MEASURING THE IMPACT OF VENTURE FINANCING ON ENTREPRENEURSHIP AND JOB CREATION: A CASE STUDY OF SINDH

Nawaz Ahmad [1] and Imamuddin Khoso [2]

Abstract

This study analysis the total jobs created as the result of entrepreneurial activity as well as total entrepreneurs established each year. The significance of entrepreneurship in the job market is well recognized by researchers, policymakers, analyst and different authors. Different methods are used to collect data related to these variables such as for total university pass-out students, secondary data from the Bureau of statistics; entrepreneurial intention data from the questionnaire and for the exit of entrepreneur's data from expert opinion. Data analysis techniques also differed since for university pass-outs growth model; entrepreneurial intention one sample t-test and for the exit of entrepreneurs, content analysis is conducted. Variables were then added to the final mathematical model to extract the total entrepreneurs and jobs created by them each year. The result obtained is very encouraging as for the first year i.e., 2009, 339,814 jobs are recorded, which keeps on increasing and reaches a respectable figure of 3,044,078 by 2018.

Keywords: Entrepreneurship, Entrepreneurial Intention, Job Creation, Unemployment, Pass Out Students

JEL Classification: C 630, E 270, J 640, L 260

Introduction

Young people in Pakistan, out of the total population, are estimated to be 48 per cent. They are aged between 15 and 49 years. On the other hand, 56 per cent of the population consists of people who are in between the age bracket of 15-64 years. The overall competitiveness of Pakistan is low, ranked from 83 to 126 from the year 2007 until 2016. The report of global competitiveness for the year 2016 identified 12 factors contributing towards competitiveness and productivity of an economy. Four of them are associated with the education of primary, secondary, business and training that leads to innovation and sophistication to the business. The pillar that indirectly impacts the business is the readiness of technology that adds efficiency to the labour market. The cause for the poor performance

---

[1] Assistant Professor, IoBM, Karachi. nawazahmad_pk@hotmail.com
[2] Professor, University of Sindh, Jamshoro. imamkhoso@gmail.com

of businesses in Pakistan is the performance on the basis that was evaluated by the weight of 60 per cent. When taking the capacity for innovation in technology, Pakistan ranked low because of the overall poor performance. Surprisingly, the fares of Pakistan in the latest technology are far better than India and thus Pakistan absorbs huge Foreign Direct Investment (FDI) by the transfer of technology. This is the surprising shock that Pakistan attains lower rank in the performance of its basic requirements but leads in FDI, followed by Turkey and Malaysia (Ekpe, Razak, Ismail, & Abdullah, 2015).

The last Census data of Pakistan indicates that most people who are educated but unemployed are below the age of thirty. These statistics showed that the crucial problem of Pakistan is that educated people are facing the problem of a job waiting or unemployment in the labour market. These people are the reason for the success of the job market and they cannot be ignored. It is the unrealistic problem that fewer jobs are not motivating people for higher education. Furthermore, the performance of unemployed people loses their control and motivation in obtaining training of science-based subjects. Specialization in education and performance are the factors that are important statisticaly to define job waiting. The good performance leads individuals for less wait in obtaining their jobs (Khan & Ali, 2011).

Moreover, unemployment in the economy forces the individuals to commit crimes in order to gain monetary benefits. Unemployment effects crime rate that impacts the market condition of a country. For instance, if the unemployment rate among individuals increases, the preferences of legal earnings decrease and the rate of crime boost up as unemployed people have to earn a monetary gain. Many studies showed that a decrease in employment rate increases the crime rate of the population. In a country, where unemployment is at its height, criminal activities are done by its young generation as sporting activity. It is defined in the Economic theory of crime that there is a cost of unemployment that increases the crime rate. Moreover, unemployment is costly because it keeps the unemployed away from production and decreases the skills of individuals (Gillani, Khan, & Gill, 2011).

As unemployment is the pervading issue of Pakistan, it is perceived by many scholars and researchers that entrepreneurship is a panacea for unemployment both in public and academic institutions. However, entrepreneurship is the important domain for the prosperity and growth of the nation. It is a fact that Nation needs job opportunities to regulate their spheres of life. The Nation needs to build their doctors, pilots, engineers, factory workers and entrepreneurs to develop their country. Keeping all such consideration in the ultimate frame of reference, this research tries to incorporate the whole process of job creation as addressed by entrepreneurship.

Literature Review

First, we would analyze the entire literature pertaining to entrepreneurial job creation process then we will further proceed with our analysis.

Entrepreneurship and Job Creation

The significance of entrepreneurship in the job market is well recognized by researchers, policymakers, analyst and different authors (Birch, 1979; Birch, 1987; Davis, Haltiwanger, & Schuh, 1996a; Davis, Haltiwanger, & Schuh, 1996b; Newmark, Wall, & Zhang, 2008). The findings of these research studies have consistently reported the fact that smaller firms despite lacking in advantages availed of large-sized firms contribute significantly to the job market or employment creation in an economy.

Birch (1987) highlighted that small enterprise with as less as 20 employees are responsible for aggregate growth in the job market within the USA. Later an argument by (Davis et al., 1996 a, b) came forward related to Birch's finding that these findings are enclosing upward bias with respect to benefactions from a small firm. In order to correct this error, these authors come up with alternative methods. The results that were disclosed by these methods were in favour of the findings that organization employing as few as 100 employees are responsible for one-third of the US employment creation from 1973-1988 with respect to the manufacturing sector.

Extending the application of Davis et al. (1996 a, b) method, again an analysis of the USA economy was conducted by Neumark et al. (2008). He highlighted the job creation between the period from 1992-2002 and proved the job creation for about 70% are by organizations employing an average of 100 employees. With this, the contribution of small-scale enterprises having based on 20 working employees is found to be 50%. Building an understanding on these findings it can be concluded that the paramount importance of small-scale firms is well documented and empirically proved with respect to the creation of employment or extension of the job market and is often taken as a justification for entrepreneurship.

Other investigations on the linkage between startups and job creation have depicted different conclusions; it may be due to different methodologies and tools that have been applied. Johnson and Parker (1996) on Great Britain conduct one such research. It verified the fact that an increase in a number of new firms and a decrease in the existing rate of already existing firm lowers the unemployment within the economy. Ashcroft and Love (1996) studies on Great Britain's firm found that the creation of new startups would greatly and favourably be linked with net changes in the unemployment level. Aghion, Blundell, Griffth, Howitt and Susanne (2004), empirical research emphasized the startup impact on increasing productivity of factors. It is concluded that startup and fresh firms do contribute to the increase in productivity in the manufacturing sector of Britain within the duration in between 1980-1993.

While considering these results at the regional level, a similarity is being observed that as the fresh firm enters in the region the unemployment rate drops (Reynolds, 1994; Acs & Armington, 2004). Anyhow, the extent of such connection shows variation over time. Brixy and Grotz,(2004)

study in Germany report consistency in findings.

Entrepreneurial Intention

Intention defines as "the willingness of people to try hard, by putting their efforts to achieve the desired performed behaviour." Generally, the stronger the intention will be, there will be more chance to perform the particular behaviour among students. It is more important to study the intentions of entrepreneurs because measuring actual behaviour is difficult for researchers. Entrepreneurial intention reflects the entrepreneurial behaviour of a person. We can say that intention is a predictor of behaviour. According to (Krueger, Reilly, & Carsrud, 2000) the behaviour of entrepreneurs is planned and intentional. Moreover, many researchers agreed that the behaviour of an entrepreneur can be judged or predicted by their intentions (Sankar & Sutha, 2016). Similarly, according to (Postigo, Lacubucci, & Tamborini, 2006) education plays an important role in entrepreneurial activity because it is crucial to motivate students towards knowledge-based environments. However, the knowledge of business and education of entrepreneurship affects its intentions and change the behaviours and attitudes of students such as the desire for self-efficacy and self-employment (Ismail, 2015).

Willingness or intention is proposed by Ajzen (1991)as the ultimate predecessor of behaviour. According to him, the behaviour is not accidental rather it comes in to play deliberately and is a consequence of pertinent information processing. Extending this, he also proposed that behaviour can be supported by events that are rewarding and can be enfeebled by pushing events. People prefer entrepreneurship since they consider self-employment as an appropriate career option for them (Davidsson, 1995). They found it on the path from where they could achieve their self-goals, work on their self-made plans and ideas and gain financial incentives by implementing these (Barringer & Ireland, 2010).

McStay, (2008) and Dohse and Walter (2010) explained intention to start entrepreneurial activity as one's desire to engage in behaviour and actions related to entrepreneurship, having been self-employed or by new venture creation. It is mostly related to becoming self-dependent or to feel, ambitions or guts for taking independent steps and courage to stand on one's own feet (Zain, Akram , & Ghani, 2010). Entrepreneurial behaviour needs to be guided by intentions since potential within an individual requires some sort of willingness in order to translate them into actions (Ismail, et al., 2009).

Bird (1988) referred willingness to start entrepreneurial activities as a person's cognitive state aiming for new venture creation, incorporating fresh concepts of business or creation of value addition within existing setups. Research studies have consistently found it as an important element that supports the creation of new establishment and having paramount significance when prosperity, growth and survival of establishment are concerned. According to him, an entrepreneur's habits wants, beliefs, values and personal needs are working at the back of the intentional process hence

giving it an engine to stimulate.

Scholars have observed and empirically tested that actions are categorized to be part of intentional behaviours making intention as a foremost regressor for behaviour to be constituted. Analysis of intention or willingness to start entrepreneurial activity provides researchers with invaluable comprehension for understanding the phenomenon or actions of entrepreneurs in much satisfaction by incorporating the antecedents of willingness to start entrepreneurial venture Peterman and Kennedy, 2003; Liñán, 2004; Kolvereid and Isaksen, 2006; Krueger, 2007. Kolvereid and Isaksen (2006) study taking longitudinal data of 297 founders of businesses disclosed that later entry within self-employment can actually be determined by the willingness to be self-employed.

Creation of a business cannot be regarded as involuntary action rather it's a more deliberate effort and requires serious intentions behind it (Krueger et al., 2000; Krueger, 2007). Research studies of Kruger (2007) have established an intervening effect of entrepreneurial intention in between potential regressors (financial support, cultural, social, skills, traits and demographics). They demonstrated that willingness as related to entrepreneurship tries to simplify the reasons that why some people initiate a venture creation before carefully scanning the opportunities or considering the nature of business in which they would be engaging themselves. According to the entrepreneurs, they should capitalize on the opportunity to get the advantage of understanding their goals, intention facilitates them in doing so. It explains the element that forces them to make decisions for opting entrepreneurship as a career or how practically the dream of venture creation would become a reality.

Entrepreneurial Exit

Since there are several reasons assumed and tested related to people having to start their entrepreneurial venture there can also be several reasons for people saying goodbye to such ventures (Parker, Storey, & Witteloostuijn, 2005), hence making exit a phenomenon that has its roots in multiple dimensions. The process of entrepreneurship should not be regarded only as a series of actions that leads to the formation of a new venture, but it should also include the exit from the venture that can occur at any instance during the development (DeTienne, 2010). A high extent of early business visionaries do not make it to an operational wander and the high extent of new pursuits survive for only a couple of years and are not effective in the long term. The process of entry and exit of businesses is a major driver of the evolution of industries and economies. It is an important determinant of market performance in terms of productivity and structure. Much is known about the interplay between entry and exit (Hessels, 2011).

It is found that an entrepreneur repeatedly enters and exits the entrepreneurial activities throughout his or her career. It helps them to acquire the required business skills and also to polish these skills. They are called "serial entrepreneurs" and they have a high share of new business in the market (Westhead, Ucbasaran, Wright, & Binks, 2005). Along with the understanding of the entrepre-

neurial process, it is necessary to understand the theory and factors which influences the discontinuation of the initiative or business idea (Davidsson & Gordon, 2012).

Although there have been contributions towards the topic in previous studies the answer remains unsatisfactory that why entrepreneurs opt for discontinuation of their new businesses especially if the study is focused in one-dimensional context because it is a multi-dimensional phenomenon (Khelil, Smida, & Zouaoui, 2012). So whatever literature is available on the entrepreneurial discontinuance, not much has been explored in it related to the duration between start-up and discontinuance phase of the entrepreneurs (Yusuf, 2012, Khan, Tang & Joshi, 2014) . And according to DeTienne (2010), Entrepreneurship is a complete process with a start and an end and we cannot understand the entrepreneurial process without understanding the end.

Starting a new business is always a risk. The chances of failure in the early stages are high and this risk is higher than the risk of unemployment when doing a salaried job. Many people do not start a personal business in spite of having high resources because they fear that the new business venture will fail (Hessels, Grilo, Thurik, & Zwan, 2009). it has been observed and evident that high proportion of young entrepreneurs does not make it to operational venture, even if they do then their venture survives few years' time and dies off in the short-term (Parker & Belghitar, 2006, Brüderl, Preisendörfer & Ziegler, 1992). However, exiting the venture is an evident act once in the entrepreneurial process by every entrepreneur (DeTienne, 2010).

Gimeno, Folta, Cooper and Woo (1997) were the first to discuss that the factors of influence for the success and failure may differ among the varying businesses and they also discussed the factors which may impact the survival of the organizations. entrepreneurs exit/discontinues their new start-ups for better opportunities which are explained as positive reasons (Wennberg, Wiklund, DeTienne, & Cardon, 2010) but one of the other reasons for entrepreneurial failure is the difficulties found in the environmental context (Cardon, Stevens, & Potter, 2011). The rate of entrepreneurial exit decisions is higher than one may presume, with an average of 150,000 people abandoning and discontinuing businesses in 2013 in the Czech Republic alone (Lukes et al., 2013b). Martin and Jan discuss the early entrepreneurial discontinuance at the Czech Republic in comparison with the Western countries. (Lukes & Zouhar, 2016). This article was based on "Hubris theory of entrepreneurship and theory of performance" and discuss the subjective decision on entrepreneur entry and exit. Peoples having higher industrial experience and those who are solo entrepreneurs making higher expectations are more found to discontinue their business in comparison with the team and new ventures with low ambitions.

Methodology

Research Design

The data collected for identifying the total job created by entrepreneurial activities involves various methods such as close-ended questionnaires, expert opinion and the Bureau of statistics reports, therefore, a multiple-method approach is incorporated and an especial emphasis on mixed method approach is made.

Sources of Information

Information is gathered from the Bureau of statistics regarding pass-out students for the past 33 years irrespective of the discipline they are enrolled in. The dropout ratio and Entrepreneurial intention is obtained through primary source by incorporating expert opinion and survey respectively.

Sampling Technique and Sample Size

Since a mixed method approach is used, therefore the sample size is different for each method. The sampling technique used for the survey is convenience sampling with a sample size of 106 individuals, studying at different universities of Sindh calculated at ten per cent margin of error. For export opinion, purposive sampling is used and opinion of Abdul Qadir Molvi (an expert in the field of entrepreneurship and a associate professor in Institute of Business Management (IoBM)) is incorporated. For secondary data incorporated on the growth of yearly pass out rate, data is taken for the period between 1981-2013. In addition to this further four year of pass out observations are forecasted for the period between 2013-2017. The an aggregate number of observations in 37.

Variables of the Final Models

Yearly University Student's Pass out Ratio

Professional college/universities average yearly pass out students, irrespective of the discipline they are enrolled in, for the province of Sindh.

The Entrepreneurial Intention of Students

The total number of university students willing to enter entrepreneurship as a possible career option.

Drop Out Ratio Of Entrepreneurs

The total percentages of entrepreneurs facing the business failure and thus discontinuing the business activity are considered in drop-out ratio. As per the interview conducted, it is found, in order to sustain a newly formed business an aggregate number of days required is 1000 days or almost 3 years. In the early year of business, the chances of failure are greater. Therefore, in consideration of this interview we have taken the drop out ratio of first two years of business as 50%, for the next two years as 25% and for the rest of the years, it remained constant for 15%.

Marginal Propensity of Employment

An entrepreneur while entering the business requires one person to carry with him the business activity. With each successful year of business, the number of people requires increases with an average increase of one person per year. These people are the major contributors to the number of jobs created via entrepreneurial activity. In this research, a term of the marginal propensity of employment is used to gauge these jobs.

Statistical Instrument to be Used & Procedure of Analysis

Various inputs of the final model are analyzed by different research techniques. entrepreneurial intention data is analyzed via one sample t-test and from its results, a percentage of intended students is derived. An Analysis of data gained from expert opinion and literature survey provide us with exit ratios. The data on a pass out students are processed via an exponential growth model. These quantities are then added to the entrepreneurial model for the generation of total entrepreneurs. when total entrepreneurs (for each successive year of business one job is created) multiply marginal propensity of employment for each year the resultant is the yearly job created by entrepreneurial activity.

The following mathematical equation is applied using MS Excel. To gauge Accumulated no. of entrepreneurs by the end of the year.

$$S_n = a_1 + a_2 + a_3 + a_4 + \ldots\ldots + a_n \ldots \ldots \ldots \ldots \ldots \ldots (1)$$

$$S_n = (x - r_1 x)(1 - r_1)^{n-2} + (x + r_2 x)(1 - r_1)^{n-2}(1 + r_2)^0 + (x + r_2 x)(1 + r_2)(1 - r_1)^{n-3} + (x + r_2 x)(1 + r_2)^2 (1 - r_1)^{n-4} +$$
$$\ldots.. + (x + r_2 x)(1 + r_2)^{n-2}(1 - r_1)^0 \ldots \ldots \ldots \ldots \ldots \ldots (2)$$

Where

S_n= Accumulated no. of entrepreneurs by the end of year 'n'
X= no. of entrepreneurs at first year
r_1= yearly drop out the ratio of entrepreneurs
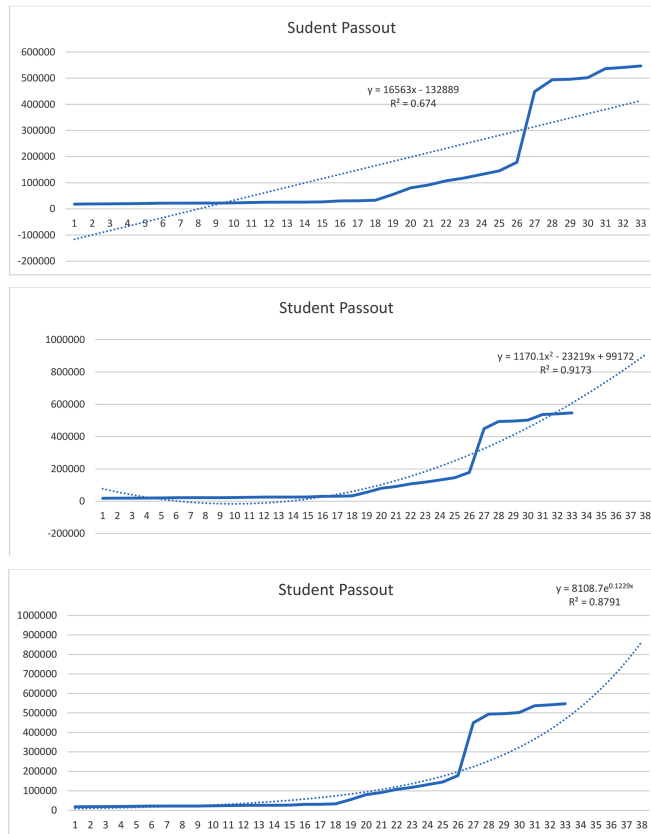
r_2= yearly growth of pass out students

The above equation may also be written in general form as follows:

$$S_n = (x - r_1 x)(1-r)^{n-2} + \sum_{\mu=0,\lambda=n}^{n,0} (x + r_2 x)(1-r_2)^{\lambda-2}(1-r_1)^{\mu} \ldots \ldots \ldots \ldots \ldots \ldots (3)$$

Analysis, Interpretation & Findings

Professional Colleges and Universities, pass outs Growth Rate

Graphical Analysis

The graphical representation of all three models can help us analyze; which growth models (linear, Quadratic and Exponential) fits the data well. The line of best fit seems to be most closely related to the observed values in the second and third graph representing Quadratic and exponential function respectively. Which method is most suitable can now be determined by inferential statistics.

Table 1
Professional Colleges and Universities, Pass Outs Growth Rate

Dependent Variable:	Student	Passout						
		Model Summary				Parameter Estimates		
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.674	64.082	1	31	.000	-132888.583	16562.737	
Quadratic	.917	166.280	2	30	.000	99172.706	-23219.199	1170.057
Exponential	.879	225.326	1	31	.000	8108.801	.123	

The above table gives statistics related to all three-growth models; linear, quadratic and exponential. Although all three models are statistically significant as linear $f (1, 31) = 64.082$, $R^2 = 67.4\%$, $p<0.01$; Quadratic $f (2, 30) = 166.280$, $R^2 = 91.7\%$, $p<0.01$ and exponential $f (1, 31) = 225.326$, $R^2 = 87.9\%$, $p<0.01$ but we have chosen exponential function for our analysis since its F statistics is most significant among comparative model considered.

Table 2
Reliability Analysis for the Questionnaire of Entrepreneurial Intention

Variables	Number of Items	Cronbach's Alpha
Family Background	3	0.753
Education	4	0.733
Individual Desire	13	0.917

The questionnaire employed to gauge entrepreneurial intention was found to be internally consistent; all construct meeting the criteria of 0.7 or above the value of Cronbach Alpha (DeVillis, 2003; Kline, 2005). The first construct of family background consisted of 3 items and had acceptable internal consistency with Cronbach al; the phase of 0.753. The second and third construct consisted of 4 and 13 items respectively, again reporting an Acceptable value of Cronbach alpha.

Table 3
Descriptive Statistics For Entrepreneurial Intention Questionnaire

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Family Background	106	2.7736	0.99946	0.09708
Education	106	3.7094	0.80776	0.07846
Individual Desire	106	3.8075	0.75652	0.07348

Since the dimension of the questionnaire was kept such that; 1 points towards lowest level of agreement and 5 pointing towards the highest level of agreement, therefore, it can be well observed from above table that agreement of respondents towards the importance of family background for shaping entrepreneurial intention is quite low (2.7736 ± 0.99946). Education (3.7094 ± 0.80776) and individual desire (3.8075 ± 0.75652) are showing the considerable agreement of respondents in shaping their entrepreneurial intention.

Table 4
Inferential Results of One Sample T Test For Entrepreneurial Intention First Questionnaire

One-Sample Test

	Test Value = 3				95% Confidence Interval of the Difference	
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Family Background	-2.332	105	0.022	-0.22642	-0.4189	-0.0339
Education	9.042	105	0	0.70943	0.5539	0.865
Individual Desire	10.99	105	0	0.80755	0.6619	0.9532

Results of one sample t test highlights that construct of Family Background is not statistically significant with Mean Difference -0.22642,(95% CI 0.03 to 0.41) ,t(105)= -2.332, p>0.05. Education with Mean Difference 0.70943,(95% CI 0.86 to 0.55) ,t(105)= 9.042, p<0.05& Individual Desire with Mean Difference 0.80755, (95% CI 0.95 to 0.66) ,t(105)= 10.99, p<0.05 are statistically significant.

Table 5
Entrepreneurial Intention Data That Need To Be Fitted To the Model

Percentage of Intended Pass out Graduates:

	N	Mean	$\{(EX/n)*100\}$	Answer /5
Family Background	106	2.7736	$\dfrac{10.2907 =}{3}$	343.02/5
Education	106	3.7094		
Individual Desire	106	3.8075	$3.4302*100=343.02$	$=68.6\%$

The summated mean score of all three constructs of entrepreneurial intention is then divided by 5 (scale incorporated consist of five-point measurement) to gain an overall percentage of students intended to become entrepreneurs.

Table 6
Total Number of jobs created by entrepreneurial activity each year

Passout Stusents	493,917	495,893	501,893	536,549	541,085	546,728	529290.6	598506.6	676774.1	765276.8	
					Number of Jobs (Incorporated with growth and drop out)						
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
J	2009	339814.90										339814.90
O	2010	339814.90	341174.38									680989.28
B	2011	254861.17	341174.38	345302.38								941337.94
S	2012	254861.17	255880.79	345302.38	369145.71							1225190.06
Created	2013	238932.35	255880.79	258976.79	369145.71	372266.48						1495202.12
	2014	243711.00	239888.24	258976.79	276859.28	372266.48	376148.86					1767850.65
	2015	241680.07	244686.00	242790.74	276859.28	279199.86	376148.86	364151.91				2025516.73
	2016	234774.93	242646.95	247646.55	259555.58	279199.86	282111.65	364151.91	411772.54			2321859.97
	2017	224503.52	235714.18	245582.83	264746.69	261749.87	282111.65	273113.93	411772.54	465620.59		2664915.81
	2018	212031.10	225401.69	238566.18	262540.47	266984.87	264479.67	273113.93	308829.41	465620.59	526510.42	3044078.33
					Year Wise Percentage Job Contribution						
	2009	100.00										
	2010	49.90	50.10									
	2011	27.07	36.24	36.68								
	2012	20.80	20.88	28.18	30.13							
	2013	15.98	17.11	17.32	24.69	24.90						
	2014	13.79	13.57	14.65	15.66	21.06	21.28					
	2015	11.93	12.08	11.99	13.67	13.78	18.57	17.98				
	2016	10.11	10.45	10.67	11.18	12.02	12.15	15.68	17.73			
	2017	8.42	8.85	9.22	9.93	9.82	10.59	10.25	15.45	17.47		
	2018	6.97	7.40	7.84	8.62	8.77	8.69	8.97	10.15	15.30	17.30	

The above table gauges the total yearly employment generated by entrepreneurial Activity within a period from 2009 until 2018. The inputs of the model are, yearly university pass out students

irrespective of their discipline; intention of students to become entrepreneurs (68.8%); the drop out ratio of entrepreneurs (50% for first two, 25% for another two and 15% for the rest of the years) and marginal propensity of employment (1 person per year). The university pass-out students for first six years are taken and the rest of the four years are extracted with exponential growth formula. These pass outs formed a base so that the individuals intended to choose entrepreneurship could be extracted from them. The drop out ratio is indicated higher for the initial years as spotlighted by many studies that, when the fresh entrepreneurs enter the industry; the hurdles present in the way to development makes many of them to cease their survival and take exist. Whereas, the entrepreneurs learning by experience and getting mature with time in the same industrial setup record low failure and manages their survival. Another major input is a marginal propensity to employment; whenever an entrepreneur starts his venture, the struggle starts on his own but as a year passes and business starts to grow an additional person is required at each year with the progression in the business. The total job created in the year 2009 are 339814.90; in 2010 680989.28; in 2011 941337.98; in 2012, 1225190; in 2013, 1495202.12; in 2014, 1767850.65; in 2015, 2025518.63; in 2016, 2321859.97, in 2017, 2664915.81 whereas in 2018, 3044078.

While looking at 2008 data it can be observed that 68.8% of intended pass outs of 2008 start their entrepreneurial setup in 2009 hence these 339815 are considered as 100%. Struggling in the first year 50% of them cease their existence and the rest remain dedicated to their business and employees one more person to carry out their business activity. The employed person thus entering the market by these entrepreneurs of 2009 setup constitutes 49.90% of total employment generated in 2010. When these entrepreneurs enter into 2 years of business, 50% more of them closes entrepreneurial venture. Remaining need two persons now to carry out the growing business expansion in 2010 .with the entrance in 2011 & 2012 the dropout ratio of these entrepreneurs' drops down to 25% and these survivors need 3 persons in 2011 and 4 persons in 2012 respectively. This makes the total employment generated these entrepreneurs in 2011 as 27.7% and 20.08% in 2012.now in the fifth year, With the further progression of time and enhanced understanding of market dynamics, the dropout rate further declines up to 15%, the remaining entrepreneurs create jobs with an addition of one more labor each year. This makes the aggregate creation of job by 2008 pass out in 2015 as 241680 (11.93%); in 2016 234775 (10.11%); in 2017 224504 (8.42%) and in 2018 212031 which is 6.97% of total employment generated in 2018.

Discussion

The contributions made by entrepreneurs within an economy are noteworthy, this significance is not only highlighted in our study but previous studies (Birch, 1979; Birch, 1987; Davis, Haltiwanger & Schuh, 1996a; Davis, Haltiwanger & Schuh, 1996b; Newmark, Wall & Zhang, 2008) also consistently report the same facts. Our study has shed light on the dynamics operating within Pakistani environment taking data from the province of Sindh as the target population. However, understanding the job creation process is not easy since it involves considerable noise. The process

involves continuous entry and exit by different participant involved therein. The study has paid paramount importance to gauge the entire process and produce the total number of job created by these entrepreneurs in their continuous years of self-employment. Our model gives an approximate numerical figure about total yearly job creation from the period between 2008 and 2011. Each step of the model is designed carefully so that the approximation of reality could be possible, giving important findings with empirical evidence. The results produced and claims established are backed up by real-life data, which are lacking in various studies conducted before.

Conclusion

The economy of Pakistan with deteriorating progress rate requires accelerators or catalyst that could boost its overall performance. Entrepreneurship with such a large share in the job creation process could perform that role and can provide such boast. An improvement in current or due diligence while formulating future policies is direly needed by the concerned authorities so an individual while framing career decision criteria could place entrepreneurship at priority.

References

Acs, Z., & Armington, C. (2004). Employment growth and entrepreneurial activity in cities. *Regional Studies, 38*(8), 911-927.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.

Ashcroft, B., & Love, J. H. (1996, October). Firm Births And Employment Change In The British Counties: 1981–89. *Regional Science, 75*(4).

Barringer, R. B., & Ireland, D. R. (2010). *Entrepreneurship: Successfully Launching New Ventures*. Pearson.

Birch, D. L. (1979). *The job generation process*. Cambridge, Mass. : M.I.T. Program on Neighbourhood and Regional Change.

Birch, D. L. (1987). *Job Creation in America: How Our Smallest Companies Put the Most People to Work*. NewYork: Free Press.

Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case For Intention. *Academy Of Management Review, 13*(3), 442-453.

Blundell, R., Griffith, R., Howitt, P., & Prantl, S. (2004). Entry and Productivity Growth: Evidence from Micro-level Panel Data. In *Journal of European Economic Association.*

Brixy, U., & Grotz, R. (2004). Differences of the economic performance of newly founded firms in West and East Germany. *n Advances in interdisciplinary European entrepreneurship.*

Brüderl, J., Preisendörfer, P., & Ziegler, R. (1992). Survival Chances of Newly Founded Business Organizations. *American Sociological Review, 57(*2), 227–242.

Cardon, M. S., Stevens, C. E., & Potter, D. (2011). Misfortunes or mistakes?: Cultural sensemaking of entrepreneurial failure. *Journal Of Business Venturing, 26*(1), 79-92.

Davidsson, P. (1995, Nov). Determinants Of Entrepreneurial Intentions. *Paper prepared for the RENT IX Workshop*. Piacenza, Italy.

Davidsson, P., & Gordon, S. R. (2012). Panel studies of new venture creation: a methods-focused review and suggestions for future research. *Small Business economics, 39*(4), 853–876.

Davis, J. S., Haltiwanger, J., & Schuh, S. (1996b). Small business & Job Creation: Dissecting the myths and Reassessing the facts. *Small Business Economics*, *8*(4), 297-315.

Davis, S. J., Haltiwanger, J. C., & Schuh, S. (1996a). *Job Creation and Destruction*. MA and London: Cambridge: MIT Press.

DeTienne, D. R. (2010). Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development. *Journal of Business Venturing, 25*(2), 203-215.

Dohse, D., & Walter, G. S. (2010). The Role Of Entrepreneurship Education And Regional Context In Forming Entrepreneurial Intentions. (08034) Barcelona Spain: l'IEB Institut d Economia de Barcelona, Universitat de Barcelona.

Ekpe, I., Razak, R. C., Ismail, M., & Abdullah, Z. (2015). Entrepreneurial skill acquisition and youth's self-employment in Malaysia: how far?. *Mediterranean Journal of Social Sciences, 6*(4), 150.

Gillani, S. Y., Khan, R., & Gill, A. (2011). Unemployment and Property Crimes in Pakistan. *Asian Economic and Financial Review, 1*(3), 124-133.

Gimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. (1997). Survival of The Fittest? Entrepreneurial Human Capital and the persistence of underperforming. *Administrative Science Quarterly*, *42*(4), 760-783.

Hessels, J., Grilo, I., Thurik, R., & van der Zwan, P. (2011). Entrepreneurial exit and entrepreneurial engagement. *Journal of Evolutionary Economics, 21*(3), 447-471.

Ismail , M., Khalid , S. A., Othman , M., Jusoff, H., Abdul Rahman, N., Kassim , K. M., et al. (2009). Entrepreneurial Intention among Malaysian Undergraduates. *International Journal Of Business Management*, *4*(10), 54-60

Ismail, A. (2015). The Entrepreneurial Attitude and Intentions of Newly Enrolled University Students – Issues and Policy Implications. *Journal of Research in Business, Economics and Management (JRBEM), 4*(3), 2210-2395.

Johnson, P., & Parker, s. (1996). Spatial Variation in Determinant and Effects Of Firms Births and Death. R*egional Studies*, *30*(7),679-688.

Khan, S. A., Tang, J., & Joshi, K. (2014). Disengagement of Nascent Entrepreneurs from the Start-up Process. *Journal of Small Business Management, 52*(1), 39–58.

Khan, S. R., & Ali, S. Z. (1988). Some findings on higher educated unemployment in Pakistan. *Canadian Journal of Development Studies/Revue canadienne d'études du développement, 9*(2), 261-278.

Khelil, N., Smida, A., & Zouaoui, M. (2012). Contribution à la compréhension de l'échec des nouvelles entreprises: exploration qualitative des multiples dimensions du phénomène. *Revue de l'Entrepreneuriat, 11*(1), 39-72.

Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing, 21*(6), 866-885.

Krueger Jr, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship theory and practice, 31*(1), 123-138.

Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing, 15*(5-6), 411-432.

Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccolla Impresa/Small Business, 3*(1), 11-35.

McStay, D. (2008). An investigation of undergraduate student self-employment intention and the impact of entrepreneurship education and previous entrepreneurial experience. *Theses,* 18.

Lukeš, M., & Zouhar, J. (2016). The causes of early-stage entrepreneurial discontinuance. *Prague Economic Papers, 2016*(1), 19-36.

Neumark, D., Wall, B., & Zhang, J. (2008). *Do small businesses create more jobs? New evidence from the national establishment time series* (No. w13818). National Bureau of Economic Research.

Nouvelles entreprises : exploration qualitative des multiples dimensions du phénomène, Revue de "Entrepreneuriat, n° 1. *11,* 39-72.

Parker, S. C., & Belghitar, Y. (2006). What Happens to Nascent Entrepreneurs? An Econometric Analysis of the PSED. *Small Business Economics, 27*(1), 81–101.

Parker, S. C., Storey, D. J., & Witteloostuijn, V. A. (2010). What Happens to Gazelles? The Importance of Dynamic Management Strategy. *Small Business Economics, 35*(2), 203–226.

Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students'perceptions of entrepreneurship. *Entrepreneurship Theory and Practice, 28*(2), 129-144.

Postigo, F., Lacubucci, D., & Tamborini, M. F. (2006). Undergraduates Students as a source of Potential Entrepreneurs: A Comparative Study Between Italy And Argentina. In F. Alian, & K. Heinz, *International Entrepreneurship education: Issue and Newness, Edward Elgar*. Newyork NY.

Reynolds, P. D. (1994). Autonomous firm dynamics and economic growth in the United States, 1986-1990. *Regional Studies*, 229-442.

Sankar, P., & Sutha, A. (2016). COLLEGE STUDENT MIND-SET AND INTENTIONS TOWARD ENTREPRENEURSHIP IN CHENNAI CITY. *Journal of research--Granthaalayah, 4*(8), 2396-3629.

Wennberg, K., Wiklund, J., DeTienne, D. R., & Cardon, M. S. (2010). Reconceptualizing entrepreneurial exit: Divergent exit routes and their drivers. *Journal of Business Venturing, 25*(4), 361-375.

Westhead, P., Ucbasaran, D., Wright, M., & Binks, M. (2005). Novice, Serial and Portfolio Entrepreneur Behaviour and Contributions. *Small Business Economics, 25*(2), 109–132.

Yusuf, J. E. (2012). A Tale of Two Exits: Nascent Entrepreneur Learning Activities and Disengagement from Start-up. *Small Business Economics, 39*(3), 783–799.

Zain, Z. M., Akram, A. M., & Ghani, E. K. (2010). Entrepreneurial intention among Malysian Business Student. *Canadian Social Science, 6*(3), 34-44.