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Bijlsma, M.; van der Wiel, K.

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Consumer Perception of Deposit Insurance: Little Awareness, Limited Effectiveness?

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By Michiel Bijlsma, Karen van der Wiel

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Consumer Perception of Deposit Insurance: Little Awareness, Limited Effectiveness?¹

Michiel Bijlsma² and Karen van der Wiel³

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Abstract

This paper provides unique survey evidence on consumer awareness about deposit insurance. We find that knowledge on the eligibility for deposit insurance is limited, in particular when it concerns small banks. In addition, consumers generally expect an associated payback time that well exceeds the time it has taken to pay back depositors in the past. Moreover, they believe repayment is more likely and faster for large, systemic banks. This confirms that households' awareness of the coverage and operations of deposit insurance are suboptimal. We also find that knowledge about the scheme is correlated with the probability to stay under the maximum guaranteed amount. Trust in the deposit insurance system however has only a marginal effect on the observed deposit behavior in "normal" and "crisis" times. Moreover, respondents have a strong preference for a deposit insurance scheme with a high coverage rate and are willing to accept a long payback time in return. All in all, limited knowledge about deposit insurance might partly explain why its effectiveness in reality is at odds with the effectiveness that theory predicts.

JEL-codes: D83, D84, G21, G28

Key words: Information, trust, banking, deposit insurance, subjective expectations

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² CPB Netherlands Bureau for Economic Policy analysis and TILEC, Tilburg University, m.j.bijlsma@cpb.nl

³ CPB Netherlands Bureau for Economic Policy analysis and IZA, Bonns, k.m.van.der.wiel@cpb.nl

1 Introduction

In 1960 the US was the only developed country with deposit insurance. Since then almost 100 countries have introduced deposit insurance and the coverage of these schemes has risen steadily during the last decades (Alessandri and Haldane, 2009). Deposit insurance aims to improve financial stability by preventing bank runs (Hoelscher et al., 2006). In particular, deposit insurance is meant to influence depositor behavior by insuring them against the risk of bankruptcy. Consumers will not run on a bank that faces bankruptcy if they are convinced they will get their deposits back quickly.⁴

Theoretically, Diamond and Dybvig (1983) argue in their seminal paper that bank runs can be prevented when deposits are fully and credibly insured. This finding is replicated in laboratory experiments (Madies, 2006; and Schotter and Yorulmazer, 2009), although these experimental papers disagree on the extent of coverage that is necessary to fully prevent bank runs. However, the existing empirical evidence on the effectiveness of deposit insurance shows that in practice deposit insurance schemes might not be as effective as theory and laboratory settings predict.

Several empirical macro-studies have tried to identify the effect of the existence of a deposit insurance scheme on between country differences in the occurrence of banking crises. Demirgüç-Kunt and Detragiache (2002) and Demirgüç-Kunt and Kane (2002) argue that banking crises have taken place more often in countries with explicit insurance of deposits. Studies examining micro-evidence concerning bank runs are scarce. A notable exception is a paper by Iyer and Puri (2010) who use a unique minute-by-minute depositor withdrawal dataset from an Indian bank that faced a run following the bankruptcy of another bank. They show that clients with deposits below the deposit insurance limit are less likely to run than those with deposits above this limit. However, their data also suggests that the effect of deposit insurance on withdrawals is small. Almost 90% of the clients who run are actually fully insured, while even for fully insured customers a higher account balance increases the probability of running. Anecdotal evidence on several bank runs in developed countries such as the United Kingdom, the Netherlands and Belgium during the recent financial crisis also suggests that high deposit insurance coverage does not prevent bank runs from occurring.

Also, theory suggests that deposit insurance may undermine market discipline by depositors. Fully insured deposit holders choose those banks that provide the highest interest rates and do not take the trade-off between risk and returns into account. As a consequence, if banks are not charged appropriate risk-dependent insurance premia they will increase the riskiness of their portfolio in order to attract deposits. See Freixas and Rochet (2008) for an overview of the theoretical literature on the effects of incorrectly priced deposit insurance. In contrast to this prediction, Peria and Schmukler (2001) show - using bank data from Argentina, Chile and Mexico - that deposit insurance does not seem to undermine market discipline. In fact, they find that even insured depositors discipline banks by withdrawing deposits and by requiring higher interest rates.

The empirical findings on bank runs and market discipline, at least in emerging markets, are thus at odds with the theoretical predictions from the literature. In this paper we explore one possible explanation for these puzzling facts: perhaps depositholders are either not fully aware of or do not fully trust deposit insurance schemes. Indeed, if consumers think the insurance fund will be slow to pay out insured deposits or if they suspect their insured deposits may not be fully repaid, they will still be inclined to switch to a safer bank in case of financial turmoil. Hence, deposit insurance might not prevent a run on the bank, and banks remain subject to market discipline even in the presence of deposit insurance. As far as we know consumer perception of bank risk and deposit insurance has not yet received any attention in the literature. A recent working paper by Cruijsen et al (2011) is

⁴ A second goal is to protect the wealth of small deposit holders in case of a bank failure. For example, in the Netherlands 'The DGS aims to protect small deposit holders, and to secure trust in the financial system, such that a bank run can be prevented' (Ministry of Finance, 2009)

somewhat related as it investigates what the general public knows about banking supervision. They conclude that a large share of the Dutch public is only poorly aware of the tasks and responsibilities of bank supervisors.

To investigate these issues, we have conducted a questionnaire in February 2011 on knowledge of the Dutch deposit insurance scheme, perception of payback time and coverage, perception of bank risk, and consumer preferences on deposit insurance coverage versus payback time. The questionnaire also included questions on the economic behavior of respondents such as the allocation of deposits over different banks, the amount of deposits held with these banks, and behavior in the wake of the 2007-2008 financial crisis. The appendix contains a detailed description of the questionnaire.

First,

we find that a considerable fraction of consumers think the DI-scheme will not fully reimburse an accountholder with 50.000 euro, while the official coverage rate in The Netherlands is currently 100.000 euro. Moreover, almost half of respondents think it will take half a year or longer before they have access to their savings again. In contrast, when two banks went bankrupt recently, it took only three months to repay depositors. We conclude that a large group of consumers are pessimistic about what fraction of deposits they will actually get refunded and how long this will take. Thus, our paper provides important evidence that knowledge and trust in deposit insurance is limited even in more advanced economies.

Second, our results suggest that trust in the deposit insurance scheme is not highly correlated with behavior. Knowledge on the eligibility of certain banks for deposit insurance however seems to be correlated with a stronger tendency to spread savings over banks and with the probability to not exceed the maximum guaranteed amount at a particular bank. In addition, individuals' subjective risk assessment of banks partly determines the number of banks wealth is spread over. We show furthermore that this risk assessment is associated with the 'flight to safety' during the past financial crisis and 'transactions' after the specific recent bankruptcies in The Netherlands. This suggests that differences in perceived banking risks may enhance the tendency to run on the bank.

Finally, depositors seem to prefer a deposit insurance scheme with a higher coverage rate over a scheme that has a shorter payback time. This preference is stronger for those with high levels of bank deposits, while trust in and knowledge of the deposit insurance scheme are also correlated with a preference for a high coverage level. Apparently, if people are convinced that the DI-scheme will operate as planned, they are willing to wait longer for their lost deposits.

The paper proceeds as follows. Section 2 explains the Dutch banking sector and the DI-scheme in some detail. Our dataset is the subject of Section 3. Section 4 deals with knowledge of and trust in the Dutch deposit insurance scheme. Section 5 focuses on depositors' behavior, respectively on the allocation of deposits over multiple banks and on withdrawals in the wake of the 2007-2008 financial crisis. In Section 6, we discuss the preferences of consumers over two important characteristics of the deposit insurance scheme: the maximum guaranteed amount and the pay-back time. Section 7 concludes.

2 The Dutch deposit insurance scheme

The Dutch deposit insurance scheme was set-up after the failure of a small bank called *Teixeira de Mattos* in 1966. Initially, the scheme consisted of a system of collective guarantees, which evolved into law in 1978. The system of collective guarantees was first tested in the early 1980's, when two small banks went bankrupt, the *Amsterdam American* Bank in 1981 and the *Tilburgse Hypotheekbank* in 1982. After that, the Dutch deposit insurance scheme was more or less a dormant institution that fell under the responsibility of a single employee at the Dutch Central Bank (DNB).⁵

This changed when in 2005 a small bank based in Amsterdam, *Van der Hoop bankiers*, went bankrupt due to mismanagement.⁶ The 1400 account holders lost their deposits and their losses were initially repaid, 20 million euro in total, under the DI-scheme.⁷ In the aftermath of this bankruptcy, the DI-scheme was incorporated in a comprehensive overhaul of Dutch financial regulation. In the process, the level of insured deposits was raised from 20.000 to 40.000 euro, with the amount of savings over 20.000 euro being insured for 90 percent only.⁸ This co-payment aimed to incentivize consumers to take into account banking risks when allocating their savings.

During the height of the financial crisis, in October 2008, the DI-scheme again became the focus of attention. Right after the Lehman bankruptcy, the Dutch government temporarily increased the maximum insured amount from 40.000 to 100.000 euro, hoping that this would reduce volatility in the Dutch savings market. Coinciding with this increase in coverage, the Icelandic bank Landsbanki, that was active in The Netherlands under the brand name IceSave, became insolvent and was unable to pay out depositors. The bank officially fell under the Icelandic deposit insurance scheme for the first 20.887 euro per deposit holder, and under the Dutch deposit scheme up to 100.000 euro.⁹ DNB took care of initially paying back all deposits up to 100.000 euro. Within three months of Landsbanki's bankruptcy, 100.000 Dutch account holders owning 1.6 billion euro in total could access their deposits again.

One year later, in October 2009, another bank run occurred at the Dirk Scheringa Bank (DSB), after an activist had summoned accountholders to withdraw their money in a popular morning television show. Within 11 days deposit holders withdrew 622 million euro. DSB did not survive the bank run, and the DI-scheme was activated on the 19th of October 2009. In total, 3.5 billion euro was paid out to depositors. This time, the bank fully fell under the Dutch DI. This implied that the DNB repaid depositors their insured savings and that other Dutch banks were liable for the amount paid out under the DI. DNB managed to repay 93% of the 225.000 depositors that filed a claim within three months, while 85% received their money back within several days.¹⁰

These changes, together with the increase in the amount of savings from 160 billion in 1998 to almost 340 billion in 2010, have substantially raised the aggregate amount of deposits that fall under the scheme substantially. Figure 1 below shows how the total savings covered by the DI- scheme has

⁵ De Nederlandsche Bank acts both as the Dutch central bank and as the prudential regulator of the Dutch financial sector.

⁶ The direct cause was a claim of the Dutch tax authority on the bank.

⁷ Eventually, all deposit holders were repaid.

⁸ In case the DI-scheme was called upon, the Dutch Central Bank would initially take up the bill, which would result in a claim of the central bank on the remaining banks in the scheme.

⁹ The Dutch deposit insurance scheme is only applicable to deposits at those banks that DNB has the supervision over. The deposits at non-EU banks are not guaranteed, while those at EU-banks fall under the local agreement in the home country. However, whenever the national scheme in EU-countries (plus Iceland, Liechtenstein and Norway) is less generous than the Dutch scheme, the Dutch DI-system will guarantee the remaining difference.

¹⁰ See http://www.dnb.nl/nieuws/nieuwsoverzicht-en-archief/persberichten-2010/dnb228162.jsp

increased from 50 billion euro in 1998 to more than 400 billion euro in 2011.¹¹ Note that a large fraction of the guarantee benefits either consumers from other countries or firms. In addition, also the probability of the DI-scheme being called upon has increased. Indicative of this higher probability is the huge increase in CDS spreads for large Dutch banks since the beginning of the crisis in 2007. Another indicator is the monthly amount of deposits being shifted between banks. Figure 2 below shows the aggregate of monthly witdrawals by Dutch households at Dutch banks. It went up rapidly in 2007, with a peak in October 2008, and has come down since then, although the level of volatility of private deposits is still higher than it used to be before the financial crisis.





Figure 2: Monthly withdrawals by households in The Netherlands (mln euro)



¹¹ In 2008 the Ministry of Finance estimated this to be approximately 365 billion euros znc in 2010 at 390 billion euro's. These are shown as dots in the figure and are quite close to our estimates, which combines the distribution of savings over banks in our survey, as well as data on savings by Dutch households (Tabel 11.1 Vermogenscomponenten van Nederlandse huishoudens, totaal deposito's) and total savings held by banks (Tabel 5.6 Balansen van geregistreerde kredietinstellingen (bedrijfseconomische opstelling), spaargelden) from DNB. The dotted line is a rough estimate asDNB has no data for recent years. We impute it as a constant factor times total savings by Dutch households.

All this has restored the deposit insurance scheme back to the center of the policy arena and policymakers on the national as well as the European level are rethinking the design of deposit insurance. In June 2009 a joint report of DNB, the Dutch Association of Banks and the Ministry of Finance was published about the future of the DI-scheme. Other Dutch official bodies, such as the committee *Maas* and committee *De Wit*, have also recently suggested alterations, particularly to the financing structure of the Dutch scheme. The EU has issued a Directive on the 12th of July 2010 to harmonize the existing schemes within its member states. While the official maximum pay-back time used to be three months, EU guidelines have shortened this substantially to a maximum of 20 workdays.¹²

3 The data

In the weekend of February 18th 2011 we have conducted a survey on banking risks and the Dutch deposit insurance scheme. The survey was financed by the Ministry of Finance and was enumerated on a well-known internet panel owned by CentERdata, a commercial institute of the University of Tilburg. Other recent studies using the CentERpanel include Von Gaudecker et al. (2011) and Van Rooij et al. (2011). The panel constitutes a representative sample, selected from the Dutch municipal administration, and frequently answers questions about economic variables. In total 1,959 individuals answered our questions, out of the 2,740 individuals who were selected to participate, such that the response rate is 71.5 percent. The questionnaire revolves around questions concerning their assessment of various banking risks, such as the probability that certain banks will go bankrupt, and their knowledge of the Dutch deposit insurance scheme. In addition, CentER provided us with a series of useful background characteristics of those who answered our questions such as age, income and employment status. The appendix contains a table with full definitions of the variables used in the analysis.

Table 1 gives some insight into the characteristics of the respondents. Column I presents descriptive statistics for all respondents, while in Columns II and III the sample is divided into those who only hold deposits at 'systemic' banks and those who (also) hold deposits at a minor bank. We consider ING, Rabobank and ABN Amro as large and systemic banks. Of the respondents that filled in the deposit questions 68 percent only has deposits at systemic banks. Overall, the mean age of respondents is over 50, implying that respondents are relatively old. There is a remarkable difference in education levels between the different banking status groups. Of those who are customers at systemic banks only, 34 percent finished a bachelors or a master degree. This percentage is a lot higher for those who are customers at a minor bank as well, at 54 percent. The customers of small banks are also relatively richer as their average amount of total deposits is almost twice as high. Additionally, the group of respondents that owns deposits at minor banks is a customer at almost twice as many banks.

The appendix includes a full list of banks that respondents own deposits with. From Table 1 it can be seen that the majority of respondents owns an account at ING Bank. This can partly be explained by the fact that ING incorporated the former Postbank - a bank that used to operate an independent payment system. Almost half of respondents own deposits at the Rabobank, while an additional one third is a customer at ABN Amro. It is interesting to see that the group of respondents with at least one minor bank is relatively overrepresented within ING but relatively underrepresented at the Rabobank. There are also remarkable differences between the knowledge the sample claims to possess for the different systemic banks. Rabobank seems to be most well-known, while ABN Amro is least well-known. Almost five percent of our sample was recently hit by a bankruptcy: two percent

¹² See amending Directive 94/19/EC on deposit-guarantee schemes as regards the coverage level and the payout delay: 'The payout delay should therefore be reduced to a period of 20 working days. That period should be extended only under exceptional circumstances and after approval by the competent authorities.'

of respondents was a customer at (Landsbanki) IceSave, while three percent of respondents was a customer at DSB bank.

Table 1: Descriptive statistics

		((I)	(]	I)	(I	II)
Selection		All resp	oondents	Respo with on bar	ndents Ily large nks	Respo with de mino	ondents posits at r bank
Observations			1,959				
of which level of deposits known			1,773		68%		32%
Percentage men			44%		45%		43%
Percentage with partner			77%		76%		77%
Perc. low education (primary/ vmbo)			30%		35%		22%
Perc. tertiary education			41%		34%		54%
Age respondent	Mean		54.7		54.3		55.6
	SD		14.8		15.2		14.1
Net monthly household income	Mean	€	2,938	€	2,903	€	3,006
	SD		4,494		5,410		1,453
Total deposits held at banks	Mean	€	44,842	€	35,911	€	64,096
	SD		62,988		51,590		77,616
Respondents with more than 100.000			11%		10%		11%
euro in total deposits							
Number of banks	Mean		1.8		1.4		2.7
	SD		1.1		0.5		1.3
Owns deposits at ING			59%		56%		66%
Owns deposits at Rabobank			49%		54%		38%
Owns deposits at ABN Amro			31%		32%		27%
Self-assessed knowledge of ING (1-5)	Mean		3.03		2.95		3.17
	SD		0.91		0.88		0.91
Self-assessed knowledge of Rabobank	Mean		3.28		3.30		3.24
	SD		1.07		0.99		1.05
Self-assessed knowledge of ABN Amro	Mean		2.80		2.78		2.85
	SD		1.02		0.93		0.99
Used to own deposits at IceSave			2%		0%		5%
Used to own deposits at DSB			3%		0%		10%

4 Knowledge of and trust in the DI-scheme

In this section we explore to what extent respondents understand the rules and regulations of the Dutch deposit insurance scheme as well as to what extent individuals believe these rules will indeed be implemented in case of hypothetical future bankruptcies.

4.1 Knowledge of the DI-scheme

Knowledge of the existence of and eligibility for deposit insurance is a prerequisite for the proper functioning of it. If DI is to prevent bank runs deposit holders should, up to certain degree, be aware that their claims are guaranteed. Of course, there is no need for deposit holders to know every detail of the system for every bank, as long as they know enough about their own situation. Our questionnaire included several questions to gather information about the respondents' knowledge.

The first set of questions involves the funding and coverage offered by the DI-scheme in the course of the recent bankruptcies of two Dutch banks, Icesave and DSB. We asked respondents two true/false questions concerning the maximum guaranteed amount: a) "A deposit holder with a normal savings account at IceSave/ DSB - owned by him alone - held 120.000 euro in this account. He did not receive all his deposits back." and b) "A deposit holder with a normal savings account at IceSave/ DSB - owned by him alone or the another savings account at IceSave/ DSB - owned by him alone - held 120.000 euro in this account. He did not receive all his deposits back." and b) "A deposit holder with a normal savings account at IceSave/ DSB - owned by him and his wife - held 120,000 euro in this account. He did not receive all his deposits back." As the maximum covered amount is 100,000 euro per individual the correct answer to the first question is true, while the correct answer to the second question is false. Table 2 reports on the answers given. The first question was answered correctly by 87% of respondents. The second question, on the guaranteed amount for a joint account, was answered correctly by 26% of respondents. There is more knowledge about the coverage of the DI-scheme among those with deposits at a minor bank.

We also asked "Who eventually paid the largest part of the bill after DSB went bankrupt?". Table 4 summarizes the answers to this question. The same question was also raised for IceSave, but because it is still unclear what the correct answer to this question is, we omit it here. Because DSB operated under the Dutch DI-scheme, the other Dutch banks eventually paid for the payments to DSB depositors. This question should be interpreted as an indicator for knowledge on the scheme. Obviously, depositors do not have to be aware of who pays in order for the DI-scheme to work as intended. The correct answer was chosen by 34 percent of respondents, while 25 percent indicated they do not have a clue who paid the deposit holders in the end. Again, respondents who own some deposits at a minor bank turn out to be more 'sophisticated': they are better informed about the rules and regulations of the DI-scheme.

In addition, we asked respondents what would happen to the deposit holders if a particular bank went bankrupt within the next five years. Respondents were divided into six groups and each group had to answer questions about the hypothetical bankruptcy of either ING, Rabobank, ABN Amro, Triodos Bank (a small bank but relatively well-known Dutch bank with a green image), Bank of Scotland (a foreign bank with a license in the UK that does a lot of marketing in The Netherlands) or AnadoluBank (a relatively unknown bank with Turkish origins that has a license from the Dutch Central Bank). Table 3 shows the percentage of respondents who believe that a particular deposit insurance scheme would come into play. The bold italic numbers represent correct answers. For Dutch systemic banks, more than 80 percent of respondents are correct concerning the DI-situation. This percentage drops for the smaller banks under review: 64% thinks that Triodos Bank fall under the Dutch DI scheme. When considering the Bank of Scotland and AnadoluBank, respectively 31% and 37% provide the correct answer concerning DI-coverage.

Selection	(I) All respondents	(II) Respondents with only large banks	(III) Respondents with deposits at minor bank
Correct on coverage 'single' account	87%	85%	89%
Correct on coverage joint account	26%	25%	30%
Who paid eventually for DSB's bankruptcy?			
The Dutch Central Bank	16%	16%	16%
The other banks in The Netherlands	34%	30%	43%
The Dutch central government	23%	25%	19%
The European Central Bank	1%	1%	2%
I don't have a clue	25%	28%	20%

Table 2: Percentage of respondents answering DI-knowledge questions

Although for small banks the percentage of respondents choosing the correct answer is low, accountholders at such banks are probably better aware of the particular coverage offered. Unfortunately we cannot test this presumption directly, as there are only a handful of depositors at these banks in our dataset. What we have done however, is split the sample into those who only own deposits at systemic banks and those who (also) own deposits at a minor bank, as in Tables 1 and 2. The last two rows in Table 3 depict the results. Here, we do see that knowledge about the eligibility for the DI-scheme for large banks is greater among respondents with an account at a small bank. Contrary to our prediction however, knowledge about the eligibility for the DI-scheme for the Bank of Scotland and Anadolu Bank is not better for customers of a small bank. This suggests that even accountholders at small banks do not know whether their deposits are covered or not.

Table 3: Percentage of respondents answering which DI-scheme applies

What will happen to deposits if bank A will go bankrupt?	ING	Rabobank	ABN AMRO	Triodos Bank	Bank of Scotland	Anadolu Bank
This bank does not fall under the Dutch DI- scheme. The deposit holders will lose their assets.	2%	2%	2%	16%	15%	41%
This bank does not fall under the Dutch DI- scheme, but does fall under a scheme in another country. The deposit holders will get (a part of) their deposits back.	1%	0%	4%	12%	31%	19%
This bank falls under the Dutch DI-scheme. The deposit holders will receive their deposits back up to a certain maximum per person.	83%	83%	80%	64%	48%	37%
This bank falls under the Dutch DI-scheme. The deposit holders will always receive all of their deposits back.	13%	15%	15%	8%	6%	2%
Percentage with correct answer						
of respondents with only large banks	82%	79%	77%	58%	31%	38%
of respondents with deposits at minor bank	86%	93%	87%	75%	32%	36%

To look in more detail into the determinants of knowledge, Table 4 presents the results from probit regressions of four different variables that represent some knowledge of the deposit insurance scheme. The regressions relate several of the knowledge variables to covariates such as gender, total deposits,

income category, education level, age category and whether one had an account at one of the banks that did go bankrupt.

Column I looks at knowledge of the actual situation during DSB's bankruptcy. The dependent variable here equals one when a respondent was aware of the fact that other banks in The Netherlands had to eventually pay the depositors of the bankrupt DSB, and zero otherwise.¹³ Both the log of total deposits and self-assessed knowledge of banks explain existing knowledge of the DI-scheme. In addition, high-income individuals and men are more likely to know who repaid depositors after DSB failed. Columns II and III examine knowledge of the maximum coverage. The dependent variable in column II equals one when an individual knew that a depositholder is not covered for 150.000 euro in a single account and zero otherwise. The dependent variable in column III equals one when an individuals are more likely to know simple details of DI-coverage, while individuals with a low education level are less likely to know such details. Self-assessed knowledge has a positive impact on involved details, such as who paid depositors after the DSB failure and the guaranteed amount for a joint account. However, none of the other included variables significantly affects whether someone is aware of the double coverage rate for joint accounts.

Column IV depicts the results for knowledge on what deposit insurance scheme applies for a particular bank in hypothetical future bankruptcies. First, it matters a lot for which bank individuals answer the question: respondents are much less likely to know the correct situation for small banks, in accordance with the results in table 3. It also appears that those who used to have an account at DSB (now bankrupt) have learned from their experience: they are better at choosing the correct scheme. Also, a high level of income enhances the probability to be correct, while a low level of education seems detrimental to correctly assessing which DI-scheme a bank falls under.

¹³ Only half of the respondents answered this question. The other half were asked about the situation after IceSave's bankruptcy.

Table 4:	Regression	results on	knowledge	about the	DI-scheme

	(I)	(II)	(III)	(IV)
	Correct on who	Correct	Correct	Correct on DI-
	paid depositors	coverage easy	coverage	scheme future
	DSB	true/false	difficult	bankruptcies
			true/false	
	b/se	b/se	b/se	b/se
Mean self-assessed knowledge of systemic banks	0.228	0.087	0.102**	0.063
	(0.07)	(0.06)	(0.05)	(0.05)
Logarithm of total deposits	0.174**	0.146**	0.063	0.043
	(0.06)	(0.05)	(0.04)	(0.04)
Total deposits above 100.000 euro	-0.234	0.006	0.121	0.156
	(0.18)	(0.18)	(0.13)	(0.15)
Total number of banks	-0.078	0.009	0.063	-0.011
	(0.07)	(0.06)	(0.05)	(0.05)
At least one account at minor bank	0.196	0.052	-0.035	0.106
	(0.13)	(0.11)	(0.09)	(0.10)
Used to have an account at	0.417	0.186	0.21	0.449*
DSB/IceSave				
	(0.24)	(0.24)	(0.17)	(0.20)
Female respondent	-0.636***	-0.059	-0.06	-0.091
	(0.10)	(0.08)	(0.07)	(0.07)
High income (vs. low middle income)	0.579***	-0.205	0.086	0.324**
	(0.17)	(0.13)	(0.11)	(0.11)
Low education (vs. middle education)	-0.238	-0.230*	0.09	-0.269**
	(0.13)	(0.10)	(0.09)	(0.09)
Systemic bank				0.641***
				(0.10)
Bank of Scotland				-0.930***
				(0.11)
Anadolu Bank				-0.737***
				(0.11)
Method	Probit	Probit	Probit	Probit
Other (insignificant) controls	Dummies for f	for being customer a	at ING, dummy for	being a customer at
	Ra	abobank, gender du	mmy, partner dumm	y and age category
Ν	890	1,750	1.750	1.750
* p<0.05, ** p<0.01, *** p<0.001			,	,

4.2 Trust in the DI-scheme

This section presents evidence on the confidence of deposit holders in the Dutch deposit insurance scheme. First we focus on the perceived pay-out time of the DI-scheme, both in recent bankruptcies and in hypothetical future bankruptcies. At the time of the survey, the Dutch Central Bank was committed to paying deposit holders their money back within three months (90 working days) after a bankruptcy. It indeed succeeded in doing so after the two recent bankruptcies of Icesave and DSB.

Figure 3 suggests that our respondents are not aware of the speed of DNB's recent operations. Two thirds of respondents (72% in case of IceSave and 68% in case of DSB) estimate the realized pay-back time to be half a year or longer. The average perceived pay-back time for the hypothetical bankruptcies is even longer for small banks such as Triodos, Bank of Scotland, and AnadoluBank.

Only 25% of individuals think it will take three months or less to get your deposits refunded under the DI-scheme. Respondents are the most optimistic about the period of time it takes to payout deposits of a bankrupt systemic bank, although they still overestimate the pay-back time. In this case, little over half of respondents believe it will take six months or longer.



Figure 3: Respondents on payback time by the DI-scheme

Our survey on banking risks and the deposit insurance scheme also contains direct information on the perceived credibility of the deposit insurance scheme. To measure respondents' trust in the DI-scheme we have asked them the probability that a deposit holder owning 50.000 euro will in reality receive this entire amount back in case of a bankruptcy.¹⁴ Figure 4 shows the cumulative distribution of answers. Clearly, individuals believe that payout is more likely when a systemic bank goes bankrupt. The average probability amounts to 73%, while 34% of individuals is absolutely certain the deposit holder will get her money back. The average probability for small banks is lower at 48%, while only 16% of respondents fully trusts the DI-scheme in this case. At face value, respondents apparently do not identify a potential problem of sustainability of the DI-scheme when one of the three large Dutch banks would go bankrupt. On the contrary, they worry about small banks instead. Note that for both types of bank a relatively large group chose a probability of 50%.

¹⁴ It is true that this question can be interpreted as capturing both trust in the DI-scheme and knowledge. If people do not know that the coverage rate is as high as 100.000 euro, but instead believe it is say 40.000 euro, the probability of full payback equals zero. The low frequency of zeros in the answers however suggests that few people reasoned this way.



Figure 4: Probability the deposit insurance scheme will pay out 50.000 euro as promised

Is is interesting to investigate the determinants of trust in the deposit insurance scheme. Knowledge of the scheme and whether the respondent thinks a bank falls under the DI-scheme might be important. The self-assessed knowledge of the bank specified in a particular question and whether the respondent has an account with that bank could also bias the respondent's answer. In addition, respondents' assessment might be affected if they have experienced the DI-scheme in practice because they held an account with either IceSave or DSB. Table 7 depicts regression coefficients of the two trust-indicators, i.e. the perceived payback time in column I and the probability of payback in column II, on these variables.¹⁵

The effects of the control variables are mostly as anticipated. Individuals who own an account at the bank for which they answer the question, believe in shorter payback times, but surprisingly not necessarily in a higher probability of payback. Respondents think that in case of bankruptcy of a systemic bank payout will be faster compared to smaller banks and that the probability of payback will be higher. Consumers who have first-hand experience with a bankruptcy and consumers that assess themselves as knowledgeable have more trust in the DI-system. Respondents that think systemic banks are more likely to fail have less trust in the Dutch deposit insurance. Here, we use the bankruptcy probabilities that individuals assigned to systemic banks as each respondent answered these questions for the same banks. Knowledge on the DI-scheme seems to be an important covariate for trust. If individuals believe that their assigned bank falls under a foreign DI-scheme or under no DI-scheme at all, their trust in the scheme is significantly lower. Demographic characteristics play a minor role. Women are more skeptical about the trustworthiness of the DI-scheme, while individuals with more deposits at banks are more optimistic. Furthermore, only whether one has a partner is positively correlated with trust in the deposit insurance institution.

¹⁵ There are twice as many observations in the first column as individuals answered the question both for either DSB or IceSave and one other hypothetically bankrupt bank.

	(I)	(II)
	Payback time (days)	Probability payback
	b/se	b/se
Account at bank that (hypothetically) goes bankrupt	-21./62**	3.039
	(6.89)	(1.86)
Systemic bank	-30.202***	7.738***
	(8.69)	(2.21)
Triodos bank	reference	reference
IceSave or DSB	-5.709	N.A.
	(6.98)	
Bank of Scotland	1.825	6.729**
	(9.98)	(2.40)
Anadolu Bank	42.318***	-5.411*
	(9.73)	(2.33)
Used to have an account at DSB/IceSave	-50.130***	12.338***
	(13.45)	(3.66)
Mean self-assessed knowledge of bank (1-5)	-16.829***	3.123**
Č ()	(3.52)	(1.01)
Mean self-assessed probability systemic bank goes bankrupt	0.805**	-0.299***
	(0.28)	(0.08)
Respondent believes bank does not fall under any DI-scheme	43.218***	-39.131***
	(9.94)	(2.69)
Respondent believes bank falls under foreign DI-scheme	30.351***	-21.766***
respondent concrete cum rans under rereign DT seneme	(8.08)	(2.40)
Respondent believes bank falls under Dutch DI-scheme	reference	reference
Respondent believes DL-scheme has full coverage	6.514	4.348
Respondent beneves Di-seneme has fun coverage	(11.07)	(3.13)
Respondent has correct beliefs DL scheme	-3.886	7.588**
Respondent has context benefis Dr-scheme	(7.53)	(2.33)
Logarithm of total deposits	-5 495*	3 094***
Logarunni or total deposits	(2.41)	(0.66)
Formale gramon dont	20 385***	-7 634***
remaie respondent	(5.07)	(1.38)
Descendent has a nexture	-15 370*	-1 333
Respondent has a partner	(6 51)	(1.74)
	OIS with clustered	(1.74)
Method	errors	OLS
N	3486	1745
Other (insignificant) controls include total number of banks, having an	account at a minor ban	k, age categories.
income categories and education categories.		, g
* p<0.05, ** p<0.01, *** p<0.001		

Table 5: Regressions of trust in Dutch DI-scheme

5 Depositor behavior

This section focuses on the behavior of deposit holders, in relationship to their knowledge of and trust in deposit insurance. In absence of reliable information about what the respondents would do while fearing for the safety of their deposits, we analyze how consumers allocate their savings over banks and how they responded to the 2007-2008 financial crisis.

5.1 Allocation over banks

The existence of a DI-scheme can also influence the allocation of deposits over the different banks in the market. In the absence of insurance, deposit holders can reduce their exposure to a potential bank failure by distributing their savings over multiple banks. As long as failures are not fully correlated, this reduces the risk of being exposed to a bank failure. In the presence of fully trusted insurance, however, this incentive is absent for consumers with deposits below the DI's maximum insurance threshold, but consumers with savings exceeding the maximum covered amount can still benefit from spreading their deposits. Thus, we expect that consumers with wealth above the DI-threshold will hold more accounts with different banks. In this section we therefore analyze with how many different banks depositors hold accounts and whether this choice is influenced by their knowledge of and trust in the DI-scheme.

In table 8 we present regression coefficients on the total number of banks a respondent holds his savings with (Column I) as well as the extent to which respondents concentrate their savings at one bank (Columns II and III). From Column I we learn that total deposits are an important determinant of the number of banks consumers have: respondents with more savings hold those savings with a larger number of banks. They may benefit more from hedging against bank failure by spreading their savings over multiple banks. The dependent variable in Columns II and III is the ratio of an individual's deposits with the bank where the individual owns most deposits over her total deposits at all banks. The columns show that wealthier deposit holders are also more prone to concentrate their deposits at one of the banks they are a customer with. Wealthier consumers have more to gain from looking for a high interest rate. Perhaps they hold more accounts in order to easily transfer money when interest rates go up elsewhere or when the perceived bankruptcy probability of their main bank increases. On the other hand, another significant coefficient in Columns II and III is the dummy for those whose aggregate deposits exceed 100.000 euro. These individuals spread their savings more evenly across banks, perhaps in order to remain below the maximum covered amount.

Also, respondents that assess their own knowledge of systemic banks as relatively high are more likely to hold accounts with multiple banks. The same holds for respondents that assign relatively high bankruptcy probabilities. It makes sense to hedge more when you feel bankruptcies are more likely. In addition, those who used to have an account with DSB or IceSave turn out to be consumers holding deposits with a relatively large number of banks and they also tend to concentrate their savings more with one bank. This suggests that these consumers are particularly prone to look for the highest interest rate.

In Column IV we focus on the sample of individuals who own more than 100.000 euro in total deposits at banks. Using data on each bank they hold deposits, we have estimated a probit regression on whether the deposits at a particular bank cross the virtual 100.000 euro threshold. Since most of these rich individuals are a customer at more than one bank, this means we use multiple observations per individual in this regression. Some interesting results emerge. First, as expected, wealthier individuals are more likely to exceed the DI-coverage threshold at any particular bank. Also as expected, the more banks, the less likely it is that a respondent's deposits at one bank exceed 100.000 euro. Moreover, it turns out that correct knowledge of which deposit insurance scheme is appropriate

is negatively associated with crossing the threshold. Here, knowledge seems important for behavior. Computing the marginal effect at the mean however indicates that the effect is small: an informed individual is 7% more likely to stay under the threshold. Another significant coefficient is the one for the self-assessed knowledge of each bank. The more respondents know about a bank, the more likely they are to entrust uninsured deposits to the bank. Here the marginal effect is larger: one unit more self-assessed knowledge (on a five-point scale) increases the probability of crossing the threshold with 10%.

	(I)	(II)	(III)	(IV)
Dependent variable	Total number of	Concentration of	Concentration of	Holding more
	banks	deposits at most	deposits at most	than 100.000
		important bank	important bank	euro at a bank
Sample	All	Those with 2 banks	Those with 3 banks	Those with
				total deposits
				above 100.000
	b/se	b/se	b/se	b/se
Logarithm of total deposits	0.444***	0.087***	0.127***	3.017***
Logariani of total asposito	(0.03)	(0.01)	(0.02)	(0.28)
Total deposits above 100.000 euro	-0.143	-0.053*	-0.139**	× ,
	(0.11)	(0.03)	(0.04)	
Correct on what DI-scheme would	-0.083	-0.012	-0.019	-0.399*
apply				
	(0.06)	(0.01)	(0.03)	(0.19)
Probability that DI-scheme will	0.001	0.000	0.000	-0.002
pay out as promised				
	(0.00)	(0.00)	(0.00)	(0.00)
Expected payback time	-0.012	-0.010	-0.003	-0.063
	(0.02)	(0.01)	(0.01)	(0.06)
Mean self-assessed knowledge of	0.136**	0.002	0.000	0.545***
systemic banks (or knowledge of				
bank in column IV)				
	(0.04)	(0.01)	(0.02)	(0.11)
Mean probability of bankruptcy	0.007*	0.000	-0.002	-0.001
systemic banks				
	(0.00)	(0.00)	(0.00)	(0.01)
Used to have an account at	1.650***	0.184***	0.173***	1.155**
DSB/IceSave				
	(0.13)	(0.04)	(0.04)	(0.44)
Systemic bank				0.265
				(0.24)
Total number of banks				-0.857***
	1.750	(22)	201	(0.11)
Ν	1,750	623	204	426
Method	Ordered probit	OLS	OLS	Probit with
				clustered
	, ,			standard errors
Other (insignificant) controls	gender dumr	ny, partner dummy, ed	lucation level, income	category and age
* = < 0.05 ** = < 0.01 *** = < 0.001				category
p<0.05, *** p<0.01, **** p<0.001				

Table 6: The number of banks consumers hold accounts with

5.2 Withdrawals in the wake of the financial crisis

In this section, we investigate observed behavior of respondents during the 2007-2008 financial crisis. In the end, a deposit insurance scheme is also meant to calm depositors in times of distress, and we would like to know whether respondents with more knowledge of and trust in the scheme behaved accordingly in the most recent financial crisis. In our survey, we have confronted our respondents with some recall questions relating to the financial crisis. We realize recall questions three/four years after an event are far from perfect. However, the answers are the only piece of information we have to analyze this relationship.

First, we've asked respondents whether they decided to transfer their savings to 'a safer place' during the 2007-2008 financial crisis . About 6% of respondents answered yes to this question. The vast majority of these respondents stated that they transferred their money to another bank. Column I in Table 9 reports probit regression coefficients for this yes/no variable. Correspondents with more deposits were more likely to put their savings in a safer place. This is intuitive, as wealthier people have more to lose when banks get into trouble. Also intuitively, people who assign high average bankruptcy probabilities were more likely to put their savings in a safer place. Finally, respondents with first-hand bankruptcy experience at IceSave and DSB were more likely to put their savings in a safer place. This might be because these consumers were forced to do so precisely by these bankruptcies.

We have also asked "What consequences did the recent bankruptcy of IceSave/ DSB have for you?", randomizing between IceSave and DSB. This question was raised in order to focus on the response to a specific event. Out of all respondents 32% answered that they were now more aware of the risks associated with banking, while another 6% of respondents answered that not only were they more aware of risks, but that they also acted upon this new awareness. This group of respondents either changed banks or spread their deposits over more accounts. Column II in Table 7 presents the results of a multinomial logit regression for this variable, in which the actions are bundled under 'transactions'. We find that those respondents who answered that they were now more aware of the risks of banking were those with more wealth, but also those with more knowledge. We use the knowledge variable for systemic banks here as this variable is comparable across respondents. Those who were correct on which DI-scheme applied, those who knew more about banks and highly educated individuals were all more likely to have 'learned' from the previous bankruptcies. Also female respondents belonged to this group. Considering transactions, a somewhat different picture emerges. Obviously, the most important coefficient here is whether an individual used to have deposits at either IceSave or DSB. Again, individuals with more deposits are more likely to have experienced 'consequences' of the bankruptcies. But the other significant coefficients for 'actions' do not overlap those for 'no actions'. Those who assign high bankruptcy probabilities, those with more banks and those who own at least some deposits at a minor bank were more likely to act upon the recent bankruptcies.

	(I)		(II)
	Flight to safety	Bankrupt	cy consequences
		More aware of	More aware of
		risks, no	risks,
		actions	transactions
	b/se	b/se	b/se
		0.1.5544	0.005
Logarithm of total deposits	0.268***	0.166**	0.32/**
	(0.05)	(0.06)	(0.12)
Correct on what DI-scheme would apply	-0.048	0.299*	-0.041
	(0.12)	(0.12)	(0.26)
Probability that DI-scheme will pay out as promised	0.000	-0.001	0.004
	(0.00)	(0.00)	(0.00)
Expected payback time	0.008	0.065	0.050
	(0.05)	(0.05)	(0.10)
Mean self-assessed knowledge of systemic banks	0.115	0.207*	0.222
	(0.08)	(0.08)	(0.17)
Mean probability of bankruptcy systemic banks	0.014*	-0.001	0.026*
	(0.01)	(0.01)	(0.01)
Used to have an account at DSB/IceSave	0.708***	0.473	1.088**
	(0.19)	(0.30)	(0.37)
Total number of banks	0.082	-0.094	0.229*
	(0.05)	(0.07)	(0.10)
Respondent has an account at a minor bank	0.254*	0.103	0.729**
	(0.13)	(0.14)	(0.28)
Female respondent	-0.09	0.248*	0.063
	(0.12)	(0.11)	(0.24)
Low education category	-0.089	0.129	-0.011
	(0.16)	(0.15)	(0.33)
Middle education category			()
High education category	-0.013	0.421**	0.199
<i>6</i> ····· <i>6y</i>	(0.14)	(0.14)	(0.28)
Method	Prohit	(0.11) N	fultinomial logitt
Observations	1690	14	1719
	1070		1/1)

Table 7: did respondent decide whether or not to put savings in safer place

Other (insignificant) controls include a dummy for having a partner, the log of total deposits, number of banks, whether respondent has an account at a minor bank, income categories, age categories, education categories * p<0.05, ** p<0.01, *** p<0.001

6 Preferences on the DI-scheme: timeliness versus coverage

A final section in our questionnaire on banking risks and the deposit insurance scheme aims to uncover preferences of deposit holders concerning the set-up of the scheme. All respondents were asked to choose which of three future policy options they preferred most. The three options were combinations of the maximum amount covered by the deposit insurance scheme and the number of days it would take to pay back deposits. The options were structured such that the option with the highest guaranteed amount also pertained the longest pay-back time and vice versa. In this way, in choosing a particular option the respondents were forced to make a trade-off between a shorter pay-back time and a lower coverage. This allows us to determine how much coverage respondents are willing to give up in return for a shorter pay-back period. Although every respondent was only presented with one set of options, in total six different option sets were presented, differing only in their suggested pay-back time. In short, all respondents could choose between a maximum coverage of 20.000, 40.000 or 100.000 euro, but the associated pay-back times differed (between 1 day, 7 days, 14 days, 30 days and 100 days).

The majority of deposit holders, namely 75%, chose a policy options in which the guaranteed amount was highest. Only 7% of them preferred the shortest pay-back time, associated with a coverage of 20.000 euro. The moderate policy option (coverage at 40.000 euro, moderate pay-back time) was preferred by 18% of respondents. This choice is heavily influenced by the wealth level of individuals, as table 8 indicates. Those who can afford a short payback time - as they have assets below the lowest coverage option - choose this option more often. Even in these groups however the highest coverage alternative is preferred.

Preferred option	€20.000 early	€40.000	€100.000 late
Total deposits NA	8%	20%	72%
Total deposits around €5.000	14%	21%	66%
Total deposits around €10.000	9%	26%	66%
Total deposits around €20.000	9%	19%	72%
Total deposits around €50.000	1%	16%	83%
Total deposits around €140.000	0%	10%	90%

Table 8: Percentage of respondents preferring policy option deposit insurance

We have investigated the demographic origins of the coverage preferences in more detail in Table 9. The table reports coefficients of ordinal probit regressions of the chosen coverage and the chosen payback time on various characteristics, including knowledge of and trust in the current DI-scheme. It becomes clear that not only wealthier individuals are more in favor of a high guaranteed amount. Also those with a higher income (and perhaps therefore higher future wealth) prefer a high coverage level (and a long pay-back time). Interestingly, individuals with more banks were more likely to choose a policy option with a lower coverage level and a shorter pay-back time. This could be related to the lower amounts they have at risk at any particular bank. Furthermore, those who assign high bankruptcy probabilities were more likely to prefer lower coverage rates. Although the coefficient for a shorter payback time is not significant, the explanation could be that the more likely is a bankruptcy the more respondents value liquidity. Finally, both trust in and knowledge of the deposit insurance scheme are correlated with a preference for a high coverage level (and a long payback time). Apparently, if people are convinced that the DI-scheme will operate as planned, they are willing to wait longer for their lost deposits.

	(I)	(II)
	Preferred coverage level	Preferred pay-back time
	b/se	b/se
Logarithm of total deposits	5.284***	3.589***
	(0.68)	(0.91)
Correct on what DI-scheme would apply	2.024	1.607
	(1.50)	(1.99)
Probability that DI-scheme will pay out as promised	0.100***	0.066*
	(0.02)	(0.03)
Expected payback time	1.798***	1.419
	(0.54)	(0.72)
Mean self-assessed knowledge of systemic banks	1.050	2.251
	(0.99)	(1.31)
Mean probability of bankruptcy systemic banks	-0.203**	-0.166
	(0.08)	(0.10)
Used to have an account at DSB/IceSave	2.453	-1.577
	(3.50)	(4.64)
Total number of banks	-2.085*	-1.568
	(0.85)	(1.13)
Respondent has an account at a minor bank	0.988	1.831
	(1.74)	(2.31)
Low income category	5.536	10.461*
	(3.28)	(4.36)
Low middle income category (reference)		
High middle income category	7.555***	6.467*
	(2.15)	(2.86)
High income category	5.688**	3.977
	(2.19)	(2.92)
Method	Ordinal probit	Ordinal probit
Other (insignificant) controls g	ender, level of education, income c	ategory, wealth category, age category, knowledge dummies
Observations	1741	1741
* p<0.05, ** p<0.01, *** p<0.001		

Table 9: Regression coefficients for DI-preferences

7 Conclusion

In response to the 2007-2008 financial crisis, deposit insurance schemes in the European union have undergone a major overhaul. Coverage has been extended and unified, while the maximum refund period has been shortened substantially. Empirical research that may shed light on the effectiveness of these measures is relatively scarce, however. In particular, no research exists into consumers' knowledge and perception of such schemes. Important aspects include consumer knowledge of DI terms (do consumers know whether they are insured), and their assessment of payback times and how much they expect to receive (how effective do consumers think the execution of the scheme is).

We find that particularly knowledge of the eligibility of small banks to deposit insurance is limited, even by accountholders at small banks. Consumers differ widely in their perception of what fraction of deposit they will actually get refunded in case of a bank failure and how long this will take. They vastly overestimate the number of days it has taken in the recent past to pay back deposits.

Our results indicate that trust in the deposit insurance scheme is not highly correlated with behavior. Knowledge on the eligibility of certain banks for deposit insurance however seems to be correlated with a stronger tendency to spread savings over banks and with the probability to stay under the maximum guaranteed amount at a particular bank. In addition, individuals' subjective risk assessment of banks partly determines the number of banks wealth is spread over. We show furthermore that this risk assessment is associated with the 'flight to safety' during the past financial crisis and 'transactions' after the specific recent bankruptcies in The Netherlands. This suggests that differences in perceived banking risks enhance the tendency to run on the bank.

Finally, depositors seem to prefer a deposit insurance scheme with a higher coverage rate over a scheme that has a shorter payback time. This preference is stronger for those with high levels of bank deposits, while trust in and knowledge of the deposit insurance scheme are also correlated with a preference for a high coverage level. Apparently, if people are convinced that the DI-scheme will operate as planned, they are willing to wait longer for their lost deposits.

Concerning policy implications, consumers generally lack knowledge of the more detailed workings of the DI-scheme, while they have overly pessimistic expectations of the way the scheme will be executed. This casts doubt on the effectiveness of DI-scheme as a means to prevent bank runs and at the same time points to the potential for government policies focusing on educating the public to contribute to the effectiveness of DI-scheme.

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Bank description

Tabel 1: Respondent had a checkings and/or savings account at bank X somewhere in the period after 1-1-2007 until 1-1-2010.

Bank	Respondents
ING/ Postbank	1,090
Rabobank	930
ABN AMRO/ Fortis	548
SNS Bank + RegioBank	233
ASN Bank	141
Aegon Bank	87
Dirk Scheringa Bank	59
Robeco Direct	55
MoneYou	39
Triodos Bank	37
IceSave	33
Friesland Bank	32
Argenta	27
CreditEurope Bank	22
OHRA Bank	20
Van Lanschot Bankiers	19
Amsterdam Trade Bank	18
NIB Capital	18
AKBank	16
Allianz	7
Centraal Beheer	7
YapiCredi Bank	7
AnadoluBank	5
Bank of Scotland	4
GarantiBank	4
DHB Bank	3
Westland Utrecht Bank	3
ASR Bank	2
Binck bank	2
KASBANK	2
Leaseplan Bank	2
The Economy bank	2
Bank of America	1
BNP Paribas	1
Directbank	1
Duitse Postbank	1
Jyske Bank	1
Lloyds TSB	1
OTP	1

Variables used

Account at bank that (hypothetically) goes bankrupt	Respondent is a client of bank X that hypothetically goes bankrupt in the questionnaire.
Age category	Age of respondent in six categories: 1) age 15-24, 2) age 25-34, 3) age 35-44, 4) age 45-54, 5) age 55- $(4, 6)$ age 65 and super
Donk	04, 6) age 65 and over.
Dalik	at bank X somewhere in the period after 1-1-2007 until 1-1-2010. Both individual and joint accounts should be reported.
Bank falls under DI-scheme	Bank in question falls under the supervision of the
	Dutch Central Bank and its deposits are therefore eligible for the Dutch DI-scheme. In our sample and not eligible for Dutch DI: Bank of Scotland, Argenta, BNP Paribas, Bank of America, Directbank, Duitse Postbank, Jyske Bank, Lloyds
Bankruptcy consequences	Recode of question v20: what did the bankruptcy of
	DSB/IceSave (randomly assigned) meant to you
	personally? 1) Nothing, 2) More aware of the risks
	of banking, no actions, 3) More aware of the risks
	of banking and I actually transferred deposits.
Choice of policy option deposit	Imagine the government decides to implement a
insurance	new deposit insurance scheme. Which of the
	Tollowing policy options has your preference? 1)
	20 000 EUP. When a bank good bankrupt it will
	20.000 EOK. when a bank goes bankrupt, it will take 1 day/7 days (ontions randomly drawn)
	before the deposits will be repaid 2) Deposits at
	Dutch banks will be insured up to 40,000 EUR.
	When a bank goes bankrupt, it will take 14 days/ 30
	days (options randomly drawn), before the deposits
	will be repaid. 3) Deposits at Dutch banks will be
	insured up to 100.000 EUR. When a bank goes
	bankrupt, it will take 30 days/ 100 days (options
	randomly drawn), before the deposits will be
	repaid. 3 Spaartegoeden bij Nederlandse banken
	worden tot een maximum van 100.000 euro
	vergoed. Het duurt 30 dagen voordat, bij een
	faillissement, tot terugbetaling wordt overgegaan
Concentration of deposits at most	The ratio of an individual's deposits at the bank
Important bank	where the individual owns most deposits over her
Correct coverage difficult true/false	Respondent answered true to the statement that an
Contect coverage unneut true/faise	individual owning 150 000 FUR in a joint account
	would get their deposits back entirely when the
	bank would go bankrupt.
Correct coverage easy true/false	Respondent answered fasle to the statement that an
	individual owning 150.000 EUR in an individual
	account would get their deposits back entirely,
	when the bank would go bankrupt.
Correct on DI-scheme future	The respondent answered the following question

bankruptcies	correctly on bank X. Imagine bank X goes bankrupt. According to the rules, what will than happen to the deposits of regular depositholders? 1 This bank is not covered by the Dutch deposit insurance scheme. The accountholders will have lost their deposits. 2 This bank is not covered by the Dutch deposit insurance scheme, but is covered by the DI-scheme in another country. The deposits will be paid back (up to a certain maximum). 3 This bank falls under the Dutch deposit insurance scheme. The deposits will be paid back up to a certain maximum per person. 4 This bank falls under the Dutch deposit guarantee scheme. All depositholders will be fully refunded at all times.
Correct on who paid depositors DSB	Respondent was correct on the question which institution(s) eventually paid back the deposits of accountholders at DSB/ IceSave (randomly drawn).
Correct ranking bankruptcy probability systemic vs. small banks	Dummy is one when respondent beliefs that the average bankruptcy probability of systemic banks is lower than the average bankruptcy probability of other banks.
Correct ranking problems probability ING vs. Rabobank	Dummy is one when respondent beliefs that the probability that a bank might face problems paying back deposits is larger at the ING than at the Rabobank (which rating agencies agree with).
Daughter of bank outside EU	AKBank, DHB Bank, GarantiBank, AnadoluBank, CreditEurope Bank, Amsterdam Trade Bank, YapiCredi Bank.
Dummy for accountholder	Variable equals one when respondent own a checking and/or savingsaccount at this bank.
Education level	Highest diploma received in three categories: 1) lower level (primary education or vocational secondary education), 2) middle level (general secondary education or lower-level vocational training), 2) higher level (tertiary education).
Expected payback time	 How long do you think it will last - approximately - until an accountholder at bank X with deposits of EUR 50.000 gets her deposits back, when bank X would go bankrupt?: 1) One week, 2) Two weeks, 3) One month, 4) Two months, 5) Three months, 5) Half a year, 6) One year.
Female respondent	Respondent is female, not male.
Flight to safety	Respondent answered yes to the question: During the financial crisis in 2007/2008, did you decide to keep your money in a safer place?
(Daughter of) foreign bank	Bank of Scotland, Allianz, AKBank, DHB Bank, GarantiBank, AnadoluBank, CreditEurope Bank, Argenta, Amsterdam Trade Bank, YapiCredi Bank, BNP Paribas, Bank of America, Directbank, Duitse Postbank, Jyske Bank, Lloyds TSB, OTP, The Economy bank.
Holding more than 100.000 euro at a bank	Respondent holds more than 100.000 euro at a single bank. The coverage rate of the DI-scheme implies that the respondent will lose money

	whenever the bank will go bankrupt.
Household income categories	Net monthly household income in four categories: 1) low income: EUR 1150 or less, 2) low middle- income: EUR 1151-1800, 3) high middle-income: EUR 1801-2600, 4) high income: EUR 2601 or higher.
Mean probability of bankruptcy systemic banks	Average per respondent of bankruptcy probability for ABN Amro, ING and Rabobank.
Mean self-assessed knowledge of systemic banks	Average per respondent of self-assessed knowledge for ABN Amro, ING and Rabobank.
Preferred coverage level	The coverage level individuals prefer when asked to chose between different policy options.
Preferred pay-back time	The pay-back time individuals prefer when asked to chose between different policy options.
Probability that DI-scheme will pay out as promised	How would you estimate the probability that an accountholder at bank X with deposits of EUR 50.000 would fully get her deposits back, when bank X would go bankrupt?
Reason to have an account at bank X	Recoding of question r[n]r3 1) No account 2) For no particular reason 3) The interest is attractive 4) The products and service are attractive 5) The financial position of the bank is stable 6) Different reason.
Respondent has a partner	Respondent has a partner and is thus not single.
Respondent has an account at a minor bank	Respondent has an account at a bank that is not considered systemic.
Self-assessed knowledge of bank	How much do you know about bank X? Provide an answer between 1 (no knowledge) to 5 (a lot of knowledge).
Subjective bankruptcy probability	How would you assess the probability that bank X will go bankrupt within the next five years? Give an answer between 0 (no chance) and 100 (this will certainly happen).
Systemic bank	ABN Amro, ING and Rabobank.
(Logarithm of) total deposits	(Logarithm of) total deposits (in checking and savings accounts) at banks.
Total number of banks	Total number of banks a respondent has accounts with.
Used to have an account at DSB/IceSave	Respondent had an account at DSB or IceSave somewhere in the period after 1-1-2007 until 1-1-2010.