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Working Paper

Internal Mobility after the Expansion of the Welfare State: Evidence from Spain

CRAM Discussion Paper Series, No. 06/18

Provided in Cooperation with:

Rockwool Foundation Berlin (RF Berlin)

Suggested Citation: Amuedo-Dorantes, Catalina; Borra, Cristina (2018) : Internal Mobility after the Expansion of the Welfare State: Evidence from Spain, CRAM Discussion Paper Series, No. 06/18, Centre for Research & Analysis of Migration (CRAM), Department of Economics, University College London, London

This Version is available at:

<https://hdl.handle.net/10419/295579>

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Discussion Paper Series

CPD 06/18

- ▶ **Internal Mobility after the Expansion of the Welfare State:
Evidence from Spain**
- ▶ Catalina Amuedo-Dorantes and Cristina Borra

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Internal Mobility after the Expansion of the Welfare State: Evidence from Spain

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April 17, 2018

Abstract

The Spanish welfare state was practically inexistent in the 1980s. It expanded throughout the 1990s and became fully in place by the 2000s. At the same time, internal migration rates dropped to less than 0.3 percent –among the lowest in the world. In a country with large labor market imbalances, internal mobility can prove crucial to economic growth. We look at the role that non-contributory pensions might have played on inter-provincial mobility over the past two decades. We find that the expansion of the welfare state has curtailed the mobility of young working-age individuals, especially less educated women. The effects are unique to non-contributory pensions, and are not restricted to cohabitating family members or tied to the care for disabled relatives, signaling the need for policy measures that facilitate the mobility of the young from lower income households.

JEL Classifications: I38, J61, R23.

Keywords: internal migration, labor mobility, welfare benefits.

We are grateful to Sara de la Rica, Lucía Gorjón and Carmen Bello-Merino for their assistance with data gathering.

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1. Introduction

Despite having a structurally high unemployment rate and large spatial unemployment differences,¹ labor mobility remains rather low in Spain (Ahn *et al.*, 1999; Antolín and Bover, 1997). Internal migration is particularly low relative to other European countries, as well as relative to other developed and less developed economies. Spain is the only European nation with a 5-year internal migration intensity that falls below 10 percent (Bell *et al.*, 2015).² This was not always the case. During the 1960s and 1970s, many Spanish workers emigrated from economically struggling regions like Andalucía or Extremadura to the prosperous regions of Madrid or Cataluña (Bover and Velilla, 2005).

The expansion of the welfare state has been previously proposed as a potential explanation for the low level of internal migration in Spain (Antolín and Bover, 1997; Bover and Velilla, 2005). Labor mobility is no longer indispensable when there exists a reliable public safety net. In Europe, where public safety nets characteristic of a welfare state are widespread, adverse shocks have translated into higher unemployment rates and an overall reduction in labor force participation rates. On the contrary, in countries with a less extensive welfare state, as is the case of the United States, adverse shocks lead to higher migration rates instead (Jimeno and Bentolila, 1998; Blanchard and Katz, 1992).

The existing literature on the impact of the welfare state on mobility has focused on two main topics. One set of studies has focused on the role played by unemployment insurance (Antolin and Bover, 1997; Hassler *et al.*, 2005; Tatsiramos, 2009). These analyses generally conclude that unemployment benefits need to be large to deter

¹ For instance, the unemployment rate in the Southern province of Cadiz was 37.2 percent in 2015, relative to 12.5 percent in the Northern province of Navarra.

² Migration intensities are computed using regression techniques that account for distinct geographic units and population densities. Using this comparable measure, Bell *et al.* (2015) report intensities over 40 percent in the United States, over 30 percent in France, and between 10 and 20 percent in Greece and Portugal.

mobility. Another group of studies has focused, instead, on the role of family benefits as a welfare magnet, primarily in the United States (Gelbach, 2004; McKinnish, 2007). For the most part, this literature concludes that welfare migration is limited and typically larger for families living close to state borders. Yet, although strong family ties are recognized as a mobility deterrent (Spilimbergo and Ubeda, 2004; David *et al.*, 2010; Alesina *et al.*, 2015), and old-age pensions have been found to affect various outcomes in developing countries,³ the literature has yet to explore the role of non-contributory pensions received by extended family members on the mobility of working-age individuals.

In this paper, we use data from the Spanish Labor Force Survey, the Residential Variations Statistics, and the Social Security Statistics from over the past two decades to study the impact of changes in the number of beneficiaries of non-contributory pensions on inter-provincial mobility. Methodologically, we model individual mobility decisions using data from the Labor Force Survey. To isolate the effect of the welfare state, we control for a wide range of demographic and human capital individual level traits, as well as temporal and provincial fixed-effects, plus province-specific time varying traits. The latter include differences in per capita Gross Domestic Product (GDP), employment rates, housing prices, share of the population earning unemployment benefits and share of international migrants in different age categories between origin and potential destination provinces –all of them weighted by actual internal migration flows.

We find that the expansion of the welfare state has curtailed the mobility of young working-age individuals, especially less educated women. The findings prove robust to the exclusion of the foreign-born and to exclusions of other benefits, including caregiving

³ The main outcomes have been: children's schooling (Case and Deaton 1998, Yanez-Pagans 2008), children's health (Duflo 2003), living arrangements (Hamoudi and Thomas 2014) and labor market participation (Juarez and Pfütze 2015, Galiani *et al.* 2016, Borella-Mas *et al.* 2016), to name a few.

or minimum income support policies implemented by some provinces. Furthermore, the impacts are unique to non-contributory pensions, and are not restricted to cohabitating family members or tied to the care for disabled relatives, signaling the need for policy measures that facilitate the mobility of the young from lower income households.

To our knowledge, this is the first attempt to assess the impact of public assistance in the form of old-age non-contributory pensions on the mobility decisions of working-age individuals. Unlike prior work examining the role of unemployment insurance or welfare benefits, our focus is on non-contributory old-age pensions received by extended family members; thus capturing the welfare state, as well as family ties channels. This is especially important for Spain where, despite the expansion of the welfare state during the past decades (Guillen and Leon, 2011), families still provide the ultimate safety net (Bentolila and Ichino, 2008). The ability to rely on benefits received by extended family members might have contributed to the relatively low mobility of some working-age individuals. Our intent is to gauge whether that is the case and, if so, to what degree. In addition, our findings inform the literature on emancipation decisions of young people in Southern European countries by considering how the welfare state might be contributing to delaying their emancipation by curtailing their mobility (Becker *et al.*, 2010; Aparicio-Fenoll and Oppedisano, 2015; Ahn and Sanchez-Marcos, 2017).

2. Spanish Non-Contributory Pensions

Spain shares with other Mediterranean welfare states, such as Greece and Italy, a generous public pension system and a strong reliance on the family unit as the ultimate safety net (Ferrera 1996, Borsch-Supan 2013). Both features of the welfare state are closely inter-twined. Elderly care is perceived as a family responsibility, with the government playing a secondary role. This implies that children and grandchildren might

benefit from non-contributory pensions of extended family members, regardless of whether they live under the same roof.

According to our own calculations using data from the Spanish Survey of Household Finances over the 2002 through 2011 period, approximately 8 percent of family units with a household head aged 65 or above remit money to relatives in other households on a regular basis. This financial help increased during the recession years, from about 4 percent in 2002 to about 13 percent in 2011. Amazingly, even families below the poverty line (that is, those with labor incomes below 60 percent of median family income) helped relatives in other households. Specifically, in 2011, six percent of families with annual gross incomes below 9,000€ remitted over 110€ month to relatives living in other households.

Old age support in Spain accounts for over 45 percent of total public social expenditures, representing 12.6 percent of GDP –almost double public spending on health (OECD, 2016). The Spanish social support system is structured around two types of assistance. The first type consists of contributory benefits, which aid those who have paid into the system during unemployment spells or during retirement. The other type of public assistance consists of non-contributory pensions, which protect individuals in need who are not entitled to contributory pensions.

In Spain, there are two types of old-age non-contributory pensions: (1) what we will refer to in this paper as “assistance pensions” –first established in 1981, and (2) the more recent non-contributory pensions. Assistance pensions were granted to individuals aged 66 and over who had no subsistence means according to the Decree 2620/1981. Non-contributory pensions were introduced in 1991 by the Decree 357/1991 to replace assistance pensions. Non-contributory pensions require being at least 65 years old and having lived in Spain for a minimum of 10 years. Compared to the 1981 assistance

pensions, the 1991 non-contributory pensions were more generous (with almost double the benefit) and had a lower income eligibility threshold, covering a larger population. Indeed, its coverage rose from 0.56 percent of the population in 1988 under the old assistance pensions, to 0.72 percent of the population a decade later under the newer non-contributive pensions. Throughout the 1990s and the first half of the 2000s, non-contributory pensions gradually replaced assistance pensions, which became virtually extinct by 2007. Therefore, while we will account for prevailing assistance pensions, the vast majority of old-age non-contributory pensions currently in place are those legislated in 1991 –henceforth “non-contributory pensions”.

3. Conceptual Framework and Methodology

Following Kennan and Walker (2011, 2013) and Beine *et al.* (2016), we model migration as an optimal search process. Individuals in a given location decide between staying where they are at, or moving elsewhere based on the utility derived from a predicted stream of current and future earnings in each location, net of migration costs. Formally, if there are J possible locations, the utility derived by an individual who chooses location j is given by $[u(x,j)+\zeta_j]$, where x includes individual level characteristics and ζ_j is a random variable that represents the characteristics of destination j not included in the model. In this framework, individuals will move to location k if:

$$(1) \quad u(x,k) + \zeta_k > u(x,j) + \zeta_j, \quad \forall j$$

Researchers have made several assumptions about the distribution of the random variable ζ_j to estimate this type of structural model. Specifically, when there is a large number of alternative locations, the estimation becomes unfeasible unless important simplifying assumptions, such as assuming a generalized extreme value distribution, are adopted (Kennan and Walker, 2011). Therefore, we rely on a reduced form model similar to those proposed by Enchautegui (1997), Rabe and Taylor (2012), according to which

out-migration depends on differences between origin and potential destination characteristics. Specifically, we model the likelihood of out-migration of individual i from province j at a time t as:

$$(2) \quad M_{ijkt} = \alpha + X_{it} \beta + (Z_j - \sum_k \omega_k Z_k) \delta + \eta_j + \mu_t + \varepsilon_{ijkt}$$

where M_{ijt} is an indicator variable that takes the value of 1 if the i th individual migrates out of province j between t and $t+1$; it is 0 otherwise. X_i is a vector of demographic characteristics of individual i at time t , including her/his human capital. Z is a vector of time and province-specific variables at the origin j and at the potential destinations k , such as the employment ratio, housing prices, GDP per capita, share of the population earning unemployment benefits and share of international migrants in different age categories,⁴ as well as our key regressors –namely, the share of social assistance and non-contributory pensioners in the population. The vector: η_j contains provincial fixed-effects that account for regional idiosyncratic and time-invariant traits that may shape out-migration decisions,⁵ whereas μ_t is a vector of year fixed effects that addresses unobserved year specific traits impacting mobility decisions across provinces in any given year.

Following Rabe and Taylor (2012), the term $\sum_k \omega_k Z_k$ is a weighted average of provincial characteristics at all alternative destinations, for both migrants and non-migrants, where the weights are the observed inter-provincial migration flows of the working age population disaggregated by broad age groups (16-24, 25-44, 45-65). For instance, the differential employment rate of an individual at age 40 is calculated as the difference between employment at the origin minus the weighted average employment rate in all other provinces, using as weights the proportion of the 25-44 population emigrating from the origin province to each other province. By using actual origin-

⁴ We include information on international migration since the latter could be potentially responsible for the lower responsiveness of natives to existing inter-province labor market imbalances.

⁵ There are 52 provinces in Spain.

destination migration rates as weights, we allow for the most popular destination regions to represent the best alternative locations.

We estimate equation (2) as a linear probability model via ordinary least squares (OLS). We hypothesize that, other things equal, individuals will be less likely to relocate the greater their access to the welfare state at the origin, when compared to alternative locations. That is, we expect δ to be negative and statistically different from zero. Standard errors are clustered at the province level.

4. Data and Some Descriptive Statistics

We gather data from a variety of sources. The individual level data come from the 2nd quarters of the Spanish Labor Force Survey (*Encuesta de Poblacion Activa*, EPA, Spanish Statistical Institute, 2017a), which provide labor market status and province of residence at the time of the survey, $t+1$, as well as one year before, at time t . We use data spanning from 1995 through 2015, and define migration as a change in the province of residence. Antolín and Bover (1997) also used these data to study the impact of unemployment insurance on regional migration rates between 1987 and 1991.

Information on migratory flows between provinces is gathered from the Residential Variations Statistics (*Estadística de Variaciones Residenciales*, EVR, Spanish Statistical Institute 2017b). As noted earlier, we use the flows to weigh average provincial traits based on the relevance of the alternative locations. We do not use the EVR to examine individual-level migratory choices because, unlike the EPA, it lacks information on key personal characteristics when modelling migration, such as educational attainment or marital status.⁶

⁶ An alternative dataset used when studying mobility is the *Muestra Continua de Vidas Laborales* (MCVL). The MCVL is an administrative dataset that contains information on all the individual labor market appointments (*e.g.* Devillanova and García-Fortes, 2004). However, in the MCVL, migration is only observed if the individual finds a job in a different location. This measure of mobility has a few shortcomings, including the fact that: a) non-job related migrations are excluded, b) we do not know when

Our key regressor is the proportion of welfare beneficiaries in the province population, which we gather from the Labor Statistics Yearbook from the Ministry of Employment and Social Security (2017) and the Population Statistics from the Spanish National Statistics Institute (2017c). We compile information on the number of beneficiaries of the so-called assistance pensions (from the 1981 Law) and the more recent non-contributory pensions (implemented by the 1991 Law).⁷ Of special interest to us is the impact of the number of non-contributory pension beneficiaries given that this welfare policy was introduced in 1991 to replace the prior assistance pensions –although the latter remained in place for existing beneficiaries.

We also gather data from various sources to account for the impact of the province’s economy, labor and housing markets, and population composition, on individual mobility decisions. Annual provincial employment rates capturing changes in labor market conditions are derived from the Spanish National Statistics Institute (2017d). Housing prices in any given province and year are gathered from the Spanish Ministry of Development (*Ministerio de Fomento*, 2017). In addition, we control for the province’s per capita GDP, which we deflate along with its housing prices, using the province’s consumer price index (gathered from the *National Statistics Institute*, 2017e). Lastly, we also include controls for the share of the province’s population earning unemployment benefits (computed using the *Encuesta de Poblacion Activa*, EPA), and for its share of international migrants ages 25 to 44, and 45 and over (computed using the *Estadística de Variaciones Residenciales*, EVR).

We restrict the analysis to prime-age working-age individuals aged 16 to 44 in order to assume away retirement location decisions more likely to be driving residential

the migration occurs, c) migrants who never find a job are not observed, and d) we need to assume that a change in job location implies a change in residence (Devillanova and García-Fontes, 2004).

⁷ We also show results for all beneficiaries –elderly, as well as disabled (see Table 6 below).

decisions of older individuals. Table 1 presents summary descriptive statistics for our sample. According to Panel A, respondents are, on average, 30 years old; about half are male and close to half are married. Approximately 10 percent are foreign-born and, for the most part, they have a secondary education or less (about 77 percent of the sample). Finally, approximately 9 percent is eligible to receive emancipation benefits,⁸ and close to 5 percent receive unemployment insurance. Of special interest to us is their low inter-provincial mobility. Approximately 0.5 percent of respondents report having moved from one province to another over the 1995-2015 period.

Panel B in Table 1 further reports on a number of macroeconomic provincial traits likely influencing mobility decisions. On average, approximately 0.04 percent of the provincial population receives the 1981 assistance pensions, and 0.7 percent receives the 1991 old-age non-contributory pensions. About 45 percent of the population is employed and the average housing price is 1,300€/square meter. GDP per capita in 2011 constant euros averaged 25,000. Finally, when we include disability pensioners, the share of covered population by the 1981 and 1991 non-contributory pensions we are focusing on rises to 0.14 percent and 1.34 percent of the entire population, respectively.

To conclude, Panel C displays the summary statistics for the provincial level differences created using the data from Panel B, as shown in equation (2).

5. The Role of Non-Contributory Pensions on Internal Mobility

5.1 Main Findings

Our purpose in this study is to learn how the welfare state, as captured by the old-age non-contributory pensions received by extended family members, might have altered the decision to move of young working-age individuals. Specifically, given the strong

⁸ Emancipation benefits were established in 2008. Young people ages 22-29 became eligible for the subsidy for a 4-year maximum. The policy was abandoned in 2012 as the policy became unsustainable.

family ties characteristics of many Mediterranean countries, we wish to learn if the establishment of old-age non-contributory pensions somehow inhibited the mobility of working-age adults. The estimates in Table 2 provide a preliminary answer to our question by displaying the estimated impacts of relative increases in the share of pensioners in origin vs. destination provinces for the two types of old-age non-contributory pensions Spain has ever offered –namely, the 1981 assistance pensions and the 1991 non-contributory pensions regulated to replace the former pensions.

As we would expect, given the relatively small share of the population still receiving the 1981 assistance pensions, the effect of increases in the relative share of those pensioners in origin vs. destinations provinces on the mobility decisions of 17 to 44 year olds is negative, but not statistically different from zero. However, the more recent and prevalent old-age non-contributory pensions appear to influence working-age individuals' mobility decisions in a meaningful manner. Specifically, a one standard deviation increase in the provinces' differential in non-contributory pensioner rates lowers the propensity to move of young working-age respondents by roughly 0.0008 or 13.3 percent. The effect appears to be somewhat stronger among women (15 percent) than among men (11.57 percent).

5.2 Heterogeneous Impacts by Age and Educational Attainment

To better understand how non-contributory pensions might be impacting men and women, we further look into any heterogeneous impacts by age and educational attainment. Other things equal, we would expect those groups with fewer employment alternatives to be the ones whose mobility is primarily constrained by the presence of a non-contributory pension's beneficiary in the family.

According to the estimates in Table 3, which splits our sample by age into 17-35 year olds and 36-44 year olds, it is clear that greater differences in the share of old-age

non-contributory pensioners at origin vs. destination provinces curtail mobility among the youngest group of working-age adults. In particular, a one standard deviation increase in the difference between the share of old-age non-contributory pensioners in origin and at destination provinces curtails mobility among young men and women by 0.0012 or 17.14 percent. The impacts are not so different for men (19.12 percent) and women (16.9 percent). However, the same increases have no statistically significant impacts on the mobility of older working-age individuals. In other words, the impact of these benefits appear constrained, primarily, to relatively young workers.

Next, we explore if the expansion of the welfare state through old-age non-contributory pensions appears to have had a differential impact on the mobility of working-age individuals depending on their educational attainment. To that end, in Table 4, we display the estimated impacts of the two types of non-contributory pensions. As in Tables 2 and 3, we continue to see that the more prevalent pension program has curtailed mobility, especially among working-age women with a primary education or less. It is for them that a one standard deviation increase in the difference between the share of pensioners in origin and potential destination provinces leads to 0.0025 or 53.19 percent reduction in their propensity to move.

In sum, old-age non-contributory pensions might have constrained the mobility of young working-age individuals, especially that of less educated women.

6. Mechanisms

Do non-contributory pensions restrict the mobility of all family members, or just the one of co-residents? In addition, do we observe alike impacts for other types of pensions, or is the mobility impact unique to non-contributory pensions? These two questions shed light onto the mechanisms possibly at play. If, for instance, non-contributory pensions affect exclusively the mobility of co-residents, they might consist

of an inter-generational transfer in exchange for the provision of care. This is different from non-contributory pensions affecting the mobility of family members that do not necessarily reside in the same household. Similarly, if the mobility impacts of non-contributory pensions are unique to this type of pension, it might be indicative of the special disadvantage at which poorer households –typically, those qualifying for the non-contributory pension– are likely to find themselves, as opposed to better-to-do households enjoying greater mobility and better employment opportunities.

To answer the two aforementioned questions and gain a better understanding of where these impacts are emanating from and why, we start by looking at whether the effects occur exclusively among family members residing in the same household or, rather, can be extensive to other family members. Most of the literature analyzing different impacts of old-age benefits restricts its focus to cohabiting family members (see Duflo 2003 or Juarez and Pfitze 2014, for instance). These should be, understandably, the most likely to respond to additional incoming monetary flows. Yet, in those instances, one might interpret that the non-contributory pension serves as the children's compensation for taking care of elderly parents residing in the same household.

To assess if that is case, Table 5 displays the estimated impact of non-contributory pensions when we include in equation (2) a dummy indicative of whether the respondent cohabits with a pension beneficiary, which we interact with the standardized difference in the number of non-contributory and assistance pensioners between origin and destination provinces. As shown therein, cohabiting with someone receiving an old-age pension reduces mobility by 0.0016 or 27 percent. Yet, accounting for whether the respondent cohabitates with an older family member receiving a retirement pension does not significantly change the estimated impact of changes in the inter-province differential non-contributory pensioner rate, which is still roughly 12 percent for a one standard

deviation increase. This finding suggests that the reduced mobility is not exclusively tied to residing in the same household as the beneficiary, possibly as compensation for elderly care provided by the younger generation. That said, when differentiating by gender, we do find that, while women's restricted mobility occurs regardless of whether the retired pensioner resides in the same household, men's reduced mobility only materializes when they reside in the same household as the pension beneficiary.

To further check if the observed impact of non-contributory pensions is, somehow, reflective of caring for the elderly, as opposed to a non-*quid pro quo* assistance to the young, we also experiment with including among our sample of old-age non-contributory pension beneficiaries disabled individuals receiving disability benefits. A priori, one might think that the receipt of such benefits might curtail mobility among some working-age individuals –perhaps those more likely to care for the disabled. Therefore, we should see, if anything, a stronger impact. Yet, according to the estimates in Table 6, the estimated policy impacts actually drop when we include disabled beneficiaries in our shares of old-age pension beneficiaries. While the same one standard deviation increase in the differential share of pensioners in origin and destination provinces lowers female mobility by roughly 11.67 percent –often more likely to be the caretakers, it no longer displays a significant impact on the mobility of men.

To further understand the mechanisms at play, it is also important to learn if the effects are unique to non-contributory pensions or, rather, also take place for other types of household pensions, such as contributory pensions. This question is relevant for various reasons. First, the share of households receiving contributory pensions and the size of those pensions are both significantly larger than for non-contributory pensions. Indeed, relative to non-contributory pensions, contributory pensions are received by a larger share of the population (14 percent vs. 0.7 percent), and their average monthly

amount is significantly higher (€1,021 vs. €367, in 2015). Secondly, if all pensions have alike impacts, the driving mechanism is likely to be distinct from the one at play when only non-contributory pensions influence household mobility. In particular, if non-contributory pensions are the sole ones to restrict the mobility of family members, with men's mobility being reduced only if they cohabit with the pensioner, it suggests that the pension might be providing a lifeline to lower income households. Perhaps, these are the households with fewer employment opportunities and options. To assess if that is the case, we re-estimate our model using, instead, the difference in the share of *contributory* pensioners between origin and destination provinces. As can be seen in Table 7, the latter has no impact on the mobility decisions of men or women.

Overall, then, the results from Tables 5 through 7 suggest that non-contributory pensions reduce the mobility of family members by providing low-income households with an alternative source of income they can use to assist the younger generation. In the case of women, this assistance occurs even if they do not cohabit with the elderly family member; however, it does not seem to be tied to quid-pro-quo caring services, as their impact is not necessarily different when the beneficiary is disabled.

7. Robustness Checks

Thus far, we have shown that non-contributory pensions curtail the mobility of younger family members, especially lower educated women. Furthermore, the impacts are not restricted to cohabitating family members possibly caring for their elderly, although they are exclusive to non-contributory pensions, which are received by lower-income pensioners.

In what follows, we assess the robustness of our main finding by addressing a number of potentially confounding factors that could be driving the observed impacts. First, in Table 8, we distinguish between natives and foreign-born individuals. Other

things equal, we would expect our effects to stem, primarily, from the behavior of natives whose parents are more likely to qualify for the pensions being examined. Indeed, we find that higher rates of old-age non-contributory pensioners at the origin are linked to significantly lower mobility propensities among both native men and women. Specifically, a one standard deviation increase in the non-contributory pensioners' rate differential between origin and destination provinces curtails the moving likelihood of working-age native women in our sample by 20 percent, that of native men by 14.29 percent and, overall, for all the native sample by 16.33 percent. However, we find no significant impacts among the foreign-born population.

Another concern might be the possibility that the found policy impacts might be due to other overlapping transfers/payments. In that regard, it is worth noting that the Dependency Law came into effect on January 1, 2007. It was aimed to assist those in need of support due to illness, disability or old age by allowing their caretakers to sign a formal labor contract and get compensated for their services. Therefore, it could be the case that the restricted mobility attributed to old-age non-contributory pensions was partially due to such transfers. To assess if that was the case, we repeat the analysis restricting our attention to the period prior to the enactment of the Dependency Law – that is, to the 1995-2008 period (see Table 9). Our estimates only get larger when we do so. The same one standard deviation increase in the difference between the share of non-contributory pensioners in origin vs. destination provinces lowers respondents' propensity to move by 34.55 percent, with the impact being slightly smaller for men (36 percent) than for women (38.89 percent).

Finally, we also experiment with excluding provinces that provide minimum income support policies to more than one percent of all households to make sure the estimated policy impacts are not driven by those other financial supports. Once again,

according to the estimates in Table 10, we continue to find that that a one standard deviation increase in the share of non-contributory pensioners in origin relative to destination provinces lowers the propensity to move of our sample by roughly 17.24 percent –about 15.52 percent among men and 19.3 percent among women.

In sum, non-contributory pensions seem to inhibit the mobility of working-age individuals. This result is robust to the exclusion of the foreign-born, to restricting our attention to the period prior to the enactment of the Dependency Law granting caregiving support, and to eliminating regions offering other supplemental benefits.

8. Concluding Remarks

Labor mobility is crucial in addressing labor market imbalances and in ensuring their efficient functioning. Yet, in many countries with extended welfare states, mobility is rather limited. This has been pointed out by many authors in the literature when underscoring how unemployment insurance fails to promote the quick adjustment of labor markets by contributing to reduced mobility.

We look at the role that the expansion of the welfare state through old age non-contributory pensions received by extended family members might have played in curtailing the mobility of young working-age individuals in Spain. Old age non-contributory pensions might provide a safety net that operates through the reliance on family and strong family ties characteristic of some Mediterranean countries, such as Spain.

Using data spanning for over two decades, we show how the expansion of the welfare state –captured through the number of old age non-contributory pensioners– has impacted the mobility of young working-age individuals, especially less educated women. The findings prove robust to the exclusion of the foreign-born and to exclusions of other benefits, including caregiving or minimum income support policies implemented

by some provinces. They are also unique to the non-contributory pensions, as opposed to regular contributory pensions, hinting on the importance of these transfers among families with lower income beneficiaries. Furthermore, the impact is not restricted to cohabitating family members or tied to the caring for disabled relatives, both of which could be seen as compensation for the services provided by the younger generation.

Overall, the results uncover some of the unintended consequences of the extended welfare state. More importantly, they underscore the need to consider policy measures that would enable the younger generation from lower income backgrounds to move in response to labor market differentials.

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Table 1: Descriptive Statistics

Variable Names		Definition	Mean	S.D.	Min	Max
Panel A. EPA data						
Moved	1233837	=1 if emigrated from province	0.006	0.08	0	1
Age	1233837	Age in years	31.10	7.79	17	44
Male	1233837	=1 if male sex	0.508	0.50	0	1
Married	1233837	=1 if married civic status	0.447	0.50	0	1
Immigrant	1233837	=1 if born abroad	0.139	0.35	0	1
Basic emancipation	1233837	=1 if eligible for emancipation benefit	0.140	0.35	0	1
Less than primary	1233837	=1 if less than primary education	0.021	0.14	0	1
Primary	1233837	=1 if primary education	0.128	0.33	0	1
Secondary	1233837	=1 if secondary education	0.572	0.49	0	1
University	1233837	=1 if college education	0.280	0.45	0	1
Insured	1233837	=1 if receiving unemployment benefits	0.047	0.21	0	1
Panel B. Macro data						
Social assistance pensioners rate	966	Proportion of province population receiving old-age pensions per 100 inhabitants	0.044	0.060	0.00	0.43
Non-contributory pensioners rate	1020	Proportion of province population receiving old-age pensions per 100 inhabitants	0.748	0.330	0.20	2.10
Employment rate	1020	Proportion of 16-64 year old population in employment	0.459	0.060	0.30	0.62
Housing prices	1000	Price of province square meter in constant 2011 prices (€)	13.33	5.23	5.61	32.99
GDP per capita	950	Provincial Gross Domestic Product per capita in constant 2011 prices (thousand €)	25.03	5.71	13.23	43.45
Unemployment insured rate	1020	Proportion of province population receiving unemployment benefits per 100 inhabitants	2.163	1.57	0.192	12.398
45 to 65 year-old international migrants	1020	International migrants aged 45 to 65 years old over total province population per 100 inhabitants	6.614	6.25	0.028	43.131
25 to 65 year-old international migrants	1020	International migrants aged 25 to 45 years old over total province population per 100 inhabitants	1.275	1.35	0.006	12.132
Social assistance beneficiaries rate	968	Proportion of province population receiving old-age or inability pensions per 100 inhabitants	0.139	0.19	0.00	1.48
Non-contributory beneficiaries rate	1020	Proportion of province population receiving old-age or inability pensions per 100 inhabitants	1.340	0.57	0.39	3.94
Contributory pensioners rate	1020	Proportion of province population receiving old-age pensions per 100 inhabitants	14.049	4.09	2.815	26.513
Year	1020	Survey year	2005.50	5.77	1996	2015
Proel	1020	Province of origin	26.00	14.73	1.0	51.0
Panel C. Merged data						
Std. differential social assistance pensioners rate	1233837	Social assistance pensioners rate at province of origin minus weighted rate at potential destinations, standardized	-0.165	0.320	-1.46	2.63
Std. differential non-contributory pensioners rate	1233837	Non-contributory pensioners rate at province of origin minus weighted rate at potential destinations, standardized	-0.201	1.090	-1.98	5.64
Std. differential employment rate	1233837	Employment rate at province of origin minus weighted rate at potential destinations, standardized	0.316	1.080	-2.52	3.01
Std. differential housing prices	1228055	Housing prices at province of origin minus weighted prices at potential destinations, standardized	0.691	1.330	-2.28	4.02
Std. differential GDP per capita	1228055	GDP per capita at province of origin minus weighted GDP per capita at potential destinations, standardized	0.486	1.270	-2.16	3.24
Std. differential unemployment insured rate	1233837	Unemployment beneficiaries rate at province of origin minus weighted rate at potential destinations, standardized	-0.533	0.99	-2.984	7.777
Std. diff. 45 to 65 year-old international migrants	1233837	International migrants 25 to 45 rate at province of origin minus weighted rate at potential destinations, standardized	0.307	1.34	-3.667	7.658
Std. diff. 25 to 65 year-old international migrants	1233837	International migrants 25 to 45 rate at province of origin minus weighted rate at potential destinations, standardized	0.139	1.4	-2.595	9.669
Std. diff. social assistance beneficiaries rate	1231034	Social assistance beneficiaries rate at province of origin minus weighted rate at potential destinations, standardized	-0.172	0.53	-1.654	3.607
Std. diff. non-contributory beneficiaries rate	1233837	Non-contributory beneficiaries rate at province of origin minus weighted rate at potential destinations, standardized	-0.219	1.22	-2.021	5.648
Std. differential contributory pensioners rate	1233837	Contributory pensioners rate at province of origin minus weighted rate at potential destinations, standardized	-0.319	0.81	-3.321	3.459

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 2: Non-Contributory Pensioners and Mobility

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All			Men			Women		
	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Social assistance pensioners rate differential	-0.0002 (0.0004)	-0.0002 (0.0004)	-0.0002 (0.0003)	0.0000 (0.0004)	-0.0002 (0.0004)	-0.0002 (0.0004)	-0.0003 (0.0004)	-0.0002 (0.0003)	-0.0002 (0.0003)
Non-contributory pensioners rate differential	-0.0009*** (0.0003)	-0.0008** (0.0003)	-0.0008** (0.0003)	-0.0008** (0.0004)	-0.0007* (0.0004)	-0.0007* (0.0004)	-0.0011** (0.0004)	-0.0009** (0.0004)	-0.0010** (0.0004)
Constant	0.0027*** (0.0006)	0.0102*** (0.0009)	0.0093*** (0.0015)	0.0039*** (0.0005)	0.0110*** (0.0011)	0.0061*** (0.0021)	0.0059*** (0.0008)	0.0143*** (0.0012)	0.0131*** (0.0017)
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,228,055	1,228,055	1,228,055	612,048	612,048	612,048	616,007	616,007	616,007
R-squared	0.0017	0.0035	0.0035	0.0017	0.0034	0.0035	0.0018	0.0037	0.0038
Mean dependent variable (S.D. in parentheses)	0.006 (0.08)			0.006 (0.08)			0.006 (0.07)		

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses.*significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 3: Heterogeneous Impacts #1: Responses by Age

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Panel A: 35 Years Old and Younger									
Standardized social assistance pensioners rate differential	0.0001 (0.0005)	-0.0003 (0.0005)	-0.0003 (0.0004)	0.0003 (0.0005)	-0.0004 (0.0005)	-0.0003 (0.0005)	-0.0000 (0.0005)	-0.0002 (0.0005)	-0.0002 (0.0005)
Standardized non-contributory pensioners rate differential	-0.0012*** (0.0004)	-0.0013*** (0.0004)	-0.0013*** (0.0004)	-0.0012** (0.0005)	-0.0013** (0.0005)	-0.0012** (0.0005)	-0.0013** (0.0005)	-0.0013** (0.0005)	-0.0014** (0.0006)
Observations	809,264	809,264	809,264	408,742	408,742	408,742	400,522	400,522	400,522
R-squared	0.0024	0.0037	0.0037	0.0024	0.0039	0.0039	0.0026	0.0038	0.0038
Mean dependent variable (S.D. in parentheses)		0.0070 (0.083)			0.0068 (0.082)			0.0071 (0.084)	
Panel B: Above 35 Years of Age									
Standardized social assistance pensioners rate differential	-0.0002 (0.0006)	-0.0005 (0.0006)	-0.0004 (0.0005)	-0.0000 (0.0006)	-0.0003 (0.0006)	-0.0004 (0.0005)	-0.0004 (0.0007)	-0.0006 (0.0007)	-0.0005 (0.0007)
Standardized non-contributory pensioners rate differential	-0.0001 (0.0005)	-0.0001 (0.0005)	-0.0001 (0.0005)	0.0003 (0.0005)	0.0003 (0.0005)	0.0002 (0.0006)	-0.0004 (0.0008)	-0.0005 (0.0008)	-0.0005 (0.0007)
Observations	418,791	418,791	418,791	203,306	203,306	203,306	215,485	215,485	215,485
R-squared	0.0011	0.0029	0.0029	0.0014	0.0031	0.0032	0.0013	0.0032	0.0032
Mean dependent variable (S.D. in parentheses)		0.0032 (0.056)			0.0036 (0.059)			0.0028 (0.053)	
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses. *significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 4: Heterogeneous Impacts #2: Responses by Educational Attainment

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Panel A: Primary Education or Less									
Standardized social assistance pensioners rate differential	-0.0002 (0.0007)	-0.0010 (0.0006)	-0.0011* (0.0006)	0.0000 (0.0008)	-0.0008 (0.0008)	-0.0009 (0.0007)	-0.0004 (0.0010)	-0.0012 (0.0009)	-0.0014 (0.0009)
Standardized non-contributory pensioners rate differential	-0.0017** (0.0007)	-0.0013* (0.0007)	-0.0010 (0.0007)	-0.0009 (0.0007)	-0.0006 (0.0007)	-0.0001 (0.0009)	-0.0026*** (0.0009)	-0.0023** (0.0009)	-0.0022** (0.0009)
Observations	184,121	184,121	184,121	100,210	100,210	100,210	83,911	83,911	83,911
R-squared	0.0034	0.0057	0.0057	0.0035	0.0059	0.0059	0.0044	0.0067	0.0068
Mean dependent variable (S.D. in parentheses)	0.0047 (0.069)			0.0047 (0.069)			0.0047 (0.068)		
Panel B: Secondary or Tertiary Education									
Standardized social assistance pensioners rate differential	-0.0000 (0.0004)	-0.0001 (0.0004)	-0.0000 (0.0004)	0.0001 (0.0005)	-0.0001 (0.0005)	-0.0001 (0.0005)	-0.0001 (0.0004)	-0.0000 (0.0004)	0.0000 (0.0004)
Standardized non-contributory pensioners rate differential	-0.0008** (0.0004)	-0.0007* (0.0004)	-0.0008* (0.0004)	-0.0008* (0.0004)	-0.0007 (0.0004)	-0.0008 (0.0005)	-0.0009* (0.0005)	-0.0007 (0.0004)	-0.0008* (0.0005)
Observations	1,043,934	1,043,934	1,043,934	511,838	511,838	511,838	532,096	532,096	532,096
R-squared	0.0017	0.0034	0.0034	0.0018	0.0034	0.0034	0.0018	0.0037	0.0037
Mean dependent variable (S.D. in parentheses)	0.0059 (0.076)			0.0059 (0.077)			0.0058 (0.076)		
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses.*significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 5: Mechanisms #1: Is the Impact of Non-Contributory Pensions on Mobility Limited to Cohabiting Household Members?

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Cohabiting with old-age pensioner (any kind)	-0.0012*** (0.0003)	-0.0016*** (0.0003)	-0.0016*** (0.0003)	-0.0016*** (0.0004)	-0.0017*** (0.0004)	-0.0017*** (0.0004)	-0.0007* (0.0004)	-0.0014*** (0.0004)	-0.0014*** (0.0004)
Social assistance pensioners rate differential	-0.0001 (0.0004)	-0.0002 (0.0004)	-0.0001 (0.0004)	0.0000 (0.0005)	-0.0002 (0.0005)	-0.0001 (0.0004)	-0.0003 (0.0004)	-0.0002 (0.0004)	-0.0001 (0.0004)
Cohabiting*Social assistance rate differential	-0.0001 (0.0007)	-0.0002 (0.0008)	-0.0002 (0.0008)	0.0001 (0.0009)	-0.0000 (0.0010)	0.0000 (0.0010)	-0.0003 (0.0008)	-0.0004 (0.0008)	-0.0004 (0.0008)
Non-contributory pensioners rate differential	-0.0008** (0.0003)	-0.0007** (0.0003)	-0.0007** (0.0003)	-0.0007* (0.0004)	-0.0006 (0.0004)	-0.0005 (0.0004)	-0.0010** (0.0004)	-0.0009** (0.0004)	-0.0009** (0.0004)
Cohabiting*Non-contributory rate differential	-0.0006* (0.0004)	-0.0006 (0.0004)	-0.0006 (0.0004)	-0.0008* (0.0004)	-0.0008* (0.0005)	-0.0008* (0.0005)	-0.0004 (0.0004)	-0.0003 (0.0004)	-0.0003 (0.0004)
Constant	0.0029*** (0.0007)	0.0103*** (0.0009)	0.0093*** (0.0015)	0.0042*** (0.0005)	0.0109*** (0.0011)	0.0059*** (0.0020)	0.0061*** (0.0008)	0.0144*** (0.0011)	0.0132*** (0.0017)
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,228,055	1,228,055	1,228,055	612,048	612,048	612,048	616,007	616,007	616,007
R-squared	0.0018	0.0035	0.0035	0.0018	0.0035	0.0035	0.0018	0.0038	0.0038
Mean dependent variable (S.D. in parentheses)		0.006 (0.08)			0.006 (0.08)			0.006 (0.07)	

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses. *significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 6: Mechanisms #2: Is The Impact Stronger When We Include Disabled Beneficiaries?

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Standardized social assistance beneficiaries rate differential	-0.0002 (0.0004)	-0.0002 (0.0003)	-0.0001 (0.0003)	-0.0001 (0.0004)	-0.0002 (0.0004)	-0.0001 (0.0003)	-0.0002 (0.0003)	-0.0001 (0.0003)	-0.0002 (0.0002)
Standardized non-contributory beneficiaries rate differential	-0.0008** (0.0004)	-0.0006* (0.0004)	-0.0006* (0.0004)	-0.0007 (0.0005)	-0.0006 (0.0004)	-0.0004 (0.0004)	-0.0010** (0.0004)	-0.0007* (0.0004)	-0.0008* (0.0004)
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,225,252	1,225,252	1,225,252	610,652	610,652	610,652	614,600	614,600	614,600
R-squared	0.0017	0.0035	0.0035	0.0017	0.0034	0.0034	0.0018	0.0037	0.0037
Mean dependent variable (S.D. in parentheses)	0.006 (0.08)			0.006 (0.08)			0.006 (0.08)		

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses.*significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 7: Mechanisms #3: Is the Impact of Non-Contributory Pensions on Mobility Unique to These Pensions?

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Contributory pensioners rate differential	-0.0005 (0.0005)	-0.0005 (0.0005)	-0.0005 (0.0006)	-0.0006 (0.0006)	-0.0005 (0.0007)	-0.0005 (0.0008)	-0.0004 (0.0005)	-0.0004 (0.0005)	-0.0006 (0.0006)
Constant	0.0041*** (0.0005)	0.0114*** (0.0009)	0.0098*** (0.0017)	0.0052*** (0.0010)	0.0122*** (0.0014)	0.0065*** (0.0022)	0.0087*** (0.0007)	0.0167*** (0.0009)	0.0139*** (0.0020)
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,228,055	1,228,055	1,228,055	612,048	612,048	612,048	616,007	616,007	616,007
R-squared	0.0017	0.0035	0.0035	0.0017	0.0034	0.0035	0.0018	0.0037	0.0037
Mean dependent variable (S.D. in parentheses)	0.006 (0.08)			0.006 (0.08)			0.006 (0.08)		

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses. *significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 8: Robustness Check #1: Distinguishing by Nativity

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Panel A: Natives									
Standardized social assistance pensioners rate differential	0.0001 (0.0004)	0.0002 (0.0004)	0.0002 (0.0004)	0.0003 (0.0004)	0.0003 (0.0004)	0.0003 (0.0004)	-0.0002 (0.0004)	0.0000 (0.0004)	0.0001 (0.0004)
Standardized non-contributory pensioners rate differential	-0.0010*** (0.0003)	-0.0009*** (0.0003)	-0.0009*** (0.0003)	-0.0009** (0.0003)	-0.0008** (0.0003)	-0.0008** (0.0004)	-0.0011** (0.0004)	-0.0010** (0.0004)	-0.0011** (0.0004)
Observations	1,137,066	1,137,066	1,137,066	569,100	569,100	569,100	567,966	567,966	567,966
R-squared	0.0015	0.0032	0.0032	0.0014	0.0028	0.0028	0.0017	0.0037	0.0038
Mean dependent variable (S.D. in parentheses)		0.0049 (0.070)			0.0049 (0.070)			0.0050 (0.071)	
Panel B: Foreign-born									
Standardized social assistance pensioners rate differential	-0.0005 (0.0026)	0.0004 (0.0026)	0.0010 (0.0030)	-0.0028 (0.0044)	-0.0019 (0.0044)	-0.0014 (0.0045)	0.0016 (0.0021)	0.0025 (0.0021)	0.0033 (0.0026)
Standardized non-contributory pensioners rate differential	0.0053** (0.0025)	0.0055** (0.0025)	0.0042 (0.0026)	0.0058* (0.0031)	0.0059* (0.0031)	0.0041 (0.0031)	0.0046* (0.0026)	0.0049* (0.0026)	0.0043 (0.0028)
Observations	90,989	90,989	90,989	42,948	42,948	42,948	48,041	48,041	48,041
R-squared	0.0049	0.0055	0.0056	0.0076	0.0082	0.0083	0.0042	0.0050	0.0050
Mean dependent variable (S.D. in parentheses)		0.0104 (0.101)			0.0114 (0.106)			0.0095 (0.097)	
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses.*significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

**Table 9: Robustness Check #2: Avoiding Confounding Impacts from the Dependency Law
(Sample Period Prior to the Dependency Law: 1995-2008)**

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Std. social assistance pensioners rate differential	-0.0003 (0.0004)	-0.0003 (0.0004)	-0.0005 (0.0004)	-0.0002 (0.0005)	-0.0004 (0.0005)	-0.0004 (0.0006)	-0.0004 (0.0005)	-0.0003 (0.0005)	-0.0005 (0.0005)
Std. non-contributory pensioners rate differential	-0.0021*** (0.0006)	-0.0018*** (0.0005)	-0.0019*** (0.0006)	-0.0019*** (0.0006)	-0.0017*** (0.0006)	-0.0018*** (0.0006)	-0.0022*** (0.0008)	-0.0019** (0.0007)	-0.0021** (0.0008)
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	851,142	851,142	851,142	425,170	425,170	425,170	425,972	425,972	425,972
R-squared	0.0017	0.0035	0.0035	0.0017	0.0035	0.0035	0.0018	0.0037	0.0037
Mean dependent variable (S.D. in parentheses)	0.0055 (0.074)			0.0055 (0.074)			0.0054 (0.073)		

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses.*significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).

Table 10: Robustness Check #3: Excluding Regions with High Income Support Policies
(i.e. Asturias, Basque Country, Navarra, and Cantabria)

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	All			Men			Women		
Model Specification:	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3	Specif. 1	Specif. 2	Specif. 3
Standardized social assistance pensioners rate differential	-0.0002 (0.0004)	-0.0003 (0.0004)	-0.0002 (0.0003)	-0.0000 (0.0004)	-0.0002 (0.0004)	-0.0002 (0.0004)	-0.0004 (0.0004)	-0.0003 (0.0004)	-0.0003 (0.0004)
Standardized non-contributory pensioners rate differential	-0.0010*** (0.0003)	-0.0009*** (0.0003)	-0.0010*** (0.0004)	-0.0009** (0.0004)	-0.0008** (0.0004)	-0.0008** (0.0004)	-0.0011** (0.0004)	-0.0010** (0.0004)	-0.0011** (0.0004)
Demographic and Human Capital Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Macroeconomic Controls	No	No	Yes	No	No	Yes	No	No	Yes
Province of origin fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,128,213	1,128,213	1,128,213	562,524	562,524	562,524	565,689	565,689	565,689
R-squared	0.0017	0.0035	0.0035	0.0017	0.0035	0.0035	0.0018	0.0037	0.0037
Mean dependent variable (S.D. in parentheses)	0.0058 (0.076)			0.0058 (0.076)			0.0057 (0.076)		

Notes: All specifications include a constant term, province of origin and year fixed effects. Demographic and human capital controls are age, male sex, marital status, an immigrant dummy, educational attainment dummies (ref. university education), a dummy indicating emancipation benefit eligibility, and a dummy for receiving unemployment benefits. Macroeconomic controls are standardized differentials between the province of origin employment rate, per capita income, house prices per square meter, share of the population receiving unemployment benefits, and international migration rates and the weighted average of the corresponding rates at potential destinations. Observations are weighted using the individual weights in the EPA. Standard errors are clustered by province. Standard errors are shown in parentheses. *significant at 10% **significant at 5%; ***significant at 1%.

Source: EPA (1995-2015), EVR (1995-2015), Cifras de Población (1995-2015), Valor Tasado de Vivienda Libre (1995-2015), Contabilidad Regional de España (1995-2015), Consumer Price Index (1995-2015).