


Banking Products: You *Can* Take Them with You, So Why Don't You?

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Received: 1 August 2016 / Revised: 24 January 2017 / Accepted: 3 April 2017 /

Published online: 5 May 2017

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Abstract Policymakers around the world call for more competition in the banking sector. One prerequisite to achieving this is customer mobility. Despite its policy relevance, surprisingly little is known about consumers' bank switching behaviour. We show that the principal reasons to stay at one's bank are a good bank-customer relationship, practical barriers, and the perception that there is not much benefit in switching. Moreover, we find that the reported propensity to switch varies across banking products. For the main current and savings accounts, this propensity is most strongly related to the bank-customer relationship, while for mortgage loans it is especially linked to switching experience. These findings have important implications for antitrust policy; they provide an argument against using a cluster-based legal standard for the analysis of competition and in favour of a disaggregated approach. Regarding the effectiveness of hypothetical policy initiatives to lower switching barriers, we find that the reported switching propensity with current accounts is higher in the case of account number portability, while more knowledge of the existing switching service has no significant effect. Lastly, scenario analysis shows that a policy of allowing new foreign banks to enter the savings market is less promising for enhancing mobility than a policy that increases the number of domestic players.

Keywords Banking products · Switching behaviour · Barriers · Household survey · Financial literacy · Psychological factors · Loyalty · Bank competition · Policy initiatives

JEL Classification D14 · G21

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1 Introduction

Policymakers frequently call for more competition in the banking sector to increase the efficiency of banking services, see for example the Global Financial Development Report 2013 (Worldbank 2013), the Australian government response (2015) to the Financial System Inquiry (Murray et al. 2014) and the annual report of De Nederlandsche Bank (DNB 2015a).¹ One way to stimulate competition is to lower entry barriers to attract new players. Consumer inertia is one example of such a barrier (The Netherlands Authority for Consumers and Markets [ACM] 2014). Consumer inertia means that only a small proportion of consumers switch banks, which makes it hard for new entrants to gain market share. Inertia is not only a barrier for new entrants, it also reduces competition among existing players in the market.

Prior studies have concluded that most bank customers are immobile. The UK Competition & Markets Authority (2015a) reported in 2015 that almost 60% of account holders had not changed their main personal accounts provider in the past ten years. A report on Canada published by EY in 2013 states that 71% of Canadians have maintained their primary relationship for over a decade. In the case of the Netherlands, the ACM reports that in 2014, 73% of current account holders over 18 were still with the same bank where they opened their first account (ACM 2014).² The European Commission (2013) concludes that mobility of consumers within Europe is low: around 10% of payment account users switched in 2011.

Even though consumers hold different banking products with distinct characteristics, prior studies use broad and general measurements of switching as they examine switching the main bank. There is little research on consumer bank switching behaviour (e.g. Kiser 2002; Chakravarty et al. 2004; Brunetti et al. 2016). Research has mostly focused on either the relationship between firms and banks (e.g. Ongena and Smith 2001; Ioannidou and Ongena 2010) or on consumers and non-banks (e.g. Giulietti et al. 2005; Yang 2014).

At the same time, the product market considered by regulatory agencies for analysing competition in the US also consists of the cluster of commercial banking products and services (Federal Reserve 2014). Similarly, the European Commission (2006) focuses on retail banking markets as a whole in merger decisions.³ Although the clustering of banking products is convenient, identifying separate product markets may be better. Differences in mobility across banking products and the factors related to switching would provide an argument in favour of using a legal standard for analysing competition that is not based on clustering.

As a result, we research banking products separately. Our study focuses on current accounts, savings accounts, mortgage loans and revolving credit as these products are most commonly held by consumers. This approach allows us to differentiate between consumers' assets and liabilities. Our research questions are: i) *Does the propensity to switch depend on the banking product?* ii) *What switching barriers do consumers perceive?* iii) *For each banking*

¹ There is no consensus in the literature regarding the effect of competition on stability. Two opposing views are described. The competition-fragility view perceives competition as detrimental for stability as it provides banks incentives to take more risks. The competition-stability hypothesis, in contrast, posits that competition enhances stability. We refer to Beck et al. (2013) for an overview of the literature on bank competition and stability as well as conditional correlations between bank market power and stability for 79 countries.

² In April 2015, a resolution put forward by two Dutch politicians was adopted to investigate ways of easing and facilitating switching on the premise that competition will increase if switching is made easier. In July 2016 the National Forum on the Payment System published a statement on improving customer mobility urging parties in the payments market to improve efforts to enhance mobility and thereby foster competition (NFPS 2016b).

³ The European Commission (2006) reports that some EU countries define relevant product markets based on individual products.

product, what are the most important factors explaining variation in switching propensities?
iv) *How effective are (potential) policies to lower switching barriers and/or increase (the threat of) switching?*

We focus on consumers' *reported* propensities to switch, collected from survey data. In the remainder of the paper we simply call these "propensities to switch". To answer the second research question, we use insights from studies in different industries to identify a broad range of factors that may be related to consumers' propensity to switch banks in the coming year.⁴ The factors we study are perceived benefits of switching, personal characteristics, switching experience, socio-psychological factors, the bank-customer relationship and knowledge related to banking products.

Better knowledge of factors related to switching propensities, switching barriers, and the effectiveness of potential policies is important for policymakers who want to increase (the threat of) switching. One way to increase competition is to allow new foreign banks to enter the market. Consequently it is also key for policymakers to understand how consumers respond to new foreign players.

Although we research bank switching behaviour of consumers in the Netherlands, the questions apply broadly to other countries as well. In all countries there should be a threat of consumers leaving their bank to foster competition. Consequently insight in factors related to switching and ways to strengthen the threat of switching is of general interest. Besides, switching rates are comparable across the Netherlands, other European countries and the US.⁵

We find that the propensity to switch depends on the banking product. The propensity to switch is highest for consumers' main savings accounts. We also find that the main factors explaining the propensity to switch best depend on the banking product. Differences in the propensity to switch the main current account are best explained by differences in the strength of the bank-customer relationship and socio-psychological factors. The bank-customer relationship is also the most important factor for the propensity to switch main savings accounts. In contrast, switching experiences play the most important role in explaining variation in the propensity to switch mortgage loans. One of our study's key insights is therefore that it is important to examine banking products separately. Our findings are meaningful for antitrust policy. Instead of using a legal standard for analysing competition that is based on clustering, our findings provide an argument in favour of using a product market definition that is highly disaggregated.

In addition, we report that satisfaction with the current situation is the most important reason to stay at one's bank. The general perception that switching is a hassle, that there is nothing to gain, and the absence of account number portability are also reasons why a substantial proportion of bank customers do not switch.

Regarding the effectiveness of potential policies to increase (the threat of) switching, we find that the reported propensity to switch main current accounts can be increased by introducing account number portability. Improving knowledge of the switching service has no significant effect. To examine respondents' willingness to switch to a new domestic or foreign bank, we randomly divide respondents in four groups and present each group with a

⁴ E.g. the car insurance industry (Antón et al. 2007), landline telecom, home insurance, electricity industry (Gamble et al. 2009; Ek and Söderholm 2008) and the banking sector (i.e. Kiser 2002).

⁵ Research by the European Commission (2012) shows that 10% of the current account holders switched the last five years in The Netherlands, while on average 8% of consumers switched in EU27 countries in the same period. 11% of the North Americans switched to a new financial service provider during March 2015 and March 2016 (Accenture 2016). Note that this proportion does not only include switching with the current account. As a result, it is not surprising that the switching proportion is higher.

different scenario. Based on these scenarios we find that it is especially difficult for new foreign banks to attract savings in the Netherlands. Therefore, a policy aiming at attracting new domestic players seems to be more effective in enhancing mobility than a policy that increases the number of foreign players.

The remainder of the paper is organized as follows: Section 2 provides an overview of the literature. Section 3 describes the survey, switching propensities and barriers that withhold people from switching. Section 4 presents the methodology and shows our estimation results. Section 5 examines the effectiveness of hypothetical policies to increase (the threat of) switching and Section 6 presents our conclusions.

2 Literature

The literature on relationship banking explains that building a relationship with the bank can be beneficial for customers. During the relationship, the bank privately observes information about the customer which can foster flexibility in loan contracts (Boot and Thakor 1994; Von Thadden 1995) and favorable contract terms for the customers (e.g. lower interest rates or less collateral). However, at the same time there are also costs associated with relationship banking. Banks can extract rents as the inside bank has an informational advantage over competing banks (Ioannidou and Ongena 2010). Consequently, the customer is locked-in. This effect will be more pronounced when consumers face switching costs. Switching costs may withhold customers from switching which blocks efficient buyer-selling matching (Farrell and Klemperer 2007).

Few studies empirically examine consumer bank switching behaviour and although consumers hold different banking products with distinct characteristics, these studies focus on the main bank. Kiser (2002) finds that geographic stability is an important factor for having a long-term relationship with the main bank, that switchers are more likely to be “shoppers” who compare prices, and that there is a cohort effect rather than an age effect involved in switching in the US. Chakravarty et al. (2004) address consumers’ propensity to switch and find that personal characteristics are important in explaining switching intentions. Responsiveness, empathy, reliability and relationship duration are significantly negatively related to the propensity to switch, while having experienced problems with the bank positively impacts the propensity to switch. A recent paper from Brunetti et al. (2016) relates the bank-customer relationship to actual switching behaviour using Italian data from 2006 to 2012. The results show that having a relationship with only one bank and having more services with the main bank reduce the propensity to switch. Using Japanese data, Inakura and Shimizutani (2010) investigate the relationship between deposit insurance and bank switching. Respondents who had no knowledge of a change in the deposit insurance cap were less likely to actually switch and also more likely to not consider switching.

Research on switching in other markets also reveals potentially relevant factors. Antón et al. (2007) focus on switching intentions in the car-insurance industry. They find that the perception of unfair prices and experience of anger incidents have more capacity to explain switching intentions than quality and the organisation’s commitment. Focusing on the electricity market, Ek and Söderholm (2008) show that income and education positively impact the intention to switch. Moreover, they find that perceptions about the behaviour of others, social descriptive norms, affect switching intentions. Gamble et al. (2009) study attitudes towards switching within three deregulated markets in Sweden characterised by a homogenous product: electricity, landline telecom, and home insurance. They find that loyalty has a negative effect on the attitude towards switching.

To summarize, the literature on switching emphasises the role of personal characteristics, the bank-customer relationship, knowledge and socio-psychological variables in explaining switching behaviour. This is why we investigate the role of these factors in explaining differences in switching propensities.

We expect to find differences in the propensity to switch across banking products. We predict the propensity to switch to be highest for savings accounts as new accounts are opened quickly, often without costs, and savings are easily transferred to the new account. Consumers who already have more than one savings account, may just transfer their savings to an existing account. We anticipate that the propensity to switch the main current account is lower as it is less easy to switch. Current accounts are often linked to other banking products and if customers switch banks they need to inform others about the new account number. Because of high evaluation and monetary costs we expect the propensity to switch mortgage loans to be lower. Besides, consumers are not always able to obtain a loan at another bank (supply effect). As a result we also expect a lower propensity to switch for revolving credit.

Our research questions not only contribute to the academic literature, they may also yield important implications for policymaking. Differences in switching propensities and the main related factors would provide an argument in favour of using a legal standard for the analysis of competition that is not based on clustering. Amel et al. (2008) explain that the current legal standard for analysing competition in the US views banking markets as geographically local and considers the cluster of financial products. The use of the cluster of banking services has generated less commentary than the use of local geographic banking markets. Both regulators and potential bank acquirers find the use of clusters convenient. The European Commission (2006) also reports that it focuses on retail banking markets as a whole in merger decisions. Without the clustering, antitrust analyses would become more time-consuming and costly. Our study contributes to the discussion on whether products should be considered as being in separate markets.

3 Survey

3.1 Data

We conducted a survey among the CentERpanel, a representative sample of the Dutch-speaking population in the Netherlands, in June 2015.⁶ For each banking product we investigate the propensity that someone will switch to another bank in the upcoming 12 months. The survey also includes questions on past switching behaviour, the bank-customer relationship, barriers that withhold consumers from switching, requirements that a new bank should meet and socio-psychological statements and policies that try to alleviate switching barriers and/or increase (the threat of) switching.⁷

⁶ The Dutch banking sector is characterized by its size and level of concentration. In Europe, only Greece, Estonia, Lithuania and Finland have a more concentrated banking system (DNB 2015b).

⁷ A stumbling block withholding people from switching banks is the time and effort it takes to arrange the switch. To alleviate this burden, in 2004 the Netherlands was the first country to instigate a “switching service” to facilitate switching current accounts. Specifically, it ensures that payments are transferred automatically to the new account for a period of 13 months, and it verifies that direct debits are paid from the new bank account. It also provides an overview of all transferred transactions. Consumers still need to inform others about the new account numbers.

The survey was sent out to 2693 members of the CentERpanel and completed by 2194 respondents, which represents an 81.5% response rate.^{8, 9} For some questions the response rate is higher (up to 83.1%) as 44 panellists partially completed the questionnaire. We merge the survey data with data on personal characteristics from the annual DNB Household Survey (DHS). This survey is filled in by the same respondents, and exists for more than two decades.¹⁰ CentERdata, a research institute affiliated to Tilburg University, manages the CentERpanel.¹¹

3.2 Background information on banking products

The banking products we study are the main current account, savings account, mortgage loan and revolving credit. Around 70% of adults had exactly one current account in 2013, while the average number of accounts is 1.16 (GfK 2014). The current account acts a gateway for other products. As a result the majority of consumers have their current account and deposits at the same bank (GfK 2014). As in many other European countries, bank customers pay a fee for having a current account, ranging between EUR 14.40 and EUR 180 per year (Consumentenbond 2016). However, more than half of consumers are not aware of the costs involved (GfK 2014).

The majority of savings are held at instant-access accounts rather than at term deposits (Competition & Markets Authority 2015b). Interest rates on savings accounts are generally higher in the Netherlands than in surrounding countries, where small Dutch banks offer 50 basis points higher interest rates than large Dutch banks (ACM, 2014). Savings up to EUR 100,000 deposited at almost all banks active in the Netherlands are guaranteed by the European Deposit Guarantee Scheme.

Around 30% of total lending in the Netherlands is in the form of outstanding mortgage loans to households (Competition & Markets Authority 2015b). It is common to have a high loan-to-value ratio due to incentives as the tax relief and the national mortgage guarantee. Between 2010 and 2015 the proportion of households choosing a period of long-term fixed interest rate has increased. In 2015, 68% of the households chose a fixed interest period of at least five years, which was likely to be driven by the low interest rates (DNB 2016).

The average amount of revolving credit was approximately EUR 8000 in 2013 (CEG 2014). Interest rates for revolving credit are generally lower than for overdrafts. The number and total amount of revolving credit has decreased between 2010 and 2013 (CBS 2017).

3.3 The propensity to switch by banking product

Depending on whether they hold the relevant product, we asked survey participants: “*What is the propensity that you will switch within the next twelve months with your main [current account/savings account/mortgage loan/revolving credit]? Fill in a propensity between 0 and*

⁸ The questionnaire is available on request.

⁹ For more information on the CentERpanel, see Teppa and Vis (2012) and <http://www.centerdata.nl/en/projects-by-centerdata/origins-of-the-centerpanel>. URL last accessed on 10 April 2017.

¹⁰ Information on the DHS is available at <http://www.centerdata.nl/en/projects-by-centerdata/dnb-household-survey-dhs>. URL last accessed on 10 April 2017.

¹¹ Previous researchers and policymakers have used the CentERpanel to investigate and ask questions on a broad range of topics. For example, Hurd et al. (2011) investigate stock market expectations, Von Gaudecker (2015) examines households' portfolio diversification, Georgarakos et al. (2014) research the impact of social interactions on debt and Van der Crujssen et al. (2012) study the impact of crisis experiences on savings behaviour.

100 (0% = ‘I will definitely not switch’ and 100% = ‘I will definitely switch’).¹² We prefer to focus on switching propensities rather than yes/no intention questions as Juster (1966) shows in his seminal paper that elicited purchase probabilities are better predictors of subsequent behaviour.¹³ Note that we measure switching between banks. Our interest in switching from one bank to another bank is clarified in the introduction of our questionnaire. Second, we use the Dutch word ‘*overstappen*’, which is used for switching from one company to another. A bank-related example of the use of this word is that the service that helps consumers switch banks is called the ‘*overstapservice*’.

We find that the propensity to switch in the coming year indeed depends on the product in question. Figure 1 shows that the average propensity to switch is the lowest for main revolving credits (5.7%) and mortgage loans (6.4%), slightly higher for main current accounts (6.8%) and the highest for main savings accounts (10.2%). This indicates differences between consumers’ assets and liabilities.¹⁴ The share of respondents who will definitely not switch is high; it ranges from 62.1% for savings accounts to 74.3% for revolving credits. For each banking product, the proportion of consumers who definitely intend to switch is below 1%.¹⁵

The data supports our first hypothesis, which states that the propensity to switch depends on the banking product. Based on t-tests, we find that the propensity to switch savings accounts is significantly higher than the propensity to switch current accounts, mortgage loans and revolving credits (all $p = 0.00$). Focusing on individuals, paired t-tests show that respondents report a significantly higher propensity to switch their main savings accounts than their main current accounts ($p = 0.00$) and main mortgage loans ($p = 0.00$).¹⁶ Table 5 in Appendix 1 reports the results of the paired t-tests.

We find positive and significant correlations between switching propensities (in all cases $p = 0.00$). The correlation is the strongest between the propensity to switch the main current account and the propensity to switch the main revolving credit (0.68). The propensity to switch the main savings account and the propensity to switch the main mortgage loan are the least correlated (0.25).

3.4 Discussion of barriers

Figure 2 gives an overview of potential switching barriers. The figure shows the answers to the question “*There can be different factors withholding you from switching. How important are*

¹² An often expressed concern is whether respondents are able to answer questions about propensities. The CentERpanel is experienced in answering such questions and therefore we believe that the respondents understand the question and are able to answer it. CentERdata has checked the clarity of our survey.

¹³ We refer to Manski (2004) for an overview of the evolution of the literature on probabilistic expectations.

¹⁴ Fischhoff and Bruine de Bruin (1999) indicate that a recorded value of 50% might mean that respondents have no idea (epistemic uncertainty) rather than that they record a quantitative probability. We think this is not a major issue in our case. First, as mentioned before, members of the CentERpanel are used to answering propensity questions. Second, our question clearly indicates what 0% and 100% answers mean. Third, for all banking products, only a small proportion of respondents express a propensity to switch of exactly 50% (ranging from 4.4% for current accounts to 7.6% for savings accounts).

¹⁵ Based on survey data collected in February 2014 GfK concludes that 3% of respondents actually switched banks with their main current account in the last 12 months (GfK 2014). There is no research on bank switching behaviour that examines the gap between intentions and actual behaviour. However, in other fields it is shown that intentions matter for actual behaviour. Other factors are important too. A meta-analysis by Webb and Sheeran (2006) shows that a medium-to-large change in intention results in a small-to-medium change in behaviour.

¹⁶ Paired t-tests compare for the same individual the propensity to switch across products. Consequently the sample is restricted to respondents who have multiple banking products.

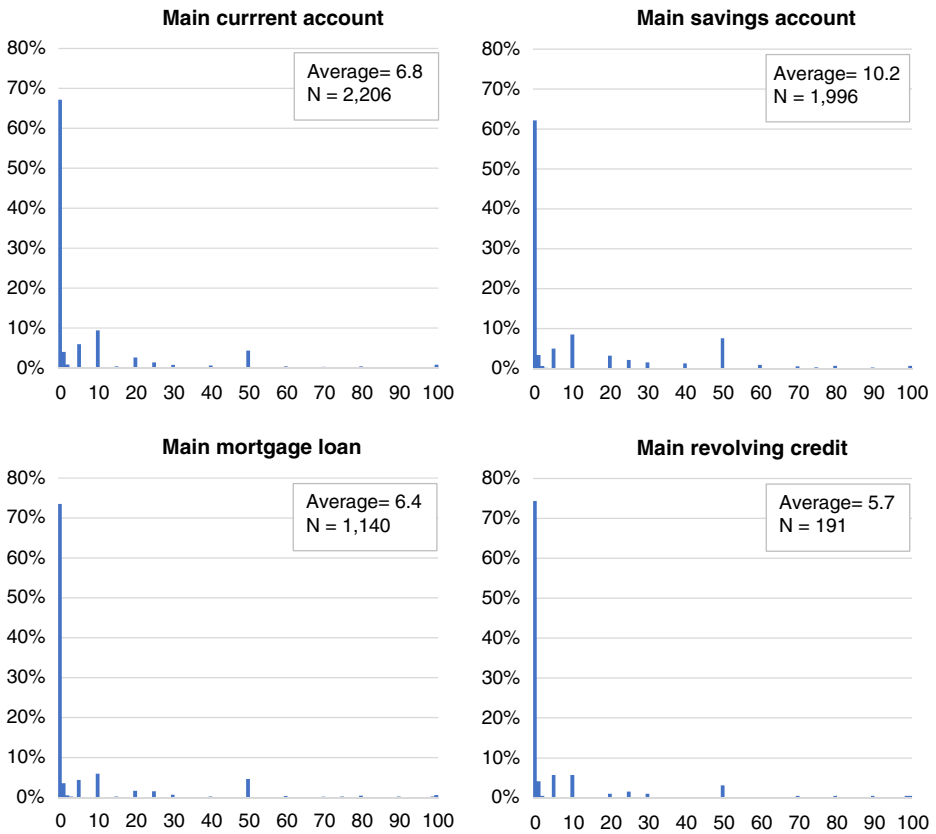


Fig. 1 Propensity to switch in the next twelve months. *Source:* CentERpanel, June 2015. *Note:* This figure also shows the switching propensities of respondents who did not complete the whole survey. 44 respondents started the survey but did not finish it

the factors below?” The statements are unconditional, and therefore we measure the importance of each barrier at this moment, rather than the importance *if* it were a barrier.

We find that for three out of four respondents, satisfaction with the current situation is a very or extremely important factor why people stay at their bank. Other relationship characteristics, like having a long-standing bank-customer relationship and finding it difficult to trust another bank also withhold a substantial group of respondents from switching. A large number of respondents mention that there is not much to gain from switching.

The outcomes also indicate important practical barriers. About half of the respondents state that the absence of account number portability withholds them from switching. A significant proportion of respondents also find switching a hassle and believe that it costs a lot of time and money. A substantial share of respondents find it a difficult choice and are afraid of making the wrong decision.

Table 6 in Appendix 2 looks at differences in the importance of barriers between respondents who will definitely not switch (*switching propensity_p* = 0) and respondents who are considering switching in the coming year (*switching propensity_p* > 0). Regarding all products, we find that for respondents who are considering switching, the relationship with their bank is a less important barrier than it is for respondents who will definitely stay with their current

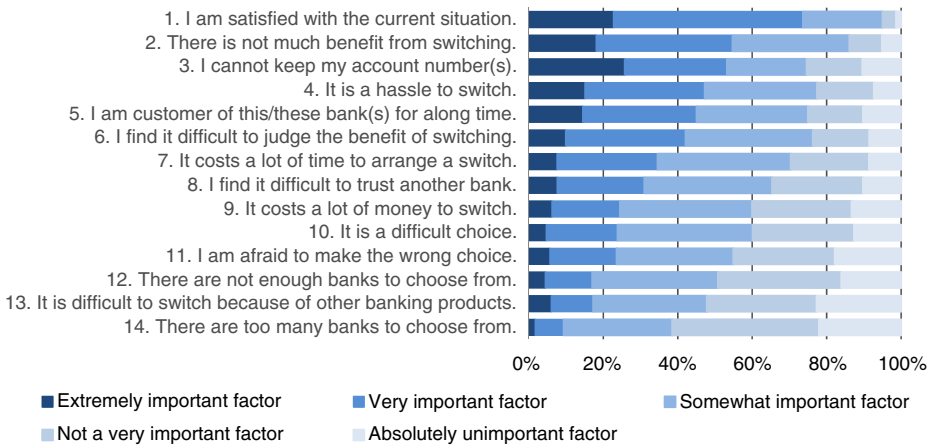


Fig. 2 Barriers to switching. *Source:* CentERpanel, June 2015. *Note:* The figure shows the response shares to the question “There can be different factors withholding you from switching. How important are the factors below?” Factors are ranked based on the average answer

bank. Respondents considering switching their current account find the absence of account number portability, lack of time and insufficient banks to choose from more important barriers than respondents who will definitely not switch their current accounts. The same holds for savings accounts. We clearly find that respondents who report a positive propensity to switch their main mortgage loans (*switching propensity mortgage loan* > 0) perceive the long bank-customer relationship less a barrier than other respondents (*switching propensity mortgage loan* = 0) do.

4 Propensity to switch: regressions

4.1 Methodology

We research the decision to switch banks for each product separately to test whether the variables related to the propensity to switch depend on the banking product. We also examine which factors are most important in explaining variation in switching propensities of the individual banking products. Table 1 shows the estimated coefficients of Tobit regressions, where each column represents the switching propensity of a specific banking product: *current account* (column 1), *savings account* (column 2), *mortgage loan* (column 3), and *revolving credit* (column 4). The dependent variables are the reported propensities to switch banks within the next twelve months (expressed as a percentage). Scores for these dependent variables range between 0 and 100. A large proportion of the observations are at the 0 boundary. Therefore these are corner solution variables and we use the Tobit model.¹⁷

¹⁷ Wooldridge (2002) argues that it makes sense to call the model that fits this type of data well a *corner solution model*. However, in practice the term *censored regression model* is used more often. Wooldridge (2002) argues that a suited method to use for a corner solution dependent variable is the Tobit model (Papalia and Di Iorio 2001). In general, most of our findings are robust with respect to the chosen method.

Table 1 Propensity to switch by banking product: baseline regressions

| | Current account | Savings account | Mortgage loan | Revolving credit |
|---|---------------------|----------------------|---------------------|-----------------------|
| <i>Male</i> | 0.10 (2.10) | -1.27 (2.39) | 1.83 (4.13) | -1.23 (9.56) |
| <i>Between 35 and 44</i> | -0.10 (3.43) | 1.49 (3.93) | -12.79* (6.64) | 18.81 (18.05) |
| <i>Between 45 and 54</i> | 1.59 (3.42) | 1.08 (3.92) | -9.83 (6.89) | 24.92 (19.17) |
| <i>Between 55 and 64</i> | -4.05 (3.47) | -8.02** (3.97) | -25.85*** (7.01) | -7.21 (16.38) |
| <i>65 and over</i> | -15.10*** (3.33) | -17.86*** (3.79) | -27.08*** (7.15) | 7.44 (16.87) |
| <i>Education: bachelor degree or higher</i> | 4.76** (2.08) | 4.50* (2.34) | -6.84* (3.76) | -2.18 (8.14) |
| <i>Income category</i> | -0.17 (0.40) | 0.40 (0.44) | 2.23*** (0.79) | -1.94 (1.69) |
| <i>Degree of urbanisation</i> | 1.40* (0.74) | 0.92 (0.81) | 1.03 (1.36) | 6.65** (3.32) |
| <i>Responsible for household finances</i> | 1.81 (2.11) | 0.85 (2.44) | 0.74 (4.02) | 25.36** (9.97) |
| <i>Not much benefit of switching</i> | -5.02*** (0.95) | -1.21 (1.03) | -2.27 (1.74) | -7.24* (3.94) |
| <i>Recent switching experience_p</i> | 47.52** (18.58) | 23.58*** (5.84) | -11.90 (13.19) | 6.98 (13.88) |
| <i>Older switching experience_p</i> | 1.97 (2.42) | 9.60*** (2.64) | 16.07*** (3.84) | 12.43 (8.82) |
| <i>Other switching experience_p</i> | 3.96* (2.35) | -1.48 (2.63) | 8.25** (3.54) | -3.96 (8.11) |
| <i>Customer loyalty_p</i> | -6.79*** (0.97) | -7.87*** (1.04) | -4.33*** (1.52) | 0.06 (3.67) |
| <i>Number of banks</i> | 0.57 (1.01) | 3.83*** (1.15) | 1.94 (1.78) | 6.69 (5.26) |
| <i>Filed a complaint</i> | 14.49*** (3.40) | 17.19*** (3.85) | -0.49 (5.60) | 7.14 (12.35) |
| <i>Knowledge of banking product_p</i> | -1.41 (2.00) | 9.25*** (2.49) | 1.75 (4.65) | 3.59 (8.81) |
| <i>Knowledge of other banking products_p</i> | 8.94** (4.25) | -9.76** (4.60) | -21.14*** (7.79) | 4.25 (14.18) |
| <i>Knowledge of switching service</i> | -0.31 (1.23) | | | |
| <i>Knowledge of switching service * Recent switching experience current account</i> | -23.30*** (7.88) | | | |
| <i>Knowledge of Deposit Guarantee Scheme</i> | | 5.36* (2.76) | | |
| <i>Perceived control over switching</i> | 5.87*** (1.23) | 4.33*** (1.32) | 2.20 (2.25) | 5.64 (4.50) |
| <i>Degree to which switching is unpleasant</i> | 0.25 (1.11) | 0.08 (1.22) | -2.95 (1.96) | 8.53* (4.45) |
| <i>Injunctive social norms</i> | 5.54*** (1.41) | 2.23 (1.55) | 0.67 (2.25) | 0.81 (5.59) |
| <i>Perceived switching behaviour of others</i> | 1.52 (1.23) | 2.15 (1.37) | -0.66 (2.07) | 0.43 (4.32) |
| <i>Jointly owned banking product_p</i> | 2.18 (1.96) | 1.52 (2.24) | -3.65 (4.19) | 20.22** (9.79) |
| <i>Constant</i> | -27.45*** (9.42) | -32.07*** (10.13) | -6.81 (16.08) | -123.32*** (41.05) |
| <i>Observations</i> | 2086 | 1889 | 1087 | 181 |

This table reports parameter estimates for Tobit regressions. Robust standard errors are in parentheses. The equations are estimated together to allow individual-level errors to be correlated. Variables with subscript p vary per regression. Subscript p indicates the banking product. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

We relate the propensity to switch to potentially relevant factors and postulate that:

$$\text{Switching propensity} = \begin{cases} \text{switching propensity}_{ip}^* & \text{if } 0 < \text{switching propensity}_{ip}^* < 100 \\ 0 & \text{if } \text{switching propensity}_{ip}^* \leq 0 \\ 100 & \text{if } \text{switching propensity}_{ip}^* \geq 100 \end{cases} \quad (1)$$

where *switching propensity*_{ip}^{*} is the latent variable:

$$\text{switching propensity}_{ip}^* = \beta_1 X_i + \beta_2 B_{ip} + \beta_3 E_{ip} + \beta_4 R_{ip} + \beta_5 K_{ip} + \beta_6 S_{ip} + e_{ip} \quad (2)$$

In these equations, *i* denotes the individual and *p* the banking product. We estimate the equations together and allow individual-level errors to be correlated. The vector *X* captures personal characteristics. We include a binary dummy *male* that is 1 for males and 0 for females. Four binary age dummies capture the age: *between 35 and 44*, *between 45 and 54*, *between 55 and 64* and *65 and over*. The reference category consists of people aged 34 or below. The level of education is measured by including the binary dummy variable *education: bachelor degree or higher*. We furthermore include *income category* which captures the gross monthly personal income. Switching propensities may also depend on respondents' place of residence. We therefore include *degree of urbanisation*, which ranges between 1 (rural) and 5 (very urbanised). The last variable included in *X* is *responsible for household finances*, which is a binary dummy that is 1 for respondents who take care of household finances.

As shown in Fig. 1 a large proportion of respondents report a switching propensity of 0%. A potential concern is that these zeros are generated by two distinct data generation processes. Either one foresees no incentive to switch and reports a propensity of 0%, or one foresees an incentive to switch but nevertheless does not intend to do so (for example because one finds it a hassle). To distinguish between the two cases, we control for perceived benefits of switching by including *not much benefit of switching* (vector *B*). This variable ranges between 1 (strongly disagree) and 5 (strongly agree).

Third, the vector *E* includes both recent and non-recent switching experience with the banking product in question, as well as switching experience with other banking products. For each banking product, we construct three binary dummy variables: *recent switching experience*, *older switching experience* and *other switching experience*. *Recent switching experience* is 1 for respondents who switched less than a year ago with the banking product in question, whereas *older switching experience* is 1 for respondents who switched at least a year ago with this product. For respondents who have at any point switched with other banking products, *other switching experience* is set at 1. For all banking products, we find that the vast majority of respondents have never switched banks, a substantial proportion switched longer than a year ago, and only a small proportion report recent switching activities. For revolving credit, we find the highest proportion of respondents without switching experience (73%), whereas the highest proportion of respondents reporting switching experience is for mortgage loans (44%).

Fourth, the vector *R* captures the strength of the bank-customer relationship. The first variable *customer loyalty* measures the perceived strength of the relationship. This variable ranges between 1 (no bond at all) and 5 (very strong bond) and is measured separately for each banking product. Many respondents report having a strong bank-customer relationship. We include *number of banks*, which is a measure of the number of banks. We find that 43% of

respondents bank with one bank only. Lastly, we construct the binary dummy *filed a complaint* that is 1 for consumers who filed a complaint in the three years prior to the survey.

Fifth, we include a vector *K* with product specific knowledge variables. For the current account we include a binary dummy that is 1 for respondents who report to know how much they pay for their main current account including debit cards. We also include *knowledge of switching service*, a variable that measures the extent to which one is familiar with the switching service. For the other three banking products we include binary dummies that capture self-reported knowledge of the interest rate. For the savings account we also construct *knowledge of Deposit Guarantee Scheme*, a binary dummy that is 1 for respondents who state that they know the DGS. In each regression, we also include a variable that captures the knowledge of other banking products. We find that a substantial proportion of bank customers are not fully aware of the costs and benefits of banking products, the switching service and the DGS.¹⁸

Sixth, the vector *S* includes a range of socio-psychological variables that measure the degree of perceived control over switching, joint ownership of the product, social norms (*injunctive social norms* and *perceived switching behaviour of others*), and the extent to which consumers perceive switching as unpleasant. Almost one in five respondents believes that they would not be able to switch if they would want to. We find that joint ownership is the lowest for main current accounts (52% of respondents) and the highest for the main mortgage loans (77% of respondents). Only a small proportion of consumers believe that others whom they want to resemble switch every now and then, and that people who are important to them think they should switch. 50% of the respondents perceive switching as unpleasant. Appendix 3 includes a detailed description of the variables that we constructed and the summary statistics.

4.2 Results

We find that the model provides a better fit than an intercept-only model for the main current account, savings account and mortgage loan (F-test, $p = 0.00$).¹⁹ The regression model of revolving credit is not significant (F-test, $p = 0.40$) so we will not discuss these results.

A wide range of variables from all six factors significantly explains variation in switching propensities, and both the sign and significance level of these variables depend on the banking product in question. Although we do not necessarily identify causal effects, our regressions reveal interesting correlations.

First of all, we find that the propensity to switch is significantly related to various socio-economic variables. There is a negative age effect for all three products. For example, the predicted propensity to switch the current accounts is 9.1% for people aged 34 or below and 4.8% for people in the highest age bracket.²⁰ This negative age effect is in line with studies on switching in banking and health insurance (Chakravarty et al. 2004; Inakura and Shimizutani 2010; Frank and Lamiraud 2009).

¹⁸ This finding is related to the results of Van der Crujssen et al. (2011), who show that consumers gather little information on the bank and product before choosing a savings product.

¹⁹ Note that multicollinearity is not a problem in our regressions. The mean Variance Inflation Factor (VIF) ranges between 1.48 and 1.99. The minimum VIF found is 1.05 and the maximum is 5.08. As a rule of thumb a VIF smaller than 10 is fine.

²⁰ To obtain the predicted propensity to switch the current account, we make a prediction for every respondent while setting the variable *65 and over* at 1 and the other age dummies at 0. The average of these predictions is the predicted propensity to switch for respondent aged 65 or above. All predictions below zero are set to 0 and all predictions above 100 are set to 100.

In addition, people with a high degree of education are more likely to switch their main current account and savings account than people without a bachelor degree or higher. The opposite holds for the propensity to switch mortgage loans. Income is positively related to the reported propensity to switch the main mortgage loan provider.

We also find that consumers living in urbanised regions are more likely to switch their current account than consumers in rural areas. A plausible explanation is that some consumers find it important to have a physical bank branch nearby. However, in the Netherlands there are fewer banks in rural areas than in urbanised regions and the distance to the closest bank branch is further (National Forum on the Payment System 2016a). To the extent that this is causing the lower switching propensity in rural areas, it provides an argument in favour of preserving local bank branches in rural areas or improving online banking if one wants to strengthen (the threat of) switching. This finding is in line with Brunetti et al. (2016) who report a negative effect of bank market concentration on switching.

As in Chakravarty et al. (2004), Ek and Söderholm (2008) and Brunetti et al. (2016) we do not find a gender effect. There is also no difference between people who are responsible for household finances and those who are not.

Second, switching propensities are related to the perceived benefits of switching. This relationship is significant for the current account. The predicted propensity of switching is 9.9% for people who disagree with the statement that there is not much benefit from switching, and 6.6% for people who agree with this statement.

Third, we confirm the positive relationship between switching experience and the propensity to switch documented in Chakravarty et al. (2004). The predicted propensity of switching main savings accounts in the coming year is 20.8% for consumers with recent experience, whereas it is 9.9% for consumers who did not switch these accounts in the past year. Regarding main current accounts, we also find that consumers who switched less than a year ago report a higher propensity to switch in the coming year. This effect is stronger for people unfamiliar with the switching service. For mortgage loans it is not the recent experience that counts, but the experience of having switched more than a year ago. This is intuitive given the long maturity of mortgage loans and the switching penalty. Experience in switching other banking products also matters for current accounts and mortgage loans.²¹

Fourth, switching propensities are related to the strength of the bank-customer relationship. In the case of all banking products, consumers who feel a strong bond with their bank report a significantly lower propensity to switch than respondents who feel a weak bond or no bond at all. To illustrate the strength of the effect, the predicted propensity to switch their main current account is 9.3% for consumers who feel a poor bond with the bank where they hold their main current account, whereas it is only 5.2% for consumers who feel a strong bond. We furthermore find a positive relationship between the number of bank-customer relationships and the reported propensity to switch main savings accounts. This is in line with Brunetti et al. (2016) who report a positive relationship between having multiple bank relationships and switching the main bank in general. In addition, we find that consumers who contacted their bank in the

²¹ We cannot rule out the possibility that an omitted variable explains both switching experience and switching propensities. Furthermore, in case of knowledge there may be reverse causality or an omitted factor driving both knowledge and switching propensities. We ran additional regressions excluding experience and knowledge. Our findings are robust. We find the same variables to be related to switching propensities as in the baseline analysis, with two exceptions: (1) *perceived switching behaviour of others* is significantly positive related to the propensity to switch savings, and (2) *between 35 and 44* is no longer significantly related to the propensity to switch mortgages. The results are available upon request.

past three years to file a complaint report a significantly higher propensity to switch main current and savings accounts than consumers without complaints.

Fifth, switching propensities are also related to knowledge of banking products. The propensity to switch savings accounts is higher for consumers who know by heart the interest rate they currently receive than for other consumers. The predicted propensity to switch is 11.5% for the first group and 8.3% for the second group. This finding is in line with Van der Crujssen et al. (2012) who show that consumers who consider themselves knowledgeable about financial matters are more likely to have savings accounts at multiple banks. Knowledge of the DGS is positively related to the propensity to switch main savings accounts. Compared to the effects of other variables in the model, this effect is rather small. The difference in the predicted switching probability is 1.9 percentage points. Knowledge of other banking products has a mixed effect on the propensity to switch. The effect is positive for the main current account but negative for the main savings account and mortgage loan.

Lastly, the propensity to switch is also related to socio-psychological factors. Consumers who agree with the statement *“If I want, I can switch to another bank”* are more likely to switch their main current account and savings account than consumers who disagree with this statement. For example, with respect to the current account we find that people who strongly agree with this statement have a predicted propensity to switch of 9.2%, while the predicted propensity to switch for people who neither agree nor disagree with this statement is 5.6%. We also find that consumers who agree with the statement that switching is unpleasant are less likely to switch their main mortgage provider than consumers who disagree with this statement. In addition, injunctive social norms significantly relate to the propensity to switch current accounts. The predicted propensity is 7.5% for consumers who disagree with the statement *“I believe that most people who are important to me think that I should switch to another bank”* and 11.5% for consumers who agree with this statement. Perceptions of the behaviour of people who one wants to resemble do not significantly matter. This is in contrast to findings of Ek and Söderholm (2008) who report that behaviour of others positively affects switching electricity suppliers in Sweden. Lastly, we find that the propensity to switch is the same for people with joint banking products and single users.

In short, we conclude that for all banking products a wide range of factors are related to the reported propensities to switch the current account, savings account and mortgage loan and that the strength of the relationships depend on the banking product. For all three banking products, we find that personal characteristics, the strength of the bank-customer relationship, switching experience, and knowledge of banking products are related to the propensity to switch. In addition, perceived benefits are related to the propensity to switch the current account and socio-psychological factors matter for both the propensity to switch the current account and savings account.

To examine the importance of each of the six factors of our model, we regress switching propensities on the variables belonging to each of the six factors of our model separately and measure the relative quality of the models by assessing Akaike’s Information Criterion (AIC, Akaike 1974). The results are presented in Appendix 4.

The most important factors related to switching propensities depend on the banking product. The bank-customer relationship is most important in explaining variation in the propensity to switch current accounts, followed by socio-psychological factors. The bank-customer relationship is also the main factor explaining the propensity to switch savings accounts. This finding is in line with studies that show that the bank-customer relationship is important in financial decision making (Brunetti et al. 2016; Brown et al. 2016). Switching

experience is the second most important factor for the savings account and the most important factor for mortgage accounts. The factor that ranks second in explaining variation in mortgage loan switching propensities is personal characteristics.²²

4.3 Robustness

As a first robustness test, we present the outcomes of regressions which excludes all respondents who state that “*satisfaction with the current situation*” is an extremely important factor that withholds them from switching. Although unforeseen circumstances may trigger a switch, the incentive to switch and the reported propensities to switch are lower for this group of respondents than for other respondents. Table 2 presents the regression results. Overall, we find that most of our results are robust to the exclusion of respondents with the weakest incentive to switch. There are only a few coefficients that have become insignificant: *education: bachelor degree or higher* in case of the savings account regression, and *between 35 and 44* and *income category* in the mortgage loan regression.

Second, as responses are skewed we make bin switching probabilities (0–20 20–40, 40–60, 60–80 and 80–100) and estimate ordered logits and find that most of our baseline results are robust.²³ There are a few exceptions. For the current account switching propensities are no longer related to *education: bachelor or higher*, *other switching experience* and *knowledge of other banking products*. Regarding the savings account, we now find insignificant coefficients for *between 55 and 64*, *education: bachelor degree or higher*, *knowledge of other banking products* and *knowledge of DGS*. We do find a significant coefficient for *injunctive social norms* now. With respect to switching propensities for mortgage loans we find significant coefficients for *not much benefit of switching* and *degree to which switching is unpleasant*, and an insignificant coefficient for *other switching experience*. Moreover, this robustness exercise tells us that the size of the effects we found in our baseline analysis are plausible, and it confirms that the strength of the relationships can be substantial.^{24, 25}

Third, we add background variables distilled from DNB’s annual Household Survey. The number of observations is substantially lower in these cases because these background characteristics are not available for all participants in our survey. As a first exercise, we include risk aversion and find a negative relationship between the level of risk aversion and the propensity to switch for all banking products. Most other relationships still hold.²⁶ Additional robustness analyses show no significant relationship between self-assessed financial knowledge or change in relative trust in the bank and the propensity to switch. For revolving credit the model becomes significant if we add the variables risk aversion, self-

²² We do not discuss the outcomes for the propensity to switch for the main revolving credit as all models are insignificant. The results are available upon request.

²³ The results of all robustness analyses are available upon request.

²⁴ For example, the strong effect of switching experience is confirmed. Compared to people without recent switching experience, people with recent switching experience are 16 percentage points less likely to report a switching propensity between 0% and 20%, 4 percentage points more likely to report a switching propensity between 20% and 40%, 8 percentage points more likely to report a switching propensity between 40% and 60%, and 2 percentage points more likely to report a switching propensity between 60% and 80% or between 80% and 100%.

²⁵ As additional robustness tests we have also estimated (1) Tobit regressions with log-transformed dependent variables, and (2) fractional response logit models. The results of the robustness analyses are available on request.

²⁶ *Education: bachelor degree or higher* is no longer significant for the current and savings account. *Between 45 and 54* and *knowledge DGS* lose significance in the specification of the main savings account. *Between 45 and 54* is now significant in the specification of mortgage loans.

Table 2 Propensity to switch by banking product: excluding extremely satisfied customers

| | Current account | Savings account | Mortgage loan | Revolving credit |
|---|----------------------|----------------------|---------------------|----------------------|
| <i>Male</i> | -1.25 (2.29) | -3.25 (2.60) | 5.55 (4.36) | 3.84 (11.53) |
| <i>Between 35 and 44</i> | -0.48 (3.70) | 1.55 (4.34) | -9.98 (6.86) | 13.61 (26.07) |
| <i>Between 45 and 54</i> | 0.72 (3.61) | 0.67 (4.18) | -9.13 (7.15) | 23.88 (26.95) |
| <i>Between 55 and 64</i> | -5.49 (3.73) | -8.01* (4.35) | -23.74*** (7.15) | -12.10 (24.41) |
| <i>65 and over</i> | -15.52*** (3.58) | -18.14*** (4.15) | -25.74*** (7.39) | -1.36 (25.23) |
| <i>Education: bachelor degree or higher</i> | 4.38* (2.27) | 3.77 (2.56) | -7.66* (4.08) | -8.76 (10.36) |
| <i>Income category</i> | -0.11 (0.43) | 0.42 (0.48) | 1.33 (0.85) | -2.11 (1.92) |
| <i>Degree of urbanisation</i> | 1.78** (0.81) | 1.04 (0.88) | 0.79 (1.47) | 6.76* (3.82) |
| <i>Responsible for household finances</i> | 1.27 (2.29) | 1.54 (2.65) | 1.11 (4.28) | 23.74** (10.97) |
| <i>Not much benefit of switching</i> | -4.94*** (1.11) | -0.36 (1.22) | -0.68 (2.06) | -6.59 (4.57) |
| <i>Recent switching experience_p</i> | 41.27* (21.51) | 24.23*** (6.28) | -13.24 (16.00) | 7.55 (14.13) |
| <i>Older switching experience_p</i> | 2.20 (2.60) | 6.81** (2.85) | 17.63*** (4.06) | 7.45 (11.71) |
| <i>Other switching experience_p</i> | 3.98 (2.47) | 0.70 (2.80) | 7.56** (3.75) | 1.59 (10.25) |
| <i>Customer loyalty_p</i> | -5.06*** (1.07) | -6.49*** (1.16) | -2.98* (1.67) | 2.28 (4.41) |
| <i>Number of banks</i> | 0.10 (1.10) | 2.11* (1.28) | 2.82 (1.97) | 5.28 (5.53) |
| <i>Filed a complaint</i> | 14.59*** (3.54) | 16.77*** (4.03) | 2.07 (5.81) | -14.03 (18.89) |
| <i>Knowledge of banking product_p</i> | -1.68 (2.14) | 10.58*** (2.68) | 3.33 (4.80) | 13.77 (11.34) |
| <i>Knowledge of other banking products_p</i> | 10.71** (4.53) | -9.51* (5.03) | -18.92** (8.06) | 0.65 (18.33) |
| <i>Knowledge of switching service</i> | -0.77 (1.33) | | | |
| <i>Knowledge of switching service * Recent switching experience current account</i> | -21.49** (9.49) | | | |
| <i>Knowledge of Deposit Guarantee Scheme</i> | | 5.99** (3.05) | | |
| <i>Perceived control over switching</i> | 7.02*** (1.42) | 5.47*** (1.57) | 2.22 (2.59) | 3.39 (5.43) |
| <i>Degree to which switching is unpleasant</i> | 0.37 (1.26) | 0.13 (1.40) | -1.44 (2.22) | 8.55 (5.57) |
| <i>Injunctive social norms</i> | 5.28*** (1.60) | 1.66 (1.77) | 1.78 (2.51) | 6.47 (6.51) |
| <i>Perceived switching behaviour of others</i> | 0.67 (1.40) | 1.66 (1.57) | -2.10 (2.23) | -4.19 (5.55) |
| <i>Jointly owned banking product_p</i> | 3.46 (2.14) | 1.82 (2.46) | -0.01 (4.54) | 31.78*** (11.37) |
| <i>Constant</i> | -31.50*** (10.61) | -36.11*** (11.44) | -23.38 (18.08) | -125.64** (51.44) |
| <i>Observations</i> | 1609 | 1447 | 846 | 139 |

This table reports parameter estimates for Tobit regressions. The sample excludes respondents who indicate that satisfaction with the current situation is an extremely important factor that withholds them from switching and respondents who do not report the degree of satisfaction. Robust standard errors are in parentheses. The equations are estimated together to allow individual-level errors to be correlated. Variables with subscript p vary per regression. Subscript p indicates the banking product. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

assessed knowledge or change in relative trust. Consumers who believe that their financial knowledge is adequate are less likely to switch their main revolving credit than consumers who perceive their knowledge to be poor.

The balance on the main savings account is positively related to the propensity to switch this account. A variable that measures to what extent people save with the goal to generate interest income is not significantly related to the propensity to switch the savings account. The value of the mortgage loan has a positive but insignificant sign if included in the regression with the mortgage switching propensity. We do not find a significant effect on the propensity to switch of a year-on-year change in the trust in one's own bank compared to other banks.

Fourth, we take into account whether customers have different types of banking products at the same bank. Brown et al. (2016) report that customers are less likely to withdraw from a distressed bank when they have a loan linkage with this bank. In the specification of current accounts we include two dummy variables representing whether one has a mortgage loan and/or a savings account. We do not find a significant difference in the propensity to switch between consumers with a mortgage and/or a savings account and consumers without these accounts. To guarantee that the savings account and mortgage loan are held at the same bank as the current account, we restrict the sample to respondents who bank with only one bank in a next specification. Again we do not find significant effects for having a savings account or a mortgage loan.

5 Effectiveness of policies to increase (the threat of) switching

In this section, we address the last research question by discussing the effectiveness of three different hypothetical policies to increase (the threat of) switching: attracting new foreign banks, increasing knowledge of the switching service and introducing account number portability.

5.1 Attracting new banks

A first potential way to increase (the threat of) switching is to enhance the benefits of switching by allowing new banks to enter the market. For this policy to be effective, customers should be willing to switch to new banks, which can either be domestic or foreign. Six out of ten of our respondents indicate they are not willing to switch to a foreign bank.²⁷ To examine this issue in more detail, we perform a scenario analysis for the savings account.

This scenario analysis confirms that it will be more difficult for new foreign banks than new domestic banks to attract new customers. A policy of allowing new foreign banks to enter the savings market is less promising for enhancing mobility than a policy that increases the number of domestic players. Table 3 shows the outcomes of the four cases. Respondents were randomly assigned to one of these. The question was: "*Suppose you have a savings account with a balance of EUR 25,000 at a Dutch*

²⁷ Previous studies have shown that consumers prefer domestic products. For more information on this topic see Siamagka and Balabanis (2015).

Table 3 Home bias in bank switching behaviour

| | Deposit insurance text | Certainly not | Probably not | Neutral | Probably yes | Certainly yes | Mean score | N |
|--------------|------------------------|---------------|--------------|---------|--------------|---------------|------------|-----|
| Dutch bank | no | 8% | 25% | 33% | 28% | 7% | 3 | 564 |
| Foreign bank | no | 26% | 39% | 21% | 13% | 1% | 2.2 | 577 |
| Difference | | -18% | -15% | 12% | 15% | 6% | 0.8*** | |
| Dutch bank | yes | 7% | 21% | 27% | 35% | 10% | 3.2 | 536 |
| Foreign bank | yes | 22% | 31% | 23% | 19% | 5% | 2.5 | 522 |
| Difference | | -15% | -11% | 5% | 16% | 5% | 0.7*** | |

Source: CentERpanel, June 2015

The question was: “Suppose you have a savings account with a balance of EUR 25,000 at a Dutch bank. You receive 1% interest on your savings (EUR 250 per year). A new [Dutch/foreign] bank, Bank B, enters the market and offers 2% interest (EUR 500 per year). [If the bank goes bankrupt, you will get your money back.] Would you switch?” N = number of respondents. *** $p < 0.01$

bank. You receive 1% interest on your savings (EUR 250 per year). A new [Dutch/foreign] bank, Bank B, enters the market and offers 2% interest (EUR 500 per year). [If the bank goes bankrupt, you will get your money back.] Would you switch?” Respondents indicated the propensity to switch to a new entrant that offers a higher interest rate for savings. Depending on the scenario, the new entrant was either a Dutch or a foreign bank and the accompanying text included the line “If the bank goes bankrupt, you will get your money back” or not. Table 3 shows that consumers are significantly less likely to switch to a foreign bank than to a Dutch bank. Respondents who received the scenario with the text “If the bank goes bankrupt, you will get your money back” report a significantly higher propensity to switch than respondents who received the question without this text ($p < 0.01$). However, there remains a significant difference in the propensity to switch to domestic and foreign banks.²⁸

5.2 Increasing knowledge of the switching service

A second route to enhance (the threat of) switching is by better informing customers of the “switching service”. This service was introduced in the Netherlands in 2004 to make current account switching easier. The service ensures that payments are automatically transferred to the new account for 13 months after the switch and that direct debits are paid from the new bank account. It also provides an overview of all transferred transactions.²⁹ However, not all consumers are aware of the switching service. To test the impact of better knowledge of the switching service on the reported switching propensities, we informed respondents about this service. After this explanation respondents who reported that they did not know of this service, or did not know exactly what it entails, were again asked to report their switching

²⁸ Note that in these scenarios consumers know the ultimate owner of the bank, while in practice not all consumers may know whether their bank is foreign or domestically owned.

²⁹ Although the switching service provides a framework to facilitate switching, customers need to inform third parties about their new account numbers.

propensity. We find that on average the reported switching propensity is not significantly higher after the explanation, see Table 4.³⁰

5.3 Reducing the hassle: account number portability

The last potential policy to increase (the threat of) switching that we examine is introducing account number portability. Although the switching service makes switching easier, customers still have to inform third parties of their new account number. Account number portability does not currently exist but would enable account holders to retain their current account numbers when switching to a new bank. Although account number portability would not eliminate all aspects of switching costs, Table 4 reveals that the average reported propensity to switch significantly increases in the hypothetical case of number portability. The effect is the strongest for respondents who are aware of what the switching service provides.³¹ More research is needed to evaluate whether the benefits of account number portability outweigh the costs involved due to technical complexity and to learn to what extent consumers' attitudes change if they have to pay for account number portability.

6 Conclusions

Policymakers argue for more competition in the banking sector to improve efficiency of banking services. However, consumer inertia can impose a barrier for new entrants and can lower competition among current players (ACM, 2014). Despite its relevance, little is known about consumers' switching behaviour.

This paper provides detailed insight into consumers' bank switching behaviour. Although our research focuses on the Netherlands, the questions we raise apply broadly to other countries as well. By conducting a survey among a representative panel of consumers, we retrieve a unique dataset that enables us to study switching intentions, barriers to switching, factors related to switching intentions and the effectiveness of hypothetical policy initiatives to ease switching.

We contribute to the existing literature in several ways. First, we show that the propensity to switch differs across banking products, with the propensity to switch the main savings account to be highest. Second, we provide insight in barriers that withhold consumers from switching. Satisfaction with the current situation is the most often mentioned reason for staying at one's

³⁰ The question was: "*The switching service entails that the first thirteen months after switching to another bank, payments are automatically redirected to your new current account. Payments based on direct debit will be directly withdrawn from your new account. In addition, your statement of account includes an overview of all redirected transactions. You also have to arrange some things yourself, for example applying for a debit card, credit card and online banking at the new bank and informing people and companies that pay money into your account about your new account number. You indicated a likelihood of switching within 12 months with your main current account of x%. What is the likelihood that you will switch within 12 months with your main current account now that you know (more) about the switching service? Fill in a percentage between 0 and 100 (0% = "I will certainly not switch" and 100% = "I will certainly switch").*"

³¹ The question was formulated as follows: "*Currently, if you want to switch your current account you can't keep your current account number. Account number portability means that bank customers can keep their current account number when they switch banks. You indicated a likelihood of switching within 12 months your main current account of x%. What is the likelihood that you will switch within 12 months your main current account if you were able to keep the account number? Fill in a percentage between 0 and 100 (0% = "I will certainly not switch" and 100% = "I will certainly switch").*"

Table 4 Effectiveness of improving knowledge and reducing hassle

| | Average switching propensity (in %) | Percentage of respondents who report a switching propensity of... | | | N |
|---|-------------------------------------|---|----------|------------|------|
| | | ...0%. | ...100%. | ... ≥ 50%. | |
| All respondents | | | | | |
| Current situation | 6.8 | 67.1 | 0.8 | 6.7 | 2206 |
| In case of account number portability after explanation switching service | 13.3*** | 58.1 | 2.3 | 13.7 | 2205 |
| People unaware of the switching service | | | | | |
| Current situation | 5.8 | 70.4 | 0.6 | 5.6 | 895 |
| After explanation of switching service | 7.0 | 66.4 | 0.6 | 6.1 | 895 |
| After explanation and account number portability | 10.7*** | 62.9 | 1.3 | 10.8 | 895 |
| People unaware of the content of the switching service | | | | | |
| Current situation | 8.0 | 60.9 | 0.6 | 8.3 | 654 |
| After explanation of switching service | 8.9 | 56.9 | 0.5 | 8.4 | 654 |
| After explanation and account number portability | 15.8*** | 48.9 | 1.8 | 15.0 | 654 |
| People aware of the content of the switching service | | | | | |
| Current situation | 7.0 | 68.9 | 1.4 | 6.7 | 657 |
| In case of account number portability after explanation switching service | 14.4*** | 60.7 | 4.1 | 16.2 | 656 |

Source: CentERpanel, June 2015

This table shows the reported propensity that someone will switch within twelve months with their main current account before and after the switching service was explained to them. It also shows the effect of the hypothetical case of account number portability on the reported propensity to switch. N = the number of respondents. We have tested whether the difference in reported switching probabilities is significant. *** $p < 0.01$

bank. The perceptions that switching is a hassle, that there is nothing to gain, and the absence of account number portability are also withholding a substantial proportion of respondents from actually switching.

Third, we reveal that a wide range of variables is related to switching propensities, and that both the sign and significance level of these variables depend on the banking product in question. Consumers' differences in the propensity to switch their main current accounts are best explained by differences in the strength of the bank-customer relationship and socio-psychological factors. The bank-customer relationship is also the most important factor for the propensity to switch their main savings accounts. In contrast, switching experiences play the most important role explaining variations in the propensity to switch mortgage loans.

One of the key policy implications of our research is that it is important to view banking products separately. This finding gives guidance for designing antitrust policy. It provides an argument against using a legal standard for the analysis of competition that is based on clustering, as is done by the Federal Reserve (2014) and European Commission (2006), and in favour of using a product market definition that is highly disaggregated.

Another finding with potential policy implications is that local banking competition matters for the current account. Consumers living in urbanised regions are more likely to switch their current account than consumers in rural areas. A plausible explanation is that some consumers find it important to have a physical bank branch nearby and there are fewer banks in rural areas (National

Forum on the Payment System 2016a). To the extent that this is causing the lower switching propensity in rural areas, it provides an argument in favour of preserving local bank branches in rural areas or improving online banking if one wants to strengthen (the threat of) switching.

Last, we show the effectiveness of potential policies to increase (the threat of) switching, thereby providing policymakers with initial guidelines. We find that consumers are less willing to switch their savings account to a new foreign bank than to a new domestic bank. This suggests that a policy of allowing new foreign banks to enter the savings market is less promising in enhancing mobility than a policy that increases the number of domestic players. Regarding the main current account, our research indicates that reported switching propensities do not significantly change as a result of better knowledge of the switching service. We also test the hypothetical effect of account number portability. Introducing account number portability seems to be a more promising policy avenue.

We will leave it to future research to provide insight into time patterns and to what extent various events and technological developments, such as the increase in electronic banking, affect switching behaviour. We also welcome studies that include non-banks in the analysis, given the rise of non-banks executing banking activities, e.g. credit unions providing loans and technology companies providing payment services. It would also be interesting to analyse the gap between switching propensities and actual switching behaviour.

Acknowledgements We thank three anonymous referees for careful reading of the manuscript and their feedback and suggestions. We are furthermore grateful for discussions with Yvonne Adema, Marieke Bos, Hans Brits, Jakob de Haan, David-Jan Jansen, Olivier De Jonghe, Nicole Jonker, Rein Kieviet, Joris Knobben, Maarten van Rooij, Helmut Stix, Ayse Zoodsma and seminar participants at Tilburg University, the Netherlands Economist Day, De Nederlandsche Bank, the DNB Payments Conference 2016, the IBEFA summer meeting 2016, the 15th TIBER Symposium on Psychology and Economics and the Research in Behavioral Finance Conference 2016. We thank Miquelle Marchand (CentERdata) for arranging the survey and Gareth Budden and Renée Dekker for linguistic services. The views expressed in this paper do not necessarily reflect the views of De Nederlandsche Bank or those of the Eurosystem.

Appendix 1. Comparison of switching propensities

Table 5 Paired t-tests to compare reported switching propensities across banking products

| | Average switching propensity (in %) | Difference | t-value | P-value | N |
|-----------------------|-------------------------------------|------------|---------|---------|------|
| Main current account | 6.7 | -3.51 | -10.20 | 0.00 | 1988 |
| Main savings account | 10.3 | | | | |
| Main current account | 7.3 | 0.90 | 1.52 | 0.13 | 1138 |
| Main mortgage loan | 6.4 | | | | |
| Main current account | 6.4 | 0.65 | 0.65 | 0.51 | 189 |
| Main revolving credit | 5.8 | | | | |
| Main savings account | 11.4 | 4.97 | 6.89 | 0.00 | 1074 |
| Main mortgage loan | 6.4 | | | | |
| Main savings account | 8.0 | 1.74 | 1.26 | 0.21 | 164 |
| Main revolving credit | 6.3 | | | | |
| Main mortgage loan | 5.4 | -1.37 | -0.79 | 0.43 | 128 |
| Main revolving credit | 6.8 | | | | |

This table shows the results of paired t-tests. The column “difference” shows the difference in average switching propensity for the products in question. The column “t-value” shows the t-value of testing whether the difference is equal to zero, while the column “p-value” reports the according p-value of this test. N denotes the number of observations

Appendix 2. Barriers to switching

Table 6 Barriers to switching: results for different groups of respondents

| | Current account | | | Savings account | | | Mortgage loan | | | Revolving credit | | | |
|--------------------|--|--|------|--|--|------|--|--|------|---|---|------|----|
| | Switching propensity current account = 0 | Switching propensity current account > 0 | Mean | Switching propensity savings account = 0 | Switching propensity savings account > 0 | Mean | Switching propensity mortgage loan = 0 | Switching propensity mortgage loan > 0 | Mean | Switching propensity revolving credit = 0 | Switching propensity revolving credit > 0 | Mean | N |
| Satisfaction | 4.0 | 3.6*** | 718 | 4.0 | 3.7*** | 744 | 3.9 | 3.8* | 299 | 3.9 | 3.7 | 140 | 48 |
| Difficult | 2.7 | 2.8 | 718 | 2.7 | 2.8 | 744 | 2.7 | 2.7 | 299 | 2.6 | 2.8 | 140 | 48 |
| Time | 3.0 | 3.2*** | 718 | 3.0 | 3.2*** | 744 | 3.1 | 3.1 | 299 | 2.8 | 3.1 | 140 | 48 |
| Costs | 2.8 | 2.8 | 718 | 2.8 | 2.8 | 744 | 2.8 | 2.8 | 299 | 2.7 | 2.6 | 140 | 48 |
| Not enough banks | 2.5 | 2.6*** | 718 | 2.5 | 2.7*** | 744 | 2.6 | 2.5 | 299 | 2.6 | 2.4 | 140 | 48 |
| Too many banks | 2.3 | 2.2** | 718 | 2.3 | 2.2 | 744 | 2.2 | 2.2 | 299 | 2.2 | 2.2 | 140 | 48 |
| Hassle | 3.2 | 3.5*** | 718 | 3.2 | 3.5*** | 744 | 3.4 | 3.4 | 299 | 3.1 | 3.5*** | 140 | 48 |
| Regret aversion | 2.7 | 2.6 | 718 | 2.7 | 2.7 | 744 | 2.6 | 2.6 | 299 | 2.5 | 2.6 | 140 | 48 |
| Low benefit | 3.6 | 3.4*** | 718 | 3.6 | 3.5 | 744 | 3.6 | 3.5 | 299 | 3.3 | 3.3 | 140 | 48 |
| Long relationship | 3.4 | 2.8*** | 717 | 3.5 | 2.9*** | 744 | 3.3 | 2.8*** | 299 | 3.4 | 3.0** | 140 | 48 |
| Benefit unclear | 3.2 | 3.2 | 717 | 3.2 | 3.2 | 744 | 3.2 | 3.1 | 299 | 3.1 | 3.3 | 140 | 48 |
| Trust difficult | 3.0 | 2.9 | 717 | 2.9 | 2.9 | 744 | 2.9 | 2.8 | 299 | 2.9 | 3.0 | 140 | 48 |
| Number portability | 3.4 | 3.6*** | 717 | 3.4 | 3.6*** | 744 | 3.5 | 3.3 | 299 | 3.2 | 3.7*** | 140 | 48 |
| Other products | 2.5 | 2.5 | 717 | 2.5 | 2.5 | 744 | 2.6 | 2.6 | 299 | 2.7 | 2.8 | 140 | 48 |

Source: CentERpanel, June 2015

We refer to Fig. 2 for a complete description of the barriers. N = the number of respondents. We tested whether differences in mean reported switching propensities are significant. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Appendix 3. Description of variables

Table 7 Description of variables

| Variable | Description | Mean | Sd | Min | Max | N |
|--|---|------|-------|-----|-----|------|
| Dependent variables | | | | | | |
| <i>Switching propensity current account</i> | Propensity to switch within the next twelve months with main current account (%). | 6.68 | 16.54 | 0 | 100 | 2086 |
| <i>Switching propensity savings account</i> | Propensity to switch within the next twelve months with main savings account (%). | 9.98 | 19.79 | 0 | 100 | 1889 |
| <i>Switching propensity mortgage loan</i> | Propensity to switch within the next twelve months with main mortgage loan (%). | 6.34 | 17.03 | 0 | 100 | 1087 |
| <i>Switching propensity revolving credit</i> | Propensity to switch within the next twelve months with main revolving credit (%). | 5.85 | 17.15 | 0 | 100 | 181 |
| Personal characteristics (X) | | | | | | |
| <i>Male</i> | Binary dummy (1 = male, 0 = female). | 0.53 | 0.50 | 0 | 1 | 2093 |
| <i>34 and below</i> | Binary dummy (1 = 34 or below, 0 = else). | 0.11 | 0.31 | 0 | 1 | 2093 |
| <i>Between 35 and 44</i> | Binary dummy (1 = between 35 and 44, 0 = else). | 0.17 | 0.38 | 0 | 1 | 2093 |
| <i>Between 45 and 54</i> | Binary dummy (1 = between 45 and 54, 0 = else). | 0.16 | 0.37 | 0 | 1 | 2093 |
| <i>Between 55 and 64</i> | Binary dummy (1 = between 55 and 64, 0 = else). | 0.22 | 0.41 | 0 | 1 | 2093 |
| <i>65 and over</i> | Binary dummy (1 = 65 or older, 0 = else). | 0.34 | 0.47 | 0 | 1 | 2093 |
| <i>Education: bachelor degree or higher</i> | Successful completion of higher vocational education and/or university education. Binary dummy (1 = graduate level diploma, 0 = else). | 0.37 | 0.48 | 0 | 1 | 2093 |
| <i>Income category</i> | Classification of gross monthly personal income in euros (1 = 500 or less, 2 = 501-1000, 3 = 1001-1500, 4 = 1501-2000, 5 = 2001-2500, 6 = 2501-3000, 7 = 3001-3500, 8 = 3501-4000, 9 = 4001-4500, 10 = 4501-5000, 11 = 5001-7500, 12 = 7500 or more). | 4.96 | 2.80 | 1 | 12 | 2093 |
| <i>Degree of urbanisation</i> | Degree of urbanisation of respondent's residence based on the address density per km ² (1 = 500 or less, 2 = 500-1000, 3 = 1000-1500, 4 = 1500-2500, 5 = more than 2500). | 2.94 | 1.31 | 1 | 5 | 2093 |
| <i>Responsible for household finances</i> | Whether or not respondent is responsible for the household's financial affairs. Binary dummy (1 = responsible for financial affairs, 0 = else). | 0.67 | 0.47 | 0 | 1 | 2093 |
| Benefits (B) | | | | | | |
| <i>Not much benefit of switching</i> | Perceived benefit from switching. Derived from the question: "There can be different factors that withhold you from switching. How important are the factors below? There is not much benefit from switching." (1 "absolutely unimportant factor" 2 "somewhat important factor" 3 "not a very | 3.55 | 1.05 | 1 | 5 | 2093 |

Table 7 (continued)

| Variable | Description | Mean | Sd | Min | Max | N |
|---|--|------|------|-----|-----|------|
| | important factor" 4 "very improtant factor" 5 "extremely important factor"). | | | | | |
| Switching experience (E) | | | | | | |
| <i>Recent switching experience current account</i> | Binary dummy (1 = switched main current account less than one year ago, 0 = else). | 0.02 | 0.15 | 0 | 1 | 2086 |
| <i>Older switching experience current account</i> | Binary dummy (1 = switched main current account at least one year ago, 0 = else). | 0.28 | 0.45 | 0 | 1 | 2086 |
| <i>Other switching experience current account</i> | Binary dummy (1 = switching experience with main savings account, mortgage loan or revolving credit, 0 = else). | 0.45 | 0.50 | 0 | 1 | 2086 |
| <i>Recent switching experience savings account</i> | Binary dummy (1 = switched main savings account less than one year ago, 0 = else). | 0.04 | 0.19 | 0 | 1 | 1889 |
| <i>Older switching experience savings account</i> | Binary dummy (1 = switched main savings account at least one year ago, 0 = else). | 0.36 | 0.48 | 0 | 1 | 1889 |
| <i>Other switching experience savings account</i> | Binary dummy (1 = switch experience with main current account, mortgage loan or revolving credit, 0 = else). | 0.41 | 0.49 | 0 | 1 | 1889 |
| <i>Recent switching experience mortgage loan</i> | Binary dummy (1 = switched main mortgage loan less than one year ago, 0 = else). | 0.02 | 0.14 | 0 | 1 | 1087 |
| <i>Older switching experience mortgage loan</i> | Binary dummy (1 = switched main mortgage loan at least one year ago, 0 = else). | 0.42 | 0.49 | 0 | 1 | 1087 |
| <i>Other switching experience mortgage loan</i> | Binary dummy (1 = switching experience with main current account, savings account or revolving credit, 0 = else). | 0.35 | 0.48 | 0 | 1 | 1087 |
| <i>Recent switching experience revolving credit</i> | Binary dummy (1 = switched main revolving credit less than one year ago, 0 = else). | 0.03 | 0.16 | 0 | 1 | 181 |
| <i>Older switching experience revolving credit</i> | Binary dummy (1 = switched main revolving credit at least one year ago, 0 = else). | 0.24 | 0.43 | 0 | 1 | 181 |
| <i>Other switching experience revolving credit</i> | Binary dummy (1 = switching experience with main current account, savings account or mortgage loan, 0 = else). | 0.49 | 0.50 | 0 | 1 | 181 |
| Bank-customer relationship (R) | | | | | | |
| <i>Customer loyalty current account</i> | Extent to which one feels a bond with the bank of one's main current account (1= no bond at all, 2 = poor bond, 3 = some bond, 4 = strong bond, 5 = very strong bond). | 2.98 | 1.05 | 1 | 5 | 2086 |
| <i>Customer loyalty savings account</i> | Extent to which one feels a bond with the bank of one's main savings account (1= no bond at all, 2 = poor bond, 3 = some bond, 4 = strong bond, 5 = very strong bond). | 2.94 | 1.05 | 1 | 5 | 1889 |
| <i>Customer loyalty mortgage loan</i> | Extent to which one feels a bond with the bank of one's main mortgage loan (1= no bond at all, 2 = poor bond, 3 = some bond, 4 = strong bond, 5 = very strong bond). | 2.83 | 1.15 | 1 | 5 | 1087 |

Table 7 (continued)

| Variable | Description | Mean | Sd | Min | Max | N |
|--|--|------|------|-----|-----|------|
| <i>Customer loyalty revolving credit</i> | Extent to which one feels a bond with the bank of one's main revolving credit (1= no bond at all, 2 = poor bond, 3 = some bond, 4 = strong bond, 5 = very strong bond). | 2.78 | 1.15 | 1 | 5 | 181 |
| <i>Number of banks</i> | Number of banks of which one is customer (1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = 5 or more). | 1.86 | 0.94 | 1 | 5 | 2093 |
| <i>Filed a complaint</i> | Binary dummy (1=contacted the bank to file a complaint during the last three years, 0=else) | 0.08 | 0.28 | 0 | 1 | 2093 |
| Knowledge (K) | | | | | | |
| <i>Knowledge of current account</i> | Binary dummy (1 = knows the costs of main current account, 0 = else). | 0.52 | 0.50 | 0 | 1 | 2086 |
| <i>Knowledge of savings account</i> | Binary dummy (1 = knows the interest rate on main savings account, 0 = else). | 0.65 | 0.48 | 0 | 1 | 1889 |
| <i>Knowledge mortgage loan</i> | Binary dummy (1 = knows the interest rate on main mortgage loan, 0 = else). | 0.79 | 0.41 | 0 | 1 | 1087 |
| <i>Knowledge revolving credit</i> | Binary dummy (1 = knows the interest rate on main revolving credit, 0 = else). | 0.49 | 0.50 | 0 | 1 | 188 |
| <i>Knowledge of other banking products:</i> | | | | | | |
| <i>Current account</i> | Average score on other knowledge questions than the current account questions. | 0.43 | 0.27 | 0 | 1 | 2086 |
| <i>Savings account</i> | Average score on other knowledge questions than the savings account questions. | 0.32 | 0.25 | 0 | 1 | 1889 |
| <i>Mortgage loan</i> | Average score on other knowledge questions than the mortgage loan question. | 0.45 | 0.25 | 0 | 1 | 1087 |
| <i>Revolving credit</i> | Average score on other knowledge questions than the revolving credit question. | 0.49 | 0.30 | 0 | 1 | 181 |
| <i>Knowledge of switching service</i> | Extent to which one is familiar with the switching service (1 = not heard of it, 2 = heard of it but no knowledge of content, 3 = heard of it and knowledge of content). | 1.90 | 0.83 | 1 | 3 | 2086 |
| <i>Knowledge of Deposit Guarantee Scheme</i> | Binary dummy (1 = knows the DGS, 0 = else). | 0.71 | 0.45 | 0 | 1 | 1889 |
| Socio-psychological factors (S) | | | | | | |
| <i>Perceived control over switching</i> | "If I want, I can switch to another bank" (1=completely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = completely agree). | 4.04 | 0.91 | 1 | 5 | 2093 |
| <i>Degree to which switching is unpleasant</i> | "Switching to another bank is unpleasant" (1=completely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = completely agree). | 3.49 | 0.93 | 1 | 5 | 2093 |
| <i>Injunctive social norms</i> | "I believe that most people who are important to me think that I should switch to another bank" (1=completely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = completely agree). | 1.89 | 0.89 | 1 | 5 | 2093 |

Table 7 (continued)

| Variable | Description | Mean | Sd | Min | Max | N |
|--|--|------|------|-----|-----|------|
| <i>Perceived switching behaviour of others</i> | “People who I would like to resemble switch banks every now and then” (1=completely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = completely agree). This measures descriptive social norms. | 2.00 | 0.96 | 1 | 5 | 2093 |
| <i>Jointly owned current account</i> | Binary dummy (1 = shares current account, 0 = else). | 0.52 | 0.50 | 0 | 1 | 2086 |
| <i>Jointly owned savings account</i> | Binary dummy (1 = shares savings account, 0 = else). | 0.56 | 0.50 | 0 | 1 | 1889 |
| <i>Jointly owned mortgage loan</i> | Binary dummy (1 = shares mortgage loan, 0 = else). | 0.77 | 0.42 | 0 | 1 | 1087 |
| <i>Jointly owned revolving credit</i> | Binary dummy (1 = shares revolving credit, 0 = else). | 0.58 | 0.49 | 0 | 1 | 181 |

This table describes the variables used in the regressions reported in Table 1 for the respondents included in these regressions. The mean, standard deviation (sd), minimum (min), maximum (max) and number of observations (N) for DHS variables are based on the data available for the respondents of our additional June 2015 survey

Appendix 4. The importance of model elements

Table 8 Propensity to switch main current account

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---------------------|--------------------|---------------------|--------------------|---------------------|---------------------|
| <i>Male</i> | 2.45 (2.26) | | | | | |
| <i>Between 35 and 44</i> | 1.16 (3.60) | | | | | |
| <i>Between 45 and 54</i> | 4.46 (3.59) | | | | | |
| <i>Between 55 and 64</i> | -1.38 (3.58) | | | | | |
| <i>65 and over</i> | -13.63*** (3.37) | | | | | |
| <i>Education: bachelor degree or higher</i> | 7.58*** (2.21) | | | | | |
| <i>Income category</i> | 0.19 (0.41) | | | | | |
| <i>Degree of urbanisation</i> | 1.46* (0.78) | | | | | |
| <i>Responsible for household finances</i> | 1.58 (2.25) | | | | | |
| <i>Not much benefit of switching</i> | | -6.19*** (1.01) | | | | |
| <i>Recent switching experience current account</i> | | | -1.67 (6.64) | | | |
| <i>Older switch experience current account</i> | | | 4.06 (2.59) | | | |
| <i>Other switching experience current account</i> | | | 9.09*** (2.43) | | | |
| <i>Customer loyalty current account</i> | | | | -8.29*** (1.02) | | |
| <i>Number of banks</i> | | | | 3.38*** (0.96) | | |
| <i>Filed a complaint</i> | | | | 17.49*** (3.56) | | |
| <i>Knowledge of current account</i> | | | | | -2.51 (2.15) | |
| <i>Knowledge other banking products</i> | | | | | 10.01** (4.10) | |
| <i>Knowledge of switching service</i> | | | | | 1.35 (1.32) | |
| <i>Knowledge of switching service * Recent switching experience current account</i> | | | | | -1.56 (2.56) | |
| <i>Perceived control over switching</i> | | | | | | 7.55*** (1.26) |
| <i>Degree to which switching is unpleasant</i> | | | | | | -1.35 (1.18) |
| <i>Injunctive social norms</i> | | | | | | 6.58*** (1.47) |
| <i>Perceived switching behaviour of others</i> | | | | | | 1.98 (1.29) |
| <i>Jointly owned current account</i> | | | | | | 0.37 (1.95) |
| <i>Constant</i> | -25.48*** (4.02) | 3.55 (3.56) | -23.88*** (1.85) | -1.64 (3.64) | -24.19*** (3.06) | -60.87*** (7.89) |
| Observations | 2086 | 2086 | 2086 | 2086 | 2086 | 2086 |
| Akaike's Information Criterion | 8143.67 | 8159.60 | 8173.49 | 8071.60 | 8199.74 | 8126.41 |
| Ranking | 3 | 4 | 5 | 1 | 6 | 2 |

Table reports parameter estimates for Tobit regressions. Robust standard errors are in parentheses. The propensity to switch equations of the four different types of banking products are estimated together to allow individual-level errors to be correlated. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All models are significant at the 1% level

Table 9 Propensity to switch main savings account

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|---------------------|--------------------|---------------------|--------------------|---------------------|---------------------|
| <i>Male</i> | 1.79 (2.56) | | | | | |
| <i>Between 35 and 44</i> | 1.65 (4.02) | | | | | |
| <i>Between 45 and 54</i> | 5.30 (4.02) | | | | | |
| <i>Between 55 and 64</i> | -4.15 (4.03) | | | | | |
| <i>65 and over</i> | -14.71*** (3.77) | | | | | |
| <i>Education: bachelor degree or higher</i> | 10.24*** (2.49) | | | | | |
| <i>Income category</i> | 0.93* (0.47) | | | | | |
| <i>Degree of urbanisation</i> | 1.26 (0.86) | | | | | |
| <i>Responsible for household finances</i> | 1.40 (2.55) | | | | | |
| <i>Not much benefit of switching</i> | | -2.91*** (1.11) | | | | |
| <i>Recent switching experience savings account</i> | | | 39.79*** (6.10) | | | |
| <i>Older switching experience savings account</i> | | | 15.76*** (2.79) | | | |
| <i>Other switching experience savings account</i> | | | 0.03 (2.78) | | | |
| <i>Customer loyalty savings account</i> | | | | -9.12*** (1.08) | | |
| <i>Number of banks</i> | | | | 7.35*** (1.07) | | |
| <i>Filed a complaint</i> | | | | 20.09*** (3.81) | | |
| <i>Knowledge of savings account</i> | | | | | 5.48** (2.71) | |
| <i>Knowledge of other banking products</i> | | | | | 1.59 (4.92) | |
| <i>Knowledge of Deposit Guarantee Scheme</i> | | | | | 9.25*** (2.85) | |
| <i>Perceived control over switching</i> | | | | | | 7.60*** (1.39) |
| <i>Degree to which switching is unpleasant</i> | | | | | | -0.91 (1.29) |
| <i>Injunctive social norms</i> | | | | | | 2.60 (1.69) |
| <i>Perceived switching behaviour of others</i> | | | | | | 3.62** (1.49) |
| <i>Jointly owned savings account</i> | | | | | | -0.53 (2.25) |
| <i>Constant</i> | -24.18*** (4.29) | -3.99 (4.14) | -21.22*** (1.78) | -2.75 (4.21) | -25.18*** (2.73) | -53.94*** (8.48) |
| Observations | 1889 | 1889 | 1889 | 1889 | 1889 | 1889 |
| Akaike's Information Criterion | 8456.67 | 8525.68 | 8451.19 | 8344.35 | 8511.46 | 8492.53 |
| Ranking | 3 | 6 | 2 | 1 | 5 | 4 |

Table reports parameter estimates for Tobit regressions. Robust standard errors are in parentheses. The propensity to switch equations of the four different types of banking products are estimated together to allow individual-level errors to be correlated. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All models are significant at the 1% level

Table 10 Propensity to switch main mortgage loan

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|---------------------|--------------------|---------------------|--------------------|---------------------|---------------------|
| <i>Male</i> | 0.74 (4.19) | | | | | |
| <i>Between 35 and 44</i> | -5.32 (6.58) | | | | | |
| <i>Between 45 and 54</i> | -1.89 (6.89) | | | | | |
| <i>Between 55 and 64</i> | -18.55*** (6.88) | | | | | |
| <i>65 and over</i> | -22.10*** (6.93) | | | | | |
| <i>Education: bachelor degree or higher</i> | -4.77 (3.86) | | | | | |
| <i>Income category</i> | 2.51*** (0.81) | | | | | |
| <i>Degree of urbanisation</i> | 1.57 (1.39) | | | | | |
| <i>Responsible for household finances</i> | -2.24 (3.98) | | | | | |
| <i>Not much benefit of switching</i> | | -3.70** (1.74) | | | | |
| <i>Recent switching experience mortgage loan</i> | | | -14.39 (14.42) | | | |
| <i>Older switching experience mortgage loan</i> | | | 14.79*** (3.87) | | | |
| <i>Other switching experience mortgage loan</i> | | | 10.63*** (3.62) | | | |
| <i>Customer loyalty bank mortgage loan</i> | | | | -6.65*** (1.57) | | |
| <i>Number of banks</i> | | | | 2.50 (1.75) | | |
| <i>Filed a complaint</i> | | | | -0.97 (5.81) | | |
| <i>Knowledge of mortgage loan</i> | | | | | 1.72 (4.88) | |
| <i>Knowledge of other banking products</i> | | | | | -13.77* (7.54) | |
| <i>Perceived control over switching</i> | | | | | | 3.18 (2.23) |
| <i>Degree to which switching is unpleasant</i> | | | | | | -4.19** (2.03) |
| <i>Injunctive social norms</i> | | | | | | -0.04 (2.37) |
| <i>Perceived switching behaviour of others</i> | | | | | | 0.83 (2.17) |
| <i>Jointly owned mortgage loan</i> | | | | | | -1.84 (4.24) |
| <i>Constant</i> | -33.63*** (7.84) | -16.49** (6.56) | -39.35*** (3.61) | -16.17** (6.78) | -24.91*** (4.49) | -28.28** (12.89) |
| Observations | 1087 | 1087 | 1087 | 1087 | 1087 | 1087 |
| Akaike's Information Criterion | 3639.49 | 3660.56 | 3631.64 | 3645.49 | 3663.99 | 3665.59 |
| Ranking | 2 | 4 | 1 | 3 | 5 | 6 |

Table reports parameter estimates for Tobit regressions. Robust standard errors are in parentheses. The propensity to switch equations of the four different types of banking products are estimated together to allow individual-level errors to be correlated. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. The last two specifications are not statistically significant. The other specifications are significant

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