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ARTICLES

Socioemotional wealth and probability of financial distress
Pietro Gottardo and Anna Maria Moisello

Entrepreneurial intention among undergraduate agricultural students in Ethiopia: The case of Jimma University
Sultan Jemal
Socioemotional wealth and probability of financial distress

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Received 12 May, 2017; Accepted 21 June, 2017

This study analyzes a firm's characteristics which affect the probability of financial distress. It takes into account accounting variables, ownership and management characteristics. In particular, it studies the effect of the ultimate controlling owner nature; that is, family or non-family control, on a firm's likelihood to run into financial distress. This research focuses on a large sample of Italian private family and non-family firms for the period 2004 to 2013, and drawing on the socioemotional wealth framework, studies the effect of family control and influence by the means of different forms of family involvement into the business. It takes into account family indirect influence by ownership and direct influence by the means of a family chief executive officer (CEO) or by the presence of family members on the board. The study results point out that family businesses are less likely to incur in financial distress than non-family firms. Moreover, a family CEO reduces a firm's likelihood of financial distress. On the other hand, the presence of multiple family members on board increases this probability, but the effect is lower in the first generational stage.

Key words: Financial distress, family firms, family control, family influence, socioemotional wealth.

INTRODUCTION

A firm's financial distress prediction is a relevant issue in accounting and financial studies. Since the 1960s, literature has engaged in the construction of indicators whose score may predict a firm's financial distress (Beaver, 1966; Altman, 1968).

Later, these studies were extended in order to individuate valuable indicators for the prediction of non-listed firms' financial distress (Altman, 2000). This field of study continued to develop, resulting in the production of various models for the valuation of a firm's bankruptcy risk (Altman et al., 1977), its probabilistic prediction (Ohlson, 1980; Zavgren, 1985), and also providing the prediction of different corporate financial status, not only ultimate failure, in order to approximate the continuum of a firm's financial health (Lau, 1987).

More recent studies have addressed this issue by using data mining methods (Sun and Li, 2008) applied not only to financial ratios but also to information related to board ownership and insider holding (Chen and Du, 2009). These models are mainly based on a dichotomous classification of bankrupt versus non-bankrupt. By contrast, hazard models consider the samples to be
drawn from the same population, and can take into account the panel property of financial statements and the common influence of temporal and macroeconomic conditions (Nam et al., 2008; Shumway, 2001).

Some studies have focused on board and ownership structure characteristics, pointing out that weak corporate governance renders a firm vulnerable to economic downturns and enhances the probability of falling into financial distress (Lee and Yeh, 2004). Other studies find no significant relation between board and management ownership and the probability of financial distress (Simpson and Gleason, 1999), but highlight that blockholder and outside director ownership lowers this risk (Elloumi and Gueyie, 2001). Therefore, we know that ownership structure characteristics may affect a firm’s likelihood to suffer financial distress.

The effect of family control and influence on business risk of falling into severe financial difficulties is still a relatively unexplored field. Numerous family business studies suggest that family control and influence is positively related to a firm’s performance (Anderson and Reeb, 2003a; Barontini and Caprio, 2006; Villalonga and Amit, 2006) but some authors highlight the family influence drawbacks (Schulze et al., 2003).

Moreover, empirical literature shows that family businesses use more leverage, both in private and in listed companies (Anderson and Reeb, 2003b; King and Santor, 2008; Setia-Atmaja et al., 2009; Croci et al., 2011). These studies suggest that the family nature of a business could have an effect on its financial distress risk, however research on this issue is still very limited.

Wilson et al. (2013) addressed this issue for the first time, finding that when a firm is owned by a family, and has at least one family-director, it has a lower probability to run into bankruptcy. They do not control if the effect of board characteristics changes according to a family firm’s generational stage. This is a relevant issue because family firms are not an homogeneous group and a firm’s generational stage is a major source of heterogeneity for family businesses (Cruz and Nordqvist, 2012; Le Breton-Miller and Miller, 2013; Arrondo-García et al., 2016).

To the best of the study knowledge, research has not yet addressed this issue but it is of particular interest given the strong presence and the relevant role played by family businesses around the world (Porta et al., 1999; Villalonga and Amit, 2006). In continental Western Europe, the percentage of family businesses is more than 60% (Faccio and Lang, 2002).

We address this gap in literature by studying a sample of 1,137 Italian private firms for the period 2004 to 2013. Drawing on the socioemotional wealth (SEW) concept - which refers to the non-financial utilities that family owners derive from the non-economic aspects of the business (Gomez-Mejia et al., 2007) - we analyze how family ownership control and different forms of family involvement affect a company’s probability of financial distress in different generational stages.

The study analyses combine accounting variables and information related to ownership, management and board composition. Overall, the study findings suggest that family firms are less likely to run into financial distress than non-family businesses. Family control and influence exerted through a family CEO significantly reduces a firm’s likelihood of financial distress, but this probability increases in the presence of multiple family members on the board in later generational stages.

The study contributes to literature on financial distress probability, underlining the relevance of the ultimate nature of the controlling owner. It adds to family firm literature by providing evidence on the determinants of the financial distress probability of family businesses. It also addresses scholars’ calls to pay greater attention to the heterogeneity of family firms (Salvato and Moores, 2010) by analyzing the effect of a firm’s generational stage.

Theoretical framework and hypothesis development

Relatively recent studies explain family firms’ peculiarities, referring to the concept of socioemotional wealth which has been defined as “the non-financial aspects of the firm that meet the family affective needs” (Gomez-Mejia et al., 2007), that is, the part of a business’ value that the owner perceives and that cannot be explained by financial motivations (Zellweger and Astrachan, 2008).

This non-financial value derives from several dimensions which characterize the SEW: family control and influence, the sense of identification of family members with the business, binding social ties, emotional attachment, and the renewal of family bonds to the firm through dynastic succession (Berrone et al., 2012).

Families are particularly concerned with retaining control of the firm they own as it is the means to exert their influence on the business and derive a stock of affect-related values. They feel a strong sense of identification with their firm; a firm is an extension of the family and they protect the company’s reputation because it is related to that of the family itself (Berrone et al., 2012; Deephouse and Jaskiewicz, 2013).

Family firms’ employees who are not family members, with the passage of time, tend to develop a sense of identification and belonging to this extended family. Strong ties characterize not only the relationship between the owning family and its employees, but also ones with customers, suppliers and the local community (Berrone et al., 2012).

Therefore, the business is also the means to develop social bonds that increase the family’s image and influence on the community to which it belongs. The network of ties that the company develops with its stakeholders provides emotional value to the family members as it satisfies their needs in terms of affect and
belonging, and fosters their emotional attachment to the business (Astrachan and Jaskiewicz, 2008).

The preservation of the family dynasty in the business is the means to renew the family bonds and transfer the family values to the future generations. The SEW is the “affective endowment” (Cruz et al., 2012), the emotional value (Zellweger and Astrachan, 2008) produced by the interaction between the family and the business and between family members which operate in the business. Therefore, the preservation of the socioemotional wealth, and its dimensions is the main concern for family firms and characterizes their behavior (Gomez-Mejia et al., 2007).

Family control and influence on the firm is a source of emotional value for family members because of their strong linkage and endowment in the business (Gomez-Mejia et al., 2007). As a matter of fact, numerous studies point out that family firms present a higher leverage (Anderson and Reeb, 2003; King and Santor, 2008; Setia-Atmaja et al., 2009; Croci et al., 2011) because families use debt financing in order to preserve their control and influence on the business (Gottardo and Moisello, 2014). The likelihood of financial distress enhances a family’s risk of losing the business and giving up its emotional return.

Gomez-Mejia et al. (2007) studied a large sample of Spanish family-owned olive oil mills who faced the choice of joining a cooperative or remaining independent. The former option implied losing family control and lowering business risk, the latter preserving the family’s socioemotional wealth and enhancing performance hazard. The empirical findings led Gomez-Mejia et al. (2007) to conclude that family firms may be “risk willing and risk averse at the same time”.

The results prove that family firms may put at risk financial performance in order to preserve family control and influence, but when performance is below set targets, they do not assume venturing risk, in order to enhance performance, because bankruptcy would cause the loss of the family’s financial and emotional wealth.

Families see the business, and the related affective stocks, as an asset that must be transmitted to their heirs (Casson, 1999), so they prefer long-term investments, characterized by lower levels of risk (Gallo and Vilaseca, 1996; Croci et al., 2011), and they avoid risky investment strategies as they pursue business stability (Harris et al., 1994).

Families experience a strong sense of identification with the business and therefore, are concerned with their firm’s reputation (Zellweger et al., 2013), they are worried that it may harm their image and reflect on them as individuals (Dyer and Whetten, 2006). Therefore, a firm’s financial distress and the risk of bankruptcy would damage the owning family name and family members.

Financial distress would also put at risk the family ties that hold a firm hold together with vendors, suppliers, employees, and also with the community of which the firm is part as a company might not be able to guarantee employment and other benefits to the local community. Family members derive relevant emotional and reputational returns from these ties (Berrone et al., 2012) and act in order to preserve and strengthen them (Cennamo et al., 2012).

Family businesses, unlike non-family firms, are thus motivated not only by financial, but also by strong non-financial goals to act in order to avoid financial distress. The presence of a family CEO has an amplifier effect because the family exerts directly its influence on the business.

In this case, the CEO’s professional life and personal wealth are closely linked, and the concerns for the consequences of financial distress are higher. The sense of identification between the family and the business increases because the individual who represents the company in dealings with third parties is a member of the family, therefore the reputation of the firm and family image are more closely tied. Some empirical studies on listed firms (Anderson and Reeb, 2003; Chu, 2011; Maury, 2006) suggest that a family CEO enhances a firm’s performance.

The effect may differ according to a firm’s generational stage as this has a moderating effect on the relevance of the SEW (Gomez-Mejia et al., 2011). In the first generational stage, family firms are normally founder owned and run. In this stage, the affective endowment in the business is very high. There is a strong emotional attachment between the CEO and the other family members, which enables the former to resolve possible conflicts between the latter and to resist the family’s pressures that can harm a business’ financial health (Le Breton-Miller and Miller, 2013). In the first generational stage, the family CEO has a clear motivation to manage the business in order to pass on a healthy firm to later generations, thus ensuring the family dynasty (Berrone et al., 2012). Therefore, in the light of the aforementioned studies, our first hypothesis is the following:

H1: The effect of a family CEO on the probability of financial distress is different depending on the generational stage.

Previous research has highlighted that family boards are more stable and therefore the firms have a lower probability of bankruptcy (Wilson et al., 2013).

Empirical literature suggests that weak corporate governance enhances the probability of falling into financial distress (Lee and Yeh, 2004); board composition and structure affects a firm’s probability of failure (Daily and Dalton, 1994). Moreover, board ownership reduces the probability of bankruptcy for financially distressed firms because of the implicit, or explicit, incentives it provides (Fich and Slezak, 2008).

Board composition, in terms of the number of family members, power and quality of interactions, affects the
“embeddedness” of the business within the family (Le Breton–Miller et al., 2011). In the first generational stage, family members sitting on boards tend to be less conflictual as they have strict kinship ties (siblings) and the business is still under the influence of the founder.

In subsequent generational stages, the direct influence of the founder and his/her moderating effect on conflicts may be absent. With the passing of generations the kinship ties between the board’s family members are weaker, family branches’ interests become prevailing motivations, the conflicts between family members are stronger and identification with the firm lessens (Le Breton-Miller et al., 2011). Therefore, the beneficial effect of a family’s affective endowment on the business falls. Based on the aforementioned research, the study second hypothesis is:

H2: The effect of family board members on the probability of financial distress is different depending on the generational stage

METHODOLOGY

We searched for Italian firms on the Aida Database (Italian Digital Database of Companies), the Italian provider of the Bureau van Dijk European Database, during the period 2004 to 2013 with at least 4 years of accounting data and yearly sales of over €40 million in at least one year. We chose this threshold because smaller private companies often have no management data available over the years. We dropped from the sample all firms that merged during the period, since it is not clear, without carrying out detailed checks, to uncover the reasons behind the mergers. Financial firms are also excluded. The final sample contained 999 healthy firms, as of 2013, and 138 firms that underwent some form of financial distress in the period, for 5,949 firm-year observations.

The independent variables are represented by accounting variables and information related to ownership, management and board composition. We chose our accounting variables basing on the relevance pointed out by previous studies on financial distress. The exclusion of these variables from the analysis could potentially generate an omitted-variable bias. They are size (Altman, 1968), leverage (Lang and Stulz, 1992), cash flow (Casey and Bartczak, 1985; Aziz et al., 1988), liquidity (Beaver, 1966; Altman, 1968; Daily and Dalton, 1994), interest coverage ratio (Asquith et al., 1994), duration of receivables, stock turnover and fixed assets coverage (Chen, 2011) (Table 1).

Some dummies identify whether the firm is a family company (Family), the presence of a family CEO (Fceo), the weight of family members on the board (Fboard), and whether the firm is a holding company (Holding). The definition of family firm is based on one where a family is the ultimate owner, assuming a minimum control threshold of 50%. We also use as independent variables two possible SEW moderators based on a firm’s generational stage (Gomez-Mejia et al., 2011), defining a dummy variable to distinguish firms less than twenty-five years old (first generation businesses), from the other firms and then constructing two interaction variables with Fceo and Fboard (Table 2). As Table 2 points out family firms represent 58 per cent of the sample firms, while 48 per cent are firms managed by a family CEO.

We use a discrete hazard model to account for time-varying covariates using a logistic form, under the assumption that the probability of financial distress is sufficiently small (Nam et al., 2008; Shumway, 2001). Shumway (2001) defines a multi-period logit model as “a logit model that is estimated with data on each firm in each year of its existence as if each firm-year were an independent observation”. He shows that a multi-period logit model is equivalent to a discrete-time hazard model:

$$P(y_{it}|x_{it}) = h(t|x_{it}) = \frac{1}{1 + \exp\{-x_{it}\beta\}}$$

where x is the vector of independent variables. This represents a duration independent model with a time invariant baseline hazard rate and is analogous to estimate an exponential hazard model in which the probability of distress does not depend on a firm’s age. Shumway (2001) points out that using all the stacked data instead of a single period observation will improve the consistency and efficiency of the estimates. The main advantage of this methodology is a better use of the data, as it accounts for all the information related to the time variability in the explanatory variables, information that is lost in a cross-sectional design.

One disadvantage in using non-linear models, like logit and probit, is that they require a careful analysis of the interaction effects when interactions between variables are included in the model as in this case the interpretation of the interaction terms is not straightforward.

RESULTS AND DISCUSSION

We estimate three models, assuming in all cases that the covariates change over time, to exploit the panel structure of the study database.

In the first model, the explanatory variables include the accounting variables and the dummy variables related

Table 1. Accounting variables: construction and expected sign.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Construction</th>
<th>Expected sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>In(Assets)</td>
<td>-</td>
</tr>
<tr>
<td>Leverage</td>
<td>Debt/Equity</td>
<td>+</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>Cash Flow/Assets</td>
<td>-</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Current Assets/Current Liabilities</td>
<td>-</td>
</tr>
<tr>
<td>Interest coverage</td>
<td>EBIT/Interest Expenses</td>
<td>-</td>
</tr>
<tr>
<td>Receivables duration</td>
<td>Receivables/Sales*365</td>
<td>+</td>
</tr>
<tr>
<td>Stock turnover</td>
<td>Inventories/Sales*365</td>
<td>+</td>
</tr>
<tr>
<td>Fixed Assets Coverage</td>
<td>Fixed Assets/Equity</td>
<td>+</td>
</tr>
</tbody>
</table>
Hey indicate that a single model collinearity problem exists to a sizable degree of collinearity and the weight of family members on the board, that is, the variables that proxy for the presence of a family CEO (FirstGen*Fceo) and the weight of family members on the board (FirstGen*Fboard). The two interaction variables have a sizable degree of collinearity and, to avoid any multicollinearity problems, we do not include both variables in a single model (Table 3).

Table 3. Hazard model with time varying covariates.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>χ²</td>
<td>p-value</td>
<td></td>
<td>Coef.</td>
<td>χ²</td>
</tr>
<tr>
<td>Intercept</td>
<td>15.450</td>
<td>215.31</td>
<td>0.0001</td>
<td></td>
<td>15.493</td>
<td>212.01</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>-1.361</td>
<td>235.15</td>
<td>0.0001</td>
<td></td>
<td>-1.364</td>
<td>231.75</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.085</td>
<td>7.1</td>
<td>0.0077</td>
<td></td>
<td>0.082</td>
<td>6.39</td>
</tr>
<tr>
<td>Interest coverage</td>
<td>-0.021</td>
<td>12.88</td>
<td>0.0003</td>
<td></td>
<td>-0.021</td>
<td>13.33</td>
</tr>
<tr>
<td>Cash-flow</td>
<td>-10.375</td>
<td>37.84</td>
<td>0.0001</td>
<td></td>
<td>-10.407</td>
<td>37.67</td>
</tr>
<tr>
<td>Receivables duration</td>
<td>0.008</td>
<td>29.99</td>
<td>0.0001</td>
<td></td>
<td>0.008</td>
<td>29.78</td>
</tr>
<tr>
<td>Stock turnover</td>
<td>0.003</td>
<td>4.59</td>
<td>0.0321</td>
<td></td>
<td>0.003</td>
<td>4.71</td>
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<tr>
<td>Current ratio</td>
<td>-0.489</td>
<td>8.49</td>
<td>0.0036</td>
<td></td>
<td>-0.490</td>
<td>8.46</td>
</tr>
<tr>
<td>Fixed Assets coverage</td>
<td>-0.002</td>
<td>0.04</td>
<td>0.8388</td>
<td></td>
<td>-0.002</td>
<td>0.03</td>
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<tr>
<td>Holding</td>
<td>-1.302</td>
<td>39.91</td>
<td>0.0001</td>
<td></td>
<td>-1.376</td>
<td>41.89</td>
</tr>
<tr>
<td>Family</td>
<td>-0.737</td>
<td>14.37</td>
<td>0.0002</td>
<td></td>
<td>-0.738</td>
<td>14.42</td>
</tr>
<tr>
<td>Fceo</td>
<td>-0.275</td>
<td>1.38</td>
<td>0.2396</td>
<td></td>
<td>-0.273</td>
<td>1.37</td>
</tr>
<tr>
<td>Fboard</td>
<td>2.428</td>
<td>61.9</td>
<td>0.0001</td>
<td></td>
<td>2.691</td>
<td>59.58</td>
</tr>
<tr>
<td><strong>Interactions variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FirstGen*Fceo</td>
<td></td>
<td></td>
<td>-0.458</td>
<td>2.79</td>
<td>0.0950</td>
<td></td>
</tr>
<tr>
<td>FirstGen*Fboard</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Log-Likelihood</td>
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<td></td>
<td>-525.26</td>
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<td>-523.85</td>
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<td>Wald-test</td>
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<td></td>
<td>392.15</td>
<td>0.0001</td>
<td></td>
<td>390.10</td>
</tr>
<tr>
<td>N=1137-obs.=5949</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 reports three different hazard model estimates. Consistently with previous research, they indicate that larger firms and higher liquidity, interest-coverage and cash flow ratios reduce the likelihood of distress. Larger firms can rely on significant capital requirements barriers (Hall and Weiss, 1967) therefore size has a lowering effect on a firm’s financial distress probability.

Liquidity, as pointed out by empirical literature (Beaver, 1966; Altman, 1968; Daily and Dalton, 1994) decreases a company’s likelihood to get into financial troubles as it
generally allows the firm to cope with short-term commitments, but the cash flow effect is stronger as it helps the company to cope with adverse changes in its operating conditions (Casey and Bartczak, 1985).

Not surprisingly interest coverage has a significant lowering effect on the probability of financial distress as literature indicates that profitability is a major source of financial health (Beaver, 1966; Altman, 1968; Daily and Dalton, 1994). The study results point out that holding companies have a lower probability of financial distress as these firms can rely on the availability of internal capital markets and on a relatively cheaper cost of funding (Meyer and Kuh, 1957).

Family firms are less likely to fall into financial distress but a higher weight of the family on the board increases the distress probability. These findings confirm previous research results (Wilson et al., 2013) suggesting that, ultimately, family businesses present a lower probability of suffering financial distress than non-family firms. Family firms’ behavior is guided not only by financial motivations but is strongly affected by the need to preserve the emotional values that owning family members derive from the business.

Family businesses are managed with a long-term survival view in order to maintain the emotional returns that a family perceives, exerts its control and influence on the business. When a family exerts its influence directly, by the means of a family CEO and not by appointing a professional CEO, the affective endowment is higher and, in the first generational stage, significantly reduces the likelihood of financial distress.

In this generational stage, the family CEO normally coincides with the business founder who is highly motivated to transfer family values, by the means of business succession, to future generations. Moreover, the presence of a family CEO means that the company is perceived as the image of the family in the community where it operates and the reputational concerns of suffering financial distress or ultimate failure are particularly high. This would also mean losing the social relationships that the family has built with the community, with suppliers and employees by its involvement in the business. A family’s sense of identification, endowment in the business and the relevance of SEW preservation, declines through successive generations, leaving room for financial goals that result in different strategic behaviors (Gomez-Mejia et al., 2011; Le Breton-Miller and Miller, 2013).

In fact, there is evidence that firms in different generational stages faced the 2008 global crisis with a different attitude towards financial risk (Arrondo-Garcia et al., 2016). Consistent with this trend, the study points out that a heavy presence of family members on the board results in different effects on the probability of financial distress depending on a firm’s generational stage.

In the first stage, it has a moderating effect on this probability. In this generational stage, when numerous family members sit on the board, the links between the founding family and the business are more intense in terms of image, family influence, and family members’ personal investment in the company.

Consequently, the concerns for a firm’s financial distress and reputation are higher. Conflicts between family members, which in this stage are normally siblings, may occur because the goals of family members as individuals might not be aligned with those of the family unit.

However, the probable presence of the founder can smooth out conflicts and pressure from individual members may benefit the company’s well-being; in the firm’s subsequent generational stages, conflicts related to rivalry among siblings may occur and hamper other initiatives.

Moreover, when a company is in later generational stages, the family members sitting on the board belong to different nuclear families and family members’ sense of belonging and identification with the firm falls. They behave in order to fulfill the particular needs of their nuclear family, thus harming the financial health of the business.

Conclusion

This study addresses the issue of financial distress probability in family owned businesses, analyzing a sample of 1,137 Italian private firms for the period 2004 to 2013. In so doing, it points out family firms’ heterogeneity, taking into account different forms of family influence and highlighting its different effect in the generational stages.

Overall, the study results suggest that the direct influence of the family, by the means of a family CEO, reduces a firm’s probability of financial distress. A large family presence on the board has a detrimental effect on a business’ likelihood of survival but the SEW moderates this effect in the first generational stage. This study has practical implications for family firms because it highlights the determinants of their probability of suffering financial distress taking into account both financial and qualitative characteristics.

Nevertheless, it has some limitations. The first is that we focus only on the family control and influence dimension of SEW when it would be of interest to broaden research into other dimensions. Further research could analyze the emotional links between family members on the board in different generational stages in order to analyze how they affect risk attitude and management and, in doing so, a firm’s probability of financial distress. The second limitation is that this study is single-country focused, therefore it would be of interest to extend the study to a cross-national sample in order to highlight the effect of institutional, normative and cultural aspects.
CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES


Entrepreneurial intention among undergraduate agricultural students in Ethiopia: The case of Jimma University

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Received 25 April, 2017; Accepted 16 May, 2017

The basic objective of this study was to find out the entrepreneurial intention of undergraduate agricultural students in Ethiopia taking Jimma University college of Agriculture and Veterinary Medicine as a study area. Descriptive and inferential design was employed in the study. The stratified sampling techniques were applied to select respondents and in order to collect data, pretest self-administered questionnaires were distributed to 212 participants. Out of the total participants’ from ten (10) different departments all 88.2% (n=187) of the students’ returned the entrepreneurial intention questionnaire. Both qualitative and quantitative data analysis techniques mainly descriptive analysis using computed mean used while for inferential statistics Spearman correlation were employed. The study found that the entrepreneurial intention of under graduating agricultural students is high in the sense that they prefer to become self-employed and had strong desire and were certain to pursue entrepreneurial career. Related to the attitude to risk, majority of respondents were ready to assume risk while pursuing entrepreneurial career. However, the study result showed that availability of infrastructure, premises and utility was not satisfactorily available to be self-employed. In addition according to the finding, it was somewhat difficult to obtain startup capital. The major causes for the shortage of startup capital were requirement of collateral followed by high interest rate. Majority of respondents somewhat had positive attitudes on simplicity of the required legal procedure to obtain license and on availability of sufficient subsidies for establishing entrepreneurial venture. Students’ attitude towards the support of family and friend was positive, which is good opportunity for the students’ intention to become self-employed. Undergraduate agricultural students living in rural areas have slightly greater intention to become an entrepreneur. Further, Spearman correlation analysis revealed that moderate positive relationship exists between independent variables of desire to start own business, certainty of startup own business, willingness to assume risk and overall entrepreneurial intention whereas the relationship between availability of infrastructure, utility as well as provision of premise and entrepreneurial intention was weakly correlated.

Key words: Entrepreneurial intention, entrepreneurial career, undergraduate agricultural students, Jimma University.

INTRODUCTION

In many countries, entrepreneurship is considered as a key to the ever growing problem of unemployment among graduates from educational institution. However, according to a study this career choice is not privileged by younger people who observe entrepreneurship as their second or last choice of career option due to
In another research, the environmental factors such as social and economic can influence the intention to establish self-owned business (Tim et al., 1999) cited by Golo (2013). There are individual factors, family and friend's support as well as access to credit, political and economic condition of a nation affects an individual’s intentions to become an entrepreneur. A study showed that startup capital are also an obstacle for business startups, especially for young people, as youth have less assets and savings available (Anne, 2014). These factors can affects entrepreneurial intention of person.

A report from World Bank 2016 indicates that 39% of Ethiopian population is below poverty line. When this situation continues in the same way both in urban and rural areas affects the basic needs of people, results low or inadequate level of income as well as creates inequality among citizens and may affect negatively the stability of the country.

In order to address this situation, the country’s main aim of the strategy is promoting the development of entrepreneurship which is one option of the remedy for the problem of unemployment through the establishment of micro and small enterprises as a result the enterprises contribute a lot in poverty reduction.

In Ethiopia, Entrepreneurship is linked with establishment of micro and small enterprises and in order to achieve this objective currently policy on micro and small enterprises in the country was formulated and implemented to promote entrepreneurship development. Micro and small enterprises operation enhance per capital income and output, and is stimulant for enhancing indigenous entrepreneurship, it also creates employment opportunities.

Currently in Ethiopian higher education institutions, entrepreneurship and small business management course has been in the department curriculum which enhance entrepreneurship practice, and the number of graduating students in various discipline increases from time to time where government organization cannot hire all of them. It is not exceptional also in the case of agricultural under graduating students. Under-graduating agricultural students are also studying entrepreneurship and small business management courses that enable individual to think entrepreneurship is one of the employment options.

The students prefer entrepreneurship as their career option when they have entrepreneurial intention. This is due to the fact that an entrepreneurial intention is a primary step to pursue entrepreneurial career. In previous studies, factors which affect entrepreneurial intention has mostly been studied in higher education institute considering different fields together in Ethiopian context and the finding leads to have mixed result of entrepreneurial intention. Little is known in the case of agricultural under graduating students.

Thus, this study aimed to fill this gap so that the finding broaden our insights about entrepreneurial intention of the undergraduate agricultural students in Ethiopia. According to this study, the major objective is to determine their entrepreneurial intention among agricultural under graduating students in a sense to determine the extent of entrepreneurial intention. Moreover, the study also aims to explore differences that exist in entrepreneurial intention with respect to residential status, and to know the relationship between some selected independent variable and entrepreneurial intention of agricultural students.

The general objective of the study was to determine the extent of the entrepreneurial intention of undergraduate agricultural students in Ethiopia. To assess the extent of the entrepreneurial intention of undergraduate final year agricultural students’ of the college of agriculture and veterinary medicine at Jimma University, the study aims to;

1. To determine the perceived barriers to pursue entrepreneurial career related to access of credit;
2. To identify the perceived support of family and friends as well as impact of government policy to pursue entrepreneurial career;
3. To compare entrepreneurial intention of students considering their residential status;
4. To explore the association exist between under graduating students’ entrepreneurial intention and factors that determine their intention.

Scope of the study

The study was undertaken at Jimma University College of Agriculture and Veterinary Medicine, aimed at assessing entrepreneurial intention of final year undergraduate agricultural students as the respondents considering 10 (ten) departments in 2016. The study majorly focused to explore the extent of entrepreneurial intention, and to explore the relationship that exist between entrepreneurial intentions with selected independent variables. It was considered that the attitude towards the entrepreneurial intention of agricultural students will be generally applicable to other Universities in Ethiopia.

LITERATURE REVIEW

An individual will venture out and initiate entrepreneurial

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behaviors when the intention is high with respect to a specific opportunity (Sing, 2014) this indicates that entrepreneurial process starts from development of entrepreneurial intentions. Entrepreneurial process starts from development of intention noted by John et al. (2012).

Entrepreneurial intent refers to the intention of individual to start a new business (Abubakar et al., 2014). This means that entrepreneurial career emerge from personal aspiration of business owners who prefer the autonomy of ownership rather than seeking jobs. Entrepreneurs are individuals who are able to overcome the challenges of growth-oriented ventures while entrepreneurship is a function that creates new jobs, and it also contributes to improving the overall living standards of people and increases the country's competitiveness.

In developing and non-developing countries, entrepreneurship is considered as a means for enhancing economic development through creating jobs. In many universities and colleges, courses on the entrepreneurship and small business management have been planned and implemented and still it is offered in various programs due to the recognition of promoting entrepreneurship development which is more important for the creation of self-employment opportunities and reductions of unemployment as well as contributes a lot in poverty reduction.

Entrepreneurship education improves motivation towards being entrepreneurial by inspiring students' personal attraction towards entrepreneurship and perceived behavioral control (Dugasa, 2012) cited by Mekonnen (2015). Among many models used to assess the entrepreneurial intention is Shapero (1982) which includes namely perceived desirability which refers to the attractiveness to start up a business (that is, lack of personal desire) (Kruger, 1993) cited by Zoi (2013). Perceived feasibility refers to the degree an individual feels that he/she is capable in starting a business (for example, lack of finance), and individual's willingness to act on decisions (that is, to actually start up) (Holden, 2008) cited in Zahria et al. 2013. In another study, the finding of Lee (1996) indicated that experience in the course of business may create higher profit as by cited Buba et al. 2015.

Thus, for the purpose of this study Shapero (1982) cited by Zoi (2013) model was employed, and other independent variables were considered from empirical study explained in the following topics.

Factors that affect entrepreneurial intention

Access to credit

Entrepreneurs can find financial assistance from commercial banks and microfinance institutions to fund their own business. In Ethiopia, micro finance institutions are established to deliver credit and deposit services in urban, semi urban and rural areas where their major objective is to address unemployment problem targeting specific groups particularly the poor.

Teshome (2014) finding revealed that the most barrier factors for students to pursue entrepreneurial career was shortage of initial capital and fear of the risk involved in private higher education students in Ethiopia. However, the study does not include the public university but rather involves various students in the study from various programs.

Firms in Ethiopia are much more likely to be fully credit constrained than firms elsewhere in the world' (World Bank, 2015). On investigating formal and informal institutions’ lending policies and access to credit in Kenya, the availability of credit facilities to small scale enterprises is one of the incentives that have been proposed for stimulating its growth and the realization of its potential contribution to the economy (Rosemary, 2001). Based on the findings, access of credit affects entrepreneurial career of individual.

Family and friend support

Entrepreneurial network relationship such as family relationship and friendship network are important in order to establish entrepreneurial venture.

In the study of factors that has impact on entrepreneurial intention of tertiary students in Ghana, Richard et al. (2015) noted that family and friend support computed mean score was 3.49 and 3.15 respectively this indicates that perceived support were moderate that affects entrepreneurial intention of polytechnic students.

A study carried out on the assessment of entrepreneurial intention of undergraduate students considering business and economics discipline at Addis Ababa University in Ethiopia, indicated that there was significant relationship between the entrepreneurial intention and perceived support of family including friends, and the major barriers to pursue entrepreneurial career was access of finance (Asfaw, 2015).

Some study showed that family with business background in most cases encourage and motivate other family members to be involved in entrepreneurial venture (Stephens et al., 2006) as cited by Galina et al (2015) which means they are considered as a role model by the individual to pursue entrepreneurial career. Seyed et al. (2012) noted that agricultural students have positive attitude toward social support of entrepreneurship.

Government policy and environmental factors

The ease or simplicity of establishing own business in terms of procedures and requirements to obtain license can influence pursuing entrepreneurial career. Walid and Loay (2014) noted that the government role in creating a
perceived climate and favorable policies encourages entrepreneurship to start business.

Thus, this research tried to assess the view of students' on overall legal and regulatory environments, subsidies available for establishing entrepreneurial venture and political condition in Ethiopian context. Availability of premises, infrastructure and utility factors can also affect entrepreneurial career where the founders cannot control them.

Specht (1993) noted that infrastructure development was one factor that influences the startup intention among other identified five main environmental factors cited by Tim et al. (1999). For the purpose of this study, this variable was considered as an overall environmental factor.

**Residential status**

Under the study of comparative analysis of rural and urban start-up entrepreneurs reasons for apparent differences in entrepreneurship rates in rural and urban areas, the study revealed that the rate of rural entrepreneurship is lower than the rate of urban entrepreneurship in the sense that the rate of decisions to start a business is higher in urban areas than rural areas (Joo, 2011). On the other hand, in an investigation of impact of contextual factors on entrepreneurial intention of final year students in India, the result revealed that a respondent from urban area is more likely to opt for entrepreneurial career (Hem, 2013). However, the study did not consider agricultural students where this study tries to identify entrepreneurial intention with respect to residential status.

The relationship between various factors and entrepreneurial intention

By the assessing the attitudes of private higher education students towards entrepreneurship in Ethiopia, Teshome (2014) found that majority of students wanted to work with company and obtain a professional experience immediately after completion of their study believing they will have the business skills and knowledge required for business ownership.

In another study of exploring the extent of entrepreneurial intention among the final year students of open university of Malaysia. Leoong (2008) indicated that students intention to pursue entrepreneurial career is slightly above the neutral value where most of them were from undergraduate program.

The study also found that students were not sure on which career path to take on, either to work for someone else or work independently. Another study on assessment of entrepreneurial intention of undergraduate students: impacts of attitudes, revealed that there is significant relationship between the entrepreneur intention and entrepreneurial attitude was 0.015 which is weak positive association, and the relationship between entrepreneurial intention and perceived desirability is negative (Abubakar et al., 2014).

Another study on entrepreneurial intention of agricultural students in Tehran, showed that about a half of the respondents had medium entrepreneurial intention (Mahtab, 2015). Nematoollah et al. (2012) study on entrepreneurial intention of agricultural students in Iran indicated that students have positive attitude toward social support (family, relative and friends) of entrepreneurship. To put it in a nut shell, majority of the empirical study focus on investigating entrepreneurial intention which covers mixed discipline, and little study was conducted on entrepreneurial intention of undergraduate agricultural students of higher education students where this study aimed to investigate in the Ethiopian context. Based on the previous empirical study which focused on entrepreneurial intention, the following independent variables were identified to assess entrepreneurial intention among under graduating students in Ethiopia. Analysis was used to measure the entrepreneurial intentions of students based on selected determinants used by several authors in other empirical studies explained in literature review section (Figure 1).

**METHODOLOGY**

The type of research followed for this study was descriptive in nature, and included analytical study where inferential design was employed. The major objective of the study was to assess the extent of the under graduating agricultural students entrepreneurial intention which was carried out at Jimma University College of Agriculture and Veterinary Medicine. The preliminary study showed that the total population was 449 students (College’s registrar Office). The study area, College of Agriculture and Veterinary Medicine was selected purposively due to the fact that currently the researcher is permanent worker at the university in academic jobs and engaged in research activities. The study employed both primary and secondary data. The primary data was collected through distributions of a pretest structured questionnaire from the selected participants. Secondary data also from previously conducted research and various books. College of Agriculture and Veterinary Medicine registrar office report and various published journals support analysis of data with conceptual and empirical evidences. To obtain high response rate, the author participated in data collection.

**Sample size**

For the purpose of this study, Slovin’s sampling formula (Guilford and Fruchter, 1973) cited by Adie et al (2011) was employed to determine the study size. The computation stated below provides 212(47%) of total population samples.

\[
N = \frac{449}{1 + \alpha^2 N} = \frac{449}{1 + (0.05^2)449} = \frac{449}{2.1225} = 212
\]

Where N= Total number of students’  \( \alpha = 0.05 \) (margin of error)
Independent variable

- Desire, certainty and extent of effort to establish own firm
- Willingness to assume risk
- Access to credit
- Government policy, Family and friend support
- Overall convenience of environment (availability of infrastructure, utility, premise)
- Residential status (Urban, Rural)

Dependent variable

Entrepreneurial intention

Figure 1. Conceptual framework (Shapero, 1982; Mohd et al., 2010; Shiri et al., 2012; Hem, 2013; Saleh and Loay, 2014; Denanyoh, 2015).

Table 1. Reliability analysis.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial intention</td>
<td>0.759</td>
<td>6</td>
</tr>
<tr>
<td>Support given from institution as well as Family and friend</td>
<td>0.740</td>
<td>7</td>
</tr>
<tr>
<td>All variables</td>
<td>0.7495</td>
<td>13</td>
</tr>
</tbody>
</table>

For the purpose of this study, stratified random sampling was preferred as it gave a sample that was a representative of the population from the ten departments. The individual sample representatives were taken into the respondent based on convenience sampling. After administering the pretest structured questionnaire, the response rate was 187 (88.2%), and all returned questionnaire were valid for the analysis and interpretation.

Data analysis

Both quantitative and qualitative data analysis employed for the study used statistical package for the social sciences (version16). The data was collected using self-administered structured questionnaire which was analyzed by computing mean scores, and percentages. A mean score of less than 2.60 indicates a negative attitude (strongly disagree and disagree), a score of equal to 2.60 or less than 3.40 indicates a neutral attitude (moderate) and a mean score greater than 3.40 indicates positive attitude (strongly agree and agree) (Hussain et al., 2014). Spearman correlation was also employed to determine the relationship between variables where the association of the correlation is guided using absolute value of r, 0.00-0.19 is very weak, 0.20-0.39 is weak, 0.40-0.59 moderate, 0.60-0.79 strong and 0.80-1 very strong.

Reliability test

Table 1 shows reliability analysis. Cronbach’s alpha method was used to determine reliability of the scales which is a measure of internal consistency, that is, how closely related a set of items are as a group and when the result is generally above 0.5 (or 50%), is considered to be reliable (Peigmahari, 2007) as cited by Mohammed and Abdulahi (2011). Analysis revealed that for all variables, the scale is reliable by 74.95%. Other items included in the questionnaire consists of variables related to the shortage of capital to rank on suggested problems that may impede to establish entrepreneurial venture and measurement of the rate of entrepreneurial intention related to residential status which are separately single measure factors, and categorized under different title but in order to address the problem of reliability pretest questionnaire was employed.

RESULTS

Demographic characteristic of respondents

The result of the analysis of participants' demographic characteristics is shown in Table 2. Out of the 212 distributed questionnaires, 187 (88.2%) were finalized and returned. Entrepreneurial intention questionnaire were valid for the analysis. The major respondents were male which constitute 118 (63.1%), and 69 (36.9%) females participated in the study. Female students in all programs were few in number related to the number of male students. Most of the respondents aged between 21 to 25 comprise 164 (87.7%). In addition, 128 (68.5%) of participants were from either semi urban or rural area while 59 (31.5%) were from Urban area.

The majority of respondents were from agricultural economics, and plant science each constitute 28 (15%) followed by natural resource management which were 25 (13.4%). Whereas, agribusiness and value chain management were 22 (11.7%). Rural development and horticulture each accounts for 17 (9.1%) while animal science and veterinary medicine each constitute 14 (7.5%), and the remaining 7 (3.7%) were sugarcane Agronomy students.
Table 2. Demographic characteristic of respondents (n=187).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>118</td>
<td>63.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>69</td>
<td>36.9</td>
</tr>
<tr>
<td>Age</td>
<td>Less than 21</td>
<td>21</td>
<td>11.2</td>
</tr>
<tr>
<td></td>
<td>21-25</td>
<td>164</td>
<td>87.7</td>
</tr>
<tr>
<td></td>
<td>Above 25</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>Residential area</td>
<td>Urban</td>
<td>59</td>
<td>31.5</td>
</tr>
<tr>
<td></td>
<td>Semi urban</td>
<td>42</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>86</td>
<td>46.0</td>
</tr>
<tr>
<td>Field of study or educational programs</td>
<td>Agricultural economics</td>
<td>28</td>
<td>15.0</td>
</tr>
<tr>
<td></td>
<td>Rural development</td>
<td>17</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>Agri business and value chain management</td>
<td>22</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>17</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>Plant science</td>
<td>28</td>
<td>15.0</td>
</tr>
<tr>
<td></td>
<td>Sugarcane agronomy</td>
<td>7</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>Post-harvest management</td>
<td>15</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>Natural resource management</td>
<td>25</td>
<td>13.4</td>
</tr>
<tr>
<td></td>
<td>Animal science</td>
<td>14</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>Veterinary medicine</td>
<td>14</td>
<td>7.5</td>
</tr>
<tr>
<td>Experience in doing business before joining the university</td>
<td>Yes</td>
<td>50</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>67</td>
<td>35.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>70</td>
<td>37.4</td>
</tr>
<tr>
<td>Family member business exposure</td>
<td>Yes</td>
<td>122</td>
<td>65.2</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>65</td>
<td>34.8</td>
</tr>
</tbody>
</table>

Source: Study survey (2016).

Table 3. Entrepreneurial intention, risk taking ability and convenient of environment (n=187).

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>After graduation I will prefer to pursue entrepreneurial career</td>
<td>3.5775</td>
<td>1.02555</td>
</tr>
<tr>
<td>I will exert the necessary effort to establish own business</td>
<td>3.8075</td>
<td>0.85845</td>
</tr>
<tr>
<td>I have a strong desire to start a business</td>
<td>3.7487</td>
<td>1.02440</td>
</tr>
<tr>
<td>Certainly, I will establish my own business</td>
<td>3.7647</td>
<td>0.93224</td>
</tr>
<tr>
<td>I am ready to assume risk in my entrepreneurial career</td>
<td>3.7807</td>
<td>0.92751</td>
</tr>
<tr>
<td>Over all there is convenient environment to pursue entrepreneurial career</td>
<td>3.0802</td>
<td>1.07212</td>
</tr>
</tbody>
</table>

The finding revealed that significant number of 117 (62.5%) respondent sometimes were involved, and completely engaged in money earning activities before joining the university which indicates they had prior experience in business that is they were self-employed or work in family business. Related to the experience of respondent’s family exposure in business, the study found that 122 (65.2%) were engaged in the course of business whereas 65 (34.8) were not self-employed.

Entrepreneurial intention

Table 3 indicates the results of overall entrepreneurial
intention of students related to their desire, certainty and extent of effort on establishing own business. By measuring their view on a five point likert scale, there were four items that measured respondents view on their preference to pursue entrepreneurial career, desire and certainty of becoming entrepreneur, the study revealed that the mean score for all variables was above 3.5 which indicates participants’ had positive attitude on entrepreneurial career in the sense that undergraduate agricultural students entrepreneurial intention is high which indicates after completion of their study students prefer to be self-employed.

Moreover, they had strong desire to pursue entrepreneurial career and were certain to start up their own business. Table 3 also shows the result of attitude to risk and overall environment. Attitude to risk was measured, and the study result showed that the mean score was above 3.5 representing majority of respondents who are ready to assume moderate risk while pursuing entrepreneurial career which is one of the qualities of successful entrepreneur. Regarding the overall convenient of the environment related to availability of infrastructure, premise and utility to pursue entrepreneurial career, the mean score was 3.08 that means respondents were not well satisfied with the existing availability of infrastructure, premise and utility that affects entrepreneurial intention.

Opinion of respondents’ on support given by institutions as well as family and friends

The study also examined factors influencing decision to pursue entrepreneurial career related to financial support services in relation to start own business in addition support given by government as well as family and friends. The result is summarized in Table 4

The finding showed that majority of the respondents 147 (78.6%) perception was somewhat and completely difficult to obtain startup capital that affects one becoming an entrepreneur, and 145 (77.5%) of participants replied that obtaining adequate finance to run business would be difficult which represents the ones who agree and disagree on the statement. According to the respondents, It can be concluded that the major obstacle would be obtaining the required adequate fund to establish and run own business.

Regarding legal procedure and availability of sufficient subsidy, the study also found that majority of respondents somewhat had positive attitudes which constitute 78 (41.7%) and 72 (38.5%) respectively indicating that they were not well satisfied on the procedure of legal procedure for obtaining license and support given by the government. But on contrary, most of the respondents (87 (46.5%)) were well satisfied and believed that at the moment political condition of the country is conducive to establish their own business. On measurement of support of family and friend, the result revealed that most of respondents had positive perceptions on their families and friends support while they become an entrepreneur which constitutes 156 (83.4%) and 150 (79.2%) respectively computed out of the whole participants which indicates good opportunity for the students intention to become self-employed.

Major causes of shortage of startup capital

As it is indicated in Table 5, respondents were asked to rank among the suggested problems of the cause for the shortage of capital to establish and run own business. 1= most suggested problem 2=second option 3=third suggested option 4= the least suggested problem. Rank orders of one to four (1 to 4) have been assigned to them in which 1 reflects the most series problem and 4 shows relatively the least series one.

The mean result 2.1497 indicate that the first suggested challenge were requirement of collateral-a property pledged to creditor to assure repayment of loan followed by the response of existing interest rate is high to borrow money from financial institutions. According to the reply of participants, the third suggested problem was no adequate financial institutions available in their living place that provide loan. Finally, the least series problem was due to risk of failure, financial institutions are not lending.

Entrepreneurial intention with respect to their residential area

One of the objectives of this study was to compare entrepreneurial intention with respect to residential area where result is shown in Table 6. The research outcome revealed that out of the 59 urban residents, 45 (24%) preferred to pursue entrepreneurial career while out of 86 rural residents, 63 (33.7%) of them agreed and strongly agreed to be self – employed that is percentage result is out of the total study participants whereas least proportion of respondents out of total participants 25 (13.3%) have still not decided whether to seek jobs in organization or to set up their own business. The preference of pursuing entrepreneurial career rather than seeking jobs in other organization is rated slightly higher in rural areas than urban areas.

Relationship of students’ entrepreneurial intention and factors determine their intention

The study also investigated the relationship between entrepreneurial intention and some selected independent variable using Spearman correlation. The finding revealed that there was association between
Table 4. Respondents perception on support given (n=187).

<table>
<thead>
<tr>
<th>Access to financial support service</th>
<th>Yes (%)</th>
<th>Somewhat (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is not difficult to obtain startup capital</td>
<td>40 (21.4)</td>
<td>83 (44.4)</td>
<td>64 (34.2)</td>
</tr>
<tr>
<td>Financial institutions are providing the required adequate finance to run business</td>
<td>42 (22.5)</td>
<td>79 (42.2)</td>
<td>66 (35.3)</td>
</tr>
</tbody>
</table>

**Government policy, perceived support of family and friend**

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes (%)</th>
<th>Somewhat (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy legal procedure to establish entrepreneurial venture</td>
<td>68 (36.4)</td>
<td>78 (41.7)</td>
<td>41 (21.9)</td>
</tr>
<tr>
<td>Sufficient subsidies available by the government</td>
<td>57 (30.5)</td>
<td>72 (38.5)</td>
<td>58 (31)</td>
</tr>
<tr>
<td>Political condition is conducive to establish own business</td>
<td>87 (46.5)</td>
<td>58 (31)</td>
<td>42 (22.5)</td>
</tr>
<tr>
<td>My family support me to be an entrepreneur</td>
<td>112 (59.9)</td>
<td>44 (23.5)</td>
<td>31 (16.6)</td>
</tr>
<tr>
<td>My friends support me to pursue a career as an entrepreneur</td>
<td>94 (50.3)</td>
<td>56 (29.9)</td>
<td>37 (19.8)</td>
</tr>
</tbody>
</table>

Table 5. Rank of the major reason for the shortage of startup capital (n=187).

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement of collateral</td>
<td>2.1497</td>
<td>1st</td>
</tr>
<tr>
<td>Interest rate is high</td>
<td>2.4011</td>
<td>2nd</td>
</tr>
<tr>
<td>No adequate financial institutions provide loan</td>
<td>2.6898</td>
<td>3rd</td>
</tr>
<tr>
<td>Due to risk of failure, financial institutions are not lending</td>
<td>2.7219</td>
<td>4th</td>
</tr>
</tbody>
</table>

Table 6. Views on entrepreneurial intention with respect to their residential status (n=187).

<table>
<thead>
<tr>
<th>Item</th>
<th>Residential status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban (%)</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>3 (5.1)</td>
</tr>
<tr>
<td>Disagree</td>
<td>3 (5.1)</td>
</tr>
<tr>
<td>Undecided</td>
<td>8 (13.6)</td>
</tr>
<tr>
<td>Agree</td>
<td>39 (66.1)</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>6 (10.2)</td>
</tr>
<tr>
<td>n</td>
<td>59 (100)</td>
</tr>
</tbody>
</table>

entrepreneurial intention with desire to start a business in the future where spearman correlation rs= 0.454, p<0.01), and readiness of assuming moderate risk rs= 0.410, p<0.01 which is moderate positive relationship. The entrepreneurial intention and certainty of establishing own business attained also moderate positive relationship rs= 0.505, p<0.00. The relationship between entrepreneurial intention and overall convenience of environment related to availability of infrastructure, utility and availability of premise to pursue entrepreneurial career obtained weak positive correlation rs= 0.232, p=0.01. The result is presented in Table 7.

**DISCUSSION**

The empirical study found that the mean score above 3.5 represents participants’ had high entrepreneurial intentions to become an entrepreneur. The study to conclude that undergraduate agricultural students had positive attitude towards entrepreneurship in which it contradicts with agricultural students in Tehran were about half of the respondents had medium entrepreneurial intention (Pouratashi, 2015). This completely contradicts with the attitudes of private higher education students in Ethiopia (Teshome, 2014), were majority of students wanted to work in a company being salaried worker.

The finding of the study indicates that the mean score result above 3.5 on measurement of willingness to assume risk indicate that under graduating agricultural students did not lack the confidence to start their own business. That means students’ are ready to assume moderate risk which is one of the qualities of successful
entrepreneurs. Thus, this research work finding contradicts that of Teshome (2014) finding, students do not start a business due to fear of risk on the study of assessing the attitudes of private higher education students towards entrepreneurship. The participants in this study have a positive attitude towards entrepreneurship and were motivated to be self-employed which is understood as majority of respondents had prior experience in the course of business where to some extent developed skill on managing self-owned business so that they would benefit by earning high profit. This is consistent with the finding of Lee (1996) who revealed that experience in the course of business may create higher profit cited by Buba et al (2015).

In addition, larger proportion of respondents’ family had exposure in the course of business so that they would benefit by earning high profit. This is consistent with the finding of Lee (1996) who revealed that experience in the course of business may create higher profit cited by Buba et al (2015).

The study also found that overall environment of the living place of respondents in terms of availability of premises, utility and infrastructure was not satisfactory to pursue entrepreneurial career which affects the desire of undergraduate agricultural students to be self-employed which confirms the study of Specht (1993) who noted that infrastructure development was one factor that influences the startup intention cited by Tim et al. (1999).

The study result revealed that, it was somewhat difficult to obtain startup capital from financial institutions that affects one to become an entrepreneur, and the major reason was requirement of collateral which affects the capability of starting business which agreed with the finding of Rosemary (2001). Lack of finance affects willingness to act on decisions to actually establish own business cited by Zahariah et al. (2010).

Based on the finding of the research, the next outstanding challenge for the under graduating agricultural students in Ethiopia is the existing high interest rate demand being the cause of shortage of startup capital from financial institutions that can imbed entrepreneurial intention of students followed by no adequate number of financial institution and due to risk of failure respectively which means both has relatively little negative impact to promote entrepreneurship. Undergraduate agricultural students believed that they would face some difficulties in dealing with the requirements of government regulations and procedures to obtain license, and permits as well as insufficient subsidies available for the establishing entrepreneurial venture which affects entrepreneurial career of agricultural students’ which confirms the finding of Walid and Loay (2014) who noted that procedures and requirements influence pursuing entrepreneurship career.

The highest proportion of respondents view on perceived support of family and friend was positive that confirms the finding of Seyed et al. (2012) who noted that agricultural students have positive attitude toward social support of entrepreneurship however partly contradicts the study of Richard et al. (2015) where the finding showed that perceived friend support were moderate that affects entrepreneurial intention. On the other hand, most of the students’ were well satisfied and believed that at the moment political condition of the country is conducive to establish their own business which indicates currently stability of the country is good opportunity to pursue entrepreneurial career in the context of Ethiopia.

Furthermore, the study found that the preference of pursuing entrepreneurial career rather than seeking jobs in other organization is rated slightly higher in rural areas than urban areas where the finding of this study indicate that undergraduate agricultural students from rural area have greater intentions to become an entrepreneur. The result of this study disagreed.

### Table 7. Spearman correlation of entrepreneurial intention with overall desire and certainty of establishing own business, willingness to take risk and convenient of the environment (n=187).

<table>
<thead>
<tr>
<th>Variable</th>
<th>I have a strong desire to start a business</th>
<th>Certainly, I will establish my own business</th>
<th>I am ready to take a moderate risk</th>
<th>Overall there is convenient environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>After graduation I will prefer to pursue entrepreneurial career</td>
<td>0.454**</td>
<td>0.505**</td>
<td>0.410**</td>
<td>0.232**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**
with the study finding of Joo (2011) who noted that the rate of decisions to start a business is higher in urban area than rural area.

After testing spearman correlation between the entrepreneurial intention and some selected independent variable, the empirical study revealed that moderate positive relationship exists between independent variables: desire to start own business rs = 0.454, p<0.01, certainty of startup own business rs = 0.505, p<0.01, and willingness to assume risk rs = 0.410, p<0.01.

This contradicts with the study of Abubakar et al. (2014) finding that indicates the relationship between entrepreneurial intention and perceived desirability is negative among undergraduate students and the entrepreneur intention and entrepreneurial attitude was 0.015 which is weak positive association.

Furthermore, this study indicated that the overall convenient of environment related to availability infrastructure, premise and utility to pursue entrepreneurial career is rs=0.232 p=0.01. Since the association between entrepreneurial intention and overall environment of living place of respondents was weak positive relationship, it can be conclude that government should pay special attention to improve aforementioned facilities that affects the entrepreneurial intention of students’.

Conclusion

Based on the finding of this research study, the study concludes that the existence of high entrepreneurial intention among final year undergraduate agricultural students in Ethiopia is certain, and has strong desire to establish their own business.

However, they put forth the necessary effort to be self-employed, and have willingness to assume moderate risk while pursuing entrepreneurial career. Students’ attitude towards the support of family and friend is positive indicating that they demand support from them since they are not reluctant to provide the required assistance to establish their own business. The key challenges that affects entrepreneurial career includes:

(1) Undergraduate agricultural students’ has difficulties in getting startup capital
(2) Having difficulty in obtaining legal license as well as the existing insufficient subsidies by the government was not satisfactory to pursue entrepreneurial career.

In addition, according to the finding, among undergraduate agricultural students’ the choice of pursuing entrepreneurial career rather than seeking jobs in other organization is rated slightly higher in rural areas than urban areas. Finally, the research result reveals that the association between the certainty, desire to be self-employed as well as willingness to assume risk with overall entrepreneurial intention is moderately positive. However, weak positive correlation was observed between the independent variable environmental factor with respect to obtaining premise, utility as well as availability of infrastructure and overall entrepreneurial intention.

LIMITATIONS

The research is not sponsored by any organization leading to lack of finance and adequate time to include additional study area. Due to this reason, the author limits the study to College of Agriculture and Veterinary Medicine at Jimma University. In addition, another limitation was lack of adequate empirical study finding on the measurement of entrepreneurial intention of undergraduate agricultural students in Ethiopian context.

IMPLICATION

The existing overall environment which is very essential for establishing own business is unsatisfactory to pursue entrepreneurial career. Thus, to encourage entrepreneurship practice, government needs to pay special attention to improve facilities such as infrastructure, availability of premises and utility that affects the entrepreneurial intention. There is also the need to improve the existing legislation and regulation to ease establishing entrepreneurial intention which aims to enhance entrepreneurial. Based on conclusion it is recommended that financial support service need to be flexible, and the need to reduce the cost of credit or has to be affordable and flexible requirements of collateral can be a solution to shortage of startup capital in financing entrepreneurial venture.

FUTURE RESEARCH

The author recommends for further research to consider agricultural students from other public universities which can help them to get better accuracy of the students’ feedback, and enable them to generalize the research outcome. It is better also to include the opinions of stakeholders: financial lenders, institutions that provide assistance in various ways for establishing enterprises and others. A comparative study can be undertaken to determine whether difference exist on entrepreneurial intention among various programs.

ACKNOWLEDGEMENT

The author would like to thank all the final year undergraduate agricultural students who participated in
this study. Further, the author would like to extend his
gratitude to the workers of student service and registrar
office workers of Jimma University College of Agricultural
and Veterinary Medicine for the administrative support
and providing the required information for the study.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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