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The driving forces of rising inequality in Spain: Is there more to it than a deep worsening of low income households' living standards?

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Abstract

This paper describes the evolution of inequality and living standards and their driving forces in Spain during a period of more than thirty years. Since the beginning of the crisis Spain has been the OECD country where both market and disposable income inequality have grown faster and annual real income growth has showed its most regressive pattern ever since 1973. During the last decade, Spain suffered one of the largest decreases in mean household incomes due to the Great Recession and is the OECD country where the gap between the income slice of those in the highest decile and those in lowest has widened the most. We disentangle the main driving forces of this relevant rise in inequality (employment trends, earnings growth and the role of redistributive policies) and discover the trends in living standards of ordinary working-age households, particularly those around and below the middle of the distribution.

Keywords: inequality trends, working-age households, Spain, recession.

JEL Codes: D31, I31.

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INTRODUCTION

During the last three decades, Spain has experienced large social changes with a significant improvement of middle and low income families' living standards. Up to the Great Recession, long term growth in Spain had generally benefitted low more than high income households, so that inequality levels, even if relatively high, had a generally stable or decreasing trend. Notwithstanding this general increase in living standards, Spain has traditionally suffered from relatively high unemployment rates since their large increase between the mid-1970s and the beginning of the 1990s. In fact, aggregate individual unemployment rates only reached a relatively low value just before the Great Recession in 2007 at the economic boom peak (8%). However, these employment gains were quickly eroded as the economy underwent the deepest recession in the last fifty years that pushed unemployment to a dramatic growth reaching a 26% of the active population in 2013 and falling slowly since then but being always over 18% up until today. In fact, the Spanish unemployment rate is currently one of the highest among OECD countries and today remains one of the most serious problems in the Spanish economy (18.6% in the last quarter of 2016).

While the dimension of unemployment is undoubtedly one of the main driving forces of inequality, the changes in the demographic structure, the increased concentration of capital income and, above all, the limited redistributive capacity of the tax-benefit system are also key determinants of the changes in the long-term indicators of inequality in Spain. Most of these processes have been shaping the income distribution regardless of the evolution of macroeconomic conditions, which in the two decades prior to the crisis had a generally positive trend. One of the most outstanding features of the distribution of household income in Spain with respect to other high-income countries is the lower intensity of redistributive policies. In fact, already before the crisis the Spanish tax-benefit system was one of the least effective in redistributing incomes of all the European Union schemes. The main difference compared to other countries is the limited redistributive effect of taxes and monetary social benefits, except for contributory pensions (OECD, 2011; Cantó, 2013; Avram et al., 2014).

Over the last two decades there have been several demographic changes with relevant effects on the Spanish income distribution. The first of these processes is population ageing, much faster than in other OECD countries (European Commission, 2014). The effect of this process is an issue of growing importance, given the difficulties to maintain the level of benefits for the elderly relative to median income. A second major demographic process during the 2000s was the growing presence of immigrant population: in less than ten years there was a fivefold increase of foreign population occupying a growing number of low-paid jobs. Moreover, these immigrant workers have been one of the groups hit the hardest by the fall in employment during the recession. A third demographic issue is the change in household typologies and, above all, the growing weight of lone-parent households. While in the early eighties these households accounted for less than 0.5% of Spanish households, they currently account for a 10%. Noteworthy, lone-parent household's income level is approximately a 30% lower than that of the average Spanish household. A fourth demographic issue is the increase in the concentration of unemployment in particular households. Indeed, the proportion of workless households in the population has consistently grown from a 2.5% of total population in 2007 to a more than four times larger group at the beginning of 2015 (Avala et al., 2017).

In this setting, a variety of papers show that the Great Recession hit Spanish low and middle income families strongly with relevant losses in their living standards (linked to wage reductions and transfer cuts) and a massive increase in unemployment rates of their adult members and the weakening of a variety of welfare state policies (Ayala, 2013; Muñoz de Bustillo, 2014). Out of thirty OECD countries, Spain suffered one of the largest decreases in mean household incomes only behind Greece, Iceland and Ireland and, during the 2007-11 period, it was the OECD country where both market and disposable income inequality grew the most. This was driven by the fact that annual growth by percentile showed the most regressive pattern in the country ever since 1973. As a consequence, Spain is currently one of the OECD countries with higher levels of economic net disposable income inequality as different reports with relatively homogeneous datasets have revealed (OECD, 2015).

In this paper we aim to describe the evolution of inequality and living standards and their driving forces in Spain in the last four decades. We focus on disentangling the main driving forces of this relevant rise in inequality (employment trends, earnings growth and the role of redistributive policies) and on discovering the particular trends in living standards of ordinary working-age households, particularly those around and below the middle of the distribution, in contrast with that of other socioeconomic groups.

The organization of the chapter is as follows. In Section 2 we revise the general background related to the large social and economic changes that took place in the country since the early 1970s and the transition from a dictatorship to a Western democracy. In section 3 we describe long-term inequality trends and real income growth at different points of the income distribution using Growth Incidence Curves (GICs) based on a variety of different information sources that allow us to provide measures for relatively similar concepts of market and disposable household income. We also present long-term employment trends and household employment patterns and somewhat shorter trend for the dimension of the redistributive impact of the tax-benefit system. Section 4 provides a summary of the main drivers of changes in the income distribution, paying special attention to inequality in the labour market and redistributive policies. Section 5 focuses on the differences in real income growth and employment patterns of individuals situated around and below the middle of the income distribution in comparison with other socioeconomic groups. We measure the dimension of the middle class in Spain and discuss its long-term trends in the light of expansion and recession periods in the last four decades. Finally, the last section concludes.

10.2. MACROECONOMIC BACKGROUND: LARGE SOCIAL AND ECONOMIC CHANGES DURING FOUR DECADES

Changes in macroeconomic conditions can have a substantial effect on the economic circumstances of low-income households. Conventional wisdom predicts that changes in unemployment and, in more general terms, economic growth can produce significant changes in a country's income distribution. Economic downturns are associated with increases in inequality and poverty while periods of strong aggregate growth are expected to contribute to the reduction of inequality and poverty. However, in the years before the Great Recession began (i.e. since the late nineties until 2008), many OECD countries were experiencing strong and rapid economic expansions (only shortly interrupted by mild recessions) while their poverty and income inequality indicators were rather stable or, in some cases, even followed a rising trend. The idea that economic growth does not

always help the poor has generated substantial debate in the academic literature.¹ The discussion about the assumption that economic growth is an effective anti-poverty tool has clearly divided analysts and policymakers. Many research papers have been recently analyzing the degree of pro-poorness of economic growth in a variety of countries at different points of the business cycle as opposed to considering mean aggregate economic growth as a main indicator of the impact of real income growth on the income distribution (World Bank, 2005).

In 1973 Spain was at the end of Franco's dictatorship and the economy had initiated a consistently growing GDP trend since the end of the 1950s. The death of Franco in 1975 coincided with the period of worldwide economic crisis resulting from successive monetary and raw material crises. In Spain the economic crisis aggravated the political crisis provoked by the dictator's death. At the end of the 70s, a series of economic reforms were implemented, affecting diverse economic sectors and, especially, the labour market. Various processes of industrial rationalisation and economic deregulation were initiated to permit a greater play of market forces. In the labour field the system of industrial relations was profoundly transformed. The trade unions and working-class organisations came to play the role corresponding to them but until then in the hands of the government. Bargaining procedures were reinforced and a programme of labour market deregulation was initiated, leading eventually to a more flexible hiring and firing system.

Nevertheless, the structural inability of the Spanish economy to create jobs, until then concealed by the boom of the 60s and the enormous flow of emigrants to Central European countries such as France, Germany or Switzerland², was reflected in the rise in unemployment rates to a figure beyond comparison with any other OECD country, surpassing 20% of the active population. Rationalisation policies and the deterioration of profit margins were added to the factors already described, making the unemployment situation in Spain especially worrying in the early 80s.

< Insert Figure 10.1 around here >

During the second half of the 1980s and until the beginning of the 1990s, the Spanish economy recorded a notable economic recovery with a GDP growth over 5% (see Figure 10.1). The end of the process of industrial adjustment, the arrival of foreign capital and the positive expectations resulting from entry into the European Community favored growth. The economic recovery and policies designed to reduce labour costs and make hiring procedures more flexible helped a significant unemployment rate reduction up to 15%, still the highest amongst OECD countries, at the cost of an excessive and persistent labour market segmentation (Jaumotte, 2011).

The high rates of economic growth continued until the period 1992-94. In that period, economic growth slowed sharply and unemployment rose again up to almost 25% of the active population. From then onwards, until 2007, the Spanish economy experienced a

¹ Despite the fact that the bulk of this literature has focused mainly on the US, a number of authors have also addressed the analysis of the relationship between macroeconomic conditions and income inequality in other countries – See Nolan (1987), Burgess *et al.* (2001), Jäntti and Jenkins (2010) using UK data, Björklund (1991) using Swedish data, Farré and Vella (2008) using Spanish data, and Buse (1982) using Canadian data.

² More than one million Spanish workers (Instituto Español de Emigración) left the country between 1959 up to 1973 mainly to these three European countries (and to Argentina and Uruguay in South America). Prior to departure they had generally signed a labour contract with a particular firm which was related to the need for low-qualified workforce in these European countries' industrial sector at the time.

prolonged economic boom. This growth model was characterized by a consumption-led GDP growth with a large reliance on Foreign Direct Investment (FDI), and a remarkable macroeconomic stability as a result of the adjustment made for the entry into the euro area. Unemployment fell below 7%, to even lower levels of most European countries for the first time in many years.

Another remarkable process that played a role in supporting real GDP expansion was a rapid immigration-led population growth. The proportion of immigrants over total population increased from a 1.4% in 1996 to a 12.2% in 2010. Despite consensus has not been reached in the identification of the contribution of immigration to economic growth in this expansion period (Arce, 2010: Conde-Ruiz, 2008; Izquierdo *et al.*, 2010), some authors found that immigration contributed to 0.7 p.p of the annual growth of GDP per capita in 2006 which is approximately a 20 percent of total GDP per capita growth that year (Oficina Económica del Presidente, 2006). The substantial increase in the labour force contributed to moderate wages, provided a large and low-cost workforce to a rapidly expanding construction sector, and stimulated domestic spending even further.

This remarkable pace of growth hid some structural problems of the Spanish economy. The possibility of funding at very low interest rates led to a significant part of the economic agents to borrow in large quantities. The easy access to credit and the spectacular increase in housing prices resulted in a housing bubble of a much larger size than in other EU countries, except Ireland and, consequently, a large proportion of Spanish households and companies held unsustainable levels of debt. The severe restriction of liquidity in the markets following the outbreak of the financial crisis resulted in a dramatic increase of the economic vulnerability of a significant part of economic agents.

< Insert Figure 10.2 around here >

Therefore, the dramatic effects raised by the change in macroeconomic conditions in the following years were clearly related to some of the imbalances accumulated in the prolonged period of economic expansion. As a result, the bursting of the bubble triggered a negative accumulation of economic results, with a rapid increase in the financial sector risk, a sharp drop in economic activity, a sudden fall in public revenues and, above all, a dramatic increase in unemployment (see Figure 10.2). As mentioned above, before the great recession started, Spain was the EU country with the highest employment growth. Unfortunately, these employment gains were eroded in a very short time.

Among the long-term changes in the labour market, the growth in female labour participation also stands out. Figure 10.2 shows how female employment has changed over the last four decades. All along this time period, the increasing number of employed women represented a major shift in the Spanish labour market. Even if the number of working women over the late 1970s and early 1980s was rather stable, it was followed by a period of dramatic growth: between the late 1980s and the beginning of the crisis the number of employed women doubled. With the crisis this trend slowed down but the fall in employment was significantly lower than that of men. Female employment began to creep up again in 2014, and continued upward at an increasing pace through the last years of economic recovery.

< Insert Figure 10.3 around here >

These efforts at getting women into the workforce have given rise to important changes in different dimensions related to social welfare. On the one hand, the increasing participation of women in the labour market has had a positive contribution to economic growth, both through the higher level of employment and increased human capital. In the period of economic boom this incorporation was facilitated by immigration. The fact that one of the sectors in which immigrants were most employed was that of domestic service contributed to a significant increase in the rate of female activity. For each point of increase in the proportion of immigrants the rate of female activity increased by 0.6 points (Oficina Económica del Presidente del Gobierno, 2006). On the other hand, the increasing rate of female participation has led to significant changes in the Welfare State. The growth of female employment over the last decades has diluted the male-breadwinner model in place during many decades imposing new challenges on the production of basic social welfare services.

In general terms, the long-term trend of the Spanish economy has been a process of economic progress and institutional modernization after a large period of production expansion. In this setting, some features of the long-term economic growth in Spain experience should also be highlighted. Figure 10.3 shows how GDP per capita has changed over the last five and a half decades as compared to the EU-15. While the time pattern followed by GDP per capita in Spain is very similar to that of EU countries, the average rate is far greater than that of the EU. As stressed by Myro (2017), two distinct features of the Spanish experience are the greater depth of the recessions, particularly the economic crisis related to the hike in oil prices in the 1970s, and, most importantly the generally more pronounced fluctuations of economic growth in Spain in comparison with other EU15 countries.

10.3. CHANGES IN LIVING STANDARDS ACROSS THE INCOME DISTRIBUTION IN SPAIN

Trends in real net equivalised household incomes

Two characteristic features of the evolution of economic growth in Spain are a late external openness and a singular process of introducing flexibility into the labour market. At the end of the 70s, a series of economic reforms were implemented, trying to improve both competitiveness and the functioning of the labour market in a variety of economic sectors. Various processes of industrial rationalization and economic deregulation were initiated to allow for a greater interplay of market forces. In general, industrial relations were profoundly transformed and trade unions and working-class organizations began to play their natural role that, up to then, had been in the hands of the government. However, while bargaining procedures were reinforced, a program of labour market deregulation was initiated in the mid-eighties, leading eventually to a more flexible hiring and firing system. The immediate result was the generalization of fixed-term contracts which has implied that Spain is the EU country with a largest proportion of these contracts in place.

In more recent years, 2010 and 2012, a process of decentralized wage bargaining from sector to firm level has been also taking place. This has most likely been pushing wage dispersion and market income inequality to higher levels in the last five years. As a consequence, Spain is now one of the EU countries with a higher level of both earnings inequality and market income inequality in general (Bonhomme and Hospido, 2017). This greater dispersion of wages is added to an average level of remunerations far more distant

from the richest EU countries than the GDP per capita. In fact, in 2012 annual mean wages in Spain are a 84 percent that of the Euro area countries while equivalised disposable income is even lower, a 81 percent.³ In general terms, the progressive deregulation of the labour market has led to wage inequality having a marked countercyclical component, increasing in recessions and decreasing in economic expansions (Arranz and García-Serrano, 2014).

Given that earnings are the main source of income of Spanish households, the evolution of household disposable income is highly determined by changes in the former. Moreover when, as we will be see below, the impact of the tax-benefit system in household income is considerably lower in Spain than in other OECD countries.

< Insert Figure 10.4 around here >

Figure 10.4 shows the long-term trends of total population household disposable income growth over the last two decades using data from National Accounts. The dashed lines in the figure show disposable income growth both unadjusted and adjusted by population, while the solid line corresponds to total GDP growth. Until the economic crisis began, the data show a similar (even if decreasing since 2004) household disposable income growth compared to total GDP growth, with relatively strong positive rates. Despite this prolonged growth, the annual rate was progressively decreasing (with the exception of 2008). When the crisis began, the fall of GDP was more dramatic than that of household disposable income while as the crisis evolved and deepened, household income reduction fell at a larger rate than GDP. In the most recent period of economic recovery, the growth of household income has remained more modest than GDP growth.

< Insert Figure 10.5 around here >

It is interesting to distinguish the evolution of household income growth depending on whether the individuals are working or not (Figure 10.5). To do so, it is necessary to move from data on household disposable income from National Accounts to income survey data. There are two annual sources covering this period, which are the Spanish sample of EUSILC and the Family Budget Survey. According both of these sources, there is a little difference in the evolution of disposable income of working and non-working individuals. Some small differences are observable along the economic cycle: in the last moments of the expansionary phase before the economic downturn, the incomes of working individuals. During the economic crisis, although the incomes of the two groups decreased, the fall was more pronounced in the case of working individuals. In the same way, the recovery of their incomes in the post-crisis years has been slower than in the case of non-working individuals. There are some differences here depending on the data source, the recovery is observed earlier in the HBS incomes than in the EUSILC data source.

Inequality trends

Spain is currently one of the OECD countries with higher levels of economic inequality as different reports with homogeneous datasets have revealed (OECD, 2015) while its

 $^{^3}$ These numbers are calculated using the information available in the web-based Eurostat Database <u>http://ec.europa.eu/eurostat/data/database</u>.

relative position in the list is similar to the one it had four decades ago which underlines the limits to convergence towards EU inequality levels in this period. At the beginning of the seventies Spain was one of the high-income countries with a greater distance between the percentage of total disposable income received by households in the lowest quintile and that received by the 20% richest (Sawyer, 1976). This apparent stability in Spain's relative position hides, however, some significant changes in inequality trends over these past four decades. In this relatively long time period, there have been both very marked changes in the economic cycle and a variety of reforms of the tax-benefit system.

Drawing a picture of the long-term inequality trends in Spain is a complex task, given the lack of datasets with homogeneous information on households' income and living conditions. Unlike other countries, information systems for the analysis of inequality have very relevant deficiencies. There is no systematic source that annually collects comparable information on the evolution of income differences for recent decades. Indeed, even if in the last twenty years there have been various datasets that include information on household incomes, they have large differences in sample sizes, income collection and territorial coverage and, additionally, have suffered from various methodological breaks.

The Family Budget Surveys data of 1973, 1980, 1990 and the new ones with annual information since 2006, together with other datasets providing annual data since the mideighties (Continuous Family Budget Survey, European Community Households Panel, and most recently the European Union Survey on Income and Living Conditions) can provide an overview of the main trends in inequality in the long-term. To provide comparable indicators, we use homogeneous definitions of the income variables for the different surveys and apply the same methodological options.⁴

One way to look at the long-term changes in the income distribution is the construction of Growth-incidence curves (GIC) by income groups. Over the past four decades, median income rose steadily in Spain with important gains in real terms despite the deep impact of the Great Recession. The availability of microdata on household income since the early seventies allows us to identify how has that growth and recession been spread by income groups. Before the crisis, income growth for the first percentiles was considerably higher than that of the richest households, confirming therefore the idea of a marked progressive growth (Figure 10.6). Moreover, income growth for the richest 10 percent of the population lagged clearly behind the mean income growth over both periods.

< Insert Figure 10.6 around here >

Nevertheless, it is easy to see that the picture changes slightly when the time window considered includes also the years after the economic crisis began. The effect of the crisis on the lowest incomes has been so strong that in a very short period the gains of the three previous decades have almost vanished. More precisely, while mean annual income growth in the period from 1973 up to 2007 was 1.6%, the mean reduction in income during the recession was 1.9%. During the first period, income growth of the richest percentiles (p90) was clearly below that of the poorest (p10) (1.4% versus 1.8%, respectively) while during the recession this was exactly the opposite (a reduction of 1.3%).

⁴ The top 1% and bottom 1% of weighted household disposable income and households with negative income have been dropped from the sample in most of the analyses. Household income has been adjusted by an equivalence factor using a parametric scale (ϕ =0.5).

for the richest versus a 3.7% for the poorest). The lower growth of the richer percentiles three first decades since 1973 was due both to the extension of cash and in-kind transfers, which affected the lower incomes more, and to the development of progressive taxation.

The progressivity observed in the variation of the average household income has clearly not been constant during the last four decades (Figure 10.7). During the seventies, a period of deep slowdown in economic activity and numerous job losses, the process of falling disposable income was especially concentrated at the upper and lower tails of the income distribution. The economic crisis that lasted until the early eighties increased poverty, but also affected negatively the economic wellbeing of the wealthiest households. The late development of the tax-benefit system mainly improved the relative position of middle-income households.

< Insert Figure 10.7 around here >

In the eighties, the remarkable growth of incomes was particularly intense in the lower percentiles, driven by the recovery in employment in the second half of the decade, increased social spending and the implementation of new minimum income schemes. On the contrary, at the other tail of the income distribution the gains were clearly lower than the average. Of all the sub-periods considered, this was the one with the largest improvements for the poorest income percentiles.

The analysis of the following years before the economic crisis began is largely influenced by the differences between the previous Family Budget Survey and the new annual survey, and the length of this time period. Economic cycles of different sign followed one another, including a long expansionary period until the beginning of the nineties, the brief but intense recession of 1993-94 and the subsequent and prolonged stage of employment growth which began in the mid-nineties and lasted until 2007. However, the changes in the different strata of the income distribution were rather modest. The most outstanding feature was the highest relative income growth of households in the lower tail of the income distribution and the concentration of much of the income growth in middleincome population. The improvement observed in the lowest income percentiles is probably linked to the development of regional minimum income benefits during those years.

< Insert Figure 10.8 around here >

The changes by income groups once the economic crisis started leave few doubts on the regressive nature of economic growth changes. The most outstanding feature was a much greater reduction of income in the lowest percentiles and a higher growth than the average –or a lower reduction than the average– in most of the upper percentiles. The homogeneous information provided by the OECD also confirms the singularity of the Spanish experience (Figure 10.8). Of the thirty-three countries with available information, Spain was the fourth where median income decreased the most –only surpassed by Greece, Iceland and Ireland– but being the one with the greatest distance between the income growth of the richest 10 % and the poorest 10%.

< Insert Figure 10.9 around here >

These general changes in the incidence of economic growth by income percentiles over time can be summarized by means of inequality measures (Figure 10.9). According to the above-mentioned sources, the greatest reduction in inequality in recent history took place during the eighties, just when other OECD countries were registering inequality increases. From then onwards, until the Great Recession there were no major changes. Thereafter, the stagnation of incomes and the dramatic growth of unemployment gave rise to one of the largest increases in inequality among OECD countries.

The main changes in inequality were as follows:

- Modest reduction of inequality during the seventies. The economic crisis that lasted throughout that decade did not involve a significant increase in inequality. The negative effect of unemployment was partially offset by increased wages and the late development of basic Welfare State services and benefits and progressive taxation.
- In the eighties, the economic recovery, the reduction of unemployment rates and increasing wages, and the increase in social spending in the second half of the decade, significantly reduced inequality.
- Stability in inequality in the distribution of income in the pre-crisis period. After a certain rise in inequality in the first half of the nineties, as a result of a brief but intense recession, inequality stabilized. The strong economic growth and – especially– employment growth during those years did not translate into an improvement in distributional outcomes. This mismatch between the improvement in macroeconomic conditions and the lack of changes in inequality may be explained by the high incidence of low-wage jobs during this period and the decreasing capacity of redistributive policies.
- Dramatic growth of inequality and poverty in the crisis. The sharp unemployment growth, rising wage inequality and the limited strength of redistributive policies gave raise to increasing inequality and poverty rates in Spain. While lower incomes fell much more than the average, this was not the case in the upper tail of the income distribution.
- The data available for the post-crisis period show a marked downward resistance of inequality, despite the reduction in unemployment and the higher rates of economic growth. The most recent data, once the economy has reactivated, shows a clear predominance of the types of labour contracts linked to low wages.

10.4 THE DRIVING FORCES OF CHANGES IN THE INCOME DISTRIBUTION

One of the most relevant features in the Spanish experience during the last decades was that inequality was remarkably stable during the expansionary period before the recession despite the large reduction of unemployment, which reached its lowest level in twenty years' time in 2007. This behaviour of inequality contrasts radically with that of the previous stage of prolonged economic growth (1980s). On the one hand, unlike what happened before the last crisis, social spending grew significantly during the 1980s, widening the positive effect on inequality of employment growth. On the other hand, the

large number of low-wage households with insecure and precarious contracts along with the weakening social welfare state would be also key factors to explain this particular pattern. In times of strong economic growth, such characteristics make it difficult to reduce inequality and poverty, although both phenomena do not grow substantially due to the expansive effect of the shock wave itself. The expansive nature of the economy does not prevent, however, that a high percentage of the population have incomes only slightly above the poverty line. In recessive times, this kind of vulnerability becomes a rapid increase in inequality, poverty and social exclusion. Thus, during the last recession, as unemployment grows and market incomes fell, inequality rose rapidly in a very brief period.

Nevertheless, in contrast with previous recession periods, the recent one has had two distinct features: a much larger increase in main-earner unemployment rates and a considerable concentration of unemployment in certain households. As a consequence, the sizable increase in unemployment linked to the macroeconomic shock together with subsequent austerity policies (consumption and income taxes rise, unemployment benefits reduction, public sector pay cuts and labour market reform) and in combination with the limited redistributive effect of the tax-benefit system, has pushed severe poverty steadily upwards.

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A measure of severe poverty that is not affected by changes in the business cycle is the proportion of households who do not earn any income from labour and do not receive any benefit from Social Security transfers (i.e. pensions or other benefits) nor from unemployment insurance or assistance payments. This particular measure of extreme poverty can be calculated using the Spanish Quarterly Labour Force Survey. Figure 10.10 illustrates how this poverty measure has changed during the last three decades, in which there have been diverse types of expansions and recessions. It is outstandingly clear that severe poverty rapidly declined during the economic expansion of the second half of the eighties while at the beginning of the nineties, the brief recession between 1992 and 1994 pushed it upwards. Subsequently, during the long expansion period after that recession, severe poverty decreased slightly and, in line with the previous statement about the modest sensitivity of inequality and poverty indicators to economic growth, during this second expansion period it took more than a decade to go back to the poverty levels of the early nineties. Poverty was greatly increased during the last crisis. The recession pushed poverty back to mid-eighties levels reaching its historic maximum. It began to decline with the recovery of employment once the crisis was over but currently it is still twice than it was before the crisis began.

The increase in inequality -and severe poverty- is undoubtedly one of the most serious threats in the long run resulting from the economic crisis. The fact that the greatest reductions of income took place in the lower tail of the distribution and the experience of previous recessions, such as the one of the early 1990s, after which the previous levels of inequality were not recovered again, warn us about the possibility a chronic increase in inequality in the long term. There is growing evidence that inequality responses seem modest in periods of strong economic growth (Ayala, Cantó and Rodríguez, 2017). Positive rates of GDP growth do not guarantee, therefore, that the severe problems of inequality in Spanish society will be reduced significantly in the medium term.

Inequality in market and disposable income

One of the main features of inequality trends in Spain in the long run compared to those of other OECD countries is the persistently larger difference between market and disposable income inequality levels. In fact, before the crisis the Spanish system was already one of the least effective in redistributing income throughout the European Union (Immervoll *et al.*, 2006). Therefore, the continuous decline in the effectiveness of the taxbenefit systems in reducing inequality in western economies has only maintained or exacerbated this difference.

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Figure 10.11 shows the long-term changes in the Gini coefficient computed on both disposable and market income. Except for the first half of the 1980s and the years immediately preceding the last crisis, inequality in market income has been consistently increasing, while disposable income inequality has been much more stable – even declining during some sub-periods. The period between the seventies and the first part of the nineties is particularly important: The late development of the welfare state in Spain, both through significant increases in public expenditure on social benefits and higher personal income tax burdens in this period prevented inequality in disposable income from rising as much as disparities in market income grew.

From then onwards, until the beginning of the crisis, the difference between inequality of disposable income and that of market income remained more or less stable. The relative ratio between these two Gini coefficients was exactly the same in 2007 and 1990 (1.48). However, even if in the years preceding the crisis, market income inequality stabilized or even decreased, its reducing trend did not drive disposable income inequality downwards; which is most probably linked to a simultaneous weakening of the redistributive impact of taxes and transfers in that period.

Indeed, in the first years after the Great Recession began, income inequality of market income increased strongly even if benefits and other redistribution measures managed to cushion, at least partially, a potentially even larger rise. Along the crisis, inequality of market income continued to increase strongly and automatic stabilizers' through taxbenefit redistributive policies were able to cushion this consistent rise only to a certain extent. As Figure 10.11 shows, this was not enough to avoid a relevant increase of disposable income inequality, particularly between 2008 and 2011, situating Spain among the ten most unequal countries in the OECD (OECD, 2015) when, five years earlier, in 2007 it was below the OECD average.

< Insert Figure 10.12 around here >

The previous patterns do not change substantially when instead of taking into account the entire population the focus is on working age individuals. As shown in Figure 10.12, the most visible difference from the previous analysis of the changes in inequality with the two distributions is a more marked parallelism. Particularly noteworthy is the asymmetry that can be observed for the years before the crisis –corresponding to the last period of economic boom– with a slight downward trend in market income inequality and an increase in disposable income inequality instead. This different behaviour seems to show a greater loss of redistributive capacity of the tax-benefit system in the case of this demographic group: working-age individuals.

Inequalities in the labour market

One of the most differential features in the determination of primary incomes in Spain compared to other OECD countries is the higher incidence of unemployment and the difficulties to create stable non-cyclical employment. The extension of long-term unemployment and high unemployment rates in certain demographic groups, such as young people or low-skilled workers, have traditionally contributed to substantial levels of economic vulnerability.

Given these traits, it appears that the serious weaknesses of the Spanish economy in terms of unemployment during economic downturns should have provoked a sharp increase in poverty and a serious problem of social instability. However, this has not been the case. Throughout the 80s, the first period of high and increasing unemployment, income inequality and poverty fell in Spain. The main factors commonly adduced to explain this apparent contradiction are the role of public protection networks and the crucial protective function the Spanish family provides even today, mainly because unemployment has traditionally affected more intensely other members of family different from the main breadwinner. However, during the last recession, it was the actual fall in employment that mainly drove the abovementioned rise in market income inequality.

Some authors have analyzed how the intra-household distribution of unemployment can be more relevant than aggregate unemployment in order to explain poverty changes (Ayala *et al.*, 2017). According to their results, unemployment is found to have a positive and significant impact on severe poverty, while inflation has a negative and significant impact on it too. Among the different measures of unemployment considered to test this relationship, the aggregate individual rate of unemployment has a lower effect on the lower tail of the income distribution than the unemployment rate of household heads or the proportion over the total number of households in the population where all active members are unemployed.

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Figure 10.13 illustrates the changes in various unemployment measures in the long-term. Two features are noticeable. One is that, traditionally, these stricter definitions of unemployment have a much lower incidence among Spanish households than the overall unemployment rate. Another one is that the three indicators present remarkable differences in the great recession as compared to what happened in previous periods of economic downturns.

Focusing on the trends for household heads' unemployment rate first, and in contrast to what happened in the short contraction of the early 1990s, this rate has been growing even more sharply than aggregate individual unemployment in recent times. As mentioned earlier on, in previous recessions massive youth unemployment was partially offset by the employment of household heads. In the economic downturn of the late 00s, this rate has been growing at a higher pace than in any other period reaching its historical maximum in 2012. While in 1994 –when the aggregate unemployment rate reached its highest value– household heads' unemployment rate was about half of aggregate overall unemployment, during the great recession that proportion increased up to an 85%. A similar behaviour can also be observed for the proportion of workless households in the population. While this type of households was a 2.5% of total population in 2007, at the beginning of 2017 –once the economy is in a recovery path– this group is more than three

times larger. To the extent that these alternative unemployment measures may have a more direct impact on the income distribution, it seems reasonable to expect that inequality measures will not change substantially without large changes in these variables.

In addition to a structural problem of job creation, the persistence over time of high levels of precarious employment, with low wages and very low upward mobility, incorporates into the social structure a clearly determining factor of income differences between households. For this inequality in primary incomes does not translate into a widening of inequality in disposable income, a large compensatory effect of redistributive policies would be necessary.

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The identification of this structural component in earnings inequality is not easy, however, in the light of the long-terms changes in earnings dispersion. While the increase in wage inequality during the crisis seems clear with different datasets (Bonhomme and Hospido, 2013), there is also a coincidence in pointing out the previous years as a period of reduction in wage differences. The available evidence seems to show that inequality has a countercyclical behaviour, decreasing during expansions and increasing during recessions (Arranz and García Serrano, 2014). Despite this result, it is not difficult to infer the existence of a latent component in earnings inequality in Spain. The papers that have tried to identify the reasons for its reduction in the expansion period emphasize as a first driving factor the reduction of the graduates' salary premium due to oversupply. These papers have also highlighted an over-qualification problem in the labour force and the greater difficulties of the Spanish labour market in the comparative context to absorb a large increase in the proportion of university graduates with adequate jobs (García Montalvo, 2009, Murillo et al., 2012, Carrasco et al., 2015, Felgueroso et al., 2016). They emphasize the consequences both on the reduction of the differences between the different educational attainment groups and the increase of intra-group earnings inequalities (Budria and Moro-Egido, 2008).

A second factor that seems to explain why earnings inequality did not increase in the expansion period and why it did so rapidly during the crisis are the observed changes in the composition of employment. The boom in the construction sector and associated industries and services gave rise to a marked improvement in the incomes of low-skilled workers who in a context of much weaker demand for this type of activities would have received considerably lower wages. This change in the composition of labour supply would have meant an increase in inequality if their expected wage had remained constant (Lacuesta and Izquierdo, 2012). In line with this reasoning, the increase in earnings inequality in the crisis can be attributed to the change in the structure of occupations, with a significant effect of the fall in activity of the construction sector as well as a decrease in wages in this sector. Moreover, there has been an increase in more precarious forms of employment and low pay. Low wage earners have grown from 13.4% of total employees to 14.6% in 2014 while temporary employees are more than 26 percent of total employment in 2016 (a 65% more than the mean of the Euro area) and involuntary parttime employment is 62% of total part-time employment (more than double the EU area mean, 30.4%).

A third process that could have affected earnings inequality is the aforementioned increase in female labour participation. Some authors have found that female participation does not appear to be able to explain the decrease in overall inequality during these years. According to Izquierdo and Lacuesta (2007), the fact that female's wages were below the unconditional mean dominates the fact that wage inequality within females is lower than within males. The large increase in the participation of women was not followed by a change in their relative wage respect to men. This meant that this change in the structure of wages did not lead to significant changes in earnings inequality.

Therefore, it seems difficult that in the long term the conditions that determine wage inequality in the lower tail of the earnings distribution could be modified, without expecting major changes at the top either. In fact, the picture resulting from homogenous sources for different countries shows that inequality in the upper tail of the earnings distribution in Spain is high in comparative terms (Simón, 2009). Our results in Figure 10.14 show that it is mostly the increase in the distance between the 10th percentile and the mean or the 90th percentile that is pushing inequality upwards during the last recession. It is not easy to predict that an expansionary cycle can substantially alter the basic characteristics of the wage structure. So, without substantial changes in the production system, for which structural actions and lengthy periods are needed, or changes in the legislative framework aimed at reducing wage differences, the trend in the largest component of Spanish household incomes will be of high inequality.

Demographic changes and economic inequality

The translation of individual income into household disposable income goes through the pooling of all sources of market income received by each household member. The way in which this final distribution takes place is conditioned not only by the type of income received but also by the household structure. Therefore, there may be demographic changes that, regardless of changes in market income, affect the evolution of inequality in the long run.

Among the various processes that have affected the demographic structure in Spain there are three with a special distributional incidence: population ageing, the growth of migration flows and changes in the structure of households, including the remarkable growth of single-parent and single-person households. There is consensus in pointing out the improvement of the elderly in the income scale over the years. As stressed by some authors, the problems of a huge distance between pension benefit levels, the limited intensity of some of these benefits, such as those of widowhood, or the intermittence of working careers in some groups, although they persist, have been moderating over the last decades (Ayala, 2014). During the crisis, the incomes of the elderly showed a rapid improvement as compared to the average due to a much more stable evolution. This was not the case in the expansionary phase, when these incomes, largely dependent on Social Security pensions and updated according to the evolution of prices, did not have the same growth capacity as earnings. Our results in Table 10.1 show that disposable income growth was largest for individuals over 45 years of age during the 80s and the 90s and before the crisis while during the recession income reductions were somewhat smaller for individuals over 56 years of age.

< Insert Table 10.1 around here >

However, this evolution raises serious questions about the effect of aging on inequality in the coming years. First, the determining factor for avoiding the increase in the proportion of individuals potentially recipients of retirement pensions does not translate into higher inequality is the maintenance of benefit levels not very distant from average income. Over the last forty years, this has only been possible in the two recession periods (Figure 10.15). Second, while pensions continue to be the main redistributive instrument in Spain (Cantó, 2013), sustainability problems have forced –and will continue to do so– to the development of reforms that may affect the benefit levels and their contribution to redistribution. Modifying any parameter of the system could reduce the redistributive capacity of the main policy reducing inequality in this country.

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The second major demographic process that has affected inequality is the increasing weight of the immigrant population. Before the stabilization of the inflows caused by the crisis, they multiplied by five in almost a decade. Immigration, which was an important factor for achieving the high economic growth rates registered in the pre-crisis period, added pressure to the distributive process given the growing weight of a group with incomes lower than the average. Despite the fact that the effects of immigration on wage changes are small and only noticeable when job characteristics are included as determinants of wages (Carrasco *et al.*, 2008), several authors have shown that immigrant workers tend to concentrate to a greater extent at the lower levels of the earnings scale, with higher levels of poverty and worse living conditions (Iriondo and Rahona, 2009, Muñoz de Bustillo and Antón, 2011, Martínez, 2010).

During the crisis, immigrants were most affected by the fall in employment, giving rise to a deterioration of both their position in the distribution of income and their living conditions. The economic recovery may ease some of these problems but will not substantially alter them. At the same time, job creation might fuel the arrival of new immigrants, who would be affected by low initial salaries and difficulties to access social protection. Given that the time frame for transforming this disadvantageous situation into one of wage and income assimilation tends to widen over a long time span, it will be difficult to prevent this factor from introducing distributional pressures.

A third demographic process affecting income inequality is the change in household typology and, above all, the growing weight of single-parent families. While in the early 1980s these households accounted for less than 0.5% of Spanish households, they currently account for 10%. Although a direct relationship cannot be drawn between the fact of living in a household with a single adult with family burdens and having a low income, the average income of this group is 30% below the average of Spanish households. Poverty rates for this group are also very high, with a remarkable contribution to the high incidence of child poverty in Spain (Ayllón, 2017). The growing social fragmentation among children and the adverse consequences of child poverty on various dimensions of well-being are undoubtedly factors of future vulnerability. There is also evidence that the incomes of single-parent households are less sensitive to the economic cycle than those of other population groups.

The limited redistributive effect of the tax-benefit system

The Spanish tax-benefit system is one of the least effective redistributing income across the European Union (Immervoll *et al.*, 2006, Paulus *et al.*, 2009). As one can easily see in Table 10.2, transfers and pensions reduce the Gini in 16 p.p. while in the Euro are the mean reduction is 20.9 p.p. while in countries such as Germany or Portugal the redistributive impact of government transfers is significantly larger reaching a 26.1 p.p. or 30.1 p.p., respectively. The main difference with respect to other countries is the limited dimension of the redistributive effect of each and every one of the policies that comprise it (with the exception of contributory pensions). The inequality trends reviewed in the previous sections are closely linked to this constraint.

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Regarding taxes, the trend in Spain, similar to that of many other countries, has been the reduction of the rates in direct taxes and a gradual concentration on those taxable objects that are easier to control, such as labour income or consumption. Such a trend seems to obviate the redistributive effect of direct progressive taxation and the regressive one of indirect taxation. In the case of Spain, it is important to note that although the personal income tax continues to have an equalizing effect its impact has decreased over time, despite the temporary improvement of emergency actions in response to the crisis (Cantó, 2013). In terms of public revenues, the fiscal system had a very remarkable increasing trend from the 1970s to the 1990s (Figure 10.16), linked to a process of late institutional modernization. From then onwards it increased moderately during the period of economic growth prior to the economic crisis, and then collapsed as the crisis started. The result is a level of public revenues on GDP that is persistently at a significantly lower level than that of other European countries.

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In general terms, in the countries where the redistributive effect of tax-benefit systems has grown the most, the driving force has been the growth of the relative weight of cash benefits in household incomes, not their progressivity (Cantó, 2013). In the case of Spain, it is very difficult to maintain the level of income redistribution only through increases in the progressivity of social benefits. Higher spending levels are needed, in sharp contrast to the cuts imposed by the crisis, which led to a contraction of social spending adding greater constraints to narrowing the gap with other European countries.

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The lower redistributive capacity compared to other countries (see Table 2) does not mean in any case that the system is not redistributive. The tax-benefit system has traditionally contributed to a much more progressive income distribution than the one that would have resulted from market income. However, this effect has not been constant over time, with periods with more intense redistribution than others (Figure 10.17). During the seventies and the eighties, the contribution of the tax-benefit system to the reduction of market income inequality continuously increased. The advent of democracy was followed by strong growth of cash benefits and a rapid development of in-kind transfers. These were also the years when the foundations for the introduction of a progressive personal income tax were laid. As stressed by Rodríguez Cabrero (2011), political parties gave their support not only to political democracy but also to the enlargement of the Welfare State, and the three-year period between 1976 and 1978 witnessed the greatest-ever growth in social expenditure. During the eighties, the trend towards universal social protection continued, with important reforms in the education and health fields. The expansion of pensions between 1980 and 1990 helps to explain the improved position of the elderly. There also was a gradual coverage of different demographic groups by means of specific welfare subsystems. From the mid-1980s, there has been an attempt to resolve the apparent contradiction between two objectives that seem hard to reconcile, namely, the desire to make the various welfare benefits universal and the need to contain the increase in public spending. The solution was to increase the coverage of social needs with those benefits that led to the lowest possible public expenditure. The problems of job creation stimulated the establishment of alternative mechanisms to guarantee incomes; non-contributory protection for the unemployed increased notably, while the increase in temporary work and the extension of the informal economy added new pressures. The result was an increase in the number of means-tested benefits. This led to a certain softening of social conflict, but created additional social segmentation by adding differences in the types of income guarantee to existing differences in earnings and income mobility. Furthermore, the creation of new benefits was insufficiently coordinated, producing a highly complex non-contributory system in which different benefits aimed at the same groups still coexist. In terms of public revenues, the eighties were also years of generalization and extension of the fiscal system among citizens. That was the only way to get the resources needed for the welfare state consolidation process.

The trend towards increased redistributive capacity of the system was halted in the 1990s. Because of the commitment to adjust macroeconomic indicators to the obligations conferred by the Treaty of Maastricht, especially the maximum public deficit target, the state adopted austerity policies that affected social policy. Until the period of economic expansion came to a halt in 2008, social spending was restrained while levels of protection were reduced and moves were gradually made towards outsourcing social services (Rodríguez-Cabrero, 2011). Such restrictions work to the detriment of the numerous shortages still persisting in public social provision. In overall terms, Spanish social expenditure figures are still five percentage points below the European Union average.

With the crisis, some of these processes were reinforced. Nonetheless, the tax-benefit system became more redistributive because of the sharp fall in household incomes and the consequent growing weight of social benefits (Cantó, 2013). However, the weakness of this redistributive capacity meant that the benefits received by households that experienced the greatest fall in their income were not enough to maintain their disposable income at the previous level. As a result, inequality increased in a very short period of time. At the same time as this drastic increase in inequality occurred, additional reforms were introduced as a response to the commitments imposed by fiscal consolidation requirements and, on the other hand, to provide a minimum income for the unemployed with no access to other benefits. As a result, Spain still has a significant differential in terms of social spending compared to the EU average (25.4 %of GDP in Spain and 28.7% in EU-28). Before the crisis the difference was 5 points.

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One possible approach to address how the above-mentioned changes in the capacity of the tax-benefit system to reduce inequality is to re-calculate the changes by income percentiles between two moments in time differentiating now between disposable and market income (Figure 10.18). In the seventies, the growth gap increased especially at the tails of the income distribution. The eighties registered the most marked tendency of correction of market income inequality, with a clear asymmetry in the income growth by percentiles in each distribution. During the last economic crisis, the correction of market income inequality not enough to avoid the drastic increase in disposable income inequality.

10.5 HOW IS REAL INCOME GROWTH AROUND AND BELOW THE MIDDLE?

The various factors reviewed in the previous section -labour market, demography and public policies- have affected differently each percentile of the income distribution. In some of the revised stages, the changes took place mainly at the lower tail of the distribution such as the trend towards a greater relative improvement of the lowest percentiles from the 1980s up to the crisis in the 1990s, and a rapid reversal of that process in the last economic downturn. The higher incidence of the crisis on low-income households has not, however, received much attention from the public opinion. With the rapid deterioration of employment and household incomes, statements about the shrinking middle class became generalized. Assertions emphasizing the inevitable end of the middle class or a marked tendency towards dualism and the polarization of the income distribution were generalized.

These judgments, although they do not faithfully mirror the recent reality, require at least some analysis of what has happened to middle-income households in the last decades. To do so, a possible classification is that proposed by Atkinson and Brandolini (2013), who divide the population into three groups according to household disposable income: income below 75% of the median, income between that threshold and 200%, and income higher than this last percentage. A limitation to this classification in the case of Spain is that the group defined as middle income is excessively aggregated. For our analysis, it seems more appropriate to separate this group into two: low-middle income (between 75 and 125% of the median income) and high-middle income (between 125 and 200% of the median income).

According to this classification, two different stages can be differentiated over time in terms of the distribution of the population by income groups (Figure 10.19). In the first one, the development of the tax-benefit system entailed the gradual reduction of the low-income group, the growth of the middle-income group, especially low-middle incomes, and a reduction in the weight corresponding to the highest-income group. In a second and more recent stage, the severity of the economic crisis has meant a new structure of the population by income groups. The main change has been the transformation of an important segment of the middle-low income group -which is no longer the one with the highest weight- into low income individuals. On the other hand, the population with higher incomes has gained weight.

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The changes are relatively similar when the focus is on the income share that each group receives instead of the accumulated population (Figure 10.20). The stability of the percentage corresponding to the low-income group, which did not reach 15% of total income in the last four decades and which fell only slightly in the last crisis, stands out over time. Also noteworthy is the increase in the percentage over the total received by the middle classes up to the year 2000, with a particularly remarkable increase in the share of the low-middle income group. The crisis, however, particularly affected this group which after having reached a maximum of 37% of total income saw how this percentage decreased to 27%. The income slice corresponding to the richest group had just the opposite process. Economic and institutional modernization gave rise to a continuous reduction of its income share since the 1970s. This process was truncated by the crisis, reaching in few years its maximum percentage (25% of the total).

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Given these results, it may be relevant to analyze the evolution of each income group using the available datasets. The known evidence points to a prolonged trend of a decreasing percentage of the population defined as poor -income below 60% of median income- from 1973 to at least 1990 (Figure 10.21). In the years in which the oil crisis was particularly virulent -up to the first eighties- the combination of very different forces, such as the severity of the employment destruction, on the one hand, and, on the other hand, the improvement of earnings in the framework of an upward spiral of nominal wages and prices, and the late consolidation of some of the basic instruments of the Welfare State, had as a balance a moderate reduction of poverty. Institutional changes and the development of redistributive policies served to offset the regressive effect of the crisis. However, in the first half of the 1980s, the increase in unemployment, which reached its all-time high until the recent crisis, and moderation in the rise in wages put a clear brake on the previous trend toward improvement. The more moderate growth of social spending in these years also contributed to the stagnation of improvements in the low-income group.

In the second half of the 1980s, as discussed in section 10.2, a new expansionary cycle began and the result was the reduction of unemployment, to which a more intense public intervention to reduce poverty was also added with a late rise in social spending (supported among other things by the development of new income guarantee schemes). The expansionary phase was followed by a short but intense recession, which resulted in the loss of one million jobs and after a long period of reduction, poverty rates increased again. The recovery from the mid-1990s to the last third of the next decade pushed unemployment rates below a 10% from 2005 to the beginning of the recession. According to the analysis of the historical series, one would have expected to see a significant fall in poverty levels. However, all the available data sources point to the maintenance of a similar poverty rate despite the intense economic growth, which suggests that the characteristics of the jobs created (low wage positions and fixed-term contracts) limited the potential positive effect of employment growth on poverty.

The extent of poverty in Spain before the crisis remained therefore high. The rate offered a strong resistance for several years, staying at approximately one in five Spanish households. One particularly relevant finding is that not only did relative poverty not decline during this boom period but rates did not return to their previous level after the recession. This reality warns against what Spanish society can expect even if high levels of economic activity and job creation are recovered. The datasets that provide information on the most recent period show a remarkable growth in the incidence of poverty during the last crisis. Available data show an overwhelming tendency to a poverty rate increase year by year, bringing the indicator to a maximum value in the last decade of 22.2%. This increase contrasts with that of the proportion of income received by this group, which is much more stable over time and with a trend only moderately decreasing in recent years.

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In addition to the worsening of the economic situation of the lower income households, the crisis has also had an impact on the middle-income group. The available data show a progressive restructuring of the distribution of the population by income groups, with a decline over time in the percentage of households belonging to the middle group. Between 2007 and 2014 the middle-income group decreased from representing two thirds of total population to 55%. Almost one in six households that were part of the middle class in terms of income would have fallen, therefore, to the lower income group in just a few years. Such a process has obviously affected inequality within each group. More precisely, it has largely increased inequality within the low-income group.

Both in terms of the population belonging to this group and its income share, there has been a quite similar process in the three subgroups in which the middle-income one can be broken down. The clearest pattern is that of the low-middle class, with a very marked evolution shaped by an inverted-U profile (Figure 10.21). Both their demographic weight and total incomes increased until the mid-1990s, then stabilized and reduced with the crisis. In the case of the intermediate group within the mid-middle class, this pattern is broadly repeated but with more marked variations, such as the reduction of its weight in the first nineties and much greater fluctuations in the 2000s than in the previous case (Figure 10.22). In the case of the high-middle class, the process of a progressive gain also occurred, both in terms of population and income, moving to stability afterwards and decreasing with the crisis (Figure 10.23).

< Insert Figure 10.25 around here >

Probably, the most singular evolution is that of the highest income group (Figure 10.25). The development of progressive taxation and the process of economic modernization meant a gradual loss of the weight of this group, somewhat more moderate in the case of the income share. The process of decreasing participation was especially pronounced from the late 1990s to the mid-2000s. From then onwards a process of continuous improvement began regarding both percentages spurred by the economic crisis.

In summary, it can be said that the economic crisis has meant a deep change in the process of consolidation of social classes, defined according to the income scale. The regressive effect of the changes in the labour market and, most particularly, the increase in unemployment has been particularly harmful for both low-income and middle-income households. Second, the relative weight of middle-incomes has followed an inverted-U pattern in the last four decades. This has happened -with slight differences, in the three groups that compose it (low-, mid- and high-middle incomes). Third, the decreasing capacity of redistributive policies to reduce market income inequality has meant that the position of middle-income households in the final distribution has become more like the distribution resulting from the market. Fourth, this process has also made the income share of the rich the highest of the last forty years.

CONCLUSIONS

This chapter has aimed to describe the evolution of inequality and living standards and their driving forces in Spain in the last three decades. In this country, both market and disposable income inequality have grown faster than in many other OECD countries during the Great Recession and Spain has become the OECD country where the gap between the income slice of those in the highest decile compared to that of those in lowest one has widened the most in the 2007-2014 period. Up to the recession, long term growth had generally benefitted low more than high income households, so that inequality levels, even if relatively high, had a generally stable or decreasing trend. Interestingly, one of the most relevant features in the Spanish experience during the last decades was that inequality was remarkably stable during the expansionary period before the recession despite the large reduction of unemployment, which reached its lowest level in twenty years' time in 2007.

While the dimension of unemployment during the crisis has been undoubtedly one of the main driving forces of the rapidly increasing inequality levels in this country, we find that the limited redistributive capacity of the tax-benefit system is one of the key determinants of the changes in the long-term indicators of inequality in this country. This is most clearly observable since 2008, when market income inequality and wage dispersion has grown most strongly. Nevertheless, in contrast with previous recession periods, the recent one has had two distinct features: a much larger increase in main-earner unemployment rates and a considerable concentration of unemployment in certain households. Consequently, the sizable increase in unemployment linked to the macroeconomic shock together with subsequent austerity policies and in combination with the limited redistributive effect of the tax-benefit system, has pushed severe poverty steadily upwards. The increase in inequality -and severe poverty- is undoubtedly one of the most serious threats in the long run. The fact that the greatest reductions of income took place in the lower tail of the distribution and the experience of previous recessions, such as the one of the early 1990s, after which the previous levels of inequality were not recovered again, warn us about the possibility a chronic increase in inequality in the long term.

Changes in the demographic structure of the population is another key determinant of inequality trends. In the case of Spain there are three demographic issues with a special distributional incidence: population ageing, the growth of migration flows and changes in the structure of households, including the remarkable growth of single-parent and single-person households.

Our results underline that even if during the recession income reductions were somewhat smaller for older individuals, pensions continue to be the main redistributive instrument in Spain. Therefore, modifying any parameter of the contributory pensions system could seriously damage the redistributive capacity of the tax-benefit system and push inequality significantly upwards in this country. Regarding the growth of immigration, during the crisis immigrants were most affected by the fall in employment, giving rise to a deterioration of both their position in the distribution of income and their living conditions. The economic recovery may ease some of these problems but will not substantially alter them. We believe that, in whatever the context, it will be difficult to prevent this factor from introducing distributional pressures. A third demographic process affecting income inequality is the change in household typology and, above all, the growing weight of single-parent families. The growing social fragmentation among children and the adverse consequences of child poverty on various dimensions of well-being during the recent crisis are undoubtedly factors of future vulnerability for the Spanish society where young couples with children have experienced high and increasing poverty rates since 2008.

In this chapter, we have also focused on discovering the trends in living standards of ordinary working-age households, particularly those around and below the middle of the distribution, in contrast with that of other socioeconomic groups. Our results show that the severity of the economic crisis has meant a new structure of the population by income groups. The main change has been the transformation of an important segment of the middle-low income group -which is no longer the one with the highest weight- into low income individuals. On the other hand, the population with higher incomes has gained weight. Almost one in six households that were part of the middle class in terms of income would have fallen, therefore, to the lower income group in just a few years. This is a contrast with what happened in previous decades when the development of the tax-benefit system entailed the gradual reduction of the low-income group, the growth of the middle-income group, especially low-middle incomes, and a reduction in the weight corresponding to the highest-income group.

REFERENCES

Arce, R.D. (2010). El impacto económico de la inmigración en España, 2000-2009: antes y después de la crisis. *Información Comercial Española*, 854, pp. 23-35.

Arranz, J.M. and García-Serrano, C. (2014). How green was my valley: Earnings differentials and the changing distribution of wages in Spain, 2005-2010. *International Journal of Manpower*, 35(7), pp.1059-1087.

Atkinson, A.B. and Brandolini, A. (2013). On the Identification of the Middle Class. In: J.C. Gornick and M. Jäntti, eds., *Income Inequality*, Stanford: Stanford University Press, pp. 77-100.

Avram, S., Levy, H. and Sutherland, H. (2014). Income Redistribution in the European Union, *IZA Journal of European Labor Studies*, pp.3-22, http://www.izajoels.com/content/3/1/22

Ayala, L. (2014). Desigualdad y pobreza en España en el largo plazo. *VII Informe sobre exclusión y desarrollo social en España 2014*. Fundación FOESSA, Documento de Trabajo 2.5.

Ayala, L., Cantó, O. and Rodríguez, J.G. (2017). Poverty and the business cycle: The role of intra-household distribution of unemployment. *Journal of Economic Inequality*, 15, pp. 47-73.

Ayllón, S. (2017). Growing up in Poverty: Children and the Great Recession in Spain. In: B. Cantillon, Y. Chzhen, S. Handa and B. Nolan, eds., *Children of austerity: The Impact of the Great Recession on Child Poverty in Rich Countries*, Oxford: UNICEF and Oxford University Press, pp. 219-242

Bonhomme, S. and Hospido, L. (2013). Earnings inequality in Spain: new evidence using tax data. *Applied Economics*, 45, pp. 4212-4225.

Bonhomme S. and Hospido, L. (2017). The cycle of earnings inequality: Evidence from Spanish Social Security data. The Economic Journal, *forthcoming*.

Bjorklund, A. (1991). Unemployment and Income Distribution: Time-Series Evidence from Sweden. *Scandinavian Journal of Economics*, 93(3), pp. 457-465.

Budria, S. and Moro-Egido, A. I. (2008). Education, Over-education and Wage Inequality: Evidence for Spain. *Economics of Education Review*, 27, pp. 332-341.

Burgess, S., Gardiner, K. and Propper, C. (2001). Why rising tides don't lift all boats: an explanation of the relationship between poverty and unemployment in Britain. LSE Research Online Documents on Economics 6438, London School of Economics and Political Science, LSE Library.

Buse, A. (1982). The Cyclical Behaviour of the Size Distribution of Income in Canada 1947-1978. *Canadian Journal of Economics*, 15, pp. 189-204.

Cantó, O. (2013). La capacidad redistributiva del sistema español de prestaciones e impuestos. *Papeles de Economía Española*, 135, pp. 140-152.

Carrasco, R., Jimeno, J.F. and Ortega, A. (2008). The effect of immigration on the labor market performance of native-born workers: some evidence for Spain. *Journal of Population Economics*, 21, pp. 627-648.

Carrasco, R., Jimeno, J.F. and Ortega, A. (2015). Returns to Skills and the Distribution of Wages: Spain 1995–2010. *Oxford Bulletin of Economics and Statistics*, 77, pp. 542-565.

Conde-Ruiz, J.I. (2008). Inmigración y Crecimiento Regional en España. Colección Estudios Económicos 09-08, Serie Inmigración, FEDEA.

European Commission (2014). Population ageing in Europe: Facts, implications and policies, Brussels.

Farré, L. and Vella, F. (2008). Macroeconomic Conditions and the Distribution of Income in Spain. *Labour*, 22(3), pp. 383-410.

Felgueroso, F., Hidalgo-Pérez, M. and Jiménez-Martín, S. (2016). The Puzzling Fall of the Wage Skill Premium in Spain. *The Manchester School*, 84, pp. 390-435.

García Montalvo, J. (2009). La inserción laboral de los universitarios y el fenómeno de la sobrecualificación en España. *Papeles de Economía Española*, 119, pp. 172-187.

Immervoll, H., Levy, H., Lietz, C., Mantovani, D., O'Donoghue, C., Sutherland, H., and Verbist, G. (2006). Household Incomes and Redistribution in the European Union: Quantifying the Equalizing Properties of Taxes and Benefits. In: Papadimitriou, D.B. (ed.): *The Distributional Effects of Government Spending and Taxation*. Palgrave, Macmillan.

Iriondo, I. and Rahona, M. (2009). Vivienda y condiciones de vida de los inmigrantes en España. *Revista del Ministerio de Trabajo e Inmigración*, 80, pp. 269-291.

Izquierdo, M., Jimeno, J.F., and Rojas, J.A. (2010). On the Aggregate Effects of Immigration in Spain. *SERIEs: Journal of the Spanish Economic Association*, 1, pp. 409-432.

Izquierdo, M, and Lacuesta, A. (2007). Wage inequality in Spain: recent developments. ECB Working Paper, No. 781.

Jäntti, M. and Jenkins, S. J. (2010). The impact of macroeconomic conditions on income inequality. *The Journal of Economic Inequality*, 8(2), pp. 221-240.

Jaumotte, F. (2011). The Spanish Labor Market in a Cross-Country Perspective, IMF WP/11/11.

Lacuesta, A. and Izquierdo, M. (2012). The contribution of changes in employment composition and relative returns to the evolution of wage inequality: the case of Spain. *Journal of Population Economics*, 25, pp. 511-543.

Martínez, R. (2010). Baja renta y privación material de la población inmigrante en España. *Presupuesto y Gasto Público*, 61/2010, pp. 311-336.

Muñoz de Bustillo, R. and Antón, J. I. (2011). From rags to riches? Immigration and poverty in Spain. *Population Research and Policy Review*, 30, pp. 661-676.

Muñoz de Bustillo, R. and Antón, J. I. (2014). Turning back before arriving: the weakening of the Spanish Welfare State. In: Vaughan-Whitehead, D. (ed.) *Dismantling the European Social Model: Europe losing its soul*, Cheltenham: Edward Elgar.

Murillo, I.P., Rahona-López, M. and Salinas-Jiménez, M.M. (2012). Effects of educational mismatch on private returns to education: An analysis of the Spanish case (1995–2006). *Journal of Policy Modeling*, 34, pp. 646-659.

Myro, R. (2017). Crecimiento económico y cambio estructural. In: J. L. García Delgado and R. Myro, eds., *Lecciones de economía española*, Madrid: Thomson Reuters.

Nolan, B. (1987). Cyclical Fluctuations in Factor Shares and the Size Distribution of Income. *Review of Income and Wealth*, 33(2), pp. 193-210.

OECD (2011). Divided we stand. Why inequality keeps rising. Paris: OECD Library.

OECD (2015). In It Together: Why Less Inequality Benefits All. Paris: OECD Publishing.

Oficina Económica del Presidente (2006): *Inmigración y economía española: 1996-2006.* Madrid: Presidencia del Gobierno. Paulus, A., Čok, M., Figari, F., Hegedüs, P., Kump, N., Lelkes, O., Levy, H., Lietz, C., Lüpsik, S., Mantovani, D., Morawski, L., Sutherland, H., Szivos, P., Võrk, A. (2009). The Effects of Taxes and Benefits on Income Distribution in the Enlarged EU. EUROMOD Working Paper Series Nr EM8/09.

Rodríguez Cabrero, G. (2011). The Consolidation of the Spanish Welfare State. In: Guillén, A.M. and León, M., *The Spanish Welfare State in European Context*. Surrey: Ashgate.

Simón, H. (2009). La desigualdad salarial en España: Una perspectiva internacional y temporal. *Investigaciones Económicas*, XXXIII (3), pp. 439-471.

Sawyer, M. (1976). Income Distribution in OECD Countries. *OECD Economic Outlook*. Paris: OCDE.

World Bank, (2005). Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries, Washington.



Figure 10.1 Trends in annual real GDP growth, share of internal and external demand.

Source: Own construction using data National Accounts information from Instituto Nacional de Estadística (INE) (Base 2010) (p) means "predicted". GDP Deflator (FEDEA).



Figure 10.2 Trends in Employment and Unemployment rates (1976-2016): males and females.

Source: Own construction using data from Spanish Labour Force Survey (Encuesta de Población Activa, EPA), Instituto Nacional de Estadística (INE).





Source: Data from Bank of Spain and OECD, kindly provided by the author of Myro, R. (2017): "Crecimiento económico y cambio estructural" In J. L. García Delgado y R. Myro (Dirs.): Lecciones de economía española, Thomson Reuters, Madrid".

Figure 10.4. Trends in real annual GDP growth and Total Household Disposable Income growth (National Accounts).



Source: Own construction using National Accounts information from Ministerio de Economía, Industria y Competitividad: Indicadores e Informes Macroeconómicos (Cuentas no Financieras Sectores Institucionales. Base 2010. 972 Sector Hogares e ISFLSH) and Instituto Nacional de Estadística (INE) – Series de PIB - Base 2010. <u>http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadística C&cid=1254736165950&m</u> <u>enu=resultados&idp=1254735576581</u>

Figure 10.5. Trends in Household Disposable Income growth (National Accounts) and Survey data Equivalent Disposable Income growth for working and non-working individuals.



Source: Own construction using the Family Budget Survey and EUSILC income growth of equivalent incomes. Zero and negative income values included and 1st and 100th percentile trimmed in all calculations. National Accounts information from Ministerio de Economía, Industria.

Figure 10.6. Real annual growth rate of equivalent disposable income by disposable income percentiles, 1973-2015.



Source: Own construction using data from Family Budget Survey (1973, 2015).



Figure 10.7. Real annual growth rate of equivalent disposable income by disposable income percentiles, 1973-80, 1980-90, 1990-2007 and 2007-2014

Source: Own construction using data from Family Budget Survey (1973, 1980, 1990, 2007, 2014). Income data correspond to the year of analysis. Percentiles 1 and 100 dropped from graph for convenience.



Figure 10.8. Real growth rate by income groups in OECD countries, 2007-2014.

Source: OECD Income Distribution Database.



Figure 10.9. Inequality of equivalent disposable income in Spain: Gini index, 1973-2015



Figure 10.10. Percentage of households without any regular income.

Source: Labour Force Survey: 1987-2016



Figure 10.11. Inequality of equivalent market and disposable income in Spain: Gini index, 1973-2014.





Figure 10.13. Alternative unemployment rates, 1987-2017



Source: Labour Force Survey.



Figure 10.14. Hourly wage inequality in Spain: Gini and percentile ratios, 2004-2013.

Source: Own construction using Structure of Earnings Survey (Encuesta de Estructura Salarial) 2004-2013.



Figure 10.15. Average benefits as a proportion of per capita GDP.

Source: National Accounts (INE) and Ministerio de Sanidad, servicios sociales e igualdad



Figure 10.15. Average benefits as a proportion of per capita GDP.

Source: National Accounts (INE) and Ministerio de Sanidad, servicios sociales e igualdad



Figure 10.17. Impact of the Tax-Benefit system on Inequality: % difference in Gini before and after taxes and transfers, 1973-2014

Source: Own construction using a variety of sources of data, various Family Budget Surveys and EUSILC. Zero and negative income values included and 1st and 100th percentile trimmed in all calculations. Market income in FBS for 1973, 1980, 1990 is monetary income from dependent and independent work and property income. From 2005 onwards Market income in EUSILC is monetary income from dependent and independent work and property income is disposable income plus transfers minus taxes.

Figure 18a. Real annual growth rate of equivalent disposable and market income ordered by 1973 percentile in each of them, 1973-1980 (difference to the mean)



Source: Own construction using data from Family Budget Survey (1973, 1980). All income data correspond to the year of analysis. Percentiles 1 and 100 dropped from graph for convenience.



Figure 18b. Real annual growth rate of equivalent disposable income and market income ordered by corresponding 1980 percentile, 1980-1990 (difference to the mean)

Source: Own construction using data from Family Budget Survey (1980, 1990). All income data correspond to the year of analysis. Percentiles 1 and 100 dropped from graph for convenience.



Figure 18c. Real annual growth rate of equivalent disposable income and market income ordered by corresponding 2007 percentile, 2007-2014 (difference to the mean)

Source: Own construction using data from EU-SILC (2007,2014). All income data correspond to the year before the analysis, thus 2006 and 2013. Percentiles 1 and 2 and 99 and 100 dropped from graph for convenience.



Figure 10.19. Trends in population weight of middle classes: group limits are in % of median income, 1973-2014.

Figure 10.20. Trends in income slice of middle classes: group limits are in % of median income, 1973-2014





Figure 10.21. Trends in middle classes: population weight and income slice of the poor (<60% median equivalent disposable income), 1973-2014.

Source: Own construction using a variety of sources of data, various Family Budget Surveys and EUSILC. Zero and negative income values included and 1^{st} and 100^{th} percentile trimmed in all calculations.

Figure 10.22. Trends in middle classes: population weight and income slice of the low middle class (60%-80% median equivalent disposable income), 1973-2014





Figure 10.23. Trends in middle classes: population weight and income slice of the midmiddle class (80%-120% median equivalent disposable income), 1973-2014

Source: Own construction using a variety of sources of data, various Family Budget Surveys and EUSILC. Zero and negative income values included and 1st and 100th percentile trimmed in all calculations.







Figure 10.25. Trends in middle classes: population weight and income slice of the rich (>200% median equivalent disposable income), 1973-2014

Table 10.1. Mean disposable income growth by age cohort, with children, with spouse characteristics and time periods.

	<26	26-35	36-45	46-55	56-65	>65	Men	With children	With spouse	Single earner	Total
1980/1973	-	-	-	-	-	-	-	-0,71%	-	- 1,52%	- 0,77%
1990/1980	2,09%	2,01%	2,36%	2,51%	2,25%	2,60%	2,31%	1,83%	-	-	2,22%
2007/1990	1,90%	2,01%	2,18%	2,22%	2,24%	1,14%	2,22%	2,01%	-	-	1,99%
2014/2007 EPF	- 2,49%	- 2,64%	- 2,19%	- 2,54%	- 1,04%	1,00%	- 1,97%	-2,18%	-2,18%	- 1,44%	- 1,88%
2014/2007 ECV	- 1,76%	- 1,88%	- 1,04%	- 2,27%	- 0,50%	1,56%	- 1,32%	-1,10%	-1,40%	- 1,21%	- 1,15%

	Gini index - 2015										
	European Union	Euro area	Germany	Spain	France	Italy	Portugal	United Kingdom			
Gini before transfers	51,8	51,7	56,4	50,8	50,2	48,6	64,1	55,5			
Gini disposable income	31	30,8	30,1	34,6	29,2	32,4	34	32,4			
Gini reduction	20,8	20,9	26,3	16,2	21	16,2	30,1	23,1			

Table 10.2. Redistributive capacity of benefits (including pensions) in various EU countries, 2015

Source: Own construction using Eurostat Database information.