



## The Effect of Financial Risk Tolerance and Family Income on Entrepreneurial Intention in Higher Education Sector of District Swabi



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### Abstract

*The study examines the effect of family income (FI) and financial risk tolerance (FRT) on entrepreneurial intention in students of Universities of the Higher Education Sector located in district Swabi. This is an explanatory and co relational study carrying a sample size of 330 out of the total of all 501 students from public and private Universities in Swabi. Financial determinants are prominent aspects of the study contributing to entrepreneurial intention. The study has established the relationship between FI and FRT on EI of universities of the Higher Education Sector located in district Swabi. The study is a contribution to the rare work on the relationship between financial determinants and entrepreneurial intention. The study revealed that FI and FRT significantly affect EI, whereas the order of contribution of these determinants on EI are evident their coefficients are FRT and FI.*

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### Key Words:

Family income (FI), Financial risk tolerance (FRT), Entrepreneurial intention (EI)

### JEL Classification:

## Introduction

The study is carried out in order to exhibit the entrepreneurial intention of the business students of the Higher Education Sector of district Swabi in terms of financial risk tolerance and family income. As per the prevailing mindset of most of the Pakistanis is employment seeking, which is pushing the demand for jobs rather than demand for the creation of job opportunities. The scenario under consideration is a deep concern for people who are having an intention of creating job opportunities. To tackle the issue here, a study on entrepreneurial intention and its determinants is under consideration. The entrepreneurial intention is always

backed by the financial soundness and back up in hand as any investment is first developed with financial wellbeing.

[Bhatti, M. A. et al. \(2021\)](#) also focused on psychological attributes and Entrepreneurial Intention and the study of [Shah et al. \(2020\)](#) had also taken psychological attribute of financial risk tolerance and suggested to further extend the area of research.

In term of the relationship between income and entrepreneurial intention by Shujahat and Wang (2012) suggests that further research. [Karhunen and Ledyaeva \(2010\)](#) also work on financial risk tolerance and entrepreneurial intention,

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suggested that a large sample size should be taken to generalize. Currently, to the author's knowledge, there is rare work in the area under consideration in Pakistan.

The current studies researched the financial determinants of entrepreneurial intention. The growth rate of private business and entrepreneurship are the key indicators of development. In an economic transition from a market economy to communism, among the general population, entrepreneurship is a common career choice. This reflects the quality of formal business activity and institutions [Karhunen and Ledyeva \(2010\)](#). [Say's \(1803\)](#) entrepreneur is an individual who creates value in an economy by shifting the resources from the area of lower productivity to higher productive zones.

The study examined the relationship between financial risk tolerance, family income, and entrepreneurial intention and the effects of earlier two variables on the later one among the universities of Higher Education Sector located in district Swabi, Khyber Pakhtun khwa, Pakistan.

The derived research questions are

- i) Finding the relationship between Financial Risk Tolerance and family income on Entrepreneurial Intention?
- ii) Finding the effect of financial risk tolerance and family income on entrepreneurial intention?

## Literature Review

As provided by [Ajzen, \(1991\)](#) defining the term entrepreneurial intention as the effect of the individual to behave in a particular manner. The previous research of [Ajzen, \(1991\)](#) used the theory of planned behavior in which entrepreneurial intention is used as a dependent variable. [Fayolle, Gailly, & Lassas \(2006\)](#) define the intention as the individual shows acceptance of certain cognitive behavior.

According to ([Yang 2013](#): Ulysses et al., 2011), which means that entrepreneurial behavioral is an intentional and planned behavior.

Entrepreneurship is one of the most prominent topics of a country's in the world, besides its popularity in the academic area Keeble, (1990). Entrepreneurs not only incubate innovation but also contribute to economic growth and job creation (Kuip and Verheul, 2004; Fitz Simmons and Douglas, 2005). Therefore, it is also an emerging education program, especially in a business discipline (Chen, 2014: 2).

Traditionally, entrepreneurial intention is promoted by business education. For example, today, it is thought that the use of new technologies like IT and web-based platforms could be the drivers and promoters of entrepreneurship programs' efficiency (Hejazinia, 2015). According to Awogbenle and Iwuamadi (2010) mentions that poverty and unemployment can be knockdown through entrepreneurship, and in a developing country, there is a great demand for entrepreneurial activity.

According to Orbánová and Velichová (2013), those kinds of support activities is to teach young entrepreneur candidates, as in begging process of learning, the ability to see profitable business ideas, to make use of them after graduation, and to apply them in the market, to show them how to manage the potential risks and to help them to dispose of the important financial knowledge & skills.

According to Mc Mullen (2010) point of view that entrepreneurship gives to the market based abroad growth to the poor. Institutions act as blockade or catalyst to control poverty in entrepreneurship and the developmental economy. Baumol (1990) mention that good institutional policy will create successful entrepreneurial activity.

In the research of Tkachev and Kolvereid's (1999), the respondent's preference to become an entrepreneur calculates entrepreneurial intentions rather than something else. Several studies show that the term entrepreneurial intention and self-employment are used interchangeably the same concept ([Wang & Wong, 2004](#)).

[Suliswiyadi, Kurnia, & Nugroho \(2020\)](#) financial risk tolerance is significantly related to the intention to become an entrepreneur. FRT is significantly related to the entrepreneurial intention of [Karhunen and Ledyeva \(2010\)](#). The term entrepreneurial personality is historically linked with risk-taking propensity ([Ferreira et al., 2012](#); Brockhaus, 1980; [Baron, 1998](#); [Van der Kuip & Verheul, 2003](#)). Studies like ([Stewart and Roth, 2001](#); Zhao, Seibert, & Lumpkin, 2010) conclude that Entrepreneurial intention has a positive relationship with risk-taking propensity.

According to [Estelami \(2020\)](#), a study shows that financial risk tolerance and financial literacy significantly affect entrepreneurial intention. Furthermore, entrepreneurial performance is not significantly linked to Zhao et al., (2010).

In other research, Risk-taking propensity has a great consequence on entrepreneurial intention (Zhao et al., 2010). Similarly, [Mathieu and St-Jean, \(2013\)](#) supported the relationship, entrepreneurial intention to run a business, the risk-taking propensity & self-efficacy is a good indicator. The chance of success of the entrepreneurial activity is related to risk-taking propensity [Van der Kuip & Verheul, \(2003\)](#).

[Ilhan Ertuna and Gurel \(2011\)](#) identify that there is a significant positive association among entrepreneurial education at the participation in the

university, increase risk-taking propensity, and EI. According to ([Krueger, Reilly, & Carsrud, 2000](#); Zhao et al., 2010) per the previous discussion suggests that risk-taking propensity is significant in temperament in the initial stage of entrepreneurship.

Furthermore, the researcher elaborated that there is a significant positive link between the EI and entrepreneurial self-efficacy ([Zhao, Seibert, & Hills 2005](#); [Krueger et al., 2000](#); [Wilson, Kickul, & Marlino, 2007](#)), we assume that person with a greater entrepreneurial intention will have greater self-efficacy. Similarly, research shows that the personal decision to become an entrepreneur is affected by a perception of capability e.g. [Zhao et al., \(2005\)](#) explore that persons who want to become entrepreneur depends on the highest entrepreneurial self-efficacy and believe that they are a success and competent with their life.

The research shows that the investigation of the university of southern queen land 789 students showed that Financial literacy is higher than those who hand high personal income and working experiences [Beal & Delpachitra, \(2003\)](#). There is a significant positive association of new business entry with income level [Klapper and Love, \(2010\)](#).

According to [Xu and Zia \(2012\)](#), people in a lower-income country perform worse than higher-income countries in financial literacy. The income level is significantly positively correlated with the test. The variation in the salary scale sample is different in university employees [Agnew and Szykman, \(2005\)](#). [Cude et al. \(2006\)](#) show that the financial behavior on money management is affected by families, the student of the University of Georgia, and the University of Louisiana from a survey of 2,382 students. Moreover, the study shows the relationship between family

income and entrepreneurial intention  
Shujahat and. Wang (2012).

**Table 1.** Literature Summary

S.no	Author/Years	Keywords	Country/ Sample	Findings
1	Orbánová and Velichová,(2013)	The entrepreneurial intention, financial literacy, youth, business environment	Russia	Findings demonstrate that the financial literacy of the students has a significant relationship with entrepreneurial intention. The undergraduate student having a different entrepreneurial intention
	Amir Ali Shusha (2017)	Moderate role of financial literacy, financial risk tolerance, demographic factors	Pakistan	The study engaged the moderate role of financial literacy in the relations among individuals and financial risk tolerance. Furthermore, the study reveals that financial literacy has a significant relationship with financial risk tolerance. It was found that statistically, financial literacy moderates the relationship between financial risk tolerance.
3	<a href="#">Aizen, (1991)</a>	Organizational behavior and human decision	United States	Research shows that behavior relates to entrepreneurial intention .the term entrepreneurial intention is the effect of the individual to behave in a particular manner.
4	<a href="#">Yang, (2013)</a>	Theory of planned behavior, China, Entrepreneurial intention	China	The finding of the recent study shows that's financial literacy and gender have a statistical relationship between entrepreneurial intention
5	Fitz Simmons and Douglas, (2005)	The entrepreneurial intention, behavior, and attitude	Australia, N= 414	The finding of the investigation shows that entrepreneurial behaviors increased the entrepreneurial intention; also, personal who have entrepreneurial

6	Hejazinia, (2015)	Entrepreneurship Education, IT-based, Entrepreneurial intention.	Iran	<p>behaviour has a significant effect on the entrepreneurial intention. The current investigation finds out that financial literacy has insignificant relationships with entrepreneurial intention.</p> <p>The theory used in this work is the theory of planned behavior.</p> <p>However, the investigation finds out that those who have financial literacy have significant relationships with entrepreneurial intention than those who have not financial literacy. Besides that, financial literacy contribution major inspiration on the positive effect on entrepreneurial intention.</p>
7	Awogbenle and Iwuamadi, (2010)	Entrepreneurship, unemployment, youth.	Nigeria	<p>Findings demonstrate that youth entrepreneurial intention creates the potential entrepreneur, which creates employment and jobs opportunity.</p> <p>Furthermore, entrepreneurial intention decreases unemployment by creating jobs opportunity for young people.</p> <p>Financial literacy has a significant role in entrepreneurship and helps in livelihood and economic independence.</p>
8	Bayrakdaroğlu, Funda; Bayrakdaroğlu (2017)	Financial Literacy, Digital Literacy, Internet Entrepreneurship, Internet Entrepreneurship Intention	Russia	<p>The finding of the recent study suggests that financial literacy have a significant role in the entrepreneurial intention, and also financial knowledge student have better in knowing the investment</p>

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				<p>projects which create the entrepreneurial intention.</p> <p>Internet entrepreneurship provides the necessary information to the entrepreneur.</p>
9	Mullen, (2010)	Education, business student, entrepreneurial intention	Turkey, N=207	<p>The proposed investigation finds out that financial literacy has statistically related to entrepreneurial intention.</p> <p>Those who have low financial literacy have less trend toward entrepreneurial intention. While those who have financial literacy increased the entrepreneurial intention.</p> <p>The family income has a significant effect on entrepreneurial intention and starting their business.</p>
10	<a href="#">Wang &amp; Wong, (2004)</a>	Entrepreneurship University education Singapore	Singapore	<p>The current work shows that financial education is significantly related to entrepreneurial intention.</p> <p>Family income has a significant statistical role in entrepreneurial intention.</p> <p>Financial education and family income have positively affect jobs opportunity</p>
11	<a href="#">Karhunen and Ledyeva, (2010)</a>	Risk tolerance, entrepreneurial intention. University student	Russian, N= 200	<p>Financial risk tolerance has statistically significant related to entrepreneurial intention. The investigators suggest that gender also affect entrepreneurial intention among Russian student, Risk tolerance increased entrepreneurial intention, and those who</p>

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12	Li Liaoa, Jing Jian Xiaob, Weiqiang Zhan, Congyi (2017)	Risky asset, Financial literacy	china	have more FRT have high EI. The investigators suggest that Both estimates on basic and advanced financial literacy are significantly positive.
13	Ilhan Ertuna and Gurel, (2011)	Education, entrepreneurship, student	Turkey	The finding demonstrates that higher education students are contributing more toward entrepreneurial intention. The regression analysis of regression reveals that FL has significantly related to EI.
14	Turker & Selcuk, (2009)	Entrepreneurialism, Students, Universities	Turkey N= 300	The finding of the investigation digs out that education affects entrepreneurial intention in university students.
15	Baručić & Umihanić (2016)	Entrepreneurship education, Entrepreneurial opportunity.	Russia N=50	The finding of the current investigation presents that's entrepreneurial intention is significantly related to entrepreneurial education.
16	Maes (2014)	Theory of planned behavior, gender, Entrepreneurial intention	USA	The investigation shows that gender affects entrepreneurial intention. The female is less attracted toward the entrepreneurial intention. The business student is more instructed in entrepreneurial intention than non-business students.
17	<a href="#">Suliswiyadi, Kurnia, &amp; Nugroho, (2020)</a>	Risk-Taking Behavior, Entrepreneurial Intention,	Malaysia	In the study, the theory of planned behavior is used to study the entrepreneurial intention of students. financial risk tolerance is significantly related to the intention to become an entrepreneur

18	Abad-Segura, & González-Zamar, (2019)	Entrepreneurial intention, financial literacy	Spain	Financial literacy is significantly related to entrepreneurial intention.
19	Nurbaeti, Mulyati, & Sugiharto, (2019)	Entrepreneurial intention, financial literacy, perceived behavior control, theory of planned behaviors	Indonesia	Financial literacy significantly affects entrepreneurial intention, and the study used the theory of planned behavior.
20	Diana j beal and sarath b. Delpachitra. (2003)	Financial risk tolerance, investment, literacy.	Australia, 789	Financial literacy and financial risk tolerance is significantly related to entrepreneurship
21	<a href="#">Brockhaus (. 1980).</a>	Risk-taking propensities, Entrepreneurial intention	USA	The finding shows that Risk-taking propensities are significantly related to Entrepreneurial intention
22	Block, Sandner, and Spiegel (, 2009).	necessity entrepreneurship, creativity, Risk Tolerance	USA	The result shows that the Financial Risk Tolerance is significantly related to the Entrepreneurship
23	Calcagno, Alperovych, & Quas, (2019).	Entrepreneurship, financial literacy,	Oman	The studies show a significant relationship between financial literacy and entrepreneurial intention, and the effect of financial literacy on entrepreneurial intention
24	Crant, (1996)	Personality scale, Entrepreneurial intention	USA, n=90	Financial literacy and gender are positive related to entrepreneurial intentions. Males students tend to be more than female toward the entrepreneurial intention
25	Farashah,(2013)	Entrepreneurship Education, entrepreneurship Perception and intention	Iran, n=601	The finding shows that Financial literacy and self-efficacy are significant predictors of entrepreneurial intentions
26	<a href="#">Estelami (2020).</a>	Gender, Risk preferences, Entrepreneurial Intention, need for cognition	USA, n=668	The study shows the result the Gender and Risk preference affect Entrepreneurial Intentions.
27	Shinnar, Hsu, & Powell (2014)	Self-efficacy, Gender, Education, and		The result of the research shows that Self Efficacy are positive with



28	Tessema Gerba,	Entrepreneurial Intentions Entrepreneurship education, Entrepreneurial intention,	Ethiopia n=56	Entrepreneurial Intentions The finding shows that the student of business management sciences have higher entrepreneurial intention than those who have not taken an entrepreneurship course (Engineering student)
29	Ulysses, Ruby, and Sharon, (2011),	Risk Propensity, Self-efficacy, perception of entrepreneurial intention	USA	The finding shows that Risk Propensity and Self-efficacy are significantly related to entrepreneurial intention.
30	<a href="#">Yang, (2013)</a>	Theory of planned behavior, Entrepreneurial Intention, undergraduates	China	The finding of the research shows that the theory of planned behavior predicted that the perceived behavior and Self-efficacy affect Entrepreneurial Intention.

The literature cited to express the association between Financial Risk tolerance, Family Income in association with demographic and different other variables; however, there is rare work on the association with entrepreneurial intention, and specifically, in the context of district Swabi there is no such study. On the basis of the literature following hypotheses were derived

H1: There is a significant relationship between financial risk tolerance and Entrepreneurial Intention.

H2: There is a significant relationship between family incomes and Entrepreneurial Intention.

### Research Methodology

The nature of this study is explanatory and co-relational study with a total population of 501 from Universities of Higher Education Sector located in district Swabi, Khyber Pakhtunkhwa, Pakistan, which consists of the University of Swabi having 342 students, Ghulam Ishaq Khan Institute having 130, and Women University having 29 students.

Table 2.

S. No	Universities	Population N	Sample Size n
1	The University of Swabi	342	250
2	The Ghulam Ishaq Khan Institute Swabi	130	75
3	The women university Swabi	29	25

Source: Author Compilation

### Research Model

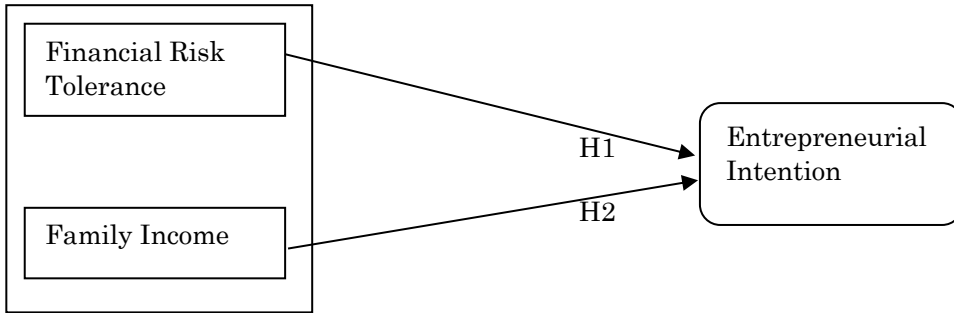


Figure 1:

### Econometric Model

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \mu \quad (2)$$

Y = Entrepreneurial intention.  
 $\beta_0$  = Constant or intercept.  
 $\beta_i$  = Slope of regression.

$X_1$  = Financial Risk tolerance.  
 $X_2$  = Family income.

$\mu$  = errors term.

### Research Instrument and Reliability

The first section contained 15 questions on entrepreneurial intention, family income,

and information on the demographic variables of the respondent, the questionnaire related to, Entrepreneurial intention and family income scales are adopted from (Hyder, Asma, et al., 2011), and for reliability, the Cronbach alpha for entrepreneurial intention and income is 0.85 which is good. Those questions were further modified according to the need of the study.

The third section contains 13 questions of the FRT scale are adopted from Grable and Lytton (1999), and for reliability, the Cronbach alpha for FRT is 0.73, which is acceptable.

Table 3. Reliability test

Number	Variables	Number of items	Cronbach alpha
1	Entrepreneurs intention	15	0.85
2	Financial risk tolerance	13	0.73

Source: Author Compilation

### Descriptive Statistics

Table 3 shows N as the number of respondents, which are 330 in this case. The table shows the means value of entrepreneurial intention is 3.98 are of moderate value, and the highest is 5

values. The means value of Family income is 2.3, which is a moderate value, and the highest is 4 values. The means value of financial risk tolerance is 2.3, which is a moderate value, and the highest is 4 values.

Table 4. Descriptive Statistics

	N	Std. Deviation	Mean
Entrepreneurial intention	330	.811	3.98

Family income	330	.47078	2.3091
Financial risk Tolerance	330	.682	3.29

Source: Author Compilation

**Table 5. Correlations**

	N	Entrepreneurial Intention	Family Income	Financial Risk Tolerance
Entrepreneurial Intention	330	1.000		
Family Income	330	.467**	1.000	
Financial Risk Tolerance	330	.798**	.342**	1.000

Source: Author Compilation \* Correlation is significant at 0.01 level \*\* Correlation is significant at 0.01 level

Tables 4 shows a positive relationship between entrepreneurial intention and FRT approving hypothesis H1 with a strong correlation given by a correlation coefficient value is 0.798. However,

The relationship between

entrepreneurial intention and family income is positive. Hence the hypothesis H2 is proved and accepted with the correlation coefficient value is .467 showing the moderate relationship between entrepreneurial intention and family income.

**Table 6. Model Summary**

Model	Unstandardized Coefficients		t	Sig.	F	R square
	B	Std. Error				
Constant	.417	0.189	2.196	.000		
FI	.377	.058	6.540	.000	214.423	.580
FRT	.862	.040	21.535	.000		

Source: Author Compilation

The table shows the value of F (230.423). The value of F shows that the model is fit and the value of p (0.000), hence meet the assumption of regression for model fitness. The R square value is .580 means that a 58 % change in the dependent variable is explained by independent variables like financial risk tolerance and Family Income. The table shows that the B-value of financial risk tolerance is (.862) and 0.377 for Family Income which means that unit increase in FRT and FI will bring 0.862 and 0.377 percent change in entrepreneurial intentions, respectively.

### Conclusion Recommendations and Implications

The study concluded a positive relationship between financial risk tolerance (FRT) and entrepreneurial intention (EI), supporting [Karhunen and Ledyeva \(2010\)](#), and it can be concluded to look for the FRT profile of the individuals and are trained and made aware of reducing their level of anxiety for EI however there is a positive relationship between family income and entrepreneurial intention confirming (Wang, 2012). In short, it is concluded that there is a highly significant effect of FRT and FI on developing entrepreneurial

intention.

Policymakers should focus on financial risk tolerance and family income, increasing entrepreneurial intention toward entrepreneurship in the educational sector of the District Swabi.

Moreover, a focus on FRT, FI as determinants of EI will lead to developing EI and also implied for the initiation of entrepreneurship among the graduates of Universities of District Swabi. The study is highlighting the most needed segment of valuing the culture of entrepreneurship rather than employment seeking attitude among the graduates.

### **Limitations Suggestions for Future Research**

Every investigation has a limitation, so the current study is not exempted from limitation as well. Due to a shortage of time, the researcher used a cross-sectional method. This study was carried out in both government, and private higher education sectors in swabi area only, and the result, therefore, cannot be generalized on a broad level. The sample of this research study includes most of the male participants, which shows that it is limited to male students mostly and

therefore, there is a need to include the majority of female students in the higher education sector. Another limitation is that the data collection instrument used in this study is a questionnaire, while other methods could have been used to provide a better insight like interviews or focus groups. This research finds out the effect of financial determinants like financial literacy, financial risk tolerance and family income on the entrepreneurial intention of student in the organization. Due to limited financial resources, the researcher is unable to study more paper which is important and related to the study.

This investigation focuses on analyzing the effect of financial determinants such as financial literacy, financial risk tolerance, family income on entrepreneurial intention. Future researchers can use other factors such as family wealth. The data collection instrument is a questionnaire which is in English language; future researchers should try to design a questionnaire in the Urdu language, which is the mother tongue of Pakistan, for better understanding and thus resulting in more reliable data.

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