

A letter experiment to increase take-up of wage subsidies by employers

Nicole Bosch* Lucy Kok[†] Lennart Kroon[‡]

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Abstract

This paper analyzes the effect of a large-scale randomized letter experiment nudging employers to take up a wage subsidy for previously older unemployed. Since long-term unemployment rates are fairly high among this group, the wage subsidy should make hiring them more attractive. However, non-take-up is high (59 percent, Van der Werff et al., 2021). From interviews and earlier behavioural research reasons for non-take up are unawareness and difficulty applying for the wage subsidy. To circumvent these problems, the Dutch Ministry of Social Affairs and Employment sent more than 30,000 carefully constructed letters to employers, which to the best of our knowledge is the first time this has been done. All letters contained a detailed explanation on how to apply for the subsidy. Furthermore, using nudges from behavioural economics three different versions of the letter were sent, each referring to a specific possible benefit of hiring an older unemployed person. It was tested whether companies changed their hiring behaviour after receiving a letter compared to a control group that did not receive a letter. The findings are as follows. First, we find on average no effect

*Tax and Customs Administration of the Netherlands. E-mail: n.m.bosch@zonnet.nl.

[†]SEO Amsterdam Economics. E-mail: l.kok@seo.nl.

[‡]SEO Amsterdam Economics. E-mail: l.kroon@seo.nl.

of the letters on take-up of the subsidy, nor on the probability of hiring an older worker. This indicates that unawareness and difficulty are not the main reasons for the high non-take-up or that sending a letter is no solution for these problems maybe because of the time laps between receiving the letter and the hiring decision. Second, there is no distinguishable effect of the three different messages. Overall, our findings suggest that nudging employers concerning their hiring behaviour is more difficult than nudging employers or individuals concerning their tax payments.

1 Introduction

Long-term unemployment rates for older workers remain fairly high (OECD, 2022) and over a long time several public policies have been targeted at combatting this problem. One of these public policies is a Dutch wage subsidy targeted at unemployed older workers. Theoretically this wage subsidy reduces labour costs and would make it more attractive to hire them. However, non-take up of such a wage subsidy is high (59 percent, Van der Werff et al.,2021).

From interviews and earlier behavioural research, reasons for non-take up are unawareness and difficulty applying for the wage subsidy. To circumvent these problems, the Dutch Ministry of Social Affairs and Employment sent more than 30,000 letters to employers. The letters were constructed by us and contained carefully formulated messages. To the best of our knowledge this is the first time a randomly controlled letter experiment is exploited to analyse the impact of non-take-up of a public policy instrument.

In our paper, we analyse the impact of this letter experiment on hiring decision of older workers (56 years and older) in the Netherlands. The letter experiment uses recent insights from behavioural research in formulating the

messages in the letter. The letter also explains how to apply for the wage subsidy.

Surprisingly, there is hardly any evidence of a positive effect of wage subsidies on employment for (older) unemployed individuals. This holds true for the most earliest paper - which even finds a negative impact - (Burtless, 1985 for the US) as well as more recent published paper (Huttunen et al., 2013 for Finland). Exceptions to this notion are Katz (1996) who find a small significant effect for young unemployed of the Targeted Jobs Tax Credit in the US and Blundell et al. (2004) who find a positive effect for young unemployed of a job search program including wage subsidies in the UK. Some papers do find an effect of wage subsidies on current employees (to prevent exit from employment) but not on entry into employment (Kramarz and Philippon, 2001, Boockman, 2015).

Several papers point at the low take-up rate as an explanation for the lack of impact (Katz, 1996, Robertson, 1994, Burtless, 1985). This may occur if firms are unaware of the subsidy, they find the paperwork too burdensome or the subsidy too small to justify the expense of filing for them. For these reasons the program should be advertised well and simple to use (Robertson, 1994).

So far, the question whether non-awareness of the subsidy is the reason for the low take-up of wage subsidies has not been addressed empirically. Our paper is the first to address this question in an experimental setting. Our experimental set-up is such that the program is advertised in three different letters to employers and all letters include explicit explanation on the use of the program. To assess whether the information problem is responsible for the under-usage of the instrument, we compare these employers to similar employers that did not receive a letter. The letters for large employers were addressed to the head of HRM and the letters for small and medium employers to the director. The outcome of the experiment provides more knowledge on the non-take-up of the wage subsidy, which is essential information to

evaluate the program as a whole.

Although a great number of studies have been conducted in the field of behavioral economics, most of them focus on the incentives and behavior of (private) individuals. Field experiments targeted at employers are scarce. Leets et al. (2020) conducted an experiment in Pennsylvania (US) to increase tax compliance by sending letters with different nudges at delinquent tax businesses, reminding them to pay within 15 days. They found a small significant increase of the number of business owners who responded and the amount of delinquency paid within 15 days of receiving the letters. Vainre et al. (2020) conducted a field experiment in Estonia directed at employers in the construction industry to increase their tax compliance. They sent personally addressed e-mails with different nudges. The intervention significantly increased declared payroll taxes over a 3-month follow-up period.

Our contribution to the literature is fourfold. First, we add to the knowledge of wage subsidies. In line with earlier research we find no positive effect of these subsidies on hiring rates of older workers. Whereas earlier studies point to unawareness of the subsidy as a reason, we think our research shows that this might not be the main reason for the lack of impact. Employers that received a letter which brought this subsidy to their attention, did not hire more older workers than employers that did not receive such a letter. Second, there is some indication that smaller firms, for whom the wage subsidy is relatively more profitable, were unaware of the subsidy, as they seem to make more use of the wage subsidy and hire more older people after they received the letter (although the effect is only marginally statistical significant after 15 months). There is no discernible effect on large firms. Third, the three versions of the letter from different behavioural insights resulted in similar (non) results. Fourth, we add to the field of randomized controlled experiments targeted at firms. Earlier experiments focused on tax payments which is directly linked to an individual action. In our experiment the employer receives information that could affect its hiring decision, but this decision is more complicated and our research shows that even a carefully set-up exper-

iment might not be the best way to induce employers to hire older workers.

Overall, our findings suggest that nudging employers concerning their hiring behaviour is more difficult than nudging employers or individuals concerning their tax payments.

The paper is structured as follows. The institutional setting is discussed in Section 2. Section 3 describes the behavioural theory and experiment. Section 4 introduces the experimental data used for the analysis. The empirical strategy is explained in section 5. Section 6 shows the descriptive statistics whereas section 6 highlights the results and section 7 concludes.

2 Institutional Setting

Unemployment among older workers (aged 55 years and above) has been an important policy topic in the Netherlands in the last decade. The share of older workers in total unemployment has increased from 10 percent in 2006 to 22 percent in 2016 (CBS, 2017). Moreover, long-term unemployment is especially high for older workers. In 2016 almost 70 percent of the unemployed 55 years and older has been unemployed for more than a year. For 35- to 55-year-olds this was 50 percent and for 15- to 35-year-olds it was 20 percent. One of the reasons why hiring older workers is relatively unattractive for companies, is because they face a higher risk in hiring older people, as they are more prone to more severe (long-term) sickness. To reduce the cost of these risks, the Dutch government introduced the wage subsidy for older unemployed workers. Firms that hire a previously unemployed older person, are eligible for a discount on the employer contributions for social insurance (like unemployment and disability insurance). An employer receives a premium discount of 7,000 euro for full-time employment and less for part-time employment. The discount can be used for three years, therefore the maximum discount is 21.000 euro. In comparison, the labour costs of a minimum wage worker is about 23.000 euro.

Even though this policy has been present for many years, the use is not as widespread as intended. Non-take up of this wage subsidy is high (59 percent, Van der Werff et al., 2021). Van der Werff et al. (2012) shows that for most regulations that aim at making older employees more attractive for employers (like the premium discount), there is a problem with awareness. Less than 10 percent of the managers have detailed knowledge of these regulations. For the premium discount specifically, 40 percent of the managers is unaware of this regulation and 50 percent is globally familiar with the regulation. In the interviews with managers, it is confirmed that there exists little awareness of the premium discount.

3 Behavioural Theory and Experiment

We made use of recent insights from behavioural research in formulating the messages which are intended to induce employers to make use of wage subsidies for hiring older unemployed workers. Theoretically, there could be several reasons for the non-take up of wage subsidies.

1. Companies are unaware of the existence of these instruments or don't know that they are entitled to them or think the process is too cumbersome.
2. There is awareness of these instruments, but this information is not passed on to the people within the firm that are responsible for hiring.
3. The information is passed on to the people responsible for hiring, but they don't take these possible financial advantages into account when hiring people. Other behavioral factors, other than just financial factors, can also play a role. For example social norms also affect the decision of a firm to hire older workers.
4. Possible financial advantages are taken into account, but the size of

the financial benefit is not large enough to alter the companies' hiring strategies.

Specifically, for the instrument under study (a wage subsidy for unemployed older people in the Netherlands), Van der Werff et al. (2012) find that there is indeed a problem of awareness (explanation 1). More than 40 percent of the managers in the survey had no idea of the existence of this regulation. Less than 10 percent knew of the regulation in detail.

Different versions of the letter were sent, each referring to a specific possible incentive for the company. In all letters, we specifically emphasized the simplicity of applying for the wage subsidy. The versions were each based on a different principle from the behavioral economic literature.

Behavioral 'bias' Communication is, according to the literature, strongly related to salience: the extent a message stands out (Della Vigna et al., 2009, Lunn, 2014). Behavioral bias relates to the way a message or incentive is 'wrapped'. The influence of this bias has been established in many experiments before. In the behavioral economics literature different aspects of salience have been studied as a means of influencing the behavior of individuals. Many of the strategies originate from marketing. Some examples are:

- A handwritten call-to-action on a post-it makes the response rate in a survey go up from 19 percent to 35 percent.
- Placing a picture on a message by the tax authority to pay the car taxes, with the image depicting the car that the person would lose by not paying the taxes.

Furthermore, the language is of importance. Experiments show that simple language yields a higher response. An example is also the use of emphatic language, short sentences with a very clear call-to-action. For example, putting "pay now" on the envelope of the tax authorities makes the result of the

letter go up with 3,1 percentage point. Personalizing messages, i.e. using names, also has a positive influence on the impact of a message. A personal addressed message asking to raise funds for charity has been shown to yield more results (BIT UK, 2013).

Referring to *social norms* is another effective communication strategy. People exhibit social behavior if they know that others will do the same (World Bank, 2015). John et al. (2014) mention a non-published study by BIT UK focused on tax payment by dentists and doctors. In this experiment three type of letters were sent: a letter with language in the style of Medics Tax Health Plan, a letter with easier language and a letter with easier language and with the sentence “97 percent of all the doctors have done their tax declaration in the past 4 years” added. The control group received a letter that was sent before. The results show that the simplification of the message had a strong positive effect. Adding the sentence about the social norm increased the effect slightly. Hallsworth et al. (2014) show similar results for the social norm.

Making the financial incentive **salient** is an important subject of many experiments. The framing of the incentive is important in this regard. A common result in behavioral economics is that people react stronger to the possibility of a financial loss than the chance of financial gain, even if the expected value is equal. People are often susceptible to loss aversion (Kahneman and Tversky, 1979). Another famous example is the ‘present bias’. Benefits or costs that are further in the future are often underestimated. Emphasizing the benefits on the short term can therefore improve the effectiveness of a message (BIT UK, 2013). Appealing to scarcity and urgency is a similar strategy. Websites for hotels abundantly use this method, by pointing out that a specific room is limited in availability or that a similar room has been booked very recently.

These principles are included in three different letters. After testing the messages in a sample group of employers, three versions were chosen. The

Regarding: wage subsidy for older employees

Dear Sir or Madam,

Are you hiring an employee (on a temporary or permanent contract) that is 56 years or older and that was receiving a social benefit until that moment? Then you are eligible to a discount on your employer contributions. You will receive a maximum of € 7,000 per year for a maximum period of 3 years.

[...]

Applying for the subsidy is easy and only takes a couple of simple steps. Check the back of this letter for the instructions.

Kind regards,

Box Base letter

Behavioral principle	Sentence
1. Financial advantage	In a period of three years, the financial gain may be as much as € 21,000.
2. Loss aversion	Make sure you do not miss out on this financial gain that may be as much as € 21,000 over a period of 3 years.
3. Peer norm	Already a large number of employers make use of this deduction and receive a discount on their labor costs that may be as much as € 21,000 in three years.

Box Three letter versions

base letter was as follows, see Box 'Base letter'. It explicitly indicates that applying is easy and included a simple instruction how to do this.

The three versions differed in the text between the square brackets. The text of the first version was based on the financial advantage principle, the one of the second version on the loss aversion principle and the one of the third on the peer norm principle. Box 'Three letter versions' gives an overview.

The letters were sent by the Ministry of Social Affairs and Employment and signed by the chairman of one of the boards of the Ministry. Unfortunately, it was not possible to send personally addressed letters. Letters intended for big companies (more than 100 employers) were addressed to the head of HRM and letters for smaller companies (less than 100 employees) were addressed to the managing director.

4 Data

4.1 Sample

A power analysis was used to calculate the minimum sample size and duration of the observation period that were needed in order to detect a 5 percent effect. This learned us that a minimum observation period of 14 months was needed. With the help of UWV (Employee Insurance Agency) four separate samples of 10,000 employers were drawn, three groups that received one of the letter versions and a control group that did not receive a letter. The four experiment groups were stratified according to size (10 to 100 employees and more than 100 employees) and use of the subsidy (companies that were using it and were not using it at the moment the sample was drawn).¹ This was done because the expected effect of the letters was different for smaller and big companies and between users and non-users of the deduction. The information on size and use of the deduction was defined for a reference date (14 October 2015).

The sample was drawn in two steps.

1. The two groups (user/non-user of employer contribution deduction) with more than 100 employees were randomly distributed over the four experiment groups.
2. From the two groups (user/non-user of employer contribution deduction) with 10 to 100 employees, samples of 37,5 percent were drawn. Next, the two samples were randomly distributed over the four experiment groups.

The letters were sent at the end of June 2016. We have collected administrative panel data on individual worker level for the period June 2015 (one year

¹Companies with less than 10 employees were dropped from the experiment as the probability they will hire new employees during the experiment period is low.

	Letter financial advantage	Letter loss aversion	Letter peer norm	Control group
Sector				
Education & Government	6%	5%	6%	5%
Health & Social services	13%	13%	13%	13%
Services	58%	60%	59%	59%
Construction	3%	3%	3%	3%
Industry	15%	15%	14%	15%
Agriculture	4%	4%	4%	3%
Unknown	1%	1%	1%	1%
Size				
Less than 100 employees	79%	79%	79%	79%
More than 100 employees	21%	21%	21%	21%
Use of wage subsidy				
Company was receiving wage subsidy before the experiment	26%	25%	26%	25%
Size X use of wage subsidy				
More than 100 employees, current use of deduction	11%	11%	11%	11%
More than 100 employees, no current use of deduction	10%	10%	10%	10%
10 to 100 employees, current use of deduction	15%	14%	15%	14%
10 to 100 employees, no current use of deduction	65%	65%	64%	65%
Total number of companies	10,199	10,198	10,203	10,179

Source: Original data UWV, edited by SEO Amsterdam Economics.
Information: The numbers apply to the situation on June 2016, the month the letters were sent.

Table 1: Descriptive statistics

before the letters were sent) to September 2017 (15 months after the letters were sent). The data on the period before the letters were sent enable us to correct for any pre-existing differences between the experiment groups and (macro)trends. The data included information about the firms where the individuals are working. This data includes the size of the firm, the use/non-use of the subsidy and the sector. Table 1 shows that the four experiment groups are almost identical on these characteristics.

4.2 Subgroups

Apart from the effect on the total group of employers, we are interested in three subgroups of companies:

1. companies that hired older workers before the experiment but did not make use of the wage subsidy
2. companies that did not hire any employees 56 years or older before the experiment.

The expected effect of the experiment is different for each these subgroups. We expect the biggest effect on companies that did hire older workers but were not using the wage subsidy, as they might have been unfamiliar with the policy or were not using it because they believed the application process to be cumbersome. Furthermore, we were interested in whether firms that did not have any employees aged 56 years or older (perhaps because it was regarded as unprofitable) can be incentivized in hiring older workers by pointing out the possible financial benefits.

Table 2 gives the size of each of the subgroups and shows that the treatment and control groups are equally divided within all subgroups.

The subset of small companies consists of almost 80 percent of the total sample, see Table 3. Furthermore, the subset of companies that did not hire any employees aged 56 years or older consists almost solely of small companies. The subset of companies that hired older workers before the experiment but did not make use of the wage subsidy consists for more than a quarter of large companies (more than 100 employees).

Outcomes might differ by firm size. We divide the group in firm size and again table 4 shows that the treatment and control groups are equally divided. The financial benefit of the wage subsidy will, on average, be larger for smaller companies compared to the total revenue. Furthermore, our assumption is that smaller firms will be less aware of all the possible tax benefits like

	Letter financial advantage	Letter loss aversion	Letter peer norm	Control group	Total
(1) Companies that hired older workers before the experiment but did not make use of the wage subsidy	2,543 (25%)	2,494 (25%)	2,515 (25%)	2,470 (25%)	10,022
(2) Companies that did not hire employees aged 56 years or older before the experiment	5,582 (25%)	5,698 (25%)	5,618 (25%)	5,690 (25%)	22,588
(3) Companies that hired older workers before the experiment and made use of the wage subsidy	2,074 (25%)	2,006 (25%)	2,070 (25%)	2,019 (25%)	8,169

Source: Original data UWV, edited by SEO Amsterdam Economics.

Information: The numbers apply to the situation in June 2015, the month the letters were sent.

Table 2: Experiment groups equally divided in all subgroups of the total sample

Subgroup	(1) Companies that hired older workers before the experiment but did not make use of the wage subsidy	(2) Companies that did not hire employees aged 56 years or older before the experiment	(3) 'Small' companies, with less than 100 employees	Total sample
(1) Companies that hired older workers before the experiment but did not make use of the wage subsidy	–	0 (0%)	7,180 (72%)	10,022
(2) Companies that did not hire employees aged 56 years or older before the experiment	0 (0%)	–	21,013 (93%)	22,588
(3) 'Small' companies, with less than 100 employees	7,180 (22%)	21,013 (65%)	–	32,202
Total sample	10,022 (25%)	22,588 (55%)	32,202 (79%)	40,779

Source: Original data UWV, edited by SEO Amsterdam Economics.

Information: The numbers apply to the situation in June 2015, the month the letters were sent.

Table 3: Subgroups small and large firms

	Letter financial advantage	Letter loss aversion	Letter peer norm	Control group	Total
(1) Small firms (< 100 employees)	8,078 (25%)	8,059 (25%)	8,055 (25%)	8,010 (25%)	32,202
(2) Large firms (≥ 100 employees)	2,121 (25%)	2,139 (25%)	2,148 (25%)	2,169 (25%)	8,577

Source: Original data UWV, edited by SEO Amsterdam Economics.

Information: The numbers apply to the situation in June 2015, the month the letters were sent.

Table 4: Experiment groups by large and small firms

	Large companies (100 or more employees)	Small companies (less than 100 employees)	Total
Companies that did <u>not</u> hire employees aged 56 years or older before the experiment	1,575 (18%)	21,013 (65%)	22,588
Companies that did hire employees aged 56 years or older before the experiment	7,002 (82%)	11,189 (35%)	18,191
- Companies that made use of the wage subsidy	4,160 (/7,002 = 59%)	4,009 (/11,189 = 36%)	8,169
- Companies that did not make use of the wage subsidy	2,842 (/7,002 = 41%)	7,180 (/11,189 = 64%)	10,022
Total	8,577	32,202	40,779

Table 5: Differences in hiring of older workers and use of the wage subsidy between large and small firms

the premium discount. Lastly, smaller firms will have smaller HR teams on average and therefore, their possibilities of applying for benefits like the premium discount might be smaller. For these reasons, we expect the effect of the letters to be bigger for small firms.

The difference in hiring rates between large and small companies is large, see Table 5. First of all, there is only a small fraction (18 percent) of the large companies that did not hire any employees aged 56 years or older before the experiment. In contrast, almost two thirds of the small companies did not hire any older workers before the experiment. This is not surprising, as the higher the number of hired workers, in general, the higher the chances that an older worker is hired. What is less evident, is that among those companies that did hire older workers, the large companies made significantly more use of the wage subsidies. More than half of the large companies (59 percent) that hired older workers made use of the wage subsidy. Of the small companies that hired older workers, only 36 percent made use of the wage subsidy. These results clearly show that there exist differences between the use of the wage subsidy between large and small firms, which might be explained by a difference in awareness of the wage subsidy.

5 Empirical strategy

In order to assess the effect of the letters we looked at two outcomes:

1. The use of the deduction: the cumulative number of employees hired with wage subsidy, starting from the month the letters were sent.
2. The employment opportunities of elderly: the total number of hired employees of 56 years or older, counting from the month the letters were sent.

Our dataset consists of monthly firm-level panel data from June 2015 to September 2017. This allows us to assess how the effects of the letters change over time. More specifically, we estimate:

$$y_{it} = \gamma P_i + \sum_{k=1}^K \beta_k X_i + \alpha + \epsilon_i \quad (1)$$

Where y_{it} is the outcome variable after $t = 3, 6, 9, 12$ or 15 months for firm i . The parameter of interest γ is the estimated difference between treatment and control group. P_i is a dummy variable that equals 1 for firms that received a letter and 0 for firms that did not receive a letter. X_i is a set of K firm-level control variables, like firm size and sector. Finally, α is a constant term and ϵ_i is the residual.

We start by estimating (1) for the total sample. There are firms that were eligible for the premium discount but did not make use of it, perhaps because of a lack of awareness of the possibility. Therefore, we also estimate (1) for the subset of companies that did hire people of 56 years or older before the experiment but did not make use of the premium discount. Secondly, there are also companies that did not hire people of 56 years or older. We also estimate (1) for these companies. Thirdly, firm size is likely to be related to the use of premium discount and therefore we also estimated (1) for the subset of small firms (less than 100 employees)

Lastly, we are interested in whether effects depend on the message of the letter, i.e. if there were any differences among the letters. We therefore estimate the following equation for the total sample,

$$y_{it} = \sum_{j=0}^3 \gamma_j P_{ij} + \sum_{k=1}^K \beta_k X_i + \alpha + \epsilon_i \quad (2)$$

Where $P_{i0}, P_{i1}, P_{i2}, P_{i3}$ are dummy variables equaling one if a companies respectively received no letter, the *financial advantage* letter, the *loss aversion* letter or the *peer norm* letter.

6 Descriptive statistics

In section 2 we showed that the companies that received a letter (treatment group) and the companies that did not receive a letter (control group) are comparable in firm characteristics such as the sector, size and use of premium discount. Figure 1 shows the average cumulated number of hired employees with premium discount for the companies that did and did not receive a letter, starting at one year before the letters were sent. The figures shows that at the month the letters were sent the average cumulated number is 0,2 employee. The monthly hiring rates vary substantially (see Appendix 1). The figure shows a similar development for the control and treatment group. However, the figure also shows that the companies that did not receive a letter hired, on average, slightly more employees with premium discount, both before and after the letters were sent. For this reason, we include fixed sector and a variable indicating the cumulative number of employees hired with premium discount in the year before the letter was sent in our estimate that control for pre-existing differences in our analyses.

The companies that did not receive a letter also hired slightly more employees aged 56 years or older on average, both before and after the letters were sent (Figure 2). This is particularly the case 6 months before and after the letters

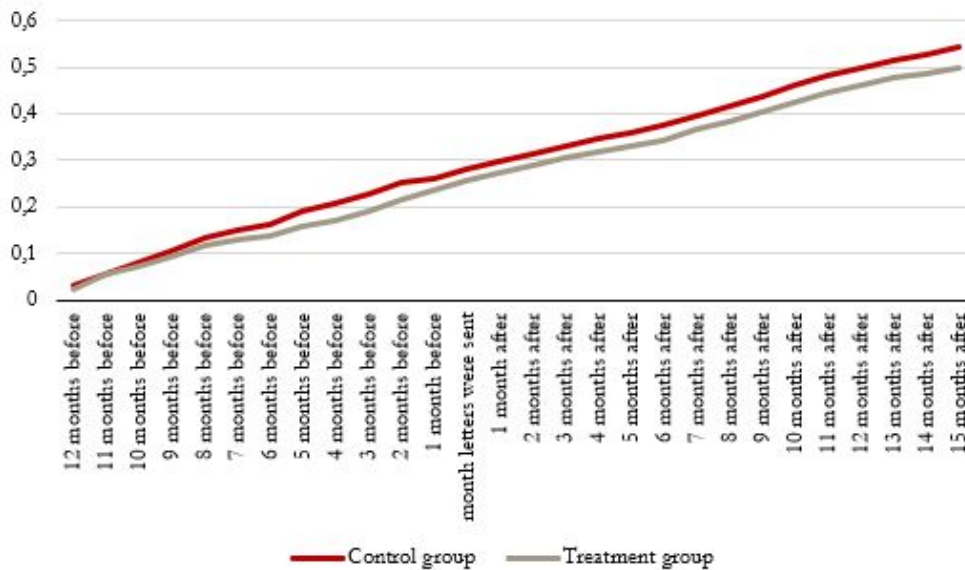


Figure 1: Average cumulated number of hired employees with premium discount, one year before the letters were sent until 15 months after the letters were sent

were sent (January 2016 and January 2017 respectively). For this reason, we will also correct for the number of older workers hired in the year before the letters were sent.

The figures in this section do not point toward an effect of the letters on either the number of employees hired with premium discount or the number of older workers hired. There are increases in January 2016 and January 2017 in the number of hired employees 56 years or older both in the treatment and the control group. This could be due a change in policy where the eligible age was increased from 50 to 56 years of age. The figures also show that there are small pre-existing differences in the outcomes between the companies that received a letter and that did not receive a letter. The next section will give the regression results, which are corrected for any pre-existing differences between the treatment and control firms.

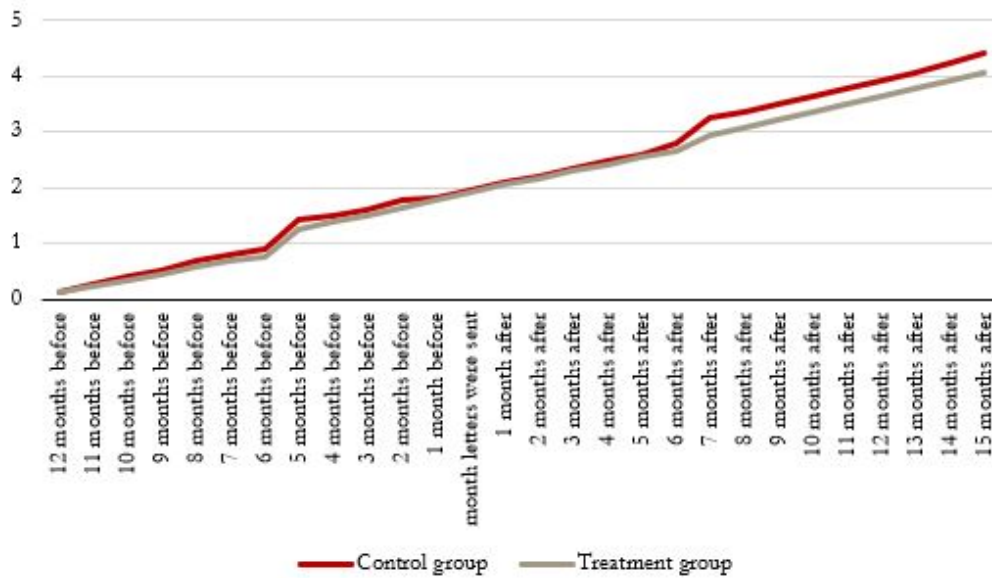


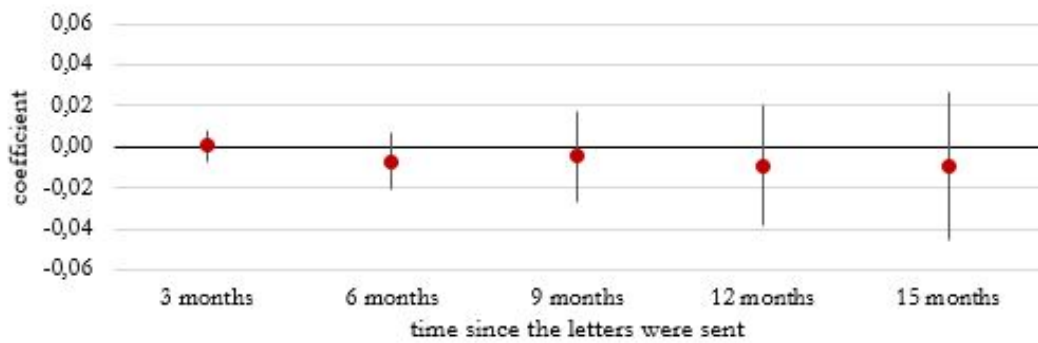
Figure 2: Average cumulated number of hired employees 56 years or older, one year before the letters were sent until 15 months after the letters were sent

7 Results

7.1 Main results

Figure 3 shows that the letters had no significant effect on the total number of employees hired with premium discount for the total set of firms. This is in line with the descriptive statistics in the previous section.

The previous figure showed that firms that received a letter did not make significantly more use of the premium discount than the firms that did not receive a letter. Figure 4 shows that there is a negative but non-significant effect on the number of hired employees of 56 years or older of the letters. Again, this is in line with the descriptive statistics in the previous section.



Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 6 in the appendix for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees with premium discount.

Figure 3: Effect of the letters on the number of employees with premium discount

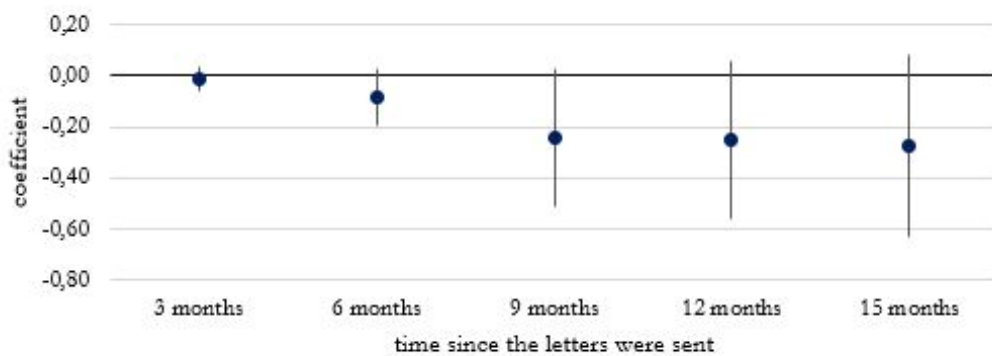


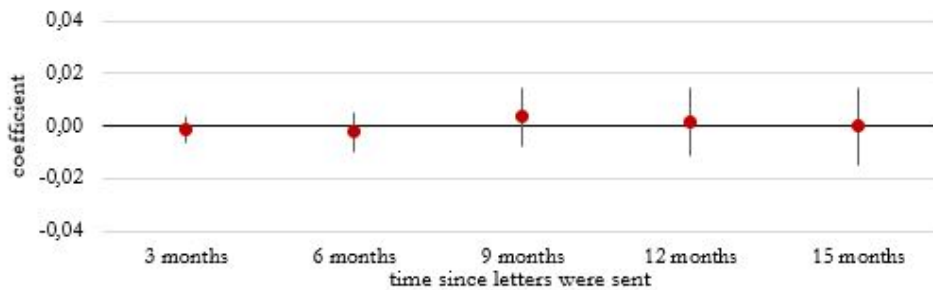
Figure 4: Effect of the letters on the number of employees 56 years or older

7.2 Subgroup analysis

Firms that hired older people but did not receive premium discount

The main results show that firms that received a letter did not make more use of the premium discount or employ more people aged 56 years or older. A possible explanation is that most firms (that received a letter) were already aware of the premium discount. We therefore estimated (1) for the subset of firms that did hire older people but did not receive premium discount. This is the case for 9,997 firms (25 percent) in our total sample. These firms were eligible for the premium discount but are most likely not aware of it or don't apply because they assume the process is complicated.

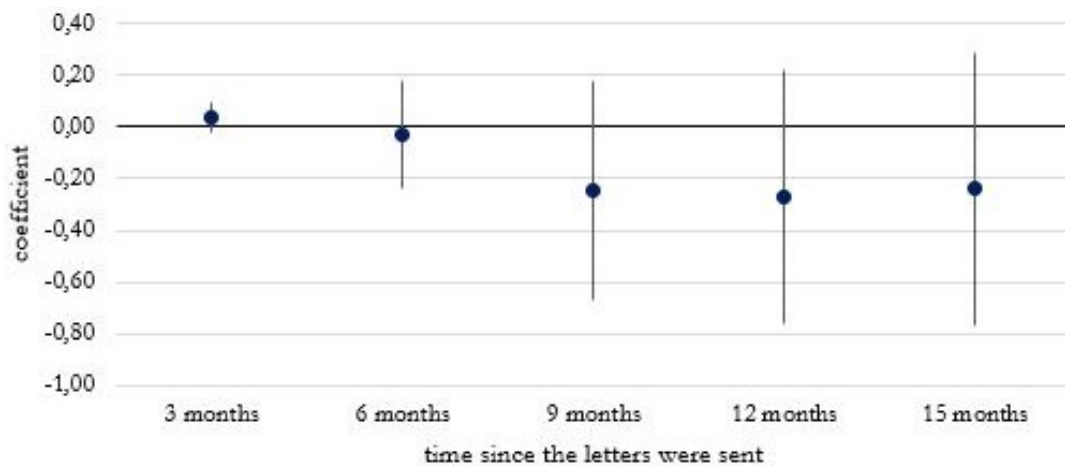
Figure 5 shows a positive but non-significant effect of the letter over time on the total hired number of employees with premium discount, for the subset of firms that did hire people of 56 years or older but did not receive premium discount.



Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 8 in the appendix for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees with premium discount.

Figure 5: Effect of the letters on the number of employees with premium discount for the subset of firms that did hire older workers but did not receive premium discount before the experiment

Companies who received a letter did not hire significantly more older workers than companies that did not receive a letter (Figure 6). There is actually a negative, but non-significant, effect of the letters.



Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 9 in the appendix for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees aged 56 years or older.

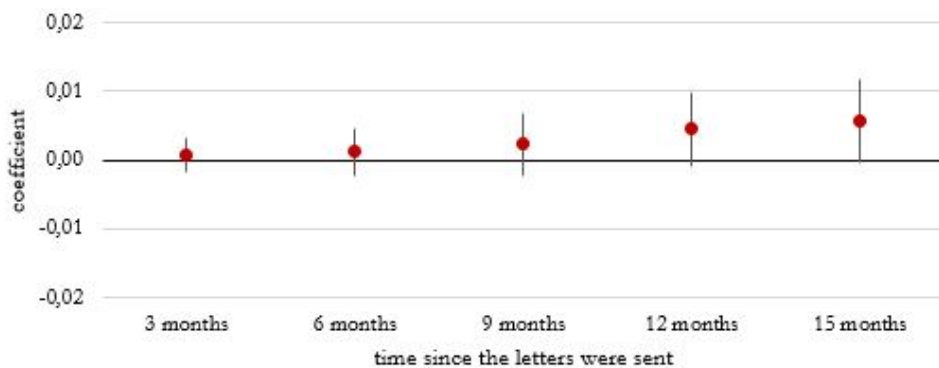
Figure 6: Effect of the letters on the number of employees 56 years or older for the subset of firms that did hire older workers but did not receive premium discount before the experiment

The results above show that there is no effect for the companies that did hire 56 years or older but did not make use of the premium discount. There could be several explanations for this. This experiment tackled the awareness problem.

However, it could still be that the information on the premium discount was not passed on to the right people in the company. Van der Werff et al. (2012) interviewed managers and find that most were unaware of the premium discount. It could also be that the people responsible for hiring people, do not take into consideration any possible financial benefits when hiring employees but focus solely on whether people are a good fit for a position. If that is the case for most companies, it can be questioned whether instruments like wage subsidies are effective at all. Van der Werff et al. (2012) asked managers whether their hiring strategy would change if they would be aware of the premium discount. The answers were mixed. Some managers

replied that their company was so large, that they did not concern themselves with financial matters, but that, if they had more information on financial regulations, they might take it into account when hiring people. A third explanation could be that financial benefits are taken into account when hiring people, but that the size of the premium discount is not high enough to incentivize companies into hiring more older people. One of the managers that was interviewed by Van der Werff et al. (2012) indeed answered that “a premium discount of € 7,000 a year is not interesting enough for a company of 550 employees” but that “it could, however, be different for small firms”.

Firms that did not hire older people We were also interested whether the letters could incentivize firms that did not hire older workers before the experiment, into hiring people of 56 years or older. We estimated (1) for this subset of companies. Figure 7 shows no significant effect on the use of premium discount for this subsample of companies.

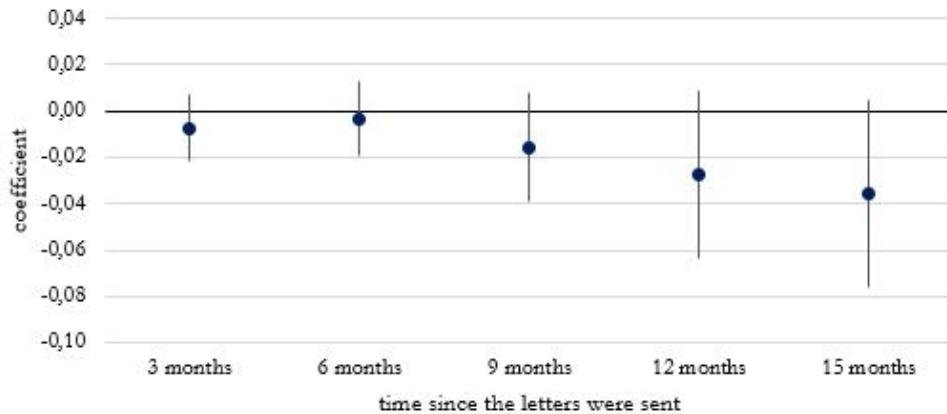


Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 10 in the appendix for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees with premium discount.

Figure 7: Effect of the letters on the number of employees with premium discount for the subset of firms that did not hire older workers before the experiment

There is no significant effect of the letter on the hiring of older workers for the companies that did not hire older people before the experiment – Figure

8. This corroborates the finding of a non-significant effect on the use of the premium discount.



Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 11 in the appendix for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees aged 56 years or older.

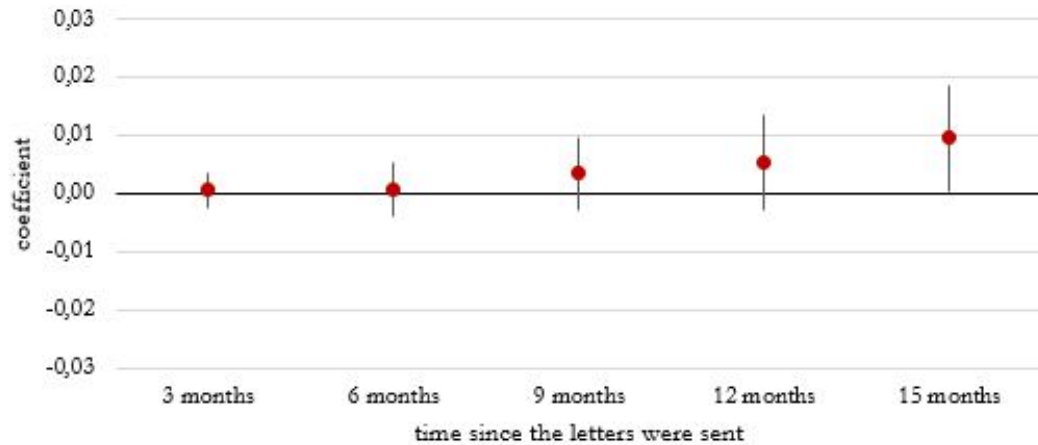
Figure 8: Effect of the letters on the number of employees 56 years or older for the subset of firms that did not hire older workers before the experiment

The results above show that there is neither an effect on the use of the premium discount nor on the hiring of older employees for the companies that did not hire older people before the experiment. There seems to be two logical explanations. First of all, it could be that these companies mostly have jobs that are more suited for younger people, i.e. jobs that require specific skills like computer skills that, in general, are more common for young people. Secondly, it could be that these companies do have jobs suited for older people, but the amount of premium discount is not deemed high enough to compensate for the risk of hiring an older unemployed person. If that is the case, awareness of the premium discount does not play a role. The interviews with managers conducted by Van der Werff et al. (2012) do show that for some companies, the size of the financial benefit is not high enough to consider a change in their hiring strategy. An alternative explanation is that awareness fades away after some months. The letter does not urge

immediate action - in contrast to most other experiments - and might be forgotten when a vacancy opens.

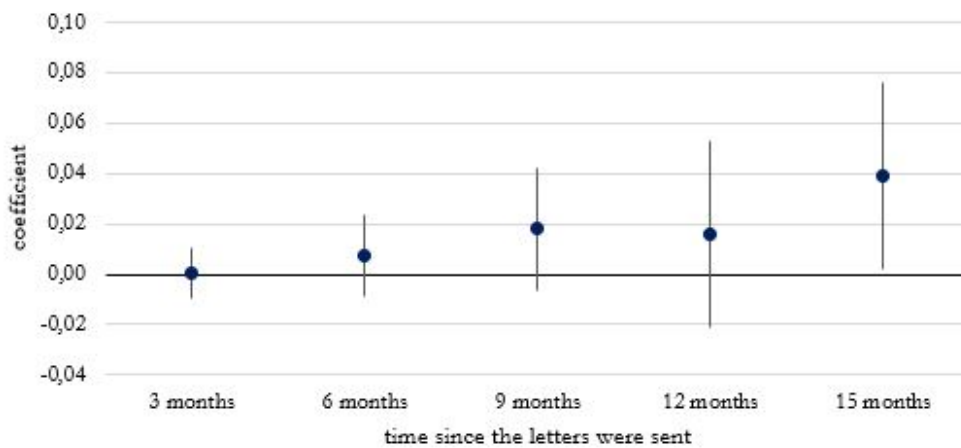
Small firms (<100 employees) Lastly, it is possible that the effects of the letters depend on firm size. There are several reasons why firm size could play a role. First of all, the relative financial benefit of the premium discount will, on average, be higher for small companies than for bigger companies. Secondly, awareness of possible beneficial regulations (like the premium discount) for firms might be higher for bigger firms. Thirdly, bigger firms will have, on average, a bigger HR team and will have more capacity to apply for premium discounts. For these reasons, we also estimated (1) for the subset of small firms (less than 100 employees).

Figure 9 shows a 5%-significant positive effect on the total number of hired employees with premium discount for the subset of small firms after 15 months.



Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 12 for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees with premium discount.

Figure 9: Effect of the letters on the number of employees with premium discount for the subset of small firms (<100 employees)



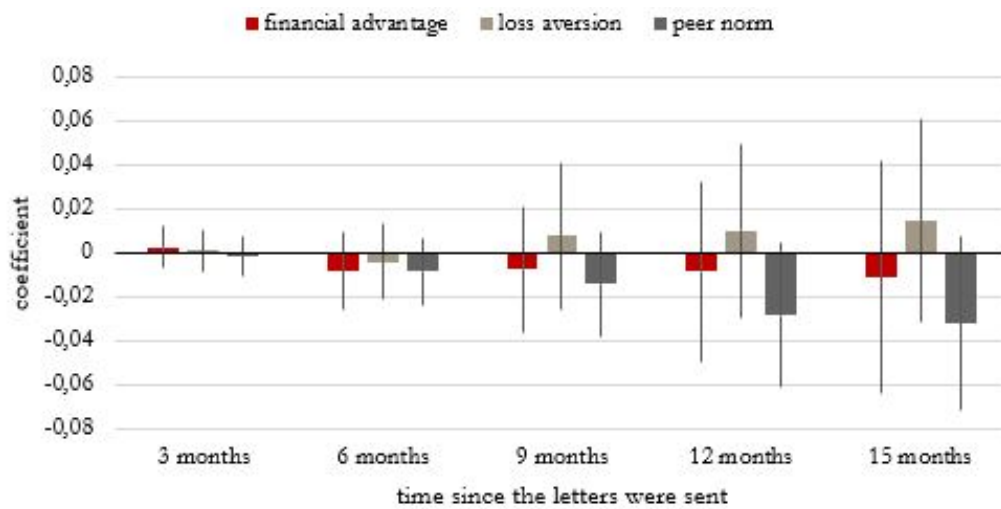
Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 13 for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees aged 56 years or older.

Figure 10: Effect of the letters on the number of employees 56 years or older for the subset of small firms (<100 employees)

The effects for the subset of small firms on the number of employees of 56 years or older are similar to the effects on the use of premium discount. There is positive 5%-significant effect 15 months after the letters were sent (Figure 10).

7.3 Effect by letter type

The results above indicate that the letters seem to be more effective for smaller companies compared to the total set of companies. The fact that the effects of the letters on the use of premium discount and the amount of hired older people is positive for small firms, might be because for small companies the size of the premium discount is financially attractive. The fact that the effects are only significant after 15 months might be because there is only a small subset of the small firms that are incentivized into hiring (more) older people and applying for premium discount. For the other firms, several of the earlier mentioned explanations could play a role. Either the financial



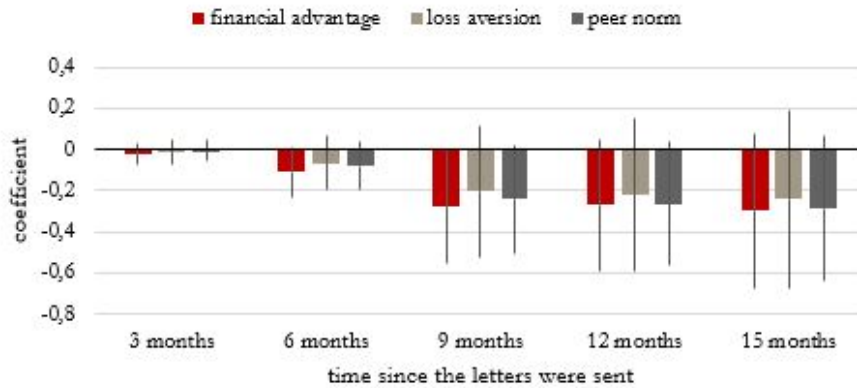
Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 14 for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees with premium discount.

Figure 11: Effect of the letters on the number of employees with premium discount per letter version

advantage is not high enough, the people responsible for hiring don't take into account possible financial benefits or the information on the premium discount does not reach the people that are responsible for hiring.

Three versions of the letter were sent to companies. Figure 11 shows no significant difference between the effects of the three letter versions on the total hired number of employees with premium discount. The effect of the peer norm letter seems to have a slightly more negative effect compared to, especially, the loss aversion letter. However, the confidence intervals for the point estimates of the effect of the separate letter types overlap in all periods.

Figure 12 show that there are no clear differences between the letters in the effects on the number of employees hired of 56 years or older. The confidence intervals for the point estimates for the different letters overlap for a large part in all periods.



Information: The figure shows the point estimates along with corresponding 95% confidence intervals. See Table 15 for the full regression results. The figure shows the results of the regressions with dependent variable the total number of hired employees aged 56 years or older.

Figure 12: Effect of the letters on the number of employees 56 years or older per letter version

8 Conclusions

Long-term unemployment rates for older workers remain fairly high (OECD, 2022) and over a long time several public policies have been targeted at combatting this problem. One of these public policies is a Dutch wage subsidy targeted at unemployed older workers. Theoretically this wage subsidy reduces labour costs and would make it more attractive to hire them. However, non-take up of this wage subsidy is high (59 percent, Van der Werff et al., 2021).

From interviews and earlier behavioural research reasons for non-take up are unawareness and difficulty applying for the wage subsidy. To circumvent these problems, the Dutch Ministry of Social Affairs and Employment sent more than 30,000 carefully constructed letters to employers. To the best of our knowledge we are the first to exploit a randomly controlled letter experiment to analyse the impact of non-take-up of a public policy instrument.

In our paper, we analyse the impact of this letter experiment on hiring de-

cision of older workers (56 years and older) in the Netherlands. The letter experiment uses recent insights from behavioural research in formulating the messages in the letter. Furthermore, it explicitly explains how to apply for it.

Although the results show that there is some, but no concluding, proof that the letters were marginally effective for smaller firms, on average there is no effect of the letters on take up of the subsidy, nor on the probability of hiring an older worker. This might indicate that unawareness is not the reason for the high non-take-up of wage subsidies. Although our experimental set-up was careful, we do have some suggestions for future research. First, a personalized letter addressing a person might be more more effective than addressing a manager. Second, since the letters were on paper, it is harder to redirect them to people that actually hire employees. Third, as there is time between moment letter was send and a vacancy opens, there is less sense of urgency and employers might have forgotten about the letter.

Our contribution to the literature is fourfold. First, we add to the knowledge of wage subsidies. In line with earlier research we find no positive effect of these subsidies on hiring rates of older workers. Whereas earlier studies point to unawareness of the subsidy as a reason, we think our research shows that this might not be the main reason. Employers that receive a letter which brought this subsidy to their attention, did not hire more older workers than employers that did not receive such a letter. Second, there is some indication that smaller firms, for whom the wage subsidy is relatively more profitable, were unaware of the subsidy, as they seem to make more use of the wage subsidy and hire more older people after they received the letter (although small effect after 15 months). There is no discernible effect on large firms. Third, the three versions of the letter from different behavioural insights resulted in similar (non) results. Fourth, we add to the field of randomized controlled experiments targeted at firms. Earlier experiments focused on tax payments which is directly linked to an individual action. In our experiment the employer receives information that could affect its hiring decision, but

this decision is more complicated and our research shows that even a carefully set-up experiment might not be the best way to induce employers to hire older workers.

Overall, our findings suggest that nudging employers concerning their hiring behaviour is more difficult than nudging employers or individuals concerning their tax payments.

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10 Appendix A

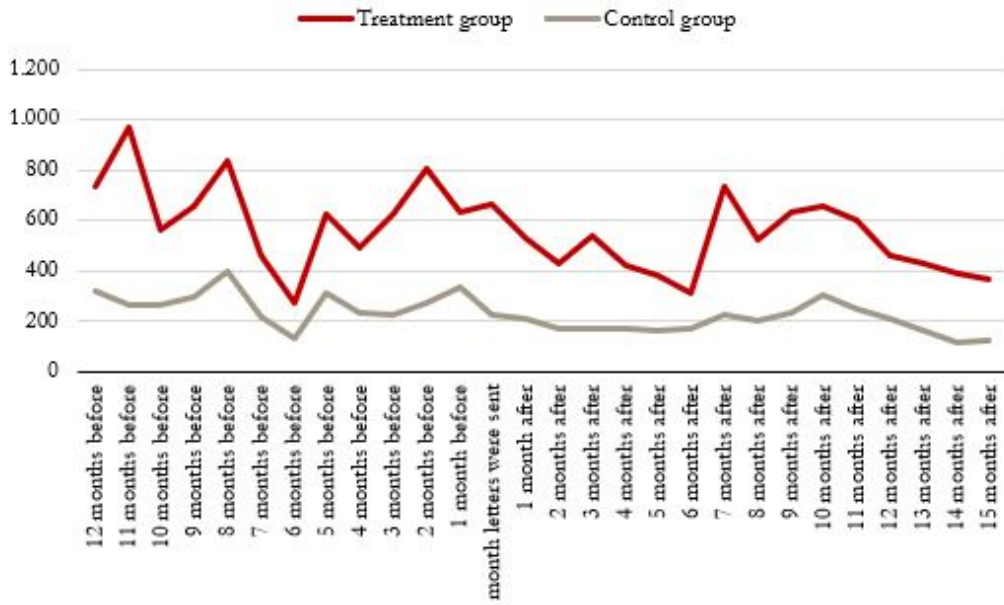


Figure 13: Monthly hiring rates with premium discount

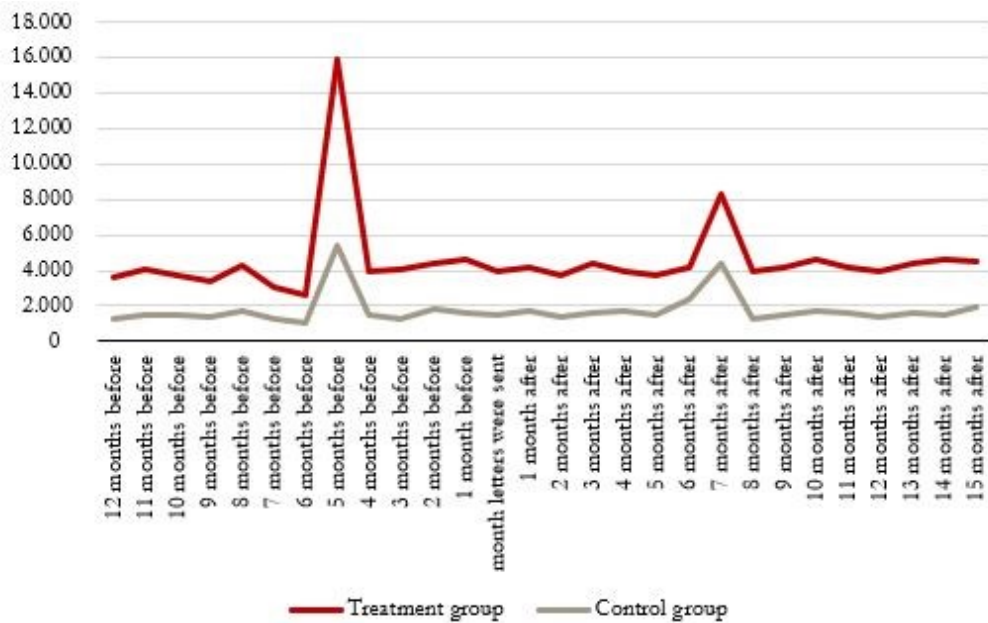


Figure 14: Monthly hiring rates

11 Appendix B: Full regression results

Y: Cumulative number of hired employees with premium discount	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	0.0007 (0.0039)	-0.0069 (0.0073)	-0.0046 (0.0113)	-0.0090 (0.0151)	-0.0095 (0.0185)
Firm size (ref: < 25 employees)					
25-50 employees	0.0046* (0.0024)	0.0097** (0.0038)	0.0171*** (0.0061)	0.0228*** (0.0079)	0.0296*** (0.0095)
50-100 employees	0.0140*** (0.0048)	0.0311*** (0.0084)	0.0494*** (0.0142)	0.0643*** (0.0186)	0.0800*** (0.0222)
100-250 employees	0.0355*** (0.0094)	0.0774*** (0.0182)	0.1231*** (0.0315)	0.1533*** (0.0416)	0.1942*** (0.0505)
250-1,000 employees	0.0791*** (0.0253)	0.1779*** (0.0506)	0.3135*** (0.0895)	0.4516*** (0.1226)	0.5860*** (0.1468)
> 1,000 employees	0.1423*** (0.0507)	0.3890*** (0.1091)	0.9121*** (0.2508)	1.2010*** (0.3174)	1.4335*** (0.3710)
Sector (ref: sector is unknown)					
Public sector	-0.0134 (0.0128)	-0.0455** (0.0189)	-0.1053*** (0.0341)	-0.2212*** (0.0512)	-0.2616*** (0.0600)
Health and social sector	-0.0019 (0.0105)	0.0012 (0.0126)	0.0006 (0.0257)	-0.0646* (0.0386)	-0.0748* (0.0439)
Services	-0.0004 (0.0096)	0.0087 (0.0107)	0.0006 (0.0183)	-0.0454 (0.0317)	-0.0477 (0.0371)
Construction	0.0033 (0.0103)	0.0203* (0.0122)	0.0270 (0.0191)	-0.0091 (0.0338)	-0.0096 (0.0393)
Industry	0.0002 (0.0102)	0.0177 (0.0134)	0.0158 (0.0193)	-0.0240 (0.0348)	-0.0215 (0.0412)
Agriculture	-0.0048 (0.0101)	-0.0012 (0.0113)	-0.0128 (0.0173)	-0.0492 (0.0366)	-0.0504 (0.0452)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	-0.0017 (0.0037)	-0.0015 (0.0066)	0.0113 (0.0125)	0.0205 (0.0163)	0.0148 (0.0203)
Self-insurer Sickness Benefits Act	0.0050 (0.0122)	-0.0189 (0.0221)	0.0068 (0.0366)	0.0262 (0.0493)	0.0465 (0.0618)
Share of fixed-term contracts in the firm	0.0408*** (0.0120)	0.0906*** (0.0248)	0.1915*** (0.0484)	0.2719*** (0.0639)	0.3287*** (0.0779)
Cumulative number of employees hired with premium discount in the year before the letter was sent	0.1209*** (0.0163)	0.1952*** (0.0339)	0.2930*** (0.0596)	0.4198*** (0.0778)	0.4954*** (0.0963)
Cumulative number of employees hired of 56 years or older	0.0007 (0.0012)	0.0007 (0.0017)	0.0042 (0.0028)	0.0055 (0.0038)	0.0028 (0.0044)
Province (ref: Drenthe)					
Flevoland	-0.0278 (0.0258)	-0.0631 (0.0467)	-0.1536* (0.0634)	-0.1749 (0.1181)	-0.3055* (0.1806)
Friesland	-0.0163 (0.0213)	-0.0115 (0.0355)	-0.0713 (0.0547)	-0.0530 (0.0801)	-0.1210 (0.1415)
Gelderland	-0.0148 (0.0206)	-0.0138 (0.0326)	-0.0612 (0.0522)	-0.0570 (0.0773)	-0.1183 (0.1399)
Groningen	-0.0130 (0.0239)	-0.0268 (0.0359)	-0.0737 (0.0554)	-0.0894 (0.0786)	-0.1768 (0.1415)
Limburg	-0.0101 (0.0208)	-0.0091 (0.0335)	-0.0380 (0.0573)	-0.0434 (0.0809)	-0.1075 (0.1428)
Noord-Brabant	-0.0122 (0.0200)	-0.0079 (0.0322)	-0.0537 (0.0519)	-0.0474 (0.0770)	-0.1084 (0.1396)
Noord-Holland	-0.0295 (0.0202)	-0.0384 (0.0342)	-0.0925* (0.0539)	-0.0857 (0.0800)	-0.1601 (0.1413)
Overijssel	-0.0239 (0.0210)	-0.0402 (0.0329)	-0.0469 (0.0694)	-0.0538 (0.0893)	-0.1314 (0.1470)
Utrecht	-0.0215 (0.0195)	-0.0290 (0.0320)	-0.0791 (0.0554)	-0.0681 (0.0842)	-0.1415 (0.1436)
Zeeland	-0.0128 (0.0199)	-0.0270 (0.0320)	-0.0692 (0.0541)	-0.0760 (0.0790)	-0.1661 (0.1387)
Zuid-Holland	-0.0200 (0.0193)	-0.0282 (0.0315)	-0.0617 (0.0525)	-0.0838 (0.0785)	-0.1579 (0.1400)
Unknown	-0.0241 (0.0236)	-0.0413 (0.0362)	-0.1063* (0.0624)	-0.1127 (0.0943)	-0.1828 (0.1565)
Constant	0.0072 (0.0245)	-0.0042 (0.0378)	0.0090 (0.0572)	0.0280 (0.0801)	0.0851 (0.1386)
N	39,496	39,157	38,295	37,928	37,506
R ²	0.52	0.50	0.42	0.46	0.44

Table 6: Results for the cumulative number of hired employees with premium discount since the month the letters were sent, full sample

Y: Cumulative number of hired employees of 56 years or older	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	-0.0112 (0.0249)	-0.0841 (0.0576)	-0.2396* (0.1368)	-0.2493 (0.1575)	-0.2742 (0.1629)
Firm size (ref: < 25 employees)					
25-50 employees	0.0144 (0.0092)	0.0343* (0.0177)	0.0748** (0.0334)	0.1117*** (0.0423)	0.1249** (0.0489)
50-100 employees	0.0389* (0.0232)	0.0477 (0.0447)	0.1168 (0.0890)	0.2187** (0.1113)	0.3317** (0.1359)
100-250 employees	0.1275** (0.0517)	0.2057** (0.1027)	0.6077*** (0.2336)	0.8623*** (0.2818)	1.1131*** (0.3352)
250-1,000 employees	0.4676*** (0.1542)	0.7831** (0.3053)	1.5715** (0.6481)	2.5653*** (0.8212)	3.5417*** (0.9971)
> 1,000 employees	2.2230*** (0.4821)	3.9933*** (0.9578)	8.5845*** (1.9980)	11.1408*** (2.4432)	14.9876*** (2.9132)
Sector (ref: sector is unknown)					
Public sector	0.0676 (0.0571)	-0.0654 (0.1589)	0.1239 (0.3452)	-0.5210 (0.4196)	-0.5684 (0.4636)
Health and social sector	-0.0074 (0.0347)	-0.1808 (0.1100)	-0.0104 (0.2025)	-0.2119 (0.2911)	-0.2219 (0.3427)
Services	0.0030 (0.0239)	-0.0298 (0.0996)	-0.0232 (0.1369)	-0.2233 (0.2378)	-0.3072 (0.2890)
Construction	0.0124 (0.0285)	-0.0130 (0.1015)	-0.0197 (0.1419)	-0.1820 (0.2427)	-0.2363 (0.2959)
Industry	0.0066 (0.0279)	-0.0261 (0.1027)	-0.0574 (0.1407)	-0.2575 (0.2431)	-0.3161 (0.2974)
Agriculture	0.0702** (0.0325)	0.0431 (0.1030)	-0.0282 (0.1404)	-0.1983 (0.2305)	-0.2104 (0.2930)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	0.0373* (0.0226)	0.0849* (0.0473)	0.1079 (0.1043)	0.1414 (0.1246)	0.1187 (0.1471)
Self-insurer Sickness Benefits Act	0.0207 (0.0611)	0.0726 (0.1372)	0.1830 (0.2639)	0.2182 (0.3407)	0.3320 (0.4113)
Share of fixed-term contracts in the firm	0.2809*** (0.0655)	0.6274*** (0.1367)	0.8184** (0.3285)	1.3315*** (0.4139)	1.7370*** (0.5058)
Cumulative number of employees hired with premium discount in the year before the letter was sent	0.2036** (0.1005)	0.2944 (0.1954)	0.2613 (0.3885)	0.4345 (0.5099)	0.6268 (0.6226)
Cumulative number of employees hired of 56 years or older	0.1306*** (0.0259)	0.3030*** (0.0463)	0.4893*** (0.1121)	0.6024*** (0.1360)	0.8992*** (0.1592)
Province (ref: Drenthe)					
Flevoland	0.1124 (0.0955)	0.3955 (0.2480)	-0.0362 (0.5011)	-0.0690 (0.6383)	-0.4348 (0.7980)
Friesland	0.0177 (0.0618)	0.5247 (0.3001)	0.1177 (0.4331)	0.1170 (0.4928)	-0.0168 (0.6065)
Gelderland	0.1061 (0.0638)	0.3086 (0.1283)	0.0639 (0.3353)	0.1449 (0.4079)	0.1207 (0.5450)
Groningen	0.1651 (0.1401)	0.3893 (0.2597)	0.9386 (1.0083)	1.0346 (1.1607)	1.0136 (1.3656)
Limburg	0.1062 (0.0743)	0.2615 (0.1349)	-0.0617 (0.3389)	0.0338 (0.4105)	-0.0065 (0.5476)
Noord-Brabant	0.0953 (0.0629)	0.2490 (0.1253)	-0.0378 (0.3340)	0.0560 (0.4063)	-0.0109 (0.5421)
Noord-Holland	0.0890 (0.0671)	0.2425 (0.1333)	-0.1229 (0.3406)	-0.1000 (0.4141)	-0.1604 (0.5530)
Overijssel	0.0323 (0.0611)	0.1717 (0.1290)	-0.0944 (0.3447)	-0.0886 (0.4157)	-0.2064 (0.5530)
Utrecht	0.0623 (0.0658)	0.1756 (0.1294)	-0.1155 (0.3531)	-0.0826 (0.4292)	-0.1513 (0.5647)
Zeeland	0.0913 (0.0656)	0.1813 (0.1291)	-0.1338 (0.3438)	-0.1156 (0.4150)	-0.2679 (0.5435)
Zuid-Holland	0.0787 (0.0642)	0.2271 (0.1268)	0.0242 (0.3509)	0.0866 (0.4221)	0.0871 (0.5555)
Unknown	0.0188 (0.0826)	0.1709 (0.1771)	-0.1825 (0.3669)	-0.1108 (0.4617)	-0.2161 (0.6119)
Constant	-0.1920*** (0.0687)	-0.4016** (0.1683)	-0.1056 (0.3861)	-0.1308 (0.5015)	-0.1139 (0.6470)
N	39,496	39,157	36,295	37,926	37,506
R ²	0.66	0.68	0.52	0.58	0.56

Table 7: Results for the cumulative number of hired employees of 56 years or older since the month the letters were sent, full sample

Y: Cumulative number of hired employees with premium discount	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	-0.0012 (0.0026)	-0.0023 (0.0038)	0.0036 (0.0057)	0.0013 (0.0066)	0.0001 (0.0075)
Firm size (ref: < 25 employees)					
25-50 employees	0.0048* (0.0028)	0.0101** (0.0042)	0.0182*** (0.0083)	0.0223*** (0.0072)	0.0255*** (0.0080)
50-100 employees	0.0061** (0.0038)	0.0165*** (0.0054)	0.0396** (0.0160)	0.0402** (0.0164)	0.0506*** (0.0171)
100-250 employees	0.0173*** (0.0042)	0.0269*** (0.0060)	0.0394*** (0.0084)	0.0499*** (0.0097)	0.0632*** (0.0110)
250-1,000 employees	0.0107** (0.0045)	0.0209*** (0.0089)	0.0356*** (0.0104)	0.0571*** (0.0137)	0.0729*** (0.0160)
> 1,000 employees	0.0151 (0.0116)	0.0502** (0.0223)	0.0721** (0.0288)	0.0899** (0.0314)	0.1046*** (0.0392)
Sector (ref: sector is unknown)					
Public sector	0.0147*** (0.0045)	0.0221*** (0.0080)	0.0160 (0.0203)	-0.0450 (0.0391)	-0.0684 (0.0471)
Health and social sector	0.0129*** (0.0032)	0.0270*** (0.0051)	0.0224 (0.0195)	-0.0283 (0.0384)	-0.0425 (0.0461)
Services	0.0108*** (0.0018)	0.0197*** (0.0026)	0.0045 (0.0183)	-0.0482 (0.0376)	-0.0651 (0.0453)
Construction	0.0051 (0.0047)	0.0099 (0.0067)	0.0190 (0.0332)	-0.0147 (0.0497)	-0.0237 (0.0568)
Industry	0.0092*** (0.0030)	0.0231*** (0.0049)	0.0151 (0.0192)	-0.0406 (0.0382)	-0.0556 (0.0460)
Agriculture	0.0108** (0.0052)	0.0166** (0.0065)	0.0120 (0.0223)	-0.0460 (0.0400)	-0.0637 (0.0474)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	0.0024 (0.0028)	-0.0010 (0.0039)	-0.0076 (0.0058)	-0.0072 (0.0066)	-0.0059 (0.0077)
Self-insurer Sickness Benefits Act	-0.0016 (0.0046)	-0.0042 (0.0065)	0.0054 (0.0128)	0.0118 (0.0144)	0.0123 (0.0160)
Share of fixed-term contracts in the firm	0.0070** (0.0034)	0.0072 (0.0052)	0.0185 (0.0137)	0.0236 (0.0149)	0.0221 (0.0160)
Cumulative number of employees hired of 56 years or older	0.0000 (0.0000)	-0.0001* (0.0000)	-0.0001 (0.0001)	0.0000 (0.0001)	0.0000 (0.0001)
Province (ref: Drenthe)					
Flevoland	-0.0054 (0.0084)	-0.0164 (0.0128)	-0.0488* (0.0265)	-0.0594** (0.0284)	-0.0674** (0.0300)
Friesland	0.0039 (0.0099)	-0.0116 (0.0131)	-0.0318 (0.0271)	-0.0344 (0.0297)	-0.0423 (0.0310)
Gelderland	0.0027 (0.0076)	0.0029 (0.0119)	-0.0102 (0.0260)	-0.0116 (0.0278)	-0.0127 (0.0293)
Groningen	-0.0057 (0.0084)	-0.0079 (0.0146)	-0.0352 (0.0288)	-0.0349 (0.0330)	-0.0480 (0.0342)
Limburg	-0.0023 (0.0079)	-0.0029 (0.0130)	-0.0186 (0.0268)	-0.0211 (0.0285)	-0.0200 (0.0302)
Noord-Brabant	0.0066 (0.0078)	-0.0002 (0.0118)	-0.0179 (0.0259)	-0.0141 (0.0276)	-0.0104 (0.0292)
Noord-Holland	-0.0013 (0.0073)	-0.0063 (0.0115)	-0.0294 (0.0256)	-0.0359 (0.0271)	-0.0341 (0.0287)
Overijssel	0.0031 (0.0084)	-0.0096 (0.0122)	-0.0311 (0.0262)	-0.0328 (0.0281)	-0.0381 (0.0296)
Utrecht	-0.0016 (0.0077)	-0.0021 (0.0123)	-0.0044 (0.0323)	0.0035 (0.0340)	0.0082 (0.0355)
Zeeland	0.0062 (0.0103)	-0.0006 (0.0154)	-0.0313 (0.0276)	-0.0407 (0.0292)	-0.0437 (0.0308)
Zuid-Holland	0.0045 (0.0074)	-0.0008 (0.0116)	-0.0171 (0.0258)	-0.0218 (0.0273)	-0.0247 (0.0287)
Unknown	0.0010 (0.0122)	-0.0132 (0.0150)	-0.0183 (0.0327)	-0.0320 (0.0341)	-0.0165 (0.0389)
Constant	-0.0092 (0.0073)	-0.0070 (0.0114)	0.0236 (0.0306)	0.0863* (0.0466)	0.1102** (0.0533)
N	9,729	9,656	9,452	9,375	9,269
R ²	0.01	0.01	0.01	0.01	0.01

Table 8: Results for the cumulative number of hired employees with premium discount since the month the letters were sent, firms that hired older people but did not receive premium discount

Y: Cumulative number of hired employees of 56 years or older	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	0,0383 (0,0303)	-0,0303 (0,1054)	-0,2447 (0,2153)	-0,2723 (0,2509)	-0,2406 (0,2701)
Firm size (ref: < 25 employees)					
25-50 employees	0,0351** (0,0153)	0,0984*** (0,0297)	0,1486*** (0,0443)	0,1963*** (0,0482)	0,2320*** (0,0546)
50-100 employees	0,0961*** (0,0257)	0,1291** (0,0549)	0,3211*** (0,0916)	0,4699*** (0,1080)	0,6202*** (0,1284)
100-250 employees	0,2387*** (0,0547)	0,3218*** (0,1177)	0,7617*** (0,1885)	1,0386*** (0,2124)	1,3700*** (0,2330)
250-1,000 employees	0,4073*** (0,0946)	0,6719*** (0,2163)	1,3154*** (0,3928)	1,8933*** (0,4833)	2,4939*** (0,5363)
> 1,000 employees	0,8525*** (0,3261)	2,0489*** (0,8259)	4,6978*** (1,5282)	6,3877*** (1,8585)	8,5256*** (2,1535)
Sector (ref: sector is unknown)					
Public sector	-0,0006 (0,0921)	0,3044 (0,1885)	0,8614*** (0,2774)	0,6250** (0,3124)	0,6747* (0,3683)
Health and social sector	-0,0228 (0,0626)	0,0953 (0,0990)	0,4958*** (0,1788)	0,4338* (0,2439)	0,4683 (0,3015)
Services	-0,0029 (0,0814)	0,1136 (0,0881)	0,3375*** (0,1283)	0,2426 (0,1789)	0,2118 (0,2441)
Construction	-0,0756 (0,0646)	-0,0124 (0,1112)	0,1431 (0,1642)	0,0413 (0,2249)	0,0341 (0,3225)
Industry	-0,0415 (0,0816)	0,0743 (0,0917)	0,2398* (0,1248)	0,1522 (0,1776)	0,0994 (0,2446)
Agriculture	0,2199** (0,0988)	0,4707*** (0,1235)	0,5875*** (0,1606)	0,6622*** (0,2423)	0,8140** (0,3283)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	0,0255 (0,0343)	0,0816 (0,0881)	0,0923 (0,1500)	0,1055 (0,1755)	0,1377 (0,2010)
Self-insurer Sickness Benefits Act	0,0051 (0,0737)	0,2277 (0,2582)	0,3822 (0,3780)	0,4283 (0,4371)	0,5660 (0,4879)
Share of fixed-term contracts in the firm	0,3152*** (0,0597)	0,7432*** (0,1415)	1,1448*** (0,2514)	1,6908*** (0,3236)	2,1151*** (0,3802)
Cumulative number of employees hired of 56 years or older	0,1183*** (0,0118)	0,2959*** (0,0319)	0,4437*** (0,0571)	0,5477*** (0,0690)	0,6410*** (0,0779)
Provinces (ref: Drenthe)					
Flevoland	0,1654* (0,0844)	0,3033* (0,1605)	0,0084 (0,4254)	0,0066 (0,5102)	-0,0177 (0,5452)
Friesland	-0,0425 (0,0541)	0,4814 (0,6965)	0,0812 (0,8192)	-0,0142 (0,8559)	0,0362 (0,8664)
Gelderland	0,1031 (0,0702)	0,1531 (0,1180)	0,1477 (0,4379)	0,1527 (0,4906)	0,3201 (0,5217)
Groningen	0,0091 (0,0541)	-0,0439 (0,0881)	-0,3242 (0,4225)	-0,4026 (0,4751)	-0,4317 (0,5027)
Limburg	-0,0078 (0,0475)	-0,0246 (0,0737)	-0,3830 (0,3946)	-0,3390 (0,4484)	-0,2914 (0,4707)
Noord-Brabant	0,0256 (0,0522)	0,0238 (0,0819)	-0,2757 (0,3954)	-0,2608 (0,4433)	-0,1925 (0,4619)
Noord-Holland	-0,0307 (0,0476)	-0,0790 (0,0656)	-0,4141 (0,4068)	-0,5134 (0,4586)	-0,5381 (0,4795)
Overijssel	-0,0099 (0,0587)	-0,0930 (0,0936)	-0,4349 (0,4053)	-0,5263 (0,4556)	-0,6170 (0,4756)
Utrecht	0,0641 (0,0664)	0,0819 (0,1303)	0,1738 (0,5709)	-0,3054 (0,6789)	0,3375 (0,7141)
Zeeland	0,1137 (0,0583)	0,0153 (0,0816)	-0,3290 (0,3950)	-0,3179 (0,4441)	-0,1831 (0,4653)
Zuid-Holland	-0,0096* (0,0460)	-0,0421 (0,0816)	-0,3450 (0,4003)	-0,4206 (0,4495)	-0,3554 (0,4679)
Unknown	0,0362 (0,1393)	-0,0943 (0,2050)	-0,4579 (0,4489)	-0,4846 (0,5193)	-0,4933 (0,5539)
Constant	-0,1875** (0,0954)	-0,5205*** (0,1287)	-0,5489 (0,3896)	-0,6398 (0,4537)	-0,8555* (0,5031)
N	9,729	9,656	9,452	9,375	9,289
R ²	0,62	0,63	0,55	0,58	0,61

Table 9: Results for the cumulative number of hired employees of 56 years or older since the month the letters were sent, firms that hired older people but did not receive premium discount

Y: Cumulative number of hired employees with premium discount	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	0.0008 (0.0013)	0.0012 (0.0016)	0.0024 (0.0023)	0.0045 (0.0028)	0.0058* (0.0031)
Firm size (ref: < 25 employees)					
25-50 employees	0.0062*** (0.0019)	0.0068*** (0.0024)	0.0104*** (0.0030)	0.0156*** (0.0037)	0.0172*** (0.0040)
50-100 employees	0.0025 (0.0023)	0.0018 (0.0029)	0.0061 (0.0040)	0.0214*** (0.0060)	0.0320*** (0.0068)
100-250 employees	0.0060** (0.0030)	0.0127*** (0.0043)	0.0232*** (0.0056)	0.0355*** (0.0072)	0.0470*** (0.0085)
250-1,000 employees	0.0215** (0.0107)	0.0597*** (0.0178)	0.0855*** (0.0190)	0.0689*** (0.0198)	0.0864*** (0.0249)
> 1,000 employees	-0.0053*** (0.0020)	-0.0085*** (0.0030)	-0.0128*** (0.0039)	0.0756 (0.0657)	0.0821 (0.0940)
Sector (ref: sector is unknown)					
Public sector	-0.0039 (0.0078)	0.0034 (0.0090)	0.0055 (0.0129)	-0.0141 (0.0174)	-0.0145 (0.0178)
Health and social sector	0.0001 (0.0065)	0.0064 (0.0070)	0.0040 (0.0100)	-0.0071 (0.0153)	0.0000 (0.0158)
Services	-0.0036 (0.0062)	0.0027 (0.0065)	-0.0008 (0.0094)	-0.0130 (0.0148)	-0.0093 (0.0152)
Construction	0.0057 (0.0075)	0.0217** (0.0089)	0.0259** (0.0121)	0.0203 (0.0175)	0.0289 (0.0181)
Industry	0.0008 (0.0065)	0.0055 (0.0068)	0.0083 (0.0099)	-0.0011 (0.0153)	0.0050 (0.0157)
Agriculture	-0.0048 (0.0066)	-0.0048 (0.0068)	-0.0090 (0.0100)	-0.0211 (0.0157)	-0.0178 (0.0181)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	0.0011 (0.0014)	0.0034* (0.0019)	-0.0030 (0.0024)	0.0040 (0.0030)	0.0033 (0.0032)
Self-insurer Sickness Benefits Act	0.0005 (0.0031)	-0.0037 (0.0045)	-0.0045 (0.0056)	-0.0065 (0.0072)	-0.0089 (0.0081)
Share of fixed-term contracts in the firm	0.0038** (0.0016)	0.0056** (0.0023)	0.0046 (0.0029)	0.0035 (0.0034)	0.0033 (0.0039)
Province (ref: Drenthe)					
Flevoland	-0.0024 (0.0063)	-0.0053 (0.0086)	-0.0045 (0.0101)	-0.0018 (0.0117)	-0.0021 (0.0123)
Friesland	-0.0032 (0.0057)	-0.0089 (0.0075)	-0.0067 (0.0090)	-0.0019 (0.0107)	0.0016 (0.0118)
Gelderland	-0.0032 (0.0049)	-0.0028 (0.0068)	0.0013 (0.0080)	0.0075 (0.0088)	0.0104 (0.0094)
Groningen	-0.0097* (0.0050)	-0.0157** (0.0071)	-0.0123 (0.0090)	-0.0107 (0.0101)	-0.0056 (0.0118)
Limburg	-0.0036 (0.0052)	-0.0045 (0.0073)	-0.0010 (0.0088)	0.0022 (0.0095)	0.0077 (0.0104)
Noord-Brabant	-0.0014 (0.0050)	-0.0016 (0.0068)	0.0018 (0.0079)	0.0068 (0.0086)	0.0098 (0.0091)
Noord-Holland	-0.0056 (0.0048)	-0.0128** (0.0065)	-0.0113 (0.0075)	-0.0090 (0.0082)	-0.0069 (0.0087)
Overijssel	-0.0051 (0.0050)	-0.0072 (0.0070)	-0.0079 (0.0081)	-0.0045 (0.0089)	-0.0040 (0.0094)
Utrecht	-0.0030 (0.0051)	-0.0113* (0.0068)	-0.0143* (0.0078)	-0.0115 (0.0085)	-0.0079 (0.0091)
Zeeland	-0.0021 (0.0061)	-0.0082 (0.0078)	-0.0066 (0.0094)	-0.0078 (0.0101)	-0.0063 (0.0107)
Zuid-Holland	-0.0060 (0.0048)	-0.0106 (0.0065)	-0.0107 (0.0075)	-0.0062 (0.0082)	-0.0055 (0.0087)
Unknown	-0.0105** (0.0047)	-0.0163** (0.0072)	-0.0172* (0.0090)	-0.0082 (0.0116)	-0.0094 (0.0121)
Constant	0.0092 (0.0076)	0.0107 (0.0089)	0.0169 (0.0117)	0.0282* (0.0187)	0.0240 (0.0171)
N	22,276	22,026	21,499	21,241	20,961
R ²	0.00	0.01	0.01	0.01	0.01

Table 10: Results for the cumulative number of hired employees with premium discount since the month the letters were sent, firms that did not hire older people

Y: Cumulative number of hired employees of 56 years or older	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	-0.0074 (0.0074)	-0.0032 (0.0082)	-0.0156 (0.0119)	-0.0275 (0.0186)	-0.0360* (0.0206)
Firm size (ref: < 25 employees)					
25-50 employees	0.0199*** (0.0043)	0.0465*** (0.0068)	0.0773*** (0.0096)	0.0955*** (0.0124)	0.1191*** (0.0141)
50-100 employees	0.0308*** (0.0085)	0.0578*** (0.0109)	0.1098*** (0.0217)	0.1639*** (0.0257)	0.2098*** (0.0276)
100-250 employees	0.1042*** (0.0272)	0.1836*** (0.0311)	0.3405*** (0.0411)	0.4421*** (0.0450)	0.5633*** (0.0516)
250-1,000 employees	0.1365*** (0.0284)	0.2825*** (0.0441)	0.4357*** (0.0683)	0.5787*** (0.0604)	0.7718*** (0.1077)
> 1,000 employees	0.0493 (0.0796)	0.2140 (0.1846)	0.4260* (0.2337)	0.7533* (0.4109)	1.1264** (0.5206)
Sector (ref: sector is unknown)					
Public sector	0.0245 (0.0162)	0.0724*** (0.0233)	0.1690** (0.0673)	0.1798** (0.0758)	0.2540*** (0.0974)
Health and social sector	0.0365* (0.0203)	0.0685*** (0.0234)	0.1097*** (0.0315)	0.1280*** (0.0364)	0.1449*** (0.0418)
Services	0.0112 (0.0099)	0.0272** (0.0136)	0.0339 (0.0218)	0.0486* (0.0286)	0.0338 (0.0339)
Construction	0.0258** (0.0129)	0.0585*** (0.0176)	0.0786*** (0.0274)	0.1079*** (0.0349)	0.0972** (0.0403)
Industry	0.0172 (0.0109)	0.0348** (0.0147)	0.0707*** (0.0241)	0.0790*** (0.0300)	0.0757** (0.0354)
Agriculture	0.0573** (0.0249)	0.0589*** (0.0191)	0.0692** (0.0275)	0.0698** (0.0338)	0.0729* (0.0412)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	-0.0052 (0.0057)	-0.0086 (0.0067)	-0.0090 (0.0092)	-0.0205* (0.0118)	-0.0211 (0.0132)
Self-insurer Sickness Benefits Act	0.0245 (0.0341)	0.0213 (0.0355)	0.0573 (0.0442)	0.0494 (0.0462)	0.0580 (0.0501)
Share of fixed-term contracts in the firm	0.0023 (0.0078)	0.0018 (0.0080)	-0.0085 (0.0115)	-0.0153 (0.0187)	-0.0099 (0.0208)
Province (ref: Drenthe)					
Flevoland	0.0168 (0.0129)	0.0092 (0.0198)	0.0294 (0.0302)	0.0313 (0.0359)	0.0412 (0.0388)
Friesland	-0.0108 (0.0097)	-0.0380** (0.0152)	-0.0544** (0.0225)	-0.0737*** (0.0276)	-0.0541* (0.0309)
Gelderland	0.0140 (0.0109)	-0.0018 (0.0141)	0.0226 (0.0233)	0.0264 (0.0279)	0.0423 (0.0306)
Groningen	-0.0111 (0.0156)	-0.0278 (0.0218)	-0.0385 (0.0280)	-0.0411 (0.0348)	-0.0214 (0.0421)
Limburg	0.0363 (0.0327)	0.0402 (0.0355)	0.0496 (0.0403)	0.1247 (0.0765)	0.1582* (0.0612)
Noord-Brabant	0.0013 (0.0087)	-0.0044 (0.0143)	0.0247 (0.0235)	0.0353 (0.0285)	0.0560* (0.0311)
Noord-Holland	0.0042 (0.0087)	-0.0072 (0.0138)	-0.0141 (0.0200)	-0.0201 (0.0250)	-0.0074 (0.0278)
Overijssel	0.0049 (0.0095)	-0.0142 (0.0144)	-0.0297 (0.0210)	-0.0365 (0.0280)	-0.0245 (0.0291)
Utrecht	0.0072 (0.0098)	-0.0114 (0.0153)	-0.0169 (0.0217)	-0.0113 (0.0270)	0.0099 (0.0302)
Zeeland	0.0232 (0.0147)	0.0295 (0.0209)	0.0598 (0.0485)	0.0495 (0.0519)	0.0783 (0.0556)
Zuid-Holland	-0.0007 (0.0085)	-0.0130 (0.0135)	-0.0074 (0.0200)	-0.0046 (0.0253)	0.0183 (0.0286)
Unknown	0.0065 (0.0152)	0.0098 (0.0280)	0.0162 (0.0376)	0.0328 (0.0444)	0.0629 (0.0531)
Constant	0.0079 (0.0133)	0.0230 (0.0190)	0.0554* (0.0293)	0.0867** (0.0396)	0.1119** (0.0452)
N	22,276	22,026	21,499	21,241	20,961
R ²	0.01	0.02	0.03	0.03	0.03

Table 11: Results for the cumulative number of hired employees of 56 years or older since the month the letters were sent, firms that did not hire older people

Y: Cumulative number of hired employees with premium discount	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	0.0005 (0.0016)	0.0008 (0.0024)	0.0035 (0.0032)	0.0055 (0.0042)	0.0095** (0.0047)
Firm size (ref: < 25 employees)					
25-50 employees	0.0054*** (0.0020)	0.0078*** (0.0029)	0.0142*** (0.0041)	0.0190*** (0.0051)	0.0237*** (0.0059)
50-100 employees	0.0172*** (0.0039)	0.0278*** (0.0053)	0.0461*** (0.0076)	0.0607*** (0.0096)	0.0719*** (0.0115)
Sector (ref: sector is unknown)					
Public sector	0.0032 (0.0074)	0.0035 (0.0100)	-0.0091 (0.0174)	-0.0578* (0.0329)	-0.0618* (0.0361)
Health and social sector	0.0060 (0.0060)	0.0084 (0.0088)	-0.0035 (0.0153)	-0.0429 (0.0315)	-0.0423 (0.0345)
Services	0.0043 (0.0056)	0.0087 (0.0082)	-0.0052 (0.0148)	-0.0413 (0.0313)	-0.0405 (0.0342)
Construction	0.0109 (0.0068)	0.0168* (0.0096)	0.0167 (0.0171)	-0.0124 (0.0327)	-0.0059 (0.0357)
Industry	0.0084 (0.0059)	0.0111 (0.0085)	-0.0001 (0.0151)	-0.0369 (0.0312)	-0.0347 (0.0342)
Agriculture	0.0014 (0.0061)	0.0010 (0.0088)	-0.0112 (0.0156)	-0.0468 (0.0317)	-0.0474 (0.0347)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	0.0021 (0.0016)	0.0018 (0.0023)	-0.0016 (0.0030)	-0.0049 (0.0039)	-0.0051 (0.0043)
Self-insurer Sickness Benefits Act	-0.0024 (0.0052)	-0.0033 (0.0084)	0.0097 (0.0130)	0.0319 (0.0196)	0.0333 (0.0211)
Share of fixed-term contracts in the firm	0.0138*** (0.0024)	0.017*** (0.0036)	0.0311*** (0.0058)	0.0426*** (0.0077)	0.0491*** (0.0086)
Cumulative number of employees hired with premium discount in the year before the letter was sent	0.0670*** (0.0116)	0.1435*** (0.0274)	0.2156*** (0.0320)	0.2857*** (0.0412)	0.3431*** (0.0468)
Cumulative number of employees hired of 56 years or older	0.0056** (0.0027)	0.0077** (0.0034)	0.0135*** (0.0052)	0.0201*** (0.0063)	0.0253*** (0.0085)
Province (ref: Drenthe)					
Flevoland	-0.0041 (0.0065)	-0.0063 (0.0091)	-0.0124 (0.0116)	-0.0150 (0.0142)	-0.0200 (0.0172)
Friesland	-0.0090 (0.0056)	-0.0127* (0.0076)	-0.0062 (0.0105)	0.0052 (0.0138)	0.0002 (0.0166)
Gelderland	-0.0014 (0.0054)	0.0038 (0.0073)	0.0115 (0.0100)	0.0145 (0.0125)	0.0125 (0.0153)
Groningen	-0.0062 (0.0065)	-0.0132 (0.0088)	-0.0202* (0.0114)	-0.0254* (0.0143)	-0.0364** (0.0170)
Limburg	0.0045 (0.0064)	0.0106 (0.0093)	0.0188 (0.0127)	0.0243 (0.0152)	0.0258 (0.0185)
Noord-Brabant	0.0027 (0.0055)	0.0047 (0.0074)	0.0052 (0.0100)	0.0113 (0.0128)	0.0109 (0.0156)
Noord-Holland	-0.0045 (0.0052)	-0.0088 (0.0089)	-0.0107 (0.0094)	-0.0114 (0.0118)	-0.0170 (0.0146)
Overijssel	-0.0071 (0.0054)	-0.0110 (0.0073)	-0.0102 (0.0102)	-0.0055 (0.0130)	-0.0093 (0.0160)
Utrecht	-0.0033 (0.0054)	-0.0021 (0.0073)	0.0001 (0.0115)	0.0024 (0.0136)	-0.0008 (0.0162)
Zeeland	0.0012 (0.0067)	-0.0047 (0.0083)	-0.0012 (0.0112)	0.0020 (0.0146)	-0.0032 (0.0173)
Zuid-Holland	-0.0043 (0.0052)	-0.0043 (0.0070)	-0.0023 (0.0096)	0.0017 (0.0122)	-0.0034 (0.0150)
Unknown	-0.0037 (0.0107)	-0.0060 (0.0141)	0.0069 (0.0196)	0.0341 (0.0333)	0.0502 (0.0477)
Constant	-0.0051 (0.0077)	-0.0057 (0.0108)	0.0029 (0.0176)	0.0342 (0.0333)	0.0331 (0.0367)
N	31,139	30,385	30,085	29,742	29,335
R ²	0.06	0.11	0.13	0.15	0.16

Table 12: Results for the cumulative number of hired employees with premium discount since the month the letters were sent, small firms (less than 100 employees)

Y: Cumulative number of hired employees of 56 years or older	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received a letter	0.0004 (0.0051)	0.0075 (0.0082)	0.0178 (0.0123)	0.0159 (0.0189)	0.0388** (0.0189)
Firm size (ref: < 25 employees)					
25-50 employees	0.0302*** (0.0057)	0.0683*** (0.0096)	0.1256*** (0.0154)	0.1571*** (0.0197)	0.1745*** (0.0218)
50-100 employees	0.0926*** (0.0110)	0.1715*** (0.0183)	0.3118*** (0.0288)	0.4197*** (0.0371)	0.5563*** (0.0446)
Sector (ref: sector is unknown)					
Public sector	-0.0053 (0.0200)	0.0697** (0.0319)	0.1510 (0.1063)	-0.0139 (0.1911)	-0.0936 (0.2652)
Health and social sector	0.0015 (0.0162)	0.0497** (0.0235)	0.0417 (0.0642)	-0.1238 (0.1765)	-0.1676 (0.2534)
Services	-0.0053 (0.0154)	0.0257 (0.0220)	-0.0306 (0.0636)	-0.1963 (0.1766)	-0.2706 (0.2539)
Construction	-0.0049 (0.0189)	0.0313 (0.0242)	-0.0176 (0.0646)	-0.1875 (0.1761)	-0.2711 (0.2530)
Industry	-0.0018 (0.0158)	0.0313 (0.0226)	-0.0221 (0.0632)	-0.2072 (0.1751)	-0.2953 (0.2515)
Agriculture	0.0875*** (0.0239)	0.1545*** (0.0307)	0.0749 (0.0660)	-0.1068 (0.1770)	-0.1204 (0.2541)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	-0.0140*** (0.0047)	-0.0291*** (0.0070)	-0.0492*** (0.0108)	-0.0663*** (0.0137)	-0.0677*** (0.0172)
Self-insurer Sickness Benefits Act	0.0297 (0.0189)	0.0619 (0.0384)	0.1895*** (0.0608)	0.1848** (0.0725)	0.2721*** (0.1015)
Share of fixed-term contracts in the firm	0.0549*** (0.0079)	0.1156*** (0.0148)	0.1648*** (0.0211)	0.2322*** (0.0295)	0.2963*** (0.0363)
Cumulative number of employees hired with premium discount in the year before the letter was sent	0.0092 (0.0252)	0.0491 (0.0436)	0.1275* (0.0654)	0.1997** (0.0645)	0.2892** (0.1091)
Cumulative number of employees hired of 56 years or older	0.1022*** (0.0076)	0.2003*** (0.0151)	0.2934*** (0.024)	0.3909*** (0.0343)	0.4801*** (0.0423)
Province (ref: Drenthe)					
Flevoland	0.0315 (0.0276)	0.0427 (0.0374)	0.0967** (0.0474)	0.0733 (0.0551)	0.0465 (0.0637)
Friesland	-0.0254 (0.0202)	-0.0418 (0.0257)	-0.0020 (0.0556)	0.0020 (0.0640)	-0.0897* (0.0489)
Gelderland	0.0053 (0.0200)	0.0077 (0.0260)	0.0279 (0.0303)	0.0212 (0.0397)	0.0232 (0.0487)
Groningen	-0.0132 (0.0216)	-0.0028 (0.0300)	0.0297 (0.0414)	0.0078 (0.0525)	-0.0012 (0.0631)
Limburg	0.0064 (0.0219)	0.0034 (0.0276)	0.0174 (0.0343)	0.0739 (0.0603)	0.0958 (0.0688)
Noord-Brabant	0.0027 (0.0200)	-0.0036 (0.0246)	0.0210 (0.0306)	0.0215 (0.0394)	0.0367 (0.0491)
Noord-Holland	-0.0003 (0.0198)	-0.0031 (0.0246)	0.0121 (0.0311)	0.0048 (0.0400)	0.0023 (0.0489)
Overijssel	-0.0140 (0.0201)	-0.0305 (0.0252)	-0.0056 (0.0336)	-0.0036 (0.0428)	-0.0083 (0.0515)
Utrecht	0.0056 (0.0205)	-0.0050 (0.0254)	0.0180 (0.0324)	0.0127 (0.0418)	0.0031 (0.0502)
Zeeland	0.0438* (0.0247)	0.0234 (0.0300)	0.0608 (0.0473)	0.0625 (0.0567)	0.1005 (0.0678)
Zuid-Holland	-0.0081 (0.0197)	-0.0007 (0.0250)	0.0342 (0.0312)	0.0348 (0.0407)	0.0522 (0.0513)
Unknown	-0.0203 (0.0277)	-0.0204 (0.0474)	0.0226 (0.0601)	0.0898 (0.0836)	0.1030 (0.1041)
Constant	0.0018 (0.0264)	-0.0396 (0.0348)	-0.0005 (0.0853)	0.1750 (0.1734)	0.2279 (0.2449)
N	31,139	30,385	30,085	29,742	29,335
R ²	0.14	0.20	0.20	0.20	0.22

Table 13: Results for the cumulative number of hired employees of 56 years or older since the month the letters were sent. small firms (less than 100 employees)

Y: Cumulative number of hired employees with premium discount	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received the 'financial advantage' letter	0.0025 (0.0047)	-0.0081 (0.0089)	-0.0075 (0.0145)	-0.0084 (0.0209)	-0.0111 (0.0268)
Company received the 'loss aversion' letter	0.0008 (0.0049)	-0.0041 (0.0086)	0.0077 (0.0170)	0.0096 (0.0202)	0.0144 (0.0234)
Company received the 'peer norm' letter	-0.0012 (0.0046)	-0.0085 (0.0080)	-0.0140 (0.0121)	-0.0284* (0.0167)	-0.0319 (0.0202)
Firm size (ref: < 25 employees)					
25-50 employees	0.0046* (0.0024)	0.0097** (0.0038)	0.0171*** (0.0061)	0.0229*** (0.0079)	0.0297*** (0.0095)
50-100 employees	0.0141*** (0.0048)	0.0312*** (0.0084)	0.0495*** (0.0142)	0.0646*** (0.0186)	0.0803*** (0.0222)
100-250 employees	0.0355*** (0.0094)	0.0774*** (0.0182)	0.1232*** (0.0315)	0.1534*** (0.0416)	0.1944*** (0.0505)
250-1,000 employees	0.0791*** (0.0253)	0.1779*** (0.0506)	0.3135*** (0.0895)	0.4517*** (0.1226)	0.5861*** (0.1468)
> 1,000 employees	0.1423*** (0.0507)	0.3891*** (0.1091)	0.9124*** (0.2509)	1.2016*** (0.3175)	1.4341*** (0.3711)
Sector (ref: sector is unknown)					
Public sector	-0.0134 (0.0129)	-0.0455** (0.0189)	-0.1054*** (0.0341)	-0.2214*** (0.0512)	-0.2816*** (0.0598)
Health and social sector	-0.0019 (0.0105)	0.0011 (0.0126)	0.0003 (0.0256)	-0.0651* (0.0385)	-0.0753* (0.0439)
Services	-0.0004 (0.0096)	0.0087 (0.0107)	0.0003 (0.0163)	-0.0458 (0.0316)	-0.0482 (0.0371)
Construction	0.0032 (0.0103)	0.0203* (0.0122)	0.0269 (0.0191)	-0.0094 (0.0338)	-0.0068 (0.0393)
Industry	0.0001 (0.0102)	0.0177 (0.0134)	0.0154 (0.0194)	-0.0245 (0.0348)	-0.0220 (0.0412)
Agriculture	-0.0049 (0.0101)	-0.0012 (0.0113)	-0.0129 (0.0173)	-0.0493 (0.0366)	-0.0505 (0.0452)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	-0.0017 (0.0037)	-0.0014 (0.0066)	0.0114 (0.0125)	0.0206 (0.0164)	0.0149 (0.0203)
Self-insurer Sickness Benefits Act	0.0050 (0.0122)	-0.0190 (0.0220)	0.0064 (0.0364)	0.0256 (0.0492)	0.0457 (0.0617)
Share of fixed-term contracts in the firm	0.0409*** (0.0121)	0.0906*** (0.0248)	0.1914*** (0.0483)	0.2719*** (0.0638)	0.3286*** (0.0777)
Cumulative number of employees hired with premium discount in the year before the letter was sent	0.1209*** (0.0163)	0.1952*** (0.0339)	0.2930*** (0.0595)	0.4198*** (0.0777)	0.4954*** (0.0962)
Cumulative number of employees hired of 56 years or older	0.0007 (0.0012)	0.0007 (0.0017)	0.0042 (0.0028)	0.0055 (0.0038)	0.0028 (0.0044)
Province (ref: Drenthe)					
Flevoland	-0.0277 (0.0258)	-0.0632 (0.0467)	-0.1537* (0.0835)	-0.1748 (0.1181)	-0.3053* (0.1805)
Friesland	-0.0162 (0.0213)	-0.0116 (0.0355)	-0.0713 (0.0547)	-0.0527 (0.0800)	-0.1207 (0.1414)
Gelderland	-0.0147 (0.0206)	-0.0138 (0.0326)	-0.0614 (0.0523)	-0.0571 (0.0773)	-0.1186 (0.1398)
Groningen	-0.0130 (0.0239)	-0.0269 (0.0359)	-0.0741 (0.0555)	-0.0900 (0.0786)	-0.1775 (0.1414)
Limburg	-0.0101 (0.0208)	-0.0092 (0.0335)	-0.0384 (0.0573)	-0.0441 (0.0809)	-0.1084 (0.1428)
Noord-Brabant	-0.0122 (0.0200)	-0.0079 (0.0322)	-0.0538 (0.0519)	-0.0475 (0.0769)	-0.1087 (0.1394)
Noord-Holland	-0.0295 (0.0202)	-0.0384 (0.0342)	-0.0926* (0.0539)	-0.0858 (0.0797)	-0.1602 (0.1411)
Overijssel	-0.0238 (0.0210)	-0.0403 (0.0329)	-0.0471 (0.0693)	-0.0539 (0.0891)	-0.1316 (0.1467)
Utrecht	-0.0214 (0.0195)	-0.0290 (0.0320)	-0.0792 (0.0555)	-0.0680 (0.0843)	-0.1415 (0.1434)
Zeeland	-0.0128 (0.0199)	-0.0271 (0.0321)	-0.0695 (0.0541)	-0.0763 (0.0789)	-0.1666 (0.1385)
Zuid-Holland	-0.0199 (0.0193)	-0.0283 (0.0315)	-0.0819 (0.0525)	-0.0838 (0.0784)	-0.1580 (0.1397)
Unknown	-0.0242 (0.0236)	-0.0414 (0.0362)	-0.1067* (0.0624)	-0.1135 (0.0943)	-0.1835 (0.1567)
Constant	0.0071 (0.0245)	-0.0041 (0.0378)	0.0095 (0.0571)	0.0285 (0.0799)	0.0857 (0.1383)
N	39,496	39,157	38,295	37,926	37,506
R ²	0.52	0.50	0.42	0.46	0.44

Table 14: Results for the cumulative number of hired employees with premium discount since the month the letters were sent, small firms (less than 100 employees)

Y: Cumulative number of hired employees of 56 years or older	After 3 months	After 6 months	After 9 months	After 12 months	After 15 months
Company received the 'financial advantage' letter	-0.0221 (0.0270)	-0.1092* (0.0626)	-0.2761** (0.1399)	-0.2700* (0.1633)	-0.2985 (0.1922)
Company received the 'loss aversion' letter	-0.0083 (0.0312)	-0.0643 (0.0681)	-0.2036 (0.1637)	-0.2160 (0.1895)	-0.2391 (0.2202)
Company received the 'peer norm' letter	-0.0031 (0.0262)	-0.0790 (0.0578)	-0.2391* (0.1339)	-0.2618* (0.1543)	-0.2852 (0.1797)
Firm size (ref: < 25 employees)					
25-50 employees	0.0144 (0.0092)	0.0343* (0.0177)	0.0747** (0.0334)	0.1117*** (0.0423)	0.1249** (0.0489)
50-100 employees	0.0388* (0.0232)	0.0478 (0.0446)	0.1169 (0.0889)	0.2192** (0.1112)	0.3322** (0.1358)
100-250 employees	0.1274** (0.0517)	0.2056** (0.1026)	0.6076*** (0.2336)	0.8624*** (0.2818)	1.1131*** (0.3352)
250-1,000 employees	0.4675*** (0.1542)	0.7830** (0.3053)	1.5714** (0.6480)	2.5653*** (0.8212)	3.5417*** (0.9971)
> 1,000 employees	2.2229*** (0.4821)	3.9933*** (0.9578)	8.5852*** (1.9983)	11.1416*** (2.4435)	14.9884*** (2.9134)
Sector (ref: sector is unknown)					
Public sector	0.0680 (0.0572)	-0.0647 (0.1589)	0.1249 (0.3452)	-0.5205 (0.4197)	-0.5676 (0.4837)
Health and social sector	-0.0073 (0.0347)	-0.1808 (0.1101)	-0.0107 (0.2026)	-0.2123 (0.2912)	-0.2221 (0.3428)
Services	0.0031 (0.0239)	-0.0299 (0.0997)	-0.0236 (0.1370)	-0.2238 (0.2379)	-0.3075 (0.2890)
Construction	0.0128 (0.0265)	-0.0124 (0.1015)	-0.0190 (0.1419)	-0.1817 (0.2427)	-0.2357 (0.2959)
Industry	0.0068 (0.0279)	-0.0261 (0.1027)	-0.0577 (0.1408)	-0.2579 (0.2431)	-0.3163 (0.2974)
Agriculture	0.0703** (0.0325)	0.0433 (0.1030)	-0.0280 (0.1404)	-0.1984 (0.2404)	-0.2104 (0.2929)
Self-insurer WGA (Return to Work (Partially Disabled) Regulations)	0.0373* (0.0226)	0.0851* (0.0473)	0.1081 (0.1044)	0.1415 (0.1247)	0.1189 (0.1472)
Self-insurer Sickness Benefits Act	0.0207 (0.0610)	0.0722 (0.1371)	0.1821 (0.2832)	0.2172 (0.3399)	0.3211 (0.4106)
Share of fixed-term contracts in the firm	0.2806*** (0.0655)	0.6267*** (0.1367)	0.8174** (0.3283)	1.3310*** (0.4137)	1.7363*** (0.5055)
Cumulative number of employees hired with premium discount in the year before the letter was sent	0.2036** (0.1005)	0.2944 (0.1954)	0.2614 (0.3885)	0.4345 (0.5099)	0.6269 (0.6226)
Cumulative number of employees hired of 56 years or older	0.1306*** (0.0259)	0.3030*** (0.0463)	0.4893*** (0.1121)	0.6024*** (0.136)	0.6992*** (0.1592)
Provinces (ref: Drenthe)					
Flevoland	0.1120 (0.0956)	0.3945 (0.2464)	-0.0374 (0.5014)	-0.0686 (0.6388)	-0.4354 (0.7983)
Friesland	0.0173 (0.0618)	0.5239* (0.3002)	0.1168 (0.4331)	0.1166 (0.4929)	-0.0171 (0.6064)
Gelderland	0.1059* (0.0638)	0.3080** (0.1283)	0.0629 (0.3353)	0.1441 (0.4079)	0.1199 (0.5449)
Groningen	0.1649 (0.1402)	0.3684 (0.2598)	0.9371 (1.0086)	1.0332 (1.1612)	1.0122 (1.3660)
Limburg	0.1060 (0.0743)	0.2607* (0.1350)	-0.0630 (0.3389)	0.0326 (0.4107)	-0.0078 (0.5476)
Noord-Brabant	0.0950 (0.0630)	0.2482** (0.1254)	-0.0391 (0.3339)	0.0551 (0.4063)	-0.0119 (0.5419)
Noord-Holland	0.0887 (0.0671)	0.2417* (0.1333)	-0.1240 (0.3406)	-0.1007 (0.4141)	-0.1611 (0.5528)
Overijssel	0.0319 (0.0611)	0.1707 (0.1290)	-0.0958 (0.3445)	-0.0895 (0.4156)	-0.2075 (0.5527)
Utrecht	0.0618 (0.0658)	0.1746 (0.1295)	-0.1170 (0.3531)	-0.0835 (0.4293)	-0.1523 (0.5648)
Zeeland	0.0910 (0.0657)	0.1805 (0.1291)	-0.1352 (0.3438)	-0.1167 (0.4150)	-0.2690 (0.5434)
Zuid-Holland	0.0782 (0.0643)	0.2259* (0.1269)	0.0225 (0.3507)	0.0856 (0.4220)	0.0859 (0.5552)
Unknown	0.0192 (0.0826)	0.1714 (0.1771)	-0.1820 (0.3669)	-0.1111 (0.4618)	-0.2160 (0.6121)
Constant	-0.1916*** (0.0687)	-0.4004** (0.1684)	-0.1037 (0.3857)	-0.1293 (0.5012)	-0.1126 (0.6485)
N	39,496	39,157	38,295	37,926	37,506
R ²	0.66	0.68	0.52	0.56	0.56

Table 15: Results for the cumulative number of hired employees of 56 years or older since the month the letters were sent. small firms (less than 100 employees)