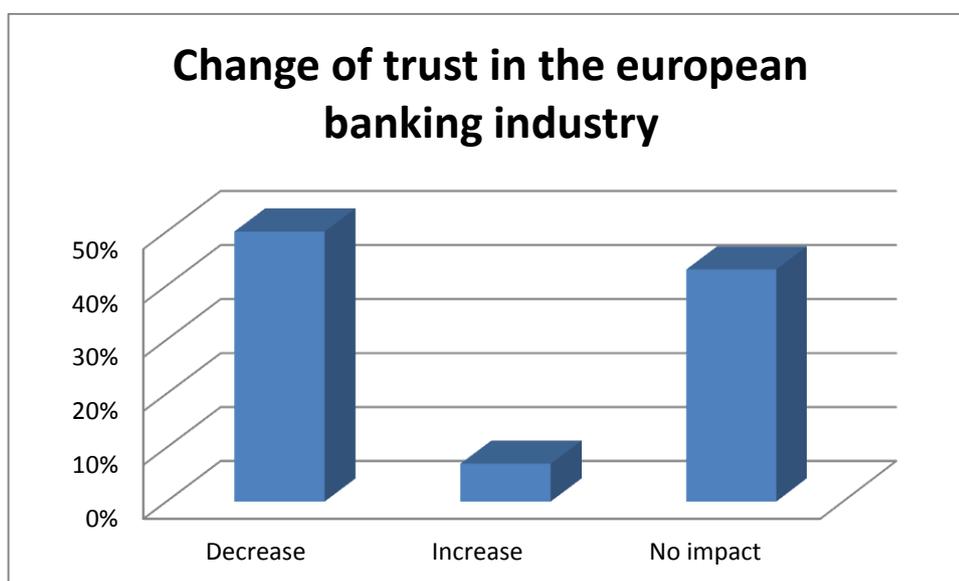


Figure 5: Change of trust in banking industry

According to Iñigo de Barrón Arniches<sup>10</sup>, if there is anything that the stronger and weaker Spanish banks have in common it is the bad reputation that they have earned since the

---

<sup>9</sup> Ernst & Young, 2012

<sup>10</sup> De Barrón, I. 2013

---

economic crisis started. The evidence that shows that their reputation is at its lowest level, is the report that they appear as the second worst social valued institution for the first time in history as revealed in the last Metroscopia survey of March 2013. It can be appreciated by looking at Figure 6 that banks were disapproved of by 88% of people, which means a decrease of approval of 11 percentage points during the year. This might open up an opportunity for German banks to enter the Spanish banking market. Two main events have damaged the image and reputation of the Spanish banking system bringing customers perception to its lowest in history: the increasing number of evictions and investments in preferential shares. Both events are described in the following sub-chapters.

## Evaluación sobre las instituciones y grupos sociales

¿Aprueba o desaprueba usted la forma en desempeñan sus funciones?

En %

	Diciembre de 2012		Saldo aprueba-desaprueba		
	Desaprueba	Aprueba	Diciembre 2012	Junio 2012	Variación dic./jun.
Los científicos	3	94	+91	+84	+7 ▲
Los médicos	7	90	+83	+87	-4 ▼
Las pequeñas y medianas empresas	8	89	+81	+78	-3 ▼
Los profesores de la enseñanza pública	9	86	+77	+75	+2 ▲
Las ONG	14	81	+67	+63	+4 ▲
La Universidad	18	78	+60	+51	+9 ▲
La radio	18	75	+57	+46	+11 ▲
La obra social de la Iglesia (Cáritas)	21	77	+56	+53	+3 ▲
La policía	21	77	+56	+67	-11 ▼
La Sanidad pública	21	76	+55	+50	+5 ▲
La Guardia Civil	20	74	+54	+54	0
Los servicios sociales en su municipio	20	74	+54	--	--
Las Fuerzas Armadas	23	69	+46	+29	+17 ▲
Los funcionarios	28	66	+38	+34	+4 ▲
El Príncipe de Asturias	29	66	+37	+29	+8 ▲
Los abogados	28	61	+33	0	+33 ▲
La prensa (los periódicos)	36	58	+22	+13	+9 ▲
El Rey	37	58	+21	+15	+6 ▲
El Defensor del Pueblo	40	52	+12	+12	0
Los jueces	41	53	+12	-6	+18 ▲
Los curas de las parroquias	42	47	+5	+5	0
Las grandes empresas españolas	45	49	+4	-21	+25 ▲
El Tribunal Supremo	43	45	+2	-41	+43 ▲
La televisión	49	46	-3	-6	+3 ▲
Los tribunales de justicia	49	45	-4	-24	+20 ▲
El Tribunal Constitucional	49	39	-10	-37	+27 ▲
La Iglesia	54	41	-13	-20	+7 ▲
Las multinacionales	66	29	-37	-40	+3 ▲
La patronal	67	27	-40	-51	+11 ▲
Los sindicatos	69	29	-40	-44	+4 ▲
Los Ayuntamientos	69	27	-42	-42	0
El Gobierno del Estado	74	20	-54	-51	-3 ▼
Los obispos	76	16	-60	-60	0
El Parlamento	81	16	-65	-65	0
Los bancos	88	11	-77	-77	0
Los partidos políticos	89	10	-79	-78	-1 ▼
Los políticos	88	9	-79	--	--

**Ficha técnica:** Los datos de diciembre 2012 proceden de un sondeo realizado a una muestra nacional de población mayor de 18 años (N = 1.200) entre el 17 y 19 de diciembre. Margen de error para datos globales  $\pm 2,9$  puntos. Para junio, sondeo de Metroscopia (EL PAÍS, 1 de julio de 2012).

Figure 6: Assessment of institutions and social groups 2012 (Disapproval/Aproval) (Source: Metroscopia 2012)

---

### 3.1.1. Evictions

---

The increasing number of evictions has punished the weakest inhabitants, who are actually the most affected by the economic crisis. These evictions have had a great media repercussion. Evictions of people from their first residence that were carried out during 2012 reached 38.976<sup>11</sup>. This number has to be taken in consideration because it shows the repercussions of the global crisis that has been hitting Spain since 2008.

Figures 7 and 8 indicate that 75% of evictions carried out refer to first residences. This event has had an extreme media impact because these people are pushed out onto the street. So large is this impact that foreign media have also written several articles about the topic. Banks, being the initiating part of the process, have taken all the blame for these evictions which has severely damaged their image. Also, because of this, trust levels and the perception that people used to have of Spanish banks have been dramatically altered.

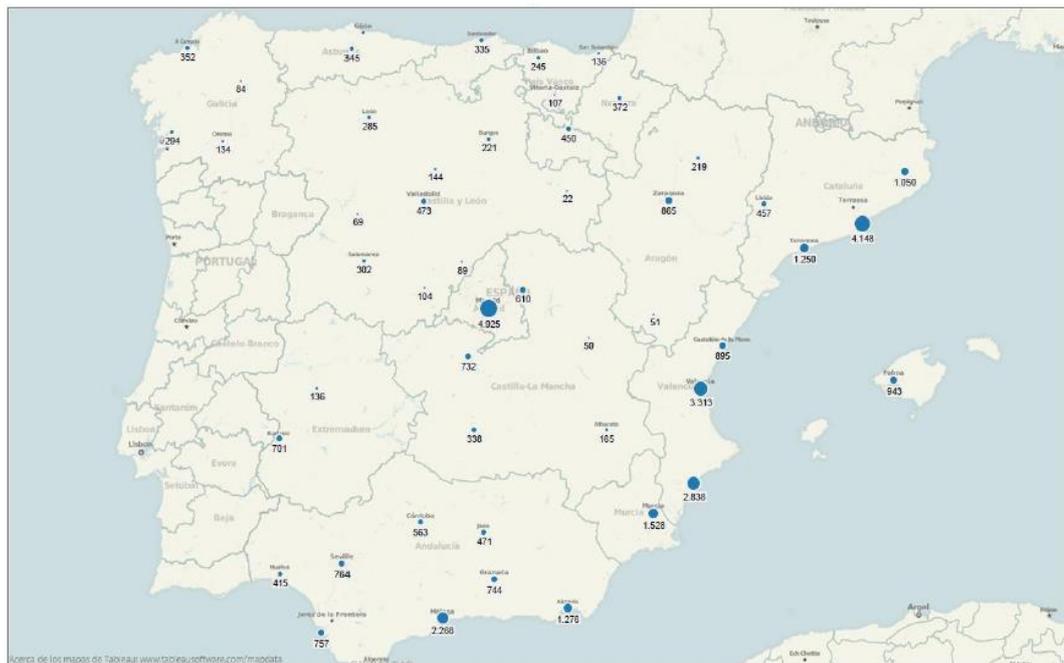


Figure 7: Map of evictions in Spain 2012 (Source: Registradores de España, 2012)

---

<sup>11</sup> Registradores de España, 2012

## Evictions in Spain 2012

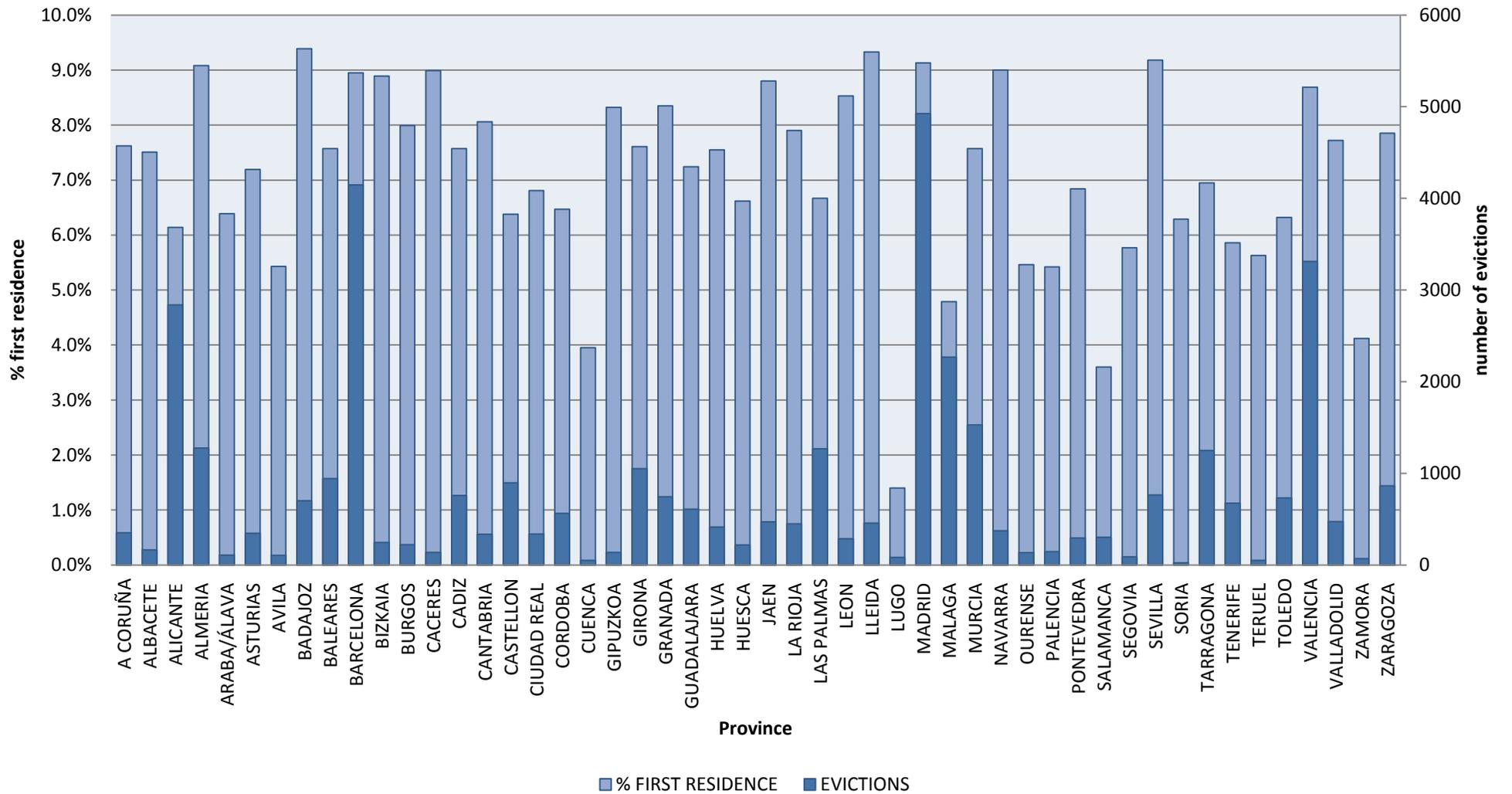


Figure 8: Evictions in Spain 2012

Both Figures show that the greatest number of evictions is carried out in the major cities, Madrid and Barcelona. The main reason for this was the huge growth of real estate during the pre-crisis period. Hence, when the crisis hit the Spanish economy, these cities were the most at risk. Moreover, Valencia's community has become the most damaged province because this province was the main focus of real estate investments.<sup>12</sup>



Figure 9: Article informing about evictions in Spain (Source: Daley S., 2012)

<sup>12</sup> Daley S., 2012

---

### 3.1.2. Preferential shares

---

The investments in preferential shares has also damaged de image of the Spanish banking system. This has mainly been caused by the great losses incurred associated with the reduction of share value, leading to a huge loss of money by smaller savers. It must be noted that the problem is not the amount of money that the savers have lost, the problem resides in the way those shares were sold. The shares were sold as a safe place to deposits money without explaining the risk that these kinds of shares have. This event has had a large media impact in Spain but not outside the country. This means that the bad banking behavior surrounding this issue has damaged only the image of Spanish banks within the country and is not an extended perception.



Figure 10: Preferential shares demonstration in Spain<sup>13</sup> (Source: Ruiz J., 2013)

Customer's perception about the purpose of banking has changed leading it towards a distrustful attitude. In conclusion, this can be confirmed as, regarding the selling of preferential shares that banks generally sell what is interesting for the bank and not necessarily what is best for the customer<sup>14</sup>.

---

<sup>13</sup> Ruiz J., 2013

<sup>14</sup> De Barrón, I. 2013

---

### 3.2. Client attitude

---

Customer attitude towards their relationship with banks has changed since the economic crisis started. Literature highlights<sup>15</sup> that their attitude has evolved into a renewed one:

***“The client is cautious, smart, less trusting and loyal, and now demanding better service and clearer value”***

Cautious, less trusting and less loyal are the three key points to be considered as important when analysing the study results. These attitudes should be the key for opening the Spanish banking for German banks to enter. Moreover, the banking survey carried out in 2012 by Ernst & Young shows that customers are more likely nowadays to use other banks. Due to the fact that customers are becoming less loyal, the number of banks used has increased (see Figure 11)<sup>16</sup>. Hence, it can be inferred that costumers are likely to change or transfer their savings or investments if another bank has better products or is safer.

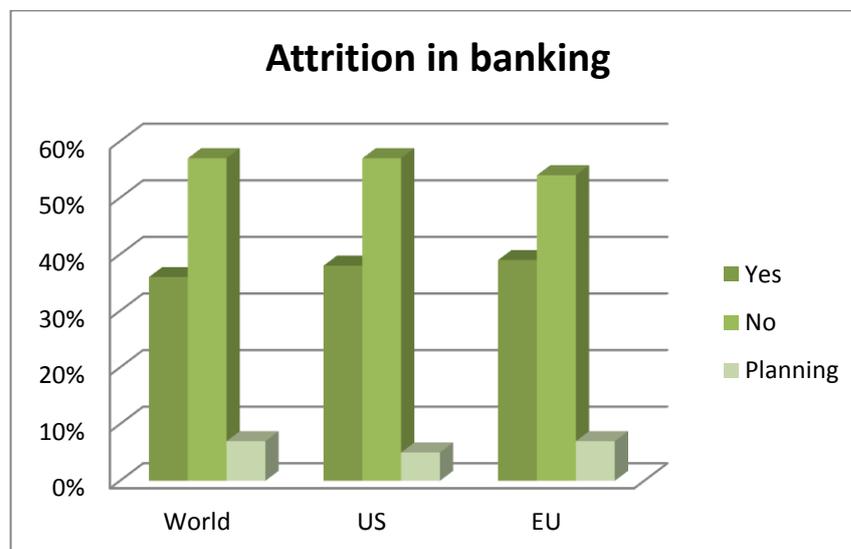


Figure 11: Attrition in banking

Figure 11 shows that around 38,5% of the current population in the world and in Europe have already or are likely to change their main bank. These results are surprising for until the last

---

<sup>15</sup> PwC, 2011

<sup>16</sup> E&Y, 2012

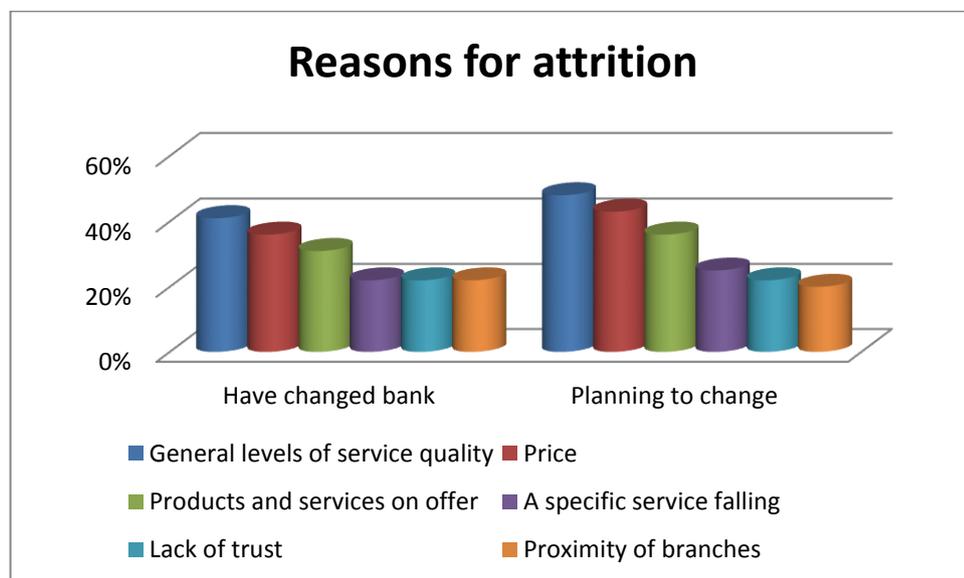
---

few years the rate of changing banks was really low. However, due to the fact that this willingness to change banks exists, a question should be formulated:

### ***Why are people changing banks?***

Lack of trust and the proximity of branches are both parameters that have been rigorously analyzed because of their impact on the topic of this research study. More specifically, these may be the main reasons for Spaniards to leave their once preferred Spanish bank.

The importance of the level of trust as a reason for attrition reason lies in the fact that before 2008, the lack of trust in a bank was barely in existence and it was never considered a reason for changing bank therefore people did not change their bank based on their trust in the bank.



**Figure 12: Main reasons for attrition**

The proximity of branches however has always been a key factor for changing from one bank to another. During the last few years, the number of people that have changed bank due to this reason has been constant.

---

### **3.3. Banks in Spain**

---

The existing banks in Spain are analysed in order to identify the weaknesses of the actual banking system in Spain. In order to carry out this assessment, the economic status and solvency of these banks is obtained.

Figure 13 displays the current market share of the Spanish banks in terms of Spanish assets. This chart states that Santander, BBVA, Caixabank and Bankia are the four main banks in Spain controlling more than 60% of total Spanish assets. Alternatively, the rest of the banks have relatively small market share.

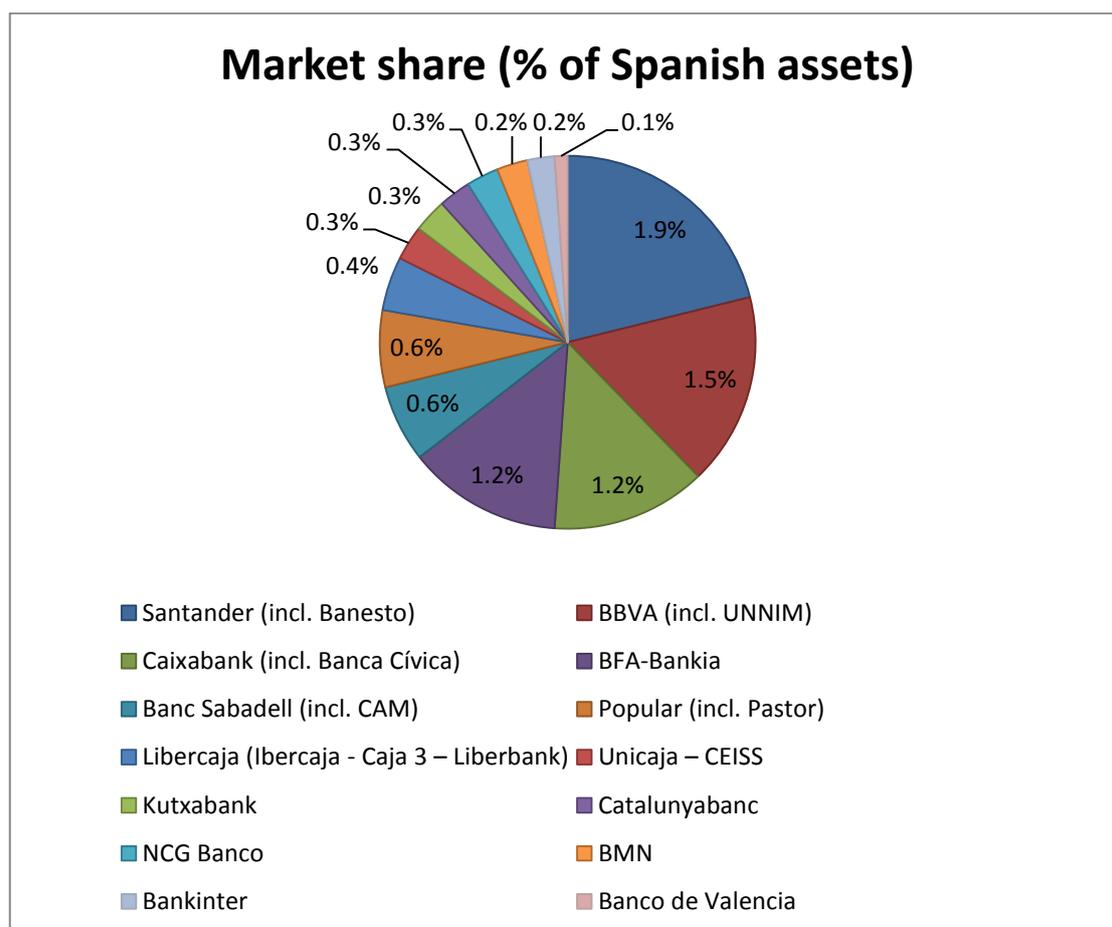


Figure 13: Market share in Spain in 2012 (Source: Horwood C., 2012)

Although these four banks have the major assets of the Spanish banking market, these main banks have a BBB+ or BBB rating according to Fitch's long term rating. This rating means that they are a medium class company, which is satisfactory at the moment. These rates should not be shocking or surprising; however, since Santander has been awarded the title of best bank of the world in 2012 by Euromoney's<sup>17</sup> It is kind of surprising that the best bank in the world has a BBB+ rating instead of a AAA rating. Moreover, CaixaBank has been given the award for being as the best bank in Spain in 2012 by Euromoney's but the bank has a

<sup>17</sup> Horwood C., 2012

---

BBB rating. It is surprising that the best banks in the world even though they are in Spain have low ratings. This study assumes that a specific reason exists for such a low rating. In order to get an explanation a question is formulated:

***Which problems do Spanish banks have?***

Figures 14 and 15 report the findings of the stress test done by Oliver Wyman<sup>18</sup> in 2012 about the Spanish banking sector and their capital needs. Crossing both figures is the problematic picture that Bankia brings to the Spanish banking market: a bank with a 12% share of the total Spanish Market but with a capital need of 13.200 million euros in a Base scenario or 24.700 million euros in an adverse scenario. Moreover, Bankia is the bank with the largest number of preferential shares that have been sold to clients, thus, it can be assumed that Bankia is the black sheep of the Spanish Bank system. Only three banks have no need for additional capital, Santander, Caixabank and BBVA. The direct consequence of this image problem leading to the expectation, for instance, of the need of rescue, that faces a high number of banks is that Spaniards have lost their trust in the Spanish banking system.

---

<sup>18</sup> Wyman O., 2012

	Base Scenario				Adverse Scenario			
	Expected loss	Loss absorption	Capital exceeds(pre tax)	Capital exceeds(post-tax)	Projected loss	Loss absorption	Capital exceeds(pre tax)	Capital exceeds(post-tax)
<b>Santander (incl. Banesto)</b>	22	43	21,3	19,2	34	59	24,4	25,3
<b>BBVA (incl. UNNIM)</b>	20	31	10,9	10,9	31	40	8,2	11,2
<b>Caixabank (incl. Banca Civica)</b>	22	32	10,2	9,4	33	37	3,9	5,7
<b>Banc Sabadell (incl. CAM)</b>	18	22	4,4	3,3	7	9	1,8	2,2
<b>Kutxabank</b>	5	8	3,4	3,1	25	26	0,6	0,9
<b>Unicaja – CEISS</b>	7	8	1	1,3	3	4	0,3	0,4
<b>Popular-Pastor</b>	15	16	0,5	0,7	10	9	-0,9	0,1
<b>Bankinter</b>	2	3	0,6	0,4	9	8	-3,1	-2,2
<b>Libercaja</b>	11	11	0,4	0,5	16	12	-3,4	-2,1
<b>BMN</b>	6	6	-0,4	-0,4	6	2	-3,4	-3,5
<b>Banco de Valencia</b>	4	2	-1,7	-1,8	22	17	-5,5	-3,2
<b>NCG Banco</b>	9	6	-3,6	-4	13	6	-6,8	-7,2
<b>Catalunyabanc</b>	13	6	-6,2	-6,5	17	7	-10,5	-10,8
<b>BFA-Bankia</b>	30	17	-12,2	-13,2	43	19	-23,7	-24,7
<b>System</b>	<b>183</b>	<b>212</b>	<b>-24,1</b>	<b>-25,9</b>	<b>270</b>	<b>252</b>	<b>-57,3</b>	<b>-53,7</b>

Table 1: Stress test results in 2012 (Source: Wyman.O. 2012)

Positio n	Financial group	Market share	Ratings				Stress Tests		
			Fitch Long Term	Fitch Short Term	Moody' s	S&P	2009	2010	201 1
1	Santander (incl. Banesto)	19,0%	BBB+	F2	Baa2	BBB	10,2 %	7,1%	8,4 %
2	BBVA (incl. UNNIM)	15,0%	BBB+	F2	Baa3	BBB -	9,3%	8,0%	9,2 %
3	Caixabank (incl. Banca Cívica)	12,0%	BBB	F2	Baa3	BBB -	-	-	-
4	BFA-Bankia	12,0%	BBB	F2	Ba2	BB	-	6,9%	5,4 %
5	Banc Sabadell (incl. CAM)	6,0%	BB+	B	Ba1	BB	-	6,2%	5,7 %
6	Popular (incl. Pastor)	6,0%	BB+	B	Ba1	BB	7,0%	7,1%	5,3 %
7	Libercaja (Ibercaja - Caja 3 – Liberbank)	4,2%	BB+	B	Ba3	BB	5,9%	6,8%	5,7 %
8	Unicaja – CEISS	2,7%	BB-	F3	Ba1	BB	9,0%	12,5 %	9,4 %
9	Kutxabank	2,6%	BBB	F2	Ba1	BBB -	-	-	-
10	Catalunyabanc	2,5%	BBB+	F2	B1	-	3,9%	6,4%	4,8 %
11	NCG Banco	2,5%	BB+	F2	B1	-	7,2%	5,2%	5,3 %
12	BMN	2,4%	BB+	F3	-	-	-	8,3%	6,1 %
13	Bankinter	2,1%	BBB+	F1	Ba1	BB	6,8%	6,2%	5,3 %
14	Banco de Valencia	1,0%	BBB	B	B3	-	-	-	-

Table 2: Ratings based on the stress test of Spanish banks (Source: Wyman.O. 2012)

---

### 3.4. Capital flight

---

Flight of capital<sup>19</sup> out of the country has become an issue for the Spanish economy. Since 2004, the increasing number of capital transfers has damaged the national economy. However, this exodus has not hit bottom yet. One alternative option could be that instead of fighting for the money or capital that is currently leaving Spain, foreign banks should be encouraged to enter in Spanish market. It could be prove to be a great opportunity for all players in the market.

Figure 16 shows that between 2000 and 2005 there was regulation between capital both incoming and outgoing and thus, the balance between them was approximately 0. Subsequently, from September 2004 till September 2007 incoming capital was higher than outgoing, which means that foreigners were transferring to and investing in the Spanish market system. However, from September 2007 till May 2010 the negative fluctuations have appeared more frequently and with a higher impact so that private capital was starting to move away from Spain. This considerable deterioration in the situation was stopped by the little money injections put by the European Union. However, from May 2010 until today capital flight has become a great matter of importance. As Figure 16 shows, it has continued to be a negative trend which means that capital flight has become a reality, and no monetary help from Europe has been able to stop it.

The worst year in terms of capital flight was 2012, reaching a total amount of 223.400 million euros from April 2011 till the end of 2012. This huge amount of money has been transferred to foreign countries where the solvency of those countries and their banking system was not in question.

---

<sup>19</sup> Bank of Spain, 2013

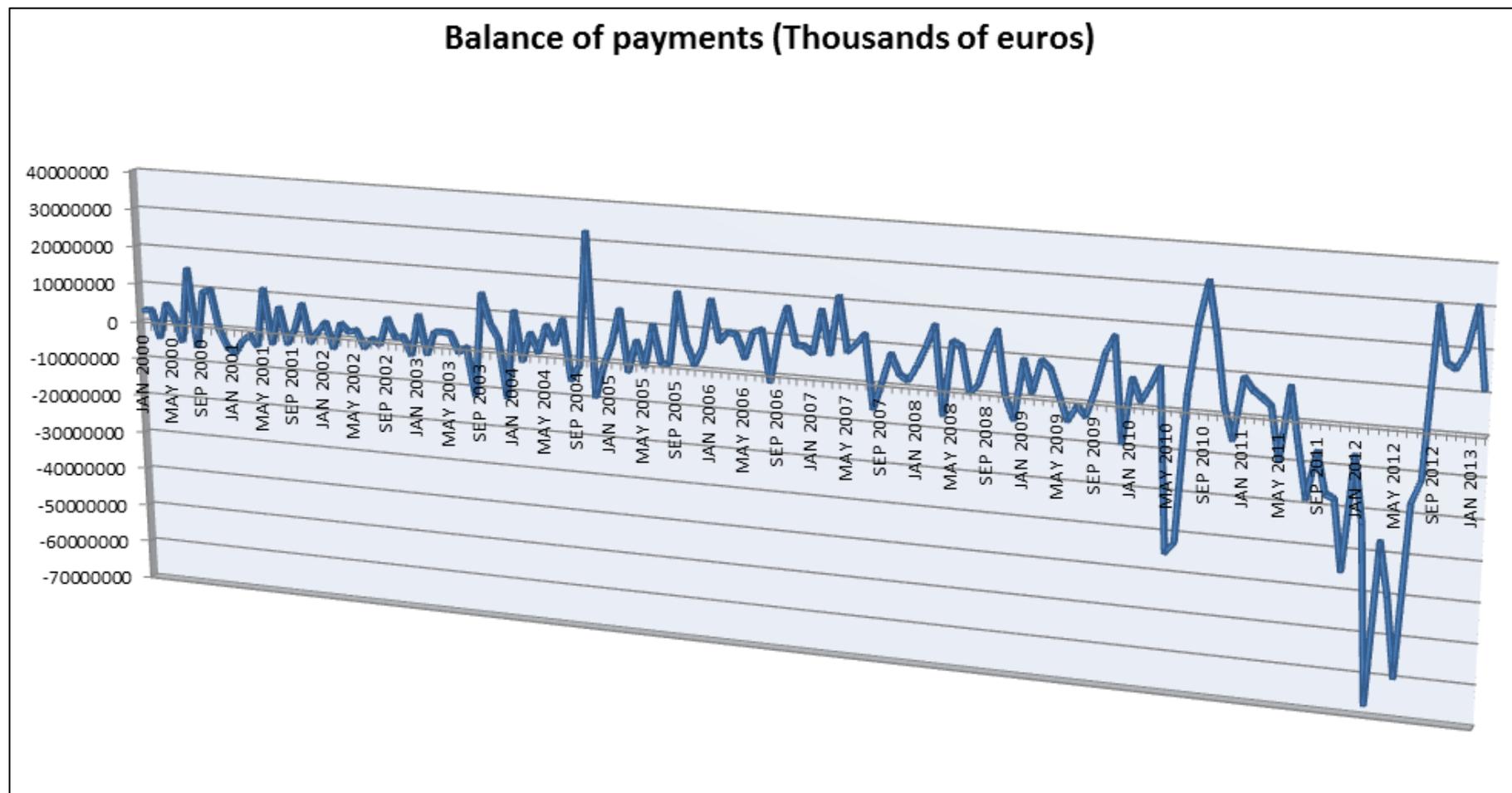


Figure 14: Balance of payments between 2000-2013

(Source: Bank of Spain, 2013)

The capital from countries, where the crisis has impacted severely, is flying to other destinations. Figure 17 documents that the greatest amount of this capital is being transferred to Germany. As a result, Germany has been attracting this capital because of its solvency.

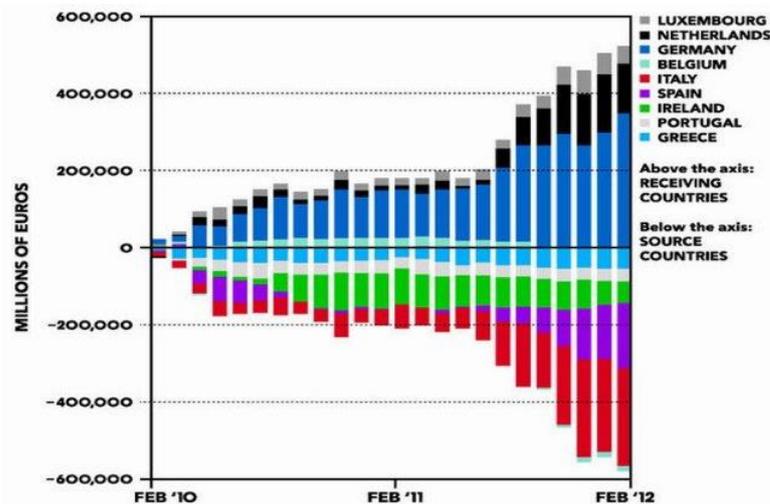


Figure 15: Capital Flight to foreign countries (Source: El economista 2012)

The capital coming from countries like Spain, Italy, Ireland, Portugal and Greece is being transferred to countries like Luxembourg, Netherlands, Germany and Belgium. In order of importance and volume, Spain is the country with the greatest amount of capital leaving and Germany is receiving the greatest amount of this capital. Therefore, the opportunity for German banks to take part in the Spanish banking market is already a reality.<sup>20</sup>

<sup>20</sup> El economista, 2012

---

## **4. Main Activities and the methodological approach to research**

---

Chapter 4 aims to make a brief analysis of people's perceptions and feelings. Moreover, data gathering methods are specified according to the specific goal of each research question. Finally, any limitations encountered during the preparation of this MSc Thesis are presented in this chapter.

---

### **4.1. Analysis of people's feelings and perceptions**

---

People's perceptions, including thoughts, feelings and intentions, as well as social characteristics have a considerable influence on their savings and investments. Thus, the successful entry of a German bank to Spain, is subject to people's perceptions. Levels of trust depend largely on the quantity and quality of available information that people have and on the difference in people's perceptions of risk.<sup>21</sup>

In order to identify this range of perceptions and awareness, multiple social questions are addressed in the survey. First there is a question regarding Spain and Germany, followed by the identification of current perceptions about both banking systems. From the answers, the result of an irruption of a German bank into Spain can be predicted. Therefore, the map of questioning is displayed in Figure 16, and is extensively addressed in Chapter 5, in order to get a brighter view of the line of questions that are included in the survey. Note that the QX questions are referred to by their position in the survey.

---

<sup>21</sup> KpmG, 2012

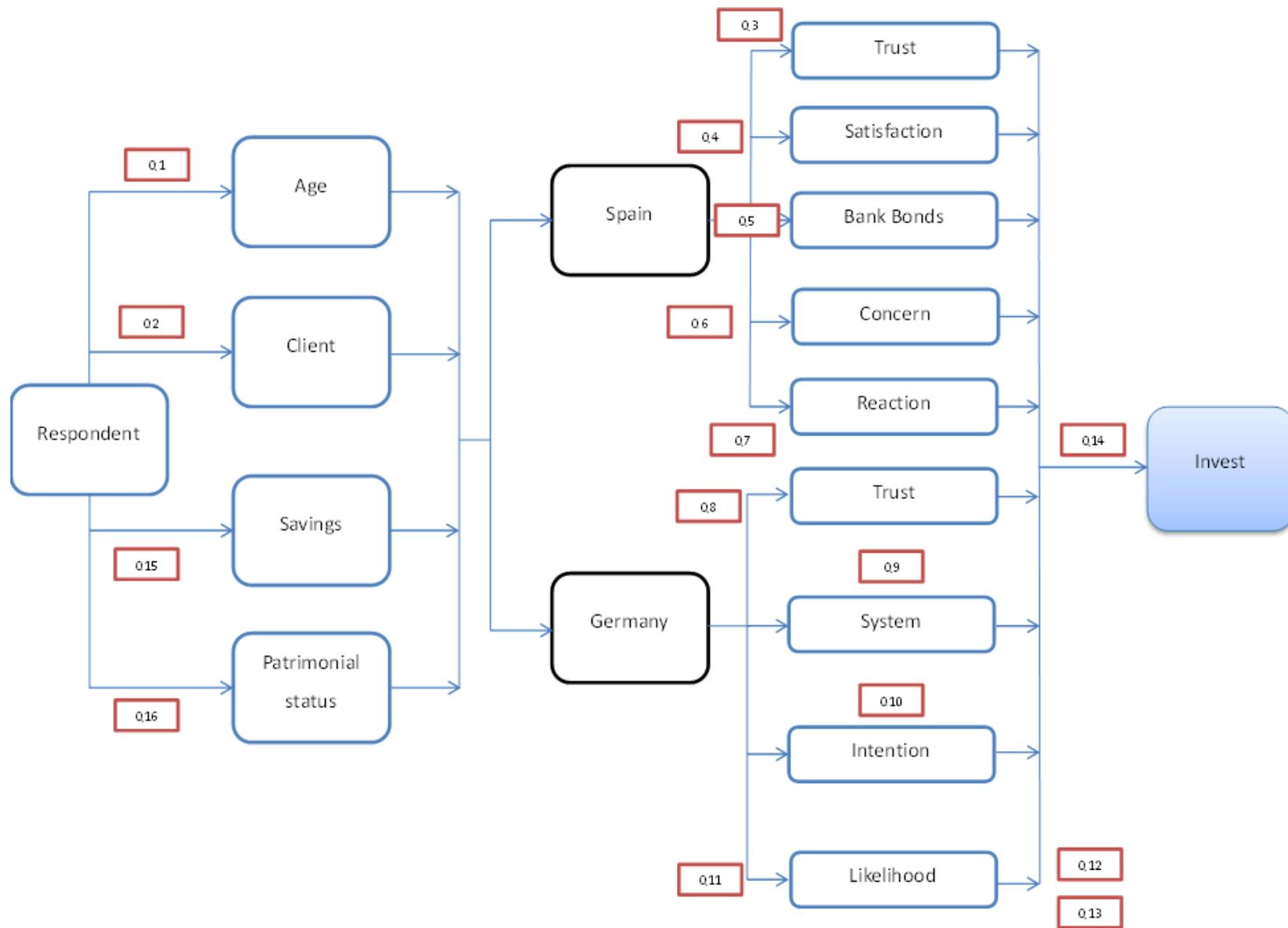


Figure 16: Map of questioning

---

## 4.2. Main activities

---

This subchapter aims to list the specific activities that are carried out in order to answer the research questions.

**Research question 1:** *What is the level of trust in the Spanish and German banking sectors?*

Activities carried out:

- Literature review of banking surveys
- Identification of the main reasons for the loss of trust in the Spanish banking sector.
- Specific questions in the survey referring to the actual perceptions of Spanish banking.
- Analysis of the results obtained from the survey.

The literature review regarding banking surveys has been obtained by searching publications from the big four consulting enterprises: Ernst & Young, PwC, KPMG and Deloitte. It has taken into account the last three years of surveys. The reasons for loss of trust have been identified through extensive research including publications from economic agencies and newspapers. Specific questions in the survey have been obtained from reading the mentioned information and assessing it against goals of the project.

**Research question 2:** *What is the level of concern of Spanish inhabitants regarding the likelihood that a Bailout will become real?*

Activities carried out:

- Literature review about strikes, preferential shares, flying capital and all the different variables that have shown individual and societal fear about the loss of money.
- Analysis of people's perceptions and experiences
- Identification of the facts that make the Spanish banking system weak.
- Quantification of the different variables within the survey
- Analysis of different people's attitudes towards confidence in the Spanish banking system

The activities carried out are mainly focused in people's perceptions and knowledge. In order to get clear information, four filter questions have been introduced into the survey defining the responder's economic status and therefore allowing the researcher to recognize the different behaviors depending on the amount of money invested. Literature research has been carried

---

out using newspapers and private consultants' publications. Newspapers have shown the impact that media have had on fear and on the impact of the economic crisis in people's confidence. Additionally, private consultants have shown the measurable reactions of this fear by using several quantification methods.

**Research question 3:** *Does the location of bank offices play a relevant role in people's intention to invest their money?*

Activities carried out:

- Literature review about the banking system and all the customers' surveys done by the consulting enterprises.
- Analysis of people's wants about their relationship with banking.
- Direct questioning through survey about the main reasons for working with a bank
- Analyzing the variables that have come out of the survey

The literature review has shown a lot of different points that the new client or evolved client has earned and has identified the way to get to those clients. The proximity of branches has come to be identified as an importance decision making factor when it comes to working with a bank and other variables have come to light to show that people's wants have to be met before getting new clients can be a reality.

---

### 4.3. Data collection methods

---

A number of methods have been employed for data collection for this MSc thesis. The general approach is qualitative and involves the methods listed below:

- Literature reviews
- Searches of the internet
- Direct contact with Spaniards through written surveys

This research assumes that the best way to identify people's intentions regarding their investment approaching is achieved by carrying out a closed survey and by analyzing out coming results. A large number of media are used for delivering surveys; however this MSc Thesis focuses on face-to-face written questioners. Moreover, literature review and searches of the internet have been also considered as assessment tools as they can provide valuable background information.

Although it could be easily assumed that written surveys are just questionnaires, developing a survey includes instructions for the procurement of standardized information from a targeted sample, for the formulation of questions, for assessing the answers in order to identify the most relevant points, amongst all the others.

According to Kraemer (1991)<sup>22</sup>, the three main characteristics that should be addressed in surveys are the following:

1. The survey research is being used to quantitatively describe specific aspects of a given population, this needs to be identified
2. Data are gathered from people therefore, they are subjective.
3. A selected portion of the population is used from which the findings can later be generalized back to the whole population.

The construction of a written survey consists of two steps. The first step should be the development of a sampling plan followed by the definition of the expected population estimation and its reliability. The sampling plan makes a description of the approach that is used to select the sample that would be used to determine the size of the sample and the communication media for delivering the surveys.

---

<sup>22</sup> Glasow P., 2005

---

Since surveys are carried out to collect information, it is essential to identify the information that is required for the study and thus, this must be considered when designing the questions to be used in the survey. In order to collect information, two different types of questions can be used: open-ended questions and closed-ended questions. The difference between open and closed questions lies in the formulation of the answer. In closed questions, the recipient receives a list of possible responses. In open questions the possible response list disappears and the responder answers with whatever seems desirable. In order to get a more in-depth view of the field of research surveys, an evaluation<sup>23</sup> of the weaknesses and strengths of a written survey is displayed in Table 3.

---

<sup>23</sup> Joan C. and Fisher K., 2005



<b>Strengths</b>	<b>Weaknesses</b>
Best for gathering brief written responses on attitudes, beliefs regarding library programs.	Responses are limited to the questions included in the survey.
Can include both close-ended and open-ended questions.	Participants need to be able to read and write to respond.
Can be administered in written form or online.	Takes time to pre-test a written survey to make sure that your questions are clearly stated.
Personal contact with the participants is not required.	Relies on participants' perceptions. Be aware of potential gaps between participants' responses and reality.
Staff and facilities requirements are minimal, since one employee can easily manage the distribution and collection of surveys, and issues such as privacy, quiet areas, etc. are typically not concerns.	Surveys work better after you have determined the range of outcomes that the survey can target. Therefore, surveys may not be the best initial data collection tool.
	Questions on surveys can be misunderstood, especially if they are self-administered and/or if participants do not understand the context for the survey questions.
	Survey questions (especially closed-ended questions) can be limited to what the provider thinks may be the range of responses.

**Table 3: Advantages and Disadvantages of surveys**

---

---

#### **4.4. Limitations of the study**

---

The main constraint of this MSc Thesis is the lack of research studies about people's perceptions and attitudes regarding the current banking system. The small number of existing studies focuses on the relation between client and banks and do they not consider as relevant the trust and confidence in the banking system. A further important gap in this MSc thesis is the reduced number of people who have answered the written survey, reaching approx. 120 responders. An acceptable representative sample in the city of Tarragona according to a 5% of margin error and with a 95% of confidence level should be around 400 inhabitants. However, due to the lack of time, the results of this MSc thesis should be only considered as a trending analysis.

---

## 5. Assessment methodology - Survey

---

This chapter aims to analyse the Spanish people's feelings, perceptions and intentions through a written survey. The design of the questionnaire is based on those parameters that have been identified in Chapter 3 to have an influence on people's impressions. The parameters have been classified into filter and specific questions. The written survey is available in Annex 1.

The written and online survey consists of a total of 121 participants. This number was chosen for several reasons, one of these is the time available to do the survey, another is the willingness of people to answer the survey, since it is a really personal survey and people don't like to talk about the money they have. Due to its content, it is been considered that 120 respondees should be representative. Another factor determining the number chosen is the fact that with a 121 participants the survey should be able to show a variety people of different age ranges and incomes, so it should be representative of the population questioned. The survey was carried out Tarragona, which has a population of around 100.000 and the 121 responders should allow the survey to have a 9% of margin error and an 80% confidence level, so these two quantified variables should make the sample representative.

Population	Margin of error			Confidence level		
	10%	5%	1%	90%	95%	99%
100	50	80	99	74	80	88
500	81	218	476	176	218	286
1000	88	278	906	215	278	400
10000	96	370	4900	264	370	623
100000	96	383	8763	270	383	660
1000000 or more	97	384	9513	271	384	664

Table 4: Margin error and confidence level according to the population size

---

## **5.1. Filter questions**

---

### **5.1.1. Age range**

---

The first question is a filter question that allowed 3 groups of people to be categorized, and thus the results were disaggregated into these three groups. The main reason for making this filter is because banks sort their customers into these three big groups: young people, adults and old people.

#### **Young People (18-26)**

This category includes all types of young people from workers to students; the expected results are low income per year, and few capital investments.

#### **Adults (26-65)**

Adults are the group that involves all type of workers and the unemployed. Their range of income will be very varied with the expectation of a mortgage or credit, and these might be capital investments.

#### **Old people (65+)**

Old people will be expected to have capital investments in banks.

The following filter question in the written questionnaire identifies age range:

#### **What is your age range?**

- 18-26
- 26-65
- 65+

---

### **5.1.2. Type of client**

---

The second question is another filter question needed to be addressed in this survey because different types of clients tend to have a different behaviour.

---

## **Personal**

The personal group gathers all the people that have a bank account and are not receptive of any type of bank bonus offers like young and old people are. Although this does not mean that these people could not be expected to have a certain credited range of income or be attracted by some other offers that the bank gives to their clients. However, in order to make it clear let's say that this group of people are not getting recognised as a group.

## **Business**

The business group is formed by the people who are part of a firm and operate in the bank as a legal customer, so their relationship between the bank and its business is a bit different than the one that operates between bank and individuals. This is the reason for having this particular group as a filter.

## **Young people**

This group of people of between 18-26 years old is treated as a separate group as they do not get a bonus, commission or other types of bonuses only because of being young. They are treated specially in the bank as well.

## **Old people**

Old people are kind of a young people group but they are going to get all types of bonuses only because of their age. This is the main reason for why one is going to treat them as a separate group.

This factor regarding people's characteristics has been addressed in this written survey as the following question:

### **In which group of clients do you belong?**

- Personal
- Business
- Young people
- Old people

---

### 5.1.3. Capital invested

---

The amount of capital invested is both a filter and an absorption question. The main reason for including this question in the written survey was to show and filter the preferences of the different types of savers. By separating them into three groups according to the Spanish bank classifications, the results showed the type of clients that might be more interested in investing in the German Banks. It must be also noted that this kind of question is also an absorption question, because with the wide ranges to choose from the intention is not to offend anyone's personal honour.

#### **Particular Bank (0 – 100.000€)**

Particular Bank is a group of small savers that probably don't think they have enough money to be afraid of a bailout process as they would not be investing a lot. The study put forward the hypothesis that the bulk of the population belongs to this group.

#### **Personal Bank (100.000 – 500.000€)**

This group of people have more money to invest and they have invested in the Spanish Banks so this group should be one of the targets that the German Banks should focus on first, because this group of people may think they do not have enough money to transfer to another country, and secondly that their belief in German stability is going to be a main factor in their investment decision making process.

#### **Private Bank (+500.000€)**

The private bank group is composed of those people that have more than a half million euros to invest. This group of people are normally very active in investing their capital, and if their capital has not already flown out of the country should offer a great opportunity for the German Banks to gain market entry.

This factor regarding people's characteristics in terms of their socio-economic status has been addressed in the survey as follows:

**In which money range do your personal savings belong to (invested and not invested)?**

- 0-100.000€
- 100.000€-500.000€
- +500.000€

---

#### **5.1.4. Assets**

---

The next filter question was used to make a distinction based on the total personal assets belonging to a person like houses, cars, amongst others. This filter showed another perspective about clients' behavior by sorting them through their financial status. The question is also an absorption question due to the fact that although it is a personal question, the intention is not to attempt to invade personal privacy and allow them to answer it with generalities.

##### **0 - 500.000€**

In this group the main population is covered. These persons frequently own or rent only a single house. Moreover, this group is also expected to have a low personal income per year giving them only small amounts of money to save. Thus it is assumed that these are not the principal target for the German banks.

##### **500.000€ - 2.000.000€**

This group is composed of people who own a high value house or even two. They might also be involved in all types of business with a local market. Moreover, it can be assumed that this group tends to have more saving than the other group as described previously. These are more likely to invest their saving. As a result, This MSc thesis assumes that this group would be the main target of German banks.

##### **+2.000.000€**

This group is composed of wealthy people with a considerable amount of money to invest. Hence, the population that establishes this group are considered as another important target group that the German banks should be aiming to.

This filter and absorption question has been addressed in the written survey as the following question:

#### **In which money range does the value of your personal assets belong to?**

- 0-500.000€
- 500.000€-2.000.000€
- +2.000.000€

---

## 5.2. Specific questions – Spain

---

---

### 5.2.1. Level of trust

---

The general question that tends to be answered is: ***What is your level of trust in the Spanish Banking sector?***. However, in order to get a more precise answer from the respondent, this had to be formulated differently. More specifically, this was given a choice of answers from 1 to 5 in order to be more precise when analyzing the results. As a direct consequence of that question, the existing connections between banks and population could be constructed. The question was phrased in a way that is not ambiguous. Ambiguity in such a survey should be avoided because the results could be affected, defining the different levels turn this question into a clear question. This factor has been addressed in this written survey by posing as the following question:

#### **What is your current level of trust in the Spanish Banking sector?**

- I completely mistrust the Spanish banking sector and I would not invest my savings in a Spanish bank
- I do not completely mistrust the Spanish banking sector but I would not likely invest my savings in a Spanish bank
- The level of trust is irrelevant for me
- I do not completely trust the Spanish banking sector but I would be likely to invest my savings in a Spanish bank
- I completely trust the Spanish banking sector and I would only invest my savings in a Spanish bank.

---

### 5.2.2. Relationship between Spanish banks and their clients.

---

An informative question is used to identify the connection between Spanish banks and their clients ***“Why do you have your money invested in a Spanish bank?”***. This question was separated into two further questions. As a result, information about the existing connection between Banks and customers was obtained allowing the discovery of whether it is an obligated connection or a willing connection. In order to discover about this type of connection, a social question and a financial question are used.

---

### 5.2.3. Social questions

---

With the purpose of identifying the current social relationship between banks and clients, the level of satisfaction of the Spanish clients regarding their banks was explored in the written survey. Therefore, the existing customer relationship between clients and banks was identified based on how well or poorly the Spanish banks treat their own clients. Including this question in the survey, the possible lack of customer service from banks was analyzed. It was also an opportunity to create a pattern for customer service excellence allowing the German banks offer better customer service.

**Which would be the value of your current satisfaction regarding your bank's treat?**

- I am completely disappointed with my bank's customer service procedures
- I am quite disappointed with my bank's customer service procedures
- Customer service is irrelevant to my investment choice.
- I am quite satisfied with my bank's customer service procedure but there are several things that could be done in a better way.
- I am completely satisfied with my bank's customer service procedure

---

### 5.2.4. Financial questions

---

This closed question established the main reason for the direct connection between a bank and its current customers allowing the identification of whether the connection established is mandatory or voluntary.

The question is a multiple choice question in which the responders is only able to tilt one answer. This measure allowed to identify the strengths and weaknesses from Spanish Banks regarding their clients. On the one hand, the 'Don't know' answer was only used in the case that the responder had not considered the reason of being a costumer from a bank. On the other hand, an open question however was used in order to let the polled express any other fact that could be important to his personal connection. The financial question been addressed in this written survey as the following question:

---

**Why do you choose to have your capital in a specific bank?** (You can choose more than one answer)

- Proximity
- Availability of mortgages, Credits
- Number of offices
- Customer Service
- Don't know
- Other reasons \_\_\_\_\_

---

### **5.2.5. Fear about the safety of savings**

---

In order to provide the following information, the question indirectly addressed in the research asks “**Are you afraid of losing your money if the bailout becomes real?**” Two sub-questions are asked in the written survey. The questions have been split into two further questions since an in depth look into the fear of losing money is essential. Thus, one question asks about has been directed to the level of fear that the population have and the other refers to the kind of reaction that people experience when encountering this fear.

#### **a) Level of fear question**

Since the purpose of this sub-question is to get a quantifiable level of fear that people have in relation to losing their money due to a bailout, a 1 to 5 scale of fear is formulated and therefore, the capital leaving the country can be linked with the fear at bailout.

**Which would most closely describe your current level of fear about the safety of your money?**

I think...

1. I will not lose my money
2. It is not probable that I will lose my money
3. I do not think about it
4. It is probable that I will lose my money
5. I will certainly lose my money

---

## b) Reaction to the Bailout fear

People reactions (potentially or real) regarding the current economic situation is analyzed in this informative question. More specifically, this multiple-choice question aims to assess the way in which people are resolving/will resolve that fear in terms of the actions that people are carrying out or are going to carry out with the specific purpose of making their money safe before the hypothetic bailout happens. This parameter has been addressed in this written survey as the following question:

**What have you done to ensure the safety of your money?** (You can tick more than one)

- I keep it at home
- I have transferred it to a foreign bank
- I have done nothing
- I have invested it
- Other \_\_\_\_\_

---

## 5.3. Specific questions – Germany

---

---

### 5.3.1. Trust in German banks

---

This sub-chapter proposes to answer the following question: “***What is your level of trust in the German Banking sector?***” Instead to asking this question directly, two sub-questions have been used in the written survey. The main reason for splitting this question up was to quantify the level of trust and to understand the reason behind their trust in German banking. From the answers, the strengths that German banks should exploit if they decide to invest in the Spanish market.

---

### a) Level of trust in German Banks

With the main purpose of quantifying the level of trust that the current Spanish population have in the German banking sector, a 1 to 5 level question is used.

#### What would your current level of trust be in the German Banking sector?

- I completely mistrust the German banking sector and I would not invest my savings in a German bank
- I mistrust the German banking sector and I would be not likely to invest my savings in a German bank
- The level of trust is irrelevant for me
- I do not completely trust the German banking sector but I would be likely to invest my savings in a German bank
- I completely trust the German banking sector and I would only invest my savings in a German bank.

### b) Trust in the German Banking sector

This information question is addressed in the written survey in order to discover the main grounds for why the Spanish people currently trust the German banking sector. This in connection with the level question gives a representative overview of the Spanish perceptions of German banking.

#### Why do you trust the German Banking sector? (You can tick more than one)

- Personal knowledge
- I've been told about it
- Germany is the leading first European force
- Their reputation Made in Germany (Quality guaranteed)
- Other \_\_\_\_\_

---

### 5.3.2. Investment in German banks.

---

The Yes/No question “**Would you be least worried if your money was invested in a German Bank?**” is used in the written survey to analyze investment in German banks. The main reason for choosing this as a Yes/No question, is because in such issues people tend to give the ‘but answer’ (Yes,but..... No,but.....). Hence, the intention is to avoid this kind of ambiguity by summarizing the whole question in a Yes/No question.

---

## Would you invest your capital in a German Bank?

- Yes
- No
- Don't know

---

### 5.3.3. Transferring capital out of Spain

---

The question that is answered in this part of the survey refers to the principal reasons people have for not transferring their money to a foreign country, specifically Germany. The main question is: "***Would you fly to Germany in order to open a bank account and transfer your money?***". However, since the intention is to get as much information as possible, the main question is divided into a Yes/No question with two possible further questions based on the answer to the first question. People's reactions to the idea of going to Germany to open a bank account are addressed in these sub-questions.

## Would you fly to Germany to open a Bank account?

- Yes
- No
- Don't know

If the answer to the above question is a Yes then:

## Why would you fly to Germany?

- My money will be safe
- I am told to do it
- That is what people are doing
- Other reasons\_\_\_\_\_
- 

If the answer to the above question is a No then:

## Why would you not fly to Germany?

- Language issue
- Spending money on a trip
- Too far away
- My money is safe in Spain
- Other reasons\_\_\_\_\_

---

#### 5.4. Specific questions – Spain & Germany

---

The above questions led to the final question that summed up the variables addressed before. The last question also gave a response to the question that reflected the MSc thesis main goal: “***Would you open a bank account and transfer your capital to a German Bank if there were German banks offices operating in Spain?***”. The goal question was a Yes/No question in order to get a clear answer and thus making, results more accurate.

**Would you invest in a German bank if it has offices in Spain?**

- Yes
- No
- Don't know

---

## 6. Results and Statistical Analysis

---

The identification of the main variables that play a role in this topic, the survey results and finally the statistical analysis are carried out in this chapter. The research questions concerning this M.Sc. Thesis addressed are:

- *What is the level of trust in the Spanish and German banking sectors?*
- *What is the level of concern of Spanish inhabitants regarding the likelihood that a bailout will become real?*
- *Does the location of the bank offices play a relevant role in people's decision-making with regard to investing their money?*

---

### 6.1. Analytical variables

---

The analysis of people's feelings and perceptions both German and Spanish banking has been carried out initially by identifying 16 critical analytical variables. These have been classified according to the type of question in which they are addressed and the transformation used during the statistical analysis. In the case of closed questions, possible responses have been listed.

Variable	Question	Responses(Numerical Response)	Transformation	Comments
Age Range	What is your age range?	<ul style="list-style-type: none"> <li>○ 18-26 (1)</li> <li>○ 26-65 (2)</li> <li>○ 65+ (3)</li> </ul>	None	Filter question
Type of client	In which group of clients do you belong?	<ul style="list-style-type: none"> <li>○ Personal (1)</li> <li>○ Business (2)</li> <li>○ Young people (3)</li> <li>○ Old people (4)</li> </ul>	None	Filter question
Capital invested	In which range do your personal savings belong to (invested and not invested)?	<ul style="list-style-type: none"> <li>○ 0-100.000€ (1)</li> <li>○ 100.000€-500.000€ (2)</li> <li>○ +500.000€ (3)</li> </ul>	None	Filter question
Assets	In which range does the value of your personal assets belong to?	<ul style="list-style-type: none"> <li>○ 0-500.000€ (1)</li> <li>○ 500.000€-2.000.000€ (2)</li> <li>○ +2.000.000€ (3)</li> </ul>	None	Filter question
Level of trust	What is they current level of your trust in the Spanish Banking sector?	<ul style="list-style-type: none"> <li>○ I completely mistrust the Spanish banking sector and I would not invest my savings in a Spanish bank (1)</li> <li>○ I do not completely mistrust the Spanish banking sector but I would not be likely to invest my savings in a Spanish Bank (2)</li> </ul>	None	Spanish Banking sector question

		<ul style="list-style-type: none"> <li>○ Level of trust is irrelevant for my investments (3)</li> <li>○ I do not completely trust the Spanish banking sector but I would be likely to invest my savings in a Spanish bank (4)</li> <li>○ I completely trust the Spanish banking sector and I would only invest my savings in a Spanish bank. (5)</li> </ul>		
Connection between Spanish Banks and clients	What would be the value of your current satisfaction regarding your bank's treatment of you and your business?	<ul style="list-style-type: none"> <li>○ I am completely disappointed with my bank's customer service (1)</li> <li>○ I am quite disappointed with my bank's customer service (2)</li> <li>○ It is irrelevant. (3)</li> <li>○ I am quite satisfied with my bank's treatment of me but there are several things that could be done in a better way. (4)</li> <li>○ I am completely satisfied with my bank's customer service (5)</li> </ul>	None	Discarded due to a distortion in the results.

Choice of bank	Why did you choose to put your capital in a specific bank?	<ul style="list-style-type: none"> <li>○ Proximity (1)</li> <li>○ Mortgage, Credits (2)</li> <li>○ Number of offices (3)</li> <li>○ Customer Service (4)</li> <li>○ Don't know (5)</li> </ul>	$(1)*1+(2)*2+(3)*3+(4)*4$	Since the question is a multiple choice question, the transformation is needed in order to quantify the responses; the transformation shows the exact combination of responses.
Level of fear question	What would describe your current level of fear about the safety of your money?	<p>I think...</p> <ul style="list-style-type: none"> <li>○ I am not losing my money (1)</li> <li>○ It is not probable that I will lose my money (2)</li> <li>○ I do not think about it (3)</li> <li>○ It is probable that I will lose my money (4)</li> <li>○ I will lose my money (5)</li> </ul>	None	Fear question
Reaction to the Bailout fear	What have you done to ensure the safety of your money?	<ul style="list-style-type: none"> <li>○ I have it at home (1)</li> <li>○ I have transferred it to a foreign bank (2)</li> <li>○ I have done nothing (3)</li> <li>○ I have invested it (4)</li> </ul>	$(1)*1+(2)*2+(3)*3+(4)*4$	Since the question is a multiple choice question, the transformation is needed in order to quantify the responses; the transformation shows the exact combination of responses.
Trust in German banks	What would your current level of trust in the German banking sector be?	<ul style="list-style-type: none"> <li>○ I completely mistrust the German banking sector and I would not invest my savings in a German Bank (1)</li> <li>○ I do not completely mistrust the German</li> </ul>	None	German Banking sector question

		<p>banking sector but I would not be likely to invest my savings in a German bank (2)</p> <ul style="list-style-type: none"> <li>○ The level of trust is irrelevant for me (3)</li> <li>○ I do not completely trust the German banking sector but I would be likely to invest my savings in a German bank (4)</li> <li>○ I completely trust the German banking sector and I would only invest my savings in a German bank. (5)</li> </ul>		
Reasons for trust	Why do you trust the German banking sector?	<ul style="list-style-type: none"> <li>○ Personal knowledge (1)</li> <li>○ Told about it (2)</li> <li>○ First European force (3)</li> <li>○ Made in Germany (Quality guaranteed) (4)</li> </ul>	$(1)*1+(2)*2+(3)*3+(4)*4$	Since the question is a multiple choice question, the transformation is needed in order to quantify the responses; the transformation shows the exact combination of responses.
Investment in German banks.	Would you invest your capital in a German bank?	<ul style="list-style-type: none"> <li>○ Yes (1)</li> <li>○ No (2)</li> <li>○ Don't know (3)</li> </ul>	None	The question is a control question, once I have seen that most of the answers of my response variable are don't know, I have used this variable as a control question.

Flying Capital	Would you fly to Germany to open a bank account?	<ul style="list-style-type: none"> <li>○ Yes (1)</li> <li>○ No (2)</li> <li>○ Don't know (3)</li> </ul>	None	Yes/No question derivative to other specific question with two different cases.
If the answer to the above question is a Yes then:	Why would you fly to Germany?	<ul style="list-style-type: none"> <li>○ My money will be safe outside of Spain(1)</li> <li>○ I am told to do it (2)</li> <li>○ That is what people are doing (3)</li> </ul>	None	The question is removed due to the fact that there are not enough answers to consider it a valid question.
If the answer to the above question is a No then:	Why would you not fly to Germany?	<ul style="list-style-type: none"> <li>○ Language (1)</li> <li>○ Spending money on a trip (2)</li> <li>○ Too far away (3)</li> <li>○ My money is safe in Spain (4)</li> </ul>	$(1)*1+(2)*2+(3)*3+(4)*4$	Since the question is a multiple choice question, the transformation is needed in order to quantify the responses; the transformation shows the exact combination of responses.
Specific questions – Spain & Germany	Would you invest in a German bank if it had offices in Spain?	<ul style="list-style-type: none"> <li>○ Yes (1)</li> <li>○ No (2)</li> <li>○ Don't know (3)</li> </ul>	None	Response variable

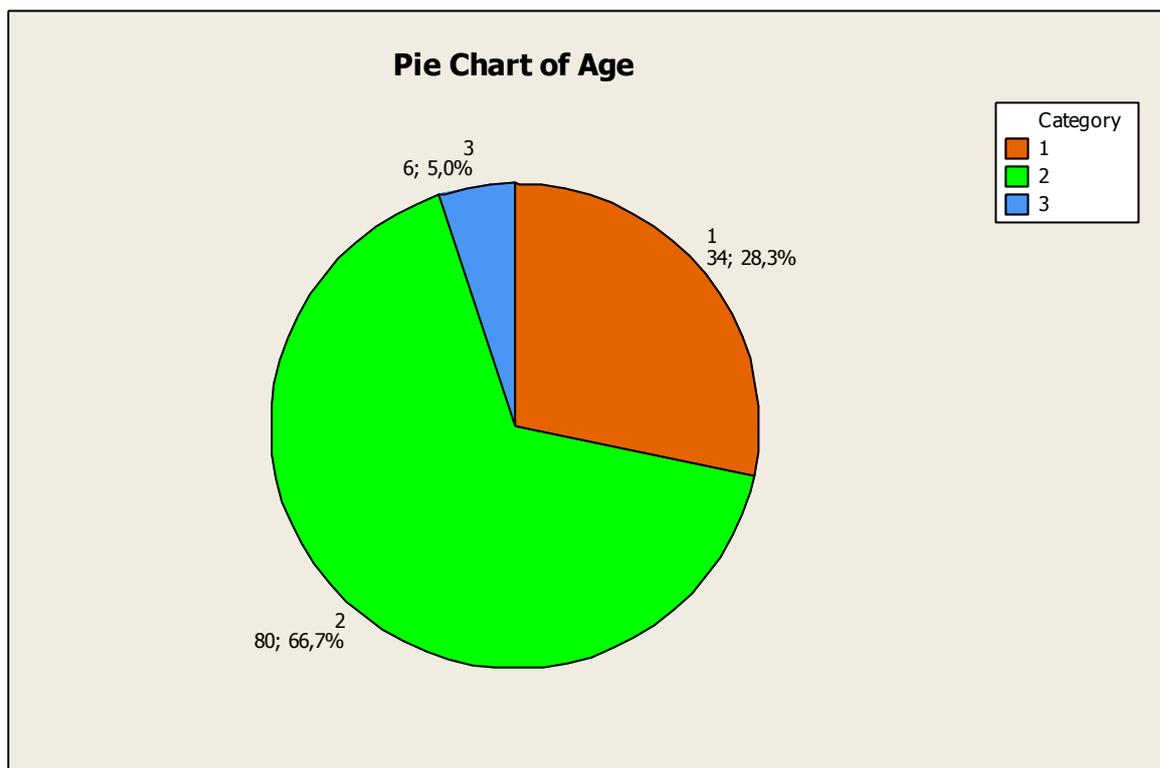
**Table 5: Analytical variables**

---

## 6.2. Survey results

---

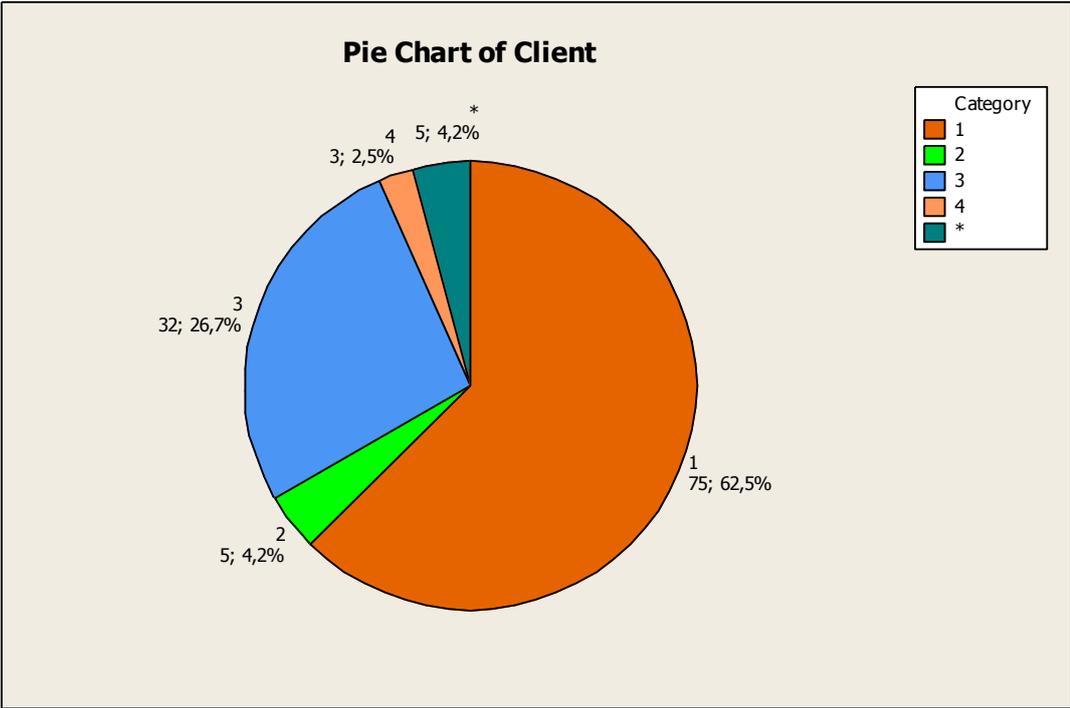
The results obtained from the written surveys are showed in this sub-chapter 6.2. in order to have a clearer view of the data collected.



Category	Answer
1	18-26
2	26-65
3	65+

**Figure 17: Age ranges**

Figure 17 shows that 66,7% of the people surveyed are between 26-65 years old, while, 28,3% are between 18-25. The main reason of having focused in the 18-65 age range is mainly because the population younger than 18 years old are frequently not able to decide the ways to invest their savings. By contrast, usually their parents are legally the owners of that money. Finally, people older than 65 are no frequently likely to move their money from their banks.

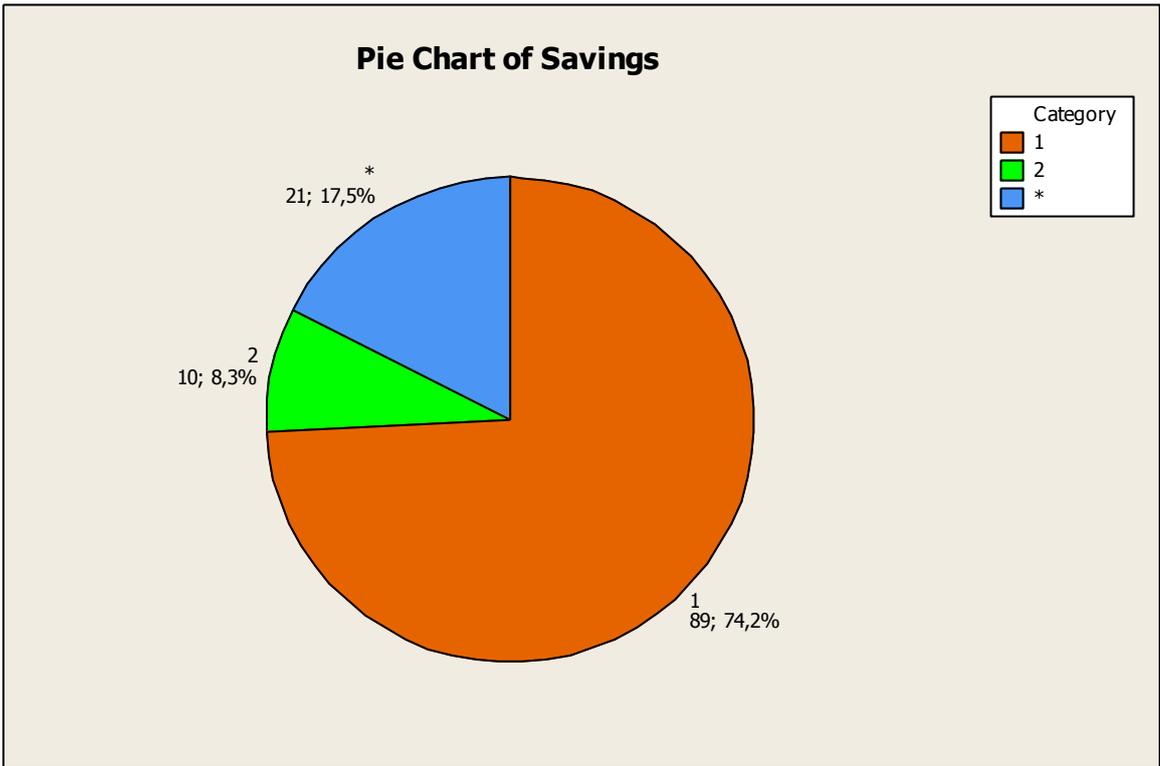


Category	Answer
1	Personal
2	Young People
3	Business
4	Old People
*	Missing value

**Figure 18: Client type**

Two types of client have been identified as predominant in the survey, personal customers and young people. There are 62,5% of personal clients which accounts for a total of 75 surveyed, within which group young people account for 26,7% (32 respondents). Referring to the data analysed in Figure 17 the conclusion obtained from both Figures 17 and 18 would be similar: our target customer would be a man or woman between 18-65 years old and therefore eligible for personal or young people customer privileges.

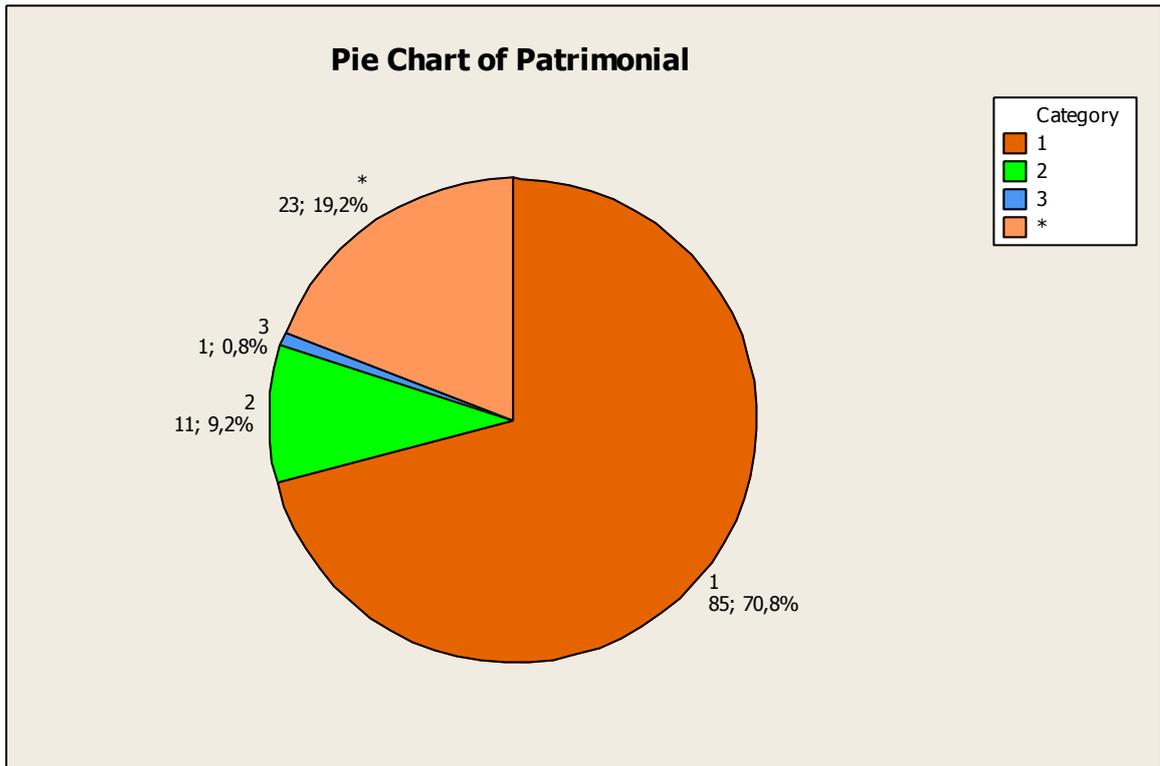
The main reason of removing business clients from the survey is based on their need to work in a day-to-day bank-business relationship and have different requirements. Hence, since the survey is looking for investors and not for a typical client, business people are not likely to be representative in the survey.



Category	Answer
1	0-100.000€
2	100.000€-500.000€
3	+500.000€
*	Missing value

**Figure 19: Savings ranges**

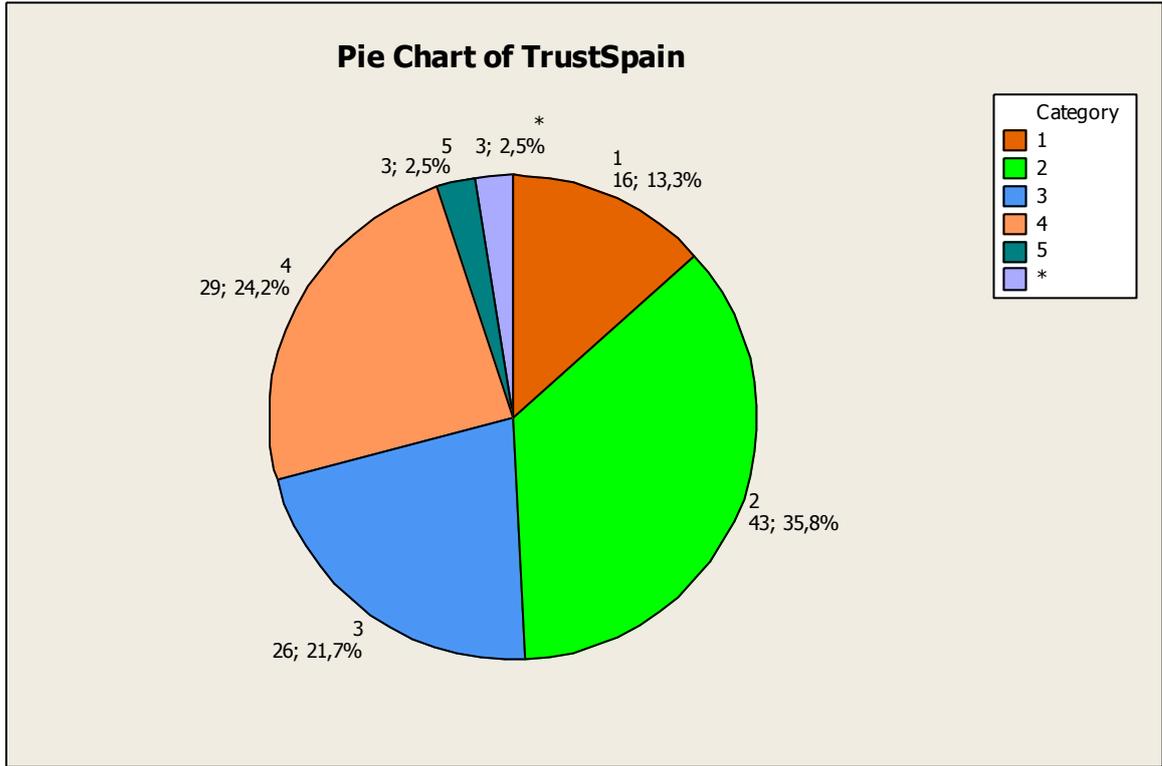
Most of the respondents (74,2%) have an approx.. total amount of savings between the 0-100.000€ range. Only 8,3% of those surveyed are in the second range 100.000-500.000 euros. The main problem is people’s reluctance to publicly state the amount of their savings. As a consequence, 17,5% of responses from the written survey are missing values, meaning that the person has not answered the question. The other difficulty found while doing the survey was the small number of people for the 2 and 3 ranges.



Category	Answer
1	0-500.000€
2	500.000€-2.000.000€
3	+2.000.000€
*	Missing value

**Figure 20: Patrimonial ranges**

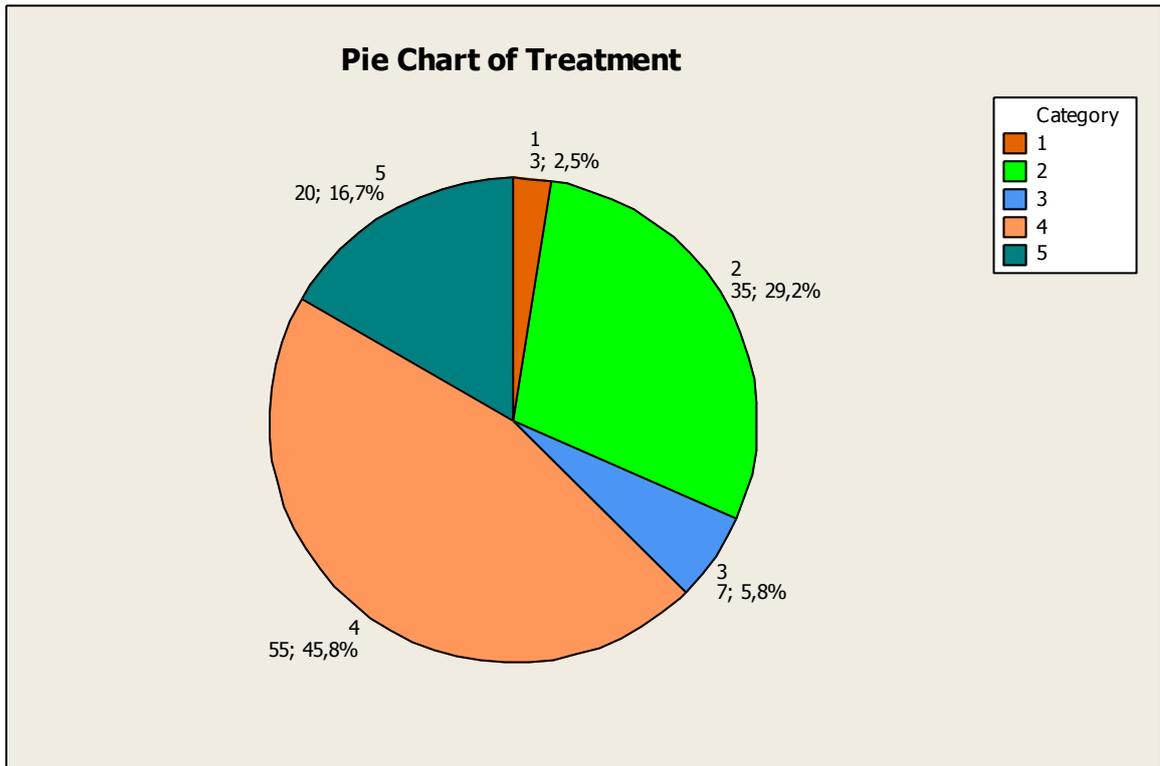
Figure 20 displays 70,8% respondents are within the 0-500.000€ patrimonial status range, by contrast, 9,2% are included in the 2nd range. It must be noted, that similarly to the question regarding people's savings, a large number of missing values (19,2%) have been obtained. This could be caused by the unlikelihood of people revealing the value of their personal assets. The target population is the larger number of respondents, which means the first patrimonial range. This group has been identified as a target for of two main reasons. On the one hand, the largest amounts of money have already left from Spain. On the other hand, the small savers are the ones that think that they don't have enough money to move it from Spain but simultaneously they are not sure about the safety of their money.



Category	Answer
1	I completely mistrust the Spanish banking sector and I would not invest my savings in a Spanish bank
2	I do not completely mistrust the Spanish banking sector but I would not likely invest my savings in a Spanish bank
3	The level of trust is irrelevant for me
4	I do not completely trust the Spanish banking sector but I would likely invest my savings in a Spanish bank
5	I completely trust the Spanish banking sector and I would only invest my savings in a Spanish bank.
*	Missing value

**Figure 21: Trust in the Spanish Banking system**

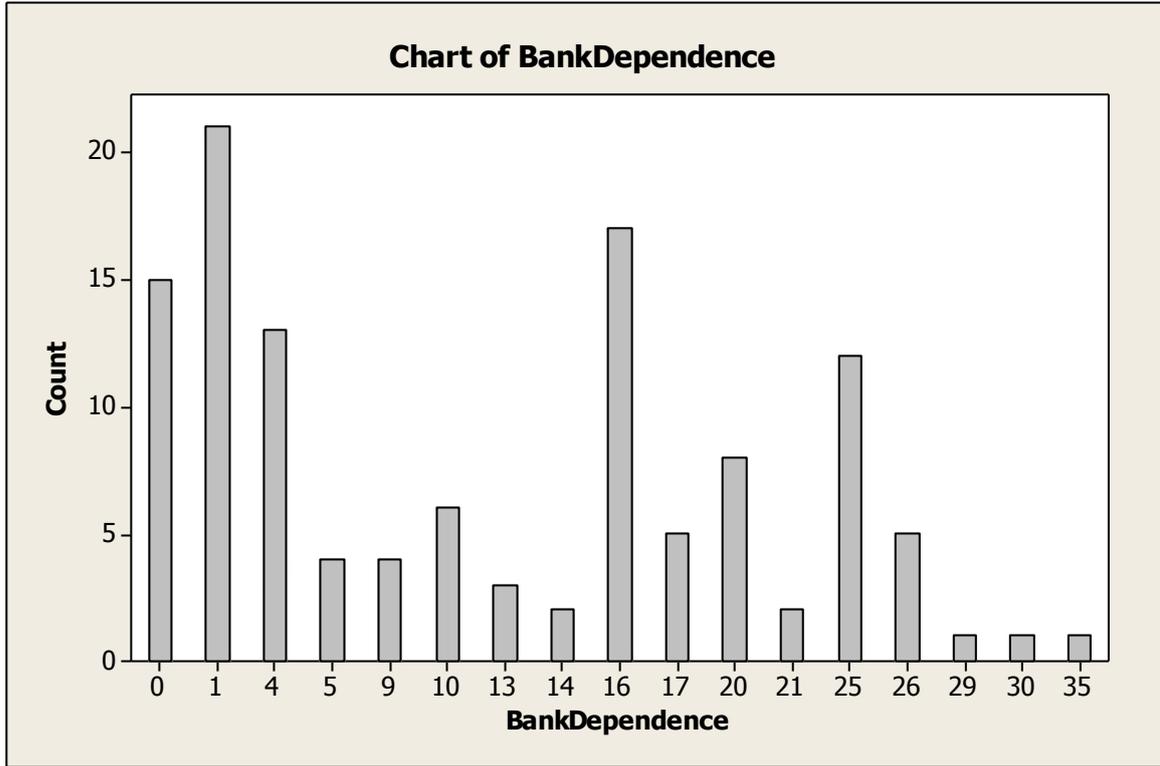
While analysing the variable “Trusting the Spanish banking system”, 3 groups that represent more than the 75% of the answers have been identified. These would be category 2 with a percentage of 35,8%, followed by category 3 with 21,7% and finally category 4 amounting to 24,2%. According to the results, category 2, being ‘I do not completely mistrust the Spanish Banking sector but I would not likely invest my savings in a Spanish Bank’, showed that people are not likely to invest in the Spanish Banking system. Adding up category 3, which refers to the irrelevancy of level of trust, to category 2 the percentage reaches more than 50%. That means that 50% of people are potential clients for German banks.



Category	Answer
1	I am completely disappointed with my bank's treatment of my business
2	I am quite disappointed with my bank's treatment of me and my business
3	It is irrelevant.
4	I am quite satisfied with my bank's level of service but there are several things that could be done in a better way.
5	I am completely satisfied with my bank's customer service
*	Missing value

**Figure 22: Bank's treatment of me and my business**

The larger group within the survey would be within category 4 regarding the level of satisfaction with the bank's service levels. The option "I am quite satisfied with my bank's treatment of me and my business but there are several things that could be done in a better way" was not considered as a satisfactory explanation in this question. This is because the response is redundant in combination with the next question, addressed in Figure 23. The response variable there is not affected by the relationship between the bank's treatment and investing in the German banking system.



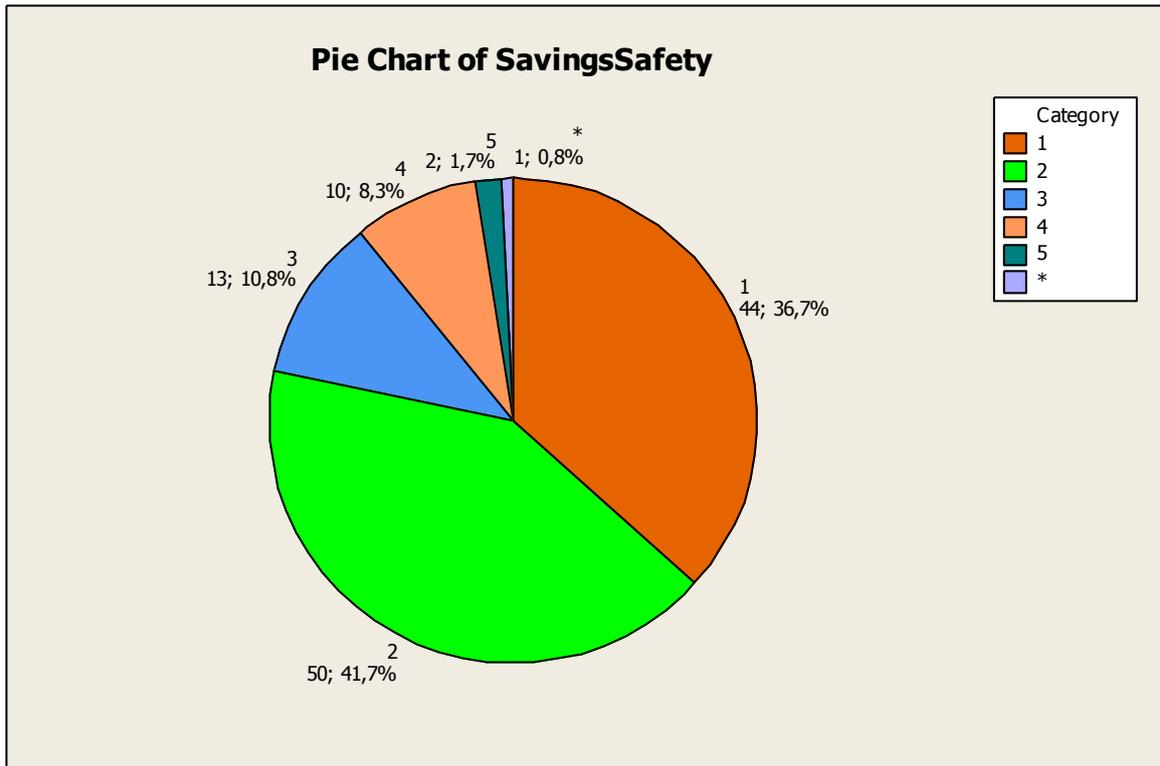
Category	Answer
1	Proximity
2	Mortgage, Credits
3	Number of offices
4	Service Levels
5	Don't know
*	Missing value

**Figure 23: Bank dependence**

The values shown in Figure 23 are the combination of the following arithmetical equation:

$$(1)*1+(2)*2+(3)*3+(4)*4+(5)*5$$

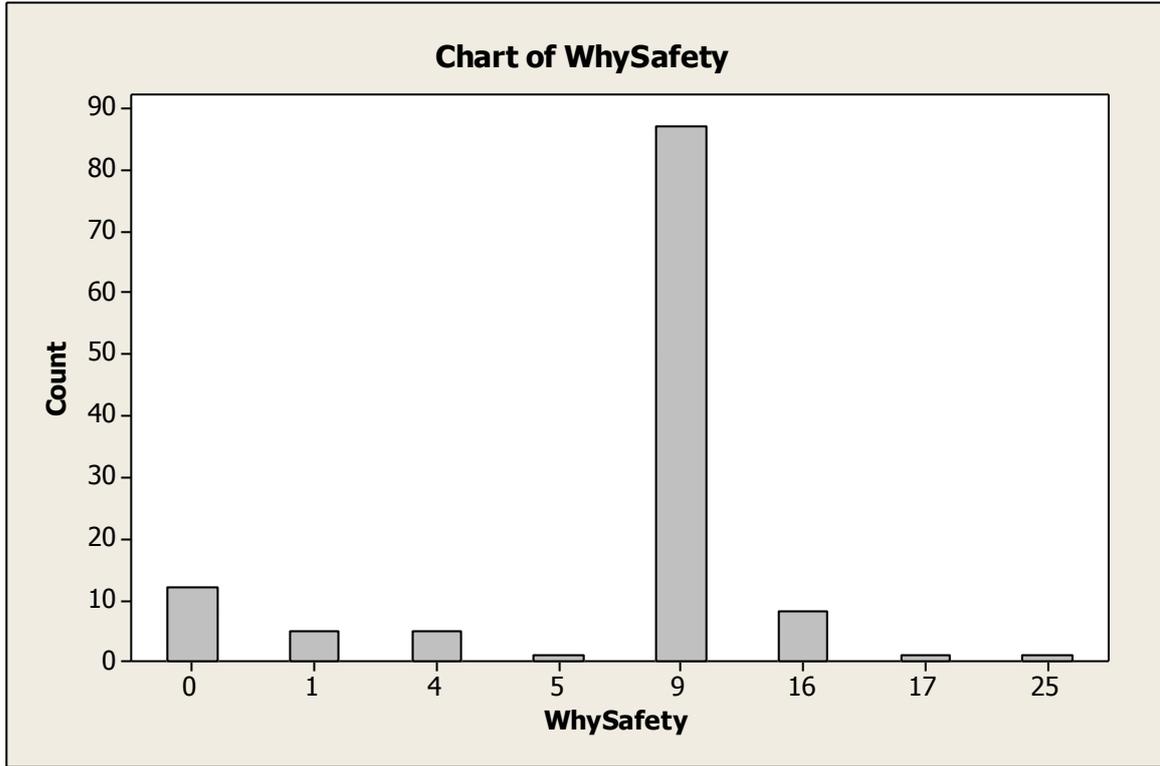
The larger groups exposed in the “Bank dependence” variable are the Proximity of the branches, which is perceived to be important for keeping money in a particular bank, as well as, number 16 which refers to the treatment received from bank employers. These appear to be the two main reasons for keeping money in a particular bank.



Category	Answer
1	I am not losing my money
2	It is not probable that I am losing my money
3	A I do not think about it
4	It is probable that I am losing my money
5	I will lose my money
0	Missing value

**Figure 24: Savings safety**

Referring to the fear of monetary loss, the results displayed in Figure 24 show that over 75% of responders do not consider it a possibility that they are going to lose their savings. The results obtained are quite surprising because of the fact that a large number of respondents chose on the one hand the option saying that they are not worried about losing their money; however, on the other hand they also answered that they don't trust the Spanish banking system.



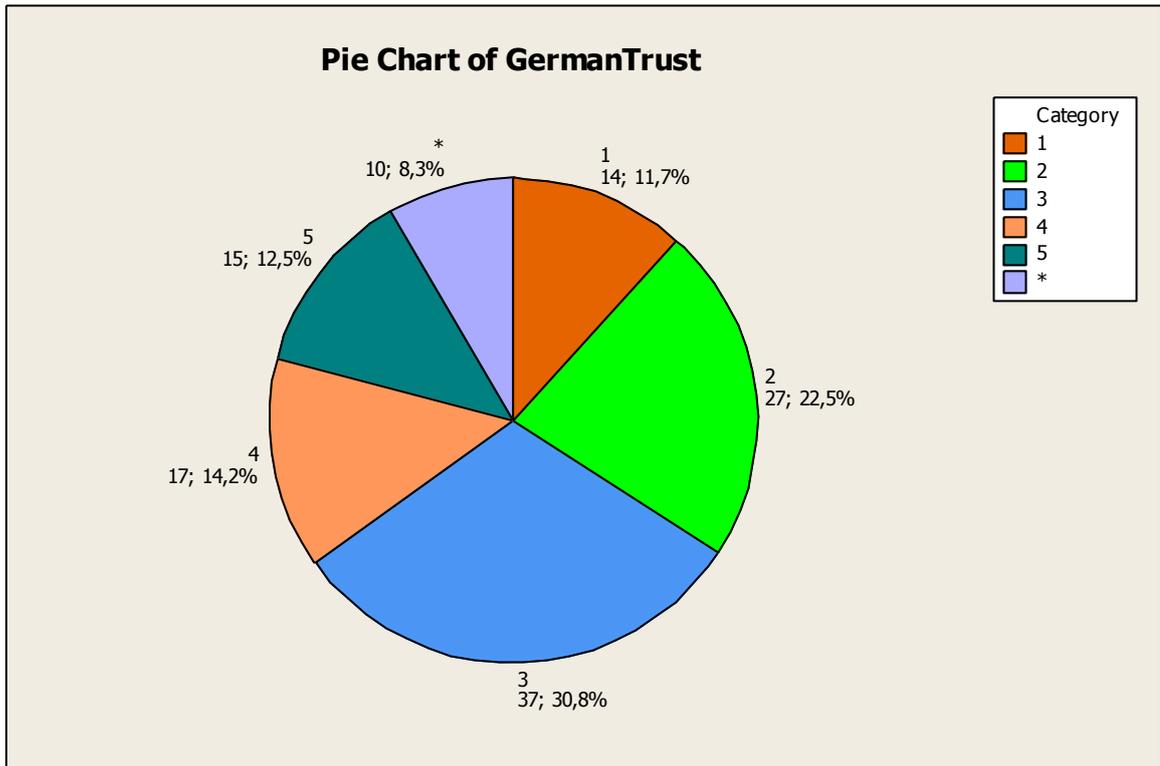
Category	Answer
1	I have it at home
2	I have transferred it to a foreign bank
3	I have done nothing
4	I have invested it
0	Missing value

**Figure 25: Safety ranges**

The variable “why safety” have been obtained by the combination of the arithmetical equation displayed below:

$$(1)*1+(2)*2+(3)*3+(4)*4$$

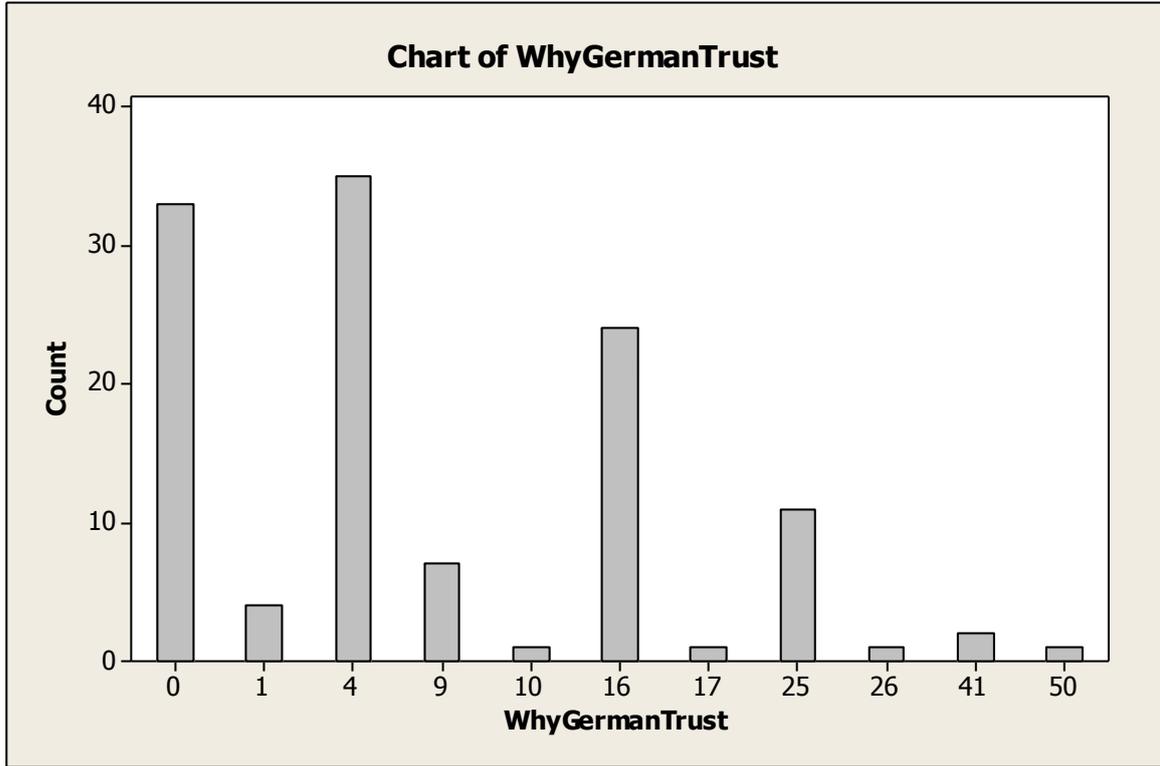
Figure 25 documents that the group that represents the majority of respondents is category 3: “I have done nothing”. This means that frequently people have not the initiative to take measures in order to ensure the safety of their savings. As a result, if people frequently do nothing to keep their money safe but simultaneously they don’t trust the Spanish banking sector, it could be a great opportunity for German banks to target these clients.



Category	Answer
1	I completely mistrust the German banking sector and I would not invest my savings in a German bank
2	I do not completely mistrust the German banking sector but I would not likely invest my savings in a German bank
3	The level of trust is irrelevant for me
4	I do not completely trust the German banking sector but I would likely invest my savings in a German bank
5	I completely trust the German banking sector and I would only invest my savings in a German bank.
*	Missing value

**Figure 26: Trust in the German banking sector**

Figure 26 shows that two large groups represent approx. 50% of those surveyed, categories 2 and 3. Both categories refer to the irrelevancy of trust and the unlikelihood of investing people's money in a German bank. However, the spread of answers shows that these are not strongly focused in one or another direction. As a consequence, it can be concluded that regarding the Spanish people's trust in the German banking sector that the variety of answers is too large to come to a substantial conclusion.



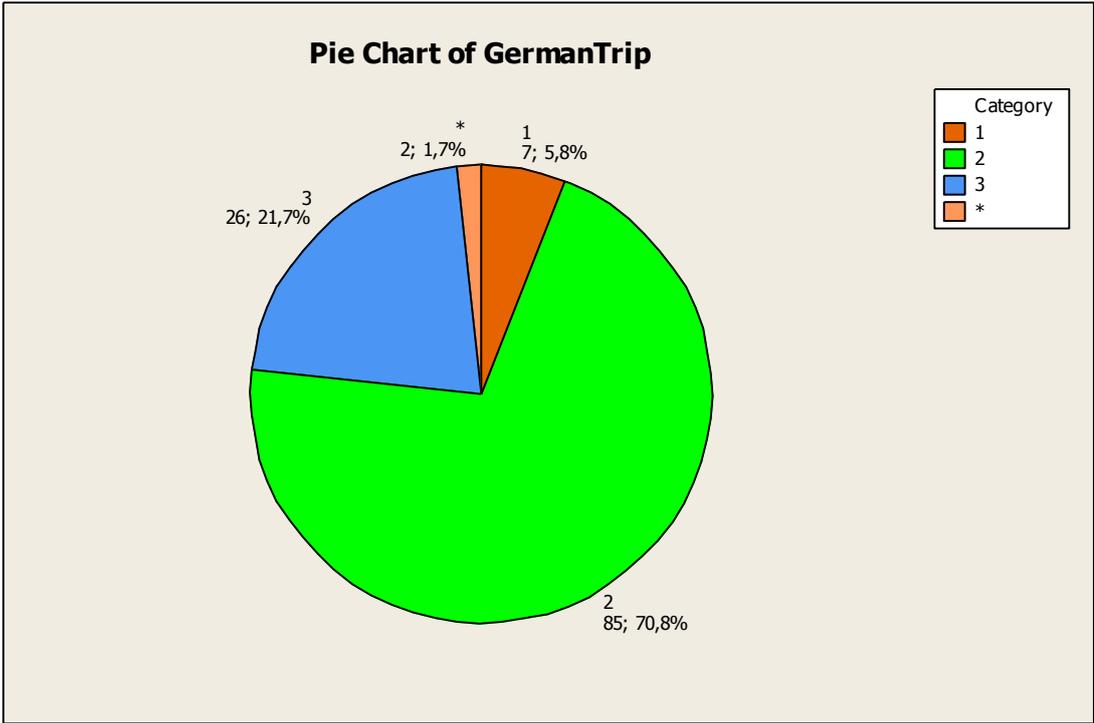
Category	Answer
1	Personal knowledge
2	Told about it
3	First European force
4	Made in Germany (Quality guaranteed)
5	Others
	Missing value

**Figure 27: Reasons of Spaniard's trust in the German Banking sector**

This variable is the result of a combination of the following arithmetical equation:

$$(1)*1+(2)*2+(3)*3+(4)*4+5*5$$

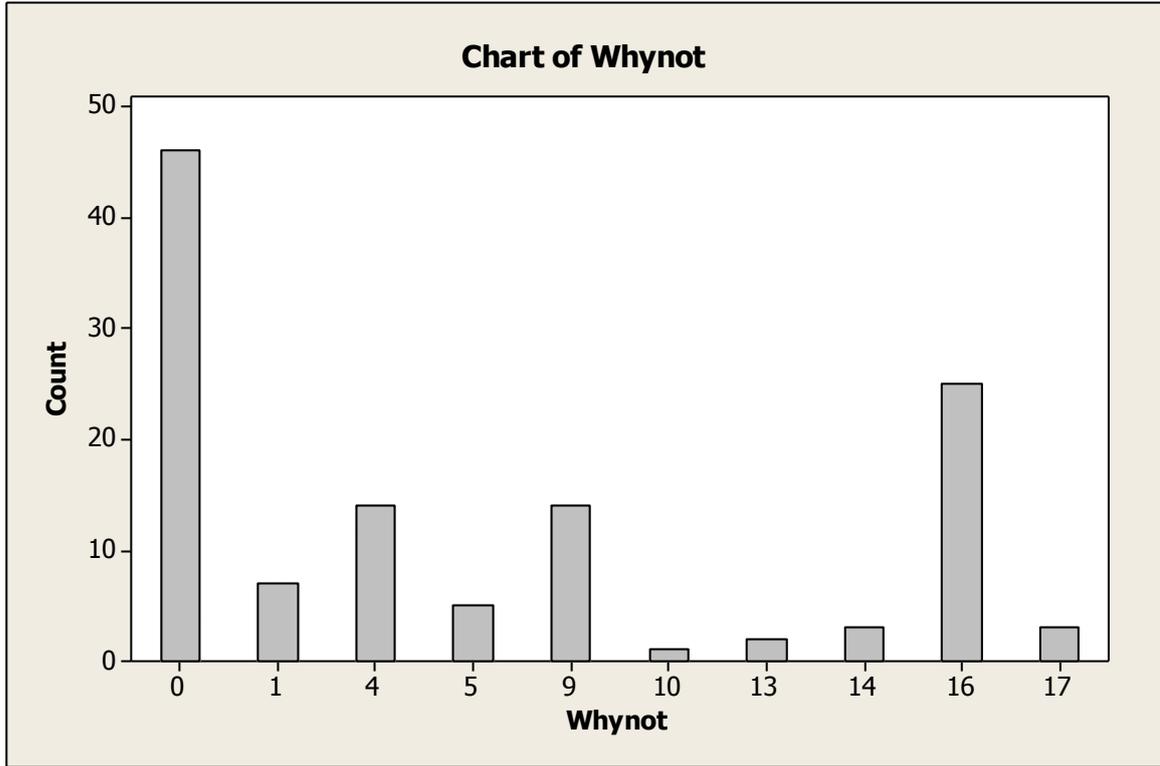
The main group represented in the chart is number 4, which corresponds with category 2. The results displayed in Figure 27 report that most Spaniards do trust in "Germany" due to their personal experiences. Moreover, the other large groups would be numbers 16 and 25, corresponding to categories 4 and 5. Category 4 represents the international perception that people have about Germany. In conclusion, it suggests that Germany as a brand could be the answer.



Category	Answer
1	Yes
2	No
3	Don't know
*	Missing value

**Figure 28: Travelling to Germany**

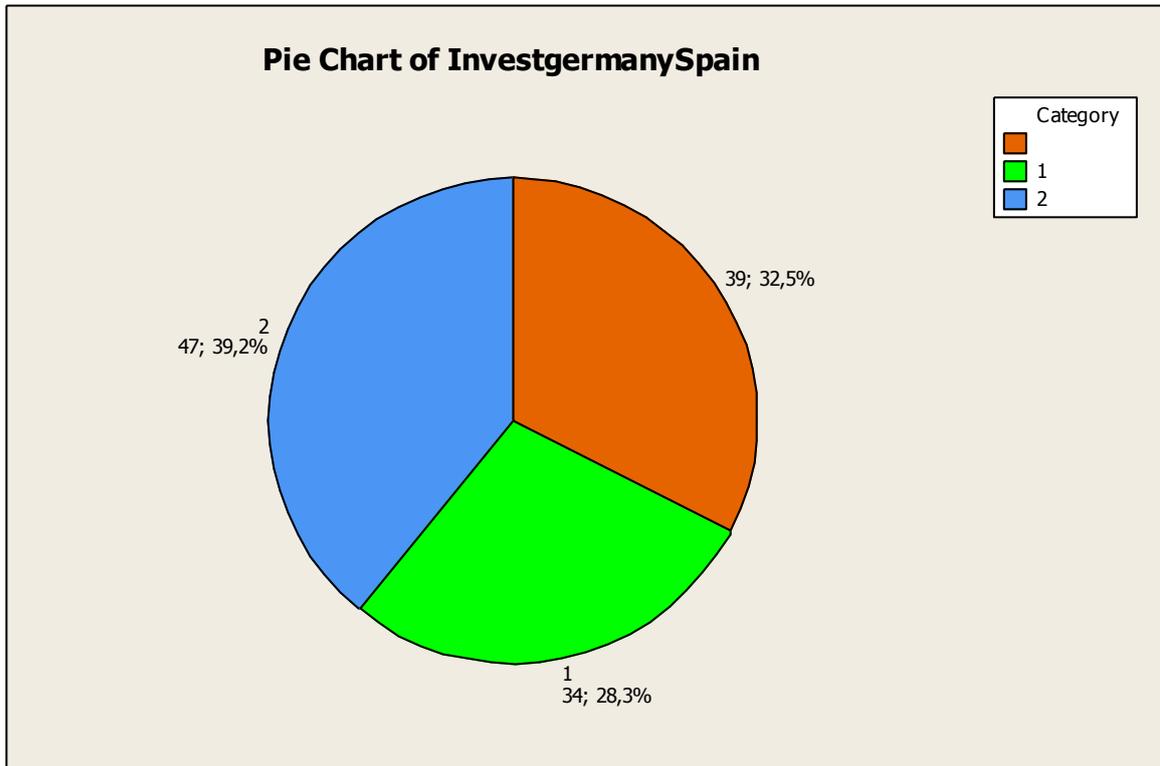
The result of the chart displayed in Figure 28 shows that as could be expected, around 71% of people from Spain would not be willing to travel to Germany to open a bank account in order to make their own savings safe. So it can be assumed that physical distance between Spain and Germany is one of the most important issues in order to obtain Spanish savings.



Category	Answer
1	Spending money on a trip
2	Too far away
3	My money is safe in Spain
4	Language
0	Missing value

**Figure 29: Reasons impeding the investment of savings in a German bank**

As displayed in Figure 29, the main reasons that deter Spaniards from travelling to Germany are two. On the one hand, language and distance have been identified as relevant factors by Spaniards (see also Figure 28). On the other hand, some people think that their savings are currently safe in Spain and are not willing to travel. Therefore, it can be assumed that the two challenges facing a German bank to reach these clients would be firstly to focus on the capacity of the bank to develop intercommunication methods with Spanish clients in their own language and secondly to solve the difficulty of the distance between both countries.



Category	Answer
1	Yes
2	No
*	Missing value

**Figure 30: Investing in Germany or in Spain**

The answer collected and shown in Figure 30 documents that 39,2% of respondents would not invest their money in a German bank if that bank had offices in Spain. By contrast, 28,3% of people would be willing to invest their money in that bank. Therefore, German banks should focus on both subgroups shown in Figure 30. On the one side, there are the people that are willing to invest and on the other side there are people who are unsure about what to do with their money. These two target groups add to more than a 50% of the population asked.

---

## 6.3. Multinomial regression

---

---

### 6.3.1. The multinomial regression

---

The multinomial regression has been used based on two reasons:

- Multinomial logistic regression is used to analyze relationships between a non-metric dependent variable and metric or dichotomous independent variables.
- Multinomial logistic regression compares multiple groups through a combination of binary logistic regressions.

---

### 6.3.2. Variables and assumptions

---

The variables and assumptions considered during the statistical analysis are listed:

- Multinomial logistic regression analysis requires that the dependent variable be non-metric. Dichotomous, nominal, and ordinal variables satisfy the level of measurement requirement.
- Multinomial logistic regression does not make any assumptions of normality, linearity, and homogeneity of variance for the independent variables.
- The minimum number of cases per independent variable is 10, using the guideline provided by Hosmer and Lemeshow<sup>24</sup>.
- The alpha or confidence level being used in the analysis will be of 0.05, or what is similar to 95% of confidence level.

---

<sup>24</sup> Hosmer, D.W., Lemeshow, S., 2000

### 6.3.3. Case evaluation

	N	Marginal Percentage
InvestGermanySpain 1	29	44,6%
2	36	55,4%
Valid	65	100,0%
Missing	56	
Total	121	
Subpopulation	65 <sup>a</sup>	

a. The dependent variable has only one value observed in 65 (100,0%) subpopulations.

**Table 6: Case processing summary**

Because of all the missing values given in the survey, the subpopulation that it is used to do the prediction is of 65 values, leaving 56 values outside the scope.

Model	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	91,354	93,528	89,354			
Final	75,847	106,289	47,847	41,507	13	,000

**Table 7: Model fitting Information**

The model fitting information shows the Sig. of 0.000 that is less than our 0.05 alpha. Therefore, it can be concluded that at least one of the regression coefficients in the model is not equal to zero and thus, the model can be fitted with a multinomial distribution. The Pearson and Deviance Goodness of fit shows a Sig value of 0.202 and 0.6, being that two are greater than our 0.05 alpha, expressing that the model is fit for multinomial analysis.<sup>25</sup>

	Chi-Square	df	Sig.
Pearson	59,176	51	,202
Deviance	47,847	51	,600

**Table 8: Goodness of Fit**

<sup>25</sup> SPSS 19

Parameter Estimates

InvestGermanySpain <sup>a</sup>	B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for	
							Exp(B)	
							Lower Bound	Upper Bound
2 Intercept	3,720	3,491	1,135	1	,287			
TrustSpain	,400	,428	,875	1	,350	1,492	,645	3,452
Treatment	,137	,446	,095	1	,758	1,147	,479	2,750
BankDependence	-,044	,055	,637	1	,425	,957	,858	1,066
SavingsSafety	,714	,466	2,344	1	,126	2,042	,819	5,095
WhySafety	,201	,160	1,582	1	,208	1,223	,894	1,674
GermanTrust	-1,262	,451	7,840	1	,005	,283	,117	,685
WhyGermanTrust	-,020	,056	,134	1	,714	,980	,878	1,093
GermanTrip	-,844	,952	,787	1	,375	,430	,067	2,777
Whynot	,124	,066	3,511	1	,061	1,132	,994	1,290
Age	-,830	1,091	,579	1	,447	,436	,051	3,698
Client	-,624	,479	1,696	1	,193	,536	,209	1,371
Savings	-,612	1,724	,126	1	,722	,542	,018	15,897
PatrimonialStatus	,512	1,272	,162	1	,687	1,669	,138	20,195

a. The reference category is: 1.

Table 9: Parameters Estimates

---

It must be noted that all the Std. Errors measured by our variables are less than 2. This means that they are fit and validated in order to continue our analysis. In this step the main results that are going to be used are the Sig and the B constant. On the one hand, the Sig is the fitting value in our regression. On the other hand, the B is the constant of our prediction model. Normally the Sig should be less than our 0.05 alpha but since we are analyzing the conduct of our sample group and not the fitness of our predictors, all the variables will be treated. Otherwise the program SSPS discards the Satisfaction variable due to an outlier fact and the variable does mess the results.

---

#### 6.3.4. Evaluation of Results

---

In order to have an overview of the results, the variables will be analyzed going from the most significant to the least by following the Sig. Value, being the variable with the least Sig. Value the most significant.<sup>26</sup>

**Intercept-** This is the multinomial logit estimate for a No answer relative to a Yes answer when the predictor variables in the model are evaluated at zero

**German Trust (Sig.=0.005)-** This is the multinomial logit estimate for a one unit increase in German trust score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his German Trust score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to decrease by 1.262 units while holding all other variables in the model constant.

**Why not (Sig.=0.061)-** This is the multinomial logit estimate for a one unit increase in 'Why not' score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Why not score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to increase by 0.124 units while holding all other variables in the model constant.

**Savings Safety(Sig.=0.126)-** This is the multinomial logit estimate for a one unit increase in Savings Safety score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Savings Safety score by one

---

<sup>26</sup> Institute for Digital Research and Education (2013)

---

point, the multinomial log-odds of preferring a No to a Yes would be expected to increase by 0.714 units while holding all other variables in the model constant.

**Client (Sig.=0.193)**- This is the multinomial logit estimate for a one unit increase in Client score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Client score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to decrease by 0.624 units while holding all other variables in the model constant.

**Why Safety (Sig.=0.208)**- This is the multinomial logit estimate for a one unit increase in Why Safety score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Why Safety score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to increase by 0.201 units while holding all other variables in the model constant.

**Trust Spain (Sig.=0.35)**- This is the multinomial logit estimate for a one unit increase in Trust Spain score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Trust Spain score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to increase by 0.4 units while holding all other variables in the model constant.

**German Trip (Sig.=0.375)**- This is the multinomial logit estimate for a one unit increase in German Trip score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his German Trip score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to decrease by 0.844 units while holding all other variables in the model constant.

**Bank Dependence (Sig.=0.425)**- This is the multinomial logit estimate for a one unit increase in Bank dependence score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Bank dependence score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to decrease by 0.044 units while holding all other variables in the model constant.

**Age (Sig.=0.447)**- This is the multinomial logit estimate for a one unit increase in Age score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Age score by one point, the multinomial log-odds of

---

preferring a No to a Yes would be expected to decrease by 0.830 units while holding all other variables in the model constant.

**Patrimonial Status (Sig.=0.687)**- This is the multinomial logit estimate for a one unit increase in Patrimonial Status score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Patrimonial Status score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to increase by 0.512 units while holding all other variables in the model constant.

**Why Trust German (Sig.=0.714)**- This is the multinomial logit estimate for a one unit increase in Why German Trust score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Why Trust German score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to decrease by 0.02 units while holding all other variables in the model constant.

**Savings (Sig.=0.722)**- This is the multinomial logit estimate for a one unit increase in Savings score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Savings score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to decrease by 0.612 units while holding all other variables in the model constant.

**Treatment (Sig.=0.758)**- This is the multinomial logit estimate for a one unit increase in Treatment score for a No answer relative to a Yes answer given that the other variables in the model are held constant. If a subject were to increase his Treatment score by one point, the multinomial log-odds of preferring a No to a Yes would be expected to increase by 0.137 units while holding all other variables in the model constant

---

### 6.3.5. Variable Analysis summary

---

The variable analysis summary is displayed in Table 10. This analysis includes the analytical variables and the numerical responses, as well as, the parameter B and the influences of these variables to the response variable.

---

In order to clarify the information that has been obtained from the statistical program, it is necessary to analyze of the effect that these variables have on the response variable. Filter variables like Age, Client and Savings have a crescent effect. In terms of numerical order, older people with big savings and with a special treatment in banks services are represented by the greatest rates. Based on this premise, the greater the number is, the more likely those people are to invest their money in a German bank. In addition, patrimonial status or assets has a negative effect in the response variable, which means that people with less assets are more likely to invest in a German Bank.

In regard to the other questions, those variables that have a positive effect in the response variable, if greater numbers are achieved, are BankDependece, GermanTrust, WhyGermanTrust and GermanTrip. Alternatively, the variables that should have the lowest value are TrustSpain, SavingSafety, WhySafety and Whynot. These variables that make Spanish people believe in the German country and in the German banking system should be in their highest values. This could be achieved by promoting them. On the other side, the variables that do not need to be promoted are those variables regarding with the Spanish banking system safety.

The main issue that needs to be considered is that German banks that aim to attract Spanish people should not depreciate the Spanish value. Instead, they should promote "Germany" only since the results from the survey showed that customers do trust in the Spanish banking system. Once this promotion is carried out, Spanish customers will decide where to invest their savings.

Label	Question	Responses(Numerical Response)	B (parameter)	Getting 'Yes'
Age	Which is your age range?	<ul style="list-style-type: none"> <li>○ 18-26 (1)</li> <li>○ 26-65 (2)</li> <li>○ 65+ (3)</li> </ul>	-0.830	↑
Client	In which group of clients do you belong?	<ul style="list-style-type: none"> <li>○ Personal (1)</li> <li>○ Business (2)</li> <li>○ Young people (3)</li> <li>○ Old people (4)</li> </ul>	-0.624	↑
Savings	In which money range do your personal savings belong to (invested and not invested)?	<ul style="list-style-type: none"> <li>○ 0-100.000€ (1)</li> <li>○ 100.000€-500.000€ (2)</li> <li>○ +500.000€ (3)</li> </ul>	-0.612	↑
Patrimonial Status	In which money range does your personal assets value belong to?	<ul style="list-style-type: none"> <li>○ 0-500.000€ (1)</li> <li>○ 500.000€-2.000.000€ (2)</li> <li>○ +2.000.000€ (3)</li> </ul>	0.512	↓
Trust Spain	Which is your current level of trust in the Spanish Banking sector?	<ul style="list-style-type: none"> <li>○ I completely mistrust the Spanish Banking sector and I would not invest my savings in a Spanish Bank (1)</li> <li>○ I do not completely mistrust the Spanish Banking sector but I would not likely invest my savings in a Spanish Bank (2)</li> <li>○ The level of trust is irrelevant for me (3)</li> <li>○ I do not completely trust the Spanish Banking</li> </ul>	0.4	↓

		<p>sector but I would likely invest my savings in a Spanish Bank (4)</p> <ul style="list-style-type: none"> <li>○ I completely trust the Spanish Banking sector and I would only invest my savings in a Spanish Bank. (5)</li> </ul>		
Bank dependence	Why do you have your capital in a specific bank?	<ul style="list-style-type: none"> <li>○ Proximity (1)</li> <li>○ Mortgage, Credits (2)</li> <li>○ Amount of offices (3)</li> <li>○ Treatment (4)</li> <li>○ Don't know (5)</li> </ul>	-0.044	↑
Savings Safety	Which would be your current level of fear about the safety of your money?	<p>I think...</p> <ul style="list-style-type: none"> <li>○ I am not losing my money (1)</li> <li>○ It is not probable that I am losing my money (2)</li> <li>○ I do not think about it (3)</li> <li>○ It is probable that I am losing my money (4)</li> <li>○ I will lose my money (5)</li> </ul>	0.714	↓
Why Safety	What have you done to the safety of your money?	<ul style="list-style-type: none"> <li>○ I have it at home (1)</li> <li>○ I have transferred it to a foreign bank (2)</li> <li>○ I have done nothing (3)</li> <li>○ I have invested it (4)</li> </ul>	0.201	↓

German Trust	Which would your current level of trust in the German Banking sector?	<ul style="list-style-type: none"> <li>○ I completely mistrust the German Banking sector and I would not invest my savings in a German Bank (1)</li> <li>○ I do not completely mistrust the German Banking sector but I would not likely invest my savings in a German Bank (2)</li> <li>○ The level of trust is irrelevant for me (3)</li> <li>○ I do not completely trust the German Banking sector but I would likely invest my savings in a German Bank (4)</li> <li>○ I completely trust the German Banking sector and I would only invest my savings in a German Bank. (5)</li> </ul>	-1.262	↑
Why German trust	Why do you trust the German Banking sector?	<ul style="list-style-type: none"> <li>○ Personal knowledge (1)</li> <li>○ Told about it (2)</li> <li>○ First European force (3)</li> <li>○ Made in Germany (Quality guaranteed) (4)</li> </ul>	-0.020	↑
German Trip	Would you fly to Germany to open a Bank account?	<ul style="list-style-type: none"> <li>○ Yes (1)</li> <li>○ No (2)</li> <li>○ Don't know (3)</li> </ul>	-0.844	↑
Whynot	Why would you not fly to Germany?	<ul style="list-style-type: none"> <li>○ Language (1)</li> <li>○ Spending money in a trip (2)</li> <li>○ Too far away (3)</li> <li>○ My money is safe in Spain (4)</li> </ul>	0.124	↓

Table 10: Variable analyssi summary

### 6.3.6. Predictions

Since the main purpose of the paper is to be able to view the effects that the different variables have in our response variable, it is not necessary to pursue a prediction equation.

Observed	Predicted		
	1	2	Percent Correct
1	24	5	82,8%
2	6	30	83,3%
Overall Percentage	46,2%	53,8%	83,1%

Table 11: Classification

But it can be observed that with these current variables 82,8% of correct prediction of the Yes answer is obtained and 83,3% of the No answer. Hence, it can be stated that our prediction model achieves 83,1% of accuracy.

The regressions equation for the prediction category 1 would be:

All the variables are referred to the labels in the Table 10, and the X values should be taken by the numeration shown also in the above table.

$$\Pr[Y=1]=\exp(\beta_1X_1+\dots+\beta_mX_m)/1+\exp(\beta_1X_1+\dots+\beta_mX_m)$$

$$\begin{aligned} Pr(Y=No)= & \exp(- 0.830*Age - 0.624*Client -0,612*Savings + 0,512*PatrimonialStatus \\ & + 0,4*TrustSpain + 0,137*Treatment - 0,044*BankDependence + \\ & 0,714*SavingsSafety + 0,201*WhySafety - 1,262*GermanTrust - \\ & 0,02*WhyGermanTrust - 0,844*GermanTrip + 0,124*Whynot) / 1+ \exp(- 0.830*Age - \\ & 0.624*Client -0,612*Savings + 0,512*PatrimonialStatus + 0,4*TrustSpain + \\ & 0,137*Treatment - 0,044*BankDependence + 0,714*SavingsSafety + \\ & 0,201*WhySafety - 1,262*GermanTrust - 0,02*WhyGermanTrust - \\ & 0,844*GermanTrip + 0,124*Whynot) \end{aligned}$$

---

---

## 7. Conclusions and recommendations

---

Literature research highlights that the Spanish banking system is in its worst shape ever and the deep economic crisis that has hit the country during the last 5 years has lead people to a situation of total mistrust. People's perception of the Spanish banking system has been getting worse and worse, and large fortunes have already fled to other countries where solvency is not in question. The other face of the economic crisis, putting aside its impact on the banking system, is the wave of impoverishment that has impacted on the population, leading the Spanish population to suffer evictions and to discover that investments they thought were safe are gone. They have lost their money. These consequences have lead people to change their attitudes regarding Spanish banks. Spaniards have been thinking about changing the location of their savings. The Capital flight proves that a large amount of money has already been transferred to other countries.

A written survey has been carried out in the area of Tarragona (Spain) focusing on a particular target group of respondents, as well as having a few others to make the sample representative. Through the different survey questions it is been able to identify Spaniards perceptions regarding the Spanish and German banking system. The level of trust in both sectors and the likelihood of investing have been the main issues addressed in the research questions of this M.Sc. Thesis.

The statistical analysis has showed the importance of the critical variables chosen in relation with the main question "*Is there a market opportunity for German banks in Spain?*" and the effect that it will have to move a variable up or down in a level. As a direct consequence the formula to continuously increase the number of clients willing to transfer their money to a German bank is shown. The survey has confirmed that the level of trust in the Spanish banking sector is really low. It can be also concluded that Spaniards do not actually have real fear about a bailout in Spain. This affirmation has been proved by the fact that most of them do not think about it or if they do, they think that is unlikely to happen.

One of the strongest variables that need to be addressed is the trust in the German banking sector. This increase of trust could be done through advertisement, documentaries and all kind of marketing strategies. The other most important variables defined by analyzing the statistical results are proximity and language. The conclusion is confirmed that Spaniards do not want to travel and they have fear about not understanding what German bank workers are saying. Therefore, it can be assumed that the two focus challenges for a German bank to



---

get these clients would be firstly to focus on the capacity of intercommunication with the Spanish clients in their own language and secondly to solve the difficulty of the distance between both countries.

Since the distance would be the main problem, the suggestion I am giving is to explore the internet banking possibility, trying to get the costumers comfortable by opening and dealing with their day to day bank issues by the internet. It is the hope of the author that it will make a significant contribution to the availability of information for any future market research in the Spanish banking system.

---

---

## List of figures

---

Figure 1: Spanish GDP .....	1
Figure 2: Evolution of banking defaults (Source: Ortega E. And Peñalosa J., 2012).....	2
Figure 3: Total Spanish unemployment 2005-2013(Source: Izquiero Juárez P., 2013).....	2
Figure 4: Foreign countries - Spanish exposure in percentage terms 2011 .....	4
(Source: Maudos J., 2012) .....	4
Figure 5: Change of trust in banking industry .....	6
Figure 6: Assessment of institutions and social groups 2012 (Disapproval/Aproval) (Source: Metroscopia 2012).....	8
Figure 7: Map of evictions in Spain 2012 (Source: Registradores de España, 2012).....	9
Figure 8: Evictions in Spain 2012 .....	10
Figure 9: Article informing about evictions in Spain (Source: Daley S., 2012).....	11
Figure 10: Preferential shares demonstration in Spain (Source: Ruiz J., 2013) .....	12
Figure 11: Attrition in banking.....	13
Figure 12: Main reasons for attrition .....	14
Figure 13: Market share in Spain in 2012 (Source: Horwood C., 2012) .....	15
Figure 14: Balance of payments between 2000-2013.....	20
(Source: Bank of Spain, 2013) .....	20
Figure 15: Capital Flight to foreign countries (Source: El economista 2012).....	21
Figure 16: Map of questioning .....	23
Figure 17: Age ranges.....	48
Figure 18: Client type .....	49
Figure 19: Savings ranges.....	50
Figure 20: Patrimonial ranges .....	51
Figure 21: Trust in the Spanish Banking system.....	52
Figure 22: Bank's treatment of me and my business .....	53
Figure 23: Bank dependence .....	54
Figure 24: Savings safety .....	55
Figure 25: Safety ranges .....	56
Figure 26: Trust in the German banking sector.....	57
Figure 27: Reasons of Spaniard's trust in the German Banking sector .....	58
Figure 28: Travelling to Germany .....	59
Figure 29: Reasons impeding the investment of savings in a German bank.....	60
Figure 30: Investing in Germany or in Spain.....	61

---

---

## List of tables

---

Table 1: Stress test results in 2012 (Source: Wyman.O. 2012) . . . . .	17
Table 2: Ratings based on the stress test of Spanish banks (Source: Wyman.O. 2012) . . .	18
Table 3: Advantages and Disadvantages of surveys . . . . .	28
Table 4: Margin error and confidence level according to the population size . . . . .	30
Table 5: Analytical variables . . . . .	47
Table 6: Case processing summary . . . . .	63
Table 7: Model fitting Information . . . . .	63
Table 8: Goodness of Fit . . . . .	63
Table 9: Parameters Estimates . . . . .	64
Table 10: Variable analyssi summary . . . . .	71
Table 11: Classification . . . . .	72

---

---

## References

---

Banco de España. *Boletín Estadístico 08/2012*. Banco de España. Eurosistema, Madrid (2012)

Bennet R. *Public attitudes towards the UK banking industry following the global financial crisis*, Emerald Group Publishing Limited, London (2012)

Daley S. *Wave of Evictions Leads to Homeless Crisis in Spain*. New York Times, USA (2012)

De Barrón I. *¿Gana siempre la banca? Por qué necesitamos banqueros pero desconfiamos de ellos*. Claves de Razón Práctica. Taurus, Spain (2013)

Ernst & Young. *Global consumer banking survey 2012. The customer takes control*. Ernst & Young (2012)

Europa Press. *El rescate a la banca costó a cada español 1.846,67 euros*. Público.es, Madrid (2012)

El economista *Fuga de capitals del estado español*.Madrid (2012)

Glasow P *Fundamentals of Survey Research Methodology* Virginia (2005)

Horwood C. *Best Bank 2012: Santander storms through the Spanish crisis*. Euromoney institution investor PLC, USA (2012)

Hosmer, D.W., Lemeshow, S. *Applied Logistic Regression*, USA, New York (2000)

Huffington Post. *Warren Buffett Blasts Obama's Bank Tax, Compares It to A 'Guilt Tax'*. Huffington Post, US (2010)

Institute for Digital Research and Education *Annotated SSPS Output Multinomial Logistic Regression*, UCLA (2013)

Izquiero Juárez P. *En 2012 hubo 38.976 desahucios de viviendas en España por impago de hipotecas*. El diaroexterior.com, Madrid (2013)

Joan C. and Karen E. Fisher. *How Libraries and Librarians Help: A Guide to Identifying User-Centered Outcome*. Chicago : American Library Association, 2005

KPMG. 2012 Banking Industry Customer Satisfaction Survey, Amsterdam 2012.

Maudos J. *Spanish Economic and Financial Outlook. The importance of foreign Banks in financing the Spanish economy*. Fundación de las Cajas de Ahorros, Madrid (2012)

---

Metroscopia *Evaluación sobre las instituciones y grupos sociales* El País Madrid (2012)

Montero C. *El desempleo en España: "Una de las cosas más aterradoras que yo haya visto"*. La carta de la Bolsa. Ediciones Saavedra, Spain (2013)

Ortega E. and Peñalosa J. *The Spanish Economic Crisis: Key Factors and Growth Challenges in the Euro Area*. Documentos Ocasionales N° 1201. Banco de España, Madrid (2012)

PwC. *Banking industry reform. A new equilibrium*. PricewaterhouseCooper, USA (2012)

Registradores de España. *Panorama registral. Impagos hipotecarios de vivienda 2012*. Colegio de Registradores de la Propiedad, Bienes Muebles y Mercantiles de España, Spain (2012)

Ruiz J. *Los inversores con participaciones preferentes perderán desde el 38% en Bankia hasta el 61% en Catalunya Caixa*. Vozpopuli, Spain (2013)

Wyman O. *Asset quality review and bottom-up stress test exercise*. Marsh&McLennan Companies, Madrid (2012)

Statistical Software "*Statistical Product and Service Solutions*" SSPS 19, IBM

---

---

## Key terms<sup>27</sup>

---

**Boom period:** A period of time during which sales of a product or business activity increases very rapidly.

**QX:** Quarter of the year (1,2,3,4)

## Fitch Group

### Long term credit ratings

Investment grade	Non-investment grade
<b>AAA:</b> the best quality companies, reliable and stable	<b>BB:</b> more prone to changes in the economy
<b>AA:</b> quality companies, a bit higher risk than AAA	<b>B:</b> financial situation varies noticeably
<b>A:</b> economic situation can affect finance	<b>CCC:</b> currently vulnerable and dependent on favourable economic conditions to meet its commitments
<b>BBB:</b> medium class companies, which are satisfactory at the moment	<b>CC:</b> highly vulnerable, very speculative bonds
	<b>C:</b> highly vulnerable, perhaps in bankruptcy or in arrears but still continuing to pay out on obligations
	<b>D:</b> has defaulted on obligations and Fitch believes that it will generally default on most or all obligations
	<b>NR:</b> not publicly rated

## Short-term credit ratings

<b>F1+</b> : best quality grade, indicating exceptionally strong capacity of obligor to meet its financial commitment
<b>F1</b> : best quality grade, indicating strong capacity of obligor to meet its financial commitment
<b>F2</b> : good quality grade with satisfactory capacity of obligor to meet its financial commitment
<b>F3</b> : fair quality grade with adequate capacity of obligor to meet its financial commitment but near term adverse conditions could impact the obligor's commitments
<b>B</b> : of speculative nature and obligor has minimal capacity to meet its commitment and vulnerability to short term adverse changes in financial and economic conditions
<b>C</b> : possibility of default is high and the financial commitment of the obligor are dependent upon sustained, favourable business and economic conditions
<b>D</b> : the obligor is in default as it has failed on its financial commitments.

## **Moody's:**

<b>Long term ratings</b>	<b>Short term ratings</b>
<b>Aaa</b> : Rated as the highest quality and the lowest credit risk	<b>Prime-1</b> : Best ability to repay short-term debt
<b>Aa1,Aa2,Aa3</b> : Rated as high quality and very low credit risk	<b>Prime-1/Prime-2</b> : Best ability or high ability to repay short term debt
<b>A1,A2,A3</b> : Rated as upper-medium grade and low credit risk	<b>Prime-2</b> : High ability to repay short term debt
<b>Baa1,Baa2,Baa3</b> : Rated as medium grade with same speculative elements and moderate credit risk	<b>Prime-2/Prime-3</b> : High ability or acceptable ability to repay short term debt
<b>Ba1, Ba2, Ba3</b> : Judged to have speculative elements and a significant credit risk	<b>Prime-3</b> : Acceptable ability to repay short term debt
<b>B1,B2,B3</b> : Judged as being speculative and a high credit risk	<b>Not Prime</b> : Do not fall within any of the prime categories
<b>Caa1,Caa2,Caa3</b> : Rated as poor quality and very high credit	
<b>Ca</b> : Judged to be highly speculative and with likelihood of being near or in default, but some possibility of recovering principal and interest.	
<b>C</b> : Rated as the lowest quality, usually in default and low likelihood of recovering principal or interest.	

## Standard and Poor's

### Long term credit ratings

Investment grade	Non-investment grade
<b>AAA:</b> An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by Standard & Poor's.	<b>BB:</b> An obligor rated 'BB' is less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitments.
<b>AA:</b> An obligor rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors only to a small degree. Includes:	<b>B:</b> An obligor rated 'B' is more vulnerable than the obligors rated 'BB', but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.
<b>AA+:</b> equivalent to Moody's Aa1 (high quality, with very low credit risk, but susceptibility to long-term risks appears somewhat greater)	<b>CCC:</b> An obligor rated 'CCC' is currently vulnerable, and is dependent upon favorable business, financial, and economic conditions to meet its financial commitments.
<b>AA:</b> equivalent to Aa2	<b>CC:</b> An obligor rated 'CC' is currently highly vulnerable.
<b>AA-:</b> equivalent to Aa3	<b>C:</b> highly vulnerable, perhaps in bankruptcy or in arrears but still continuing to pay out on obligations
<b>A:</b> An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories	<b>R:</b> An obligor rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision, the regulators may have the power to favor one class of obligations over others or pay some obligations and not others.
<b>A+:</b> equivalent to A1	<b>SD:</b> has selectively defaulted on some obligations
<b>A:</b> equivalent to A2	<b>D:</b> has defaulted on obligations and S&P believes that it will generally default on most or all obligations
<b>BBB:</b> An obligor rated 'BBB' has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.	<b>NR:</b> not rated

---

---

## Appendix 1

---

### Encuesta ciudadanos sobre el sistema bancario español

¿Cuál es su nivel de confianza en el sector bancario español?

- Tengo total desconfianza en el sector bancario español y no invertiría en un banco español.
- No desconfío totalmente pero no me gustaría invertir mis ahorros en un banco español
- El nivel de confianza no es relevante para mi
- No confío totalmente pero me gustaría invertir mis ahorros en un banco español
- Tengo total confianza en el sector bancario español y solo invertiría en un banco español

¿Cuál es su nivel de satisfacción respecto al trato recibido en su banco?

- No estoy nada satisfecho con el trato recibido
- La atención recibida es bastante mejorable
- No es relevante el trato que reciba
- Estoy satisfecho con el trato recibido aunque hay cosas que se deberían mejorar.
- Estoy muy satisfecho con el trato recibido

¿Por qué trabaja con su banco/s? (puede marcar más de una casilla)

- Proximidad de las filiales
- Hipoteca, créditos
- Cantidad de oficinas
- Trato
- No me lo he planteado
- Otras \_\_\_\_\_

¿Cuál es su nivel de preocupación respecto a la seguridad de sus ahorros?

- Creo que no voy a perder mis ahorros
- Es bastante probable que no pierda mis ahorros
- No pienso en la seguridad de mis ahorros
- Es probable que pierda mis ahorros
- Creo que seguramente pierda mis ahorros

¿Qué acciones ha emprendido para que su dinero este más seguro? (puede marcar más de una casilla)

- Tengo mi dinero en casa
- Lo he trasferido a un banco extranjero
- No he emprendido ninguna acción
- Lo he invertido
- Otras \_\_\_\_\_

¿Cuál es su nivel de confianza en el sector bancario alemán?

- Tengo total desconfianza en el sector bancario alemán no invertiría mis ahorros en un banco alemán.
- No desconfío totalmente pero no me gustaría invertir mis ahorros en un banco alemán
- El nivel de confianza no es relevante para mi
- No confío totalmente pero me gustaría invertir mis ahorros en un banco alemán
- Tengo total confianza en el sector bancario alemán y me gustaría tener mis ahorros en un banco alemán

**¿Porque confía en el sector bancario alemán?** (Puede marcar más de una casilla)

- Conocimientos propios sobre el sector
- No confío en el sector bancario alemán
- Por el boca a boca
- Porque es la primera fuerza económica europea
- Made in Germany (Calidad garantizada)
- Otras \_\_\_\_\_

**¿Invertiría sus ahorros en un banco alemán??**

- Si
- No
- No lo se

**¿Viajaría a Alemania con la intención de abrir una cuenta bancaria?**

- Si
- No
- No lo se

**En caso de que la respuesta haya sido afirmativa 'SI' responda a la siguiente pregunta**

**¿Porque viajaría a Alemania?**

- Mis ahorros estaría seguros
- Me han dicho que lo debo hacer
- Es lo que la gente está haciendo
- Otras razones \_\_\_\_\_

**En caso de que la respuesta haya sido negativa 'NO' responda a la siguiente pregunta**

**¿Porque no viajaría a Alemania?**

- Idioma
- Gastos de viaje
- Demasiado lejos
- Mi dinero está seguro en España
- Otras razones \_\_\_\_\_

**¿Invertiría sus ahorros en un banco alemán si este tuviera oficinas en España?**

- Si
- No
- No lo se

**¿En qué franja se encuentra su cantidad de ahorros depositados en el banco?**

- 0-100.000€
- 100.001€-500.000€
- +500.000€
- No responde

**¿En qué franja se encuentra su patrimonio (casas, coches, ahorros) total?**

- 0-500.000€
- 500.001€-2.000.000€
- +2.000.000€
- No responde