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* Views expressed are those of the authors and do not necessarily reflect official positions of De Nederlandsche Bank.

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What drives trust in the financial sector supervisor? New empirical evidence*

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Abstract

Using a survey among more than 2,000 consumers in the Netherlands, we examine the drivers of trust in the financial sector supervisor. Trust in De Nederlandsche Bank (DNB) declined sharply during the financial crisis and has not yet completely recovered. Our results suggest that consumers' knowledge about supervision is positively associated with their trust in the supervisor. Assessing the fitness and propriety of top managers of financial institutions and supervising financial institutions enlarge trust in DNB. The same holds for the execution of the deposit guarantee system. Finally, we find that communicating about supervisory activities also increases trust.

Key words: Trust; financial sector supervisor; financial literacy; communication

JEL-codes: D12; D84; E58; G21

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"Ultimately, finance is about promises, because it involves obligations whose concrete settlements are spread over time. Promises, in turn, need to be sustained by trust. … Finance will always have to be based on trust."
(Interview with Tommaso Padoa-Schioppa, 2005).[1]

1. Introduction

Trust in financial institutions is key to the functioning of the financial sector (see van der Cruijsen et al. (2022a) for a review of the literature on public trust in financial institutions). Trust in financial institutions, which may be defined as consumers' expectation that financial institutions are generally dependable and can be relied on to deliver on their promises (Sirdeshmukh et al., 2002), is widely believed to be important for financial stability.[2] For instance, Guiso (2010) reports that people who lost trust in their bank during the Global Financial Crisis were more than four times more likely to run on the bank than those who retained full trust. Likewise, Sapienza and Zingales (2012) find that high trust in banks or bankers keeps people from withdrawing deposits and storing them as cash because they fear a bank's collapse. Furthermore, when customers trust financial institutions, they are more likely to allocate their savings to financial intermediaries.[3]

Surprisingly, whereas a large strand of literature examines trust in financial institutions and its drivers, only few studies have touched upon trust in the financial sector supervisor. Our research contributes to filling this gap in the literature. In their survey, Van der Cruijsen et al. (2022a) conclude that there is strong evidence that financial institutions' characteristics and behavior affect trust. Given that institutions' behavior affects trust, trust in the supervisor may enhance trust in the financial sector, if consumers are aware that the behavior of financial institutions is supervised. Indeed, Mosch and Prast (2008) and van der Cruijsen et al. (2021) find a positive association between trust in the supervisor and trust in the financial sector. This obviously leads to the question of what drives public trust in the financial sector supervisor.

[1] https://www.cairn.info/revue-finance-et-bien-commun-2005-1-page-81.htm.
[2] Obviously, the reverse also holds: financial instability, notably financial crises, may lead to lower trust in financial institutions. And this effect may last for a long time. Osili and Paulson (2014) find that immigrants who experienced a systemic banking crisis prior to living in the US are less likely to have checking accounts in the US than immigrants from the same country without such an experience. Likewise, van der Cruijsen et al. (2021) report that consumers' experiences during the Global Financial Crisis have an impact on their trust in financial institutions many years later.
[3] Using survey data for ten Central, Eastern and Southeastern European countries, Stix (2013) reports, for instance, that distrustful people are less likely to have a savings account and have stronger liquidity preferences than trustful people. Likewise, Park (2020) reports that the willingness of Koreans to entrust money to financial institutions is positively correlated with their trust in financial institutions.

This paper examines trust in one of the financial sector supervisors in the Netherlands, namely De Nederlandsche Bank (DNB). Under the so-called Twin Peaks model of supervision, DNB is responsible for micro-prudential supervision of banks[4], insurance companies, and pension funds, whereas the Netherlands Authority for the Financial Markets (AFM) exercises market conduct supervision. The AFM examines whether banks, insurance companies and pension funds treat their clients properly and that financial market processes are orderly and transparent. As resolution authority, DNB is responsible for the execution of the Deposit Guarantee Scheme under which deposits of up to EUR 100,000 in most accounts will be refunded to the accountholder if a bank fails. DNB is also the central bank of the Netherlands and its President is member of the European Central Bank (ECB) Governing Council, which decides about monetary policy in the euro area.

Using a survey among more than 2,000 consumers in the Netherlands, we address four questions: 1. How has trust in DNB as financial sector supervisor evolved? 2. Which characteristics of respondents (like their knowledge about supervision) are related to their trust in DNB? 3. Which responsibilities and actions of DNB enhance public trust in DNB? And finally: 4. Can communication enhance trust in DNB as financial sector supervisor?

A large and rapidly expanding literature uses survey data to analyze the drivers of public trust in (the monetary policies of) central banks. Most of this research has been conducted for the case of the ECB, based on readily available survey data from the Eurobarometer (see Blinder et al. (2022) for a review of this literature). In contrast, the drivers of trust in the financial sector supervisor have received scant attention in the literature. The only studies that we are aware of are Mosch and Prast (2008) and van der Cruijsen et al. (2016), which used previous editions of the same survey as we employ. Mosch and Prast (2008) conclude that trust in other people, age and income are positively related to trust in DNB and men trust DNB more than women; van der Cruijsen et al. (2016) report similar findings. In addition, their results suggest that trust in the banking supervisor is relatively high for home-owners, more educated people, and people who take care of household finances. We expand on both studies by not only examining the association between respondents' characteristics and their trust in the supervisor, but by also asking respondents which activities of DNB enhance their trust in the supervisor. For instance, do fit and proper assessments of top managers of financial institutions by the financial sector

[4] Since the start of the European Banking Union in 2014, the ECB's Single Supervisory Mechanism (SSM) is responsible for the supervision of large banks. DNB is involved in implementing the supervision of large banks and bears the primary responsibility for supervising small banks.

supervisor enhances trust in the supervisor? And if so, is this effect on trust stronger than the impact of supervision of the financial health of financial institutions?

One of the characteristics of respondents that we consider is their knowledge about supervision. Our work is thus related to the literature on financial literacy (see Lusardi and Mitchell (2014) for a survey). This literature shows that financially literate people generally make better financial decisions. However, little is known about the importance of financial knowledge for trust in the financial sector supervisory authority. The only study we are aware of is by van der Cruijsen et al. (2021) who report that self-assessed financial knowledge in general is significantly positively related to trust in the supervisory authority. Instead, we construct measures for respondents' actual knowledge about financial sector supervision following van der Cruijsen et al. (2013).[5] To ensure that this measure does not pick up financial literacy, we control for general financial knowledge in some of our models explaining trust in the financial sector supervisor.

Finally, we analyze how communication on financial sector supervision may enhance trust in DNB. Although there is a rapidly growing literature on central bank communication with the general public, as surveyed by Blinder et al. (2022), communication by financial sector supervisors with the general public has received very limited attention yet in the literature (Born et al., 2011). Still, supervisors seem to believe that their communication may enhance trust. For instance, on its website the ECB's SSM states that "Clear and effective communication is very important to us. It increases trust and contributes to stability."[6] To the best of our knowledge, this is the first paper addressing this issue.

The remainder of the paper is structured as follows. Section 2 outlines our data and shows how public trust in DNB has evolved. Section 3 examines the relationship between respondents' characteristics (including knowledge of supervision) and their trust in DNB, while section 4 reports which activities of DNB are related to respondents' trust in the supervisor. Section 5 discusses whether communication by the supervisor may enhance public trust. Section 6 concludes.

[5] These authors used these measures to examine how well the public is informed about banking supervision. They did not analyze whether knowledge about supervision is related to trust in the supervisor.
[6] https://www.bankingsupervision.europa.eu/press/html/index.en.html.

2. Public trust in DNB as supervisory authority

We use data from the DNB Trust Survey (DTS). Each year, DNB collects detailed data on trust in the financial sector via the DTS. The DTS is held among the Centerpanel, a representative sample of the Dutch-speaking population in the Netherlands. The Centerpanel is managed by Centerdata, a research institute affiliated with Tilburg University. To recruit panel members, a random national sample was drawn from the private postal address file issue. Households were then contacted by phone number (if available) or postal mail. People who do not possess a computer with internet access also participate. Centerdata provides a simple computer, an ADSL connection and technical assistance to these people. Households can only join the Centerpanel upon invitation from Centerdata.[7] All family members aged 16 and above in the panel are invited to complete the DTS.[8] Because Centerdata handles all contacts with the survey participants, and it is not mentioned in our questionnaire that DNB has commissioned the survey, it seems more likely that, if anything, participants associate the survey with Centerdata rather than DNB. DTS data can easily be linked to data on personal characteristics of respondents. This information is captured by the annual DNB Household Survey (DHS), which is also filled in by members of the Centerpanel. The DHS has been extensively used by researchers for different purposes (see, for example, Hurd et al., 2011; van Rooij et al., 2011; 2012; and van Rooij and de Haan, 2019).

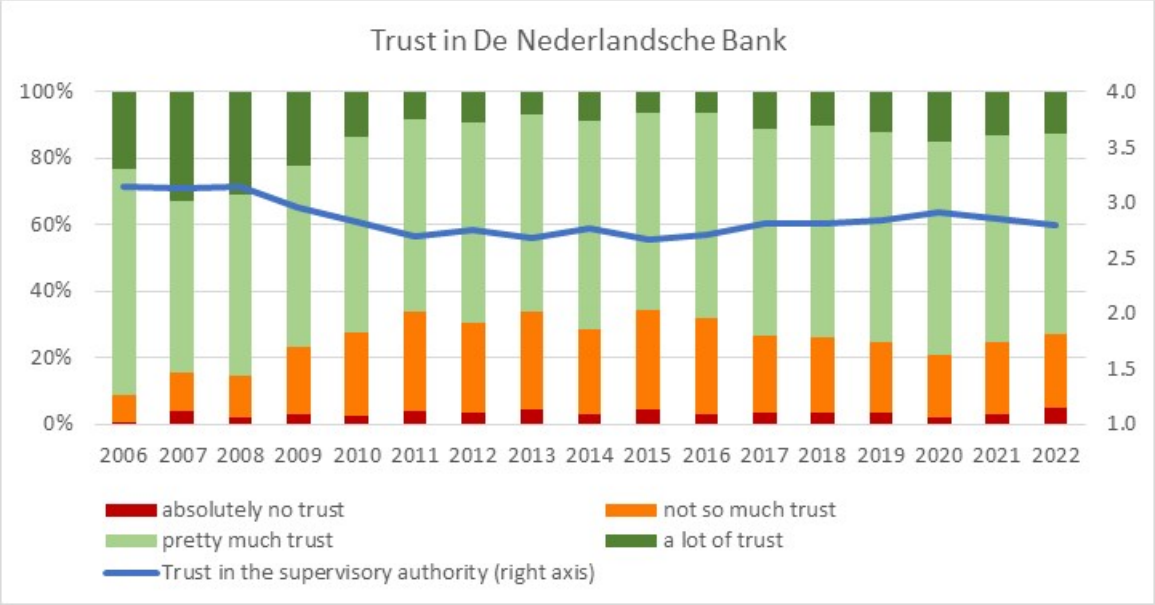
The questionnaire was presented to all participants in the Centerpanel aged 16 years or older in the period 18 March 2022 - 19 April 2022. Of the 3,114 panel members approached 2,197 panel members completed the survey, which is a response rate of 70.6%. In addition, 37 panel member (1.2%) answered part of the survey. The response rate is high compared to regular surveys, but not uncommon for internet-based surveys.

Since its inception in 2006, the DTS includes a question about trust in DNB. We therefore have data from 2006 until 2022. It is important at this stage to point out that although many respondents participate over several years in the survey, we have information for all years of our 2022 sample for only 9.7% of respondents. On average, respondents in our 2022 sample are included 8.2 times in the annual survey. 4.5% of the respondents in our 2022 sample participated only in 2022. Our empirical analysis on the relationship between respondents' characteristics and their trust in DNB is based on data from the 2022 DTS so that we can verify

[7] See Teppa and Vis (2012) for more information on the Centerpanel.
[8] Several previous papers have used the DTS; see, for example, Jansen et al. (2015) and Diepstraten and van der Cruijsen (2019).

whether results reported by Mosch and Prast (2008) and van der Cruijsen et al. (2016), who used previous trust surveys, are robust.

On average, respondents have pretty much trust in DNB. Figure 1 shows the outcomes for trust in DNB. *Trust in the supervisory authority* is an ordered variable capturing trust in DNB. It ranges from 1 (absolutely no trust) to 4 (a lot of trust). Between 2006 and 2008, trust in DNB was high and stable. However, trust in the supervisory authority declined sharply during the financial crisis and has not yet completely recovered. Notably after the nationalization of a bank in 2008 and the bankruptcy of another bank in 2009 trust in the supervisor declined sharply. In 2012, trust in DNB increased somewhat, but this trend was reversed after the nationalization of a bank in 2013. Although trust in DNB gradually increased since 2015, it declined somewhat during the COVID-19 pandemic. In 2022, trust in the supervisory authority was 2.8 on average.



Source: DTS. *Notes*: The total number of observations is 38,488. The figure shows the answers to "How much trust do you have in De Nederlandsche Bank?" with answer categories absolutely no trust (1), not so much trust (2), pretty much trust (3), a lot of trust (4). It includes response shares on the left axis and the average value of the answer (*trust in the supervisory authority*) on the right axis.

3. Who trusts DNB?

To examine in more details which respondents trust DNB as supervisory authority, we estimate a model using data from the 2022 DTS with *trust in the supervisory authority* as dependent variable and respondents' characteristics as explanatory variables. As the trust variable is an

ordered variable that can take on a limited number of values, we estimate ordered logistic regressions. The model is as follows:

$$\textit{Trust in the supervisory authority}_i = f(K_i, X_i) + e_i \quad (1)$$

Where *Trust in the supervisory authority*$_i$ denotes trust in DNB of individual i. K_i is respondents' knowledge about supervision, while the vector X_i captures other personal characteristics, and e_i is the idiosyncratic error.

K_i has been constructed as follows (cf. van der Cruijsen et al., 2013). We asked a question to determine knowledge about banking supervision. The question was introduced by the following text: "The next question is intended to measure your knowledge about banking supervision in the Netherlands. It is no problem if you don't know the right answer. To give a fair impression of your current knowledge it is important that you don't look up any answers." This introduction prevents guesswork and looking up of correct answers. Respondents always have the option to answer "I don't know". The question provided several supervisory tasks and responsibilities and respondents were asked to indicate whether DNB, the AFM, both supervisory authorities or none of them was responsible for a particular task. More specifically, we asked: "According to you, which are tasks and responsibilities of De Nederlandsche Bank (DNB) and which of the Netherlands Authority for the Financial Markets (AFM)?" We gave the panel a list of 13 tasks and responsibilities. Table 1 shows the outcomes with the tasks and responsibilities numbered K1-K13.[9]

Only a small share of respondents knows that the responsibilities identified in K8, K11, K12, and K13 are not among the duties of either DNB and/or AFM. A majority (51%) believes that supervisors have to prevent banks from selling products to customers who cannot really afford them (K8). Only 8% of the respondents is aware that supervisors do not decide on the bankruptcy of a bank – in practice it's a court of law (K11). Almost two-thirds of the public think that supervisors have to inform the outside world if a bank has financial problems (K12). Finally, many respondents (64%) incorrectly assume that supervisors will refund any deposits when a bank goes bankrupt (K13). In practice, repayment depends on the type of account and is topped at EUR 100,000 per person per bank.

[9] The formulation of K1 is different than in the survey question of van der Cruijsen et al. (2013). We changed it from "never let banks go bankrupt" into "trying to prevent that banks go bankrupt". The latter formulation reflects DNB's mandate, in contrast to the former.

Knowledge of supervisory tasks and responsibilities of AFM and DNB is poor. AFM supervises the careful treatment of customers by banks (K2), sees that banks do not provide misleading information (K5) and that openness is observed in financial markets (K6), and ensures that banks are candid toward their customers about the costs of bank products (K7). About 1 in 3 respondents knows that AFM is responsible for these tasks. DNB tries to prevent that banks go bankrupt (K1). Supervision does, however, not offer a guarantee against the failure of financial institution and hence supervisors cannot promise never to let a bank fail. By their supervision they aim to reduce the likelihood and impact of an institution's failure. DNB supervises the financial health of banks (K3), promotes financial stability (K9) and decides on banking authorizations (K10). Slightly more than 1 in 3 respondents is aware of this.

Table 1. Knowledge about supervisory tasks and responsibilities.

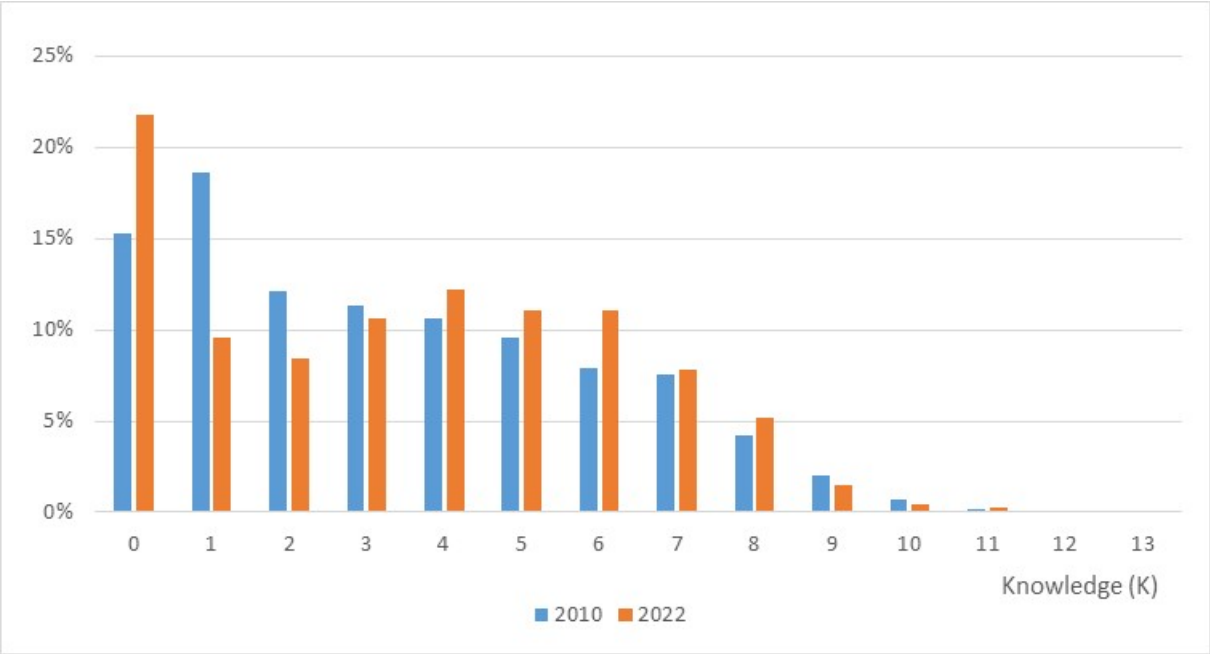
		DNB	AFM	DNB & AFM	Neither	I don't know
K1	trying to prevent that banks go bankrupt	38%√*	5%*	25%*	6%	26%
K2	supervision of due customer care by banks	11%*	36%√*	22%*	6%	25%
K3	supervision of banks' financial health	38%√*	10%*	29%*	1%	22%
K4	supervision of bankers' remuneration	14%*	19%*	17%√*	19%	31%
K5	prevention of misleading information by banks	7%*	37%√*	28%*	3%	26%
K6	ensuring openness about what is going on in financial markets	9%*	28%√*	29%*	6%	27%
K7	ensuring openness about the cost of banking products	10%*	35%√*	21%*	7%	27%
K8	preventing the sale of bank products to customers that cannot really afford them	5%	30%	16%	18%√*	30%
K9	promoting the stability of the financial sector	36%√*	6%*	32%*	2%	24%
K10	power to decide on the issue/withdrawal of banking authorizations	42%√*	9%*	17%*	3%	29%
K11	power to pronounce bankruptcy on a bank	36%	7%	18%	8%√*	31%
K12	disclosing banks' financial problems	28%	12%	22%	6%√*	32%
K13	ensuring that all customers of a failed bank are fully reimbursed	40%	6%	18%	8%√*	29%

Source: DTS. *Note*: the number of observations is 2,203. √ indicates the correct answer and forms the basis for K. In case of the alternative, less strict knowledge measure (K_alt) all answers with a * are considered 'correct'.

Based on the respondents' answers we have constructed *K* as a proxy for knowledge about supervision. Respondents get a score of 1 for each correctly identified task or responsibility. Therefore, K may range from 0 (all answers wrong or I don't know) to 13 (all answers correct). In practice, however, the highest knowledge score a Centerpanel member

obtained was 11. Figure 2 summarizes the knowledge scores. The average score was 3.5 in 2022 and 3.3 in 2010, which is a small improvement (one-sided t-test, p=0.01).[10]

Figure 2. Knowledge about supervisory tasks and responsibilities: 2022 versus 2010.



Source: DTS. *Note*: the number of observations is 2,203. Data for 2010 come from van der Cruijsen et al. (2013).

X_i includes a wide range of variables (see Table A1 in the appendix for an overview). *Male* is a binary dummy that is 1 for males and 0 for females. Three *age dummies* capture the age of the respondent: between 36 and 50, between 50 and 65, and 65 and over. Respondents younger than 36 are in the reference category. *Education: high* is 1 for respondents who successfully completed higher vocational or university education and 0 for lower-educated respondents. Three *income dummies* are constructed to control for differences in the household net monthly income: *Income: EUR 1,840-2,800*; *Income: EUR 2,800-3,900;* and *Income: > EUR 3,900*. The dummies are 1 for respondents who have a household income that falls in the mentioned income category and 0 otherwise. Respondents in the reference category have an income of EUR 1,840 or below. We also control for employment status: the binary dummy *Employed* is 1 for respondents who have a paid job, work in the family business or are self-employed and 0 for other respondents. If the head of a household lives together with a partner the variable *Partner* is 1 and otherwise it is 0. *Homeowner* is included as a proxy for wealth.

[10] To make a fairer comparison, we also constructed a knowledge measure that excludes K1 as this question changed. This knowledge measure was 3.0 in 2010 and 3.1 in 2022. Again, the knowledge increase is small, but significant (one-sided t-test, p=0.09).

This variable is 1 for homeowners and 0 else. The variable *Urban area* is 1 if the degree of urbanization of the respondent's residence is high or very high, and 0 otherwise.

In some of our models, we also control for generalized trust, respondents' health, their financial literacy and their understanding of monetary policy. Van der Cruijsen et al. (2022b) report that generalized trust, respondents' health, and their financial literacy are related to trust in financial institutions. The dummy variable *Trust in other people* is capturing trust in other people. The question asked to construct this variable is in the DTS and very similar to the World Values Survey (WVS) question that is generally used to construct a measure of generalized trust (see Torpe and Lolle (2011) for a further discussion). *Trust in other people* is equal to 1 for respondents who find that most people can be trusted, and 0 for respondents who believe that one cannot be careful enough. As an alternative, we employ the variable *Trust in other people_alt* which is an ordered variable ranging between 1 (absolutely no trust) and 4 (a lot of trust). *Health: fair-poor* is a dummy reflecting respondents' assessment of their own health situation which is 1 if the respondent indicates to be in poor, not so good, or fair health and 0 otherwise. It is based on a question included in the DHS. We also use DHS data to construct several financial literacy (FL) dummy variables (*FL: more-or-less knowledgeable, FL: knowledgeable*; and *FL: very knowledgeable*). These variables reflect respondents' self-assessed knowledge of financial matters. For example, *FL: more-or-less knowledgeable* is 1 if respondents answer to be more-or-less knowledgeable, and 0 otherwise. The reference category includes respondents who consider themselves to be not knowledgeable. Alternatively, we include *FL: actual* as a proxy for financial literacy using data collected in 2018 among the Centerpanel. Following Alessie et al. (2011), this variable measures the number of correct answers to three widely used questions about finance.[11] Last, we control for *Knowledge of monetary policy*. This is the number of correct answers to eleven statements about the ECB's main objective of price stability. See van der Cruijsen et al. (2015) for more information on the underlying question. Brouwer and de Haan (2022) asked the same question in their survey among the Centerpanel. We use their data which is based on a survey held in 2020.

Trust in DNB is positively related to knowledge of supervision. Table 2 shows the estimation results. The coefficient of the variable reflecting respondents' knowledge of

[11] These questions are: 1. Suppose you have 100 euros in a savings account and the interest rate is 2% a year. How much do you think you will have in your savings account after five years, assuming you leave all the money in this account: more than 102 euros, exactly 102 euros, less than 102 euros? 2. Suppose the interest rate on your savings account is 1% per year and inflation is equal to 2% per year. Would you be able to buy more, exactly the same or less after 1 year than today with the money in the account? 3. In your opinion, is the following statement 'true' or 'not true'? A share of a company normally gives a more secure return than an investment fund that only invests in shares.

supervision is always significant, also if we control for generalized trust (columns 3 and 4), financial literacy (columns 6 and 7) or knowledge of monetary policy (column 8). To illustrate the size of the effect, the likelihood that someone trusts DNB a lot is 2.8 times larger for someone with a knowledge score (K) of 11 than for someone with a knowledge score of 0 (see Figure 3).

Trust in the supervisory authority is also related to personal characteristics. In line with the findings of previous studies, we find that male, older, and highly educated people have more trust in DNB. For example, based on the baseline model (Table 3 column 2), the likelihood of having a lot of trust in the supervisory authority is 2 percentage points higher for males than females, 3 percentage points higher for people aged 65 and over than people younger than 36, and 6 percentage points higher for highly educated people than for lower-educated people. Furthermore, there is a positive relationship with income. To illustrate this, someone with a household net monthly income of more than EUR 3,900 is 6 percentage points more likely to have a lot of trust in the supervisory authority than someone with an income of EUR 1,840 or less. Homeowners and healthy people trust DNB more than people who rent a house or with a poor health, respectively, while having a partner and living in an urban area have a negative association with trust in DNB. For example, people who assess their health to be poor, not so good, or fair are 4 percentage points less likely to have a lot of trust in DNB than people with good or excellent health. Being employed is not robustly related to trust in DNB.

When we control for generalized trust, there is still a significant positive relationship between knowledge of supervision and trust in DNB. Trust in DNB is positively related to trust in other people. For example, compared to people who believe one cannot be careful enough in dealing with other people, people who find that most people can be trusted are 15 percentage points more likely to have a lot of trust in DNB.

The relationship between knowledge of supervision and trust in DNB is also robust to the inclusion of financial knowledge and understanding of monetary policy. We find a non-linear relationship between self-assessed financial knowledge and trust in DNB (Table 2 column 6). People who are more-or-less knowledgeable or knowledgeable on financial matters trust DNB more than people who consider themselves to be not knowledgeable (the reference group). However, there is no significant difference between very knowledgeable people and the reference group. Column 7 of Table 2 shows the results of the regression with actual financial knowledge. Someone with all three questions about finance correct is 10 percentage points more likely to have a lot of trust in DNB than someone with an actual financial literacy score of 0. The last column of Table 2 includes knowledge of monetary policy. The coefficient of the

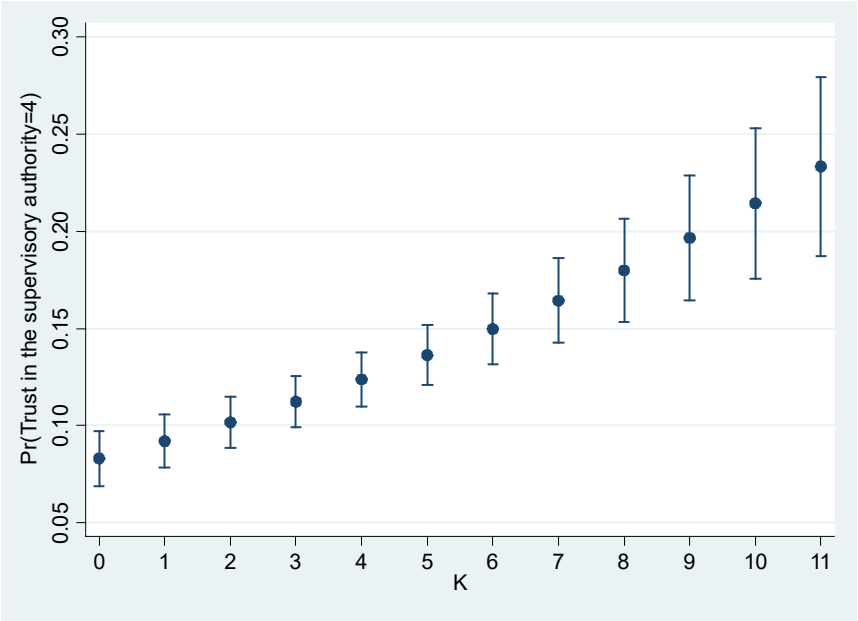
variable reflecting knowledge about the ECB's objective is positive but insignificant. Again, we find a positive relationship between knowledge of supervision and trust in DNB.

Table 2. Knowledge about supervision and public trust in the supervisory authority: regression results.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	0.30***	0.16*	0.21**	0.31***	0.18*	0.15	0.14	0.17*
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.12)	(0.10)
Between 36 and 50	0.10	0.06	0.11	0.01	0.08	0.10	0.43**	-0.00
	(0.15)	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.20)	(0.17)
Between 51 and 65	0.18	0.11	0.11	0.03	0.17	0.13	0.46***	0.06
	(0.14)	(0.13)	(0.14)	(0.13)	(0.14)	(0.14)	(0.18)	(0.16)
66 and over	0.41***	0.36**	0.38**	0.22	0.37**	0.36**	0.72***	0.35**
	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.21)	(0.17)
Education: high	0.64***	0.53***	0.33***	0.40***	0.54***	0.55***	0.43***	0.51***
	(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.13)	(0.10)
Income: EUR 1,840-2,800	0.32**	0.27**	0.22*	0.14	0.28**	0.31**	0.15	0.29**
	(0.13)	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)	(0.18)	(0.14)
Income: EUR 2,800-3,990	0.42***	0.37***	0.35**	0.35**	0.35**	0.40***	0.21	0.31**
	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)	(0.14)	(0.19)	(0.14)
Income: > EUR 3,990	0.65***	0.58***	0.53***	0.45***	0.54***	0.57***	0.38*	0.51***
	(0.15)	(0.15)	(0.15)	(0.16)	(0.17)	(0.16)	(0.22)	(0.16)
Employed	-0.18	-0.18	-0.16	-0.17	-0.27**	-0.23*	-0.09	-0.12
	(0.12)	(0.12)	(0.12)	(0.12)	(0.13)	(0.12)	(0.17)	(0.13)
Partner	-0.47***	-0.44***	-0.41***	-0.38***	-0.38***	-0.38***	-0.34**	-0.46***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.15)	(0.12)
Homeowner	0.43***	0.37***	0.29***	0.29**	0.34***	0.34***	0.43***	0.40***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.15)	(0.12)
Urban area	-0.19**	-0.22**	-0.18*	-0.21**	-0.26***	-0.24**	-0.22*	-0.22**
	(0.09)	(0.09)	(0.09)	(0.09)	(0.10)	(0.10)	(0.12)	(0.10)
K		0.11***	0.07***	0.08***	0.10***	0.10***	0.09***	0.10***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Trust in other people			1.43***					
			(0.10)					
Trust in other people_alt				1.57***				
				(0.10)				
Health: fair-poor					-0.38***			
					(0.11)			
FL: more-or-less knowledgeable						0.24*		
						(0.15)		
FL: knowledgeable						0.39**		
						(0.16)		
FL: very knowledgeable						0.12		
						(0.26)		
FL: actual							0.28***	
							(0.08)	
Knowledge of monetary policy								0.03
								(0.02)
Number of observations	2,180	2,180	2,180	2,180	1,895	2,005	1,232	1,931
Wald χ^2	139.5***	182.7***	364.7***	460.7***	167.5***	171.5***	121.6***	161.7*
Log pseudolikelihood	-2198.8	-2177.6	-2067.1	-2015.3	-1904.0	-2002.1	-1211.6	-1945.4
Pseudo R^2	0.03	0.04	0.09	0.11	0.05	0.04	0.05	0.04

Notes: The table reports parameter estimates of ordered logit models. Robust standard errors are shown in parentheses. The dependent variable *Trust in the supervisory authority* ranges from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denote statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Figure 3. Relationship between knowledge of financial supervision (K) and trust in the supervisory authority.



Notes: The figure shows the probability of having a lot of trust in the supervisory authority (DNB) for each of the knowledge levels observed in our data and includes 95% confidence intervals. It is based on model (2) of Table 2.

Knowledge about DNB's power to decide on the issue/withdrawal of banking authorizations (K10) seems to be particularly important. We reran the models of Table 2 with thirteen detailed knowledge measures K1-K13 instead of K. These binary indicators capture the knowledge score on each statement. For example, K1 is 1 for respondents who gave the correct answer to the first statement and is 0 for respondents who gave the false answer or answered I don't know. The results are shown in Table A.2 of the appendix. In the baseline model (column 2) we find significant and positive coefficients for K7, K9, K10 and K11, whereas the coefficients of the other knowledge of banking supervision measures are insignificant. People who know that AFM ensures that banks are candid toward their customers about the costs of bank products (K7), that DNB promotes the stability of the financial sector (K9) and has the power to decide on the issue/withdrawal of banking authorizations (K10), and that neither DNB nor AFM has the power to pronounce bankruptcy on a bank (K11) have higher trust in DNB than people who do not know this. Only for the coefficient of K10 it holds that it is significant in all models presented in Table A.2.

Our findings are robust to the use of an alternative, less strict, supervisory knowledge indicator. This alternative knowledge indicator *K_alt* treats the supervisors as if they were in a 'Single Peak' system. Respondents no longer need to associate the correct supervisor, AFM

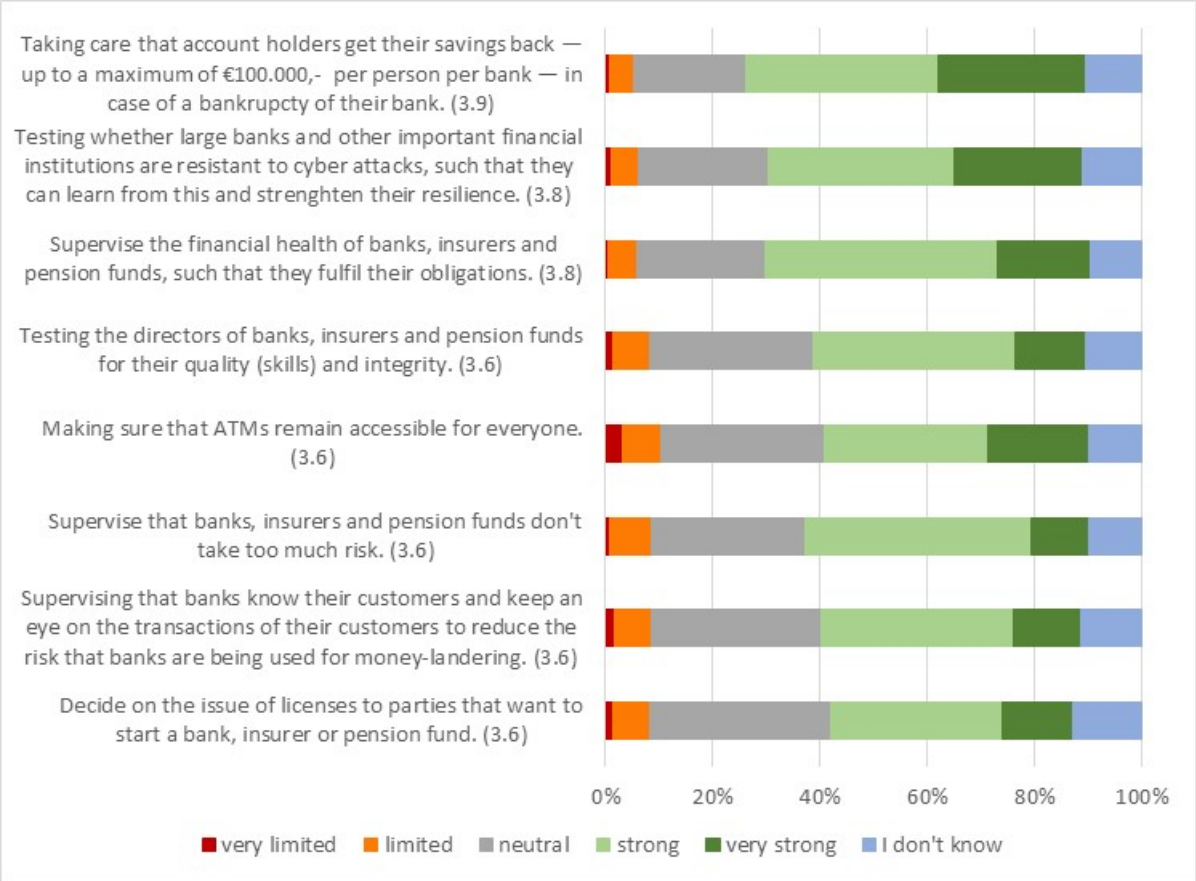
and/or DNB, with a particular supervisory responsibility. They only need to correctly identify which tasks belong to the financial supervisors and which not. Table A.3 in the appendix shows the results when we use this alternative definition of knowledge. The signs of the coefficients of the variables are the same as in Table 2. There are also no material effects on the significance of coefficients. A noteworthy exception is *Knowledge of monetary policy*. In contrast to before, its positive relationship with trust in DNB is significant. Someone with a knowledge of monetary policy score of 11 is 1.4 times more likely to trust DNB a lot than someone with a knowledge score of 0. As in the regressions with K, we find a positive, although weaker, relationship between knowledge of supervision and trust in the supervisory authority.

4. Which tasks and responsibilities contribute to trust?

We find that a wide range of tasks and responsibilities of DNB contribute to public trust. We asked our respondents whether particular tasks and responsibilities of DNB affects their trust in DNB. For instance, DNB submits newly appointed management and supervisory board members to a fit and proper assessment. The same applies to other key officers.[12] Not all tasks and responsibilities of DNB we submitted to the respondents are related to financial sector supervision. For instance, as resolution authority, DNB is responsible for implementing the Deposit Guarantee Scheme (DGS). This responsibility may, however, be related to respondents' trust in DNB as supervisory authority. Indeed, as Figure 4 shows, this responsibility received the highest score (average of 3.9 out of 5), closely followed by the responsibilities to supervise financial institutions' resilience against cyber-attacks and financial health. Although the other tasks and responsibilities of DNB received slightly lower scores, Figure 4 shows that on average respondents feel that all of these tasks and responsibilities increase their trust in DNB as financial sector supervisor.

[12] 57% of the respondents (fully) agree that this task enlarges their trust in the financial sector. Likewise, the fact that DNB supervises financial institutions contributes to trust in the financial health of institutions. 61% of the of the respondents (fully) agree that this task enlarges their trust in financial institutions fulfilling their obligations.

Figure 4. Degree to which tasks of DNB enlarge trust in this supervisor.



Source: DTS 2022. *Notes*: The number of observations is 2,197. The question was phrased as follows: "Below are some tasks of De Nederlandsche Bank (DNB). To what degree does the execution of these tasks of DNB enlarge your trust in this supervisor?". Factors are ranked based on the average score, where "very limited"=1, "limited"=2, "neutral"=3, "strong"=4 and "very strong"=5. We have included the average scores in parentheses behind each factor.

5. Communication about supervision

There is quite some recent research about central bank communication with the general public. Blinder et al. (2022) provide a survey of this line of literature. In answering the question of whether better communication with the public can increase trust in the central bank, these authors conclude that "the answer appears to be yes—though not easily or predictably."

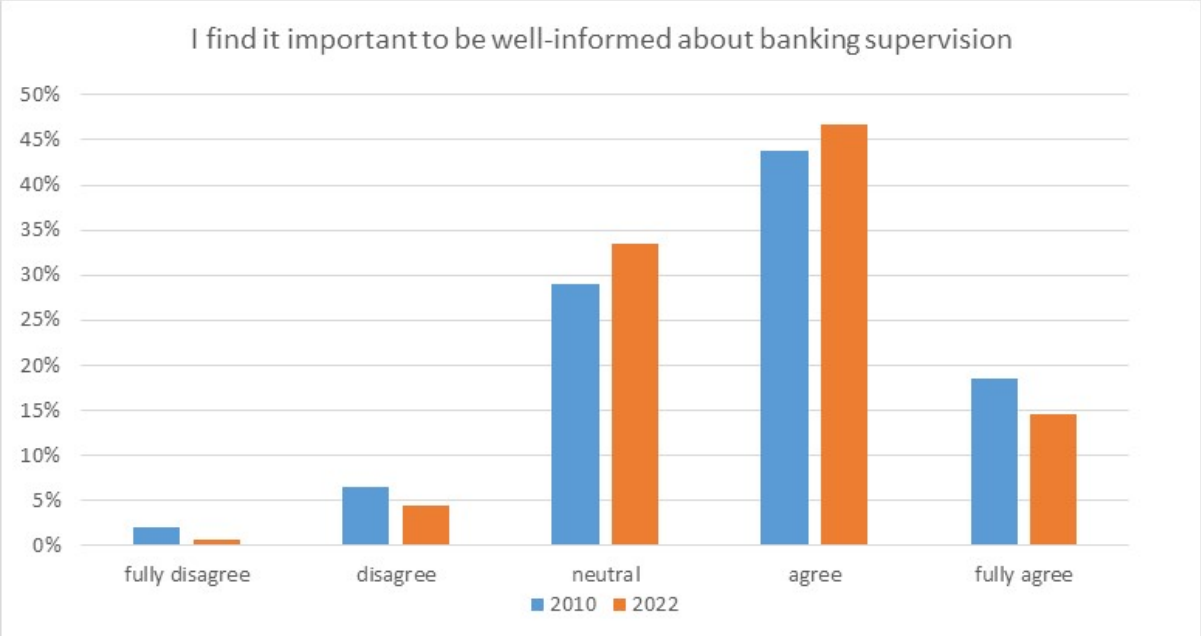
There is hardly any research on communication with the general public about financial sector supervision, let alone research examining whether this may enhance trust in the supervisor.[13] Aiming communication at the general public raises a host of challenges that are not present when communication is designed for financial markets. For one thing, there are

[13] Liedorp et al. (2015) developed an index of supervisory transparency but their research has not led to any follow-up. Research mostly focuses on market reactions to supervisory disclosure; see Sahin et al. (2020) for a discussion of this literature.

several legal confidentiality requirements which imply that a lot of information about financial institutions cannot be shared. Furthermore, as pointed out by Tadesse (2006), the 'transparency-fragility' view implies that more transparency, notably on interventions related to specific institutions, may engender banking-system instability. Disclosure of financial problems at the bank level may lead to the bank's failure through a bank run. A good example is the run on the U.K. bank Northern Rock in September 2007 after disclosure that it had to resort to the Bank of England. Information about problems of a specific bank may be seen as indicator of widespread problems in the banking system, thereby possibly leading to runs on several banks. Finally, communication requires both a sender and a receiver, and non-experts often are not listening. As Blinder (2018: 569) put it: "… the part of central bank communication that matters most is the way policymakers communicate with markets—and for a simple reason: market participants listen." Moreover, compared to monetary policy making, supervisors may have to communicate differently to various stakeholders, such as the public, financial institutions and policy makers.

Our findings suggest that people may be listening when supervisors communicate. Similar to van der Cruijsen et al. (2013), we asked our respondents how important it is to be informed about supervision. Figure 5 shows that in both surveys, most respondents (strongly) agree with the statement that it is important to be informed about banking supervision.

Figure 5. Importance of being well-informed about banking supervision



Source: DTS 2010 and DTS 2022. *Notes*: The number of observations is 2,103 in 2010 and 2,209 in 2022.

The stronger their desire to be well-informed about banking supervision, the higher is respondents' knowledge about supervisory tasks and responsibilities. Table 3 shows this positive association. A respondent who fully disagrees that it is important to be well-informed about banking supervision has on average a knowledge score (K) of 1.7, whereas respondents who find it important to be well-informed have a knowledge score that is more than twice as large, namely 3.8.

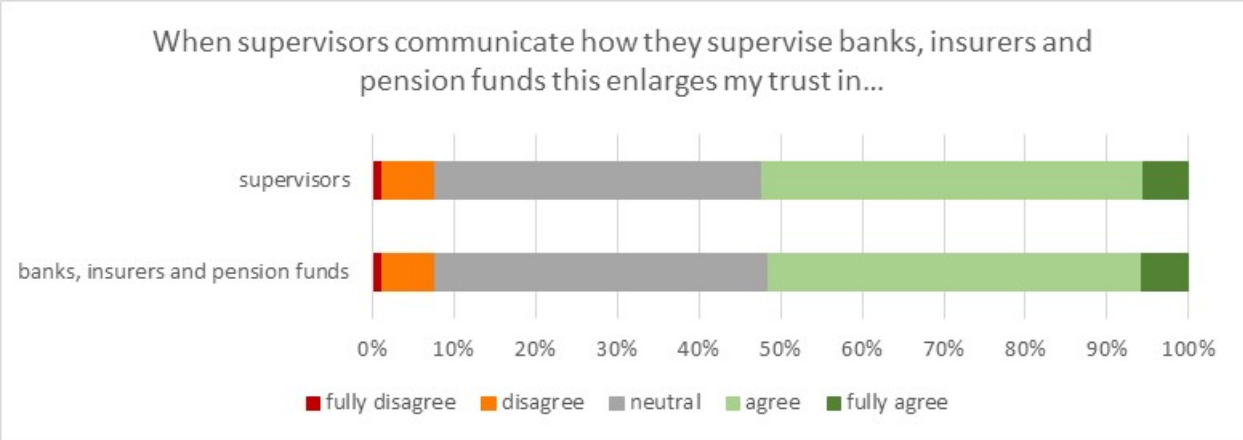
Table 3. There is a positive association between the desire to be well-informed about banking supervision and knowledge of financial supervision.

It is important to be well-informed on banking supervision.	K	K_alt
Fully disagree	1.7	3.7
Disagree	2.8	5.3
Neutral	2.9	5.4
Agree	3.8	7.1
Fully agree	3.8	7.4

Source: DTS 2022. *Note*: the number of observations is 2,203.

Based on a question to analyze communication further, we find that communication about supervision enhances trust in the supervisory authority. Most respondents agree or fully agree with the statement that communication about how financial institutions are supervised enhances their trust in the supervisor and the supervised financial institutions (see Figure 6). Further research is needed as to how this communication can be done in such a way that it enhances trust in the supervisor the most.

Figure 6. Impact of communication about supervision on trust.



Source: DTS 2022. *Note*: number of observations is 2,201.

Respondents who fully agree that communication about supervision enlarges trust in supervisors have better knowledge about supervisory tasks and responsibilities than respondents who disagree or take a neutral stance. This is shown in Table 4.

Table 4. Knowledge and the impact of communication about supervision.

	K		
	Mean	95% confidence interval	
"When supervisors communicate how they supervise banks, insurers and pension funds this enlarges my trust in supervisors."			
Fully disagree	2.9	2.0	3.9
Disagree	3.3	2.9	3.7
Neutral	2.8	2.6	3.0
Agree	4.0	3.8	4.1
Fully agree	4.5	4.0	4.9

Source: DTS 2022. *Note*: the number of observations is 2,201.

6. Conclusions

Our research contributes to knowledge about trust in the financial supervisor, a topic only few studies have touched upon. This is surprising given that trust in the financial institutions is key to the functioning of the financial sector and may be enhanced by trust in the financial sector supervisor. Using a survey among more than 2,000 consumers in the Netherlands, we find that trust in DNB – the Dutch supervisor responsible for micro-prudential supervision of banks, insurance companies, and pension funds – declined sharply during the financial crisis and has not yet completely recovered. In 2022, on average, respondents had pretty much trust in DNB.

Our research shows that public knowledge about supervision is positively associated with trust in the supervisor. The likelihood that someone trusts DNB a lot is 2.8 times larger for someone that has the highest observed knowledge score than for someone with the lowest observed knowledge score. Knowledge about DNB's power to decide on the issue/withdrawal of banking authorizations seems to be especially important. Still, public knowledge about banking supervision is far from perfect. This finding is in line with prior research on the Netherlands by van der Cruijsen et al. (2013).

Trust in the supervisor is also related to personal characteristics. For example, trust in DNB is relatively high among high-educated males with a high income. It is also positively related to generalized trust, whereas the relationship with financial knowledge in general is less clear-cut. Respondents indicate that a wide range of tasks and responsibilities of DNB contribute to trust in the financial supervisor. The execution of the deposit guarantee system is the most important factor. The responsibilities to supervise financial institutions' resilience

against cyber-attacks and financial health are also in the top three. Finally, we find that communicating about supervisory activities also enlarges trust.

Our research suggests trust in the financial supervisor might be enhanced by enlarging public knowledge of supervisory tasks and responsibilities. This is a very challenging route with obstacles on its way. Supervision is not easy to understand for laymen and it is hard to reach the public. There is hope though as our findings suggest that a majority of the public wants to be well-informed about banking supervision. Moreover, respondents self-declare that communication about supervision enhances their trust in the financial supervisor. Our research therefore underlines the importance of transparency for trust in the financial sector supervisor. Supervisors need to find a right balance between communication about their actions, while recognizing the effects too much transparency might have on an institutions' financial position and financial stability in general. Further research is needed as to how to optimally design communication such that it enhances trust in the supervisor the most.

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Appendix

Table A.1. Description of variables.

Variable	Description	Mean	Sd	Min	Max	N
Dependent variable						
Trust in the supervisory authority	Answer to "How much trust do you have in De Nederlandsche Bank?" (1 = absolutely no trust, 2 = not so much trust, 3 = pretty much trust, 4 = a lot of trust).	2.80	0.71	1	4	2,180
Explanatory variables						
K	Knowledge about banking supervision. Respondents received a list of 13 tasks and responsibilities. Respondents get a score of 1 for each correctly identified task or responsibility. Therefore, K may range from 0 (all 13 answers wrong or I don't know) to 13 (all answers correct).	3.46	2.69	0	11	2,180
K1	Knowledge based on statement 1 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.38	0.48	0	1	2,180
K2	Knowledge based on statement 2 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.36	0.48	0	1	2,180
K3	Knowledge based on statement 3 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.38	0.49	0	1	2,180
K4	Knowledge based on statement 4 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.17	0.38	0	1	2,180
K5	Knowledge based on statement 5 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.37	0.48	0	1	2,180
K6	Knowledge based on statement 6 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.28	0.45	0	1	2,180
K7	Knowledge based on statement 7 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.35	0.48	0	1	2,180
K8	Knowledge based on statement 8 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.18	0.38	0	1	2,180
K9	Knowledge based on statement 9 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.36	0.48	0	1	2,180
K10	Knowledge based on statement 10 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.42	0.49	0	1	2,180
K11	Knowledge based on statement 11 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.08	0.27	0	1	2,180
K12	Knowledge based on statement 12 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.06	0.24	0	1	2,180
K13	Knowledge based on statement 13 (0 = answer is wrong or I don't know, 1 = answer is correct).	0.08	0.27	0	1	2,180
K_alt	Knowledge about banking supervision. This alternative knowledge indicator treats the supervisors as if they were in a 'Single Peak' system. Respondents no longer need to associate the correct supervisor with a particular supervisory responsibility. They only need to correctly identify supervisory tasks.	6.46	3.58	0	12	2,180
Male	Binary dummy (1 = male, 0 = female).	0.52	0.50	0	1	2,180
35 and below	Binary dummy (1 = 35 and below, 0 = else). Reference category.	0.13	0.34	0	1	2,180
Between 36 and 50	Binary dummy (1 = between 36 and 50, 0 = else).	0.18	0.39	0	1	2,180
Between_51_and_65	Binary dummy (1 = between 51 and 65, 0 = else).	0.30	0.46	0	1	2,180
66 and over	Binary dummy (1 = 66 and over, 0 = else).	0.38	0.49	0	1	2,180
Education: high	Binary dummy (1 = higher vocational education or university education, 0 = else).	0.39	0.49	0	1	2,180
Income: ≤ EUR 1,840	Binary dummy (1 = household net monthly income ≤ EUR 1,840, 0 = else). Reference category.	0.25	0.43	0	1	2,180
Income: EUR 1,840-2,800	Binary dummy (1 = household net monthly income > EUR 1,840 and ≤ EUR 2,800, 0 = else).	0.25	0.43	0	1	2,180
Income: EUR 2,800-3,990	Binary dummy (1 = household net monthly income > EUR 2,800 and ≤ EUR 3,990, 0 = else).	0.24	0.43	0	1	2,180
Income: > EUR 3,900	Binary dummy (1 = household net monthly income > EUR 3,990, 0 = else).	0.26	0.44	0	1	2,180

(continued on next page)

Table A.1 *(continued)*

Variable	Description	Mean	Sd	Min	Max	N
Employed	Binary dummy (1 = paid job, work in family business or self-employed, 0 = else).	0.46	0.50	0	1	2,180
Partner	Binary dummy (1 = head of household is married or living with a partner, 0 = else).	0.68	0.47	0	1	2,180
Homeowner	Binary dummy (1 = homeowner, 0 = else).	0.71	0.45	0	1	2,180
Urban area	Binary dummy (1 = degree of urbanisation of respondent's residence is strong or very strong, 0 = else).	0.41	0.49	0	1	2,180
Trust in other people	Binary dummy. Answer to "In general, do you think most other people can be trusted or do you think one cannot be careful enough in dealing with other people?" (1 = can be trusted, 0 = one cannot be careful enough).	0.62	0.49	0	1	2,180
Trust in other people_alt	Ordered variable capturing trust in other people (1 = absolutely no trust, 2 = not so much trust, 3 = pretty much trust, 4 = a lot of trust).	2.81	0.53	1	4	2,180
Health: fair-poor	Binary dummy (1 = poor, not so good or fair, 0 = good or excellent).	0.26	0.44	0	1	1,895
FL: not knowledgeable	Self-assessed knowledge of financial matters. Binary dummy (1 = not knowledgeable, 0 = else). Reference category.	0.13	0.34	0	1	2,005
FL: more-or-less knowledgeable	Self-assessed knowledge of financial matters. Binary dummy (1 = more-or-less knowledgeable, 0 = else).	0.49	0.50	0	1	2,005
FL: knowledgeable	Self-assessed knowledge of financial matters. Binary dummy (1 = knowledgeable, 0 = else).	0.32	0.47	0	1	2,005
FL: very knowledgeable	Self-assessed knowledge of financial matters. Binary dummy (1 = very knowledgeable, 0 = else).	0.06	0.24	0	1	2,005
FL: actual	Number of correct answers to three questions about finance (see footnote 10).	2.36	0.84	0	3	1,232
Knowledge of monetary policy	Number of correct answers to eleven statements about the ECB's main objective of price stability.	4.66	2.77	0	11	1,931

Note: This table describes the variables used in the regressions of which the results are reported in Table 2. The mean, standard deviation (Sd), number of observations (N), minimum (Min) and maximum (Max) are reported for the sample included in these regressions.

Table A.2. Knowledge about supervision and public trust in the supervisory authority: regression results of models with detailed knowledge scores.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	0.30***	0.12	0.17*	0.27***	0.13	0.10	0.08	0.12
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.12)	(0.10)
Between 36 and 50	0.10	0.05	0.10	-0.01	0.06	0.07	0.40**	-0.02
	(0.15)	(0.16)	(0.15)	(0.15)	(0.17)	(0.16)	(0.20)	(0.17)
Between 51 and 65	0.18	0.08	0.08	-0.01	0.14	0.10	0.41**	0.03
	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)	(0.14)	(0.18)	(0.16)
66 and over	0.41***	0.34**	0.34**	0.18	0.35**	0.34**	0.67***	0.33*
	(0.15)	(0.16)	(0.16)	(0.16)	(0.17)	(0.16)	(0.22)	(0.18)
Education: high	0.64***	0.52***	0.32***	0.38***	0.52***	0.53***	0.41***	0.49***
	(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.13)	(0.10)
Income: EUR 1,840-2,800	0.32**	0.27**	0.22	0.13	0.27*	0.30**	0.14	0.28**
	(0.13)	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)	(0.18)	(0.14)
Income: EUR 2,800-3,990	0.42***	0.35**	0.33**	0.33**	0.34**	0.38***	0.20	0.30**
	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)	(0.15)	(0.19)	(0.15)
Income: > EUR 3,990	0.65***	0.57***	0.52***	0.43***	0.52***	0.55***	0.38*	0.50***
	(0.15)	(0.15)	(0.15)	(0.16)	(0.17)	(0.16)	(0.22)	(0.17)
Employed	-0.18	-0.17	-0.14	-0.15	-0.25*	-0.22*	-0.09	-0.11
	(0.12)	(0.12)	(0.12)	(0.12)	(0.13)	(0.13)	(0.17)	(0.13)
Partner	-0.47***	-0.45***	-0.41***	-0.37***	-0.39***	-0.39***	-0.33**	-0.47***
	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.12)	(0.15)	(0.12)
Homeowner	0.43***	0.36***	0.28**	0.27**	0.33***	0.33***	0.41***	0.39***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.15)	(0.12)
Urban area	-0.19**	-0.21**	-0.17*	-0.20**	-0.26***	-0.24**	-0.23*	-0.22**
	(0.09)	(0.09)	(0.09)	(0.09)	(0.10)	(0.10)	(0.12)	(0.10)
K1		0.06	0.07	0.04	0.02	0.00	0.10	0.02
		(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.14)	(0.11)
K2		0.04	-0.07	-0.02	0.03	-0.02	-0.06	0.03
		(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.15)	(0.12)
K3		0.17	0.12	0.13	0.18	0.15	0.01	0.18
		(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.15)	(0.11)
K4		-0.01	-0.04	-0.08	-0.01	-0.03	0.07	-0.05
		(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.16)	(0.12)
K5		0.06	-0.00	-0.05	0.04	0.10	0.03	0.05
		(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.15)	(0.12)
K6		-0.14	-0.18	-0.18	-0.13	-0.18	-0.17	-0.14
		(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.15)	(0.12)
K7		0.20*	0.17	0.22*	0.24*	0.22*	0.27	0.20
		(0.12)	(0.12)	(0.13)	(0.13)	(0.13)	(0.17)	(0.13)
K8		0.05	0.04	0.02	0.02	0.05	0.00	0.05
		(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.16)	(0.13)
K9		0.31***	0.21*	0.23**	0.26**	0.31***	0.25	0.25**
		(0.11)	(0.11)	(0.12)	(0.12)	(0.12)	(0.15)	(0.12)
K10		0.29***	0.31***	0.34***	0.30***	0.31***	0.38***	0.31***
		(0.10)	(0.11)	(0.11)	(0.11)	(0.11)	(0.14)	(0.11)
K11		0.33*	0.34**	0.27	0.22	0.29*	0.29	0.25
		(0.17)	(0.17)	(0.18)	(0.18)	(0.17)	(0.22)	(0.17)
K12		-0.22	-0.26	-0.12	-0.18	-0.20	-0.26	-0.24
		(0.16)	(0.17)	(0.18)	(0.17)	(0.16)	(0.22)	(0.16)
K13		-0.15	-0.19	-0.14	-0.23	-0.22	-0.08	-0.17
		(0.18)	(0.18)	(0.19)	(0.19)	(0.19)	(0.23)	(0.18)
Trust in other people			1.44***					
			(0.10)					
Trust in other people_alt				1.57***				
				(0.10)				

(continued on next page)

Table A.2 *(continued)*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Health: fair-poor					-0.36***			
					(0.11)			
FL: more-or-less knowledgeable						0.25*		
						(0.14)		
FL: knowledgeable						0.39**		
						(0.16)		
FL: very knowledgeable						0.13		
						(0.26)		
FL: actual							0.28***	
							(0.08)	
Knowledge of monetary policy								0.03
								(0.02)
Number of observations	2,180	2,180	2,180	2,180	1,895	2,005	1,232	1,931
Wald χ^2	139.5***	198.8***	376.8***	475.2***	182.3***	190.4***	133.3***	176.0***
Log pseudolikelihood	-2198.8	-2166.1	-2055.7	-2004.0	-1893.3	-1989.7	-1204.3	-1934.7
Pseudo R^2	0.03	0.05	0.10	0.12	0.05	0.05	0.06	0.05

Notes: The table reports parameter estimates of ordered logit models. Robust standard errors are shown in parentheses. The dependent variable *Trust in the supervisory authority* ranges from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denote statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table A.3. Alternative knowledge measure and public trust in the supervisor: regression results.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	0.30***	0.21**	0.24***	0.35***	0.22**	0.19**	0.17	0.20**
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.12)	(0.10)
Between 36 and 50	0.10	0.05	0.10	0.01	0.08	0.10	0.43**	-0.00
	(0.15)	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.20)	(0.17)
Between 51 and 65	0.18	0.10	0.10	0.02	0.16	0.12	0.47***	0.04
	(0.14)	(0.13)	(0.14)	(0.13)	(0.14)	(0.14)	(0.18)	(0.16)
66 and over	0.41***	0.32**	0.35**	0.20	0.33**	0.33**	0.71***	0.32*
	(0.15)	(0.15)	(0.16)	(0.16)	(0.17)	(0.16)	(0.21)	(0.18)
Education: high	0.64***	0.57***	0.35***	0.42***	0.58***	0.58***	0.47***	0.54***
	(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.13)	(0.10)
Income: EUR 1,840-2,800	0.32**	0.28**	0.22*	0.15	0.29**	0.31**	0.16	0.29**
	(0.13)	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)	(0.18)	(0.14)
Income: EUR 2,800-3,990	0.42***	0.38***	0.35**	0.36**	0.36**	0.40***	0.22	0.31**
	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)	(0.14)	(0.19)	(0.14)
Income: > EUR 3,990	0.65***	0.62***	0.54***	0.47***	0.58***	0.60***	0.42*	0.53***
	(0.15)	(0.15)	(0.15)	(0.16)	(0.17)	(0.16)	(0.22)	(0.16)
Employed	-0.18	-0.18	-0.16	-0.17	-0.28**	-0.24*	-0.08	-0.12
	(0.12)	(0.12)	(0.12)	(0.12)	(0.13)	(0.13)	(0.17)	(0.13)
Partner	-0.47***	-0.46***	-0.42***	-0.38***	-0.39***	-0.39***	-0.36**	-0.47***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.15)	(0.12)
Homeowner	0.43***	0.40***	0.31***	0.31***	0.37***	0.37***	0.45***	0.43***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.15)	(0.12)
Urban area	-0.19**	-0.19**	-0.16*	-0.19**	-0.24**	-0.21**	-0.20*	-0.20**
	(0.09)	(0.09)	(0.09)	(0.09)	(0.10)	(0.10)	(0.12)	(0.10)
K_alt		0.07***	0.05***	0.05***	0.06***	0.06***	0.06***	0.06***
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Trust in other people			1.45***					
			(0.10)					
Trust in other people_alt				1.58***				
				(0.10)				
Health: fair-poor					-0.38***			
					(0.11)			
FL: more-or-less knowledgeable						0.24*		
						(0.15)		
FL: knowledgeable						0.40**		
						(0.16)		
FL: very knowledgeable						0.14		
						(0.26)		
FL: actual							0.28***	
							(0.08)	
Knowledge of monetary policy								0.04**
								(0.02)
Number of observations	2,180	2,180	2,180	2,180	1,895	2,005	1,232	1,931
Wald χ^2	139.5***	177.2***	371.4***	457.1***	165.2***	165.8***	121.3***	158.5***
Log pseudolikelihood	-2198.8	-2183.4	-2068.8	-2018.9	-1907.4	-2006.3	-1213.8	-1948.4
Pseudo R^2	0.03	0.04	0.09	0.11	0.04	0.04	0.05	0.04

Note: The table reports parameter estimates of ordered logit models. Robust standard errors are shown in parentheses. The dependent variables range from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denote statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

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