

A blue-tinted photograph of an industrial robotic arm in a factory setting. The arm is white and grey, extending from the left side of the frame towards the right. It is positioned above a metal workbench. The background shows industrial machinery and a concrete floor. The overall scene is dimly lit, with the blue tint giving it a futuristic or industrial feel.

Challenge #7

**ADDRESS THE  
SHORTCOMINGS OF  
OUR LABOUR MARKET  
AND ADAPT IT TO NEW  
SOCIAL, ECONOMIC  
AND TECHNOLOGICAL  
REALITIES**



## EXECUTIVE SUMMARY

- Over the last four decades, Spain has undergone a profound transformation in its labour market, which has led to an increase in the employment rate from 50% in 1980 to 65% in 2019, a substantial reduction in gender gaps, and the significant improvement of the rights and working conditions of millions of people.
- However, this progress has been overshadowed by the persistence of problems such as high unemployment, high job insecurity, and job dissatisfaction, which have led to the marked segmentation of the labour market. In Spain, established companies and skilled workers with stable employment coexist with a majority of low productivity SMEs and workers in unstable employment. This duality is splitting our society in two and limiting the economic and social development of the whole country.
- The demographic and technological transformations of the coming decades will bring new challenges, but also new opportunities to redress this situation. Ageing will lead to 3.7 million fewer potential workers in our country. Unless reversed, this could lead to a fall in employment of -0.5 per cent per year by 2050, compared to the 2.0 per cent increase we have seen between 1995 and 2019. To neutralise this loss of labour force, it will be necessary to increase the employment rates of women, young people and the over-55s; incentivise legal immigration and boost the recovery and attraction of talent.
- Our goal must be to bring the unemployment rate to less than half and to reach an figure similar to that of the most advanced countries in Europe (80% in 2050). This means increasing our labour market insertion by 15 points over the next 30 years. It is an ambitious yet feasible goal and one that has already been achieved in a number of neighbouring countries.
- The spread of new technologies and the digital economy will profoundly change the way we conceive, organise and carry out work. In the short term, it could lead to job losses and a worsening of the employment conditions of certain groups, a risk that will have to be countered by a firm commitment to retraining and an adequate provision of social safety nets. In the medium to long term, however, the technological transformation will create new jobs, increase productivity, and improve working conditions for most workers.
- To take advantage of the opportunities of the future, Spain must modernise its productive network; update and strengthen its active labour market policies; adapt its regulatory framework to the new economic and labour realities; update its collective bargaining mechanisms; and improve working conditions to make work a more satisfactory experience for all citizens.

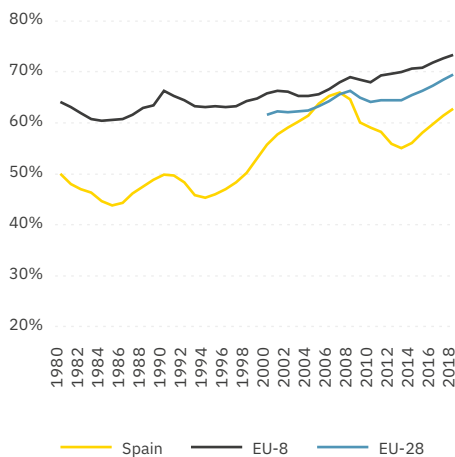


## THE PAST: WHAT WE'VE ACHIEVED

Employment is the foundation of any country's economy, a source of income, life stability and fundamental personal development for citizens. Since the transition to democracy, **Spain has undergone a profound modernisation of its labour market**, the balance of which has left important unfinished business, but also many achievements that should be kept in mind, as they are the irrefutable proof that our country is also capable of carrying out successful transformations in this area.

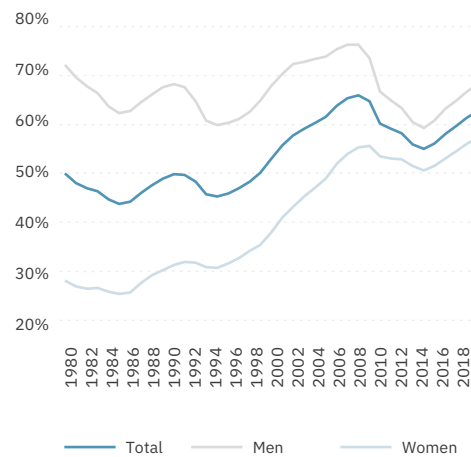
In the last four decades, Spain has gone from having a closed and antiquated economy, with a heavy reliance on agriculture,<sup>1</sup> to a dynamic and open economy, with a productive structure similar to that of our European partners. Thanks to this modernisation process, **Spain has managed to significantly increase the labour market integration of its population**, successfully incorporating groups that had not previously participated in the labour market. While in the early 1980s only 47% of our workforce was working,<sup>2</sup> in 2019 the employment rate was 63% [Fig. 1]. The key players in this process were women, who accounted for 70 per cent of the almost 8 million people who entered the labour market since 1980.<sup>3</sup> Over this period, the female employment rate has doubled, reducing the gap between it and the male employment rate to 10 points, a gap which in the 1980s was more than 40 points<sup>4</sup> [Fig. 2].

Fig. 1. Rate of employment



Source: Author's own based on data from the OECD.<sup>5</sup>

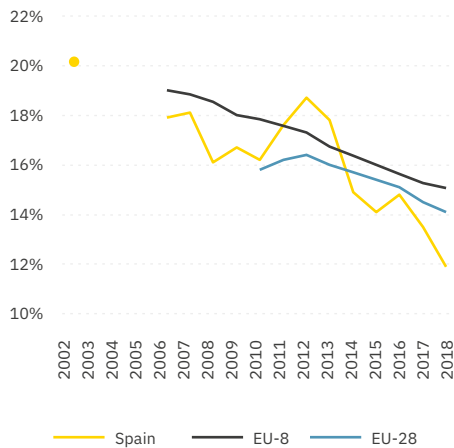
Fig. 2. Employment rate in Spain by gender



Source: Author's own based on data from the OECD.<sup>6</sup>

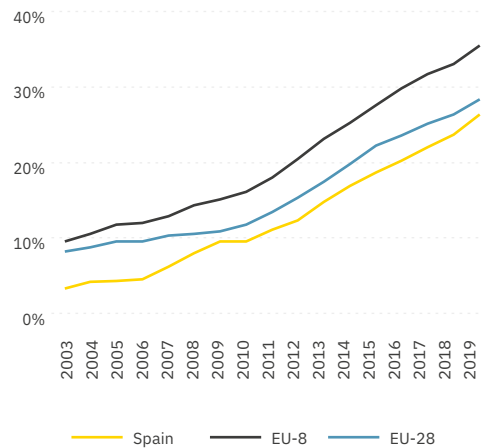
This sharp increase in women's labour force participation has been accompanied by **a progressive narrowing of the gender gap**. In the last two decades alone, the gender pay gap has narrowed from 20% to 12% [Fig. 3], with an increasing presence of women in governance and decision-making bodies, on a par with the European average, both in the public and private sector<sup>7</sup> [Fig. 4]. Today, **Spain is among the EU countries with the lowest levels of gender-based and other forms of discrimination in the workplace**.<sup>8</sup>

Fig. 3. Gender pay gap



Source: Drafted by the authors based on data from Eurostat.<sup>9</sup>

Fig. 4. Percentage of women on Boards of Directors



Source: Drafted by the authors based on data from Eurostat.<sup>10</sup>

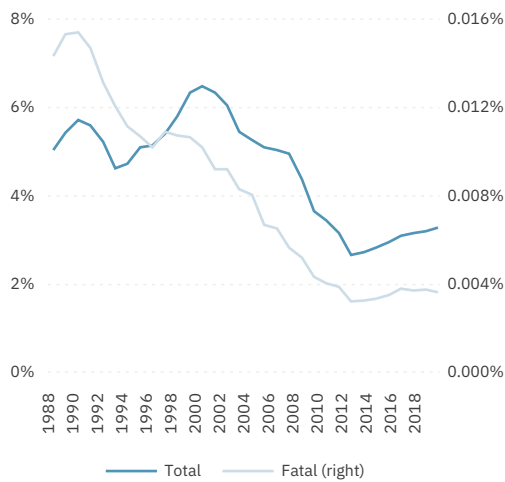
No less important have been the **advances in labour rights and conditions**,<sup>11</sup> many of them driven by European directives. We have forgotten that until not so long ago, most jobs in Spain were physically demanding and often dangerous. Accidents and work-related illnesses were frequent, and social protection mechanisms for such contingencies were very weak. Labour rights were limited, and abuses and violations were common. Dismissal was poorly regulated and unemployment benefits lasted barely half a year.<sup>12</sup>

Recent decades, however, **have seen the modernisation of the productive network** [see chapter 1] **and the advances resulting from collective bargaining**<sup>13</sup> **have led to a substantial improvement in working conditions in Spain**.<sup>14</sup> Fatal accidents at work have fallen by 60 per cent since the late 1980s [Fig. 5],<sup>15</sup> the proportion of physically demanding jobs has fallen to one of the lowest rates in the EU,<sup>16</sup> and jobs that are perceived as prestigious or more fulfilling have increased significantly.<sup>17</sup>

In addition, the number of hours worked per week per employed person have fallen from an average of 42 in 1980 to 37 in 2019,<sup>18</sup> and the percentage of those working more than 50 hours per week has fallen from 13% to 7%, in alignment with the EU-27 and EU-8 averages.<sup>19</sup> This reduction in working hours has been accompanied by the extension and recent equalisation of maternity and paternity leave,<sup>20</sup> and more flexible working hours, which together have led to a clear improvement in the work-life balance and the levels of well-being of millions of workers. At the same time, dismissal has been regulated, the minimum wage has been raised,<sup>21</sup> and unemployment protection has been extended.<sup>22</sup>

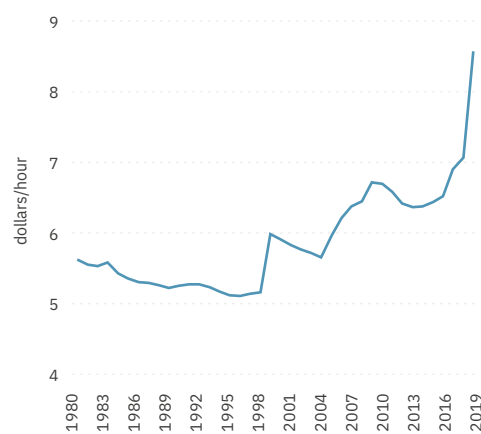


**Fig. 5. Proportion of workplace accidents per total employed persons, Spain**



Source: Drafted by the authors based on data from the Department of Work and Social Economy.<sup>23</sup>

**Fig. 6. Real minimum wage, Spain**



Source: Author's own based on data from the OECD.<sup>24</sup>

All these transformations have served to create a more flexible and efficient labour market. Unfortunately, and as we will see below, **most of these measures have been overshadowed by the persistence and/or worsening of a series of structural deficiencies that have made the labour market the great Achilles' heel of the Spanish economy today.**

## THE PRESENT: UNRESOLVED CHALLENGES

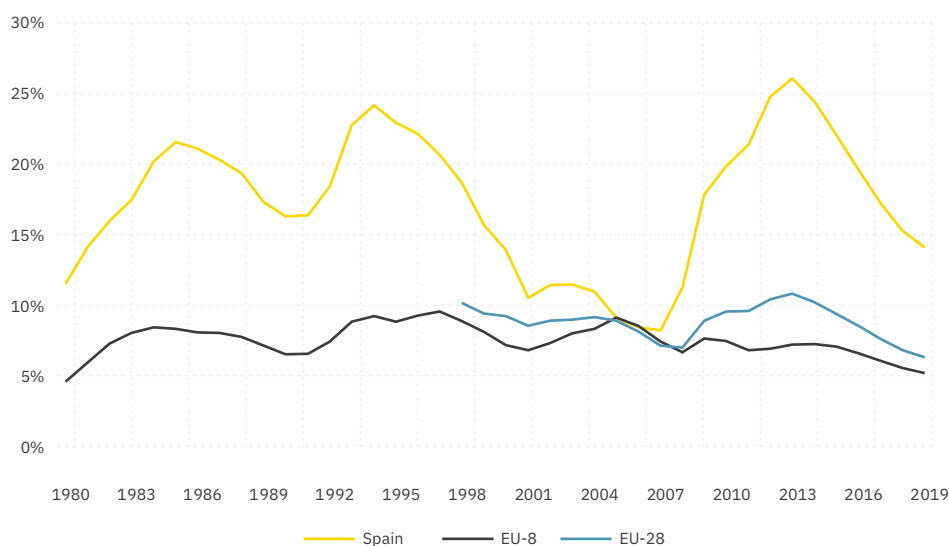
Despite the progress made in recent decades in terms of rights, quality and integration, the Spanish labour market still suffers from a series of structural deficiencies that prevent us from converging with the EU-27 and with the most advanced countries in Europe, here grouped under the term "EU-8".<sup>25</sup> What are these shortcomings? Here we highlight four.

**Firstly, there is the low employment rate.** Despite the significant increase in recent decades, Spain has not yet managed to meet the labour force participation rate of the most advanced EU economies. The recessions of 2008 and 2011 cut short the route to convergence initiated in the mid-1990s. All the gains made since joining the euro were wiped out during the banking and sovereign debt crises. And, although the economic recovery that started after the Great Recession allowed for intense job creation, **in 2019, Spain had the same employment rate as in 2008, and its gap with the EU-27 and EU-8 average was still 7 and 11 percentage points, respectively [Fig. 1].**

This lower employment rate is reflected in high unemployment and high employment volatility. On the one hand, **Spain has an average unemployment rate much higher than that of most developed economies** (17% over the last four decades, compared to 8% in the EU-8 and 9% in the EU-28) [Fig. 7]; on the other hand, our country creates more jobs than any other when the economy is booming, but also destroys more in times of crisis. The result of this dynamic is that, **in 14 of the last 39 years, our unemployment rate has exceeded 20%**, an exorbitant rate,

even if we take into account that the official unemployment figures hide a significant segment of the population employed in the black economy.<sup>26</sup> Only once (between 2005 and 2007) was our unemployment rate close to the EU-8 average (9%), at a time when our economy was growing at 4% and in an unbalanced way [see chapter 1].<sup>27</sup>

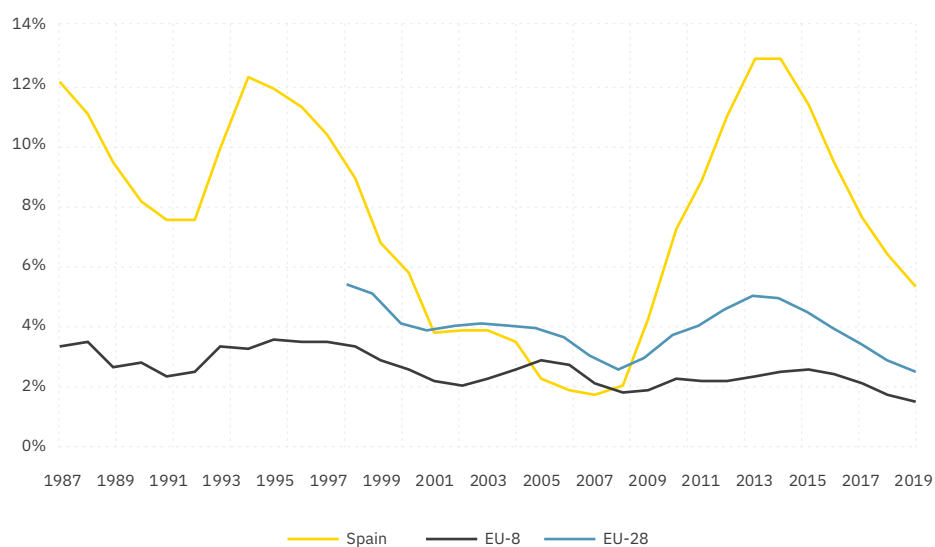
**Fig. 7. Unemployment rate**



Source: Author's own based on data from the OECD.<sup>28</sup>

One of the starkest manifestations of this reality is the **extraordinary level of long-term unemployment** in our country. In 2019, 5% of the labour force and 44% of those experiencing unemployment had been unsuccessfully seeking work for more than a year [Fig. 8].<sup>29</sup> This problem particularly affects those over 45 with a low level of education<sup>30</sup> and means that in at least 4% of households, the head of the household is long-term unemployed.<sup>31</sup> The longer a person is unemployed, the more likely they are to give up looking for a job; a "discouragement effect" suffered by more than 280,000 people in our country.<sup>32</sup>

**Fig. 8. Long-term unemployment rate (one year or more)**

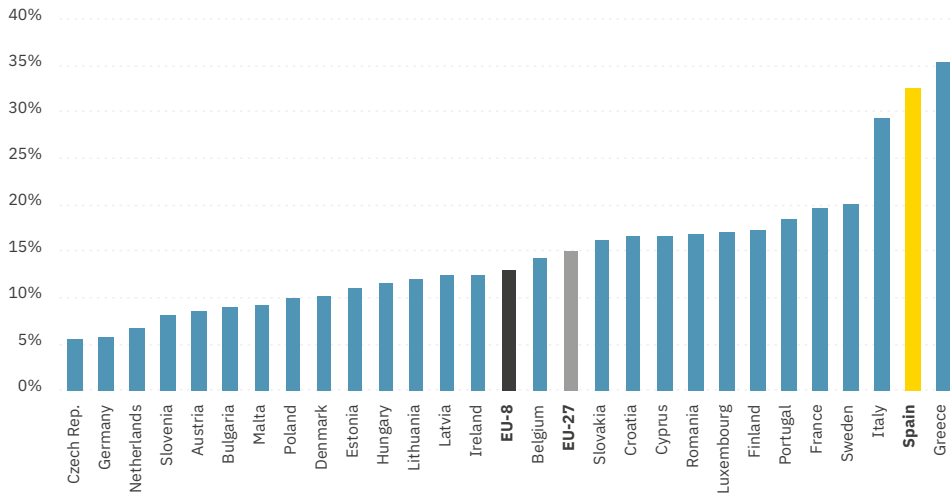


Source: Author's own based on data from the OECD.<sup>33</sup>



The high rate of youth unemployment is another of the great unresolved issues with our labour market. In Spain, 33% of 16-24 year-olds who wanted to work in 2019 were unable to do so, compared to 13% in the EU-8 and 15% in the EU-27 [Fig. 9]. This low labour market integration of young people has severe implications for the country as a whole, as it affects phenomena such as the rising age of leaving home (among the highest in the EU),<sup>34</sup> the delay in having children,<sup>35</sup> and the reduction in fertility rates,<sup>36</sup> thus contributing to progressive demographic ageing [see chapter 5].

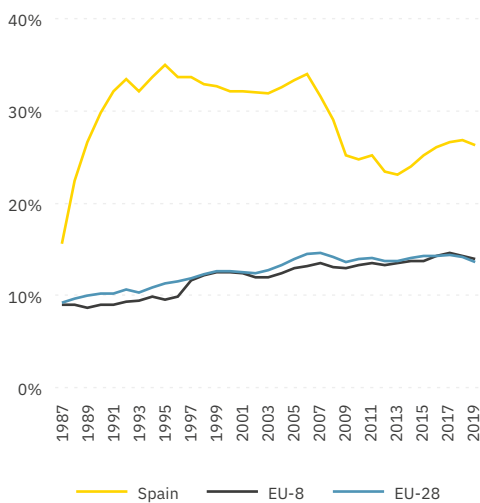
Fig. 9. Youth unemployment rate, 2019



Source: Authors' own, based on Eurostat data.<sup>37</sup>

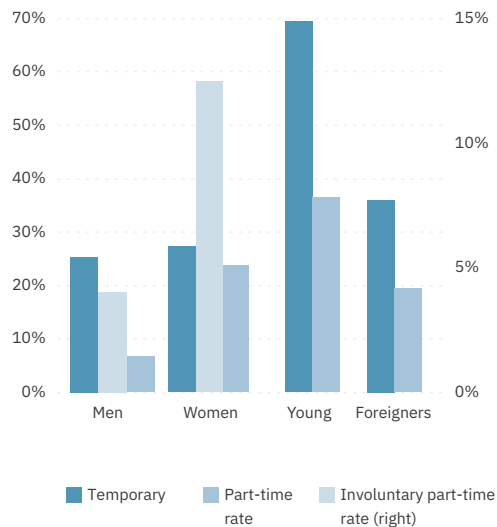
The second shortcoming of the Spanish labour market is job insecurity, which is projected in at least four dimensions. Firstly, the high rate of temporary contracts.<sup>38</sup> In Spain, 1 in 4 employed persons has a temporary contract,<sup>39</sup> twice as many as in the EU-8 and the EU-28 [Fig. 10]. This problem particularly affects the population with a migrant background<sup>40</sup> and young people<sup>41</sup> [Fig. 11], who are finding it increasingly difficult to get a permanent<sup>42</sup> full-time job.

Fig. 10. Temporary contract rate



Source: Author's own based on data from the OECD.<sup>43</sup>

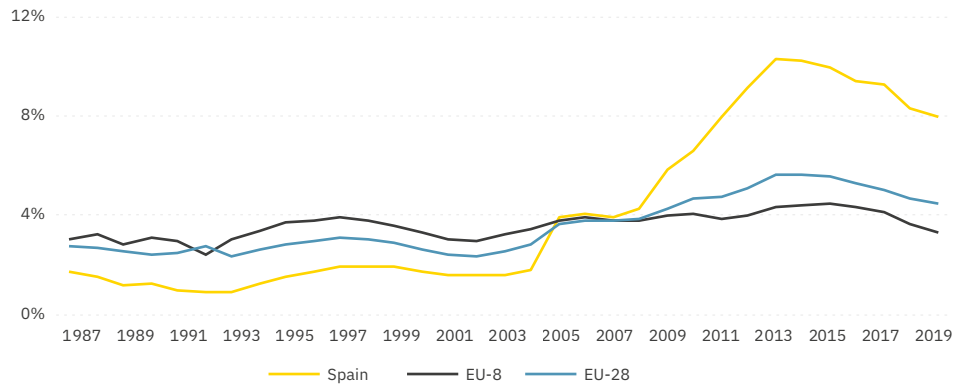
Fig. 11. Temporary, part-time and non-voluntary part-time work rates in Spain, 2019



Source: Drafted by the authors based on data from Eurostat.<sup>44</sup>

A second dimension of job insecurity is the expansion of non-voluntary part-time work, which has accelerated since the 2008 crisis, and which disproportionately affects women<sup>45</sup> who also suffer a higher unemployment rate<sup>46</sup> [Figs. 11 and 12].

Fig. 12. Involuntary bias rate

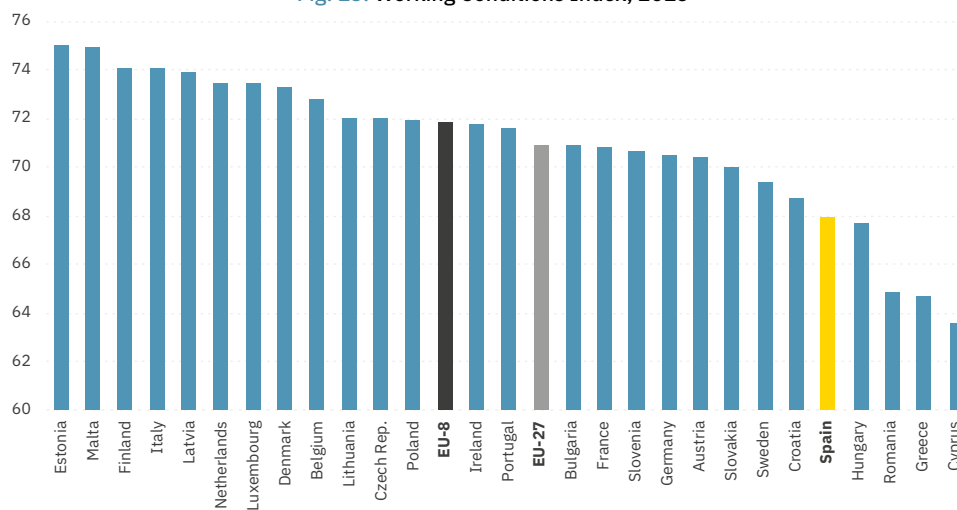


Source: Author's own based on data from the OECD.<sup>47</sup>

Thirdly, job insecurity can be seen in the high labour turnover. Over the last decade, the chaining of very short-term temporary contracts,<sup>48</sup> coupled with an increase in the turnover of permanent contracts<sup>49</sup> and the expansion of some forms of atypical employment associated with digital platforms,<sup>50</sup> has led to an increase in the number of workers who change jobs every few years; something that often brings with it greater uncertainty and vulnerability for these people and their households.

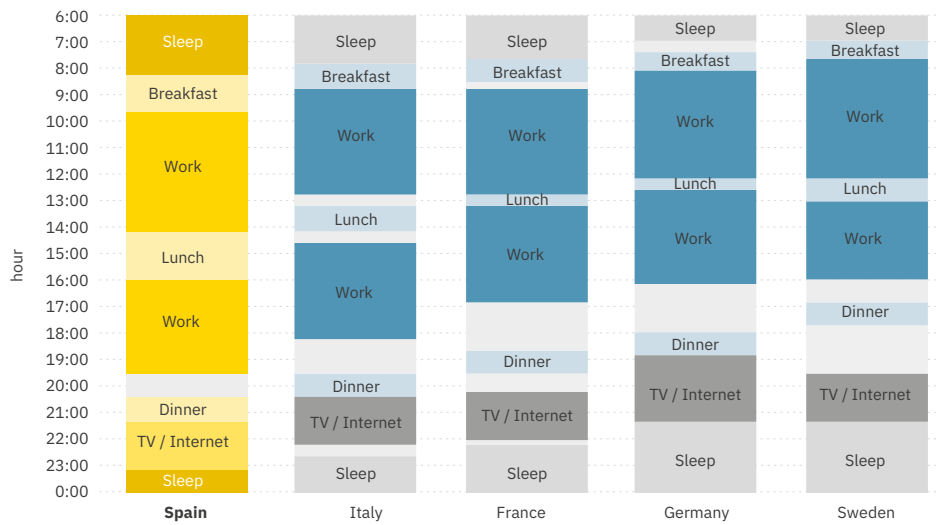
Job insecurity can also be detected in the low quality of work that many of our workers suffer from: little autonomy and accident rates which remain high<sup>51</sup> [Fig. 13], fewer opportunities for training and career development, and longer working hours than in many European countries [Fig. 14]. All these factors negatively affect our social well-being, as they increase absenteeism and sick leave, accelerate the flight of talent and reduce the productivity of those in employment.

Fig. 13. Working Conditions Index, 2015



Source: Drafted by the authors based on data from Piasna.<sup>52</sup>

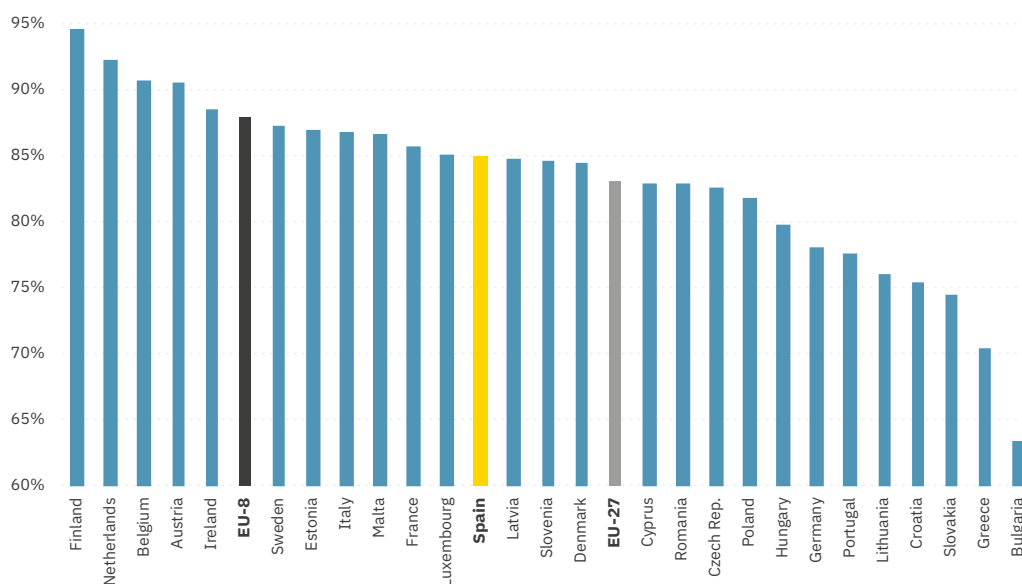
Fig. 14. Daily time distribution, 2016



Source: Drafted by the authors based on Fernández-Crehuet.<sup>53</sup>

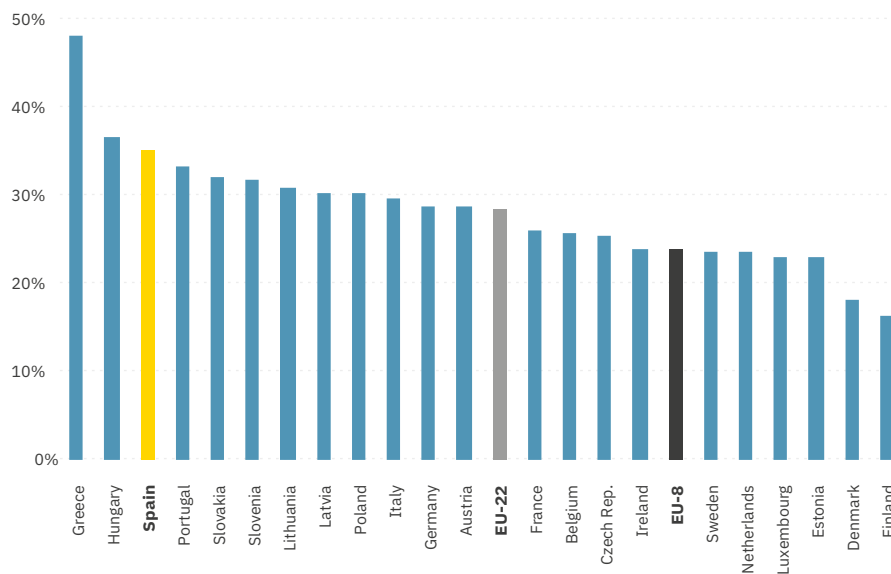
**The third shortcoming is job dissatisfaction.** There are numerous indicators suggesting that work in Spain is generally less fulfilling and enriching than in other European countries. Surveys tell us that 11% of our workers deal with emotionally disturbing situations (the highest percentage in the EU),<sup>54</sup> that 15% feel dissatisfied with their work situation [Fig. 15] that 31% do not learn anything on the job,<sup>55</sup> and that 1 in 3 suffer from work-related stress (a much higher proportion than the EU-8 or EU-22 average) [Fig. 16].<sup>56</sup> In fact, if they did not need the job to live, more than half of employed people in Spain would not work; in contrast, three out of four Danes or Dutch people would.<sup>57</sup> The truth is that **we have failed to make work a positive and rewarding experience, something that affects both the productivity of our workforce and the subjective well-being of citizens** [see chapter 9].

Fig. 15. People satisfied with their employment situation, 2018



Source: Authors' own, based on Eurostat data.<sup>58</sup>

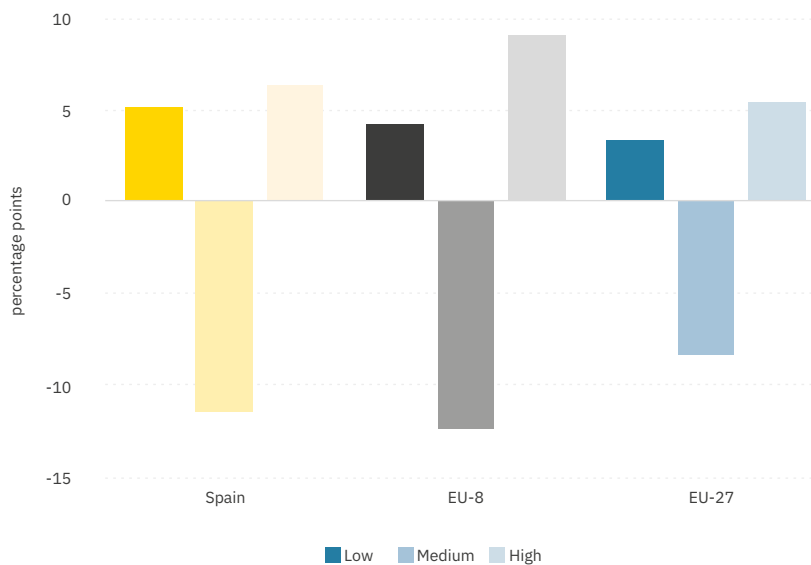
Fig. 16. People experiencing stress at work, 2015



Source: Drafted by the authors based on data from OCDE.<sup>59</sup>

Finally, there is the problem of wage and employment polarisation, a phenomenon shared by most developed countries. In recent decades, technological change has played a key role in transforming the structure of the Spanish and European labour market.<sup>60</sup> Medium-wage occupations involving routine tasks (e.g. administrative or industrial tasks) have become increasingly automated and have been losing weight in the production structure, while those requiring high abstraction and decision-making skills (e.g. legal advisory services), or a high non-routine manual content (e.g. care work) have seen their weight in the economy increase<sup>61</sup> [Fig. 17]. This has resulted in **greater wage polarisation** (more high and low wages, and lower average wages), especially noticeable in cities,<sup>62</sup> and in an increase in labour (working conditions, type of contract) and income inequality in Spain [see chapter 8].

Fig. 17. Polarisation of employment: change in the share of occupations by skill level in total employment, 1995-2018



Source: Authors' own, based on European Commission data.<sup>63</sup>

**Taken together, the shortcomings described above** (unemployment, job insecurity, job dissatisfaction and polarisation) **have led to a marked segmentation of the Spanish labour market**, divided between companies and skilled workers capable of generating and performing productive and stable jobs; and many SMEs and workers who are forced into unproductive and unstable pairings and, therefore, job insecurity, unemployment and, in many cases, poverty. **This phenomenon, often referred to as "duality," is splitting our society in two and is severely limiting the economic and social development of our country.** Progress in reducing it will be crucial if we are to take advantage of the opportunities of the digital revolution and compete on a level playing field with the world's most advanced economies.

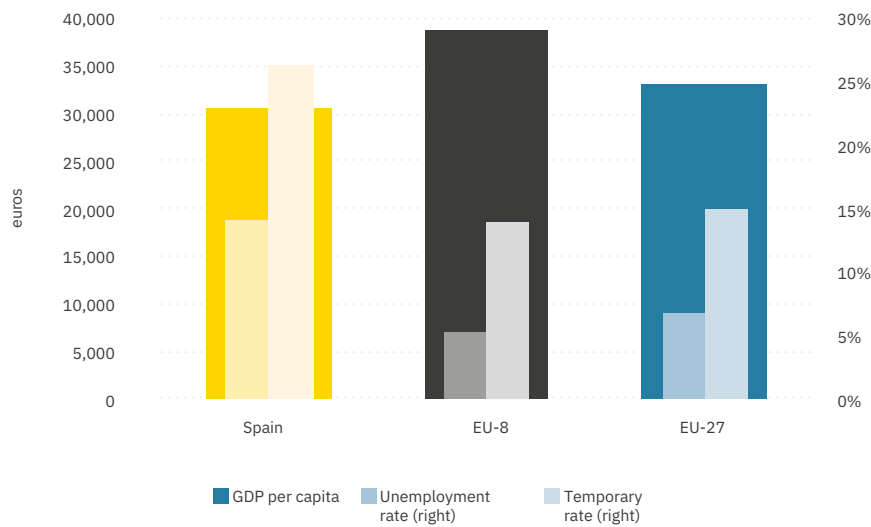
### The channels of improvement

The causes of the dysfunction of our labour market are numerous and complex. In an effort to summarise, they could be grouped into two: **the particularities of our production system and the characteristics of our regulatory framework.**<sup>64</sup> Reducing unemployment, seasonality and job insecurity requires simultaneous work on both fronts. Only in this way can we create stable, quality jobs and reduce volatility in the face of changes in the economic cycle.

**Let us start with the production system.** As we have already seen, the deficit in human capital, the lower technological implementation in the business network, the limited effort in innovation, and the existence of bureaucratic obstacles limit the growth of our companies, which are predominantly small in size [see chapter 1]. This, in turn, restricts the development of new ideas and products, and means that our productive structure is biased towards industries with lower added value, whose demand for human capital is also lower, and where recourse to temporary employment becomes the first resort when faced with a crisis. Consequently, incentives for training and for the implementation of workforce requalification programmes are substantially reduced.<sup>65</sup> The first way to improve the situation is therefore to break with this dynamic, which has been a feature of our economy for decades.

The other front that needs to be addressed concerns the **regulatory and institutional factors** that characterise our labour market. Although the Spanish economy does not reach the productive complexity or the average level of human capital of the EU-8, it is in the upper part of the world distribution in these variables. However, unemployment and temporary employment rates remain higher than those of the world's most advanced countries and, in many cases, exceed those of countries with a less sophisticated production system and a less educated population [Fig. 18].<sup>66</sup> This shows that, in addition to improving business and productive dynamics, some **regulatory dysfunctionalities need to be corrected if we are to lay the foundations for a more efficient and equitable labour market. This will require review of three priority areas: labour regulation, collective bargaining and active labour market policies.**

Fig. 18. GDP per capita, unemployment rate and seasonality rate, 2019



Source: Authors' own, based on Eurostat data.<sup>67</sup>

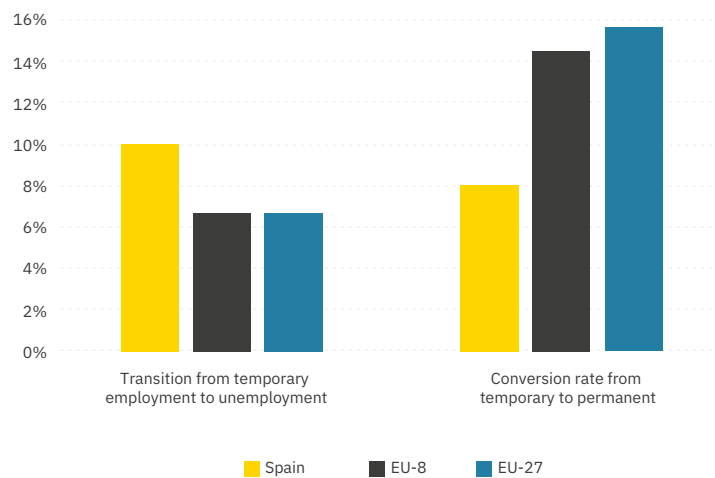
## I. Labour regulation

Labour regulation explains, in part, the high level of temporary employment in our country. The reforms of the *Statute of Workers* in the early 1980s opened the door to the increasingly widespread use of **formal temporary contracts**, that is, contracts that do not respond to companies' temporary production needs. What was initially conceived to create flexibility in entering the labour market has also created flexibility for job destruction in times of recession, especially among those who had been employed in the company for a short time.<sup>68</sup> Today, despite successive reforms, the practical application of the regulations continues to allow a high level of fraud in temporary contracts, without sufficient supervision and penalties for the perpetrator<sup>69</sup> and improper use of temporary contracts to break this dynamic. Differences in terms of severance costs between temporary and permanent contracts,<sup>70</sup> and the difficulties in establishing objective grounds for dismissal in permanent employment relationships<sup>71</sup> have also encouraged the use of temporary contracts.

The result of all the above is that **temporary contracts continue to have an excessively high weight in our labour market**. This results in **high employment volatility** by fostering extensive adjustment, based on a "hire and fire" policy, rather than intensive adjustment, where firms and workers negotiate changes in, for example, wages or hours worked.

**In the case of SMEs and the public sector**, the use of flexible temporary contracts for jobs that are often open-ended in nature is particularly high.<sup>72</sup> If "temporary unemployment" is to be reduced and a higher conversion rate from temporary to permanent is to be achieved [Fig. 19], this "**culture of temporary contracting**" in labour relations must be eradicated.

**Fig. 19. Transitions from temporary employment to unemployment and conversion rate from temporary to permanent contracts, 2018**



Source: Drafted by the authors based on data from Eurostat.<sup>73</sup>

## II. Collective bargaining

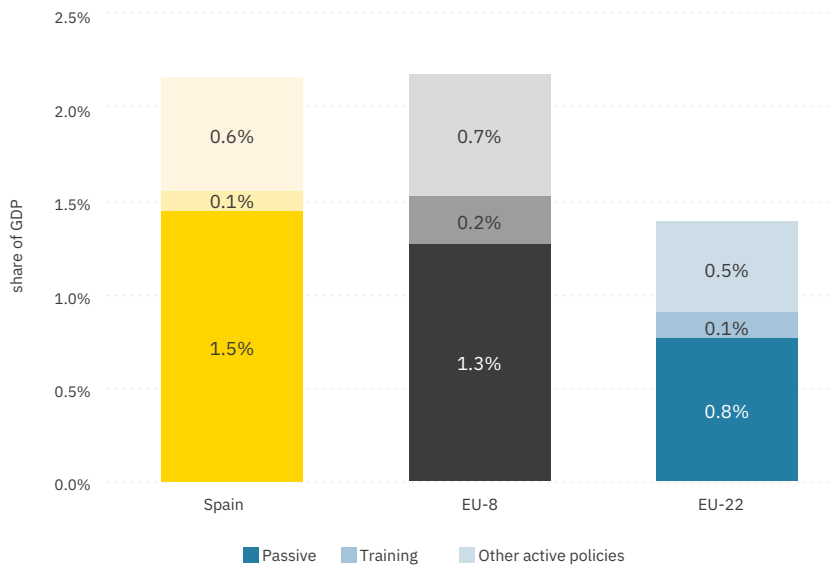
**Collective bargaining is a key mechanism for balancing industrial relations.** The Spanish model has irrefutable strengths that have enabled it to contribute enormously to improving the conditions of the working population. In fact, many of the labour and social rights we have today would not have been achieved without it. However, there are also major weaknesses to collective bargaining that need to be addressed if it is to continue to play an important role in the new social and economic realities. Among other issues, collective bargaining should address the debate on the model of representation of the social partners (on both the trade union and employer sides); improve the coordination and articulation of sectoral and company agreements; and resolve the limitations of agreements on fundamental issues such as technological innovation, new forms of work organisation, lifelong learning for the working population, or the adaptation of the workplace to the needs of older people.<sup>74</sup> It will also have to improve the elements of internal flexibility to allow for wage and working hour changes (both upwards and downwards) in line with the economic situation, in order to prevent companies from resorting to temporary hiring as a lever for adjustment.

## III. Active labour market policies

The main tools available to the welfare state to fight unemployment are passive and active labour market policies. The former cushion the blow of job loss; the latter aim to reduce employment search time as much as possible. **In Spain, high unemployment rates have meant that a large proportion of the resources allocated to the fight against unemployment have gone to passive policies (mostly benefits managed by the State), while the resources devoted to active policies (transferred to the Autonomous Communities)<sup>75</sup> have been considerably lower [Fig. 20].**



**Fig. 20. Public expenditure on employment policies, 2018**



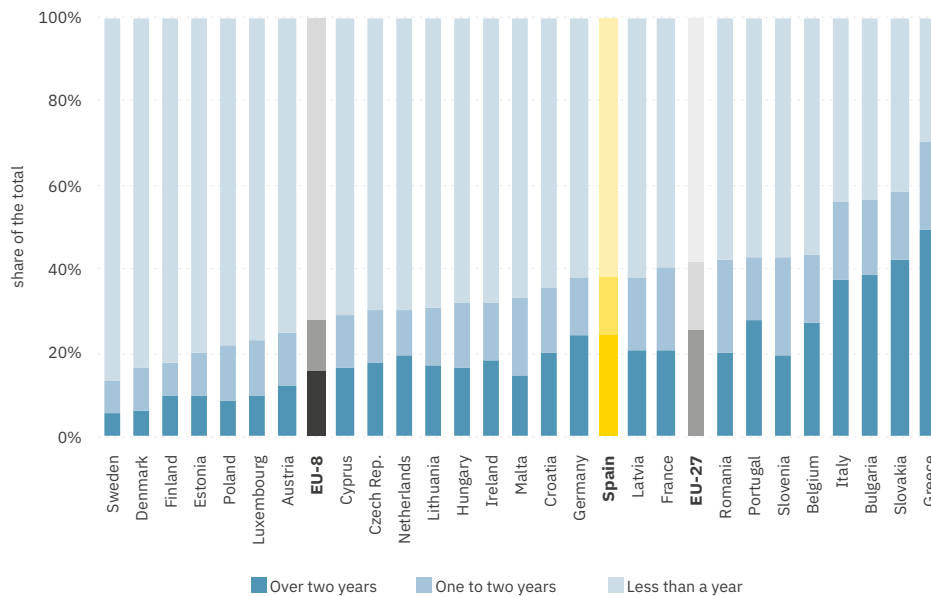
Source: Author's own based on data from the OECD.<sup>76</sup>

In addition to this lack of funding, there are some specific characteristics that limit the correct functioning of these policies. In particular, the following should be noted:

- Recruitment subsidies and incentives (many of which are of low effectiveness<sup>77</sup>) make up the bulk of the budget, while money for training (including design, implementation and evaluation) is much lower [Fig. 20] [see chapter 3].
- The low efficiency of the public employment services, due to the lack of resources; the limited use of new technologies in the processes of searching for and filling vacancies; the difficulties of coordination with the multiple collaborating entities; and the scarcity of follow-up, control and evaluation mechanisms.<sup>78</sup>
- Insufficient public-private partnership in both intermediation and training processes.
- The impossibility of transferring some social welfare benefits (e.g. housing assistance) from one autonomous community to another hinders the mobility of jobseekers and hampers adjustment at the aggregate level of the labour market.<sup>79</sup>

Addressing these shortcomings in active labour market policies is imperative to make our labour market institutions more effective in activating, orienting and guiding the unemployed back to work.<sup>80</sup> If progress is made in this direction, the time it takes for an unemployed person in Spain to return to work, currently much longer than in **most EU countries**, will be substantially reduced [Fig. 21].

Fig. 21. Distribution of unemployment by duration, 2019



Source: Authors' own, based on Eurostat data.<sup>81</sup>

### The long shadow of the Spanish labour market

These dysfunctional features of the Spanish labour market described above have a profound impact on Spain's economic and social life. Indeed, it is no exaggeration to say that **most of our country's problems are related, directly or indirectly, to the same.**

To begin with, **high structural unemployment is limiting our capacity for growth.** Spain is wasting the skills of its labour force, something that not only damages our economy and conditions our ability to grow in the long term [see chapter 1], but also explains much of the high income inequality and poverty rates in our population [see chapter 8].<sup>82</sup>

Similarly, **excessive temporality and high worker turnover are undermining labour productivity and social cohesion.** Firstly, because the short-term nature of the temporary contract reduces the incentives for companies and workers to invest in training, which prevents productivity gains through on-the-job learning [see chapter 3].<sup>83</sup> Secondly, because, far from generating sustained employment, the extension of job insecurity systematically leads to a reduction in the quality of jobs and labour rights, and a decline in social well-being that distances us further from an inclusive society.

**The job insecurity of the labour market is also conditioning young people's age of leaving home,<sup>84</sup> and parenting decisions,<sup>85</sup>** thus contributing to the problem of the low birth rate, population ageing, and demographic contraction in our country [see chapter 5].

Finally, high unemployment rates and poor working conditions are **undermining the well-being** of millions of workers and are currently **the main source of dissatisfaction and unrest in Spain**. This is because unemployment not only determines current income and future income expectations, but also affects other issues fundamental to well-being such as physical and mental health (increased susceptibility to depression, anxiety and stress<sup>86</sup>) [see chapter 9].

As we can see, the effects of our labour market deficiencies are multiple and profound and, **if not addressed, could be exacerbated in the coming years as a result of demographic change, digitalisation and transformations in the international economy**.

**The good news is that this can be changed.** Although the improvements achieved to date have been insufficient, the fact is that Spain has the human, institutional and economic resources necessary to carry out far-reaching reforms, and with room for improvement still to be exploited which, if properly undertaken, **could help to mitigate or correct many of the current and future problems, and to articulate a much more efficient and fairer labour market between now and 2050**.

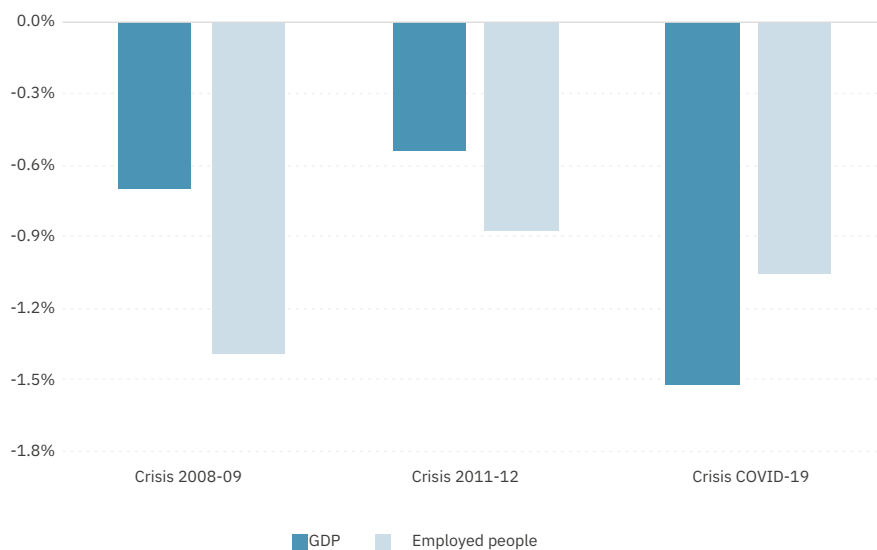
## THE FUTURE: POSSIBLE DESTINATIONS

### The short term: the labour market during the coronavirus crisis

The coronavirus pandemic arose when the Spanish labour market was close to recovering the peak level of employment (20 million employed) it had a few months before the 2008 crisis. As in other episodes of economic recession, there was a rapid and intense destruction of employment, leading to a spike in unemployment and an increase in job insecurity. The most negative effects, again, were concentrated on those with temporary contracts and on the young population.<sup>87</sup>

The temporary nature of lockdown facilitated the government's intensive use of temporary furlough scheme (ERTE).<sup>88</sup> The ERTes prevented the destruction of some 3.5 million jobs during the months of the March 2020 lockdown,<sup>89</sup> coinciding with the closure of production activity on a national scale. **This has allowed the adjustment of employment in this crisis to be smaller than that of economic activity, a notable difference with respect to what was observed in the 2008 and 2011 crises** [Fig. 22].

**Fig. 22. Correction of real GDP and employment in Spain during the last recessions (average quarterly change)**



Source: Drafted by the authors based on data from the INE.<sup>90</sup>

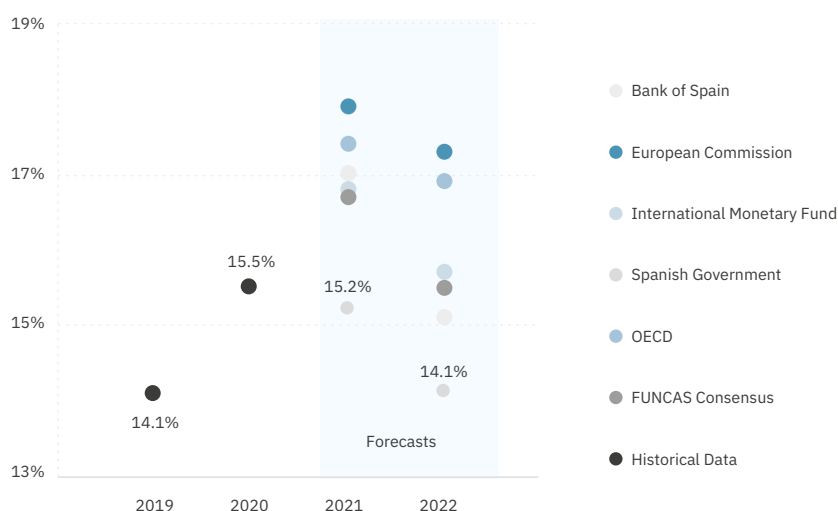
Other labour **flexibility measures** such as the MECUIDA Plan,<sup>91</sup> the redistribution of working hours, organisational changes or the **promotion of remote working**,<sup>92</sup> have also helped to protect and maintain employment.<sup>93</sup> For example, remote working made it possible to keep about 30% of our country's workforce active during the toughest weeks of lockdown (compared to 46% in the EU-8).<sup>94</sup>

Despite the measures taken, **the pandemic has led to an economic crisis, the consequences of which are expected to be severe on the employment front.** In 2020, almost 600,000 people<sup>95</sup> lost their jobs and the number of unemployed increased by 280,000 (9% more than before the pandemic),<sup>96</sup> especially in those sectors hardest hit by mobility restrictions, social distancing and border closures (e.g. hospitality, catering, air transport). At the worst moments of the crisis, the unemployment rate reached 16.3%, 2.5 points higher than at the beginning of the pandemic.

**What happens from here on?** This will depend to a large extent on how many of the hundreds of thousands of people currently on ERTE<sup>97</sup> or in receipt of self-employed benefits<sup>98</sup> manage to keep their jobs and businesses open once the payment of these benefits comes to an end. This, in turn, will be determined by the future evolution of the virus and progress with vaccination, the performance of the global economy, and the effectiveness of the economic recovery measures being implemented.<sup>99</sup>

Similarly, the evolution of unemployment in Spain will depend on the country's capacity to carry out **a sectoral reallocation of employment after the asymmetric impact of the pandemic**, that is, its capacity to generate jobs in those sectors that have been less affected by the crisis, and meeting this new demand with the appropriate professional profiles [Fig. 23]. In this sense, it will be essential that, in the future, both the ERTes and the self-employed benefits are articulated in such a way that they continue to prevent a greater loss in the productive network and do not compromise to the necessary reallocation of employment between industries.

Fig. 23. Forecasts of the unemployment rate in Spain



Source: Prepared by the authors based on data from Banco de España, European Commission, International Monetary Fund, FUNCAS, Department of Economic Affairs and Digital Transformation, and OECD.<sup>100</sup>

The greatest risk is that the rise in unemployment will become chronic and lead to an increase in job insecurity and inequality, as we saw in previous recessions [see chapter 8]. However, the coronavirus crisis will also bring important opportunities that, if seized, could help to significantly improve working conditions in Spain. For example, the trends necessary for transformation, such as the digitisation of businesses and public administrations, the rise of remote working, flexible working hours aimed at achieving a better work-life balance, and the revaluation of essential jobs are likely to accelerate. Furthermore, the COVID-19 experience could be used to incorporate transitional employment adjustment mechanisms such as ERTes into our labour regulations, facilitating internal flexibility in companies at times of crisis and helping to avoid job destruction in future recessions.

### The medium and long term: the future of our labour market

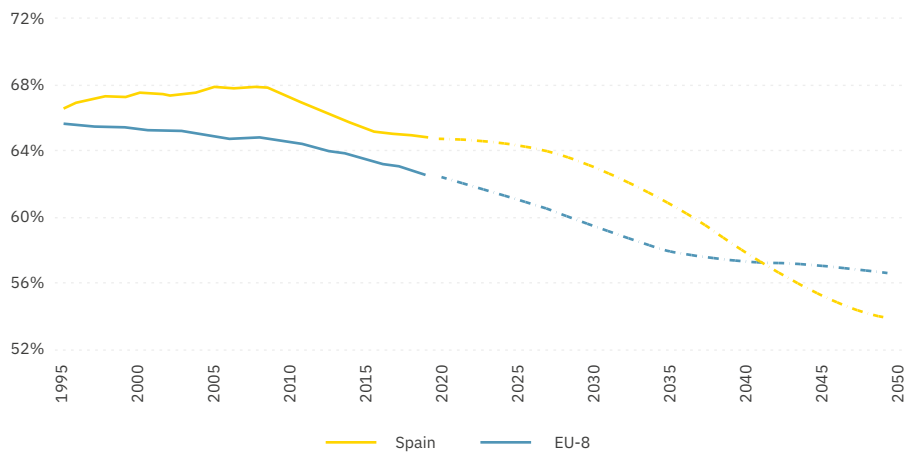
Sooner or later, Spain will overcome the coronavirus crisis. Our economy will return to growth and employment generation, new businesses will be created and the economic situation of many households will improve significantly. However, for the recovery to be sustained and to benefit the majority of our population, it must be accompanied by a root and branch reform of the labour market that corrects the deficiencies we have been experiencing for decades, creates quality employment, and prepares us to deal with phenomena coming down the line like the transformation of work or the ageing and contraction of our labour force. Otherwise, the same patterns observed in the recent past will be replicated and Spain will move inexorably away from the levels of prosperity and welfare enjoyed by the EU-8 countries.

Achieving this will not be easy. However, there is nothing to suggest that it cannot be achieved. As we see below, Spain has the human and economic means to undertake the necessary transformations and significantly reduce its unemployment and job insecurity by the middle of the century.

## A shrinking labour force and a substantial change in the profile of our working population

Demographic ageing could reduce our working age population by 12% by the middle of the century.<sup>101</sup> The effects of demographic change will be almost imperceptible between now and 2030, but will become significantly more pronounced thereafter [Fig. 24], so that **by 2050, Spain could have 3.7 million fewer potential workers** [see chapters 1 and 5].<sup>102</sup> If 2019 (pre-pandemic) employment rates are maintained, this fall in the working-age population would translate into a reduction in the number of employed by 2.5 million,<sup>103</sup> which would have **major consequences for the economy and public revenue, and would place great strain on the sustainability of the welfare state** as we know it today.

Fig. 24. Working-age population over total population

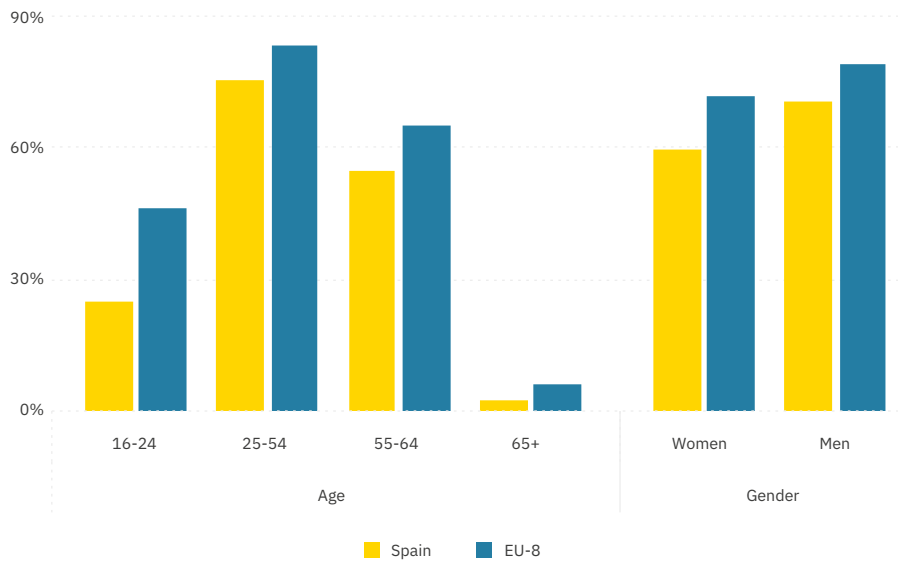


Source: Authors' own, based on Eurostat data.<sup>104</sup>

To avoid this potential loss of labour force, Spain must do two things. First of all, **increase the integration of women, young people and over-55s into labour market**. Secondly, **incorporate hundreds of thousands of immigrants into the labour market and society**.

In Spain, women, young people and the over-55s have lower employment rates than in the EU-8 countries [Fig. 25].

Fig. 25. Employment rate by age group and gender, 2019



Source: Authors' own, based on Eurostat data.<sup>105</sup>

If we are to mitigate the negative effects of demographic change on our economy, we must close this gap, taking advantage of the organisational, educational and cultural changes already underway [see chapters 2 and 3].

Over the last two decades, Spain has managed to increase **female employment** rate by 20 points. If we were to achieve a similar increase between now and 2050, Spain would add almost 2 million additional workers to its workforce, many of them highly educated (in 2019, 58% of Spanish university graduates were women).<sup>106</sup> This would help close the gender gap and raise the productivity of our economy and the growth of our per capita income in the long run [see chapter 1].

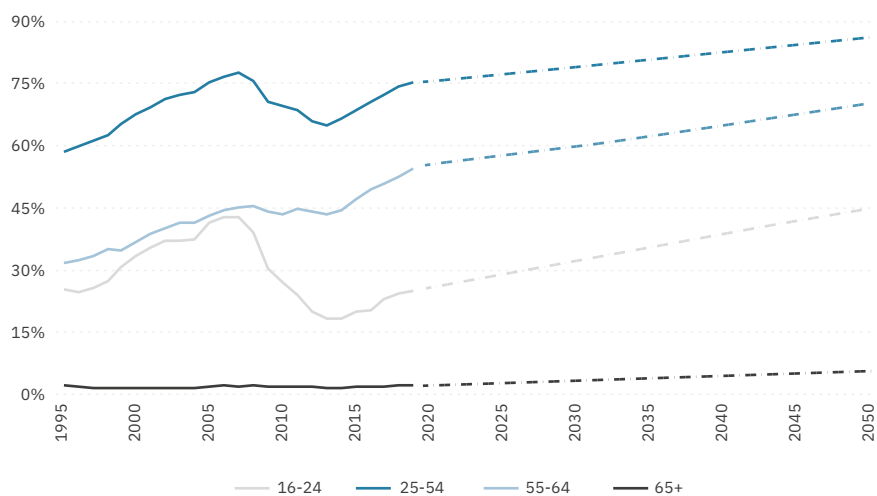
**To achieve this, it will be necessary to continue to raise the average education level of women, to boost professional networks for elderly care [see chapter 5], to continue to combat the persistence of certain gender roles, and to further promote work-life balance, especially after having children.** Gender occupational segregation in our country is not only about women's and men's choice of different educational and employment paths. It can also be observed in early stages due to socialisation patterns and values acquired in the family environment.<sup>107</sup> For example, a mother's working time outside the home has an important effect on children's attitudes towards gender equality, largely conditioning their behaviour as adults.<sup>108</sup> With regard to work-life balance, the data reveal that, after having a child, a significant proportion of working women in our country reduce their working hours or abandon their careers, resulting in a drop in their labour participation of around 9% compared to their male partners.<sup>109</sup> Greater equality in the sharing of care, both for children and other dependants, and an increase in co-responsibility would help reverse this situation.<sup>110</sup>



As far as **young people** are concerned, the key will be to reduce school dropout rates, to make the boundary between work and training more porous, to promote formats like dual vocational training, which offer students the possibility of entering the world of work while they complete their studies, and to adapt their training to the real needs of the productive network [see chapters 2 and 3]. In 2007, our country's youth employment rate was over 40%; in 2019, it was just 25%. We must recover these levels based on the foundations of a better education that provides more and better job opportunities for young people, and not as a result of the expansion of low-skilled labour-intensive sectors of activity that lead to early school leaving [Fig. 26]. In fact, in the EU-8 countries, the youth employment rate has been around 45% for the last three decades and without major variations. Increasing the employability and quality of youth work would also contribute to progress in other fundamental dimensions of social development: it would improve the possibilities of emancipation,<sup>111</sup> be favourable for the birth rate,<sup>112</sup> and significantly increase commitment to work.<sup>113</sup>

Increasing employment rates among the **over-55s** will require progress in four directions. Firstly, a **paradigm of lifelong learning must be established** as a way of improving the adaptability of our workers to the new economic and employment realities, avoiding the obsolescence of their skills and avoiding unemployment at an advanced age [see chapter 3]. Secondly, the way in **which work is organised and structured will have to change**. Studies show that people bring a different balance of skills depending on their age and work experience, all of which are valuable. The younger population has better skills related to physical work, reading comprehension, numeracy and the use of new technologies. In contrast, the senior population excels in key skills like the ability to plan, monitor and react to setbacks.<sup>114</sup> Over the coming decades, our country will have to learn to make better use of the skills of both groups and the synergies between them. A key way to achieve this will be to enable new positions in both business and government that better match the interests (reduced hours, flexible working hours, greater autonomy and leadership<sup>115</sup>) and skills of our older workforce, while encouraging mentoring programmes and more horizontal collaboration between generations.<sup>116</sup> Thirdly, **some stereotypes still associated with old age**, such as poor productivity or frailty, must be broken, so that people can develop and continue to contribute their talents and experience for longer and longer [see chapter 5]. Fourthly, and finally, **incentives to work at older ages, with attention paid to health inequalities, and mechanisms such as active retirement** [see chapter 5] should be encouraged in order to increase employment rates in older age groups, where Spain still has significant growth potential [Fig. 26].

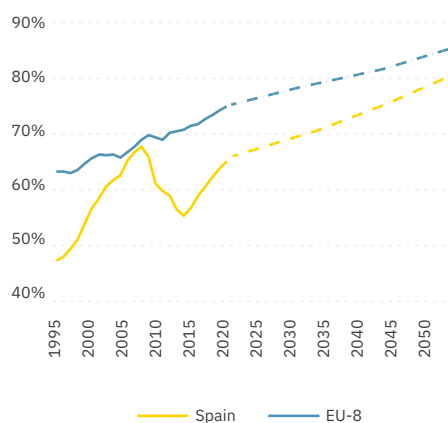
Fig. 26. Age-group employment rate scenario for Spain



Source: Authors' own, based on Eurostat data.<sup>117</sup>

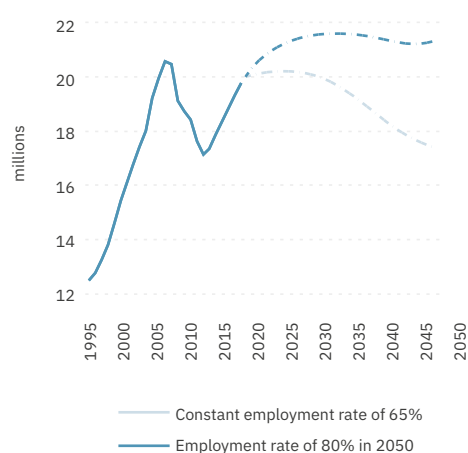
Ultimately, **our aspiration should be to reach a labour force participation rate of 80% by 2050**,<sup>118</sup> positioning ourselves slightly above current EU-8 levels [Fig. 27]. Doing so will allow us to mitigate the negative effect of demographic ageing and increase the number of employed people by 1.5 million compared to the 2019 level [Fig. 28]. This would, in turn, imply a growth in per capita income of up to four tenths of a percentage point higher, on average, than we would have in a scenario in which the employment rate remains unchanged at current levels,<sup>119</sup> with all that this implies for the maintenance of the public system of social services and benefits. **This is a difficult but achievable goal. After all, it means increasing our country's employment rate by 15 points over the next 30 years - the same increase we already recorded in the 30 years before the 2008 crisis.**

Fig. 27. 2050 employment rate scenario



Source: Drafted by the authors based on data from Eurostat.<sup>120</sup>

Fig. 28. Number of employed in Spain



Source: Drafted by the authors based on data from Eurostat.<sup>121</sup>

**The other thing our country will have to do to limit the reduction of its labour force is to welcome and integrate hundreds of thousands of immigrants between now and 2050**, achieving, at a minimum, a migration balance (the difference between people entering and leaving) of more than 191,000 people each year.<sup>122</sup> **If we can integrate more, even better.** For example, if we achieve an annual migration balance in the region of 255,000 people, the fall in the working age population would be 1.8 million (rather than the 3.7 million projected in a scenario with a migration balance of 191,000).<sup>123</sup>

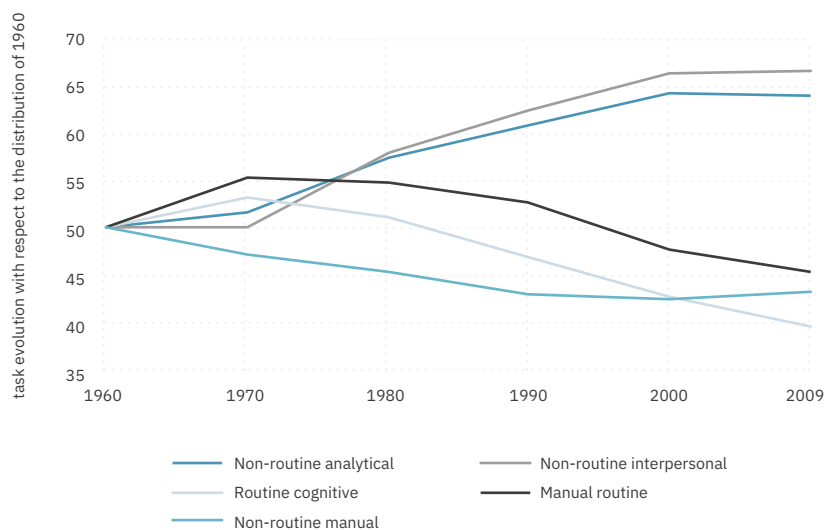
**If well managed, the arrival of this foreign population in our country would have eminently positive effects.** Empirical evidence shows that increased immigration does not lead to increased unemployment and it does benefit the economy.<sup>124</sup> This has also been the case in Spain. Between 1998 and 2007, Spain received 3.8 million immigrants<sup>125</sup> and the rate of employment rose by 17 points.<sup>126</sup> The foreign population have significantly higher activity and employment rates than the indigenous population,<sup>127</sup> are a key workforce in sectors such as care or agriculture, contribute to public finances, and do not use public services and benefits such as unemployment benefits or pensions more than the Spanish population.<sup>128</sup> In short, **immigration can, for a country like Spain, be a source of solutions rather than a source of problems.** It can help us to cushion the decline in the working age population, to maintain our relative weight in Europe, and to ensure the sustainability of our welfare state.<sup>129</sup>

### Technological transformation

The other major megatrend that will transform the Spanish labour market is technological change. In the coming decades, the generalised spread of technologies such as Artificial Intelligence, Internet of Things, 5G, autonomous vehicles and advanced robotics will bring significant improvement in our well-being, but also profound changes in the structure of the labour market, which will affect both the distribution of occupations and the organisation of work itself.

**This process is already underway.** Since the late 20th century, technology has automated many routine tasks associated with medium-skilled occupations, and has generated an increased demand for occupations that are highly skilled and involve predominantly analytical and interpersonal tasks. On the other hand, low-skilled occupations that cannot be digitised, such as care occupations, have been able to better withstand technological progress [Fig. 29].<sup>130</sup>

Fig. 29. Evolution of the type of tasks in employment, USA. .



Source: Drafted by the authors based on Autor & Price.<sup>131</sup>

In the coming years, **automation will continue to advance and will increasingly cover routine (physical and abstract) tasks that, until now, could only be performed by humans** (e.g. administrative management, street cleaning, driving trains and underground trains). At the same time, **automation will extend its range of action to other more abstract and less repetitive tasks** where awareness, creativity or versatility are important.<sup>132</sup> Examples are medical diagnosis (IBM Watson),<sup>133</sup> legal advice (LawGeek or Legal Robot),<sup>134</sup> text translation (Google translator),<sup>135</sup> building construction,<sup>136</sup> copywriting,<sup>137</sup> music composition, or graphic design. Finally, it is expected that non-routine manual tasks will progressively require greater specialisation and will gain in importance as personal care services become more important.

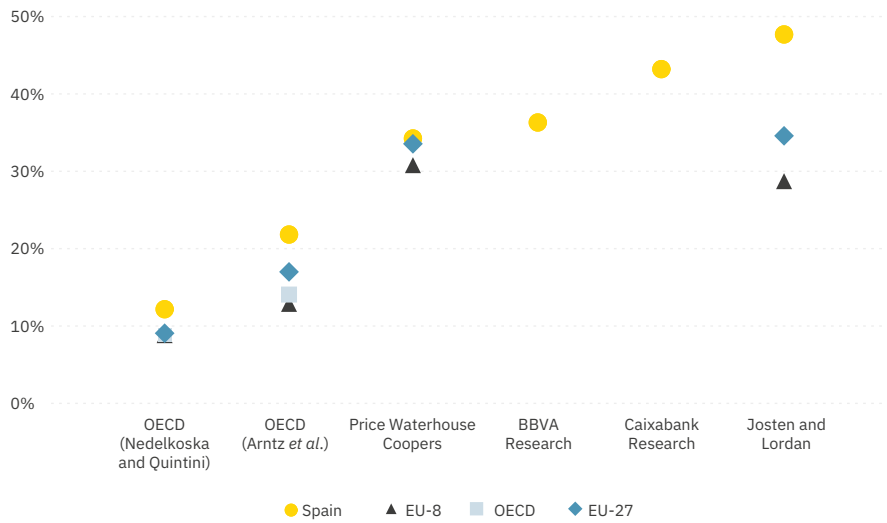
**This technological transformation will have three effects on our labour market: 1) destroy some occupations, 2) create new ones, and 3) transform the rest.**

**First, the technological transformation will lead to the disappearance of many occupations.**

In 2050, many of the jobs performed by people today will be done by autonomous machines, supervised or coordinated by humans. Where once there were several accountants, in the future there will be only one, aided by powerful digital assistants. Where there used to be a forestry crew, there will be a forestry technician in charge of managing and maintaining a fleet of fire drones and robots for forest clearance.

**It is impossible to anticipate precisely how many jobs will be automated in the future.** In fact, all estimates made in the recent past have failed or are on the way to failing,<sup>138</sup> and the latest available estimates give very different results [Fig. 30]. What is certain is that **a high number of occupations will disappear** and that it will most strongly affect those jobs that today eminently involve physical tasks or repetitive abstract tasks that can be performed by a robot or a low to medium-cost digital agent.

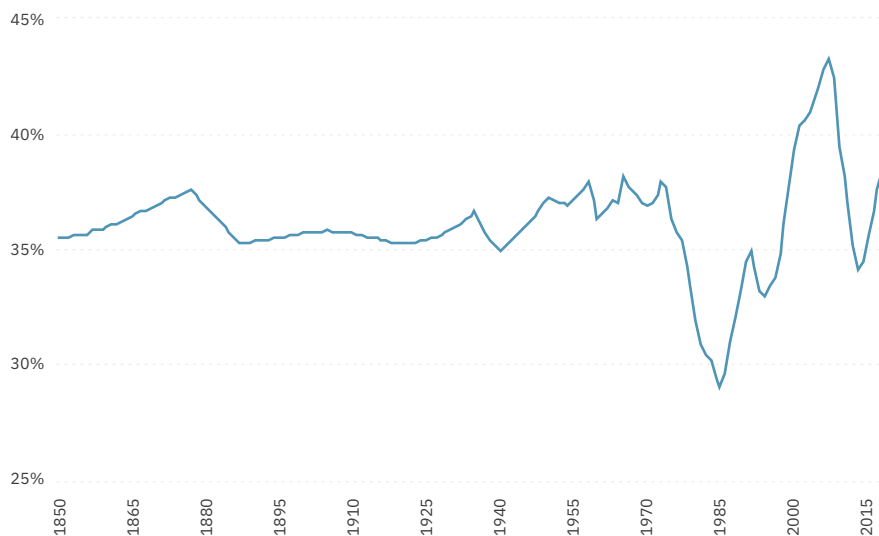
Fig. 30. Estimates of the proportion of jobs at high risk of automation in Spain



Source: Drafted by the authors based on the above-mentioned studies.<sup>139</sup>

In any case, this does not mean that structural unemployment will inexorably increase in Spain. History shows us that, although technology may generate job losses for some groups in the short term, in the medium and long term it always ends up creating more jobs than it destroys.<sup>140</sup> This is why the percentage of the working population in Spain today is higher than in 1850 despite the fact that, in between, several disruptive technologies (e.g. the telephone, the automobile, the personal computer or the Internet) have become widespread [Fig. 31]. If technology were to destroy net employment on a sustained basis, the countries that have automated and digitised their economies the most in recent decades should be the ones with the highest levels of unemployment, when in fact the opposite is true.<sup>141</sup>

Fig. 31. Employment rate over total population in Spain



Source: Drafted by the authors based on Prados de la Escosura.<sup>142</sup>

This is because, by becoming more technologically advanced, companies increase their productivity, which in turn allows them to increase profit margins, reinvest, grow, and employ more staff. It happened to the textile sector during the first industrial revolution, to manufacturing companies in the early 20th century, to service sector companies that introduced computers in the 1980s and 1990s, and to factories that introduced industrial robots between 1990 and 2016.<sup>143</sup>

This dynamic has been with us for centuries and there is no reason to believe that it will not continue to do so in the future: **new technologies will also create jobs**, many of them associated with the development, management and repair of these same technologies (programmers, mechanics, remote robot operators, data scientists<sup>144</sup>) and with the growth of the metaverse and virtual reality. Jobs such as Minecraft gardener, avatar trainer, or e-sports professional will become increasingly common.

**New jobs associated with increasing longevity, the green transition or changes in social dynamics will also emerge.** The Spain of the future will need more health personnel specialised in care of the elderly and dependants, as well as psychologists and counsellors [see chapters 5 and 9]. Labour demand in science and engineering will also increase, with more specialists needed in renewable energy, recycling, water management, building renovation or sustainable food [see chapter 4]. In fact, it is estimated that the transformation of the energy system and the development of the circular economy will generate a net increase in employment in our country of around 250,000 people, on average per year, between now and 2050.<sup>145</sup> More jobs will also be created in the fields of training (especially for adults), culture, mobility, and digital rights to name but a few. As a result, **the greatest growth in employment over the coming decades is expected to be concentrated in sectors such as healthcare, technology, R&D, leisure, and care**[Fig. 32].

**Fig. 32. Main sectors in which employment will grow and shrink in Spain**

Source	Oliver (2018)	PWC (2013)	Adecco (2016)	CEDEFOP (2018)	Alós (2018)
Sectors that will grow	Health and social services	Hospitality and catering	Technology and R&D	Trade	Health and social services
	Manufacturing	Trade	Tourism and leisure	Culture and leisure	ICT services
	Culture and leisure	Culture and leisure	Health and social services	ICT services	Culture and leisure
Sectors that will decrease	Trade	Public administration	Manufacturing	Agriculture	Banking and insurance
	Public administration	Agriculture	Construction	Professional services	Administrative tasks
	Education	Manufacturing	Trade	Public administration	Manufacturing

Source: Drafted by the authors based on the above-mentioned studies.<sup>146</sup>

In addition to destroying and creating new jobs, what **technological change will do is to severely transform most existing jobs**. This transformation will be seen in at least two main ways.

**On the one hand, the level and type of skills required for the job will be altered.**<sup>147</sup> The jobs of the future will require more complex knowledge and skills than today, especially in terms of technology. These skills will also be different. Physical performance will become less and less important and STEM knowledge, advanced cognitive skills (such as creativity or deductive reasoning) and transversal and soft skills (such as communication, teamwork, leadership or negotiation) will gain in importance [Fig. 33], which are not really replaceable by machines and algorithms.<sup>148</sup>

**Fig. 33. Future demand for labour skills in Spain**

More demand	Less demand
Technological, scientific and mathematical skills	Basic cognitive skills
Advanced cognitive skills	
Soft and social skills	Repetitive and/or automatable physical skills
Non-repetitive and/or automatable physical skills	

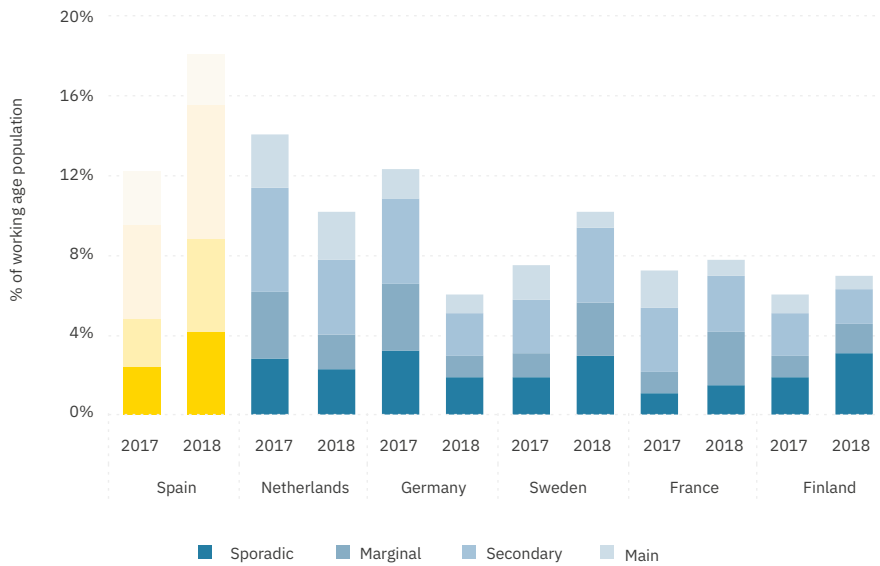
Source: Drafted by the authors based on Hidalgo.<sup>149</sup>

**It will also change the way we conceive, carry out and organise work.** The spread of digital technologies, the growing outsourcing of economic activities (accelerated by the gig economy), and the increasing concentration of production in larger and larger companies<sup>150</sup> will mean that **full-time salaried employment will become less common**. The numbers in atypical forms of employment such as the self-employed, freelancers, and on-demand workers,<sup>151</sup> who combine several sources of income and various professional activities will increase.<sup>152</sup>

In Spain, **a model in which companies increasingly contract more tasks than people, and in which people are paid for the results obtained, rather than for the hours worked will become the norm**. Perhaps the best example in this respect is the growth of employment linked to **digital platforms**. The latest European Commission survey reveals that, in 2018, 18% of the working population in Spain already worked on a recurrent or one-off basis for a platform, a much higher proportion than in the EU-8 countries included in the study [Fig. 34] and which is likely to grow in the future.



Fig. 34. Intensity and relevance of work for platforms



Source: Drafted by the authors based on Urzi Brancati, Pesole and Fernández-Macias.<sup>153</sup>

**Between now and 2050, physical workplaces will also change.** “Work” will cease to be a place you go to and become an activity that takes place in the office, in the factory, on the street, but also at home, in a rural house, abroad, or in one of the hundreds of *coworking* spaces that are springing up in our cities. In Spain, there will be an increasing number of digital nomads, both nationals and foreign, who combine remote and face-to-face work. In fact, it is estimated that the number of people who will routinely work remotely in Spain could triple over the coming years.<sup>154</sup>

This digitisation of the workplace will open the door to **a global market** in which Spanish citizens can and will have to collaborate and compete with professionals from other countries [see chapter 3]. We will also see the **boundaries between personal and professional life become more blurred and porous**. Working time will be mixed with private life, each adapted to to the other, in some cases resulting in greater flexibility and in others in a heavier workload.

In this new employment paradigm, **careers will have less continuity**. Instead of remaining with the same employer all their lives, people will change employers or even sectors several times. This will be due to the greater fluidity of the business world, but also the will of the workers themselves, who are less and less interested in dedicating their entire professional career to the same institution (surveys reveal that 52% of millennials in Spain plan to change jobs in the next 5 years).<sup>155</sup>

**All these transformations in how we conceive, carry out and organise work will bring challenges, but also immense opportunities to the country, which will be minimised or maximised depending on how far-sighted and efficient the response of public administrations, companies, trade unions and citizens is in regulating and channelling them.**

We tend to think that traditional forms of employment (employed, permanent and full-time) are inherently better than other forms of employment. But this is not true in all cases nor need it remain true for most in the future. If well managed, the rise of self-employment and freelance work, partly associated with the expansion of digital platforms, could contribute to more flexible working hours, a better work-life balance, and a **significant increase in career development and wage opportunities** for many people (especially younger people and those living in unpopulated areas with low levels of economic activity).<sup>156</sup> It could also lead to a potential increase in business productivity, especially in companies that are more digitised.<sup>157</sup>

On the contrary, if not well managed, the transformations over the coming decades could end up leading to **an erosion of the working conditions and welfare of a large part of the population**, through greater labour duality and social inequality. The growth of the gig economy, together with the considerable weight of its large companies and platforms and the low bargaining power of its workers, could lead to unstable and poorly paid jobs,<sup>158</sup> lower levels of labour protection,<sup>159</sup> and longer and less satisfactory working hours.<sup>160</sup> At the same time, the rise of digital competition and the possibility of outsourcing services to workers in other countries (often with high skills, similar wage expectations and lower tax rates) could negatively affect employment and wages in Spain.<sup>161</sup>

**Changes in the world of work could therefore lead to a weakening of social safety nets.** As new forms of work (voluntary non-permanent, part-time and non-dependent) become more prevalent, our social safety nets may become less effective and leave more people unprotected.<sup>162</sup> Despite the advances in social coverage achieved in recent decades,<sup>163</sup> the Spanish welfare state, like many other European states, continues to be based on work and on a dominant way of understanding and exercising it: permanent, full-time and employed, regulated by a contract and a wage relationship between the employee and the employer.<sup>164</sup>

To avoid this potential weakening of the welfare state, two major transformations will be necessary. **Firstly, it will be necessary to change the way in which workers contribute to the system** by ensuring that all workers, including those in unconventional forms of employment linked to the digital economy,<sup>165</sup> are taxed on their real income [see chapters 5 and 8].

**The way in which welfare state benefits are conceived and articulated will also have to be adapted.** Spain will have to consolidate a model in which citizens are protected on the basis of their needs and not just their employment history.<sup>166</sup> A model financed by workers' and employers' contributions, but also by general taxation. Doing so will not be easy. The transition poses significant economic, social and cultural challenges. However the process is already underway. Our country has already moved from a health care system determined by social contributions to a tax-financed universal health care system in the 20th century.<sup>167</sup> In the first half of the 21st century, we will have to take a further step in the same direction, and extend the universality of our welfare state to other areas. The adoption of the Minimum Living Income in 2020 is an important step in this direction [see chapter 8].

**How can these transformations be achieved?** A number of measures are suggested on the following pages.

## WHAT NEEDS TO BE DONE TO ENSURE QUALITY EMPLOYMENT FOR ALL CITIZENS

Over the coming decades, Spain will have to carry out far-reaching reforms aimed at correcting the structural shortcomings of its labour market, **adapting it to the new social, economic and technological realities and preparing it for the changes that these will bring in the future**. In addition, our country should **progressively raise its employment rate to the current levels of some of the most advanced economies in Europe**. It must do so by improving the labour market integration of all groups and, in particular young people, women and the over-55s.

It is impossible to attain that which cannot be measured. That's why it's fundamental that, over the coming years, to reach a consensus through social partnership on **a dashboard of quantifiable indicators and a list of specific goals** that will enable us to monitor the progress made and guide the ambition of our reforms. Here are some suggestions, following the principles outlined in the Introduction to this *Strategy*:

**Goal 3.** Increase the employment rate from the current 62% to 80% by the middle of the century. This increase should take place across all autonomous communities and in all social groups, especially in those that currently have a lower rate of labour market insertion than the EU-8: young people, women and the over 55s.

**Goal 19.** Increase funding for active labour market policies dedicated to training to reach 0.25% of GDP by 2030 and 0.4% by 2050.

**Goal 37.** Reduce the unemployment rate to EU-8 levels (7%) by the middle of the century.

**Goal 38.** Raise the employment rate of women to at least the same level as that of men by 2050.

**Goal 39.** Reduce the youth unemployment rate by half, bringing it into line with the EU-8.

**Goal 40.** Increase the labour market participation of the population aged 55-64, raising their employment rate by at least 15 points compared to the 2019 level.

**Goal 41.** Reduce the temporary employment rate to converge with the EU-8 average.

**Goal 42.** Cut the rate of involuntary part-time employment by half.

**Goal 43.** Progressively reduce the number of hours worked per week to levels similar to those in the EU-8.

**Goal 44.** Close the gender pay gap by 2050.

**Goal 45.** Raise the percentage of people satisfied with their employment situation from the current 85% to the 93% recorded in the most advanced EU-8 countries.

Table of indicators and targets

Indicators	Place	Average 2015-2019 or latest data available*	Targets		
			2030	2040	2050
3 Employment rate <sup>168</sup>	Spain	62%	68%	72%	80% <sup>169</sup>
	EU-27	68%	–	–	–
	EU-8	73%	–	–	–
19 Active labour market policies devoted to training (% of GDP) <sup>170</sup>	Spain	0.11%	0.25%	0.30%	0.40%
	EU-27	0.15%	–	–	–
	EU-8	0.27%	–	–	–
37 Unemployment rate <sup>171</sup>	Spain	18%	12%	10%	7%
	EU-27	8%	–	–	–
	EU-8	6%	–	–	–
38 Employment rate of women <sup>172</sup>	Spain	57%	65%	75%	82%
	EU-27	63%	–	–	–
	EU-8	70%	–	–	–
39 Youth unemployment rate <sup>173</sup>	Spain	40%	30%	21%	14%
	EU-27	18%	–	–	–
	EU-8	13%	–	–	–
40 Employment rate (55-64 years) <sup>174</sup>	Spain	51%	56%	62%	68%
	EU-27	56%	–	–	–
	EU-8	62%	–	–	–
41 Temporary rate <sup>175</sup>	Spain	26%	23%	18%	15%
	EU-27	15%	–	–	–
	EU-8	14%	–	–	–
42 Involuntary part-time rate <sup>176</sup>	Spain	9%	7%	5%	3%
	EU-27	5%	–	–	–
	EU-8	5%	–	–	–
43 Hours worked per week <sup>177</sup>	Spain	37.7	37.0	36.0	35.0
	EU-27	37.1	–	–	–
	EU-8	35.4	–	–	–
44 Gender wage gap <sup>178</sup>	Spain	14%	10%	5%	0%
	EU-27	15%	–	–	–
	EU-8	15%	–	–	–
45 People satisfied with their employment situation <sup>179</sup>	Spain	85%*	87%	90%	93%
	EU-27	83%*	–	–	–
	EU-8	88%*	–	–	–

To achieve these objectives, Spain must undertake **far-reaching reforms and implement significant initiatives** on at least eight fronts:<sup>180</sup>

### **Front 1: Correct the shortcomings of our productive system and promote the creation of quality jobs**

Many of the problems of our labour market stem from the deficiencies of our productive system: lack of innovation, low implementation of technology in the business network, a deficit of human capital, bureaucratic obstacles, and insufficient development of alternative sources of financing to the banking system. Until these shortcomings are corrected, problems such as job insecurity and unemployment cannot be solved. It is essential, therefore, to improve the skills and education of the active population, increase R&D, promote the adoption of technologies, boost business growth and modernise the functioning of the public sector, as set out in chapters 1, 2 and 3 of this *Strategy*.

### **Front 2: Update and strengthen active labour market policies**

Over the coming decades, technological change will cause many occupations to disappear, new ones to emerge and the rest to be transformed. We must endeavour to ensure this transition is as rapid and beneficial as possible for our working population. To this end, we must significantly increase the capacity of our labour institutions to retrain, guide and assist jobseekers. In this regard, it is proposed:

- To move towards the creation of an integrated system of lifelong learning that allows us to keep our workforce up to date and to rapidly requalify those who will be irretrievably displaced by automation in the coming decades [see chapter 3]. The philosophy must be to protect the worker, not the job, and to understand that it is better to anticipate rather than resist unstoppable trends of change. The evidence shows that those workers who left the more routine jobs in the first wave of automation ended up with faster wage growth than those who remained in them, regardless of the occupation they migrated to (manual-low or cognitive-high).<sup>181</sup>
- To create a state-wide digital platform that functions as a job marketplace connecting all jobseekers with all job vacancies nationwide, both public and private. This platform will rely on the use of Artificial Intelligence, profiling algorithms and big data to improve the efficiency of job matching and increase competition and productivity in the economy. It should be operated in a transparent and anonymous manner, both for workers and companies, in order to avoid segregation and discrimination at work on the basis of gender, age or race. In this respect, a good starting point could be the modernisation of the Single Employment Portal.<sup>182</sup> In the medium to long term, it will also be necessary for this jobs marketplace to be integrated into a similar one for the EU as a whole, thus facilitating the creation of a truly integrated European labour market that allows the social and economic advantages of the Union to be exploited to the full.
- To expand and improve guidance services for the unemployed to provide quality and personalised guidance, with a special focus on the integration of women, young people and the long-term unemployed.<sup>183</sup> To this end, we propose the following:
  - Increase the ratio of guidance counsellor to unemployed person.
  - Digitalise and automate administrative procedures related to unemployment, so that the human and spatial resources of the State Public Employment Service (SEPE) can be fully dedicated to vocational guidance. Priority should be given to returning

to work from the first visit, introducing commitments on actions to be undertaken by the jobseeker in the short term, and generalising coaching techniques [see chapter 3].

- Improve the training of counsellors, especially in the use of digital tools.
  - Putting new technologies at the service of guidance counsellors and the unemployed. Create a system that, based on the digital jobs marketplace, makes it possible to know the present training needs and anticipate the future needs of the productive fabric [see chapter 3].
  - Increase the search range of the unemployed to broader economic activities, occupations and geographical areas than those suggested by their most recent jobs.<sup>184</sup>
- Achieve maximum coordination between the SEPE, regional employment services, trade unions, employers' organisations and educational bodies to structure coherent and integrated public-private responses at national level.
  - Make social benefits fully portable (e.g. housing benefits) in order to facilitate the mobility of jobseekers from one autonomous community to another. To this end, it will be necessary to improve coordination between the different administrations (local, regional and state) with responsibilities in this area. In parallel, this portability must also be fostered at European level.<sup>185</sup>
  - Increase funding for active policies through the establishment of a guidance counsellor/unemployed person ratio or other objective indicators to close the relative gap between Spain and EU-8 countries [see chapter 3]. It will also be necessary to redirect hiring subsidies towards groups with especial employability difficulties.
  - Create an effective evaluation and monitoring system for active policies by standardising all the information and including key criteria such as the success of labour market insertion or the quality of the employment achieved. Data from this system should be shared (properly anonymised) with the research and academic community, so that they can also contribute to the monitoring and improvement of public policies.

### **Front 3: Modernise our regulatory framework to reduce unemployment and temporary contracts and adapt it to the new social, economic and labour realities of the country**

A number of measures are proposed in this regard:

- To make progress in simplifying the recruitment system, the establishment of three main categories: a permanent one, a temporary one for temporary needs and substitutions, and another of a training nature.
- Increase penalties and compensation for the use of fraudulent temporary contracts to discourage the use of temporary work.
- Improve inspection resources to reduce unjustified temporary employment, job insecurity and the black economy. This would require, among other measures, streamlining and digitising all administrative processes in the labour and business sphere, and

strengthening the Labour and Social Security Inspection System (ITSS), providing it with adequate financial, human and technological resources (e.g. using Artificial Intelligence to massively identify patterns such as the unjustified chaining of contracts of very short duration).<sup>186</sup>

- At the same time, the introduction of mechanisms to encourage permanent contracts as opposed to temporary contracts at the end of the contract should be considered, in order to help reduce the incentive to use the latter, always taking into account the effects on job creation and workers' rights. It would also be desirable, within the framework of social dialogue, to improve legal certainty for companies and workers in decisions to adjust the workforce. These changes would help to avoid the massive destruction of temporary employment during recessions and the excessive creation of precarious jobs during periods of economic growth.
- Reform the Basic Statute of Public Employment to reduce as much as possible the high use of temporary contracts and their chaining in public institutions (especially in health and education). Employment should be limited to permanent open-ended, open-ended or temporary positions with a maximum duration of three years until the position is filled.
- Incorporate a new employment adjustment mechanism which, based on the experience of the ERTes, introduces greater internal flexibility in companies in the face of temporary or cyclical downturns in activity. This system should establish training programmes for affected workers to facilitate their reintegration at the end of the crisis period.
- Progressively adapt, through social dialogue, labour regulations in order to achieve greater equality of labour rights and obligations for the working population. To this end, one could:
  - Define, in the framework of a new Workers' Statute, a Charter of social rights common to all workers in areas such as health protection, prohibition of discrimination or data protection.<sup>187</sup>
  - Progressively adapt our labour regulation to converge, by 2050, with the regulatory frameworks of the rest of the EU, which is essential if we want to implement common policies such as a European unemployment benefit, reduce regulatory arbitration, and achieve the articulation of a truly integrated EU labour market.
- Gradually reduce the differences between regular activities and new forms of employment in order to avoid regulatory and fiscal arbitration, and increase protection against potential fraud and abuse of the working population. To this end, the differences between paid employment and self-employment must be assessed with concrete and quantifiable criteria (in terms of dedication, exclusivity, own means of production, and management and control), taking into account the fact that circumstances are variable over time and can be combined with each other. Particular attention should be paid to the regulation of work on platforms.<sup>188</sup>
- Further update the regulatory framework to extend the recognition and protection of workers' digital rights (right to privacy, data ownership),<sup>189</sup> and take advantage of the opportunities offered by remote working or hyper-connectivity to improve working conditions and the work-life balance of men and women.

- Adequately regulate markets for goods and services in order, on the one hand, to foster competition and create an environment that facilitates the creation of firms and removes barriers to their growth [see chapter 1], and, on the other hand, to prevent some firms from having price and wage-setting power.
- Make changes to our regulatory and fiscal frameworks and push for the development of international mechanisms and agreements to ensure social protection and tax engagement for remote digital workers globally. The objective to be achieved is twofold: firstly, that our companies can easily access talent in the international labour market; and secondly, that our digital workers can access opportunities beyond our borders with common rights and obligations.

#### **Front 4: Modernise the social safety nets of our welfare state, adapting them to present and future employment realities**

Our entire welfare state is designed according to a single way of understanding, conceiving and organising work and labour relations. As we have seen, this form is changing. It will therefore **be necessary to gradually adapt our welfare benefit system so that benefits are allocated not only on the basis of people's employment history, but also on the basis of their needs**, as recommended by European directives<sup>190</sup> [see chapter 8]. Thus, for example, retirement benefits will have to adapt to a near future in which professional careers will be increasingly heterogeneous and discontinuous; and unemployment benefits must adapt to an employment reality in which full-time permanent work will no longer be an option for a large part of the Spanish population.

#### **Front 5: Expand and update collective bargaining mechanisms**

If collective bargaining is to continue to play an important role in the future, it must adapt to the new social, economic and technological realities of the country. In this regard, it is proposed:

- To redesign the criteria for classifying professional groups and contracts so that they better adapt to the reality of our productive activity. This process will need to be flexible and dynamic, given the pace of change in technological developments.
- To update existing agreements, incorporating content related to technological innovation, variable remuneration based on objectives, new forms of work organisation and the right to lifelong learning for employees.
- To bring the regulatory framework closer to the changing needs of business, without undermining workers' rights. One possible option would be to maintain the application of firm collective agreements in those companies of a certain size with legal worker representation and to bring sectoral collective agreements closer to smaller companies. In this sense, a wage guarantee could be established at sectoral level to avoid excessive wage adjustments (both in rate and duration) while, at the same time, allowing greater flexibility in other relevant aspects such as work organisation, the distribution of hours or the adaptation of the job to the skills of the workers.
- To strengthen business and trade union representation and representativeness, adapting it to the reality of the business and social makeup of Spain, through a greater presence of small companies both in the negotiation of sectoral collective agreements and in trade union elections.



- To extend collective bargaining to the self-employed without dependent employees and other types of workers in the digital economy, while respecting the rules of free competition.<sup>191</sup>
- To adapt the mechanisms for renewing collective agreements in order to avoid prolonged blockages and failure to update collective agreements over long periods of time, especially in changing circumstances such as those caused by economic crises.
- To encourage the role of workers in decision-making in their companies and in the sharing of productivity gains resulting from the technification of production systems. To this end, it is recommended to facilitate the participation and investment of the workforce in the robotisation and digitalisation of their companies, following the philosophy of cooperative enterprises linked to the social economy [see chapter 8].

#### **Front 6: Encourage labour participation, especially among young people, women after having children and those over 55 years of age**

- In order to bring the Spanish youth employment rate closer to the EU-8 average, and in addition to the measures included in the Department of Labour and Social Economy's Youth Employment Shock Plan 2019-2021<sup>192</sup>, it is proposed:
  - To promote compliance with the European Youth Guarantee, whose implementation in Spain has so far been very poor. The aim is to ensure that, once they have spent a maximum period of time unemployed or not in education, young people are contacted by the corresponding public employment service and receive a personalised activation plan.
  - To promote dual vocational training as one of the most efficient ways of increasing the labour market integration of young people [see chapter 3].
  - To strengthen career guidance systems in universities and vocational training centres, increasing the number of guidance counsellors per student and improving their technical training with constant refresher courses.
  - To promote the development of experimental pilot policies within public administration, following the example of Denmark's Building Bridge to Education.<sup>193</sup>
  - Promote and incentivise entrepreneurship and self-employment among young people, with a special focus on the most depopulated areas.
  - Create a national second-chance education programme to facilitate the re-employment of young people aged 15-29 who are in neither employment nor training. It should provide personalised training, which reinforces basic and work-related skills and promotes practical experience in the company.
  - Encourage better and greater collaboration with specialised third sector entities to reach the most vulnerable sectors.

- Continue working to reduce the gender gap, both in education (greater presence of women in science, technology and engineering) and in employment (greater presence of women in certain sectors and equal working conditions), in the knowledge that an increase in the female labour rate will contribute significantly to increasing the productivity and long-term growth of the economy.<sup>194</sup> To this end, it would be advisable to combat gender stereotypes from an early age, focusing on both the family environment and primary education. To avoid the drop in labour participation that affects many women after motherhood, it is proposed, among other measures, to increase the public network of childcare centres and to strengthen work-life balance policies, so that the burden of parenting is reduced and shared equally between men and women.
- To increase the participation rates of the over-55s, it is suggested to match future jobs to the skills and interests of older workers and to create more flexible tax and wage mechanisms that facilitate and encourage their continued employment [see chapter 5].

### Front 7: Incentivise labour migration and talent recovery

Our country must avoid the drain of domestic talent and encourage the arrival of foreign talent to improve the quantity and quality of human capital [see chapter 1]. Spain should facilitate the reception and integration (economic and social) of the foreign population to cushion the potential reduction of the working-age population and underpin the sustainability of the welfare state. By 2050, our country will need at least 191,000 net migrants per year if it is to meet the conservative projections set out in this *Strategy*. To achieve this, Spain must:

- Promote recruitment at origin, in order to meet the potential needs of our productive fabric in a more rapid and surgical manner.<sup>195</sup> Doing so will require, among other things, establishing more bilateral agreements with those countries from which we receive the largest migration quotas, and updating and expanding existing ones.
- Optimise the procedures for hiring and Social Security registration for workers of foreign origin and, while at the same time improving the administrative regularisation procedures through channels other than employment and reducing technical difficulties, costs and waiting times. The ultimate goal is for the immigrant population to integrate successfully into the labour market and society, and to have full access to social protection mechanisms and public services.
- Improve labour inspection and control instruments to avoid situations of abuse and the black economy, as suggested by the Pact of Toledo.<sup>196</sup>
- Develop mechanisms to improve the professional skills and lifelong learning of immigrants, as well as their knowledge of the official languages of the State.<sup>197</sup>
- Promote, at European level, the adoption of a common migration, asylum and refugee policy that favours the socio-occupational integration, activation, recognition of qualifications and development of migrants' skills.<sup>198</sup>

### Front 8: Promote healthier and more satisfying work

As we have already seen, work in Spain stands out as less satisfying, less enriching, more frustrating and more stressful than in most of the countries around us. To correct this problem, it is proposed to:

- Amend workplace health and safety legislation to update the catalogue of occupational diseases, renew the procedure for notification of workplace accidents, and incorporate the treatment and prevention of stress, anxiety and other physical and mental health conditions among workers [see chapter 9].
- Continue to adapt legislation to achieve more flexible working hours and shorter working hours to converge on the EU-8 number of hours worked per week, taking advantage of the opportunities of digitalisation and productivity improvements.<sup>199</sup>
- Create public and private programmes to improve the training of managers in companies (among the worst trained in Europe)<sup>200</sup> and public institutions to introduce a management style that is less authoritarian, more participative and more committed to the professional concerns and well-being of employees.

**By adopting these and other measures, our country could address the shortcomings of our labour market; adapt it to the new social, economic and technological realities and, as a result, close the gap in labour market insertion with the EU-8.**



## CHALLENGE 7: ADDRESS THE SHORTCOMINGS OF OUR LABOUR MARKET AND ADAPT IT TO NEW SOCIAL, ECONOMIC AND TECHNOLOGICAL REALITIES

<sup>1</sup> In 1980, 15% of the employed population in Spain worked in the agricultural sector, a proportion that today is only 4%. Meanwhile, employment in the service sector has increased by almost 30 percentage points to 80%. For further details, see: AMECO. *Employment, persons: agriculture, forestry and fishery products (National accounts) [NET1]; Employment, persons: industry excluding building and construction (National accounts) (NET2); Employment, persons: building and construction (National accounts) (NET4); and Employment, persons: services (National accounts) (NET5)*. [https://ec.europa.eu/economy\\_finance/ameco/user/serie/SelectSerie.cfm](https://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm).

<sup>2</sup> The employment rate used here is the ratio of total employed population to population aged 15-64, to facilitate international comparisons and to provide historical data since 1980.

<sup>3</sup> Between 1980 and 2019, the employed population in Spain has grown by 7.9 million, of which 5.7 million were women (72%). The role of the foreign-born population in the Spanish labour market is also noteworthy. Between 1995 and 2019, the employed population of foreign origin has increased from 103,000 to 2.4 million, accounting for 32% of the net employment created during this period (7.2 million employed). For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]*. <https://ec.europa.eu/eurostat/data/database>; and INE. *Encuesta de población activa. Ocupados por sexo y grupo de edad. Valores absolutos y porcentajes respecto del total de cada sexo*. [https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736176918&menu=resultados&idp=1254735976595#ltab=1254736195129](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&idp=1254735976595#ltab=1254736195129).

<sup>4</sup> The employment rate for women has risen from 28% in 1980 to 57% in 2019, while the male employment rate has fallen from 72% to 68% over the same period. For further details, see: OECD. *Historical population and Annual Labour Force Statistics summary tables*. <https://stats.oecd.org/>.

<sup>5</sup> The EU-8 is constructed as the weighted average of the values of the individual countries, with working age population being the reference for the calculation of weights. The EU-28 is constructed from the aggregates reported by the OECD. For further details, see: OECD. *Historical population and Annual Labour Force Statistics summary tables*. <https://stats.oecd.org/>.

<sup>6</sup> OECD. *Historical population and Annual Labour Force Statistics summary tables*. <https://stats.oecd.org/>.

<sup>7</sup> In the private sector, the percentage of women on Boards of Directors has increased from 3% in 2003 to 26% today (EU-27: 28%). The percentage of female executives has increased to 16% of the total (EU-27: 18%). In the public sector, the percentage of women in Parliament has risen from 30% of the total in 2003 to over 40% in 2019, a much higher proportion than in the EU-27. For further details, see: Eurostat. *Positions held by women in senior management positions (source: EIGE) [sdg\_05\_60]; y Seats held by women in national parliaments and governments (source: EIGE) [sdg\_05\_50]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>8</sup> Eurostat. *Employed persons discriminated at work during the last 12*

*months by sex and age (source: Eurofound) [qoe\_ewcs\_1c3]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>9</sup> The gender pay gap is defined as the difference between men's and women's average gross hourly earnings as a percentage of men's average gross hourly earnings. The indicator has been defined as "unadjusted" (by the socio-economic characteristics of the working population) because it provides an overall picture of gender pay inequality and measures a broader concept than "equal pay for equal work". Note that if the gap in gross annual wages is analysed, the figure for Spain in 2017 is 22% (compared to 12% for the hourly wage gap), which is mainly explained by the higher incidence of part-time work among women. The EU-8 is constructed as the simple average of the values of the individual countries, and the EU-27 is the aggregate indicator reported by Eurostat. For further details, see: Eurostat. *Gender pay gap in unadjusted form [sdg\_05\_20]*. <https://ec.europa.eu/eurostat/data/database>; and INE. *Salario anual medio, mediano y modal. Salario por hora. Brecha salarial de género (no ajustada) en salarios por hora*. [https://www.ine.es/ss/Satellite?L=es\\_ES&c=INESeccion\\_C&cid=1259925408327&p=1254735110672&pagename=ProductosYServicios%2FPYLayout](https://www.ine.es/ss/Satellite?L=es_ES&c=INESeccion_C&cid=1259925408327&p=1254735110672&pagename=ProductosYServicios%2FPYLayout).

<sup>10</sup> The EU-8 is constructed as the simple average of the values of the individual countries, and the EU-27 is the aggregate indicator reported by Eurostat. For further details, see: Eurostat. *Positions held by women in senior management positions (source: EIGE) [sdg\_05\_60]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>11</sup> In this respect, the approval of the Workers' Statute in 1980 is noteworthy. For further details, see: Official State Gazette. *Ley 8/1980, de 10 de diciembre, del Impuesto sobre Sociedades*. Madrid, 1980. <https://www.boe.es/eli/es/lj/1980/03/10/8/dof/spa/pdf>.

<sup>12</sup> In 1961, the first national unemployment insurance law was passed and remained in force until 1980. Esta ley arrancó con una cobertura del 75% del salario y una duración de la prestación por desempleo de seis meses. For further details, see: Official State Gazette. *Ley 62/1961, de 22 de julio, por la que se implanta el Seguro Nacional de Desempleo. Art. 8*. Madrid, 1961. <https://www.boe.es/boe/dias/1961/07/24/pdfs/A11006-11009.pdf>.

<sup>13</sup> In this respect, it is worth highlighting the reform of the Workers' Statute in 1994, which definitively repealed the labour ordinances of the pre-constitutional regime, promoted collective bargaining by allowing working conditions previously regulated by law to be subject to negotiation, introduced the obligation to include opt-out conditions in agreements at a higher level than the company, and added those based on economic reasons to the objective causes of fair dismissal. For further details, see: Ortega Masagué, Ana Carolina, and Juan Francisco Jimeno Serrano. "Veinticinco años de mercado de trabajo en España." *Economía Industrial*, n.º 349-350. 2003. <https://www.mincotur.gob.es/Publicaciones/Publicacionesperiodicas/EconomiaIndustrial/RevistaEconomiaIndustrial/349/09%20FRANCISCO%20JIMENO.pdf>.

<sup>14</sup> In this regard, Spain's commitment to the International Labour Organisation (ILO) should be highlighted. Spain is, together with Finland and Sweden, one of the EU-27 countries that has ratified the

most ILO instruments. For further details, see: European Commission. *Analysis – in the light of the European Union acquis – of the ILO up to date Conventions*. Luxembourg: Publications Office of the European Union, 2013. <https://op.europa.eu/en/publication-detail/-/publication/ac9e4e2a-f158-4607-8149-9f11e66633b5>.

<sup>15</sup> It has risen from 1,751 in 1990 to 721 in 2019. For further details, see: Department of Labour and Social Economy. *Condiciones de trabajo y relaciones laborales. Accidentes de trabajo*. <http://www.mites.gob.es/estadisticas/eat/welcome.htm>.

<sup>16</sup> En 2017, un 26% de la población ocupada española tenía un trabajo con una demanda física moderada o alta, frente al 42% de la UE-8 y el 41% de la UE-27. For further details, see: Eurostat. *Persons performing physical activity when working by type of activity, most frequent activity status, quantile and degree of urbanization [ilc\_hch06]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>17</sup> Oesch, Daniel, and Giorgio Piccitto. “The polarization myth: Occupational Upgrading in Germany, Spain, Sweden and the UK, 1992-2015.” *Work and Occupations*, n.º 46. 2019. [https://people.unil.ch/danieloesch/files/2019/09/Oesch\\_Piccitto\\_2019\\_Polarization\\_Myth.pdf](https://people.unil.ch/danieloesch/files/2019/09/Oesch_Piccitto_2019_Polarization_Myth.pdf).

<sup>18</sup> Eurostat. *Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and occupation (hours) [lfsa\_ewhuis]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>19</sup> In 2019, the EU-8 average was 7% and the EU-27 average was 8%. For further details, see: Eurostat. *Long working hours in main job by sex, age, professional status and occupation [lfsa\_qoe\_3a2]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>20</sup> Over the last decades, maternity and paternity leave have been increased to equal 16 weeks in 2021, of which 6 weeks are mandatory for each parent. This places Spain at the EU-27 average for women, but above the European average for men. For further details, see: Official State Gazette. *Real Decreto-ley 6/2019, de 1 de marzo, de medidas urgentes para garantía de la igualdad de trato y de oportunidades entre mujeres y hombres en el empleo y la ocupación*. Madrid: 2019. <https://www.boe.es/boe/dias/2019/03/07/pdfs/BOE-A-2019-3244.pdf>; and European Parliament. *Infographic: Maternity and paternity leave in the EU*. 2019. [https://www.europarl.europa.eu/RegData/etudes/ATAG/2019/635586/EPRS\\_ATA\(2019\)635586\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2019/635586/EPRS_ATA(2019)635586_EN.pdf).

<sup>21</sup> In 1980, the real minimum wage (in 2019 dollars and adjusted for purchasing power differences) was \$5.4 per hour worked, while in 2019 it is \$8.6 per hour. For further details, see: OECD. *Real minimum wages*. <https://stats.oecd.org/>.

<sup>22</sup> In 1980, the unemployment benefit was reformulated by Law 51/1980 and its maximum duration was extended to 18 months. For further details, see: Official State Gazette. *Ley 51/1980, de 8 de octubre, Básica de Empleo. Título II, Capítulo II, Art. 19 Duración de la prestación*. Madrid, 1980. <https://www.boe.es/eli/es/l/1980/10/08/51>.

<sup>23</sup> The numerator is the sum of accidents with sick leave during working hours and in *in itinere* (during the journey from home to the workplace or vice versa), and the denominator is the number of total employed persons. For further details, see: INE. *Encuesta de población activa. Ocupados por sexo y grupo de edad. Valores absolutos y porcentajes respecto del total de cada sexo*. <https://www.ine.es/dyngs/INEbase/es/>

[operacion.htm?c=Estadistica\\_C&cid=1254736176918&menu=resultados&idp=1254735976595#ltabs-1254736195129](operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&idp=1254735976595#ltabs-1254736195129); and Department of Work and Social Economy. *Condiciones de trabajo y relaciones laborales. Accidentes de trabajo*. <http://www.mites.gob.es/estadisticas/eat/welcome.htm>.

<sup>24</sup> Data in 2019 dollars and adjusted for purchasing power differences. For further details, see: OECD. *Real minimum wages*. <https://stats.oecd.org/>.

<sup>25</sup> For further details on the construction of the EU-8, see the *Apunte metodológico* número I.

<sup>26</sup> For further details, see: International Labour Organization. *Women and men in the informal economy: A statistical picture*. Geneva, 2018. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_626831.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_626831.pdf); y Williams, Colin, *et al.* “An Evaluation of the Scale of Undeclared Work in the European Union and Its Structural Determinants: Estimates Using the Labour Input Method.” *European Commission*, Luxembourg: Publications Office of the European Union, 2017. <https://op.europa.eu/en/publication-detail/-/publication/8c3086e9-04a7-11e8-b8f5-01aa75ed71a1>.

<sup>27</sup> From the mid-1990s until the financial crisis of 2008, the Spanish economy recorded an average annual growth rate of 3.7%, 1.3 points higher than the EU-27. However, this growth was accompanied by the generation of strong imbalances, such as high external dependence (the current account deficit rose from 0.8% of GDP in 1996 to 9.6% in 2007) and high private sector indebtedness (the ratio of household and non-financial corporate debt to GDP rose from 79% in 1996 to 210% in 2007). For further details, see: Banco de España. “Deuda consolidada de las sociedades no financieras y de los hogares e ISFLSH.” Banco de España, [https://www.bde.es/webbde/es/estadis/infoest/temas/te\\_cf.html](https://www.bde.es/webbde/es/estadis/infoest/temas/te_cf.html); and Eurostat. *GDP and main components (output, expenditure and income) [nama\_10\_gdp]*; y *Current account balance - annual data [tipsbp20]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>28</sup> The EU-8 is constructed as the weighted average of the values of the individual countries, with active population being the reference for the calculation of weights. The EU-28 is constructed from the aggregates reported by the OECD. For further details, see: OECD. *Annual Labour Force Statistics summary tables*. <https://stats.oecd.org/>.

<sup>29</sup> In Spain, the probability of finding a job for people experiencing long-term unemployment was 11% in 2018, while for the rest of unemployed people it was 30%. For further details, see: Eurostat. *Transition from unemployment to employment by sex, age and duration of unemployment - annual averages of quarterly transitions, estimated probabilities [lfsi\_long\_e01]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>30</sup> Gorjón, Lucía, Sara de la Rica, and Antonio Villar. “The social cost of unemployment in Spain: who are the losers?” *ISEAK Working Paper*, n.º 2019/2, 2019. <https://iseak.eu/wp-content/uploads/2019/03/The-social-cost-of-unemployment-in-Spain-Who-are-the-losers.pdf>.

<sup>31</sup> For further details, see: INE. *Encuesta de población activa*. [https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595).

<sup>32</sup> Inactive people who are not looking for work and whose main reason is that they do not believe that work is available accounted for 2.3 per cent of the inactive 15-74 year-olds in 2019, or 287,000 people.

For further details, see: Eurostat. *Inactive population by sex, age and citizenship (1 000) [lfsa\_igan]*; and *Inactive population not seeking employment by sex, age and main reason [lfsa\_igar]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>33</sup> The EU-8 is constructed as the simple average of the values for each of its countries and the EU-28 is constructed from the aggregates reported by the OECD. The simple average criterion has been used instead of a weighted average based on each country's active population in order to have a time series since 1987. For further details, see: OECD. *Annual Labour Force Statistics summary tables*. <https://stats.oecd.org/>.

<sup>34</sup> In 2018, 82% of young people aged 16-29 lived with their parents, compared to 52% in the EU-8 and 69% in the EU-27. For further details, see: Eurostat. *Share of young adults aged 18-34 living with their parents by age and sex - EU-SILC survey [ilc\_lvps08]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>35</sup> In 2018, the average age at which Spanish women had their first child was 31 years, compared to 29 years on average in the EU-8 and EU-27. For further details, see: Eurostat. *Fertility indicators [demo\_find]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>36</sup> In 1975, the fertility rate in Spain was 2.8 children per woman, while in 2019 it had fallen to 1.2. For further details, see: INE. *Indicadores demográficos básicos. Indicador Coyuntural de Fecundidad según orden del nacimiento y nacionalidad (española/extranjera) de la madre*. [https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736177003&menu=resultados&idp=1254735573002#tba bs-1254736195380](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177003&menu=resultados&idp=1254735573002#tba bs-1254736195380).

<sup>37</sup> The EU-8 is constructed as the simple average of the values of the individual countries, and the EU-27 is the aggregate indicator reported by Eurostat. For further details, see: Eurostat. *Unemployment by sex and age – annual data [une\_rt\_a]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>38</sup> By branch of activity, temporary employment is particularly high in agriculture (56% in 2019), construction (40%), recreational and other services (30%), and hotels, restaurants, trade and transport (26%). The public sector is also characterised by high temporary employment rates (27%), which have increased since 2013. For further details, see: Eurostat. *Employees by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) - 1 000 [lfsa\_eegan2]*; and *Temporary employees by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) - 1 000 [lfsa\_etgan2]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>39</sup> The purpose of a temporary employment contract is to hire a worker for a specific period of time and for a very specific activity.

<sup>40</sup> Economic and Social Council. *La inmigración en España: efectos y oportunidades*. Madrid, 2019. <http://www.ces.es/documents/10180/5209150/Inf0219.pdf>.

<sup>41</sup> In Spain, 71% of young people have a temporary job, although the vast majority would like to have a permanent job. In the EU-8 this percentage is 47%. This fact, together with the aforementioned high unemployment rate and the high proportion of young people who neither study nor work (16% in 2018, compared to 9% in the EU-8), constitutes one of the great challenges ahead for the Spanish labour force. For further details, see: OECD. *Employment by permanency of the job*. <https://stats.oecd.org/>; and OCDE. *Share of 18-24 year-olds population not in education*

*and unemployed or inactive (NEET)*. <https://stats.oecd.org/>.

<sup>42</sup> An open-ended employment contract is characterised by the fact that there is no time limit for the provision of services. Puede ser a tiempo completo o a jornada parcial (de una duración inferior a la de los trabajadores a tiempo completo en situación comparable), y para la prestación de servicios de manera fija o discontinua

<sup>43</sup> The EU-8 is constructed as the simple average of the values for each of its countries and the EU-28 is constructed from the aggregates reported by the OECD. The simple average criterion has been used instead of a weighted average based on each country's active population in order to have a time series since 1987. For further details, see: OECD. *Employment by permanency of the job*. <https://stats.oecd.org/>.

<sup>44</sup> For further details, see: Eurostat. *Part-time employment as percentage of the total employment, by sex, age and country of birth (%) [lfsa\_eppgacobj]*; *Involuntary part-time employment as percentage of the total part-time employment, by sex and age (%) [lfsa\_eppgai]*; and *Temporary employees as percentage of the total number of employees, by sex, age and country of birth (%) [lfsa\_etpgacobj]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>45</sup> The rate of partiality among young people and those with a migrant background is very high [Fig. 11], suggesting that involuntary bias is also very high in these groups (no involuntary bias data are available for these groups).

<sup>46</sup> In 2019, the aggregate unemployment rate was 14.1%, while that of women was 16.0%. For further details, see: INE. *Encuesta de población activa. Tasas de paro por sexo y grupo de edad*. <https://www.ine.es/dynt3/inebase/es/index.htm?padre=982&capsel=986>.

<sup>47</sup> The EU-8 is constructed as the simple average of the values for the individual countries and the EU-28 is the aggregate indicator reported by the OECD. For further details, see: OECD. *Incidence of involuntary part time workers*. <https://stats.oecd.org/>.

<sup>48</sup> Comparisons of the duration of temporary contracts with the EU-8 and the EU-27 show that the increase in very short-term contracts (less than 1 month) has been a generalised trend in the rest of Europe, although the magnitude has been much higher in Spain. Moreover, in our country, the increase is also observed in contracts lasting between 1 and 3 months. For further details, see: Eurostat. *Temporary employees by sex, age and duration of the work contract (1 000) [lfsa\_etgadc]*. <https://ec.europa.eu/eurostat/data/database>. For further details for the case of Spain, see: Conde-Ruiz, J. Ignacio, *et al.* "Calendar effects in daily aggregate employment creation and destruction in Spain." *SERIEs* 10, 2019. <https://doi.org/10.1007/s13209-019-0187-7>; and Felgueroso, Florentino, *et al.* "Recent trends in the use of temporary contracts in Spain." *FEDEA, Estudios sobre la Economía Española*, n.º 2017/25, 2017. <https://documentos.fedea.net/pubs/eee/eee2017-25.pdf>.

<sup>49</sup> In recent years, there has been an increase in the number of permanent contracts signed that are necessary to create permanent employment that is maintained at the end of the year. For further details, see: Economic Cabinet of CCOO. *La falta de enmienda de la reforma laboral sigue precarizando la contratación indefinida*. Madrid, 2019. <https://www.ccoo.es/11aaciaa1507b3d2dedb16621fe6d872a000001.pdf>.

<sup>50</sup> The broadest definition of platform workers includes those who have



earned income from providing services through online platforms, where both the transaction between provider and client and the payment are done digitally through the platform, whether the work is done digitally or physically. For example, riders, freelancers or workers doing micro-tasks. For further details, see: Amazon Mechanical Turk, <https://www.mturk.com/>; and Urzi Brancati, Maria Cesira, Annarosa Pesole, and Enrique Fernández-Macías. "New evidence on platform workers in Europe. Results from the second COLLEEM survey." *European Commission JRC*, Luxembourg: Publications Office of the European Union, 2020. [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118570/jrc118570\\_jrc118570\\_final.pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118570/jrc118570_jrc118570_final.pdf).

<sup>51</sup> In 2018, Spain recorded a higher ratio of fatal and non-fatal occupational accidents per number of employees than the EU-27 average. For further details, see: Eurostat. *Fatal accidents at work by NACE Rev. 2 activity [hsw\_n2\_02]; and Non-fatal accidents at work by NACE Rev. 2 activity and sex [hsw\_n2\_01]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>52</sup> This index takes into account 20 indicators from the *European Working Conditions Survey* subdivided into three sections: work intensity, autonomy and physical risk. The EU-8 and EU-27 are constructed as the simple average of the values of the individual countries. For further details, see: Piasna, Agnieszka. "Bad jobs' recovery? European Job Quality Index 2005-2015." *European Trade Union Institute Working Paper*, n.º 6, 2017. <https://www.etui.org/sites/default/files/WP-2017.06-WEB.pdf>.

<sup>53</sup> Fernández-Crehuet Santos, José María. *La conciliación de la vida profesional, familiar y personal España en el contexto europeo*. Ediciones Pirámide, 2016.

<sup>54</sup> Eurofound. *Sexta Encuesta Europea sobre las Condiciones de Trabajo 2015. Intensidad en el trabajo*. <https://www.eurofound.europa.eu/es/data/european-working-conditions-survey>.

<sup>55</sup> Authors' own, based on microdata from the *European Skills and Jobs Survey* of CEDEFOP. For further details, see: CEDEFOP. *European Skills and Jobs Survey 2014*. <https://www.cedefop.europa.eu/en/events-and-projects/projects/european-skills-and-jobs-survey-esjs/first-european-skills-and-jobs-survey-esjs>.

<sup>56</sup> For further details, see: European Agency for Safety and Health at Work "Los riesgos psicosociales y el estrés en el trabajo." European Agency for Safety and Health at Work, <https://osha.europa.eu/es/themes/psychosocial-risks-and-stress>; Cinfa. *VII Estudio Cinfasalud: Percepción y hábitos de la población española en torno al estrés*. Madrid, 2017. <http://www.infocoponline.es/pdf/ESTUDIO-ANSIEDAD.pdf>; INE. *Nivel medio de estrés laboral según sexo y clase social basada en la ocupación de referencia. Media y desviación. Población de 15 y más años ocupada 2017*. <https://www.ine.es/dynt3/inebase/es/index.htm?type=pcaxis&path=/t15/p419/a2017/p03/&file=pcaxis>; and OECD. *Job quality. Job strain*. <https://stats.oecd.org/>.

<sup>57</sup> People do not only work for financial compensation. Work is one of the most important aspects of our daily lives and of our personal and social identity. One way to measure this non-financial component of work is through the so-called "job engagement index", which measures the extent to which a person would want to continue working if he or she did not need the money that work brings. If we look at this index, Spain appears as the country with the fourth lowest

employment engagement index out of eighteen European countries, only ahead of the Czech Republic, Slovenia and Estonia. For further details, see: Van der Wel, Kjetil A., and Knut Halvorsen. "The bigger the worse? A comparative study of the welfare state and employment commitment." *Work, Employment and Society* 29, n.º 1, 2014. <https://doi.org/10.1177/0950017014542499>.

<sup>58</sup> The graph represents the proportion of people who rate their job satisfaction as medium or high. The EU-8 and EU-27 are constructed as the simple average of the values of the individual reported countries. For further details, see: Eurostat. *Percentage of the population rating their satisfaction as high, medium or low by domain, sex, age and educational attainment level [ilc\_pw05]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>59</sup> The EU-8 and EU-22 are constructed as the simple average of the values of the individual countries. The EU-22 consists of all EU-27 countries except Malta, Croatia, Romania, Bulgaria and Cyprus due to lack of data. For further details, see: OECD. *Job quality. Job strain*. <https://stats.oecd.org/>.

<sup>60</sup> For further details, see: Anghel, Brindusa, Sara de la Rica, and Aitor Lacuesta. "The impact of the great recession on employment polarization in Spain." *SERIEs* 5, 2014. <https://doi.org/10.1007/s13209-014-0105-y>; Sebastian, Raquel. "Explaining job polarisation in Spain from a task perspective." *SERIEs* 9, 2018. <https://doi.org/10.1007/s13209-018-0177-1>; and Torrejón Pérez, Sergio. "Ciclo económico y empleo en España (1995-2014). La dinámica de los flujos y el cambio estructural." *Universidad Complutense de Madrid*, 2018. <https://eprints.ucm.es/49465/>.

<sup>61</sup> For further details, see: Acemoglu, Daron "Technical change, inequality, and the labor market." *Journal of Economic Literature* 40, n.º 1, 2002. [www.jstor.org/stable/2698593](http://www.jstor.org/stable/2698593); Andrés, Javier, and Rafael Doménech. *La era de la disrupción digital*. Barcelona: Ediciones Deusto, 2020; Autor, David H., Lawrence F. Katz, and Alan B. Krueger. "Computing Inequality: Have Computers Changed the Labor Market?" *The Quarterly Journal of Economics* 113, 1998. <https://doi.org/10.1162/003355398555874>; Autor, David H., Frank Levy, and Richard J. Murnane. "The skill content of recent technological change: an empirical exploration." *The Quarterly Journal of Economics* 118, 2003. <https://doi.org/10.1162/003355303322552801>; and Goos, Maarten, Alan Manning, and Anna Salomons. "Job Polarization in Europe." *American Economic Review* 99, n.º 2, 2009. [www.jstor.org/stable/25592375](http://www.jstor.org/stable/25592375).

<sup>62</sup> Eurofound and Comisión Europea. *European Jobs Monitor 2019: Shifts in the employment structure at regional level*. Luxembourg: Publications Office of the European Union, 2019. [https://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef19036en.pdf](https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef19036en.pdf).

<sup>63</sup> High-skilled occupations include jobs classified in groups 1, 2 and 3 of the *International Standard Classification of Occupations (ISCO-88)*. Medium-skilled occupations include jobs classified in groups 4, 7 and 8; and low-skilled occupations include jobs classified in groups 5 and 9. The EU-8 is constructed as the simple average of the values of the individual countries, and the EU-27 is the aggregate indicator reported by the European Commission. For further details, see: European Commission. *Science, research and innovation performance of the EU 2020. A fair, green and digital Europe*. Luxembourg: Publications Office of the European Union, 2020. <https://ec.europa.eu/info/sites/info/files/>



[srip/2020/ec\\_rtd\\_srip-2020-report.pdf](#).

<sup>64</sup> Much of the debate (academic and political) in recent years has been about trying to demonstrate the pre-eminence of one of these factors over the other. One position maintains that the dysfunctionality of our labour market can be explained *fundamentally* by the particularities of our productive system. The other one considers that this is *fundamentally* due to shortcomings in our regulatory framework. The very existence of the debate (and of valuable studies supporting both perspectives) demonstrates that both factors are important and therefore both must be addressed in order to solve the problem.

<sup>65</sup> For further details, see: Cabrales, Antonio, Juan José Dolado, and Ricardo Mora. "Dual employment protection and (lack of) on-the-job training: PIAAC evidence for Spain and other European countries." *SERIEs* 8, 2017. <https://doi.org/10.1007/s13209-017-0166-9>; and Dolado, Juan José, Salvador Ortigueira, and Rodolfo Stucchi. "Does dual employment protection affect TFP? Evidence from Spanish manufacturing firms." *SERIEs* 7, 2016. <https://doi.org/10.1007/s13209-016-0150-9>.

<sup>66</sup> Doménech, Rafael, Juan Ramón García, and Camilo Andrés Ulloa. "Hacia un mercado de trabajo más flexible y seguro." *Revista del Ministerio de Empleo y Seguridad Social*, 2018. [https://www.uv.es/rdomenec/DGU\\_Revista\\_MEYSS\\_134\\_2018.pdf](https://www.uv.es/rdomenec/DGU_Revista_MEYSS_134_2018.pdf).

<sup>67</sup> GDP per capita is expressed in 2015 euros adjusted for purchasing power differences. The EU-8 is constructed as the weighted average of the values of the individual countries, with active population being the reference for the calculation of weights. EU-27 is the aggregate indicator reported by Eurostat. For further details, see: Eurostat. *Active population by sex, age and citizenship (1 000) [lfsa\_agan]; Employees by sex, age and educational attainment level (1 000) [lfsa\_eegaed]; GDP and main components (output, expenditure and income) [nama\_10\_gdp]; Population on 1 January by age and sex [demo\_pjan]; Purchasing power parities (PPPs), price level indices and real expenditures for ESA 2010 aggregates [prc\_ppp\_ind]; Temporary employees by sex, age and educational attainment level (1 000) [lfsa\_etgaed]; y Unemployment by sex and age – annual data [une\_rt\_a]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>68</sup> Bentolila, Samuel, *et al.* "Two-tier labour markets in the great recession: France versus Spain." *The Economic Journal* 122, n.º 562, 2012. <http://www.jstor.org/stable/23271737>.

<sup>69</sup> Fraud in temporary contracts leads to unfair dismissal, the cost of which is 33 days' salary per year worked, which is the same as the cost of unfair dismissal in a permanent contract. This reduces incentives to choose open-ended over temporary contracts.

<sup>70</sup> This is due to the gap between employment protection for workers with permanent contracts (20 days' pay per year worked; 33 days if the dismissal is unfair) compared to temporary workers (12 days' pay per year worked for temporary contracts and contracts for work and services).

<sup>71</sup> Specifically, it refers to the need to clarify in the law the causes of objective and collective dismissal, or dismissal for economic, technical, organisational and production reasons (which in labour law are called ETOP causes), in order to avoid an increase in legal uncertainty.

<sup>72</sup> In this respect, the recent ruling of the Plenary of the Social Chamber

of the Supreme Court on the impossibility of linking the temporary contract for work or services to the existence of a contract is noteworthy. This judgement establishes the dissociation of the duration of contracts for works or services from commercial contracts between companies, unless such contracts do not represent the usual activity of the company and have sufficient autonomy and substance to justify their temporal delimitation. In practice, this means that workers who continuously carry out the same work on contracts are made permanent. For further details, see: Social Chamber of the Supreme Court. *Sentencia 1137/2020, de 29 de diciembre de 2020: imposibilidad de vincular el contrato temporal de obra o servicio a la existencia de una contrata*. Madrid, 2020. <http://www.poderjudicial.es/search/openDocument/c58363f2c4f87938>.

<sup>73</sup> The EU-8 and EU-27 are constructed as the simple average of the values of the individual countries. The EU-27 does not include Germany due to lack of data. The EU-27 does not include Germany and Luxembourg in the variable "conversion rate from temporary to permanent employment" and Germany, Luxembourg, Malta and Romania in the variable "transition from temporary employment to unemployment" due to lack of data. For further details, see: Eurostat. *Transition from fixed term contracts to permanent contracts by sex and age - annual averages of quarterly transitions, estimated probabilities [lfsi\_long\_e05 and lfsi\_long\_e09]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>74</sup> OECD. *Negotiating Our Way Up: Collective Bargaining in a Changing World of Work*. Paris: OECD Publishing, 2019. <https://doi.org/10.1787/1fd2da34-en>.

<sup>75</sup> The fact that passive and active employment policies are not managed by the same administration may affect the incentives to design, implement and evaluate these policies, reducing their potential effectiveness.

<sup>76</sup> Passive policies mainly include unemployment benefits. The "other active policies" include spending by public employment services, subsidies and bonuses for job creation in the private sector, measures to improve the employability of people with disabilities and aid for unemployed people setting up new businesses. The EU-8 and EU-22 are constructed as the simple average of the values of the individual countries. The EU-22 consists of all EU-27 countries except Malta, Croatia, Romania, Bulgaria and Cyprus due to lack of data. For further details, see: OECD. *Public expenditure and participant stocks on LMP*. <https://stats.oecd.org/>; and OCDE. *Coverage and classification of OECD data for public expenditure and participants in labour market programmes*. Paris: OECD Publishing, 2015. <http://www.oecd.org/els/emp/Coverage-and-classification-of-OECD-data-2015.pdf>.

<sup>77</sup> Several studies show that hiring bonuses do not provide incentives for the creation of stable employment. In many cases, these subsidised contracts are used to fill positions that were already intended to be offered and which, when the period in which the company benefits from the subsidies ends, are terminated or converted back into temporary contracts. For further details, see: AIREF. *Estudio programa políticas activas de empleo. Evaluación del gasto público 2018*. Madrid, 2019. [https://www.airef.es/wp-content/uploads/2019/06/Estudio3-PAE/protegido\\_Proyecto\\_03.pdf](https://www.airef.es/wp-content/uploads/2019/06/Estudio3-PAE/protegido_Proyecto_03.pdf); Cebrián López, Inmaculada. "La contratación temporal en España y los efectos de la reforma de 1997." *Gaceta Sindical*, 2005. <https://www.ccoo.es/c81d2e75c99cdea858715ae38932b279000001.pdf>; and Toharia Cortés, Luis (dir.). *El efecto*

de las bonificaciones de las cotizaciones a la Seguridad Social para el empleo en la afiliación a la Seguridad Social: un intento de evaluación macroeconómica, microeconómica e institucional. Department of Labour and Immigration, 2008. [http://www.seg-social.es/wps/wcm/connect/wss/62d7c3ea-0908-4706-8dfa-6c2607661a8f/F81\\_07N.pdf?MOD=AJPERES&CVID=](http://www.seg-social.es/wps/wcm/connect/wss/62d7c3ea-0908-4706-8dfa-6c2607661a8f/F81_07N.pdf?MOD=AJPERES&CVID=).

<sup>78</sup> AIReF. *Estudio programa políticas activas de empleo. Evaluación del gasto público 2018*. Madrid, 2019. [https://www.airef.es/wp-content/uploads/2019/06/Estudio3-PAE/protegido\\_Proyecto\\_03.pdf](https://www.airef.es/wp-content/uploads/2019/06/Estudio3-PAE/protegido_Proyecto_03.pdf).

<sup>79</sup> There are a series of obstacles of an administrative nature (for example, the opening of a new Personalised Insertion Itinerary) that hinder mobility between autonomous communities, due to the fact that each autonomous community organises its policies and services according to the resources available and with criteria that, on occasions, are not shared by other regions. In fact, in the first quarter of 2020, 4 out of 5 unemployed had not changed residence in the last 5 years. For further details, see: INE. *Estadística de movilidad laboral y geográfica. Parados por comunidad autónoma, sexo y según el tiempo de residencia en el municipio*. [https://www.ine.es/dyngs/INEbase/operacion.htm?c=Estadistica\\_C&cid=1254736176909&menu=resultados&secc=1254736195112&idp=1254735976597](https://www.ine.es/dyngs/INEbase/operacion.htm?c=Estadistica_C&cid=1254736176909&menu=resultados&secc=1254736195112&idp=1254735976597).

<sup>80</sup> For further details, see: Card, David, Jochen Kluge, and Andrea Weber. "Active labour market policy evaluations: a meta-analysis." *The Economic Journal* 120, n.º 548, 2010. <https://doi.org/10.1111/j.1468-0297.2010.02387.x>; Card, David, Jochen Kluge, and Andrea Weber. "What works? A meta-analysis of recent active labor market program evaluations." *Journal of the European Economic Association* 16, n.º 3, 2018. <https://academic.oup.com/jeea/article/16/3/894/4430618>; and Dolado, Juan José, *et al.* "Youth labour market performance in Spain and its determinants: a micro-level perspective." *OECD Economics Department Working Papers*, n.º 1039, Paris: OECD Publishing, 2016. <https://doi.org/10.1787/5k487n5bfz5c-en>.

<sup>81</sup> The EU-8 average is constructed as the simple average of the values of the individual countries. EU-27 is the aggregate indicator reported by Eurostat. For further details, see: Eurostat. *Long-term unemployment by sex - annual data [une\_ltu\_a]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>82</sup> For further details, see: Anghel, Brindusa, *et al.* "Income, consumption and wealth inequality in Spain." *SERIEs* 9, 2018. <https://doi.org/10.1007/s13209-018-0185-1>; and Ayala, Luis, *et al.* "Social needs in Spain." *Social Observatory of "La Caixa"*, Palma: "La Caixa" Banking Foundation Publishing, 2019. [https://observatoriosocialcaixa.org/documents/22890/166850/iNeSo\\_2\\_Labour%20Market\\_June.pdf/dccd2acb-0ace-a2fd-910c-bdfd223c5bed](https://observatoriosocialcaixa.org/documents/22890/166850/iNeSo_2_Labour%20Market_June.pdf/dccd2acb-0ace-a2fd-910c-bdfd223c5bed).

<sup>83</sup> For further details, see: Cabrales, Antonio, Juan José Dolado, and Ricardo Mora. "Dual employment protection and (lack of) on-the-job training: PIAAC evidence for Spain and other European countries." *SERIEs* 8, 2017. <https://doi.org/10.1007/s13209-017-0166-9>; Dolado, Juan José, Salvador Ortigueira, and Rodolfo Stucchi. "Does dual employment protection affect TFP? Evidence from Spanish manufacturing firms." *SERIEs* 7, 2016. <https://doi.org/10.1007/s13209-016-0150-9>; and García-Pérez, J. Ignacio, Ioana Marinescu, and Judit Vall Castello. "Can fixed-term contracts put low skilled youth on a better career path? Evidence from Spain." *Economic Journal* 129, 2018. <https://doi.org/10.1111/econj.12621>.

<sup>84</sup> Cantó, Olga, Inmaculada Cebrián, and Gloria Moreno. "Household job insecurity and youth living arrangements in Spain: evidence for a complete business cycle." *ECINEQ Working Paper*, n.º 499, 2019. <http://www.ecineq.org/milano/WP/ECINEQ2019-499.pdf>.

<sup>85</sup> Ibáñez Garzarán, Zyab, *et al.* "Empleo y maternidad: obstáculos y desafíos a la conciliación de la vida laboral y familiar." Barcelona: *IGOP-FUNCAS*, 2015. <https://igop.uab.cat/wp-content/uploads/2016/01/Informe-FUNCAS-IGOP.pdf>.

<sup>86</sup> For further details, see: Arnetz, Bengt B., *et al.* "Neuroendocrine and immunologic effects of unemployment and job insecurity." *Psychotherapy and Psychosomatics* 55, 1991. <https://www.jstor.org/stable/45113918>; Clark, Andrew E., and Andrew J. Oswald, "Unhappiness and Unemployment." *Economic Journal* 104, 1994. <https://www.jstor.org/stable/2234639>; Hollander, Anna-Clara, *et al.* "Hospitalisation for depressive disorder following unemployment - differentials by gender and immigrant status: a population-based cohort study in Sweden." *Journal of Epidemiology and Community Health* 67, 2013. <https://www.jstor.org/stable/43281630>; and Mendolia, Silvia. "The impact of husband's job loss on partners' mental health." *Review of Economics of the Household* 12, 2014. <https://doi.org/10.1007/s11150-012-9149-6>.

<sup>87</sup> While total employment fell by 3% in 2020, employment among young people (16-24) and those on temporary contracts fell by 15% and 11%, respectively. For further details, see: INE. *Encuesta de población activa. Ocupados por tipo de contrato, por nacionalidad y por sexo*. <https://www.ine.es/dynt3/inebase/es/index.htm?padre=982&capsel=985>.

<sup>88</sup> This mechanism has facilitated the survival of thousands of companies and has provided additional security for many workers, as it ensures the maintenance of the job and the company's commitment to maintain employment for up to 6 months after the resumption of activity. For further details, see: Official State Gazette. *Real Decreto-ley 8/2020, de 17 de marzo, de medidas urgentes extraordinarias para hacer frente al impacto económico y social del COVID-19. Artículo 6*. Madrid, 2020. <https://www.boe.es/boe/dias/2020/03/18/pdfs/BOE-A-2020-3824.pdf>.

<sup>89</sup> In the first half of 2020, the number of hours worked fell by 25%, while employment losses were 8%. This is a milestone compared to previous recessions, in which the drop in hours and people was of a similar magnitude. For further details, see: INE. *Contabilidad nacional trimestral de España: principales agregados (CNTR). Empleos por ramas de actividad*. [https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736164439&menu=ultiDatos&idp=1254735576581](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736164439&menu=ultiDatos&idp=1254735576581).

<sup>90</sup> The 2008-09 crisis includes from the third quarter of 2008 to the fourth quarter of 2009; the 2011-2012 crisis, from the first quarter of 2011 to the second quarter of 2013; and the COVID-19 crisis, from the second to the fourth quarter of 2020. For further details, see: INE. *Contabilidad nacional trimestral de España: principales agregados (CNTR). PIB pm Oferta (Índices de volumen encadenado); y Empleos por ramas de actividad*. [https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736164439&menu=ultiDatos&idp=1254735576581](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736164439&menu=ultiDatos&idp=1254735576581).

<sup>91</sup> The MECUIDA Plan allows for the flexibilisation of the working day in order to exercise the duty of care towards the spouse or relatives by

blood up to the second degree for exceptional circumstances related to COVID-19. For further details, see: Official State Gazette. *Real Decreto-ley 8/2020, de 17 de marzo, de medidas urgentes extraordinarias para hacer frente al impacto económico y social del COVID-19. Artículo 6*. Madrid, 2020. <https://www.boe.es/boe/dias/2020/03/18/pdfs/BOE-A-2020-3824.pdf>.

<sup>92</sup> Telework in Spain was a relatively minority practice until the emergence of COVID-19. In 2019, only 8% of employed people used the option of working from home, either regularly or occasionally (compared to 15% in the Eurozone). For further details, see: Anghel, Brindusa, Marianela Cozzolino, and Aitor Lacuesta. "El teletrabajo en España." *Artículos Analíticos, Boletín Económico*, n.º 2/2020, Banco de España, 2020. <https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/InformesBoletinesRevistas/ArticulosAnaliticos/20/T2/descargar/Fich/be2002-art13.pdf>; Brás, Ana, and Lukas Schaefer. "La COVID-19 da un empujón al teletrabajo." *Caixabank Research*, 2020. <https://www.caixabankresearch.com/es/economia-y-mercados/mercado-laboral-y-demografia/covid-19-da-empujon-al-teletrabajo>; and Eurostat. *Employed persons working from home as a percentage of the total employment, by sex, age and professional status (%) [lfsa\_ehomp]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>93</sup> Among the measures approved to mitigate the effects of the pandemic on the working population, the introduction of an exceptional unemployment benefit due to lack of activity for people integrated in the Special System for Domestic Employees of the General Social Security Scheme stands out. For further details, see: Official State Gazette. *Real Decreto-ley 11/2020, de 31 de marzo, por el que se adoptan medidas urgentes complementarias en el ámbito social y económico para hacer frente al COVID-19. Artículos 30, 31, 32, y 33*. Madrid, 2020. <https://www.boe.es/boe/dias/2020/04/01/pdfs/BOE-A-2020-4208.pdf>.

<sup>94</sup> This lower take-up of teleworking compared to the European benchmark countries is related to "a face-to-face business culture" and, to a lesser extent, to a sectoral composition biased towards economic activities where remote working is more difficult to carry out. In fact, the bulk of telework during confinement was concentrated in those enterprises and service sector jobs that were most technology intensive. For further details, see: Eurofound. *Living, working and COVID-19 dataset*. Dublin, 2020. <http://eurofound.link/covid19data>; OECD. *Capacity for remote working can affect shutdowns' costs differently across places*. OCDE COVID-19 Policy Note, 2020. [https://read.oecd-ilibrary.org/view/?ref=134\\_134296-u9iq2m67ag&title=Capacity-for-remote-working-can-affect-lockdown-costs-differently-across-places](https://read.oecd-ilibrary.org/view/?ref=134_134296-u9iq2m67ag&title=Capacity-for-remote-working-can-affect-lockdown-costs-differently-across-places); and Sostero, Matteo, et al. "Teleworkability and the COVID-19 crisis: a new digital divide?" *JRC Working Papers Series on Labour, Education and Technology*, n.º 121193, 2020. <https://ec.europa.eu/jrc/sites/jrcsh/files/jrc121193.pdf>.

<sup>95</sup> INE. *Encuesta de Población Activa. Tasas de paro por sexo y grupo de edad*. <https://www.ine.es/dynt3/inebase/es/index.htm?padre=982&capsel=986>.

<sup>96</sup> INE. *Encuesta de Población Activa. Parados por sexo y grupo de edad. Valores absolutos y porcentajes respecto del total de cada sexo*. <https://www.ine.es/dynt3/inebase/es/index.htm?padre=982&capsel=986>.

<sup>97</sup> With data as of 31 March 2021, there were over 740,000 persons in ERTE (layoff). For further details, see: Department of Social Inclusion, Social Security and Migration. "El mes de marzo termina con 743.628

personas en ERTE." Department for Inclusion, Social Security and Migration, <https://prensa.inclusion.gob.es/WebPrensaInclusion/noticias/seguridadsocial/detalle/4016>.

<sup>98</sup> The beneficiaries of the cessation of activity benefits include those in self-employment who have been forced to suspend their activity temporarily due to an administrative decision related to the control of the pandemic, the benefits compatible with the activity, the extraordinary benefits for low income and the aid for seasonal self-employed, in addition to the extraordinary benefits whose application period has already ended. Based on data as of 31 March 2021, there were 470,000 self-employed persons receiving a termination benefit. For further details, see: Department of Social Inclusion, Social Security and Migration. "La Seguridad Social abona 435 millones en ayudas por la pandemia a 470.000 autónomos." Department for Inclusion, Social Security and Migration, <https://prensa.inclusion.gob.es/WebPrensaInclusion/noticias/seguridadsocial/detalle/4013>.

<sup>99</sup> For further details, see: Official State Gazette. *Real Decreto-ley 5/2021, de 12 de marzo, de medidas extraordinarias de apoyo a la solvencia empresarial en respuesta a la pandemia de la COVID-19*. Madrid, 2021. <https://www.boe.es/boe/dias/2021/03/13/pdfs/BOE-A-2021-3946.pdf>; and Government of Spain. *Recovery, Transformation and Resilience Plan*. Madrid, 2021. <https://www.lamoncloa.gob.es/presidente/actividades/Documents/2021/130421-%20Plan%20de%20recuperacion%2C%20Transformacion%20y%20Resiliencia.pdf>.

<sup>100</sup> Data published before 10 April 2021. The FUNCAS consensus reflects the estimates of the main national analysts. For further details, see: Banco de España. "Proyecciones macroeconómicas." Banco de España, [https://www.bde.es/bde/es/areas/analisis-economi/analisis-economi/proyecciones-mac/Proyecciones\\_macroeconomicas.html](https://www.bde.es/bde/es/areas/analisis-economi/analisis-economi/proyecciones-mac/Proyecciones_macroeconomicas.html); European Commission. *Statistical Annex. European Economic Forecast. Autumn 2020*. Brussels, 2020. [https://ec.europa.eu/info/sites/info/files/economy-finance/ecfin\\_forecast\\_autumn\\_2020\\_statistical-annex\\_en.pdf](https://ec.europa.eu/info/sites/info/files/economy-finance/ecfin_forecast_autumn_2020_statistical-annex_en.pdf); International Monetary Fund. *Spain 2020 Article IV Consultation*. Washington, D.C., 2020. <https://www.imf.org/en/Publications/CR/Issues/2020/11/12/Spain-2020-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-Executive-49883>; FUNCAS. *Panel de previsiones de la economía española. Marzo 2021*. Madrid, 2021. <https://www.funcas.es/wp-content/uploads/2021/03/PP2103.pdf>; OECD. *OECD Economic Outlook, Volume 2020 Issue 2*. Paris: OECD Publishing, 2020. <https://doi.org/10.1787/39a88ab1-en>; and Department of Economic Affairs and Digital Transformation. *Presentación Escenario Macro*. Madrid, 2021. [https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/asuntos-economicos/Documents/2021/090421-Presentaci%C3%B3n\\_previsiones\\_macro.pdf](https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/asuntos-economicos/Documents/2021/090421-Presentaci%C3%B3n_previsiones_macro.pdf).

<sup>101</sup> The working-age population considered here ranges from 16 (the legal minimum age) to 64, unlike the one used in the analysis of the recent past which also included the 15-year-old population to facilitate international historical comparison. For further details, see: Eurostat. *Population on 1 January by age and sex [demo\_pjan]*; and *Population on 1st January by age, sex and type of projection [proj\_19np]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>102</sup> It is estimated that, between 2020 and 2050, the volume of net migration in Spain will exceed 6 million people, which represents an average annual flow of about 197,000 people, similar to the average

observed between 2002 and 2018. For further details, see: Eurostat. *Population on 1st January by age, sex and type of projection [proj\_19np]*; *Immigration by age and sex [migr\_imm8]*; and *Emigration by age and sex [migr\_emi2]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>103</sup> Due to this demographic effect alone, the country would go from growing at rates of 2% (average for the period 1996-2018) to 1%.<sup>111</sup> If we add to this scenario of a smaller working-age population<sup>112</sup> a productivity dynamic similar to that observed over the last few decades, then our economic growth could be even lower: with an average of between 0.3% and 1.1% the period 2023-50.<sup>113</sup> The advance in per capita income would be of a similar order [Fig. 26], something that would distance us from the most advanced countries in Europe.

<sup>104</sup> Eurostat projections foresee a decline in the ratio of working age population to total population of 11 percentage points over the next 30 years, from 65% in 2020 to 54% in 2050. The EU-8 is constructed as the weighted average of the values of the individual countries, with active population being the reference for the calculation of weights. For further details, see: Eurostat. *Population on 1 January by age and sex [demo\_pjan]*; and *Population on 1st January by age, sex and type of projection [proj\_19np]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>105</sup> The EU-8 is constructed as the weighted average of the values of the individual countries, with working age population being the reference for the calculation of weights. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]*; and *Population on 1 January by age and sex [demo\_pjan]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>106</sup> Department of Education and Vocational Training. *Serie históricas de estudiantes universitarios desde el curso 1985- 1986. Total SUE. Egresados por tipo y modalidad de la universidad, nivel de estudio, sexo y rama de enseñanza. Curso 2018-2019*. [http://estadisticas.mecd.gob.es/EducaDynPx/educabase/index.htm?type=pcaxis&path=/Universitaria/Alumnado/Nueva\\_Estructura/Serie/TotalSUE/&file=pcaxis](http://estadisticas.mecd.gob.es/EducaDynPx/educabase/index.htm?type=pcaxis&path=/Universitaria/Alumnado/Nueva_Estructura/Serie/TotalSUE/&file=pcaxis).

<sup>107</sup> Torre, Margarita. "Structural and individual Determinants of Sex Segregation in blue-Collar occupations." *Gender & Society* 33, n.º 3, 2019. <https://doi.org/10.1177/0891243219830974>.

<sup>108</sup> Platt, Lucinda, and Javier Polavieja. "Saying and Doing Gender: Intergenerational Transmission of Attitudes towards the Sexual Division of Labour." *European Sociological Review* 32, 2016. <https://doi.org/10.1093/esr/jcw037>.

<sup>109</sup> See: De Quinto, Alicia, Laura Hospido, and Carlos Sanz. "The Child Penalty in Spain." *Banco de España, Documentos Ocasionales*, n.º 2017, 2020. <https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSerias/DocumentosOcasionales/20/Files/do2017e.pdf>; and de la Rica, Sara, Lucía Gorjón, and Odra Quesada. "Woman and mother: double employment penalty?" *ISEAK Working Paper*, n.º 2020/2, 2020. <https://iseak.eu/wp-content/uploads/2020/10/Woman-and-mother-double-employment-penalty-1.pdf>.

<sup>110</sup> In this regard, it will be necessary to continue moving towards effective policies that implement co-responsibility and that, following Directive 2019/1158, guarantee the reconciliation of family, personal and professional life (ninth pillar of European social rights). For further details, see: Official State Gazette. *Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and carers and repealing Council Directive 2010/18/*

*EU* Madrid, 2019. <https://www.boe.es/doue/2019/188/L00079-00093.pdf>; and European Commission. "El pilar europeo de derechos sociales en 20 principios." European Commission, [https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles\\_es](https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_es).

<sup>111</sup> Martínez-Mazza, Rodrigo. "Mom, Dad: I'm staying. Initial labor market conditions, housing markets, and welfare." *IEB Working Paper*, n.º 2020/13, 2020. <https://ieb.ub.edu/wp-content/uploads/2020/12/Doc2020-14.pdf>.

<sup>112</sup> Currie, Janet, and H. Schwandt. "Short- and Long-term Effects of Unemployment on Fertility." *Proceedings of the National Academy of Sciences of the United States of America* 111, 2014. <https://doi.org/10.1073/pnas.1408975111>.

<sup>113</sup> Among the main reasons for the low non-financial commitment of young Spaniards to employment are low levels of education and long periods of unemployment. For further details, see: Demel, Simona, Petr Mariel, and Luis Miller. "Education and the Non-financial Employment Commitment in Times of Economic Recession Among the Youth." *Social Indicators Research* 140, 2018. <https://doi.org/10.1007/s11205-017-1789-8>.

<sup>114</sup> Anghel, Brindusa, and Aitor Lacuesta. "Envejecimiento, productividad y situación laboral." *Artículos Analíticos, Boletín Económico*, n.º 1/2020, Banco de España, 2020. <https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/InformesBoletinesRevistas/ArticulosAnaliticos/20/T1/descargar/Fich/be2001-art2.pdf>.

<sup>115</sup> Hudomiet, Péter, et al. "The effects of job characteristics on retirement." *Journal of Pension Economics and Finance*, 2020. <https://doi.org/10.1017/S1474747220000025>.

<sup>116</sup> Fundación Adecco, and Fundación SERES. *Libro Blanco. Talento Sénior*. Madrid, 2020. <http://www.fundacionadecco.org/talentosenior/talentosenior.pdf>.

<sup>117</sup> For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]*; *Population on 1 January by age and sex [demo\_pjan]*; and *Population on 1st January by age, sex and type of projection [proj\_19np]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>118</sup> This implies a slightly higher employment rate in 2050 than maintaining the 1995-2019 trend (78% in 2050). Under this scenario of an increase in the employment rate to 80% in 2050, average employment growth between 2022-50 would be 0.2% per annum, well below the 2.0% recorded between 1996 and 2019 but higher than if the employment rate were to remain stable at 65% (-0.5% per annum)

<sup>119</sup> For further details, see chapter 1 and the *Methodological note* number V.

<sup>120</sup> The EU-8 is constructed as the weighted average of the values of the individual countries, with working age population being the reference for the calculation of weights. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]*; *Population on 1 January by age and sex [demo\_pjan]*; and *Population on 1st January by age, sex and type of projection [proj\_19np]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>121</sup> For further details, see: Eurostat. *Employment by sex, age and*



citizenship (1 000) [lfsa\_egan]; Population on 1 January by age and sex [demo\_pjan]; and Population on 1st January by age, sex and type of projection [proj\_19np]. <https://ec.europa.eu/eurostat/data/database>.

<sup>122</sup> This is Eurostat's baseline scenario projection for Spain's migration balance (average for the period 2021-50). For further details, refer to the *Methodologic note* number III. For further details, see: Eurostat. *Assumptions for fertility rates by age, and type of projection [proj\_19nanmig]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>123</sup> This is the projection of Eurostat's favourable scenario (*higher immigration*) for Spain's migration balance (average for the period 2021-50). For further details, see: Eurostat. *Assumptions for net migration by age, sex and type of projection [proj\_19nanmig]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>124</sup> The empirical literature has not found a significant effect of immigration on employment, either positive or negative. Although there may be an initial *shock*, beyond that, any effects, positive or negative, are reduced. In the medium to long run, the evidence for the US shows that the arrival of immigrants leads to increases in the productive capacity of the economy by stimulating investment and promoting productive specialisation, with little impact on the employment opportunities of native workers. Indeed, the counties where immigration was most important between 1850 and 1920 enjoy today, almost a century later, higher per capita incomes and levels of urbanisation, lower poverty and unemployment, and better educational outcomes. For further details, see: D'Albis, Hippolyte, Ekram Boubtane, and Dramane Coulibaly. "Macroeconomic evidence suggests that asylum seekers are not a "burden" for Western European countries." *Science Advances* 4, n.º 6, 2018. <https://advances.sciencemag.org/content/4/6/eaq0883>. For the case of Spain, see: Carrasco, Raquel, Juan F. Jimeno, and A. Carolina Ortega. "The effect of immigration on the labor market performance of native-born workers: some evidence for Spain." *Journal of Population Economics* 21, 2008. <https://link.springer.com/article/10.1007/s00148-006-0112-9>; Fernández-Huertas Moraga, Jesús. "Inmigración y políticas migratorias en España." *FEDEA, Estudios sobre la Economía Española*, n.º 2021/10, 2021. <https://documentos.fedea.net/pubs/eee/eee2021-10.pdf>; and González, Libertad, and Francesc Ortega. "How do very open economies adjust to large immigration flows? Evidence from Italian Regions." *Labour Economics* 18, n.º 1, 2011. <https://doi.org/10.1016/j.labeco.2010.06.001> For medium- and long-term effects in the United States, see: Peri, Giovanni. "The Effect Of Immigration On Productivity: Evidence From U.S. States." *Review of Economics and Statistics* 94, n.º 1, 2012. [https://doi.org/10.1162/REST\\_a\\_00137](https://doi.org/10.1162/REST_a_00137); Peri, Giovanni, and Chad Sparber. "Task Specialization, Immigration, and Wages." *American Economic Journal: Applied Economics* 1, n.º 3, 2009. <https://www.aeaweb.org/articles?id=10.1257/app.1.3.135>; and Sequeira, Sandra, Nathan Nunn, and Nancy Qian. "Immigrants and the Making of America." *Review of Economic Studies* 87, n.º 1, 2020. <https://doi.org/10.1093/restud/rdz003>.

<sup>125</sup> INE. *Principales series de población desde 1998. Población extranjera*. <https://www.ine.es/dynt3/inebase/es/index.htm?type=pcaxis&path=t20/e245/p08/&file=pcaxis&dh=0&capsel=1>.

<sup>126</sup> The total employment rate is defined as the ratio of total employed persons to the population aged 16-64. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]; y Population on 1 January by age and sex [demo\_pjan]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>127</sup> In 2019, the activity rate of the foreign population was 50% for those aged 16-24 and 39% for those aged 55 and over, while these rates were 35% and 26%, respectively, for the Spanish population. Similarly, the employment rate of the foreign population was 34% for those aged between 16 and 24, and 33% for those aged 55 and over, while these rates were 23% for the Spanish population. For further details, see: INE. *Encuesta de Población Activa. Ocupados por nacionalidad, sexo y grupo de edad; Población por nacionalidad, sexo y grupo de edad; y Tasa de actividad por nacionalidad, sexo y grupo de edad*. [https://www.ine.es/dyngs/INEbase/operacion.htm?c=Estadistica\\_C&cid=1254736176918&menu=resultados&secc=1254736195128&idp=1254735976595](https://www.ine.es/dyngs/INEbase/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&secc=1254736195128&idp=1254735976595).

<sup>128</sup> The behaviour and characteristics of the population of immigrant origin in Spain have meant that, until now, their pressure on the welfare state has not been greater than that of those born in Spain. Immigrants represent a smaller proportion of recipients of unemployment protection (only 9.7% of the total) and, in contrast to national beneficiaries, receive comparatively more contributory benefits than welfare benefits. Likewise, the requirements of continuous residence in the country or the autonomous community in order to receive some welfare benefits, such as minimum income, mean that their participation in these benefits is also relatively lower, since it is common for foreigners to change residence more quickly than Spaniards when faced with a situation of unemployment. On the other hand, the small number of immigrants over 65 years of age also means that very few of them receive retirement pensions. For further details, see: Economic and Social Council. *La inmigración en España: efectos y oportunidades*. Madrid, 2019. <http://www.ces.es/documents/10180/5209150/Inf0219.pdf>; and Muñoz de Bustillo Llorente, Rafael, and Rafael Grande Martín. "Inmigración y Estado de bienestar en España." In Arango, Joaquín, Ramón Mahía, David Moya, and Elena Sánchez-Montijano (dirs.). *La inmigración en el ojo del huracán*. Barcelona: Anuario CIDOB de la Inmigración, 2017. 206-231. [https://www.cidob.org/es/publicaciones/serie\\_de\\_publicacion/anuario\\_cidob\\_de\\_la\\_inmigracion/la\\_inmigracion\\_en\\_el\\_ojo\\_del\\_huracan\\_anuario\\_cidob\\_de\\_la\\_inmigracion\\_2017](https://www.cidob.org/es/publicaciones/serie_de_publicacion/anuario_cidob_de_la_inmigracion/la_inmigracion_en_el_ojo_del_huracan_anuario_cidob_de_la_inmigracion_2017).

<sup>129</sup> Economic and Social Council. *La inmigración en España: efectos y oportunidades*. Madrid, 2019. <http://www.ces.es/documents/10180/5209150/Inf0219.pdf>.

<sup>130</sup> For further details, see: Anghel, Brindusa, Sara de la Rica, y Aitor Lacuesta "The impact of the great recession on employment polarization in Spain". *SERIEs* 5, 2014. <https://doi.org/10.1007/s13209-014-0105-y>; and Sebastian, Raquel. "Explaining job polarisation in Spain from a task perspective." *SERIEs* 9, 2018. <https://doi.org/10.1007/s13209-018-0177-1>.

<sup>131</sup> For further details, see: Autor, David, H. Frank Levy, and Richard J. Murnane. "The skill content of recent technological change: an empirical exploration." *The Quarterly Journal of Economics* 118, 2003. <https://doi.org/10.1162/003355303322552801>; and Goos, Maarten, Alan Manning, and Anna Salomons. "The Changing Task Composition of the US Labor Market: An Update of Autor, Levy, and Murnane (2003)." *MIT Working Paper*, 2013. <https://economics.mit.edu/files/11661>.

<sup>132</sup> Hidalgo, Manuel Alejandro. *El empleo del futuro. Un análisis del impacto de las nuevas tecnologías en el mercado laboral*. Barcelona: Ediciones Deusto, 2018.

<sup>133</sup> IBM Watson, <https://www.ibm.com/watson>.

<sup>134</sup> For further details, see: LawGeex, <https://www.lawgeex.com/>; and LegalRobot, <https://legalrobot.com/>.

<sup>135</sup> Google translator, <https://translate.google.es/?hl=es>.

<sup>136</sup> APIS COR, <https://www.apis-cor.com/>.

<sup>137</sup> Narrative Science, <https://narrativescience.com/>.

<sup>138</sup> For further details, see: Forrester. *The Future of Jobs, 2027: Working Side by Side with Robots*. 2016. <https://www.forrester.com/report/The+Future+Of+Jobs+2027+Working+Side+By+Side+With+Robots/-/RES119861>; Manyika, James, et al. "Jobs Lost, Jobs Gained: Workforce Transitions in a time of automation." *McKinsey Global Institute*, 2017. <https://www.mckinsey.com/~media/BAB489A30B724BECB5DEDC41E9BB9FAC.ashx>; PriceWaterhouseCoopers. *Will robots steal our jobs? The potential impact of automation on the UK and other major economies*. 2017. <https://www.pwc.co.uk/economic-services/ukey/pwcukey-section-4-automation-march-2017-v2.pdf>; and World Economic Forum. *The Future of Jobs*. Geneva, 2016. [http://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf).

<sup>139</sup> The EU-8 and the EU-27 are constructed as the simple average of the values of the individual countries. Due to data availability, the EU-27 does not include all countries. In Arntz, Gregory and Zierahn Bulgaria, Croatia, Cyprus, Hungary, Latvia, Luxembourg, Malta, Portugal, Romania, Greece, Slovenia and Lithuania do not join. Nedelkoska and Quintini do not include Bulgaria, Croatia, Hungary, Latvia, Luxembourg, Malta, Portugal and Romania. In Josten and Lordan, Bulgaria, Luxembourg, Malta, Romania and Slovenia are not included. The PriceWaterhouseCoopers study does not include Bulgaria, Croatia, Estonia, Hungary, Latvia, Luxembourg, Malta, Portugal and Romania. For further details, see: Arntz, Melanie, Terry Gregory, and Ulrich Zierahn. "Revisiting the risk of automation." *Economics Letters* 159, 2017. <https://doi.org/10.1016/j.econlet.2017.07.001>; Doménech, Rafael, et al. "¿Cuán vulnerable es el empleo en España a la revolución digital?" *BBVA Research, Observatorio económico*, 2018. <https://www.bbva.com/publicaciones/cuan-vulnerable-es-el-empleo-en-espana-a-la-revolucion-digital/>; Frey, Carl Benedikt, and Michael A. Osborne. "The future of employment: how susceptible are jobs to computerisation?" *Technological Forecasting and Social Change* 114, 2017. <https://doi.org/10.1016/j.techfore.2016.08.019>; Josten, Cecily, and Grace Lordan. "Robots at work: automatable and non automatable jobs." *IZA Discussion Paper Series*, n.º 12520, 2019. <http://ftp.iza.org/dp12520.pdf>; Morron Salmeron, Adrià. "¿Llegará la Cuarta Revolución Industrial a España?" *Informe Mensual Caixabank*, n.º 398, 2016. <https://www.caixabankresearch.com/es/economia-y-mercados/mercado-laboral-y-demografia/llegara-cuarta-revolucion-industrial-espana>; Nedelkoska, Ljubica, and Glenda Quintini. "Automation, skills use and training." *OECD Social, Employment and Migration Working Papers*, n.º 202, Paris: OECD Publishing, 2018. <https://doi.org/10.1787/2e2f4eea-en>; and PriceWaterhouseCoopers. *Will robots steal our jobs? An international analysis of the potential long term impact of automation*. 2018. <https://www.pwc.co.uk/economic-services/assets/international-impact-of-automation-feb-2018.pdf>.

<sup>140</sup> For further details, see, among others: Autor, David H., and Anna Salomons. "Is Automation Labor-Displacing? Productivity Growth, Employment, and the Labor Share." *Brookings Papers on Economic Activity*, 2018. <https://doi.org/10.3386/w24871>; Dauth, Wolfgang, et al. "German Robots - The Impact of Industrial Robots on Workers."

*CEPR Discussion Paper*, n.º DP12306, 2017. <https://ssrn.com/abstract=3039031>; Graetz, Georg, and Guy Michaels. "Robots at work". *The Review of Economics and Statistics*, n.º 5, 2018. [https://www.mitpressjournals.org/doi/pdf/10.1162/rest\\_a\\_00754](https://www.mitpressjournals.org/doi/pdf/10.1162/rest_a_00754); and Nübler, Irmgard. "New technologies: A jobless future or golden age of job creation?" *International Labour Office, Working paper*, n.º 13, 2016. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms\\_544189.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_544189.pdf).

<sup>141</sup> Andrés, Javier, and Rafael Doménech. *La era de la disrupción digital*. Barcelona: Ediciones Deusto, 2020.

<sup>142</sup> Data extracted from the Rafael del Pino Foundation database, constructed by Leandro Prados de la Escosura. For further details, see: Fundación Rafael del Pino. *Historical perspective*. [https://frdelpino.es/investigacion/category/01\\_ciencias-sociales/01\\_economia-espanola/04\\_economia-espanola-perspectiva-historica/](https://frdelpino.es/investigacion/category/01_ciencias-sociales/01_economia-espanola/04_economia-espanola-perspectiva-historica/); and Prados de la Escosura, Leandro. *Spanish Economic Growth, 1850 – 2015*. London: Palgrave Macmillan, 2017.

<sup>143</sup> See: Klenert, David, Enrique Fernández-Macías, and José-Ignacio Antón. "Do robots really destroy jobs? Evidence from Europe." *JRC Working Papers Series on Labour, Education and Technology*, n.º 118393, 2020. <https://ec.europa.eu/jrc/sites/jrcsh/files/jrc118393.pdf>; Koch, Michael, Ilya Manuylov, and Marcel Smolka. "Robots and firms." *CESifo Working Papers*, n.º 7608, 2019. [https://www.ifo.de/DocDL/cesifo1\\_wp7608.pdf](https://www.ifo.de/DocDL/cesifo1_wp7608.pdf); Domini, Giacomo, et al. "Threats and opportunities in the digital era: automation spikes and employment dynamics". *LEM Working Paper Series*, n.º 2019/22, 2019. <https://www.econstor.eu/bitstream/10419/203112/1/166959548X.pdf>; and Dottori, Davide. "Robots and employment: Evidence from Italy." *Questioni di Economia e Finanza*, n.º 572, 2020. <https://www.sipotra.it/wp-content/uploads/2020/09/Robots-and-employment-evidence-from-Italy.pdf>.

<sup>144</sup> For further details, see: Hinojosa, Carlos, and Xavier Potau. "Advanced industrial robotics: Taking human-robot collaboration to the next level." *Eurofond*, 2018. <https://www.eurofound.europa.eu/sites/default/files/wpfomeef18003.pdf>; Korte, Werner B., Tobias Hüsing, and Eriona Dashja. *High-Tech Leadership Skills for Europe-Towards an Agenda for 2020 and Beyond*. Brussels: European Commission, 2017. [http://eskills-scale.eu/fileadmin/eskills\\_scale/all\\_final\\_deliverables/scale\\_e-leadership\\_agenda\\_final.pdf](http://eskills-scale.eu/fileadmin/eskills_scale/all_final_deliverables/scale_e-leadership_agenda_final.pdf); and McGuinness, Seamus, Konstantinos Pouliakas, and Paul Redmond. "Skills-displacing technological change and its impact on jobs: challenging technological alarmism." *IZA Discussion Paper Series*, n.º 12541, 2019. <http://ftp.iza.org/dp12541.pdf>.

<sup>145</sup> The PNIEC analyses the impact of the effect of the policies and measures set out in the PNIEC against a baseline scenario without additional measures. The net annual employment generated is estimated at between 253,000 and 348,000 people per year in the period 2021-2030. The ELP assesses the additional effect of policies needed to decarbonise the economy in the period 2031-2050, with its baseline scenario being the PNIEC target scenario until 2030 and no additional policies thereafter. The net annual employment generated is estimated at between 140,000 and 300,000 people per year. In addition, the *Waste and Resources Action Programme* estimates that, if the current rate of implementation is maintained, Spain will create 81,000 jobs linked to the circular economy alone by 2030. For further details, see: Department for Ecological Transition and Demographic Challenge *Impacto económico, de empleo, social y sobre la salud pública*

del Plan Nacional Integrado de Energía y Clima 2021-2030. 2020. [https://www.miteco.gob.es/images/es/informesocioeconomicopnieccompleto\\_tcm30-508411.pdf](https://www.miteco.gob.es/images/es/informesocioeconomicopnieccompleto_tcm30-508411.pdf); Department for Ecological Transition and Demographic Challenge. *Long Term Decarbonisation Strategy Anexos*. Madrid, 2020. [https://www.miteco.gob.es/es/prensa/anexoelp2050\\_tcm30-516147.pdf](https://www.miteco.gob.es/es/prensa/anexoelp2050_tcm30-516147.pdf); and Department for Ecological Transition and Demographic Challenge. *Estrategia de transición justa*. Madrid, 2020. [https://www.miteco.gob.es/images/es/documentoetj\\_tcm30-514300.pdf](https://www.miteco.gob.es/images/es/documentoetj_tcm30-514300.pdf); International Labour Organization. *World Employment and Social Outlook 2018: Greening with jobs*. Geneva: 2018. [https://www.ilo.org/weso-greening/documents/WESO\\_Greening\\_EN\\_web2.pdf](https://www.ilo.org/weso-greening/documents/WESO_Greening_EN_web2.pdf); and Mitchell, Peter, and Keith James. *Economic growth potential of more circular economies*. WRAP, 2015. <https://www.circularonline.co.uk/wp-content/uploads/2015/09/ECONOMIC-GROWTH-POTENTIAL-OF-MORE-CIRCULAR-ECONOMIES-FINAL-v04.09.20151.pdf>.

<sup>146</sup> For further details, see: Adecco. *Informe Adecco sobre el futuro del trabajo en España*. Madrid, 2016. <https://drive.google.com/file/d/0BByv5CAGx1V26NXNVLtG4M05LdzQ/view>; Alós, Ramón. “El empleo en España en un horizonte 2025.” *Economía digital y políticas de empleo*, 2019. [https://ddd.uab.cat/pub/caplli/2019/205105/205105\\_Alos\\_EL\\_empleo\\_en\\_Espana\\_en\\_un\\_horizonte\\_2025\\_def.pdf](https://ddd.uab.cat/pub/caplli/2019/205105/205105_Alos_EL_empleo_en_Espana_en_un_horizonte_2025_def.pdf); CEDEFOP. “Skills panorama. Future employment growth in Spain.” CEDEFOP, <https://skills Panorama.cedefop.europa.eu/en/countries/spain>; Oliver Alonso, Josep. “El futuro del empleo. El impacto de la transformación productiva y la revolución demográfica en la creación de empleo 2017-2026.” *ManpowerGroup*, 2018. [https://www.adams.es/documentos\\_pdf/ElFuturoDelEmpleo.pdf](https://www.adams.es/documentos_pdf/ElFuturoDelEmpleo.pdf); and PriceWaterhouseCoopers. *Trabajar en 2033*. PWC España 2033, 2013. <https://www.pwc.es/es/publicaciones/espana-2033/assets/trabajar-en-2033.pdf>.

<sup>147</sup> The OECD estimates that 30% of our current jobs will change significantly. For further details, see: Nedelkoska, Ljubica, and Glenda Quintini. “Automation, skills use and training.” *OECD Social, Employment and Migration Working Papers*, n.º 202, París: OECD Publishing, 2018. <https://doi.org/10.1787/2e2f4eea-en>.

<sup>148</sup> For further details, see: Bughin, Jacques, et al. “Skill shift: automation and the future of the workforce.” *McKinsey Global Institute Discussion paper*, 2018. <https://mck.co/3mEcz3t>; and Korte, Werner B., Tobias Hüsing, and Eriona Dashja. *High-Tech Leadership Skills for Europe-Towards an Agenda for 2020 and Beyond*. Brussels: European Commission, 2017. [http://eskills-scale.eu/fileadmin/eskills\\_scale/all\\_final\\_deliverables/scale\\_e-leadership\\_agenda\\_final.pdf](http://eskills-scale.eu/fileadmin/eskills_scale/all_final_deliverables/scale_e-leadership_agenda_final.pdf). On the importance of social skills, see: Deming, David J. “The growing importance of social skills in the labor market.” *Quarterly Journal of Economics* 132, n.º 4, 2018. <https://doi.org/10.1093/qje/qjx022>. On the skills that leading Spanish companies already demand and expect to demand in the future, see the following reports: Blázquez, María Luisa, Roger Mesclans, and Jordi Canals. “El futuro del empleo y las competencias profesionales del futuro: la perspectiva de las empresas.” *The Education for Jobs Initiative, IESE Business School*, 2019. <https://media.iese.edu/research/pdfs/ST-0490.pdf>; and Blázquez, María Luisa, Roger Masclans, and Jordi Canals. “Las competencias profesionales del futuro: un diagnóstico y un plan de acción para promover el empleo juvenil después de la COVID-19.” *The Education for Jobs Initiative, IESE Business School*, 2020. [https://media.iese.edu/research/pdfs/ST-0548.pdf?\\_ga=2.224913754.1722173866.1600016812-1030612539.1600016812](https://media.iese.edu/research/pdfs/ST-0548.pdf?_ga=2.224913754.1722173866.1600016812-1030612539.1600016812). On the skills that will be most valued in the ecological transition, see: Marin, Giovanni, and Francesco Vona.

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<sup>149</sup> Hidalgo, Manuel Alejandro. *El empleo del futuro. Un análisis del impacto de las nuevas tecnologías en el mercado laboral*. Barcelona: Ediciones Deusto, 2018.

<sup>150</sup> For further details, see: International Labour Organization. *World employment social outlook: The changing nature of jobs*. Geneva, 2015. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_368626.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_368626.pdf); and World Employment Confederation. *The future of work: White paper from the employment industry*. Bruselas, 2016. [https://www.weceurope.org/uploads/2019/07/2016\\_WEC\\_Future-of-Work.pdf](https://www.weceurope.org/uploads/2019/07/2016_WEC_Future-of-Work.pdf).

<sup>151</sup> Eurofound identifies 9 new forms of employment in Europe: *Employee sharing, Job sharing, Interim management, Casual work, ICT-based mobile work, Voucher-based work, Portfolio work, Crowd employment, and Collaborative employment*. For further details, see: Mandl, Irene, et al. “New forms of employment.” *Eurofound*, 2015. <https://www.eurofound.europa.eu/publications/report/2015/working-conditions-labour-market/new-forms-of-employment>. Lawrence F. Katz, and Alan B. Krueger differentiate four possible types for the USA: 1) the self-employed and freelancers; 2) on-call demandworkers; 3) temporary agency workers and 4) contract workers. For further details, see: Katz, Lawrence F., and Alan B. Krueger. “The rise and nature of alternative work arrangements in the United States, 1995-2015.” *NBER Working Paper*, n.º 22667, 2016. <https://doi.org/10.3386/w22667>.

<sup>152</sup> European Commission. *Employment and Social Developments in Europe in 2018*. Luxembourg: Publications Office of the European Union, 2018. <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&bid=8110>.

<sup>153</sup> Workers can be classified into four categories according to the hours and percentage of their income that platform work represents: (1) *occasional*, less than once a month in the last year; (2) *marginal*, less than 10 hours per week and direct income from this activity represents less than 25% of the total; (3) *secondary*, more than 10 hours per week and direct income from this activity represents between 25% and 50% of the total; and (4) *main*, more than 20 hours per week and direct income from this activity represents more than 50% of the total. For further details, see: Urzì Brancati, Maria Cesira, Annarosa Pesole, and Enrique Fernández-Macías. “New evidence on platform workers in Europe. Results from the second COLLEEM survey.” *European Commission JRC*, Luxembourg: Publications Office of the European Union, 2020. [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118570/jrc118570\\_jrc118570\\_final.pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118570/jrc118570_jrc118570_final.pdf).

<sup>154</sup> Anghel, Brindusa, and Aitor Lacuesta. “El teletrabajo en España.” *Banco de España, Boletín Económico*, n.º 2/2020, 2020. <https://ideas.repec.org/a/bde/joures/y2020i06daan13.html>.

<sup>155</sup> Deloitte. *The 2016 Deloitte Millennial Survey: Winning over the next generation leaders*. 2016. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-millennial-survey-2016-exec-summary.pdf>.

<sup>156</sup> Not surprisingly, surveys indicate that the majority of people in Spain who work as self-employed or freelancers do so of their own free will, and not for lack of alternative. For further details, see: Eurofound. *Exploring self-employment in the European Union*. Luxembourg: Publications Office of the European Union, 2017. [https://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef1718en.pdf](https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1718en.pdf); International Labour Organization. *Non-standard Employment around the World*. Geneva, 2016. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_534326.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_534326.pdf); and Manyika, James, et al. "Independent work: Choice necessity, and the gig economy." *McKinsey Global Institute*, 2016. <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Employment%20and%20Growth/Independent%20work%20Choice%20necessity%20and%20the%20gig%20economy/Independent-Work-Choice-necessity-and-the-gig-economy-Full-report.pdf>.

<sup>157</sup> European Commission. *Employment and Social Developments in Europe in 2018*. Luxembourg: Publications Office of the European Union, 2018. <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8110>.

<sup>158</sup> For the case of France, see: Marinescu, Ioana, Ivan Ouss, and Louis-Daniel Pape. "Wages, Hires, and Labor Market Concentration." *SSRN*, 2019. <http://dx.doi.org/10.2139/ssrn.3453855>. For evidence in the USA, see: Azar, José, Ioana Marinescu, and Marshall I. Steinbaum. "Labor market concentration." *Journal of Human Resources*, 2020. <http://dx.doi.org/10.3368/jhr.monopsony.1218-9914R1>; and Benmelech, Efraim, Nittai Bergman, and Hyunseob Kim. "Strong employers and weak employees: how does employer concentration affect wages?" *NBER Working Paper*, n.º 24307, 2018. <https://www.nber.org/papers/w24307>.

<sup>159</sup> International Labour Organization. *Digital labour platforms and the future of work. Towards decent work in the online world*. Geneva, 2018. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_645337.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_645337.pdf).

<sup>160</sup> For further details, see: Kornelakis, Andreas, and Dimitra Petrakaki. "Digitalisation of work: blessing for some, curse for others." *LSE Business Review*, 2017. <https://blogs.lse.ac.uk/businessreview/2017/12/04/digitalisation-of-work-blessing-for-some-curse-for-others/>; and Vermeylen, Greet, et al. "Exploring self-employment in the European Union." *Eurofound*, 2017. <https://www.eurofound.europa.eu/publications/report/2017/exploring-self-employment-in-the-european-union>.

<sup>161</sup> Baldwin, Richard. *The Globotics Upheaval: Globalization, Robotics and the Future of Work*. Oxford: Oxford University Press, 2019.

<sup>162</sup> For further details, see: European Commission. *Employment and Social Developments in Europe in 2018*. Luxembourg: Publications Office of the European Union, 2018. <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8110>; and Spasova, Slavina, et al. *Access to social protection for people working on non-standard contracts and as self-employed in Europe. A study of national policies*. Brussels: European Commission, 2017. <https://op.europa.eu/en/publication-detail/-/publication/fb235634-e3a7-11e7-9749-01aa75ed71a1/language-en>.

<sup>163</sup> For an analysis of the evolution of regulations and legislation on domestic work, see: Lebrusán Murillo, Irene, and Pierina Cáceres Arévalo. *La mujer inmigrante en el servicio doméstico. Análisis de la*

*situación laboral e impacto de los cambios normativos*. Madrid, 2017. <http://www.admolinos.org/wp-content/uploads/2017/07/ESTUDIO-MUJER-MIGRANTE-EN-SERVICIO-DOMESTICO.pdf>.

<sup>164</sup> Fives, Allyn. *Political and Philosophical Debates in Welfare*. New York: Palgrave Macmillan, 2008.

<sup>165</sup> For further details, see: Eichhorst, Werner, and Ulf Rinne. "Digital Challenges for the Welfare State." *IZA Policy Paper*, n.º 134, 2017. <http://ftp.iza.org/pp134.pdf>; Greve, Bent. "Welfare States and Labour Market Change: What is the Possible Relation?" *Social Policy Administration* 51, n.º 2, 2017. <https://doi.org/10.1111/spol.12293>; and McKinnon, Roddy. "Introduction: Social security and the digital economy - Managing transformation." *International Social Security Review* 72, n.º 3, 2019. <https://doi.org/10.1111/issr.12211>.

<sup>166</sup> Rodríguez Fernández, María Luz. "Las pensiones y las nuevas formas de empleo de la revolución digital." *FEDEA, Policy Papers*, n.º 2021/03, 2021. <https://documentos.fedea.net/pubs/fpp/2021/02/FPP2021-03.pdf>.

<sup>167</sup> The beginning of the universalisation of care has its origin in Article 41 of the 1978 Constitution, which recognises that "the public authorities shall maintain a public Social Security system for all citizens, guaranteeing sufficient social assistance and benefits in situations of need," and is consolidated with the General Health Act of 1986. For further details, see: Official State Gazette. *Spanish Constitution Art. 41*. Madrid, 1978. <https://www.boe.es/legislacion/documentos/ConstitucionCASTELLANO.pdf>; Official State Gazette. *Ley 14/1986, de 25 de abril, General de Sanidad*. Madrid, 1986. <https://www.boe.es/buscar/pdf/1986/BOE-A-1986-10499-consolidado.pdf>.

<sup>168</sup> The total employment rate is defined as the ratio of total employed persons to the population aged 16-64. This rate differs slightly from that included in Figs. 1 and 2 because the former uses the OECD as a source for historical data since 1980. This implies slight differences in the denominator, as the OECD reports the population between 15 and 64 years old, while in this case the population between 16 and 64 years old is used (the minimum legal working age in Spain is 16 years old). The EU-8 is constructed as the weighted average of the values of the individual countries, with working aged 16-64 population being the reference for the calculation of weights. La UE-27 se construye a partir de los agregados reportados por Eurostat. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]; y Population on 1 January by age and sex [demo\_pjan]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>169</sup> It should be noted that among the headline targets of the EU 2020 strategy, 75% of men and women aged 20-64 should be in employment. In 2019, this employment rate for Spain was 74% for men and 62% for women, below the target and far from the EU-27 average. (79% and 67% respectively). For further details, see: European Commission. *Europe 2020: A European strategy for smart, sustainable and inclusive growth*. Brussels: European Commission, 2020. <https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%2020007%20-%20Europe%202020%20-%20EN%20version.pdf>; and INE. *Tasas de empleo según niveles de educación. Brecha de género*. [https://www.ine.es/ss/Satellite?L=es\\_ES&c=INESeccion\\_C&cid=1259925461647&p=1254735110672&pagename=ProductosYServicios/PYSLayout&param1=PYSDetalle&param3=125992482288](https://www.ine.es/ss/Satellite?L=es_ES&c=INESeccion_C&cid=1259925461647&p=1254735110672&pagename=ProductosYServicios/PYSLayout&param1=PYSDetalle&param3=125992482288)



<sup>170</sup> Expenditure on active training policies includes both the employed and unemployed population. The EU-8 and EU-22 are constructed as the simple average of the values of the individual countries when these are available. The latest data available is from 2018. For further details, see: OECD. *Public expenditure as a percentage of GDP. 20: Training*. <https://stats.oecd.org/>.

<sup>171</sup> The unemployment rate is defined as the ratio of total unemployed persons to the active population. The EU-8 is constructed as the weighted average of the values of the individual countries, with active population being the reference for the calculation of weights. The EU-27 is constructed from the aggregates reported by Eurostat. For further details, see: Eurostat. *Active population by sex, age and citizenship (1 000) [lfsa\_agan]; y Unemployment by sex, age and citizenship (1 000) [lfsa\_ugan]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>172</sup> The employment rate of women is defined as the ratio of total employed women to the population of women aged 16-64. This rate differs slightly from that included in Fig. 2 because it uses the OECD as a source for historical data since 1980. This implies slight differences in the denominator, as the OECD reports the population between 15 and 64 years old, while in this case the population between 16 and 64 years old is used (the minimum legal working age in Spain is 16 years old). The EU-8 is constructed as the weighted average of the values of the individual countries, with working aged 16-64 population being the reference for the calculation of weights. The EU-27 is constructed from the aggregates reported by Eurostat. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]; y Population on 1 January by age and sex [demo\_pjan]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>173</sup> The youth unemployment rate is defined as the ratio of unemployed persons aged 18-24 to active persons in the same age range. The EU-8 is constructed as the weighted average of the values of the individual countries, with working aged 18-24 population being the reference for the calculation of weights. The EU-27 is constructed from the aggregates reported by Eurostat. For further details, see: Eurostat. *Active population by sex, age and citizenship (1 000) [lfsa\_agan]; and Unemployment by sex and age – annual data [une\_rt\_a]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>174</sup> The employment rate of those people aged 55-64 is defined as the ratio of employed persons to the population in that age range. The EU-8 is constructed as the weighted average of the values of the individual countries, with working aged 55-64 population being the reference for the calculation of weights. The EU-27 is constructed from the aggregates reported by Eurostat. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]; y Population on 1 January by age and sex [demo\_pjan]*. <https://ec.europa.eu/eurostat/data/database>.

<sup>175</sup> The temporariness rate is defined as the ratio of employees with a temporary contract to the total number of employees aged 15-74. The EU-8 is constructed as the weighted average of the values of the individual countries, with working aged 15-74 population being the reference for the calculation of weights. The EU-27 is constructed from the aggregates reported by Eurostat. For further details, see: Eurostat. *Temporary employees by sex, age and educational attainment level (1 000) [lfsa\_etgaed]; y Employees by sex, age and educational attainment level (1 000) [lfsa\_eegaed]*. <https://ec.europa.eu/eurostat/data/database>

<sup>176</sup> The involuntary part-time rate is defined as the ratio of the total number of involuntary part-time workers (15-74 years) to the total number of employees. The EU-8 is constructed as the weighted average of the values of the individual countries, with active population being the reference for the calculation of weights. The EU-27 is constructed from the aggregates reported by Eurostat. For further details, see: Eurostat. *Employment by sex, age and citizenship (1 000) [lfsa\_egan]; Full-time and part-time employment by sex, age and educational attainment level (1 000) [lfsa\_epgaed]; and Involuntary part-time employment as percentage of the total part-time employment, by sex and age (%) [lfsa\_eppgai]*. <https://ec.europa.eu/eurostat/data/database>

<sup>177</sup> The EU-8 is constructed as the simple average of the values of the individual countries, and the EU-27 is the aggregate indicator reported by Eurostat. For further details, see: Eurostat. *Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and occupation (hours) [lfsa\_ewhuis]*. <https://ec.europa.eu/eurostat/data/database>

<sup>178</sup> The EU-8 is constructed as the simple average of the values of the individual countries, and the EU-27 is the aggregate indicator reported by Eurostat. The latest data available is from 2018. For further details, see: Eurostat. *Gender pay gap in unadjusted form [sdg\_05\_20]*. <https://ec.europa.eu/eurostat/data/database>

<sup>179</sup> The proportion of people satisfied with their job is defined as the percentage of people who rate their job satisfaction as medium or high.. The EU-8 is constructed as the simple average of the values of the individual reported countries, and the EU-27 is the aggregate indicator reported by Eurostat. The latest data available is from 2018. For further details, see: Eurostat. *Percentage of the population rating their satisfaction as high, medium or low by domain, sex, age and educational attainment level [ilc\_pw05]*. <https://ec.europa.eu/eurostat/data/database>

<sup>180</sup> The draft of the “Recovery, Transformation and Resilience Plan” can play a key role on this front. Component 23 “New public policies for a dynamic, resilient and inclusive labour market,” with funding in the order of 2.4 billion euros, aims, among other things, to boost the digitalisation of the SEPE; to reorient active employment policies towards guidance; and, within the social dialogue, to promote the modernisation of collective bargaining. For further details, see: *Government of Spain. Recovery, Transformation and Resilience Plan*. Madrid, 2021. <https://www.lamoncloa.gob.es/presidente/actividades/Documents/2021/130421-%20Plan%20de%20recuperacion%2C%20Transformacion%20y%20Resiliencia.pdf>

<sup>181</sup> Cortes, Guido Matias. “Where Have the Middle-Wage Workers Gone? A Study of Polarization Using Panel Data.” *Journal of Labor Economics* 34, n.º 1, 2016. <https://www.journals.uchicago.edu/doi/abs/10.1086/682289>

<sup>182</sup> Employment Portal. “Empléate.” Employment Portal, <https://www.empleate.gob.es/empleo/#/>

<sup>183</sup> The proposed measures reinforce some of the main lines set out in the Reincorpor-T Plan of the Ministry of Labour and Social Economy. For further details, see: Servicio de Empleo Público (State Public Employment Service). *Reincorpora-T: Three-year plan to prevent and reduce long-term unemployment*. Madrid, 2019. <https://www.sepe.es/>

[HomeSepe/Personas/encontrar-trabajo/plan-reincorpora-T.html](#)

<sup>184</sup> Belot, Michèle, Philipp Kircher, and Paul Muller. “Providing Advice to Jobseekers at Low Cost: An Experimental Study on Online Advice.” *Review of Economic Studies* 86, n.º 4, 2019. <https://doi.org/10.1093/restud/rdy059>

<sup>185</sup> Principle 4, “Active support for employment” of the European Pillar of Social Rights, states that “Everyone has the right to transfer social protection and training rights during career transitions”. For further details, see: European Commission. *European Pillar of Social Rights*. Luxembourg: Publication Office of the European Union, 2018. <http://dx.doi.org/10.2792/95934>

<sup>186</sup> In this regard, the Shock Plans that have been implemented since 2018 have yielded good results thanks to the cross-referencing of databases and big data for the mass mailing of letters to companies where fraud was suspected. For further details, see: Servicio de Empleo Público (State Public Employment Service). “El Plan Director por un Trabajo Digno duplica los resultados de la Inspección en la lucha contra el fraude en la contratación temporal y a tiempo parcial.” Servicio Público de Empleo Estatal, <https://www.sepe.es/HomeSepe/que-es-el-sepe/comunicacion-institucional/noticias/historico-de-noticias/2019/detalle-noticia.html?folder=/2019/Diciembre/&detail=plan-director-trabajo-digno-duplica-resultados-inspeccion-lucha-contra-fraude-contratacion-temporal-tiempo-parcial>

<sup>187</sup> Rodríguez Fernández, María Luz(.). *Plataformas digitales y mercado de trabajo*. Madrid: Department for Labour, Migration and Social Security, 2018

<sup>188</sup> De Stefano, Valerio, y Antonio Aloisi. “European Legal framework for digital labour platforms.” *European Commission JRC*, 2018. <http://dx.doi.org/10.2760/78590>

<sup>189</sup> Recent laws regulating data protection and telecommuting are important developments that point the way forward. For further details, see: Official State Gazette. *Ley Orgánica 3/2018, de 5 de diciembre, de protección de datos personales y garantía de los derechos digitales*. Madrid, 2018. <https://www.boe.es/eli/es/lo/2018/12/05/3/dof/spa/pdf>; Official State Gazette. *Decreto-Ley 28/2020, de 22 de septiembre, de trabajo a distancia*. Madrid, 2020. <https://www.boe.es/boe/dias/2020/09/23/pdfs/BOE-A-2020-11043.pdf>

<sup>190</sup> European Commission. Proposal for a Council Recommendation on access to social protection for workers and the self-employed, COM(2018) 132 final. Strasbourg, 2018. <https://eur-lex.europa.eu/legal-content/GA/TXT/?uri=COM%3A2018%3A132%3AFIN>; European Commission. *Commission staff working document impact assessment accompanying the document “Proposal for a Council recommendation on access to social protection for workers and the self-employed”, COM(2018) 132 final*. Estrasburgo, 2018. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018SCO070&from=EN>; y Spasova, Slavina, et al. *Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies*. Brussels: European Commission, 2017. <http://dx.doi.org/10.2767/700791>

<sup>191</sup> Currently, Law 20/2007 recognises the capacity to sign “agreements of professional interest”, but only in the case of economically dependent self-employed workers (TRADE). To date, its impact has been limited. For further details, see: Official State Gazette. *Ley 20/2007, de 11 de*

*julio, del Estatuto del trabajo autónomo*. Art. 13. Madrid, 2007. <https://www.boe.es/buscar/pdf/2007/BOE-A-2007-13409-consolidado.pdf>

<sup>192</sup> Servicio de Empleo Público (State Public Employment Service). *Plan de Choque por el Empleo Joven 2019-2021*. Madrid, 2019. <https://www.sepe.es/HomeSepe/Personas/encontrar-trabajo/plan-de-choque-empleo-joven-2019-2021>

<sup>193</sup> Danish Agency for Labour Market and Recruitment. “Building Bridge to Education.” Danish Agency for Labour Market and Recruitment, <https://star.dk/en/active-labour-market-policy-measures/tackling-youth-unemployment-in-denmark/building-bridge-to-education/>

<sup>194</sup> Dabla-Norris, Era, and Kalpana Kochhar. “Closing the Gender Gap”. IMF, Finance and Development, 2019. <https://www.imf.org/external/pubs/ft/fandd/2019/03/pdf/fd0319.pdf>; OECD. *Is the Last Mile the Longest? Economic Gains from Gender Equality in Nordic Countries*. Paris: OECD Publishing, 2018. <https://doi.org/10.1787/9789264300040-en>; and Thévenon, Olivier, et al. “Effects of Reducing Gender Gaps in Education and Labour Force Participation on Economic Growth in the OECD.” *OECD Social, Employment and Migration Working Papers*, n.º 138, 2012. <https://doi.org/10.1787/5k8xb722w928-en>

<sup>195</sup> Molinero Gerbeau, Yoan. “Dos décadas desplazando trabajadores extranjeros al campo español: una revisión del mecanismo de contratación en origen.” *Panorama Social*, n.º 31, 2020. <https://www.funcas.es/wp-content/uploads/2020/09/Yoan-Molinero-Gerbeau.pdf>

<sup>196</sup> Official Gazette of the Spanish Parliament. *Informe de evaluación y reforma del Pacto de Toledo*. Madrid, 2020. [https://www.congreso.es/public\\_oficiales/L14/CONG/BOCG/D/BOCG-14-D-187.PDF](https://www.congreso.es/public_oficiales/L14/CONG/BOCG/D/BOCG-14-D-187.PDF)

<sup>197</sup> Economic and Social Council. *La inmigración en España: efectos y oportunidades*. Madrid, 2019. <http://www.ces.es/documents/10180/5209150/Inf0219.pdf>

<sup>198</sup> Ibid.

<sup>199</sup> Both Royal Decree-Law 6/2019 and the COVID-19 labour standards have established procedures in this direction. For further details, see: Official State Gazette. *Real Decreto-ley 6/2019, de 1 de marzo, de medidas urgentes para garantía de la igualdad de trato y de oportunidades entre mujeres y hombres en el empleo y la ocupación*. Madrid, 2019. <https://www.boe.es/eli/es/rdl/2019/03/01/6>

<sup>200</sup> For further details, see: Banco de España. *Informe Anual 2015*. Madrid: Banco de España, 2015. <https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesAnuales/InformesAnuales/descargar/15/Fich/inf2015.pdf>; and World Management Survey. *Management Matters: Manufacturing Report 2014*. 2014. <https://cdnstatic8.com/worldmanagementsurvey.org/wp-content/images/2015/06/Manufacturing-Report-2014-EUROPE-ENGLISH.pdf>