



# GENDER

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## NOTES

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# Gender and Business Cycles

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NOTE/2024/001

**Cataloging-in-Publication Data**

**IMF Library**

Names: Gomes, Diego B. P., author. | International Monetary Fund, publisher.

Title: Gender and business cycles / Diego B. P. Gomes.

Other titles: IMF Gender notes.

Description: Washington, DC : International Monetary Fund, 2024. | April. 2024. | NOTE/2024/001. | Includes bibliographical references.

Identifiers: ISBN:

9798400270376 (paper)

9798400270499 (ePub)

9798400271816 (WebPDF)

Subjects: LCSH: Business cycles—Sex factors. | Women-Employment. | Men-Employment.

Classification: LCC HB3711.G6 2024

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**RECOMMENDED CITATION:** Gomes, Diego B. P. 2024. "Gender and Business Cycles." IMF Gender Note 2024/001, International Monetary Fund, Washington, DC.

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# Contents

<b>Gender and Business Cycles</b> .....	1
Introduction .....	1
Are Business Cycles Gender Neutral? .....	2
Unemployment, Employment, and Participation .....	2
Income Risk and Hours Worked .....	8
Monetary and Fiscal Policy Shocks .....	10
What Mechanisms Account for These Differences? .....	13
Prospects and Policy Considerations .....	14
<b>References</b> .....	17

## Figures

Figure 1. Cyclical Sensitivities of Unemployment .....	3
Figure 2. Cyclical Sensitivities of Employment and Labor Force Participation .....	4
Figure 3. Cyclical Sensitivities of Unemployment in Good and Bad Times .....	6
Figure 4. Cyclical Sensitivities of Unemployment during COVID-19 and Other Bad States .....	7
Figure 5. Cyclical Sensitivities of Income Risk .....	8
Figure 6. Cyclical Sensitivities of Hours Worked in the United States .....	9
Figure 7. Impulse Responses from Monetary Policy Shocks .....	10
Figure 8. Impulse Responses from Monetary Policy Shocks by Sign of Shock .....	11
Figure 9. Impacts of Spending Shocks during Recessions .....	12

# Gender and Business Cycles

Diego B. P. Gomes

April 2024

This note reviews the literature on the complex relationship between gender and business cycles. It focuses on nuanced patterns that challenge the notion of gender neutrality in economic fluctuations. The note also analyzes dimensions, such as unemployment, income risk, hours worked, and responses to monetary and fiscal policy shocks, and documents distinctive disparities. Women's unemployment is significantly less exposed to business cycles than men's in advanced economies (AEs), but no significant differences are observed in emerging markets and developing economies (EMDEs). This relationship got weaker during the COVID-19 crisis when compared with other past bad economic states. Women's income risk, in a group of AEs and EMDEs, and hours worked, in the United States, are also less sensitive to business cycles compared with men's. Men's employment is more susceptible to monetary policy shocks in a group of AEs and EMDEs, whereas positive fiscal spending shocks during recessions favor women's employment in the G7 countries, although the effects of fiscal shocks vary per country. Factors such as sectoral employment composition, firm-size variations, composition of part-time and flexible work arrangements, gender wage gaps, and household dynamics can drive gendered business cycles. As the global economy navigates low growth, limited policy space, and heightened uncertainty, policymakers must understand these dynamics when designing targeted and country-specific measures that address the unique challenges men and women face during economic fluctuations.

## Introduction

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Business cycles play a central role in shaping the economic landscape, with important consequences for men and women. Cyclical fluctuations, marked by periods of economic expansion and contraction, have far-reaching implications for individuals, households, and entire nations. Understanding the differential impact of business cycles on various demographic groups is crucial for devising policies that promote both economic stability and social equity. One particularly significant dimension is how these cyclical movements affect men and women differently.<sup>1</sup>

This note reviews the literature on the gender-differentiated effects of business cycles, discusses explanatory mechanisms, and considers these impacts within the current and projected economic environment for informed policymaking. We first review whether business cycles are gender neutral across important economic dimensions, such as unemployment, income risk, hours worked, and responses to monetary and fiscal policy shocks. We then discuss possible mechanisms that explain our findings. Finally, we place these facts in the

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<sup>1</sup> Although this note primarily discusses how business cycles affect genders differently, it is also well documented that exposure to business cycles varies based on age and economic sectors. For instance, Zanin (2014) finds that the young population, and particularly the young male population, tends to be most exposed to the business cycle in both developed and emerging countries of the Organisation for Economic Co-operation and Development (OECD) countries. Also, An, Bluedorn, and Ciminelli (2022) found in a study of 38 AEs and 58 EMDEs that youth unemployment is twice as responsive to business cycles compared with that of adults. Additionally, Goto and Bürgi (2021) identified significant differences in business cycle exposures across sectors in a group of AEs. They found that the agriculture and government sectors present no cyclical relationship between the unemployment rate and output. Conversely, manufacturing and some service sectors show a strong, negative relationship between these two factors. However, services like education, health, and financial activities do not exhibit a strong correlation between output and unemployment across different countries.

context of the existing and projected economic environment and conclude with policy considerations.<sup>2</sup>

The findings we report reveal significant gender disparities in business cycle exposure across various dimensions such as unemployment, income risk, hours worked, and differential impacts of monetary and fiscal policy shocks. Specifically, we find that women's unemployment in AEs is generally less vulnerable to business cycles compared with men's, a distinction that tends to be not significant in EMDEs. Notably, this relationship was weaker during the COVID-19 crisis when compared with other past bad economic states, indicating a shift in the historical patterns of economic resilience. Furthermore, we observed that women's income risk is less sensitive to business cycles than men's in a group of AEs and EMDEs. The same is true for hours worked in the United States. On the other hand, men's employment appears more exposed to monetary policy shocks across a group of AEs and EMDEs. However, positive fiscal spending shocks during recessions seem to disproportionately benefit women's employment in the G7 countries, although the magnitude of these effects varies across countries.

The mechanisms driving gendered business cycles are multifaceted and rooted in gender differences in the labor market and household dynamics. Men are predominantly found in cyclical sectors like manufacturing and construction, which are highly sensitive to economic downturns and are more affected by interest rate fluctuations, whereas women tend to work in more stable areas such as health care, education, and the public sector. This sectoral segregation contributes significantly to gender disparities in employment, income risk, and the impact of monetary and fiscal policy shocks. Additionally, women are more likely to be employed in smaller firms known for their employment stability compared with larger, more cyclical corporations where men are overrepresented. Also, the gendered composition of part-time and flexible work arrangements, with women more likely to engage in part-time employment, suggests that men may be more directly exposed to business cycle fluctuations because of the countercyclical nature of such employment, which is dominated by women. Furthermore, the gender wage gap, with women earning less on average than men, may inadvertently make them more retainable by employers during challenging financial times, thus affecting the gendered dynamics of the labor market across business cycles. Moreover, the "added worker effect" plays a critical role in household responses to economic stress, with married women often entering the workforce to compensate for lost household income when their husbands become unemployed during downturns. This household dynamic underscores the complex interplay of market and nonmarket factors in shaping gendered responses to business cycles.

## Are Business Cycles Gender Neutral?

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Business cycles are not gender neutral. At its core, the business cycle represents the natural rhythm of economic growth and recession. Economic expansions bring opportunities, such as increased employment and rising incomes, whereas contractions can lead to job losses and financial challenges. The relationship between gender and business cycles is complex, with a multitude of interwoven factors influencing outcomes. The impact of these cycles, however, is far from gender neutral. We begin by documenting the cyclical sensitivity of unemployment, employment, and labor force participation. Then, we look at income risk and hours worked. Finally, we assess the gendered consequences of monetary and fiscal policy shocks, as well as inflation.

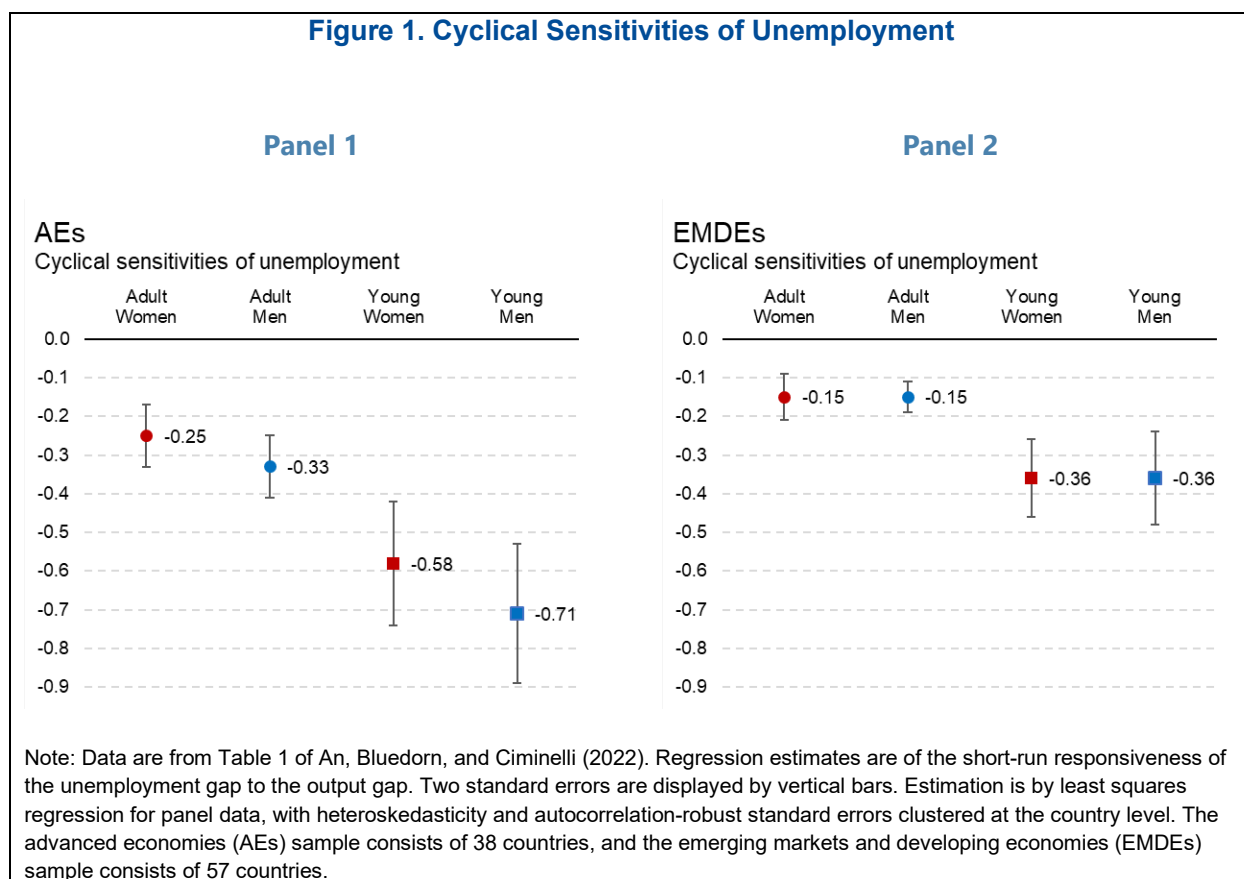
### Unemployment, Employment, and Participation

Women's unemployment is significantly less sensitive to aggregate demand conditions than men's in AEs; no significant differences exist in EMDEs. Consider the well-documented negative and stable relationship between aggregate demand conditions and unemployment. There is a significant degree of heterogeneity in the cyclical

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<sup>2</sup> Although the note's primary focus is indeed on the dynamics of gender within the context of business cycles, it's important to underscore that this focus is not intended to diminish the significance of structural gender gaps. We fully acknowledge that these structural issues are critically important.

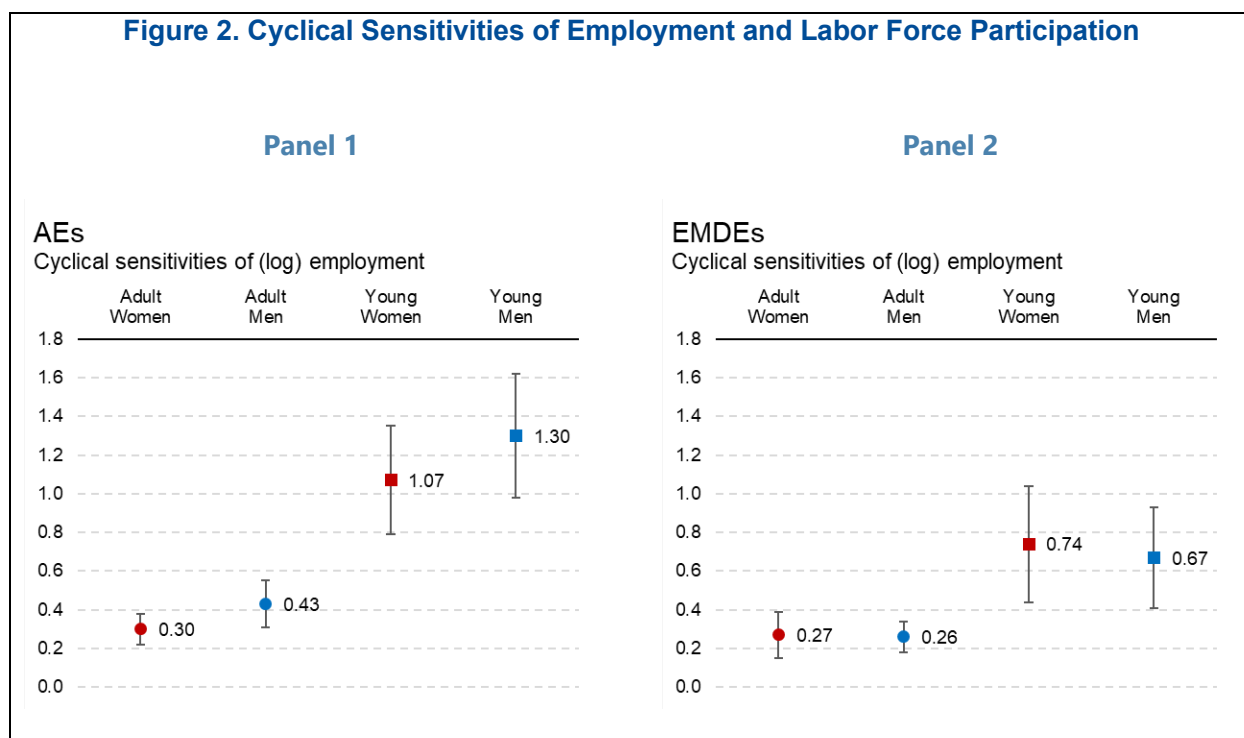
sensitivities of unemployment across gender and economic groups (An, Bluedorn, and Ciminelli 2022). Young and adult women in AEs have lower unemployment gap sensitivity than do men, which means that women’s unemployment gap is less responsive to output gap in the short run than men’s (Figure 1, panel 1). These differences are significant within the same age group and even more pronounced between age groups. For instance, young men in AEs display a sensitivity that is about three times larger in absolute value than that of adult women. Surprisingly, the cyclical sensitivities of unemployment in EMDEs are similar for men and women within each age group (Figure 1, panel 2). This suggests that factors other than demand conditions might be more important in explaining potential gender differences in the cyclical fluctuations of the unemployment gap in EMDEs.



Country-specific evidence confirms that women’s unemployment in advanced economies is less exposed to business cycles than men’s. Research by Razzu and Singleton (2016) in the US and UK indicates that during economic downturns, men’s unemployment rate increases more rapidly than women’s, temporarily narrowing the gender unemployment gap. However, in economic recoveries, men’s unemployment decreases more quickly, restoring the original gap. Hutengs and Stadtmann (2014) observed in Scandinavian countries (Norway, Sweden, Finland, Denmark, and Iceland) that men’s unemployment is more responsive to GDP changes than is women’s, as indicated by higher absolute Okun coefficients for men. In Italy, Zanin (2018) found that as the workforce gets older, men’s unemployment becomes more sensitive to economic cycles than does women’s. Kim and Park (2019) reported that in South Korea, women’s Okun coefficients are smaller in absolute terms and more stable over time compared with men’s. Finally, Evans (2018) discovered that in Australia, men in every age group have higher absolute Okun coefficients than do women, indicating a greater sensitivity of men’s unemployment to economic changes.

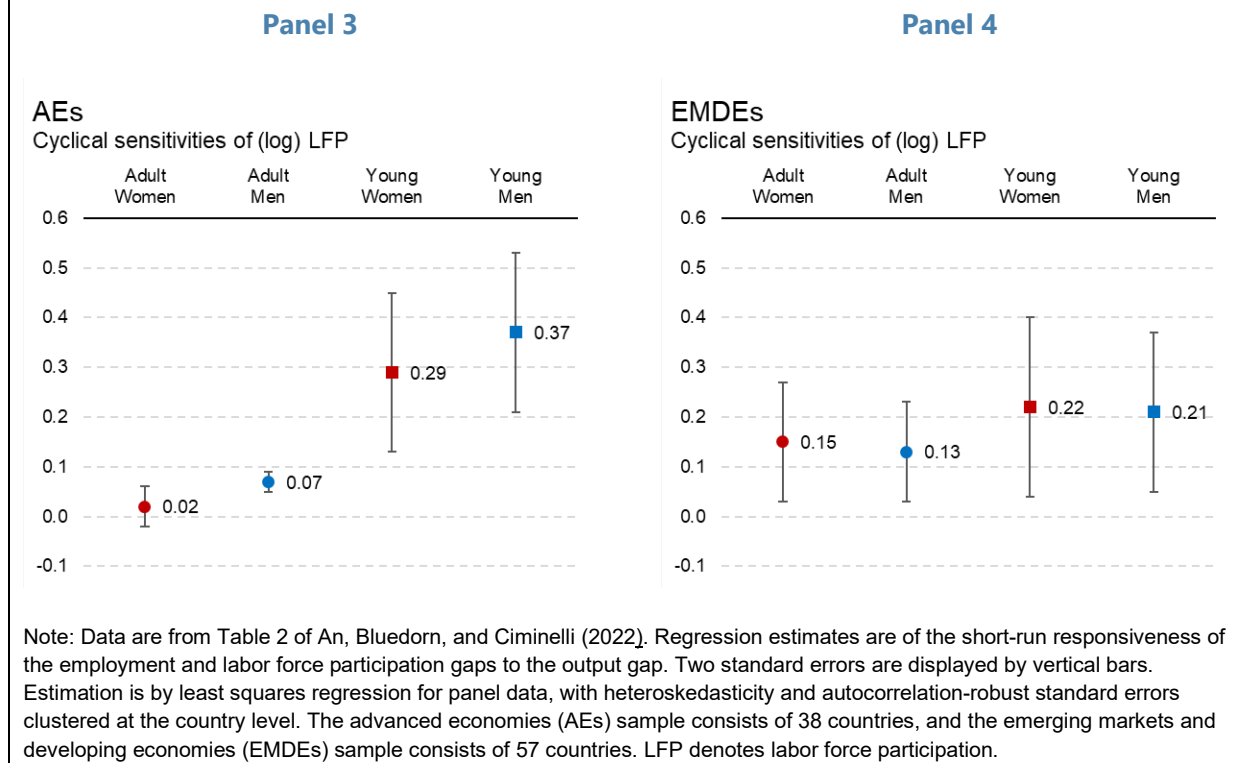
Women’s lower unemployment cyclical in AEs is mostly driven by lower employment cyclical, with slight influence from labor force participation. The cyclical sensitivity of unemployment depends on the relative

magnitudes of cyclical labor force participation and employment; in other words, the cyclical unemployment response can be decomposed into employment and participation margins. Verifying how much cyclical participation responds to the output gap is important for understanding how much of the unemployment cyclicity is driven by the employment margin and, therefore, for interpreting the lower unemployment gap sensitivities displayed by women in AEs discussed in the previous paragraph. Indeed, the smaller magnitude of women’s cyclical sensitivities of unemployment is driven by a lower employment gap response for women than for men (An, Bluedorn, and Ciminelli 2022). Although both participation and employment gaps display procyclicality, as expected, the gender gap for the employment margin is substantially larger than the one for the participation margin for both young and adult individuals in AEs (Figure 2, panels 1 and 3). For instance, considering young (adult) people, participation cyclicity for men is only 8 (5) percentage points higher than for women, whereas employment cyclicity is 23 (13) percentage points higher.<sup>3</sup> It is also worth noting that men display greater participation sensitivities in AEs than do women. This apparently counterintuitive result could be due to a greater cyclical fluctuation in the prevalence of discouraged workers among men than among women.



<sup>3</sup> For EMDEs, men and women in both age groups have similar employment and participation cyclical sensitivities, with slightly higher magnitudes for women, particularly in the employment margin of young individuals.

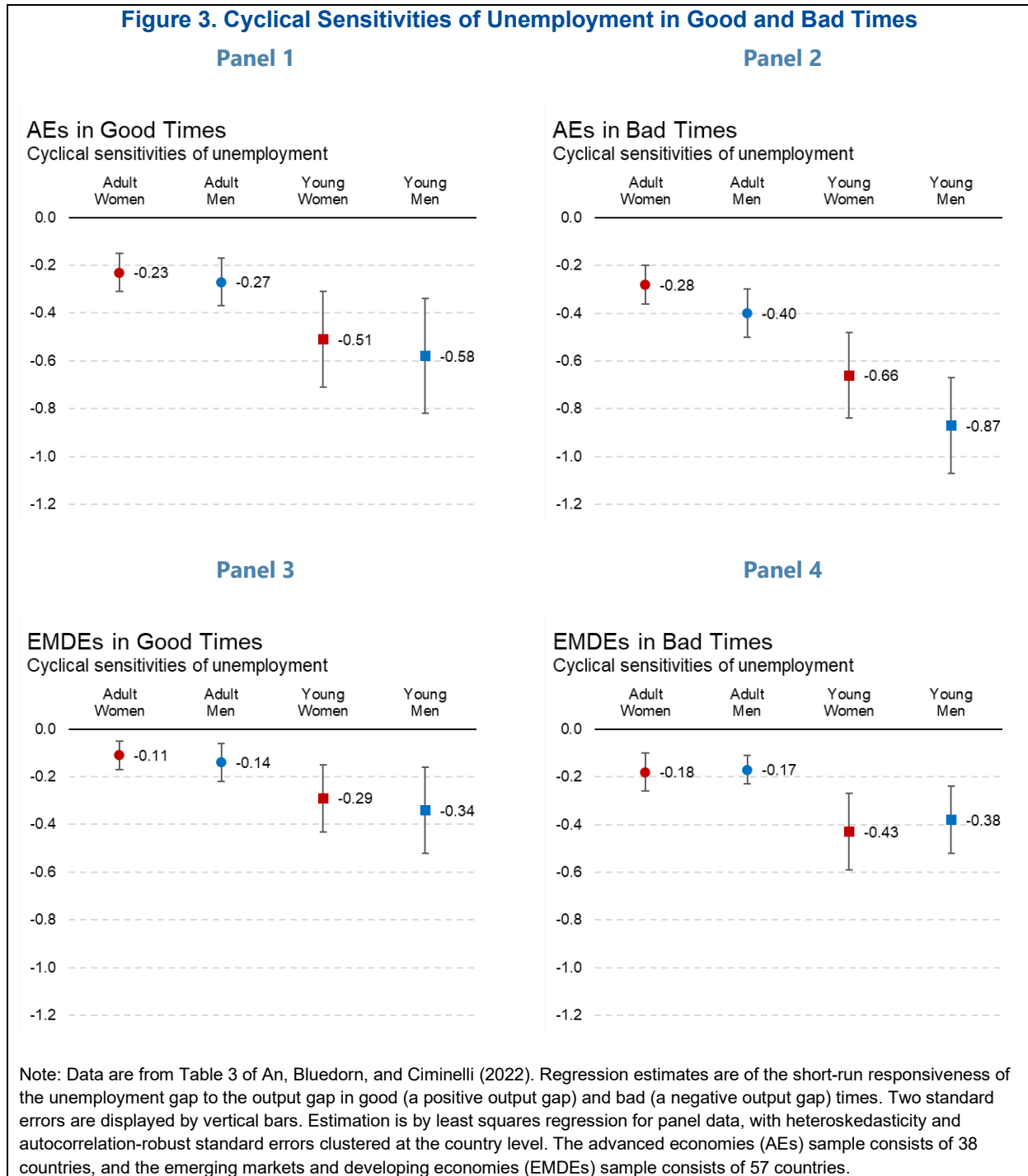
Figure 2 (continued)



Bad times are especially detrimental to men in AEs (asymmetric effect). There is no significant difference for women in AEs, and there is no significant difference for EMDEs in general. Unemployment cyclical sensitivity might vary according to the phase of the business cycle; in other words, the impact of business cycles on men and women may differ during good (positive output gap) and bad (negative output gap) times. The negative relationship between unemployment gap and output gap is stronger in bad times than in good times in general, although the results are only statistically different from each business cycle stage in AEs and only for men, either young or adult (An, Bluedorn, and Ciminelli 2022). For instance, young (adult) men's unemployment gap in AEs is 29 (13) percentage points more exposed to output gap in bad times than in good times (Figure 3, panels 1 and 2). Women also show variations from bad to good times; however, they are much lower in magnitude and not statistically significant. The bottom line is that periods of negative output gap are especially detrimental for men, and particularly young men, in AEs.



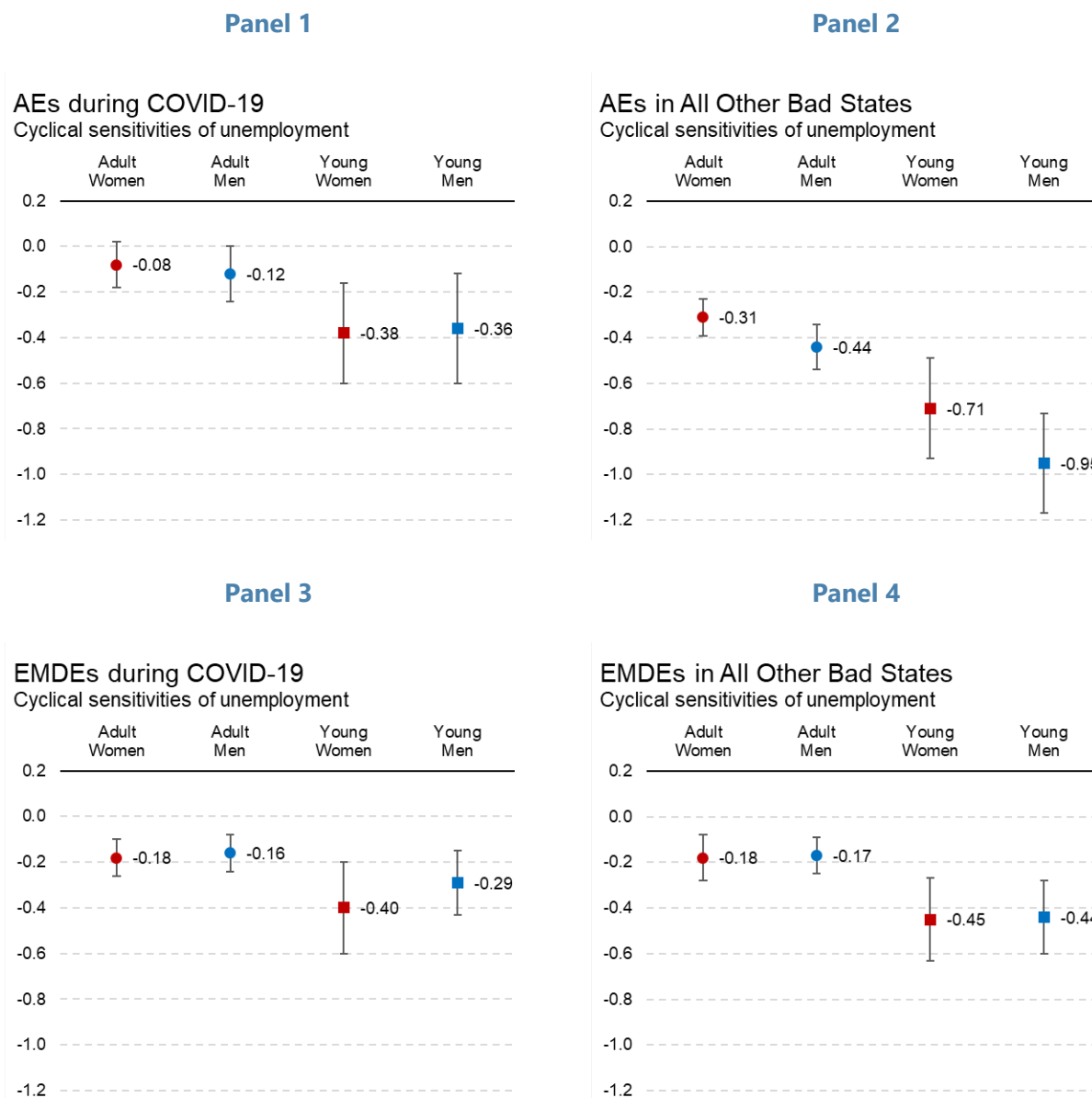
**Figure 3. Cyclical Sensitivities of Unemployment in Good and Bad Times**



The relationship between unemployment gap and output gap was much weaker during the COVID-19 crisis than during other bad economic states. So far, the discussion has focused on pre-COVID-19 pandemic times. The COVID-19 pandemic, however, demonstrated that some crises can be different in terms of gendered outcomes. In fact, the term “she-session” has been coined to describe a disproportionate impact of the pandemic on women in some countries. This relates to several factors such as job losses in sectors where women are overrepresented and are subjected to increased care burdens due to school closures and caregiving responsibilities. A more systematic look into the relationship between unemployment gap and output gap reveals that this relationship was much weaker during the COVID-19 crisis than in other bad economic states, although the results are only statistically different from each other in AEs (An, Bluedorn, and Ciminelli 2022).

Furthermore, gender gaps in the sensitivity of unemployment were much smaller during the pandemic crisis than in other bad economic times. For instance, considering adult individuals during the COVID-19 crisis, men’s sensitivity of the unemployment gap in AEs is 4 percentage points more negative than women’s (Figure 4, panel 1). In other bad economic states, adult men’s unemployment cyclical sensitivity is 13 percentage points more negative than adult women’s, more than three times higher than in the pandemic period (Figure 4, panel 2). For young people in AEs, men’s unemployment gap is 24 percentage points more exposed to output gap than women’s in other bad economic times, whereas the exposures were virtually the same during the pandemic crisis: women were 2 percentage points more negatively exposed than men.

**Figure 4. Cyclical Sensitivities of Unemployment during COVID-19 and Other Bad States**



Note: Data are from Table 5 of An, Bluedorn, and Ciminelli (2022). Regression estimates are of the short-run responsiveness of the unemployment gap to the output gap during the COVID-19 crisis and all other bad states. Two standard errors are displayed by vertical bars. Estimation is by least squares regression for panel data, with heteroskedasticity and autocorrelation-robust standard errors clustered at the country level. The advanced economies (AEs) sample consists of 38 countries, and the emerging markets and developing economies (EMDEs) sample consists of 57 countries.

## Income Risk and Hours Worked

Women's income risk is significantly less sensitive to business cycles than men's in a group of 13 AEs and EMDEs. Another key factor that amplifies the impact of business cycles on both men and women is income risk. Economic fluctuations introduce uncertainty into individuals' and households' financial well-being. This uncertainty can be particularly pronounced during periods of economic recession, where job security and income stability come under duress. Income risk, measured as the skewness of the one-year income change distribution, varies significantly from expansions to recessions in a group of 13 AEs and emerging markets (Guvener, Pistaferri, and Violante 2022). In particular, income shocks become more negatively skewed in recessions, with the probability of large negative tail shocks rising and the likelihood of large positive shocks falling. The opposite happens in expansions, which see a rise in the likelihood of large positive shocks and a decline in the likelihood of large negative shocks. All these findings are more pronounced for men than for women, indicating that women's income risk is significantly less sensitive to business cycles than is men's (Figure 5).

**Figure 5. Cyclical Sensitivities of Income Risk**

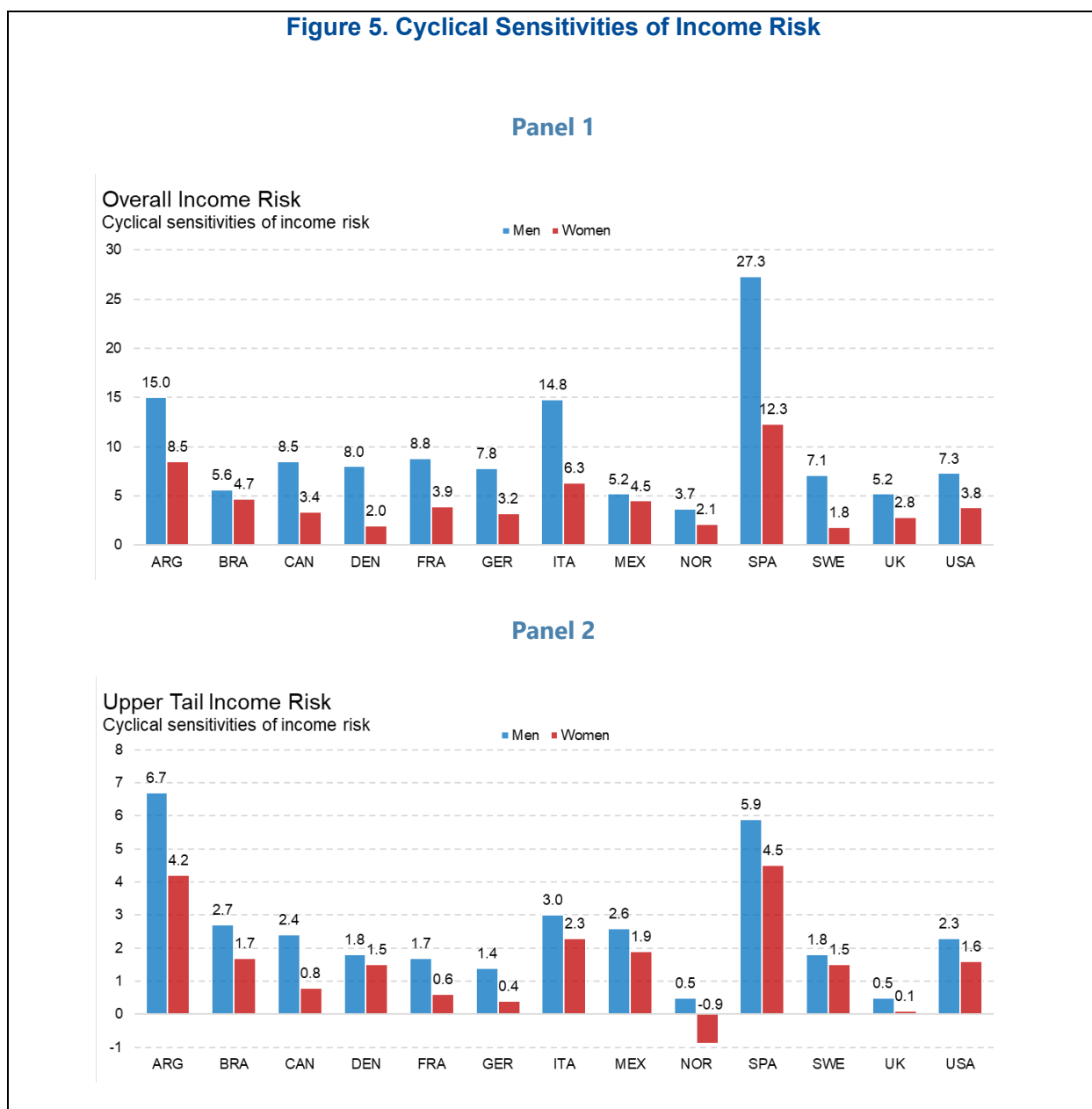
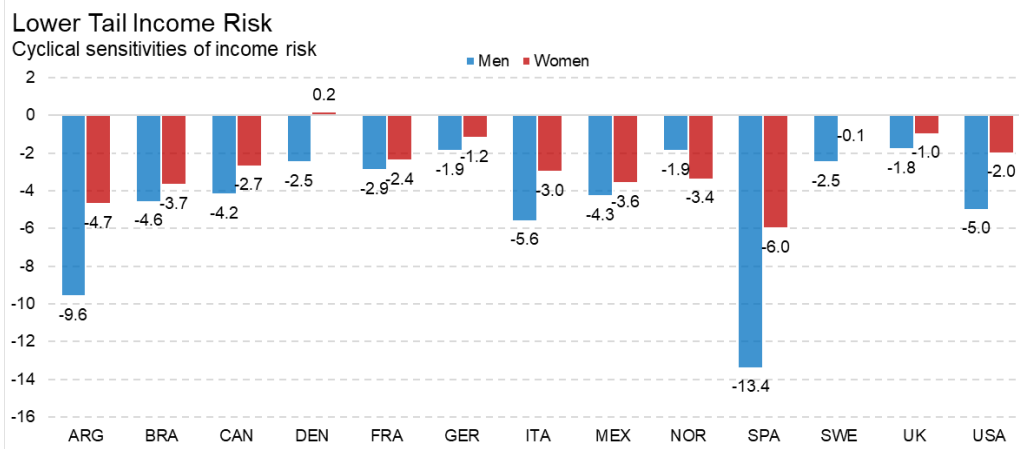


Figure 5 (continued)

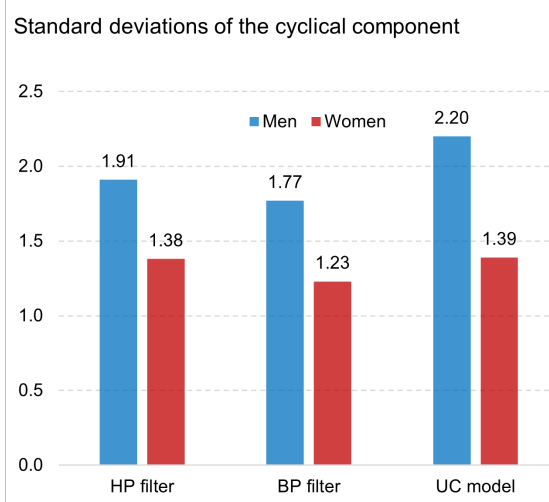
Panel 3



Note: Data are from Table 3 of Guvenen, Pistaferri, and Violante (2022). Estimates are for the cyclical sensitivity coefficient in regressions of particular statistics of the one-year (log) income change distribution on (log) annual GDP per capita change plus a constant and a time trend. The Kelley skewness is the top panel statistic; the difference between the 90th and 50th percentiles (P90P50) is the middle panel statistic; and the difference between the 50th and 10th percentiles (P50P10) is the bottom panel statistic. Coefficients are multiplied by 100 for ease of interpretation. Figure uses International Organization for Standardization (ISO) country codes.

Women’s business cycle volatility in average hours worked is consistently smaller than men’s in the United States. In examining the dynamics of labor market outcomes during business cycles, it is crucial to consider not only the extensive margin of labor and income risk but also the intensive margin of work, namely the number of hours worked. Business cycles can significantly affect the number of hours men and women work, further affecting their income and financial stability. The evidence in this case is more limited and restricted to the United States. Men’s business cycle volatility of hours worked is consistently higher than women’s (Albanesi 2020; Guisinger 2020). This finding holds true regardless of the approach used to filter the cyclical component of hours worked (Figure 6).

Figure 6. Cyclicity of Hours Worked in the United States



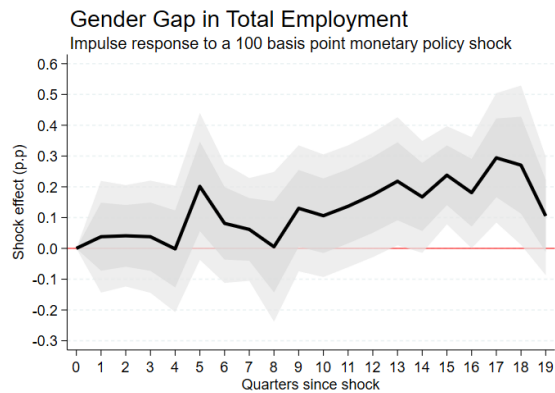
Note: Data are from Table 1 of Guisinger (2020). All calculations are the standard deviations of the cyclical component of hours worked. Left bars show the results for the Hodrick-Prescott (HP) filter. Middle bars show the results for the Baxter-King Band Pass (BP) filter. Right bars show the results for the univariate unobserved components (UC) model. To keep the same number of observations across methods, the sample spans 1979:Q3 to 2012:Q2.

## Monetary and Fiscal Policy Shocks

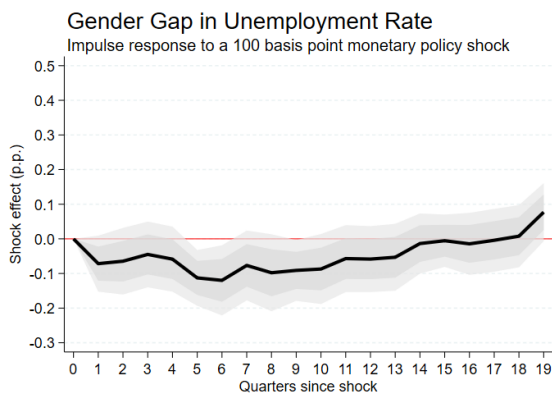
Although monetary policy shocks have broad-reaching impacts on the economy, they also have specific gendered effects within the labor market. These effects can influence how men and women experience unexpected changes in interest rates. One key aspect to consider is the influence of monetary policy on overall employment levels. In a panel of 22 AEs and EMDEs, men’s employment falls more than women’s after contractionary monetary policy shocks, narrowing the employment gender gap over time (Flamini and others 2023). An unexpected increase of 100 basis points in the interest rate narrows the total gender employment gap starting around 10 quarters after the shock, with a peak impact of about 0.3 percentage point (Figure 7, panel 1). These employment changes can be explained by adjustments in labor force participation and unemployment. After monetary policy shocks, employment dynamics are primarily driven by a decline (narrowing) in the unemployment gender gap in the short term, followed by an increase (narrowing) in the labor force participation gender gap in the medium term (Figure 7, panels 2 and 3).

**Figure 7. Impulse Responses from Monetary Policy Shocks**

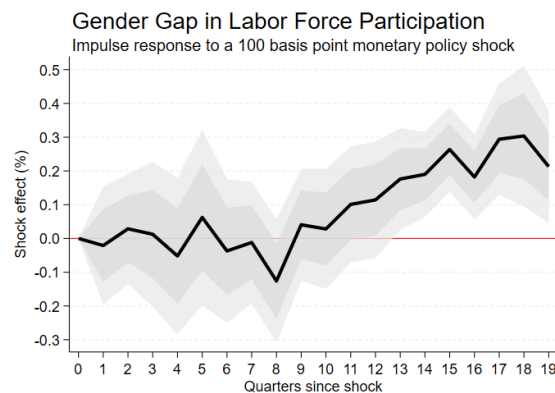
**Panel 1**



**Panel 2**

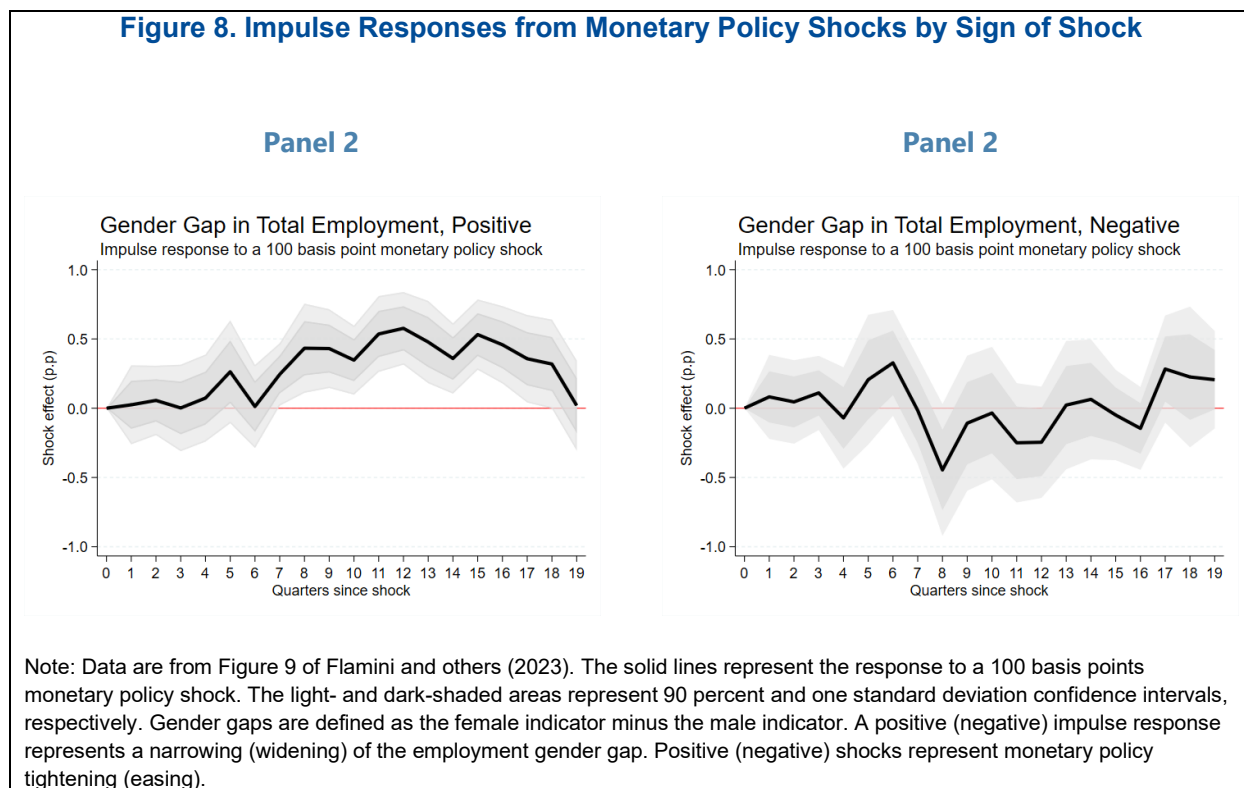


**Panel 3**



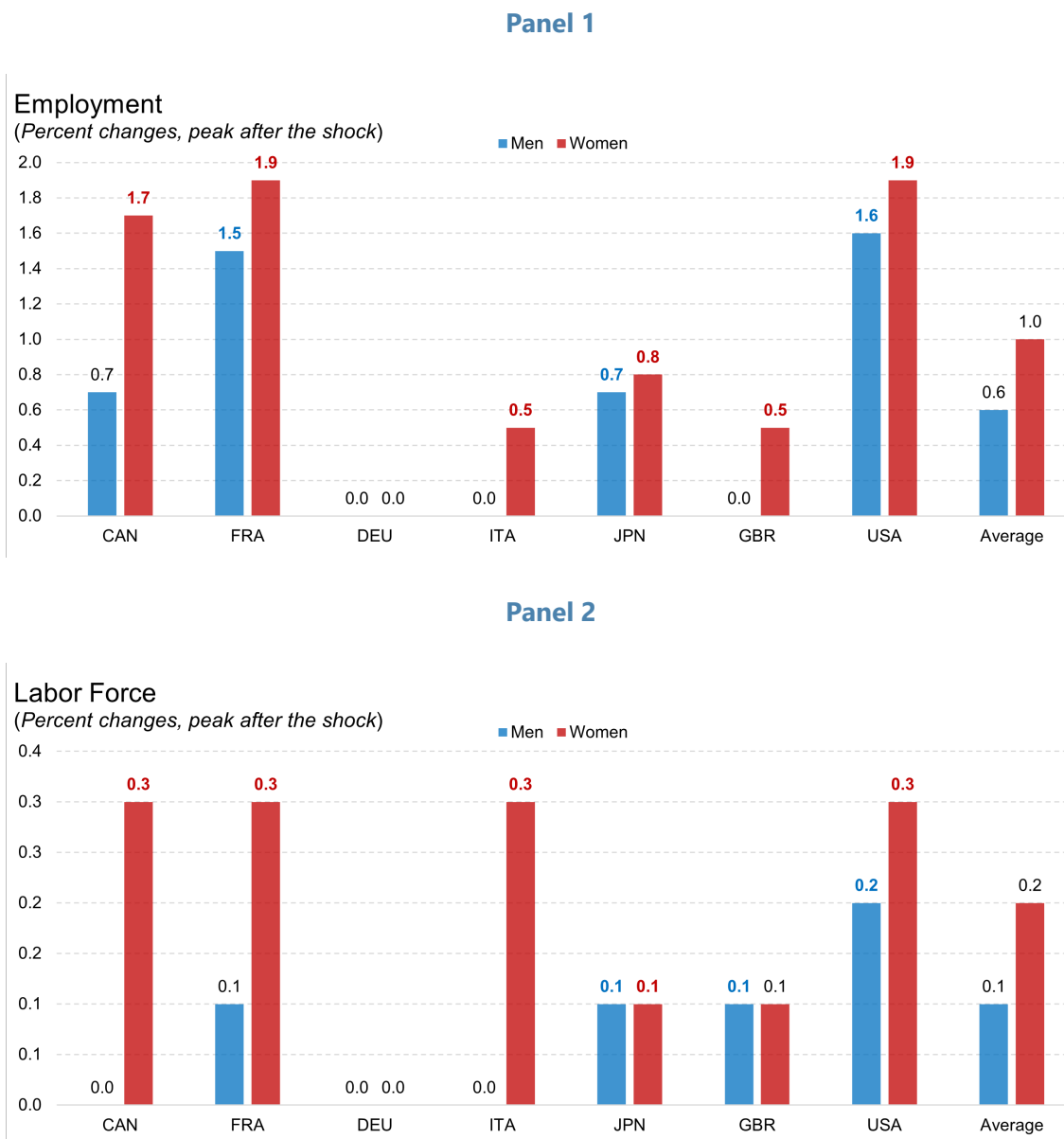
Note: Data are from Figure 2 and Figure 5 of Flamini and others (2023). The solid lines represent the response to a 100 basis points monetary policy shock. The light- and dark-shaded areas represent 90 percent and one standard deviation confidence intervals, respectively. Gender gaps are defined as the female indicator minus the male indicator. For total employment (panel 1), a positive (negative) impulse response represents a narrowing (widening) of the gender gap. For unemployment (panel 2), a positive (negative) impulse response represents a widening (narrowing) of the gender gap. For labor force participation (panel 3), a positive (negative) impulse response represents a narrowing (widening) of the gender gap.

The response of the gender employment gap to monetary policy varies by the sign of the shock (asymmetric effect). Positive shocks, namely tightening monetary policy stances, drive the effects documented in the previous paragraph (Flamini and others 2023). In particular, the gender employment gap narrows more after positive shocks, by more than 0.4 percentage point eight quarters after the shock and peaks at 0.6 percentage point after 11 quarters (Figure 8, panel 1). On the other hand, negative shocks yield no significant effects on the gender gap in employment (Figure 8, panel 2).



In addition to monetary policy, fiscal policy shocks, characterized by sudden and significant changes in government spending or taxation, have implications for gender disparities within the labor market. Recognizing the gendered impact of fiscal policy decisions on the workforce is essential for a comprehensive analysis of gendered effects during business cycles. During recessions in the G7 countries, positive spending shocks improve women's employment more than men's, although the effects vary by country (Akitoby, Honda, and Miyamoto 2019). A positive shock of 1 percent of GDP would, on average, lift female employment by 1 percent at peak, while increasing male employment by 0.6 percent (Figure 9, panel 1). The more favorable employment outcome for women is prevalent in all G7 countries, except for Germany. A similar spending shock would, on average, increase the women's labor force by 0.2 percent at peak, whereas the men's labor force may increase by 0.1 percent, although the results of four countries are statistically not significant (Figure 9, panel 2).

**Figure 9. Impacts of Spending Shocks during Recessions**



Note: Data are from Table 2 of Akitoby, Honda, and Miyamoto (2019). The country estimates presented in bold and color above the bars are statistically significant at the 5 percent level. Figure uses International Organization for Standardization (ISO) country codes.

Women are more vulnerable to inflation than men because they are more likely to work in low-paying jobs and have restricted access to financial services. A common business cycle phenomenon often associated with monetary and fiscal policies is inflation, the rate at which the general price level of goods and services rises. Inflation can erode the purchasing power of individuals and households as prices rise. This phenomenon can lead to a reduction in the real wages of workers, making it more challenging for them to maintain their standard of living. Although inflation affects everyone, its impact falls disproportionately on the poor, who are more reliant on wage income, welfare benefits, and pensions; have less access to interest-bearing accounts; and are unlikely to have significant holdings of financial or real assets apart from cash (Ha, Kose, and Ohnsorge 2019).

Given that women are often overrepresented in lower-paying jobs and have less access to financial services, they may be more vulnerable than men to the erosion of real wages during periods of inflation.

## What Mechanisms Account for These Differences?

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The reasons behind gendered business cycles often lie in the differing roles that men and women play in the labor market and households. Recognizing that men and women frequently play distinct roles in the labor market and within households is essential to understanding why business cycles are not gender neutral. These fundamental distinctions have significant implications for how each gender experiences economic contractions and expansions.

Men are more likely than women to be employed in sectors and occupations that are more cyclical, more exposed to interest rate risk, and less exposed to positive fiscal spending shocks. Historically, certain industries and occupations have exhibited gender imbalances, with women predominantly employed in less cyclical sectors. For instance, highly cyclical sectors, such as manufacturing and construction, have traditionally employed a larger percentage of men, whereas less cyclical fields, such as health care, education, and the public sector, have attracted a greater number of women (Albanesi and Sahin 2018; OECD 2019). During economic downturns, these imbalances become apparent as some industries are more susceptible to contraction than others. For example, the manufacturing sector usually faces greater job losses during a recession, thus affecting a higher proportion of male workers. Conversely, industries like health care and education, where women are more predominant, often display more resilience during economic downturns. This discrepancy in industry exposure is a significant factor that contributes to gender disparities in employment and unemployment during business cycles. It is also key in accounting for the gendered cyclicity in income risk (Busch and others 2022) and hours worked (Albanesi 2020), as well as explaining the gendered transmission of monetary policy shocks (Flamini and others 2023) and fiscal policy shocks (Akitoby, Honda, and Miyamoto 2019).

Another labor market aspect contributing to the differential impact of business cycles on men and women is the size of the firms in which they are employed. Women are more likely than men to work in smaller firms (Paik 2008), which exhibit lower cyclicity in employment compared with their larger counterparts (Moscarini and Postel-Vinay 2012). This divergence in firm size is a significant factor shaping the distinct experiences of men and women during economic cycles. Larger corporations, because of their scale and complexity, can be more sensitive to economic fluctuations. They may resort to layoffs or downsizing during recessions, thus affecting a higher proportion of male workers who are more prevalent in these environments. Smaller firms, on the other hand, tend to maintain a more stable workforce, even during challenging economic times. This stability can be advantageous for women who are more likely to be employed in such settings.

The gendered composition of part-time and flexible work arrangements is another critical factor in understanding gendered business cycles. OECD data indicate that women are, on average, 2.5 times more likely than men to engage in part-time employment, a trend that underscores the gendered nature of labor market flexibility.<sup>4</sup> Part-time employment tends to be countercyclical, with a noticeable shift from full-time to part-time roles during economic downturns (Borowczyk-Martins 2017). Furthermore, cyclical variation in hours worked per employee can be largely attributed to shifts in the proportion of part-time workers, driven by fluctuations in the transition rates between full-time and part-time employment (Borowczyk-Martins and Lalé 2019). These considerations suggest that men, primarily occupying full-time roles, may be more directly exposed to the fluctuations of

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<sup>4</sup> The aforementioned figure depicts the female-to-male ratio of the OECD's average share of part-time workers as of 2022. The average values for women and men are 24 percent and 9.6 percent, respectively. The data were extracted on March 4, 2024, from OECD.Stat.



business cycles than women, given the countercyclical nature of part-time and flexible work arrangements predominantly held by women.<sup>5</sup>

Gender wage gaps may also play a role in the dynamics of the labor market during business cycles, particularly during economic downturns. On average, women earn lower wages than men, a situation that inadvertently positions them as more economically viable options for employers who seek to minimize labor costs in challenging financial times. Therefore, this wage gap can lead to a higher likelihood of women being retained on payrolls during recessions because lower-paid employees are less costly for businesses aiming to reduce expenses. Mueller (2017) provides evidence supporting this notion by showing that recessions tend to disproportionately affect high-wage workers because of the high cyclical nature of separations in this group. As a result, the gender wage gap not only reflects existing inequalities but also influences the gendered impact of economic downturns on employment stability. This implies that women's lower average wages may inadvertently shield them from job losses more than their higher-paid male counterparts during economic downturns.

The different roles men and women play within the household also matter in understanding gendered business cycles. One important phenomenon that emerges over economic cycles is the "added worker effect." It refers to an increase (decrease) in the labor supply of married women when their husbands become unemployed (employed). This effect provides a crucial safety net for households during tough economic times but has gender-specific implications. When economic hardships strike and a household's primary breadwinner loses their job, married women often enter or re-enter the labor force to mitigate the loss of income (Bredtmann, Otten, and Rulff 2018). This behavior can be seen as a form of household insurance through labor supply, where women take on additional work to stabilize their family's financial situation during economic uncertainty. This effect helps explain why women's employment is much less cyclical and more symmetric than men's. If this phenomenon did not exist, married women's employment would be as volatile as men's and would display negative skewness, that is, it would decline quickly in recessions and rebound slowly in expansions (Guner, Kulikova, and Valladares-Esteban 2021).

The fact that EMDEs display greater gender equality in terms of business cycle exposure can be linked to major features present in these countries. Agriculture is a more significant source of employment for both men and women in EMDEs than AEs, which is a less cyclical sector than others, thus contributing to a greater gender-neutral business cycle exposure. EMDEs have less developed social safety nets and budgetary capability than AEs, which can result in more balanced labor force involvement of men and women, as both must work to guarantee the economic well-being of their families during difficult times. EMDEs often have a significant share of employment in the informal sector, where men and women can participate more equally. By making the outside option of self-employment more readily available, greater informality is likely to reduce the sensitivity of unemployment rates to overall business conditions and to contribute to similar exposure levels for men and women.<sup>6</sup>

## Prospects and Policy Considerations

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The global economy continues to recover slowly from the blows of the pandemic, Russia's invasion of Ukraine, and the cost-of-living crisis. Despite the disruption in energy and food markets caused by the war and the

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<sup>5</sup> We acknowledge that this conclusion warrants a nuanced examination. It is important to consider the argument that part-time workers may experience more job insecurity, a factor that complicates the relationships among gender, employment type, and cyclical labor market fluctuations.

<sup>6</sup> It's worth emphasizing that while the mechanisms discussed provide a theoretical basis for understanding the gender dynamics of business cycles in EMDEs, empirical evidence to substantiate these mechanisms is currently limited. This discussion is intended to highlight potential areas for future research that could shed light on the intricate dynamics of gender and business cycles, especially in the context of EMDEs. Further empirical work is necessary to validate these mechanisms and deepen our understanding of the complex interplay between gender, labor markets, and economic fluctuations.

unprecedented tightening of global monetary conditions to combat decades-high inflation, the global economy has slowed but has not stalled. Yet growth remains slow and uneven, with growing global divergences. The global economy is limping along, not sprinting, and a full recovery toward prepandemic trends appears increasingly out of reach (IMF 2023).

Looking ahead, the economic landscape is challenging. In the short to medium term, the world is grappling with low growth and a shock-prone environment, with limited policy space, record-high debt levels, higher-for-longer interest rates, and growth prospects at their weakest in two decades. This scenario suggests several challenges and opportunities for gender disparities. Considerations about gendered prospects in such a challenging environment require an understanding of the unique dynamics that may unfold.

In a low-growth environment with limited policy space, employment and labor market participation may be influenced by the reduced demand for labor. Women, who often occupy roles in sectors that are less cyclical, may experience a more stable attachment to the workforce than do men. However, growth prospects at their weakest in decades may limit the overall availability of jobs for both genders. In such circumstances, women may face fewer swings than men do in employment situation, hours worked, and earned income. These developments can potentially reduce gender inequalities in the short to medium term but for unintended reasons.

The greater stability of women's jobs, working hours, and income may serve as a stabilizing force for household resources during the shock-prone times ahead.<sup>7</sup> The primary aim of countercyclical fiscal policy is to manage aggregate demand, not to directly achieve gender equality. Although improved job security for women may indirectly support fiscal stability by moderating the extent of government interventions required in downturns, the necessity for countercyclical fiscal measures remains critical to adjust aggregate demand effectively. On the other hand, given the constrained fiscal space, governments may face challenges in deploying such measures, which could inadvertently slow recovery efforts, especially for women who may benefit disproportionately from these interventions. Thus, although gender considerations can enrich the understanding of economic resilience, they should complement, not overshadow, the fundamental objectives of countercyclical fiscal policies.

In the context of lower growth prospects, higher interest rates, and reduced fiscal space, structural reforms emerge as crucial levers for spurring higher long-term growth (IMF 2023). Importantly, these reforms offer a strategic avenue to directly target and reduce gender disparities in labor force participation. Research by Asai and others (2023) demonstrates that structural fiscal policies are not only beneficial for overall economic health but can also be explicitly designed to enhance female labor force participation, showing statistically significant impacts in OECD countries. Furthermore, Budina and others (2023) show that well-designed structural reforms and macroeconomic policies can help narrow gender gaps in education and labor supply. These findings underscore the importance of acknowledging gender gaps as a primary focus of policy efforts rather than viewing their reduction as merely a beneficial byproduct of broader reforms.

Also, in light of the challenging economic outlook ahead, it is essential for policymakers to consider the diverse impacts of economic downturns on different demographic groups, particularly gender, recognizing that within these groups, individuals face varying levels of vulnerability. Targeted policies can be crafted to address the distinct challenges faced by men and women during periods of economic instability. They can leverage measures tailored to a country's specific needs and circumstances to effectively promote economic stability and gender equality. Policies such as temporary tax relief or subsidies tailored to sectors heavily affected by economic downturns, including manufacturing and construction, should aim to maximize employment retention

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<sup>7</sup> While the note emphasizes the potential stabilizing role of women's labor market outcomes within the context of business cycles, it does not suggest that this role compensates for or diminishes the importance of addressing structural gender gaps. On the contrary, a comprehensive approach to economic policy should address both cyclical and structural gender issues to achieve genuine gender equality and economic stability. The focus on business cycles in this note should be seen as complementary to, rather than in replacement of, ongoing efforts to address structural gender gaps.

across the economy. These measures are designed to prevent job losses and facilitate economic recovery, with an understanding that within both male and female populations, there are individuals who are more susceptible to economic fluctuations. The focus should be on creating an inclusive economic environment that supports the most vulnerable, regardless of gender. Government-funded training and reskilling programs should support workers in transitioning from declining to emerging sectors, fostering labor market adaptability and resilience. This approach is particularly important for those who are more vulnerable to economic shifts, ensuring that both men and women have the support needed to navigate these changes. Further, the implementation or expansion of short-time work programs, like Germany's *Kurzarbeit*, offers a model for reducing working hours instead of layoffs, with government compensation for lost income. Such strategies should be universally applicable, across a wide range of sectors, ensuring that the benefits are equitably distributed among all workers, especially those who are most at risk. Cross-cutting policies, such as enhancing unemployment insurance, providing childcare support, and promoting flexible work arrangements, could further bolster labor force participation and economic stability. Such policies would support both men and women, particularly during economic recoveries, and would foster a more inclusive economic resilience.

Although this note has extensively covered the gendered aspects of business cycles, it is also important to touch on the scarring effects of recessions and their gender differences, which merit deeper exploration in future analyses. Empirical studies have provided mixed evidence on gender disparities related to these long-term effects. For instance, von Wachter (2020) summarizes the literature on labor market scarring (mostly for AEs) and suggests that no clear differences exist between genders in the adverse impact of labor market conditions at entry. Conversely, research by Berniell and others (2023) on Latin American markets indicates that women who enter the labor market during high unemployment periods tend to outperform their male counterparts, a phenomenon that may contribute to the empowerment of these women. Recognizing the importance of this topic, the scarring effects and long-term implications of crises and recessions on gendered outcomes are left for future work.

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