The relationship between Entrepreneurial Activity (in Switzerland) against Motivational Index, Innovation, Business Service Sector

Bachelor Thesis

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Abstract

This research paper investigates the relationship between entrepreneurial activity in Switzerland and three variables: the Motivational Index, Innovation, and the Business Service Sector. The aim of the study is to investigate how motivational index, innovation and business service sector influences individuals in Switzerland to intend to start an entrepreneurial project or to actually engage in starting a new business. Using data from the Global Entrepreneurship Monitor (GEM), this research employs a quantitative approach through multi-linear regression models to assess the significance of each variable on entrepreneurial activity and intention. The findings reveal that among the variables studied, only the Motivational Index has a significant influence on entrepreneurial activity. Furthermore, the results reveal an insignificant impact on Entrepreneurial Intention from all the included variables. The results support individual-level theories such as the Theory of Planned Behavior, while challenging institutional theories like the Entrepreneurial Ecosystem model. Recommendations are made for Swiss policymakers to prioritize motivation-enhancing policies and raise awareness about innovation and support infrastructure. This research contributes to theory, practice, and policymaking by identifying the key drivers that stimulate entrepreneurship in Switzerland.

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1.0 Introduction

The comparative in the business environment of Switzerland has been recently changing significantly. New entrants have been entering into the market, and regulations have been easing in terms of the ease of starting a business. Entrepreneurship has also been on the rise in the EU, and local governments in the EU, as well as Switzerland, have been focusing on improving the level of international in the country. The idea is that international is the engine in which the small business sector operates, and at the same time, it is the source of high innovation in terms of startups, which can lead to the development of silos of technologies in the countries (Kazanouski, 2020).

This can be related to the cloud system industry, where companies are developing applications for services, such as Uber and Booking, for instance, where the main service is the minimization of communication and traction between different parties or on the level of driverless taxis, as seen recently in the US. Entrepreneurship has been encompassing these fields, and the local government in Switzerland has been attempting to improve the entrepreneurial activity in the country (Kaasa, 2022).

This research paper will be focusing on entrepreneurial activity in Switzerland, and primarily it is focused on identifying the major areas of change that are needed in Switzerland pertaining to the improvement of entrepreneurial activity. The research from other countries has been really fragmented, and therefore there is a need to investigate case study by case study in order to better understand the behavior in Switzerland specifically.

Objectives of the Thesis

1.1 Rationale

The rationale for this research paper stems from two particular aspects: from the commercial aspect and from the empirical aspect. From a commercial point of view, there is a need to revise the results of the entrepreneurial activity in Switzerland – the government efforts in terms of improving entrepreneurial activity need to be evaluated and analyzed. For instance, reviewing the most recent results for the Global Entrepreneurship Monitor, it is evident that Switzerland's

perception of opportunity rate is at 52 while the global rate is 55% with countries such as the US and the UK reaching 70%, which means that Switzerland, though high in financial resources and in its ability to attract human capital, still lags when it comes to developing the right environment for entrepreneurial activity (GEM, 2025).

As to the empirical aspect of the discussion, the empirical results show fragmentation in the results where some research papers highlighted the role of motivation, while others indicated the significance of innovation as a critical factor. Other researchers have also signified the role of the business service sector as an engine for improving entrepreneurial activity in the country (Baldagger, 2023). Thus, in this case, it is difficult to replicate the results from the existing literature to provide recommendations for the Swiss regulatory system to improve the entrepreneurial activity in the country.

1.2 Research objectives

- Analyze the level of entrepreneurial activity in Switzerland.
- To analyze the level of motivation, business service sector, and innovation in the Swiss market.
- To assess the relationship between entrepreneurial activity and entrepreneurial activity variables (innovation, motivation, and business service sector).
- To provide recommendations for entrepreneurs and policymakers in Switzerland.

1.3 Research questions

1. What is the current state of entrepreneurial activity in Switzerland?
2. What are the most influential variables that influence entrepreneurial growth in Switzerland?

1.4 Structure of the Thesis

- Introduction
- Literature Review
- Methodology
- Discussion and Analysis
- Conclusion and recommendations

2.0 Theoretical Foundation

2.1 Background

The research will be analyzing the relationship between entrepreneurial activity and three different variables constructed in the model: (1) motivation, (2) business service sector, and (3) innovation. There are various theoretical frameworks that explain the introduction of each variable into the model. Each of these theoretical backgrounds will be discussed, finally arriving at the Entrepreneurial Ecosystem Theory, which is an attempt to include all of these variables into one theoretical framework.

To further highlight the challenge of creating a theoretical framework for entrepreneurial activity, it is important to cite Marques (2023), who cited Filion (2002), a dominant researcher in the field of entrepreneurship, who argued that "It should be highlighted, however, that entrepreneurship is an emerging field of research, in which there are no established theories yet (cf. Filion 2002). As such, it can be assumed that there is a large number of previous studies adopting environmental, demographic, psychological, and, more recently, cognitive characteristics as predictors of entrepreneurial behavior."

2.2 McClelland

McClelland developed one of the most compelling theoretical frameworks that paint entrepreneurial activity and argued that entrepreneurs are not motivated to engage in this activity in an opportunity-driven behavior (McClelland, 1961). Furthermore, McClelland argues that "From McClelland's perspective and considering that a person has a high necessity of self-recognition, starting up a new business involves assuming risks, taking on responsibilities and paying attention to the firm's finances, as much as discovering innovative manners to develop products and/or provide services" (Marques, 2023).

Thus, in this theoretical perspective, the researcher highlights self-recognition as a major motivator for engaging in entrepreneurial activity. Yet, this research paper is not focused on the entrepreneur as an individual but is attempting to analyze the ecosystem or the institutional element that creates the right environment for entrepreneurs to flourish.

2.3 Theory of Planned Behavior (TPB)

Ajzen (1991) introduced the theory of planned behavior, which is a theory that attempts to explain the behavior of the entrepreneur, in this case, by studying three components of behavior which are

attitude, subjective norms, and perceived behavioral control. In regards to how they are connected to the development of this model, it can be argued that TPB can be used to explain how individual intention to start a business is influenced by the motivation of the entrepreneur to start a business – a high motivational index in Switzerland can indicate an overall positive attitude towards entrepreneurship and even summarize the possibility of the presence of subjective norms that encourage individuals to start a business.

2.4 Entrepreneurial Ecosystem Theory

This theory encompasses different elements in the ecosystem that attempt to explain the performance of an entrepreneurial regulation or system. Kostantinova (20240) defines the ecosystem of entrepreneurship as "a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organisations (e.g. firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (e.g. the business birth rate, numbers of high growth firms, levels of 'blockbuster entrepreneurship,' number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition) which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment."

But the seminal work of Stam (2016) and Stan (2021) creates the framework that is going to be implemented in this research paper. As seen in the figure below, Stam (2021) develops the theoretical background of the entrepreneurial ecosystem and shows the elements that interact with one another in order to create the most effective ecosystem for productive entrepreneurial activity. Note that this research paper will focus on the formal institutional basis, which is the foundational level of this theory. The researcher will, for example, analyze formal institutional networks by measuring "Service Sector" in Switzerland. Then talent, knowledge, culture, and infrastructure are all measured via the innovation index, and finally, motivation is influenced as a general measure of attitude, which can also be a measure for the culture aspect in the model below.

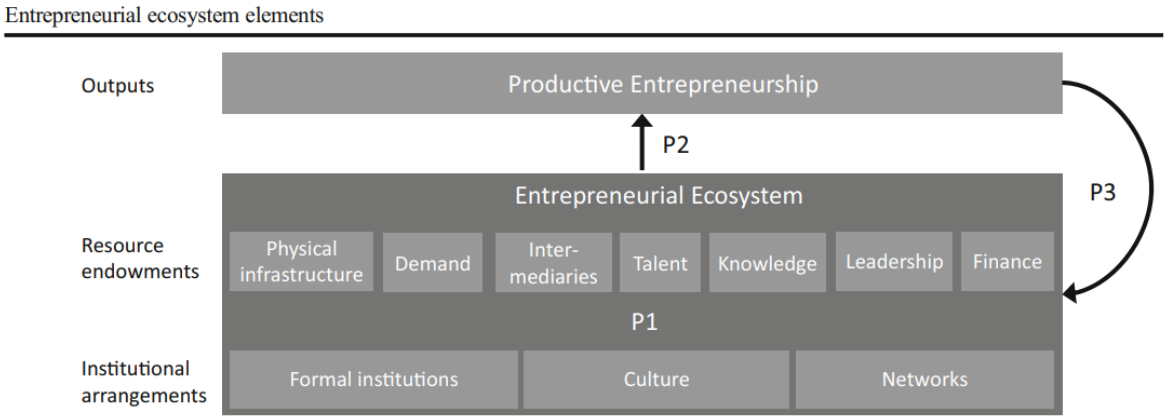

Fig. 1 Elements and outputs of the entrepreneurial ecosystem

Figure 1. Entrepreneurial Ecosystem Theory (Stam, 2021)

2.5 Brief Literature Review

Alvarez (2011) investigated the different viable channels influencing entrepreneurial activity in Latin America and found, via statistical quantitative research, by collecting data from databases within Latin America, that lack of confidence in the system and therefore lack of motivation was the main factor that influenced entrepreneurial activity (Rusu, 2017). A different research paper in Latin America also argued that the lack of data is a primary limitation for this research, and therefore a survey was conducted in order to investigate the factors and confirmed the results by Alvarez (2011).

Yet again, relying on surveys creates and generates a lot of biases since it is confirming an existing conclusion in the market – in other words, asking potential entrepreneurs in Latin America if they are motivated to start an entrepreneurial business might entail a bias within it and therefore casts doubt on the strength of these conclusions (Leitao, 2021).

Yahya (2024) is another research paper that also was conducted by a survey and found that "s. The findings reveal that both innovation and entrepreneurship education have significant direct and indirect impacts on entrepreneurial intentions, mediated by entrepreneurial motivation." Again, the problem of using a survey, contrary to the use of quantitative data from a database, which is found in GEM for example, is that it might be biased and that the sample might not be large enough to generate reliable results. Gohman (2013) investigated via a combined method where surveys and interviews were used and the sample included individuals from different markets, from the

EU, UK, and the US as well as developing countries, and concluded that the perception of economic freedom is the most influential factor that influences the decision to start entrepreneurial activity.

An interesting paper by Levent (2009) that analyzed the entrepreneurial behavior of Turkish immigrants in Switzerland adopted in-depth interviews with the sample and found that "actors such as socio-cultural norms, government policy, and the education system of the country have led people to prefer working in paid jobs rather than becoming entrepreneurs." Yet the results further showed that the shift from employment to non-employment (entrepreneurial activity) was influenced mainly by cultural dimensions.

Tajeddini (2009) is another paper that compared the entrepreneur in the UK to the entrepreneur in Switzerland – note that this paper is focused on analyzing the individual characteristics and not the ecosystems of the countries, but it is interesting here to see the differences which will be necessary for the discussion and analysis of the data. The results showed, via a questionnaire, that "Findings reveal that some entrepreneurial characteristics such as autonomy, propensity for risk, and locus of control are higher among UK techno-entrepreneurs while other characteristics such as achievement need, tolerance for ambiguity, innovativeness, and confidence are higher among Swiss techno-entrepreneurs."

2.6 Conceptual Framework

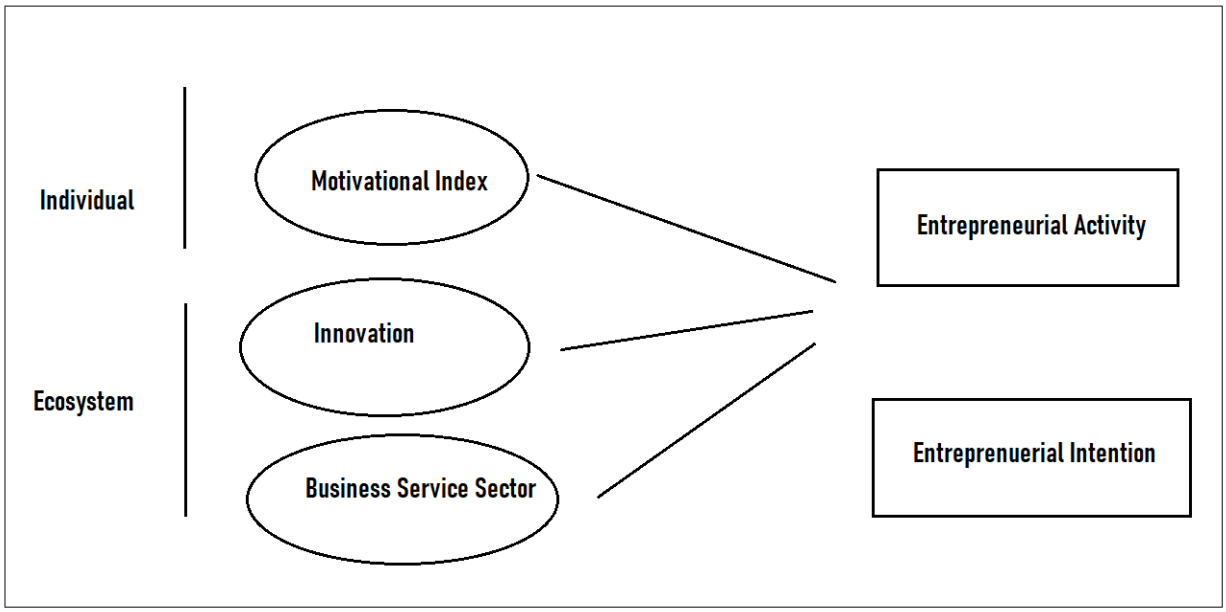

Figure 2. Conceptual Framework of thesis

3.0 Methodology

3.1 Background

The aim of the methodology section is to create a blueprint for how the researcher is going to analyze the research questions. The research onion is often adopted as a framework for making the methodological decisions, starting from the philosophy to the data collection and analysis strategy.

3.2 Philosophy

The research philosophy is the decision of what the researcher is going to consider acceptable knowledge. The researcher can choose between positivism and interpretivism. In the positivist philosophy, the researcher only accepts universally acceptable knowledge such as numerical data and statistics, while the interpretivism research philosophy considers data or knowledge that can change based on the researcher's vision of the environment (Hair, 2019). In other words, the main difference is that positivism is objective while interpretivism is subjective. The researcher will be choosing the positivist philosophy where the researcher is going to use quantitative research design in order to answer the research questions – the advantage of this option is the improvement of the credibility of the research results (Saunders, 2019).

3.3 Research approach

Deductive and inductive research approaches discuss how the researcher is going to approach the research hypothesis. In the deductive approach, the researcher aims to assess the validity of an existing hypothesis, while the inductive approach is aimed towards generating a research hypothesis at the end of the paper (Saunders, 2019).

In this research paper, the researcher adopted the deductive approach, where existing research hypotheses link entrepreneurial activity with motivation, innovation, and business service sectors as independent variables (Bryman and Bell, 2022). Therefore, the research approach in this paper is the inductive approach to test the hypothesis that connects entrepreneurial activity with the above-mentioned variables.

Hypothesis

H1: there is a significant relationship between Entrepreneurial Activity and Motivation Index, Innovation and Business Service Sector

3.4 Research Choice

The research choice is essentially an automatic research design which is either quantitative or qualitative design. In the quantitative design, the research adopts numerical data, while the qualitative design adopts qualitative (categorical or non-numerical data) such as data collected from observations or scripts of interviews (Srejeesh, 2019). In this research paper, the quantitative research design is going to be adopted, where numerical data is going to be used – statistical data from the surveys are turned into a regression and descriptive statistics.

3.5 Research Strategy

The research strategy can be either survey, ethnography, interview, secondary data or desk research, or an experiment (Saunders, 2019). In this research paper, the strategy is going to be secondary data or the desk research strategy. The database that is going to be used is the Global Entrepreneurship Monitor – which is a global database that collects entrepreneurship-related data from global countries, including Switzerland. The advantage of using the desk research in this case is the generation of results that are not criticized by the limitation of bias that has been given in the literature, as seen above when data was collected from the survey and interview.

The problem is that identifying who an entrepreneur is a problem and whether the researcher who conducted the survey effectively analyzed who the entrepreneur is and whether there is bias in the question or the answer is high. Note that to be completely fair, there are questions on how GEM has collected its data – the issue is that GEM also collects data via surveys. Though the surveys used by GEM are more complex and significantly large in sample size (minimum 2000) and that the results are based on two different surveys done in each country: the Adult Population Survey (APS) and the National Expert Survey (NES) (GEM Data, 2025). Therefore, the only difference here is the quality of the survey collection since GEM, an existing database, also collects data via surveys.

3.6 Data Collection

The researcher will be collecting data from GEM database – the data will be pertaining to five variables as described below:

Dependent variables:

- Entrepreneurial Intentions
- Entrepreneurial Activity

Independent Variables:

- Motivational Index
- Innovation
- Business Services Sector

3.7 Data Analysis

The researcher will be using regression analysis in order to analyze the relationships above. The equations for both relationships are shown below. Note that the Y variables are going to be entrepreneurial activity and entrepreneurial intentions – both of these variables are important to measure the strength of entrepreneurship in Switzerland, with entrepreneurial intentions being less significant and less effective since it only measures intentions while activity mentions actual activity. Overall, both of the variables and measures are important because there is a strong theoretical link, as proposed in the Theory of Planned Behavior, between attitude (intention) and actual creation of entrepreneurial activity.

- EI (Entrepreneurial Intentions) $=\beta 0+\beta 1 \cdot MI+\beta 2 \cdot INNO+\beta 3 \cdot BSS+\varepsilon$
- EA (Entrepreneurial Activity) $=\alpha 0+\alpha 1 \cdot MI+\alpha 2 \cdot INNO+\alpha 3 \cdot BSS+\mu$

The reason why entrepreneurial intentions and activity are introduced especially must be described, and the distinction between entrepreneurial intentions and activity is critical in the research of entrepreneurship. Firstly, entrepreneurial intentions are defined as the self-reported desire or even plan to start a business, while entrepreneurial activity is defined as the actual engagement in starting a business. Therefore, the importance of entrepreneurial intentions in research is that it captures latent entrepreneurial potential, while activity captures the actual behavior.

Therefore, the difference is essential: the difference between attitude and behavior – intentions show whether motivation has, in fact, influenced the intention to start a business, and activity measures whether the influence materializes into a business. Both are important because intentions are influenced and shaped by culture, psychology, and institutional factors, while activity is influenced by the environment, access to capital, and market opportunities.

4.0 Results

The results of this research paper will be discussed in this section of the paper. The researcher generated multilinear regressions in order to investigate the effects of different variables on entrepreneurial activity and intentions.

4.1 Entrepreneurial Intention

In regards to the first correlation relationship, the first observation made from the analysis is that there is an insignificant relationship in the whole model. The p-value of the model is 0.27, which means it is 27% and therefore higher than the 5% threshold, which allows the researcher to reject the null hypothesis (Burns, 2008). The R-square is 0.28, which is not high enough as well, meaning that 28% of the change in the dependent variable, entrepreneurial intention, is caused by changes in the three variables chosen. In any case, in regards to the effect of the variables on entrepreneurial intention, the researcher concludes that there is an insignificant relationship and that the model is not really acceptable (Blumberg, 2014). Refer to appendix 1 for detailed description of the statistical results for the relationship between Entrepreneurial Intention and the variables of the model.

It was critical to include the entrepreneurial intention because it showed a distinction between intention and activity. It is expected that entrepreneurial intention would have revealed how weak variables could influence intention. In other words, it was expected that entrepreneurial intention would have a stronger significance and stronger correlation; yet the reality is that entrepreneurial intention was insignificant, and that is perhaps due to the fact that entrepreneurs are more likely to have accurate intentions and therefore will not exaggerate their intention to start an entrepreneurial project in Switzerland (Purwana, 2018). Consequently, activity is in fact higher than intention.

Another explanation to the insignificant relationship is that perhaps more institutional and environmental variables have a stronger effect on activity rather than intention – in other words, access to capital, innovation, business service sector, and innovation are more likely to influence a person who is already invested in a project rather than thinking of starting a project (Ridwan et al., 2025).

4.2 Entrepreneurial Activity

The entrepreneurial activity analysis has shown better results since the p-value of the model is, in fact, significant and showing a measure of 3%, which is lower than 5%, meaning that the researcher can reject the null hypothesis. The researcher can reject the null hypothesis, which states that the relationship between entrepreneurial activity and motivational, innovation, and business service sector is a random relationship – the fact that the randomness measure is lower than 5% means that the researcher can reject the null hypothesis. Therefore, the researcher can state that there is a significant relationship between entrepreneurial activity and the chosen variables (motivational index, innovation, and business service sector) (Burns, 2008).

The R-squared, which is the measure of the strength of the model, is 54% after the Multiple R, which is also high at 73%. In other words, the correlation strength is 0.73, with the R-squared being the measure of the relationship or the movement of the variables impacting the change in the dependent variable, which in this case is the entrepreneurial activity. Refer to appendix 2 for the primary data and statistical results for the regression model for the relationship between Entrepreneurial Activity and innovation, motivational index and business service sector.

Further analysis of the coefficients of each variable in the model shows that only the Motivational Index has a strong enough impact or a significant impact, where only the Motivational Index has an acceptable p-value lower than 5%. In other words, the model is acceptable, and the Motivational Index has the strongest and most effective influence on entrepreneurial activity. The B coefficient is 0.3 for the Motivational Index, meaning that for every 1-point increase in the Motivational Index, a 0.3 increase in entrepreneurial activity occurs. This is not a very strong impact, but still, it is the most influential among the variables, and given that the scores are out of 10, a 0.3 increase is considered significant.

Thus, the final conclusion is that the whole model for the relationship between entrepreneurial activity and the Motivational Index, innovation, and the business service sector is significant and acceptable, with a p-value of 3% and a correlation strength of 0.73. As for the individual X variables, only the Motivational Index was indeed significant since it had a low p-value (lower than 1%) with a B coefficient of 0.3, meaning that a 1% change in the Motivational Index causes a 0.3% increase in entrepreneurial activity.

It is also necessary to highlight that the primary raw data shows and confirms that the major change in the independent variables has been the Motivation Index. The figure below shows that the major change in Switzerland occurred since 2010 and that entrepreneurs are, in fact, increasingly becoming more interested in entrepreneurial activity.

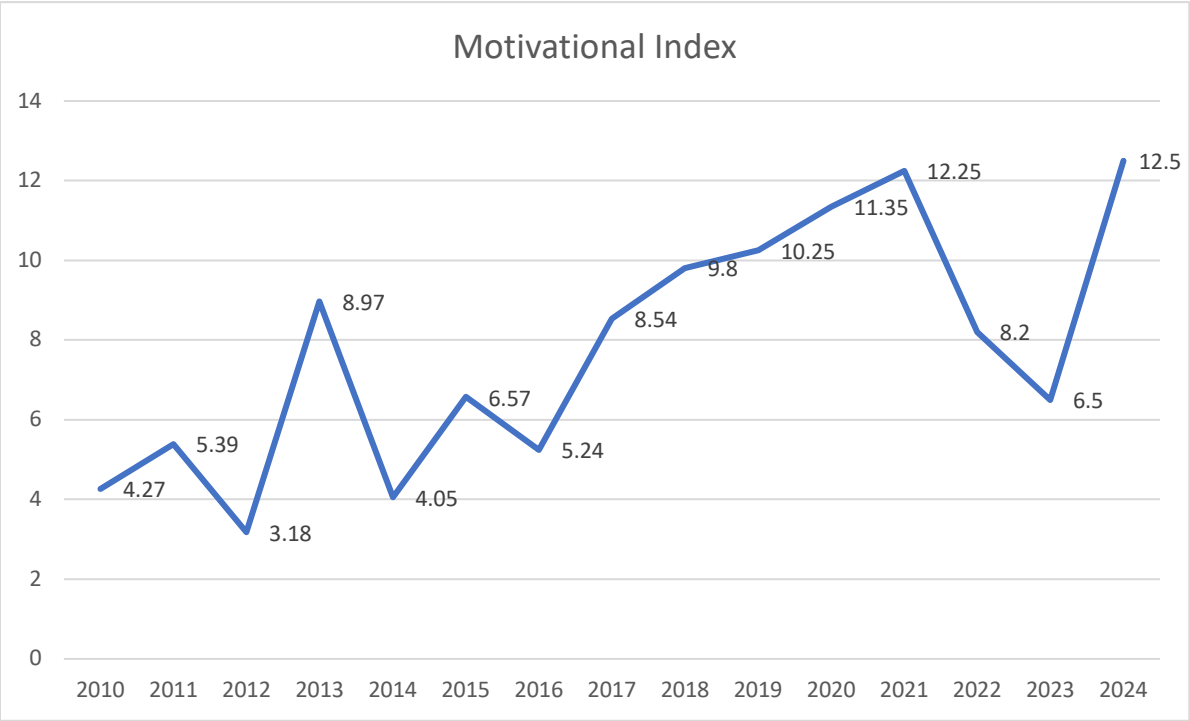

Figure 3. Motivational Index in Switzerland

In regards to the overall trend of entrepreneurial activity their researcher found an overall increasing trend since 2010. It is notable to highlight the period between 2021 and 2023 where over three years entrepreneurial activity in Switzerland declined.

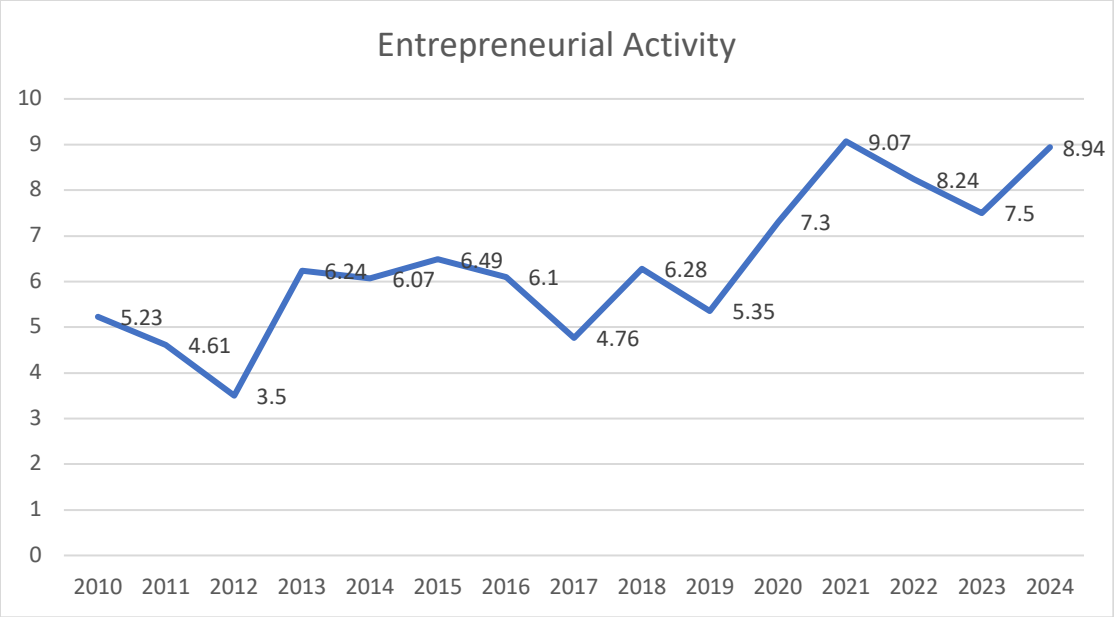

Figure 4. Entrepreneurial Activity in Switzerland between 2010 and 2024

5.0 Discussion

5.1 Critical Analysis of the Results

The results reveal that the motivational index is the most significant variable that influences entrepreneurial activity. The results also indicated that temperamental intention is not a significant dependent variable to measure since it did not generate a model with acceptable significance. Therefore, the focus of the analysis will be on the relationship between entrepreneurial activity and the chosen X variables since the effects on entrepreneurial intention were insignificant overall in the regression model.

The researcher found that the Motivation Index had a significant effect on entrepreneurial activity, while innovation and the business service sector were not significant with a very weak effect. There are various reasons why this relationship occurred – firstly, the literature is very strong when it comes to the effect of the motivational index of the entrepreneur and its effects on starting a business. In other words, there is a very strong relationship between the motivation of the entrepreneur and their actual starting of a business. This is because, by nature, entrepreneurship is a very difficult task that has minimal rewards in the early stages, and it requires qualitative aspects of the individual character of the entrepreneur in order to sustain during the initial stages.

Researchers such as Rusu (2021) and Tajeddini (2009) found that inclination for achievement, ego, and persistence are common characteristics of the entrepreneur that motivate them to initiate a business and that motivation to start a business is a strong measure that forecasts entrepreneurial activity. The meaning of this result in regards to what the researcher will recommend at a later stage is that the Swiss government or regulators must focus on improving the motivation of the entrepreneurs or the individuals of the business environment in Switzerland in order to improve the overall entrepreneurial activity.

Another assessment is in regard to the lack of effect of innovation. This was a surprising result since it would be assumed that the presence of innovation would have a significant effect on entrepreneurial activity. Yet evidence from the literature can confirm that there is significant evidence that points out the strength of innovation, yet there is an indirect effect.

Thus, innovation might influence the ecosystem level outcomes, as suggested by Stan's (2021) ecosystem theory, by influencing competitiveness, for example, but it does not directly influence

the individual to start a business. This is one explanation for why the researcher failed to generate a significant relationship. Moreover, if the GEM database measures innovation at the country level, then that may not capture the local startup conditions that affect the decision to start a business. For instance, innovation in Switzerland may be high at the country level, but if someone from the regions of Switzerland participated in the sample, they may not be influenced by the innovation that is occurring in some specific parts of Switzerland that are not affecting the whole country (all the entrepreneurs in the country) (Bergmann, 2010).

As to the effects of the business service sector, researchers such as Gawel (2014) and Rodriguez (2015) state that there are no effects, and that's again because individuals may not be aware of the presence of the infrastructure that could assist them. Baumgartner (2014) states that there are also situations when the entrepreneur cannot access the infrastructure, and some researchers such as Borysenko (2021) argue that entrepreneurs may not need the complicated infrastructure in order to start a business and may need tenacity and individual characteristics rather than external factors that influence their decisions to start a business.

The reason why motivation is a better variable that explains change in internal activity is that the motivational index captures the internal drive and perceived desirability of entrepreneurship and therefore includes the push and pull factors (necessity and opportunity) that influence decision-making for a person to start a business. In other words, even in a high innovation environment, if the entrepreneurial individual does not have enough drive, they will not go through the process of starting a business, which is challenging (Shi, 2020). Therefore, innovation provides the means but does not really provide the will to start an entrepreneurship project.

Another explanation for why the motivational index has a stronger effect than innovation is the ability of motivation to reach a wide range of entrepreneurship contrary to specific factors that are influenced by innovation (Alam, 2019). In other words, motivation can impact someone to start a low-tech or a high-tech entrepreneurship project, while innovation influences only high-tech projects (Aljubari, 2019). Thus, the concentrated effect of innovation for individuals with technical expertise limits the expansion of the effects of innovation and therefore, in a wide survey, the results could be capturing individuals that are not interested in high-tech projects (Ma, 2020).

Moreover, there is empirical support for behavioral theories when it comes to entrepreneurship, and that explains why motivation index is stronger than innovation. As the theoretical frameworks

were discussed in this paper and the adopted form of an ecosystem theory, which brings in behavioral and environmental factors (such as institutional factors), the researcher also wanted to point out which theoretical frameworks are more influential (Ma, 2020). The fact that motivation was more significant than innovation skews the discussion towards behavioral theories such as the Theory of Planned Behavior or the Entrepreneurial Event Theory, which suggest that behavioral variables such as motivation have a strong influence on entrepreneurial activity (Alam, 2019).

5.2 Contribution to theory

The main contribution to theory from these results is that the results support individual-level theories and challenge the institutional and ecosystem-related theories. For instance, the fact that the results show that motivational index impacts the actual creation of companies (activity rather than intention) supports the Theory of Planned Behaviour, which argues that actual behaviour is influenced by positive attitudes - therefore, the individual characteristics of the entrepreneur are the most influential indicators that can influence the behaviour of the person starting a business and not external factors which are impacted by the institutions or the ecosystem.

Therefore, the results reinforce individual-level theories such as the Theory of Planned Behaviour and Shapero's Entrepreneurial Event model, which suggest that perceived desirability and feasibility are the strongest factors that influence the behaviour or the outcome, which in this case is entrepreneurial behaviour (Inderwati et al., 2024). Structural and ecosystem-based theories such as Stam's theory, which has been the major theory in this paper, that influence external variables such as innovation and the business service sector are significantly challenged and question the strength of the claims that entrepreneurs require ecosystems to thrive – they require motivation according to this research paper (Uctu, 2023).

The explanation here is that Swiss entrepreneurs could be desensitized and not significantly influenced by changes in the environment – this may be due to the welfare culture or the general relaxed nature of the economy in Switzerland, which does not have a positive influence on entrepreneurial activity. Therefore, the cultural dimension could have a strong impact on this relationship since the pre-existing conditions in Switzerland, which are already high, are not changing a lot to generate an effect on the entrepreneurs (Tajeddini, 2009). For instance, the primary data shown in the growth below indicates that overall innovation remains stagnant since

2010 in Switzerland – it has been fluctuating between 35% and 40%, and 2025 does not even have the highest level of innovation. In other words, the change in innovation in Switzerland is not high enough to have an impact on entrepreneurial activity.

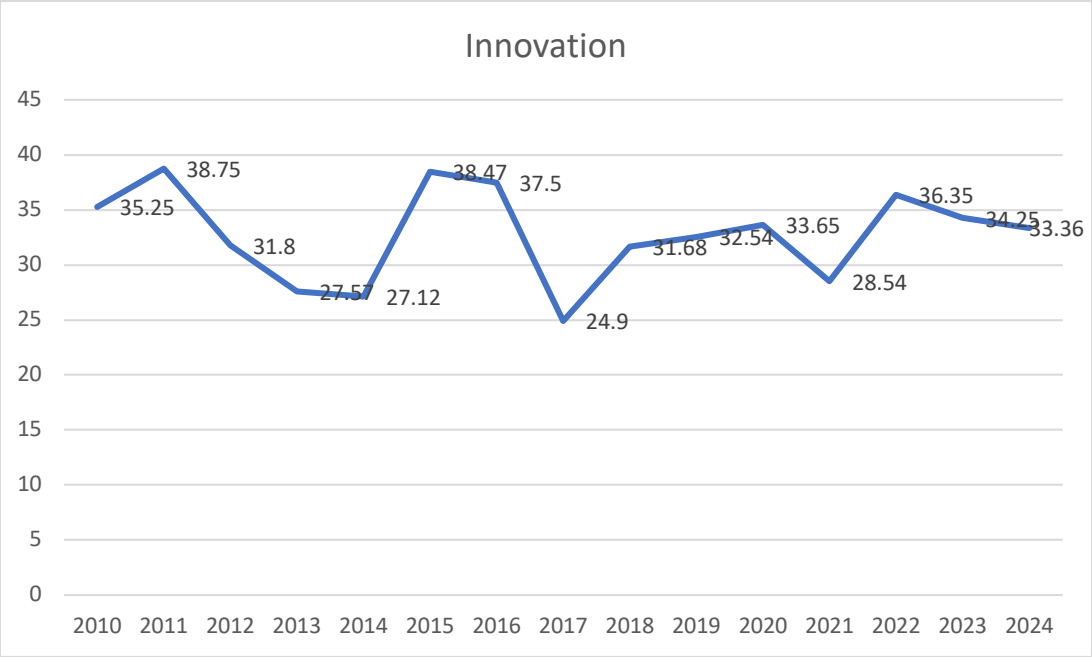

Figure 5. Innovation Levels in Switzerland

Therefore, the conclusion about the theoretical conclusion is that there must be a stage-based refinement to the models that combine individual elements to institutional ones, the Entrepreneurial Process Model by Bygrave and Hofer (1992). The figure below summarizes the suggested model as a good combination between individual and institutional elements to explain entrepreneurial activity.

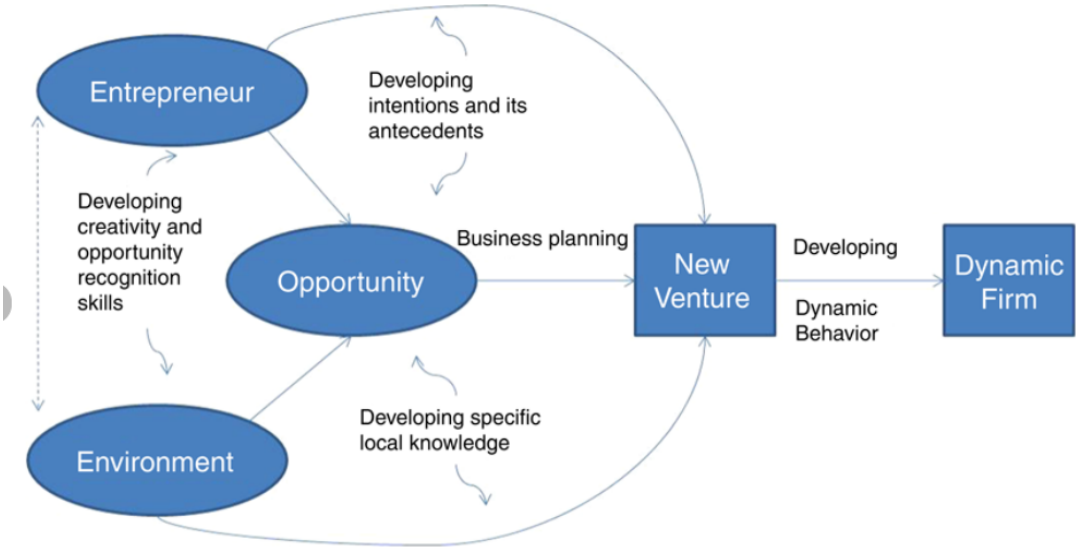

Figure 6. Entrepreneurial Process Model by Bygrave and Hofer (1992).

5.3 Contribution to Practice

The first contribution to practice is concerned with the need to focus on the mindset of the entrepreneur and not the structure and the ecosystem of the business environment. In other words, policymakers and regulators must think about the individual entrepreneur and their mindset – the development of a culture that promotes entrepreneurial thinking as well as promotes entrepreneurs in the country as innovative and desirable individuals. This increases their motivational index and therefore will increase their entrepreneurial activity. Advertisements, promotions as well as public efforts to change how the public perceives entrepreneurs to make them more desirable individuals (improving the subjective norm as suggested in the Theory of Planned Behavior) will lead to more people thinking about entrepreneurship as a direction in their life and that results in an improvement in the overall entrepreneurial activity in the country (Leyden, 2015).

Moreover, policymakers should focus on designing programs that promote the use of business support services - that is because there was a significant relationship between the business service sector and entrepreneurial activity which suggests that entrepreneurs may be unaware of these support services. Therefore, improving awareness of the available services to the entrepreneurs will improve uptake as well. Creating incubators and accelerators in major cities in the country where individuals will get support for starting their businesses and getting legal protection for their ideas is a necessary step to incentivize entrepreneurial activity (Hui, 2014).

Finally, the last contribution to practice is in linking innovation policy to the innovation to people. In other words, innovation systems may exist and contribute to an improved ecosystem, but if individuals in Switzerland do not feel inspired, motivated, and confident to really use these systems, then that will not really lead to improved performance in terms of entrepreneurial activity (Arthur, 2012).

Entrepreneurial activity must become incentivized and made culturally relevant – the culture must support the new generation in Switzerland to be independent thinkers and workers and to promote the desirability of entrepreneurial behavior. At the same time, making sure that the innovation infrastructure is available for the public to use.

5.4 Limitations

The first limitation is concerned with the scope where the researcher has chosen three variables to attempt to explain the effect on entrepreneurial activity. On that basis, there were conclusions made concerning the theoretical framework as well – yet the limitation is that there are many more variables that can influence the results, such as education, finance, regulation, risk tolerance, as well as the taxation system (Galankis, 2017). All of these can impact the entrepreneurial activity as well as influence the ecosystem – for instance, high taxation might be a factor that negatively influences entrepreneurial activity in Switzerland and therefore could contribute to the theoretical and practical contributions of the paper, yet these variables have not been included in the model (Van der Veen, 2005).

Another limitation is concerned with the measurement of the variables. These variables were measured in the GEM database, and further analysis shows that the GEM database also measures via a survey which includes a high degree of self-reporting. The literature has shown that self-reporting is a major criticism of this research strategy and therefore diminishes the strength and credibility of the results (Zapkau, 2017). Self-reporting is considered a limitation because it asks the respondents to measure their own motivation – in other words, a person might say that they are highly motivated to start a business, and that might be an exaggeration and not matched by reality; therefore, the results might not really be accurate when self-reporting is a limitation. Another issue is that the participant might feel pressure to show or reveal that they are motivated to start a business and be active, and therefore again there could be a bias to misrepresent motivational levels (Stanweiski, 2019).

There is the issue of generalizability – where criticism could be that the results cannot be generalized to countries beyond Switzerland. Yet the reality is that the researcher is content with this limitation because the researcher wants to actually investigate the case of Switzerland. In fact, this limitation is what paved the way for this research paper – in other words, because the results from other papers are not generalizable, it was necessary to investigate a country-level analysis for Switzerland specifically in order to understand the effects of different variables on entrepreneurial activity (Hui, 2014).

6.0 Conclusions

6.1 Conclusion

In conclusion, this research paper has been designed to investigate the effects of differential entrepreneurial variables such as motivation index, innovation, and business service sector on the entrepreneurial activity in Switzerland. The country Switzerland has been chosen as a case study due to renewed interest in Switzerland after news about the decline in entrepreneurial activity in the country, which led to researchers in entrepreneurship gaining more interest in the country. The lack of ability to generalize results from different countries in the literature meant that there is a need to investigate via a country-level analysis specifically for Switzerland.

The researcher used a quantitative research design with desk research as a research strategy. The researcher used the Global Entrepreneurship Monitor as a database to collect data regarding the variables chosen for the paper. Two theoretical frameworks have been chosen, which are the Theory of Planned Behavior and Entrepreneurship Ecosystem Theory, as an institutional theory that puts an increased weight on the external elements that influence entrepreneurs in an economy, such as innovation and service sector that supports the entrepreneurs.

The researcher also used multi-linear regression as a data analysis tool. The researcher investigated two regression models: one that analyzes the relationship between motivation, innovation, and business sector with (1) entrepreneurial intention and (2) entrepreneurial activity. The conclusions will continue to answer the different research objectives of this research paper.

The first objective of this research paper was to analyze the level of entrepreneurial activity in Switzerland. The primary raw data reveals that entrepreneurial activity in Switzerland has been highly volatile since 2010 – but in general, a trendline of an increasing nature has been identified. Therefore, it can be confirmed that between 2010 and 2024, the entrepreneurial activity in Switzerland is on the rise – the rationale for investigating Switzerland is seen in the raw data where between 2021 and 2023, entrepreneurial activity declined from 9 to 7, showing a slowing interest in entrepreneurship in Switzerland, but overall since 2010 there is an increasing trend.

The second objective is in relationship to the independent variables, namely motivation index, innovation, and business service sector. In regards to motivation, the results show that overall entrepreneurs in Switzerland are having an increased level of motivation. In regards to innovation,

there is stability, and in general since 2010 there is volatility, with the highest level of innovation achieved in 2015 with a score of 38. Finally, in regards to the business service sector, there is in general a decline since 2010 – though the best description is volatility, with a slight decline in the business service sector in Switzerland.

The third objective is concerned with investigating the relationship between those variables. The first conclusion reveals that there is an insignificant relationship between those variables and entrepreneurial intention – the p-value was high and therefore the null hypothesis could not be rejected. In regard to the relationship between entrepreneurial activity and motivation, innovation, and the business service sector, the model shows a significant relationship with a model strength of 0.73. Only the motivational index had a significant effect on entrepreneurial activity in the model.

In conclusion, motivation is the most significant factor that influences entrepreneurial activity in Switzerland. Policymakers and regulators must focus on the cultural and individual characteristics of the Swiss individual in order to improve entrepreneurial activity.

6.2 Recommendations

Lastly, the recommendations of this paper are that policymakers should focus on ways to encourage Swiss entrepreneurs and improve their motivation. That's because motivation seems to be the most influential factor that influences entrepreneurial activity. Strategies to improve motivation could be by promoting the benefits of entrepreneurial activity, improving the subjective norms towards individuals having their own businesses – making entrepreneurship appealing and attractive to the public, which creates motivational factors that improve motivation.

Making innovation and business sector services more accessible. Increasing awareness of these services and their availability via incubators, for instance, can increase the quality of this infrastructure and therefore increase the ability of entrepreneurship to benefit from them. That's because the results revealed that they have no effect on entrepreneurial activity – which means that they are either clustered in specific locations in the country or that the entrepreneurs are unaware of them.

It is also recommended that local governments in Switzerland adopt targeted entrepreneurship education programs that integrate entrepreneurship modules into secondary and higher education

and design specialized curriculums for the youth and early career professionals. The emphasis of these educational programs should also include real-world success stories in order to inspire individuals to adopt entrepreneurship paths and increase their motivational levels. Also in the curriculum, develop the mindset of the individual by increasing resilience, creativity, and autonomy; all will include the motivational levels and therefore increase the chance to adopt entrepreneurial pathways by Swiss individuals.

Public awareness campaigns are another strategic recommendation where storytelling that highlights non-traditional entrepreneurship, especially women and minority group individuals, will broaden the horizons of people from these underrepresented segments to also participate (Meyer, 2023). Often, people from diverse backgrounds are able to bring added value via their entrepreneurial activity, as the evidence also suggests (Duan, 2023).

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Appendix 1 Entrepreneurial Intentions model

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.538194
R Square	0.289653
Adjusted R Square	0.095922
Standard Error	1.918607
Observations	15

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	16.51093	5.503643	1.495128	0.270013
Residual	11	40.49157	3.681051		
Total	14	57.00249			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-4.13194	6.343746	-0.65134	0.528199	-18.0944	9.830553	-18.0944	9.830553
Business Service Sector	0.144763	0.113009	1.280983	0.226547	-0.10397	0.393495	-0.10397	0.393495
Motivational Index	0.218035	0.174227	1.251443	0.236733	-0.16544	0.601506	-0.16544	0.601506
Innovation	0.188334	0.126045	1.494171	0.163252	-0.08909	0.465758	-0.08909	0.465758

Appendix 2 Entrepreneurial Intentions model

Appendix 3 Entrepreneurial Activity Model

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.735287
R Square	0.540646
Adjusted R Square	0.415368
Standard Error	1.226131
Observations	15

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	19.46402	6.488005	4.315566	0.030549
Residual	11	16.53736	1.503396		
Total	14	36.00137			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-2.22463	4.054119	-0.54873	0.594152	-11.1477	6.69843	-11.1477	6.69843
Business Service Sector	0.077772	0.072221	1.076863	0.304592	-0.08119	0.23673	-0.08119	0.23673
Motivational Index	0.37024	0.111344	3.325195	0.006769	0.125174	0.61530	0.12517	0.61530
Innovation	0.095379	0.080552	1.184062	0.261344	-0.08192	0.27267	-0.08192	0.27267

Appendix 4Entrepreneurial Activity Model