

Exploring the Determinants of Early Retirement in Spain

Carlo Pizzinelli, Rodrigo Barrela

SIP/2025/078

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on May 16, 2025. This paper is also published separately as IMF Country Report No 25/122.

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Prepared by Carlo Pizzinelli, Rodrigo Barrela*

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ABSTRACT: Increased longevity and population aging pose growing fiscal challenges for Spain, which can be mitigated by encouraging greater labor force participation among older workers. Over the past decade, increases in both the minimum and standard pensionable age have led to longer average careers, resulting in significant aggregate employment rate gains. However, a considerable proportion of workers still retire early or exit the labor force several years before reaching retirement age. Therefore, policy action across a broader range of areas is needed to foster further employment growth, by addressing critical issues and constraints to labor force participation among workers aged 55 and above. These include deteriorating health conditions, the need for flexibility in work arrangements, other household-related time commitments—such as caregiving for family members, maintaining in-demand skills, and the financial (dis)incentives embedded in unemployment support programs.

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* Rodrigo Barrela (Nova School of Business and Economics) contributed to the SIP during his PhD internship at the IMF in the summer of 2024. The authors would like to thank Romain Duval, Ana Lariau, Ippei Shibata, Nina Biljanovska, and participants of the EUR Research Seminar for useful comments and suggestions.

SELECTED ISSUES PAPERS

Exploring the Determinants of Early Retirement in Spain

Spain

Prepared by Carlo Pizzinelli, Rodrigo Barrela¹

¹ Rodrigo Barrela (Nova School of Business and Economics) contributed to the SIP during his PhD internship at the IMF in the summer of 2024. The authors would like to thank Romain Duval, Ana Lariau, Ippei Shibata, Nina Biljanovska, and participants of the EUR Research Seminar for useful comments and suggestions.

EXPLORING THE DETERMINANTS OF EARLY RETIREMENT

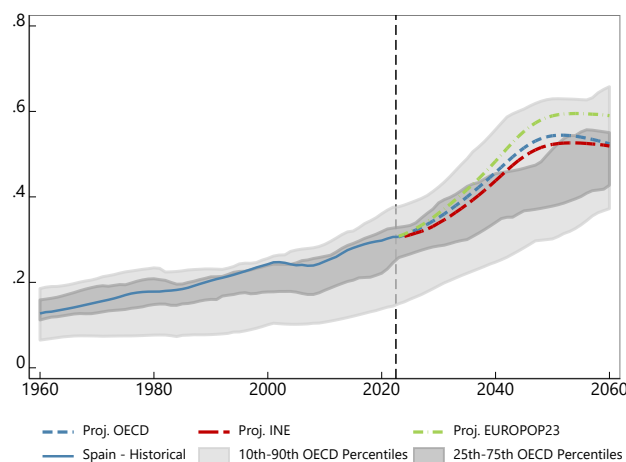
Increased longevity and population aging pose growing fiscal challenges for Spain, which can be mitigated by encouraging greater labor force participation among older workers. Over the past decade, increases in both the minimum and standard pensionable age have led to longer average careers, resulting in significant aggregate employment rate gains. However, a considerable proportion of workers still retire early or exit the labor force several years before reaching retirement age. Therefore, policy action across a broader range of areas is needed to foster further employment growth, by addressing critical issues and constraints to labor force participation among workers aged 55 and above. These include deteriorating health conditions, the need for flexibility in work arrangements, other household-related time commitments—such as caregiving for family members, maintaining in-demand skills, and the financial (dis)incentives embedded in unemployment support programs.

A. Introduction

1. Over the coming decades, Spain faces mounting fiscal pressures driven by the ongoing aging trend of its population.

The old-age dependency ratio—defined as the ratio of the population aged 65 and above to the population aged 15–64—grew steadily since the early 2000s, reaching around 30 percent in 2023, and is expected to rise to above 50 percent in 2050 according to multiple sources (Figure 1). The higher number of pensioners for each worker typically associated with a rising dependency ratio entails lower social security contributions to fund the pay-as-you-go pension system and fewer revenues from general taxation to support other aging-related spending. At the same time, as longevity stems from broad-based improvements in health, it inherently reflects greater potential for older individuals to actively contribute to many aspects of society, including economic activities. This implies that the ratio of pensioners to workers need not rise as much as the old-age dependency ratio.

Figure 1. Old-Age Dependency Ratio
(ratio)



Sources: OECD, INE, Eurostat, and IMF staff calculations.

Note: The old-age dependency ratio is defined as the ratio of the population aged 65 and above to the population aged 15–64.

2. To ease some of these fiscal challenges, extending working lives through pension reforms has proven to be effective. Past reforms in Spain progressively raised the minimum and standard pensionable ages, with the latter set to gradually reach 67 by 2028. As a result, the labor force participation rate of older workers has grown steadily over the past decade (Figure 2). Moreover, the 2021–2023 reforms strengthened financial incentives for delayed retirement. Early evidence suggests that these measures are successfully nudging more and more workers to postpone their retirement age. According to data from the Ministry of Inclusion, Social Security, and Migration (MISSMI), the share of delayed retirements among new recipients of old-age pensions has risen from 4.9 to 9.3 percent between 2020 and 2024. Meanwhile, the share of early retirements with reduced benefits among new pensioners has fallen from 27.8 percent in 2020 to 20.2 percent in 2024 over the same period.

3. Going forward, however, other complementary policy actions may be needed to keep extending working lives. Older workers' lives are increasingly complex, and their labor market decisions are not dictated just by financial concerns but also by health, family situations, the ability to keep their human capital up-to-date and to master new in-demand skills. These factors are likely driving many workers to leave employment earlier than originally planned and well ahead of the standard retirement age. As of 2023, the effective average age of exit from the labor force in Spain was estimated at 62 by the OECD (2023) and at 64 by the European Commission (2024) Aging Report, which is below the average age at which new pensioners begin to receive a state pension—estimated to be just above 65 years by MISSMI—and the statutory retirement age—which lied between 65 years and 66 and 4 months, depending on contribution history.^{1,2} As individuals continue to work until older ages, these concerns can become binding constraints in their decisions to remain active in the labor force, overriding financial considerations related to pension benefits. This underlines the importance of also improving health outcomes, increasing work flexibility, revising unemployment support schemes, and supporting families with caring needs to help workers stay employed for longer or return to the labor force after having exited.

4. This paper explores older workers' pathways to retirement and their drivers. The analysis builds on the recent study by Barrela et al. (2025), which takes stock of developments in the activity rate of workers aged 55–69 in Spain since COVID-19 and identifies several areas of policy relevance: health, family care needs, unemployment benefit schemes, and flexible working arrangements. To this end, the paper uses a Multinomial Logit (M-Logit) model to examine which personal characteristics and socioeconomic factors are associated with transitions across different labor market states for older workers. It first considers moves out of employment into a set of alternative states: retirement, unemployment, and inactivity due to health, family caring responsibilities or other reasons. It then examines transitions from joblessness either back into employment or into retirement, with the aim of uncovering the drivers of alternative pathways to

¹ The OECD's 2023 Pensions at a Glance report (OECD, 2023) estimates that the effective age of labor market exit in Spain in 2022 was 62 for men and 61.8 for women.

² Moreover, the age of first pension includes early retirees, which were approximately 23 percent of new retirees in 2023.

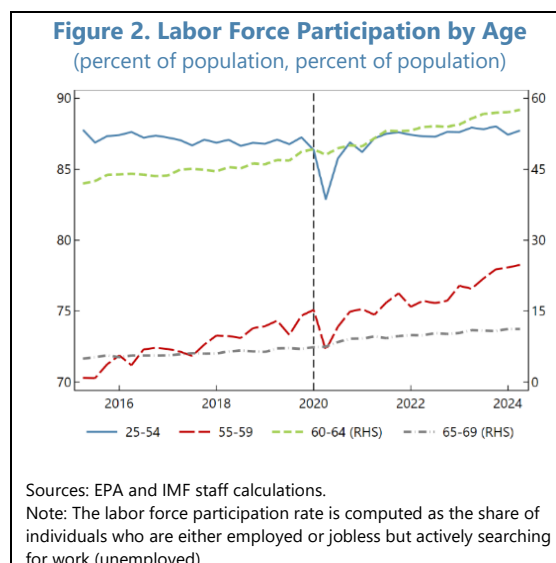
retirement. The results of the M-Logit model subsequently motivate an extended discussion, supported by descriptive evidence, of key themes driving inactivity and early retirement in Spain.

5. Two data sources are employed for the analysis: the Encuesta de Población Activa (EPA) and the Encuesta de Condiciones de Vida (ECV). The EPA, a quarterly survey, serves as the country's primary source of labor market statistics. It has a longitudinal structure that allows following workers over six quarters. The ECV is an annual household survey covering employment, other income sources, health, housing, and broader socio-economic wellbeing issues. It also has a panel structure that follows workers for at most four consecutive years. The ECV is used for the M-Logit model given the broader range of topics it covers, allowing for a more comprehensive study of drivers of transitions across labor market states. Throughout the analysis, the term "older workers" is used to refer to individuals aged 55-69, while "prime-age" workers comprise those aged 25-54.

6. The analysis highlights the diverse set of factors playing into older workers' labor supply decisions, calling for a broad range of policies to support longer careers, in addition to further pension reforms. Greater flexibility in work arrangements, particularly the ability to choose the number of hours worked, is important to strengthen worker retention and reduce early retirement. Addressing the rising constraint posed by adverse health on labor supply requires not only improving overall health outcomes but also the ability of workers with some health limitations to participate in the labor market or to return to employment after a prolonged leave. Reducing the constraints of family caring duties, which are heavily skewed towards women, hinges on fiscal incentives for caring expenses, increasing flexibility in work arrangements, and training programs for those who have remained away from the labor force for long. Finally, while the design of unemployment assistance should be further strengthened to provide stronger incentives for older job seekers to return to work, other structural factors that likely underpin their low job finding prospects should also be addressed. Doing so requires improving re-skilling programs and other active labor market policies (ALMPs).

B. Alternative Pathways to Retirement

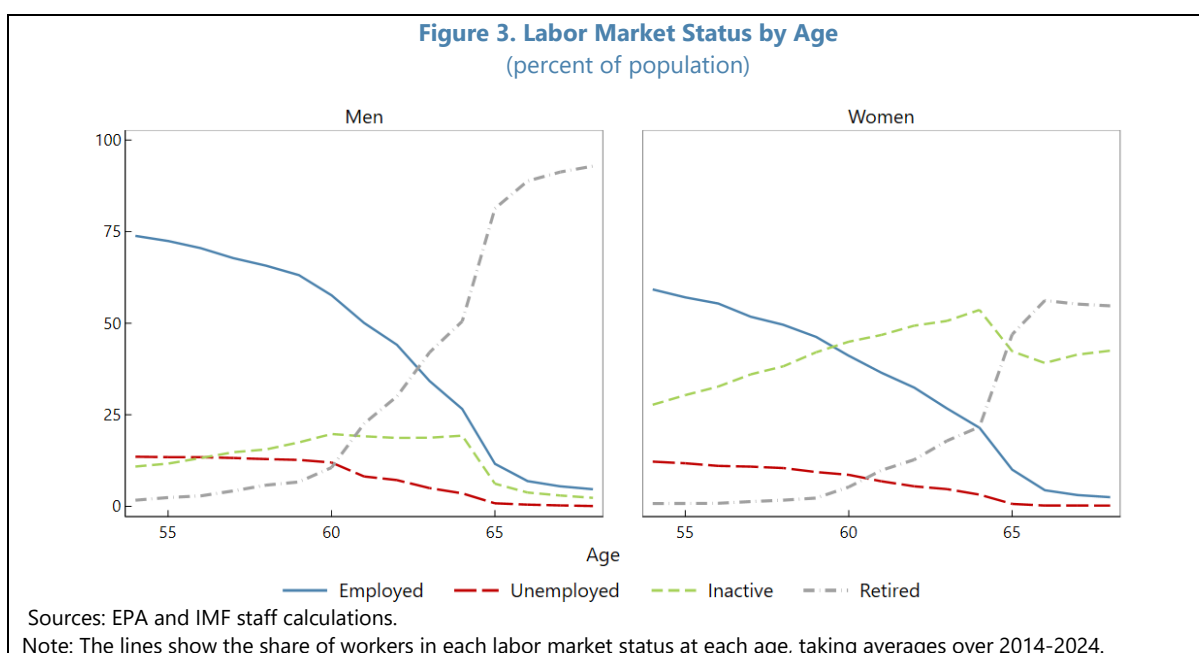
7. The labor force participation and employment rates of older workers in Spain have grown steadily over the last ten years while remaining stable for prime-age workers (Figure 2). The rise in the activity rate of older workers has been broad-based across both genders and education levels, but it has been most pronounced for women and those without a university (or post-secondary) degree (Annex Figure 1). While increases in the minimum and standard pensionable ages have been major determinants of increased participation, secular improvements in health and working conditions (such as the decline in physically intensive manual jobs) also likely played a role. On the back of



higher participation, the employment rate of workers aged 55-69 and above has grown by more than 14 percentage points over the past decade, from 32 percent in 2014 to above 46 percent in 2024. This rise had a material aggregate impact on the economy, as it contributed to an increase in the overall employment rate of approximately 4 percentage points since 2014.

8. Despite such improvements, a significant share of workers still leave employment several years prior to the standard pensionable age, either becoming inactive or retiring early.

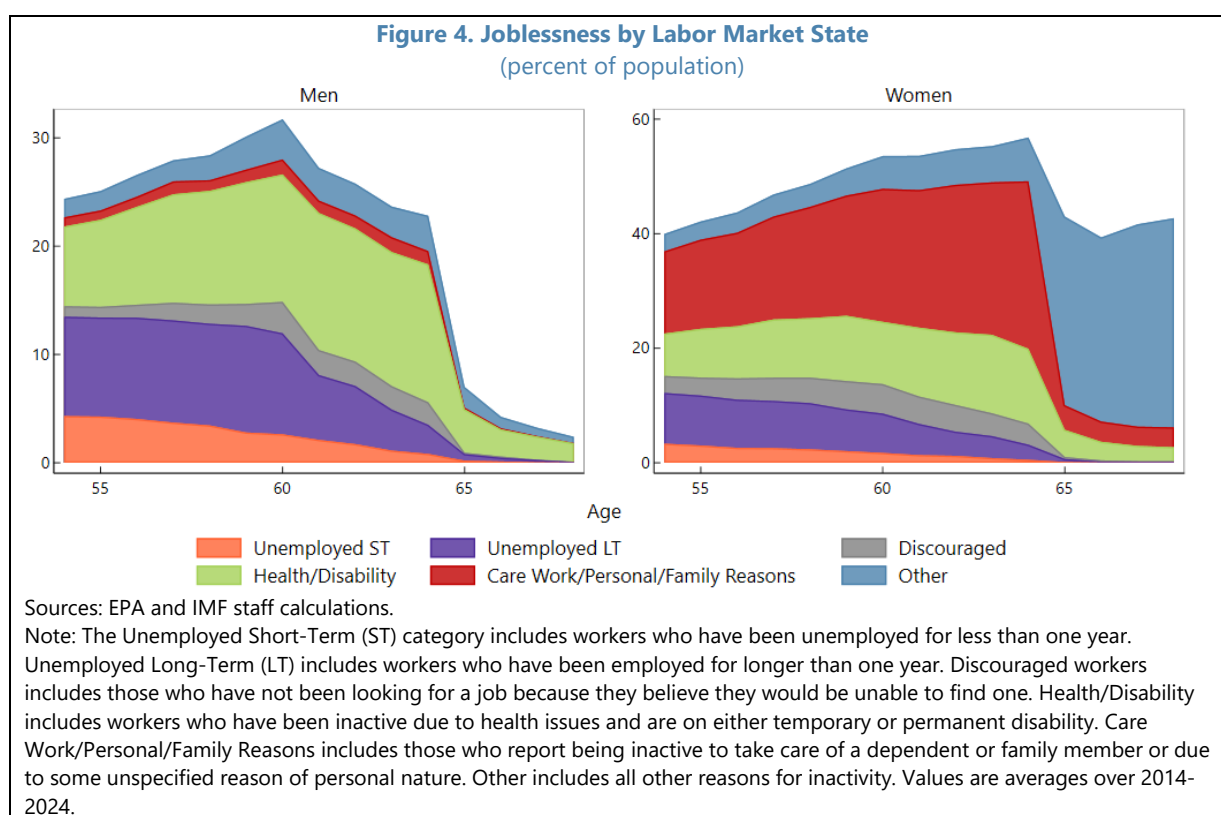
As Figure 3 shows, for both men and women the employment rate starts declining already in the mid-50's, approximately 10 years before full pension benefits are accrued for most workers. This fall is initially mirrored by a rise in inactivity, which is particularly steep for women, followed by a rise in self-reported retirement after age 60.³ Meanwhile, unemployment also declines mildly after age 55, as individuals who are out of a job become less likely to actively look for work. This pattern suggests that the decline in employment starting in the mid-50's is not just driven by retirement but also by a set of other channels that, can be defined as "alternative pathways" to retirement (e.g., Duval, 2003; Rogerson and Wallenius, 2022). Using data from 2022-2024, the rise in non-retirement inactivity after age 50 reduces by approximately 6 percentage points the employment rate of male workers aged 51-64 compared to 50-year-old ones, and by 11 percentage points for the employment rate of females.⁴



³ For the remainder of the paper, "inactivity" will be used to refer to all states of inactivity other than retirement, unless otherwise specified. "Non-employment" is used to define inactivity or unemployment.

⁴ This is computed by creating a counterfactual employment rate for each age between 51 and 64 using 2022-2024 average values. Specifically for each age, the change in the share of non-retired inactive population relative to those aged 50 is first computed. Then this share of workers is reassigned to employment and unemployment, using the age-specific unemployment rate to determine the shares of employed and unemployed workers. Finally, the employment rate of the 51-64 year-olds is computed as the average of the age-specific rates weighted by the age groups' shares in the total population.

9. The evolving states of non-employment among the 55-65 year-olds are indicative of the multiplicity of factors that drive older workers' retirement pathways. Figure 4 breaks down the share of non-retired jobless workers at each age by stated reason for inactivity or duration of unemployment. Among both men and women, inactivity related to health and disability accounts for a large part of the rise in joblessness prior to retirement. Moreover, as the total share of unemployed falls with age, the composition of its remaining pool shifts towards the long-term unemployed (those who have not worked for more than one year), reflecting significantly reduced job prospects. Finally, among women, there is a significant increase in inactivity in the 50's and early 60's due to caring for a family member or for personal reasons. This state is then sharply replaced by the "other inactive" state after age 65. This latter state, which is uncommon among males, mostly captures those women who are permanently out of the labor force but might not consider themselves retired because they do not receive a contributory old-age pension.



10. A corollary to the importance of non-employment among older workers is that a significant share of transitions into retirement do not occur directly from employment but instead from inactivity and unemployment. Using the ECV, Figure 5 shows that less than 50 percent of new retirees were employed a year prior to retirement. A large share of men, and to a lower extent women, instead transition to retirement from unemployment, suggesting that job loss at older ages is very likely to ultimately turn into a permanent withdrawal from the labor market. Inactivity due to sickness and disability also accounts for 25 percent of new retirees among men and 15 percent among women. Finally, among women, approximately one third of

the newly retired were previously inactive to care for a family member or for other family and/or personal reasons. One reason why alternative retirement pathways are so prevalent is that jobless older workers very infrequently return to employment. As shown in Annex Figure 2, across various categories of older unemployed and inactive individuals, the yearly probability of moving back into work is very low and, importantly, lower than the likelihood of moving into retirement.⁵

C. Multinomial Logit Model

11. A Multinomial Logit (M-Logit) model is applied to examine quantitatively which

worker characteristics are associated with pathways to inactivity and retirement. The M-Logit model sheds light on how explanatory variables of interest are associated with a higher probability of one state compared to another in the following period. To this end, the probability if worker i in year t moving to labor market state $k = \{1, \dots, K\}$ in year $t+1$ is computed as follows:

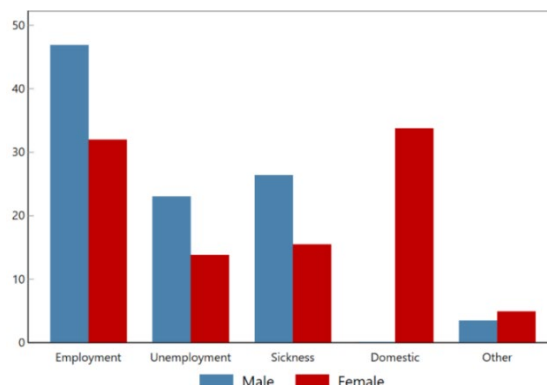
$$P(Y_{i,t+1} = k) = \frac{1}{1 + \sum_{j=2}^K e^{\beta'_j X_{i,t}}} \quad \text{for } k = 1$$

$$P(Y_{i,t+1} = k) = \frac{e^{\beta'_k X_{i,t}}}{1 + \sum_{j=2}^K e^{\beta'_j X_{i,t}}} \quad \text{for } 1 < k < K$$

where the individual elements of the vector β'_k can be interpreted as an increase in the log-odds of state k relative to the base state $k'=1$ from a one-unit increase in the respective element of the vector X . The estimated β 's can in turn be used to compute “marginal effects”, representing the change in $P(Y_{i,t+1}) = k$ from a one-unit increase in a selected variable in vector X_i , holding all other variables in X_i constant at the original level for individual i . Integrating the marginal effect for a given variable across all individuals, the average marginal effect of the variable of interest is obtained.

12. Using the ECV, separate M-Logit specifications are used to explore both transitions for older workers in employment and for those not in employment, respectively. In the first case, the interest is in what characteristics are associated with continued employment or, instead, moving

Figure 5. Initial Labor Market State of Workers Transitioning to Retirement
(percent of new retirees)



Sources: ECV and IMF staff calculations.

Notes: The bars show the share of individuals who retired in a given survey year by their previous labor market state, within each gender category.

⁵ Annex Figure 3, using data from the EPA, shows a quantitatively similar result for labor market states one year prior to retirement. In the quarters just prior to retirement, the share of non-employment rises further—and particularly inactivity not related to health or family roles—suggesting that a considerable share of workers pass through a short spell of non-employment before retirement that is perhaps planned or at least expected.

from employment to other states, including retirement, health-related inactivity, unemployment, and, especially for women, “domestic” roles—that is caring for family members or tending to the household. The first specification is thus estimated on the sample of workers who are employed in year t . A second specification is estimated on the sample of non-retired jobless workers to examine transitions into retirement or back into employment. This second exercise investigates which factors are associated with remaining in a state of non-employment (which includes both inactivity and unemployment), moving into retirement, or returning to work. For both exercises, the sample of individuals includes those aged 55–69 using the panel version of the ECV over 2010–2023, for a total of approximately 26,973 worker-year observations.

Transitions from Employment

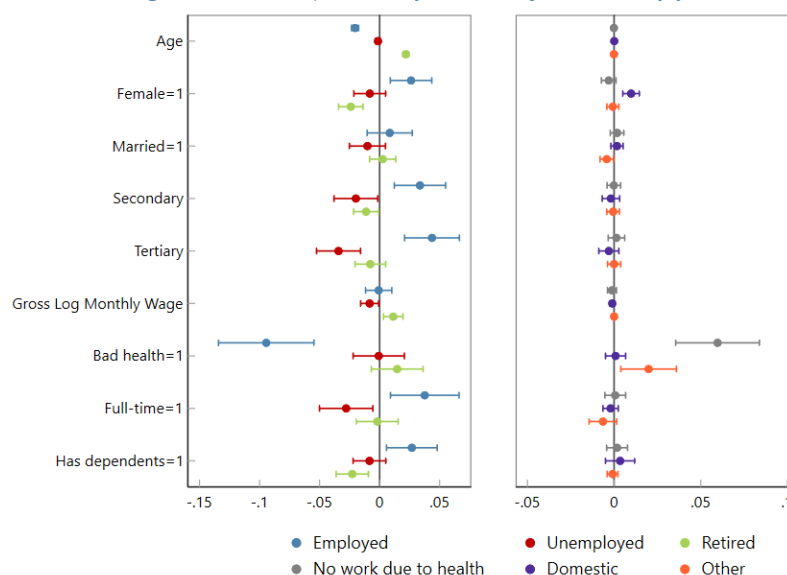
13. The first M-Logit model is estimated on a pooled sample of male and female workers aged 55–69 who are initially employed. Figure 6 shows the estimated marginal effects. Each dot represents the effect of increasing the variable by one unit (or going from zero to one, in the case of dummy variables) on the probability of being employed (blue), unemployed (red), retired (green), inactive due to health (yellow), inactive due to domestic work (purple), and inactivity due to other reasons (orange) at $t+1$. The bands represent 95 percent confidence intervals. By construction, the sum of the coefficients for a given variable over all possible states equals zero. The included variables can be grouped into two categories: demographic factors and job/worker-specific contextual factors that might play into the worker’s labor supply decision. The former category includes age, gender, marital status, and bins for education level, with primary schooling being the base value. In the latter category are log gross monthly wages, a dummy variable characterizing whether a worker self-assesses as being in a state of bad health, full-time status, and a dummy for whether the worker has any dependents in the household (including both children and elderly members). Not shown, but also present, are year fixed effects to capture time-varying aggregate developments, such as the general state of the labor market.

14. Demographic characteristics are all significant predictors of older workers’ labor market decisions. As expected, when workers age, their probability of remaining employed from one year to the next diminishes in favor of transitioning into retirement. Female workers have a 3-percentage points higher probability of remaining employed compared to males, which comes alongside a lower chance of retirement. At the same time, females are also more likely to move into the “domestic” inactivity category, although the effect is quantitatively small. Education is also a positive predictor of employment: having secondary or tertiary education increases the likelihood of remaining employed by 3 and 4 percentage points, respectively. This positive effect on employment is driven especially by a lower risk of becoming unemployed *vis-à-vis* the baseline group of workers who did not finish secondary school.

15. Other contextual factors, such as health status, full-time work, and having dependents are also significantly associated with transitions out of employment. Workers who claim to have bad or very bad health are much more likely to move to inactivity. This effect is quantitatively strong, with workers in this category having a 9-percentage point lower probability of remaining employed. In line with priors, workers with health issues are very likely to transition to health-related inactivity,

although they also move to other types of inactivity relatively more frequently than those in good health. Conversely, having a full-time job and having any dependents in the household are positive predictors of employment at $t+1$. As explored in more detail below, working full time is likely a proxy for overall job quality, explaining its positive relationship with staying employed (see the sub-section on hours worked in Section D). As workers grow older, working part-time may reflect not just a voluntary decision to progressively transition out of work but also having to endure a more insecure and precarious job, implying higher chances of job loss in the future. This likely explains why the positive association of full-time work with employment is closely mirrored by a lower chance of becoming unemployed (including compared to moving to other types of inactivity). Controlling for having a full-time job, higher monthly earnings are associated with a small rise in the probability of retirement, consistent with a role of income effects in older workers' labor supply decisions.⁶ Lastly, and also consistent with a role of income effects, having dependents is associated with a lower likelihood of retirement and, to a smaller extent, unemployment. There is no increase in the probability of moving to "domestic" inactivity, which could be expected if workers had to perform care duties when in this situation. The effect of this variable is mostly driven by young dependents, as discussed below (see the sub-section on domestic inactivity in Section D).

Figure 6. Estimated Average Marginal Effects from M-Logit Model of Transitions out of Employment
(change in transition probability across adjacent survey years)



Sources: ECV and IMF staff calculations

Note: Gross Log Monthly Wage refers to the average monthly wage in the year prior to the survey. Bad health is a self-reported variable which equals one if the respondent claims to have a general health status that can be described as either bad or very bad. Has dependents is a dummy variable which equals one if the worker has a child (< 18) or an elderly (> 65) inactive member in the household. The bands represent 95% confidence intervals.

⁶ For log wages, Figure 6 reports the probability change for one log-unit increase in monthly income, corresponding to a 2.7-times rise in earnings. In Spain, such a rise is approximately equal to the ratio of the 75th to 25th percentile of monthly labor earnings, suggesting that, keeping other variables constant, a worker in the 75th percentile of the distribution has a 1-percentage point higher yearly retirement rate compared to one at the 25th percentile.

Transitions from Non-Employment

16. Figure 7 shows the results for the M-Logit model of transitions out of non-employment. Workers in the sample are those who are non-employed and non-retired in the initial period. As in the previous section, the sample considers male and female workers aged 55-69. To obtain better statistical power, it pools workers across different types of non-employment except retirement: that is, unemployment, health-related inactivity (including permanent disability), inactivity for “domestic” reasons, and all other types of inactivity. Possible outcomes in year $t+1$ are employment, retirement, and all other non-employment statuses. The set of predictors is somewhat different from that considered in the previous section. The model controls for the initial non-employment status using dummy variables for whether the worker was inactive due to health, domestic, or other reasons at time t . As such, the baseline category is unemployment, and the coefficients on the various variables should be interpreted relative to this baseline. Furthermore, the model includes demographic variables such as age, gender, marital status and education level. Lastly, other predictors are the log of gross household income in the initial period, a self-reported bad health state, a dummy variable for whether the worker having any dependents in the household, and a dummy variable for whether the individual received any type of benefits or social assistance in the previous year. These benefits can be unemployment benefits but also other social benefits, such as child allowances or sickness benefits. Not shown, but also present, are year dummy variables.⁷

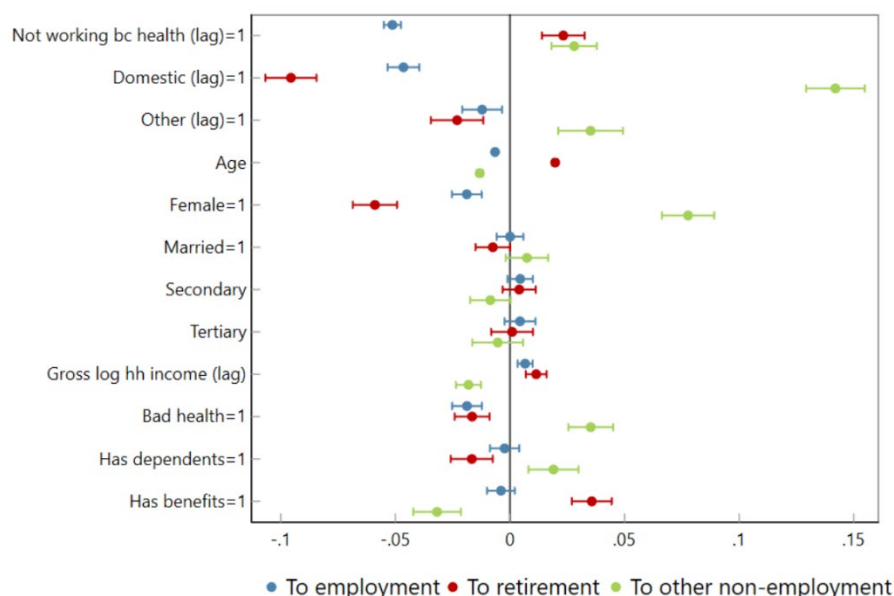
17. Gender and age are strong demographic predictors of alternative retirement pathways among the non-employed. Similar to the findings in the previous section, age is positively associated with higher chances of retirement and reduced prospects of returning to work. Non-employed women have a 2 percentage points lower job-finding probability compared to men, as well as a 5 percentage points lower probability of transitioning to retirement. These findings show some heterogeneity in the degree of stickiness of the non-employment status across genders, as women are more likely to remain in their current state of inactivity.

18. The type and reasons for non-employment are highly predictive of the chances of returning to work or retiring. Relative to the unemployed (the base group), those who are inactive, regardless of the reason, are more likely to remain jobless in the next period, as seen by the “To employment” coefficients in the first three rows. Health- and domestic-related inactivity in particular seem persistent, as they both imply approximately a 5-percentage points fall in the probability of re-employment. Health-related inactivity is also associated with an increased likelihood of retirement, corroborating the existence of alternative multi-stage pathways to retirement besides transitioning directly from employment. Meanwhile, domestic duties and other reasons for inactivity appear to be more persistent states on non-employment, with also lower transitions into retirement. As noted above, a large portion of those jobless due to domestic work

⁷ One possible caveat from this list of control variables is the potential high correlation between some of them. For example, those inactive due to health will probably be in bad health, and vice versa. Receiving benefits, if they are unemployment-related, is also correlated with being unemployed. Therefore, the quantitative effect of these collinear variables may be imprecisely estimated.

are women, often with few years of labor market experience. Hence, their lower likelihood of retirement may partly reflect a low expected old-age pension, or lack of eligibility altogether, due to insufficient social security contributions.

Figure 7. Estimated Average Marginal Effects from M-Logit Model of Transitions out of Non-Employment
(change in transition probability across adjacent survey years)



Sources: ECV and IMF staff calculations.

Note: Does not include previously retired. Gross Log Household Income refers to the average household income in the year prior to the survey. Bad health is a self-reported variable which equals one if the respondent claims to have a general health status that can be described as either bad or very bad. Has dependents is a dummy variable which equals one if the worker has a child (< 18) or an elderly (> 65) inactive member of the household. Has benefits is a dummy variable which equals one if the person received any type of benefits in the year prior to the survey. These can be unemployment, sickness, disability, social assistance or family support benefits. The bands represent 95% confidence intervals.

19. With regard to socio-economic variables, household income, health status, having dependents, and benefit reciprocity all matter for the retirement pathways of the non-employed. First, higher-income households are less prone to remain inactive, showing higher probabilities of both re-employment and retirement. This may be a result of higher skills, higher wages in previous employment—and thus, a potentially higher replacement rate in retirement—or larger household financial wealth, which may allow for earlier retirement. Second, those who claim to suffer from bad health conditions have a higher chance of remaining in non-retirement inactivity.⁸ This, combined with the marginal effects of being initially in a health-related inactivity state (first row), shows how bad health can strongly hinder re-employment and labor market participation for older workers. Having dependents in the household is also associated with lower transitions into retirement, but not with higher job finding rates, thus also implying greater

⁸ Note that this result refers to workers who may not report bad health as being the main reason for why they are inactive. Hence, it implies that also those who are unemployed but suffer from poor health conditions have lower re-employment prospects than healthy unemployed workers.

persistence of non-employment. Lastly, those who received any social assistance benefits in the previous year are more likely to retire at the expense of re-employment and other inactivity transitions.

D. Policy Issues

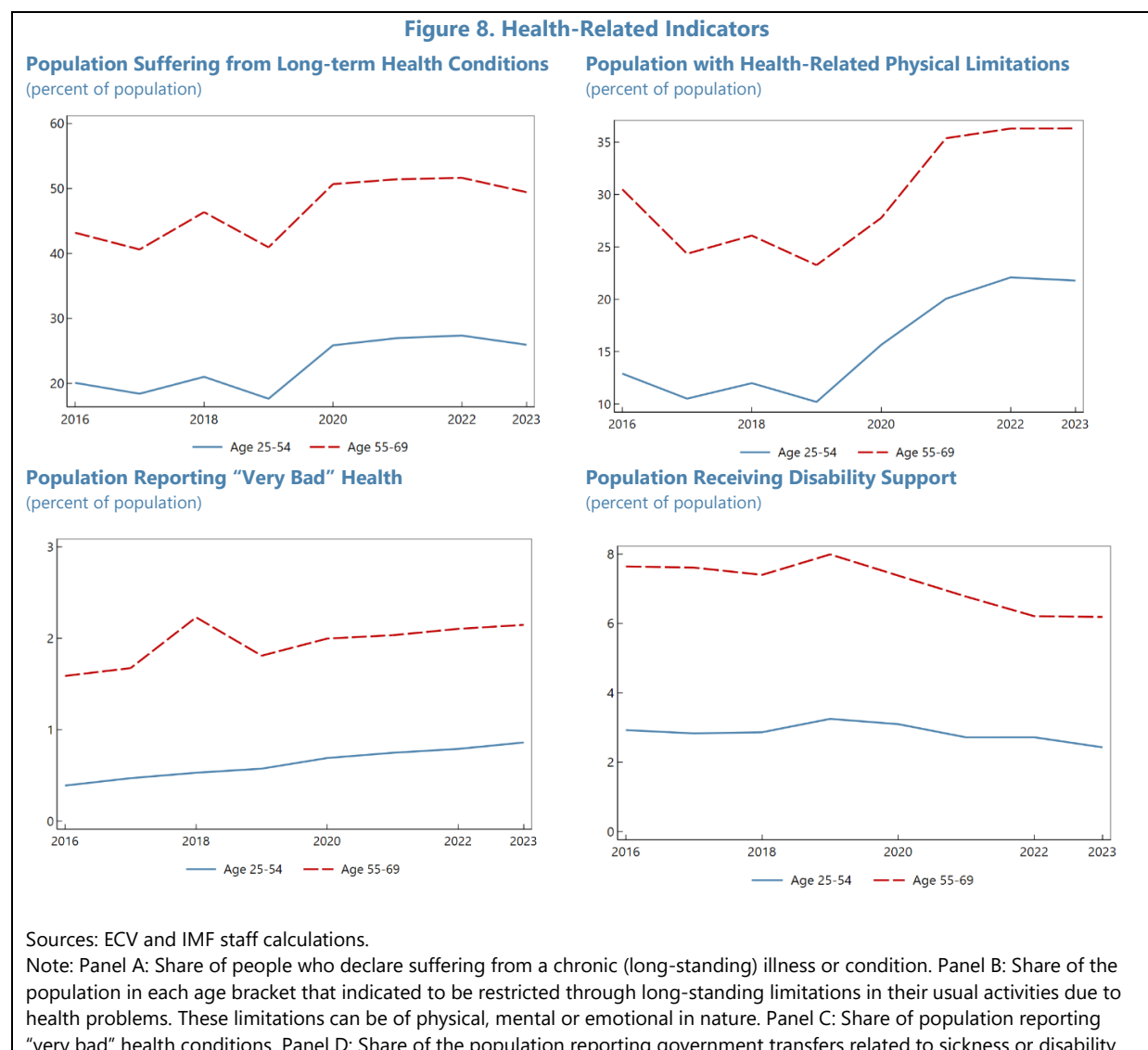
20. Several of the variables with statistically significant associations to transitions out of employment or from non-employment have a link to structural policy areas. Poor health emerges as a strong predictor of both employment exits and persistent inactivity. Household-specific factors and gender roles seem to also play an important role: the presence of dependent household members is associated with greater employment attachment and lower early transitions to retirement, while a gender-based difference in transitions into “domestic” inactivity, albeit small, is also statistically significant. The negative association between full-time work and employment exits likely masks strong self-selection effects but also calls for a deeper study of how the ability to adjust hours facilitates work at older ages. Lastly, among the jobless, social benefits, either at the individual or household level, seem to be an important factor in workers’ decision to exit the labor force through their impact on work incentives. However, to some extent their reception is endogenous to limited prospects of re-employment, calling for more in-depth analysis. Therefore, this section delves into each topic in greater detail to derive some policy implications.

Health

21. Poor health can act as a drag on the labor market participation of older workers. The M-Logit estimates show that bad health is a major driver of exits from employment (Figure 6) and, for those not employed, an impediment to going back to work and moving earlier into retirement (Figure 7). The latter result is in line with Barrela et al. (2025), who show that in Spain health-related exits from employment tend to be long-lasting. Although this applies to both prime-age and older workers, it is a more critical driver of labor market participation for the latter since the incidence of bad health is markedly higher in this group (Figure 8).

22. Several indicators point towards a persistent worsening of health conditions since the onset of the COVID-19 pandemic. Based on the ECV, close to 50 percent of the Spanish population aged 55-69 in 2023 reported being affected by some long-term health condition (Figure 8, top left panel), 35 percent reported some degree of health-related physical limitations (Figure 8, top right panel), and above 2 percent assessed their overall health condition as “very bad” (Figure 8, bottom left panel). These three indicators of adverse health all show a rise since 2016, reflecting not only a long-term trend but also some upward shift since the pandemic. As these measures capture all possible health-related issues, it is not possible to fully disentangle COVID-related health complications from a general health worsening, however. Moreover, being based on self-assessment, this deterioration in health might at least in part reflect a more acute perception of pre-existing conditions or greater awareness of personal health issues (for instance of mental health) rather than concrete changes. Hence, the picture may be more nuanced once more factual measures are considered. Indeed, other indicators in fact suggest that the worsening may not be reflected in more factual measures of severely adverse health conditions. For instance, the share of population

receiving permanent disability support has remained stable or even fallen slightly among the older working-age population (Figure 8, bottom right).



23. Although not all indicators point to worsening conditions, poor health has likely been a driver of lower labor supply for older workers in recent years. Health-related work absences, which were already trending upward since 2016, rose sharply starting in 2020 (Figure 9). This pandemic-induced spike was larger for older workers, hinting at some link between the rise in bad health and COVID-19. However, the share of workers on medical leave has remained persistently high, or even increased further, once the pandemic ended, suggesting the presence of other factors. This trend is also reflected in official social security data showing that the yearly number of temporary disability benefits recipients has increased by 37 percent from 6 million in 2018 to 8.1 million in 2023 (Granado Martínez, 2024).

24. Reducing the adverse effect of ill health on labor force participation requires policy action to improve general health outcomes. These policies are not specific to older workers but will have a relatively larger beneficial impact for them. For example, poor health in young and prime ages may not immediately be a constraint to labor force participation, but to a large degree it will eventually translate into poor health at an older age (Tipirneni et al., 2025) and become a drag on labor force participation at that stage.

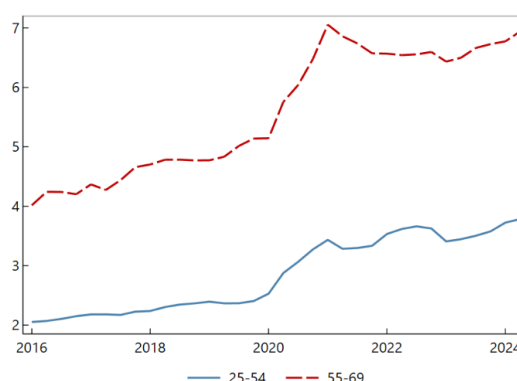
25. Supporting workers with health limitations so they can remain employed or return to work is also critical. Providing

increased flexibility and accommodations, such as work from home and reduced schedules, can improve the labor market attachment of those with reduced capacity to work full time or commute. To this end, the recent proposal by the Ministry of Inclusion, Social Security, and Migration to facilitate voluntary gradual return to work for those receiving temporary disability benefits would be a positive step toward strengthening labor market attachment, as it would limit the potential adverse labor supply effect of protracted absence from work (López-Guillén García and Vicente Pardo, 2018). When such flexible work arrangements are not feasible due to the nature of the worker's previous occupation, job search guidance and active labor market policies could be targeted to help them find new roles that better suit their needs and physical capacities.

Dependents and Household Duties

26. Domestic-related inactivity is particularly common among women and typically comes together with low labor market attachment. This group comprises those who do not search for work as they are dedicated to household activities, including caring for children and other dependents, or for other family-related reasons. In the ECV, among older women, close to 35 percent of respondents fall under this "domestic inactivity" labor market status. For older men, this figure amounts to only 0.16 percent of the respondents. According to the ECV, on average, domestic-inactive older women have only 15 years of experience in

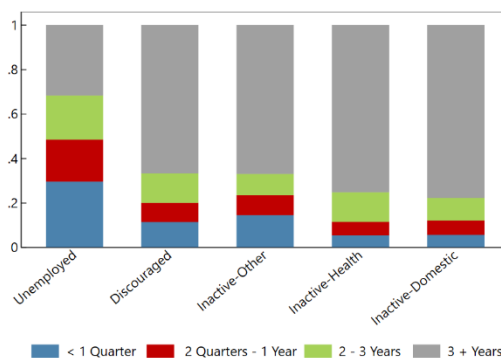
Figure 9. Health-Related Work Absentees in Reference Week
(percent of employed workers)



Sources: EPA and IMF staff calculations.

Note: the lines show the share of employed workers who report being absent from work in the reference week due to health-related reasons.

Figure 10. Average Duration of Joblessness
(share of joblessness category)



Sources: EPA and IMF staff calculations.

Note: Each bar reports the share of individuals in each joblessness category who have been out of work for a given period of time.

the labor market, compared to 30 for older women in employment, unemployment or other inactivity types.

27. The analysis suggests that domestic-related inactivity is a highly persistent state.

Figure 10 shows that, among all joblessness categories, the domestic-inactive feature the highest share of individuals who have been out of a job for more than 3 years—close to 80 percent. This result is also reflected in the M-Logit estimates in Figure 7, where the probability of remaining out of a job is almost 5 percentage points higher for the domestic-inactive compared to the unemployed. This is further corroborated by Annex Figure 2 (bottom center panel 5), showing that close to 80 percent of the domestic-inactive group remain in that labor market status across two years. At the same time, however, exits from employment directly into this type of inactivity are very infrequent (Annex Figure 2, top left panel). Figure 6 shows that women, who account for the vast majority of this group, only have a 1 percentage point higher probability of moving from employment to domestic inactivity in a given year compared to men, for whom it is close to zero. Taken together, these findings suggest that domestic duties account for a large share of women's inactivity, but they are not a significant driver of new exits from employment among older women. Nevertheless, it is possible that women who leave work for other reasons and stay jobless for a prolonged period eventually take up more household duties and caring roles in their families, ultimately making this their main commitment and thus no longer desiring a job.

28. The fact that the domestic-inactive group is mostly comprised of women suggests that labor supply choices may follow traditional gender norms, but it does not rule out that older males may also face family caring responsibilities.

For instance, evidence shows that caring for elderly family members is also common among males. According to CSIC (2023), using data from INE, in 2021 in Spain there were 638,000 individuals with some level of caring duties for people aged 70 or above within their household, and 920,000 for elderly outside of their household. Those aged 50-59 were the group most responsible for these duties, suggesting the responsibilities mostly concerned elderly parents. Moreover, while the majority of carers were women, men constituted a significant 40 percent. This suggests that the incumbency of caring duties affects both men and women, but the main gender-based difference concerns the labor market impact due to the likely uneven burden sharing within the household when facing these family responsibilities.

29. When they have dependents, older males are less likely to retire and more likely to stay employed.

Figure 11 shows the estimated marginal effects of having dependents for the sample of workers employed in the initial period, separated by gender and distinguishing between dependents below age 18 (i.e., children) and elderly. Results show that males are less likely to become jobless and, therefore, more likely to remain employed than females. The effect is stronger and statistically significant for young dependents: having a child in the household increases the probability of remaining employed by close to 4 percentage points. The effect of having an older dependent in the household is slightly weaker, and not statistically different from zero.

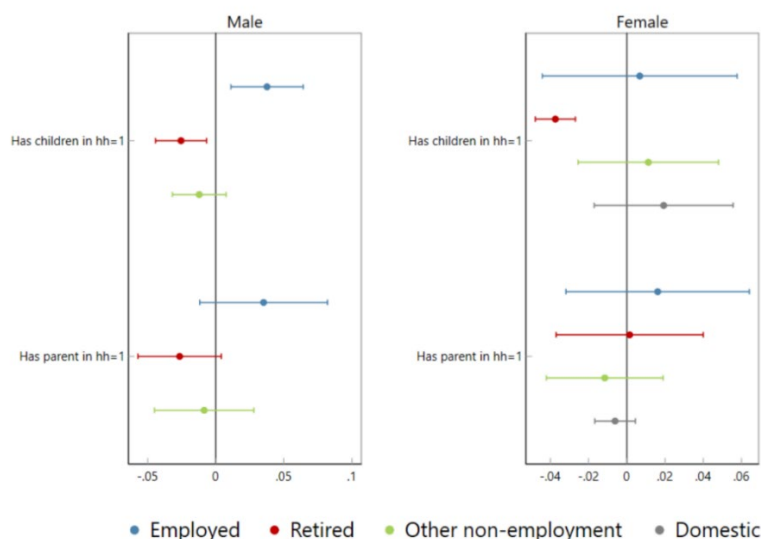
30. For older working women, having dependents, young or old, does not have statistical predictive power on the probability of transitioning out of employment.

Given the large share of domestic-inactive women, this result points to stronger sorting into employment or inactivity at

younger ages among women based on the presence of dependents. At older ages, most women who may have decided to stop working to tend to family and caring duties may have already done so by age 55. Figure 12 shows that, for females, within each employment category, the group that has the largest share of dependent children is the domestic-inactive. However, differences are relatively small, suggesting that individual preferences or household circumstances may play a substantial role. For elderly dependents, there is no clear pattern.⁹

31. Supporting the labor force participation of those with family caring duties includes providing flexibility in work arrangements as well as lowering the costs of caring services through public provision and fiscal incentives for purchasing private services. Greater flexibility in reducing hours worked or adjusting work modalities (e.g., telework, compressed work schedules) would make employment and caring duties more compatible. The recent amendment to the Charter of Workers, which grants workers the right to request adjustments to their schedules when caring for a dependent (RDL 5/2023) goes in the right direction. Meanwhile, as working would require greater spending on external care-related services, tax benefits can provide an additional incentive to return to work by lowering the implied cost of this decision. PIT deductions for families caring for an elderly or disabled family member who resides with them—introduced first in 2006 (RDL 35/2006, Art. 59-61) and whose parameters were last updated in 2015—support those who provide assistance while also giving them an incentive to continue working. Finally, several autonomous communities provide PIT deductions for expenses related to childcare and elderly care, including the hiring of dedicated home carer professionals.

Figure 11. Average Marginal Effects of Having Dependents in the Household on the Labor Market Transitions of the Employed, by Gender and Type of Dependents
(change in transition probability across adjacent survey years)



Sources: ECV and IMF staff calculations.

Note: Average marginal effects from a multinomial logit model as in section C, now splitting the dummy for having any dependents in the household into children (< 18 years) and elderly. The model is estimated separately by gender.

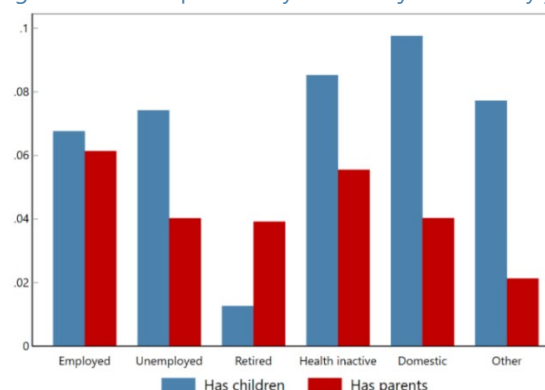
⁹ An important caveat is that ECV only captures those who live in the same household, but often elderly relatives are not part of the same immediate family unit.

32. Specific support is needed for those who have remained out of the labor force for a prolonged period, once their family caring role is no longer a priority. It is important to

make sure that these workers, particularly women, can access guidance services and training programs to re-acquire skills needed in the labor market, which they may have lost. In this regard, the recent reform of unemployment benefits (RDL 2/2024) could be helpful if accompanied by enhance active labor market policies. The reformed *subsidio por desempleo por cotizaciones insuficientes* extends its

eligibility to those with just 3 months of social security contributions and dependents, allowing access to the job guidance services provided by public employment offices. The impact of this reform could be strengthened if activation requirements were strengthened.

Figure 12. Share of Women with Dependents in the Household, by type of Dependents and Labor Market Status
(change in transition probability across adjacent survey years)



Sources: ECV and IMF staff calculations.

Note: The height of the bar represents the share of women within that labor market state that have the corresponding type of dependents in the household.

Working Hours Flexibility

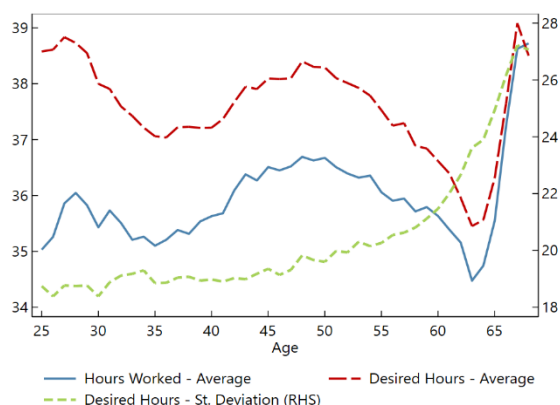
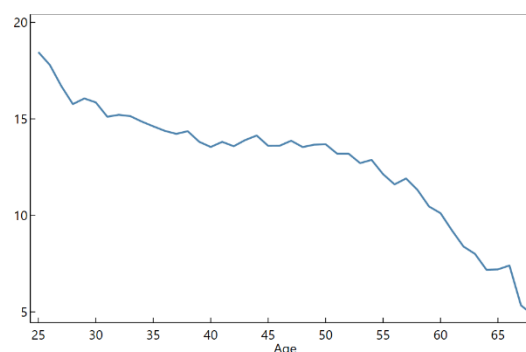
33. The ability to choose how much to work is likely to be an important driver of the decision to remain employed at older ages. Although some older individuals prefer to continue working as many hours as in their prime years, aging brings changes in priorities and preferences, weaker health and new family needs. These may drive some workers to seek shorter work weeks. Conversely, having fewer dependents once children move away from home and unencumbered by other family duties, some older workers may in fact want to increase hours worked. Faced with changing circumstances and preferences, older workers may instead choose to leave the labor force instead if unable to adjust their number of hours and broader work arrangements.

34. Selection effects based on job types and labor supply preferences likely explain the positive association between full-time work and continued employment uncovered by the M-Logit analysis. The positive effect of full-time employment on the likelihood of remaining employed, controlling for other characteristics, likely reflects labor market attachment and job quality. Full-time employment is generally associated with greater job stability, lower unemployment risk, and higher earnings. Meanwhile, although part-time work for older workers may be a way to ease the path to retirement and maintain attachment to employment for longer, several channels may link it to earlier labor force exit instead. First, workers with a preference for fewer hours may also have a higher propensity to leave the labor force altogether. Second, if the part-time arrangement is not voluntary, workers may also be more likely to become discouraged and leave the labor force. One caveat from this analysis is that the ECV does not differentiate between those who are voluntarily in part-time jobs versus those who are not. However, the EPA contains information

on workers' effective and desired weekly hours, allowing for further analysis of their evolution among older workers.

35. The paths of average effective and desired hours worked from ages 50 to 69 highlight the evolution of labor supply preferences at both the intensive and extensive margin as workers get older. Figure 13 shows that average hours worked and desired hours start declining at age 50 until age 64, with a narrowing gap between the two. The decline in average weekly hours worked over this interval mostly reflects a widespread shift in workers' preferences towards a shorter work week, as suggested by the steeper decline in desired hours. The convergence between the two averages also comes with falling mismatch between effective and desired hours for individual workers, which is reflected in a falling share of workers not satisfied with their number of hours (Figure 13, right panel). Finally, starting from age 65, average effective and desired hours both rise steeply, and the gap between the two closes. This sharp change, joint with a continued fall in the share of workers unsatisfied with their hours, suggests that those who continue working into their late 60's have a strong preference for full-time employment. Finally, as workers get older, preferences for hours worked also become more diverse. Throughout the age range 50-69, the standard deviation of desired hours rises by almost 50 percent, suggesting that workers' preferences (among those who remained employed) become more and more heterogeneous (Figure 13, left panel). In other words, while on average older individuals prefer reducing their work weeks by 2 to 3 hours relative to 50-year-olds, some of them continue to desire full-time employment while others seek significant reductions in their work time.

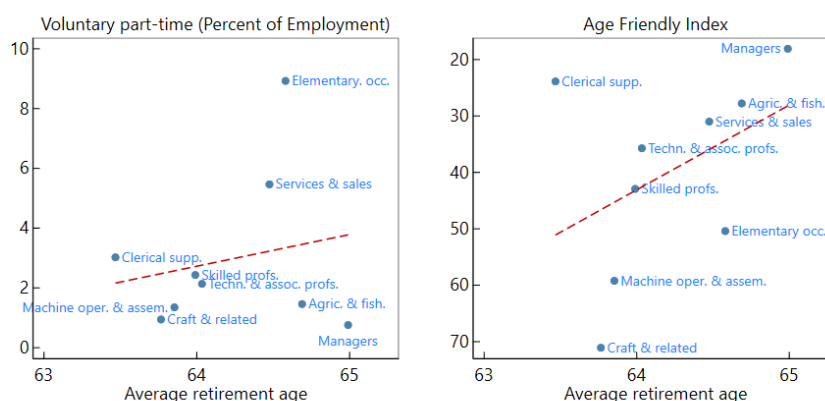
36. Flexibility in hours worked and other accommodations to older workers' needs and preference can support longer careers (Angrisani et al. 2020). Figure 14 (left panel) shows that broad occupation groups (using the 1-digit ISCO-08 aggregation) with higher shares of voluntary part-time employment among those aged 55 and above also have higher average retirement ages. This association is particularly strong for some lower-paying jobs, such as "elementary occupations" and "services and sales" ones, where hours flexibility might be traded off against lower compensation. Meanwhile, managers are the main exception, showing both high retirement ages and low incidence of part-time work. In fact, this and some other types of jobs, other factors may be driving long careers. In this regard, Acemoglu et al. (2022) construct a composite index of the "old-age friendliness" of occupations, which captures multiple features aligned with older workers' preferences, including flexible work, reduced job stress, less demanding cognitive and physical activities, shorter commuting times, and the opportunity to telework. Hence, occupations may be overall old age-friendly by having distinct combinations of characteristics that are conducive to old-age employment. Figure 14 (right panel) finds a positive association between this composite index and average retirement ages across occupations in Spain.

Figure 13. Effective and Desired Hours Worked**Effective and Desired Weekly Hours**
(average, standard deviation)**Workers Whose Hours Differ from Desired Amount**
(percent of employed workers)

Sources: EPA and IMF staff calculations.

Note: the left plot reports the average effective hours worked and desired hours worked by age, and the standard deviation in desired hours worked. The right plot reports the share of employed workers whose weekly hours worked in the reference week were either higher or lower than the desired amount.

37. These results point to the importance of policies that allow for a better matching between workers and their desired hours and work arrangements. Encouraging greater labor force participation of older workers implies establishing a regulatory framework and providing incentives for firms to accommodate their diverse preferences. This can be achieved by adjusting hours within workers' current roles but also by enacting policies that facilitate transitions to jobs that better align with desired hours worked and other desired job characteristics. To this end, greater labor mobility in older ages could be fostered through training programs to help older workers acquire the skills needed in other occupations, thus facilitating their career transitions and continued labor market attachment.

Figure 14. Average Retirement Age and Job Features by Occupation
(percent of employment, inverted index value)

Sources: EPA, O*NET, Acemoglu et al. (2022), and IMF staff calculations.

Note: A lower value of the Age-Friendly Jobs Index from Acemoglu et al. (2022) indicates age-friendlier jobs (the y-axis is reversed).

38. Recent initiatives to make it easier to combine pension benefits with reduced work schedules are a step in the right direction, but they could be expanded. Measures approved in December 2024 (RDL 11/2024) increase the flexibility in combining work earnings and pensions benefits to allow a more gradual reduction in working hours for older workers through “partial” (early) retirement and “active” (delayed) retirement schemes. Although these measures go in the right direction, further improvements in the flexibility of the partial retirement option could be achieved by eliminating the requirement for the worker’s employer to introduce a “replacement” worker to compensate for the reduced hours (with the commitment to convert the contract into a full-time open-ended one). While this requirement aims to avoid the misuse of the partial retirement option as an employment-reducing mechanism, it also makes workers’ personal decisions subject to firms’ needs and long-term plans.

Unemployment Benefits and Social Support Schemes

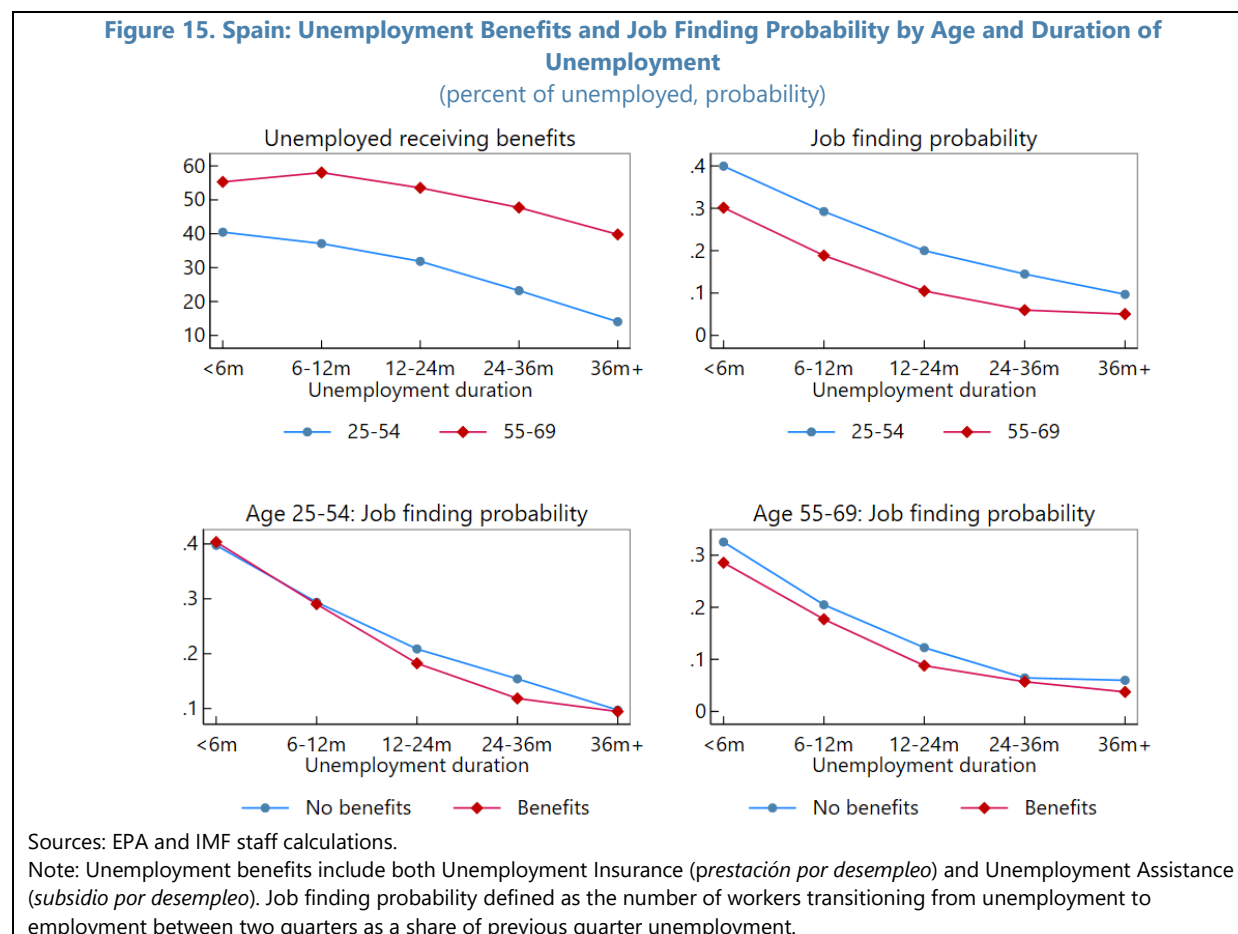
39. Unemployment support programs must balance providing a safety net and incentivizing older workers’ return to work. Unemployment benefits (UB) in Spain include both contributory unemployment insurance (UI, *prestación por desempleo*) and non-contributory unemployment assistance (UA, *subsidio por desempleo*). Depending on years of contribution, UI benefits can last up to a maximum of 24 months. After finding a job, recipients may also continue to combine work income with benefits for 6 months.¹⁰ UA is means-tested and accessible after the expiration of the earnings-linked UI. For those aged 52 and above, UA has unlimited duration and comes together with social security contributions of 125 percent of the minimum contribution base.¹¹ For younger workers, the program has limited duration (from 4 to 24 months) and does not include contributions. While the greater generosity of UA provides an extra insurance against poverty at older ages, some studies have found that it can also reduce the job search incentives of older workers, especially among those with low potential earnings (Domènech-Arurí and Vannutelli, 2023; Arranz and García-Serrano, 2023).

40. Older unemployed workers are more likely to receive UB and for longer, while also facing markedly lower re-employment prospects. The share of the prime-age unemployed receiving either UI or UA decreases steeply with the duration of the joblessness spell (Figure 15, top left panel). By contrast, for the 55+ it has a hump-shaped profile. Hence, a large gap in benefit coverage between older and prime-age workers of approximately 30 percentage points emerges among the long-term unemployed. This difference in coverage likely results from the longer contribution histories of older workers as well as the unlimited duration of the old-age UA scheme. At the same time, the job finding rate of older unemployed workers is approximately 10 percentage

¹⁰ Until 2024, the ability to combine UI with employment income, known as *complemento al empleo*, was only available to those in part-time employment. A reform approved in 2024 is set to loosen those requirements starting in 2025.

¹¹ This age threshold has changed over the years, being raised from 52 to 55 years in 2012 and subsequently lowered to 52 in 2019.

points lower than that of the prime-aged at all unemployment durations, suggesting more limited re-employment prospects across the board (Figure 15, top right panel).



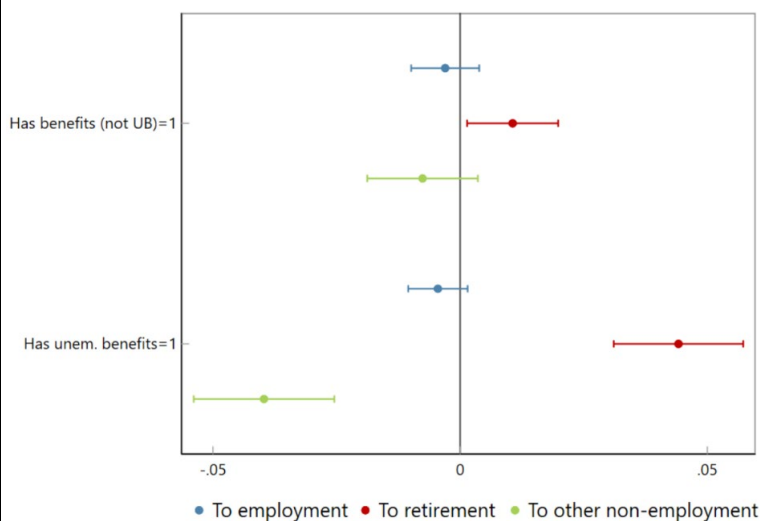
41. Receiving unemployment benefits is associated with slightly lower job finding rates, particularly at longer durations (Figure 15, bottom right panel). This contrasts with the absence of gap in the job finding probability of recipients and non-recipients among the prime-age unemployed at short durations, and its very small magnitude at longer durations (Figure 15, bottom right). While this finding does not control for workers' observed characteristics and sorting along unobserved characteristics among benefits recipients, it is in line with other studies. For instance, using regression discontinuities around the 2012 reform of the age threshold for UA eligibility, Domènech-Arúmi and Vannutelli (2023) find that the unlimited duration of UA for those aged 55 and above reduced incentives to return to work.

42. An extended specification of the M-Logit model provides further nuance on the role of social support programs, distinguishing between unemployment support and other social assistance benefits. The results in Section C also found that the non-employed receiving benefits have a higher likelihood of retiring while their re-employment effects were smaller. An alternative model (Figure 16) expands this result by separating income support beneficiaries into those receiving unemployment benefits and those receiving other schemes such as disability, sickness, or

family assistance. Importantly, the latter may be set at the household level and may also be means-tested, sometimes implying a trade-off between working and receiving such benefits. Furthermore, given that the analysis is done using 2010-2023 data, some of these benefits may be different from the kind of support that is being rolled out today under the progressive establishment of the Minimum Basic Income (*Ingreso Mínimo Vital*, IMV)

43. Receiving UB is associated with lower re-employment probabilities for older workers to a larger degree than other types of support. Figure 16 shows the marginal effects of both types of benefits from the multinomial logit model for transitions out of non-employment. Receiving UB increases the probability of retiring in the next period by more than 5 percentage points, while for other benefits this increase is closer to 1 percentage point. These findings imply that older workers may smooth their transition to retirement through the benefits system, with unemployment benefits being used as a *de facto* early retirement scheme, in particular. Hence, there is room for

Figure 16. Average Marginal Effects of Benefit Recipience on Labor Market Transitions of the Non-Employed, by Type of Benefits
(change in probability of transition)



Sources: ECV and IMF staff calculations.

Note: Average marginal effects from a multinomial logit model as in section C, now splitting the dummy for receiving any benefits into those receiving unemployment benefits and those receiving any other benefits. Original state: non-employment. The non-UB benefits may be sickness, disability, social assistance or family support assistance. The bands represent 95 percent confidence intervals.

strengthening the job search incentives of UI and UA benefit recipients. The 2024 UA reform was a step in the right direction by allowing recipients to combine benefit receipt with employment earnings for a period of 6 months. This earnings complement (*complemento de empleo*) reduces the so called “participation tax rate” (PTR), defined as the reduction in earnings resulting from the loss of support benefits after returning to work. The PTR can be particularly high for low-pay work, thus creating stronger disincentives for those with the lowest labor market prospects (Coady et al., 2021). Strengthening activation requirements among UA benefit recipients and allowing them to combine benefit receipt with labor earnings for longer could amplify the employment impact of this reform.

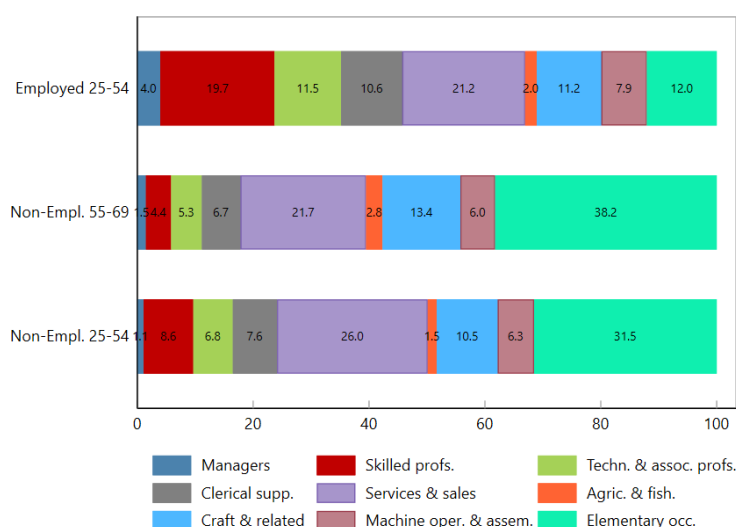
44. Beyond the design of UB and UA schemes, addressing other structural drivers of the age-based gap in re-employment prospects would help increase the old-age employment rate substantially. As computed in Barrel et al. (2025), the mechanical impact on the employment rate of older workers from closing the job finding rate gap between benefit recipients and non-recipients could be only 0.1 percentage points. Meanwhile, equalizing the job finding rate of older workers to

to prime-age job seekers, or by sectoral and occupational mismatch with respect to labor demand. Figure 17 compares the composition of employment by broad occupation groups to that of job seekers' last occupation prior to unemployment. The composition of past employment for older jobless workers is less aligned to that of the employed labor force than for younger job seekers, with a greater skew towards lower-wage occupations. For instance, more than 38 percent of unemployed older workers were previously in elementary occupations, compared to 31 percent of those aged 25-54, while elementary occupations account for only 12 percent of overall employment.

Conversely, the older jobless are less likely than the younger jobless to have occupied high-wage jobs (such as high-skilled and technical professions) that contribute as much as 20 percent to overall employment. To the extent that the composition of employment reflects demand, these findings suggest that older job seekers might be particularly mismatched *vis-à-vis* demand.

45. Improving the matching between older workers' skills and labor market needs requires both ALMPs for the jobless and training programs while still employed. If sectoral and occupational mismatch are more acute for older workers, ALMPs may need to emphasize career shifts by focusing on acquiring new skills or exploring new careers with similar skill needs to close the age-based gap in job-finding probabilities. ALMPs should be closely tailored to the training needs of older workers and their realistic potential to acquire new skills, matching the kind of jobs that are compatible with their other life commitments and preferences. Moreover, lower employability can be addressed at the source—that is, prior to job loss—by preventing skill depreciation and loss of human capital among the employed through enhanced lifelong training initiatives.

Figure 17. Occupational Distribution of Employed and Non-Employed Individuals, Prime-Aged and Older
(percent of unemployed workers)



Sources: EPA and IMF staff calculations.

Note: Each colored section within the horizontal bar represents the share of individuals in that occupation among the total employed (first row) or non-employed (bottom rows). For the non-employed, the occupation is defined as the occupation in their last job. Information on past occupations is only available for individuals who left their jobs less than a year prior to the reference week, therefore excluding the long-term jobless. The non-employed group excludes those in self-reported retirement. The figure is based on data from 2016 to 2024.

E. Conclusions

46. The labor supply decisions of older workers in Spain are affected by a plurality of factors. Timing of exits from employment and the timing of retirement depend on health, capacity to come back from job losses, family caring needs and ability to adjust the number of hours worked, in addition to financial incentives embedded in unemployment insurance and pension systems. These factors reflect the inherent complexity and diversity in the lives of older workers. The inability to adjust working arrangements and opportunities to their needs and skills often induce older workers to exit the labor market earlier and reach retirement via alternative pathways. Some of these reflect voluntary decisions but other times they may not be planned or intentional. Providing opportunities to accommodate their needs and preferences may thus give older workers a broader range of choices and encourage greater participation before and after the standard pensionable age.

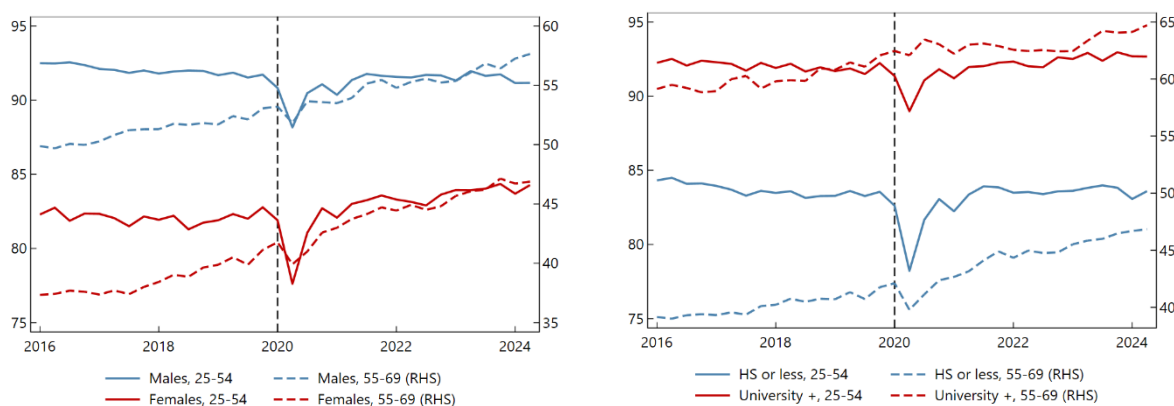
47. Encouraging greater labor force participation of older workers requires acting on multiple fronts. Over the past decades, the progressive increase in the standard pensionable age and enhanced financial incentives for delayed retirement have been successful in extending the average length of careers. However, continued recourse to these measures may only go so far if other constraints on labor supply at older ages are not addressed. Important policy levers in this regard include improving health outcomes, adjusting labor modalities to reduced health and physical capacities, allowing greater flexibility in adjusting hours worked and other flexible arrangements (like telework), improving on-the-job training, and enhancing ALMPs for older unemployed workers, including recipients of unemployment insurance and assistance benefits.

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Annex I. Additional Figures

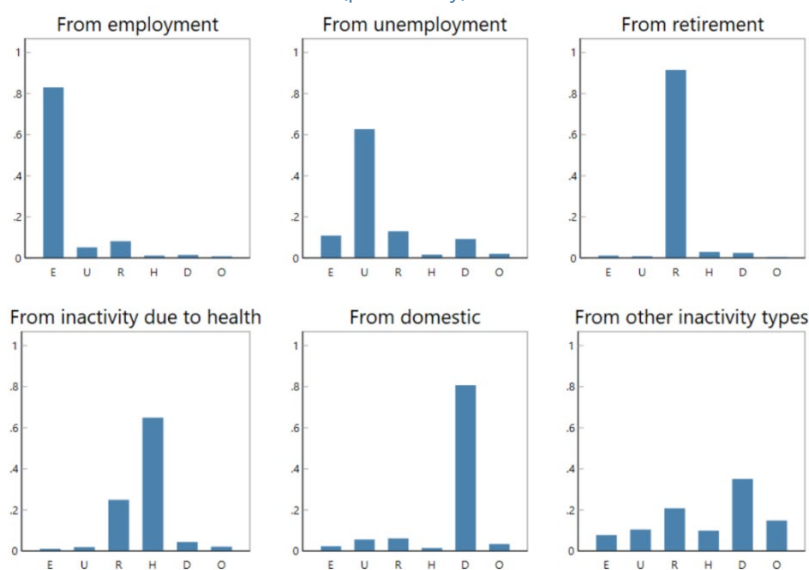
Annex I. Figure 1. Spain: Labor Force Participation Rate by Gender and Education
(percent of population)



Sources: EPA and IMF staff calculations.

Note: The labor force participation rate is computed as the share of individuals who are either employed or jobless but actively searching for work (unemployed).

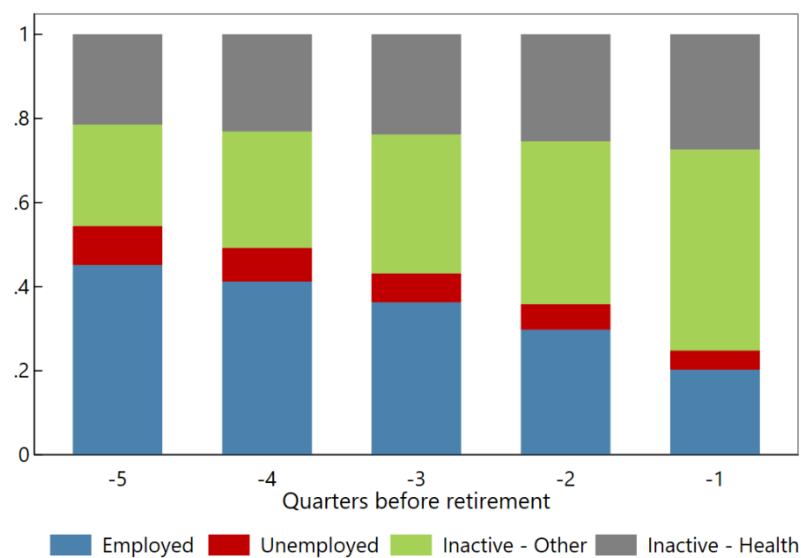
Annex I. Figure 2. Spain: Yearly Transition Probabilities Across Labor Market States by Initial State
(probability)



Sources: ECV and IMF staff calculations.

Note: Each panel shows transition probabilities according to the initial labor market state. E: to employment; U: to unemployment; R: to retirement; H: to inactivity due to health; D: to domestic; O: to other inactivity. Each bar corresponds to the probability corresponding to the respective destination state. For example, the first bar in the top left panel is calculated as the sum of individuals employed at t and employed at t-1 over the sum of individuals employed at t-1.

Annex I. Figure 3. Spain: Labor Market State by Quarter Prior to Entering Retirement
(share of new retirees)



Sources: EPA and IMF staff calculations.

Note: For workers who report being retired in quarter t but not x quarters before, each bar, summing up to one, reports the composition of their labor force statuses in quarter $t-x$.