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**Nothing ventured, nothing gained!**  
**How and under which conditions employers invest in the employability of their  
older workers.**

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## **Abstract**

Employability generally refers to the participation in training or in courses. An often less regarded aspect is that sustaining work capacity and health is at least as important. Especially for older workers, this may play an important role. We therefore investigate employability as a form of ‘age-conscious personnel policy’ for older workers and focus on employers’ role for this investment. We ask 1) to which extent employers implement ‘age-conscious personnel policies’. Additionally, we are interested 2) under which conditions employers invest in their older workers’ employability. Analyses on Dutch data, collected in spring 2012, show that employers take measures that are easily implemented and not expensive. Furthermore, organizational characteristics, such as the share of the older workers or the size of the organization, and labor market environment, such as scarcity, affect employers’ investment decision.

Keywords: Employability, employers, older workers, organization, personnel policy

## **Employability and its relevance for older workers**

The population in most European countries is ageing. Thus, it is often articulated that a more encompassing labor market participation, especially of older workers, is desired in order to avoid shortages on the labor market. These policy goals however also involve that ‘active ageing’ or ‘age-conscious’ personnel policies embrace what is often advised to employers and organizations: to safeguard and develop employability and work capacity at different stages in life and up to a higher age. Also in the context of an increasingly flexible labour market, ‘employability’ is used as a policy concept to secure employment. Employability is thought to serve as an instrument to both assure successful labour market transitions and to increase the chance that workers are deployable within the firm. The concept ‘employability’ is often used as a catchword for very distinct forms of personnel policies (Gazier 1999, Gazier 2001). While many definitions of employability can be found, the one by De Grip, Loo and Sanders (2004) illustrates the different aspects of employability. They define employability as referring

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‘to the capacity and willingness of workers to remain attractive for the labour market (supply factors), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resource development instruments available to them (institutions).’ (De Grip, Loo and Sanders 2004: 216).

This definition, which appears especially relevant for our research, clarifies three things which we want to elaborate on in the following: first, employability refers to individuals’ capacity, second, decision makers determine whether investment is made, and third, the organizational and labour market framework play a role.

In contrast to the notion that employability concerns the capacity of employees, the general connotation of employability refers to their participation in formal training and courses. However, research shows that older workers report a low participation in these ‘general’ forms of employability investment (Antikainen 2001, Arulampalam, Bryan and Booth 2004, Bishop 1996, Canduela et al. 2012, Dalen et al. 2006). It is argued that increasing employability by training or participation in courses might be more aimed towards younger workers, while older workers will rather need to sustain their employability and work capacity (Tamkin and Hillage, 1999). In line with prior research, when considering employability for older workers, we therefore define employability as ‘age-conscious personnel policies’ (Remery et al. 2003, Schaeps and Klaassen 1999). These personnel policies are thought to be especially designed towards older employees’ needs. If their needs to alleviate work are satisfied, their work capability can be ensured. This is found to increase the active participation of older workers in the labour force or delay their retirement (Fleischmann et al. 2011, Siegrist et al. 2006, Siegrist and Wahrendorf 2010). Other research indicates that these policy aims are accomplishable if

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older workers move to a less demanding job or reduce their working hours (Hurd and McGarry 1993). However, job redesign to ensure these working conditions is hardly ever put into practice (Taylor and Walker 1998). In our first research question, we therefore aim to answer *to which extent 'age conscious personnel policies' are implemented in order to support the employability of older employees?*

Second, the definition of De Grip, Loo and Sanders (2004) puts emphasis on the role of employers as actors that facilitate, enable and decide about the employability investment. Not only can employees themselves increase or sustain their employability, but also do employers (i.e. the 'decision makers', see Gazier 2001) have to provide the possibilities. The facilitation by employers can be especially relevant for older personnel, because they are more interested in sustaining their work capacity and employability compared to investing in 'general' forms of employability. As employers decide about personnel investments, it is important to shift the focus to employers and investigate under which conditions they enhance their older workers' employability. Thus, our second and explanatory research questions reads: *Under which conditions do employers invest in the employability of their older employees?*

As the last notion of the employability definition above indicates, organizational characteristics and the labour market framework will help to explain when investment is taking place. Following different theoretical arguments, the returns from investments in older workers are lower, which decreases the benefits for employers. In line with this, prior research frequently reports that employers are reluctant to invest in their older personnel (Canduela et al. 2012, Chui et al. 2001, Henkens 2005, Van Dalen, Henkens and Schippers 2010, Karpinska, Henkens and Schippers 2011, Taylor and Walker 1998,

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De Vries, Gründemann and van Vuuren 2001). However, we also discuss why investment in older workers' employability might take place. In this context, we discuss the marginal costs argument, human capital theory and the perception of organizations. We formulate expectations about the relation between investment in employability and the share of older workers in an organization, the organization's size, the existent capital in the organization and the organization's perception of older workers. Furthermore, we argue that the labour market dependency of organizations might influence the investment in older workers' employability.

To investigate the above stated research questions, we make use of an encompassing dataset that we collected in spring 2012 among a random sample of Dutch employers from organizations with more than ten employees. In the questionnaire we asked for organizations' human resource policies regarding older workers. It also included questions about scarcity on the labour market and possible human resource measures when facing an ageing workforce. Our analyses rely on about 750 Dutch organizations and can thus provide an extensive picture of employability investment in the Netherlands.

### **Employers' decisions about investment in older workers' employability**

To theorize about employers' decisions whether or not to invest in their older workers' employability, we assume that employers are rational in the sense that they pursue 'goal-oriented' behaviour. This means that they are believed to act in order to increase the benefits of the organization (Kalleberg 1996). In line with this assumption the question is under which conditions employers do not invest in their older workers' employability and

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under which they do. Employers' final decision of whether to invest in older workers' employability might be dependent on two conditions. First, employers will be influenced by organizational characteristics and second, employers' decisions are dependent on labour market characteristics.

*Arguments against investment*

Older workers are often regarded as being 'overpaid', meaning that they are paid more than their actual productivity. From a neoclassical economic view it is assumed that earnings and productivity of a worker are directly related to each other. As this is however hardly ever observed in reality, Thurow (1975) introduced what became known as the 'seniority principle'. This term summarizes the finding that in the first career phase, workers' productivity is often higher than their earnings, while in the second phase, earnings exceed productivity. This long-term payment relation supports workers' loyalty to the firm and makes it beneficial for employers to invest in workers' employability during the first part of the career. However, this relation between earnings and productivity increases the costs for employers if older workers delay retirement (Lazear 1979). Retiring later involves that the period expands in which workers are paid more than their productivity. Thus, seniority wages reflect a burden for employers. The costs of older workers would additionally increase, if investment in older workers' employability were made. Moreover, the pay-off period of investments in older workers may be shorter compared to younger workers.

Another argument explaining why employers might hesitate to invest in their older personnel are stereotypes. Literature on stereotyping states that due to missing

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information, employers cannot evaluate the productivity of each single worker. Thus, they use their prior knowledge and general characteristics of workers, such as their gender, age or type of work, to estimate their productivity (Arrow 1973, Phelps 1972). Prior studies on employers' views on older workers indicate that they generally regard older workers as being less productive or flexible, and having a lower acceptance of new technologies (Chui et al. 2001, Henkens 2005, Loretto et al 2000, Remery et al 2003). This involves that the willingness of older workers to gather training is estimated to be low.

Organizations differ with regard to their demographic composition; some organizations will have a high fraction of older employees, while other firms will have a lower fraction. Organizations that are employing a larger share of older employees will experience high costs when considering investing in their employability. Employers might decide to rather not invest in their workers. In line with the costs argument, we therefore expect that *the higher the share of older employees, the lower is the investment in employability* (age hypothesis).

Besides the costs that an investment in the employability of their workers involves, characteristics of the labour market will play a role for employers' decision against or in favour of investment. Such a characteristic is competition on the labour market between firms. Competition between firms might involve that employers compete on attracting new workers, or on keeping their existent staff. Since competing firms are often similar in their orientation and tasks, it is easier for workers to switch between organizations. Competing firms might also be involved in competing for the lowest prices, which, in the case that this lowers their surplus, does not leave budget for

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investment in workers. We therefore expect that *the higher the competition is on the labour market, the lower is the investment in employability* (competition hypothesis).

#### *Arguments in favour of investment*

Even though the costs related to the investment in employability as well as the level of labour market competition provide reasons for employers not to invest in their older workers' employability, there are several arguments in favour of investment.

From the 'marginal costs' argument we know that the costs of investment in employability are not linearly increasing with for example, the number of workers for whom the investment is made. The relative costs of investing in an additional workers' employability will be lower for organizations where the investment is planned or made for a greater share of workers. The marginal costs of implementing employability measures – relatively speaking – decrease, because the investment in one additional worker is cheaper if the measure is already implemented for a hundred employees compared to when it is only implemented for ten. Thus, the costs of investment in employability marginally decrease with the size of the organization. We therefore frame the following hypothesis: *the larger the organization (i.e. the higher the number of employees), the higher is the investment in their employability* (organizational size hypothesis).

From the marginal costs argument a second hypothesis is deductible. While the marginal costs decrease in larger organization, this is especially the case if in these organizations also a greater share of employees are in need of employability investment. We therefore assume that a greater share of older workers in need of investment,



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combined with a larger organization, reduces the costs of the investment. This means, if there is a high need in a large organization, the costs of investment are relatively seen lower than if the need would be lower. We therefore hypothesize that *with an increasing organizational size, the greater share of older workers, the higher is the investment in employability* (age-size interaction hypothesis).

Human capital theory (Becker 1964) proposes arguments why organizational characteristics might influence the investment in employability. Human capital theory assumes that workers with a higher educational level or a longer tenure in the firm learn faster and with higher returns. This means that if organizations have the ‘capital’ of an on average higher educated workforce or one with a longer tenure, the investment in this workforce will be less costly and result in greater pay-offs. Thus, the existent human capital hypothesis reads that *the higher the existent human capital is in an organization, the higher the investment in employability* (existing human capital hypothesis).

Last, organizations might differently evaluate the idea that older workers should be retained or whether older workers can provide benefits for the organization. In organizations with a more positive perception of older workers, this will provide the basis for investment. We therefore expect that *the more positive the perception of older workers is, the higher the investment in employability* (perception hypothesis).

Besides organizational characteristics that are related to employers’ decisions whether or not to invest in the employability of their workers, the labour market in which organizations are embedded in will play a role. One such characteristic of the labour market is the scarcity in labour supply. Scarcity involves that employers are confronted with difficulties in filling their vacancies. When organizations are facing scarcity,

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employers could increase the labour force participation of the existing workforce, take internal measures that enhance the organization's productivity, or restrict the number of workers who leave their organization. In such a case, employers might find it relevant to investment in older workers' employability in order to sustain older workers' capability. Again, the perception of the firm will play a role as well. Employability measures can serve as a possible policy means to increase the attractiveness of the own organization and to retain own workers. In the case of scarcity in labour supply, investment in employability can enhance employees' capacity and at the same time increase the attractiveness of the organization. Our scarcity hypothesis therefore reads that *the higher the scarcity is on the labour market, the higher is the investment in employability* (labour market scarcity hypothesis).

### **Data & Methods**

To investigate the above stated research questions, we make use of an encompassing dataset on Dutch employers that was collected as part of a larger project about social security in the Netherlands. For the questionnaire entitled "Towards a greying workforce? Personnel policies for older workers" a random sample was drawn from the Dutch Trade Register ('Kamer van Koophandel'). Due to the generally very low response rate in corporate studies, we sampled 8,000 organizations. Only organizations with more than ten employees were selected and the sample was stratified according to the size of the organization. To secure that enough large firms would participate in the questionnaire, they were oversampled. The data collection took place between April and June 2012. After sending the questionnaires and cover letters by post mail, two reminders in postcard

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format were sent after three and six weeks. Respondents had two possibilities to fill in the questionnaire: They could either fill in the paper questionnaire they received with the first post mail, or they could complete an online questionnaire. Both questionnaires included the same questions. In total, 983 employers participated in the survey. This response of 12.3 per cent is lower than the response rate in individual surveys, but comparable to other corporate studies in the U.S. and Europe, where the response rate is at most 20-30% (Kalleberg et al. 1996, Van Dalen et al. 2006; Henkens et al. 2008).

The organizations can be classified according to their size and the sector they belong to. We arrange organizations in sectors according to the Dutch ‘standard organizational classification’ (SBI93 – standaard bedrijfsindeling). If it was appropriate, some of the sectors were aggregated. Of the organizations that participated in our study, 20 per cent are operating in ‘industry’, and both 15 per cent in ‘commerce’ and ‘business services’. Furthermore, about ten per cent are operating in ‘construction’ and ‘health care’ (see Table 1). On average, the organizations that participated in our study have 400 employees. The median is 55, indicating that more organizations with fewer employees are included in our sample. This is in accordance with the general picture in the Netherlands.

### *The implementation of age-conscious personnel policies*

Similarly to prior research on age-conscious personnel policy (Remery et al. 2003, Schaeps and Klaassen 1999) we identify fifteen organizational measures that might be used in order to retain older employees’ employability and work capacity. For each item we ask the employers (a) whether they already implemented this instrument, (b) whether

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implementing is/will be considered, (c) or whether it will not be considered. These items include employability measures such as ‘continue working in combination with part-time retirement’, ‘exempt older workers from working overtime’ or ‘take ergonomic measures’. This way, we included differently expensive or encompassing organizational instruments to keep older employees in the workforce and sustain their employability. In Table A1, we list the age-conscious personnel policy measures that were included in our questionnaire. From Figure 1, we see that measures such as taking ergonomic measures, offering expanded leave for older workers, alleviating older workers’ tasks, or employing older workers to coach younger colleagues are those that are most frequently already implemented. On the other hand, instruments such as demoting position and wage, developing educational trajectories, or taking lengthy career breaks are implemented in less than 13 per cent of the firms (see Table A1). Organizational measures that are recently considered are conducting personal interviews especially focusing on the last career stage or to moving to a less burdensome position within the organization.

**\*\*\* Figure 1 about here \*\*\***

As organizational instruments to sustain older workers’ employability range from offering ergonomic measures to expanded leave opportunities or exemption from working overtime, we investigate whether different categories of employability instruments can be distinguished. We included the items in different ways in factor analyses. First, we opposed those organizations that indicated that a personnel policy measure was already implemented to those who said it is/will be considered and will not

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be considered. Second, we opposed organizations indicating that a policy measure was implemented and that said it is/will be considered to those that will not consider it. For both definitions it appears that, when including all items into a factor analysis, we find one factor that bears the greatest eigenvalue. For the first definition it is 4.0 and for the second definition 4.8. Both times, there are other dimensions identified, with eigenvalues below 1.3. This indicates that, generally, the personnel policy items can be summarized in one dimension. We operationalize this dimension as age-conscious personnel policies. All items have factor loadings above 0.4 and the Cronbach's alpha of the resulting scale is 0.80 for the first, and 0.84 for the second operationalization. For the following analyses, we recode the scale in such a way that organizations add one point to the scale for each of the fifteen policy measure that they already implemented or consider to implement (see below). In that way, the resulting scale can give an indication of the extent to which an organization is actively implementing age-conscious personnel policies.

Generally, we find that employers especially implement or consider implementing measures that are not expensive (e.g. taking ergonomic measures, using older workers for coaching) or those that are state regulated or discussed in collective agreements (e.g. continue working in combination with part-time retirement, offering expanded leave/vacation opportunities). Those policy measures that are most expensive for the organization (e.g. taking lengthy career breaks, develop educational trajectories) are hardly ever considered. Regarding our first research question, we can thus summarize that more expensive policy measures, and those that involve more restructuring are less often implemented or considered by organizations. Furthermore, we find that all fifteen

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items can be summarized in one scale that we operationalize as age-conscious personnel policies.

*Operationalization age-conscious personnel policies*

For the following explanatory analyses, we are interested in answering the question which organizational and labour market characteristics relate to a greater investment in age-conscious personnel policies. We already discussed that all fifteen items asking about these policies can be summarized in one scale (see above). Therefore, we construct a scale that counts how often an organization indicates to have already implemented an age-conscious personnel policy measure or is/will be considering to implement it. No points are added to the scale if an organization does not consider implementing it. For example, if an organization already implemented ergonomic measures for older workers one point is added to the scale, and if the organization is/will be considering conducting personal interviews it receives one point as well. As each organization indicates for each of the 15 age-conscious personnel policy measure whether they already implemented it, is/will be considering it, or will not consider it, our employability variable ranges from zero to 15. Zero refers to an organization that did not implement (or consider) any measure, and 15 to an organization that implemented (or considers) all measures.

*Operationalization independent variables*

The *age of employees* in the organization is measured by the percentage of older workers in the organization. The percentage of older workers is operationalized by having the respondents indicate how many per cent of the organization's workforce is older than 50

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years. The *size of organization* is operationalized by the variable asking for the number of employees the organization has at the beginning of 2012. We took the natural logarithm of the organization's size in order to lessen the influence of very large organizations. The *existent human capital* is operationalized by the average educational level and the average tenure in the organization. The average educational level is operationalized by a variable asking the employers "What is the composition of the personnel according to educational level?". Employers could indicate the percentage of lower educated (MAVO, VMBO, LBO, LO), medium educated (HAVO, VWO, MBO), and the percentage of higher educated workers (HBO, WO). We applied weights to the three educational levels (low=1, medium=2, high=3) and summed the percentage of lower, medium and higher educated workers. This way, our average educational level in the organization ranges from 1 (100 percent low educated) to 3 (100 percent higher educated) employees. To assess the average tenure in the organization we asked "How long on average are workers employed in your firm". The answer categories were 1 '0 – 5 years' (reference category), 2 '5 – 10 years', 3 '10 – 15 years', and 4 'more than 15 years'.

To assess the *perception of older employees* within the organization, we make use of the item-battery that asked "In your opinion, what are the consequences for your organization if the average age of the personnel increases?". Employers could evaluate multiple items on a scale from 1 'very unlikely' to 5 'very likely'. Seven of these items, including statements such as 'knowledge increases', 'experience rises', 'productivity increases' or 'mobility of the personnel enhances', refer to a positive perception of older employees. We conduct factor analyses to assess whether these items can be regarded as one scale. As this is the case, we summarize those items referring to a positive

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perceptions of older employees (Cronbach's Alpha=0.75). The resulting scale ranges from 1 to 5.

Last, we assess to which extent the organization is dependent from the labour market. Employers can perceive that there is competition on the market or scarcity in labour supply. *Competition* is measured by several dummy variables that indicate whether the organization perceives 'no competition, due to no market', 'market with hardly any competition', 'market with some competition', or 'market with high competition' (reference category). *Scarcity* is operationalized by two dummy variables where employers could indicate whether they expect 'no scarcity in labour supply' (reference category), 'scarcity in some positions', or 'scarcity in many positions' for the future.

In our analyses, we control for the sector of the organization. We differentiate 14 sectors which we include as dummy variables in the analyses. In the reference category are organizations operating in the industrial sector.

As the implementation of age-conscious personnel policies is measured with a continuous variable, we employ linear regressions. We include all variables in the regression analysis (Model 1) and additionally run a regression for the interaction between the age of employees in the organization and the size of the organization (Model 2).

## **Results**

In Model 1 (Table 2) we include all variables, except for the interaction variable. In line with the argument that investment is less likely if the costs are higher, we expected that a



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higher share of older workers is related to a lower investment in employability. We do not find a significant association between the organization's share of older workers and the investment in age-conscious personnel policies. Our age-hypothesis can therefore not be supported. Organizational size was expected to be positively related to investment in employability. We find support for our rationale: A higher organizational size relates to a higher investment in age-conscious employability measures.

In Model 2, we included the interaction effect between the percentage of older workers and the size of the organization. We find that when including this interaction effect, the relation between the percentage of older workers and employability becomes significant. Interpreting the interaction, we can say that the percentage of older workers in an organization is positively affecting the investment in employability especially in larger organizations (see Figure 2). In smaller firms, however, a higher percentage of older workers rather adds to a de-investment in age-conscious personnel policies. Put differently, we can say that in both large and small firms, the investment in employability is about the same if there are no or hardly any older workers. As the percentage of older workers increases, the investment in employability becomes greater in large organizations but lower in small organizations. Our finding supports the expectation formulated based on the marginal cost argument and leads us to accept the age-size interaction hypothesis.

**\*\*\* Figure 2 about here \*\*\***

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We test the existent human capital hypothesis by the average educational level in the organization and the average tenure. If more capital is available in an organization, we assumed to find more investment in employability measures. The analyses reveal that a higher average educational level in an organization is associated with a higher investment in employability ( $p=0.053$ ). Furthermore, we find that the average tenure in the organization is positively related to employability. This separate effect of tenure comes on top of the effect of the share of older workers (age). Our results indicate that organizations with an average longer tenure compared to an average tenure between zero and five years, are implementing more age-conscious personnel policies. Regarding the existent human capital hypothesis, we conclude that if an organization has a higher level of existent human capital, then employers also implement more employability measures.

Regarding the perception hypothesis, we test whether a more positive perception of older workers is related to a higher investment in employability. Our results show that employers are investing more in the employability of their older employees if the perception of older workers in the organization is better. Thus, we find support for the perception hypothesis.

Last, we investigate whether the organization's dependency on the labour market, in terms of competition and scarcity, relates to their investment in employability. We find that organizations operating in a market with hardly any competition are more often investing in the employability of their older employees than organizations that have to deal with high competition in the market. This finding is in line with our hypothesis. If there is more competition in the labour market, organizations invest less in their age-conscious policies. Regarding scarcity on the labour market, our results show that the

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investment in age-conscious personnel policies is higher in organizations that experience scarcity in more positions. This finding supports our theoretical expectations.

### **Conclusion & Discussion**

Theoretically, this paper uses a definition of employability that takes into account the different focus for older workers. Theoretical considerations about differences in employability measures for older and younger employees clarified that we rather need to study age-conscious personnel policies than ‘general’ measures for employability. We embed our expectations about investment in age-conscious personnel policies in a context in which costs of investment play a role but employers take decisions dependent on organizational and labour market characteristics. Thus, hypotheses both against and for investment were phrased. Empirically, we make use of a large data set on about 750 Dutch organizations to test our expectations. These encompassing data allow drawing general conclusions about Dutch organizations with more than ten employees and is comparable to few other Dutch datasets (Henkens 2005; Henkens, Remery and Schippers 2008).

Our findings can be summarized in two points. First, regarding age-conscious personnel policies, we find that especially those measures that are the most feasible, very easy to implement in the organization and least expensive, such as alleviating older workers’ tasks, taking ergonomic measures, or using older workers for coaching, are implemented or considered in organizations. Those measures that are formulated in some collective agreements, such as part-time retirement, additional leave days or adjusting working hours, are also considered by employers. This clearly shows that employers are

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generally not averse to implement policy measures that also help older workers to sustain their capability. However, exactly those measures that are increasingly becoming of importance in the recently changing economy, where older workers will need to participate longer, are not yet implemented or considered. Expensive measures and those that are detaching the employee from the organization for a longer period, or involve organizational restructuring are not even considered by employers. Examples are developing educational trajectories for older workers, facilitating long-term care breaks or career breaks (sabbatical leave). In an ageing population, it will become important for both public and organizational policy to increase the attention for measures that allow older workers to take long-term breaks or make other considerable changes in their career path. This way, their participation in the labour market might as a result be prolonged.

In our second research questions we investigated under which organizational and labour market conditions employers implement age-conscious personnel policies. We find that larger organizations invest more in employability policies and that these investments are even higher in organizations where the share of older workers is high as well. For older workers this means that more investment in their employability will take place if they are employed in larger organizations, and especially if they have a larger share of older colleagues. Additionally, the labour market dependency plays a role. In those organizations where scarcity in labour supply is expected for the future, more investment in employability is made. This can be interpreted in several ways. Either, employers invest in their older workers to keep them capable and employable for a longer time, or employers invest in them in order to detain them from leaving for a different

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organization. Also it is possible that employability measures are used to increase the attractiveness of the organization in general, and thus solicit new employees.

Our results show that both organizational and labour market characteristics affect employers' decisions whether to invest in their older workers' employability. This helps to understand that differences between organizations will foster differences in investments in age-conscious personnel policies. In order to assimilate the investments across organizations, policy measures should be taken. As it appears that for example especially larger organizations invest in their employees' employability, policy measures could increase the incentives for smaller firms to invest in their workers. Thinking about the form employability measures should have for older workers and ways to implement these in organizations is important due to the current changes that take place on the labour market. With the ageing of the population, the call for a higher labour market participation and delayed retirement, older employees will need to participate longer on the labour market. This can be achieved by implementing employability measures that help them to remain capable to work until a higher age.

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**Tables and Figures**

*Table 1: Descriptive statistics (N=749).*

	Mean	SD	Range
Age-conscious personnel policies	9.69	3.89	0 - 15
Percentage older workers	23.47	15.93	0 - 100
Size organization (log)	4.18	1.54	0 - 11.08
Average educational level	1.84	0.54	1 - 3
<i>Average tenure</i>			
0 - 5 years (ref.)	0.13		0/1
5 - 10 years	0.34		0/1
10 - 15 years	0.33		0/1
More than 15 years	0.20		0/1
Perception older workers	3.10	0.49	1.29 - 4.71
<i>Competition</i>			
Market with strong competition (ref.)	0.63		0/1
Market with some competition	0.28		0/1
Market with hardly any competition	0.07		0/1
No market, no competition	0.02		0/1
<i>Future scarcity expected</i>			
No scarcity (ref.)	0.42		0/1
Some positions	0.47		0/1
Many positions	0.10		0/1
<i>Sector of organization</i>			
Agriculture	0.03		0/1
Industry (ref.)	0.20		0/1
Construction	0.12		0/1
Commerce	0.15		0/1
Transport	0.07		0/1
Gastronomy	0.04		0/1
Information and Communication	0.03		0/1
Financial services	0.01		0/1
Commercial services	0.15		0/1
Education, public administration, government agency	0.02		0/1
Health and social work	0.08		0/1
Culture, sport, recreation	0.04		0/1
Else, service sector	0.05		0/1



Nothing ventured, nothing gained!

Table 2: Regression results for implementation of age-conscious personnel policies.

	Model 1		Model 2	
	Coef.	SE	Coef.	SE
Percentage older workers	0.001	(0.009)	-0.039*	(0.019)
Size organization (log)	0.713***	(0.094)	0.409*	(0.160)
Percentage older workers * size organization (log)			0.012*	(0.005)
Average educational level	0.537	(0.287)	0.554	(0.286)
<i>Average tenure</i> (ref: 0 – 5 yrs)				
5 - 10 years	1.746***	(0.442)	1.728***	(0.441)
10 - 15 years	1.500**	(0.464)	1.476**	(0.463)
More than 15 years	1.841***	(0.539)	1.812***	(0.538)
Perception older workers	0.986***	(0.269)	1.010***	(0.269)
<i>Competition (ref: high)</i>				
Market with some competition	0.012	(0.307)	-0.034	(0.307)
Market with hardly any competition	1.248*	(0.556)	1.177*	(0.556)
No market, no competition	0.225	(0.913)	0.124	(0.911)
<i>Future scarcity expected</i> (ref: no)				
Some positions	1.188***	(0.295)	1.188***	(0.294)
Many positions	1.614***	(0.458)	1.558***	(0.457)
<i>Sector of organization</i> (ref: Industry)				
Agriculture	0.412	(0.794)	0.351	(0.792)
Construction	0.075	(0.474)	0.094	(0.472)
Commerce	-0.373	(0.455)	-0.287	(0.455)
Transport	-0.695	(0.563)	-0.663	(0.562)
Gastronomy	-0.886	(0.771)	-0.849	(0.768)
Information and Communication	-2.300**	(0.855)	-2.259**	(0.852)
Financial services	-0.252	(1.304)	-0.164	(1.301)
Commercial services	-0.469	(0.479)	-0.408	(0.479)
Education, public administration, government agency	-2.307*	(1.088)	-2.484*	(1.087)
Health and social work	-0.683	(0.569)	-0.676	(0.568)
Culture, sport, recreation	-1.407	(0.745)	-1.412	(0.743)
Else, service sector	-1.158	(0.655)	-1.027	(0.656)
Constant	0.837	(1.141)	1.781	(1.207)
Observations	749		749	
Adjusted R <sup>2</sup>	0.190		0.195	

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

## Nothing ventured, nothing gained!

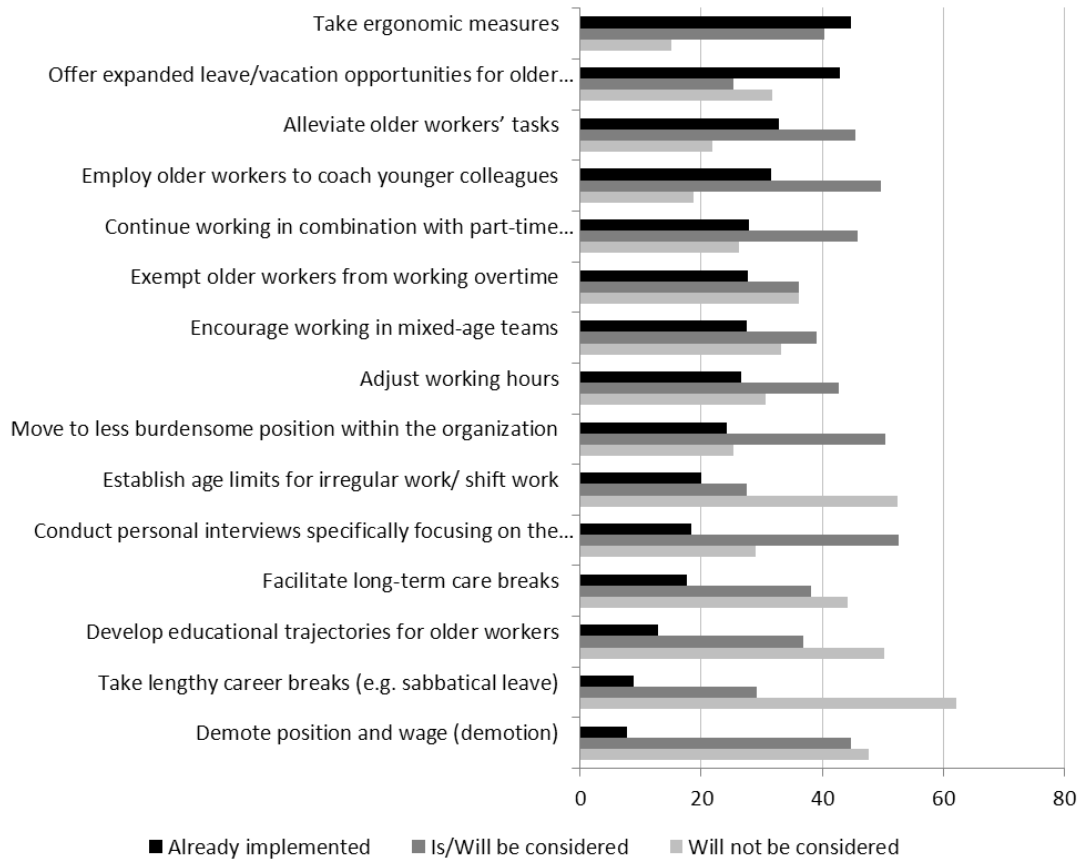


Figure 1: Age-conscious personnel policies ordered by share of organizations indicating to having 'already implemented' the policy measure.

# Nothing ventured, nothing gained!

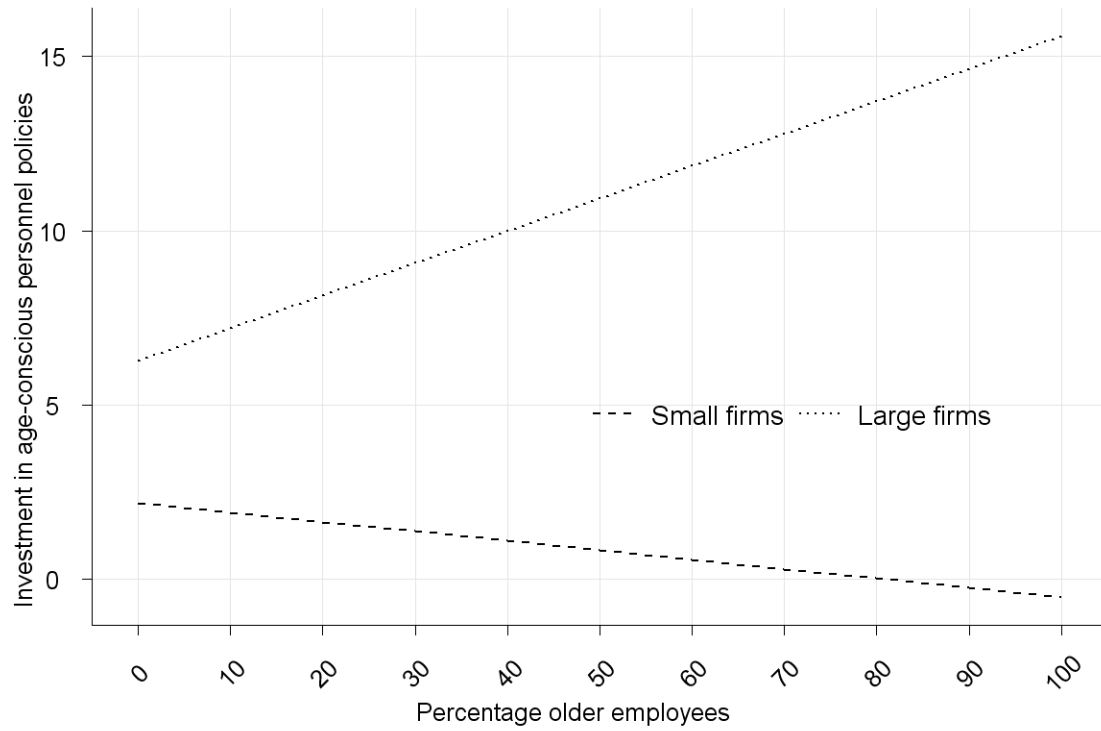


Figure 2: *Test of age-size interaction hypothesis.*

Nothing ventured, nothing gained!

**Appendix**

*Table A1: Fifteen organizational measures for age-conscious personnel policy.*

	<i>Already implemented</i>	<i>Is/will be considered</i>	<i>Will not be considered</i>
Continue working in combination with part-time retirement	27.9	45.9	26.2
Exempt older workers from working overtime	27.7	36.2	36.1
Develop educational trajectories for older workers	12.8	36.9	50.3
Offer expanded leave/vacation opportunities for older workers	42.9	25.3	31.8
Alleviate older workers' tasks	32.8	45.4	21.8
Conduct personal interviews specifically focusing on the last career stage	18.4	52.6	29.0
Adjust working hours	26.6	42.7	30.6
Facilitate long-term care breaks	17.7	38.1	44.2
Demote position and wage (demotion)	7.7	44.8	47.6
Take lengthy career breaks (e.g. sabbatical leave)	8.8	29.1	62.1
Take ergonomic measures	44.7	40.3	15.0
Establish age limits for irregular work/ shift work	20.0	27.5	52.5
Employ older workers to coach younger colleagues	31.5	49.7	18.8
Encourage working in mixed-age teams	27.5	39.1	33.3
Move to less burdensome position within the organization	24.2	50.4	25.4