

Labour market change

Assessment of public initiatives to combat labour market segmentation in the EU Member States

Case study: Employment maintenance subsidy for older workers (Spain)

<u>Labour market segmentation:</u>
Piloting a new quantitative and policy analysis

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Introduction

This report presents the in-depth analysis of the measure named 'Employment maintenance subsidy for older workers' (Subsidio para el mantenimiento del empleo de los trabajadores mayores). This policy was in place for the period 2006-2012 and targeted workers aged 60-64, already hired under an open-ended contract and with at least five years of seniority within a company. Its goal was to encourage the employment retention of this group of workers and to reduce their transitions towards non-employment. It was included in a set of measures adopted at the same time, aimed at improving job stability, limiting excessive turnover and curbing segmentation in the Spanish labour market. Older workers are a particularly vulnerable group as they may face specific challenges when attempting to reintegrate into the labour market, since they have lower reemployment probabilities than their younger counterparts. Thus, the policy measure had a 'preventive' stance, since it was geared to avoid the separation of older workers from their employers in the first place. This case study discusses the general characteristics and mechanisms of this policy measure and gives some assessment of their effectiveness and efficiency.

Applied methodological approach

The in-depth analysis is based on a search of formal evaluation reports and academic studies of the selected policy measure. Given the specificity of the scheme, only one evaluation study has been found (Font et al, 2017). It aims to evaluate whether the financial subsidy given to the employers contributes to maintaining elderly employees with at least five years of seniority within the same firm as compared to other similar elderly employees who are not eligible for the subsidy. Although it is the only one, the academic evaluation contains reliable conclusions. It uses quantitative data coming from a large administrative dataset referring to contracts and social security records and is also based on causal inference. As the research follows a quantitative approach only, such methodology falls short in explaining mechanisms. However, one important feature of this study is that it allows to examine not only the effectiveness but also the efficiency of the policy measure, since it performs a cost-benefit analysis of the measure. No additional studies or relevant monitoring data are available.

Two semi-structured interviews have been conducted in addition to the desk research. They have provided qualitative information on relevant features of the policy measure. The interview with the representative of the administrative staff allowed to fill the gaps concerning the design and delivery characteristics of the policy measure and to have information on the number of workers who benefited from the measure as well as data on the annual expenditure. The interview with the expert in the field of labour market segmentation (LMS) and evaluation served to deepen the knowledge on the intended and unintended effects of the measure.

Description of the initiative in focus

Type of initiative

The Employment maintenance subsidy for older workers (*Subsidio para el mantenimiento del empleo de los trabajadores mayores*) is an incentive-based measure directed to employers and is related to employment/job stability and flexicurity. It is deemed a demand-side measure, since it affects the job retention and layoff decisions of firms, trying to increase the permanence in employment of a sub-population of workers with high risks related to long-term joblessness, low reemployment rates as well as large losses in earnings after reemployment. This is especially the case for those with long tenure, in blue-collar jobs and when lacking a tertiary education. This type of measure aims to either prevent or reduce the numerical/external

adjustment of employment through natural attrition (dismissals of older workers who are close to the mandatory retirement age).

Rationale and objectives

Older workers (especially those who are low-educated and/or in low-skilled jobs) may be at risk of being expelled from the labour market. One of the reasons is skill-biased technical change (one of the main drivers of LMS) that, by changing the demand for skills, affects the substitutability between workers of different age cohorts. Related to this is the evolution of their perceived productivity with age and its relationship with wages. In general, empirical evidence points towards an inverse relationship between productivity and age after some peak is reached, and that the pay-productivity gap increases with age, although this wage-productivity gap seems to differ depending on the type of tasks the worker performs within the company. If such a trade-off exists, employment incentives to maintain older workers in the firm can be viewed as a way to compensate firms for the undergone productivity that mature age workers experience in a context of downwardly rigid wages.

Although a clear relationship between age and productivity is difficult to determine, employers may still have strong priors about the productivity of elderly workers. In addition, once the latter leave their long-term employer, even the highly productive ones will find it extremely hard to find alternative employment. In fact, long-term unemployment (namely, being out of work and having been actively seeking employment for at least one year) is much higher among older workers than among prime-age and young workers. If older workers lose their job, acquiring a new job becomes extremely difficult, and potential wage losses are large. In OECD countries, older workers are not only at a higher risk of displacement compared to prime-age workers but also their hiring rate is on average less than half the hiring rate of workers aged 25–49 (OECD, 2013, 2018). While this suggests some employers' reluctance to hire older workers, it may also be related to weak search incentives and inadequate support from public employment services.

Thus, extending ongoing employee-employer relationships may be easier than inducing employers to hire older workers. However, older workers may face difficulties in retaining their jobs for two main reasons. First, they may be perceived by their employers to be less able than younger workers to adapt to technological and organisational changes. This would be more acute for older workers in the lower segments of the labour market (for the less educated and those in low-skilled jobs). Second, their wages may rise faster than their productivity. Bad health and difficult working conditions, such as long working hours, may also play a role. In order to help older workers to keep their jobs and tackle LMS, in June 2006 the Spanish government introduced reductions on employers' social security contributions to increase companies' attachment to elderly employees. This measure was part of a broader package aimed at improving job stability, limiting successive and abusive temporary employment, reducing excessive turnover and encouraging open-ended contracts, especially for the target groups identified as suffering a disadvantage in the labour market, older workers among them. By affecting the incentives of employers to retain older workers, this policy measure was aimed to prevent the external adjustment of workers who are close to the legal retirement age and to limit their exit from employment into non-employment, reducing the risks of long-term unemployment and early withdrawal from the labour force. The ultimate goal was to encourage the permanence of employment within this population group. No specific quantitative targets were set in this respect.

Time frame

In June 2006 (Royal Decree-Law 5/2006, of 9 June 2006, later passed as Law 43/2006, of 29 December 2006), the government introduced reductions (modulated with the age of the worker) on the employer's social security contributions to increase the firm's attachment to workers aged 60-64. This measure was in force until July 2012. The Royal Decree-Law 20/2012 of 13 July 2012 eliminated the incentives to employment maintenance from August 2012 onwards.

This was done in the context of the labour reform of 2012, enacted by the new conservative government without any agreement or dialogue with the social partners, and the austerity plan launched to reduce the public deficit at that time, which implied important cuts in public spending in different areas of social and employment policies. According to the administrative staff of the Spanish Public Employment Service (PES), this measure was one of the first candidates to be eliminated due to its high cost: the average total spending for this policy measure was €705 million per year. In sum, the policy measure was in force for the period June 2006-July 2012.

Target group(s)

This policy was targeted at workers aged 60-64, already hired under a permanent contract, and with at least five years of seniority within their employer's company. According to the information provided by the administrative staff of the Spanish PES, the average number of beneficiaries of the measure was 360,000 people yearly during the period in which the measure was in force. The yearly average number of wage and salary workers in that age bracket (as evidenced by the Spanish Labour Force Survey, LFS) was about 500,000 during the period 2006-2012 (around 4% of total salaried employment). Given that most of them held an openended contract and had a relatively long seniority, this would imply that probably all companies employing workers with these characteristics (and potentially covered by this measure) benefited from it.

Delivery methods

The specific measures that were applied to achieve the overall objectives of the scheme consisted of incentives in the form of bonuses to employers' social security contributions. The social security reduction amounted to 50% of the payroll tax at the age of 60, and it increased by 10 percentage points (pp) per year to a maximum of 100% at the age of 64. The reduction affected what is called 'common contingencies' (namely non-work-related accidents and common illnesses; maternity/paternity; the cessation of work once the retirement age is reached; unemployment understood as the involuntary loss of employment; or the reduction of the working time of those who can and want to work and have family responsibilities), which account for a tax rate of 23.6% overall. The reductions lasted for the duration of the elderly employee's contract with the company. Firms that dismissed workers under subsidised contracts were excluded from the hiring and employment incentives established in the corresponding plan (approved in 2006) for a period of 12 months. The aforementioned exclusion affected a number of contracts equal to the number of terminations produced. The information provided by the PES implies an average spending of €2,000 per worker and year. To put it into context, the amount of financial incentives (reductions on employers' contributions) created by the Spanish government in 2006 to encourage the hiring of older workers (45 and over) was €1,200 yearly.

Key actors involved in implementation

This measure was agreed upon by the workers' and employers' representatives and accepted by the government under the so-called 'Agreement for the improvement of growth and employment' (*Acuerdo para la mejora del crecimiento y el empleo*, AMCE) in May 2006, later approved by the government and passed by the parliament in June 2006 and December 2006, respectively. The main actor in the implementation of this measure was the Spanish government through the Ministry of Labour, since they implemented changes in the employment subsidy, decided on the exact target group (regarding the age and seniority of eligible workers) and established the amount of the financial incentives that the employers would receive when retaining an elderly employee. In fact, it is the PES, as a self-governing body attached to the Ministry of Labour, which is in charge of administrating the subsidy, since it manages the unemployment protection system and develops labour market policies. The PES is composed of central services and a network of offices for on-site assistance that are distributed among all

Spanish provinces. Services offered by the PES are the following: information on employment opportunities tailored to the requester's profile; professional orientation; vocational training (education is offered for employed or unemployed people; specific programmes for those experiencing difficulties to find employment are also available); and unemployment benefits' claiming and managing assistance.

Administrative level of implementation

The measure was implemented at national level.

Sectoral focus

The measure was not targeted to any specific industry.

Funding arrangements

This measure was financed through the budget of the PES using the revenues coming from the employers' contributions to the unemployment benefits system. The employment incentives in the form of bonuses or reductions were entered as a transfer of funds from the PES to the social security system. This scheme can be considered an incentive measure for employment maintenance. Employment incentives can be divided between hiring incentives (which promote new hires through subsidies for a limited period of time) and employment maintenance incentives (the objective of which is to subsidise the retention of workers previously hired). The most prevalent employment incentive in Spain has been to offer cuts in employers' social security contributions. Employment incentives have long been the central pillar of active labour market policies (ALMPs) in Spain in terms of spending, amounting to about 0.3% of its Gross Domestic Product (GDP) since the mid-1990s (around €3 billion yearly in 2006–2007) and representing an average of around 50% of its total ALMP expenditure.

Linkages with/embeddedness into other measures (national and EU)

Promoting early retirement was a frequently used policy to keep open unemployment low in a phase of massive industrial restructuring in the 1970s and 1980s in many EU Member States. In some countries, explicit policies to encourage older workers to leave the labour force were put in place to make jobs available for young labour market entrants at the time. However, such schemes were gradually dismantled in many European countries over the last two decades. Thus, European countries have been redesigning their social security programmes and pension schemes to create incentives for workers to raise effective retirement ages and put forward the concept of active ageing (European Commission, 2004, 2012). From a worker's perspective, the generosity of the pension system might influence one's individual decision whether to depart early or not.

One key factor in this respect is the existence of an early retirement age, which is the earliest age at which individuals can claim social security retirement benefits. Low early retirement ages and relatively generous retirement benefits can create incentives for early exits from the labour force and low participation rates at older ages. Potential social security reforms consider increasing those ages in the belief that it would influence retirement and labour supply decisions (OECD, 2015). In the Spanish case, according to Law 27/2011, the age of 67 is foreseen as the age of access to retirement, while maintaining the same at 65 years old for those who have contributed to their pension for 38 years and six months. The implementation of the new age requirements is carried out progressively and gradually in a period of 15 years, also applied to complete the contribution periods that allow access to the pension from 65 years. Following this provision starting from 35 years and three months in 2013, a period of 38 years and six months of contribution will be required in the year 2027. In this context of delaying the legal age of retirement and not encouraging early retirement, the policy measure was aimed at contributing to increase employment stability and labour market attachment of older workers who were already of age to move towards inactivity.

Furthermore, due to their personal situation and/or health status, some older workers might not be able or want to work on a full-time basis. There are several flexible working-time arrangements and partial retirement options entitling older workers to reduce their working time. Several EU countries (in particular, the Nordic ones) have had gradual retirement schemes in place for older workers since the 1970s (Kantarci and van Soest, 2008). Gradual retirement arrangements also exist in Spain (similar to those of France and Germany), allowing workers aged 60 or 61 and older to reduce working time and receive a corresponding partial pension, conditional on having contributed a long enough time to the social security system (Belloni et al, 2006). The interaction of the policy measure with these arrangements allowed that, when a subsidised contract that had been arranged as a full-time became a part-time contract, or vice versa, the rebates/reductions were not lost but received according to the new contract, without this implying the start of any new bonus period. Neither did the loss of rebates/reductions occur in cases in which partially-retired workers further reduced their working hours and wages, as they were also modulated according to the number of hours worked.

In case of dismissal, payments to the Public Treasury are foreseen for companies employing more than 100 workers for collective dismissals which include workers over 50 years of age, when the percentage of older workers dismissed among the total dismissed workforce is higher than the proportion of older workers among the total staff of the company. A company then has to pay between 60% and 100% of the unemployment benefits received by the dismissed workers over 50 years (depending on the size and the yearly profits of the company, and the proportion of older workers dismissed). At least 50% of the amounts collected are expected to be used by the public employment service to pay for labour insertion services aimed at workers over 50 years of age.

In-depth analysis of the initiative in focus

This section presents an in-depth analysis of the context of the initiative, its details in terms of actions and target groups, mechanisms, and outcomes. These separate elements are represented in Figure 1.

Generic contexts External conditions that guide decisions on types of policy **Policy measure** measures, target groups; favour or hinder the mechanisms in Public policy decisions taken in a given context to place; influence the scope of policy impacts on LMS implement changes individually or as a package Employment maintenance subsidy for older - In the mid-2000s, ageing and its impact on public accounts (particularly on the pension system) In 2006, effective retirement age about three years lower In June 2006, reduction of the employers' than the statutory retirement age social security contributions to promote the - In 2006, employment and participation rates of older retention of mature age workers within firms workers lower than those of prime-age workers and to prevent these workers from being laid In 2006, a high share of older workers among the long-term unemployed In December 2012, cease of the measure In 2006, long-term unemployment of older workers higher than the average once they were jobless, and their Target group(s) hiring rates lower Characteristics of the groups that the initiative aimed to target Workers aged 60-64, already hired under an open-ended contract and with at least five years of seniority within their firm Practical effects produced by causal mechanisms triggered by a policy measure within given contexts Slightly increased number of wage and salary workers in the age group of 60-64 Relatively stable employment rates of the age group of Mechanisms

Ways in which one of the policy measure's

components (or a set of them) brings about change

through subjects' reasoning and reactions

Incentivising employers to retain elderly

employees and to avoid their dismissal by

Reducing employers' social security

by firms

worker, per year)

reducing the productivity-cost gap experienced

contributions: 50% of the payroll tax at the age

of 60, increasing 10pp per year to a maximum of

100% at the age of 64 (on average, €2,000 per

Figure 1: Visual presentation of the initiative

60-64 during the period when the subsity scheme was in place, although economic conditions worsened and net job

Positive effects concentrated exclusively on workers

of separating from the firm after the subsidies had been

with lower seniority and on jobs requiring lower skills
- For all age levels (from 60 to 64), increased probability

employees, particularly of those more at risk of being

Nevertheless, disproportionate cost of the measure as

discontinuance of the initiative generated a net increase of

€39.5 million in the social security fund in December 2012

- Overall, positive effects on retention of elderly

destruction occured during that time

Source: Compiled by the authors

suppressed

dismissed

Overview of the context

Skill-biased technical change affects the substitutability between workers of different age cohorts. Technical change affects the demand for skills and is one of the main drivers of LMS. Although many tasks can be more cheaply carried out by computers, the demand for higher levels of skills is increasing. Theoretically, unlike young workers, older workers – by being more experienced and better equipped with decision-making and social skills- may potentially benefit from technological and organisational innovations, which tend to be skill biased. On the other hand, innovation may hurt older workers by accelerating their skills obsolescence, with part of their competences becoming outdated, and by requiring more adaptability and flexibility. Learning new skills is costly and older workers may not invest in acquiring them if their remaining working life is too short to recoup the costs. By contrast, younger workers will more readily learn new skills because the period over which they can recover their costs is longer. Studies using US data indicate that the sector-specific rate of technological progress leads to more unemployment and the early retirement of older workers (Ahituv and Joseph, 2011). If firms faced higher labour costs following an increase in the retirement age (for example, because seniority decreases the profitability of older workers), they could replace older workers with younger workers. Economic theory suggests that any substitution of one type of worker with another type is governed by the similarity of the skills they possess. As a consequence, the

hiring and firing behaviour of firms in response to the labour costs of older workers could go in the direction of replacing older workers by young workers, if they are substitutes rather than complements to the companies. Therefore, when the cost of employing older workers increases significantly, the substitution of older with younger workers could be relevant. This substitutability might also depend on the country's institutional setting. In this regard, institutions such as the unemployment compensation system and the retirement system have to be taken into account because they can influence the behaviour of workers and employers, reducing the labour market participation of older workers.

This backdrop of LMS associated with technological change and the consequent potential replacement among workers of different ages, together with the ageing of the population and its impact on the public welfare system (particularly on the pension system), were key contextual aspects that had to be faced. The labour market attachment and employment retention of older workers to avoid their premature withdrawal from the labour force was the main aspect of concern for the government when enacting this scheme. In this context, several measures were approved to increase the participation of older workers and limit their withdrawal from the labour market.

During the 1990s and 2000s, many OECD countries reformed their public pension systems. Pension reforms have been on the agenda in all EU Member States during the 2000s (European Commission, 2008). These efforts often reversed trends toward early retirement and led to an increase in average retirement ages in many countries. In Spain, like in most countries, the effective retirement age was lower than the statutory one. In 2006, the latter was fixed at 65 for men and women, while the former was slightly below 62 (above 61 for men and 63 for women), according to OECD estimates. Although the effective retirement age increased moderately in the following decade, life expectancy rose faster than increases in the effective retirement age. This implies a longer time in retirement, raising concerns about the sustainability of public pensions and old-age poverty.

Despite a long period of economic expansion, strong GDP growth and intense net job creation, in 2006 the Spanish unemployment rate, which had fallen to 9% (the lowest rate over the last three decades), was already above the EU average. According to Spanish LFS figures, the unemployment rate of older workers in 2006 was lower than the overall rate (6% for those aged 55-59 and 5% for those aged 60-64), but this population group faced a serious problem of long-term unemployment (half of all the unemployed aged 55-64 had been looking for a job for at least one year). At the same time, their employment rates in 2006 were below the employment rates of prime-age workers: 54% for the 55-59 age group and 33% for the 60-64 age group, compared to 76% for the 25-54 age group. Inactivity was also a serious concern, since activity rates were low for older workers: 58% for those aged 55-59 and 35% for those aged 60-64, compared to 82% for people aged 25-54. These figures were quite similar to other European economies: according to Eurostat statistics the EU15 countries showed participation rates of 62.5% for the 55-59 age group and 30.6% for the 60-64 age group in 2006.

In this context, after months of negotiations between the government and the most representative social partners at the national level, an agreement was reached in May 2006 called 'Agreement for the improvement of growth and employment' (*Acuerdo para la mejora del crecimiento y el empleo*, AMCE), first embodied in the Royal Decree-Law (RDL) 5/2006, of 9 June 2006, and subsequently in Law 43/2006, of 29 December 2006. The reform was mainly aimed at improving job stability, limiting successive and abusive temporary employment and encouraging open-ended contracts, especially for the target groups identified as suffering a disadvantage in the labour market: female, young (16-29) and older (45 and over) workers. Hiring incentives to promote permanent employment of people from these groups were designed. Moreover, the government introduced employment incentives (reductions on the employer's social security contributions) directed to encourage the retention of older workers within firms. This policy was targeted at workers aged 60-64, hired under a permanent contract, and with at least five years of seniority within the firm. In addition, the Law 42/2006, of 28 December 2006 (2007 State Budget) confirmed these reductions in social security contributions

to support job maintenance and extended them for those workers aged 59 years, subject to a permanent contract, and with at least four years of seniority within the firm. This measure, which was agreed upon by the workers' and employers' representatives and accepted by the government, clearly implied an advantage for the older workers (who saw their chances of being fired reduced) and for the companies (who received a money transfer for keeping jobs that they probably would have kept anyway).

This initiative was launched when labour demand was strong (in 2006), but it was in effect during a period when economic and labour market conditions were substantially worse (2008-2012). If companies are performing well, older workers might be highly valued due to their specific knowledge and experience. This would result in higher job retention and increased employment rates for older workers. But this could also happen during recessions, if companies adjust to the changing economic conditions by dismissing/not renewing the contracts of younger workers (who hold temporary positions to a greater extent) and retain elderly employees, whose dismissal costs are higher. At the same time, the institutional setting can positively influence older workers' retention and integration if labour market policies effectively support this through specific measures and consider older workers as a priority group. This was the case when the AMCE was agreed and the employment incentive for older workers approved. This policy measure was in force for six and a half years without any alteration. In 2012, the Spanish labour market regulation underwent a major change. The RDL 20/2012 of 13 July 2012 eliminated the incentives to employment maintenance for the group of workers aged 60-64 from August 2012 onwards. This elimination resulted in an unanticipated exogenous upward shift in the labour costs for firms that employed these workers – amounting to a rise of between 10% and 22% in the labour costs per worker. However, the employment incentive for workers aged 59 was not eliminated: this measure survived the RDL 20/2012 until December 2012, which resulted in workers aged 59, under a permanent contract and with at least four years of seniority in the firm, remaining subsidised for five additional months as compared to the 60-64 age group.

Overview of the mechanisms

This policy measure has to be considered in relation to the stage of the life cycle of workers and to other types of policy that may influence the decisions of participation by workers and maintenance of employment by companies. Although many factors may potentially influence older workers' permanence and reintegration in employment (including labour demand, institutional settings, motivation, cultural values, health, skills and competences – see Eurofound, 2018), two dimensions are of special concern for employers: productivity and pay. Ageing may have different effects on workers' productivity. Older workers may be more reliable and have better skills than average workers. However, older workers may have higher health care costs for firms and may be less flexible in accepting new tasks and even les s appropriate for training. Establishing how age affects labour productivity is difficult. Nevertheless, age by itself is generally found to be a weak predictor of individual performance. While there exist wide differences between jobs and workers, older workers are typically regarded as more consistent, cautious, and slow but conscientious. Older workers have also fewer accidents and are less likely to quit, thus decreasing the hiring costs. A conventional wisdom (partly supported by empirical studies) seems to hold among most employers – and perhaps even among many employees – that the average labour productivity drops at some point around 50 years of age, although at the same time there is typically more dispersion in labour performance within age groups rather than across age groups. Empirical evidence is not conclusive about the relationship between age, productivity and wages. An extended review covering studies until the mid-1990s (Warr, 1998), mostly based on cross-sectional analysis and only a few longitudinal studies, shows no evidence that older workers perform worse than younger workers at their jobs. Subsequent studies, many using matched employees-employer datasets, arrive at opposing results, with some of them finding similar increases of productivity

and wages for older workers (Aubert, 2003) and others finding that productivity falls short of wage increases (Ilmakunnas and Maliranta, 2005; Dostie, 2011).

A widely observed phenomenon is that many firms employ older workers, but few firms hire older workers. There are two possible explanations: training and the productivity-wage relationship. First, older workers have firm-specific skills, knowledge and experience, and thus they are important in training functions within firms. Second, when back-loading of the compensation profile is used to motivate greater lifetime effort, workers have to remain in the firm to cash in. Moreover, firms using deferred compensation and internal labour markets will refrain from hiring older workers due to the steep wage-tenure profile. Daniel and Heywood (2007) show that modest financial incentives are not sufficient to modify the hiring practices particularly in firms that use back-loading and require specific human capital. Behaghel et al (2004) find instead evidence that financial incentives do influence the hiring behaviour of French firms: abolishing a firing tax for workers hired after the age of 50 increased the hiring of older workers. Thus, financial incentives have to be relatively generous in order to alter the behaviour of companies in relation to the hiring and/or retention of elderly employees. In addition, there are also cultural norms and established stereotypes that may hint at older workers as being less productive, less able to cope with the demands of the job, resistant to change and more difficult to train than their younger colleagues. Due to such stereotypes, age discrimination is frequently cited as one of the main labour market obstacles affecting older workers (Carlsson and Erikson, 2017). This evidence would suggest that it may be easier to incentivise the retention in employment of older workers and affect the decisions of companies when these workers are employed rather than to encourage their hiring once they become unemployed. In line with this idea, this policy measure was designed to favour the job stability of elderly employees by influencing the incentives of employers to keep these workers and to avoid their dismissal. The logic behind the introduction of reductions in the employer's social security contributions for mature age workers was to address age-based discrimination and stereotypes and the productivity-wage gap by offering relatively important financial aid. Previous studies suggest that in order to engage older people, it is important to improve the attitudes of employers towards older workers (RAKE, 2012) and to provide practical help to employers, notably small and medium-sized firms, when employing older workers (Vogel, 2013). For that reason, the subsidies were relatively generous and increased with the employee's age in order to influence employers' decisions related to job retention and working conditions, thus implicitly recognising that differentiation (at least in terms of age) was relevant within the group of older workers. Thus, the scheme specified that a company who employed a worker aged 60 and older with at least five years of seniority was entitled to a 50% reduction in the employer's social security contribution, which increased by 10 percentage points yearly. This implied that, for example, in the case of a worker who turned 61 but had only five years of tenure, the firm was entitled to a 50% reduction, while, in the case of a worker of the same age with six years of tenure or more, the firm was entitled to a 60% reduction (after benefiting from a 50% reduction the previous year), and so forth. No additional differentiation in terms of percentages or amounts was established within the group of older workers by considering other dimensions (such as pay, skills levels, occupations, sectors, or health status). According to the information provided by the PES, the yearly subsidy received by employers was €2,000 per worker, on average. This can be compared to the financial incentives (also featuring reductions on employer's contributions) of €1,200 yearly for hiring older workers that were put in place in 2006. Therefore, the subsidy to encourage the stability of older workers' employment was

As indirect evidence that the measure succeeded in altering the behaviour of employers, the Spanish LFS figures show that the number of wage and salary workers in the age group 60-64 increased slightly (from about 490,000 in 2007 to around 520,000 in 2011) and the employment rate remained more or less constant (around 33%) during the period when the subsidy was in place. And this occurred when economic conditions worsened substantially (after the financial and economic shock of 2008) and the destruction of employment was massive (especially in

relatively generous, implying savings on labour costs of 10–22%.

2008-2009). However, the number of employed workers and the employment rate diminished just after the elimination of the subsidy (during the second half of 2012 and in 2013). Thus, it seems that the employment maintenance subsidy helped to compensate the possible productivity-wage differential of older workers and influenced the decisions on dismissal of companies and permanence in the employment of workers.

Overview of results and impacts

According to Spanish LFS figures, the yearly average number of wage and salary workers aged 60-64 was about 500,000 during the period 2006-2012. In 2008, 63% were men; 66% had mandatory secondary school or less; 90% held an open-ended contract; 38% worked in high-skilled white-collar occupations while 41% did it in manual jobs; and 9% worked in agriculture, 16% in manufacturing, 10% in construction, 27% in 'traditional' services (commerce, hospitality, transport, and communications), 9% in 'advanced' services (financial, real estate, professional and technical, and administrative activities), 21% in 'collective' services (public administration, education, health, and social services), and nearly 9% in 'other' services (artistic and entertainment activities, for households, and other services). This would imply that probably all companies employing workers with these characteristics and potentially covered by this measure benefited from it. When compared to the 'average' employee, a worker aged 60-64 is more likely to be male, less-educated and working with a permanent contract, in a high-skilled white-collar job and in agriculture, collective services or other services.

This measure did not aim to increase hires but to maintain a defined group of workers (at risk of unemployment and/or leaving the labour force) in employment. While recruitment incentives have been widely studied, much less is known about incentives that seek to maintain workers in companies. The desk research in this study could identify only one study (Font et al, 2017) that evaluated the effect that this particular subsidy for employment maintenance have on the probability of mature age workers to stay in the same firm for Spain. This study employs a quasi-experimental design and a difference-in-differences strategy based on data from the socalled 'Continuous Sample of Working Lives' (Muestra Continua de Vidas Laborales, MCVL), a dataset that contains longitudinal information on a representative sample of the population with any type of relationship with social security. The authors estimate the probability of losing their jobs between August and the end of the year for older workers who have kept their job as far as July 2012. They regard the elimination of the subsidies to employment maintenance in July 2012 as the treatment, and workers aged 60 and older subject to a permanent contract and with at least five years of seniority within the firm as the treated group. To infer the counterfactual outcome, they exploit the continuation of the subsidies to employment maintenance for workers 59 years old until December 2012; hence their control group consists of those workers aged 59 under a permanent contract and with at least five years of seniority in the firm.

Their results indicate that the difference in the probability of separating from the firm in the treated group (60 to 64 years old) versus the control group (59 years old) rose after the subsidies were suppressed: from 6.7% to 8.5% (a 1.8 pp increase). Furthermore, although this increase happened for all age levels (in the range of 1-2 pp for workers aged 60 to 63), it was higher and statistically significant for workers aged 64 (of the order of a 4.6 pp increase). These positive effects of the subsidy on employment maintenance of elderly employees were large in relative terms, with those aged 64 being the group that experienced the largest improvement: the probability of job loss increased after the discontinuation of the measure from about 5.6% to between 7-7.8% for those aged 60-62, from 9.3% to 11 for those aged 63 and from 10.5% to 15.1% for those aged 64. Additional analyses are carried out by tenure (5-9 years, 10-17 years, and 18 or more) and skills level (low and high). The significant positive effects were concentrated exclusively on workers with lower seniority and jobs with lower skills requirements. On the one hand, the probability of losing the job increased by 2.7 pp after the subsidy was removed for workers with between 5 and 9 years of seniority and by 1.9 pp for workers with between 10 and 17 years of seniority, while it had no significant effect for the

employees with a seniority in the firm greater than 18 years. On the other hand, after the subsidy removal the probability of separating from the firm for a worker in a low-skilled job increased by 2 pp, while the end of subsides did not have any statistical significant effect for a worker in a high-skilled job.

These results support the argument that incentives to employment maintenance for mature age workers were positively associated with a higher retention rate while the subsidy was in place. When the incentives were eliminated, those workers that had been previously entitled to a reduction of their social security contributions saw the probability of losing their job grow. The result that the end of incentives to employment maintenance negatively affected the probability of staying in the firm of those workers with relatively less seniority is the expected outcome, as seniority is proportional to the worker's dismissal cost (and workers with less seniority in the firm have also less firm-specific human capital). Furthermore, this finding suggests that dismissal costs were already acting as an incentive to maintain workers in the firm; consequently, the end of subsidies to mature age workers with high seniority and high dismissal costs did not have a large impact on the retention rate. In addition, the diverging results by skills level would support the argument that workers' productivity evolves differently with age according to differences in the type of tasks that different jobs demand. Specifically, productivity does not decrease for high-skilled workers in high-skilled jobs, but it does for workers involved in more manual tasks in low-skilled jobs. If this is the case, the employment maintenance subsidy would have contributed to curb LMS in terms of more job stability and fewer transitions towards non-employment for those workers more at risk of being permanently excluded from the labour market.

Regarding the macroeconomic outcomes, no studies have examined the potential aggregate impacts of this measure. However, one important aggregate dimension of the scheme relates to its impact on the public accounts. Font et al (2017) performed a cost-benefit analysis to document whether the goal of the measure was achieved at a disproportionate cost or not, generating social security efficiency gains or losses. They only use the month of December 2012 to draw comparisons between the two states of the world (with and without the subsidy) because they consider that five months is a long enough lapse of time for companies to decide whether to maintain or fire their previously subsidised employees. Their results point out that eliminating the subsidies to employment maintenance generated a net increase of €9.5 million in the social security funds in the month of December 2012 alone, detailed as follows. The end of incentives translated to a loss of €3.1 million in total wages, which in turn reduced by €1.1 million the income from social security contributions. The mild but significant increase in the probability of mature age workers separating from their job resulted in a greater expense on unemployment insurance benefits, of the order of an additional €1.1 million. On the other hand, the end of the subsidies resulted in direct savings of €41.7 million for the social security. In other words, the €41.7 million investment to promote the job maintenance of older workers solely achieved an increase of €3.1 million in labour wages, €1.1 million in social security contributions, and a decrease of €1.1 million in unemployment benefits. This low return on investment shows the high inefficiency of the policy to achieve the foreseen results and it evidences the generation of an important deadweight that accounted for 87.3% of the subsidies. This means that the subsidies only managed to keep employment for a small subset of people. After removal, these people started earning unemployment benefits, which are greater than the cost of the subsidy for a given individual. But since they are very few, the savings coming from not paying the subsidy to the whole treated group more than compensates the extra unemployment benefits earned by the few who lost their jobs.

Conclusions and policy pointers

The employment maintenance subsidy for older workers aims to affect one of the features of segmentation, namely to avoid the transition of workers from the upper segments towards the lower segments and from these towards non-employment. As low-skilled older workers are at risk of being expelled from the labour market, the implementation of this scheme is relevant. The subsidy was targeted at employees with relatively high seniority in their company – for whose dismissal employers' decision was greatly influenced by the high severance payment this group of workers is entitled to. According to the evaluation evidence used in this case study (Font et al, 2017), since dismissal costs were already acting as an incentive for firms to keep workers, the increase in the labour costs after the end of incentives to employment maintenance had a weak impact on the probability of workers separating from the firm. As a matter of fact, a worker's seniority already played a fundamental role in the worker's continuation in the firm. Employees with relatively lower seniority, and hence with smaller dismissal costs, saw their probability of separating from the job increase significantly, while this probability remained unchanged for those employees with a relatively higher tenure in the firm. Moreover, the end of cuts in the employer's social security contributions affected the worker's productivity-cost gap. The probability for low-skilled workers to lose their job significantly increased after the subsidy was eliminated, while this probability remained unaffected for high-skilled workers. This finding implies that, while low-skilled workers were benefiting from the policy, firms employing high-skilled workers were simply cashing in the subsidies to employment maintenance. These diverging results by skills level (and tenure) suggest that the policy measure would have contributed to fight LMS by bringing about more job stability and fewer transitions towards non-employment for those workers more at risk of being separated from the labour market.

Thus, the policy measure can be effective for job retention of older workers and to reduce LMS affecting less educated workers and those working in jobs with lower skills requirements, in combination with employment protection legislation, which is the most commonly used instrument to limit economic dismissals by increasing employer-borne costs associated with redundancy and discouraging layoffs (OECD, 2018). It can work in good times as well as in bad times: it seems that it was effective in affecting the behaviour of employers to retain elderly employees and not worsen their working conditions even during recessive years (2008-2011).

However, one important weakness of this measure is the lack of greater focus on more specific groups of workers: it did not establish different percentages or amounts of the subsidy within the group of older workers despite important differences as regard skills levels, occupations and sectors, that might affect their individual performance. This lack of differentiation made that, in terms of cost-benefit analysis, the maintenance of employment created unjustifiable public costs. The elevated deadweight originated from the policy inefficiency advises against subsides to employment maintenance of high-tenured and high-skilled older workers. As the target group is heterogeneous, in order for the policy to be more effective and exhibit less deadweight, it would have been necessary to use mechanisms to select workers more at risk of dismissal or withdrawal from the labour market within these groups. Therefore, subsidising workers' employment maintenance is most likely to carry a high deadweight effect, and desirability of such policies should be questioned if they are not more targeted.

In terms of transferability, thus, one important feature that should be borne in mind is that differentiation among the group of older workers is relevant and, if anything, incentives to employment maintenance should be targeted at workers with low seniority in their company, who present the lowest dismissal cost and the highest turnover rate. These incentives should also be targeted at workers in low-skilled jobs, whose productivity is more likely to be below the wages negotiated in collective agreements, and who face the most negative effects of LMS. Non-targeted schemes can be very expensive in terms of cost-benefit analysis, generating large social security efficiency losses.

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List of abbreviations

ALMP	Active Laboration	our Market	Policy
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GDP Gross Domestic Product

LFS Labour Force Survey

LMS Labour Market Segmentation

PES Public Employment Service

RDL Royal Decree-Law

Table 1: CMO configurations of the 'Employment maintenance subsidy for older workers'

Initiative	In June 2006, the government introduced reductions on the employer's social security contributions to promote the retention of mature age workers within firms and prevent them from being laid-off.
Target group characteristics	Workers aged 60-64, already hired under an open-ended contract, and with at least five years of seniority within the firm.
Contextual features	 Ageing and its impact on public accounts (particularly on the pension system), together with the low participation and employment rates of older workers, were issues that concerned the Spanish government in the mid-2000s. In 2006, the effective retirement age was about three years below the statutory retirement age. Employment and participation rates of older workers were low as compared to prime-age workers and similar to the average European country. Despite the decline in the unemployment rate, older workers suffered a high share of long-term unemployment (about half of all the unemployed aged 55–64 had been looking for a job for at least one year). The long-term unemployment of this sub-population of workers was higher than the average once they were jobless, and their higher rates lower.
	average once they were jobless, and their hiring rates lower.
Mechanisms	 Incentives in the form of reductions of the employer's social security contributions: 50% of the payroll tax at the age of 60, increasing 10 pp per year to a maximum of 100% at the age of 64. The amount was, on average, €2,000 per worker and year. This employment subsidy was designed to affect the incentives of employers to retain elderly employees by reducing their productivity-cost gap, thus encouraging firms to maintain them in employment and avoid their dismissal. For this reason, the subsidies were relatively generous and increased with the employee's age. The measure succeeded in altering the behaviour of employers: the number of wage and salary workers in the age group 60-64 increased slightly and the employment rate remained quite constant during the period when the subsidy was in place. This occurred when economic conditions worsened and there was net job destruction.
Outcomes	 The probability of separating from the firm after the subsidies were suppressed increased for all age levels (from 60 to 64), with workers aged 64 being the age group that experienced the highest increase. The significant positive effects were concentrated exclusively on workers with lower seniority and jobs with lower skills requirements. These results can be interpreted as positive effects of the subsidy on employment maintenance of elderly employees. The diverging results by skills level (and tenure) suggest that the policy measure would have contributed to tackle LMS by generating more job stability and fewer transitions towards non-employment for those workers more at risk of being separated from the labour market. Cost-benefit analysis: eliminating the subsidies to employment maintenance generated a net increase of €39.5 million in the social security funds in the month of December 2012 alone. Thus, the goal of the measure was achieved at a disproportionate cost.

Table 2. Evaluation studies of the 'Employment maintenance subsidy for older workers'

Evaluation study	Period	Data source	Method	Outcomes	Author's assessment of the quality of the evidence
Font et al (2017)	January- December 2012	'Continuous sample of working lives' (Muestra continua de vidas laborales, MCVL): administrative and longitudinal data based on social security employment records	Difference-in-differences	 The probability of separating from the firm after the subsidies were suppressed increased for all age levels (from 60 to 64), with workers aged 64 being the collective that experienced the highest increase. This can be interpreted as small positive effects of the subsidy on employment maintenance of elderly employees, especially for those closer to the legal retirement age. Cost-benefit analysis: eliminating the subsidies to employment maintenance generated a net increase of €39.5 million in the social security funds in the month of December 2012 alone. Thus, the goal of the measure was achieved at a disproportionate cost. 	The study defines treatment and control groups, and controls for workers' personal characteristics and cyclical factors that can influence the relationship between the eligibility for the employment subsidy and the labour market outcomes for workers. The evidence produced on the basis of a counterfactual analysis is strong. The evaluation is relevant for the purposes of this study because it considers the effectiveness of the measure (in terms of retention of workers). As analyses are carried out distinguishing by tenure and skills level, they provide the basis for more specific LMS discussions. The evaluation also deals with the analysis of efficiency (providing a cost-benefit estimate).

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