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POLICY BRIEF

PIIE
Women's Economic Empowerment
Research Initiative

21-8 The Evolving Gender Gap in Labor Force Participation during COVID-19

Simeon Djankov, Pinelopi Koujianou Goldberg, Marie Hyland, and Eva Yiwen Zhang

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INTRODUCTION

Despite many significant gains by women in the paid workforce in recent decades, the percentage of women participating in the labor force has remained lower than the percentage of male participants. Now, in response to the COVID-19 pandemic and the global economic downturn it precipitated, the gap in labor force participation between men and women[1] in some economies has actually widened, with potentially damaging repercussions for women's career prospects and pay.[2]

Simeon Djankov is senior fellow at the Peterson Institute for International Economics.

Pinelopi Koujianou Goldberg is nonresident senior fellow at the Peterson Institute for International Economics and the Elihu Professor of Economics at Yale University.

Marie Hyland is an economist in the World Bank's Women, Business and the Law team.

Eva Yiwen Zhang is research statistician and quality control coordinator at the Peterson Institute for International Economics.

1 Factors that have been associated with higher female labor force participation over the long run include access to contraceptives (Bailey 2006), childcare services (Lefebvre and Merrigan 2008), the increased availability and affordability of household appliances (Cavalcanti and Tavares 2008; Coen-Pirania, León and Lugauer 2010), improved maternal health (Albanesi and Olivetti 2016), and less gender discrimination under the law (Hyland, Djankov and Goldberg 2021). Research on the "motherhood" penalty has discussed long-term consequences of motherhood on women's labor market outcomes; see, for example, Aisenbrey, Evertsson, and Grunow (2009); Napari (2010); and Goldin (2014).

2 The long-term consequences of the COVID-19 pandemic on working women are discussed in Alon et al. (2020) and Collins et al. (2021).

The gender gap discussed in this Policy Brief measures the difference between the share of women employed or actively looking for paid work, relative to the share of men. To gauge its evolution over time, and especially during the pandemic, we have compiled a new database across 43 countries (36 member countries of the Organization for Economic Cooperation and Development [OECD] and 7 emerging-market economies) representing 60 percent of global GDP (in current US dollars as of 2019).[3] These data track trends over 30 years, providing many valuable insights into the evolving and varied nature of male and female workplace presence. The data will also be updated quarterly and made publicly available. Forthcoming research will examine trends over the three decades of the database, with a focus on demographic factors, differences among sectors of the economy, and what can be learned from the experience of varied government policies.

Some preliminary analysis of the trends in 2020, a time of enormous disruption because of the pandemic, suggests that:

- Out of the 43 countries in this study, two Latin American countries—Chile (+2.3 percentage points) and Colombia (+1.3)—and Finland (+1.1) experienced the largest gender gap expansion in monthly labor force participation from early 2020; Colombia and Cyprus experienced the largest expansion in quarterly labor force participation gap by more than 2 percentage points.
- The gender gap widened in the United States, driving 2.5 million women from their jobs in what Vice President Kamala Harris called a "national emergency" for women.
- The quarterly gender gap narrowed the most in three small European economies (Luxembourg, Lithuania, and Malta) by 2.9, 2.1, and 1.5 percentage points, respectively. Nine other countries (Austria, Belgium, Denmark, Ireland, Romania, Russia, the Slovak Republic, Turkey, and the United Kingdom) have also experienced a shrinking of the gender gap in 2020 (see appendix table).
- Female labor force participation fell the most in countries where women are more likely to be employed in the services and retail sales sectors, which were disproportionately affected by the lockdown measures adopted to curb the spread of the virus.
- Employees on temporary contracts were more likely to have lost their jobs during the pandemic. In countries with a lower share of female workers on such contracts relative to men, women were less likely to drop out of the labor force relative to men. Generally speaking, women in temporary employment are at the lower end of the income scale and do not include professional women with credentials who seek career opportunities in their jobs, a sector that has opened up for women in many advanced economies in recent years.

3 The 43 economies include Australia, Austria, Belgium, Bulgaria, Canada, Chile, Colombia, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, the Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

- Not surprisingly, countries with stronger laws against gender discrimination, as measured by the overall World Bank's Women, Business and the Law index score, experienced fewer disparities between men and women in keeping jobs during the pandemic.
- Greater government expenditure on childcare in the pre-COVID-19 era does not appear to have insulated female workers from the labor-market impacts of the pandemic.

I PREVIOUS EVIDENCE

There are two main channels through which COVID-19 has been documented to expand the gender gap in employment (Alon et al. 2020). The first is the occupation channel, whereby women were overrepresented in the sectors hardest hit by lockdowns. The second is the childcare channel, whereby the extra caregiving responsibilities brought about by school and childcare closures fell disproportionately on working mothers' shoulders.

Earlier research focused on advanced economies and examined the effects of the pandemic on overall employment as well as on domestic work and childcare responsibilities.[4] In this Policy Brief, we shift the focus to a different outcome: female labor force participation. We also expand country coverage by including a small set of emerging-market economies in our analysis.

The rest of the Policy Brief is organized as follows. Section II documents the changes in female labor force participation in the countries in our sample since the onset of the pandemic. Section III examines the factors that have contributed to these changes and discusses the role of various policies in explaining cross-country differences in the effects we document. Section IV offers some conclusions.

II CHANGES IN FEMALE LABOR FORCE PARTICIPATION ACROSS COUNTRIES

To examine the resilience of female labor in a country to the shock caused by COVID-19, we consider the change in the gender gap in the labor force participation (LFP) rate from early 2020. The data span 36 of the 37 OECD countries and 7 emerging-market economies.[5] We employ two sets of LFP data: the first is seasonally adjusted quarterly data from OECD and Eurostat that cover the population aged 15 to 64.[6] The second is monthly data from national sources that measure labor force participation as a three-month moving average.

The country coverage of the two datasets is different. The quarterly data cover 41 out of the 43 sample countries. The monthly data cover 20 economies and allow us to add two countries (Chile and Mexico) to the analysis that are not available in the quarterly series. The age range of employees covered in the monthly data is wider than that of quarterly data. We use these overlapping

4 This research includes Farre et al. (2020) on Spain; Craig and Churchill (2021) on Australia; Kikuchi et al. (2020) on Japan; and Adams-Prassel et al.'s (2020) cross-country study.

5 Germany is not included in the analysis, as reliable LFP monthly or quarterly data do not exist.

6 Russia's quarterly LFP data are an exception, as it is retrieved from the Russian Statistical Office (ROSSTAT).

countries to examine the robustness of our results to the use of different data sources and population coverage. In the United Kingdom, Denmark, and Norway monthly data are provided in three-month moving averages by national statistics agencies, while for other countries we converted monthly data to moving averages for consistency.[7]

Gender Gap Patterns Prior to 2020

Countries with a higher level of GDP per capita generally have higher labor force participation by women (figure 1a and appendix table). Data from 2019 show that two Nordic countries (Iceland and Sweden) and Switzerland had the highest women's participation rates, at above 80 percent. Next come New Zealand, the Netherlands, two Baltic countries (Lithuania and Estonia), and the remaining Nordic countries (Finland, Denmark, and Norway). Mexico and Turkey had the lowest rates, at 49 and 39 percent, respectively. Five other countries had female participation rates below 60 percent and appear below the trend line in figure 1a. These are South Africa, Italy, Chile, Romania, and Korea.

As cross-country comparisons of the female labor force participation may reflect national differences that affect both genders' participation rates similarly, we also present the gender gaps in labor force participation in 2019 relative to income levels (figure 1b). Mexico and Turkey stand out, with the largest gender gaps in the sample at 33 and 39 percent, respectively. They are followed by Colombia and Romania. Lithuania has the smallest gender gap in employment, at only 2.3 percentage points. Two Nordic economies (Sweden and Finland) and one Baltic economy (Latvia) are close behind Lithuania.

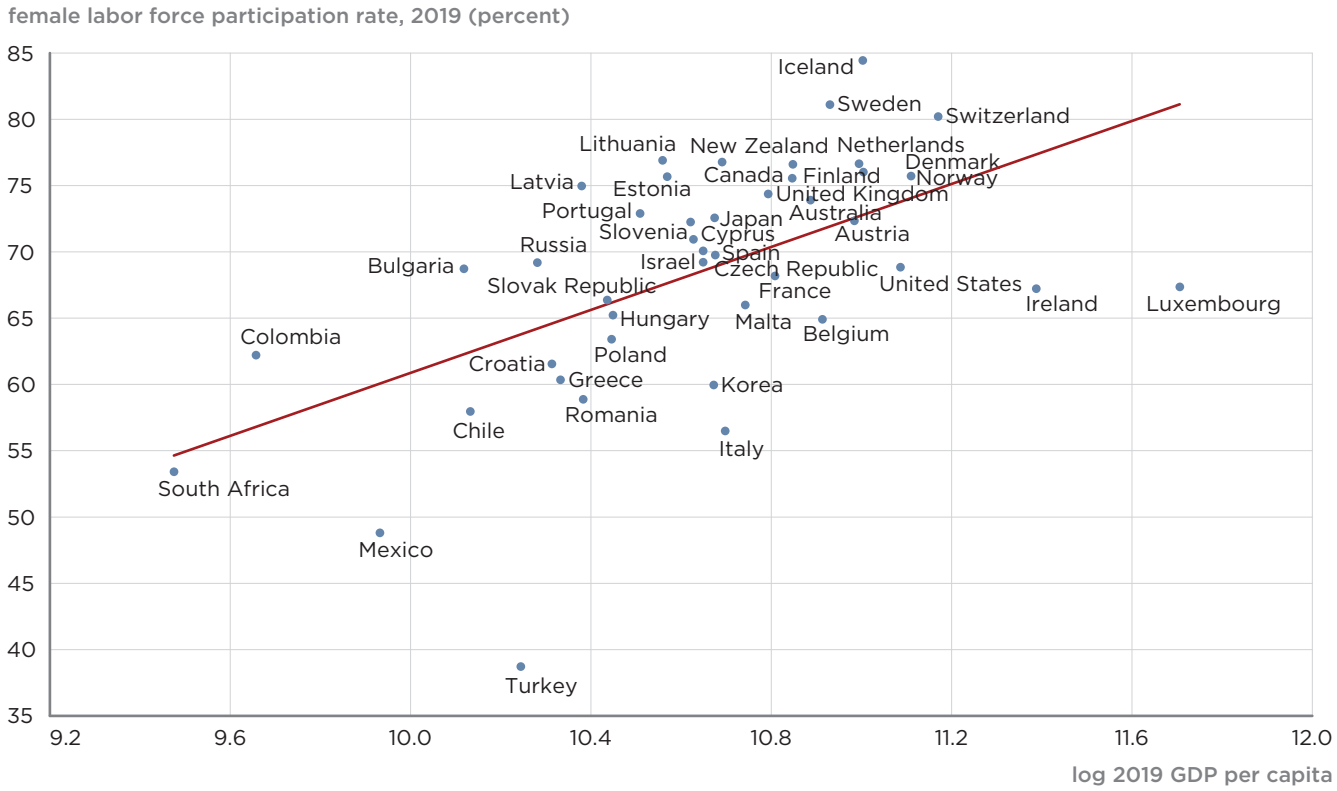
Widening of the Gender Gap in 2020

We next examine how the gender gap has changed between the first (Q1) and third (Q3) quarter of 2020. Since the onset of the pandemic, the gap in labor force participation has widened in some countries and shrunk in others. Figure 2 contrasts the countries in which the gender gap has expanded (panel a) and contracted (panel b) the most.

The increased gap in labor force participation between men and women in Colombia and Cyprus shown in figure 2, panel a is striking. Relative to precrisis levels, the gender gap has increased approximately 3.4 percentage points for Colombia and 2.3 percentage points for Cyprus. Women in Colombia appear to have been hit particularly hard due to the concentration of female employment in contact-intensive services sectors where remote working is not feasible and job losses were widespread (IMF 2020).

7 Due to COVID-19, the data collection process may be hampered or altered in some countries. For example, in Mexico, the national labor force participation data collected by INEGI up to March 2020 are from the National Occupation and Employment Survey (ENOE), from April to June 2020 they are from the Telephone Occupation and Employment Survey (ETOE), and as of July 2020 the information is generated with the Survey National Occupation and Employment (new edition) (ENOEN), www.inegi.org.mx.

Figure 1a
Countries with higher levels of GDP per capita generally have higher female labor force participation

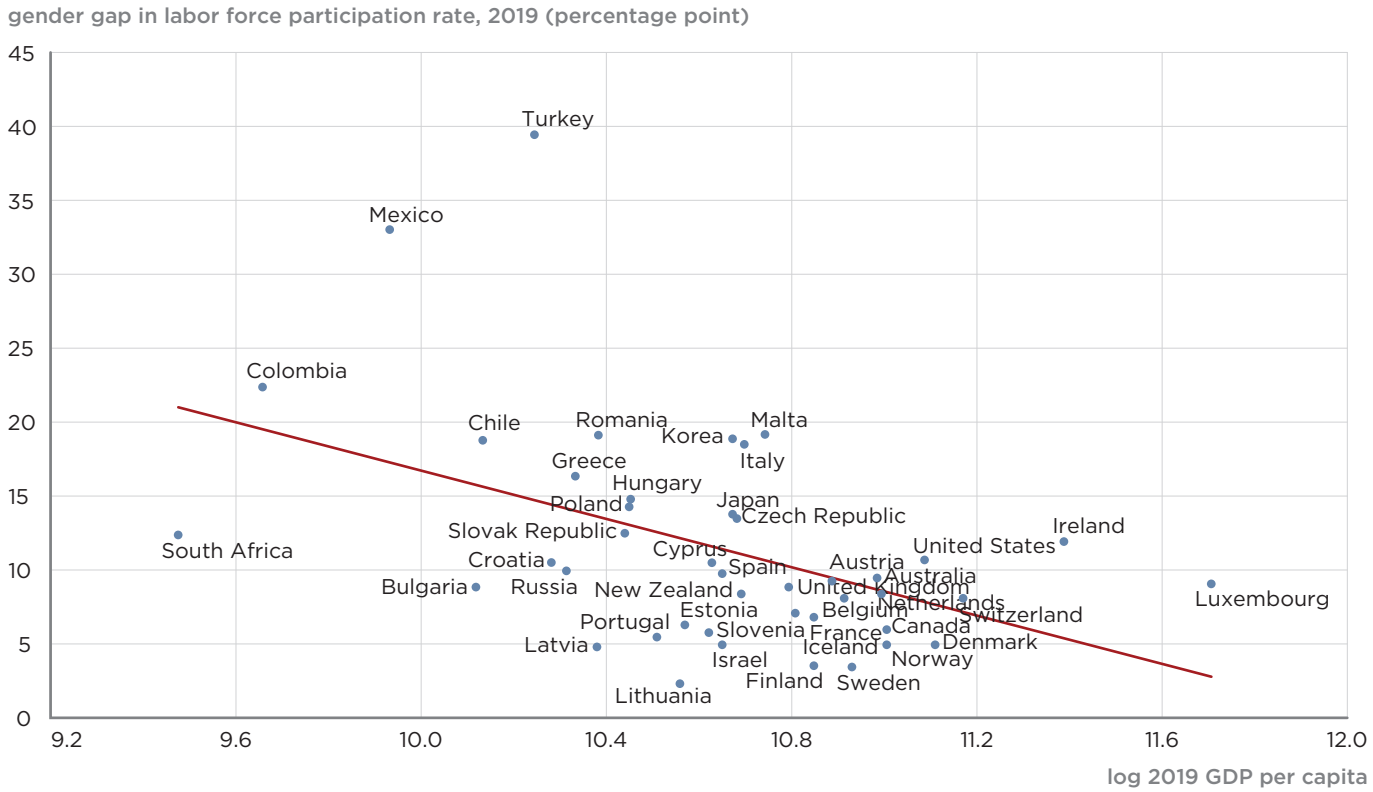


Note: The red line represents the linear fitted line.
Sources: Labor force data are from the Organization for Economic Cooperation and Development; GDP data are from the World Bank.

Additionally, in Colombia, employment in paid domestic work, an occupation where women are disproportionately represented, has declined dramatically since the onset of the crisis (NU, CEPAL 2021). In Canada, Croatia, and Japan, the gap increased from the first to the second quarters, and then remained relatively flat into the third quarter. Figure 2, panel b shows that the COVID-19 pandemic has not been universally associated with a widening of the gender gap—in certain economies, the gap has shrunk since the onset of the crisis. For example, in Luxembourg, the gap contracted in the second quarter and remained flat in the third quarter. In Portugal, Latvia, Malta, and Lithuania, the gap remained relatively flat between the first and second quarters but then contracted more noticeably in the third quarter. In the four countries, participation rates for women started to recover in the third quarter of 2020 while those for men did not.

Figure 1b

In 2019, Mexico and Turkey had the largest gender gaps in labor force participation, while Nordic and Baltic economies had among the smallest gaps



Note: The red line represents the linear fitted line.

Sources: Labor force data are from the Organization for Economic Cooperation and Development; GDP data are from the World Bank.

The comparisons highlight large differences between countries in how working women were affected by the pandemic, relative to working men. In the second and third quarters of 2020, 70 percent of the economies in our sample experienced an expansion in the gender gap in labor force participation relative to the first quarter of the year. On average, the gender gap expanded by 0.2 percentage point in the second quarter and shrank by 0.1 percentage point in the third quarter, but these averages mask considerable heterogeneity across countries. The variation in the changes in the gender gap increased from the second to the third quarter. In 13 economies, the gender gap expanded in both quarters; these were Australia, Canada, Colombia, Croatia, Cyprus, the Czech Republic, Finland, Iceland, Italy, Japan, Korea, Slovenia, and the United States. In contrast, 12 countries (Austria, Belgium, Denmark, Ireland, Lithuania, Luxembourg, Malta, Romania, Russia, the Slovak Republic, Turkey, and the United Kingdom) experienced a shrinking of the gender gap in both quarters.

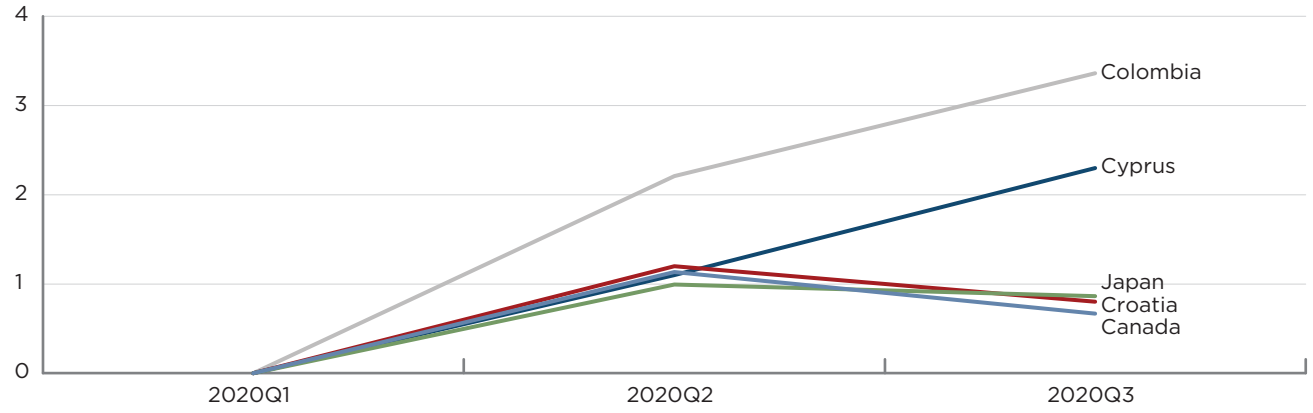
Monthly Gender Gap Expansion in 2020

Analysis of the monthly data confirms the patterns evident in figure 2. Based on the expansion of the gender gap in labor force participation from January to December of 2020, Colombia once again stands out for its large increase, by 1.6 percentage points, coming second to Chile, where the gender gap expanded 2.3 percentage points by end 2020. Interestingly, the monthly data show some signs that women returned to the workforce in numbers comparable to men after September 2020.[8]

Figure 2
Since the onset of the pandemic, the gap in the labor force participation rate (LFPR) has widened in some countries and shrunk in others

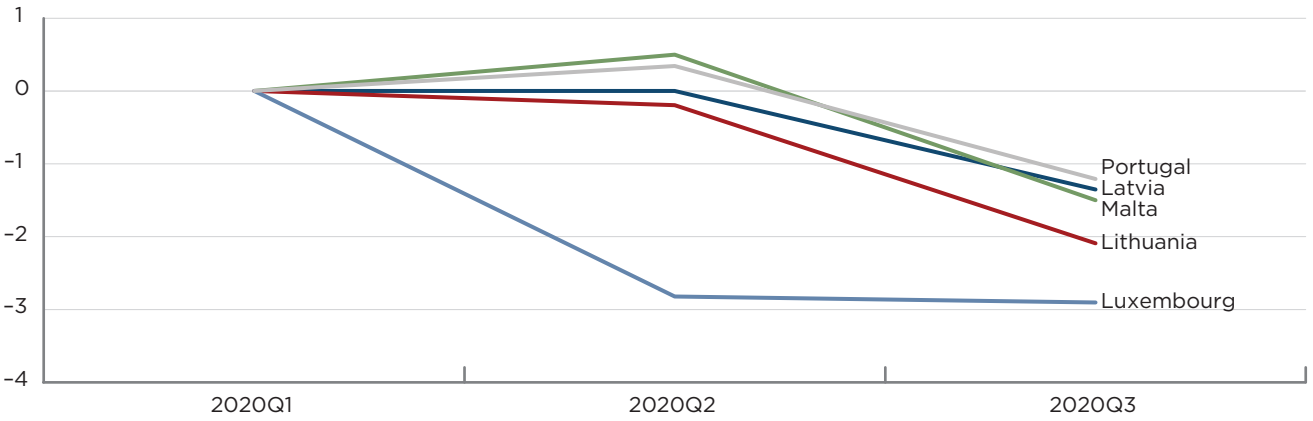
a. The gap as of 2020Q3 expanded the most in Colombia, followed by Cyprus

increase in gender gap in LFPR, top 5 economies (percentage points)



b. The gap as of 2020Q3 shrank the most in Luxembourg, followed by Lithuania

decrease in gender gap in LFPR, top 5 economies (percentage points)



Sources: Organization for Economic Cooperation and Development; Eurostat.

8 The maximum gender gap recorded for a country differs between the monthly and quarterly data because of differences in the population covered; in Colombia, for example, the quarterly data cover persons aged 15–64, whereas the monthly data cover all persons aged 15 and over.

The monthly data also reveal that the countries in which the gender gap expanded the most are a heterogenous group. Overall, countries where the gap in labor force participation was high prior to the onset of the COVID-19 crisis experienced a larger increase in the gender gap once the crisis hit. There are many outliers in this relationship, however. For example, two of the countries with the largest widening of the gender gap already had a very high gender gap prior to the pandemic (20.9 percentage points in Chile and 23.9 percentage points in Colombia); on the other hand, two Scandinavian countries, Sweden and Finland, where the gender gap prior to the COVID-19 pandemic was less than four percentage points each, also experienced a large increase in the LFP gap, by around 1 percentage point. This heterogeneity suggests that policies that have been associated with bringing more women into the labor force in normal times, including childcare supports and protections against discrimination, may not be successful in retaining them under extraordinary circumstances.

III. WHAT EXPLAINS THE DIFFERENCES ACROSS COUNTRIES?

Hypotheses, Data Sources, and Measurement

This section lays out the main factors that earlier studies have identified as potential contributors to changes in the gender gap,[9] along with a description of the data available to measure them. These factors include countries' sectoral differences in employment by gender; preexisting gendered laws and family friendly policies; women's temporary employment and related protections; and public childcare support prior to the pandemic.

Sectoral Differences in Employment

Across all countries in our sample, an average of 24 percent of women are employed as service and sales workers, 12 percentage points higher than the rate for men.[10] Female employees' representation in the services sector is above 30 percent in Colombia, Japan, Mexico, and Norway. The gap in representation between men and women is highest in Colombia, at 26 percentage points.

Because services were disproportionately affected by the coronavirus pandemic, the higher representation of women in the services sector implies that the pandemic's effects on women's labor market prospects may have been particularly severe. We hypothesize that the higher the share of women employed in the services sector in a country, the larger the expansion of the LFP gap in that country.

Gendered Laws and Policies

We use several variables to examine the correlation between the evolving gender gap and a range of laws and policies that relate to women's participation in the labor market. Specifically, we consider family leave policies, as well as a broader measure of the legal discrimination that women face as they navigate their working lives, as captured by the World Bank's Women, Business and the

9 See the studies referenced in section I.

10 Sectoral employment data based on International Labor Organization (ILO) modeled estimates from November 2019.

Law (WBL) index. The first variable relates to the length of paid paternity leave available to fathers. This leave ranges from zero to five weeks across countries. On average, 1.3 weeks of paternity leave was provided, with 12 economies providing none. Four countries provide at least four weeks of leave: these are Lithuania, Spain, Slovenia, and Portugal. We also capture a broader measure of parental leave policies by considering the score under the Parenthood indicator from the WBL database. This indicator summarizes the policies that enable a woman to continue to work once she has had children. It covers maternity, paternity, and parental leave, as well as legislation that prohibits the dismissal of pregnant workers.

Hyland, Djankov, and Goldberg (2020) show that high-income OECD countries have made greater progress than other countries when it comes to equalizing laws across genders. For the 36 OECD countries in our sample, 20 countries received a perfect score of 100 in the Parenthood indicator in 2019, while Mexico, Israel, and Switzerland scored the lowest at 60. Among the seven non-OECD economies, Romania, Bulgaria, and Croatia scored 100, Malta scored 60, and the other three (Cyprus, South Africa, and Russia) scored 80. To test if there is a relationship, on aggregate, between the evolving gender gap and gender equality under the law, we use the overall WBL index score as a proxy for equal treatment in the labor force. For the countries in our sample, the 2019 WBL index ranges from 73.1 for Russia (implying that women have less than three-quarters the rights of men in the areas covered by the index) to a perfect 100 for eight countries in the sample (Belgium, Canada, Denmark, France, Iceland, Latvia, Luxembourg, and Sweden).

We hypothesize that countries with stronger family leave policies and more equal treatment of women under the law may have allowed households to cope with the additional house and childcare responsibilities during the pandemic without women having to withdraw from the labor force.

Temporary Employment and Protections

Across the countries included in our study, the share of women on temporary contracts was higher than that of men by an average of 1.2 to 1.4 percentage points between 2017 to 2019.[11] The share of women on temporary contracts was the highest in Colombia, representing more than 30 percent of female workers, versus 26 percent for men. Spain, Poland, and Chile follow, with between 25 to 28 percent of female workers on temporary contracts. The gender gap in temporary employment was widest in Finland, at 5.5 percentage points higher for women than for men, followed by Japan at 4.5 and Colombia at 4.3.

To measure protections for temporary workers, we use the OECD's Employment Protection Legislation indicator for hiring temporary workers, which measures the strictness of regulations on the use of fixed-term and temporary work agency contracts, such as the types of work and duration allowed for successive fixed-term contracts, regulation on the establishment of temporary agencies, and requirement for agency workers to receive the same pay and work conditions as regular workers.[12] This variable ranges from 0.3 to 4.5, with

11 These figures are based on employment data retrieved by the authors from the OECD.

12 See OECD Indicators of Employment Protection.

Turkey, Luxembourg, Italy, France, Spain, Estonia, and Norway scoring above 3. The countries with poor temporary labor protection with a score lower than 1 are New Zealand, the United Kingdom, the United States, South Africa, and Canada.

We hypothesize that countries with a higher share of women employed as temporary workers may have experienced a larger expansion of the LFP gender gap as temporary workers have been disproportionately affected by the pandemic. For the same reason, less protection of temporary workers may have resulted in more women leaving the workforce.

Childcare

Childcare policy is the final variable that we correlate with the evolving gender gap during the COVID-19 era. Government spending on childcare[13] is an imperfect proxy for childcare support, as spending is aggregated across different types of programs. Public childcare expenditure ranges from 0.1 percent of GDP in Turkey to 1.8 percent of GDP in Iceland. Turkey, Spain, Slovenia, the Czech Republic, Japan, Portugal, the United States, and Ireland spent less than 0.5 percent of their GDPs on public childcare in 2015.

We hypothesize that in countries with strong childcare support, women were able to continue working during the pandemic. Note, however, that our measure captures childcare support prior to the pandemic and not measures that were taken to specifically address the pandemic's challenges. The United Kingdom, for example, offered a local property tax exemption for eligible childcare centers from 2020 to 2021. Additionally, UK parents whose work hours have been reduced during the pandemic are eligible to offset childcare costs through tax credits. These may help explain the resilience of the United Kingdom's female participation rate. Due to data constraints, we are unable to test the effectiveness of COVID-19-specific childcare policies. Instead, we use pre-COVID-19 childcare expenditure as a proxy for the proclivity of governments to subsidize childcare.

Findings

This section presents associations between the evolving LFP gender gap during the COVID-19 era, and the country characteristics and policies regarding (1) female employment in the services sector, (2) gender equality under the law and family-friendly policies, (3) employment share and protections for workers on temporary contracts, and (4) government expenditure on childcare. These associations are captured through simple cross-country ordinary least squares (OLS) regressions of the expansion in LFP gender gap between the first and third quarters of 2020 on the relevant covariates.

To summarize our findings, the results indicate a statistically significant positive correlation between the expanding gender gap since the onset of the COVID-19 crisis and women's concentration in the services sector. We also find that the expansion of the LFP gender gap was lower in those countries that had a smaller female temporary employment share (relative to men). Additionally, a higher level of legal equality between men and women as measured by the

13 Data retrieved from OECD Family Database: PF3.1 Public spending on childcare and early education, oe.cd/fdb.

overall WBL score is associated with a smaller gender gap expansion during the pandemic. On the other hand, there is no significant relationship between the evolving gender gap and the scale of protection measures for temporary workers, family leave policies, or childcare policies.

The gender gap in LFP increased more in countries where a greater proportion of women were employed in the services sector prior to the crisis. In an OLS cross-country regression where the dependent variable is the change in the LFP gender gap between Q1 and Q3 of 2020, and the independent variable is the female employment share in the services sector, the coefficient on female employment share is positive and statistically significant at the 5 percent level (figure 3, panel a). Every 10 percentage point higher female service employment share prior to COVID-19 is associated with an additional 0.9 percentage point increase in the gender gap by Q3. The statistical significance holds if the female employment share in services is replaced with its gap from men's share (figure 3, panel b). These results provide support for our hypothesis that the LFP gender gap expansion was driven primarily by occupational composition: countries with a particularly high representation of women in the services sector (Colombia, for example, at 34 percent) experienced a particularly steep decline of female LFP (by an additional 3.4 percentage points relative to men) as many services sectors were partially shut down by the pandemic.

Figure 3

Countries with higher shares of women employed in services experienced larger gender gap expansion in the labor force participation rate (LFPR) between 2020Q1 and Q3

a. Gender gap in LFPR increased more in countries with higher female employment share in services

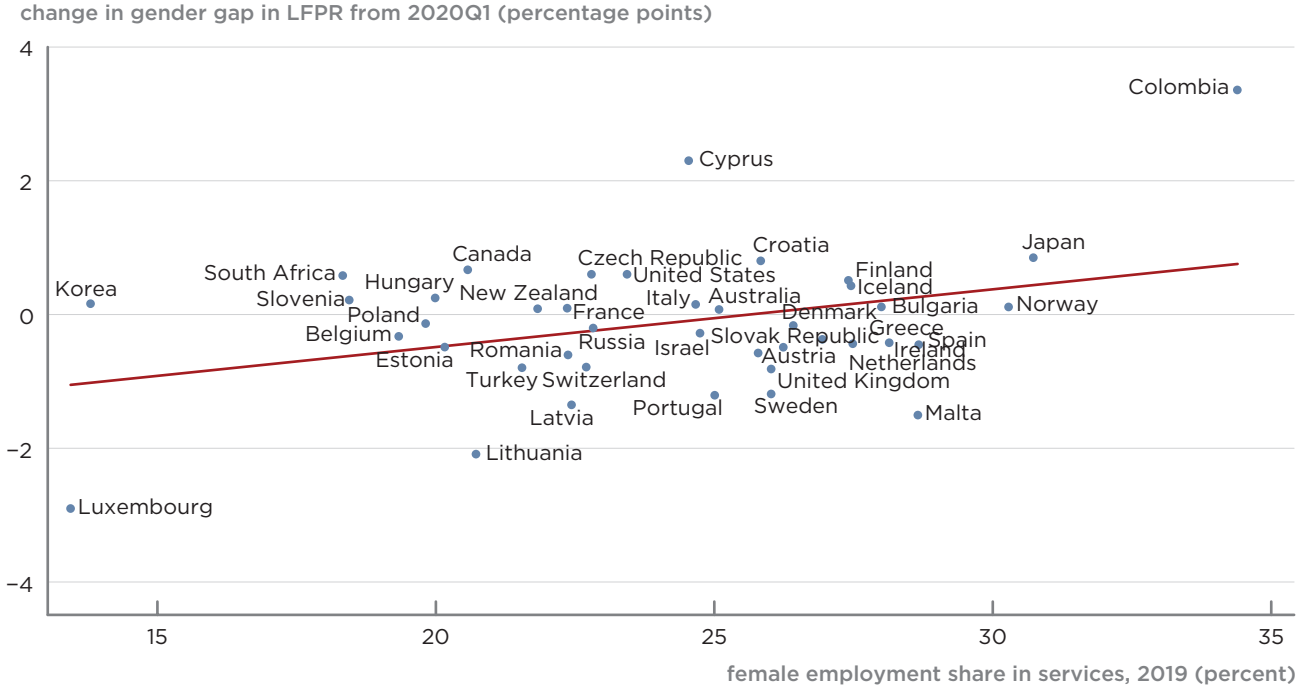


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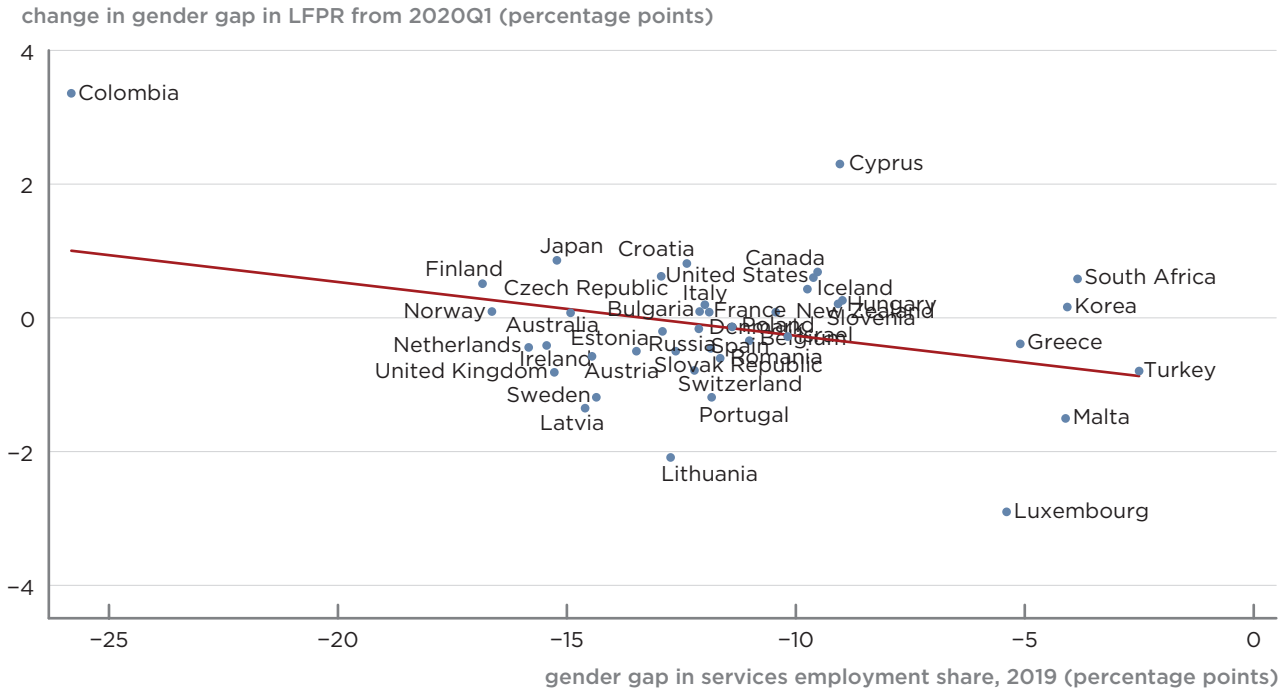
Figure 3 (continued)

b. Gender gap in LFPR increased more in countries with higher representation of women in services employment



Notes: The red line represents fitted values. Figure shows 41 out of the 43 countries in the sample, because quarterly LFPR data are not available for Mexico and Chile. If the change in the gender gap is measured in percent rather than in percentage points, the positive association displayed in panel a holds, but the negative association displayed in panel b is no longer statistically significant. If Colombia is removed, the correlations in panels a and b preserve their signs but are no longer statistically significant.

Sources: Labor force participation data from Organization for Economic Cooperation and Development, Eurostat, and ROSSTAT. Service employment data are based on International Labor Organization (ILO) estimates for 2019.

Research by Hyland, Djankov, and Goldberg (2020), among others, has shown that greater legal equality between men and women is positively associated with female labor supply. We test whether this correlation could suggest a more resilient female labor supply, relative to male labor supply, amid the global pandemic. Though not presented in charts, we find that women's labor supply, relative to that of men, has been more resilient to COVID-19 in countries with more gender equalizing laws as measured by the overall WBL score. The correlation is significant at the 90 percent confidence level. A country's paternity leave policy, however, is not statistically significant in our analysis, nor is the broader measure of family leave policy (as captured by the WBL Parenthood indicator).

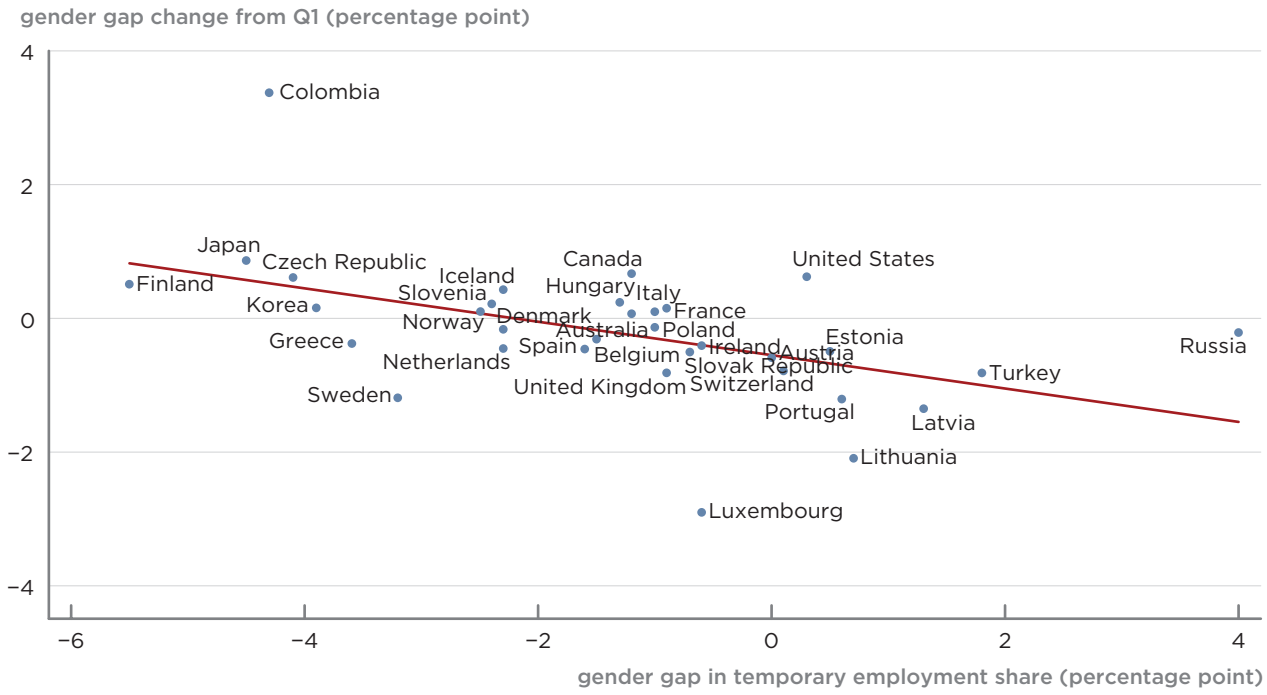
Next, we move on to the type of employment. Early evidence from Japan shows that female workers fare worse than men largely because the share of part-time, temporary, and contract workers is larger for women (Kikuchi et al.

2020).[14] Figure 4 displays the correlation between the LFP gender gap expansion during the COVID-19 era and the gender gap in temporary employment prior to 2020 in panel a, and with the level of protections for temporary workers in panel b. The regression results show that the LFP gender gap expanded less in economies with a smaller share of women working under temporary contracts relative to men prior to the onset of the crisis. The correlation with temporary employment is statistically significant at the 1 percent level.[15] But protections in place for workers under temporary or fixed-term contracts do not have a significant effect.

Figure 4

Countries with higher shares of female temporary workers experienced larger widening of the gender gap in the labor force participation rate (LFPR) during the pandemic

a. Gender gap in LFPR in 2020Q1–Q3 increased more in countries with higher shares of women in temporary employment relative to men prior to 2020



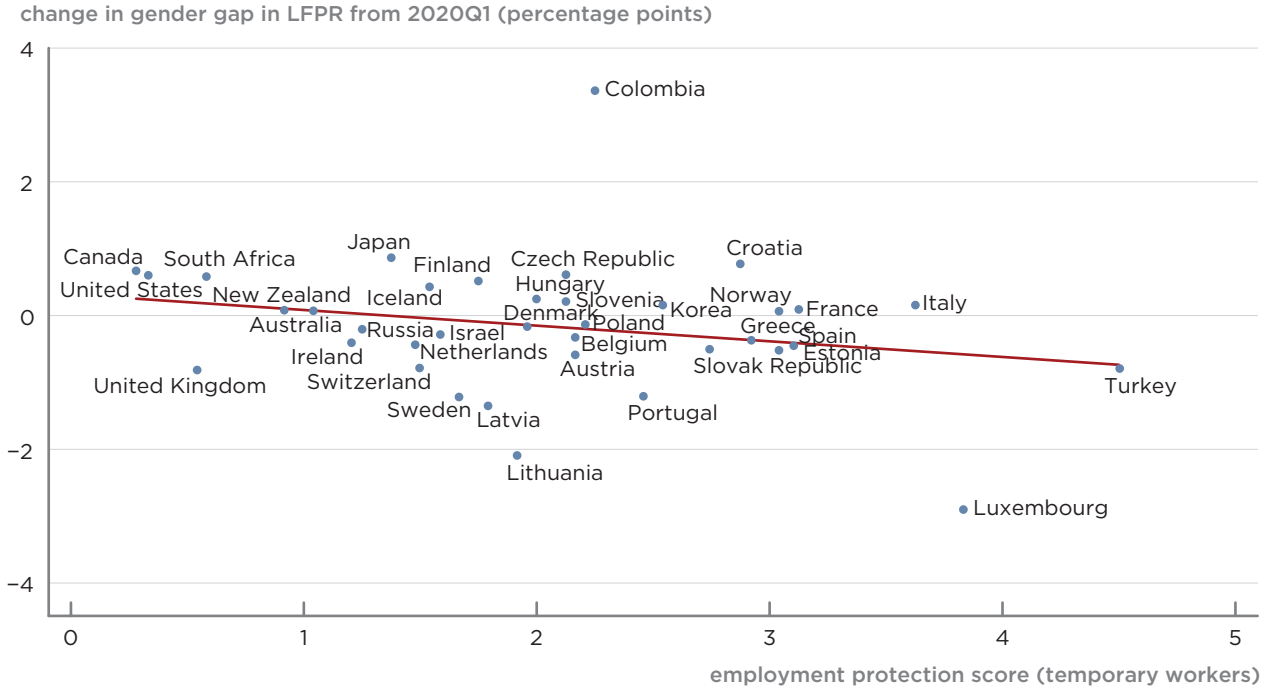
(figure continues)

14 As a robustness check, we also test the correlation between LFP gender gap expansion and part-time employment share in the precrisis era through the OLS model. We find that a female's part-time employment share is not significantly related to changes in the gender gap since the onset of the crisis.

15 Regression results show that countries with a 10 percentage point larger gender gap in temporary employment tended to experience a 2.5 percentage point higher LFP gender gap expansion in 2020Q3.

Figure 4 (continued)

b. Pre-COVID-19 protections for temporary workers do not predict changes in gender gap in LFPR in 2020Q1–Q3



Notes: The red line represents fitted values. Figure shows 33 out of 43 countries in the sample due to limited availability of temporary employment data. Employment protection score measures the strictness of regulations on the use of fixed-term and temporary work agency contracts. Higher score means better protection. Temporary employment share is based on 2017 level. If the change in the gender gap is measured in percent rather than in percentage points, the coefficients for temporary employment share remain statistically significant at 5 percent and the coefficient for protection remains insignificant.

Source: Labor force participation data retrieved from Organization for Economic Cooperation and Development, Eurostat, and ROSSTAT. Data on temporary employment (2017) and employment protection scores (2019 or latest available) retrieved from Organization for Economic Cooperation and Development.

Because of its well-established links to female labor supply, we also look at the relationship between the evolving gender gap during the COVID-19 pandemic and government expenditure on childcare, measured as a percent of gross domestic product. For this policy variable, we find no significant effect. Thus, while a number of authors (for example, Farré et al. 2020) have noted that the negative impact of the pandemic on female workers could be related to the extra childcare responsibilities they have borne, greater government expenditure on childcare in the pre-COVID-19 era does not appear to have insulated female workers from the labor-market impacts of the pandemic. This is not surprising in light of the fact that many childcare facilities had to shut down during the pandemic, leaving parents with no other option than to take time off work to care for their children. As we pointed out above, measures that were taken to specifically address such childcare closures (as in the United Kingdom) had more impact on keeping women in the workforce than preexisting policies.

IV CONCLUSIONS

The COVID-19 pandemic has inflicted disproportionate damage to sectors employing more women, such as retail stores, restaurants, and the hotel and hospitality business. An increase in family caregiving responsibilities because of school closures has also fallen on working mothers' shoulders. Both factors have pulled women out of the labor force. But there have been substantial differences across countries in the way the participation of women in the workforce has been affected relative to that of men. In some countries, the progress made toward integrating women into the workforce reversed substantially, while in other economies, the gender gap in labor force participation, unexpectedly, shrank during the early period of the pandemic.

On average, female employees have fared better in countries where women are less concentrated in the services sector, less likely to be employed as temporary workers, and where laws supported greater equality at the onset of the crisis. By contrast, precrisis policies pertaining to temporary worker protection, family leave and government expenditure on childcare were not found to be significantly correlated with changes in the LFP gender gap. Nevertheless, these policies are still worthwhile to pursue because they have been shown to have beneficial long-term effects on labor force participation by women (Zabalza and Tzannatos 1985; Berlinski, Galiani, and McEwan 2011; Amin, Islam, and Sakhonchik 2016; Herbst 2017; Hyland, Djankov and Goldberg 2020).

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APPENDIX

Data on labor force participation and changes in the gender gap in 43 countries covered in this study

	Labor force participation, 2019		Gender gap change in 2020 (percentage points)				
			Monthly			Quarterly	
Country	*Gender gap (percentage points)*	*Female labor force participation (percent)*	*January to October*	*January to November*	*January to December*	*Q1 to Q2*	*Q1 to Q3*
Australia	9.25	73.90	0.06	0.05	0.10	1.03	0.07
Austria	9.45	72.34	—	—	—	–0.33	–0.58
Belgium	8.18	64.92	—	—	—	–0.48	–0.32
Bulgaria	8.90	68.73	—	—	—	–1.30	0.10
Canada	6.81	75.56	0.97	0.70	0.60	1.13	0.67
Chile	18.81	57.97	1.66	2.25	2.34	—	—
Colombia	22.37	62.22	1.99	1.41	1.27	2.21	3.36
Croatia	9.95	61.55	—	—	—	1.20	0.80
Cyprus	10.51	70.95	—	—	—	1.10	2.30
Czech Republic	13.66	69.76	0.45	0.18	–0.04	0.22	0.61
Denmark	5.97	76.02	–1.00	–1.30	–1.00	–0.32	–0.16
Estonia	6.28	75.69	—	—	—	0.42	–0.49
Finland	3.53	76.61	1.10	1.10	1.07	0.59	0.51
France	7.08	68.19	—	—	—	–0.11	0.10
Greece	16.35	60.35	—	—	—	0.16	–0.38
Hungary	14.76	65.27	—	—	—	–0.12	0.24
Iceland	4.95	84.45	0.03	–0.80	–1.10	0.87	0.43
Ireland	11.92	67.22	—	—	—	–0.32	–0.41
Israel	5.00	69.23	–0.44	–0.44	–0.63	1.08	–0.28
Italy	18.50	56.50	0.68	0.58	0.72	0.69	0.16
Japan	13.78	72.57	0.45	0.16	–0.07	0.99	0.86
Korea	18.87	59.96	0.34	0.34	0.11	0.41	0.16
Latvia	4.79	74.98	—	—	—	0.00	–1.35
Lithuania	2.31	76.91	—	—	—	–0.20	–2.09
Luxembourg	9.06	67.36	—	—	—	–2.82	–2.90
Malta	19.12	65.99	—	—	—	0.50	–1.50
Mexico	33.02	48.80	1.23	0.77	0.47	—	—

	Labor force participation, 2019		Gender gap change in 2020 (percentage points)				
			Monthly			Quarterly	
Country	*Gender gap (percentage points)*	*Female labor force participation (percent)*	*January to October*	*January to November*	*January to December*	*Q1 to Q2*	*Q1 to Q3*
Netherlands	8.47	76.65	–1.07	–1.13	–1.10	0.38	–0.44
New Zealand	8.38	76.77	—	—	—	–0.03	0.08
Norway	4.95	75.73	0.00	0.10		–0.04	0.09
Poland	14.30	63.41	—	—	—	0.73	–0.13
Portugal	5.45	72.89	–0.50	–0.40	–0.40	0.34	–1.21
Romania	19.16	58.88	—	—	—	–0.90	–0.60
Russia	10.49	69.19	–0.10	–0.33	–0.10	–0.80	–0.20
Slovak Republic	12.48	66.36	—	—	—	–0.16	–0.50
Slovenia	5.77	72.24	—	—	—	1.28	0.21
South Africa	12.37	53.42	—	—	—	–0.68	0.59
Spain	9.78	70.07	—	—	—	0.99	–0.45
Sweden	3.44	81.11	0.43	0.73	0.97	0.23	–1.19
Switzerland	8.08	80.21	—	—	—	1.03	–0.79
Turkey	39.44	38.72	—	—	—	–1.66	–0.79
United Kingdom	8.85	74.37	–1.00	–1.00	–1.00	–0.44	–0.82
United States	10.68	68.85	0.20	0.20	0.03	0.19	0.60

— = not available

Note: Monthly data are based on three-month moving average of labor force participation rate, using maximum age group available; quarterly and annual data are based on labor force aged 15–64.

Source: Labor force data are from the Organization for Economic Cooperation and Development (annual, quarterly, and monthly), Eurostat (quarterly), and national statisics offices (monthly).

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