

Chapter I

Introduction

Entrepreneurship is glamorous word in the world of business. Often, successful entrepreneurs are celebrities. They are seen as catalysts of harnessing opportunity, technology and capital or economic structure. Even policy makers eye them as potential employment generators and wealth creators. Despite such social standing, Amar Bhide (2000) laments that systematic knowledge on how entrepreneurs start and grow their business is very limited. Even more, it does not occupy a prominent place in the study arena of business of Economics. Apart from clichés and anecdotes, little is known about new and fledgling business. Fortunately, of late, some important studies are coming to fore which are trying to unravel the world beyond the popular imagination.

Of popular imagination, Bill Gates and Steve Jobs dominate the horizon who used the changes in technology to exploit the investment-uncertainty-profit tri-axis. These founders pursued highly uncertain areas in new technological fields where upfront capital requirement was less and profit was also not assured. On contrary in same time space, developed companies focused on initiatives that required significant upfront investment and relatively low uncertainty.

Changes in the nature of opportunities set in motion variations in the difficulties entrepreneurs face and the tasks they must perform. Usually, founders of new business, who face significant capital constraints and great uncertainty, rely on opportunistic adaptation to unexpected events. As businesses grow and commit more resources to uncertain initiatives, the opportunism gives way to systematic

methods to anticipate and plan for long term. The tendency of business of different sizes and maturity to specialise in different and often complementary initiatives has important implications for the social good.

The link of technological changes and firm formation is widely studied. The changes in technology spurs formation of firms to exploit the advancement in technology by providing new goods, services and other value added services. Schumpeter (1934) argued that creative destruction of resources by technological advancement is major source of innovation in capitalist system in which new firms displace old firms. The first part of the study envisages study of personal narratives of India's leading entrepreneurial icons contained in Entrepreneurship- A study by Knowledge Commission of India. The results and interpretations in National Knowledge Commission (NKC) report and study of Amar Bhide of 100 entrepreneurs appearing in *The Inc 500*¹ is list used for exploring the link.

This study examines the creation of firms from economic point of view. It relies extensively on terms and findings drawn from economic literature on small firms. New firm creation is considered to be integral feature of economic growth and progress (Young and Phillip, 2006). This is because entrepreneurial activity can diversify country's sources of wealth creation and, therefore, it is important for governments to commit vast resources to entrepreneurial development. The study attempts to study macro-economic factors and technological factors that drive firm formation. Logically, this study is an exploratory endeavour to understand this complex and but less studied subject. The significance of such study lie in the exploration of various factors which contribute in formation of new firms.

¹Bhide, Amar V. (2000). *The Origin and Evolution of New Business*. New York: Oxford University Press

New firm creation is influenced by the various components of macroeconomics which is measure of flow of resources. Whether economic structure affects the formation of new firms or not is proposed to be studied. The economic constraints which shape business opportunities are usually limited by economic setup of the country. As it is it is commonly known that most promising businesses start with a meagre fund. Availability of capital, labour, technology is influenced by the existing economic theory are common constraints. Does nature of business, initial conditions, resources, adaptation in the market and traits and skills of the founders define the boundary conditions of new firm? There are studies longitudinal time-series data which show that unemployment is positively related with firm creations while other studies on cross-sectional data on predicted the opposite. Another aspect of failure of firms and its relation to birth of firms is an interesting area of study. The failure rate which is measured by closure of new firms is studied as a factor contributing to creation of new firms. Measuring closure of firms is much easier than survival of new firms because very few new firms survive beyond 3-year period. Theoretically, death of firms may be related to births of firms as resources released by ceased firms would provide opportunity in the economy. In this study the failure rate of firms is studied to find any correlation with the creation of new firm.

Statement of Problem:

It is established that changes in technology, demography and society provide the fertile ground for new business opportunities. Societal, demographic and technological changes are genesis of entrepreneurial opportunities for innovators to exploit the demand for related products and services. These changes create uncertainty in the market providing opportunity to be exploited for profits.

Established businesses are found to be slow to react in uncertainty and usually avoid highly uncertain areas where markets are unknown and profits are not certain. This highly uncertain area is naturally filled up first with new firms. There are numerous studies which relate technological changes to formation of new firms. There are empirical studies which investigated the effects of macroeconomic conditions on business environment. These studies also studied the role of productivity of new small firms in harnessing resources in uncertain and low profit business conditions. Normally, these studies on this subject are available only for developed economies. In recent years, a few studies are done in India also. Noteworthy among them is the study of entrepreneurship by the National Knowledge Commission (NKC). The longitudinal time series study (Choi Rok Young and Phan Phillip H (2006)) showed that unemployment is positively related to creation of new firms. For an important, fast-developing economy like India, a similar study might help to provide a lead to policy makers and future researchers. In India, there are so many policies for intervention by government on the economic structure and based on findings of this study these can be suitably altered /modified /replaced to impart stimulus for new firm formation. Furthermore, It would add to scarce knowledge resource of India in this field.

Objectives:

1. To understand the influence of economic structure of the country on entrepreneurial activity which affect the formation of new ventures in last two decades.

2. To explore the influence of government policies/initiatives for promotion of business environment in creation of new start-ups/ventures in the country.

Research Questions:

1. How has economic structure of last two decades influenced the creation of new firms in India?
2. Is there any relationship between unemployment level in the economy and creation of new ventures in India?

Scope/Limitation/Delimitations

The data for registration of new firm from 1994 to 2014 is obtained from Annual Reports on Working and Administration of Companies Act 1956. This report contains data of annual registration of new non-government firms which are limited by shares. These firms are registered as per Companies Act 1956 and only one data of 2014-15 is based on Companies Act 2013.

Furthermore, this study is limited to the formal private sector and registration of new firms per year. The database does not include the number of total, closed or inactive firms, because it is seen that data is not accurately collected on total active or inactive firms.

This study uses only the number of newly registered firms limited by shares. Partnerships and Sole-proprietorships firms are not considered. It is certain that

the stock number of total operational firms might include many closed firms which has not formally de-registered to be shown under ceased category.

The failure of firm data is based on Statement no IV, which contains data of ceased/liquidated companies formally closed by the Ministry of Corporate Affairs. The actual closure might have happened earlier as process of formal closure takes time.

The unemployment rate is based on ILO estimation and inflation rate ad deflator of GDP is adopted from World Bank site for open data.

It is critical to note that many variables which are outside the control of the researcher could impact the formation of firm. These variables may include: new invention or discovery, sudden change in society or taste of people, regional imbalances, legal changes, etc.

There are statistical and design problems inherent with correlation studies and that is true for present study also.

The delimitations utilized by the researcher in this study were determined by a desire to gain an understanding of the complete relationship that exists between macroeconomic indicators and creation of firm. The selected macroeconomic indicators are chosen which have an apparent direct effect on creation of firms.

A second delimitation used by the researcher is the use of only the self-appraisal of prominent founders used in the report on Entrepreneurship by NKC. Fresh self-appraisal from leading founders and company heads was not possible in this limited time.

A third delimitation is used by the researcher is to rely on the exploration of 100 founders listed in The Inc 500 by Bhide (2000) for his book.

Literature Review

Bhide (2000) tried to build a framework around the entrepreneurial space limited by investment, uncertainty and profit. He argued that Entrepreneurs are the primary engine of commercial change in the economy. Entrepreneurial opportunities are ideas that have the potential to create value through new, repackaged, or repositioned products, markets, processes, or services. These ideas are executed by willing individuals who are bold to take the risk and enter the market with their offerings. This space has many forces working in different ways. The economic structure in which this plays out is very crucial for new businesses. The macroeconomic aggregates and growth of technology strongly influence the entrepreneurship and new firms so born add to the wealth of the country. This book provides more insight on individualities and traits of the entrepreneurs but explain little about economic conditions in which these enterprising people work. He had broadly discussed three primary aspects of entrepreneurs- initial conditions, nature of business and traits and skills. This study is based on economic conditions of US & UK and hence the claims and findings of author may not be applicable to all kind of economic setups.

With ever increasing worth and perceptible impact of Entrepreneurship in wealth-creation and employment-generation in the country, National Knowledge Commission in 2008 conducted a detailed study to comprehend and evaluate the entrepreneurship in India. A report titled 'Entrepreneurship' came out of this endeavour. NKC explored factors that have assisted and which could further encourage and facilitate even greater growth of Entrepreneurship in India.

This report is based on an intensive study. It conducted one-on-one interviews with one hundred and fifty-five entrepreneurs from diverse backgrounds, in selected cities across India. It also collected information from consultations with other relevant stakeholders in the entrepreneurial ecosystem (such as educational institutions, incubation centres, the financial community, chambers of commerce, entrepreneurial associations etc.) across the country. NKC summarises that a successful entrepreneurship ecosystem is critical for nurturing new businesses to augment the national wealth. The critical elements of this ecosystem are: individual motivations, socio-cultural factors, access to early-stage finance, and education & business environment. However, the report has not examined the links of macroeconomic aspects and firm formation or closure.

Theories of entrepreneurship and industry dynamics generally assume that new firms are mostly launched by novice or new entrepreneurs and failure in its endeavour means exit of this individual from entrepreneurship. But Plehn-Dujowich, Jose (2010) in his work, 'A theory of serial entrepreneurship', proposed a theory of serial entrepreneurs in which an entrepreneur has three occupational choices: maintain his existing business, shut down to enter labour market as wage earner, or shut the original business and start a new business with additional startup cost. They, based on this theory, argued that to promote new firm formation, policymakers should reduce the cost of shutting down firm and starting new firm by using incentives, loan guarantee, etc. to increase resources for new firms. They also showed that increase in wages decrease entrepreneurial activity of both novice and serial entrepreneurs. The model in this study has not included labour market citing ambiguity. It is mainly focused on two choices (maintain his business or shut and start a new business) of serial entrepreneurs.

They, therefore, have cautioned that policies based on results of this study could have unintended results which are not factored in the model.

Shane and Scott (2001) focused on Industry-level factors such as market structure and technological regime or on individual-level factors such as the work experience of entrepreneurs affect creation of high-technology companies. This research showed that three attributes of technology; importance, radicalness and patent scope; influence the likelihood that an invention will be exploited for venture creation. However, this study has not discussed the spread of new innovations/technology in geographical areas and resultant opportunities created thereof. Instead this study is limited to university technology and research leading to entrepreneurial exploitation.

Decer Ryan, Haltiwanger, Jarmin and Miranda Javier (2014) did a US specific study on role of entrepreneurship which adapts to changing economic circumstances and recover from recessions. It shows that job creation and productivity growth is based on the reallocation of resources away from low productivity business to high productive business. These reallocations depend on entry and exit of firms in an economy. This study ,however, has not discussed relocation of resources due to migration of workers and switching of works in same job allocation due to technological changes.

Storey (1991) in his work, ‘The birth of new firms—does unemployment matter? A review of the evidence’, tried to review two strands of works on the subject of formation of firms and unemployment. He found a paradox in longitudinal time-series studies and cross-sectional pooled studies of relationship of unemployment to the firm formation. Unemployment is associated differently with firm

formation in two type of data sets (longitudinal and cross-sectional). He attributed this paradox to a possible measurement error or omitted variable bias.

Audretsch David B. and Acs Zoltan J. (1994) tried to explain the paradox discussed by Storey (1991) with their models on firm formation. Audretsch David B. and Acs Zoltan J. (1994) discussed the paradox of the results of longitudinal and cross-sectional study of impact of unemployment on firm formation. The longitudinal time series studies show that entrepreneurship is promoted by high levels of unemployment but cross sectional study point that startup activity tend to shrink where unemployment is high. This study reveals that cross-sectional studies of startup activity in a manner is not directly comparable to longitudinal time-series analysis. The cross-sectional study is done with the assumption that unemployment is uniform across all industries. This inconsistent results of the study show that depending on data type the unemployment in an economy is positively or negatively related to the formation of new businesses. They tried to explain their model based on 'economy-wide shocks' and its impact on the economy. They argued that 'economy-wide shocks' is the reason for paradoxical results of previous studies. This study has limitation of based on US data where labour resource is organised quite differently than fast developing and developing economies of the world. They have urged future researchers to study the paradox in other economic setup.

There were studies which tried to analyse the macroeconomic aggregate and creation of firms by HighField (1987). Audretsch David B. and Acs Zoltan J. (1994) in their study, New Startups, technology, and Macroeconomic

fluctuations, discussed about macroeconomic fluctuations and its effect on activity of new firm start-ups. During macroeconomic expansion, the activity of start-up increases and during contraction it becomes sluggish. This study has, however, not studied the role of technological conditions during the macroeconomic fluctuations. The authors mention that small firms account for a larger share in the economy while it is expanding and smaller share when contracting. The fluctuations of macroeconomics are absorbed by small firms which induce a productive flexibility in the economy. They have tried to explore the small firm creations which offer much needed flexibility to the economy. Authors have studied the new firms along a cross section of industries which are industry specific elements along with other macroeconomic aggregates like unemployment, cost of capital, GDP growth, etc. They have asserted, based on this empirical investigation, that small firms do serve as agents to fulfil the Schumpeterian work of creative destruction of available resources to provide consumers with new or improved products and services.

They have further argued that Schumpeterian task is performed in two distinct ways. “First, as incumbent enterprises reduce employment and close plants during economic contractions, the resulting unemployment triggers an increase in the startup of new firms. That is, at least some of the resources released by the incumbent firms, presumably because they were being applied the least efficiently, will be redeployed by new startups. This redeployment of resources occurs despite the findings in this paper that all boats are lifted by rising tides, that is, startup activity is generally driven, to a considerable extent, by the business cycle. During the macroeconomic expansion, the startup of new firms increases in

virtually every industry. By contrast, startup activity becomes sluggish during a recession.

The second manner in which new start - up serves as Schumpeterian firm is through innovative activity. A rather striking result is that the start-up of new firms is apparently not deterred either in industries which are capital intensive or R&D intensive, or where learning-by-doing plays an important role.”

The authors have concluded that small firms fulfil the Schumpeterian criteria of redeployment of unemployed resources of incumbent enterprise as well as resources through innovation. Macroeconomic fluctuations change the direction of flow of existing resources and new resources through improvements or inventions. But these studies have not been done in a growing economy of developing or under developed countries where resource flow due to macroeconomic fluctuations follow different contours.

Young Rok Choi and Phillip H. Phan (2005) also studied above aspects and the paradox. In their work ‘The influences of Economic and Technology Policy on the Dynamics of new Firm Formation’, they attempted to investigate the role of macroeconomic and technological policies that encompass the opportunity and individual drivers of entrepreneurship. These factors do spur growth of new firms in a country. An exploratory attempt was made on longitudinal time series data in US on unemployment and other macroeconomic aggregates and its association with creation of new firms. They have observed that entrepreneurship involved opportunity in the economy and presence of enterprising individuals who can harness them. Their model used three factors; technological, economic opportunities and willing-individuals; to engage in enterprise. Authors have used

R&D expenditure as inputs to knowledge creation and tried to link it to as a driver of technological opportunities. They have argued that scientists and engineers working on these R&D projects accumulate tacit knowledge and spill-overs of cutting edge technologies. This know how arms them to start new ventures. Furthermore, government and corporate investments in Research and Development (R&D) push further sophistication and enhance the level of technological capacity in the country. Secondly, it is noticed that there individual-level choice is another factor which is not yet empirically established, between self-employment and employment.

They further discussed that there are several components that lower opportunity costs of self-employment and possibly positively influence the entrepreneurship or the individual choice for self-employment. Factors which increase the opportunity cost of starting new business would result in choice which favour employment over self-employment. They explained that influence of unemployment can be due to two distinct factors. One is a “pull” factor which attracts people towards self-employment as it generates great level of personal wealth as compared to wage-employment. However, higher level of unemployment is sign of a weak economy and new small firms will fail to survive in such conditions. This may result in reduction in rate of return for newer firms and hence creation of new firms in the weak economy might decrease. Another argument, is that new firm formation is driven by persons forced by poor labour conditions and job insecurity to start a new enterprise. These two push and pull factors of unemployment have negative and positive relationship with rate of firm creation. Authors, for this study, had assumed, being US, a flexible labour market to have free mobility of labour resources.

Finally, the authors have concluded, based on longitudinal US dataset, that their study show “that opportunity drivers (R&D, patent application, economic concentration, and pro-competition) and individual driver choice driver were significantly related to new firm formation over time”. Contrary to previous studies, they did not find a significant relationship between unemployment and new firm formation. Overall this study demonstrated that macro policies designed to enhance technological and market opportunity and lower the opportunity costs of self-employment can lead to higher level of new firm formation. They concluded that the role of government is important given the positive relationship of policy factors in technology, economic concentration, competition and labour market to entrepreneurial intensity.

Above review of Literature point to the basic foundation of the present study that the number of firms created in an economy is a measure of entrepreneurship. Annual Reports on working of Companies Act by Ministry of Corporate Affairs (MCA) have data on firms registered, ceased and other development on the working of Companies under the Company’s Act of India. The data on number, size and its distribution of new firms was collected from these reports spanning from 1994 to 2014. It gave insight on the nature and geographical distribution of companies working in India. Important statutory changes and its implications were also learnt from these reports. These were also studied to understand the legal changes taking place in corporate administration and management with new rules, regulations and laws.

Methodology

The study uses secondary data for quantitative and qualitative methods of research. The quantitative data collected for new firm formation and other economic aggregates is used for descriptive statistics. The findings are further supplemented by qualitative data. A qualitative study of existing research papers, policy papers, etc. is done to explore the linkage of economic structure to creation of firms. Also, analysis of narratives of Founders/CEOs of successful new ventures available at different sources like NKC report on entrepreneurship, etc. would be used as supplement to gather insights on the impact of these factors.

Various data sources were scanned for data on macroeconomic aggregates as well as about aggregates on firms, companies, etc. The primary data source is World Bank for macroeconomic data like unemployment, lending rate, inflation, interest rate, GDP, etc. This is because of uniformity and fidelity of data, Also, this data is used by majority of researchers worldwide. For data on new firm registration, the data available with the concerned ministry was found relevant for the study. Data for firm formation and liquidation per year was collected from the annual reports of the Ministry of Corporate Affairs. The data was collected for a period of 20 years (1994-2014) period. 1994 is taken for its relevance to economic changes initiated in Indian Economy. The end period of 2014 is determined solely by data availability for all variables up to the time of study.

The initial information gathering also involved collecting data, understanding definition and relevance of macroeconomic indicators like GDP, Unemployment rate, Inflation, R&D expenditure/capita, etc. The data is collected from World

Bank open database source, Planning Commission (now NITI Ayog) sources, Department of Science and Technology, MOSPI, RBI, etc.

The collection of data on unemployment was difficult exercise because the data on unemployment is assessed based on NSO four-yearly survey and estimation. After detailed study on the method of aggregation of unemployment data, it is found that the data available at World Bank open data source is based on ILO benchmarks. Since this benchmark is adopted by most of the countries and scholars, it is considered suitable for the present study.

The data on expenditure on R&D was available at Department of Science and Technology (DST). It is available both in actual terms as well as a percentage of GDP. However, for compatibility and relevance with other data, World Bank data for R&D which is also as a percentage of GDP is used for the study.

To assess the average size of new firms, data for 10 years is collected in different size brackets of paid up capital of new registered companies (Table 1). The breakup followed by Ministry of Corporate Affairs (MCA) is used. The data was presented in following sizes; Less than 1 lakh; More Than 1 lakh and less than 5 lakh; More than 10 lakh and less than 25 lakh; More than 50 lakh and less than 100 lakh; More than 100 lakh;

Qualitative data collected relates to personal narratives and insights of many entrepreneurial icons of India which was available in appendices of NKP report (2008) and newspaper sources. Furthermore, Bhide (2000), has interviewed and analysed 100 Inc 500 entrepreneurs in the US. These insights are critically examined to study the impact of various macroeconomic aggregates on rate of firm creation. Analysis, conclusions and recommendations of NKC(2008) and

Bhide (2000) provide the foundation of understanding entrepreneurship processes which supplemented the study. This scrutiny was essential for understanding and interpreting the results of quantitative study. Detailed analysis of qualitative data is needed to supplement the answers to research questions.

Chapterisation:

This research study is organised in five chapters.

Chapter I includes the background of the study, statement of the problem, objectives research questions, limitations, delimitations, review of literature and methodology.

Chapter II is about entrepreneurship and economic structure.

Chapter III includes the selection of macroeconomic data sources, data type, definition and relevance.

Chapter IV presents the study's findings including correlation information, testing the research questions, and results of the data analyses for the two research questions.

Chapter V provides a summary of the entire study, discussion of the findings, implications of the findings for theory and practice, recommendations for further research, and conclusions.