

# Perception of job security – empirical evidence from Slovenia\*

Tatjana Kozjek, Marko Ferjan, Anja Žnidaršič\*\*

Traditionally, it is assumed that gender and the type of employment contract affect the perception of job security. The research presented in this article was conducted by surveying 1,009 Slovenian private and public sector employees, and it includes data about six types of security. Their estimates were compared between employees with permanent and flexible employment contracts and according to gender. First, the normality of variables was evaluated according to skewness and kurtosis values in conjunction with histograms and Q-Q plots. The differences were then tested with a one-sided Independent Samples t-test and its non-parametric alternative, the Mann-Whitney test. Employees with permanent jobs evaluated the possibilities of an individual to access workplace training higher than employees with flexible contracts did. Men evaluated an individual's level of job security, the opportunity to have resources for a decent life, safe working conditions, and well-being in the workplace higher than women did.

**Keywords:** job security, economic security, security of income, gender, employment contract  
JEL J28, J31, J41

## 1. Introduction

According to Ignjatović (2012), the recent developments in European labour market(s) and societies are part of more profound long-term changes concerning the emphasis a particular form of security has for the members of European societies. As modern labour markets are becoming more dynamic, the probability of retaining one's job for a longer time is becoming smaller for a growing proportion of the workforce. Developed EU countries predominantly use part-time employment as a form of flexible employment. It offers higher job security and lower income than temporary employment and self-employment. In contrast, less developed new members from Central and Eastern Europe do not have high

\* Manuscript received: 12.05.2015, accepted: 19.05.2016, 1 revision.

\*\* *Tatjana Kozjek* (Corresponding author), Ph.D., Senior lecturer, Faculty of Administration, University of Ljubljana, Gosarjeva 5, 1000 Ljubljana, Slovenia. Email: tatjana.kozjek@fu.uni-lj.si. Main research interests: Flexibility and security in the field of work, work-life balance, gender equality.

*Marko Ferjan*, Ph.D., Full professor, Faculty of Organizational Sciences, University of Maribor, Kidriceva 55 a, 4000 Kranj, Slovenia. Email: marko.ferjan@fov.uni-mb.si. Main research interests: HRM, communication processes in organizations, educational planning.

*Anja Žnidaršič*, Ph.D., Assistant professor, Faculty of Organizational Sciences, University of Maribor, Kidriceva 55 a, 4000 Kranj, Slovenia. Email: anja.znidarsic@fov.uni-mb.si. Main research interests: Social network analysis, measurement issues of network data, non-response treatments, micro-enterprises and information-communication technology, students' performance in methodological courses and their competencies, employees' perceptions of job security.

shares of flexible forms of employment at all. Kanjuo Mrčela and Ignjatović (2012) made an analysis of Eurostat and IMAD data (2011) and found that the levels of male (6.3%) and female (10.3%) part-time employment in Slovenia are lower than EU27 averages (at 7.1% for men and 30.7% for women). The temporary employment rate for women in Slovenia is considerably higher than the corresponding EU27 average rate for women, as well as the rate for men in Slovenia. Kanjuo Mrčela and Ignjatović (2015) made another analysis of Eurostat data (2015) and SURS data (1991-2014) and found that the Slovenian labour market is relatively rigid and inflexible compared to other markets in the EU. The research for the three most common forms of flexible employment in the developed countries of the EU and Slovenia (part-time, fixed-term employment, and self-employment) shows that the Slovenian labour market already exceeds the EU average (8<sup>th</sup> place). According to the share of self-employed and the proportion of part-time work, Slovenia is at the 18<sup>th</sup> place among the EU countries. Furthermore, with regards to the total share of all three forms of flexible employment, Slovenia is also on the 18<sup>th</sup> place among 28 EU countries.

Job insecurity seems to be much higher in Slovenia than in the EU27 on average. More than a quarter of both men and women in Slovenia are afraid of losing their jobs. More men in Slovenia than on average in EU27 think that it will be easy to find a similar job if they lose their job. The proportion of women in Slovenia who share this view is lower than the EU27 average (Kanjuo Mrčela, Ignjatović, 2012). According to Parker and Bevan (2011), job security is one of the key attributes of a good job. The importance of job security, according to Yousef (1998), derives from the fact that it is a major factor influencing the wellbeing of employees and their retention and organizational commitment. Ong and Shah (2012) stated that in job security satisfaction, gender differences need to be taken into account. The type of the employment contract is also significant. Green and Heywood (2011) claimed that temporary employment contracts are associated with higher job insecurity. Dawson and Veliziotis (2013) stated that individuals on temporary employment contracts have lower job satisfaction with job security than those with permanent employment contracts.

The purpose of the research presented in this article is to compare and analyse differences in perceptions of job security in Slovenian organizations. The study examines whether 1) *employees with permanent job contracts evaluate the variables of job security higher than employees with other types of job contracts do;* 2) *men evaluate variables of job security higher than women do.*

The research examined whether job security differs between different flexible types of job contracts, such as permanent jobs, contract jobs, student contract jobs and other forms of job contracts. The research also addressed the differences in job security between men and women.

## 2. Types of job security

According to Jonsson (2007), stability means that employees have strong employment protection, perceived as job security. The literature describes different types of job security, which are presented in the following sections. The ILO (2004) defined the term *economic security* as being from basic social security; it is related to the ability to access the infrastructure for basic health needs, education, housing, information and other job-associated securities. Nesadurai (2005) divides economic security into micro and macro levels. On the micro level, economic security is the security of an employee's job and income, while on the macro level, it is directed at ensuring the integrity of the market, creating growth and prosperity in the society that enables the well-being of the individual.

*Security of employee income*, according to Standing (1999), indicates the actual and expected income that an individual earns by working, or receives as social or other transfers. Security of employee income includes income level regarding payments, and expectations of current and future income such as minimum wage, wages indexed to the rate of inflation and progressive taxation. The ILO (2004) and Wilthagen et al. (2004) state that this form of security relates to an employee's opportunity to obtain basic resources and have a decent life.

*Job security* is a type of security against losing a job that provides income, according to Chung and van Oorschot (2010). Standing (1999) states that it means both a high level of security against job loss as well as security for self-employed people against unexpected business or job loss. The ILO (2004) also includes losses that would occur in violation of the terms of the employment contract.

Wilthagen et al. (2004) and the European Commission (2007) define *security at the workplace*. They claim that this type of security refers to the probability that an individual will keep his job with his current employer. It also means security against major changes in their working conditions. Standing (1999) claims that it presents the possibility of using niches in the labour market, which allows the employee continued employment within the same organization but in another job position. That mechanism enables the employee to continue working in accordance with his education, abilities, capabilities, and skills.

*Work security* relates to the work conditions in organizations that encourage employee well-being. This type of security, according to Standing (1999), is reflected in the regulations regarding health and security in the workplace, stress prevention, workplace bullying, discrimination, and absenteeism. The State Service Commission (2003) wrote about harassment (racial and sexual) and intimidation in the workplace. The ILO (2004) warned about the restrictions on working hours and night work.

Security related to education, training and development are skills that Standing (1999) defined as *reproductive skills security*. In his opinion, this type of security refers to the ability of the individual to achieve education and training that promote opportunities for employment. The ILO (2004) defined it as *employee skills security*, which means the opportunities for the acquisition, retention, and development of individual education, abilities, skills, and knowledge.

According to Standing (1999), *combination security* represents the individual's ability to coordinate paid work with other responsibilities. Hobson (2014) defined this coordination as work-life balance. Tros (2004) described combination security as coordination between professional and private life, work-life balance and flexible, early (partial) retirement and flexible working time.

### 3. Types of employment contracts

One *typical type of employment contract* is a permanent contract, the primary characteristic of which is that no exact date of termination of the position is specified. There is a stereotypical belief that permanent jobs are more secure and stable than other types of job contracts are.

According to Soltwedl et al. (1999) and the ILO (2004 a), *atypical or flexible types of employment contracts* include:

- flexitime, which means that an employee may arrive later and/or depart earlier and may continue working during the lunch break;
- fixed working time, which is arranged in advance, when the employee and employer agree to a definite working schedule;
- time banking, which means that overtime is recorded on an individual account for the management of his/her working time and can be used in case of personal or family responsibilities;
- compressed work week, which means the employee works the same amount of hours in fewer days, e.g. the worker puts in all his/her hours for the week in four days instead of five days, leaving the remaining three days free;
- work for fixed period (for a specific period);
- part-time and term-time working;
- job sharing, when two individuals work part-time at the same workplace;
- teleworking.

Temporary employment, in which workers are engaged for a specific period, according to ILO (2015) includes fixed-term, project- or task-based contracts, as well as seasonal or casual work. Fixed-term contracts can be either written or oral, but are characterized by a predefined term. Such contracts, as well as project- or task-based work, are also widely used in informal employment relationships. In part-time employment, the normal hours of work are fewer than those of comparable full-time workers. Many countries have specific legal thresholds that define part-time work in relation to full-time work.

Casual work is the engagement of workers on an occasional and intermittent basis, for a specific number of hours, days or weeks, in return for a wage dictated by the terms of a daily or periodic work agreement. Casual work is a prominent feature of informal waged employment in low-income developing countries.

Workers who are not directly employed by the company to which they provide their services may be performing work under contractual arrangements involving multiple parties, such as when a worker is deployed and paid by a private employment agency to perform work for a user firm. In most countries, the agency and the worker enter into an employment contract or relationship, whereas the agency and the user firm conclude a commercial contract. Although there is no employment relationship between temporary agency workers and user firms, some jurisdictions impose legal obligations on user firms regarding temporary agency workers, especially in respect to health and safety. The user firm pays fees to the agency, and the agency pays the wages and social benefits to the worker.

Cao et al. (2011) found that workers work temporarily in jobs with an inferior match quality, before transferring to better, and more stable, matches. A substantial increase in inequality follows an increase in the level of firing costs. This rise in inequality is due entirely to the increase in the fraction of temporary workers, which earn relatively lower wages. It is not due to an increase in the “permanent worker premium”, the ratio of the wage a permanent worker earns relative to that of a temporary worker. The ILO (2015) stated that temporary work gives enterprises flexibility to replace temporarily absent workers, to evaluate new hires before offering them open-ended contracts, and to respond to seasonal or other changes in demand. Part-time work allows employers greater flexibility in planning work, aligning schedules with peaks in customer demand and retaining workers who are not in a position to commit to full-time work. Workers seek non-standard arrangements to accommodate family, educational or other obligations, to supplement their income, or in the hope that the job might lead to permanent employment.

#### 4. Methodology

The purpose of this research was to compare and analyse differences among the perceptions of job security in Slovenian organizations, according to two factors: the type of the employment contract, and gender. Data were gathered using an online questionnaire from October to November 2011. Organizations from the private sector were randomly selected from the email addresses list obtained from the Slovenian Business Register. The link to the online questionnaire was sent by e-mail to official e-mail addresses, requesting it to be sent to employees. We do not know whether they forwarded the e-mail to other employees, which could imply that the survey did not include manual workers, or industrial work-

ers but mainly workers in administration or that the questionnaire was completed by one or many employees from the same organization. The link to the online questionnaire for organizations in the private and public sector was sent by e-mail to 6,000 official e-mail addresses. In the survey, 1,009 employees participated.

The following research hypotheses were tested:

*H1: Employees with permanent job contracts evaluate the variables of job security more highly than employees with other types of job contracts do.*

*H2: Men evaluate variables of job security more highly than women do.*

The comparison between different types of employment contract is an important research question. The research examines fifteen variables of job security (see Table 1). The convention of the International Labour Organisation (number 175) provides equal treatment (regarding job security, discrimination, and health) of employees with part-time employment contracts. The labour law in Slovenia determines that employees with fixed-time employment contracts have the same rights and obligations as those with permanent employment contracts. According to Guest (2004), workers who have fixed-term and temporary contracts might plausibly be associated with higher job insecurity, a sense of marginalization and loss of opportunity for development, for career and for organizational identification. According to Kanjuo Mrčela and Ignjatović (2015), mostly younger workers who do not have much work experience respond to fixed-term and part-time employment demand in Slovenia. Younger people also work with student referrals. The contracted work is typical for activities such as production or repair, physical or intellectual work, etc.

The hypotheses were written as one-sided, since several studies had previously revealed that men see job security as more important than women (e.g. 37% of men saying that job security is “extremely important” to them and 33% of women (PewResearchCenter, 2013); similar stable differences in perception of job security were determined by Tolbert and Moen (1998) in a two-decade-long study starting in the mid-1970 s). Another survey revealed gender differences according to perceived bad influences on health: 52% of female survey participants in Slovenia responded that a great deal of ill health is caused by work, in comparison to 42% of male respondents (Mrčela, 2010). More women (86%) than men (76%) in Slovenia think that health and security conditions at work might further deteriorate due to the economic crisis. According to the findings of Kanjuo Mrčela and Ignjatović (2012), there are considerably more men than women who are not satisfied with the fit of their working hours and family/outside work life. They also found that women in Slovenia reported greater dissatisfaction and less high satisfaction with their working conditions in comparison to men. Almost half of men and 40% of women in Slovenia estimate that

their work affects their health in a mainly negative way. They also found that a third of women and as much as 40.6% of men in Slovenia think that their health and security are at risk at work.

#### 4.1 *Methods used for the statistical methods*

The two hypotheses were analysed with the one-sided Independent Samples t-test, which compares means between two groups for normally distributed variables, while for non-normally distributed variables a non-parametric alternative called the Mann-Whitney test for comparison of medians or distributions (with respect to the rank-orderings of the scores) was used. The normality of variables was evaluated according to skewness and kurtosis values in conjunction with histograms and Q–Q plots.

The Mann-Whitney test assumes that the two samples are independent of each other, that the observed variable is measured on continuous or ordinal levels (and that the other variable forms two groups), and that the observations are independent. If the underlying distributions from which both samples are derived are identical, the Mann-Whitney test is used to interpret whether differences exist in the medians of two groups; otherwise, the only differences in the distributions of two groups (or mean ranks) can be examined. The distributions imply equal dispersion of data within each group; therefore, it also assumes the homogeneity of variance (similarly as for the Independent Samples t-test) with respect to the underlying population distributions (Sheskin, 2004). Therefore, in order to test the assumption of equality of shapes, the Kolmogorov-Smirnov Z (Field, 2013) test together with Levene's Test of Equality of Variances was used. For the Mann-Whitney test in addition to the standard U-statistics, z-value, asymptotic 2-tailed significance, a 9% confidence interval for one-tailed Monte Carlo significance (according to Field (2013) more preferable in large samples), the effect size ( $r$ ) is also presented.

#### 4.2 *Instrument*

The questionnaire is based on the literature review that covers types of job security (explained in Section 2 of this paper). Variables included in the questionnaire were carried out according to the following authors: Standing (1999), ILO (2004), Wilthagen et al. (2004) and the European Commission (2007). The questionnaire was divided into two parts, the first of which was about demography. The study gathered data about the organization and people who participated in the research. Data about job security were gathered in the second part of the questionnaire and was divided into six parts:

- in the area of economic security, the participants evaluated the possibilities of an individual to access infrastructure for basic health needs in general, health and security needs at the workplace, education in general, education in the

- workplace at the request of employees and at the employer's expense, training in the workplace, buying a house, renting an apartment, and job security;
- in the area of income security, the participants evaluated the possibilities of an individual to receive or have resources for a decent life (such as the regulation of minimum wage) opportunities for wage coordination and indexation;
  - in the area of workplace security, participants evaluated the level of an individual's protection from major changes in working conditions by the current employer;
  - in the area of work security, the participants evaluated the possibilities of an individual to have safe working conditions and to enable well-being;
  - in the area of employee job skills security, the participants evaluated the possibilities of an individual to achieve education and training, as well as opportunities for skills and competences acquisition, retention, and development;
  - in the area of combination security, the participants evaluated the possibilities of an individual to have a work-life balance, the understanding of an individual for the needs to integrate into civil, political, religious and other organizations.

Table 1 shows abbreviations of the studied variables of security and the exact wording of the questions.

**Table 1: Symbols and measured items of the variables of security**

<b>Variables of the security</b>	
<b><i>Variables of economic security</i></b>	
ES1	The possibilities of an individual to access infrastructure for basic health needs (in general).
ES2	The possibilities of an individual to access infrastructure for basic health needs of safety at the workplace.
ES3	The possibilities of an individual to access infrastructure for the basic needs of education (in general).
ES4	The possibilities of an individual to access the basic needs of education at the workplace at the request of the employee and at the employer's expense.
ES5	The possibilities of an individual to access workplace training based on the needs of employers.
ES6	The possibilities of an individual to buy a house.
ES7	The possibilities of an individual to rent an apartment.
ES8	An individual's level of job security.
<b><i>Variables of income security</i></b>	
IS1	The possibilities of an individual to have resources for a decent life (such as income, the regulation of minimum wage).
IS2	The possibilities of an individual to have opportunities for wage coordination and indexation.

<b>Variables of the security</b>	
<b>Variable of workplace (service) security</b>	
WSS1	The level of protection of an individual from large changes in working conditions by the current employer.
<b>Variable of work security</b>	
WS1	The possibilities of an individual to have safe working conditions, which also enable well-being in the workplace.
<b>Variable of employee job skills security</b>	
EJSS1	The possibilities of an individual to achieve education and training, as well as the opportunities to improve skills and competences acquisition, retention, and development.
<b>Variables of combination security</b>	
CS1	The possibilities of an individual to have a work-life balance – to satisfy family needs.
CS2	The possibilities of an individual to have a work-life balance – understanding an individual's needs to integrate into civil, political, religious, and other organizations.

Source: own

### 4.3 Sample

The questionnaire was completed by 1,009 employees in organizations in the private and the public sectors. The participants are broken down as follows: 25.5% were employed in the private sector and 74.5% in the public sector. The proportions of respondents are unequal and do not represent the exact structure of the employees in both sectors in Slovenia, which is the main weakness of the study. Distribution of respondents according to gender is as follows: 70.3% of the participants were women, and 29.7% were men. The participants' average age was 40.9 years, while the youngest respondent was 23 years old and the oldest was 67 years old. The highest level of the completed education of participants is as follows: 8.1% of participants finished primary, vocational professional or middle professional education; 16.9% finished either a four-year high school or high school education; 29.0% finished college or higher education; 31.7% had university degrees; and 14.3% finished post-graduate studies such as specialization, master's or doctorates.

The types of contracts participants held were as follows: 85.0% of participants had permanent jobs, 11.9% had contract jobs, 1.0% were students, 1.3% had copyright or service contracts, and 0.8% marked another choice, meaning that they were retired, had a five-year mandate, were self-employed.

The link to the online questionnaire was sent by e-mail to official e-mail addresses of enterprises, asking them to forward it to employees. We do not know whether they did so. This could imply that the research did not include manual workers and industry workers, but mainly workers in administration; also questionable was whether the questionnaire was completed by one or many employees from the same organization.

Table 2 shows a sample of the research.

**Table 2: Sample**

		Type of employment contract (2 classes)			
		Permanent period		Flexible types of employment	
		Count	Row N %	Count	Row N %
Education (3 groups)	Elementary school or less	1	25.0%	3	75.0%
	professional school, secondary school, gymnasium	204	81.9%	45	18.1%
	higher vocational education, higher education, university education, master's degree, doctorate	652	86.4%	103	13.6%
Sex	Women	603	85.3%	104	14.7%
	Man	253	84.3%	47	15.7%

Source: own

Among women 85.3% have a permanent contract, while this percentage was slightly lower among men (84.3%). One quarter of respondents with elementary school or less has permanent contracts, while among respondents with higher levels of education the permanent type of contract is favoured (81.9% respondents with secondary or vocational level and 86.4% of respondents with tertiary education).

## 5. Results

With the research, we attempted to determine individuals' opportunities to access job security according to the listed job security variables (presented in Table 1). The participants evaluated questions on job security on a seven-point scale with the following categories:

- 1 – an individual does not have opportunities,
- 2 – an individual has very poor opportunities,
- 3 – an individual has bad opportunities,
- 4 – an individual has limited opportunities,
- 5 – an individual has good opportunities,
- 6 – an individual has very good opportunities,
- 7 – an individual has great opportunities.

The reliability test showed that the data gathered was reliable because the Cronbach's Alpha coefficient was 0.887.

### 5.1 Normality of the observed data

In the first step of data analysis, the normality of 15 variables included in the analysis was examined using skewness and kurtosis. According to Field (2013), in samples larger than 200 units it is more important to look at the shape of the distribution visually and to look at the value of the skewness and kurtosis statistics rather than calculate their significance and use any of the tests for normality (e.g. Kolmogorov-Smirnov or Shapiro-Wilk test). Therefore, all measured variables were examined, and their normality was interpreted according to skewness and kurtosis values in conjunction with histograms and Q–Q plots. In the literature, different rules of thumb are used regarding which threshold should be used to describe fairly normally distributed data. Researchers often use a rule of thumb stating that values between -2 and 2 indicate reasonably normal distribution (Bachman 2004), while a more conservative rule is that distribution is reasonably close to normal if its skewness and kurtosis have values between -1.0 and 1.0 (e.g. Bulmer 1979).

The values of skewness for the 15 measured variables are in the range from -0.606 and 1.639, while the values of kurtosis are ranging from -1.058 and 2.398. The only variable with skewness higher than 1.0 is ESS6, while two variables have absolute kurtosis values higher than 1.0 (ES4 and ES6). The histograms and Q-Q plots (where the linearity of the points suggests that the data are normally distributed) are presented in Appendix A. The combination of the presented criteria for normally distributed variables suggests that all variables, except ES4, ES6, ES7, and SI2, are approximately normally distributed.

Therefore, in the analyses of two research hypotheses the one-sided Independent Samples t-test was used for comparison of the means of two groups for 11 normally distributed variables, while for four non-normally distributed variables a non-parametric alternative called the Mann-Whitney test for comparison of medians or distributions (with respect to the rank-orderings of the scores) was used.

**Table 3: Values of skewness and kurtosis with standard errors for fifteen measured variables**

Variable	N		Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
	Valid	Missing				
ES1	832	180	-.527	.085	-.509	.169
ES2	830	182	-.526	.085	-.418	.170
ES3	833	179	-.374	.085	-.727	.169
ES4	832	180	.328	.085	-1.058	.169
ES5	828	184	-.180	.085	-1.009	.170
ES6	815	197	1.639	.086	2.398	.171
ES7	821	191	.789	.085	-.351	.170
ES8	821	191	-.281	.085	-.742	.170

Variable	N		Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
	Valid	Missing				
SI1	836	176	.026	.085	-.673	.169
SI2	820	192	.940	.085	.428	.171
WSS1	832	180	-.204	.085	-.834	.169
WS1	833	179	-.606	.085	-.440	.169
EJSS1	807	205	-.460	.086	-.562	.172
CS1	834	178	-.287	.085	-.649	.169
CS2	822	190	-.244	.085	-.905	.170

Source: own

### 5.2 Job security regarding the type of employment contract

To test the hypothesis H1: *Employees with permanent job contracts evaluate the variables of job security more highly than employees with other types of job contracts do* (e.g. student contract job and other forms of job contracts), a variable forming two classes was used in addition to the 15 variables on job security. The first class includes permanent jobs, and the second class includes other job contracts. Table 4 shows mean values, standard deviations, first quartiles, medians, and third quartiles of the variables of job security regarding the type of the job contract. Table 5 shows the results of Independent Samples t-tests and Mann-Whitney tests together with p-values for a one-sided test regarding the type of the job contract.

It can be seen that respondents with permanent contracts gave the highest evaluations to the variables ES1 (M=5.02) and ES2 (M=5.03), which are related to the possibility of an individual to access infrastructure for basic health needs in general and at the workplace, respectively. The same two variables were, on average, graded the highest by the respondents with definite period job contracts but with slightly higher mean values (M=5.17 and M=5.18). The variable that was evaluated the lowest on average by respondents with permanent contracts (M=1.88) and by the respondents with other (flexible) type job contracts (M=1.93) is ES6, which examines the possibility of an individual to buy a house.

**Table 4: Descriptive statistics of the variables of the job security regarding the type of the job contract**

Variables	Permanent period					Flexible types of employment				
	M	SD	Q1	Mdn	Q3	M	SD	Q1	Mdn	Q3
ES1	5.02	1.535	4	5	6	5.17	1.640	4	6	6
ES2	5.03	1.492	4	5	6	5.18	1.661	4	6	7
ES3	4.75	1.608	4	5	6	4.94	1.698	4	5	6
ES4	3.39	1.835	2	3	5	3.14	2.017	1	3	5
ES5	4.28	1.773	3	4	6	3.89	2.029	2	4	5
ES6	1.88	1.233	1	1	2	1.93	1.466	1	1	2
ES7	2.55	1.580	1	2	4	2.56	1.759	1	2	4
ES8	4.41	1.690	3	5	6	3.90	1.811	3	4	5
SI1	4.03	1.557	3	4	5	3.99	1.727	3	4	5
SI2	2.59	1.450	1	2	3	2.90	1.748	1	2	4
WSS1	4.16	1.647	3	4	6	4.22	1.663	3	4	6
WS1	4.98	1.544	4	5	6	5.11	1.649	4	6	6
EJSS1	4.71	1.565	4	5	6	5.01	1.613	4	5	6
CS1	4.49	1.559	3	5	6	4.52	1.619	3	5	6
CS2	4.55	1.697	3	5	6	4.99	1.708	4	5	7

Source: own

**Table 5: Results of the Independent Samples t-tests and Mann-Whitney tests for variables of job security according to the type of the employment contract**

Independent Samples t-tests						
Variable	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p	t	df	p(2-tailed)	p(1-tailed) <sup>a,b</sup>
ES1	2.145	.143	-.965	829	.335	.833 <sup>b</sup>
ES2	3.810	.051	-.982	827	.326	.837 <sup>b</sup>
ES3	.631	.427	-1.235	830	.217	.891 <sup>b</sup>
ES5	5.972	.015	2.047	157.9	.042	.021 <sup>a</sup>
ES8	1.663	.198	3.022	818	.003	.001 <sup>a</sup>
SI1	2.014	.156	.264	833	.792	.396 <sup>a</sup>
WSS1	.168	.682	-.388	829	.698	.651 <sup>b</sup>
WS1	1.182	.277	-.814	830	.416	.792 <sup>b</sup>
EJSS1	.773	.380	-1.907	804	.057	.972 <sup>b</sup>
CS1	.349	.555	-.175	831	.861	.569 <sup>b</sup>
CS2	.190	.663	-2.681	819	.007	.996 <sup>b</sup>

Mann–Whitney tests								
	Levene's Test for Equality of Variances		Mann-Whitney test					
	F	p	U	N	z	Asym. p(2-tailed) / p(1-tailed) <sup>a,b</sup>	MC p(1-tailed) <sup>c</sup> Lower/Upper	r
<b>ES4<sup>d</sup></b>	2.773	.096	39927.5	831	-1.720	.085 / .043 <sup>a</sup>	.041 / .045	-.060
<b>ES6<sup>c</sup></b>	4.359	.037	41114.5	814	-.635	.526 / .263 <sup>a</sup>	.259 / .266	-.022
<b>ES7<sup>c</sup></b>	4.423	.036	41838.5	820	-.560	.576 / .288 <sup>a</sup>	.284 / .291	-.020
<b>SI2<sup>c</sup></b>	10.962	.001	39902.0	819	1.349	.177 / .912 <sup>b</sup>	.908 / .913 <sup>b</sup>	.047

<sup>a, b</sup> 2-sided p-values obtained from SPSS have to be converted to 1-tailed p-values, because our research hypotheses are one-sided (mean (or median) is greater for the permanent contracts than for the other types of job contracts).

<sup>a</sup> If the mean (or mean rank / median) values in the sample are in the right relationship according to our prediction (higher for the permanent contracts than for the other types of job contracts), then a 1-tailed p-value is recalculated as  $p(2\text{-tailed})/2$ .

<sup>b</sup> If the mean (or mean rank / median) values in the sample are in the opposite relationship according to our prediction (lower for the permanent contracts than for the other types of contracts), then a 1-tailed p-value is recalculated as  $1-p(2\text{-tailed})/2$ .

<sup>c</sup> Due to non-equal variances according to Levene's Test and / or unequal shape according to Kolmogorov-Smirnov Z Test (Appendix A2), the Mann-Whitney test is used to examine the differences in the distributions of the permanent and the other types of job contracts or mean ranks in two groups.

<sup>d</sup> Due to equal variances according to Levene's Test and equal shape according to Kolmogorov-Smirnov Z Test (Appendix A2), the Mann-Whitney test could be interpreted in terms of equality of medians between the permanent and the other types of job contracts.

<sup>e</sup> Lower and upper bound of 99% confidence interval for 1-tailed significance obtained with Monte Carlo simulations based on 100,000 samples.

Source: own

The comparison between the employees with permanent jobs and the employees with other job contracts (such as student job contracts, copyright contracts, or other contract jobs) showed that employees with permanent jobs evaluated only three variables of job security statistically significantly more highly than employees with other contract jobs did, at a 5% significance level. Those three variables are the possibilities of an individual to access workplace training based on the needs of employers (ES5: Independent Samples t-test:  $t(df=157.9)=2.047$ ,  $p(1\text{-tailed})=.021$ ), an individual's level of job security (SE8: Independent Samples t-test:  $t(df=818)=3.022$ ,  $p(1\text{-tailed})=.001$ ), and an individual's ability to access the basic needs of education at the workplace at the request of the employee and at the employer's expense (ES4: Mann-Whitney test (higher mean ranks):  $U=39927.5$ ,  $z=-1.720$ ,  $p(1\text{-tailed})=.043$ ).

In a research project entitled *Households, Work and Flexibility for Slovenia*, Sicherl (2003) determined that dissatisfaction with job security is higher among

employees with atypical forms of employment contracts. De Cuyper and De Witte (2005) investigated the position of job insecurity in the relation between types of contract and found that the type of contract was highly predictive for job insecurity. Temporary workers were found to be more insecure in comparison to permanent workers. Bernhard-Oettel et al. (2005) conducted research among Swedish healthcare workers and found that the type of employment is related with perceptions of job insecurity, and that insecurity was associated with impaired well-being among permanent full-time workers. Kuroki (2012) found that non-regular employment increases the fear of job loss among Japanese workers.

The research hypothesis H1: *Employees with permanent job contracts evaluate the variables of job security more highly than employees with other types of job contracts do* was then rejected. Analysis of statistically significant differences between the evaluated average estimates of variables of security of employees for contract jobs (student contract jobs and other forms of job contracts) has shown that only three of fifteen variables of job security were statistically higher when evaluated by the employees with permanent jobs than employees with job contracts. The result is unexpected, since other researchers (e.g. Green and Heywood (2011); Dawson and Veliziotis (2013)) emphasized that employees on temporary employment contracts report higher job insecurity.

### 5.3 Job security according to gender of the participants

In this part of the paper, hypothesis H2: *Men evaluate the variables of job security more highly than women do* is tested. Table 6 shows average estimates and standard deviations of the variables of security of the employees by their gender. Table 7 shows results of Independent Samples t-tests and Mann-Whitney tests together with p-values for one-sided tests.

It can be seen that men evaluated the variables ES1 (M=5.24), ES2 (M=5.21) and WS1 ES2 (M=5.21) the highest; these variables are related to the possibility of an individual to access infrastructure for basic health needs in general and at the workplace and to the possibility to have safe working conditions. The same three variables were also estimated more highly on average by women (M=4.95, M=4.98, and M=4.90) but with lower mean values in comparison to men. The variable that was evaluated the lowest by women on average (M=1.84) and men (M=1.98) is the possibility of an individual to buy a house (ES6).

**Table 6: Descriptive statistics of the variables of job security of the employees by gender**

Variables	Women					Man				
	M	SD	Q1	Mdn	Q3	M	SD	Q1	Mdn	Q3
ES1	4.95	1.582	4	5	6	5.24	1.477	4	6	6
ES2	4.98	1.536	4	5	6	5.21	1.467	4	5	6
ES3	4.74	1.619	4	5	6	4.85	1.637	3	5	6
ES4	3.32	1.871	2	3	5	3.42	1.859	2	3	5
ES5	4.20	1.801	3	4	6	4.27	1.859	3	4	6
ES6	1.84	1.285	1	1	2	1.98	1.234	1	2	3
ES7	2.50	1.605	1	2	4	2.68	1.610	1	2	4
ES8	4.22	1.764	3	4	6	4.57	1.581	4	5	6
SI1	3.94	1.599	3	4	5	4.20	1.530	3	4	5
SI2	2.52	1.489	1	2	3	2.89	1.500	2	3	4
WSS1	4.04	1.715	3	4	5	4.45	1.444	4	5	6
WS1	4.90	1.604	4	5	6	5.21	1.436	4	6	6
EJSS1	4.66	1.586	4	5	6	4.97	1.534	4	5	6
CS1	4.46	1.589	3	5	6	4.56	1.515	3	5	6
CS2	4.55	1.683	3	5	6	4.75	1.746	3	5	6

Source: own

**Table 7: Results of the Independent Samples t-tests and Mann-Whitney tests for variables of job security according to the gender**

Independent Samples t-tests						
Variable	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p	t	df	p (2-tailed)	p(1-tailed) <sup>a,b</sup>
ES1	1.788	.182	-2.463	828	.014	.007 <sup>a</sup>
ES2	.675	.411	-2.005	826	.045	.023 <sup>a</sup>
ES3	.364	.547	-.861	829	.390	.195 <sup>a</sup>
ES5	.531	.466	-.453	825	.650	.325 <sup>a</sup>
ES8	4.406	.036	-2.784	535.9	.006	.003 <sup>a</sup>
SI1	.109	.741	-2.208	832	.028	.014 <sup>a</sup>
WSS1	8.244	.004	-3.616	575.7	.000	.000 <sup>a</sup>
WS1	4.510	.034	-2.723	539.2	.007	.003 <sup>a</sup>
EJSS1	2.958	.086	-2.616	803	.009	.005 <sup>a</sup>
CS1	.396	.529	-.885	830	.376	.188 <sup>a</sup>
CS2	1.279	.258	-1.575	818	.116	.058 <sup>a</sup>

Mann-Whitney tests								
			Levene's Test for Equality of Variances			Mann-Whitney test		
	F	p	U	N	z	Asym. p(2-tailed) / p(1-tailed) <sup>a,b</sup>	MC p(1-tailed) <sup>e</sup> Lower/Upper	r
ES4 <sup>d</sup>	.101	.751	70933,5	830	.757	.449 /.225 <sup>a</sup>	.220 /.226	.026
ES6 <sup>c</sup>	.927	.336	63744,0	814	2.568	.010 /.005 <sup>a</sup>	.005 /.006	.090
ES7 <sup>d</sup>	.000	.988	66718,5	820	1.655	.098 /.049 <sup>a</sup>	.049 /.051	.058
SI2 <sup>c</sup>	.211	.646	60152,5	818	3.675	.000 /.000 <sup>a</sup>	.000 /.000	.128

<sup>a, b</sup> 2-sided p-values obtained from SPSS have to be converted to 1-tailed p-values because our research hypotheses are one-sided (mean (or median) is greater for men than for women).

<sup>a</sup> If the mean (or median) values in the sample are in the right relationship according to our prediction (higher for men than women), then a 1-tailed p-value is recalculated as  $p(2\text{-tailed})/2$ .

<sup>b</sup> If the mean (or median) values in the sample are in the opposite relationship according to our prediction (lower for men than women), then a 1-tailed p-value is recalculated as  $1-p(2\text{-tailed})/2$ .

<sup>c</sup> Due to non-equal variances according to Levene's Test and / or unequal shape according to Kolmogorov-Smirnov Z Test (Appendix A2), the Mann-Whitney test is used to examine the differences in the distributions of the men and women or mean ranks in two groups.

<sup>d</sup> Due to equal variances according to Levene's Test and equal shape according to Kolmogorov-Smirnov Z Test (Appendix A2), the Mann-Whitney test could be interpreted in terms of equality of medians between men and women.

<sup>e</sup> Lower and upper boundary of 99% confidence interval for 1-tailed significance obtained with Monte Carlo simulations based on 100.000 samples.

Source: own

Analysis of the statistically significant differences in the variables of security between men and women showed that nine variables of job security were evaluated more highly by men at a 5% significance level. Those variables were the possibilities of an individual to access infrastructure for basic health needs in general (ES1: Independent Samples t-test:  $t(df=828)=-2.463$ ,  $p(1\text{-tailed})=.007$ ), the possibilities of an individual to access infrastructure for basic health needs and safety at the workplace (ES2: Independent Samples t-test:  $t(df=826)=-2.005$ ,  $p(1\text{-tailed})=.023$ ), the possibilities of an individual to buy a house (ES6: Mann-Whitney test (higher mean ranks):  $U=63744,0$ ,  $z=2.568$ ,  $p(1\text{-tailed})=.005$ ), an individual's level of job security (ES8: Independent Samples t-test:  $t(df=535.9)=-2.784$ ,  $p(1\text{-tailed})=.003$ ), the possibilities of an individual to have resources for a decent life (SI1: Independent Samples t-test:  $t(df=832)=-2.208$ ,  $p(1\text{-tailed})=.014$ ), the possibilities of an individual to have opportunities for wage coordination and indexation (SI2: Mann-Whitney test (higher mean ranks):  $U=60152,5$ ,  $z=3.675$ ,  $p(1\text{-tailed})=.000$ ), the level of protection an individual from large changes in working conditions by the current employer (WSS1: Independent Samples t-test:  $t(df=575.7)=-3.616$ ,  $p(1\text{-tailed})=.000$ ), the

possibilities of an individual to have safe working conditions, which also enable well-being in the workplace (WS1: Independent Samples t-test:  $t(df=539.2)=-2.723$ ,  $p(1\text{-tailed})=.003$ ), and the possibilities of an individual to achieve education and training, as well as the opportunities to improve skills and competences acquisition, retention, and development (EJSS1: Independent Samples t-test:  $t(df=803)=-2.616$ ,  $p(1\text{-tailed})=.005$ ).

Differences between the average estimates are minimal, 0.37 and 0.41, for SI2 and WSS1, respectively. The concern is the fact that the results are statistically significant at a 5% significance level.

Zeytinoglu et al. (2012) conducted research among Turkish employees and determined that job security refers to the objective dimensions of continuous contract and working full-time hours. Hansson and Aavik (2012) explore how the labour market position of Estonian men and women and Russian-speaking men and women changed between 1993 and 2008. They examined earnings, perceived job security, and overall job satisfaction and determined that Estonian men, especially those working in white-collar occupations, had clearly emerged as the most privileged group in the Estonian labour market. Rosenblatt et al. (1999) investigated gender effects on job insecurity and other work attitudes (e. g. organizational commitment) of Israeli schoolteachers and found that gender affected both the experience and the impact of job insecurity on work attitudes. The results showed that male teachers were more insecure than female teachers were and that males were mostly concerned with financial aspects of the job and with making a significant impact and females with work content and work schedule, as well as with financial aspects.

Campos-Serna et al. (2013) conducted a study that attempted to identify the differences between women and men in the exposure to working and employment conditions through a systematic review of observational studies published regarding occupational health in Europe. They determined that women have greater feelings of high job insecurity, worse contractual working conditions and psychosocial work environments, and report poorer self-perceived physical and mental health. Men are exposed to longer work hours, highly physically demanding work, noise, effort-reward imbalance and have higher job status. Moreover, the gender differences in power that place men in a better situation than women to negotiate their employment conditions could explain the gender inequalities identified in the type of contract and job status, which show more men than women working with permanent contracts and occupying the higher status job positions.

The research hypothesis H2: *Men evaluate the variables of job security more highly than women do* was supported, since the analysis of statistically significant differences between evaluated average estimates of the variables of security showed that men evaluated the possibilities of an individual to have the opportu-

nities for wage coordination and indexation more highly than women did in nine out of fifteen (60%) cases. Men also evaluated the level of protection of an individual from major changes in working conditions by the current employer more highly than women did.

## 6. Discussion

The results show that the respondents with permanent contracts and those with fixed-term period job contracts gave the highest marks to the possibility of an individual to access infrastructure for basic health needs in general and at the workplace. The comparison between men and women also show that both evaluated the possibility of an individual to access infrastructure for basic health needs in general and at the workplace and the possibility to have safe working conditions the highest. That is understandable, because labour legislation in Slovenia states that the employer has to register the worker with the social insurance system and with the unemployment insurance system.

The possibility of an individual to buy a house was evaluated the lowest on average by respondents with permanent and those with other (flexible) type job contracts. The possibility of an individual to buy a house was evaluated the lowest by both women and men, but women evaluated it with the lowest mean values in comparison to men. The highest marks are a consequence of the current situation in the labour market, which is a result of the recent economic recession and the fact that unemployment has risen during this period. The state has to do more in the housing market, to enable more individuals to buy or rent an apartment or house.

The comparison between the employees with permanent jobs and those with other job contracts showed that employees with permanent jobs evaluated the possibilities of an individual to access workplace training based on the needs of employers and at the request of the employee and at the employer's expense more highly than employees with other contract jobs did. The possibilities of an individual to achieve education and training and the opportunities to improve skills and competences acquisition, retention and development were evaluated highly by men. Organizations should be aware that investing in the development of employees is a necessary business expense, because it provides the employer with a huge payout in terms of efficiency and success. The state also has to ensure financial resources to employers and organizations for training and retraining. The leaders of the European Union in the "Europe 2020" Guidelines (see European Commission, 2012) state that the Member States have to do more in the field of education. According to Bassanini and Duval (2009), the problem of unemployment, especially of youth and women, needs to be solved by education, training, and professional courses; therefore, organizations have to pay more attention to education in the workplace.

Men more highly evaluated an individual's level of job security, the possibility to have resources for a decent life, safe working conditions, protection from large changes in working conditions (well-being in the workplace) than women did. Employees with different types of atypical job contracts experience a lower level of job security. More has to be done in the field of flexibility. According to the conclusions of the OECD (2004) and Kahn (2007), a strict policy of security of employment has a negative impact on unemployment. Employers use atypical types of contracts more often, which may increase the possibility of moving employees into lower job positions within the organization. Almer and Kaplan (2002) determined that flexibility has an impact on increased satisfaction of employees and better work-life balance. Gariety and Shaffer (2001) found that employees with flexible working hours receive higher wages. That means that employees have an interest in flexible working hour programs. Hoffmann and Solbrig (2003) emphasize that flexible working hours increase the possibilities of employment for women.

The introduction of flexibility or other different types of atypical employment contracts brings substantial benefits to both organizations and employees. However, the results of the research show that employees who are employed with atypical job contracts experience lower job security. This result is understandable for the current circumstances in Slovenia, because most organizations still use term-time contract jobs or hire students, whose jobs are not secure and the research was carried out during an economic crisis, which also affects the results of the research.

The introduction of sound, flexible programs into organizations has a significant impact on the social security and employment security of women. Before the introduction of such programs, organizations must be aware of the needs of the organization itself and employees. Van Venzel and Wilthagen (2004) have been advising that organizations have to explore and understand employees' needs, review the organizational culture and identify obstacles and potential weaknesses that flexibility can cause. Based on this, employers should see that it is necessary to create flexible programs to improve the efficiency of organizations. However, the programs must be implemented, monitored and improved when necessary.

Slovenian legislation is very rigid (long notice periods, high severance), which is the reason for a large number of atypical employment contracts. Many students work through a referral for years (some of them ten years or more). The consequences of this are also macro-economic (e.g. fewer pay taxes). It seems that the flexible types of contracts have more positive effects for the employers than employees, since it "gives enterprises flexibility to replace temporarily absent workers, to evaluate new hires before offering them open-ended contracts, and to respond to seasonal or other changes in demand" (ILO, 2015). In contrast,

employees seek flexible types of arrangements to balance family or educational obligations, to supplement or increase their income (ILO, 2015), or in the hope that the job might lead to permanent employment. As pointed out by Cao et al. (2011), the employees with flexible types of contract constantly seek better job opportunities.

According to Maslow's Hierarchy of Needs, security is one of the primary human needs; therefore, it is difficult to further motivate an employee who does not feel safe. This has been shown to be so in many Slovenian companies, which have problems with employees who have atypical employment contracts (e.g. despite relatively good remuneration, deviant behaviour occurs; consequently, manufacturers introduce video surveillance of their employees).

Organizations should pay more attention to education and training. They should encourage employees to participate in training programs and check their progress. As far as possible, organizations should (co)finance employee participation in training programs. Equal access to education for all must be ensured, including those who are employed through flexible forms of employment contracts (e.g. fixed-term contract). In addition, with a purpose of reducing transport costs, a cooperation of organizations and the state with nearby service apartments and houses that would allow subsidized rental flats, is suggested.

The research was carried out at the time of the economic crisis, which affects the results; therefore, the cross-sectional nature of the research could be seen as a limitation. The research should be repeated in times of economic growth and repeated periodically. Moreover, the number of participants from private sector organizations should be increased in further research, and the mechanism for inclusion of respondents from all organization departments should be incorporated in the study design. Finally, it would be interesting to perform structural equation modelling to investigate the relationships among concepts of job security; however, a thorough study is left for future work.

## 7. Conclusion

Traditionally it is known that gender and the type of employment contract affect job security. Results show that employees with permanent job contracts evaluated job security higher than employees with other types of job contracts and men higher than women. Employees, organizations, and countries together should endeavour to solve problems in the field of security.

The labour market should be more attractive, and it has to introduce changes into active employment policy (particularly in the context of education and training), promote employment; create more competitive jobs; activate the entry of women and parents in the labour market (e.g. savings on income tax), reduce the gap between the lowest and the highest paid employees; provide tax relief for the lower and middle-class employees; and reduce labour costs. The differences

between the incomes of those who are unemployed as well as those who work actively need to be increased. A range of flexible types of employment that is adjusted to harmonize professional and family life and even out the possibilities in the field of social and economic security between men and women should be increased.

Greater attention should be given to solving housing problems, in particular, those faced by many young families. Organizations should be aware that investing in the development of employees is a necessary business expense, because it provides the employer with huge returns in terms of efficiency and success.

## References

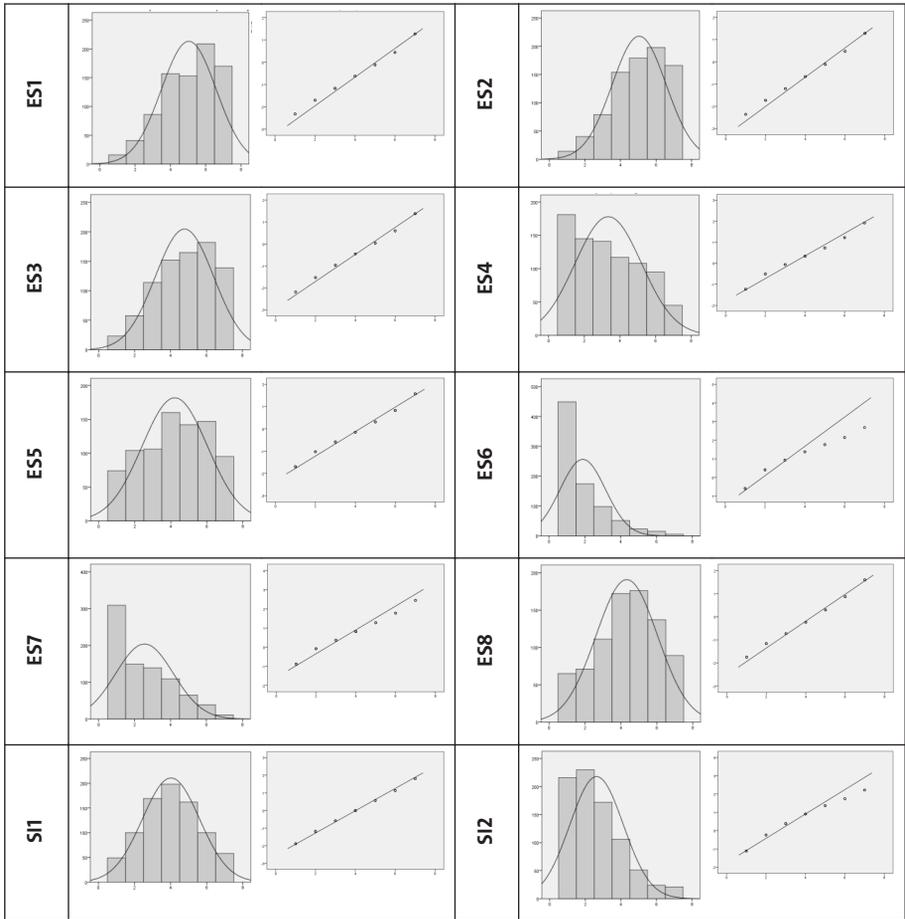
- Almer, E.D./Kaplan, S.E. (2002): The Effects of Flexible Work Arrangements on Stressors, Burnout and Behavioural Job Outcomes, in: *Behavioural Research in Accounting*, 2, 14, 1–34.
- Bachman, L.F. (2004): *Statistical Analyses for Language Assessment*. United Kingdom: Cambridge University Press.
- Bassanini, A./Duval, R. (2009): Unemployment, institutions and reform complementarities: Re-assessing the aggregate evidence for OECD countries, in: *Oxford Review of Economic Policy*, 25, 1, 40–59. doi: 10.1093/oxrep/grp004.
- Bernhard-Oettel, C./Sverke, M./De Witte, H. (2005): Comparing three alternative types of employment with permanent full-time work: How do employment contract and perceived job conditions relate to health complaints?, in: *Work & Stress*, 19, 4, 301–318. doi: 10.1080/02678370500408723.
- Bulmer, M.G. (2012): *Principles of Statistics*. New York: Dover Publ.
- Campos-Serna, J./Ronda-Perez, E./Artazcoz, L./Moen, B.E./Benavides, F.G. (2013): Gender inequalities in occupational health related to the unequal distribution of working and employment conditions: a systematic review, in: *International Journal for Equity in Health*, 12, 57, 1–18. doi:10.1186/1475-9276-12-57.
- Cao, S./Shao, E./Silos, P. (2011). Fixed-Term and Permanent Employment Contracts: Theory and Evidence. Bank of Canada Working Paper 21. Retrieved November 15, 2015, from: <http://www.bankofcanada.ca/wp-content/uploads/2011/10/wp2011-21.pdf>.
- Chung, H./Van Oorschot, W. (2010): Employment insecurity of European individuals during the financial crisis: A multi-level approach, in: *Working Papers on the Reconciliation of Work and Welfare in Europe*. RECOWE Publication. Dissemination and Dialogue Centre. Retrieved February 15, 2011, from: [http://www.socialpolicy.ed.ac.uk/\\_\\_data/assets/pdf\\_file/0005/55508/REC-WP\\_1410\\_Chung\\_Oorschot.pdf](http://www.socialpolicy.ed.ac.uk/__data/assets/pdf_file/0005/55508/REC-WP_1410_Chung_Oorschot.pdf).
- Commission of European Communities. (2007): *Towards Common Principles of Flexicurity: More and better jobs through flexibility and security*. Luxembourg. Retrieved February 15, 2011, from: <http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCUQFjAA&url=http%3A%2F%2Fec.europa.eu%2Fsocial%2FblobServlet%3FdocId%3D2756%26langId%3Den&ei=LmMhU7XjG4KGyWpC94DwCw&usq=AFQjCNGQJ9SI2z-SCtYDhhS77GC7sfH2ag>.

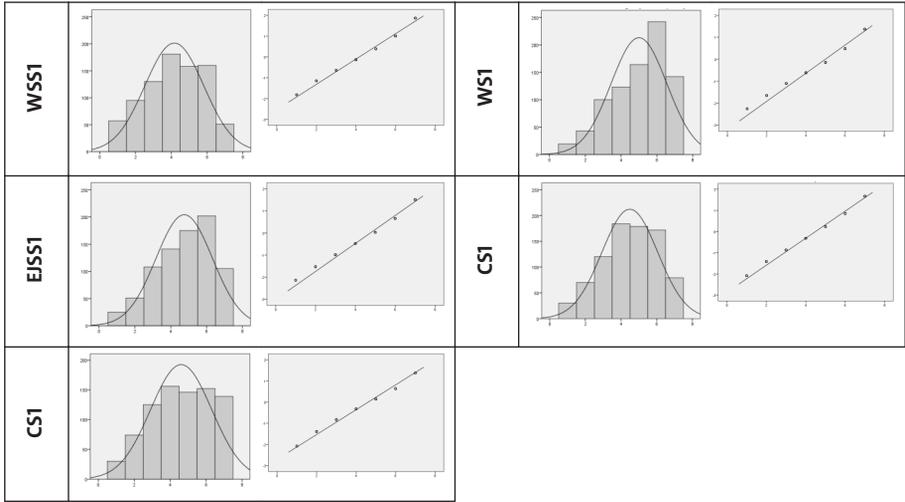
- Dawson, C./Veliziotis, M. (2013): Temporary employment, job satisfaction and subjective well-being Economics, in: Working Paper Series 1309, Bristol: UWE, Faculty of Business and Law.
- De Cuyper, N./De Witte, H. (2005): Job insecurity: Mediator or Moderator of the relationship between type of contract and various outcomes?, in: SA Journal of Industrial Psychology, 31, 4, 79–86.
- European Commission. (2012): Draft joint employment report to the Communication from the Commission. Annual growth survey 2013. COM(2012) 750 final. Retrieved May 15, 2012, from: [http://ec.europa.eu/europe2020/pdf/ags2013\\_emplr\\_en.pdf](http://ec.europa.eu/europe2020/pdf/ags2013_emplr_en.pdf).
- Field, A. (2013): Discovering statistics using IBM SPSS statistics. London: SAGE.
- Gariety, B.S./Shaffer, S. (2001): Wage differentials associated with flextime, in: Monthly Labour Review, 124, 3, 68–75.
- Green, C./Heywood, J. (2011): Flexible contracts and subjective well-being, in: Economic Inquiry, 49, 3, 716–729.
- Guest, D. (2004): Employment contracts, the psychological contract and employee outcomes: an analysis and review of the evidence. IJMR, Retrieved November, 15, 2015 from: [http://www.uv.es/~psycon/documentacion/publicaciones/IJMR\\_002.pdf](http://www.uv.es/~psycon/documentacion/publicaciones/IJMR_002.pdf).
- Haasson, L./Aavik, K. (2012): The Effect of Gender and Ethnicity and their Intersection on Work Satisfaction and Earnings in Estonia. 1993-2008, in: Studies of Transition States and Societies, 4, 2, 3–19.
- Hobson, B. (Ed). (2014): Worklife balance: The Agency & Capabilities Gap. United Kingdom: Oxford University Press.
- Hoffmann, F.C./Solbrig, J. (2012): Wie Familienfreundlich ist die Deutsche Wirtschaft?, in: Iw-trends, 4. Retrieved May 15, 2012, from: [http://www.femtech.at/fileadmin/downloads/Wissen/Themen/Vereinbarkeit/wie\\_familienfreundlich\\_ist\\_die\\_deutsche\\_wirtschaft.pdf](http://www.femtech.at/fileadmin/downloads/Wissen/Themen/Vereinbarkeit/wie_familienfreundlich_ist_die_deutsche_wirtschaft.pdf).
- Ignjatović, M. (2012). Labour Market Flexibility and Security in the EU. Teorija in praksa, 49, 3, 901-921. Retrieved November 15, 2015 from: [http://dk.fdv.uni-lj.si/db/pdfs/TiP2012\\_6\\_Ignjatovic.pdf](http://dk.fdv.uni-lj.si/db/pdfs/TiP2012_6_Ignjatovic.pdf).
- ILO. (2004): Economic security for a better world. Genova. Retrieved May 15, 2012, from: [http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CDIQFjAC&url=http%3A%2F%2Fwww.social-protection.org%2Fgimi%2Fgessi%2FressourceDownload.action%3Bjsessionid%3Dc18b4b6b881eedf947852c6132da1239047fd2b9420d25374c877f5b550ee8ea2.e3aTbhULbNmSe34MchaRah8Saxn0%3Fressource.ressourceId%3D8670&ei=uWUhU9TCDIr-ygP0n4LQDw&usg=AFQjCNG6\\_NHPBarAauuLey-D2ZTw8PzKGIa](http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CDIQFjAC&url=http%3A%2F%2Fwww.social-protection.org%2Fgimi%2Fgessi%2FressourceDownload.action%3Bjsessionid%3Dc18b4b6b881eedf947852c6132da1239047fd2b9420d25374c877f5b550ee8ea2.e3aTbhULbNmSe34MchaRah8Saxn0%3Fressource.ressourceId%3D8670&ei=uWUhU9TCDIr-ygP0n4LQDw&usg=AFQjCNG6_NHPBarAauuLey-D2ZTw8PzKGIa).
- ILO. (2004 a): Making work arrangements more family-friendly. Genova. Retrieved May 15, 2012, from: <http://www.ilo.org/public/english/region/eurpro/moscow/areas/gender/wf-5.pdf>.

- ILO (2015): Non-standard forms of employment. Report for discussion at the Meeting of Experts on Non-Standard Forms of Employment. MENSFE/2015. Conditions of Work and Equality department. International Labour Office, Geneva. Retrieved November, 15, 2015 from: [http://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---travail/documents/meetingdocument/wcms\\_336934.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/meetingdocument/wcms_336934.pdf). Kahn, L.M. (2007): The impact of employment protection mandates on demographic temporary employment patterns: international Microeconomic evidence, in: *Economic Journal*, 117, 521, 333–356. doi: 10.1111/j.1468-0297.2007.02059.x.
- Kanjuo Mrčela, A./Ignjatović, M. (2015): From the flexibility to social insecurity – intensification of the negative changes at the beginning of the 21. Century. [Od prožnosti do prekamnosti dela: stopnjevanje negativnih sprememb na začetku 21. stoletja]. *Teorija in praksa*, 52, 3, 350–381. Retrieved November, 15, 2015 from: <http://crawl.prod.proquest.com.s3.amazonaws.com/fpcache/24c0d9fa4d8851aa98abd1f92f33a157.pdf?AWSAccessKeyId=AKIAJF7V7KNV2KKY2NUQ&Expires=1447844259&Signature=9HTqsGeyvqVDcQLLE52Xtq4ZWEw%3D>.
- Kanjuo Mrčela, A./Ignjatović, M. (2012): *Psychosocial risks in the workplace in Slovenia*. Dublin: European Foundation for the Improvement of Living and Working Conditions, cop. 2012. Retrieved November, 15, 2015 from: <http://www.eurofound.europa.eu/pubdocs/2012/45/en/1/EF1245EN.pdf>.
- Kuroki, M. (2012): The Deregulation of Temporary Employment and Workers. Perceptions of Job Insecurity, in: *ILRReview*, 65, 3, 560–577. Retrieved February 10, 2013, from: <http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=2264&context=ilrreview>
- Mrčela, M. (2010). Citizens voice concerns over health and safety at work in EU poll, Eurofound, Dublin. Retrieved November, 15, 2015 from: <http://www.eurofound.europa.eu/ewco/2009/12/SI0912019I.htm>.
- Nesadurai, H.E.S. (2005): Conceptualising Economic Security in an Era of Globalisation: What does the East Asian Experience Reveal?, in: *CSGR Working Paper*, 157/05. United Kingdom: Centre for the Study of Globalisation and Regionalisation (CSGR). University of Warwick. Retrieved May 15, 2012, from: [http://wrap.warwick.ac.uk/1963/1/WRAP\\_Nesadurai\\_wp15705.pdf](http://wrap.warwick.ac.uk/1963/1/WRAP_Nesadurai_wp15705.pdf).
- OECD. (2004): *Employment Outlook 2004*. Paris. 2004. Retrieved February 10, 2011, from: <http://www.oecd.org/employment/emp/oecdemploymentoutlook2004.htm>.
- Ong, R./Shah, S. (2012): Job Security Satisfaction in Australia: Do Migrant Characteristics and Gender Matter?, in: *Australian Journal of Labour Economics*, 15, 2, 123–139.
- Parker, L./Bevan, S. (2011): *Good Work and Our Times*, Report of the Good Work Commission. Retrieved, 20. 03. 2015, from: [http://www.theworkfoundation.com/DownloadPublication/Report/291\\_GWC%20Final.pdf](http://www.theworkfoundation.com/DownloadPublication/Report/291_GWC%20Final.pdf).
- Part-time work convention no. 175. Retrieved November, 15, 2015 from: [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:51:0::NO:51:P51\\_CONTENT\\_REPOSITORY\\_ID:2543234:NO](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:51:0::NO:51:P51_CONTENT_REPOSITORY_ID:2543234:NO).
- PewResearchCenter (2013). *On Pay Gap, Millennial Women Near Parity – For Now. Despite Gains, Many See Roadblocks Ahead*. Retrieved November 15, 2015, [http://www.pewsocialtrends.org/files/2013/12/gender-and-work\\_final.pdf](http://www.pewsocialtrends.org/files/2013/12/gender-and-work_final.pdf).

- Rosenblatt, Z./Talmud, I./Ruvio, A. (1999): A Gender-based Framework of the Experience of Job Insecurity and its Effects on Work Attitudes of Israeli Schoolteachers European, in: *Journal of Work and Organizational Psychology*, 8, 2, 197–217. DOI: 10.1080/135943299398320.
- Sheskin, D.J. (2004): *Handbook of parametric and nonparametric statistical procedures*. 3<sup>rd</sup> edition Boca Raton: Chapman & Hall/CRC.
- Sicherl, P. (2003): *Labour flexibility: A Comparative Analysis*. Law and Economy. Ljubljana: Faculty of Social Sciences.
- Soltwedel, R./Dohse, D./Krieger-Boden, C. (1999): EMU Challenges European Labour Markets, in: *IMF Working Paper*. Iss. WP/99/131. Washington. Retrieved February 10, 2011, from: <http://www.imf.org/external/pubs/ft/wp/1999/wp99131.pdf>.
- Standing, G. (1999) *Global Labour Flexibility. Seeking Distributive Justice*. London: Macmillan Press.
- State services commission. (2003): *Creating a Positive Work Environment. Respect and Safety in the Public Service Workplace*. Retrieved May 15, 2011, from: [http://www.ssc.govt.nz/upload/downloadable\\_files/Creating\\_a\\_Positive\\_Work\\_Environment.pdf](http://www.ssc.govt.nz/upload/downloadable_files/Creating_a_Positive_Work_Environment.pdf).
- The Labour Law [Zakon o delovnih razmerjih (ZDR)]. *Gazette of the Republic of Slovenia [Uradni list RS]*, no. 42/2002.
- Tolbert, P.S./Moen, P. (1998). Men's and women's definitions of "good" jobs: similarities and differences by age and across time. Cornell University, ILR School. Retrieved November, 15, from: <http://digitalcommons.ilr.cornell.edu/articles/436/>.
- Tros, F. (2004). *Flexicurity and HR Policies for the Older Workers*. HSI Working Paper for the Workshop TLM Work Package 7 in Alcalá. Available 15. 09. 2011 on: [http://www.tilburguniversity.edu/research/institutes-and-research-groups/reflect/publications/papers/fixp2004\\_7\\_tros.pdf](http://www.tilburguniversity.edu/research/institutes-and-research-groups/reflect/publications/papers/fixp2004_7_tros.pdf).
- Yousef, D.A. (1998): Satisfaction with job security as a predictor of organizational commitment and job performance in a multicultural environment, in: *International Journal of Manpower*, 19, 3, 184.
- Van Velzen, M./Wilthagen, T. (2004): *The road towards adaptability, flexibility and security*. Discussion paper. Tilburg University. Tilburg. Retrieved May 15, 2012, from: [http://www.vinnulastofnun.is/files/%7B00997b86-7b7a-4998-af45-4da68c18cfd0%7D\\_the%20road%20towards%20wilthagen\\_en.pdf](http://www.vinnulastofnun.is/files/%7B00997b86-7b7a-4998-af45-4da68c18cfd0%7D_the%20road%20towards%20wilthagen_en.pdf).
- Wilthagen, T./Tros, F./Van Lieshort, H. (2004): Towards »Flexicurity«? Balancing Flexibility and Security in EU Member States, in: *European Journal of Social Security*, 6, 2, 113–136.
- Zeytinoglu, I.U./Keser, A./Yilmaz, G.K./Inelmen, K./Özsoy, A./Uygur, D. (2012): Security in a sea of insecurity: job security and intention to stay among service sector employees in Turkey, in: *The International Journal of Human Resource Management*, 23, 13, 2809–2823. doi:10.1080/09585192.2011.637067.

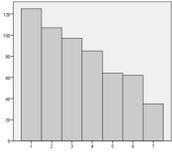
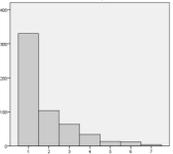
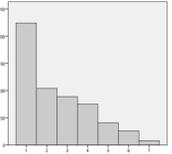
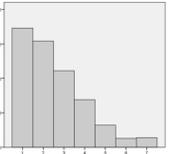
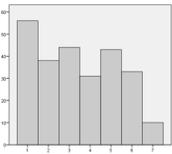
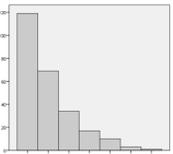
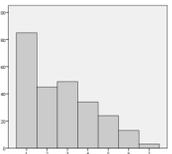
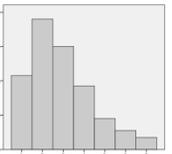
### Appendix A: Histograms and Q-Q Plots for 15 variables on job security





**Appendix B: Histograms for four non-normally distributed variables according to permanency of job contract and gender together with Kolmogorov-Smirnov Z test (K-S)**

		ES4	ES6	ES7	SI2
Type of the job contract	Definite				
	Permanent				
	K-S	Kolmogorov-Smirnov Z 1.351 Asymp. Sig. (2-tailed) 0.052	Kolmogorov-Smirnov Z 0.617 Asymp. Sig. (2-tailed) 0.841	Kolmogorov-Smirnov Z 0.821 Asymp. Sig. (2-tailed) 0.510	Kolmogorov-Smirnov Z 1.113 Asymp. Sig. (2-tailed) 0.168

		ES4	ES6	ES7	SI2
Gender	Women				
	Men				
	K-S	Kolmogorov-Smirnov Z 0.761 Asymp. Sig. (2-tailed) 0.609	Kolmogorov-Smirnov Z 1.557 Asymp. Sig. (2-tailed) 0.016	Kolmogorov-Smirnov Z 0.855 Asymp. Sig. (2-tailed) 0.458	Kolmogorov-Smirnov Z 1.783 Asymp. Sig. (2-tailed) 0.003



### Ethik von Banken und Finanzen

Edited by Dr. Manfred Stüttgen

2017, 564 pp., pb., € 65.00

ISBN 978-3-8487-3846-5

eISBN 978-3-8452-8169-8

(Religion – Wirtschaft – Politik, vol. 17)

[nomos-shop.de/28999](http://nomos-shop.de/28999)

In German language

New rules of engagement are emerging in the financial industry. In addition to financial returns, non-economic elements are becoming increasingly important. This transdisciplinary anthology collates the research findings, critical reflections and new ideas of leading international experts.

To order please visit [www.nomos-shop.de](http://www.nomos-shop.de), send a fax to (+49)7221/2104-43 or contact your local bookstore.

All costs and risks of return are payable by the addressee.



**Nomos**