Determination of Important Attributes for Obtaining Financial Products Requiring Sound Financial Advice:

A survey analysis among Dutch consumers about mortgages

M. van den Dool

Abstract:

The aim of this thesis is to empirically investigate what determines the Willingness to Pay for financial products requiring sound financial advice. This is researched by means of a Maximum Difference analysis and a Choice-Based Conjoint analysis about obtaining mortgages. The Choice-Based Conjoint survey results are analyzed with a binary Logit Model. The main results of the present study indicate that the price (interest rate), the product conditions, the trustworthiness of the advisor, and the customization of the product are important attributes for obtaining financial products requiring sound financial advice. It can be concluded that the product conditions, the trustworthiness of the advisor, and the customization of the products are the most important determinants of the Willingness to Pay for financial products requiring sound financial advice.

Keywords: mortgages, financial products requiring sound financial advice, attributes, determinants, willingness to pay

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Student Number: 375036
Supervisor: Prof. Dr. A.R. Thurik
Co-reader: Dr. P.W. van der Zwan
Supervisor Flowresulting: Roel Reukers
Department: Erasmus School of Economics

Preface

This paper is the thesis for my master of science degree in Entrepreneurship and Strategy Economics, a specialization within the Erasmus School of Economics, which is part of the Erasmus University Rotterdam. I would like to greatly thank my thesis supervisor Prof. Dr. A.R. Thurik for his pleasant guidance and useful comments while writing my thesis. Furthermore, I would also like to thank Dr. P.W. van der Zwan for the helpful comments with regard to the empirical part of this study.

This paper is written during an internship at Flowresulting. Flowresulting is a marketing and strategy consulting firm. The present study is done for the department 'winning propositions'. Banks and financial service providers can compete based on prices (interest rates). However, Flowresulting wants to protect her customers for the danger of a commodity trap.[1] To avoid this commodity trap, financial service providers can also compete based on providing maximum value to customers. This results in a distinctive value proposition. If financial service providers want to compete on value, they first have to know what the most important value elements are according to customers. With this research, Flowresulting wants to obtain insights in what value propositions may be successful and what value propositions may be less successful. I would like to thank Roel Reukers, my mentor at Flowresulting, for his pleasant guidance, useful comments, and numerous brainstorm sessions. Furthermore, I would like to thank all my colleagues at Flowresulting for supporting me in writing my thesis and the possibility to work on interesting marketing and strategy consulting projects.

[1] A situation of purely price-based competition

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1. Introduction

In response to the last credit crisis, people argue that financial innovations made the financial system too complex (Brunnermeier & Oehmke, 2009). In addition, the Dutch government demands more and more personal involvement of its citizens with regard to their pensions, healthcare costs, and career breaks. Furthermore, financial planning for households becomes more and more important (Koel & Van der Leij, 2016). Due to these developments financial advice becomes more appreciated. Hence, it is useful to shed more light into what determines the Willingness To Pay (WTP) for financial products that require financial advice. This is done with a framework that divides the value of financial products that require sound financial advice into a few important value elements, called attributes in this research.[2] Although price is not really a determinant of the WTP, it is taken into account to keep the value breakdown realistic. Excluding price could lead to unrealistic evaluations of other attributes. In the present research, the interest rate is the price that people have to pay for mortgages. Having the right combination of attributes that a product or service delivers, leads to stronger customer loyalty, greater willingness to try and sustained revenue growth, as mentioned in a recent Harvard Business Review article (Almquist, Senior, & Bloch, 2016). For example, it is less likely that a bank is successful when it tries to position itself as the bank with the fastest services if it turns out that customers do not care about fast services but more about reliability and security.

The present research addresses a gap in the empirical literature about the WTP for financial products requiring sound financial advice. This lack of empirical literature is remarkable, as several researchers have shown that household finance is an important determinant of economic well-being and development (Claessens, 2006). Claessens (2006) elaborates on the value of financing and mentions the problems with households finances. Although his research shows the importance of finance, it does not say anything about what attributes are important for desirable financial products. Probably, it is more than just price and quality (Treacy & Wiersema, 1993).There are empirical studies that investigate the WTP, but I have not come across any studies that investigate the WTP for financial products. Nevertheless, there are studies about what determines the customer's bank choice. Although this is not really about what determines the WTP, it is closely related. An issue with these studies is that they show contradictory results with regard to what influences the decisions (Chaniotakis, Lymperopoulos, & Soureli, 2006; Devlin & Gerrard, 2004). This may be a result of the problem that most studies are not specifying a particular product or product group (Chaniotakis et al, 2006). Most studies are focusing on all basic transaction banking services (Devlin, 2002A; Devlin & Gerrard, 2004). Furthermore, two studies that focus on mortgages are not about customers in the Netherlands and took place prior to the last financial crisis (Devlin, 2002A; Chaniotakis et al, 2006).

[2] See third paragraph of the introduction for a definition of financial products requiring sound financial advice.

Mortgage products and the access to financial services differ across countries (Lea, 2010; Claessens, 2006), which means that these papers do not say a lot about the WTP of Dutch consumers for financial products and in particular for mortgages. In addition, existing research claims that when there are sufficiently competitive financial institutions, lenders are inclined to compete on product features and cost (Avlonitis, Papastathopoulou, & Gounaris, 2001). But is it really only product features and cost that influence purchase decisions? A recent article claims that creating exceptional customer experiences could enhance the competitive position (McKinsey&Company, 2016). Research is needed to determine whether the customer experiences also influence the WTP and choice process for financial products requiring sound financial advice, to conclude whether it makes sense to compete on customer experiences. Summarized, with the contradictions and external validity problems in the existing literature it remains unclear what determines the WTP of Dutch consumers for financial products requiring financial advice. Hence, the following research question is formulated:

What are the important determinants of the willingness to pay for financial products requiring sound financial advice?

Financial products are not regular goods, such as shoes or cars. According to the definition of Howcroft, Hewer & Hamilton (2003), financial products are more like a service.[3] It is important to focus on a subset of financial products because customer buying behavior is strongly influenced by the type and nature of the financial product (Howcroft et al, 2003). The focus of the present research is on financial products requiring sound financial advice. With sound I mean solid and thorough. These are products on which the Netherlands Authority for the Financial Markets (AFM) implied a provision ban since January 1, 2013. This commission regulation applies to remunerations for advice with regard to the following products: mortgages, loans, payment protectors, complex financial products, individual disability insurances, life insurances, funeral insurances, and National Regime Services (Autoriteit Financiële Markten, 2015A; Autoriteit Financiële Markten, 2016). These products are viewed as impactful and complex products (Autoriteit Financiële Markten, 2015A). Most of these products are personalized and customized.

In the present study, mortgage loans are used to determine what factors play an important role for the WTP for financial products requiring sound financial advice. In 2015, 60 percent of the people in the Netherlands that purchased a house, used the services of a mortgage broker and only a small

[3] Services should be distinguished from goods on the basis of their unique characteristics, such as intangibility, inseparability, heterogeneity and perishability (Howcroft et al, 2003).

percentage of homeowners bought a house without any advice (Battes, 2016). This indicates that mortgages are indeed financial products that require advice. Furthermore, the total value of all mortgage loans in the Netherlands was around 650 billion euro in 2015 (Centraal Bureau voor de Statistiek, 2015). This, in combination with the fact that the total value of the advice market for mortgages in the Netherlands was around 0.5 billion in 2015 (Battes, 2016), makes it a valuable market for the present research. In addition, there is a general consensus that banks can especially use mortgage loans to create positive relationships with their customers. Developing a good relationship with a bank can be a reason for customers to obtain more financial products and services from that particular bank, which makes it for bank managers an even more interesting product (Kessler, 2001; Almquist et al, 2016).

A lot of existing studies about value propositions are performance related with a business mindset, while the present research is from a consumer perspective. It is not about what value proposition is most profitable for a company, but about what value proposition and which product features are most appealing to customers. This allows the reader to conclude, through the eyes of the customer, whether or not businesses apply the right value proposition. Costs with regard to the attributes are not taken into account in this research. An important assumption in the present study is that customers act rational and choose the product with the highest value. Furthermore, I assume that attributes with a high relative importance in a choice process are important determinants for the WTP for mortgages and financial products requiring sound financial advice, except for the interest rate attribute.

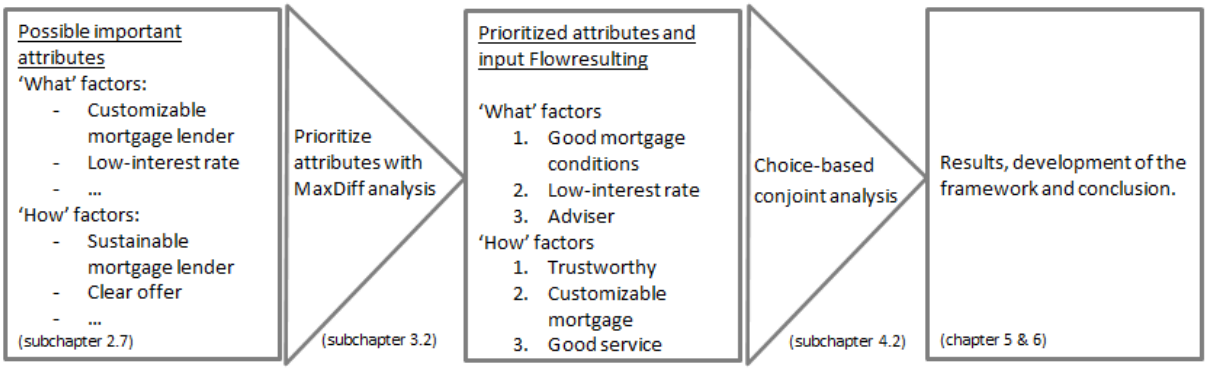
Research set-up, methodology & main results

The present research is based on stated preferences. The empirical part consists of two stages, a hypotheses-generating stage and a hypotheses testing stage. I use a different research method for each stage. See figure 1 for a graphical representation of the research structure of this paper. For testing the hypotheses, I use a choice-based conjoint analysis as the hypothetical products in this analysis simulate real life choices. A conjoint analysis usually has about six attributes. Existing literature and brainstorm sessions with my colleagues at Flowresulting suggest that there are more than six attributes when obtaining a mortgage. As I do not want to select the possible six attributes by myself, I compiled a maximum difference (MaxDiff) analysis to prioritize all the possible attributes. This prioritization is based on the relative importance of the attributes. The hypotheses and the attributes for the conjoint analysis are mainly based on the results of the MaxDiff analysis and the reviewed literature. According to the MaxDiff analysis, the four most important attributes are *good*

mortgage conditions, *low*-interest rate, *trustworthiness,* and *customizable mortgage.*[4] Based on the results of the conjoint analysis I conclude that the price (interest rate), the product conditions, the trustworthiness of the advisor, and the customization of the product are of great importance when obtaining financial products requiring sound financial advice. A focus on these attributes likely results in stronger customer loyalty, greater willingness to try and sustained revenue growth. The most important determinants of the WTP are the product conditions, the trustworthiness of the advisor, and the customization of the product.

The structure of the paper is as follows. Chapter 2 is about the theoretical background for this research. It consists of an overview of the previous researches that are closely related to this study, a description of the changes in the world of financial products, a description of WTP theory and other related theories, and it ends with a list of possible important attributes. Chapter 3 is about the data, methodology, and results of the hypotheses generating part of this study, the MaxDiff analysis. The data and methodology for the choice-based conjoint analysis are discussed in chapter 4, whereas the results and discussion are presented in chapter 5. Chapter 6 contains the conclusions, limitations, and suggestions for further research.

Figure 1: *Graphical representation of the research structure of this paper*



2. Theoretical background

This chapter consists of several parts. The first two subchapters are about the subject-related literature and the changes in the world of financial products and services. The third, fourth and fifth subchapters elaborate on the following topic related theories: willingness to pay theory, job-to-be-done theory, and buying decision classifications. Subchapter six is about the importance of a good value proposition. This chapter ends with a list of 'candidate' attributes that is constructed based on the reviewed literature and brainstorm sessions with professionals in this particular service area.

[4] The other two attributes in the conjoint analysis are added because these attributes add additional value to this present research for Flowresulting. It is a restriction implied by Flowresulting. See subchapter 3.2.

2.1. Previous research

This part of the paper elaborates on studies that are related to this research. There are previous studies about what determines the consumer's bank choice. Those studies examine the choice criteria for banking services. Most of these studies are focused on basic transaction banking services. A few studies are focused on mortgage loans (Devlin, 2002A). Nevertheless, it remains psychologically complicated and difficult to pin down what consumers truly value (Almquist et al, 2016). I will review the previous findings in a chronological manner, but as there are contradictory findings in the literature it is sometimes interesting to combine results.

Researchers claim that in the past a large segment of bank customers saw banking services as undifferentiated services (Anderson, Cox, & Fulcher, 1976; Chaniotakis et al, 2006). However, due to changes in the financial world, financial service providers started to make an effort to differentiate themselves. As a result of this differentiation strategy, consumers started to evaluate the different value propositions of these financial service providers.

A Swedish study mentions the importance of locational factors and parental influences when making a bank choice (Martenson, 1985). Other studies also show the importance of parental influences (Lewis, 1982; Lewis & Bingham, 1991). Zineldin (1996) performed a study in Sweden with recommendations as possible selection determinant. Although both Swedish studies found that recommendations belong to the choice criteria, recommendations are more important in Martensons (1985) study. In addition, two studies held in Singapore show even more contradictory results with regard to recommendations. One study found that recommendations by others have a strong influence on someone’s bank choice (Tan & Chua, 1986), while the other study found that recommendations are nearly influential (Gerrard & Cunningham, 1997). Tan and Chua (1986) claim that recommendations have a stronger impact than factors as reputation, the speed of the service, interest rates, and location. This contradicts the findings of Gerrard and Cunningham (1997).

Boyd, Leanard, and White (1994) also researched what determines the consumer's bank choice. They gave a lot of selection criteria with respect to retail banking. Their study shows that the reputation of a bank, modern facilities, location, interest rates, opening hours, friendliness of the staff, and word of mouth are important determinants for choosing a bank. The results of this study are not very useful for bank managers as it does not identify the most important reasons for choosing a bank. Further research is needed to gain insight into the most important attributes.

Elliot, Shatto, and Singer (1996) did research in the US and their results contradict the results of Tan and Chua (1986). Elliot et al. (1996) investigated consumer behavior and claimed that price, speed, and access are important selection criteria. They found that customers prefer lower bank fees and

higher transaction speed in exchange for lower personalized services. Reeves and Bednar (1996) responded to these findings with a contradicting paper. They claimed that the quality of the service is more important than the price. Earlier research of Khazed and Decker (1992) supports this finding of Reeves and Bednar (1996). Although interest rates are frequently mentioned as important choice criteria, it is not the only cost related aspect that matters. The service charge policy could also be an important determinant for the consumer's bank choice (Khazeh & Decker, 1992). If research solely focuses on the choice criteria for choosing a mortgage institution, instead of choosing a bank in general, it turns out that professional advice and interest rates are frequently cited choice criteria (Devlin, 2002A). Demographic factors and previous relationships with banks are also determinants for choosing a particular mortgage provider.

In more recent studies, involvement and perceived risk are important attributes for consumers to make a bank choice. Risk depends on the consumer's perception of the complexity of the product, the certainty of the outcome associated with the product and the consumer's understanding and knowledge of the product (Howcroft et al, 2003). Where Howcroft et al. (2003) connect knowledge to consumers purchase behavior via risk; Devlin (2002B) connects knowledge more directly to consumers purchase behavior. He claims that higher knowledge groups may prefer other value propositions than lower knowledge groups. The importance of intrinsic service attributes might depend on whether the buyers are high or low knowledge customers. For factors as product range, opening hours, and reputation, the customer's knowledge does not matter. For perceived risky products, financial advisors play an important role, as these people are able to reduce the involved uncertainty in buying a bank product. Furthermore, having the right mix of channels through which the financial advisors can be reached and through which the services can be delivered is not only interesting with regard to cost efficiency but is also important for maximizing customer satisfaction. For example, consumers prefer to purchase a mortgage at the office, while they use the telephone when buying simple insurance products (Howcroft et al, 2003).This is confirmed by an article of the AFM in 2015, which stated that most people prefer personal face-to-face contact for obtaining a mortgage (Autoriteit Financiële Markten, 2015B). Probably it is more powerful for banks to provide both physical and digital channels to deliver the products and services (Almquist et al, 2016).

The influence of recommendations increased and is according to Devlin and Gerrard (2004) the most important choice criterion. They also mention some other important attributes, such as having a wide product range (which makes mergers and takeovers more interesting) and economic factors such as interest rates, fees and charges levied. Decreasing factors are those related to location aspects (Devlin, 2002A). Locational factors have been important choice criteria for several decades, until the mid-1990s (Devlin & Gerrard, 2004). Nowadays, consumers are willing to put more effort in

reaching a mortgage provider or getting excellent professional advice (Devlin, 2002A). There are also some factors that remain constant over time, such as the reputation of a bank and expectations about the service level (Devlin & Gerrard, 2004). Devlin and Gerrard (2004) elaborate on a few studies conducted in the USA about the continuing importance of convenience, recommendations and reputation. This continuing importance is confirmed by a study in Malaysia that shows that factors as reliability, responsiveness, and convenience gained increased value in the bank selection process (Saleh, Rosman, & Nani, 2013). Customers prefer convenient services, as this enables them to save time and prevent from the feelings of frustrations. Convenience can be increased by using several electronic services that make the service less time demanding. Fast and efficient services provided by helpful staff influences the decision process as well. Friendliness of staff is also important (Mokhlis, 2009). In 1985 there was already a study that emphasizes the importance of convenience and ease in transactions, so it is not a new phenomenon (Arora, Cavusgil, & Nevin, 1985).

Some studies argue that doing business in an environmentally friendly manner becomes more important for consumers (Porter & Kramer, 2006). Researchers mention that the WTP is higher when it concerns environmental friendly products (Barber, Kuo, Bishop & Goodman, 2012). As far as I know attributes with regard to environmental sustainability are not included in studies that determine what influences the consumer's bank choice. Only factors as reputation and image are taken into account in former studies (Devlin, 2002A), but these are not specifically about sustainability. This is the first research that investigates whether it attributes significant value for customers if banks advocate sustainability.

The question arises whether all the above-described discrepancies are due to the fact that the studies are held in different time periods, or that it is a result of different sampling and measurements. Another explanation is that different sets of choice criteria make it difficult to compare studies. The way in which results are presented could influence the comparisons between studies as well (Devlin & Gerrard, 2004). In addition, the type and nature of the financial services and products are of great importance for consumers purchase behavior, which could also be an explanation for all the above-given discrepancies (Howcroft et al, 2003). Value is also something psychological (Almquist et al, 2016), which makes it more difficult to analyze. Nevertheless, it can be concluded that research is needed to determine what attributes are important determinants of the WTP for financial products requiring sound financial advice in the Netherlands.

2.2. Changes in the world for financial products

In the last decades, several major changes took place in the world for financial products and services. Financial crises and changing regulatory frameworks have impact on customer behavior. Furthermore, the saturation of markets influences how the bank should formulate their strategy (Chaniotakis et al, 2006). This subchapter elaborates on the important changes that took place in the past 50 years and their possible impact on customer behavior.

Since the 1970s financial systems have undergone revolutionary changes. Rapid technology developments have changed the financial landscape. The financial service sector moved from 'face-to-face' selling to the marketing of products and services via phone, mail and computer (Lee, 2002). This in combination with deregulation resulted in a highly competitive market for financial services. Due to this increased competition, it became more uncertain whether financial service providers could retain their profitable customers (Howcroft et al, 2003). The developments in the financial sector also enhance the ability to spread risk, which leads to higher risk-bearing capacities. For both households and firms, the access to finance improved. People were also able to borrow greater amounts of money. At the same time, the emergence of intermediaries changed the structure of the financial service market (Rajan, 2005). Another important development in the banking industry is the globalization of banking activities (Puri, Rocholl, & Steffen, 2010). Due to the above-mentioned changes, it is important for financial service providers to understand their customers behavior and decision making. Researchers claim that customer relationships became an increasingly important component of marketing strategies (Chaniotakis et al, 2006).

In addition to the above-mentioned developments, behavior of financial customers also changed during the last few decades. These changes occur due to deregulation, the information revolution, and new forms of technology (Howcroft et al, 2003). Not everybody likes the new marketing of products and services via phone, mail, and computer. Whereas certain segments of the population prefer these new ways of communication, other segments still prefer personal face-to-face communication for financial products and services. This preferred way of purchasing a financial product or service also depends on the product itself. For example, a lot of people still prefer face-to-face communication for obtaining mortgages (Lee, 2002; Autoriteit Financiële Markten, 2015B). Furthermore, the ICT revolution of the last few decades has led to increasing prosperity and globalization and resulted in more knowledge creation. In general, this enhanced prosperity results in an increasing demand for services and a variety of customer preferences (Thurik, Stam, & Audretsch, 2013). It is likely that this ICT revolution also influenced bank customers in such a way that there is an increase in the variety of preferences for financial products and services.

The last global financial crisis, which started in 2007, has been the worst financial crisis since the Great Depression in the 30s. This financial crisis occurred as a result of subprime mortgages and affected the financial sector globally (Duchin, Ozbas, & Sensoy, 2010). Since the economic crisis, banks reject more loan applications. This is mostly done to preserve bank liquidity (Puri et al, 2010). This means that it became more difficult to get a mortgage loan. As a result of these developments, more and more loans are established without any bank involvement. In the future, people can probably use private investors to get their mortgage loan. New start-ups, such as Jungo, who would like to finance mortgages with crowdfunding, try to substitute the banker's role (De Horde, 2016). Furthermore, banks already lose market share in the mortgage market and mortgage brokers recapture market share from banks (Battes, 2016). Another development is the possibility to obtain your mortgage online, without any involvement of an advisor (Het financieele Dagblad, 2015). Getting your mortgage loan online is less expensive than using a mortgage broker. However, the question arises whether this is successful, as previous research shows that people prefer face-to-face communication for closing their mortgage loan.

Another result of the financial crisis is the decline in confidence and trust. European citizens lost their trust in the European Central Bank (Roth, 2009). Confidence and trust are important in financial crises. A certain level of assurance is needed to have a stable economic system (Earle, 2009). Re-establishing trust in the financial system is a key objective to solve a financial crisis. Therefore, government intervention in the free-market system and regulations with regard to financial products and services are needed (Roth, 2009). The provision ban implemented in 2013 is a good example of increased regulations (Autoriteit Financiële Markten, 2015A; Autoriteit Financiële Markten, 2016). Banks have to keep in mind that their (potential) customers are looking for trustworthy bank institutions, especially now as they lost their trust and confidence in the financial system. They should understand that trust and confidence are needed between investors and borrowers (Earle, 2009). Banks have to reduce anxiety (Almquist et al, 2016) Therefore, it is likely that attributes with regard to trustworthiness and confidence become more important when obtaining mortgages.

2.3. Willingness To Pay (WTP) theory

WTP is an often used term in scientific research and businesses and it is closely related to the reservation price theory. Studying WTP can have different purposes, but before discussing these purposes I will first give a description of the WTP based on existing literature.

The WTP is the amount of money a customer is willing to spend for a product or services (Cameron & James, 1987; Krishna, 1991). It reflects the value a customer assigns to the usage of a product or services (Homburg, Koschate, & Hoyer, 2005). Customers are sensitive to the context of a good or

services when determining the WTP (Miller, Hofstetter, Krohmer, & Zhang, 2011). This means that the WTP for a product or service depends on the decision context. Furthermore, the question what constitutes value appears to be a personal and idiosyncratic question. A low price can be of high value for one customer, while another customer determines value as what he or she wants in a product, no matter of what the price is (Zeithaml, 1988). This corresponds with the fact that a financial brokerage firm stated that the consumers level of demand for services is different among several consumer segments (Treacy & Wiersema, 1993). Thus, one gives value to an all-encompassing service, while another person prefers basic services. There are numerous factors that could influence the WTP. In general, it can be concluded that the more satisfied people are with a product or service, the more they are willing to pay for that particular product or service (Homburg et al, 2005). It is the purpose of this study to determine what factors mainly influence WTP for financial products. As mentioned earlier, price is not really a determinant of the WTP, but it is taken into account to keep the value breakdown realistic. Excluding price could lead to unrealistic evaluations of other product features. Later on in this paper, I extensively elaborate on the possible attributes that could influence the WTP for financial products requiring sound financial advice.

There are several different approaches for calculating the WTP. Four frequently used approaches to calculate the WTP are: open-ended questions; choice-based conjoint analysis; Becker, De Groot and Marschak incentive-compatible mechanism; and the incentive-aligned choice-based conjoint analyses (Miller et al, 2011). Each method has its advantages and disadvantages. In the present study, I use the choice-based conjoint analysis, on which will be elaborated in subchapter 4.2.

When discussing the WTP for a product, it is important to mention whether it is the hypothetical or the actual WTP. The hypothetical WTP is often higher than the actual WTP (MacMillan, 2004; Paradiso & Trisorio, 2001). These differences in the hypothetical WTP and actual WTP is also related to whether it concerns private or (quasi-)public goods and services.[5] Private and (quasi-) public goods are provided in a different way, which influences consumers preferences (Carson, Martin, Wright, & Flores, 1996). The WTP in this study is a hypothetical WTP, as the empirical part is not based on real purchase data. However, knowledge of the products or services can decrease the disparity between the hypothetical and actual WTP. A distinction has to be made in the types of knowledge because the effect of direct and indirect knowledge differs. Direct knowledge is knowledge of the characteristics of a product or service, which people derive from a physical inspection of the product or service. This is difficult to envision for a mortgage loan, as the mortgage itself does not have physical features. A given description of a product or service in the introduction of an experiment results in indirect

[5] (Quasi-)Public goods are goods which are (partly) non-excludable and (partly) non-rival.

knowledge of a product or service. Direct knowledge of a product or service reduces the difference between the hypothetical WTP and actual WTP (Paradiso & Trisorio, 2001). Although the larger effect of direct knowledge, corresponding research shows that informed subjects (indirect knowledge) also have lower variances between hypothetical and actual WTP than less informed subjects (Lazo, Schulze, McClelland, & Doyle, 1992). As it is difficult to facilitate direct knowledge for this study, it is important to design the surveys in such a way that the respondents of this study are well informed. All attributes have to be clearly defined.

Another important distinction is whether the WTP is measured directly or indirectly (Gafni, 1991; Miller et al, 2011). Some researchers may prefer the direct WTP approach, which means that consumers are directly asked to state their WTP for a certain product or service. This can be done by using an open-ended question survey. Others prefer an indirect WTP measure, which means that the WTP is calculated based on consumers choices among several product alternatives (Miller et al, 2011). An example is the choice-based conjoint analysis, where the customer has to choose between two alternatives with different characteristics or attributes. Consumers can also decide to choose none of both options. This indirect method forms the core for the empirical part of this paper. It has to be mentioned that both the direct and indirect approach are not fully foolproof. The results of both methods might be a bit inaccurate, due to technical and psychological reasons (Chernev, 2003; Verlegh, Schifferstein, & Wittink, 2002) .

Furthermore, the value of a product or service is determined by a set of product and customer experience attributes. All these features together constitute the total utility, which determines the WTP. The importance of a certain element or attribute depends on the industry, culture, and demographics (Almquist et al, 2016). The new consumer demand theory of Lancaster (1966) is one of the first theories that acknowledge that goods or services are not the direct object of utility, but that the utility of a good or service is derived from the characteristics and properties of that particular good or service. Lancaster (1966) concluded that each good possess more than one characteristic, so the utility of one single good is determined by more than one characteristic. Lancaster's theory states that consumer's preferences are determined by these characteristics of the good. This corresponds with the fact that respondents allocate value to a wide variety of attributes (Zeithaml, 1988). Businesses also acknowledge that the value of a product it determined by the characteristic of a product. For example, Flowresulting normally makes a value 'breakdown' of the different product features. This is done to gain insight into how much money people are willing to pay per product component or feature, to determine which product features are imported for customers and which are not (Smits & Westeneng, 2015). A result of Lancaster's (1966) theory is that different goods can be related to each other because they common attributes. These common attributes, that determine

part of total product value, make it possible to make statements about the value of related products. Therefore it is possible to say something about financial products requiring sound financial advice based on surveys about mortgages because all these products have some common characteristics.

Calculating the WTP for products can have different purposes. It is useful for formulating competitive strategies, conducting value audits and for developing a new product and introducing it into the market (Miller et al, 2011). The WTP is also important for applying various pricing mechanisms, such as nonlinear pricing, one-to-one pricing, and targeted promotions. The WTP can also help by determining prices based on the value-based price mechanism or when developing optimal value propositions (Smits, 2016). The objective of this research it to determine the important value contributors for mortgages to obtain insight into what constitutes the WTP for these products. This enables managers to calculate the WTP for financial products or apply a value-based pricing mechanism.

2.4. Job-to-be-done theory

Since the 1990s firms focus on customers and customer power. Before the 1990s firms were used to apply an inside-out approach, but now firms started to adopt the outside-in approach. Companies started to focus on the needs of its customers (Barnes, Blake, & Pinder, 2009). The job-to-be-done theory is a useful theory when people and organizations want to produce a product or service for which customers have a high WTP. The job-to-be-done theory is a great example of an outside-in approach that became more popular since 1990. According to this theory, the focus should not be on the customer itself, but on the job that the customer wants to be done (Ulwick, 2005). Products and services are more successful when they facilitate the lives of customers and do the jobs that have to be done according to the customers (Oestreicher, 2011). When choosing product and service features it is important to focus on aspects that are appealing to customers. Appealing features are those that fulfill the jobs that have to be done. When we partition the WTP for products into attributes that significantly attribute to the total value of a product, it is useful to keep this theory in mind. Attributes that do not fulfill a job-to-be-done, are less likely to be an important valuable determinant for the WTP of customers.

What the jobs are that have to be done partly depends on the personal circumstances of a customer. Abraham Maslow argued that human behavior is a result of an innate desire to fulfill needs. These needs can be very basic, such as food and security, but also complex, such as self-esteem and altruism (Almquist et al, 2016). For the basic needs, the job that has to be done is likely to be the same for everyone. However, like the WTP theory, the job-to-be-done theory is also context sensitive, especially when it concerns complicated needs. Furthermore, customers seldom base their

purchase decisions on what the average customer in their category is doing, exceptionally when it concerns gadgets or products that are bought under group pressure. Customers rather buy products because they solve certain problems in their lives, which indeed depend on the personal circumstances (Christensen , 2015). By using segmentation in the empirical part of this research, I try to take into account certain circumstances that apply to certain customers. Although this segmentation, it remains difficult to control for the personal circumstances when analyzing the results of the conjoint analysis.

2.5. Purchase decisions

Customer behavior science has developed various theories to explain and predict consumer buying behavior. All these theories assume that consumers search actively for information, act rational and are intelligent and problem-solving organisms. However, not all consumer behaviors correspond with these assumptions. This subchapter elaborates on classifications that influence buying decision behavior and the WTP of customers. The first classification is the distinction between high-involvement and low-involvement products. The second classification is the type of demand.

2.5.1. High-involvement & Low-involvement products

It is important to make a distinction between high-involvement and low-involvement buying decisions (Tanner & Raymond, 2012). Besides the difference in the level of involvement, there are also different types of involvement, such as emotional involvement, situational involvement and rational involvement (Zaichkowsky, 1985; Laurent & Kapferer, 1985). With regard to high- and low-involvement buying decisions, some buying decisions can be made quickly, while other decisions are time-consuming. The time that is needed to make decisions also depends on the knowledge and experience of a customer (Tanner & Raymond, 2012). Although it varies per customer whether a buying decision is a high-involvement or a low-involvement decision, some products are typically high-involvement products or low-involvement products. Low-involvement products are products that are relatively inexpensive and carry low levels of risk, while high-involvement products are the products that carry higher levels of risk, are complex and are usually expensive (Tanner & Raymond, 2012). Usually, high-involvement products are also not bought frequently. The level of involvement influences the length of the choice process, the number of comparisons between products and the information search (Tanner & Raymond, 2012; Laurent & Kapferer, 1985). According to Laurent and Kapferer (1985), the predictors of the level of involvement are: the perceived importance of the product, the perceived associated risk of the product, the symbolic value a consumer attributes to the product and the hedonic value of a product.[6] Buying a house is a typical example of a high-involvement decision (Tanner & Raymond, 2012). This makes it likely that obtaining a mortgage loan

[6] The hedonic value of a product is the extent to which products are consumed for luxury purposes.

belongs to the high-involvement decision category (Chaniotakis et al, 2006). This can also be argued with the facts that mortgages are complex products, there is always associated risk with a mortgage and most people need a mortgage loan to buy a house, which makes it an important product. These characteristics of mortgage loans result in active search and active information processing (Laurent & Kapferer, 1985). The level of involvement in obtaining a mortgage can still differ, as consumers with no experience purchasing a particular product usually show more involvement (Tanner & Raymond, 2012). Another example of a high-involvement decision is the decisions with regard to life insurances.

Classical models of consumer decision making are usually only valid for high-involvement products (Rosenbaum-Elliott, Percy, & Pervan, 2015). The degree of consumer involvement in a buying decision is a relevant variable for advertising strategies. The reaction on commercial advertisements partly depends on whether it concerns high- or low-involvement goods (Laurent & Kapferer, 1985). For high-involvement products, the external word-of-mouth sources play a significant role (Gu, Park, & Konana, 2012). Furthermore, personal channels are also important for high-involvement goods. Therefore is also plausible that the possible communication channels for obtaining a mortgage are seen as important choice criteria. However, it is important to mention that there are different approaches for calculating the customers' involvement in buying decisions. Different customer behaviors can cause conflicting results, but the different approaches can also be the cause of conflicting results (Zaichkowsky, 1985).

2.5.2. Derived demand

The demand for a product or service depends on the price and quality of a product and is often a result of utility maximization (Hanamann, 1984). Demand for a product means that consumers want to obtain that product. This desire of obtaining a product normally results in a WTP for that product. Sometimes the demand for a product or service is classified as derived demand. This type of demand occurs as a result of the demand for other goods or services. Transportation of cargo is a great example of derived demand because a lot of movements take place to facilitate other economic activities. Cargo transportation does not take place because it generates a lot of utility on itself, but it rather takes place to fulfill the demand for a certain product or service (Rodrigue, Comtois, & Slack, 2013). The demand for a mortgage can also be characterized as derived demand as this demand often occurs as a result of the demand for housing. This means that people desire a mortgage loan because they want to own a house. However, the value of, and WTP for a certain mortgage is not determined by the characteristics of the desired house but by the attributes belonging to that particular mortgage. Nevertheless, the characteristics of a house might sometimes influence the preferences of customers for a particular mortgage.

2.6. The importance of value propositions

We know that the market for financial services is a highly competitive market, which makes it difficult to retain profitable customers (Howcroft et al, 2003). Developing a good value proposition is important to survive competitive markets. It is necessary that your offerings to customers outmatch the offerings of your rivals, on elements that matter most to customers (Anderson, Narus, & Van Rossum, 2006). As was mentioned in the introduction, having the right combination of value attributes leads to stronger customer loyalty, greater willingness to try and sustained revenue growth (Almquist et al, 2016). The value proposition can be seen as the centerpiece of a company's strategy. This subchapter first elaborates on what value propositions are and what good value propositions contain. Secondly, it explains why this is relevant for this study.

In short, a firm's value proposition expresses the value a firm provides through its products and services (Cambridge performance partners, 2013). Or in other words, it emphasizes the essence of a business, to concretize what the firm intends for its customers. (Barnes et al, 2009). Companies use value propositions to point out why to buy a good or use a service. Good value propositions should convince consumers that their offerings are better than the offerings of other companies (Investopedia, 2016). This helps to please customers (Barnes et al, 2009). Satisfying customers is the core of sustainable value creation. Important for a good value proposition is that it clearly explains which elements of the value proposition are points of parity and which are points of difference compared to other suppliers (Anderson et al, 2006). Without a good value proposition, the possibility arises that firms can only compete on prices and are caught in a commodity trap (Barnes et al, 2009).

According to Anderson et al. (2006), there are three kinds of value propositions: declaring all benefits, only declaring favorable points of difference and the resonating focus value proposition. A lot of managers are inclined to use the 'all benefits' method and list all the benefits that the company is offering to their customers. They believe that the more they deliver, the better it is. A disadvantage of listing all benefits is that you might claim advantages that actually provide no benefit to customers. The second kind of value propositions 'favorable points of difference' is used when consumers have an alternative. Then firms have to differentiate their offerings from the next best alternative. In this situation, managers have to make sure that they know the offerings of the competitors to come up with different elements in their own value proposition. This value proposition method consist of all favorable points of difference a firm has, relative to the best alternative. However, the best way to formulate a proposition is the 'resonating focus' value proposition. The 'resonating focus' value proposition is a great tool to enhance growth. In this value propositions the manager on formulates the few value elements that matter most to customers. Thus, it only represents the elements that deliver the greatest value to customers. Developing such a

value proposition is time-consuming as it requires a deep understanding of customer preferences (Cambridge performance partners, 2013).

This study investigates the determinants of the WTP for financial products requiring sound financial advice. This helps to select the most important value adding attributes, which makes it easier for financial service providers to focus on the right fundamentals. It helps financial service providers with providing a 'resonating focus' value proposition. Besides that, more and more people acknowledge that it is not only product quality and price that matters, but that it is also the customer experience that can create customer loyalty. This means that the customer experience becomes a building block of the value proposition (Barnes et al, 2009). It is likely that the customer experience also plays an important role for the value proposition of financial service providers. Several attributes that could influence the customer experience are taken into account in this research. Formulating the value proposition with regard to customer experience attributes may be more difficult than formulating the value proposition with regard to product characteristics. For example, every mortgage advisor says that they provide trustworthy and good services. The next subchapter elaborates on the possible important attributes.

2.7. Expectations and possible important attributes

There are several classifications for attributes. Value can be functional, such as reducing cost and time savings, but also emotional, such as a reduction in anxiety and the delivering of entertainment (Almquist et al, 2016). In this research, the attributes that can influence the WTP are divided into 'what' and 'how' factors. The 'what' factors are about the quality of the product, while the 'how' factors are about the customer experiences with getting the product. This classification is not exactly the same as the distinction between intrinsic and extrinsic cues (Zeithaml, 1988). Nevertheless, there is some overlap in the definitions of intrinsic and extrinsic cues and the definitions used in this paper for 'what' and 'how' factors. The 'what' factors are the product characteristics. This is comparable with the intrinsic cues in the sense that 'what' factors cannot be changed, without changing the product itself. Changing a 'what' factor will change the product. However, in contrast with the intrinsic cues, 'what' factors also contain immaterial factors, such as price and brand name. A conformity between extrinsic cues and 'how' factors is that both are not part of the product itself.

Based on the discussed theoretical and empirical literature, I expect that both 'what' factors and 'how' factors play in important role in the value determination of financial products requiring sound financial advice. Brainstorm sessions with professionals in the financial sector and supporting literature result in a list of possible important attributes for obtaining mortgages, see *Table 1*. As it concerns a research in the Netherlands, the original list of attributes is in Dutch as shown in *Appendix*

A. This means that the translations may be a little bit different than the actually used formulations in the surveys. While choosing and defining the attributes, it was important to keep in mind that the attributes should also be interpretable for other financial products that require sound financial advice. The attributes with respect to the quality of a product are reflected by the first four attributes. The customer experience is reflected by the other twelve attributes.

Another important classification with regard to these sixteen attributes is the distinction based on whether it concerns value that lenders ask from their customers (e.g. interest rate or price) or value that lenders provide to their customers. Lenders can compete based on what they ask from their customers (price-competition) and based on what they provide to their customers (competition based on providing maximum value). The attributes with regard to what the lenders or advisors provide to their customers are the possible important determinants of the WTP for financial products requiring sound financial advice. The interest rate is viewed as a 'what' factor, but it does not add any value for which the customer is willing to pay. Actually, this attribute reflects the value that the lender or advisor asks from its customer. All the other fifteen attributes are about what the lender or adviser provides to its customers and are possible important determinants of the WTP for mortgages and financial products requiring sound financial advice.

To determine hypotheses about the attributes, I first carry out the MaxDiff analysis. These hypotheses will be tested by means of a conjoint analysis. Thus, the MaxDiff analysis in Chapter 3 serves as a hypotheses-generating method. The MaxDiff analysis orders all these attributes according to the preferences of Dutch respondents.

>>> Insert Table 1 <<<

3. Data, Methodology & Results of MaxDiff analysis

This chapter elaborates on the data, methodology and the results of the MaxDiff analysis, which is the hypotheses generating part of this study. The data section describes how I gathered my data and gives descriptive statistics of the data. The methodology part is about the MaxDiff analysis and the formulas used to calculate the relative importance of each attribute. The third and fourth sections are about the results of the MaxDiff analysis and the proposed hypotheses, that are based on these results and earlier discussed literature. The third section also shortly discusses some interesting results of the MaxDiff analysis.

3.1. Data collection and description

For the present research, I do not use existing data, but I collect new data with surveys. The survey for this part of the paper enables me to prioritize the sixteen attributes shown in *Table 1. Appendix B*

gives the questionnaire (in Dutch) that is used for the MaxDiff analysis. The survey is designed by using the program Survey Analytics. I collaborated with Multiscope (an online sampling and data collection company) to find suitable respondents. This research focusses on people that consider buying a house within two years. In 2015 approximately 220.000 mortgages are closed. I assume, based on this amount of closed mortgages and the growing market for houses, that approximately 540.000 people will close a mortgage the upcoming two years (Bokeloh, 2015).[7] Researching this extensive group of buyers is too expensive and will be too time-consuming. Based on earlier studies within Flowresulting and a limited budget I decided to work with at least 80 respondents for this first survey. Multiscope collected 83 respondents. All these 83 respondents consider buying a house within two years. I critically assessed the results of the respondents that completed the survey within an unreliable time period. In my opinion, people need at least two minutes to complete the questionnaire correctly. Three respondents completed the survey within two minutes. For two respondents the responses are contradictory as the same attributes are chosen as most and least important. I deleted the data of these two respondents. Furthermore, I segmented the respondents based on whether they are existing homeowners. 40 respondents (49%) are homeowners and 41 respondents (51%) currently do not own a house. I made this distinction as people who already own a house, likely have more experience in obtaining a mortgage and this may influence their preferences. It is difficult to say something about the representativeness of this sample with regard to this distribution between homeowners and people who do not own a house, as these shares differ per year and several sources also give different shares of homeowners and no homeowners (Van de Pas, 2015; Pellenbarg & Van Marwijk, 2013).

Table 2 presents the descriptive statistics of the data for the Maxdiff analysis. The distribution between men and woman is almost equal with 41 men (51%) and 40 women (49%). The average age of the whole sample is 33.2. 49 respondents (60%) have an age of 22 up to and including 35 and 32 respondents (40%) are between 35 and 48 years old. Looking at education levels, 16 respondents (20%) have had intermediate vocational education (e.g. MBO), 31 respondents (38%) have a university of applied science degree (e.g. HBO), 30 respondents (37%) have a university degree (e.g. WO) and 4 respondents (5%) only finished secondary school. 72 respondents (89%) are employees. Only a small percentage, 7 respondents (9%), is self-employed or entrepreneur and 2 respondents (2%) are unemployed. 58 respondents (72%) live together with a partner, with or without children

[7] In the first five months of 2015, 88.000 mortgages are closed, which is 11.000 more than in the same period the year before. This is a growth of approximately 14 percent per year. The total amount of closed mortgages in 2015 is approximately 220.000 (88.0000 + ((88.000/5)*7)* ((7/12)*14%)). This means that the amount of closed mortgages in the upcoming two years will be approximately 540.000, assuming a growth of 14 percent per year.

and 20 respondents (25%) live without a partner. The other 3 respondents (4%) live with their parents or have a complicated situation. There is also variation in the amount of money people need for buying a house. 3 respondents (4%) probably need less than €100.000. 37 respondents (46%) think that they need €100.000 - €200.000. 29 respondents (23%) probably need €200.000 - €300.000, 11 respondents (14%) think that they need €300.000 - €400.000 and 5 respondents (6%) think that they need more than €400.000. 6 respondents (7%) do not know how much money they need.

>>> Insert Table 2 <<<

3.2. Methodology

The sixteen possible attributes for a mortgage loan have to be limited to six attributes, as it is not possible to put sixteen attributes in one full profile conjoint analysis. Using more than six attributes will be too complicated for respondents. The MaxDiff analysis gives insight into what could be the most important attributes. The MaxDiff analysis prioritizes the attributes according to the preferences of respondents. MaxDiff analysis is a measurement and scaling technique that is developed by Jordan Louviere in 1990's (Cohen, 2003). It is also known as the 'best-worst scaling' and it is based on trade-off related techniques (Cohen & Orme, 2004).

In a MaxDiff analysis, respondents have to indicate the best and the worst attribute of a set or subset of attributes. The MaxDiff analysis assumes that respondents choose the most distinct attributes each time they see a set of attributes, based on what is the most and least important attribute. It results in a ranking of the attributes based on how important attributes are for particular purchase decisions (Beasley, 2015). With a MaxDiff analysis the relative importance per attribute can be calculated (Cohen, 2003). An advantage of the MaxDiff analysis is that it is easy to understand, which makes it less likely that there occur problems during the survey period. It also uses no numeric scale to express the strength of preferences, which avoids scale biases. Based on Pareto's 80/20 rule it is assumed that this analysis results in a few important attributes that determine more than 80 percent of the relative importance of all choice criteria.

This part of the study prioritizes the attributes, given in *Table 1,* based on the relative importance of each attribute. The relative importance of each attribute depends on the preferences of the respondents. I prioritize on relative importance because this measurement takes the value of other attributes into account. Furthermore, by using the relative importance I know how much of the total decision criteria is declared by the selected attributes. It enables me to select a set of attributes that declare at least 80 percent of the total value. Question 4 up to and including question 15 in *appendix B* are the questions for the MaxDiff analysis. The respondent has to evaluate twelve sets with four attributes. These sets can include attributes with regard to both the product quality and the

customer experience in getting the product. The following question is asked: *'What is the most and least important attribute when choosing a mortgage?'* (Dutch question: *Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?).* Each time, the respondent has to choose the best and the worst attribute out of the four attributes. The program I use for this survey, Survey Analytics, creates different choice sets by automatically combining four attributes in such a way that every attribute is used three times.

When the data is gathered, I use ratios to calculate the relative importance of each attribute.[8] The formula to calculate the relative importance (RI) of each attribute X_j is as follows:

$$\text{RI } X_j = \frac{\frac{X_j^+}{X_j^-}}{\left(\frac{X_1^+}{X_1^-} + \frac{X_2^+}{X_2^-} + \frac{X_3^+}{X_3^-} + \ldots + \frac{X_{16}^+}{X_{16}^-}\right)} \qquad (1)$$

X_j = *dummy indicating a specific attribute*

X_j^+ = *the amount of 'best' votes for attribute j*

X_j^- = *the amount of 'worst' votes for attribute j*

This means that the RI of '*Reputable mortgage lende*r' will be calculated as follows:

$$\text{RI } X_1 = \frac{\frac{X_1^+}{X_1^-}}{\left(\frac{X_1^+}{X_1^-} + \frac{X_2^+}{X_2^-} + \frac{X_3^+}{X_3^-} + \ldots + \frac{X_{16}^+}{X_{16}^-}\right)} \qquad (2)$$

The attributes with the highest relative importance will be used in the conjoint analysis. There is only one restriction implied by Flowresulting. No matter what the results of the MaxDiff are, Flowresulting wants me to include the attribute *good service* and an attribute with regard to the brand of the advisor. Flowresulting wants to include a brand as they experienced in previous researches that brands are more important in conjoint analysis than in MaxDiff analysis. In a MaxDiff analysis, respondents do not really see the logos or brands, while in a conjoint analysis respondents really see the brands. Flowresulting believes that this causes the difference in the relative importance according to both analyses. Furthermore, Flowresulting wants to include the attribute *good service* in the conjoint analysis as this adds more value to this research for flowresulting. They are interested in the importance of this attribute. I expect that attributes with a high relative importance influence the

[8] It is not possible to calculate the relative importance of attributes based on the differences in the amount of 'best' and 'worst' votes, as the sum of these differences is 0. Hence, I divide the amount of 'best' votes by the amount of 'worst' votes.

value customers attribute to mortgage loans. I will propose hypotheses about the attributes that are selected based on the results of the MaxDiff analysis.

A disadvantage of working with ratios is that a change in the denominator ('worst' votes) might have a larger impact than a similar change in the numerator ('best' votes). However, I need this ratio to calculate the relative importance.[8] As an additional check, I also prioritize the attributes based on the differences between the amount of 'best' votes and 'worst' votes per attribute, to make sure that I continue with the right six attributes for the conjoint analysis, taking into account the restriction implied by Flowresulting.

3.3. Results MaxDiff analysis

Table 3 gives the relative importance of each attribute. The attributes are prioritized according to their relative importance. There is quite some difference between the preferences of current homeowners and people who do not own a house at the moment, as we can see in *Table 3*. Hence, I also apply this segmentation in the conjoint analysis. To select the attributes for the conjoint analysis, I use the results of the total sample (n = 81).

According to the MaxDiff analysis, the attribute *good mortgage conditions* is the most important attribute with a relative importance of 39.21 percent. This relative importance is almost double as high as the second most important attribute *trustworthiness,* which has a relative importance of 20.70 percent. The third most important attribute is *customizable mortgage,* which has a relative importance of 9.99 percent. *Low-interest rate* also plays an important role with a relative importance of 8.40 percent. *Good service* is ranked six, with a relative importance of 4.47 percent. *Reputable mortgage lender* and *Reputable mortgage advisor* do not belong to the six most important attributes. In the conjoint analysis I will still include an attribute with regard to the *advisor* as mentioned in chapter 3.2. The total relative importance of all these attributes together is 84,86 percent, which is more than 80 percent.[9]

A clear offer has a higher relative importance than *good services*, but I do not take this attribute into account for the conjoint analysis as I do not want to include more than six attributes. The relative importance of all the other attributes is 3.31 percent or lower. The attributes with regard to the possibility to quickly schedule an appointment, speed, the location of a mortgage advisor, channels, and sustainability of mortgage lenders and advisors are not important according to the respondents. All these attributes have a relative importance close to 0. The low relative importance of the location of the advisor corresponds with Devlins (2002A) findings. Probably, customers are indeed willing to put more effort in reaching a mortgage advisor. The low relative importance of consultancy cost and

[9] Relative importance of the seven attributes: 39.21 + 20.70 + 9.99 + 8.40 + 4.47 + 1.09 + 1.00 = 84.86.

transaction fees is interesting and contradicts the findings of Khazeh and Decker (1992). Based on this result I argue that people are not very sensitive for these costs and fees. Furthermore, the low relative importance of 'mortgage can be quickly arranged' is interesting. The Dutch bank 'Rabobank' focuses on delivering a mortgage within a week. Apparently, customers do not care about how quick the mortgage can be arranged. Although this research does not take into account the personal circumstances of customers, the value of this proposition of Rabobank is questionable according to these results. This result also contradicts the claim of Elliot et al. (1994) that speed is an important selection criterion. As far as I know, this is the first research that takes an attribute with regard to environmental sustainability into account for financial services. According to the results, I conclude that the level of environmental sustainability of the mortgage lender or advisor is not important for customers when choosing a mortgage.

The ranking according to the differences between the amount of 'best' votes and 'worst' votes per attribute is almost the same as the ranking according to the relative importance of attributes. It results in the same six attributes for the conjoint analysis, see *Appendix C.*

>>> Insert Table 3 <<<

3.4. Hypotheses

Based on the above-described results and the reviewed literature a few hypotheses can be proposed. As mentioned earlier, six attributes will be included in the conjoint analysis. Three attributes belong to the 'what' factors category and three attributes belong to the 'how' factors category. The three attributes belonging to the 'what' factors are *good mortgage conditions, low-interest rate,* and *advisor.* The three attributes belonging to the 'how' factors are *trustworthiness, customizable mortgage,*[10] *a*nd *good service.* Five of these six attributes belong to the six attributes with the highest relative importance. Based on this result and the supporting literature, I expect that those five attributes form important criteria for choosing mortgages and financial products requiring sound financial advice. The hypotheses do not say anything about whether the impact is positive or negative, as this is not important for the calculation of the relative importance of each attribute. In the additional results, I will conclude whether the impact is positive or negative.

Two of the three chosen attributes with regard to the 'what' factors that are selected for the conjoint analysis belong to the top six attributes of the MaxDiff analysis. This results in two hypotheses with

[10] People may argue that attribute customizable mortgage is not really a 'how' factor, as it is more about the mortgage (product) characteristics. However, almost every mortgage provider can provide the desired mortgage conditions. It is more about the advisor, does he or she asks the right questions to make sure that the mortgage perfectly fits the situation of the customer. For example, are the future plans of the customer taken into account when selected to most suitable mortgage? Hence, it is more about how the product is obtained than about the product characteristics.

regard to the 'what' factors. I do not propose a hypothesis with regard to the *advisor* of the mortgage as the results of the MaxDiff analysis do not indicate that the reputation of the mortgages lender or advisor attributes much value. For the attribute *mortgage conditions* I did not find any supporting literature, thus this hypothesis is solely based on the results of the MaxDiff analysis. The supporting literature for the other hypotheses can be found in *table 1*.

Hypothesis 1a: *The mortgage conditions have impact on the value customers attribute to mortgage loans*

If it turns out that mortgages conditions have a significant impact on the value customers attribute to mortgage loans, I expect that the probability of choosing a mortgage increases if the mortgage conditions improve. This will be evaluated in subchapter 5.2.

Hypothesis 1b: *The mortgage interest rate has impact on the value customers attribute to mortgage loans*

If it turns out that the mortgage interest rate has a significant impact on the value customers attribute to mortgage loans, I expect that the probability of choosing a mortgage increases if the mortgage interest rate decreases. This will be evaluated in subchapter 5.2.

All the three selected attributes with regard to the 'how' factors are in the top six attributes. This results in the following three hypotheses with regard to the 'how' factors:

Hypothesis 2a: *The trustworthiness of the advisor has impact on the value customers attribute to mortgage loans*

If it turns out that the trustworthiness of the advisor significantly influence the value customers attribute to mortgage loans, I expect that the probability of choosing a mortgage increases if the trustworthiness of the advisor increases. This will be evaluated in subchapter in 5.2.

Hypothesis 2b: *The customization of a mortgage has impact on the value customers attribute to mortgage loans*

If it turns out that the customization of a mortgage significantly influence the value customers attribute to mortgage loans, I expect that the probability of choosing a mortgage increases if the customization of a mortgage improves. This will be evaluated in subchapter in 5.2.

Hypothesis 2c: *The quality of the service has impact on the value customers attribute to mortgage loans*

If it turns out that the quality of the service has a significant impact on the value customers attribute to mortgage loans, I expect that the probability of choosing a mortgage increases if the quality of the service improves. This will be evaluated in subchapter in 5.2.

4. Data & Methodology Conjoint Analysis

This chapter elaborates on the data and methodology of the choice-based conjoint analysis. These data and methodology are used to answer the research question and to develop the framework that divides the value for financial products that require sound financial advice into a few important elements. The first subchapter contains the data description and the second subchapter is about the applied methodology.

4.1. Data collection and description

Based on the higher importance of this part of the research and a limited budget I decided to work with at least 100 respondents for this second survey (20 respondents more than in the first survey). *Appendix D* gives the questionnaire (in Dutch) that is used for this part of the study. This survey is also designed by using the program Survey Analytics and again I collaborated with Multiscope to find suitable respondents. Multiscope collected 109 respondents. In my opinion, respondents again need at least about two minutes to carefully complete this survey. There are eight respondents that completed the survey within two minutes. The hypothetical mortgages in the conjoint analysis are described by a lot of different combinations of attribute levels. This makes it difficult to critically assess the results to discover contradictory choices. Therefore, I deleted the data from the respondents that completed the survey within two minutes. Out of the 101 respondents used for this survey, 50 respondents (50%) are homeowners and 51 respondents (50%) currently do not own a house.

Table 4 presents the descriptive statistics of the data used for the conjoint analysis. The gender distribution, 36 men (36%) and 65 women (64%), is not as equal as in the MaxDiff analysis. The average age is 36.8. 52 respondents (51%) have an age of 23 up to and including 35 and 49 respondents (49%) are between 35 and 61 years old. 6 respondents (6%) only finished secondary education, 20 respondents (20%) have had intermediate vocational education, 48 respondents (48%) have a university of applied science degree and 27 respondents (27%) have a university degree. When looking at the marital status, 33 respondents (33%) are single, with or without children. The other 68 respondents (67%) live with a partner, with or without children. With regard to the amount of money people probably need for buying a house, 4 respondents (4%) think that they need less than €100.000. With a difference of 3 respondents, the group that needs €100.000 - €200.000 (39%) is a little bit bigger than the group that needs €200.000 - €300.000 (36%). 10 respondents (10%)

probably need €300.000 - €400.000. Only 7 respondents (6%) think that they need more than €400.000 and 5 respondents (5%) do not know how much money they need. It turned out that 40 respondents (39%) have their current payment account at the Rabobank, 19 respondents (19%) at the ABN-AMRO bank and only 1 respondent (1%) has his payment account at Triodos Bank. All the other respondents (41%) have their payment accounts at banks that are not included in the conjoint questions. Out of the 50 respondents that currently own a house, 4 respondents (8%) had an ABN-AMRO Bank advisor, 6 respondents (12%) a Rabobank advisor, 8 respondents (16%) had an advisor from De Hypotheker, 4 respondents (8%) had an advisor from De Hypotheekshop. The other 28 respondents made use of an advisor that is not included in this study or did not make use of an advisor at all.

>>> Insert Table 4 <<<

The attributes for the conjoint analysis are derived from the MaxDiff results. *Table 5* gives a clear overview of the attribute names used in the MaxDiff analysis, the resulting attribute names for the conjoint analysis, the corresponding attribute levels and the variable names. Levels are specific values of an attribute and each attribute has a few levels. To have useful results, it is important to have realistic levels for each attribute. In subchapter 4.2 I will also show that the variance in attribute levels also influences the relative importance of the attributes (Hultink & Schoormans, 2004). The relative importance of each attribute is also affected by the number of levels for each attribute (Eggers & Sattler, 2011). This makes a careful selection of the levels even more important. The attribute levels for *advisor* and *mortgage interest rate* are based on existing interest rates and brands. The levels of the last four attributes are fictive customer reviews. There are many different mortgage conditions, which makes it too complicated to give levels based on real conditions. Maybe this is also the reason why the website Independer (www.independer.nl) gives an overall rating with regard to the mortgage conditions. For the other three customer experience attributes there are no clear value propositions, because every mortgage advisor says that they provide trustworthy and good services. When speaking about levels for these attributes in the remainder of this study, I mean the variance in customer reviews with regard to these attributes. The variance in the levels of these fictive customer reviews is based on the variance in real customers reviews that can be found on the website Independer. I assume that an attribute is important when the customer review scores with regard to that attribute have a high relative importance. The same applies to the hypotheses. I assume that an attribute has a significant impact on the value customers attribute to mortgage loans when the customer review levels with regard to that attribute have a statistically significant impact.

>>> Insert Table 5 <<<

4.2. Methodology

Conjoint analyses are an often used method for measuring a buyers tradeoff for products and services that consist of several attributes (Green & Srinivasan, 1990). It is a useful tool for marketers. Conjoint analyses are also known as multi-attribute utility modeling (Green, Krieger, & Wind, 2001). A purpose of conjoint analyses is the quantification of utilities, which helps to determine the WTP for product or service attributes. Since the early 1970s, there have been many developments with regard to conjoint analyses which resulted in different types of conjoint analysis. In this study, I use the choice-based conjoint analysis (Green & Srinivasan, 1990). This type of conjoint analyses shows consumers hypothetical products or services defined by several attribute levels, which are jointly considered. This combination of attributes and levels in hypothetical products makes that conjoint analyses give a better simulation of real life choices than Maxdiff analyses. In this choice-based conjoint analysis, respondents have to pick the best option out of two hypothetical products that are defined by six attribute levels. See question 5 up to and including question 12 of *Appendix D* for the questions regarding the conjoint analysis. By allowing all possible combinations of attribute levels, such as a mortgage with both the lowest interest rate and the best possible product characteristics, I estimate the independent impact of each attribute. This lowers the danger of the multicollinearity problem, which is an advantage of using stated preferences. Nevertheless, I still conduct a correlation table to indicate the correlations among the independent variables. Besides choosing between the two hypothetical products, the respondents can also select the 'no-choice' option (in Dutch: "geen van beide"), which means that he or she does not select a product. Advantages of adding a 'no choice' alternative are that it makes the choice decision more realistic and that it leads to better predictions. A disadvantage is that it may result in avoiding difficult choices. People choose the no-choice alternative more often when the value of the two hypothetical products is almost the same (Haaijer, 1999).

An important assumption for choice-based conjoint analysis is that consumers prefer certain attribute levels. Consumers choose the product with the best level combination as this product gives the most utility. A disadvantage of this method is that it is not based on actual sales data. Respondents have to make decisions, without facing the consequences of their decisions. Using an incentive-aligned conjoint analysis could solve this problem (Ding, Grewal, & Liechty, 2005). However, an incentive-aligned conjoint analysis is not possible for this study as this is too costly. There are several possible survey designs for choice-based conjoint analysis. People can use a full design, where respondents have to evaluate all the possible products. In this conjoint analysis with six attributes, each having five or six levels, a full design requires too much effort from respondents. Respondents have to evaluate too many choice sets. For this reason, I use a fractional design. In a

fractional design, respondents have to evaluate a subset of all attribute level combinations. Furthermore, I am using a full profile experiment, which means that each hypothetical mortgage displays a level for each attribute. In other words, each alternative is described by six attribute levels.

This study is about what determines the WTP, or in other words the utility of mortgages loans. The total utility of the product equals the sum of the part-worth utilities of the attribute levels of that product. The random utility theory states that the overall utility of a product (U) is the result of a systematic utility component (V) and an error component (ε). This results in the following formula:

$$U_i = V_i + \varepsilon_i \qquad (3)$$

$$V_i = \sum_{k=1}^{K} \beta_k X_{ik}$$

$$U_i = \sum_{k=1}^{K} \beta_k X_{ik} + \varepsilon_i$$

The total utility *U* of mortgage loan *i* equals the sum of the utilities of the attributes levels.

k = *certain attribute level of the total number of attribute levels K*

X_{ik} = *dummy indicating a specific attribute level of mortgage loan i*

B_k = *marginal utility of attribute level k*

ε_i = *error term*

All the independent variables are categorical variables. I use dummy coding for these categorical variables. In order to lower the danger of multicollinearity, I select reference categories for all independent variables. For the *advisor* and *mortgage interest rate* attribute, the reference categories are the variables Huis and Intr2.30 (see *table 5*). For the attributes with customer review levels I select the lowest customer review level as the reference category, as this attribute has usually the lowest value. The coefficients of the reference categories will be zero. Based on the selected six attributes and the corresponding levels, the following specification will be estimated:

$$U_i = \alpha + \beta_1 \cdot Hypotheker_i + \beta_2 \cdot Hypotheekshop_i + \beta_3 \cdot Triodos_i + \beta_4 \cdot Rabo_i + \beta_5 \cdot ABN_i + \beta_6 \cdot Huis_i + \beta_7 \cdot Trust1_i + \beta_8 \cdot Trust2_i + \beta_9 \cdot Trust3_i + \beta_{10} \cdot Trust4_i + \beta_{11} \cdot Trust5_i + \beta_{12} \cdot Con1_i + \beta_{13} \cdot Con2_i + \beta_{14} \cdot Con3_i + \beta_{15} \cdot Con4_i + \beta_{16} \cdot Con5_i + \beta_{17} \cdot Intr1.50_i + \beta_{18} \cdot Intr1.70_i + \beta_{19} \cdot Intr1.90_i + \beta_{20} \cdot Intr2.10_i + \beta_{21} \cdot Intr2.30_i + \beta_{22} \cdot Ser1_i + \beta_{23} \cdot Ser2_i + \beta_{24} \cdot Ser3_i + \beta_{25} \cdot Ser4_i + \beta_{26} \cdot Ser5_i + \beta_{27} \cdot Custm1_i + \beta_{28} \cdot Custm2_i + \beta_{29} \cdot Custm3_i + \beta_{30} \cdot Custm4_i + \beta_{31} \cdot Custm5_i + \varepsilon_i, \qquad (4)$$

The dependent variable U_i reflects the total utility of mortgage loan i. The intercept of the formula is given by α. This intercept reflects the value when a mortgage consists of only reference categories. The utility function U_i is a linear combination of part-worth utilities. In the choice-based conjoint study used for this present research, respondents choose between two products. It is a binary choice. This means that I cannot use a normal linear regression estimator, as the dependent variable is binary (0 or 1). A transformation to a random utility choice model is needed, in which each alternative is selected with a certain probability. Using a linear probability model can still result in estimated probabilities smaller than 0 or larger than 1, which is not reasonable. Therefore I use a binary Logit regression and binary Probit regression, which are both probability estimators. Binary Logit and binary Probit models are appropriate when the model has a binary dependent variable (Haaijer, 1999). Robust standard errors are applied in both the Logit model and the Probit model to deal with possible heteroskedasticity. The models assume that the choice observations are independent of each other, which means that the choices made by one respondent are considered as independent observations (Haaijer, 1999). An important difference between Logit and Probit models is the assumption about the distribution of the errors. A Logit model assumes a standard logistic distribution of errors, while the Probit model assumes a normal distribution of errors. Despite this difference, the results of both models tend to be very similar.

The Probit model is as follows:

$$Pr(Y_i = 1 \mid X_1, \ldots, X_{31}) = \Phi\,(\beta_0 + \beta_1 X_1 + \ldots + \beta_{31} X_{31}) \qquad (5)$$

Φ (…) is the cumulative distribution function of the standard normal distribution.

The Logit model is as follows:

$$Pr(Y_i = 1 \mid X_1, \ldots, X_{31}) = \frac{Exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_{31} X_{31})}{1 + Exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_{31} X_{31})} \qquad (6)$$

In both models the depend variable is 0 when consumer do not choose a particular product and 1 if they choose a particular mortgage. X_1, …, X_{31} are the independent variables. These are the attribute levels of the six attributes included in the conjoint analysis. The coefficients (β's) reflect the impact of a certain attribute level on the probability of choosing a product. A positive coefficient means that that particular attribute level increases the probability of choosing the product compared to the reference category. When using binary Logit and Probit models, it is important to mention that it is not possible to directly say anything about the magnitude of the coefficients on the probability.

I use the following goodness of fit measures to select the most appropriate model for testing the hypotheses and calculating the importance of each attribute: Efron's R^2, Count R^2, Pseudo R^2 and

Akaike information criterion (AIC). These are all goodness of fit measures. Efron's R^2 gives the percentage of explained variation. The Count R^2 gives the percentage of correct predictions. The Pseudo R^2 shows the extent to which a model is an improvement over one with just a constant term. AIC penalizes the log-likelihood measure with the number of coefficients in the model (d'Uva, 2015; Long & Freese, 2006). If there is no difference in these goodness of fit measures I will use the Logit model as this is a conventional model for conjoint analyses. Furthermore, a Logit model does not work with a cumulative distribution function, which makes it easier to interpret. In addition, low values of goodness of fit measures are not a serious matter of concern. Goodness of fit measures in Logit and Probit models are of secondary importance. The signs and significance of coefficients are more important (Gujarati, 2004). After the model selection, I will also calculate the marginal effects of the model. This enables me to say something about the magnitude of the effects of the different attribute levels. These marginal effects will be interpreted in subchapter 5.2.

I test the hypotheses based on the significance per attribute. In other words, I test for joint significance of the variables (levels) belonging to a certain attribute. I use the Wald test (F-test) to evaluate the hypotheses (d'Uva, 2015). As mention earlier, I assume that an attribute has a significant impact on the value customers attribute to mortgage loans when the customer review scores with regard to that attribute have a statistically significant impact.

In order to calculate the relative importance of an attribute, I take the difference between the highest and lowest coefficient (7) of that attribute and divide this by the sum of the differences between the highest and lowest coefficients (8) for all attributes. The resulting number always lie between zero and one and is generally interpreted as the decision weight or relative importance (in percentages) of an attribute in the overall choice process (Wilcox, 2010; Orme, 2010). It reflects the attributes value in the overall choice process.

I use the following formula to calculate the difference between the highest and lowest coefficient per attribute *j* ($Diff\_X_j$):

$$Diff\_X_j = Max(\beta_j) - Min(\beta_j) \qquad (7)$$

I use the following formula to calculate the relative importance of each attribute (RI_X_j):

$$RI\_X_j = \frac{Diff\_X_j}{(Diff\_X_1 + \ldots + Diff\_X_6)} \qquad (8)$$

Formula 7 clearly shows that the importance of each attribute is affected by the range of levels that is used for each attribute. For example, interest rates varying between 0.5% and 4.5% will have a

different relative importance than interest rates varying between 1.7% and 2.3%. Hence, the levels for each attribute are carefully formulated as mention earlier.

A high relative importance means that there is quite some difference in coefficients belonging to an attribute. The coefficients reflect the part-worth utilities. In general, it can be assumed that people are willing to pay more if the utility increases. Therefore it can be concluded that people are willing to pay more for the attribute levels with high coefficients compared to attribute levels with low coefficients. Besides researching what the important attributes are for the WTP, it is also possible to quantify the WTP for attribute levels. Based on the coefficients per attribute, the WTP for each higher valued attribute level relative to the reference category can be calculated. By knowing the relation between the interest rate and the mortgage interest rate coefficients, I can calculate what people are willing to pay for changes in levels of other attributes. Knowing the interest rate change that is necessary to increase the *mortgage interest rate* coefficient by one, enables me to calculate the WTP for changes in levels of other attributes. I investigate the WTP in terms of the interest rate. For each statistical significant attribute, I will calculate how much people are willing to pay for higher valued attribute levels, relative to the reference category. An important assumption for this calculation is that the interest rate and coefficient (utility) are linear related to each other. I will estimate a linear regression between the interest rates and the coefficients of the interest rates. The following formula will be estimated:

$$y = a + b \cdot X \qquad (10)$$

Y is the estimated interest rate. X are the coefficients of the attribute *mortgage interest rate* from the Logit model in *table 6*. The slope *b* of this estimation will be used to calculate the WTP for the higher valued attribute levels. a is the intercept of the formula. Most of the attribute levels are fictive customers reviews. Thus, I am actually calculating what people's WTP is for higher customers reviews with regard to certain 'what' and 'how' factors. Furthermore, it is important to keep in mind that I calculate the hypothetical WTP, which means that it may differ from the actual WTP (MacMillan, 2004; Paradiso & Trisorio, 2001).

5. Results & Discussion

This chapter elaborates on the results of the conjoint analysis. Subchapter 5.1 contain the main results. First I select the most suitable model. Thereafter, I will test the hypotheses. After testing the hypotheses I will discuss the results with regard to the relative importance of each attribute and the WTP for certain attributes levels. In subchapter 5.2 I give some additional interesting results, such as the marginal effects of the Logit model.

5.1. Main results

Table 6 gives the goodness of fit measures of both the Logit and the Probit model. The Efron's R^2, Count R^2, McFadden's R^2 and AIC are the same for both models. This means this it is not possible to select a model based on these goodness of fit measures. Hence, I will continue with the Logit model as mentioned in the methodology. This means that I test the hypotheses with the Logit model and that I calculate the relative importance of each attribute by means of the coefficients of this Logit model. It is save, based on the correlation table in *Appendix F,* to conclude that this conjoint analysis with a Logit model does not have a serious multicollinearity problem (Hill & Adkins, 2001). The rule of thumb that the correlations between the explanatory variables have to be smaller than 0.8 is satisfied (Farrar & Glauber, 1967).

>>> Insert Table 6 <<<

The Wald test is used to test the five hypotheses of this study. *Table 6* only gives the significance per variable (attribute level). To evaluate the hypotheses, I test for joint significance of the variables belonging to an attribute. The results of the Wald test per attribute are summarized in column 2 of table 7.

Hypothesis 1a: *The mortgage conditions have impact on the value customers attribute to mortgage loans*

According to the Wald test, the variables with regard to the mortgage conditions are jointly significant at a 1% significance level ($p<0.01$). Hence, I accept Hypothesis 1a and conclude that the customer reviews with regard to the mortgage conditions have a statistically significant impact on the value customers attribute to mortgages.

Hypothesis 1b: *The mortgage interest rate has impact on the value customers attribute to mortgage loans*

The Wald test for the joint significance of the variables belonging to the mortgage interest rate shows that these variables are jointly significant at a 1% significance level ($p<0.01$). Thus, I accept Hypothesis 1b and conclude that the mortgage interest rate has a statistically significant impact on the value customers attribute to mortgage loans.

Hypothesis 2a: *The trustworthiness of the advisor has impact on the value customers attribute to mortgage loans*

The Wald test shows that the variables with regard to the trustworthiness of the advisor are jointly significant at a 1% significance level ($p<0.01$). Hence, Hypothesis 2a can be confirmed and it can be concluded that the customer reviews with regard to the trustworthiness of the advisor have a statistically significant impact on the value customers attribute to mortgages.

Hypothesis 2b: *The customization of a mortgage has impact on the value customers attribute to mortgage loans*

Hypothesis 2b can be confirmed as well. According to the Wald test, the variables with regard to the customization of mortgages are jointly significant at a 1% significance level ($p<0.01$). I conclude that the customer reviews with regard to the customization of a mortgage have a statistically significant impact on the value customers attribute to mortgage loans.

Hypothesis 2c: *The quality of the service has impact on the value customers attribute to mortgage loans*

According to the Wald test, the variables belonging to the quality of the service are jointly insignificant at 10% significance level ($p>0.10$). Hence, hypothesis 2c cannot be confirmed. The customer reviews with regard to the quality of the service do not have a statistically significant impact on the value customers attribute to mortgage loans.

I did not construct a hypothesis with regard to the advisor of the mortgages. Nevertheless, I included variables with regard to the advisor.[11] When testing the joint significance of the variables belonging to the advisor, it turns out that these variables are not jointly significant at a 10% significance level ($p>0.10$). Apparently, the brand of the advisor does not have a lot of impact on the value customers attribute to mortgages. This corresponds to the results of the MaxDiff analysis. Summarizing, the mortgage interest rate, the mortgage conditions, the trustworthiness of the advisor, and the customization of a mortgage have a statistically significant impact on the value customers attribute to mortgage loans.

>>> Insert Table 7 <<<

Although the jointly insignificant results for the variables belonging to the attributes *advisor* and *service quality*, I do not delete these attributes and corresponding variables. Jointly insignificant variables belonging to a certain attribute do not mean that the relative importance of that particular attribute is equal to zero. Nevertheless, I will only interpret the results of the attributes that have a statistically significant impact on the value customers attribute to mortgage loans. Furthermore, it is important to keep in mind that this conjoint analysis only includes the six attributes selected by means of the MaxDiff analysis. According to the MaxDiff analysis, the relative importance of these six attributes together is 84,86 percent. This means that the value of mortgages and financial products requiring sound financial advice is determined by more than six attributes. In the remainder of this study I assume that the total value (100%) is determined by these six attributes.

[11] An restriction implied by Flowresulting. See subchapter 3.2 for an explanation.

Applying formula 7 and 8 (given in subchapter 4.2) to the coefficients of the Logit model in *table 6* results in the relative importance per attribute as given in column 4 of *table 7*. The attribute *mortgage interest rate* has a relative importance of 36.64 percent.[12] This attribute has by far the highest relative importance. The second most important attribute is the *mortgage conditions*. This attribute has a relative importance of 21.48 percent. The relative importance of the attributes *trustworthiness* and *customizable mortgage* is almost the same, respectively 15.58 percent and 14.18 percent. Furthermore, both insignificant attributes have a low relative importance. Apparently, there is not much difference in the value that respondents attribute to the different levels of these attributes. The attribute *mortgage conditions* has a higher relative importance than many other attributes. I did not find any literature that state the importance of good mortgage conditions (see table 1), but according to these results it is an important attribute for obtaining mortgages. The combined relative importance of the mortgage interest rate and mortgage conditions is 58.11 percent. This means that more than half of decision weight is determined by only two 'what' factors, namely the interest rate and the mortgage conditions.

To calculate what people are willing to pay for higher valued attribute levels, relative to the reference category, I estimated the linear regression between the mortgage interest rates and the coefficients belonging to the mortgage interest rates. This resulted in the following estimation:[13]

Interest rate = $0.0224 - 0.0036 \cdot X$

I am interested in the slope of this estimation. X is the coefficient of the *mortgage interest rate* attribute. The graph in *Appendix E* shows that this relation is not perfectly linear. However, the graph is acceptable as it shows linearity. The slope of this regression indicates that if I want to increase the coefficient (part-worth utility) of the *mortgage interest rate* attribute by one, the interest rate has to decreases by 0.36 percentage point. Thus, people are willing to pay 0.36 percentage point more interest for their mortgage if the total utility of the other attributes increases by one. *Table 6* gives the coefficients of the attribute levels. For the attribute *mortgage conditions,* the highest coefficient is 1.166. This means that the overall utility of the mortgage is 1.166 higher when the customer review score for this attribute improves from the lowest possible level to the highest possible level, ceteris paribus. Then the utility (coefficient) for the attribute *mortgage interest rate* can by reduced by 1.166 and the average customer would be as happy as before the improvement of the customer review score. Hence, the average customer is willing to pay a 0.42 percentage point higher mortgage interest rate if the customer review level for the mortgage conditions improves from the worst level

[12] Calculation: 1.989 /(0.367 + 0.846 + 1.166 + 1.989 + 0.291 + 0.770) = 0.3664

[13] This formula is not about causality, I only use it to calculate the relation between the coefficients of the mortgage interest rate and mortgage interest rates.

to the best level, ceteris paribus[14]. A customer is willing to pay a 0.30 percentage point higher interest rate for a mortgage that has the best customer review level with regard to the trustworthiness of the advisor compared to a mortgage that has the worst customer review level with regard to the trustworthiness of the advisor, ceteris paribus.[15] For the attribute *customizable mortgage*, the second best customer review level has the highest value according to the results of the Logit model (see *table 6).* This can be a result of irrational behavior of respondents or the small differences between the two different levels.[16] However, a customer is willing to pay a 0.28 percentage point higher interest rate for a mortgage that has the second best customer review level with regard to the customization of the mortgage compared to a mortgage that has the worst customer review level with regard to the customization of the mortgage, ceteris paribus.[17] This reasoning can be applied to all levels of the attributes *mortgage conditions*, *trustworthiness,* and *customizable mortgage*. The WTP for the attributes levels relative to the reference category (worst customer review level) are given in *figure 2.*

Figure 2: *WTP for the different levels of the attributes: trustworthiness, mortgage conditions, and customizable mortgage*

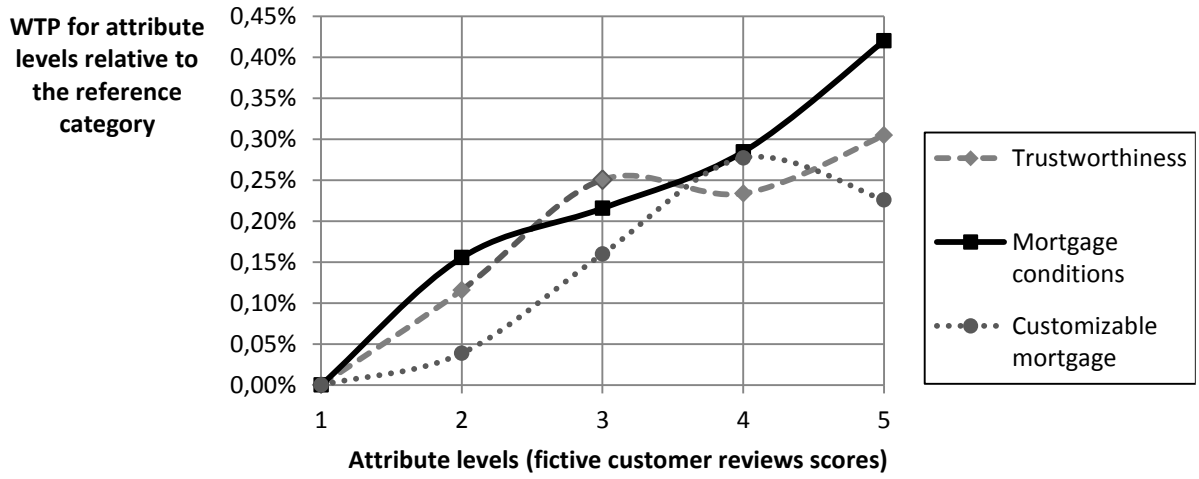


Figure 2 Notes: This figure shows the WTP (interest rate in percentage points) for the attribute levels relative to the reference categories. The reference categories are the first levels (1).The levels are the fictive customer reviews as given in Table 5. 1 means 2.5 stars and 5 means 4.5 stars. The attribute mortgage conditions has the largest impact. In overall, the higher the fictive customer review score, the higher the WTP.

Based on the above gives results I argue that the interest rate, the mortgage conditions, the trustworthiness of the advisor and the customization of the mortgage are important attributes for obtaining a mortgage. As mentioned earlier, the interest rate is not a determinant of the WTP.

[14] Calculation: 1.166*0.36 = 0.42
[15] Calculation: 0.846*0.36 = 0.30
[16] A hypothesis that both coefficients are the same, cannot be rejected at a 10% significant level (p>0.10). This means that the coefficients are not significantly different.
[17] Calculation: 0.770*0.36 = 0.28

Hence, the three most important attributes for the WTP for mortgages are the mortgage conditions, the trustworthiness of the advisor and the customization of the mortgage. These three attributes have a relative importance of 51.24 percent. These findings correspond with the findings of the MaxDiff analysis, where I also found that the attributes *good mortgage conditions, trustworthiness and customizable mortgage* have the highest relative importance. Who advises the mortgage is less important. Brands do not have a lot of impact on the value that customers attribute to mortgages. Hence, I argue that it is not very important for mortgage providers to have a well-known brand to obtain sustainable competitive advantage. Furthermore, I claim that providing the best mortgage conditions has the largest impact on the average customers' WTP for mortgages. The relative importance of this attribute is about six percentage point higher than the relative importance of the attributes *trustworthiness* or *customizable mortgage.* The most important attribute within the 'how' factors is the trustworthiness of the advisor. This means that I found support for the claims of Earle (2009) and Almquist et al. (2016) about the importance of trust. This high importance of trustworthy advisors may also be a result of the fact that customers lost their trust in the financial system, as mentioned in subchapter 2.2. The importance of customizable mortgages can be a result of the increased complexity of financial systems and the increased importance of financial planning (Brunnermeier & Oehmke, 2009; Koel & Van der Leij, 2016). Due to these developments every customer may have a different situation, which could mean that customers are not satisfied anymore with just a general advise. An advisor really has to ask the right questions to provide a mortgage that perfectly fits the situation of the customer.

5.2. Additional results

In the MaxDiff analysis, I made a distinction between the preferences of respondents who currently own a house and respondents that do not own a house at the moment. Now I use this segmentation again. *Table 8* gives the relative importance of each attribute according to people who currently own a house and according to people who currently do now own a house. The differences between these two groups are less impressive than in the MaxDiff analysis. However, the interest rate is still more important for current homeowners than for people who are going to buy their first house. People who are going to buy their first house care more about the trustworthiness of the advisor than current homeowners. This corresponds with the results of the MaxDiff analysis. Furthermore, the customization of a mortgage is more important for current homeowners than for people who are going to buy their first home. This contradicts with the results of the MaxDiff analysis. The differences between homeowners and people who do not own a house may be a result of whether people have experience in obtaining the product. Customers with experience have more knowledge of the product, which influences purchase behavior (Howcroft et al, 2003). An explanation for the

higher relative importance of the interest rate and the customization of a mortgage could be that homeowners better know what the impact is of having a higher interest rate and having a mortgage that not perfectly fits their situation. The higher relative importance of the trustworthiness of the advisor for people who currently do not own a house could be explained by the fact that these people have less experience in obtaining a mortgage and therefore have to fully trust on their advisor. The advisor helps with reducing the uncertainty in buying a bank product.

>>> Insert Table 8 <<<

It is also possible to say something about the impact of the attribute levels on the probability of choosing a mortgage. I will only discuss the statistically significant variables. It is not possible to directly interpret the magnitude of the coefficients of a Logit model. Hence, I use the marginal effects of the Logit model to interpret the effects of the different levels, see column 3 *table 6.*

The probability that customers choose a mortgage with an advisor from the Rabobank is on average 6.84 percentage point higher than the probability that customers choose a mortgage with an advisor from Huis & Hypotheek, ceteris paribus. The probability that customers choose a mortgage with an advisor from the ABN-AMRO Bank is on average 7.30 percentage point higher than the probability that customers choose a mortgage with an advisor from Huis & Hypotheek, ceteris paribus. These effects are statistically significant at a 10% significance level. The question arises whether this higher probability is caused by the higher brand value or just by the fact that customers prefer bank advisors.

The probability that customers choose a mortgage with the highest customer review level with regard to trustworthiness is on average 16.83 percentage point higher than the probability that customers choose a mortgage with the lowest customer review level with regard to trustworthiness, ceteris paribus. The probability that customers choose a mortgage with the second best customer review level with regard to trustworthiness is on average 12.91 percentage point higher than the probability that customers choose a mortgage with the worst customer review level with regard to trustworthiness, ceteris paribus. The probability that customers choose a mortgage with the third best customer review level with regard to trustworthiness is on average 13.84 percentage point higher than the probability that customers choose a mortgage with the worst customer review level with regard to trustworthiness, ceteris paribus. These effects are statistically significant at a 1% significance level. The probability that customers choose a mortgage with the second worst customer review level with regard to trustworthiness is on average 6.39 percentage point higher than the probability that customers choose a mortgage with the worst customer review level with regard to trustworthiness, ceteris paribus. This effect is statistically significant at a 10% significance level. I

already concluded that the customer reviews with regard to the trustworthiness of the advisors have a statistically significant impact on the value of mortgages. Based on the described marginal effects, the expectation that the probability that a mortgage is chosen increases if the trustworthiness of the advisor increases, can be confirmed. In general, that the higher the trustworthiness of the advisor, the higher the probability that a mortgage is chosen.

The probability that customers choose a mortgage with the highest customer review level with regard to the mortgage conditions is on average 23.18 percentage point higher than the probability that customers choose a mortgage with the lowest customer review level with regard to the mortgage conditions, ceteris paribus. The probability that customers choose a mortgage with the second best customer review level with regard to the mortgage conditions is on average 15.70 percentage point higher than the probability that customers choose a mortgage with the lowest customer review level with regard to the mortgage conditions, ceteris paribus. The probability that customers choose a mortgage with the third best customer review level with regard to the mortgage conditions is on average 11.92 percentage point higher than the probability that customers choose a mortgage with the lowest customer review level with regard to the mortgage conditions, ceteris paribus. These effects are statistically significant at a 1% significance level. The probability that customers choose a mortgage with the second worst customer review level with regard to the mortgage conditions is on average 8.58 percentage point higher than the probability that customers choose a mortgage with the lowest customer review level with regard to the mortgage conditions, ceteris paribus. This effect is statistically significant at a 5% significance level. I already concluded that the customer reviews with regard to the mortgage conditions have a statistically significant impact on the value of mortgages. Based on these marginal effects, the expectation that the probability that a mortgage is chosen increases if the mortgage conditions improve, can be confirmed. It can be concluded that better mortgage conditions makes it more likely that a mortgage is chosen.

The probability that customers choose a mortgage with an interest rate of 1.50% is on average 39.53 percentage point higher than the probability that customers choose a mortgage with an interest rate of 2.30%, ceteris paribus. The probability that customers choose a mortgage with an interest rate of 1.70% is on average 33.15 percentage point higher than the probability that customers choose a mortgage with an interest rate of 2.30%, ceteris paribus. The probability that customers choose a mortgage with an interest rate of 1.90% is on average 19.35 percentage point higher than the probability that customers choose a mortgage with an interest rate of 2.30%, ceteris paribus. These effects are statistically significant at a 1% significance level. Besides that fact that the interest rate has a statistically significant impact on the value customers attribute to mortgages, the expectation that the probability that a mortgage is chosen increases if the interest rate decrease, can be

confirmed. It can be concluded that a lower interest rate results in a higher probability that a mortgage is chosen.

The probability that customers choose a mortgage with the best customer review level with regard to the customization of the mortgage is on average 12.47 percentage point higher than the probability that customers choose a mortgage with the worst customer review level with regard to the customization of the mortgage, ceteris paribus. The probability that customers choose a mortgage with the second best customer review level with regard to the customization of the mortgage is on average 15.31 percentage point higher than the probability that customers choose a mortgage with the worst customer review level with regard to the customization of the mortgage, ceteris paribus. These effects are statistically significant at a 1% significance level. The probability that customers choose a mortgage with the third best customer review level with regard to the customization of the mortgage is on average 8.82 percentage point higher than the probability that customers choose a mortgage with the worst customer review level with regard to the customization of the mortgage, ceteris paribus. This effect is statistically significant at a 5% significance level. It already turned out that the customization of a mortgage has a statistically significant impact on the value of mortgages. It can also by concluded that a higher customization level result in a higher probability that a mortgage is chosen.

Finally, I also tested whether the coefficients of the ABN-AMRO Bank (0.367) and the Rabobank (0.344) are significantly different. The following hypothesis is evaluated: The coefficients of the Rabobank and the ABN-AMRO Bank are the same. This hypothesis is not rejected at a 10% significance level ($p>0.10$), which means that these coefficients are not significantly different. This in combination with the fact that 40 respondents have their current payment account at the Rabobank and only 19 respondents at the ABN-AMRO Bank, does not give any indication that the current payments accounts of customers influence the preferences with regard to advisors.

6. Conclusions & Limitations

This chapter gives the conclusions and the practical implications of the present research. I also give the limitations of this study and I provide some suggestions for further research.

6.1. Conclusions

The aim of the research is to investigate what the important determinants are for the WTP for financial products requiring sound financial advice. The empirical part consists of two stages, a hypotheses-generating stage and a stage where the hypotheses are tested. For the first stage a MaxDiff analysis is used and for the second stage, I used a choice-based conjoint analysis with a

binary Logit model to empirically test the hypotheses. Although the six selected attributes have a relative importance of 84.86 percent, in the choice-based conjoint analysis I made the assumption that these six attributes are the only attributes that matter. The empirical analysis is about obtaining mortgages. Although mortgages might not have completely the same characteristics as the other financial products mentioned in the introduction, it is still possible to say something about what is important for financial products requiring sound financial advice. This is possible due to the common characteristics of these products, as mentioned in subchapter 2.3. Most of the attributes in the conjoint analysis apply to all financial products requiring sound financial advice. Only for insurances, the attribute interest rate is difficult to interpret. Insurances have a price, instead of an interest rate.

This research makes a distinction between 'what' factors and 'how' factors. With regard to the 'how' factors, I conclude that especially the trustworthiness of the advisor and the customization of the product are important value adding attributes for financial products requiring sound financial advice. With regard to the 'what' factors of financial products requiring sound financial advice, I conclude that the price (interest rate) and the product conditions are important attributes. This resulted in the framework given in *figure 3*.

Figure 3: *Framework of the value elements for financial products requiring sound financial advice*

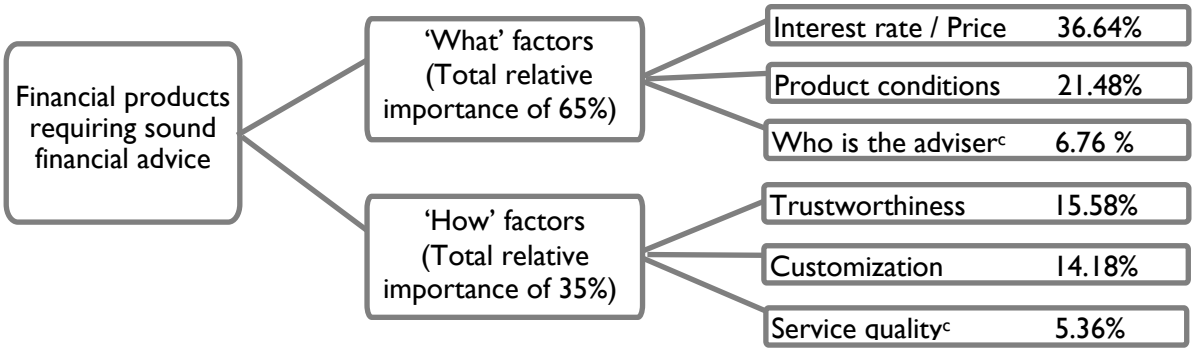


Figure 3 Notes: c: the variables with regard to this attribute were jointly insignificant. This figure shows the most important attributes for choosing financial products requiring sound financial advice, divided into 'what' factors and 'how' factors. The interest rate or price is not a determinant of the WTP.

This framework gives insights in what motivates Dutch customers. It gives a clear vision for the 'resonating focus' value proposition. In a 'resonating focus' vale proposition, a manager designs the value proposition by only focusing on the few elements that matter most to customers. Having the right combination of attributes in this value proposition leads to stronger customer loyalty, greater willingness to try and sustained revenue growth (Almquist et al, 2016). The framework shows what is most important for customers when obtaining a financial product requiring sound financial advice. Thus, managers should mainly focus on the price (interest rate) and the product conditions when formulating the elements of the value proposition with regard to the characteristic of a product.

Based on the framework, it can be concluded that it makes sense for financial service providers to compete on customer experiences as it has a relative importance of 35 percent. Formulating the value proposition with regard to optimizing the customer experience is more difficult. However, managers should mainly focus on the trustworthiness of their advisors and the customization of their products to obtain competitive advantages. Furthermore, there are differences between people who have experience in obtaining a financial product (homeowners) and people who have no experience in obtaining a financial product (no homeowners). When focusing on people with no experience, the price (interest rate) and customization of the product turns out to be less important. Probably they are less price sensitive. When focusing on people with experience, the trustworthiness of the advisor turns out to be less import attribute. Ethically, advisors should always be trustworthy. Thus, I do not recommend managers to use less trustworthy advisors for experienced customers.

This research is about the important determinants of the WTP for financial products requiring sound financial advice. When determining the important attributes for the WTP for financial products requiring sound financial advice, it is important to only look at the attributes that can influence the WTP. Hence, I made the distinction between attributes based on what a lender asks from its customers (e.g. interest rate or price) and what a lender provides to its customers. The WTP is determined by what a lender provides to its customers. Hence, the framework in *figure 3* has five attributes that determine the WTP and one attribute that is about what customers actually have to pay. The price is not a determinant of the WTP, as mentioned in subchapter 2,7. Out of these five attributes, there are three attributes that are statistically significant. I conclude that the product conditions, the trustworthiness of the advisor, and the customization of the product are the important determinants of the WTP for financial products require sound financial advice. Based on the empirical results I conclude that an improvement of the customer reviews with regard to the product conditions has the largest positive impact on the WTP (see figure 2). Improvements of customer reviews with regard to the trustworthiness of the advisor and the customization of the product have almost the same positive impact on the WTP. Improvements of customer reviews with regard to these three attributes, also increase the probability that a financial product is chosen. In general, the higher the customer review level, the higher the probability that a financial product is chosen. The brand of the advisor and the customer reviews with regard to the quality of the service nearly influences the WTP for a financial product requiring sound financial advice. Based on the MaxDiff analysis I also conclude that all the other attributes given in *table 1* do not add much to the WTP for financial products requiring sound financial advice. Competition is possible on prices but it is also possible to compete based on value delivering to customers. If financial service providers want to compete on value delivering to customers, they should try to excel on the three indicated most

important determinants of the WTP. Further research is needed to determine how financial service providers can excel with regard to these three attributes.

6.2. Limitations and suggestions for future research

There are a few limitations with regard to the present research. First of all, an online tool is used for this study. This makes it difficult to fully control for the trustworthiness of the answers. There are quite some differences with regard to the time taken to complete the surveys. This might have two reasons, a quick choice could indicate that it is an easy choice for respondents. Moreover, it may also indicate a not well thought-out choice. Another limitation is that the present study does not control for the personal circumstances. As mentioned in subchapter 2.3 and 2.4, the personal circumstances and decision context may influence the importance of attributes and the jobs that have to be done (Miller et al, 2011). Especially the importance of the attribute 'mortgage can be quickly arranged' depends on the personal circumstances. There are even researchers that claim that personal circumstances of customers are more important than product attributes (Christensen, Hall, Dillon, & Duncan, 2016). It was also infeasible to take into account the possible parental influences and recommendations. Further research is necessary to determine the effects of personal circumstances on the relative importance of attributes. Another important remark is that the conjoint analysis gives all the information about the mortgages. Respondents got two options and do not have to search for information by themselves. In reality, these options may be less clear. In other words, the transparency in obtaining a mortgage is less in reality. In addition, it is difficult to take into account the role of the advisor or intermediary, as the conjoint analysis gives information that an advisor normally gives. It is also important to critical assess the representativeness of the samples when implementing the conclusions of this study. The samples are representative in the sense that it only contains people who consider buying a house. However, the samples might not be fully representative as for example 64 percent of the respondents of the second sample are women. The samples also have different compositions, which limits the comparisons between the results of both analyses.

There are also some limitations with regard to the empirical part. The Logit model treats the choices made by one respondent as independent observations. This might not be the case, as the choices of respondents might be influenced by earlier seen choice sets. Learning and boredom might also influence the results. A respondent can also have specific opinions about certain attributes which influence all the choice of that respondent. This creates a correlation between various choice sets. Finally, I also worked with some insignificant results. This may decrease the credibility of the results. However, due to a limited budget, it was not possible to collect more data.

I concluded that product conditions are an important determinant of the WTP for financial products requiring sound financial advice. Further research is necessary to determine what conditions are especially important and influences the WTP. These conditions may differ per product. The same applies to the other two important attributes for the WTP. The WTP increases if the customer reviews improve. It has to be researched how managers can enhance the trustworthiness of their advisors and improve the customization of their products. Ariely (2016) already gives five key mechanisms about how businesses can improve their trustworthiness. In addition, further research is necessary to find statistical empirical support for interesting disparities between different segments (Treacy & Wiersema, 1993). This helps in developing value propositions for target markets. Think for example about the discussed differences between homeowners and people who buy their first house. Howcroft et al. (2003) and Devlin (2002B) argued that knowledge also influences purchase behavior. Hence a distinction between high and low educated customers may results in interesting differences. It may also be interesting to research whether gender or the amount of money people want to borrow influences the preferences.

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Tables

Table 1: *The 'candidate' attributes for obtaining a mortgage*

	(1) **Attribute**	(2) **Supporting literature**
1)	Reputable mortgage lender (party that lends the money)	Boyd, Leonard, & White, 1994; Devlin, 2002A; Devlin, 2002B; Devlin & Gerrard, 2004
2)	Reputable mortgage advisor (party that provides advice)	Boyd, Leonard, & White, 1994; Devlin, 2002A; Devlin, 2002B; Devlin & Gerrard, 2004
3)	Low-interest rate	Boyd, Leonard, & White, 1994; Elliot, Shatto, & Singer, 1996; Devlin, 2002A; Devlin & Gerrard, 2004
4)	Good mortgage conditions (No early repayment charge, ability to transfer mortgage to a new property, etc.)	
5)	Sustainable mortgage lender/advisor: attention for the environment & society	Porter & Kramer, 2006; Barber, Kuo, Bishop, & Goodman, 2012
6)	Mortgage advisor has an office in your neighborhood	Martenson, 1985; Boyd, Leonard, & White, 1994
7)	Low consultancy costs and transaction fees	Elliot, Shatto, & Singer, 1996; Khazeh & Decker, 1992; Devlin & Gerrard, 2004
8)	Independent advice: comparing multiple mortgage lenders	Devlin, 2002B; Devlin & Gerrard, 2004
9)	Mortgage can be signed using various channels: at the office, at home, by phone, directly online, etc.	Boyd, Leonard, & White, 1994; Devlin, 2002B; Saleh, Rosman, & Nani, 2013, Almquist, Senior, & Bloch, 2016
10)	Possibility to quickly schedule an appointment whenever you want: during daytime, in the evening or during the weekend	Boyd, Leonard, & White, 1994; Elliot, Shatto, & Singer, 1996; Devlin, 2002B, Almquist, Senior, & Bloch, 2016
11)	Mortgage can be quickly arranged	Elliot, Shatto, & Singer, 1996
12)	Good service (involved, friendly, fast, agreements are fulfilled, etc.)	Boyd, Leonard, & White, 1994; Reeves & Bednar, 1996; Khazeh & Decker, 1992; Devlin & Gerrard, 2004; Saleh, Rosman, & Nani, 2013; Mokhlis, 2009
13)	A clear offer/proposal	Howcroft, Hewer, & Hamilton, 2003
14)	Customizable mortgage: mortgage fits the situation of the customer	Devlin, 2002A
15)	Trustworthiness: advisor/lender acts in the interest of the customer	Boyd, Leonard, & White, 1994; Devlin, 2002A; Devlin & Gerrard, 2004; Saleh, Rosman, & Nani, 2013
16)	Ease of use: little effort to close, manage and modify the mortgage	Elliot, Shatto, & Singer, 1996; Devlin & Gerrard, 2004; Saleh, Rosman, & Nani, 2013; Arora, Cavusgil, & Nevin, 1985, Almquist, Senior, & Bloch, 2016

Table 1 Notes: This table shows the list of the possible important attributes for mortgages. It is a translation of the attributes used in the survey among Dutch customers. This list is based on previous research (see chapter 2.1) and brainstorm session with people who are specialized in this sector (colleagues and a mortgage broker with 30 years of experience). The first four attributes are about the product quality, while the last twelve attributes are about the customer experience with getting a mortgage. There are no attributes with regard to recommendations by others, as financial service providers cannot provide a recommendation by themself.

Table 2: *Descriptive statistics of the data for the MaxDiff analysis*

(1) **Description**	(2) **# persons (n)**	(3) **Percentages**
Gender		
Men	41	51%
Women	40	49%
Age		
Average age	33.2 year	
Age group 22 – 35	49	60%
Age group 36 – 47	32	40%
Education		
Intermediate vocational education	16	20%
Applied science degree	31	38%
University degree	30	37%
Secondary school	4	4%
Employment		
Employees	72	89%
Self-employed	4	5%
Entrepreneur	3	4%
Unemployed	2	2%
Family composition		
Live with a partner	58	72%
Single	20	25%
Others	3	4%
Amount of money needed		
< €100.000	3	4%
€100.000 - €200.000	37	46%
€200.000 - €300.000	19	23%
€300.000 - €400.000	11	14%
> €400.000	5	6%
Do not know how much they need	6	7%

Table 2 Notes: This table gives the descriptive statistics of the data used for the MaxDiff analysis. The second column gives the number of respondents belonging to a particular group and the third column gives the percentages of respondents belonging to that particular group.

Table 3: *The relative importance of each attribute according to the MaxDiff analysis*

(1) **Attribute**	(2) **Total** (n=81)	(3) **Homeowners** (n=40)	(4) **No homeowners** (n=41)
1) Good mortgage conditions	39.21%	54.36%	21.77%
2) Trustworthiness	20.70%	10.47%	39.83%
3) Customizable mortgage	9.99%	6.57%	11.68%
4) Low-interest rate	8.40%	11.92%	4.55%
5) A clear offer/proposal	7.94%	4.42%	10.62%
6) Good service	4.47%	2.84%	4.72%
7) Independent advice	3.31%	3.46%	2.23%
8) Low consultancy cost and transaction fees	1.91%	2.53%	0.90%
9) Ease of use	1.34%	0.95%	1.46%
10) Reputable mortgage lender	1.09%	0.92%	0.88%
11) Reputable mortgage advisor	1.00%	0.68%	1.01%
12) Possibility to quickly schedule an appointment	0.30%	0.50%	0.11%
13) Mortgage can be quickly arranged	0.19%	0.11%	0.20%
14) Mortgage advisor has an office in your neighborhood	0.08%	0.11%	0.03%
15) Mortgage can be signed using various channels	0.07%	0.14%	0.00%
16) Sustainable mortgage lender/advisor	0.02%	0.02%	0.01%

Table 3 Notes: This table gives the relative importance per attribute. The attributes are prioritized according to the relative importance of each attribute for the whole sample. The first column gives the attribute name, the second column the relative importance of that attribute according to the whole sample group, the third column gives the relative importance according to homeowners and the last column gives the relative importance according to respondents that do not own a house.

Table 4: *Descriptive statistics of the data for the conjoint analysis*

(1) **Description**	(2) **# persons (n)**	(3) **Percentages**
Gender		
Men	36	36%
Women	65	64%
Age		
Average age	36.8 year	
Age group 23 – 35	52	51%
Age group 36 – 60	49	49%
Education		
Intermediate vocational education	20	20%
Applied science degree	48	48%
University degree	27	27%
Secondary school	6	6%
Family composition		
Live with a partner	68	67%
Single	33	33%
Amount of money needed		
< €100.000	4	4%
€100.000 - €200.000	39	39%
€200.000 - €300.000	36	36%
€300.000 - €400.000	10	10%
> €400.000	7	6%
Do not know how much they need	5	5%
Current payment account		
ABN-AMRO Bank	19	19%
Triodos Bank	1	1%
Rabobank	40	39%
Other banks	41	41%
Advisor for current mortgage (n=50)		
ABN-AMRO Bank	4	8%
Rabobank	6	12%
De Hypotheker	8	16%
De Hypotheekshop	4	8%
Other advisor	28	56%

Table 4 Notes: This table gives the descriptive statistics of the data used for the conjoint analysis. The second column gives the number of respondents belonging to a particular group and the third column gives the percentages of respondents belonging to a particular group.

Table 5: *Attribute names as used in the MaxDiff analysis and the conjoint analysis, corresponding attribute levels and variable names.*

	(1) **Attribute MaxDiff**	(2) **Attribute conjoint analysis**		(3) **Levels**	(4) **Variable names**
1)	Reputable mortgage lender & Reputable mortgage advisor	Advisor	1	De Hypotheker	Hypotheker
			2	De hypotheekshop	Hypotheekshop
			3	Triodos Bank	Triodos
			4	Rabobank	Rabo
			5	ABN-AMRO Bank	ABN
			6	Huis & Hypotheek	Huis
2)	Low-interest rate	Mortgage interest rate	1	1.50%	Intr1.50
			2	1.70%	Intr1.70
			3	1.90%	Intr1.90
			4	2.10%	Intr2.10
			5	2.30%	Intr2.30
3)	Good mortgage conditions (No early repayment charge, ability to transfer mortgage to a new property, etc.)	Mortgage conditions (No early repayment charge, ability to transfer mortgage to a new property, etc.)	1		Con1
			2		Con2
			3		Con3
			4		Con4
			5		Con5
4)	Customizable mortgage: mortgage fits the situation of the customer	Customizable mortgage: mortgage fits the situation of the customer	1		Custm1
			2		Custm2
			3		Custm3
			4		Custm4
			5		Custm5
5)	Trustworthiness: advisor/lender acts in the interest of the customer	Trustworthiness: advisor/lender acts in the interest of the customer	1		Trust1
			2		Trust2
			3		Trust3
			4		Trust4
			5		Trust5
6)	Good service (involved, friendly, fast, agreements are fulfilled, etc.)	Service quality (involved, friendly, fast, agreements are fulfilled, etc.)	1		Ser1
			2		Ser2
			3		Ser3
			4		Ser4
			5		Ser5

Table 5 Notes: The first column gives the attribute names according to the MaxDiff analysis. The second column gives the resulting attributes for the conjoint analysis. The third column gives all the levels per attribute. The levels of the last four attributes are fictive customer reviews on the given attribute. I tried to choose truthful and authentic levels. The last column gives the variable names for these levels.

Table 6: *Probability of choosing a mortgage*

(1) VARIABLES	(2) Logit Model (n=101) Coeff.	RSE	(3) Marginal Effects Logit Model (n=101)
Advisor			
Hypotheker	0.258	(0.199)	0.0513
Hypotheekshop	0.199	(0.198)	0.0396
Triodos	0.325	(0.199)	0.0647
Rabo	0.344*	(0.205)	0.0684*
ABN	0.367*	(0.207)	0.0730*
Huis	0[a]		0[a]
Trustworthiness			
Trust1	0[a]		0[a]
Trust2	0.322*	(0.189)	0.0639*
Trust3	0.696***	(0.183)	0.1384***
Trust4	0.649***	(0.183)	0.1291***
Trust5	0.846***	(0.179)	0.1683***
Mortgage conditions			
Con1	0[a]		0[a]
Con2	0.432**	(0.183)	0.0858**
Con3	0.599***	(0.180)	0.1192***
Con4	0.790***	(0.178)	0.1570***
Con5	1.166***	(0.179)	0.2318***
Mortgage interest rate			
Intr1.50	1.989***	(0.186)	0.3953***
Intr1.70	1.668***	(0.188)	0.3315***
Intr1.90	0.974***	(0.188)	0.1935***
Intr2.10	0.202	(0.200)	0.0401
Intr2.30	0[a]		0[a]
Service quality			
Ser1	0[a]		0[a]
Ser2	0.117	(0.177)	0.0233
Ser3	-0.075	(0.178)	0.0150
Ser4	0.053	(0.176)	0.0106
Ser5	0.216	(0.177)	0.0430
Customizable mortgage			
Custm1	0[a]		0[a]
Custm2	0.108	(0.185)	0.0215
Custm3	0.444**	(0.181)	0.0882**
Custm4	0.770***	(0.188)	0.1531***
Custm5	0.627***	(0.187)	0.1247***
Constant	-3.265***	(0.334)	
Observations	1,616		1,616

Goodness of Fit Measures	**Logit Model**	**Probit Model**
Efron's R	0.173	0.173
Count R^2	0.696	0.696
Pseudo R^2	0.136	0.136
AIC	1.197	1.197

*Table 6 Notes: *** p<0.01, ** p<0.05, * p<0.1, a: these variables are set to zero because these are the reference categories. The dependent variable is a dummy that takes value 1 if a mortgage is chosen. See table 5 for an explanation of the variable names. The second column gives the estimated coefficients (Coeff.) of the Logit model together with the Robust Standard Errors (RSE) between parentheses. The third column represents the marginal effects of the Logit model. The Goodness of Fit measures of the Logit and Probit model are the same.*

Table 7: *The Wald tests for the joint significance of the levels per attribute and the relative importance per attribute according to the Logit model*

(1) **Attribute**	(2) **Test values** Wald test	(3) **Differences** $Max(\beta_j) - Min(\beta_j)$	(4) **Relative importance** (n=101)
1) Mortgage interest rate	0.000	1.989	36.64%
2) Mortgage conditions	0.000	1.166	21.48%
3) Trustworthiness	0.000	0.846	15.58%
4) Customizable mortgage	0.000	0.770	14.18%
5) Advisor	0.492	0.367	6.76%
6) Service quality	0.543	0.291	5.36%

Table 7 Notes: Column one gives the attributes that are included in the conjoint analysis. Column two gives the p-value results of the Wald tests. The levels per attribute of the first four attributes are jointly significant. Column three gives the maximum difference between the coefficients per attribute. Column four gives the relative importance of each attribute. The attributes are prioritized based on relative importance per attribute.

Table 8: *The relative importance of the attributes according to homeowners and no homeowners*

(1) **Attribute**	(2) **Homeowners** (n=50)	(3) **No homeowners** (n=51)
1) Mortgage interest rate	34.51%	31.62%
2) Mortgage conditions	18.82%	18.34%
3) Trustworthiness	10.14%	16.76%
4) Customizable mortgage	17.02%	12.42%
5) Advisor	8.28%	12.49%
6) Service quality	11.17%	8.37%

Table 8 Notes: Column one gives the attributes that are included in the conjoint analysis. Both segments are analyzed with a Logit model. Column two gives the relative importance of each attribute according to homeowners. Column three gives the relative importance of each attribute according to people who do not own a house.

Appendixes

Appendix A: *The 'candidate' attributes for obtaining a mortgage*

	(1) **Attribute**	(2) **Supporting literature**
1)	Goede reputatie hypotheekverstrekker (partij die geld uitleent)	Boyd, Leonard, & White, 1994; Devlin, 2002A; Devlin, 2002B; Devlin & Gerrard, 2004
2)	Goede reputatie hypotheekadviseur (partij die advies geeft)	Boyd, Leonard, & White, 1994; Devlin, 2002A; Devlin, 2002B; Devlin & Gerrard, 2004
3)	Een laag rentepercentage	Boyd, Leonard, & White, 1994; Elliot, Shatto, & Singer, 1996; Devlin, 2002A; Devlin & Gerrard, 2004
4)	Goede hypotheekvoorwaarden (boetevrij aflossen, hypotheek meenemen bij verhuizen, etc.)	
5)	Hypotheekverstrekker / adviseur is duurzaam: heeft aandacht voor milieu en maatschappij	Porter & Kramer, 2006; Barber, Kuo, Bishop, & Goodman, 2012
6)	Hypotheekadviseur heeft kantoor bij u in de buurt	Martenson, 1985; Boyd, Leonard, & White, 1994
7)	Lage advies- en afhandelingskosten	Elliot, Shatto, & Singer, 1996; Khazeh & Decker, 1992; Devlin & Gerrard, 2004
8)	Onafhankelijk advies: meerdere hypotheekverstrekkers worden vergeleken	Devlin, 2002B; Devlin & Gerrard, 2004
9)	Via elk kanaal af te sluiten: op kantoor, bij u thuis, telefonisch, direct online	Boyd, Leonard, & White, 1994; Devlin, 2002B; Saleh, Rosman, & Nani, 2013, Almquist, Senior, & Bloch, 2016
10)	Snel een afspraak wanneer u wilt: overdag, 's avonds of in het weekend	Boyd, Leonard, & White, 1994; Elliot, Shatto, & Singer, 1996; Devlin, 2002B, Almquist, Senior, & Bloch, 2016
11)	De hypotheek is snel te regelen	Elliot, Shatto, & Singer, 1996
12)	Goede service (betrokken, vriendelijk, snel, afspraken worden nagekomen, etc.)	Boyd, Leonard, & White, 1994; Reeves & Bednar, 1996; Khazeh & Decker, 1992; Devlin & Gerrard, 2004; Saleh, Rosman, & Nani, 2013; Mokhlis, 2009
13)	Een duidelijke offerte	Howcroft, Hewer, & Hamilton, 2003
14)	Maatwerk: de hypotheek sluit aan op de situatie van de klant	Devlin, 2002A
15)	Betrouwbaar: de adviseur/verstrekker handelt in belang van de klant	Boyd, Leonard, & White, 1994; Devlin, 2002A; Devlin & Gerrard, 2004; Saleh, Rosman, & Nani, 2013
16)	Gemak: het kost weinig moeite om hypotheek af te sluiten, te beheren en te wijzigen	Elliot, Shatto, & Singer, 1996; Devlin & Gerrard, 2004; Saleh, Rosman, & Nani, 2013; Arora, Cavusgil, & Nevin, 1985, Almquist, Senior, & Bloch, 2016

Appendix A Notes: This table shows the list of possible important attributes for mortgages. These attributes are formulated in Dutch, as the survey is held among Dutch consumers. The list is based on previous literature and brainstorm session with people who are specialized in this sector. The first four attributes are about the product quality, while the last twelve attributes are about the customer experience with getting a mortgage. There are no attributes with regard to recommendations by others, as financial service providers cannot provide a recommendation by themself.

Appendix B: *Questionnaire for the MaxDiff analysis*

Fijn dat u deelneemt aan dit korte onderzoek.

We zijn benieuwd naar wat uw voorkeuren zijn bij het afsluiten van een hypotheek.

Het onderzoek start met drie inleidende vragen. Vervolgens wordt u herhaaldelijk gevraagd wat voor u het meest en minst belangrijk is bij de keuze voor een hypotheek. Het onderzoek sluit af met enkele algemene vragen.

Het invullen van de vragenlijst kost ongeveer vier minuten van uw tijd.

Alvast hartelijk bedankt voor uw medewerking.

Onderzoeksbureau flowresulting

Overweegt u om binnen twee jaar een nieuwe woning te kopen en daarvoor een hypotheek af te sluiten?

- Ja
- Nee

Bent u op dit moment eigenaar van een woning?

- Ja
- Nee

Wat is het hypotheekbedrag dat u naar alle waarschijnlijkheid nodig heeft om de nieuwe woning te kopen?

- Minder dan €100.000,–
- €100.000,– tot €200.000,–
- €200.000,– tot €300.000,–
- €300.000,– tot €400.000,–
- Meer dan €400.000,–
- Weet ik niet

Step 1 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Maatwerk: de hypotheek sluit aan op de situatie van de klant	○
○	Onafhankelijk advies: meerdere hypotheekverstrekkers worden vergeleken	○
○	Goede reputatie hypotheekverstrekker (partij die geld uitleent)	○
○	Dat de hypotheek snel te regelen is	○

Step 2 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Een duidelijke offerte	○
○	Goede reputatie hypotheekverstrekker (partij die geld uitleent)	○
○	Via elk kanaal af te sluiten: op kantoor, bij u thuis, telefonisch, direct online	○
○	Dat de hypotheek snel te regelen is	○

Step 3 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Lage advies- en afhandelingskosten	○
○	Hypotheekverstrekker/adviseur is duurzaam: heeft aandacht voor milieu en maatschappij	○
○	Goede reputatie hypotheekadviseur (partij die advies geeft)	○
○	Snel een afspraak wanneer u wilt: overdag, 's avonds of in het weekend	○

Step 4 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Goede hypotheekvoorwaarden (boetevrij aflossen, hypotheek meenemen bij verhuizen, etc.)	○
○	Hypotheekadviseur heeft een kantoor bij u in de buurt	○
○	Goede reputatie hypotheekadviseur (partij die advies geeft)	○
○	Betrouwbaarheid: de adviseur/verstrekker handelt in het belang van de klant	○

Step 5 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Hypotheekadviseur heeft een kantoor bij u in de buurt	○
○	Een laag rentepercentage	○
○	Betrouwbaarheid: de adviseur/verstrekker handelt in het belang van de klant	○
○	Lage advies- en afhandelingskosten	○

Step 6 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Gemak: het kost weinig moeite om hypotheek af te sluiten, te beheren en te wijzigen	○
○	Snel een afspraak wanneer u wilt: overdag, 's avonds of in het weekend	○
○	Goede reputatie hypotheekverstrekker (partij die geld uitleent)	○
○	Goede hypotheekvoorwaarden (boetevrij aflossen, hypotheek meenemen bij verhuizen, etc.)	○

Step 7 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Gemak: het kost weinig moeite om hypotheek af te sluiten, te beheren en te wijzigen	○
○	Een duidelijke offerte	○
○	Goede hypotheekvoorwaarden (boetevrij aflossen, hypotheek meenemen bij verhuizen, etc.)	○
○	Betrouwbaarheid: de adviseur/verstrekker handelt in het belang van de klant	○

Step 8 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Gemak: het kost weinig moeite om hypotheek af te sluiten, te beheren en te wijzigen	○
○	Een duidelijke offerte	○
○	Maatwerk: de hypotheek sluit aan op de situatie van de klant	○
○	Dat de hypotheek snel te regelen is	○

Step 9 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Goede service (betrokken, vriendelijk, snel, afspraken worden nagekomen, etc.)	○
○	Maatwerk: de hypotheek sluit aan op de situatie van de klant	○
○	Onafhankelijk advies: meerdere hypotheekverstrekkers worden vergeleken	○
○	Lage advies- en afhandelingskosten	○

Step 10 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Goede service (betrokken, vriendelijk, snel, afspraken worden nagekomen, etc.)	○
○	Een laag rentepercentage	○
○	Via elk kanaal af te sluiten: op kantoor, bij u thuis, telefonisch, direct online	○
○	Hypotheekverstrekker/adviseur is duurzaam: heeft aandacht voor milieu en maatschappij	○

Step 11 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Snel een afspraak wanneer u wilt: overdag, 's avonds of in het weekend	○
○	Via elk kanaal af te sluiten: op kantoor, bij u thuis, telefonisch, direct online	○
○	Goede reputatie hypotheekadviseur (partij die advies geeft)	○
○	Hypotheekadviseur heeft een kantoor bij u in de buurt	○

Step 12 of 12

Wat vindt u het meest en minst belangrijk bij de keuze voor een hypotheek?

Meest belangrijk		Minst belangrijk
○	Hypotheekverstrekker/adviseur is duurzaam: heeft aandacht voor milieu en maatschappij	○
○	Onafhankelijk advies: meerdere hypotheekverstrekkers worden vergeleken	○
○	Een laag rentepercentage	○
○	Goede service (betrokken, vriendelijk, snel, afspraken worden nagekomen, etc.)	○

Wat is uw leeftijd?

Wat is uw geslacht?

- Man
- Vrouw

Wat is uw gezinssamenstelling?

- Gehuwd/samenwonend zonder (thuiswonende) kinderen
- Gehuwd/samenwonend met (thuiswonende) kinderen
- Alleenstaand zonder (thuiswonende) kinderen
- Alleenstaand met (thuiswonende) kinderen
- Anders, namelijk

Wat is uw hoogst afgeronde opleiding?

- MBO
- HBO
- WO
- Middelbare school
- Anders, namelijk

Wat is de aard van uw dienstverband?

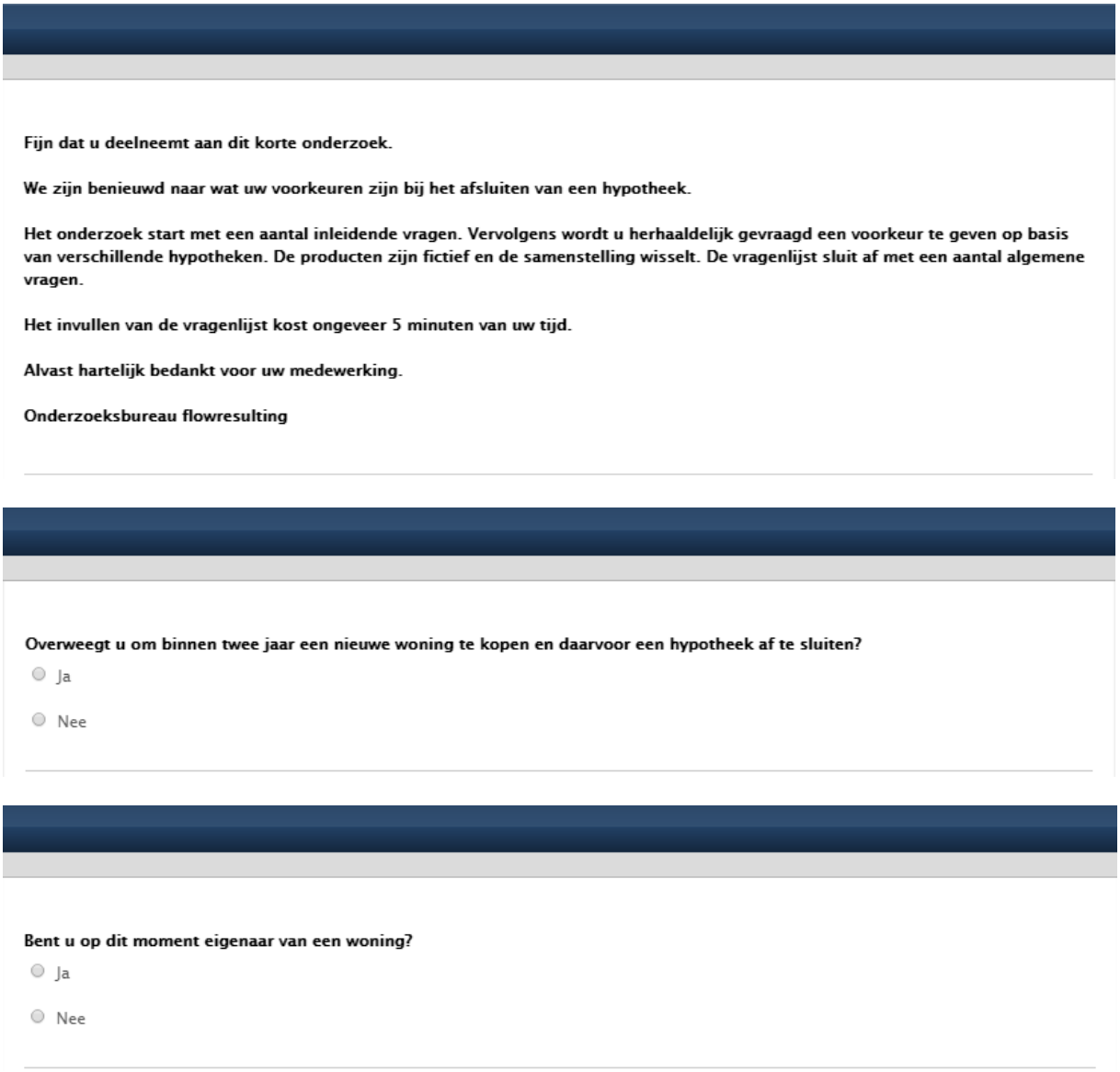
- In loondienst
- Ondernemer
- ZZP-er
- Gepensioneerd
- Werkloos
- Anders, namelijk

Appendix C: *Ranking of the attributes according to the differences between the amount of 'best' votes and 'worst' votes per attribute*

(1) **Attribute**	(2) **# 'best' votes**	(3) **# 'worst' votes**	(4) **Difference (# 'best' – # 'worst')**
1) Good mortgage conditions	168	6	162
2) Trustworthiness	133	9	124
3) Low-interest rate	126	21	105
4) Customizable mortgage	107	15	92
5) A clear offer / proposal	68	12	56
6) Independent advice	85	36	49
7) Good service	67	21	46
8) Low consultancy cost and transaction fees	49	36	13
9) Ease of use	46	48	-2
10) Reputable mortgage lender	35	45	-10
11) Reputable mortgage advisor	35	49	-14
12) Possibility to quickly schedule an appointment	21	98	-77
13) Mortgage can be quickly arranged	14	105	-91
14) Mortgages can be signed using various channels	7	149	-142
15) Mortgage advisor has an office in your neighborhood	9	156	-147
16) Sustainable mortgage lender/advisor	2	166	-164

Appendix C Notes: In this table the attributes are prioritized based on the differences between the amount of 'best' votes and 'worst' votes per attribute. The number of best votes per attribute are given in column two and the number of 'worst' votes are given in column three. Column four gives the difference between these two column. Based on these outcomes and the restriction implied by Flowresulting, the same six attributes will be selected for the conjoint analysis.

Appendix D: *Questionnaire for the conjoint analysis*



Fijn dat u deelneemt aan dit korte onderzoek.

We zijn benieuwd naar wat uw voorkeuren zijn bij het afsluiten van een hypotheek.

Het onderzoek start met een aantal inleidende vragen. Vervolgens wordt u herhaaldelijk gevraagd een voorkeur te geven op basis van verschillende hypotheken. De producten zijn fictief en de samenstelling wisselt. De vragenlijst sluit af met een aantal algemene vragen.

Het invullen van de vragenlijst kost ongeveer 5 minuten van uw tijd.

Alvast hartelijk bedankt voor uw medewerking.

Onderzoeksbureau flowresulting

Overweegt u om binnen twee jaar een nieuwe woning te kopen en daarvoor een hypotheek af te sluiten?

- Ja
- Nee

Bent u op dit moment eigenaar van een woning?

- Ja
- Nee

Door welke partij bent u geadviseerd voor uw huidige hypotheek?

- ABN AMRO Bank
- Triodos Bank
- Rabobank
- De Hypotheker
- De Hypotheekshop
- Huis & Hypotheek
- ING Bank
- ASN bank
- Knab
- Anders, namelijk

Wat is het hypotheekbedrag dat u naar alle waarschijnlijkheid nodig heeft om de nieuwe woning te kopen?

- Minder dan €100.000,–
- €100.000,– tot €200.000,–
- €200.000,– tot €300.000,–
- €300.000,– tot €400.000,–
- Meer dan €400.000,–
- Weet ik niet

Op de volgende pagina's wordt u herhaaldelijk gevraagd een voorkeur aan te geven op basis van verschillende hypotheken.

De vier onderstaande onderdelen worden aangegeven op basis van klantwaarderingen, uitgedrukt m.b.v. sterretjes. Hoe hoger het aantal sterretjes, des te beter deze hypotheek scoort op dit onderdeel.

Betrouwbaarheid: geeft aan hoe goed de bijbehorende adviseur handelt in het belang van de klant.
Hypotheekvoorwaarden: geeft aan hoe goed deze hypotheek scoort op voorwaarden als boetevrij aflossen, hypotheek meenemen bij verhuizen etc.
Kwaliteit van de service: geeft aan hoe goed deze hypotheek scoort qua services, zoals betrokken, vriendelijk, snel en het nakomen van afspraken.
Maatwerk: geeft aan hoe goed de hypotheek aansluit op uw persoonlijke situatie.

Step 1 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–

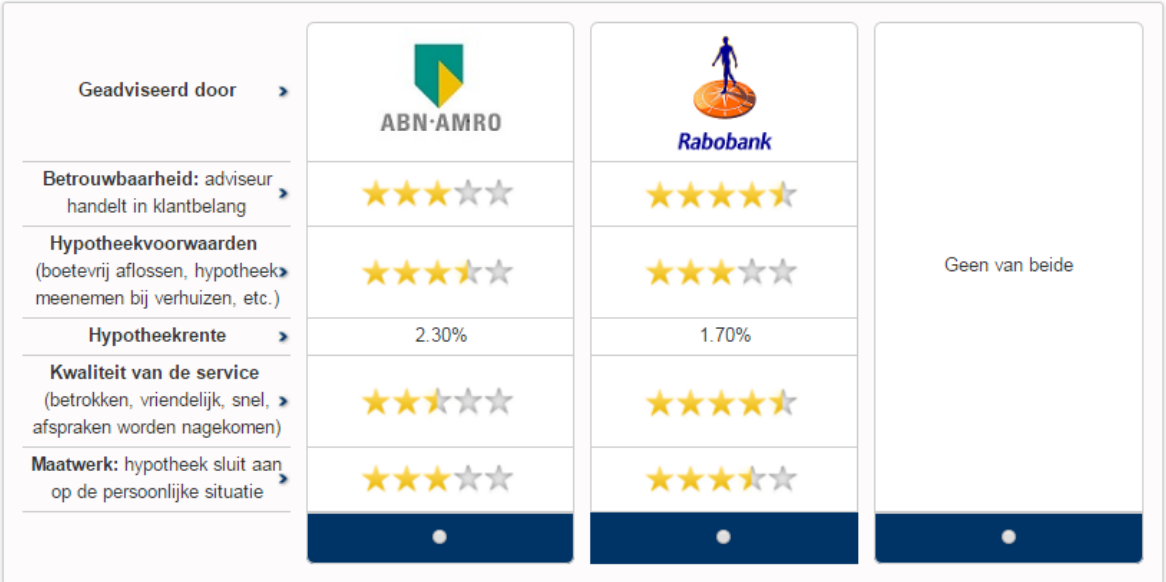
Step 2 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



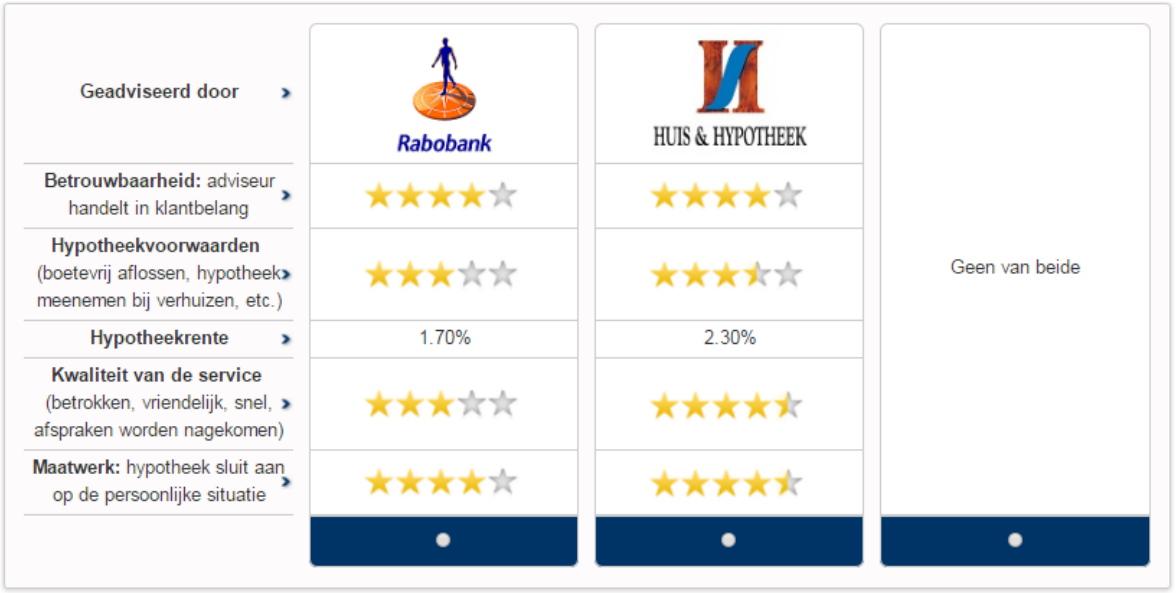
Step 3 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



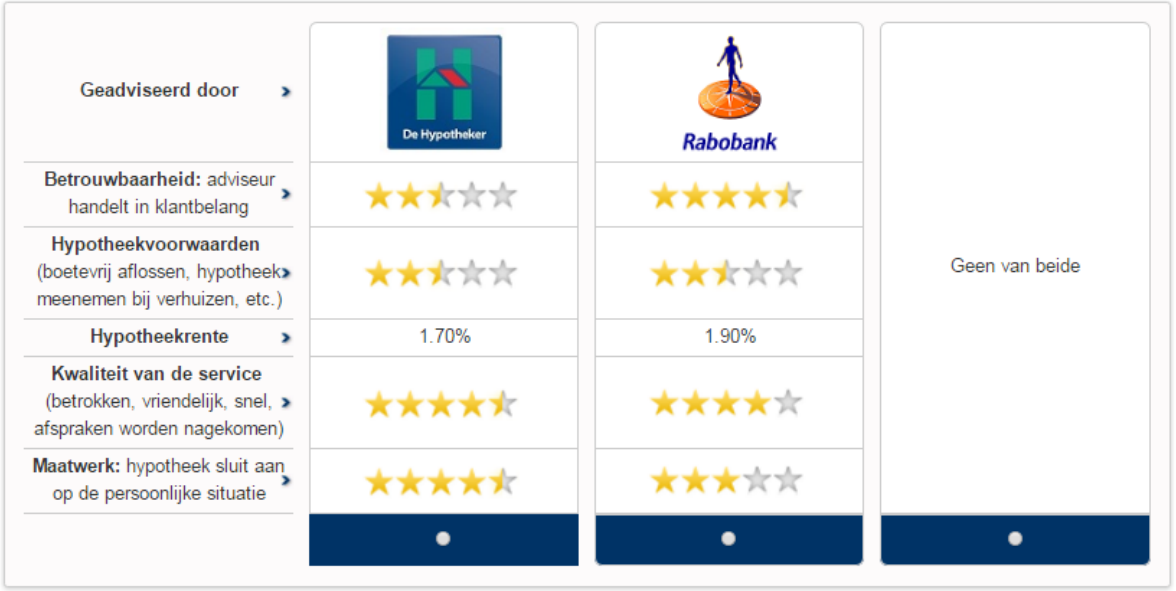
Step 4 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



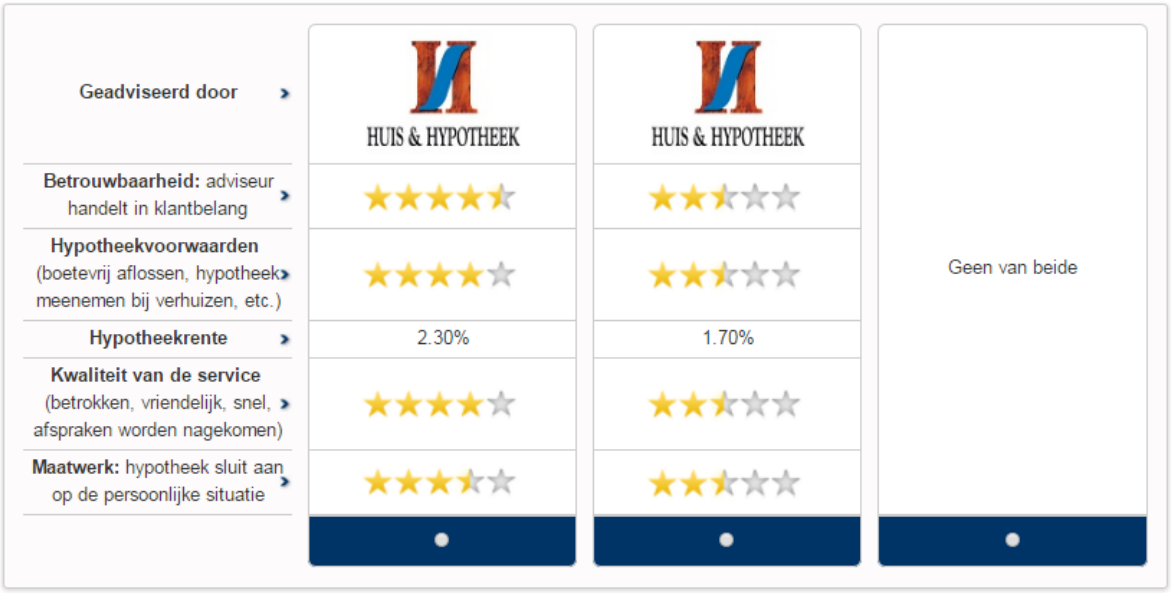
Step 5 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



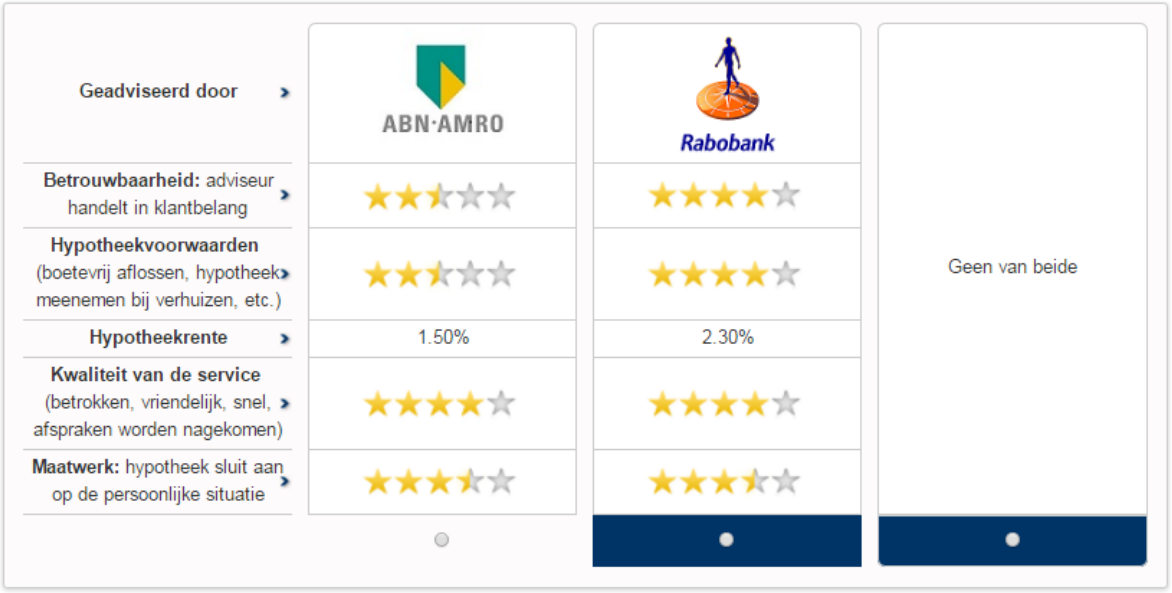
Step 6 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



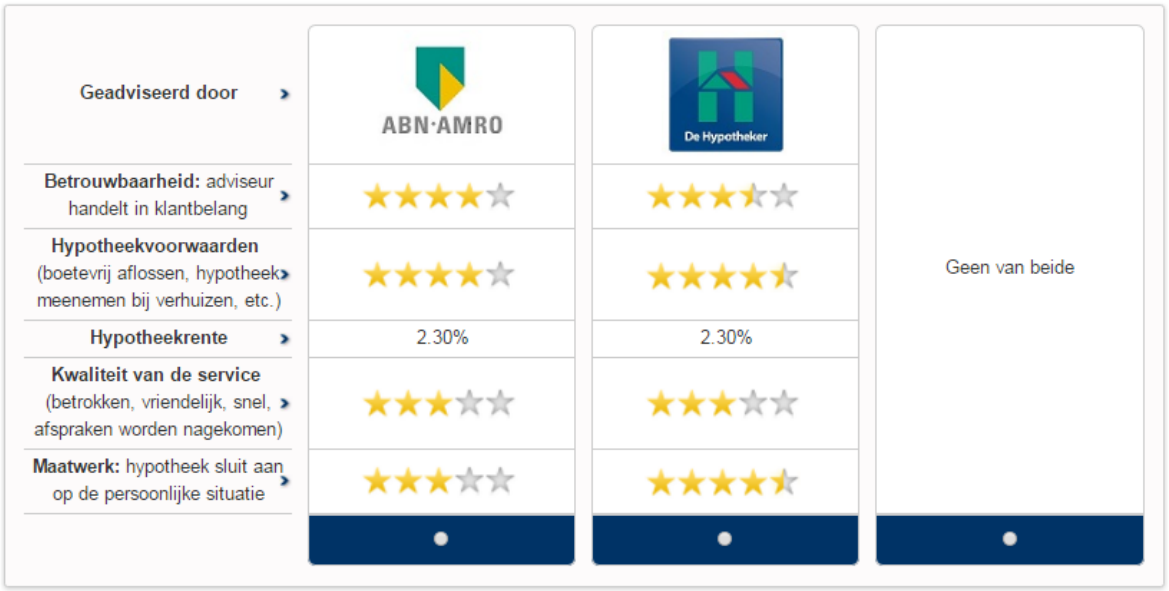
Step 7 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



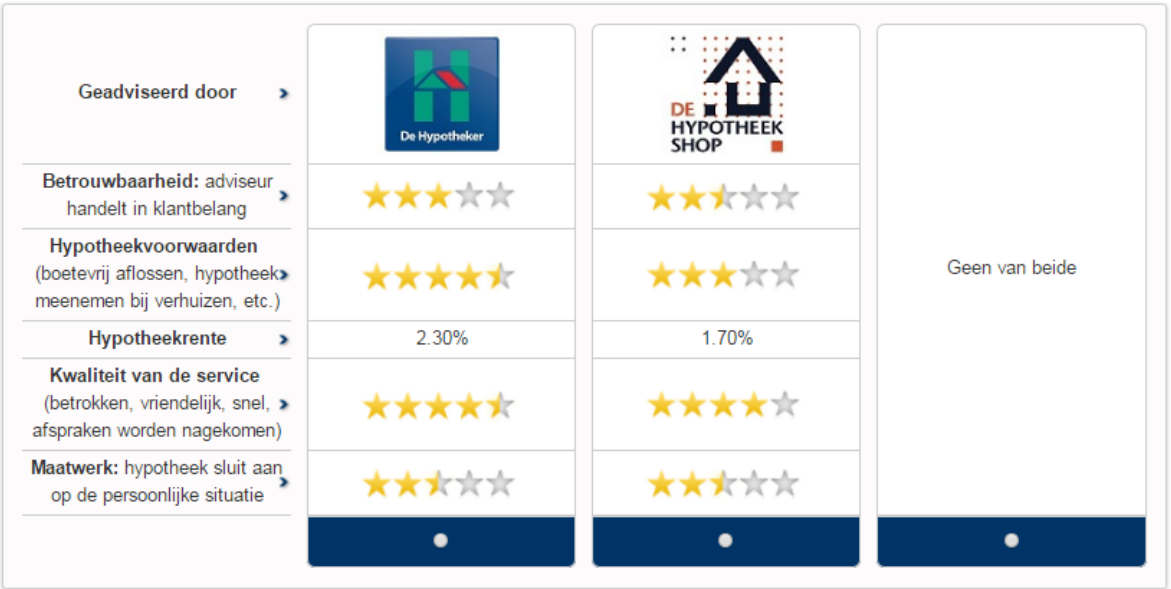
Step 8 of 8

Stel u wilt een woning aanschaffen en hiervoor een hypotheek afsluiten. Welke optie spreekt u het meest aan?

Links ziet u steeds de zes onderdelen waaruit de hypotheek is opgebouwd. De hypotheken zijn fictief en bij elke keuze zal de invulling van de zes onderdelen (een beetje) anders zijn. U kunt uw keuze duidelijk maken door het bolletje onder uw keuze te markeren. Indien beide keuzesets u helemaal niet aanspreken, kunt u rechts *geen van beide* kiezen.

Klik op 'volgende' onderaan de pagina nadat u een keuze hebt gemaakt.

We gaan in de voorbeelden hieronder uit van hypotheken met een rentevaste periode van 10 jaar en een hoogte van €250.000,–



Bij welke bank heeft u momenteel uw betaalrekening lopen?

- ABN AMRO Bank
- Triodos Bank
- Rabobank
- ASN Bank
- ING Bank
- Knab
- SNS Bank
- Anders, namelijk

Stel u wilt een hypotheek afsluiten. U kunt kiezen uit de volgende drie mogelijkheden voor het afsluiten van een hypotheek. Welke mogelijkheid heeft uw voorkeur?

- Afsluiten via een onafhankelijk adviseur die verschillende hypotheekverstrekkers vergelijkt. De totale advies en afhandelingskosten voor een onafhankelijk adviseur zijn €2700,–
- Afsluiten via een bankadviseur die geen vergelijking maakt met andere hypotheekverstrekkers. De totale advies en afhandelingskosten voor een bankadviseur zijn €1600,–
- Zonder advies zelf alles online regelen voor in totaal €600,–

Wat is uw leeftijd?

Wat is uw geslacht?

- Man
- Vrouw

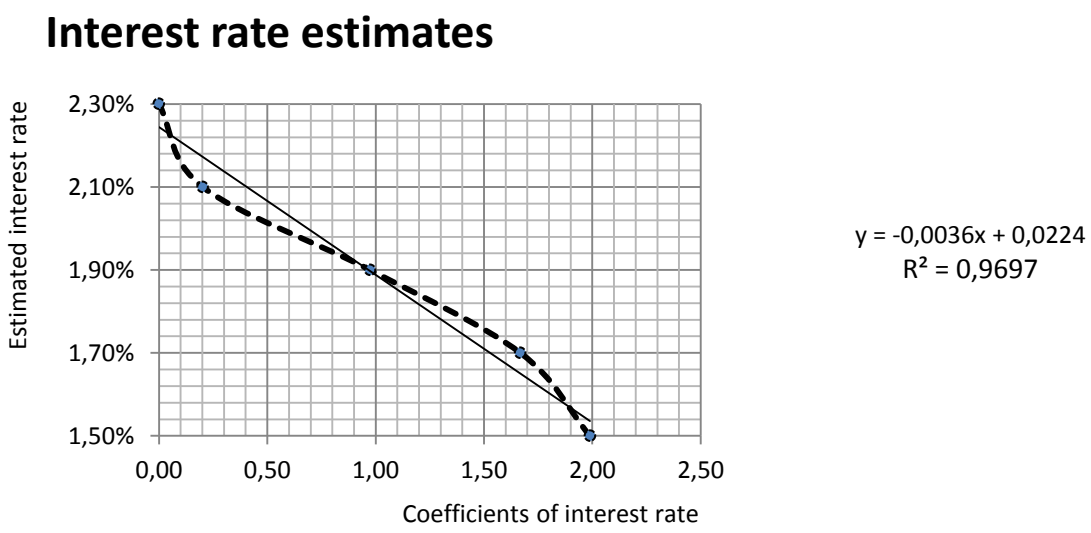
Wat is uw gezinssamenstelling?

- Gehuwd/samenwonend zonder (thuiswonende) kinderen
- Gehuwd/samenwonend met (thuiswonende) kinderen
- Alleenstaand zonder (thuiswonende) kinderen
- Alleenstaand met (thuiswonende) kinderen
- Anders, namelijk

Wat is uw hoogst afgeronde opleiding?

- MBO
- HBO
- WO
- Middelbare school
- Anders, namelijk

Appendix E: *Linear regression between the coefficients of the interest rates and the interest rates*



Appendix E Notes: This graph shows the relation between the coefficient of the interest rate (part-worth utilities) and the interest rate. By knowing this relation, it is possible to calculate what people are willing to pay for changes in levels of other attributes. The dashed line shows that the relation is not perfectly linear.

Appendix F: *Correlation table of the independent variables used in the Logit model*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1 Hypothekar	1.00																														
2 Hypothekbkbp	-0.21	1.00																													
3 Triodos	-0.21	-0.21	1.00																												
4 Rabo	-0.21	-0.21	-0.21	1.00																											
5 ABN	-0.19	-0.19	-0.19	-0.19	1.00																										
6 Huis	-0.19	-0.19	-0.19	-0.19	-0.17	1.00																									
7 Trust1	0.04	-0.02	-0.02	0.01	-0.00	-0.01	1.00																								
8 Trust2	-0.00	-0.02	0.08	-0.00	-0.03	-0.03	-0.24	1.00																							
9 Trust3	-0.02	-0.04	-0.04	0.00	0.05	0.05	-0.25	-0.26	1.00																						
10 Trust4	0.01	0.02	-0.02	0.02	-0.00	-0.02	-0.24	-0.25	-0.26	1.00																					
11 Trust5	-0.03	0.06	0.01	-0.03	-0.02	0.01	-0.24	-0.25	-0.26	-0.25	1.00																				
12 Con1	0.02	-0.01	-0.02	0.02	-0.02	0.00	-0.02	0.02	0.03	-0.01	-0.02	1.00																			
13 Con2	0.00	-0.02	0.00	-0.01	-0.01	0.04	0.02	0.01	-0.02	0.01	-0.03	-0.25	1.00																		
14 Con3	-0.00	-0.04	0.03	0.01	0.03	-0.02	-0.01	-0.00	0.00	0.03	-0.02	-0.26	-0.24	1.00																	
15 Con4	-0.01	0.02	-0.01	0.02	-0.02	-0.00	0.01	-0.01	-0.00	0.01	-0.01	-0.26	-0.25	-0.25	1.00																
16 Con5	-0.00	0.05	-0.00	-0.04	0.03	-0.02	-0.00	-0.02	-0.01	-0.05	0.08	-0.26	-0.24	-0.24	-0.25	1.00															
17 Intr1.50	0.03	-0.04	-0.03	0.01	0.02	0.01	0.02	-0.01	0.03	-0.04	0.00	0.01	0.00	-0.01	-0.01	0.01	1.00														
18 Intr1.70	-0.00	-0.01	0.04	-0.05	0.01	0.02	-0.03	-0.01	0.03	-0.00	0.00	0.00	-0.01	-0.03	0.01	0.02	-0.25	1.00													
19 Intr1.90	-0.01	0.06	-0.04	-0.00	-0.03	0.02	-0.03	0.02	-0.03	0.03	0.00	0.02	0.02	-0.00	-0.03	-0.02	-0.26	-0.25	1.00												
20 Intr2.10	-0.00	0.03	-0.01	0.02	0.01	-0.05	0.00	0.00	-0.01	0.02	-0.02	0.01	-0.02	-0.00	0.02	-0.02	-0.26	-0.24	-0.25	1.00											
21 Intr2.30	-0.01	-0.04	0.04	0.02	-0.00	0.00	0.03	-0.01	-0.02	-0.01	0.01	-0.05	0.00	0.04	0.00	-0.02	-0.25	-0.24	-0.25	-0.24	1.00										
22 Ser1	-0.02	-0.01	0.03	0.00	0.04	-0.06	-0.03	0.03	0.08	-0.05	-0.04	0.00	-0.05	0.03	-0.03	0.05	-0.00	-0.01	-0.02	0.05	-0.02	1.00									
23 Ser2	-0.04	-0.01	-0.01	0.03	0.02	0.02	-0.04	-0.03	-0.03	0.05	0.05	0.01	-0.02	-0.01	0.03	-0.02	-0.01	0.01	0.03	0.00	-0.02	-0.25	1.00								
24 Ser3	0.01	-0.01	-0.01	-0.02	-0.01	0.04	0.02	-0.03	0.03	0.01	-0.02	-0.00	0.05	0.02	-0.06	-0.00	0.03	-0.04	0.02	0.00	-0.01	-0.25	-0.25	1.00							
25 Ser4	0.02	0.00	0.00	0.00	-0.01	-0.02	0.01	0.04	-0.01	-0.03	-0.01	0.02	0.00	-0.01	0.03	-0.04	-0.02	0.03	-0.01	-0.06	0.06	-0.25	-0.25	-0.26	1.00						
26 Ser5	0.03	0.02	-0.01	-0.01	-0.04	0.01	0.04	-0.02	-0.07	0.03	0.02	-0.03	0.02	-0.02	0.02	0.01	0.01	0.01	-0.02	0.00	-0.01	-0.25	-0.24	-0.25	-0.25	1.00					
27 Custm1	0.02	-0.03	0.00	-0.01	-0.03	0.04	-0.01	0.02	0.01	-0.03	0.02	-0.02	0.01	-0.00	-0.00	0.01	-0.02	-0.01	0.05	-0.01	-0.01	0.00	-0.01	0.02	-0.03	0.02	1.00				
28 Custm2	-0.03	-0.02	-0.01	0.07	-0.01	-0.00	-0.03	0.02	-0.01	0.01	0.01	0.05	0.04	-0.02	-0.01	-0.06	0.03	0.01	-0.05	0.01	0.00	0.01	0.02	-0.06	0.04	-0.01	-0.25	1.00			
29 Custm3	0.04	-0.00	0.02	-0.01	-0.01	-0.05	-0.01	0.01	-0.01	0.01	0.01	-0.00	-0.03	-0.00	-0.02	0.05	0.03	0.06	-0.01	-0.05	-0.03	-0.02	-0.01	0.03	0.01	-0.00	-0.25	-0.28	1.00		
30 Custm4	-0.02	-0.00	0.01	-0.02	0.03	0.01	0.04	0.00	-0.04	0.01	-0.01	0.02	-0.02	-0.01	0.01	-0.01	-0.05	-0.01	0.00	0.04	0.02	-0.01	0.04	-0.02	0.00	-0.01	-0.24	-0.26	-0.26	1.00	
31 Custm5	-0.01	0.05	-0.02	-0.03	0.02	-0.00	0.01	-0.05	0.06	0.00	-0.03	-0.05	-0.02	0.03	0.03	0.00	0.00	-0.04	0.02	0.01	0.01	0.03	-0.05	0.03	-0.02	0.01	-0.22	-0.25	-0.25	-0.23	1.00

Appendix F notes: This table gives the correlations between the independent variables. The choice-based conjoint analysis allows for all possible attribute level combinations, which lowers the danger of a multicollinearity problem. Based on these correlations it is save to conclude that there is no multicollinearity problem.