

# A Comparison of Financial Well-Being and Its Antecedents Across Different Employment Categories in Malaysia

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**Abstract:** This study compares the level of financial well-being (FWB) and its antecedents (financial stress, financial behaviour, financial literacy, and the internal locus of control (LOC)) across individuals of different employment categories in Malaysia. Second, it investigates the relationship between those antecedents and FWB and compares the differences in the strength. Data were collected from 1,867 respondents from four employment groups using a questionnaire-based survey. Descriptive statistics and analysis of variance (ANOVA) were conducted to achieve the first research objective, and ordinary least squares (OLS) regression was used to achieve the second research objective. The results indicate that FWB and its antecedents of Malaysian employees vary considerably across employment categories. The FWB of the unemployed and private-sector workers is significantly lower than their government sector and self-employed counterparts. Financial stress, financial behavior, and an internal LOC are the most determinative of employees' FWB, however, they have varying degrees of impact across different employment categories to promote higher FWB among Malaysian employees, based on their employment categories.

Keywords: financial well-being, financial stress, locus of control, financial behavior, employment JEL Classification: D6, M5

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## Introduction

Differences in the behavior and rewards of workers across employment types have been the focus of scholarly discussion for at least three decades. Usually, the discussion around employment sector comparisons focuses on public-private sector employee disparities. For example, there is abundant literature in the area of organizational behavior that compares public and private sector employees' job values (Karl & Sutton, 1998; Lyons, Duxbury & Higgins, 2006; Choi, 2017), work motivation (Buelens & Van den Broeck, 2007), work commitment (Lyons et al., 2006; Zeffane, 1994; Top, Akdere & Tarcan, 2015), job satisfaction (Sardžoska, E.G. & Tang, 2015; Top et al., 2015; Lee & Sabharwal, 2016; Zeffane & Melhem, 2017; Ciobanu, Androniceanu, & Lazaroiu, 2019), work motives and attitudes (Bullock, Stritch & Rainey, 2015; Demircioglu & Chen 2019), and other employee behavior (McAdam & Reid, 2000; Bullock et al., 2015; Agarwal, & Sajid, 2017). There is also a strand of literature examining public-private sector differences from an organizational viewpoint (Rainey, Backoff & Levine, 1976; Johnson, Leenders & McCue, 2017). Meanwhile, other studies from the economics literature perspective have examined public-private sector wage differentials within specific nations and across countries (see, for example, Lucifora & Meurs, 2006; Melly 2005; Adamchik & Bedi, 2000; Afonso & Gomes, 2014; Schanzenbah, 2015; Sławińska, 2021).

Among the criteria for an individual's selection of employment type are the propensity for risk-taking and the prospects of achieving high job security and financial well-being (henceforth, FWB). It is commonly believed that public sector employees are more secure in their jobs compared to those working in the private sector (Luechinger, Meier & Stutzer, 2010), albeit receiving lower wages. Compared to non-profit government organizations, for-profit firms in the private sector are more susceptible to economic fluctuations. In Malaysia, this notion was evident from severe reductions in the labor force among employees of private firms during economic downturns. For example, in the aftermath of the Asian financial crisis in 1998, the total number of retrenchments was 83,865 compared to 19,000 in 1997 (Ariff & Abubakar, 1999). The downsizing episodes in the overall Malaysian market suggest that employment is not as secure as it is perceived to be, especially for workers in the private sector. In the unfolding effects of the COVID-19 pandemic, Malaysian employees have been increasingly worried about losing their jobs amid the economic slowdown (Azman, 2021). A likely outcome of this uncertain situation is the possibility of exploring business opportunities as a sole proprietor (i.e., being self-employed) and seeking other means of making a living. Undoubtedly, such economic uncertainties have aggravated the financial stress and FWB among workers across various employment sectors.

Generally, past studies have focused on establishing a relationship between subjective well-being and income. The literature reveals that people in more developed countries, in terms of wealth and economy, are the happiest (Diener, Kahneman, Tov and Arora, 2010), likely because their needs and desires are met in wealthier countries (Tay & Diener, 2011).

Although the profusion of studies explores the relationship between FWB and income, less attention has been paid to the differences in FWB across employment types. The literature also focuses on wage differentials, job satisfaction, and other employee behavior among different employment sectors. However, the differences in FWB and other financial attitudes of workers are still underexplored. Thus, this study contributes to the body of knowledge by examining differences in FWB across working-age adults in Malaysia, who could either be employed in the private or public sector, self-employed, or unemployed. Specifically, the objectives of this study are two-fold: (i) To compare the level of FWB and its antecedents: Financial stress, financial behavior, financial literacy, and the internal locus of control (LOC) across individuals of different employment sectors in Malaysia, and (ii) to investigate the influence of financial stress, financial behavior, financial literacy, and an internal LOC on FWB, and to compare differences in the strength of relationships across employment categories.

This study contributes to the literature by comparing the FWB of working-aged Malaysians across different employment categories. We compare differences across individuals, not only from the public and private sectors, but also include self-employed and unemployed individuals. The findings of this study will help identify the groups of working-age Malaysians who are most vulnerable in their financial situation and thus assist policymakers in formulating strategies to enhance the FWB of these groups.

In the subsequent sections of this paper, we review the relevant literature on FWB and its antecedents (Section 2). This is followed by a description of the methodology (Section 3). The analysis and results are then reviewed (Section 4), and finally, the implications of the results and limitations of the study are discussed (Section 5).

## Literature Review Financial Well-Being (FWB)

The literature indicates that FWB can be classified based on subjective or objective measures. The subjective measures of FWB can be viewed from a life domain perspective, that is, feeling a sense of satisfaction in terms of financial freedom, financial security, ability to pay debt, and maintaining the current standard of living (Guo et al., 2013; O'Neill et al., 2005a; Shim et al., 2009). It is feeling satisfied financially, associated with current life

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ongoings, having high self-esteem, feeling self-belonging, and having a sense of purpose (Su et al., 2014). Meanwhile, the objective measure of FWB is based on the financial domain, specifically, using financial parameters, financial information, financial ratios, and benchmarks to measure the state of one's FWB (Norvilitis et al., 2003; O'Neill et al., 2005b & 2005c).

The objective view of FWB is considered less holistic, as it is deemed unable to capture the subjective and non-financial elements to measure the state of one's well-being. (Bruggen et al., 2017).

### FWB Across Employment Sectors

Several studies suggest that the FWB and its antecedents vary across employment sectors. A study conducted by Parcel and Menaghan (1997) found that the nature of employment can have a crucial impact on family well-being. The study shows that employees who receive low wages and work in stressful environments exhibit low levels of family well-being.

There is also persuasive empirical evidence from several studies demonstrating that the nature of work differentials between the private and the public sector can lead to various behavioral consequences (Bordia & Blau, 1998; Melly, 2005; Lyons et al., 2006; Buelens et al., 2007; Luechinger, et al., 2010; Bullock et al., 2015). Several studies have also found evidence to suggest that unemployment may influence an individual's FWB (Brown & Gray, 2016; Simona-Moussa & Ravazzini, 2019; Salignac et al., 2020).

Relatively few studies have evaluated the FWB status of self-employed working adults, and the findings are mixed. Sevä et al. (2016) find that self-employed individuals generally experience more job satisfaction and financial happiness. Meanwhile, Kwon and Sohn (2017) and Bencsik and Chuluun (2021) report that self-employed individuals in Indonesia and the USA have lower life satisfaction and FWB than paid employees. Kwon and Sohn (2017) argue that the difference in findings may be due to differences like countries' backgrounds and economic status.

While the literature generally provides evidence that employment sectors and status should be considered when investigating FWB and its antecedents, there is still a dearth of research concerning FWB differences across different employment categories. The current study thus examines this issue by analyzing Malaysian working-aged individuals across four employment categories: those working in the public sector, private sector, the self-employed, and the unemployed.

### Antecedents of FWB

#### **Financial Stress**

Financial stress refers to financial strains that result from negative events such as disruptions to one's current financial position and facing certain shocks that entail a sum of expenditure beyond the normal capacity of the individual (Voydanoff, 1990; Kim, Sorhaindo & Garman, 2006).

The literature shows a negative relationship between financial stress and FWB (Kim and Garman, 2004; Ryan, 2013, Hojman et al., 2016; Mahdzan et al., 2019). In the context of Malaysia, Mahdzan et al. (2019) found a strong negative correlation between financial stress and FWB even when considering differences in household income. The study found that financial stress strongly affects FWB across individuals from the low-, middle-, and high-income categories. From the literature review, there seems to be a dearth of studies that have examined the differences in the influence of financial stress on FWB across different employment categories. This study aims to establish these differences, and the hypothesis to be tested is:

H1: Financial stress negatively affects FWB across individuals in different employment categories.

#### **Financial Behavior**

Financial behavior has been defined in various ways. Xiao (2008) suggests that the concept of financial behavior is related to money management such as credit and cash management and setting aside money as savings for future use (Hilgert, Hogarth & Beverly, 2003; Hogarth & Hilgert, 2002; Xiao, Sorhaindo & Garman, 2006).

Studies have shown a significant positive relationship between good financial behavior and FWB or satisfaction (Kim, Garman & Sorhaindo, 2003; Joo & Grable, 2004; Kusairi, Sanudi, Muhammad, Shukri & Zamri, 2019; Mahdzan et al., 2019). Various studies from across the globe have demonstrated a positive relationship between financial behavior and FWB, even when using different samples, such as college students (Xiao et al., 2009; Falahati, Sabri & Paim, 2012; Lajuni, Bujang, Karia & Yacob, 2019), specific types of workers (Mokhtar & Abd Rahim, 2009), and across different categories of household income (Mahdzan et al., 2019; Kusairi et al., 2019). However, the effect of financial behavior on FWB across individuals in different employment categories is still lacking. Therefore, this study aims to examine the differences in the impact of financial behavior on FWB. The hypothesis tested is:

**H2:** Financial behavior positively impacts FWB across individuals in different employment categories.

#### **Financial Literacy**

Financial literacy is a complex and widely researched concept often used interchangeably with financial knowledge and financial education (Huston, 2012). According to Remund (2010), the most basic definition of financial literacy is related to a person's competency in managing money. Meanwhile, the President's Advisory Council on Financial Literacy (PACFL, 2008) defined the concept as "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of FWB."

Generally, the literature has established a significant positive relationship between financial literacy and FWB (Ameriks et al., 2003; Lusardi & Mitchell, 2006, 2007; Stango & Zinman 2009; Van Rooij et al., 2012; Phillippas & Avdoulas, 2020; Xue, Gepp, O'Neill, Stern, & Vanstone, 2020). Higher financial literacy means having greater financial knowledge, which leads to positive financial behavior and FWB (Hilgert et al., 2003; Hira, 2012; Huston, 2012). However, the findings from the literature appear to be mixed, as some studies have found them insignificant (Utkarsh, Pandey, Ashta, Spiegelman, & Sutan, 2020) and a counterintuitive negative relationship between the two concepts (Mahdzan et al., 2019).

This study posits a significant relationship between financial literacy and FWB across different employment categories. However, the strength of its impact may differ according to the categories, as certain employment groups may be more highly associated with financial literacy than others. The hypothesis to be tested is:

**H3:** Financial literacy significantly affects FWB across individuals in different employment categories.

#### **Internal Locus of Control**

According to Rotter (1966), the locus of control (LOC) is a cognitive-behavioral psychological dimension describing how someone perceives the world, measured along an internal-external continuum. An internal LOC can be defined as one's ability to manage and control one's situation to achieve a set goal. On the other end of the continuum, when one has a high external LOC, he or she perceives that most circumstances are beyond their control, and most are influenced by external factors. It is perceived that as one moves along the continuum from an external to an internal LOC; one will experience greater personal financial happiness, satisfaction, and well-being. An internal LOC is important for a person to plan and take control of his/her present and future life to ensure that externalities do not hinder the pursuit of financial satisfaction (Strathman, Gleicher, Boninger, & Edwards, 1994).

There is evidence suggesting a link between LOC and financial behavior, attitudes, and outcomes from the literature. For example, youths showing a high correlation be-

tween low self-esteem and external LOC will likely incur higher debt (Hoeve et al., 2014). According to Prawitz and Cohart (2016), the ability to financially manage money well is associated with a high internal LOC, as someone with greater ability to control one's situation can achieve greater average savings. Based on the extant literature, the following hypothesis is posited:

**H4:** There is a significant relationship between an internal LOC and FWB across individuals in different employment categories.

## Methods

### Sample and Data Collection

The sample for this study consisted of working-aged adults from all the regions across Malaysia, namely, Central, Southern, Northern, East Coast, and East Malaysia. Trained enumerators collected the data those with from business or economic backgrounds. The quota sampling technique was adopted to identify public or private sector employees, self-employed, or unemployed respondents. Participation in this study was voluntary. Approval was obtained from the researchers' university research ethics committee before the data collection started. Data were collected from various locations, such as shopping complexes, factories, neighborhood areas, government agencies, private offices, and public locations, from both urban and rural areas. Of the 2,000 questionnaires distributed, 1,867 valid responses were received over three months.<sup>1</sup>

### Instrument and Measurement

The instrument used in this study was a self-administered questionnaire comprising six (6) sections. The first section covers the socio-demographic variables of the respondents, including four categories of employment sector: Government, private, self-employed, and unemployed, while sections 2 to 6 cover the main variables of this study. Table 1 below reports the operational definition, measurements and Cronbach's alpha of this study's main variables.

| Variable                             | Items | Operational Definition  | Source  | Measurement                 | Cronbach's<br>Alpha |
|--------------------------------------|-------|---|---|-----------------------------|---------------------|
| Financial<br>Well-<br>Being<br>(FWB) | 9     | Feelings of satisfaction and confi-<br>dence regarding current and future<br>financial situation. E.g., Ability to<br>meet monthly living expenses, Abili-<br>ty to meet financial emergencies etc. | (2013); O'Neill<br>et al. (2005a);<br>Shim et al. | (1 = worst<br>condition, to |                     |

 Table 1. Operational Definition, Measurements and

 Cronbach's Alpha of the Study's Main Variables

<sup>1</sup>Prior to data collection, a pre-test of the questionnaire was conducted whereby the opinions of five scholars from the field of household economics, human ecology, and consumer behaviour were sought. Based on their feedback, slight amendments were made to the questionnaire. There-after, a pilot test was conducted on eighty (80) working adults whom we believed sufficiently represented the various household income groups as well as ethnicities in Malaysia. Minor revisions were made based on their feedback, and finally, the final version of the questionnaire was distributed across the various regions in Malaysia.

| Financial<br>stress   | 8  | Financial situation at the present<br>time as opposed to 5 years ago. E.g.,<br>Whether the respondent's financial<br>assets/financial situation/total in-<br>come/standard of living/personal<br>debts have decreased or increased<br>over the past 5 years.   | (1990); Kim,  | 5-point Likert<br>scale (1 = de-<br>creased signif-<br>icantly, to 5 =<br>increased sig-<br>nificantly) | 0.863 |
|-----------------------|----|--|---|---|-------|
| Financial<br>behavior | 10 | Regularity of conducting certain fi-<br>nancial behavior. E.g., Setting mon-<br>ey aside for savings and retirement,<br>Having a weekly or monthly budget,<br>Having to cut living expenses etc.   | Hogarth &<br>Hilgert (2002);<br>Hilgert et al.<br>(2003); Xiao et<br>al. (2006) | ert scale (1 =  | 0.752 |
| Internal<br>LOC       | 7  | The ability to solve problems, wheth-<br>er others dominate their actions in<br>life, whether one can do anything he/<br>she set his/her mind to, and others.<br>E.g., I can do anything I set my mind<br>to, There is really no way I can solve<br>my problems, Other people domi-<br>nate my actions in life etc.                      | Strathman<br>(1994)   | 5-point Likert<br>scale (1 = al-<br>most never, to<br>5 = almost al-<br>ways)                           | 0.752 |
| Financial<br>literacy | 11 | Financial literacy is an objective<br>measurement of financial knowl-<br>edge. Respondents are asked to indi-<br>cate whether a statement regarding<br>personal finances was true (1) or<br>false (0). E.g., Buying goods on cred-<br>it will reduce purchasing power in<br>the future, All types of investments<br>are profitable, etc. | PACFL (2008)  | Total number<br>of correct an-<br>swers divided<br>by the total<br>number of<br>items (ratio)           | n/a   |

To assess FWB, a scale developed by Prawitz et al. (2006) was used in Section 2, which has nine (9) items. Feelings of satisfaction and confidence regarding the respondent's current financial situation were asked (for example, "How do you feel about your current financial situation?" and "Are you satisfied with your personal finances?"). Items in this section were measured on a continuum 10-point Likert scale, indicating low levels to high levels of FWB. Each item has a different anchor for its rating scales. Table 1 shows that the Cronbach's alpha for the FWB scale was 0.927. In Section 3, Grable, Archuleta, and Nazarinia's (2011) scale measured financial stress. The scale consisted of eight (8) items and was measured on a 5-point Likert scale. Respondents were asked to compare their present financial situation as opposed to five years ago, which ranged from increased significantly (5) to decreased significantly (1) (e.g., "My overall financial situation has..." and "My ability to meet my usual monthly living expenses has..."). Cronbach's alpha for this scale was 0.863 (Table 1). The financial behavior measurement in Section 4 was drawn from the scale proposed by Joo and Grable (2004). It consists of (e.g. "I set money aside for savings") and was measured on a 5-point Likert scale ranging from always (5) to never (1). Cronbach's alpha for this scale was 0.752 (Table 1). Items for financial literacy (Section 5) were measured by asking respondents to indicate whether a statement regarding personal finances was true (1) or false (0). Eleven statements (e.g. "Buying goods on credit will reduce purchasing power in the future") proposed by Sabri et al. (2010) were asked, and correct scores were summed and computed as a ratio for each respondent. A higher ratio indicated greater financial literacy, and a lower ratio indicated otherwise. Perry and Morris's (2005) scale was used to measure respondents' LOC on their financial outcomes in Section 6. It consisted of seven (7) items (e.g., "I can do anything I set my mind to" and "There is really no way I can solve my problems") and were measured on a 5-point Likert scale from almost always (5) to almost never (1). External LOC measures were reverse-coded to reflect the internal LOC. Cronbach's alpha for this scale was 0.752 (Table 1). As the values for Cronbach's alpha were all above the recommended threshold of 0.70 (Fornell and Larcker, 1981), the measurements used in this study were considered valid and reliable.<sup>2</sup>

#### Data Analysis Techniques

This study employed a one-way analysis of variance (ANOVA) to study the differences in the level of FWB, financial stress, financial behavior, financial literacy, and internal LOC across different employment sectors. Ordinary least squares (OLS) regression analysis was carried out to determine the proportion of variance in the respondents' FWB, explained by including independent variables. The OLS was rerun, taking employment sectors into account.

### Result

#### **Demographic Factors**

Descriptive statistics for the demographic variables are shown in Table 2. The sample was balanced in terms of gender, with 53.7% men and 46.3% women. Most respondents were age 25 to 34 years (37.8%), followed by 35 to 44 years (33.8%). In terms of ethnicity, the majority were Malays (66.6%), which was representative of the Malaysian population's ethnic distribution. Most respondents had a bachelor's degree (41.2%), followed by a diploma level (22.2%). In terms of employment categories, most respondents were from the public sector (47.8%), followed by the private sector (36.6%), self-employed (11.2%) and unemployed (4.4%). Regarding income, the largest group had a monthly income of RM4,000-5,999 (31%), followed by RM2,000-3,999 and RM6,000-7,999) (15.5%).

<sup>&</sup>lt;sup>2</sup> Financial literacy was measured as an objective measurement of correct and incorrect answers thus, reliability test was not conducted for this variable.

|                      | Variables                 | Frequency (n=1,867) | Percent (%) |  |  |
|----------------------|---------------------------|---------------------|-------------|--|--|
|                      | Male                      | 1,002               | 53.7        |  |  |
| Gender               | Female                    | 865                 | 46.3        |  |  |
|                      | 18 - 25                   | 132                 | 7.1         |  |  |
|                      | 25-34                     | 706                 | 37.8        |  |  |
| Age                  | 35-44                     | 631                 | 33.8        |  |  |
|                      | 45-54                     | 318                 | 17.0        |  |  |
|                      | 55 and above              | 80                  | 4.3         |  |  |
|                      | Malay                     | 1,243               | 66.6        |  |  |
|                      | Chinese                   | 235                 | 12.6        |  |  |
| Ethnic               | Indian                    | 173                 | 9.3         |  |  |
|                      | Bumiputra Sabah & Sarawak | 203                 | 10.9        |  |  |
|                      | Others                    | 13                  | 0.7         |  |  |
|                      | Secondary level           | 264                 | 14.1        |  |  |
|                      | Certificate level         | 206                 | 11.0        |  |  |
| Education            | Diploma level             | 414                 | 22.2        |  |  |
|                      | Bachelor degree           | 770                 | 41.2        |  |  |
|                      | Post graduate             | 213                 | 11.4        |  |  |
|                      | Government sector         | 892                 | 47.8        |  |  |
| Encolorer out status | Private sector            | 683                 | 36.6        |  |  |
| Employment status    | Self employed             | 209                 | 11.2        |  |  |
|                      | Unemployed                | 83                  | 4.4         |  |  |
|                      | Less than RM 2,000        | 201                 | 10.8        |  |  |
|                      | RM 2,000-RM 3,999         | 564                 | 30.2        |  |  |
| Individual income    | RM 4,000-RM 5,999         | 578                 | 31.0        |  |  |
| maividual mcome      | RM 6,000-RM 7,999         | 290                 | 15.5        |  |  |
|                      | RM 8,000-RM 9,999         | 126                 | 6.7         |  |  |
|                      | RM 10,000 and above       | 108                 | 5.8         |  |  |

Table 2. Descriptive statistics of demographic variables

## **Comparison of Variables Across Employment Sectors**

Table 3 reports the level of FWB, financial stress, financial behavior, financial literacy, and internal LOC across individuals of different employment sectors in Malaysia. The table indicates that employees in the public sector attained the highest FWB mean score ( $\mu$ =5.39, SD=1.88) compared to other employment sectors. This was followed by the self-employed ( $\mu$ =5.32, SD=1.83) and private sector workers ( $\mu$ =5.04, SD=1.82). Not surprisingly, those in the unemployed category had the lowest level of FWB. They suffer financially more than the people from other employment sectors because they do not have a stable full-time job to fulfill their daily expenses, leading to financial difficulties.

Meanwhile, the means for financial stress, financial behavior, and LOC across employment categories indicated that the unemployed respondents experienced the highest level of financial stress ( $\mu$ =3.33, SD=0.77), followed by the self-employed ( $\mu$ =2.86, SD=0.68) and private sector employees ( $\mu$ =2.78, SD=0.65). Among the respondents, government servants experienced the lowest level of financial stress ( $\mu$ = 2.697, SD=0.61), as they work in the most stable sector in any economic climate and have a low tendency to be terminated. The public sector employees, private sector employees, and the self-employed scored approximately the same for the level of financial behavior ( $\mu$ =3.27-3.30). This evidence infers that the variance of financial behavior is insignificant across different employment sectors, besides the unemployed. Across employment categories, the public sector employees also have a slightly higher level of LOC ( $\mu$ =3.54, SD=0.63) compared to the other employment categories, which are approximately similar ( $\mu$ =3.40-3.46).

As for financial literacy, Table 3 indicates that unemployed respondents had the highest mean score ( $\mu$ =0.757, SD=0.18) compared to the other employment categories. The unemployed respondents could consist of fresh graduates who were trying to find jobs or pursuing a higher degree; hence the higher financial literacy score. The private sector employees had the second highest financial literacy score ( $\mu$ =0.744, SD=0.18), followed by the government sector ( $\mu$ =0.731, SD=0.16), and the self-employed had the lowest score ( $\mu$ =0.699, SD=0.17).

|                |                   | Population     | FWB              | Financial<br>Stress | Financial<br>Behavior | Financial<br>Literacy | LOC  |
|----------------|-------------------|----------------|------------------|---------------------|-----------------------|-----------------------|--|
|                |                   | (n)            | Mean<br>(SD)     | Mean<br>(SD)        | Mean<br>(SD)          | Mean<br>(SD)          | Mean<br>(SD)   |
| Public sector  |                   | 892            | 5.392<br>(1.877) | 2.697<br>(0.608)    | 3.291<br>(0.696)      | 0.731<br>(0.161)      | 3.538<br>(0.632)   |
| Private sector |                   | 683            | 5.041<br>(1.821) | 2.781<br>(0.650)    | 3.298<br>(0.721)      | 0.744<br>(0.175)      | 3.462<br>(0.629)   |
| Self en        | nployed           | 209            | 5.321<br>(1.834) | 2.863<br>(0.684)    | 3.266<br>(0.686)      | 0.699<br>(0.177)      | 3.399<br>(0.689)   |
| Unem           | ployed            | 83             | 4.471<br>(1.958) | 3.335<br>(0.766)    | 2.942<br>(0.782)      | 0.757<br>(0.175)      | 3.403<br>(0.551)   |
|                |                   | Sum of Squares | 96.913           | 32.709              | 9.824                 | 0.370                 | 5.006  |
|                | Between<br>Groups | df             | 3                | 3                   | 3                     | 3                     | 3  |
| ANOVA          | Groups            | Mean Square    | 32.304           | 10.903              | 3.275                 | 0.123                 | (0.632)<br>3.462<br>(0.629)<br>3.399<br>(0.689)<br>3.403<br>(0.551)<br>5.006 |
| ANOVA          |                   | Sum of Squares | 6,414.641        | 756.903             | 934.065               | 52.822                | 748.585  |
|                | Within<br>Groups  | df             | 1,863            | 1,847               | 1,863                 | 1,861                 | 1,863  |
|                | Gloups            | Mean Square    | 3.443            | 0.410               | 0.501                 | 0.028                 | 0.402  |
|                |                   | F (Sig.)       | 9.382***         | 26.606***           | 6.531***              | 4.344***              | 4.152***   |

Table 3. ANOVA test results across employment sector

Note: \*\*\* denotes significant at 1%.

### Antecedents of FWB Across Employment Categories

The second objective of this study was to investigate the relationship between financial stress, financial behavior, financial literacy, and internal LOC with FWB, and compare the differences in these relationships across employment categories. Therefore, the sample was divided into four sub-samples: civil servants, private sector employees, self-employed, and unemployed. Then, to test the four hypotheses developed in the hypotheses development section, four estimation models were regressed for each employment sector, and the results are summarised in Table 4.

| Employment status  | Unstandardized<br>Coefficients |            | Standardized<br>Coefficients | t      | Sig.  |
|--|--------------------------------|------------|------------------------------|--------|-------|
|  | В                              | Std. Error | Beta                         | -      |       |
| Model 1: Government sector<br>(F-stat=133.38, p-value=0.000) |                                |            |                              |        |       |
| Constant   | 3.269***                       | 0.544      |                              | 6.004  | 0.00  |
| Financial Stress   | -0.775***                      | 0.097      | -0.25                        | -8.025 | 0.00  |
| Financial Behavior   | 1.044***                       | 0.088      | 0.387                        | 11.835 | 0.00  |
| Financial Literacy   | -0.611                         | 0.324      | -0.052                       | -1.889 | 0.06  |
| Internal LOC   | 0.346***                       | 0.091      | 0.116                        | 3.811  | 0.00  |
| Model 2: Private sector<br>(F-stat=78.707, p-value=0.000)    |                                |            |                              |        |       |
| Constant   | 4.452***                       | 0.589      |                              | 7.557  | 0.00  |
| Financial Stress   | -0.736***                      | 0.102      | -0.262                       | -7.216 | 0.00  |
| Financial Behavior   | 0.921***                       | 0.098      | 0.364                        | 9.42   | 0.00  |
| Financial Literacy   | -1.55                          | 0.348      | -0.149                       | -4.448 | 0.00  |
| Internal LOC   | 0.217**                        | 0.106      | 0.075                        | 2.059  | 0.04  |
| Model 3: Self Employed<br>(F-stat=31.408, p-value=0.000)     |                                |            |                              |        |       |
| Constant   | 7.202***                       | 1.093      |                              | 6.591  | 0.00  |
| Financial Stress   | -1.289***                      | 0.185      | -0.478                       | -6.975 | 0.00  |
| Financial Behavior   | 0.338                          | 0.197      | 0.126                        | 1.713  | 0.09  |
| Financial Literacy   | -0.584                         | 0.627      | -0.056                       | -0.932 | 0.35  |
| Internal LOC   | 0.327                          | 0.186      | 0.123                        | 1.763  | 0.08  |
| Model 4: Unemployed<br>(F-stat=17.733, p-value=0.000)        |                                |            |                              |        |       |
| Constant   | 3.159                          | 1.625      |                              | 1.944  | 0.056 |
| Financial Stress   | -0.856**                       | 0.26       | -0.334                       | -3.287 | 0.002 |
| Financial Behavior   | 0.854**                        | 0.288      | 0.341                        | 2.968  | 0.004 |
| Financial Literacy   | -0.53                          | 0.956      | -0.047                       | -0.554 | 0.581 |
| Internal LOC   | 0.602                          | 0.353      | 0.169                        | 1.704  | 0.092 |

Table 4. Multiple regression according to the employment sector

Note: \*\*\* and \*\* denote significance at the 1% and 5% levels, respectively.

## Discussion

### **Comparison of Variables Across Employment Sectors**

The first objective of this study was to investigate the differences in the level of FWB, financial stress, financial behavior, financial literacy, and internal LOC across individuals of different employment sectors in Malaysia. To achieve this objective, we compared the mean scores for the five (5) variables by conducting ANOVA tests, as presented in Table 3. The results strongly supported the existence of significant differences in the levels of FWB, financial stress, financial behavior, LOC, and financial literacy between these four employment sectors, as noted in the significant F-scores for each variable. Intuitively, the findings signified the differences in the nature of employment, financial security, and riskiness of each employment category. These differences played an important role in influencing employees' subjective views on their financial state, financial behavior patterns, stress, control of their actions, and financial knowledge.

### Antecedents of FWB Across Employment Categories

The second objective of this study was to investigate the relationship between financial stress, financial behavior, financial literacy, and internal LOC with FWB, and compare the differences in these relationships across employment categories. As reported in Table 4, the findings showed a significant inverse relationship between financial stress and FWB across all four employment categories (models 1 to 4). The findings suggested that a low level of financial stress was likely to enhance FWB. In terms of financial behavior, a highly significant positive association was detected for public sector employees (model 1;  $\beta$ =1.044, p<0.01), private sector employees (model 2;  $\beta$ =0.921, p<0.01), and unemployed respondents (model 4;  $\beta$ =0.338, p<0.10). The evidence supported that good financial behavior leads to higher FWB among civil servants, private sector employees, and even unemployed respondents.

When the strength of the tested factors was ranked for the four employment groups, the evidence suggested that both the public sector (model 1) and private sector (model 2) employees' FWB were strongly related to financial behavior. We found that financial behavior was a stronger predictor of FWB, compared to financial stress and LOC. Hence, the findings suggested that financial behavior was the most important factor affecting the level of FWB among government servants (model 1) and private sector (model 2) employees. Financial stress also played an important role in impacting the FWB of self-employed and unemployed respondents. The contrary factors reported among these employment sectors were expected. The respondents working either in the government (model 1) or the private sector (model 2) earned stable fixed incomes compared to the

self-employed and unemployed respondents. Due to their stable incomes and good financial behavior, handling their financial matters most affected their FWB.

However, the self-employed sector is categorized as risky, where income is strictly based on the ability of the business owners to generate better sales and income either in boom times or during an economic downturn. Business performance sustainability is uncertain for self-employed respondents; hence, the main determinant in influencing their FWB differs from the stable types of employment categories. It is even worse for unemployed respondents, where they do not have any job security in hand and cannot earn a stable income. Due to the high-risk exposure, financial stress is the most important factor affecting the FWB of the self-employed (model 3;  $\beta$ =-1.289, p<0.01) and unemployed (model 4;  $\beta$ =-0.856, p<0.01) respondents.

In summary, the estimation results strongly support H1 and H2. Nevertheless, the results could not support H3, where the statistical results showed an opposite negative relationship between financial literacy and FWB across all four estimation models. The evidence from the findings only supported H4 for employees from the government and private sectors. This evidence suggests that a high internal LOC among employees from these two sectors will improve their level of FWB, but not for self-employed and unemployed categories.

## Conclusion

Previous research documented that the risk nature of different employment types (Luechinger et. al, 2010), as reflected by the nature of work (Bullock et al., 2015), the likelihood of retrenchment (Helliwell & Huang, 2014; Lawless & Lucas, 2011), or the stability and adequacy of the income offered (Tay & Diener, 2011) influence workers' FWB. This study examined the FWB and its antecedents among workers of different employment categories. First, we compared the FWB levels and their risk-related behavioral antecedents (financial stress, financial behavior, and internal LOC and financial literacy) across workers from different employment types. Second, we analyzed the relationship between FWB and these antecedents to compare the strength of their relationships across the employment categories.

The finding that FWB differs based on the risk nature of the employment categories was supported in this study. Public sector employees, who are accorded the lowest risk of employment, scored the highest FWB. This finding is in accordance with previous studies (Luechinger et al., 2010; Bullock et al., 2015; Chen & Lemieux, 2016). Paradoxically, the price of job stability leads to high indebtedness among public workers (Loke, 2014). Stability in employment accords them with high credit-worthiness, which eases the opportunity of loans from financial institutions. Thus, the FWB of the civil servants is always at risk, especially for the lower income group. To ensure that higher FWB is maintained, policymakers must re-examine the credit practices that allow preferential credit approval to these workers. On the other hand, private workers with higher internal LOC are more likely to retain control over their finances and behave responsibly when involved in financial decisions.

Findings for the public and private sectors also highlight that financial behavior is stronger than financial stress and an internal LOC in determining FWB. This suggests that an environment that supports positive financial behavior, such as schemes that enhance their future savings, particularly for retirement, gratuities, and performance-based bonuses, are necessary for these workers.

Consistent with other studies (Kim & Garman, 2004; Friedline et al., 2021), the findings indicate that financial stress is highest among those with unstable financial resources. Being dependent on one's own ability to source capital and generate earnings for a business may add further financial pressure for the self-employed. This suggests that to avoid having low FWB, the self-employed must take measures to control their financial stress. For those thinking of moving away from salaried employment, apart from losing a stable income, this stressor should be considered an important consideration.

## Limitation

This study has several limitations. First, the sample is unbalanced across employment categories, with only 4.4% of the sample being in the unemployed category. This, however, is inevitable as the figure reflects the Malaysian unemployment rate of 4.8% (Department of Statistics Malaysia, 2021). Second, the study was conducted using a cross-sectional approach. Conducting a longitudinal study could produce differing results, considering economic fluctuations that could cause varying degrees of financial well-being across employment categories. Further research should consider the time dimensions and different periods of economic situations. Finally, this study only explored the differences across four employment categories. Future studies should consider employment across different industries, such as the financial, manufacturing, agricultural, technology, services, and other economic sectors, to capture differences in financial attitudes among workers.

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