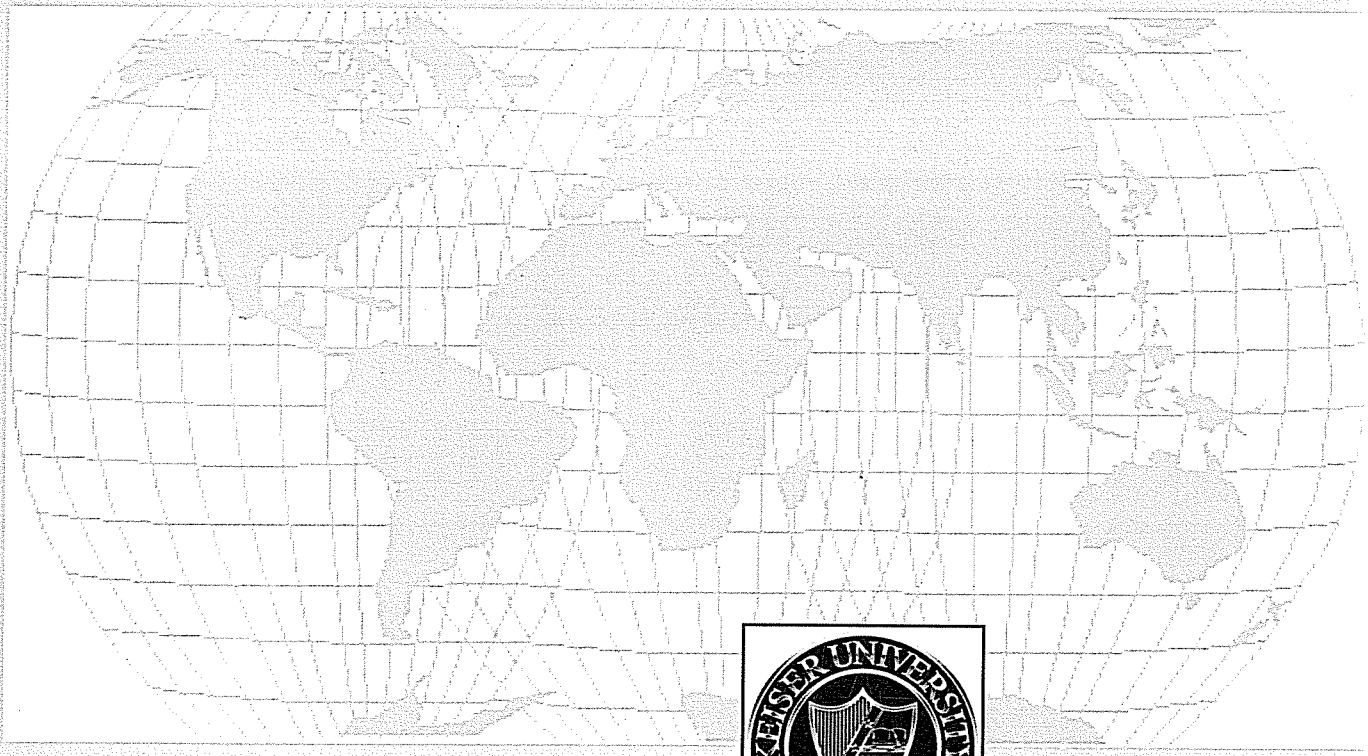
IJBR, Volume 19, Number 3, 2019 ISSN: 1555-1296

INTERNATIONAL JOURNAL OF BUSINESS RESEARCH™



Sponsored By:

KEISER UNIVERSITY

EDITOR-IN-CHIEF
Timothy Mantz, DBA, Dean, School of Business, Arts, and Media
Cabrini University Radnor, PA, U.S.A.

A Publication of the
International Academy of Business and Economics®
Promoting Global Competitiveness™

IABE.ORG

EDITORIAL BOARD:

Dr. Nashwa George, Larry L. Luing School of Business, Accounting and Finance Faculty, Berkeley College, New Jersey, U.S.A.
Dr. David Ward, European School of Economics, Milan, Italy
Dr. Federica Doni, University of Milano-Bicocca, Milan, Italy
Dr. George Clarke, Distinguished Assoc. Prof. (BBVA/Compass Bank Group Distinguished Chair), School of Business, A.R. Sanchez, Jr., Laredo, TX, U.S.A.
Dr. Joel Shulman, Babson College, Massachusetts, U.S.A.
Dr. Dale H. Shao, Marshall University, Huntington West Virginia, U.S.A.
Dr. Jose Sanchez-Gutierrez, Head of Department of Marketing and International Business, Universidad de Guadalajara, Mexico
Dr. Liang-Chieh (Victor) Cheng, College of Technology, University of Houston, Texas, U.S.A.
Dr. Revaz Gvelesiani, Ivane Javakhishvili Tbilisi State University, Georgia
Dr. Mauro Paoloni, University TRE Rome, Business Studies Department, Italy
Dr. Moshe Zviran, Tel Aviv University, Tel Aviv, Israel
Dr. Palaniappan Thiagarajan, Jackson State University, Jackson, U.S.A.
Dr. Phapruke Ussahawanitchakit, Mahasarakham Business School, Mahasarakham University, Thailand
Dr. Zinovy Radovilsky, California State University-East Bay, Hayward, CA, U.S.A.
Dr. Ricarda B. Bouncken, University of Bayreuth, Germany
Dr. Ramanjeet Singh, Amity University, India
Dr. Giovanni Liberatore, University of Florence, Italy
Dr. Silvio Bianchi Martini, University of Pisa, Italy
Dr. Antonio Corvino, University of Foggia, Italy

All rights reserved. ©2019 IABE. WWW.IABE.ORG **Printed and Published in USA.**
Disclaimer: IABE or its representatives are not responsible any error(s), validity of data/conclusion(s) or copyright infringements in any article published in the journal. Author(s) is/are solely responsible for the entire contents of the paper published in the

TABLE OF CONTENTS

	Page
DETERMINANTS OF INVOLUNTARY PART-TIME EMPLOYMENT (A STUDY ON TURKISH SAMPLE) Tekin Akgeyik, Istanbul University, Istanbul, Turkey	5
SOCIAL SECURITY AND POST-RETIREMENT BENEFITS OF DEVELOPING COUNTRIES: THE CASE OF BANGLADESH Monsurur Rahman, Indiana University of Pennsylvania, Indiana, Pennsylvania, U.S.A. Geoffrey Tickell, Indiana University of Pennsylvania, Indiana, Pennsylvania, U.S.A. Reza Karim, Independent Consultant, Ann Arbor, Michigan, U.S.A.	13
THE ATTRIBUTES OF EMOTIONAL INTELLIGENCE AND ITS IMPACT ON ACADEMIC PERFORMANCE Zeinab Shawky Younis, the British University in Egypt, Egypt	19
MANAGEMENT CONTROL TRADITIONAL PERSPECTIVES VERSUS EMERGING PERSPECTIVES: A LITERATURE REVIEW Gaetano della Corte, University of Rome, Sapienza, Department of Law and Economics of Productive Activities, Rome, Italy Federica Ricci, University of Rome, Sapienza, Department of Law and Economics of Productive Activities, Rome, Italy Salvatore Ferri, University of Naples "Parthenope", Department of Business and Economics Studies, Naples, Italy	33
A LOOK AT THE ROLE OF CULTURE IN EAST-WEST DIFFERENCES IN INDECISION Robert A. Culpepper, Stephen F. Austin State University, U.S.A. Fatemeh Zarei, Stephen F. Austin State University, U.S.A.	47
AN EMPIRICAL VERIFICATION OF THE SCALE TO MEASURE INTRA-CULTURAL ACCULTURALIZATION IN US ENTERPRISES Palaniappan Thiagarajan, Jackson State University, U.S.A. Manuel Garcia IV, Claflin University, U.S.A.	53
THE IMPACT OF FEASIBILITY STUDY ON PALESTINIAN SMALL INVESTMENT PROJECTS Khalid Mohammad Hasan Sweis, Palestine Technical University, Kadoorie, Tulkarm, Palestine Tamer Bahjat Sabri, Palestine Technical University, Kadoorie, Tulkarm, Palestine Qadri Kamal Alzaghal, Palestine Technical University, Kadoorie, Tulkarm, Palestine Samaa Baker Mssis, Palestine Technical University, Kadoorie, Tulkarm, Palestine Manal Maan Awartani, Palestine Technical University, Kadoorie, Tulkarm, Palestine	65

DETERMINANTS OF INVOLUNTARY PART-TIME EMPLOYMENT (A STUDY ON TURKISH SAMPLE)

Tekin Akgeyik, Istanbul University, Istanbul, Turkey

dx.doi.org/10.18374/IJBR-19-3.1

ABSTRACT

The aim of this study is to analyze the determinants of involuntary part-time employment in Turkey using the data from the Turkish Statistical Institute (TURKSTAT) 2017 Household Labor Force Survey (HLFS). First, the results of binary logistic regression analysis showed that being male and being 35-44 years old were the determinants of involuntary part-time employment. Moreover, working in elementary occupations, having less work experience, and being informal were found to be the predictors of involuntary part-time employment. For the total sample, the regression model explained 32.9 percent of the variance in involuntary part-time employment. Also there was 15.5 percent wage difference, to the disadvantage of involuntary part-time workers.

Keywords: *involuntary part-time, part-time work, part-time employment, Turkey.*

ACKNOWLEDGEMENT: This study was funded by Istanbul University with the project number of SBA-2018-32203.

1. INTRODUCTION

Although part-time work is defined by International Labor Organization as being less than full-time, the threshold for defining it varies among countries. For example, in the US, part-time work means less than 35 hours a week. However, in Canada, the UK and Turkey it is 30 hours a week (Fagan et al., 2014). There are two types of part-time work: voluntary and involuntary. The former refers to employees preferring to work at part-time job due to studying, training, partial retirement or family responsibilities, while the latter refers to employees working part-time because they could not find a full-time job (Veliziotis et al., 2015).

The statistics display that an important part of part-time employment is involuntary in many countries. For example, while the number of part-time employees reached to 25.6 million (17.5 percent of total employment) in the US in 2018 (BLS, 2018), the share of involuntary part-time employment was about 14% (Dunn, 2018). In Canada, the percentage of part-time workers in total employment was 19.7% in 2018. Of the part-time employment, 22% was involuntary (Statcan, 2018). In the UK, the rate of part-time contracts in the total of contracts was at 23.7% in 2017. In this country, 1 in 7 part-timers was involuntary (Eurostat, 2019).

Empirical studies have analyzed the determinants of involuntary part-time employment. Some have focused primarily on macro-economic factors. For example, a study by Fialova (2017) found that output gap had a significant negative influence on the rate of involuntary part-time employment in Central and Eastern Europe. Similarly, Valletta et al. (2018) claimed that involuntary part-time rate depended heavily on cyclical variation in labor market conditions. Buddelmeyer et al. (2004) confirmed the significant negative effect of business cycle on involuntary part-time employment in the EU-15 countries. Veliziotis et al. (2015) also reported that while economic downturn was the major factor in increasing involuntary part-time work in the UK labor market. The authors concluded that wage differentials were the main cause of growing involuntary part-time employment in the Greek sample. Moreover, Bhula-or and Yukio (2014) suggested that the share of the service sector, the level of GDP, and fiscal policy were likely to affect the proportion of involuntary part-time work. Caputo and Cianni (2001) pointed out that the length of unemployment increased the likelihood of involuntary part-time work. A study by Leppel and Clain (1993)

is other supportive evidence that local unemployment level had a significant effect on the percent of involuntary part-timers.

On the other hand, Kjeldstad and Nymoen (2009) studied the work-related determinants of involuntary part-time employment in Norway. The results revealed that the type of work contract, occupation, the type of ownership, the number of employees, hourly earnings, and the type of industry were better predictors of involuntary part-time work. A similar study conducted in South Africa by Muller (2010) illustrated that occupation, the sector of employment, firm size, and union membership were the key predictors of involuntary part-time employment.

Several studies have also examined the effects of individual and social variables on involuntary part-time employment. For instance, a study by Maurizio (2016) analyzed the personal characteristics of involuntary part-time workers in Argentina, Brazil, Chile, Ecuador and Peru. The findings showed that females had higher odds of involuntarily part-time work than males. Secondly, the authors suggested that age and education were the strong predictors for the probability of involuntary part-time work. Informal workers were also found to have greater odds of part-time work for involuntarily. Another study by Leppel and Clain (1993) observed that education level and living outside urban areas affected involuntary part-time employment rates for both males and females in the US. In addition, DeAnda (1987) discovered that being young and having a low education level raised the probability of involuntary part-time employment for Chicanos. Lastly, Caputo and Cianni (2001) reported that marriage reduced the odds of involuntary part-time work.

The aim of this study is to analyze the determinants of involuntary part-time employment in Turkey using the data from the Turkish Statistical Institute (TURKSTAT) 2017 Household Labor Force Survey (HLFS). The organization of the paper is as follows: the methodology is given in the second part, the next part explains the results of the statistical analysis, and concluding remarks are presented in the final part.

2. METHOD

2.1. Sample and Data

The dataset for the current study was drawn from the TURKSTAT 2017 HLFS. The sample included the households working as regular part-time employees in a factory, office or store. The final sample consisted of 1204 respondents, of which 930 (77.2%) were voluntary, and 274 (22.8%) were involuntary part-time workers.

Of the sample, 59.7% were male, and 62.7% were married. The mean age of the sample was 38.6 years (standard deviation (S.D.) =14.6, range=15–79). 56 percent had secondary education or less. In terms of occupation, 32.1% were services and sales workers, while 19.4 percent of the sample was elementary workers. The average experience was 3.7 years ± 4.5, ranging from 1 to 40 years. 88.8% of the workers were employed at firms with less than 50 employees. While 36.5% of the group had a social security registration, 1.8% had supervisory responsibilities at work. The average weekly working hours were 19.2 (median 48 hours). The mean hourly wage was 12.7 TL.

2.2. Variables

Involuntary part-time employment status was the dependent variable (0= voluntary part-time employed, 1= Involuntary part-time employed). Demographic (including gender, age, marital status, and education), and labor market characteristics (including occupation, work experience, firm size, position status, social security registration, weekly working hours and hourly wage rate) were the independent variables.

2.3. Statistical Analyses

The normality of data distribution was assessed by examining the skewness and kurtosis values. Due to the non-normality of the data, non-parametric tests were employed. The significant differences between the groups were investigated by Mann-Whitney U and Kruskal-Wallis tests. Binary logistic regression was performed to evaluate the determinants of involuntary part-time employment.

3. RESULTS

3.1. Descriptive Statistics

Table 1 illustrates the relevant sample means for voluntary and involuntary part time workers. The Table also shows statistically significant differences between the groups.

Part-time work is less common in Turkey. According to the HLFS, about 10.9% of all employment was working part-time in 2017. Although the number of part-time employees has risen to 23 percent since 2009, its share in the total employment has decreased by 2.4% since 2014 (TSI, 2019).

The full-time workforce in Turkey is predominantly male. Only 28% of full-time employment was women in 2017. However, the proportion of female workers among part-time employment was 44 percent. On the other hand, the rate of male part-time workers was 3.5 times higher than the rate of involuntary female part-time workers, whereas it was only 1.2 times for voluntary.

The percentage of involuntary part-time work was the greatest among adult workers (35-44 years). However, the age structure of voluntary part-time workers was different. It was the highest in the 16 to 24 age category. 64% of involuntary part-time employees were older than 35 years. This percentage for voluntary part-time workers fell to 57%. Voluntary part-time employees were more likely to be single, while the rate of married workers was the highest among involuntary part-time workers (70%).

TABLE 1: SAMPLE MEANS

	Variables		Part-Time		
			Voluntary	Involuntary	P
Demographic	Gender	Male	0,54	0,78	.000
		Female	0,46	0,22	
	Age	16-24	0,25	0,16	.000
		25-34	0,18	0,21	
		35-44	0,21	0,32	
		45-54	0,18	0,21	
		55-64	0,18	0,11	
	Marital status	Single	0,39	0,30	.004
		Married	0,61	0,70	
	Education	Years	9,1	7,5	.000
Labor market	Occupation	Managers	0,01	0,00	.000
		Professionals	0,15	0,05	
		Technicians and associates	0,06	0,03	
		Clerical support workers	0,09	0,01	
		Services and sales workers	0,33	0,27	
		Craft and related trades	0,11	0,26	
		Machine operatives	0,08	0,11	
		Elementary occupations	0,17	0,27	
	Experience	Years	4,31	1,78	.000
	Firm size	1-10	0,62	0,72	.001
		11-19	0,08	0,10	
		20-49	0,18	0,11	
		50+	0,13	0,07	
	Position status	Supervisor	0,02	0,00	.040
		Non- supervisor	0,98	1,00	
	Social security registration	Registered	0,42	0,16	.000
		Not-registered (informality)	0,58	0,84	
	Working hours	Weekly	19,3	19,1	.564
	Hourly wage	(TL)	12,9	10,9	.030
	Observations (n)		930	274	

*p < .05 **p < .001

With respect to education (years at school), involuntary part-time workers were the least educated group. They had an average schooling of 7.5 years, while the mean years of schooling for voluntary part-time workers were more than 9.1 years.

Regarding job characteristics, involuntary part-timers were more likely to work in smaller workplaces than voluntary part-timers. Moreover, they had the lowest length of experience with an average of 0.7 years. There were also significant differences in informality between voluntary and involuntary part-time workers. The incidence of informality was 2.6 times higher among involuntary part-time employees compared to voluntary part-time employees. Similarly, significant wage differences were found between the groups. Average hourly wage was about 15.5 percent lower for involuntary part-time workers.

Finally, there were significant occupational differences between the samples as well. Voluntary part time workers were more likely to be employed in services and sales. However, involuntary part-time workers were concentrated in elementary occupations.

3.3. Determinants of Involuntary Part-Time

The binary logistic regression analysis was performed to examine the determinants of involuntary part-time employment. The predictor variables were entered in two blocks. Demographic attributes were added in the first block of the analysis. The second block involved labor market variables. The Unstandardized coefficients and odds ratios for both models are displayed in Table 2.

The model 1 shows that taken together, demographic variables (gender, age, marital status and education) significantly predicted involuntary part-time employment ($\chi 2$ = 139,040, df=7, p<.001), with a total classification percentage of 78.6%. Nagelkerke R^2 was 16.6%.

TABLE 2: LOGISTIC REGRESSION FOR PREDICTING INVOLUNTARY PART-TIME

Variables	Model 1***				Model 2***			
	B	S.E.	Odds Ratios	P	B	S.E.	Odds Ratios	P
Demographic								
(1) Gender (female)	1,463	,174	4,321	,000	1,063	,196	2,896	,000
(2) Age (Ref.: Age 55-64)				,000				,000
16-24	,527	,325	1,694	,105	,024	,349	1,024	,946
25-34	1,464	,279	4,325	,000	1,154	,304	3,170	,000
35-44	1,533	,257	4,630	,000	1,264	,280	3,538	,000
45-54	,964	,263	2,622	,000	,893	,285	2,443	,002
(3) Marital status (married)	-,213	,211	,808	,314	,292	,230	1,339	,204
(4) Education (years)	-,092	,020	,912	,000	,008	,027	1,008	,778
Labor market								
(5) Occupation								,047
(Ref. Elementary)								
Managers					,782	1,253	2,185	,533
Professionals					-,629	,407	,533	,123
Technicians and associates					-,605	,474	,546	,201
Clerical support workers					-1,878	,639	,153	,003
Services and sales workers					-,288	,218	,750	,186
Craft and related trades					,109	,240	1,115	,649
Machine operatives					-,392	,303	,676	,196
(6) Experience					-,241	,049	,786	,000
(7) Firm size (Ref.: Size 50+)								,172
1-10					-,233	,325	,792	,473
11-19					,419	,396	1,520	,290
20-49					-,168	,368	,845	,648
(8) Position (supervisor)					-,501	1,263	,606	,692
(9) Social security (registered)					,639	,224	1,895	,004
(10) Weekly working hours					-,013	,011	,987	,215
(11) Hourly wage					-,039	,012	,962	,001
Constant	,979			,909	-1,448	,496	,235	,004
-2 Log Likelihood		1152,441				997,808		
Chi-square		139,040				159,907		
Classification accuracy		*78.6%*				*81.7%*		
Nagelkerke R^2		16.6%				32.9%		

**P < 0.05 **P < 0.01*

The relative odds indicated that the prevalence of involuntary part time employment was 4.3 times greater among male workers than among female workers. Age was also a significant predictor of the possibility of working involuntary part-time. The results pointed out that adult-aged workers (35-44 years old) were the

most likely to be involuntary part-time workers. The coefficient of education was negative and statistically significant at 1%, implying that an increase in education level reduced the probability of involuntary part-time employment by about 91%.

Model 2 evaluated the effects of labor market variables on the likelihood of involuntary part-time after controlling for demographic variables. The model revealed that all the determinants taken together significantly predicted involuntary part-time employment ($\chi 2$ = 159,907, df = 15, $p < .001$). When labor market variables were added in the second step, the overall classification percentage rose from 78.6% to 81.7%, and the Nagelkerke R^2 increased from 16.6% to 32.9%

Regarding occupation variable, only clerical support occupation was significant. The results indicated that being employed in elementary occupations increased the probability of involuntary part-time employment by 6.4 times compared to working in clerical support occupations. Moreover being formally employed decreased the likelihood of involuntary by about 56 percent compared to workers who were informally employed. The marginal effect of experience was negative and significant; this showed that higher experience decreased the probability of involuntary part-time work by about 79%. Finally, the findings revealed that lower wages were associated with higher odds of involuntary part-time.

4. DISCUSSION AND CONCLUSIONS

The supply and demand determinants of involuntary part-time work have been examined by many studies. The purpose of current study is to analyze the association of involuntary part time employment with demographic and labor market variables based on data from 2017 Household Labor Force Survey of the TURKSTAT. It is possible to draw some overall conclusions from the analyses.

First, the results of binary logistic regression analysis showed that being male and being 35-44 years old were the determinants of involuntary part-time employment. Also, working in elementary occupations, having less work experience, and being informal were found to be the predictors of involuntary part-time employment. For the total sample, the regression model explained 32.9 percent of the variance in involuntary part-time employment. This findings agree with the results of Veliziotis et al. (2015), who demonstrated that being male was a predictor of involuntary part-time work in the UK sample. The findings are also consistent with the results of Muller (2010), who concluded that the probability of involuntary part-time employment increased with age and decreased with longer experience. Moreover, the findings are in line with Maurizio's (2016) study revealing that informal workers had greater odds of part-time work for involuntarily. However, the findings differ from the study of Maurizio (2016), who reported that being female appeared to be a significant predictor for the likelihood of involuntary part-time employment.

On the other hand, significant age differences were found between the groups, meaning that involuntary part-time employment was found to be more prevalent among the age group of 35-44 years. This finding is inconsistent with the result of Barrett and Doiron (2001), who found that involuntary part-timers tended to be younger.

There were also significant educational differences between voluntary and involuntary part-timers, indicating that involuntary part-time employees were more likely to have less education than involuntary part-time employees. This finding is congruent with the results of Borowczyk-Martins and Lale (2016), which illustrated that educational attainment was lower among involuntary part-time workers. However, the finding is dissimilar to that of Barrett and Doiron (2001), who found that involuntary part-time workers were not less educated.

Moreover, there was 15.5 percent of the mean wage difference, to the disadvantage of involuntary part-time workers. This result is in accordance with the study by Muller (2010), who reported that involuntary part-timers earned less than half the monthly wage of voluntary part-timers. It is also in agreement with the study of Barrett and Doiron (2001), showing that involuntary part-time workers earned about 18 percent less compared to other part time workers.

In conclusion, the present study identified the determinants of involuntary part-time employment in the context of Turkish sample. Future studies should take into account other sosyo-demographic and economic variables such as studying, retirement, care responsibilities or local unemployment rates for predicting the determinants of involuntary part-time work.

REFERENCES:

Barrett, Garry F. and Doiron, Denise J., "Working Part Time: By Choice or by Constraint", The Canadian Journal of Economics, Volume 34, Number 4, Pages 1042-1065, 2001.

Bhula-or, Ruttiya and Yukio, Ikemoto, "Factors Affecting Involuntary Part-time Employment in OECD Countries", Review of Integrative Business and Economics Research, Volume 3, Number 2, Pages 333–349, 2014.

Borowczyk-Martins, Daniel and Lale, Etienne, The Welfare Effects of Involuntary Part-time Work, Discussion Paper, No: 16/673, University of Bristol, United Kingdom, 2016.

Buddelmeyer, Hielke, Mourre, Gilles and Ward, Melanie, The Determinants of Part-Time Work in EU Countries: Empirical Investigations with Macro-Panel Data, IZA Discussion Paper, No: 1361, Bonn, 2004.

Caputo, Richard K. and Cianni, Mary, "Correlates of Voluntary vs. Involuntary Part-time Employment among US Women", Gender, Work and Organization, Volume 8, Number 3, Pages 311–325, 2001.

DeAnda, Roberto M, Determinants of Involuntary Part-Time Work Among Chicanos, University of Arizona, Arizona, 1987.

Dunn, Megan "Who chooses part-time work and why?," Monthly Labor Review, U.S. Bureau of Labor Statistics, March 2018, https://doi.org/10.21916/mlr.2018.8.

Eurostat, "Main Reason for Part-Time Employment-Distributions by Sex and Age (%)", *https://ec.europa.eu/Eurostat, 2019.*

Fagan, Colette, Norman, Helen, Smith, Mark and Menendez, Maria C. Gonzalez, In Search of Good Quality Part-Time Employment, Geneva: ILO Conditions of Work and Employment Series, No: 43, Geneva, 2014.

Fialova, Kamila, "Part-time Employment and Business Cycle in Central and Eastern Europe", Review of Economic Perspectives, Volume 17, Number 2, Pages 179-203, 2017.

Kjeldstad, Randi and Nymoen, Erik H., Part-Time Work, Underemployment and Gender: Worker versus Job Explanations, Discussion Papers, No. 602 Statistics Norway, Norway, 2009.

Leppel, Karen and Clain, Suzanne, "Determinants of Voluntary and Involuntary Part-Time Employment", Eastern Economic Journal, Volume 19, Number 1, Pages 59–70, 1993.

Maurizio, Roxana, Non-Standard Forms of Employment in Latin America: Prevalence, Characteristics and Impacts on Wages, ILO Conditions of Work and Employment Series, No: 69, Geneva, 2016.

Muller, Colette, Underemployed Women: An Analysis of Voluntary and Involuntary Part-Time Wage Employment in South Africa, Working Paper, Number 185, University of KwaZulu-Natal, South Africa, 2010.

Statistics Canada, "Part-Time Employment by Reason, Annual", www150.statcan.gc.ca, 2018.

U.S. Bureau of Labor Statistics, "Employed and Unemployed Full- and Part-Time Workers by Age, Sex, Race, and Hispanic or Latino Ethnicity 2018", www.bls.gov, 2019.

Valletta, Robert G, Bengali, Leila and van der List, Catherine, Cyclical and Market Determinants of Involuntary Part-Time Employment, Federal Reserve Bank of San Francisco Working Paper, No: 2015-19, San Francisco, 2018.

Veliziotis, Michail, Matsaganis, Manos and Karakitsios, Alexandros, Involuntary Part-Time Employment: Perspectives from Two European Labour Markets, Improve Working Paper, No. 15/02, Brussels, 2015.

AUTHOR PROFILE:

Dr. Tekin Akgeyik earned his Ph.D. at Istanbul University in 1997. Currently, he is a full professor of human resource management at Faculty of Economics, Istanbul University, Istanbul, Turkey (akgeyik@istanbul.edu.tr).