

The Value of Job Security: Does Having It Matter?

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Abstract In this paper we analyze the preferences about job security using tools from behavioral economics. We focus on the non-pecuniary value of job security and specifically whether this value depends on the current position of employees as tenured or non-tenured. Using a sample of 107 Israeli social workers, randomly allocated between tenured and non-tenured positions, we demonstrate that the non-pecuniary value of job security is about 20% of the wage. We also found that this value depends on the point of reference of the employees. Those with tenure place a higher value on job security, as do those with a higher level of loss aversion.

Keywords Loss aversion · Job security · Status quo bias

1 Introduction

Job insecurity is defined as "individual expectations about continuity in working status" (Davy et al. 1998), "general concern about the future existence of the work" (Rosenblatt and Ruvio 1996) and an "employee's perception of a potential threat to continuing in his or her current job" (Heaney et al. 1994). Job security implies keeping employees from the state of unemployment, in which their income declines and they are exposed to the indirect

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costs of not having a job such as the impact on their psyches and social status (Clark and Oswald 1994; Frey and Stutzer 2001).

Much has been written about the negative effects of unemployment on the individual. In the literature there is evidence that unemployment causes more depression than any other factor, including divorce and separation, and that unemployment is one of the worst events in life (Winkelmann and Winkelmann 1988; Clark and Oswald 1994; Oswald 1997; Clark et al. 2001; Frey and Stutzer 2001).

Studies from other disciplines have shown that unemployment may lead to an increase in the rate of suicide, mortality and morbidity, a weakening of marital relations, and an increase in criminal activity. Furthermore, the longer one is unemployed, the more prestige one loses in his or her own eyes. Those without jobs develop a sense of inferiority, lose their self-confidence, and become demoralized (Eisenberg and Lazarsfeld 1938). Indeed, even the concern about possibly losing one's job can harm one's happiness and well-being (Zussman and Romanov 2005).

While worldwide, employees have enjoyed a very high level of job security, in the last two decades, the number of people involved in organized labor in OECD economies has declined, and the proportion of employees who enjoy job security has steadily decreased over this period (Cohen et al. 2007; Hayter and Stoevska 2011; Bank of Israel 2013).

Previous studies (Manhardt 1972; Green et al. 2001; Guiso et al. 2002; Anxo 2003; Böckerman 2004; Postel-Vinay and Saint-Martin 2005; Erlinghagen 2008; Clark and Postel-Vinay 2009; Salladarré et al. 2011) showed that variables such as the personal and demographic characteristics of the employee, macroeconomic indicators and institutional factors affect the perception of employment security in Europe. Therefore, it is reasonable to assume that these factors will affect the importance of job security in the eyes of the worker.

According to several studies in classical economics, there are a number of variables that affect the importance that people attach to job security. For example, some studies have found that the older the individual, the less concerned he or she is about job security (Zussman and Romanov 2005; Salladarré et al. 2011). Other research has determined that job security is more important to men than women (Johnson et al. 1992; Burchell 1999). The better educated the worker, the less concerned he or she is about job security (Zussman and Romanov 2005; Salladarré et al. 2011). Married employees attach less importance to job security (Salladarré et al. 2011), but it is an important concern for employees who have children living at home (Bellante and Link 1980; Bundy and Norris 2011; Salladarré et al. 2011). Part time workers are less concerned about job security, perhaps due to the influence of other factors such as family considerations (O'Reilly and Fagan 1998). Finally, personal attitudes toward risk might also affect the perceived value of job security. Those who are risk averse are more concerned about job security (Bellante and Link 1980; Guiso et al. 2002; Bundy and Norris 2011; Pfeifer 2011).

In addition, several studies have found that government jobs (jobs with tenure) are especially attractive to security-seeking employees (Paarlberg 1964; Bellante and Link 1981; Baldwin 1990). Newstrom et al. (1976) established that private-sector (jobs without tenure) employees actually value job security more than public servants, but Rainey (1982) and Karl and Sutton (1998) found no significant difference between the two sectors in the importance of job security.

There are several other factors that merit consideration in discussions about job security. In addition to the traditional factors that affect the value of job security Fabio and Ferrante (2008) suggested another factor from economic psychology: loss aversion (Kahneman et al. 1991; Tversky and Kahneman 1991), meaning, a stronger tendency to avoid a loss

than seek a gain.¹ The effect called endowment (Knetsch and Sinden 1984; Knetsch 1989; Kahneman et al. 1990; Kahneman et al. 1991) describes a state where people demand more to give up something than they were willing to pay for it. When one owns an object or has a connection with it, he or she tends to overestimate its value. In addition, many studies have shown that people typically demand higher prices to forgo the goods they own than they would be willing to pay to acquire those goods if they did not already own them (Kahneman et al. 1990; Brown 2005; Zhang and Fishbach 2005). In the status quo bias (Samuelson and Zeckhauser 1988; Kahneman et al. 1991) there is an irrational preference for preserving the current situation. The starting point of the current situation (or status quo) is regarded as the reference point, so any deviation from it is perceived as a loss.

According to Fabio and Ferrante, the notion that loss aversion is not a fixed, innate characteristic of individuals finds empirical support from the study of Johnson et al. (2006), which showed that loss aversion declines with an increase in education, and that age also has a strong negative impact on loss aversion. In their study, they noted that the perception of loss was probably affected by the fear of unskilled workers that finding another job would be difficult and that they would be unable to adapt to the demands of another job. Therefore, unskilled workers would be expected to be more loss averse (Guiso et al. 2002). Fabio and Ferrante argued that the status quo bias seems to justify the need to try to keep one's job as a way to reduce the cost of frequent periods of unemployment.

Sherman and Shavit (2009) claimed that loss aversion affects the decision to seek employment or go on welfare. They present a descriptive model that combines the "objectivist" approach and loss aversion. The participants in each group were asked to indicate the minimum income they would be willing to accept to move from being on welfare to being employed and vice versa. Sherman and Shavit showed that the reference point in the transition from work to welfare and welfare to work has a significant impact on the replacement rate, which is the ratio of unemployment benefits to income from employment. Actually, this rate is higher when the reference point is employment. Sherman and Shavit maintained that this behavior does not imply irrational behavior, but is another example of the asymmetry of values that Tversky and Kahneman (1991) referred to as loss aversion.

In the current paper we assess the value of job security by creating an analytical model that allows us to identify the behavioral factors that affect the importance people ascribe to job security. While researchers have investigated the issue of job security, only a few of them have tried to quantify the value that people place on it.

Gélinas (2006) estimated the value of job security using a financial human capital model. Empirical estimates of the annualized value of job security in three large corporations and the US government were also developed to create an illustrative employee profile. Pfeifer (2011) measured how much of a hypothetical private sector salary of 45,000 euros per year the respondents were willing to give up to work in very secure public sector jobs. This willingness can be interpreted as the wage differential needed for insecure private sector employment. However, we argue that when the subjects responded to the scenario of leaving the private sector, a status quo bias or endowment effect might contaminate their answers. The methodology in the current paper controls for behavioral factors when assessing the value of job security. As far as we know, the current paper is the first to combine behavioral and classic economics in the measurement of the value of job security.

¹ Researchers have argued that the loss of psychological power is more than twice that of the power of a profit (Johnson et al. 2006).

What are the factors that might affect the value of job security? The first variable is the reference point. In other words, is the value of job security different when employees already have tenure compared to when they do not? Based on the loss aversion theory (Tversky and Kahneman 1991), we argue that the value of job security might depend on whether the employee is currently in a tenured or non-tenured position. Those who are already tenured will attach greater value to job security than those who are not. To test this theory, we used a sample of Israeli social workers randomly allocated between jobs with and without tenure. Adopting this approach allows us identify how having tenure affects their perceptions about the value of job security.

The response to this question is not trivial and does not depend only on the level of risk aversion. With years of experience and the confidence that they can obtain higher salaries in others jobs, tenured workers may be less concerned about job security. Similarly, nontenured workers with a great deal of confidence in their abilities may prefer to have the option to work as freelancers as a way of obtaining higher incomes.

We will also analyze the effects of other variables on the value of job security, specifically: fatalism, risk aversion and uncertainty avoidance. As noted in Caplan and Schooler (2003), fatalism is the belief that what happens to a person is beyond his or her control (Kohn and Schooler 1983). Some authors refer to the definition inversely, that is, the belief that people can generally control the events of their own lives, as mastery (Pearlin and Schooler 1978; Penninx et al. 1997; Kempen et al. 1999). Other researchers have suggested that older people exhibit less control or more fatalism (Lachman 1986; Schieman and Turner 1998; Grob et al. 2001).

Fabio and Ferrante (2008) argued that perceptions of occupational risks and expectations of future well-being are closely related to the extent of the individual's fatalism and culture. They maintained that this claim was confirmed by their finding of fatalism as a hallmark of the countries of southern Europe (Italy, France, Spain and Portugal), which are characterized by a high level of legislation protecting employment.

2 The Conceptual Framework: Tenure Versus Non-tenure

Our conceptual framework is similar to that of Axelrad et al. (2016).

2.1 Moving from a Tenured Position to a Non-tenured Position

In this scenario, the respondents are asked to imagine that they have a tenured job and receive an offer to take a non-tenured job. All of the other conditions such as hours and benefits are the same.

Let us define I_p^* as the wage required in a non-tenured job such that an individual is indifferent about being employed in a tenured job with a wage of I_t^0 and being employed in a non-tenured job with a wage of I_p^* .

$$\mathbf{I}_p^* = \mathbf{I}_t^0 + \mathbf{U}_t + \mathbf{SQ} \tag{1}$$

where U_t is the non-pecuniary utility from tenure and SQ is the status quo bias.

2.2 Moving from a Non-tenured Position to a Tenured Position

In this scenario, the respondents are asked to imagine that they have a non-tenured job and receive an offer to take a tenured job. All of the other conditions such as hours and benefits are the same.

Let us define I_t^* as the wage required in a tenured job such that an individual is indifferent about being employed in a non-tenured job with a wage of I_p^0 or being employed in a tenured job with a wage of I_t^* .

$$\mathbf{I}_t^* = \mathbf{I}_{\mathbf{P}}^0 - \mathbf{U}_t + \mathbf{S}\mathbf{Q} \tag{2}$$

Note that U_t might be different for each individual. However, for a given individual this value should be fixed and should not depend on the scenario we present to him or her.

Summing Eqs. 1 and 2 allows us to estimate the status quo bias.

$$I_p^* + I_t^* = I_t^0 + I_p^0 + 2SQ$$
(3)

The gap between Eqs. 1 and 2 allows us to estimate the non-pecuniary value of tenure.

$$\mathbf{I}_{p}^{*} - \mathbf{I}_{t}^{*} = \mathbf{I}_{t}^{0} - \mathbf{I}_{p}^{0} + 2U_{t}$$
(4)

The framework assumes that the status quo bias is the same for both directions (Axelrad et al. 2016). The status quo bias in our model depends on the characteristics of the individual, so those who are strongly influenced by this bias will respond to this influence whether they are in a tenured or non-tenured position. Researchers such as Ert and Erev (2013) and Burmeister and Schade (2007) and others have used loss aversion to explain the phenomenon of the status quo bias.

3 Empirical Estimation

3.1 The Questionnaire

We constructed a five-part questionnaire. The first part of the questionnaire included questions regarding the current employment status of the individual. The second part contained questions related to self-determination with regard to the perception of fatalism or mastery of one's life (Pearlin and Schooler 1978), also used in the NLSY² surveys. Respondents were asked to indicate the extent to which they agreed with statements about these topics on a 5-point scale (1 = strongly disagree 5 = strongly agree).

The third section asked two questions about hypothetical situations in which the respondents had to decide on the salary in a non-tenured job that would make them move from a tenured job to a non-tenured job and the wage that would entice them to move from a non-tenured job to a tenured job.

The two scenarios were as follows:

² The National Longitudinal Survey of Youth, or NLSY (http://www.bls.gov/nls/), is a broadly representative data set of adults and children with many years of data collection. The NLSY has been used in hundreds of published research studies on children, youth, adults and families and is one of the most important data sets for social science research in this area.

(1) You work in a full-time job without tenure and earn a wage of 10,000 NIS a month (NIS stands for New Israeli Shekels. At the time of writing, there were 3.5 NIS in one American dollar). You are offered the opportunity to move to a similar job with tenure. Specify the minimum wage you would ask for in order to make the move.

The answer to this question is I_t^* , the salary an employed person without tenure would require to agree to switch to a job with tenure.

(2) You work in a full-time job with tenure and earn a wage of 10,000 NIS a month. You are offered the opportunity to move to a similar job without tenure. Specify the minimum wage you would ask for in order to make the move.

The answer to this question is I_p^* , the salary an employed person with tenure would require to agree to switch to a job without tenure.

The fourth part contained items testing the respondents' level of risk aversion (Yotav-Solberg 2004) and loss aversion (Fehr and Goette 2007) using the former's PSID questionnaire and the latter's attitudes toward lotteries. The last section included questions about the general demographic characteristics of the respondents.

3.2 The Sample

Our sample consists of social workers in a large municipality in Israel and resulted from collaboration with the welfare department in that city. Some of the social workers were employed by the local municipality and accounted for approximately 63.4% of the public social workers. These individuals have tenure. The remaining social workers in the sample came from NGOs and do not have tenure. Both groups have similar skills, often work in identical positions and even work together in the same office or building. The allocation between tenured and non-tenured is random because positions in the municipality are created when there is a need for social workers. This fact makes it almost impossible to choose whether to take a tenured position or a non-tenured one, so that the allocation is mainly determined by when the graduates enter the labor force. Using this unique sample allows us to compare tenured and non-tenured employees who work in similar conditions while controlling for the "noise" that might stem from the self-selection resulting from those who place a higher value on job security and therefore opt for tenured positions. It is possible that after taking a tenured position, the employee could switch to a non-tenured job if an opportunity arises, and vice versa. We are aware that this possibility might add the "noise" of self-selection to our sample. Since there is no formal documentation of these movements, we asked the manager of the human resources division in the municipality related to our research to assess the frequency of movement between the positions. The manager estimated that about 0.6% of the total employees make such changes each year. Therefore, we concluded that the "noise" that might stem from this option is limited. As we will show later, this result might be consistent with our finding regarding the value of the status quo bias.

Between April and June 2013 we distributed the questionnaire to all social workers employed directly and indirectly in this municipality, a total of about 300 people. The response rate was 36%: 107 social workers of whom 54 (50.5%) did not have tenure and 53 (49.5%) had tenure. The respondents were between the ages of 26 and 65 years and the average age was 39.5 (SD 11.01). With regard to gender, 15% of the respondents were male and 85% female, a rate consistent with the gender distribution of Israeli social workers. On average, the respondents had 1.31 children under the age of 18 years old (SD

0.17). The average risk aversion score was 3.59 (SD 1.14) out of 5. The average score for loss aversion was 4.36 (SD 1.61) out of 6.

Table 1 presents the attributes for tenured and non-tenured workers separately. As the table demonstrates, there were no significant differences between the groups based on gender, having children, risk aversion or loss aversion. The only difference that emerged was with regard to age. The average age was higher for the tenured group. This difference is not surprising because tenured workers are less susceptible to layoffs than non-tenured workers (Mont and Rees 1996).

4 Results

When analyzing the results, we used the term "replacement rate," which is the ratio of salaries for untenured positions to the salaries for tenured positions, taking into account that the starting monthly base wage in the two questions is 10,000 NIS. From Table 2 we can see that the moves from tenured to non-tenured positions and from non-tenured to tenured positions are not symmetric. While the replacement rate when moving from tenured to non-tenured positions is 1.302 (meaning a 30% premium for giving up tenure), the replacement rate for the opposite direction is 1.142 (meaning the employees were willing to give up 14% of their salary to get tenure). This finding is consistent with the results of Pfeifer's (2011) study in which the starting wage was 45,000 Euros. According to that study, on average most people were willing to give up 10% of their salary in the private sector to obtain a tenured position the public sector. In other words, on average, wages in the private sector were 11.11% (45,000/(0.9 × 45,000)) higher than salaries in tenured positions.

Another interesting finding is that the sum of $I_p^* + I_t^*$ is significantly different from 20,000, meaning that there is an intervention of a behavioral factor regarding the decision about whether to move from either a tenured to a non-tenured position or vice versa. This finding indicates that the value of the status quo bias is about 1009 NIS, which is about 10% of the base wage, while the average non-pecuniary value of job security (subtraction of $I_p^* - I_t^*$) is about 20% of the basic wage (4031/2 = 2015 NIS).

Some may argue that these results come from diminishing marginal utility and not as a result of the intervention of a behavioral decision about moving from a tenured position to a non-tenured one or vice versa. However, we show that even after controlling for marginal diminishing utility, our results hold.³

4.1 Robustness Check

We repeated our experiment in a laboratory to check whether our results held in a clean environment. Our sample included 59 students who were asked to indicate the minimum wage they would require to move from tenured to non-tenured work and vice versa. The

³ We conducted an additional experiment with 40 participants. This time the response to the first question I_t^* was used to choose I_t^0 for the second question (the second question was presented with a few levels of I_t^0). Doing so eliminated the effect of diminishing marginal utility on the replacement rate. The result when moving from tenured to non-tenured positions was 1.26 (compared to 1.30 in the original sample), and when moving from non-tenured to tenured positions it was 1.07 (compared to 1.14 in the original sample). Therefore, we can conclude that the results are in the same direction even after controlling for diminishing marginal utility.

| Table 1 Differences betweentenured and non-tenured groups | Variable | Tenured | Non tenured | P value |
|--|-------------------|---------|-------------|---------|
| | Age | 34.33 | 46.06 | 0.00 |
| | Gender | 0.15 | 0.15 | 0.99 |
| | Children below 18 | 0.59 | 0.57 | 0.83 |
| | Risk aversion | 3.76 | 3.40 | 0.14 |
| | Loss aversion | 4.51 | 4.31 | 0.56 |
| | | | | |

Table 2 First sample average values of SQ and U_{tf}

| | Variable | | | |
|---|--|--|-----------------------------------|----------------------------|
| | Minimum wage for giving up tenure $\left(I_{p}^{*} \right)$ | Minimum wage for getting tenure $\left(I_t^*\right)$ | $\mathrm{I}_p^* + \mathrm{I}_t^*$ | $I_p^\ast - I_t^\ast$ |
| Average | 13,024.51 ¹ (4149.66) | 8993.48 ¹ (1194.54) | $22,017.99^{2}$ (4191.22) | 4031.02^{3} (4441.49) |
| Replacement rate The difference between the replacement rates | 1.302 ⁴ 3.589 ⁵ | 1.1424 | | |

¹Differs significantly from 10,000 NIS (at the 0.01 significance level)

²Differs significantly from 20,000 NIS (at the 0.01 significance level)

³Differs significantly from 0 (at the 0.01 level of significance)

⁴Differs significantly from 1 (at the 0.05 level of significance) (In this test there were 107 observations about moving from a non-tenured to a tenured position, but only 102 observations for the opposite movement) ⁵Differs significantly from 0 (at the 0.01 level of significance)

respondents were between the ages of 21 and 47 years and the average age was 27.8 (SD 5.88). With regard to gender, 52.5% of the respondents were male and 47.5% female. On average, the respondents had 0.43 children under the age of 18 years old (SD 1.15). The average risk aversion score was 3.14 (SD 1.32) out of 5. The average score for loss aversion was 3.73 (SD 1.74) out of 6. Table 3 presents the findings of this experiment.

From Table 3 we can see that the replacement rate when moving from tenured to nontenured positions is 1.29, meaning a 29% premium for giving up tenure. The replacement rate for the opposite direction is 1.085, meaning the employees were willing to give up 8.5% of their salary to get tenure.

We can also see that the sum of is significantly different from 14,000, meaning that there is an intervention of a behavioral factor regarding the decision about whether to move from either a tenured to a non-tenured position or vice versa, just as we saw in the sample using the social workers. This finding indicates that the value of the status quo bias is about 767 NIS, which is about 11% of the base wage (compared to 10% in the first sample). The difference between the two samples is not significant (P = 0.72). The non-pecuniary value of job security is about 1259.5 NIS (subtraction of), which is about 18% of the basic wage (compared to 20% in the first sample). Once again, the difference between the two samples is not significant (P = 0.4).

Does actually having job security affect the value the individual attaches to it? In Table 4 we present the results with regard to tenured and non-tenured employees.

| | Variable | | | |
|---|--|--|-------------------------------|-----------------------------|
| | Minimum wage for giving up tenure $\left(I_{p}^{*}\right)$ | Minimum wage for getting tenure $\left(I_t^*\right)$ | $I_p^\ast + I_t^\ast$ | $I_p^\ast - I_t^\ast$ |
| Average | 9027.271 ¹ (1214.03) | 6514.411 ¹ (564.62) | $15,535.452^{2}$ (1312.36) | 2519.093^{3} (1372.03) |
| Replacement rate The difference between the replacement rates | 1.294 ⁴ 7.6613 ³ | 1.0854 ⁴ | | (, |

Table 3 Second sample average values of SQ and U_t

¹Differs significantly from 7000 NIS (at the 0.01 significance level)

²Differs significantly from 14,000 NIS (at the 0.01 significance level)

³Differs significantly from 0 (at the 0.01 level of significance)

⁴Differs significantly from 1 (at the 0.01 level of significance)

| | Variable | | | No. of | |
|--|--|--|-----------------------------------|----------------------------------|--------------|
| | Minimum wage for giving up tenure $\left(I_{p}^{*}\right)$ | $\begin{array}{l} \text{Minimum wage} \\ \text{for getting} \\ \text{tenure} \left(I_t^* \right) \end{array}$ | $I_p^\ast + I_t^\ast$ | $I_p^\ast - I_t^\ast$ | observations |
| Tenure—average | 14,038.46 ¹ (4554.51) | 8845.28 ¹ (1354.27) | 22,900 ² (642.07) | 5176.92 ³ (675.97) | 53 |
| Replacement rate | 1.403^4 | 1.173 ⁴ | | | |
| T statistic—difference in the replacement rate— tenure | 3.255 ³ | | | | |
| Non-tenure—average | 11.970 ¹ (3417.25) | 9019.17 1 (1038.99) | 21,100.7 ² (494.19) | 2839.3 ³ (511.62) | 54 |
| Replacement rate | 1.197^4 | 1.1262^4 | | | |
| T statistic—difference in the replacement rate— non-tenure | 1.661 | | | | |
| T statistic—difference between tenure and non-tenure | -2.587 ⁵ | -1.019 | -2.209 ⁵ | -2.742^{3} | |

Table 4 Average salaries required by tenured employees (I_p^*) and non-tenured employees (I_t^*)

¹Differs significantly from 10,000 NIS at the 0.01 significance level

²Differs significantly from 20,000 NIS at the 0.01 significance level

³Differs significantly from zero at the 0.01 level of significance

⁴Differs significantly from 1 at the 0.01 level of significance (In this test there were 107 observations about moving from a non-tenured to a tenured position, but only 102 observations for the opposite movement) ⁵Differs significantly from zero at the 0.05 level of significance

The results in Table 4 indicate the existence of asymmetry regarding the replacement rate only for the tenured workers. We did not find any asymmetry for the non-tenured workers.

Based on these results, the hypothesis that the I_p^* of tenured employees and non-tenured employees is equal is rejected equally at the significance level of 5%. The hypothesis that the I_t^* of tenured employees and non-tenured employees is equal is not rejected at the significance level of 5%. The hypothesis that $I_p^* + I_t^*$ (an indication of the level of the status quo bias) for tenured employees compared to non-tenured employees is equal is rejected at the significance level of 1%. This finding indicates that, in the absence of self-selection, the status quo bias for tenured employees is higher than the status quo bias of workers employed under a personal agreement. Thus, we can infer that the current status of individuals might affect their behavioral attitudes, specifically their status quo bias.

The hypothesis that $I_p^* - I_t^*$ (the value of job security) for tenured employees compared to non-tenured employees is equal is rejected at the significance level of 1%. This finding indicates that the non-monetary benefit of job security for tenured employees is higher than the non-monetary benefit for non-tenured employees. In other words, those who already have tenure attach a higher value to job security. The average value of tenure for tenured workers is about 2600 NIS, while the average value for non-tenured workers is only 1400 NIS.

4.2 Econometric Analysis

Several equations were estimated where the dependent variables were I_t^* , I_p^* , their sum and their difference. The explanatory variables were:

- 1. *Tenure* whether the respondent had a tenured or non-tenured position, a dummy variable (0—non-tenure, 1—tenure).
- 2. *Risk aversion* the respondents' level of risk aversion, measured using a questionnaire that came with the regular survey of the PSID in 1996. This is a continuous variable whose value ranges from 0 to 5. A high value indicates a high level of risk aversion.
- 3. *Loss aversion* the respondents' level of loss aversion. To estimate the degree of loss aversion in risky choices, we used the simple lottery that appeared in Fehr and Goette (2007). This is a continuous variable whose value ranges from 0 to 6. A high value indicates a high level of loss aversion.
- 4. Age the respondents' age, measured as a continuous variable.
- 5. *Gender* the respondents' gender, measured as a dummy variable (0—women, 1—men).
- 6. *Children under 18* whether the respondents have children under the age of 18, measured as a dummy variable (0—without children under 18, 1—with children under 18).
- 7. *Mastery* perceptions of control or fatalism—the respondents' subjective feelings that they can control the significant events in their lives, measured as a continuous variable using the index of Pearlin and Schooler (1978). In their study the reliability of the index was $\alpha = 0.75$ and in our study it was $\alpha = 0.74$. A high value indicates the perception of control.

The regression results imply that the current position of the employee affects the nonpecuniary value of tenure. Specifically, the value for tenured workers is 1.8 times the value

| | Model 1 $\ln(I_p^*)$ | Model 2 $\ln(I_t^*)$ | Model 3 $\ln(I_p^* + I_t^*)$ | Model 4 $\ln(I_p^* - I_t^*)^a$ |
|-------------------|----------------------|----------------------|------------------------------|--------------------------------|
| Tenure | 0.143*** | 0.041 | 0.099** | 1.83*** |
| Risk aversion | 0.043* | 0.007 | 0.03* | 0.18 |
| Loss aversion | 0.035* | -0.007 | 0.018 | 0.55** |
| Age | 0.002 | -0.001 | 0.000 | 0.021 |
| Gender | -0.009 | 0.045 | 0.01 | 0.5 |
| Children under 18 | -0.02 | -0.01 | -0.021 | 0.469 |
| Mastery | | -0.009^{***} | -0.005 | 0.04 |
| Constant | 8.993*** | 9.279*** | 9.801*** | 1.499 |
| Ν | 76 | 78 | 76 | 76 |
| Adjusted R square | 0.103 | 0.031 | 0.054 | 0.1876 |

 Table 5
 Econometric results

* Significant at the 0.1 level

**Significant at the 0.05 level

***Significant at the 0.01 level

^aIn order to eliminate the possibility of having zero when calculating the gap between $I_p - I_t$ we calculated the ln for $I_p - I_t + 1$

that non-tenured workers attach to tenure. Thus, having tenure makes it harder to give it up. The higher the level of the loss aversion, the greater the value attached to tenure.

Tenured workers and those with a higher level of risk aversion also had a higher status quo bias. Interestingly, the current status of the employees' tenure impacted the wage required in non-tenured work when moving from a tenured job but had no effect in the opposite direction. This result seems to imply that the movement between the two statuses is asymmetric.

To verify these results, we conducted additional regressions that included other variables, including interaction variables such as age and seniority (Zussman and Romanov 2005), and age squared (Clark and Postel-Vinay 2009; Michelson 2012), but none of them proved significant. Given that the educational level of all of the social workers was almost identical, we did not include education as an explanatory variable or the interaction with this variable and age (Guiso et al. 2002) or tenure (Clark and Postel-Vinay 2009). In addition, we also ran the four regression models for the complete sample of 107 respondents. In those regressions, we had only two independent variables—tenure and mastery—because we lacked complete data for the other variables. As Table 6 illustrates, the sign

| | Model 1 $\ln(I_p^*)$ | Model 2 $\ln(I_t^*)$ | Model 3 $\ln(I_p^* + I_t^*)$ | Model 4 $\ln(I_p^* - I_t^*)^a$ |
|-------------------|----------------------|----------------------|------------------------------|--------------------------------|
| Tenure | 0.152*** | -0.02 | 0.082** | 1.446*** |
| Mastery | -0.002 | -0.006* | -0.003 | 0.076 |
| Constant | 9.386*** | 9.185*** | 9.99*** | 5.404*** |
| Ν | 102 | 107 | 102 | 102 |
| Adjusted R square | 0.074 | 0.009 | 0.043 | 0.0812 |
| | | | | |

 Table 6
 Robustness check—regression with complete sample

^aIn order to eliminate the possibility of having zero when calculating the gap between $I_p - I_t$ we calculated the ln for $I_p - I_t + 1$

and significance of both variables remained unchanged compared to the models presented in Table 5. This result provides an additional robustness check for our model.

5 Conclusions

As far as we know this paper makes the first attempt to estimate the value of job security while controlling for behavioral factors. We also analyzed how actually having a tenured position versus a non-tenured one affects the value of job security.

We found that the average value of job security is about 2000 NIS (about 20% of the base wage of the worker) and that the value of the status quo bias is about 1000 NIS (about 10% of the base wage of the worker). For tenured workers the average non-pecuniary value of job security is significantly higher than for non-tenured workers (2600 NIS compared to 1400 NIS).

We also found that the status quo bias is significantly higher among tenured workers (estimated at approximately 1500 NIS, which represents approximately 14.5% of their starting wage) than non-tenured workers (estimated at 550 NIS, which represents approximately 5.5% of their starting wage).

Furthermore, the move from tenured to non-tenured positions is not symmetric. Employees require about 30% more to move from a tenured to a non-tenured position. In contrast, the premium for moving from a non-tenured to a tenured position is much lower and stands at 14%. This finding confirms our hypothesis that the employees' initial position is significant when attaching a value to job security. Furthermore, the regression analysis demonstrates that loss-averse employees attach greater value to job security.

However, it should be noted that unlike other studies, we found no differences between the genders or based on the size of the family in the non-pecuniary value of tenure or in the level of the status quo bias (Bellante and Link 1980; Bundy and Norris 2011; Salladarré et al. 2011). The results regarding gender might be due to the small number of males in our sample.

The contribution of this study lies in its combined use of factors from behavioral economics and classical economics to explain the value people attach to job security. Combining these factors allowed us to investigate the impact of various micro and macroeconomic variables. Therefore, we were able to demonstrate that there are two separate monetary amounts that people ascribe to the value of job security, indicating two different degrees of importance for the same job security. The difference depends on whether the individual's current job is tenured or non-tenured. It is this factor that has a significant effect on the value of job security to the individual. We believe this is the first study to demonstrate the value of the status quo bias effect from the perspective of the individual's employment status.

The findings of the study provide further support for the theory of loss aversion (Knetsch and Sinden 1984; Knetsch 1989; Kahneman et al. 1991; Tversky and Kahneman 1991), the endowment effect (Knetsch and Sinden 1984; Knetsch 1989; Kahneman et al. 1990; Kahneman et al. 1991) and the status quo bias effect (Samuelson and Zeckhauser 1988; Kahneman et al. 1991).

Our results also have practical implications. On the national level they help us understand the monetary impact that job security has on the well-being of the labor force. Despite the fact that we do not deal with differences in how people perform in jobs with and without tenure, job security should be considered in assessing working people's wellbeing. In addition, our framework provides a tool for managers and workers who want to include the monetary and non-pecuniary value of job security in the definition of their total compensation when negotiating the terms of employment or as a benchmark of total compensation.

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