

Understanding Economic and Social Indicators for MIFA

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ONGOING CHANGES IN PART-TIME EMPLOYMENT



FINAL VERSION

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Introduction

Since the start of the 21st century, part-time employment has increased throughout Europe, including in Germany. Although which employees are considered “part-time” varies among industries and countries, the European Framework Agreement on Part-time Work defines a part-time employee as one “whose normal hours of work... are less than the normal hours of work of a comparable full-time worker” (Council Directive 98/81/EC, 1998).

Studies of the part-time workforce can inform efforts to reconcile the demands of work and family life. The European Union has identified work-life balance as one of twenty key principles supporting “Fair Working Conditions” in the European Pillar of Social Rights Action Plan (2021). Furthermore, this principle recognizes the right of workers with caregiving responsibilities to flexible working arrangements. As workers increasingly demand job opportunities that offer better work-life balance and governments attempt to craft policies that facilitate a well-functioning economy, it is important to understand how the current state of part-time employment has developed and how it affects different groups of workers.

In the EU, more men than women work full-time, and more women than men work part-time (Eurostat, “Full-time and part-time employment by sex, age and occupation (1 000)”). The European Union has identified the “gender gap in part-time employment” as a secondary target to be used in tracking its progress toward implementing its Social Pillar Principles. Bardasi and Gornick (2000) found that across developed countries, part-time workers earn a lower hourly wage than their full-time counterparts. Matteazzi et al. (2017) found that the wage gap in Europe tends to be higher in countries where part-time work is more common. The confluence of lower wages for part-time workers and more women in part-time work therefore has the potential to explain part of the gender wage gap. EU Directive 1158 (2019) notes that working reduced hours for an extended period of time can also result in “reduced or non-existing pension entitlements.” Tracking part-time employment thus contributes to research on matters of economic and labor gender equality.

Workers enter part-time employment for different reasons. Some workers must settle for part-time employment when a suitable full-time job is not available. Miežienė et al. (2021) found that higher unemployment leads to an increase in the share of part-time work. Others accept part-time work due to financial pressures. Financial disincentives in the form of higher taxes and lower benefits can discourage part-time workers from switching to full-time employment. According to the OECD (2021), a worker in Germany earning 67% of the average wage, whose partner works full-time at 67% of the average wage, loses 43% of earnings when increasing from 50% employment to full-time work. For others, part-time work is a way to reconcile paid and unpaid work, and can allow parents to remain in the workforce instead of leaving work entirely to care for young children (Sikirić, 2021). Gender may also affect preference for part-time work. Valet et al. (2021) found that women in Germany and the Netherlands preferred scheduling flexibility when choosing a job, while men did not.

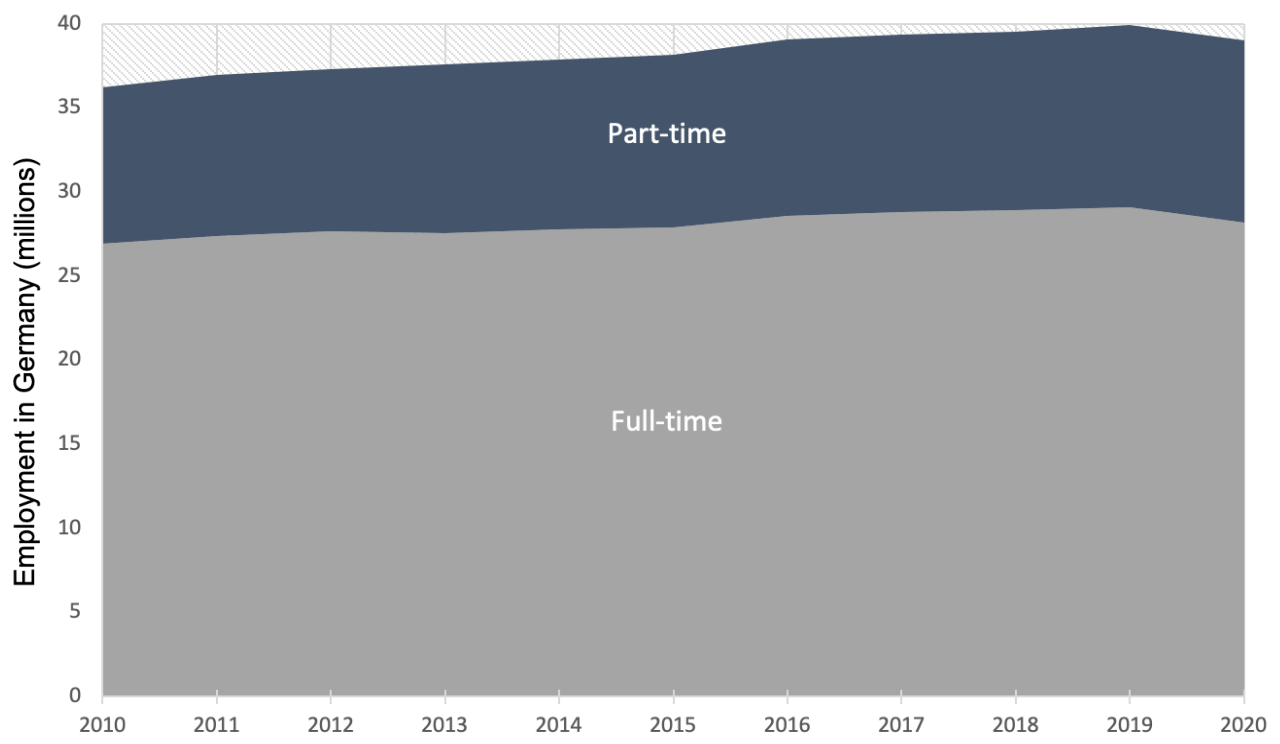
Brenke (2011) found that between 2000 and 2010, part-time employment in Germany grew even as overall employment declined following the financial crisis of 2008, and also found effects of gender, age, and worker qualifications on the development of part-time employment. Brenke's study ended amid changes in the part-time workforce due to the global financial crisis. A decade later, in 2021, Germany was among the countries with the highest number of women employed part-time, along with France, Italy, the Netherlands, and Spain; these same countries also had the highest number of men employed part-time. Now, as the COVID-19 pandemic and the so-called "great resignation" reshape part-time work, the present analysis applies Brenke's methodology for characterizing Germany's part-time workforce to the period of 2010-2020.

Aims and Methods

The aim of this paper is to compare the trends in part-time employment in Germany between the years of 2010 and 2020 with the previous decade. Applying the methodology set out by Brenke (2011), this study examines the effects of gender, age, and skill level on part-time workforce participation. First, detailed annual survey results

from Eurostat's Labor Force Survey are used in order to characterize the overall trends in Germany compared to European averages. Then, effects of gender, age, and skill on the composition of the part-time workforce are identified. Reasons for working part-time are explained, followed by a discussion of the study's conclusions, limitations, and recommendations for further investigation.

Figure 1: **Employment in Germany (millions) from 2010 to 2020**



Source: Eurostat

Part-time employment rose steadily from 2010-2019 and then dipped due to the COVID-19 pandemic.

Growth in Part-time Employment in Germany and in Europe

Part-time employment in Germany continued to rise from 2010 to 2020 (Figure 1). While part-time work accounted for all employment growth between 2000 and 2010 (Brenke, 2011), during the following decade both part-time and full-time employment grew until the pandemic caused a decline in full-time work in 2020. The 17% growth in part-time

employment from 2010 to 2020 (Table 1) added more than 1.5 million people to the part-time workforce, but was more modest than the 3 million part-time workers added during the previous decade (Brenke, 2011). Still, part-time employment grew more in Germany than the EU average of 9% from 2010–2020 (Table 1).

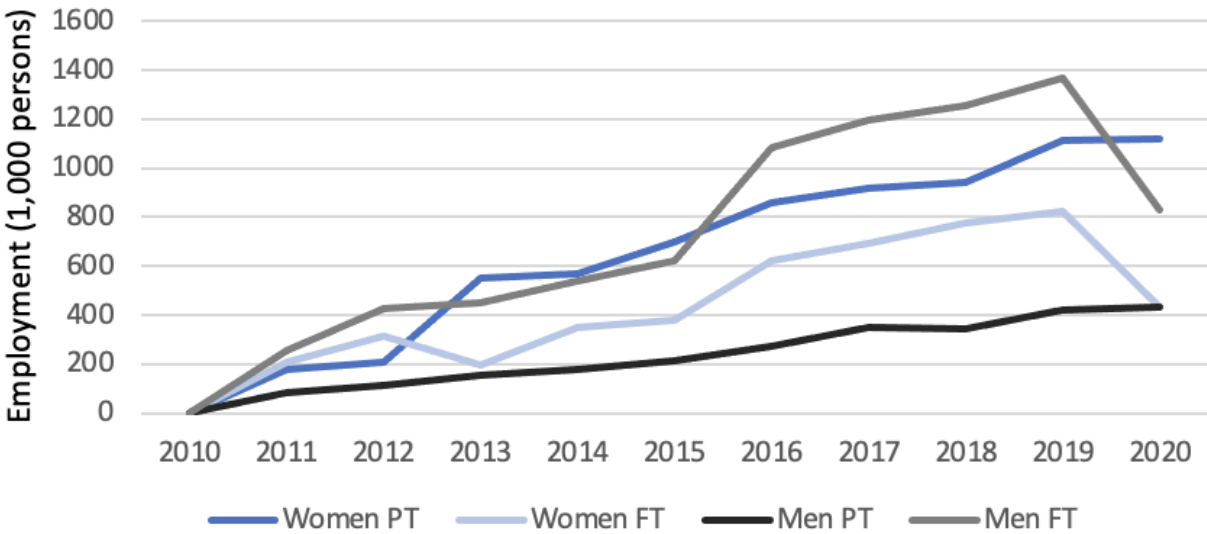
Table 1: Development of Employment in European countries from 2010 to 2020:
Change from 2010 to 2020, %

	Entire labor force			Women			Men		
	Total	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time
European Union - 27	5	4	9	6	6	6	3	2	19
Belgium	6	6	8	10	14	4	3	1	26
Bulgaria	0	0	-18	-1	-1	-16	0	1	-21
Czechia	6	5	17	9	8	20	3	3	8
Denmark	7	8	2	6	13	-8	8	5	31
Germany	8	5	17	9	5	14	7	5	27
Estonia	11	8	37	5	1	30	17	15	53
Ireland	17	24	-6	16	27	-5	18	21	-8
Greece	-12	-14	22	-8	-11	15	-14	-16	37
Spain	2	1	10	6	5	6	0	-2	25
France	4	5	0	6	11	-5	2	0	22
Croatia	-1	2	-36	0	3	-34	-2	0	-38
Italy	1	-3	24	4	-1	15	-2	-5	58
Cyprus	6	4	29	5	3	22	7	5	45
Latvia	3	3	-3	-2	-2	1	8	9	-9
Lithuania	6	8	-18	0	2	-17	12	14	-18
Luxembourg	33	32	35	42	53	21	25	21	154
Hungary	18	19	3	13	14	7	22	23	-6
Malta	62	62	62	95	103	66	45	45	49
Netherlands	6	1	12	9	14	8	3	-2	25
Austria	9	5	21	10	3	18	8	6	32
Poland	6	8	-17	6	8	-13	6	7	-26
Portugal	0	1	-14	5	8	-16	-4	-4	-8
Romania	0	4	-42	-3	1	-43	2	6	-41
Slovenia	3	5	-9	3	4	-2	4	5	-21
Slovakia	8	6	30	10	7	43	7	5	11
Finland	2	1	8	1	0	4	2	1	18
Sweden	11	16	-5	11	27	-14	11	9	23
Iceland	18	17	23	14	13	17	22	20	45
Norway	8	11	0	8	19	-8	8	6	23
Switzerland	12	5	25	15	14	17	9	3	59
North Macedonia	25	28	-16	33	36	-20	21	22	-12
Serbia	20	18	52	25	22	66	16	14	40
Turkey	21	20	25	34	42	6	16	13	56

Source: Eurostat

Employment in Germany rose more than the EU average for all groups except women in full-time work, which rose slightly less than the average.

Figure 2: **Employment in Germany by gender and working hours:** Change since 2010 (in 1,000 persons)



Source: Eurostat

Employment rose for both women and men in both part-time and full-time employment until the pandemic, when full-time employment declined.

Gender gap in part-time employment

The numbers of men and women in part-time and full-time work grew at different rates during the period (Figure 2). Employment in Germany rose more than the EU average for all groups except women in full-time work, which rose slightly less than the average. Women’s full-time employment in Germany grew at a higher rate during 2010-2020 (Table 1) than in the 2000s, when it actually declined by 2% (Brenke, 2011); meanwhile, women’s part-time employment rose at a lower rate than in the previous decade. Men’s part-time work also grew less sharply in 2010-2020 than in the previous decade (Brenke, 2011). Whereas part-time work remained steady for both men and women from 2019 to 2020, full-time employment decreased (Figure 2). The pandemic downturn eliminated significant portions of the decade’s full-time employment growth for both men (39.2%) and women (47.6%), though a higher proportion of women than men were affected.

Compared to the European average, Germany has a higher share of part-time employees in the workforce (Table 2). In 2010, Germany's share of part-time employees was among the highest in Europe, behind Switzerland and the Netherlands. By 2020, Austria's share also outstripped Germany's. Belgium, Norway, Iceland, Denmark, and Sweden remained close behind, indicating northern countries' continued tendency to have the highest shares of part-time workers in Europe, just like in the previous decade (Brenke, 2011).

Part-time work "remains the preserve of women," in the words of Brenke (2011), with a persistent gender gap across northern and western Europe, where part-time work accounts for a larger share of women's employment than men's. In 2020, nearly half of women in Germany were in a part-time job, compared with only one in ten men (Table 2). Though the growing share of men's part-time work has not kept pace with that of women, it has slightly narrowed the gender gap from 2000 (with women's part-time employment share 7.6 times higher than men's) to 2020 (4.9 times higher), but the gap in Germany remains larger than the EU average (3.8 times higher). In contrast, in eastern European countries where part-time work is marginal, the share of part-time employment is small for both men and women (Table 2). Romania was the only country in the study where part-time employment constituted a higher share of men's total employment than women's in 2020.

Table 2: **Part-time Employment in European countries:** Percentage of total employment in 2010, 2020, and 2021

	Total			Women			Men		
	2010	2020	2021	2010	2020	2021	2010	2020	2021
European Union - 27	17.7	17.2	17.2	30.5	28.6	28.3	7.1	7.5	7.6
Belgium	23.3	23.7	23.5	41	38.8	39	8.5	10.4	9.7
Bulgaria	2.2	1.8	1.5	2.2	1.8	1.8	2.2	1.7	1.3
Czechia	5.1	5.6	5.5	9	9.9	9.5	2.1	2.2	2.4
Denmark	21.2	20.2	20.9	33.9	29.6	30.5	9.6	11.7	12.3
Germany	31.9	27.8	27.9	55.1	48	47.7	11.7	9.8	10.2
Estonia	9.5	11.7	11.8	12.9	15.9	16.4	5.9	7.8	7.4
Ireland	21	16.4	17.8	33	26.4	27.5	10.5	7.9	9
Greece	6.3	8.7	8.1	10.6	13.3	12.4	3.3	5.3	5
Spain	12.7	13.6	13.4	22.4	22.5	22	4.9	6.2	6
France	18.2	17.5	17.1	31.1	27.9	27.2	6.2	7.4	7.3
Croatia	7	4.5	4.6	9.3	6.1	5.9	5	3.2	3.6
Italy	14.8	18.2	18.2	28.5	31.7	31.4	5.2	8.4	8.3
Cyprus	8.1	9.9	9.9	11.5	13.4	12.4	4.9	6.7	7.7
Latvia	7.8	7.3	7.6	9	9.2	9.9	6.4	5.4	5.4
Lithuania	7.7	6	5.8	8.9	7.4	7.5	6.4	4.7	4.2
Luxembourg	17.3	17.6	17.7	35.7	30.5	30.4	3.2	6.4	6.6
Hungary	5.3	4.6	4.5	7.1	6.7	6.7	3.6	2.8	2.7
Malta	10.7	10.8	9.3	23.3	20	16.9	4.2	4.3	3.9
Netherlands	34.9	38	38.7	61.5	61.7	61.9	12.2	16.7	17.8
Austria	25.7	28.4	29.1	45.2	48.6	49.9	8.5	10.4	10.6
Poland	6.9	5.4	5.1	10	8.2	7.4	4.4	3.1	3.1
Portugal	8.2	6.9	6.7	11.4	9.5	8.9	5.3	4.2	4.4
Romania	6.2	3.6	3.6	5.5	3.1	2.9	6.7	3.9	4
Slovenia	10	8.7	8.8	13.4	12.7	12.3	7.1	5.4	5.9
Slovakia	2.6	3.2	3.1	3.7	4.7	4.6	1.7	1.8	1.8
Finland	13.1	13.9	15.2	18.4	19	21.1	8.1	9.3	9.8
Sweden	22.3	19	19	36.7	28.4	28	9.5	10.5	10.9
Iceland	19.7	20.5	19.3	31.8	32.4	31.9	8.6	10.2	8.6
Norway	25.3	23.3	22.3	40	34	32.6	12	13.6	13
Switzerland	35.2	39.4	39	62.3	63.4	62.8	12.4	18.1	17.7
Montenegro	:	3.6	:	:	3.1	:	:	4	:
North Macedonia	5.3	3.6	:	6.8	4.1	:	4.4	3.2	:
Serbia	:	6.3	6.1	:	7.6	7.2	:	5.3	5.3

Source: Eurostat

Women remain overrepresented in part-time work. Changes from 2020 to 2021 were minor.

Age effect

Part-time employment trends also differ according to age group. From 2000 to 2010, the incidence of part-time employment was higher among older adults in Germany, with workers aged 55 and over comprising the largest group of part-time employees (Brenke, 2011). This pattern continued from 2010 to 2020 (Table 3). Women in total still represent more part-time positions than men in the eldest age range (65 and over).

Comparing other age ranges of women, the smallest among the dominant gender, the youngest of the age ranges reflects a smaller portion; it coincides with the previous decade's study's statements and the Brenke study's reports. To add Germany in comparison to the European Union has still a more pronounced employment percentage within the part-time variety, especially with the elderly age range. Both Germany and the European Union have continued to observe an increase in part-time employment across the board with a noticeable rise in older men from the previous decade.

Table 3: Part-Time Employment in Germany and the EU by Gender and Age:
 Percentage of part-time employment in total employment in 2010, 2015, and 2020

	Part-Time Employment Rate			Age spread of total working pop.		
	2010	2015	2020	2010	2015	2020
Germany						
Men						
From 15 to 39 years	11	12	13	45	44	44
From 40 to 64 years	7	8	8	51	51	50
65 years or over	60	67	65	4	5	6
Average Total	32	33	33	100	100	100
Women						
From 15 to 39 years	37	38	39	47	46	45
From 40 to 64 years	51	52	54	51	52	51
65 years or over	81	83	83	2	3	4
Average Total	68	67	67	100	100	100
EU - 27						
Men						
From 15 to 39 years	9	11	11	45	44	43
From 40 to 64 years	6	7	7	51	51	52
65 years or over	47	51	46	4	5	5
Average Total	34	36	35	100	100	100
Women						
From 15 to 39 years	27	29	29	47	46	44
From 40 to 64 years	32	32	30	50	52	53
65 years or over	60	62	60	2	3	3
Average Total	66	64	65	100	100	100

Source: Eurostat

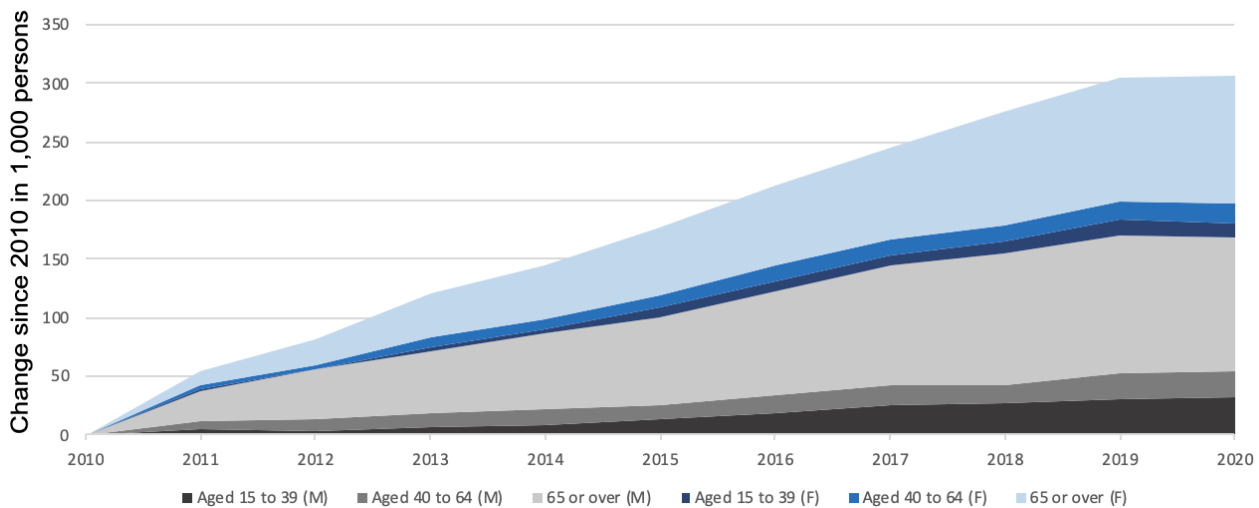
Part-time employment remains particularly common among workers aged 65+.

Part-time employment trends also differ according to age group. From 2000 to 2010, the incidence of part-time employment was higher among older adults in Germany, with workers aged 55 and over comprising the largest population of part-time employees (Brenke, 2011). This pattern continued from 2010 to 2020 (Table 3).

Part-time employment was more common for older adults in Germany than the EU average. Older men in particular increased their share of part-time employment both in Germany and across the EU. In 2000-2010, young workers contributed the least to the increase in part-time employment from 2010-2020. Young men increased more than young women.

Part-time employment is more common for men than women in every age group. However, while the rate of part-time employment increases with age for women, the rate for men does not (Table 3). In both the 2000s (Brenke 2011) and 2010s, middle-aged men had a lower rate of part-time employment than men under age 39.

Figure 3: Part-time Employment in Germany by Gender and Age Group:
Change since 2010 in 1,000 persons

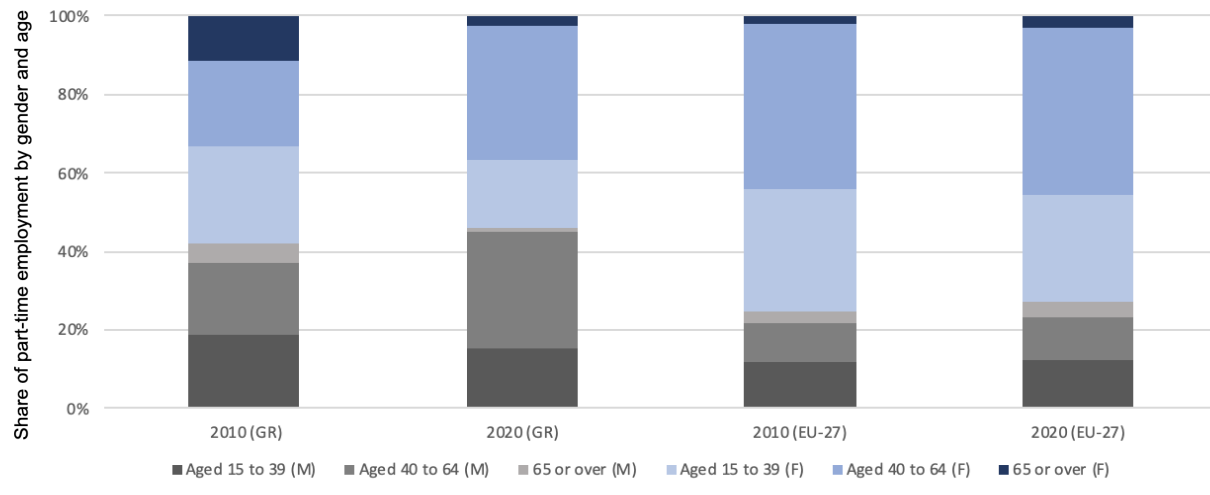


Source: Eurostat

Part-time employment increased for all age groups, with the most significant growth among older adults. Younger men increased more than younger women.

Part-time employment continued to grow from 2010-2020. Women continued to dominate as in the previous decade, but men's share also increased (Figure 4). The case in the coming ten years in the updated dataset and figures show similar trends. As well equivocal, progression in the declines of the younger generation in part-time participation. Structural changes are also observable across the European Union but do not share the same intensity as other countries such as Germany.

Figure 4: Structure of Part-time Employment in Germany and in the EU Overall:
Share of part-time employment by gender and age in 2010 and 2020



Source: Eurostat

The structure of part-time employment has shifted somewhat towards men and older employees.

Skill effect

In addition to gender and age, there is also an education level effect in the dynamics that intersect in part-time employment. In 2000-2010 (Brenke, 2011), the comparatively less qualified were the most likely to be employed part-time. In 2010-2020, however, a structural change took place in the part-time work force as more intermediate and highly-qualified workers joined (Table 4).

Table 4: Part-Time Employment in European Countries By Education 2020:
Percentage of total employment

	Total			Men			Women		
	Low	intermediate	High	Low	intermediate	High	Low	intermediate	High
European Union - 27	21	19	16	10	7	8	39	33	23
Belgium	30	27	21	13	11	8	60	51	31
Bulgaria	7	1	1	6	1	--	9	2	1
Czechia	9	5	7	4	2	3	14	9	11
Denmark	22	22	18	15	12	9	35	34	24
Germany	29	31	24	11	10	9	52	52	42
Estonia	12	12	11	7	8	8	23	18	14
Ireland	22	23	13	12	11	5	48	39	20
Greece	10	11	6	6	7	4	18	17	9
Spain	15	16	12	6	7	6	31	26	17
France	23	17	14	10	7	7	40	29	21
Croatia	8	4	4	7	3	3	11	7	4
Italy	20	19	15	9	8	7	42	36	22
Cyprus	11	10	9	8	7	6	16	16	11
Latvia	9	8	9	8	6	6	13	12	11
Lithuania	9	7	5	7	5	4	13	9	6
Luxembourg	24	21	13	7	7	5	45	37	22
Hungary	7	5	4	6	3	2	9	7	5
Malta	13	12	8	5	5	4	31	21	12
Netherlands	42	49	46	21	25	24	74	76	68
Austria	34	28	27	11	8	12	55	52	42
Poland	11	6	5	7	3	3	19	11	6
Portugal	9	6	7	5	4	5	14	8	8
Romania	25	4	1	23	4	--	30	5	1
Slovenia	12	9	6	7	5	4	22	16	8
Slovakia	32	4	3	24	2	2	41	6	3
Finland	13	15	12	10	10	8	20	23	15
Sweden	26	23	19	18	13	11	42	37	25
Iceland	23	23	17	12	11	8	39	41	25
Norway	31	26	19	19	14	11	48	44	25
Switzerland	34	41	38	11	17	20	60	66	61
United Kingdom	--	--	--	--	--	--	--	--	--
Montenegro	2	1	1	--	1	--	--	1	--
North Macedonia	3	1	0	3	1	1	4	1	0
Serbia	1	2	0	0	2	0	1	5	1
Turkey	15	7	7	10	6	5	27	13	10

Source: Eurostat

Part-time work remains more common among workers with lower qualifications, but trends show a spread in education but still not in gender.

Legend

- Low: Less than primary, primary and lower secondary education (levels 0-2)
- Intermediate: Upper secondary and post-secondary non-tertiary education (levels 3-4)
- High: Tertiary education (levels 5-8)

Eurostat uses three general segments that span the education path of an individual to represent education level. They correspond to the International Standard Classification of Education (ISCED) 2011 qualification levels described in the appendix (1) (World Bank, 2022).

Women at all skill levels continue to hold more of the part-time labor market both in the European Union and even more so in Germany (Table 4). Like in 2000-2010, workers with lower-level qualifications continued to make up a higher percentage of part-time employment in 2010-2020 (Table 4).

The representation of intermediate and high-level education in part-time employment increased (Table 5), but there was still a majority with lower-level education. It shows the changes in education spread within part-time employment. This is seen more in Germany than the European Union.

Table 5: **Part-time Segment and Structure of Part-Time Employment According to Education**: % of total employment that is part-time; % of part-time workers by education level group.

	Germany		EU -27	
	2010	2020	2010	2020
Share of part-time employment in total employment				
Low (level 0 - 2)	33	29	23	21
Intermediate (level 3 - 4)	28	31	19	19
High (level 5 - 8)	19	24	16	16
Share of all part-time employment				
Low (level 0 - 2)	17	13	27	18
Intermediate (level 3 - 4)	62	60	49	50
High (level 5 - 8)	20	27	24	32

Source: Eurostat

Part-time employment shifted to include a higher share of high-level workers and a lower share of low-level workers. Intermediate-level workers remain the largest share of part-time employees both in Germany and the EU.

Reasons for part-time work

In 2010, the inability to find full-time employment was the most common reason for working part-time (Brenke, 2011). While this reason remained important at the European level in 2020, priorities in Germany had shifted, but the general trend reflected by both men and women has stayed relatively the same. Instead, the change in the strength of the percentages are more spread out than in the previous decade's data.

Isolated Results From Table 6: **Reasons for part-time employment (2020):** % of people in part-time employment, by country.

Germany	European Union - 27
Men	Men
1. Education or training	1. No full-time job found
2. Other family or personal reasons	2. Other
Women	Women
1. Other family or personal reasons	1. Care of adults with disabilities or children
2. Care of adults with disabilities or children	2. No full-time job found

The reasons for part-time work reported in 2020, like those reported in 2010, reflect societal gender roles. Priorities are matched for women based on care for others as the top priority, which differs from men having education as the top priority and actions taken as the reason for the continuing or shift into part-time employment. In Germany, whose economy made a strong post-recession recovery, reasons for part-time work reflect traditional gender roles. This is less prominent in the EU overall, where a lack of full-time jobs remains a significant reason for working part-time, which matches the situation in Germany in 2010.

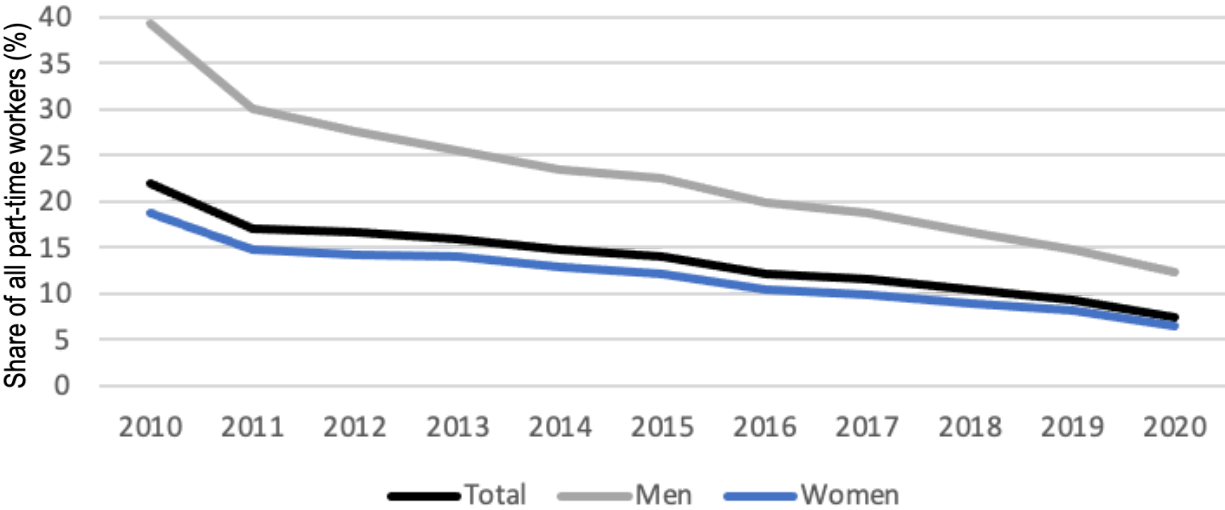
Table 6: **Reasons for part-time employment (2020): % of people in part-time employment, by country**

	No full-time job found	Other family or personal reasons	Care of adults with disabilities or children	Education or training	Own illness or disability	Other
TOTAL WORKING POPULATION						
European Union - 27	25.1	19.1	21.4	8.4	5.3	20.6
Belgium	4.8	18.6	20.5	4.4	8.6	43.1
Czechia	4.5	18	21.6	9.1	23.5	23.3
Denmark	13.2	25.7	2.3	24.9	16.6	17.3
Germany	7.5	36	27.9	10.2	4.2	14.1
Spain	52.6	6.5	11.7	7	1.5	20.7
France	38.2	16.4	22.7	4.9	9.2	8.6
Italy	66.2	5.9	12	1.9	1.6	12.4
Hungary	19	5.8	12	7.1	21.7	34.4
Netherlands	6.6	3.6	30.7	12.7	4.5	41.9
Austria	9.4	16.3	33.8	9.7	3.2	27.7
Poland	13.5	5.9	10.5	6.1	7	57
Portugal	45.5	4.8	5.5	7.3	5.6	31.3
Sweden	23.1	11.8	14.9	13.7	9.7	26.8
Norway	21.8	6.5	6.8	21.2	19	24.6
Switzerland	7.9	21.4	18.7	9.2	4.4	38.5
MEN						
European Union - 27	33.2	11.4	5.9	15.8	7.9	25.8
Belgium	6.7	11.9	7.6	6.5	10.9	56.3
Czechia	2.6	7.4	2.1	21.1	36	30.7
Denmark	14.7	14.1	:	32.7	20	18.1
Germany	12.4	24.4	8.3	25.8	8.7	20.5
Spain	61.1	1.6	3	12.1	2.1	20
France	42.8	13.6	6.6	8	13.4	15.7
Italy	79.8	1.5	1.2	3.1	2.1	12.4
Hungary	25.3	4.3	:	7.7	28.9	32.4
Netherlands	10.2	0.9	12.8	22.3	6.4	47.5
Austria	13.1	16.9	6.9	23.6	5.6	34
Poland	16	4.1	:	9.2	10.6	58.5
Portugal	42.3	:	:	8.6	6.3	38
Sweden	26.6	11.6	8.5	16.1	9.8	27.4
Norway	21.2	3.6	1.3	28.9	15.5	29.5
Switzerland	8.6	11.8	8.1	17	8.1	46.4
WOMEN						
European Union - 27	22.6	21.5	26.2	6.2	4.5	19.1
Belgium	4.2	20.7	24.3	3.7	7.9	39.2
Czechia	5	20.9	27	5.8	20	21.2
Denmark	12.6	30.8	3.1	21.4	15.1	16.9
Germany	6.4	38.8	32.5	6.6	3.1	12.6
Spain	49.8	8	14.6	5.3	1.3	21
France	37.1	17.1	26.8	4.1	8.2	6.8
Italy	61.6	7.4	15.7	1.4	1.5	12.4
Hungary	15.9	6.5	17.1	6.8	18.2	35.4
Netherlands	5.4	4.5	36.8	9.4	3.9	40
Austria	8.5	16.2	39.9	6.6	2.6	26.2
Poland	12.3	6.8	14.6	4.6	5.3	56.4
Portugal	47.1	5.7	7.1	6.7	5.3	28.1
Sweden	21.6	11.9	17.8	12.5	9.7	26.5
Norway	22.1	7.8	9.2	17.8	20.6	22.5
Switzerland	7.6	24.5	22	6.7	3.2	36

Source: Eurostat

People in Germany and the EU in general mainly choose to work part-time for family or personal reasons, though pursuing education or training was the primary reason for men in Germany.

Figure 5: **Part-time Workers in Germany who have not found Full-time Employment, 2010 to 2020: Share of all part-time workers (%)**



Source: Eurostat

The share of people working part-time because they could not find full-time employment declined.

The development of part-time employment has been on the rise (Figure 1, Table 1), excluding the pivot downwards during 2020 due to the pandemic. A rise in part-time employment can occur for different reasons. Individuals may decide to work-part time either voluntarily or due to involuntary pressures. A large volume of workers in part-time positions involuntarily indicates an inability of the economy to match labor with suitable positions, as occurred following the 2008 financial crisis (Brenke, 2011). There was an increase in involuntary part-time employment with a plateau in 2010.

This is no longer the case in Germany. From 2010 to 2020, there was a steady decline in involuntary part-time employment. to see the shift of these two trends in the opposite direction as the decade steadily increases in part-time employment.

Conclusion

The Labor Force Survey results indicate that part-time employment continued to grow both in Germany and across northern and western Europe from 2010 to 2020. The part-time workforce experienced some significant structural changes since the previous decade, shifting to include more men and higher-skilled workers. A gender gap persists, with a larger share of women than men holding part-time jobs. Both in Germany and neighboring countries, part-time employment has grown for workers of different skill levels and age groups, but is most common among older adults.

While the previous decade was marked by more people working part-time because they couldn't find full-time work amid the Great Recession, that number declined from 2010 to 2020. This indicates an improvement in the economy's ability to match workers with suitable employment opportunities, as fewer workers are forced to settle for part-time work despite preferring full-time, and others increasingly choose part-time employment for personal or family reasons.

The results also demonstrate the early effects of the COVID-19 pandemic on part-time work. The present analysis reveals a slight decline in full-time employment and slight rise in part-time employment during 2020. This is consistent with a Eurofund survey in which more than one third of workers had their hours reduced during the first wave of the pandemic (Eurofund, 2021). The full extent of the pandemic's effects on the structure of the workforce have yet to be seen.

Limitations & Future Research

The present study faced certain limitations in its aim to apply the methodology used by Brenke (2011) to a different time period. Age ranges for Table 3, which differ from those used by Brenke, were selected to avoid overlapping ranges and were limited by Eurostat database restraints. The Microcensus data used by Brenke were difficult to access, and as a result, the topics of the share of mini-jobs and midi-jobs in part-time employment could not be included. With access to the Microcensus data, the present study could be supplemented with analyses of the relationships between benefits, different legal statuses, and part-time employment.

Labor force composition and gaps among groups in the workforce remain important topics for further research. Future studies may extend the present findings, apply Brenke's methodology to other countries, or explore related themes. The effects of the COVID-19 pandemic were already observable in some data (Figure 1, Figure 2), though in many cases its full effects are not yet known. Future studies can compare the developments in part-time employment throughout the course of the pandemic and explore its relationship to the so-called "great resignation." In addition, part-time work is more prevalent in northern Europe than in the south. Further research could also examine what factors contribute to that trend, such as social security or gender roles in society.

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Appendix

(1)

The International Standard Classification of Education (ISCED) 2011 qualification levels

ISCED 0 = Early childhood education
ISCED 1 = Primary Education
ISCED 2 = Lower Secondary Education
ISCED 3 = Upper Secondary Education
ISCED 4 = Post-secondary non-Tertiary Education
ISCED 5 = Short-cycle tertiary education
ISCED 6 = Bachelor's degree or equivalent tertiary education level
ISCED 7 = Masters degree or equivalent tertiary education level
ISCED 8 = Doctoral degree or equivalent tertiary education level

Source: World Bank