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Work and children in Spain: Challenges and opportunities for equality between men and women

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EXECUTIVE SUMMARY

Despite overall convergence between men and women in labour market participation rates, women still fare worse than men, with no visible improvement on the gender gap in the last 15 years on at least three key dimensions:

- The unemployment rate remains around 2.5 points higher for women, with data showing a slower decrease of unemployment after the Great Recession (2013 onwards) for women than for men
- For the last decade, women with part-time contracts have been more than tripling men's share (23% vs. 7%)
- Around 27% of women held temporary contracts in 2019, vs. 25% of men, featuring a widening gap since 2015

The situation is further aggravated for women with children. By the end of the 2010s decade, women with children under 15 years of age are about:

- 7.5 times more likely than men (with children of the same age) to work on part-time contracts,
- twice as likely to be unemployed, and
- 20 percent more likely to hold a temporary contract

Given the unique features of the present crisis, gender differences in the impact of the Covid-19 crisis were particularly marked among people with children aged 0 to 15:

— both the employment rate and the number of weekly hours worked dropped by approximately equal amounts between 2019 and 2020 for men and women without children, but by the last quarter of 2020, the employment rate of men with children was back to its 2019 level, while that of women with children had dropped by 2.3 percentage points.

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- Similarly, sixteen percent of men with children were on furlough between April and June 2020, while this figure stood at nearly 20 percent for women with children.
- Time-use data collected during the COVID-19 pandemic shows that women were more likely to assume the main responsibility for most of housework and childcare, even when both parents were working throughout the quarantine: Farré et al (2020) estimate an increase in the gender gap in daily childcare hours by more than one hour during the pandemic.

It is unlikely that different preferences between men and women alone can explain these differences in labour market attachment: over a third of women with children under 5, and more than half of women with children aged 5 to 15 working part-time would like to work more hours.

Evidence points if favour of a set of well-designed policies to help narrow gender inequalities in the labour market:

- more generous paternity leave entitlements reserved for fathers, which Spain has recently implemented, increase female labour force participation, employment and earnings; while simultaneously increasing men's involvement in childcare, which could help closing gender gaps at home as well.
- policies that make it easier to be a working mother by reducing the motherhood penalty, such as financial incentives in the form of tax credits for working mothers and subsidized or completely free childcare for very young children, have also been shown to positively affect women's labour force participation and working hours. These policies also have the potential to improve currently low fertility rates in Spain.

1. Introduction

Over the past 25 years, Spain has undergone a striking convergence between women's and men's participation in the labour market. In 1990, for every 100 men in the labour force there were only 50 women working, compared to 70 women for every 100 men in Europe overall. By 2010, Spanish women's labour market participation had overtaken that of women in the European Union overall, as can be seen in Figure 1 (left). The Spanish labour market now shows over 88 active women for every 100 active males, compared to 86 in the EU overall. Alongside this remarkable increase in female participation, between 1980 and 2005 the female share of total hours worked has seen a 33 percent increase, from 30 percent to just under 40 percent (Olivetti and Petrongolo, 2016). The right-hand side of Figure 1 shows that this increasing trend lasted until about 2013, when the female share of total hours reached its historical maximum at around 42 percent. Similarly striking progress has been made in terms of wage equality. Figure 2 shows that the raw average hourly wage gap in Spain fell from about 20 percent in 2002 to 12 percent in 2018, with a much faster reduction than in the rest of the European Union.

In this policy brief we use data from the Spanish Labour Force Survey (Encuesta de Población Activa, or EPA) to take a close look at the evolution of four key labour market indicators by gender over the past 15 years. We show that despite overall convergence between men and women in participation rates, women still fare worse on other important measures. With the exception of a period after the Great Recession (that hit male dominated sectors disproportionately), women's unemployment rates have remained several points ahead of that of men. Despite the increase in working hours seen in Figure 1 (right), the proportion of women working part-time has barely changed in the last 15 years and remains well beyond 20 percent, while men's part-time employment share has stayed below 10 percent throughout the period. Women are also more likely to hold job insecure contracts. Moreover, only about 3 percent of women in Spain work in top level occupations, such as directors and managers. This is only about half the fraction of men, and that is despite the fact that the share of men in such occupations has been decreasing steadily over the last decade.

Ratio of female to male labour force participation rate (1990-2019) Female share of annual hours in Spain (2005-2019) 0.9 -0.45 -- EU 28 Spain 0.8 -040-0.7 -0.6 -0.35 -0.5 -0.4 -0.30 -1990 2000 2010 2020 2005 2010 2015 2020

Figure 1. Trends in female employment and hours worked

Source: OECD Labor Force Statistics, and own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: The left-hand side graph shows the female to male labour force participation (LFP) rate for Spain and the EU-28 from 1990 to 2020. A value of one indicates that the female LFP rate is equal to that of men. A value below (above) one indicates that the female LFP rate is below (above) that of men. The LFP rate is defined as the percentage of the working age population (16-64) that is either employed or unemployed. The right hand side graph shows the female share of total annual hours worked among all employed workers in Spain from 2005 to 2020.

The stagnation in gender convergence found in Spain over the past decade closely mirrors patterns observed in other industrialised economies. While many have seen a steady convergence in labour market outcomes, especially after the 1950s, this has been followed by a plateau in female participation rates starting around the 1990s in Denmark and Sweden, and in the 2000s in the US, the UK and Norway (Olivetti and Petrongolo, 2016). This has raised the question of what the drivers for the persistence in gender gaps are, and there is emerging consensus that children play a major role (Kleven et al, 2019).

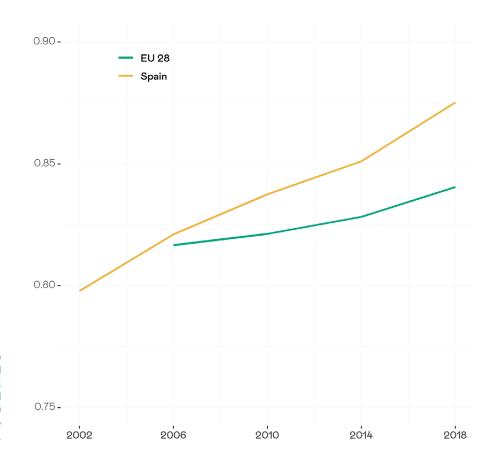
We show that labour market inequalities in Spain are further aggravated among people with children, irrespective of the indicator used. Convergence in labour force participation rates has stagnated for women with children aged 15 and below over the last seven years. By the end of the 2010s decade, women with children under 15 years of age are about 7.5 times more likely than men with children of the same age to work part-time, twice as likely to be unemployed and 20 percent more likely to hold temporary contracts (as opposed to a more job-secure permanent contract). The gender gaps for people without children in all these indicators are much smaller. It is unlikely that these differences are due to women's preferences alone: over a third of women with children under 5 and working part-time would like to work more hours. This increases to well over half of the women working part-time with children aged 5 to 15. Recent evidence shows that the motherhood penalty might be due to the fact that women chose jobs with family-friendly characteristics after the arrival of children, such as flexible hours (Goldin, 2014), being in the public sector or in lower-level occupations (Kleven et al, 2019). Thus, family-friendly policies like

flexible or shorter hours or long periods of parental leave might actually reinforce gender inequality if they are only taken up by women, by fomenting employer's beliefs about women's comparative advantage in childcare and reinforcing traditional gender roles (Olivetti and Petrongolo, 2016). Breaking up traditional gender roles thus seems crucial for enhancing equality in the labour market.

The current COVID-19 pandemic is also having an unequal effect in the labour market, with women being more likely to have lost their jobs or having been put on furlough (ERTEs). Again, the gender gap in the labour market effect of the Covid-19 crisis is larger among people with children. Women also bore the bulk of the increased childcare burden experienced during school and childcare closures than men. Evidence from real-time surveys (Farré et al, 2020) shows that the pandemic has widened the pre-existing gender gap in time spent on childcare and housework in the family. Whether this will have a persistent impact on gender roles in the household remains to be seen, but it may well imply career costs, as a consequence of work interruptions to care for children.

The fact that the arrival of children seems to be one of the main drivers of the remaining gender gap in labour market outcomes suggests that the focus of policy makers concerned about gender inequality should lie in family policies that can improve the labour market perspectives for women with children. Existing evidence shows that more generous paternity leave entitlements reserved for fathers, which Spain has already implemented, increase female labour force participation, employment and earnings. They have also been shown to increase men's involvement in childcare and therefore have the potential to reduce gender gaps not only in market work but also in the home.

Figure 2.
Ratio of female to male mean hourly earnings
2002-2018



Source: Eurostat. Structure of earnings survey | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

https://appsso.eurostat.ec.europ. eu/nui/show.do?dataset=earn_ses_ hourly&lang=en

Notes: The graph shows the female to male mean hourly earnings ratio for all employees. A value of one indicates that female mean hourly earnings are equal to that of men. A value below (above) one indicates that female mean hourly earnings are below (above) that of men.

Policies that make it easier to be a working mother, such as financial incentives in the form of tax credits for working mothers and subsidized or free childcare for very young children, have also been shown to positively affect women's employment probabilities and hours worked. These latter policies would also help tackle a related issue: Spain is among the countries with the lowest fertility rates and the highest age of women at first birth. At the same time, Spain spends only about half of the average country in the EU-27 on family and child benefits.

Whether the gains in terms of tax revenues and economic output from increased female labour supply outweigh the cost of providing more affordable childcare or in-work benefits depends on how reactive women's decisions to participate or increase their working hours are to such policies. For the case of Spain, evidence from Nollenberger and Rodríguez-Planas (2015) suggests that offering full-time, public childcare for 3-year-olds increased the labour supply of mothers by almost 10 percent, but that only about 20 to 25 percent of the cost of increased public childcare provision is covered by the income, social security, and payroll taxes generated from increased maternal employment. This, however, does not mean that such policies are inefficient, because they may bring other benefits, such as increases in fertility and, in the case of public provision of free, high quality childcare, they have also been shown to improve children's educational outcomes (Felfe et al, 2015).

The remainder of the policy brief is organised as follows. In Section 2 we review gender gaps in the Spanish labour market over the past 15 years. Section 3 looks more in detail at how parenthood affects labour market outcomes for Spanish men and women. Section 4 reviews the existing evidence on family policies and their impact on female employment and fertility. Section 5 concludes.

2. Gender gaps in the Spanish labour market over the past decades

In this section we document the evolution of four main labour market indicators for men and women in the working age population in Spain. Figure 3 plots, separately for men and women and over the last fifteen years, the participation and unemployment rates, as well as the fraction of men and women working with part-time and temporary contracts.

The increase in women's participation rates initiated several decades ago continued until the early 2010s, when almost 70% of working age women were active in the labour market. However, the participation rate has since stalled. If the female to male ratio in participation rates shown in Figure 1 still showed a slight convergence during the last seven years, it is because the male participation rate has suffered a decrease from the early 2010s.

The female unemployment rate stood at 13 percent at the beginning of the period, in 2005. This was about 5 percentage points higher than the male counterpart. The Great Recession years in Spain, with a high volume of employment destruction in male dominated industries such as construction, brought the gender gap in unemployment rates to almost zero. Both the female and male unemployment rates increased dramatically and reached 25 percent in 2013. However, as the economy started its recovery, the male unemployment rate decreased at a faster pace. By the end of 2019, the female unemployment rate had decreased to about 16 percent, 3 percentage points higher than the male analogue.

Employed women have had more job insecure contracts throughout the last fifteen years, with the exception of a very brief period during the economic recovery of 2014 and 2015, when the gender gap in temporary employment rates vanished. After that, the gender gap has increased again. By the end of 2019, about 27 percent of women (25 percent of men) were employed under fixed-term contracts.

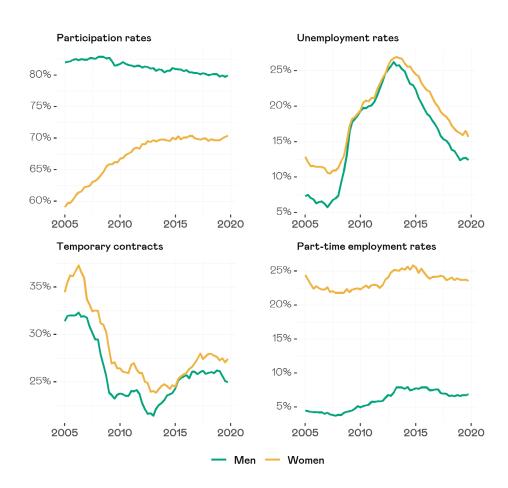
However, the biggest gender gap among the four indicators depicted in Figure 3 is seen in the fraction of workers employed part-time: Whereas well above 20 percent of employed females work part-time throughout the period, the male part-time rate never reaches 10 percent. Overall, the gender gap in part-time contracts has remained stable. As we will see in the next section, it is highly unlikely that this is all due to differences in preferences between men and women.

Figure 3.

Labour market
outcomes for men
and women 2005-2019

Source: own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: Seasonally adjusted series from Q1/2005-Q4/2019. Sample of all individuals within the workingage population (15-64 years). Participation rates are computed as the total active population (employed and unemployed) over the total working-age population. Unemployment rates are computed as the total number of unemployed over the total active population. Temporary contracts show the share of individuals with a temporary contract among all those in employment. Part-time employment rates show the share of individuals working part-time among those in employment. All variables are derived using cross-sectional weights.

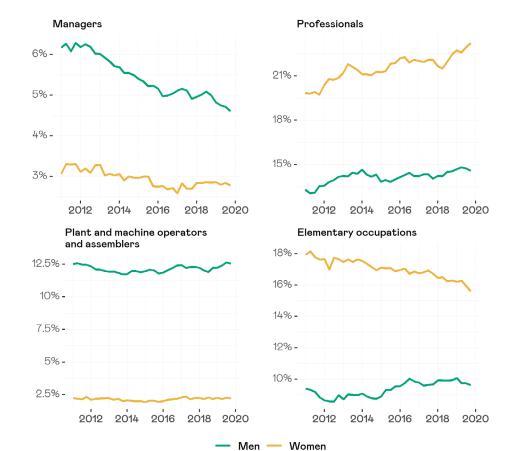


We now turn our attention to the evolution of the fraction of males and females employed in the top two occupations (managers and professionals, respectively) and bottom two occupations (plant and machine operators, and elementary occupations, respectively) in Figure 4. Because of a break in the series, these graphs only show data starting in 2011. Slightly more than 3 percent of employed females were working as managers at the beginning of the 2010s, while this percentage was between 6 and 4.5 for men throughout the whole period. In fact, the fraction of women employed in the top occupation fell below 3 percent from 2015 onwards. Indicators of the gender gap for this outcome could be misleading: This is because the fraction of males working as managers has suffered a steady decline since the early 2010s. On the flipside, the fraction of both males and females employed as professionals (e.g., engineers, teachers, doctors or lawyers) has risen in the last decade, and the rise has been bigger for females. This is the only indicator analysed here where females fare consistently better than their male counterparts: There is a large gender gap in favour of females, and it has been widening throughout the last decade.

In the bottom two occupations, relatively more men than women (around 12.5 percent versus 2.5 percent) work as plant and machine operators. The gender gap is about 10 percentage points in favour of men and has remained stable over the last decade. The situation is reversed for elementary occupations (including cleaners, domestic workers, waste collectors and food preparation workers), with 18 percent of working women sorting into this occupation group in 2011, and about 9 percent of men. The gap in favour of women has decreased, mainly due to a smaller fraction of women working in that occupation (about 16 percent), at the end of the period.

Figure 4.

Percent employed in top and bottom occupations 2011-2019



Source: own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: Seasonally adjusted series from Q1/2011-Q4/2019. Variables show the share of individuals working in the specified CNO-11 occupations over the total number of employed individuals by gender. All variables are derived using cross-sectional weights.

3. Parenthood and the Spanish labour market

Several recent papers in the academic literature have shown that differences in both the labour market attachment and earnings between men and women appear and amplify after entry into motherhood. For instance, using Danish administrative data, Kleven et al (2019) show the existence of a child penalty: The arrival of children creates a long-run gender gap in earnings of around 20 percent driven by hours worked, participation, and wage rates. In Spain, de Quinto, Hospido and Sanz (2020) find that mother's earnings drop by 11 percent while those of fathers remain unchanged one year after child birth, and this drop rises to 28 percent for women ten years after giving birth. They also show that this drop seems to be driven by mothers shifting into part-time work and temporary contracts.

Following this literature, this section provides an overview of how gender gaps in the main indicators described earlier have evolved for people with children aged 15 or under and people without children. We concentrate on males and females aged 25 to 54 to avoid capturing gender differences in education participation when young, and retirement at older ages. Rather than expressing gender gaps as the difference between male and female rates, we plot the ratio of female over male rates in Figure 5. Thus, the Y-scale axis will be informative of how many times more likely women are to be in a particular situation than men.

The picture that emerges is clear and similar across indicators. First, whereas women without children have almost converged in terms of participation in the labour market (the ratio of the female to male participation rate for those without children is close to 1), women with children under 15 are still considerably less likely to participate than men: By the end of the 2010s, only just above 80 women with children work for every 100 men with children that do so.

The situation is similar when it comes to unemployment rates: the ratio of female to male unemployment rates for those without children fluctuates around 1, implying very little gender differences. In contrast, women with children aged under 15 were about 3 times more likely to be unemployed than their male counterparts at the beginning of the period under analysis. The Great Recession drove the ratio down to just above 1.5, but it started increasing as economic activity picked up. By the end of the 2010s, women with children aged 15 or under were 2 times more likely to be unemployed than men with children of the same age.

Since the beginning of the 2010s, women without children are about 10 percent more likely to be employed under more job insecure contracts - temporary or fixed-term contracts - than men without children. This gap, once more, increases for women with children aged 15 or under: with the exception of a brief period around 2015, women have been 20 to 30 percent more likely to be employed under temporary contracts than men with children of the same age.

The starkest differences come with part-time rates, since even women without children are about two and a half times more likely to work part-time. It is very unlikely that the differences in parttime work uptake are driven by preferences alone: 74 percent of women without children who are working part-time would like to work more hours. At 76 percent, this rate is very similar for men without children working part-time. For women with children, the ratio of female over male parttime rates shows that women are around 15 times more likely to be employed part-time in the first five years of the series. The value of the ratio decreases thereafter reaching a minimum in 2015, but increasing again after that. By the end of the 2010s, women with children aged 15 or under are about 7.5 times more likely to be employed part-time than men with children of the same age. A lower fraction of women with children working part-time would like to work more hours. Still, the percentage of those wanting to do so is far from negligible: Over a third of mothers with children under 5 who are working part-time would like to work more hours. This increases to well over half of the mothers working part-time with children aged 5 to 15 years old (see Figure 6a). Children are the main reason to work part-time for women with children under 5: 46 percent of mothers with children aged 5 or below state that they are working part-time to care for children or dependent adults, whereas this is only 13 percent for fathers with children of the same age (see Figure 6b).

Figure 7 shows the ratio of females over males employed in the top managerial occupation, for two different categories: those with children aged 0 to 15, and those without children. In both cases, women are less likely to be observed in the top managerial positions. Women without children are about 70 percent as likely as men without children to be employed as managers. This falls to about 50 percent for women with children aged 0-15 for most of the period (with slight improvements over the last two years).

All in all, and despite presenting just graphical evidence, the picture that emerges mirrors findings from other studies offering causal evidence: there seems to be a child penalty for women in Spain when it comes to labour market outcomes as measured by the participation rate, job insecurity, hours worked and employment in top occupations.

Figure 5.
Women/men ratios
of LMOs by whether
or not has kids
2005-2019

Source: own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: Seasonally adjusted series from Q1/2005-Q4/2019. Sample of individuals aged 25-54. Plotted series are computed as the ratio of the rate for men for the variable in question over the rate for women. Participation rates are computed as the total active population over total working-age population. Part-time employment rates show the share of individuals working part-time among those in employment. Unemployment rates are computed as the total number of unemployed over the total active population. Temporary contracts show the share of individuals with a temporary contract among all those in employment. All variables are derived using crosssectional weights.

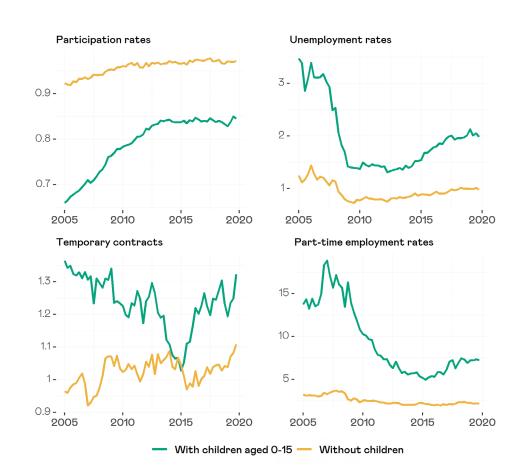


Figure 6. Reasons for part-time employment



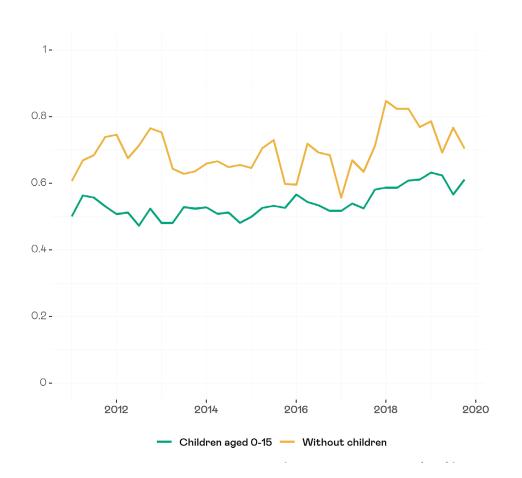
Source: own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: Sample of individuals aged 25-54 from Q4/2019. Panel A shows the share of individuals working part-time who would like to work more hours, among those in part-time employment. Panel B shows the share of individuals working part-time due to childcare or caring for dependent, ill, or aged adults. All variables are derived using cross-sectional weights.

Figure 7.
Women/men ratios of % managers by whether or not has kids 2011-2019

Source: own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: Seasonally adjusted series from Q1/2011-Q4/2019. Sample of individuals aged 25-54. Variables show the ratio of the share of men working in the specified CNO-11 occupations over the share of women working within the same occupation. The share of individuals working in each CNO-11 occupation is computed over the total number of individuals in employment. All variables are derived using cross-sectional weights.



The Covid-19 pandemic and gender gaps

The data presented up to now do not include 2020, which was marked by one of the severest recessions in the last century as a result of the Covid-19 pandemic. Spain has been hit exceptionally hard, both in terms of its human as well as its economic toll. Women overall were more affected by job loss and furloughing (ERTEs). According to data from EPA, by the last quarter of 2020, the employment rate of women had dropped by nearly 3 percentage points, while for men it had dropped by just under 2 percentage points. Between April and June 2020, 18.3 percent of working men were on ERTEs, and this percentage was 20.5 for working women.

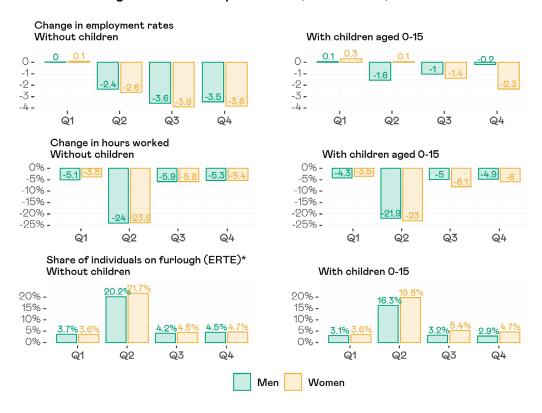
Gender differences in the impact of the Covid-19 crisis are further amplified when looking at people with and without children separately. Figure 8 shows labour market outcomes during the Covid-19 pandemic for individuals aged 25-54 by gender and by whether they have children aged 0-15 (right panel) or they do not (left panel). Both the employment rate and the number of weekly hours worked dropped by approximately equal amounts between 2019 and 2020 for men and women without

*Approximation

children. For people with children the picture looks very different: In the last quarter of 2020, the employment rate of men with children was back to its 2019 level, while that of women had dropped by 2.4 percentage points. Similarly, sixteen percent of men with children were on furlough between April and June 2020, while this figure stood at nearly 20 percent for women with children.

The gender gaps in the labour market impact of the Covid-19 pandemic for people with children might reinforce the dynamics that have been present over several decades. The unique feature of this crisis - the closure of child care centres and schools, and upon re-opening, periods of self-isolation for some families - have meant that on top of earnings and job losses, working parents have faced significant challenges combining work and child care responsibilities. Time-use data collected during the COVID-19 pandemic by Farré et al (2020) shows that women were more likely to assume the main responsibility for most of housework and childcare, even when both parents were working throughout the quarantine. They estimate an increase in the gender gap in daily childcare hours by more than one hour during the pandemic. Evidence on employment interruptions for childcare shows that these can have long-lasting negative consequences for female earnings due to a loss in human capital (see for instance Schoenberg and Lusteck, 2007). The Covid-19 pandemic might therefore have long-lasting impacts on gender equality, both in the workplace as well as at home.

Figure 8. Labor market outcomes during the Covid-19 pandemic (2019-2020)



Source: own calculations based on EPA microdata | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol

Notes: Sample of individuals aged 25-54 from Q1/2019-Q4/2020. Change in employment rates is computed as the inter-annual percentage point change in employment rates in 2020 with respect to 2019. Change in the number of hours worked is computed as inter-annual percentage change in 2020 with respect to 2019. Working hours for individuals on ERTE who did not attend work are set to zero. Furloughed employees are calculated as the share of employees who did not work in the reference week due to ERE/ERTE or technical and economic reasons over the total number of those in employment. All variables are derived using cross-sectional weights.

4. Family policies and their impact on gender equality

The fact that children seem to be closely linked to the remaining gender gap in career outcomes raises the question of what can be done to reduce this "motherhood penalty". Many countries have recently introduced changes to family policies with the explicit objective of reducing gender inequality related to childbirth. The first group of such policies are parental leave policies and the introduction of so-called "daddy-quotas", which are non-transferable periods of parental leave reserved for fathers. Such policies are thought to encourage a more equal division of child care within the household, thereby eroding traditional gender norms, facilitate women's return to work after childbirth and reduce bias by employers against women (Dunatchik and Özcan, 2020).

Over the past 13 years, Spain has seen a drastic increase in the daddy quota. While between 2007 and 2017 fathers only enjoyed two weeks of paid leave, between 2017 and 2021 this has gradually increased to 16 weeks. Increases in paternity leave have been introduced in other countries over the past decades (e.g. Sweden, Norway), sometimes coupled with explicit incentives for fathers to take up those benefits, such as an increase in the overall parental leave entitlement if both mother and father take up a sufficient amount of their individual leave entitlements (Germany).

The empirical evidence on the effects of these policies is somewhat mixed, but more recent studies point towards positive effects on women's job outcomes. Farré and González (2019), for instance, show that the introduction of two weeks paternity leave in 2007 in Spain increased both mother's likelihood of being in work six and 12 months after giving birth, as well as earnings in the two years following childbirth, facilitated by increased involvement of fathers in child rearing. Analysing the introduction of five weeks of non-transferrable paternity leave in 2006 in Quebec (Canada), Dunatchik and Özcan (2020) show that it increased 1) the labour force participation of mothers, 2) the likelihood of mothers working full-time, and 3) decreased the likelihood of mothers working part-time in the first three years after giving birth. The policy also increased father's time spent on unpaid domestic work (Patnaik, 2019). A number of other studies also find that increases in paternity leave lead to increased sharing of childcare duties within the household: For a policy granting additional leave if parents share some of the leave entitlement introduced in Germany, Bünning (2015) finds that fathers increased time spent with children and decreased time spent working. This policy had positive effects on mothers' employment rates, job continuity and quality (Kluve and Schmitz, 2018).

Another set of family policies have focused on financial assistance, consisting in either child subsidies or tax credits. With respect to the first kind of policy, González (2013) shows a negative short run effect on maternal labour supply after the introduction of the "baby cheque" in Spain.

Magda et al. (2020) conclude that the introduction of a universal benefit for the second and every further child in Poland reduced mother's labour market participation, especially among women with lower levels of education. Asakawa & Sasaki (2020) found that a reduction in the Japanese child benefit led to an increase in the participation rate of mothers of young children. This evidence suggests that the introduction of universal child subsidies has an income effect that negatively affects maternal labour supply. With respect to tax credits, or in-work benefits related to childbirth, Bastian and Lochner (2020), Bastian (2020) and Hoynes et al. (2015) show that the introduction or expansion of the Earned Income Tax Credit (EITC) in the US had a positive effect on maternal employment. Shirley (2020) finds similar effects but concentrated on unmarried women with low-education.

The third set of policies concerns the cost of childcare. Lowering the cost of childcare or subsidizing it tends to have positive impacts on mother's labour market attachment (Haeck et al., 2015; Bettendorf et al., 2015; Nollenberger and Rodríguez-Planas, 2015; Bick, 2016; Müller and Wrohlich, 2020). However, the effect is heterogeneous in terms of magnitude depending on the country's initial cost of childcare. For the case of facing initial low childcare costs, Givord and Marbot (2015) show that the introduction of a substantial child care subsidy in France increased mothers' labour force participation only marginally. Looking at cross-country evidence, the OECD (2018) finds that higher levels of enrolment in early childhood education for children below the age of three are associated with higher rates of maternal employment. The report also shows that in countries where children aged 0-3 spend more time in formal childcare settings, the share of part-time employment for working mothers is lower.

In the case of Spain, enrolment in early childhood education for children aged 0-3 stood at 38 percent in 2014, close to the OECD average of 34 percent (OECD, 2017). At the same time, public expenditure on family and child benefits is comparatively low. Figure 9 shows that Spain only spends 1.3 percent of GDP on such policies, while the EU27 average is 2.2 percent. Childcare costs for two children aged two and three years are estimated to represent about 25 percent of the average earnings of a two-earner household in Spain, which is close to the OECD average of just under 30 percent (OECD, 2018). Both the existing evidence on the effect of lowering childcare costs on maternal labour market outcomes, and the current level of spending on these policies in Spain, suggests that there is potential for such policies to improve women's participation, and particularly to increase full time employment rates.

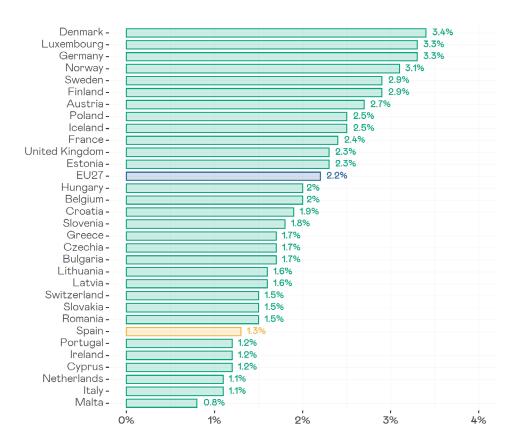
Table 1. Family policies and their impact on women's job outcomes and fertility

Type of policy	Examples	Objective	Effect on maternal employment	Effect on fertility
Parental leave	Maternity leave Paternity leave Parental leave	Increase flexibility Increase fathers' involvement in childcare	Mixed evidence Short run negative effect of increased maternity leave in Lalive et al. (2014), Schönberg and Ludsteck (2014), Bergemann and Riphahn (2015), Ginja et al. (2020) In general, positive effects are found for short to moderate-sized entitlements (Olivetti and Petrongolo, 207), while longer job-protected leave periods can be detrimental. Long-run outcomes for mothers are likely unaffected by maternity leave policies (Kleven et al., 2020). Positive effect of increased parental leave in Farré and González (2019), Byker (2016), Dunatchik and Özcan (2020), Kluve and Schmitz (2018)	Mixed evidence Positive effect in Lalive and Zweimüller (2009), Malkova (2018), Raute (2019) Negative effect in Farré and González (2019)
Financial assistance	Child cash benefits Child tax credit/ benefit	Boost birth rates Promote employment and reduce poverty	Mixed evidence Negative effect of increased cash benefits in González (2013), Magda et al. (2020) Positive effect of increased tax benefits in Hoynes et al. (2015), Bastian (2020), Bastian and Lochner (2020) Not significant in Milligan and Stabile (2009)	Positive effect González (2013), González and Trommlerová (2020), Sorvachev and Yakovlev (2020), Cohen et al. (2013), Bastian (2018) Not significant in Riphahn and Wiynck (2017)
Availability of subsidised/ free child-care	Public education 0-3 years old Childcare voucher	Increase mothers' labour market attachment	Positive effect Haeck et al. (2015), Bettendorf et al. (2015), Nollenberger and Rodríguez-Planas (2015), Müller and Wrohlich (2020)	Mixed evidence Positive effect in Bauernschuster et al. (2016), Olivetti and Petrongolo (2017) Neutral effect in Nollenberger and Rodríguez-Planas (2015), Bick (2016)

In the face of declining fertility rates across most developed countries, family policies have also increasingly been used to incentivize child bearing. With only 1.2 live births per woman in 2018, Spain has among the lowest fertility across European countries (Figure 10). At the same time, on average women have their first child at 34, compared to the EU-27 average of just over 31 years. Some of the policies reviewed above have been shown to positively affect women's labour market outcomes, but they sometimes have negative effects on fertility (and vice-versa). On the one hand, the increase in paternity leave in Spain analysed in Farré and González (2019), for instance, caused a reduction in the likelihood of having further children. On the other hand, policies that negatively affect female labour force participation, like extensions of maternity leave or more generous child benefits, have been shown to increase fertility.

Table 1 summarizes the most recent available evidence on the effects of different kinds of family policies on maternal employment and fertility. Overall, policies that make it easier to be a working mother, such as financial incentives in the form of tax credits for working mothers and subsidized or free child care for very young children, have been shown to raise both women's labour market attachment as well as fertility. Increased spending on such policies would thus likely reduce the motherhood penalty at the same time as raising fertility.

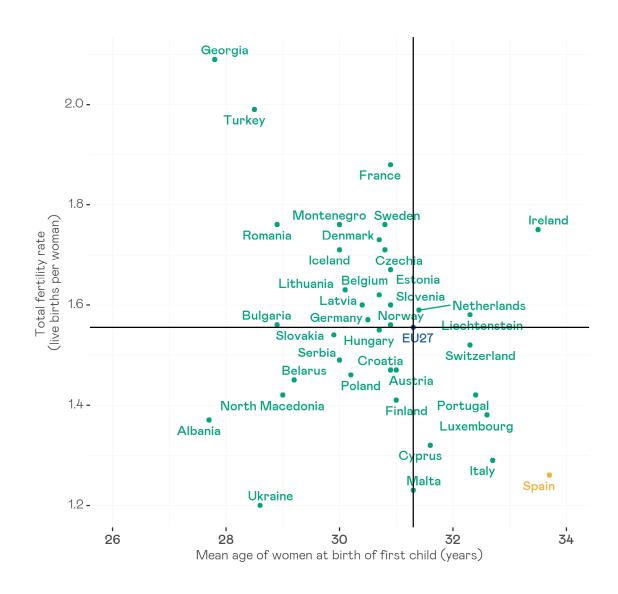
Figure 9. Expenditure on family or children benefits as percentage of GDP



Source: Eurostat. Social Protection Expenditure | Hupkau and Ruiz-Valenzuela (2021)! EsadeEcPol https://ec.europa.eu/eurostat/databrowser/view/spr_exp_sum/default/table?lang=en

Notes: According to the <u>European System of integrated Social PROtection Statistics (ESSPROS) Manual and User guidelines</u> the expenditure on family and children includes cash benefits (income maintenance benefit in the event of childbirth, birth grant, parental leave benefit, family or child allowance and other cash benefits) and benefits in kind (child day care, accommodation, home help and other benefits in kind)

Figure 10.
Fertility indicators across countries (2018)



Source: Eurostat. Social Protection Expenditure | Hupkau and Ruiz-Valenzuela (2021) ! EsadeEcPol https://appsso.eurostat.ec.europa.eu/nul/show.do?dataset=earn_ses_hourly&lang=en

Notes: Reproduced from "Statistics explained: fertility indicators", figure 4. https://ec.europa.eu/eurostat/databrowser/view/demo_find/default/table?lang=en.

5. Conclusions

Over the past 25 years Spain has undergone a striking convergence between women's and men's participation in the labour market. By 2020, the Spanish labour market showed over 88 active women for every 100 active males, whereas in the early 1990s only 50 women were active in the labour market for every 100 men. This has meant that the female to male ratio in terms of labour market participation is now very similar to the European Union overall. In fact, Spanish women's labour market participation has overtaken that of women in the European Union.

Using data from the Spanish Labour Force Survey we show that despite overall convergence between men and women in participation rates, women still fare worse on other important measures such as unemployment rates, the percent of women in temporary or part-time contracts, and the percent of women holding positions in the top occupation (i.e. directors and managers). Not only do women fare worse, the gender gap in those measures has not improved over the past 15 years. This is despite the fact that the Great Recession hit disproportionately male dominated sectors: in the aftermath of the Great Recession there were some years in which gender gaps narrowed. However, once the economy picked up, the gender gap in these main indicators started rising once more.

The situation is further aggravated for women with children, irrespective of the indicator used. Convergence in labour force participation rates has stagnated for women with children aged 15 and below over the last seven years. By the end of the 2010s decade, women with children under 15 years of age are about 7.5 times more likely than men (with children of the same age) to work on part-time contracts, twice as likely to be unemployed and 20 percent more likely to hold a temporary contract. Part of these disparities could be driven by different preferences across men and women (and especially across mothers and fathers) regarding time use. However, the data indicates that it is unlikely that preferences alone can explain these differences in labour market attachment: over a third of women with children under 5, and more than half of women with children aged 5 to 15 working part-time would like to work more hours. The Covid-19 pandemic, with its unequal effects in the labour market across genders, is already contributing to widening these existing gender gaps.

A review of the literature on family policies suggests that there is scope for well-designed policies to help narrow gender inequalities in the labour market. Existing evidence shows that more generous paternity leave entitlements reserved for fathers, which Spain has recently implemented, increase female labour force participation, employment and earnings. They have also been shown to increase men's involvement in childcare and therefore have the potential to reduce gender gaps not only in market work but also in the home.

Policies that make it easier to be a working mother, such as financial incentives in the form of tax credits for working mothers and subsidized or free child care for very young children, have also been shown to positively affect women's labour market attachment. These latter policies would also help tackle a related issue: Spain is among the countries with the lowest fertility rates and the highest age of women at first birth. At the same time, Spain spends only about half of the average country in the EU-27 on family and child benefits. Increased spending on such policies would thus likely reduce the motherhood penalty at the same time as raising fertility.

The welfare effect of such policies will depend on whether the gains in terms of tax revenues and economic output from increased female labour supply outweigh the cost of providing more affordable childcare or inwork benefits. Existing evidence suggests that women substantially increase both labour force participation and working hours in response to family policies that either provide financial assistance through tax credits or make child care more affordable. Even if not all of the increased expenditure on childcare provision is covered by the increases in income, social security, and payroll taxes generated from increased maternal employment, this does not necessarily mean that such policies would be inefficient. They may well bring other benefits, such as increases in fertility and, in the case of provision of free or affordable, high quality childcare, improvements in children's educational outcomes in primary and secondary school.

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