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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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The impact of high inflation on trust in national politics and central banks*

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Abstract

Little is known about the impact of high inflation on public trust. Using a survey in the Netherlands, we find that the recent increase in inflation is associated with a decline in trust in the Dutch central bank and Dutch politics. The higher individuals' perceived inflation is and the harder it is for them to make ends meet, the lower their trust in the European Central Bank, the Dutch central bank, and Dutch politics. We also find that people trust authorities considered responsible for bringing inflation down less. Quite remarkably, most people think government is responsible for maintaining price stability.

Key words: inflation; trust; financial stress; central banks; national politics

JEL-codes: D12; D83; E31; E58

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“Provided everyone trusts central bankers to do what it takes to protect the buying power of the money, fiat currencies can work. ... But now it’s time to ask whether low inflation was the result of central banks’ credibility or rather the cause of it.” (John Authers, Business Week 23 June, 2022).

1. Introduction

Isabel Schnabel (2022), Executive Board member of the European Central Bank (ECB), recently argued that: “Our currencies are stable because people trust that we will preserve their purchasing power. For politically independent central banks, establishing and maintaining that trust is an important policy objective in and of itself. Failing to honour this trust may carry large political costs.” Central banks face a risk to lose trust and credibility due to the recent strong uptick in inflation.¹ The latest Eurobarometer survey, for instance, shows that 41% of respondents mentioned prices, inflation, cost of living (an increase of +18pp. compared to the previous survey) as one of the most important issues facing their country, before health (32%) and the economic situation (19%).² Losing trust will make it harder for central banks to bring inflation back to target. Several studies report that the inflation expectations of individuals who trust central banks tend to be closer to the central bank’s inflation target (Christelis et al. 2020; Rumler and Valderama 2020; Brouwer and de Haan 2022). Furthermore, Stanisławska and Paloviita (2021) find that individuals who trust the central bank adjust their inflation expectations less in response to transitory economic developments than individuals who distrust the central bank.

Using a survey among more than 2,000 individuals in the Netherlands, we address four questions: 1) Has trust in De Nederlandsche Bank (DNB), i.e., the Dutch central bank, and the government declined due to the recent rise of inflation? 2) What is the relation between perceived inflation and public trust? It is well-known that knowledge about actual inflation of survey respondents is often wrong (Christelis et al., 2020). We hypothesize that the higher respondents’ inflation perceptions are, the lower their trust in central banks (DNB and the ECB) and the government. 3) What is the relation between the extent to which respondents have been personally hit by the recent inflation and their trust in central banks and the government? We hypothesize that those respondents who have more difficulties to make ends meet or are otherwise affected by

¹ In empirical research, central bank credibility is often proxied by the extent to which long-term inflation expectations are anchored at the central bank’s target. So, the evidence discussed below that trust leads to better anchored inflation expectations implies that trust enhances credibility (Blinder et al., 2022).

² <https://europa.eu/eurobarometer/surveys/detail/2553>.

increased inflation have lower trust in DNB, the ECB, and the government. 4) What is the relation between respondents' trust in a central bank and national politics and their views on who is responsible for bringing inflation down? Academics consider the central bank as being responsible for maintaining price stability, but as we will show, many respondents in our survey consider this a responsibility of national politics. We hypothesize that, against the backdrop of increased inflation, respondents trust the authorities considered responsible for bringing inflation down less.

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 (Ehrmann et al., 2013; Farvaque et al., 2017; and Bursian and Fürth, 2015).³ The impact of inflation on trust in the central bank has received limited attention.⁴ We use the DNB Trust Survey (DTS) and an additional survey among the Centerpanel to collect data on public trust of Dutch households. This database has some advantages over the use of Eurobarometer data. First, our database can be linked to data from the DNB Household Survey (DHS), which provides detailed information on respondents' characteristics, such as their education level, gender, financial literacy, and employment situation for which we can control. Secondly, in our survey among the Centerpanel we ask for respondents' perceptions of inflation, how hard they have been hit by the recent surge in inflation, and which authority they consider responsible for bringing inflation back to target. This allows us to examine whether these perceptions and experiences are related to respondents' trust in central banks and national politics.

Our results suggest that the recent increase in inflation is associated with a decline in trust in DNB and Dutch politics. We find a negative relation between individuals' inflation perceptions and their trust in the ECB, DNB, and the government. Likewise, people who have been hit the hardest by higher prices, have the lowest trust in central banks and the government. Finally, trust in national politics, DNB and the ECB is relatively low for those people who believe the particular institution has the task to keep inflation low. More than seven out of ten individuals think it is the task of the government to keep inflation low.

The remainder of the paper is organized as follows. Section 2 presents our data, while section 3 offers our main results. Section 4 contains robustness checks and Section 5 concludes.

³ See Blinder et al. (2022) for a review of this literature. Kalbhenn and Stracca (2020) also use Eurobarometer data in their study of the impact of fiscal austerity on trust in the ECB and the European Commission.

⁴ Some older studies based on aggregated Eurobarometer data suggest that inflation affects trust in the ECB (see, for instance, Roth and Jonung (2019)). However, at the time that these studies were published inflation was generally not above target.

2. Data

First, we use DTS data. Each year, DNB collects data on trust in the financial sector. All family members aged 16 and above of the households in the Centerpanel are invited to complete this survey.⁵ Since its inception, the DTS includes the questions about trust in DNB and trust in politics. We therefore have data from 2006 until 2022. The 2022 DTS was distributed in the period 18 March -19 April 2022. The Centerpanel is managed by Centerdata, a research institute affiliated with Tilburg University. 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. As the survey is done online, Centerdata provides a simple computer, an ADSL connection and technical assistance to people without these facilities. Many questions that have been part of the trust survey since its inception have remained unchanged, but part of the questionnaire changes from year to year.⁶

Second, we designed an additional survey to measure whether trust in DNB and national politics changed throughout the course of 2022. As a result, we have measured trust in DNB and national politics twice in 2022. This survey also included questions to measure respondents' trust in the ECB, inflation perceptions, and views on who is responsible for bringing inflation down. The survey was distributed among 3,192 members of the Centerpanel aged 16 years or older in the period 30 September - 18 October 2022. The survey was fully completed by 2,461 respondents (77.1%) and partially by nine panel members (0.3%). The response rate is high compared to regular surveys, but not uncommon for internet-based surveys. We use the answers of the 2,464 respondents that answered the first ten questions.^{7,8} As this sample may not be fully representative of the Dutch population, the answers of these respondents have been weighted to correct for any differences between the sample and the Dutch population with respect to gender, age, net household income, and the level of education. Appendix A reports the wording of the questions in the survey.

⁵ See Teppa and Vis (2012) for more information on the Centerpanel.

⁶ Several previous papers have used the DTS; see, for example, Jansen et al. (2015), Diepstraten and van der Cruijssen (2019) and van der Cruijssen et al. (2022).

⁷ It is important at this stage to point out that although many respondents participate over several years in the survey, we only have information on trust in DNB and trust in politics for all years of the DTS for 8% of the 2,464 respondents of our 2022 September/October sample. So, for these people we have 18 observations of trust in DNB and trust in politics. On average, we have 8.4 observations of trust in DNB and trust in national politics for respondents in our 2022 September/October sample. 195 of the 2,464 respondents in our September/October 2022 sample participated only in September/October 2022 (8%).

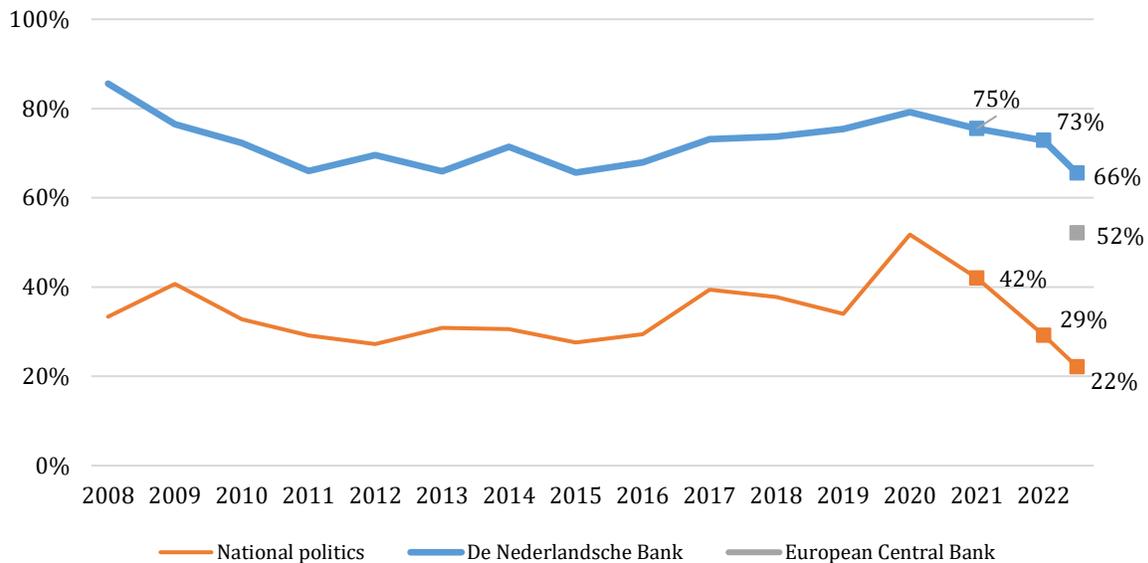
⁸ For six respondents we do not have information on their level of education. Therefore, the baseline regressions including basic socio-demographic and personal characteristics are based on the 2,458 remaining respondents.

Our data can easily be linked to data on personal characteristics of respondents. This information is captured by the annual 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, Deuflhard et al., 2019; van der Crujisen et al., 2013; van Rooij et al., 2011; 2012; and van Rooij and de Haan, 2019).

As shown by Figure 1, since 2020 trust in DNB has dropped. Public trust in national politics, which is generally much lower than trust in DNB, dropped even more. It seems likely that the recent increase in inflation is related to this drop in public trust. In the survey, we therefore asked respondents to what extent they agreed with the statement that inflation reduced their trust in several institutions. The results, as presented in Figure 2, confirm that trust declined due to inflation and that this decline is stronger for trust in national politics than for trust in the ECB and DNB.

Figure 1. Trust in DNB and national politics, 2006-2022

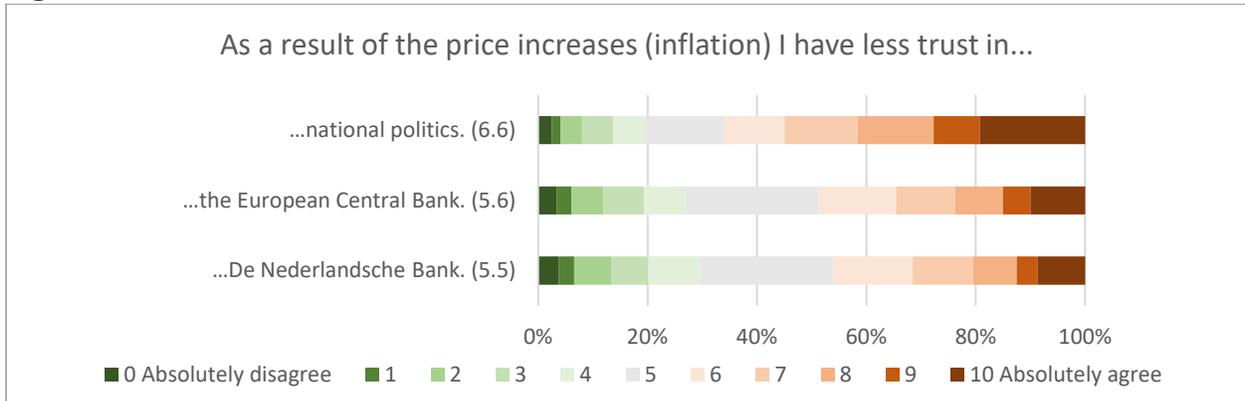
Share of respondents with pretty much or a lot of trust



Source: annual DTS and Centerpanel September/October 2022.

Note: Trust in national politics and DNB was measured once a year in the period 2008-2021. In 2022 it was measured twice, once in March/April and once in September/October. Unweighted observations.

Figure 2. Inflation and decline in trust



Source: Centerpanel September/October 2022.

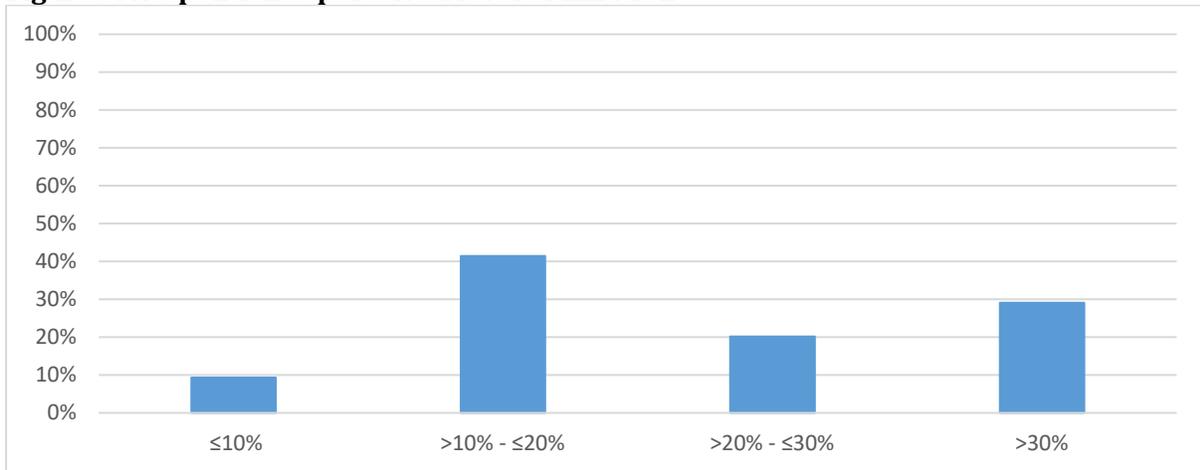
Note: The answers of 2,464 respondents have been weighted to correct for differences between the sample and the population with respect to gender, age, net household income, and the level of education. The mean answer is shown in parentheses.

We have measured inflation perceptions in three different ways: 1) qualitative perceived inflation of monthly groceries and other household expenditures (on a scale from 1 “prices have increased a lot” to 5 “prices have decreased a lot”), 2) quantitative perceived inflation of groceries at the supermarket, and 3) the perceived quantitative change in monthly spending on energy (gas and electricity). In all cases, we asked respondents to compare prices with 12 months ago.

Although 88% of the people agree that prices increased a lot, the perceived level of inflation differs quite substantially among them as shown in Figure 3. In fact, 49% of the people think that inflation is above 20%. The level of inflation shown in this figure is distilled from respondents’ answers to the question: “Suppose that 12 months ago you had to pay 100 euro for your groceries at the supermarket. How much do you think you need to pay now for the same groceries in the same supermarket?” Price increases may lead to a loss in purchasing power and cause financial difficulties. As Figure 4 shows, many individuals indeed find it hard to make ends meet.⁹ Finally, as shown in Figure 5, it is quite remarkable that more than seven out of ten people think that national politics has the task to prevent high inflation, while slightly more than half of them (also) tick the ECB in answering this question.

⁹ Moreover, respondents indicate that price increases worsen their financial situation as shown in Figure B.1 in Appendix B.

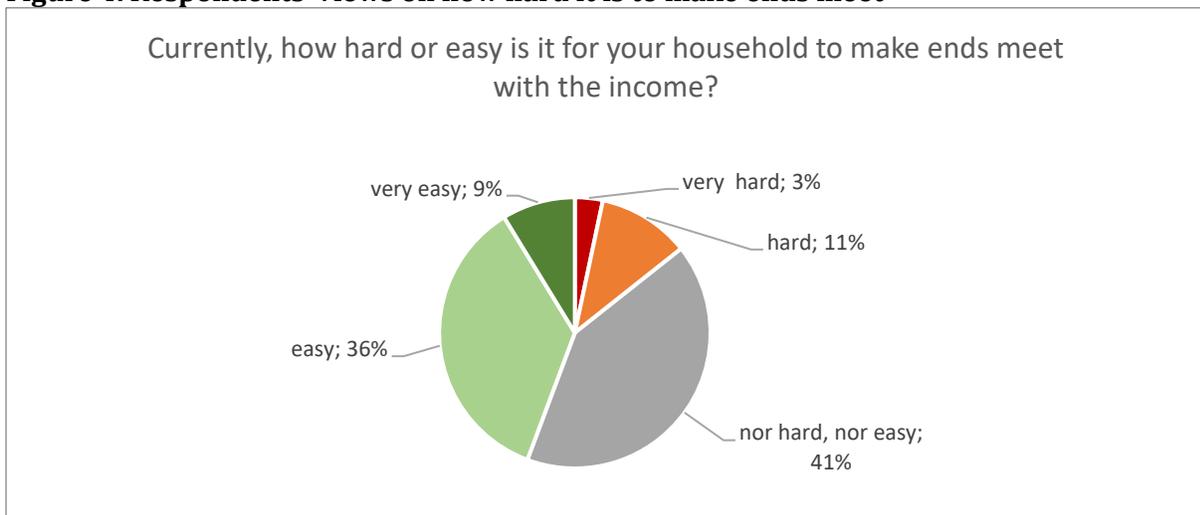
Figure 3. Respondents' perceived level of inflation



Source: Centerpanel September/October 2022.

Note: The answers of 2,464 respondents have been weighted to correct for differences between the sample and the population with respect to gender, age, net household income, and the level of education.

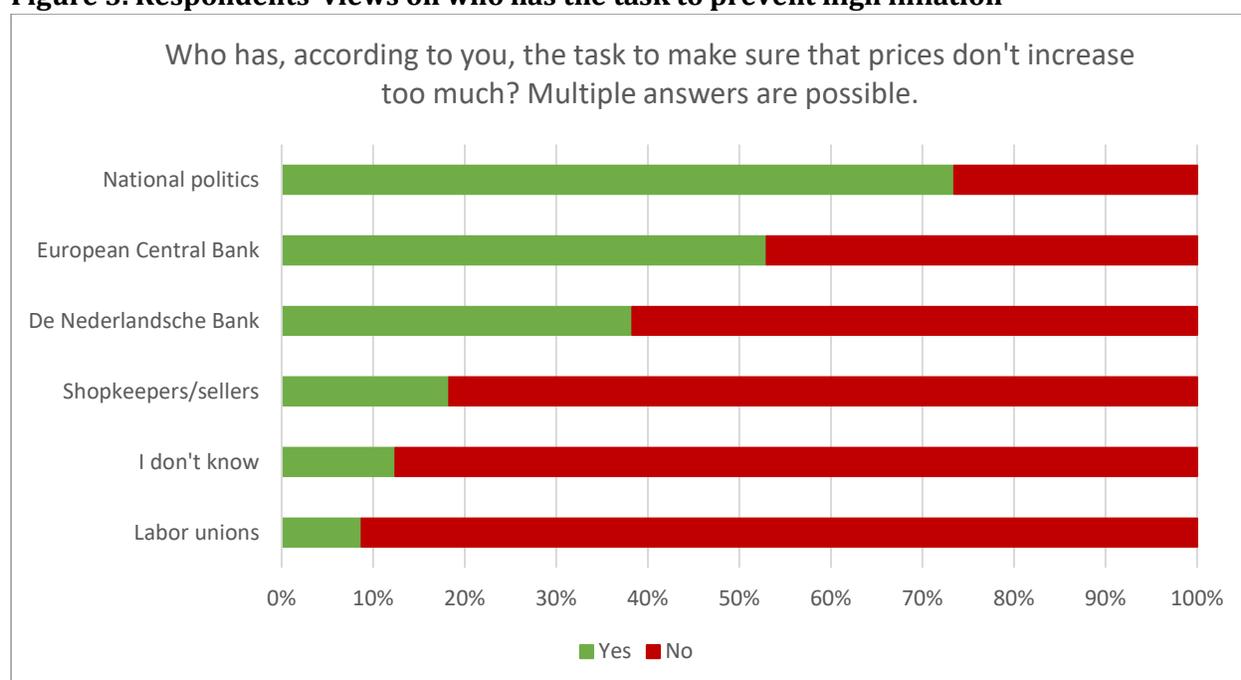
Figure 4. Respondents' views on how hard it is to make ends meet



Source: Centerpanel September/October 2022.

Note: The answers of 2,464 respondents have been weighted to correct for differences between the sample and the population with respect to gender, age, net household income, and the level of education.

Figure 5. Respondents' views on who has the task to prevent high inflation



Source: Centerpanel September/October 2022.

Note: The answers of 2,464 respondents have been weighted to correct for differences between the sample and the population with respect to gender, age, net household income, and the level of education.

3. Empirical results

Table 1 shows the estimation results of ordered logit models to examine whether there is a negative association between perceived inflation and public trust. The dependent variables are ordered variables capturing trust in national politics, DNB, and the ECB on a scale between 1 and 4 (1 = absolutely no trust, 2 = not so much trust, 3 = pretty much trust, 4 = a lot of trust). Summary statistics of these variables are shown in Table B.1 of Appendix B. We control for several characteristics of respondents that previous studies found to be related to trust (see Table B.2 in Appendix B for details). The results in the first three columns suggest that there is a negative relation between perceived inflation and public trust. The higher individuals' perceived inflation, the lower their trust in national politics and central banks. For example, individuals with inflation perceptions higher than 30% are 22 percentage points less likely to have a fair amount or a lot of trust in national politics than people with inflation perceptions of 10% or less. The effect is 23 percentage points for trust in DNB and 24 percentage points for trust in the ECB.

In line with these results, trust is relatively low for people who perceive that prices have increased a lot (columns (4)-(6)). For instance, individuals who think that prices increased a lot are 15 percentage points less likely to have a fair amount or a lot of trust in national politics. The effect is also 15 percentage points for trust in DNB and it is 16 percentage points for trust in the ECB.

Table 1. Testing the relation between respondents' perceived inflation and trust

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|----------------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|
| | Trust in national politics | Trust in DNB | Trust in ECB | Trust in national politics | Trust in DNB | Trust in ECB | Trust in national politics | Trust in DNB | Trust in ECB |
| <i>Male</i> | 0.01 (0.08) | 0.24*** (0.08) | -0.02 (0.07) | 0.06 (0.08) | 0.30*** (0.08) | 0.02 (0.07) | 0.09 (0.08) | 0.29*** (0.08) | 0.03 (0.07) |
| <i>Age: between 36 and 50</i> | -0.25* (0.14) | 0.09 (0.14) | -0.16 (0.14) | -0.16 (0.14) | 0.18 (0.14) | -0.07 (0.14) | -0.23 (0.15) | 0.10 (0.14) | -0.14 (0.14) |
| <i>Age: between 51 and 65</i> | -0.24* (0.14) | 0.43*** (0.14) | -0.05 (0.13) | -0.06 (0.14) | 0.62*** (0.13) | 0.14 (0.13) | -0.18 (0.14) | 0.49*** (0.14) | 0.03 (0.13) |
| <i>Age: 66 and over</i> | -0.39*** (0.14) | 0.68*** (0.14) | 0.07 (0.14) | -0.13 (0.14) | 0.96*** (0.13) | 0.34** (0.14) | -0.25* (0.14) | 0.83*** (0.14) | 0.22 (0.14) |
| <i>Education: middle</i> | 0.16 (0.11) | 0.31*** (0.11) | 0.30*** (0.11) | 0.19* (0.11) | 0.33*** (0.11) | 0.32*** (0.11) | 0.19* (0.11) | 0.32*** (0.11) | 0.31*** (0.11) |
| <i>Education: high</i> | 0.54*** (0.11) | 0.69*** (0.11) | 0.63*** (0.11) | 0.65*** (0.11) | 0.82*** (0.11) | 0.74*** (0.11) | 0.64*** (0.11) | 0.79*** (0.11) | 0.72*** (0.11) |
| <i>Income: ≥EUR 2,000 - <EUR 3,000</i> | 0.24** (0.12) | 0.29** (0.12) | 0.14 (0.12) | 0.23* (0.12) | 0.26** (0.12) | 0.13 (0.12) | 0.22* (0.12) | 0.22* (0.12) | 0.10 (0.12) |
| <i>Income: ≥EUR 3,000 - <EUR 4,250</i> | 0.10 (0.12) | 0.39*** (0.13) | 0.28** (0.12) | 0.12 (0.12) | 0.40*** (0.13) | 0.29** (0.12) | 0.10 (0.12) | 0.35*** (0.13) | 0.26** (0.12) |
| <i>Income: ≥EUR 4,250</i> | 0.57*** (0.13) | 0.67*** (0.14) | 0.53*** (0.13) | 0.60*** (0.13) | 0.70*** (0.13) | 0.57*** (0.13) | 0.60*** (0.13) | 0.66*** (0.14) | 0.55*** (0.13) |
| <i>Inflation perception: >10% - ≤20%</i> | -0.51*** (0.15) | -0.57*** (0.15) | -0.30** (0.14) | | | | | | |
| <i>Inflation perception: >20% - ≤30%</i> | -0.77*** (0.17) | -0.91*** (0.17) | -0.53*** (0.16) | | | | | | |
| <i>Inflation perception: >30%</i> | -1.14*** (0.17) | -1.38*** (0.17) | -1.05*** (0.16) | | | | | | |
| <i>Prices increased a lot</i> | | | | -0.89*** (0.15) | -0.72*** (0.14) | -0.69*** (0.13) | | | |
| <i>Change energy price: EUR 0</i> | | | | | | | -0.36** (0.18) | -0.39** (0.18) | -0.57*** (0.21) |
| <i>Change energy price: >EUR 0 - <EUR 150</i> | | | | | | | -0.50*** (0.17) | -0.43** (0.17) | -0.60*** (0.20) |
| <i>Change energy price: EUR 150 or more</i> | | | | | | | -0.74*** (0.18) | -0.79*** (0.19) | -0.94*** (0.21) |
| <i>Change energy price: I do not know</i> | | | | | | | -0.51*** (0.18) | -0.73*** (0.18) | -0.80*** (0.20) |
| Number of observations | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 |
| Wald χ^2 | 145.54*** | 232.06*** | 139.54*** | 136.86*** | 193.39*** | 119.43*** | 114.85*** | 188.58*** | 109.35*** |

Note: The table reports parameter estimates of ordered logit regressions. Standard errors are clustered by household and shown in parentheses. The dependent variables range from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denotes statistical significance at the 0.01, 0.05, and 0.10 level, respectively. The Wald statistic reports the value of a joint test of the null hypothesis that all parameters are zero.

There is also a negative relation between perceived changes in energy prices and trust, as shown in columns (7)-(9). For example, individuals who experienced an increase of their monthly energy bill with at least 150 euro are 14 percentage points less likely to have a fair amount or a lot of trust in national politics than individuals who experienced a decline in their monthly spending on gas and electricity. The effect is also 14 percentage points for trust in DNB and it is 20 percentage points for trust in the ECB. So, the results in Table 1 are consistent with our hypothesis that the higher

individuals' inflation perceptions are, the lower their trust in central banks (DNB and the ECB) and the government.

Table 2 shows the estimation results of ordered logit models to test the hypothesis that respondents who are most affected by price increases have lower trust in DNB, the ECB, and national politics. We test this hypothesis in three ways. First, we include information on whether households can make ends meet. The estimates shown in the first three columns show that individuals who find it harder to make ends meet have lower trust in DNB, the ECB, and the government. For example, members of households who find it very hard to make ends meet are 28 percentage points less likely to have a fair amount or a lot of trust in national politics than members of households who find it very easy to make ends meet. The effect is 49 percentage points for trust in DNB and 45 percentage points for trust in the ECB.

Second, we include information on households' financial positions. The results show a strong association between trust in DNB, the ECB, and national politics and households' current financial situation. Individuals belonging to households that incur debt or have to use their savings report significantly lower trust levels than individuals belonging to households that still have money left over (columns (4) – (6)). For instance, individuals of households that incur debt are 24 percentage points less likely to have a fair amount or a lot of trust in national politics than individuals of households that have a lot of money left over. The effect is 38 percentage points for trust in DNB and 34 percentage points for trust in the ECB.

Third, we asked respondents directly how they are affected personally by the increase in prices. The results show that many people are affected and adjust their behavior in response to the increased inflation (see Figure B.1 in Appendix B). For instance, 71% of the people are more economical with their money (i.e., they cut expenses) and 56% of the individuals economize on the use of energy to save energy costs. The effect of the rise in inflation goes beyond the financial impact of price increases; for instance, 20% of the individuals experience more stress as a result of the price increases.

Columns (7)-(9) of Table 2 show the estimates of regressions explaining trust in DNB, the ECB, and national politics when including the ways individuals are impacted by the price increases. The results confirm that the financial consequences of increased inflation contribute to lower trust as shown by the negative coefficient for people who have to use savings to make ends meet. However, the largest negative impact on trust in all authorities is found among individuals who experience stress due to the price increases. These people are 10 percentage points less likely to have a fair amount or a lot of trust in national politics than individuals who do not experience stress. The effect

is 12 percentage points for trust in DNB and 14 percentage points for trust in the ECB. All in all, the estimates shown in Table 2 provide supporting evidence for the hypothesis that the easier individuals find it to deal with higher prices, the higher their trust.

The results so far documented a decline in trust and showed that in particular individuals who perceive higher price increases and those who are most affected by higher prices report lower levels of trust in national politics, the ECB, and DNB. Our fourth hypothesis is that trust in these authorities is related to whether individuals consider these authorities responsible for bringing inflation down. To investigate this hypothesis, we include a dummy variable measuring whether respondents consider a particular authority responsible for preventing high inflation. The estimation results reported in Table 3 support our hypothesis: trust is lower when authorities are considered responsible for maintaining price stability. The estimated effect is largest for national politics (column (1)). For instance, people who think national politics has the task to keep inflation low are 13 percentage points less likely to have a fair amount or a lot of trust in national politics. The effect is 3 percentage points for trust in DNB and insignificant for trust in the ECB (columns (2) and (3)).

Table 2. Testing the relation between the extent to which respondents are affected by inflation and trust

| | (1) Trust in national politics | (2) Trust in DNB | (3) Trust in ECB | (4) Trust in national politics | (5) Trust in DNB | (6) Trust in ECB | (7) Trust in national politics | (8) Trust in DNB | (9) Trust in ECB |
|--|---|------------------------|---------------------|---|------------------------|---------------------|---|------------------------|---------------------|
| <i>Male</i> | 0.06 (0.08) | 0.29*** (0.08) | -0.01 (0.07) | 0.08 (0.07) | 0.31*** (0.08) | 0.02 (0.07) | 0.07 (0.08) | 0.30*** (0.08) | 0.02 (0.07) |
| <i>Age: between 36 and 50</i> | -0.18 (0.14) | 0.19 (0.14) | -0.06 (0.14) | -0.21 (0.14) | 0.15 (0.14) | -0.10 (0.14) | -0.26* (0.15) | 0.10 (0.14) | -0.15 (0.14) |
| <i>Age: between 51 and 65</i> | -0.16 (0.14) | 0.58*** (0.14) | 0.09 (0.14) | -0.18 (0.14) | 0.54*** (0.14) | 0.05 (0.14) | -0.28* (0.14) | 0.43*** (0.14) | -0.03 (0.14) |
| <i>Age: 66 and over</i> | -0.30** (0.14) | 0.84*** (0.14) | 0.21 (0.14) | -0.26* (0.14) | 0.85*** (0.14) | 0.23* (0.14) | -0.39*** (0.14) | 0.73*** (0.14) | 0.11 (0.14) |
| <i>Education: middle</i> | 0.12 (0.11) | 0.25** (0.11) | 0.25** (0.11) | 0.18 (0.11) | 0.31*** (0.11) | 0.31*** (0.11) | 0.19* (0.11) | 0.34*** (0.11) | 0.33*** (0.11) |
| <i>Education: high</i> | 0.49*** (0.11) | 0.63*** (0.11) | 0.58*** (0.11) | 0.57*** (0.11) | 0.71*** (0.11) | 0.65*** (0.11) | 0.63*** (0.11) | 0.80*** (0.11) | 0.74*** (0.11) |
| <i>Income: ≥EUR 2,000 - <EUR 3,000</i> | 0.01 (0.12) | 0.06 (0.12) | -0.07 (0.12) | 0.10 (0.12) | 0.13 (0.12) | 0.01 (0.12) | 0.14 (0.12) | 0.19 (0.12) | 0.07 (0.12) |
| <i>Income: ≥EUR 3,000 - <EUR 4,250</i> | -0.22* (0.13) | 0.06 (0.13) | -0.04 (0.13) | -0.09 (0.13) | 0.16 (0.13) | 0.07 (0.12) | -0.02 (0.13) | 0.26** (0.13) | 0.17 (0.12) |
| <i>Income: ≥EUR 4,250</i> | 0.19 (0.13) | 0.22 (0.14) | 0.12 (0.14) | 0.33** (0.13) | 0.37*** (0.14) | 0.25* (0.14) | 0.44*** (0.13) | 0.53*** (0.14) | 0.41*** (0.13) |
| <i>Making ends meet: very hard</i> | -1.08*** (0.27) | -0.92*** (0.34) | -0.84*** (0.32) | | | | | | |
| <i>Making ends meet: hard</i> | -0.81*** (0.15) | -0.44*** (0.15) | -0.59*** (0.14) | | | | | | |
| <i>Making ends meet: easy</i> | 0.48*** (0.10) | 0.72*** (0.10) | 0.63*** (0.10) | | | | | | |
| <i>Making ends meet: very easy</i> | 0.76*** (0.15) | 1.25*** (0.18) | 1.02*** (0.17) | | | | | | |
| <i>Financial situation: debts are incurred</i> | | | | -0.98*** (0.34) | -0.66 (0.43) | -0.45 (0.40) | | | |
| <i>Financial situation: savings used</i> | | | | -0.21 (0.13) | -0.16 (0.13) | -0.23* (0.13) | | | |
| <i>Financial situation: a little money left over</i> | | | | 0.37*** (0.11) | 0.51*** (0.11) | 0.40*** (0.10) | | | |
| <i>Financial situation: a lot of money left over</i> | | | | 0.65*** (0.15) | 1.03*** (0.17) | 0.99*** (0.16) | | | |
| <i>Impact: more economical with money</i> | | | | | | | -0.10 (0.09) | -0.27*** (0.10) | -0.15 (0.09) |
| <i>Impact: use savings to get by</i> | | | | | | | -0.32*** (0.12) | -0.40*** (0.12) | -0.38*** (0.12) |
| <i>Impact: incur debts</i> | | | | | | | -0.41 (0.34) | -0.31 (0.39) | -0.08 (0.35) |
| <i>Impact: more dependent on others</i> | | | | | | | -0.21 (0.29) | 0.03 (0.28) | -0.01 (0.26) |
| <i>Impact: use less energy</i> | | | | | | | 0.07 (0.08) | 0.15* (0.09) | 0.11 (0.09) |
| <i>Impact: more stress</i> | | | | | | | -0.60*** (0.13) | -0.60*** (0.13) | -0.58*** (0.12) |
| <i>Impact: increased hours worked</i> | | | | | | | -0.01 (0.21) | -0.13 (0.23) | -0.30 (0.24) |
| <i>Impact: other</i> | | | | | | | -0.33 (0.23) | -0.21 (0.25) | -0.44* (0.24) |
| Number of observations | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 |
| Wald χ^2 | 195.48*** | 259.53*** | 189.62*** | 145.95*** | 224.27*** | 151.96*** | 152.77*** | 215.97*** | 148.40*** |

Note: The table reports parameter estimates of ordered logit regressions. Standard errors are clustered by household and shown in parentheses. The dependent variables range from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denotes statistical significance at the 0.01, 0.05, and 0.10 level, respectively. The Wald statistic reports the value of a joint test of the null hypothesis that all parameters are zero.

Table 3. Testing the relation between respondents' view on which authority they consider responsible to keep inflation low and public trust

| | (1) Trust in national politics | (3) Trust in DNB | (5) Trust in ECB |
|---|---|------------------------|------------------------|
| <i>Male</i> | 0.11 (0.08) | 0.33*** (0.08) | 0.06 (0.07) |
| <i>Age: between 36 and 50</i> | -0.19 (0.14) | 0.15 (0.14) | -0.10 (0.14) |
| <i>Age: between 51 and 65</i> | -0.10 (0.14) | 0.57*** (0.13) | 0.09 (0.13) |
| <i>Age: 66 and over</i> | -0.14 (0.14) | 0.91*** (0.14) | 0.30** (0.14) |
| <i>Education: middle</i> | 0.22** (0.11) | 0.35*** (0.11) | 0.34*** (0.11) |
| <i>Education: high</i> | 0.63*** (0.11) | 0.85*** (0.11) | 0.77*** (0.11) |
| <i>Income: ≥EUR 2,000 - <EUR 3,000</i> | 0.22* (0.12) | 0.26** (0.12) | 0.13 (0.12) |
| <i>Income: ≥EUR 3,000 - <EUR 4,250</i> | 0.09 (0.12) | 0.38*** (0.13) | 0.28** (0.12) |
| <i>Income: ≥EUR 4,250</i> | 0.62*** (0.13) | 0.71*** (0.14) | 0.58*** (0.13) |
| <i>Inflation task: national politics</i> | -0.79*** (0.10) | | |
| <i>Inflation task: DNB</i> | | -0.15* (0.09) | |
| <i>Inflation task: ECB</i> | | | -0.13 (0.08) |
| Number of observations | 2,458 | 2,458 | 2,458 |
| Wald χ^2 | 165.51*** | 164.44*** | 91.56*** |

Note: The table reports parameter estimates of ordered logit regressions. Standard errors are clustered by household and shown in parentheses. The dependent variables range from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denotes statistical significance at the 0.01, 0.05, and 0.10 level, respectively. The Wald statistic reports the value of a joint test of the null hypothesis that all parameters are zero.

Table 4. Trust in national politics, DNB, and the ECB: robustness analyses

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|----------------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|
| | Trust in national politics | Trust in DNB | Trust in ECB | Trust in national politics | Trust in DNB | Trust in ECB | Trust in national politics | Trust in DNB | Trust in ECB |
| <i>Male</i> | 0.02 (0.08) | 0.23*** (0.08) | -0.03 (0.08) | 0.11 (0.09) | 0.19** (0.09) | 0.02 (0.09) | 0.11 (0.09) | 0.14 (0.09) | -0.02 (0.09) |
| <i>Age: between 36 and 50</i> | -0.19 (0.14) | 0.15 (0.14) | -0.11 (0.14) | -0.20 (0.17) | 0.21 (0.17) | -0.10 (0.17) | -0.20 (0.17) | 0.04 (0.17) | -0.25 (0.17) |
| <i>Age: between 51 and 65</i> | -0.19 (0.14) | 0.48*** (0.14) | -0.00 (0.14) | -0.16 (0.16) | 0.60*** (0.16) | 0.03 (0.16) | -0.17 (0.17) | 0.36** (0.17) | -0.18 (0.16) |
| <i>Age: 66 and over</i> | -0.37*** (0.14) | 0.67*** (0.14) | 0.07 (0.14) | -0.23 (0.21) | 0.44** (0.21) | 0.01 (0.21) | -0.25 (0.22) | 0.12 (0.22) | -0.29 (0.22) |
| <i>Education: middle</i> | 0.12 (0.11) | 0.24** (0.11) | 0.25** (0.11) | 0.10 (0.12) | 0.25* (0.13) | 0.19 (0.12) | 0.10 (0.12) | 0.20 (0.13) | 0.14 (0.12) |
| <i>Education: high</i> | 0.41*** (0.11) | 0.57*** (0.11) | 0.53*** (0.11) | 0.33*** (0.13) | 0.59*** (0.13) | 0.53*** (0.13) | 0.33*** (0.13) | 0.55*** (0.13) | 0.49*** (0.13) |
| <i>Income: ≥EUR 2,000 - <EUR 3,000</i> | 0.06 (0.12) | 0.11 (0.13) | -0.03 (0.12) | 0.15 (0.14) | 0.28* (0.15) | 0.08 (0.14) | 0.15 (0.14) | 0.21 (0.15) | 0.02 (0.14) |
| <i>Income: ≥EUR 3,000 - <EUR 4,250</i> | -0.17 (0.13) | 0.12 (0.14) | 0.01 (0.13) | 0.06 (0.15) | 0.40** (0.18) | 0.29* (0.17) | 0.06 (0.16) | 0.31* (0.18) | 0.22 (0.17) |
| <i>Income: ≥EUR 4,250</i> | 0.23* (0.14) | 0.25* (0.14) | 0.14 (0.14) | 0.55*** (0.18) | 0.53*** (0.20) | 0.44** (0.19) | 0.55*** (0.18) | 0.47** (0.20) | 0.37* (0.19) |
| <i>Inflation perception: >10% - ≤20%</i> | -0.41*** (0.16) | -0.48*** (0.15) | -0.22 (0.15) | -0.38** (0.18) | -0.44*** (0.17) | -0.17 (0.16) | -0.38** (0.18) | -0.44*** (0.17) | -0.17 (0.16) |
| <i>Inflation perception: >20% - ≤30%</i> | -0.63*** (0.18) | -0.80*** (0.17) | -0.43** (0.17) | -0.65*** (0.20) | -0.80*** (0.18) | -0.38** (0.18) | -0.65*** (0.20) | -0.79*** (0.19) | -0.38** (0.18) |
| <i>Inflation perception: >30%</i> | -0.87*** (0.18) | -1.15*** (0.17) | -0.84*** (0.17) | -0.96*** (0.21) | -1.20*** (0.19) | -0.85*** (0.19) | -0.96*** (0.21) | -1.16*** (0.19) | -0.82*** (0.19) |
| <i>Making ends meet: very hard</i> | -0.96*** (0.27) | -0.79** (0.33) | -0.68** (0.31) | -0.82** (0.33) | -0.43 (0.40) | -0.49 (0.37) | -0.82** (0.33) | -0.44 (0.40) | -0.49 (0.38) |
| <i>Making ends meet: hard</i> | -0.72*** (0.15) | -0.38** (0.15) | -0.52*** (0.14) | -0.82*** (0.17) | -0.35** (0.18) | -0.50*** (0.17) | -0.82*** (0.17) | -0.35** (0.18) | -0.50*** (0.17) |
| <i>Making ends meet: easy</i> | 0.38*** (0.10) | 0.66*** (0.10) | 0.59*** (0.10) | 0.32*** (0.11) | 0.53*** (0.12) | 0.42*** (0.11) | 0.32*** (0.11) | 0.55*** (0.12) | 0.44*** (0.11) |
| <i>Making ends meet: very easy</i> | 0.63*** (0.16) | 1.12*** (0.18) | 0.91*** (0.17) | 0.59*** (0.18) | 0.89*** (0.19) | 0.70*** (0.19) | 0.59*** (0.17) | 0.96*** (0.20) | 0.76*** (0.19) |
| <i>Inflation task: national politics</i> | -0.72*** (0.10) | | | -0.66*** (0.11) | | | -0.66*** (0.11) | | |
| <i>Inflation task: DNB</i> | | -0.16* (0.09) | | | -0.21** (0.10) | | | -0.24** (0.10) | |
| <i>Inflation task: ECB</i> | | | -0.18** (0.09) | | | -0.27*** (0.10) | | | -0.29*** (0.10) |
| <i>Employed</i> | | | | -0.16 (0.14) | -0.38*** (0.15) | -0.26* (0.14) | -0.16 (0.14) | -0.35** (0.15) | -0.24* (0.14) |
| <i>Retired</i> | | | | -0.27 (0.17) | 0.18 (0.18) | -0.03 (0.18) | -0.27 (0.17) | 0.18 (0.18) | -0.04 (0.18) |
| <i>Partner</i> | | | | -0.45*** (0.12) | -0.56*** (0.13) | -0.51*** (0.13) | -0.45*** (0.12) | -0.54*** (0.13) | -0.50*** (0.13) |
| <i>Homeowner</i> | | | | 0.02 (0.13) | 0.22* (0.13) | 0.21 (0.13) | 0.02 (0.13) | 0.17 (0.13) | 0.17 (0.13) |
| <i>Urban area</i> | | | | -0.09 (0.10) | -0.02 (0.10) | -0.07 (0.10) | -0.09 (0.10) | -0.06 (0.10) | -0.10 (0.10) |
| <i>Health: good or excellent</i> | | | | 0.16 (0.11) | 0.18 (0.11) | 0.20* (0.11) | 0.16 (0.11) | 0.16 (0.11) | 0.18* (0.11) |
| <i>Financial literacy</i> | | | | 0.01 (0.06) | 0.09 (0.07) | -0.00 (0.07) | 0.01 (0.06) | 0.12* (0.07) | 0.03 (0.07) |
| <i>Number of times in trust survey</i> | | | | | | | 0.00 (0.01) | 0.06*** (0.01) | 0.05*** (0.01) |
| Number of observations | 2,458 | 2,458 | 2,458 | 1,945 | 1,945 | 1,945 | 1,945 | 1,945 | 1,945 |
| Wald χ^2 | 278.34*** | 300.84*** | 223.90*** | 241.06*** | 254.91*** | 192.57*** | 241.60*** | 278.14*** | 216.30*** |

Note: The table reports parameter estimates of ordered logit regressions. Standard errors are clustered by household and shown in parentheses. The dependent variables range from 1 (absolutely no trust) to 4 (a lot of trust). ***, ** and * denotes statistical significance at the 0.01, 0.05, and 0.10 level, respectively. The Wald statistic reports the value of a joint test of the null hypothesis that all parameters are zero.

4. Robustness checks

We have run several supplementary regressions to verify the robustness of our findings. Table 4 reports the results. First, we check whether our findings still hold when we simultaneously include the information on perceived inflation, whether households are affected by price increases, and who they consider responsible for bringing inflation down. Columns (1) - (3) show the estimation results where we have included the reported price increase for groceries at the supermarket as measure for perceived inflation and the extent to which households find it hard to make ends meet as measure of how they are affected by price increases. This joint test of the hypotheses confirms our earlier findings and supports the evidence that trust is lower among individuals who have higher perceived inflation and among those who are more affected by higher prices, and for authorities who they consider responsible for maintaining price stability. In fact, the evidence for a negative relation between public trust and individuals' views on which authority they hold responsible for price stability is now also significant for the ECB.

Second, we extend the set of standard control variables and include several additional variables measuring the personal situation and characteristics of respondents. Specifically, we include the respondents' employment situation, their living situation, whether they are homeowners, live in an urban environment, and are in good health. Finally, we include respondents' financial literacy, which is proxied by respondents' self-assessed knowledge of financial matters (1 = not knowledgeable, 2 = more or less knowledgeable, 3 = knowledgeable, 4 = very knowledgeable). Some previous studies suggest that financial literacy is positively related to public trust (cf. van der Cruijssen et al., 2021). It is quite remarkable that according to our estimates financial literacy is not related to trust in national politics or central banks, which may be due to the inclusion of the variables that capture who one thinks has the task of keeping inflation low. Also, the other additional control variables are insignificant except for the negative trust effects of the variable measuring whether the respondent has a partner (likewise, van der Cruijssen et al., 2022 report in some of their regressions that partnered respondents have lower trust in other people and financial institutions). Most importantly, adding all these control variables does not change our main conclusions, as shown in columns (4) - (6) of Table 4.

As a third robustness exercise, we show that our findings are robust to the inclusion of a variable that captures the number of times respondents participated in the trust surveys. Toepoel et al. (2008) show that more experienced panel members use less time to complete questionnaires and choose the first answer option more often than new members, which could indicate that experienced members take shortcuts and study questions less carefully. Therefore, as an additional robustness

check, we included the variable *number of times in trust survey*. We find that the more often respondents have participated in the trust survey, the higher is their trust in central banks. The association between trust in national politics and the number of times one answered questions on trust is not significant. A possible explanation is that by answering these surveys respondents have become more familiar with DNB and the ECB. Nevertheless, similar to the results from the other robustness exercises our main conclusions are not affected (see columns (7) to (9) of Table 4).

5. Conclusions

The reopening of the economy after the COVID-19 pandemic and the war in Ukraine, that was accompanied by a surge in energy and food prices, boosted inflation in 2022 to unprecedented levels. Despite the importance of public trust in politics and central banks, little is known about the impact of high inflation on public trust in national politics and central banks. Based on a survey among more than 2,400 respondents in the Netherlands, we are among the first to analyze the impact of the recent surge in inflation on public trust. We conclude that this increase in inflation is associated with a decline in trust in the Dutch central bank and Dutch politics. Furthermore, our results suggest that the higher people's perceived inflation, the more stress they experience from price increases, and the harder they find it to make ends meet, the lower their trust in the ECB, DNB, and Dutch politics. Finally, we find that trust in national politics, DNB, and the ECB is relatively low for those individuals who believe the particular institution has the task to keep inflation low. It is quite remarkable that more than seven out of ten people think it is the task of the government to keep inflation low. This suggests that the conclusion of Blinder et al. (2022) that in their outreach to the general public central banks should focus on their mandate also holds for the ECB, a view which is endorsed in a survey among former ECB Governing Council Members (Ehrmann et al., 2023).

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Appendix A. Questionnaire

This questionnaire consists of eleven questions and its topic is trust. Thank you very much in advance for completing the questionnaire.

v1t1-v1t3

How much trust do you have in

v1t1 national politics

v1t2 De Nederlandsche Bank

v1t3 the European Central Bank

- absolutely no trust
- not so much trust
- pretty much trust
- a lot of trust

v2

Currently, how hard or easy is it for your household to make ends meet with your income?

- very hard
- hard
- nor hard, nor easy
- easy
- very easy

v3

Currently, what is the financial situation of your household?

- debts are incurred
- savings are somewhat used
- exactly making ends meet
- a little money left over
- a lot of money left over

v4

Compared to 12 months ago, what do you think has happened with the prices of your monthly groceries and other household expenses?

- The prices have increased a lot.
- The prices have increased a little.
- The prices have remained the same.
- The prices have decreased a little.
- The prices have decreased a lot.

v5

Suppose that 12 months ago you had to pay 100 euro for your groceries at the supermarket. How much do you think you need to pay now for the same groceries in the same supermarket?

...

v6

Compared to 12 months ago, how much more or less does your household monthly spend on energy (gas and electricity)? Please put a minus before the amount in case it is less.

...

- I do not know

v7_1-v7_9

Prices have increased in the Netherlands. How do these price increases (inflation) affect you personally? Multiple answers are possible.

As a result of the price increases...

v7_1 ...I am more economical with money.

v7_2 ...I use savings to make ends meet.

v7_3 ...I incur debts.

v7_4 ...I have become more dependent on others.

v7_5 ...I use less energy to lower my energy costs.

v7_6 ...I experience more stress.

v7_7 ...I have increased my hours worked to increase my income.

v7_8 Other, namely ...

v7_9 I am not affected by this.

No

Yes

v8t1-v8t5

To what degree do you agree with the following statements (using a scale from 0 to 10, where 0 indicates “completely disagree” and 10 “completely agree”)?

I worry about the impact of the price increases (inflation) on...

v8t1 ...my own financial situation.

v8t2 ...the economy.

v8t3 ...the financial health of banks.

v8t4 ...the financial health of insurers.

v8t5 ...the financial health of pension funds.

0 completely disagree

1

2

3

4

5

6

7

8

9

10 completely agree

v9t1- v9t3

To what degree do you agree with the following statements (using a scale from 0 to 10, where 0 indicates “completely disagree” and 10 “completely agree”)? As a result of the price increases (inflation) I have less trust in ...

v9t1 ...national politics

v9t2 ...De Nederlandsche Bank

v9t3 ...the European Central Bank

0 completely disagree

1

2

3

4

- 5
- 6
- 7
- 8
- 9
- 10 completely agree

v10_1- v10_6

Who has, according to you, the task to prevent prices from increasing too strongly? Multiple answers are possible

v10_1 national politics

v10_2 De Nederlandsche Bank

v10_3 the European Central Bank

v10_4 labor unions

v10_5 shopkeepers/sellers

v10_6 I do not know

- No
- Yes

v11

According to you, what needs to happen such that prices stop increasing strongly?

Appendix B. Description of variables

Table B.1 Description of dependent variables

| Variable | Description | N | Mean | Sd | Min | Max |
|-----------------------------------|--|----------|-------------|-----------|------------|------------|
| <i>Trust in national politics</i> | Ordered variable capturing trust in national politics (1 = absolutely no trust, 2 = not so much trust, 3 = pretty much trust, 4 = a lot of trust). | 2,458 | 1.99 | 0.69 | 1 | 4 |
| <i>Trust in DNB</i> | Ordered variable capturing trust in De Nederlandsche Bank (1 = absolutely no trust, 2 = not so much trust, 3 = pretty much trust, 4 = a lot of trust). | 2,458 | 2.66 | 0.72 | 1 | 4 |
| <i>Trust in ECB</i> | Ordered variable capturing trust in the European Central Bank (1 = absolutely no trust, 2 = not so much trust, 3 = pretty much trust, 4 = a lot of trust). | 2,458 | 2.44 | 0.74 | 1 | 4 |

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

Table B.2 Description of explanatory variables

| Variable | Description | N | Mean | Sd | Min | Max |
|---|--|----------|-------------|-----------|------------|------------|
| <i>Male</i> | Dummy (1 = male, 0 = female). | 2,458 | 0.51 | 0.50 | 0 | 1 |
| <i>Age; 35 and below</i> | Dummy (1 = 35 and below, 0 = else). Reference category. | 2,458 | 0.14 | 0.35 | 0 | 1 |
| <i>Age: between 36 and 50</i> | Dummy (1 = between 36 and 50, 0 = else). | 2,458 | 0.21 | 0.41 | 0 | 1 |
| <i>Age: between 51 and 65</i> | Dummy (1 = between 51 and 65, 0 = else). | 2,458 | 0.30 | 0.46 | 0 | 1 |
| <i>Age; 66 and over</i> | Dummy (1 = 66 and over, 0 = else). | 2,458 | 0.36 | 0.48 | 0 | 1 |
| <i>Education: low</i> | Dummy (1 = primary education/preparatory intermediate vocational education; 0 = else). Reference category. | 2,458 | 0.27 | 0.44 | 0 | 1 |
| <i>Education: middle</i> | Dummy (1 = secondary pre-university education or intermediate vocational education; 0 = else). | 2,458 | 0.32 | 0.47 | 0 | 1 |
| <i>Education: high</i> | Dummy (1 = higher vocational education or university education; 0 = else). | 2,458 | 0.41 | 0.49 | 0 | 1 |
| <i>Income: <EUR 2,000</i> | Dummy (1 = household net monthly income <EUR 2000; 0 = else). Reference category. | 2,458 | 0.24 | 0.43 | 0 | 1 |
| <i>Income: ≥EUR 2,000 - <EUR 3,000</i> | Dummy (1 = household net monthly income ≥EUR 2,000 - <EUR 3,000; 0 = else). | 2,458 | 0.25 | 0.43 | 0 | 1 |
| <i>Income: ≥EUR 3,000 - <EUR 4,250</i> | Dummy (1 = household net monthly income ≥EUR 3,000 - <EUR 4,250; 0 = else). | 2,458 | 0.26 | 0.44 | 0 | 1 |
| <i>Income: ≥EUR 4,250</i> | Dummy (1 = household net monthly income ≥ EUR 4,250; 0 = else). | 2,458 | 0.25 | 0.43 | 0 | 1 |
| <i>Inflation perception: ≤10%</i> | Dummy (1 = Inflation perception: ≤10%, 0 = else). Reference category. | 2,458 | 0.10 | 0.30 | 0 | 1 |
| <i>Inflation perception: >10% - ≤20%</i> | Dummy (1 = Inflation perception: >10% - ≤20%, 0 = else). | 2,458 | 0.47 | 0.50 | 0 | 1 |
| <i>Inflation perception: >20% - ≤30%</i> | Dummy (1 = Inflation perception: >20% - ≤30%, 0 = else). | 2,458 | 0.19 | 0.39 | 0 | 1 |
| <i>Inflation perception: >30%</i> | Dummy (1 = Inflation perception: >30%, 0 = else). | 2,458 | 0.24 | 0.43 | 0 | 1 |
| <i>Prices increased a lot</i> | Dummy (1 = Prices increased a lot, 0 = else). | 2,458 | 0.90 | 0.30 | 0 | 1 |
| <i>Change energy price: <EUR 0</i> | Dummy (1 = Change energy price: <EUR 0, 0 = else). Reference category. | 2,458 | 0.05 | 0.23 | 0 | 1 |
| <i>Change energy price: EUR 0</i> | Dummy (1 = Change energy price: EUR 0, 0 = else). | 2,458 | 0.19 | 0.39 | 0 | 1 |
| <i>Change energy price: >EUR 0 - <EUR 150</i> | Dummy (1 = Change energy price: >EUR 0 - <EUR 150, 0 = else). | 2,458 | 0.28 | 0.45 | 0 | 1 |
| <i>Change energy price: EUR 150 or more</i> | Dummy (1 = Change energy price: EUR 150 or more, 0 = else). | 2,458 | 0.19 | 0.39 | 0 | 1 |
| <i>Change energy price: I do not know</i> | Dummy (1 = Change energy price: I do not know, 0 = else). | 2,458 | 0.29 | 0.45 | 0 | 1 |
| <i>Making ends meet: very hard</i> | Dummy (1 = Making ends meet with household income: very hard, 0 = else). | 2,458 | 0.03 | 0.16 | 0 | 1 |
| <i>Making ends meet: hard</i> | Dummy (1 = Making ends meet with household income: hard, 0 = else). | 2,458 | 0.10 | 0.30 | 0 | 1 |
| <i>Making ends meet: nor hard, nor easy</i> | Dummy (1 = Making ends meet with household income is neither hard nor easy, 0 = else). Reference category. | 2,458 | 0.41 | 0.49 | 0 | 1 |
| <i>Making ends meet: easy</i> | Dummy (1 = Making ends meet with household income: easy, 0 = else). | 2,458 | 0.36 | 0.48 | 0 | 1 |
| <i>Making ends meet: very easy</i> | Dummy (1 = Making ends meet with household income: very easy, 0 = else). | 2,458 | 0.10 | 0.30 | 0 | 1 |
| <i>Financial situation: debts are incurred</i> | Dummy (1 = Financial situation: debts are incurred, 0 = else). | 2,458 | 0.02 | 0.15 | 0 | 1 |
| <i>Financial situation: savings used</i> | Dummy (1 = Financial situation: savings are somewhat used, 0 = else). | 2,458 | 0.17 | 0.38 | 0 | 1 |

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

Table B.2 Description of explanatory variables (continued)

| Variable | Description | N | Mean | Sd | Min | Max |
|--|--|-------|------|------|-----|-----|
| <i>Financial situation: exactly making ends meet</i> | Dummy (1 = Financial situation: exactly making ends meet, 0 = else). Reference category. | 2,458 | 0.25 | 0.43 | 0 | 1 |
| <i>Financial situation: a little money left over</i> | Dummy (1 = Financial situation: a little money left over, 0 = else). | 2,458 | 0.45 | 0.50 | 0 | 1 |
| <i>Financial situation: a lot of money left over</i> | Dummy (1 = Financial situation: a lot of money left over, 0 = else). | 2,458 | 0.10 | 0.30 | 0 | 1 |
| <i>Impact: more economical with money</i> | Dummy indicating the impact of the high inflation: more economical with money (1 = yes, 0 = no). | 2,458 | 0.70 | 0.46 | 0 | 1 |
| <i>Impact: use savings to get by</i> | Dummy indicating the impact of the high inflation: use savings to get by (1 = yes, 0 = no). | 2,458 | 0.18 | 0.38 | 0 | 1 |
| <i>Impact: incur debts</i> | Dummy indicating the impact of the high inflation: incur debts (1 = yes, 0 = no). | 2,458 | 0.02 | 0.15 | 0 | 1 |
| <i>Impact: more dependent on others</i> | Dummy indicating the impact of the high inflation: more dependent on others (1 = yes, 0 = no). | 2,458 | 0.03 | 0.17 | 0 | 1 |
| <i>Impact: use less energy</i> | Dummy indicating the impact of the high inflation: use less energy (1 = yes, 0 = no). | 2,458 | 0.59 | 0.49 | 0 | 1 |
| <i>Impact: more stress</i> | Dummy indicating the impact of the high inflation: more stress (1 = yes, 0 = no). | 2,458 | 0.17 | 0.38 | 0 | 1 |
| <i>Impact: increased hours worked</i> | Dummy indicating the impact of the high inflation: increased hours worked (1 = yes, 0 = no). | 2,458 | 0.04 | 0.19 | 0 | 1 |
| <i>Impact: other</i> | Dummy indicating the impact of the high inflation: other (1 = yes, 0 = no). | 2,458 | 0.04 | 0.19 | 0 | 1 |
| <i>Inflation task: national politics</i> | Dummy indicating whether the respondent thinks national politics has the task to keep inflation low (1 = yes, 0 = no). | 2,458 | 0.75 | 0.43 | 0 | 1 |
| <i>Inflation task: DNB</i> | Dummy indicating whether the respondent thinks DNB has the task to keep inflation low (1 = yes, 0 = no). | 2,458 | 0.41 | 0.49 | 0 | 1 |
| <i>Inflation task: ECB</i> | Dummy indicating whether the respondent thinks the ECB has the task to keep inflation low (1 = yes, 0 = no). | 2,458 | 0.56 | 0.50 | 0 | 1 |
| <i>Employed</i> | Dummy (1 = paid job, work in family business or self-employed, 0 = else) | 1,945 | 0.47 | 0.50 | 0 | 1 |
| <i>Retired</i> | Dummy (1 = retired; 0 = else). | 1,945 | 0.33 | 0.47 | 0 | 1 |
| <i>Partner</i> | Dummy (1 = head of household is married or living with a partner, 0 = else). | 1,945 | 0.68 | 0.47 | 0 | 1 |
| <i>Homeowner</i> | Dummy (1 = homeowner, 0 = else). | 1,945 | 0.71 | 0.45 | 0 | 1 |
| <i>Urban area</i> | Dummy (1 = degree of urbanisation of respondent's residence is strong or very strong, 0 = else). | 1,945 | 0.44 | 0.50 | 0 | 1 |
| <i>Health: good or excellent</i> | Dummy (1 = "good" or "excellent", 0 = "poor", "not so good" or "fair") | 1,945 | 0.73 | 0.44 | 0 | 1 |
| <i>Financial literacy</i> | Self-assessed knowledge of financial matters (1 = not knowledgeable, 2 = more or less knowledgeable, 3 = knowledgeable, 4 = very knowledgeable). | 1,945 | 2.31 | 0.77 | 1 | 4 |
| <i>Number of times in trust survey</i> | Variable that measures the number of times respondents answered questions on trust in DNB (DNB Trust Survey participation and participation in the additional September/October survey). | 1,945 | 8.85 | 5.18 | 1 | 18 |

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

Figure B.1. Impact of price increases and behavioral responses



Source: Centerpanel September/October 2022.

Note: The answers of 2,464 respondents have been weighted to correct for differences between the sample and the population with respect to gender, age, net household income, and the level of education. Multiple answers were possible. 11% indicated that price increases did not affect them personally.

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