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Trends in Labor Force Participation of Older Workers in Spain

Pilar García-Gómez, Sergi Jiménez-Martín, and Judit Vall Castelló

9.1 Introduction

The large increase in life expectancy and old-age dependency ratios urged a change in the trends of early retirement and lower work participation rates that were observed during the 1980s and early 1990s. Employment rates in many Organisation for Economic Co-operation and Development (OECD) countries reversed this trend and started to increase (following a U-shaped pattern) since the mid-1990s. In a majority of countries, this increase has been largest for men aged 60–64, but men aged 55–59 and 65–69 in most (though not all) countries have also experienced an increase in their participation rates. Labor force participation (LFP) and employment rates of women have also been increasing since the mid-1990s, although the previous trend was not negative, and in some countries, it was even positive. In Spain, mothers with low participation and education have been replaced in the labor market by more-educated high-participating daughters (Boldrín, Jiménez-Martín, and Peracchi 2001). In fact, the labor market participa-

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tion of women has practically doubled in the last 35 years in Spain, from 28 percent in 1977 to 53 percent in 2014, converging but still not reaching LFP rates of men.

Many factors may have contributed to the recent increases in LFP and employment, including changes in the incentives from social security, other early retirement routes like disability insurance (DI) or unemployment insurance, improving health and longevity, increasing levels of education, a shift toward less physically demanding jobs, and the growth of female LFP (combined with the desire for joint retirement among couples).

There is a line of work (see García-Pérez, Jiménez-Martín, and Sánchez-Martín [2013] and the references therein) that emphasizes the importance of social security and employment regulations in determining the labor force behavior of older workers. Using administrative data, research finds that economic incentives have a strong impact on labor market decisions in Spain. Unemployment regulations are shown to be particularly influential for retirement behavior, along with the more traditional determinants linked to the pension system. In particular, the early retirement route (see also Gruber and Wise 1999 or Hairault, Langot, and Sopraseuth 2010) of unemployment insurance is particularly important in Spain. However, there were no substantial modifications to the system around 1995 to explain a change in the previous labor force trends of older workers.

One of the key factors behind the increase in employment trends could be the strong growth of the Spanish economy observed after the 1993–95 recession. Felgueroso and Jiménez-Martín (2009) show that the Spanish economy experienced a very strong job creation period between the mid-1990s and 2007, allowing the overall employment rate to increase by about 20 percentage points. This affected all population groups regardless of education and gender. The implications of such a period of prosperity were very important. Spain moved from the last position in the employment rate of the EU15 to the average level, overtaking Italy (7 percentage points), catching up with France (1 percentage point), and cutting the distance to countries like the UK, Germany, and Finland (4–6 percentage points).

Finally, another potential factor is human capital accumulation (Felgueroso and Jiménez-Martín 2009). Between 1996 and 2008, the reduction of the share of low-educated individuals in Spain at ages 40–59 has been about 20 percentage points (thereby reducing the overall differences with other EU15 countries). This may have strong implications for LFP and employment of older workers and also for the type of jobs they can do.

In this chapter, we explore, from a descriptive point of view and using a variety of data sources, the potential influence of these factors in explaining the employment trends over the last decades in Spain. Neither changes in the underlying social security rules nor changes in health conditions can explain the change in trends observed around 1995. However, we document three factors that are potential drivers of these observed changes: the overall

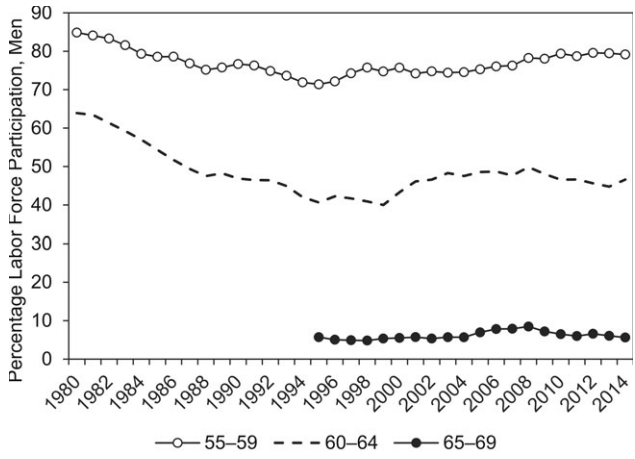

Fig. 9.1 LFP rates for older men in Spain, 1980–2014 (age groups 55–59, 60–64, and 65–69)
Source: Authors' calculation based on OECD data.

growth of the employment rate observed in the 1995–2007 period, differences across cohorts in the skill composition, and increases in the labor force attachment of wives.

The rest of the chapter is organized as follows. Section 9.2 reviews the main trends in LFP observed in the last 30 years, section 9.3 explores the potential factors behind these trends, and section 9.4 concludes.

9.2 Trends in LFP and Employment for Older Men in Spain

In this section, we present evidence on the evolution of LFP rates and employment rates for Spanish men aged 55–69. We divide older men into three age groups: those aged 55–59, those in the 60–64 age bracket, and those aged 65–69 (above the normal retirement age of 65 years old).

We first use data from the OECD statistics database to plot trends in the LFP from 1980 to 2014 for men in these three age groups. Figure 9.1 shows that, as expected, the LFP rates are highest for the youngest group and stay above 70 percent for the entire period. Their LFP rate was over 80 percent in the early 1980s, but this rate decreased smoothly until 1995, when it hit the lowest value over the period (70 percent), and then started increasing. The LFP trends for men aged 55–59 continuously increased until 2008, when the Great Recession hit Spain. The LFP of this age group has remained stable at around 80 percent thereafter.

The LFP rates of men aged 60–64 present a similar U shape between 1980 and 2008 with four particularities. First, the overall LFP levels are lower. Second, the drop between the start of the period, when LFP rates were above

60 percent, and the mid-1990s was larger. Third, trends did not immediately reverse after 1995, but the LFP rates of men aged 60–64 were stable at the lowest level of the period (40 percent) until 1999. Fourth, while LFP rates increased between 2000 and 2008, they stayed at 50 percent, 10 points below the rates at the start of the period. In addition, the LFP rates of men aged 60–64 slightly decreased during the Great Recession.

Last, for the oldest group of individuals aged 65–69, the OECD only has data from 1995 to 2014. We can see that the LFP rates of this group of individuals are very low and have remained below the 10 percent level. This is reasonable taking into account that the normal retirement age in Spain is set at 65. Although the levels are low, we can see a similar evolution of LFP rates for this older group of workers—increasing from 1995 to 2008, when the rate reached the highest level of the period (10 percent), and decreasing during the recent economic crisis.

In order to shed light on the evolution of the LFP rates of men aged 65–69 over the whole period, we use quarterly data from the Spanish Labour Force Survey (LFS; Encuesta de Población Activa, or EPA) for the 1977–2015 period.[1] The left panel of figure 9.2 shows that there was a sharp decrease in the LFP rates for this age group between the late 1970s, when more than 30 percent of men aged 65–69 were in the labor force, and the mid-1990s, when participation rates were slightly above 5 percent.

Figure 9.3 shows employment rates for the same age groups of men and the same time period using data from the OECD. First, we see that both the trends and the levels of employment of men above the normal retirement age (65–69) are the same as the LFP rates (see figure 9.3 and the right panel of figure 9.2). Therefore, men aged 65–69 in Spain only stay active in the labor force if they remain employed. Similarly, the evolution of employment rates is almost the same as the LFP rates for the group aged 60–64. We can see that their employment rates started particularly high in 1980 (60 percent) and decreased steadily until the mid-1990s when they were below 40 percent. From the late 1990s, the employment rates of men aged 60–64 increased mildly until the onset of the economic crisis in 2008, which reduced employment rates for men in this age group. Last, although employment rates of the youngest group (55–59) follow a similar trend as their LFP rates, they seem more affected by the business cycle. For example, while there is an overall decreasing trend between the early 1980s and mid-1990s, there

1. The EPA is a rotating quarterly survey carried out by the Spanish National Statistical Institute (*Instituto Nacional de Estadística*). The planned sample size consists of about 64,000 households with approximately 150,000 adult individuals. Although the survey has been conducted since 1964, publicly released cross-sectional files are available only from 1977. The 1977 questionnaire was modified in 1987 (when a set of retrospective questions were introduced), in the first quarter of 1992, in 1999, and in 2004. The EPA provides fairly detailed information on labor force status, education, and family background variables, but like most of the other European-style LFSs, no information on health is provided. The reference period for most questions is the week before the interview.

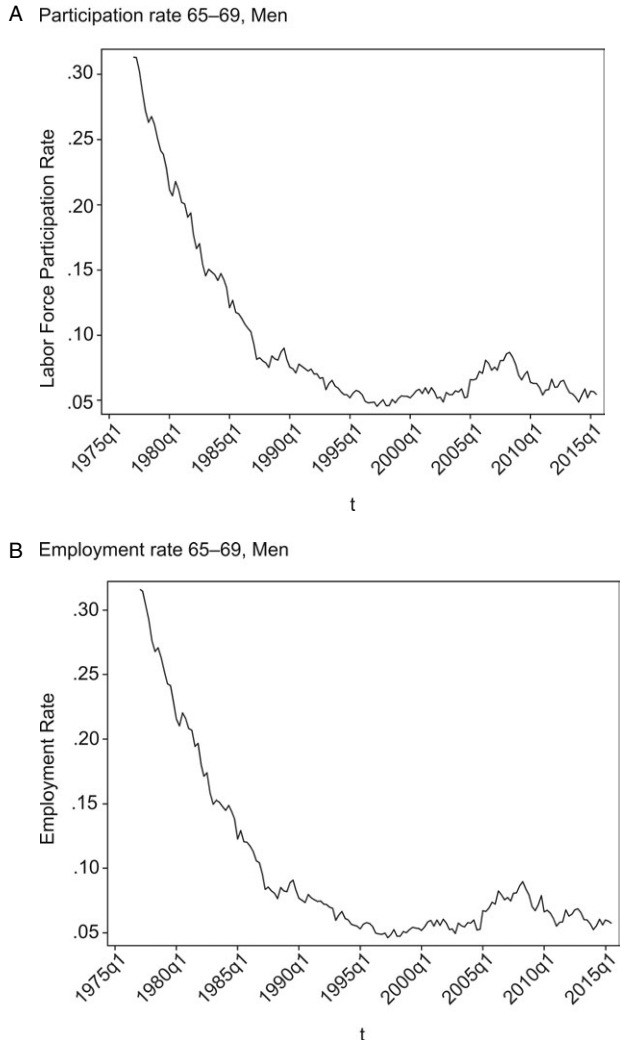

Fig. 9.2 LFP and employment rates for men aged 65–69 (1978–2015)
Source: Authors' calculation based on data from the Spanish LFS.

is a mild increase in employment rates around the late 1980s. Similarly, while the LFP rates of men aged 55–59 have remained stable after the onset of the Great Recession, we see that their employment rates have decreased from over 70 percent in 2007 to 60 percent in 2014.

Figure 9.4 plots the changes in the employment rates of older workers (aged 55–64) in OECD countries between 2004 and 2014 in order to place the Spanish case in an international perspective. The first thing to be noted is that employment rates have grown in almost all OECD countries (except

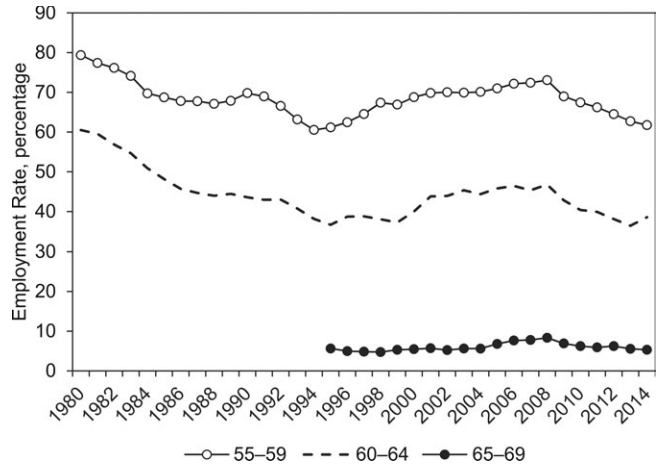

Fig. 9.3 Employment rates for older men in Spain, 1980–2014 (age groups 55–59, 60–64, and 65–69)

Source: Authors' calculation based on OECD data.

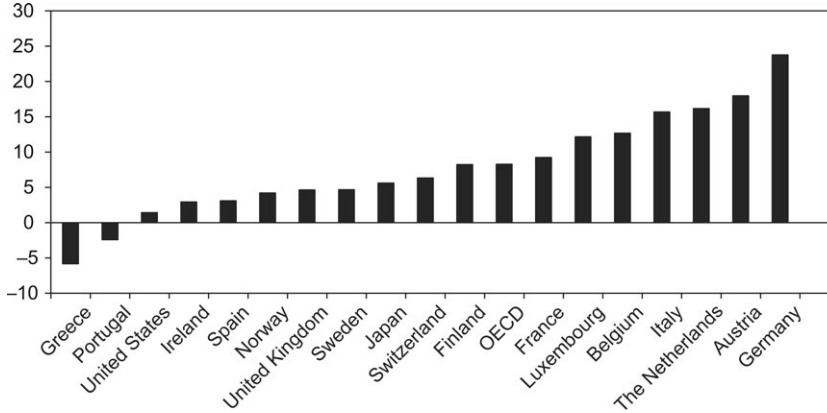

Fig. 9.4 Percentage point changes in employment rate of older workers in OECD countries, 2004–2014

Source: Authors' calculation based on OECD (2015) data.

Greece and Portugal) for individuals aged 55–64. We can also see that Spain is one of the countries where employment rates for this age group have increased the least (below 5 percent). In other European countries, like Germany, the Netherlands, or Italy, employment rates have increased by more than 15 percentage points. Furthermore, figure 9.5 also shows that in 2014, employment rates of workers aged 55–59, 60–64, and 65–69 in Spain were one of the lowest across the OECD.

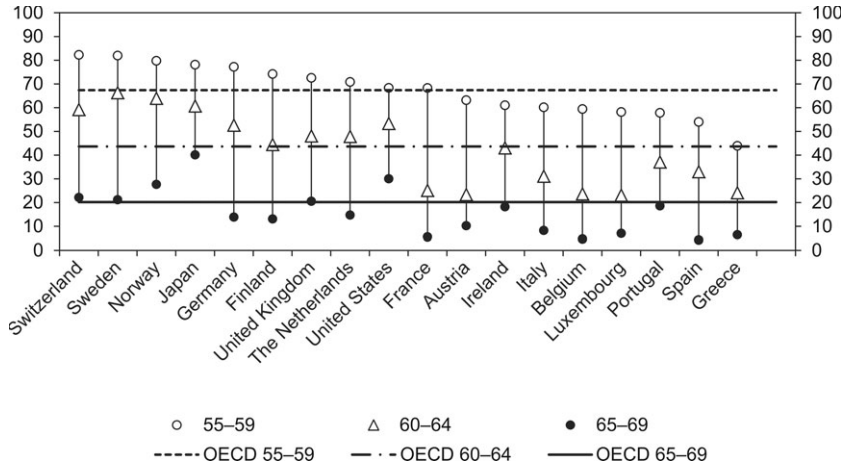

Fig. 9.5 Employment rates of workers aged 55–59, 60–64, and 65–69 in 2014 in OECD countries

Source: Authors' calculation based on OECD (2015) data.

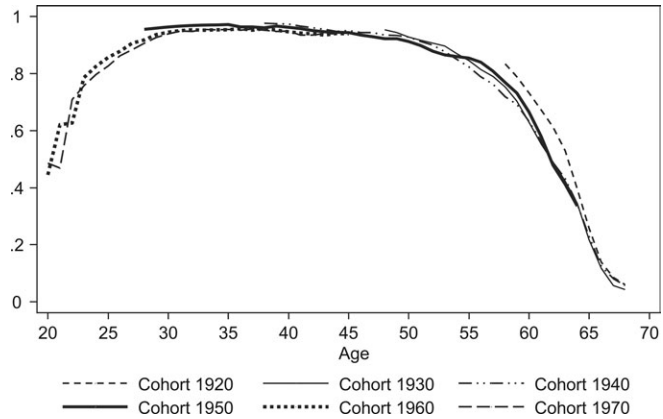

Fig. 9.6 LFP trends for different cohorts of men in Spain

Source: Authors' calculation based on data from the Spanish LFS.

Previous figures suggest that the increase in LFP and employment rates of the age group 60–64 occurred about five years after the increase in the younger age group (55–59). This suggests that changes in these trends may be driven by cohort effects. Therefore, we obtained LFP and employment rates over the working life for different cohorts using data from the Spanish LFS. In particular, figure 9.6 and figure 9.7 plot the LFP and employment profiles for ages 20–68 for the cohorts of Spanish men born in 1920, 1930, 1940, 1950, 1960, and 1970. We see that there are no main differences in LFP

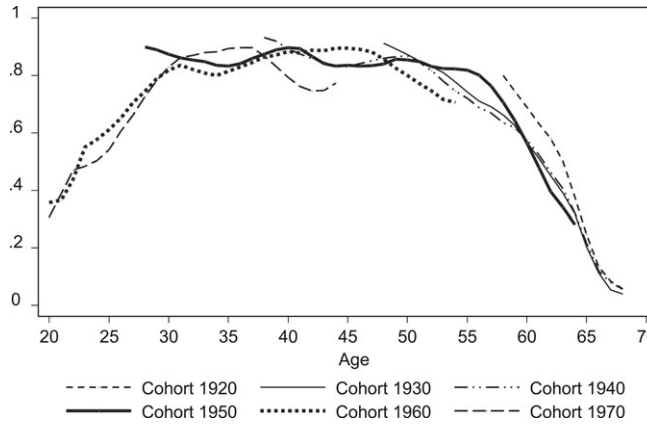

Fig. 9.7 Employment trends for different cohorts of men in Spain
Source: Authors' calculation based on data from the Spanish LFS.

and employment rates across cohorts for men aged 20–50 beyond possible business-cycle effects on employment. However, a few differences appear among older workers. The LFP and employment rates were higher at ages 57–68 for the oldest cohort of men (1920), while the differences between the other cohorts were smaller. However, it seems that the LFP rates of the cohort born in 1950 between ages 55 and 62 were slightly higher than the LFP rates of the cohorts born in 1940 and 1930. This was only partially translated into employment, as employment rates of this cohort suddenly decreased at the late 50s when they were affected by the economic crises in 2008, so employment rates of men in their early 60s in this cohort are even lower than the rates of the preceding two cohorts.

9.3 Why Have LFP Rates for Men in Spain Been Increasing since the Mid-1990s?

In this section, we provide some descriptive evidence to shed light on the possible drivers behind the trend reversal in the LFP rates for men in Spain observed in the mid-1990s. In particular, we explore the potential contributions of changes in financial incentives, health status, skill levels, labor market conditions, and women's LFP.

9.3.1 Changes in Social Security Benefits

The Spanish old-age pension system is a defined benefit pay-as-you-go system. There have been many reforms to the Spanish old-age pension system in the last 30 years (see table 9.1 for a summary and Boldrín, García-Gómez, and Jiménez-Martín [2010] and García-Gómez, Jiménez-Martín, and J. Vall Castelló [2012] for detailed expositions of the changes in the

old-age pension system in Spain). Since the 1985 reform, there have been substantial parametric reforms in 1997, 2002, 2007, and 2011 and a non-parametric reform in 2013.[2]

9.3.1.1 The Old-Age Pension System after the 1985 Reform

The key ingredients of the Spanish pension system were set in the 1985 reform. Eligibility for the old-age pension benefits in Spain requires having contributed to the system for at least 15 years. The pension amount is calculated by multiplying a regulatory base by a percentage that depends on the age of the individual and the number of years he or she has contributed to the system. The pension amount is capped from below by the minimum pension, which is currently about the same level as the minimum wage (see Jiménez-Martín [2014] for details), and from above by the maximum benefit (between four and five times the minimum wage).

Under the 1985 regime, a worker could enter into the pension system at the normal retirement age of 65 (if he or she did not have any job with an affiliation with the social security system), and those who had first contributed to the system benefit in 1967 could early retire at 60. In order to compute the pension, the regulatory base was obtained by dividing by 112 the wages of the last 96 months before retiring, and the percentage applied to this regulatory base was the following:

$$\begin{cases} 0 & \text{if } n < 15 \\ 0.5 + 0.03(n - 15) & \text{if } 15 \leq n \leq 25 \\ 0.8 + 0.02(n - 25) & \text{if } 25 < n < 35 \\ 1 & \text{if } 35 \leq n\,, \end{cases}$$

where n is the number of years of contributions to the system.

9.3.1.2 The 1997, 2002, and 2007 Reforms

In 1997, the number of contributory years used to compute the benefit base was progressively increased from 8 to 15 years,[3] and the formula to calculate the replacement rate was also made less generous. On the other hand, the 8 percent penalty applied to early retirees between the ages of 60 and 65 was reduced to 7 percent for individuals with at least 40 years of contributions at the time of early retirement.

In 2002, further changes in the old-age system were introduced. Before 2002, only individuals who had contributed to the system earlier than 1967

2. The 2013 reform cannot be classified as parametric because, by linking benefits to life expectancy, it changes—at least partially—the spirit of the system.

3. In 1997, the last 108 months were included, the last 120 months in 1998, the last 132 months in 1999, the last 144 months in 2000, the last 156 months in 2001, and the last 180 months from 2002 onward.

could benefit from early retirement at 60, while the rest had to wait until the normal retirement age of 65. In 2002, early retirement at age 61 was made available for the rest of the population. At the same time, there was an impulse in the partial and flexible retirement schemes to provide the possibility of combining income from work with old-age benefits and the introduction of incentives for individuals to retire after the legal retirement age of 65.[4] At the same time, the possibility to access early retirement at 61 was extended to some involuntary unemployed individuals—in particular, those registered in the employment office during the last six months with at least 30 years of contributions into the old-age system.

In 2007, the incentives to retire later than age 65 were further increased, providing an additional 3 percent, instead of the 2 percent introduced in 2002. In addition, two restrictions were added: first, the individual must have contributed for at least 2 out of the last 15 years to have access to the old-age pension system, and second, the proportional part related to the extra monthly salaries was now excluded from the computation of the number of contributed years. On the other hand, the 8 percent penalty applied to early retirees between the ages of 60 and 65 was reduced to 6–7.5 percent `for those individuals with at least 30 years of contributions, depending on the number of years contributed. In addition, the contributions for unemployed workers older than 52 were increased so they would receive a higher old-age pension when retiring.

Although these reforms have tried to increase the labor supply of older male workers, the existing evidence (see, for example, García-Pérez, Jiménez-Martín, and Sánchez-Martín [2013] and the references therein) does not show any clear link between these reforms and the increased labor supply of older male workers.

9.3.1.3 The 2011 Reform

The demographic and labor market developments during the first years of the Great Recession led the Spanish government (forced by the EU pressure to reduce the underlining future deficits) to introduce a reform to the pension system in 2011. In this reform, two crucial elements were changed: the extension of the number of years of contributions taken into account to compute the benefits and the increase in the normal retirement age (from 65 to 67, gradually).[5] This second change was extremely relevant for Spain because the normal retirement age had not been amended since the year it was first established in 1919. These two changes caused a cut in the generosity of the pension system. The first one reduced the replacement rate by about 10 to 20

4. An additional 2 percent per additional year of contribution beyond the age of 65 for workers with at least 35 years of contributions was on top of the 100 percent applied to the regulatory base.

5. The age was increased one month each year from 2013 to 2018 and by two months each year thereafter.

Table 9.1 Main reforms of the pension system in Spain since 1985

1985	• The minimum mandatory years of contribution increases from 8 to 15. • The number of contributive years used to compute the pension increases from 2 to 8. • Several early retirement schemes are introduced; partial retirement and special retirement are at age 64.
1997	• The number of contributive years used to compute the pension increases from 8 to 15 (progressively by 2001). • The formula to compute the benefits is made less generous. • The 8 percent penalty applied to early retirees between the ages of 60 and 65 is reduced to 7 percent for individuals with 40 or more contributory years.
2002	• Early retirement is available only from age 61. • Impulse partial retirement makes it possible to combine retirement with work. • Unemployed people aged 61 can retire if they have contributed for 30 years and are registered in employment offices for the previous 6 months. • Incentives to retire appear after age 65.
2007	• Fifteen "effective" contributory years are used to calculate the pension. • Reduction from 8 percent to 7.5 percent of the per-year penalty is applied to early retirees between 60 and 65 for individuals with 30 contributory years. • Incentives to stay employed after age 65 are broadened. • Increased contributions to the old-age pension system are made by the Social Security Administration for individuals receiving the special scheme of unemployment assistance for those aged 52 and older.
2011	• The number of contributive years used to compute the pension increases from 15 to 20. • The normal retirement age increases from 65 to 67. • Eligibility conditions for early retirement are modified.
2013	• A sustainability factor is introduced. • New scheme appears to make pension and work income compatible.

percent depending on the worker's characteristics and earnings history, and the second reduced the social security debt with those individuals planning to retire at the normal retirement age. The reform also changed (restricted) the eligibility conditions for early retirement, but the effects of these changes are less clear.[6] Finally, note that since the reform barely changed the eligibility conditions to access to the minimum pension, those workers expecting to receive the minimum pension (basically individuals with a low income and short contributive careers) are expected to be less affected by this reform (Jiménez-Martín 2014).

The case of Spain is not an isolated one, as most European countries have initiated or are about to initiate a process of pension reform (European Commission 2012). In the majority of cases, the reform involves the follow-

6. See Benítez-Silva, García-Pérez, and Jiménez-Martín (2013) for a description of other changes introduced by the 2011 reform.

ing three elements: (1) delaying the normal retirement age (but relaxing the requirement to make compatible work and pension income), (2) reducing the system's generosity, and (3) introducing a sustainability factor, which adds some uncertainty to the final benefit, thereby moving the respective system from a defined benefit to a defined contribution model.

The 2011 Spanish reform (law 27/2011), which included elements (1) and (3) above, should, in normal circumstances, have been sufficient to alleviate the medium-term financial pressure on the Spanish pension system. However, some studies consider the reform to be insufficient (Díaz-Giménez and Díaz-Saavedra 2017; Sánchez-Martín 2014, 2017) from a financial point of view.

9.3.1.4 The 2013 Reform and the Sustainability Factor

The importance of the 2013 reform lies in the introduction of an automatic link between the initial pension and the evolution of life expectancy: the sustainability factor (Conde-Ruiz and Gonzalez 2016). Therefore, it was an attempt by the government to ensure that its short- and long-term social security finances were under control. The pension system in Spain is a defined-benefit, pay-as-you-go scheme, so the pension does not fulfill any criteria of financial balance. Thus when the demographic variables (e.g., life expectancy) or economic variables (primarily, the relationship between the contributors and pensioners and their productivity) that impinge on the system deteriorate, the system becomes unbalanced. The sustainability factor, among other things, automatically adjusts the system when exposed to these demographic changes and thus can be seen as a mechanism that transforms a defined benefit scheme, such as that operated by Spain, to a defined contribution scheme.[7]

The sustainability factor has two key components: the intergenerational equity factor (IEF) and the pension revaluation index (PRI). The IEF aims to provide equal treatment to those who retire at the same age and with the same employment history but who have different life expectancies. This factor has not given rise to much controversy, since it seems reasonable that if pensioners are to receive the same total pension throughout their retirement, an individual with a greater life expectancy should receive a little less each year. The second factor fixes a budgetary constraint on the economic cycle, and as such, it is relatively flexible in the short term. However, the discretionary rule chosen by the government guarantees that even though social security revenues are insufficient to cover pension costs, pensions should increase each year by at least 0.25 percent and by no more than the annual change in the consumer price index + 0.25 percent.[8]

7. See, in this regard, http://www.fedeablogs.net/economia/?p=32680.

8. See Sánchez-Martín (2014, 2017) for a description of the functioning of the IEF and the PRI made by two members of the reform commission.

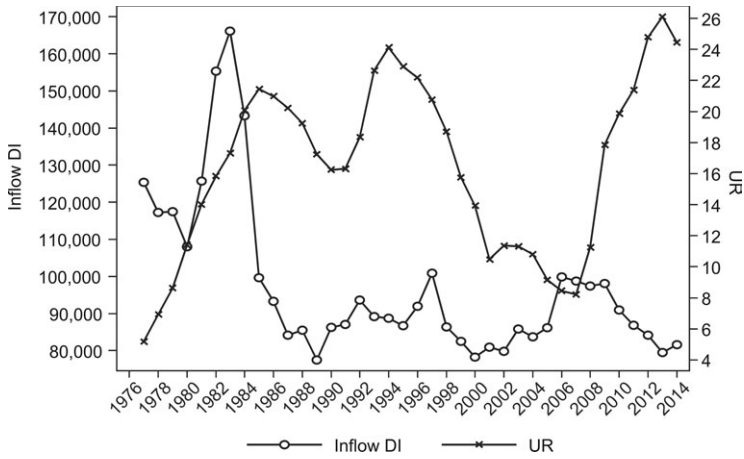

Fig. 9.8 New contributory disability benefits granted each year and unemployment rate (1977–2014)

Source: Authors' calculation using data from Spanish Social Security Administration for the inflow to disability insurance (DI) and data from the Spanish National Institute of Statistics for the unemployment rate (UR).

In summary, the 2011/2013 pension reforms, by reducing benefit expectations and also by including some incentive to work longer (partial benefit compatibility after the normal retirement age), are expected to incentivize the labor supply of older workers in Spain (see Sánchez-Martín 2014, 2017); however, it is still too early to fully detect their implications in the data.

9.3.1.5 Other Routes into Early Retirement

Another factor that may affect the labor market behavior of older workers is disability and unemployment insurance policies. Both the main characteristics of the disability system as well as its main reforms are extensively documented in García-Gómez, Jiménez-Martín, and J. Vall Castelló (2012).

Figure 9.8 shows the evolution of the number of new disability benefits granted each year (or inflow to DI) and the unemployment rate during the years 1976–2014 in Spain. In contrast to other industrialized countries, DI inflow in Spain does not show a continuous increase during the last decades (see OECD [2010] for OECD countries). As stated before, this low historical increase in the inflow could be a result of the stringency of the Spanish system (Jiménez-Martín, Juanmarti Mestres, and Vall Castelló 2018). More specifically, the government implemented a reform of the system in 1985 that increased the requirements to be granted a disability benefit. As clearly shown in figure 9.8, this reform seems to have immediately reduced the inflow to DI and kept it at a low level since then. However, around 1995, we do not detect any reduction in the inflow that can justify the strong increase in the employment rate of older workers thereafter.

Finally, between 1995 and 2011, there was a special unemployment scheme for those workers aged at least 52 (UB52+) who (a) are eligible for a retirement pension, except for their age and (b) have an income below 75 percent of the monthly minimum wage. In 2011, the program was restricted to workers aged at least 55 (UB55+).

The benefit can be collected until the person reaches retirement age—either early or normal. During this time, the individual collects UB52+ or UB55+, and until 2011, the system was assigning a fictitious contribution equal to 125 percent of the minimum wage. After the 2011 reform, the contribution varies with the length of the contributive career. The existing evidence (e.g., García-Pérez and Sánchez-Martín 2015) illustrates that UB52+ or UB55+ limits the job search of low-income workers, thereby reducing participation in the labor market.

9.3.2 Trends in Self-Assessed Health and Mortality

Another potential explanation of the increase in the LFP of Spanish men since the mid-1990s would be an improvement in health status that could allow older workers to remain longer in the labor market. We investigate the plausibility of this hypothesis by looking at trends in mortality using data from the Human Mortality Database and trends in self-reported health using data from a series of Spanish Health Surveys (*Encuesta Nacional de Salud*, ENS).[9]

Figure 9.9 plots mortality rates at age 60 for Spanish men and women from 1980 to 2012. We can see a steady decline in these mortality rates for both men and women. In addition, the decrease is slightly stronger for men, suggesting that the gender gap in mortality has narrowed over time. However, these trends do not necessarily translate to an improvement of health, as the international evidence is inconclusive regarding whether changes in mortality are translated to a compression or expansion of morbidity (Klijs, Mackenbach, and Nusselder 2009). For the Spanish case, it seems that these improvements in mortality rates at older ages have, at most, partially translated into improvements in self-assessed health. Figure 9.10 presents the percentage of men and women who declare themselves to be in fair or poor health at ages 55–64 in Spain. We see that even if mortality rates at age 60 have constantly decreased for both men and women in Spain since the early 1980s, only a minor improvement is found in self-assessed health status from 2006. In addition, García-Gómez, Jiménez-Martín, and J. Vall Castelló (2012) show that the percentage that reports having reduced their principal activity because of a health problem has increased over the same period together with the prevalence of hypertension, cholesterol, obesity,

9. ENS is a set of nationwide cross-sectional surveys that collect information on health, health care use, lifestyles, and socioeconomic characteristics of the Spanish population. We use data from the cross-section ENS in 1987, 1993, 1995, 1997, 2001, 2003, 2006, 2009, 2011, and 2014. Self-assessed health is defined as the percentage of individuals who rate their general health as fair or poor.

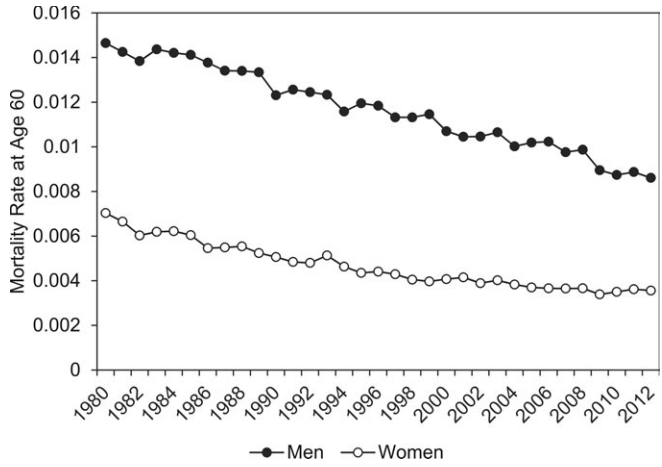

Fig. 9.9 Mortality rates at age 60 for men and women in Spain
Source: Authors' calculation based on data from the Human Mortality Database.

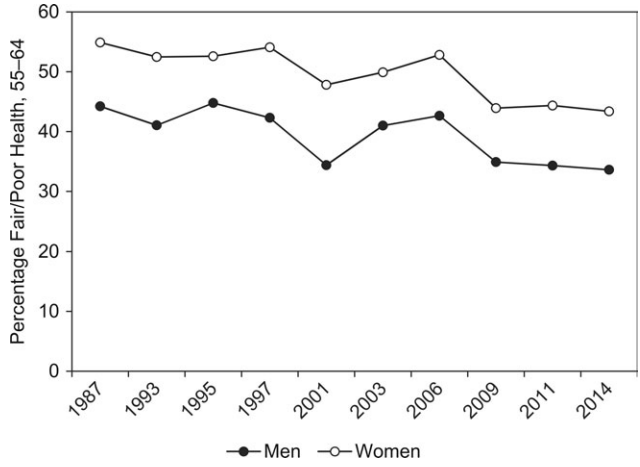

Fig. 9.10 Percentage of men/women in fair or poor health at ages 55–64 in Spain
Source: Authors' calculation based on data from the Spanish Health Survey.

and the number of hospitalizations due to mental problems in Spain for the same age groups over the same time period. Therefore, it seems unlikely that changes in the health of the population can explain changes in the LFP trends of older workers in Spain.

9.3.3 Trends in Human Capital

Another potential explanation of the increase in the LFP observed after the mid-1990s would be an increase in the skill level of Spanish men approaching the retirement age, which could lead to a stronger labor force

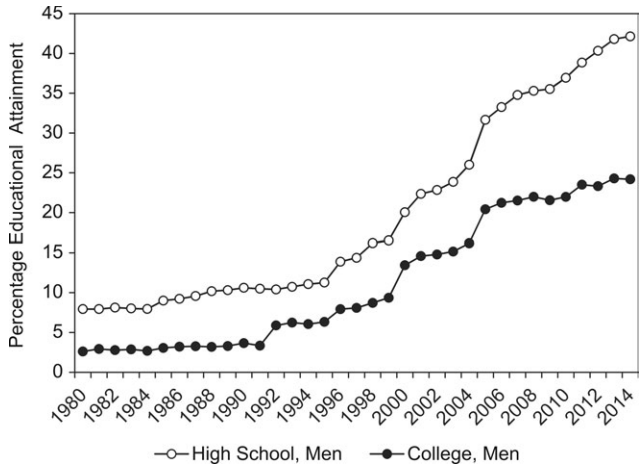

Fig. 9.11 Trends in educational attainment for men aged 55–64 in Spain, 1980–2014

Source: Authors' calculation based on data from the Spanish LFS.

attachment. Figure 9.11 plots the trend in educational attainment for men aged 55–64 in Spain from 1980 to 2014 using data from the Spanish LFS. We see a strong increase over time in both high school and college attainment for older Spanish men. While in 1980 only 8 percent of men aged 55–64 had completed a high school degree (and only 3 percent had a college education), in 2014, 41 percent of men aged 55–64 had a high school diploma, and 25 percent of them had a college degree. Moreover, their educational attainment increased slowly from 1980 until the mid-1990s but grew quite sharply from the mid-1990s until 2014. Therefore, we see that the shift in the trends in the LFP and employment rates coincides with the arrival of more educated cohorts.

A similar evolution can be observed for the percentage of Spanish men with a blue-collar job from 1980 to 2014 (see figure 9.12). We see that the percentage of men working in blue-collar occupations remained pretty stable—around 70 percent from 1980 to 1994. However, from 1995 on (and coinciding with the growth in educational attainment observed in figure 9.11), the percentage of Spanish men in blue-collar jobs started steadily to decrease from 70 percent to a level below 60 percent. Again, this confirms that changes in the skill level of older workers may be (at least partly) behind the trends in labor market participation and employment rates in Spain.

9.3.4 Business-Cycle Conditions

As previously discussed, business-cycle conditions may also be behind some of the trends in the LFP and employment rates. Figure 9.13 compares

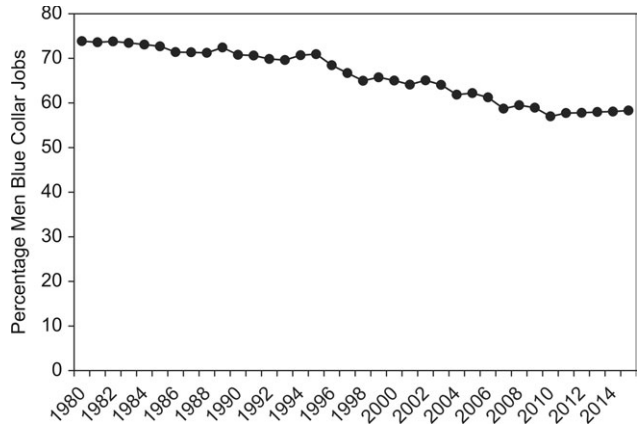

Fig. 9.12 Percentage of men workers aged 55–64 in blue-collar jobs in Spain, 1980–2014

Source: Authors' calculation based on data from the Spanish LFS.

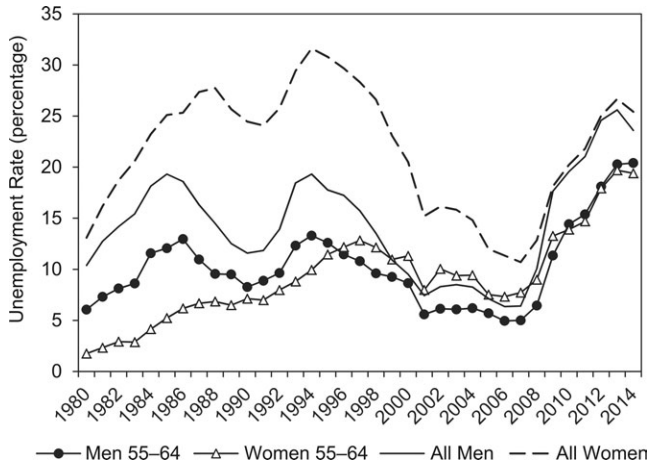

Fig. 9.13 Unemployment rate in Spain, all men / all women and those aged 55–64, 1980–2014

Source: Authors' calculation based on data from OECD.

trends in unemployment rates between 1980 and 2014 for men and women aged 55–64 and the overall working-age population using data from the OECD. First, we notice that unemployment rates for men move in parallel for both men of working age and men aged 55–64, although the levels for the older workers are always lower.[10] A similar picture, although at even higher

10. See Dolado et al. (2013) for an analysis of unemployment for young individuals in Spain.

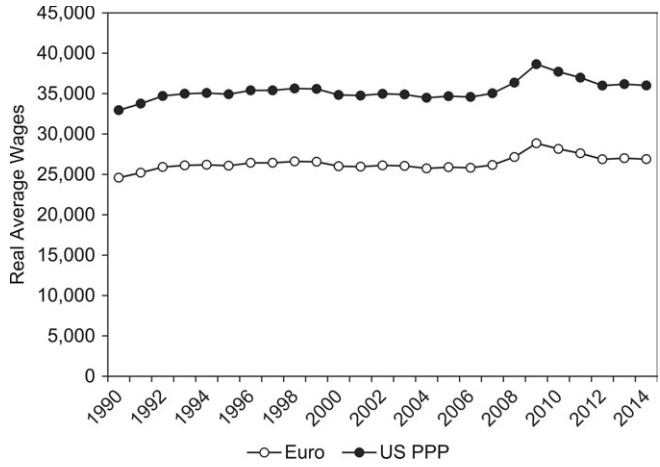

Fig. 9.14 Real average wages of Spanish workers, 1990–2014
Source: Authors' calculation based on data from OECD.

levels until the onset of the economic crises, is found for the unemployment rate of all women of working age. However, trends in unemployment rates of women aged 55–64 present a different pattern during the first half of the period. Their unemployment rate was below 5 percent in the early 1980s but continuously increased until reaching almost 15 percent in 1997. Since then, the trends move in parallel to the other age groups.

Thus by looking at figure 9.13, we can see that business-cycle conditions may have played an important role in explaining the increase in the LFP and employment rates of older men, since in the mid-1990s, unemployment rates strongly decreased for all age groups from this point onward (until the onset of the economic crisis in 2008) as a result of the strong improvement in the economic cycle in Spain.

Another potential explanation for the higher labor market attachment after the mid-1990s could be higher wages. However, there have been almost no changes in real wages in Spain over the last two decades (see figure 9.14). We see that real average wages only increased after the onset of the economic crises in 2008. However, this is due to a composition effect, as low-paid workers in temporary contracts were laid off first (Puente and Galán 2014).

9.3.5 Employment and the LFP of Spouses

Schirle (2008) estimates that between one-fourth and one half of the increase in older men's LFP in the United States, Canada, and the United Kingdom can be explained by the effect of their wife's participation decisions. Figures 9.15 and 9.16 plot LFP rates and employment rates for women aged 55–59, 60–64, and 65–69 over the 1980–2014 period using data from the OECD. We see that trends in employment (figure 9.16) follow the trends

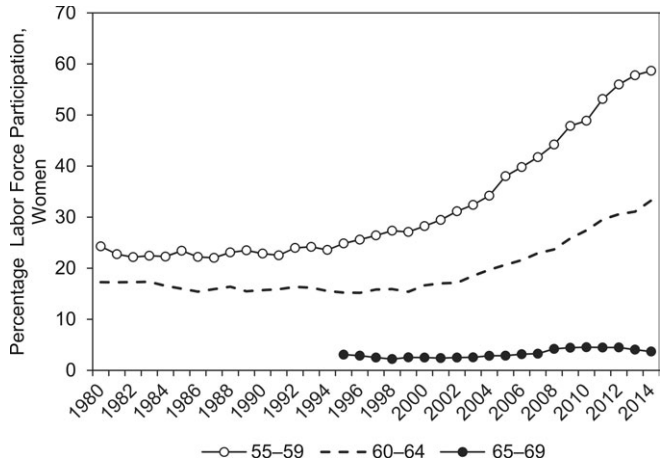

Fig. 9.15 LFP of Spanish older women, ages 55–59, 60–64, 65–69 in 1980–2014
Source: Authors' calculation based on OECD data.

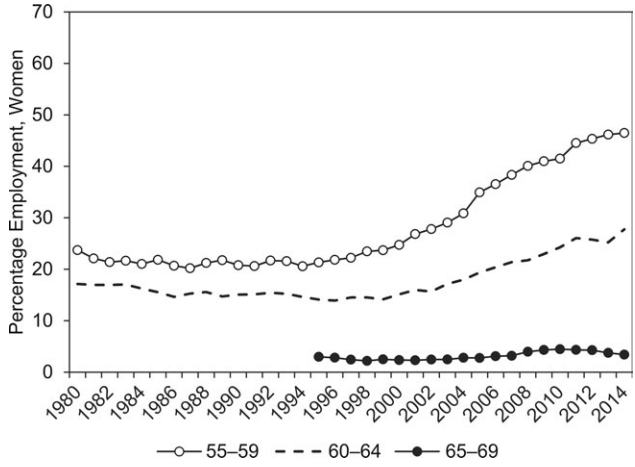

Fig. 9.16 Employment of Spanish older women, ages 55–59, 60–64, and 65–69 in 1980–2014
Source: Authors' calculation based on OECD data.

in LFP rates very closely (figure 9.15). Moreover, until the mid-1990s, the levels are similar, suggesting that almost all older women still active in the labor market were also employed. In addition, we see that participation rates remained flat at around 23 percent for women aged 55–59 and 16 percent for women aged 60–64 until the mid-1990s. Similar to the trends observed for men, we find that participation rates of women aged 55–59 started increasing first around 1995, followed by the rates of the older age group (60–64) about

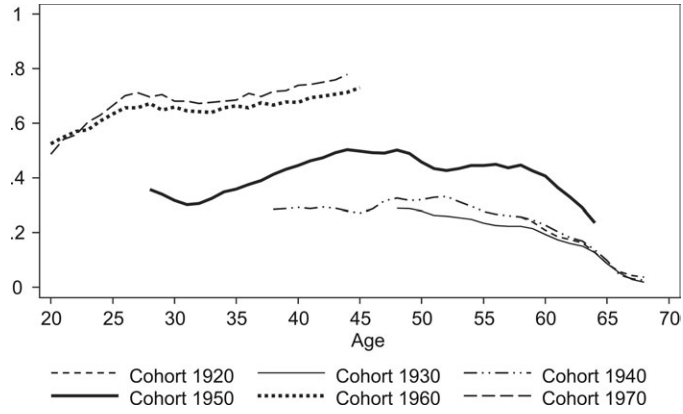

Fig. 9.17 LFP of Spanish women by cohort
Source: Authors' elaboration using data from the Spanish LFS.

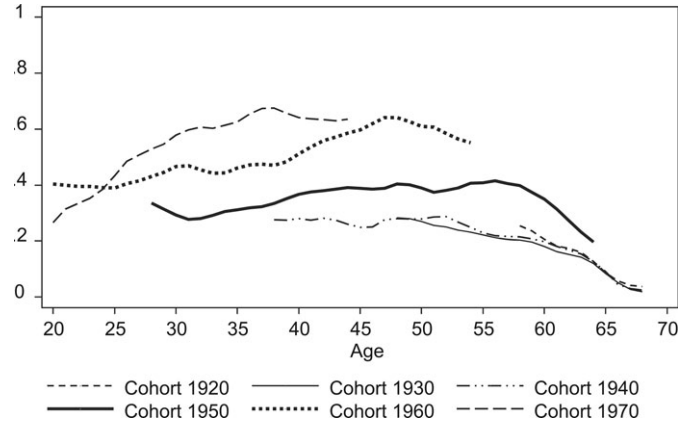

Fig. 9.18 Employment rates of Spanish women by cohort
Source: Authors' elaboration using data from the Spanish LFS.

five years later. At the end of the period, and despite the economic crises, almost 60 percent of women aged 55–59 were in the labor market, although only about 45 percent of them were employed. Last, we find that both the LFP and the employment rates of women aged 65–69 have remained low (between 2.5 percent and 4 percent) throughout the observation period. This is similar to the trends observed for men in this age group.

The five-year difference in the turning point in the trends suggests that cohort differences in labor market behavior may be relevant. Figures 9.17 and 9.18 plot the LFP and employment profiles for ages 20–68 for the cohorts of Spanish women born in 1920, 1930, 1940, 1950, 1960, and 1970

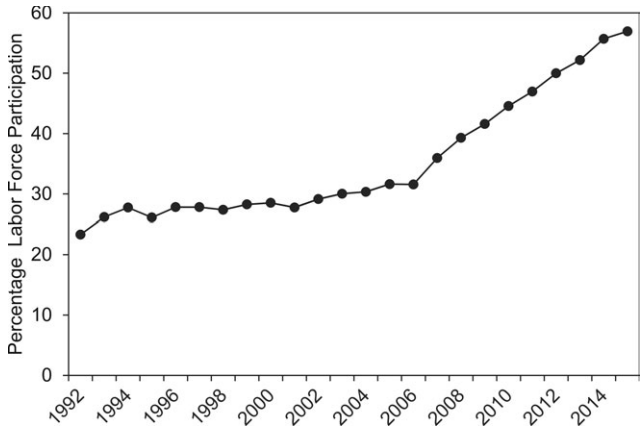

Fig. 9.19 20 years lagged LFP rate of Spanish women at ages 35–44
Source: Authors' elaboration using data from the Spanish LFS.

using data from the Spanish LFS. We see that there were no differences in the participation rates of women from the cohorts born in 1920, 1930, and 1940. However, we observe that the LFP rates of the subsequent cohort (born in 1950) were almost 20 percentage points higher, and a similar increase is observed between the cohort born in 1950 and the cohort born in 1960. Subsequent gains are smaller, and as a result, the LFP rate at younger ages of the last cohort (born in 1970) was still far below the rates observed among men.

The stronger attachment to the labor market of more recent cohorts of women can also be seen in figure 9.19. It plots the 20-years-lagged LFP rate of Spanish women at ages 35–44—that is, the LFP of women aged 55–64 when they were 20 years younger. We see that the LFP for the younger ages of the cohorts of women aged 55–64 has been steadily increasing since the early 1990s, and this increase has become steeper over the last decade.

Similar to the evidence shown for men, educational attainment of women aged 55–64 has been improving over the last few decades. In fact, in figures 9.10 and 9.20, we can see that these trends move almost in parallel, although the percentage with both high school and college have been always lower for women aged 55–64 compared to men aged 55–64.

All in all, these figures provide suggestive evidence that a stronger attachment of women to the labor market may be one of the drivers of the observed increase in labor market participation and the employment of older male workers. To the extent that the labor force attachment of future older women is expected to be higher based on the current participation at younger ages, one could expect further increases in the LFP of older men in the coming two decades.

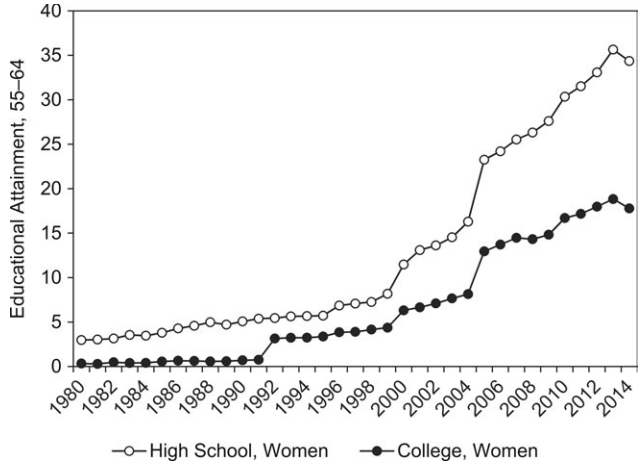

Fig. 9.20 Educational attainment of Spanish women aged 55–64, 1980–2014
Source: Authors' elaboration using data from the Spanish LFS.

9.4 Conclusions

Similar to other OECD countries, the LFP rates of older Spanish workers were falling until the mid-1990s, when there was a reversal in the trend. The LFP rates of older Spanish men have been increasing since then, although at a slower pace than other OECD countries.

We explore to what extent several factors can be behind these trends. First, we conclude that the (old-age) social security system (except perhaps for the disability component) has played a marginal (at most) role on this reversal, given the lack of major changes in social security benefits until the last set of reforms in 2011 and 2013. Future work should evaluate whether these last reforms have a substantial effect on the labor supply of older workers like one would expect given the fundamental changes in some of the main parameters of the old-age pension system. In addition, we cannot rule out that the set of reforms have introduced a higher uncertainty about future benefits over time. This increased uncertainty could have played a role.

Second, we also rule out that changes in the health status of the population are responsible for the reversal of this trend. Mortality rates at age 60 have been decreasing at a steady pace since the 1980s for both men and women in Spain. However, there is no change in this trend from the mid-1990s that could help explain the change in the LFP trends at that time. Similarly, data on self-assessed health shows a mild improvement in subjective health only from 2006.

We find that the overall increase in employment (due to the strong economic growth since 1995) is one of the factors that can explain the increase in LFP and employment rates of older Spanish men. Furthermore, differ-

ences across cohorts in both the skill composition and the labor attachment of wives are also potential drivers of these changes in the labor market outcomes of older men. We find that the share of males with high school or college degrees starts increasing at the same point in time as the employment and LFP trends reverse. Similarly, at this point in time, the percentage of older workers in blue-collar jobs starts decreasing.

Finally, we find strong cohort effects in female LFP and employment rates. In particular, the increase in the LFP, employment, and educational attainment of women in the same age group coincides with the reversal of the men's trend.

In this chapter, we have documented changes in LFP rates for older men in Spain since the 1980s. Although all the evidence presented is descriptive and we cannot estimate any causal relationship, we have pinpointed some potential factors that can explain (at least part) of the increase in the LFP rates of older men in Spain since the mid-1990s.

Further research needs to establish the causality of these relationships and the extent to which each of the factors discussed in this chapter is responsible for explaining the increase in older men's participation rates in Spain.

Appendix

Table 9.A.1 Spanish Social Security system

	Social Security system							
	Eligibility	Early and normal retirement ages	Benefit Formula	Actuarial adjustment	Earnings test	Reforms implemented since 1990	Disability insurance	Other key programs
Contributory pensions from 2002 to 2013	15 years of covered employment	—ERA: 61 or 63 —NRA: 65 and 3 months, currently on the from 65 to 67	Average of 15 last covered wages. Minimum pensions: Basic rate for age 65 with no spouse is 8,883 euros (varies with age and spouse)	—Benefits reduced by 6–8 percent per year before NRA —Benefits increased by 2–3 percent per year after NRA	50 percent of pension for those qualifying (full contributive career)	**1997** —Number of years contribution in formula increased from 8 to 15; less generous replacement rate; incentives to longer careers. **2002** —Early retirement only from age 61. —Impulse partial retirement; possible to combine it with work. **2007** —15 "effective" contributory years are used to calculate the pension. —Reduction from 8 percent to 7.5 percent of the per-year penalty applied to early retirees between 60 and 65 for individuals with 30 contributory years. —Broaden incentives to stay employed after age 65. **2011** —Years of contribution in benefit formula from 15 to 20. —NRA from 65 to 67. —Eligibility conditions for early retirement are modified. **2013** —Sustainability factor + new scheme for work/pension compatibility.	Medical screening leading to 33 percent increase in disability. Four levels of disability. Benefits is an average of the average covered wage of last eight (or two in case of accident) years.	Survival pension and dependent benefits
Not contributory old-age pensions	Means tested, insufficient contributions for the contributory regime	Age 65+	Fixed amount in 2015, 5,136.6 euros, 14 installments	NA	NA	None		

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