Entrepreneurship is one of the four factors of production: land, labour, capital and entrepreneurship. The word itself derived from 17th century French “entreprendre” refers to individuals who were “undertakers” meaning those who ‘undertook’ to take the risk of enterprise creation. Sometimes they were referred to as ‘contractors’ ‘soldiers of fortune adventurers, builders, merchants and so on and so forth. Entrepreneurship was a popular subject in writings on economics in 18th and 19th century. Notable early French, British and Austrian economists who branded entrepreneurs as ‘change agents’ were more enthusiastic in their respective progressive economies.

Entrepreneurship in developing economies particularly in the early post-war period was seen as an interesting subject of study due to its impact on fastening growth of these economies. W. Arthur Lewis very succinctly pointed out that economic growth is bound to slow unless there is an adequate supply of entrepreneurs looking out for new ideas and willing to take the risk of introducing them. The interest or the issue however, got dwindled led by the 1970s. Because of high growth rates of real output the evidence of entrepreneurial presence was felt during this period. It was however, due to the slower growth disproportionate rise in population and poor performance of public funded enterprises, decline in employment in public enterprises coupled with the growth in the free-market economics, the focus on the presumption of entrepreneurship got reactivated.

This chapter on survey of literature on entrepreneurship is presented under four sections. Section one focuses on the early theories as well as modern theories on entrepreneurship; Section two explains the determinants of entrepreneurship; Section three put a perspective on empirical research methodology used. Finally section four reviews some research findings on entrepreneurship among socially deprived class.

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2 Lewis, W.A. (1955), the theory of Economic Growth, London, Allen & Univer; p. 82,
along with the existing gap in research on entrepreneurship in India. The whole objective of this chapter is to develop a perspective on the concept of entrepreneurship so as to put this study in its right track.

I

EARLY THEORIES OF ENTREPRENEURSHIP

Entrepreneurship as a subject received attention in 18th century. The concept put in by different scholars was so elaborate and varied that there is little consensus about what actually constitutes entrepreneurial activity. Scholars have proposed a broad array of definitions resulting into identification of various dimension of it.

Richard Cantillon a French economist of Irish origin, is credited with giving the concept of entrepreneurship a central role in economics. In his book Essai sur la nature du commerce in general which was published in 1755, Cantillon described an entrepreneur as a person who pays a certain price for a product to resell it at an uncertain price, thereby making decisions about obtaining and using resources while consequently assuring the risk of enterprise Cantillon’s entrepreneur is not an investor, nor does he change supply or demand. Instead he is perceptive intelligent and willing to take risks (Richard Cantillon, 1931).

Adam Smith spoke of the ‘enterpriser’ in is book entitled ‘wealth of nations’ (1776) as an individual who undertook the formation of an organization for commercial purposes. Accordingly, he ascribed to the entrepreneur the role of industrialist, at the same time he viewed the entrepreneur as a person with unusual foresight who could recognize potential demand for goods and services. In Smith’s view, entrepreneurs reacted to economic change, thereby becoming the economic agents who transformed demand into supply. (Adam Smith, 1776).

Subsequent researchers have developed Cantillon’s thoughts or risk theory of profit in two separate and well-conceived directions. Kirzner (1973, 1985) emphasized the thrust on entrepreneur as a ‘middlemen’ or arbitrage who has necessary skill to manipulate situation to profitable opportunities. Kirzner’s explanation can be linked to why some people become entrepreneurs while others do not. He emphasized that
successful entrepreneurs notice what others have ignored. In a sense, ability to perceive things or situation differently lies with the entrepreneurs therefore they are differentiated from others’. (Kirzner, 1973 & 1985). In a similar way Gifford attempted to endogenise the component of alertness in a model of limited entrepreneurial attention. According to him entrepreneurs endowed with high levels of managerial ability optimally spend their time operating numerous projects and hence face a high opportunity cost of perceiving new innovative opportunities, which in fact renders them less ‘alert’. (Gifford, 1998).

French economist Jean Baptiste say, in his book Traite d’ Economic Politique (translated into English in 1845 as a Treatise on Political Economy) described an entrepreneur as one who possessed certain arts and skills of creating new economic enterprises, yet a person who had exceptional insight into society’s needs and was able to fulfill them, (J.B. says, 1845). Say combined the economic risk taker’ of Cantillon and the ‘industrial manager’ of Smith into an unusual character. Says entrepreneur influenced society by creating new enterprises through assimilating resources towards fulfillment of the needs of the society. Thus in the words of Say, the chief contribution of the entrepreneur is to combine and coordinate factors of production. Although some scholars have criticized Say’s view of the entrepreneur as just a superior kind of user with managerial duties, other have offered modern restatements and developments of Say’s perspective. Herbert and Link criticized Say’s perspective on entrepreneur and gave an elaborated version. According to them, “the entrepreneur is someone who specializes in taking responsibility for and making judgmental decisions that affect the location, the form, and the use of goods, resources or institutions. (Herbert & Link, 1988, 1989).

The Herbert and Link synthesis incorporates the ideas of risk, uncertainty innovation, perception and change. Explained alternatively, the entrepreneur has differentiated abilities that allow him or her, within an environment of risk and uncertainty, to act on them. In a sense then, the entrepreneur may be said to perceive what normal people of

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5 Holt, ibid, p-4.
lesser alertness and perceptiveness would fail to notice (Machlup, 1980, p. 179) and in a dynamic context, creative and imaginative action will shape the kind of transactions that will be entered into in future market periods (Kirzner, 1985, pp- 63-4).

In support of Say’s concept of entrepreneurship Casson explained that an entrepreneur is someone who specializes in taking judgmental decisions about the coordination of scarce resources’ (Casson, 2003, p. 20).

In 1848, British economist John Stuart Mill elaborated on the necessity of entrepreneurship in private enterprise. Subsequently, entrepreneur were referred to as ‘fourth factor’ of economic endeavour who credited with owning an enterprise. Mill’s work, however, was among the last of the early economic studies in British or France that recognized entrepreneurship as central to economic theory.

Carl Menger (1840-1921) established the subjective perspective of economics in his book, entitled “Principles of Economics” in 1871. According to him, economic change does not arise from circumstances but from an individual’s awareness and understanding of those circumstances. The entrepreneur, therefore, was considered as the change agent who transforms resources into useful goods and services after creating the circumstance that lead to industrial growth. (Carl Menger, 1950).

Entrepreneurship as a process was revived by an Austrian economist Joseph Schumpeter (1883-1950). Schumpeter described entrepreneurship as a force of ‘creative destruction’ whereby established ways of doing things are destroyed by the creation of new and better ways to get things done. He further described entrepreneurship as a process and entrepreneurs as investors who use the process to shelter the status quo through new combinations of resources and new methods of commerce. This could involve; (i) the creation of a new product; (ii) a new method of product, (iii) the opening of a new market; (iv) the capture of a new source of supply; or (v) a new organization of industry (Joseph A. Schumpeter, 1934).

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Schumpeter seems to have viewed the entrepreneur not as a calculating utility maximiser but as a rare unusual creature driven by instinctive motives. Schumpeter regarded profit as a residual, not a return to the entrepreneur as a factor of production and even claimed that the entrepreneur is never a risk bearer – capitalists (financers) bearing the risk instead. The very observation by Schumpeter that only the capitalists are the bearer of risk and not the entrepreneur invited criticism from Kanbur (1980) as the attempt was to differentiate unscientifically the capitalists from the entrepreneurs.

In stark contrast to Schumpeter, Liebenstein (1968) claimed that a defining feature of changes of a gradual nature to existing products and processes, through a combination of leadership, motivation, the ability to resolve crises and risk taking. (Leibenstein, 1968).

McClelland (1961) in his study ‘The Achieving Society’ established a notion of differentiation between entrepreneurs and non-entrepreneurs on the subject of ‘achievement motivation.’ For the first time perhaps, McClelland posited a ‘need for achievement’, (n-ach) as the key characteristics of successful entrepreneurs. In McClelland’s words: “a society with a generally high level of n-ach will produce more energetic entrepreneurs who, in turn, produce rapid economic development”.

McClelland further emphasized that entrepreneurs are: proactive and committed to others; unhesitatingly take responsibility for their decisions; prefer decisions involving risk propensity; desire feedback on their performance; and dislike non-challenging routinised work. His basic thrust was promotion of entrepreneurship through socialization and training although contrary results form such efforts have been found.

It is possible that attitude to entrepreneurship are determined by the culture and religion of particular ethnic groups (Weber, 1930). Examples can be drawn from the

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fact that some prominent figures in Islam and the Sikh religion were businessmen and some Hindu castes specialize in business activities. (Rafiq, 1992). In Britain, Clark and Drinkwater (2000) found that, all else equal, Muslims, Hindus and Sikhs had significantly higher probabilities of being self-employed than Christians from ethnic minorities. Similarly some Asian cultures stress self-sufficiency, thrift and hard work, which might help to explain high British- Asian self employment rates (Borooah and Hart, 1999). However, most empirical studies find little or no effect from religion on entrepreneurial choices.

Langlois (2007), identifies certain connections and contradictions in these theories in the form of “opportunity discovery, exploitation and evaluation” concepts of entrepreneurship with Kirzner, Knight and Schumpeter respectively.

Early theories can be separated in to two parts, viz. the neoclassical tradition (such as Knight, 1921, Marshall, 1930; Schultz, 1980) wherein an entrepreneur leads the market towards equilibrium and the Austrial tradition (such as Kirzner, 1973, 1997) which sees entrepreneurs as part of an ongoing disequilibrium process of indefinite or infinite duration.11

None of the above theories provides a complete guide of understanding entrepreneurship. Moreover it is difficult to derive a single assertion to conceptualise the term Entrepreneurship. The multi-dimensional aspects, thus has been an inbuilt phenomenon that exists in the term entrepreneurship.

Modern Theories of Entrepreneurship

Knight’s promise that individuals do not have to be entrepreneurs. They can choose between entrepreneurship and some other paid employment. They select that offers them the greatest expected utility. (Knight, 2000). Most theories treat occupational choice as a discrete, rather than a continuous decision.12

Meredith et al. have explained that entrepreneurs enjoy the excitement of a challenge, but they don’t gamble. Entrepreneurs avoid low-risk situations because there is a lack

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11 Parker, op cit., p-35
12 Parker, op cit., p-37
of challenge and avoid high-risk situations because they want to succeed. They like achievable challenges’. (Meredith et al., 1982, p. 25).

Most researchers assume for simplicity that entrepreneurs face some kind of idiosyncratic risk to their profits, whereas employees all face a certain wage. The assumption of perfect certainty in paid employment is usually….. and can be relaxed without affecting analytical predictions. Similarly it can also be assumed that risk can provide upside potential as well as downside outcomes, making riskier markets more attractive and hence liable to market entry even by risk-averse entrepreneurs (Sheslinski and Dreze 1976). The possibility that occupations offering high upside potential can attract able individuals seeking rare but highly profitable opportunities was recognized over half a century ago (Roy, 1951).

Bhide contends that entrepreneurs who become very successful in sectors with highly skewed returns do not necessarily need to have special insights or a novel technological discovery. They might merely possess superior information and sell an already existing service or product more effectively than the competitors.

He concludes that “given…. limited endowments, profitable start ups tend to cluster in small, uncertain market niches” (Bhide, 2000, p. 113).

Kanbur studied the effects of greater risk aversion or the equilibrium number of entrepreneurs. Kanbur’s model generates two hypotheses (i) if labour is hired after the outcome of the random shock is observed, an increase in absolute risk aversion decreases the equilibrium number of entrepreneurs, since risk-averse individuals avoid risky occupations; (ii) if labour is hired before the outcome of the random shock is observed, an increase in absolute risk aversion has an ambiguous effect on the number of entrepreneurs (Kanbur, 1979).

The models discussed above are simplistic assumptions about occupational choice as it talks of costless switching between occupations. According to them if entrepreneurship becomes attractive relative to paid employment, workers are assumed to move immediately into entrepreneurship, the converse also applies. However, individuals might incur costs of switching occupation may be non-pecuniary eg, sudden disruption of an accustomed life style, stress form change or
stigma for failure (Gromb and Scharfstein, 2002; Landier, 2004). Sometime the cost may be in economic in nature, e.g., cost of raising start-up capital (Boot, 1992).

Dixit showed that risk together with such costs can give agents an option value of waiting before switching. It is rational to remain in the occupation not only because of the switching cost, but also because there is an option value to wait and see if conditions in the currently unfavorable occupation improve (Dixit, 1989).

In practice, however, entrepreneurs differ from employees and among themselves in terms of their innate ‘entrepreneurial ability’. Lucas (1978) was one of the first scholars to trace out the economic implications of heterogeneous entrepreneurial ability. Ability in entrepreneurship might derive from human capital (van Praag, 2005), idiosyncratic leadership qualities (Leibenstein, 1968), or judgment (Casson, 2003), among other possibilities. Lucas explained the entrepreneurial ability with the help of a mathematical derivation: With lowest ability in the population ‘X’; while the highest is ‘Xm’ the relative frequency of individuals with an entrepreneurial ability x is denoted by f(x) and the cumulative relative frequency by F(x).

Lucas (1978) assumed that x scale up an entrepreneur’s output of ‘q’ to give net profit of a π(x) = xq - c, where c is the cost of using capital and labour to produce q (similar results obtain xq scales down the entrepreneur’s costs, but it is simplest to work with the output assumption)\(^{13}\)

By normalizing the output price to unity and assuming that all people are taken to be risk-neutral, it can be asserted that all and only individuals with x ≥ x will become entrepreneurs, where X_m is the identity of the ‘marginal entrepreneur (defined as the person who is indifferent between the two occupations):

\[ \pi (X_m) = W \]

An implication of this equation of entrepreneurial occupational choice is that there are a total of 1 - F(x’) entrepreneurs, the remaining F(x’) people work for the entrepreneurs as employees. Occupational choice with heterogeneous entrepreneurial ability\(^{14}\)

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\(^{13}\) Parker, op cit., p. 41

\(^{14}\) Ibid., p. 42
Lucas prescription on entrepreneurship and occupational choice although provided valuable guidance on developing a perspective on entrepreneurship vis-à-vis employment it became subject of criticism due to its over reliance on Gibrat’s Law (Firms growth rates are independent of firm size). Another point of criticism was its neglect on consideration of technological change. Innovation and technological change may have propelling impact on new entrepreneurial opportunities with a competitive advantage over their larger counterparts in some industries (Acs & Audretsch, 1991).

Kihlstrom and Laffont (1979) formalized what Knight (1979, p. 745) discussed on diversity among individuals with regard to confidence in their judgement to new firms. Those who are ‘confident and venturesome’ assume the ‘risk’ or ‘insure’ the doubtful and timid by guaranteeing to the latter a specified income in return for an assignment of the actual results.15

More risk-averse individuals are willing to pay a premium in order to insure themselves against risk. In other words, faced with choice between receiving a safe return in paid employment, w, and a risky return in entrepreneurship a more risk-averse person is likelier to take the safe option. Kihlstrom & Laffont, proved that if there is a continuum of agents differentiated only by their risk attitude only the least risk-averse will become entrepreneurs.16

II
DETERMINANTS OF ENTREPRENEURSHIP

In the preceding pages several theories of entrepreneurship, role of entrepreneurship and several factors influencing individuals to participate in entrepreneurship have been presented. The primary focus on people to participate in entrepreneurship was as a matter of occupational choice. The present section considers a wide variety of empirical variables bearing on the decision to choose entrepreneurship. Towards this end, the evidence about impact of pecuniary and non-pecuniary incentives to be an entrepreneur has been examined. Factors such as role of human and social capital,

16 Parker, op cit., p. 49
focus on risk attitudes and conditions, psychological characteristics, motivational factors etc have also been examined as determinants of entrepreneurship.

**Financial and Non-financial incentives**

Money may not be the determining factor for entrepreneurial orientation. Schumpeter in particular highlighted the importance of non-economic motivation; will to found a private kingdom; to conquer; the impulse to fight; to prove one self superior to others; to succeed for the sake of success itself, but not for the fruits of success. Finally there is the joy of creating, of getting things done, or simply of exercising one’s energy and ingenuity.\(^{17}\) The most widely used tool for estimating the effects of relative earnings or participation in entrepreneurship is the binary Probit model with relative incomes.

A relative earnings advantage in entrepreneurship increases the livelihood of participation in entrepreneurship. In comparison to the concept of relative wages, methodologically this approach is superior to and hence helps in analyzing earning as an instrument for entrepreneurship. Role of financial incentives gives conflicting observations as to determinants of entrepreneurship. Rees and Shah (1986), Dolton & Makepeace (1990), Taylor (1996) reported positively whereas Fraser & Greece (2006) reported weak support for the role of financial incentives for entrepreneurial orientation. Therefore, the relationship between relative incomes & entrepreneurial choice pose something of a puzzle, since they suggest that entrepreneurs do not respond robustly to pecuniary incentives. Alternatively, these results may simply be telling us that pecuniary rewards are not the primary motive for being an entrepreneur (Amit et al., 2000). Participation in entrepreneurship might instead be motivated by lifestyle considerations, for instance as means of being one’s own boss (Parker, 2009).

American entrepreneurs have historically been very responsive to incentives, directing their attention to profitable innovations and the satiation of demand (Khan and Sokoloff, 1993). There exists evidence that post-materialism, i.e. the possession of non-materialistic life goals is negatively related to entrepreneurship (Uhlaner & Thurik, 2007). This suggests that entrepreneurship is largely about the pursuit of

\(^{17}\) Schumpeter, op cit, p-93-4
material gain. To stretch the point further extensive research is required on entrepreneurship responsiveness to pecuniary incentives.

**Being one’s own boss**

The desire for autonomy can be suberved through entrepreneurship. Knight (1921) therefore, explained that individuals remain in entrepreneurship despite the possibility that they earn less there and receive a lower risk-adjusted return on their assets. Several literature available confirm evidence about the desire for independence in entrepreneurship in terms of both job satisfaction and contentment with work-life balance;\(^{18}\) Blanchflower and Oswald (1998) reported in a survey carried out to study the level of satisfaction through entrepreneurship as an occupation. Hundley, (2001), Benz and Frey (2004), it is necessary to take account of these factors when making cross-group comparisons. Several studies which control for job and personal characteristics, including income gained and hours worked confirm the finding that entrepreneurs are more satisfied with their jobs on average than the employees are.\(^{19}\)

**Human Capital**

Human Capital can be analysed with three main elements of human capital vector: \(X\) age experience and formal education. Individuals are increasingly likely to become entrepreneurs as they age up to a certain point, after which the probability of becoming an entrepreneur declines with age (Levesque & Minniti, 2006). Age and experience are not synonymous, yet a common practice is to measure experience as current age minus school-leaving age. Most econometric investigations have explored the effects of age on participation in entrepreneurship using cross-section data. By far the most common empirical finding obtained for a range of countries and time periods, is of a quadratic pattern with the probability of being an entrepreneur increasing up to a maximum at some age in the forties or early fifties. Age may have different effects or the willingness and opportunity to become an entrepreneur. For instance, using the bivariate probit model, Van Praag and Van Ophen (1995) found

\(^{18}\) Parker, op cit., p- 111

that the opportunity to become self-employed is significantly higher for older than for younger Americans. However, older workers are significantly less willing to become self-employed than younger workers (Blanchflower et al., 2001).

Another component of the human capital vector $X_{ex}$ here is experience as it captures more informatively than age does the productive impact of post-formal education training and skill acquisition. Evans and Leighton (1989) estimated that previous self-employment experience had a positive and significant impact on the probability of white male Americans entering self-employment, whereas previous paid employment experience had no effect.

This result is consistent with Jovanovics (1982) theory that entrepreneurs learn about their abilities over time, which can only do from having engaged in entrepreneurship. It is also not worthy that individuals with greater industry experience are more likely to start their own independent venture than to purchase a franchise (Kaufmann, 1999; Williams, 1999).

Work experience, irrespective of any specific kind, can promote entrepreneurship if entrepreneurs start business related to their former occupations. Dunkelberg et al., (1987) identified that ventures of founders who identified new venture ideas from prior jobs enjoyed higher than average rates of growth. Whether entrepreneurs who leave entrepreneurship transition into paid employment rather than unemployment (Cowling et al., 2004) or continue to different areas and remain in entrepreneurship, empirical evidence gives mixed and inconclusive results. In any case these studies are suggestive of productive effects of entrepreneurial experience rather than just a taste for entrepreneurship.

**Formal Education:**

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21 and 22 Parker, op cit., p-117.
Formal education may either effect positively on negatively or entrepreneurial orientation. On the one hand education might improve entrepreneurial judgment and abilities by providing people with analytical abilities, information about business opportunities, and an understanding of markets and the entrepreneurial process (Cason, 1995). There is no denying of the fact that formal education is associated with general search for skills, foresight, imagination and computational and communication skills as well as with specific skills and knowledge required to operate business in many sectors. Although in some sectors, such skills are not necessary to start a business in an empirical context they might provide a proxy for social background, ambition and endurance. On the other hand the skills that make entrepreneurs successful are unlikely to be the same as those embodies in formal education (Cason, 2003). One might hesitate to suggest that education as proxy for managerial ability in entrepreneurship (Lucas, 1978). In several studies entrepreneurship is usually measured as self-employment or business ownership and educational attainment is usually measured by highest qualification attained by survey respondents. As with age majority of studies find a positive relationship between educational attainment and the probability of being or becoming an entrepreneur though this is far from being a uniform finding. Sometimes the occupational and industrial substructure of self-employment, provide evidence that vocational qualification and apprenticeship training rather than purely academic qualifications affect participation in entrepreneurship (Burke et al., 2000); Knight & Mckay (2000).

**Demographic and industry characteristics**

This section discusses the influence of marital status and family background as well as industry characteristics for impacting entrepreneurial behavior.

Many researchers have regarded marriage as a form of social capital (Davidson & Horing 2003), although it is also believed that married people with children may be unwilling to take the risks associated with entrepreneurship.

**Family background**

Entrepreneurship generally runs in family. According to a collection of papers from eleven nations assembled by Arum and Muller (2004), having a self-employment further raises the odds of a son transitioning into self-employment. Fairlie and Robbs

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22 Parker, op cit., p-135
(2007) propose several reasons why having a parent who is an entrepreneur might increase the probability that a given individual eventually becomes an entrepreneur themselves:

1. Acquisition of general business or managerial experience obtained from proximity to a family-owned business (general business human capital).
2. Acquisition of industry or firm-specific business experience obtained from proximity including business networks (specific business human capital).
3. Inheritance of a business.
4. Provision of cheap finance by parents to help their offspring to overcome borrowing constraints.
5. Correlated preferences for entrepreneurial activities among family members, perhaps enhanced by favorable family role models.\(^\text{23}\)

Evidence of strong linkages in entrepreneurship between parents and children was established by Henley (2007) in European Settings; Fairlie and Robb (2007) in American situation and Djankov et al. (2006) in China.

Several studies lend support to the fact that parental experience and parental business success in entrepreneurship almost doubles the probability of a son entering self-employment.

Sometimes the entrepreneurial role models might extend beyond the boundaries of the traditional nuclear family to include friends and neighbours also.

**Macroeconomic factors**

Research particularly on two areas such as knowledge-based and technology-based entrepreneurial efforts provide evidence relating to important macroeconomic policy variable. Blau (1987) was one of the first researchers to explore the role of TFP (total factor productivity) in entrepreneurship. According to him change in TFP ratios favouring industries in which self-employment in common was one of the principal

Chapter 2: Survey of Literature

causes of rising US self-employment between 1972 and 1982. Recently it has been proposed that relationship between entrepreneurship and exogenous technological changes is U-shaped (ACs, Andretsch and Evans, 1994).

At early stages of a country’s economic development, technological change shifts output away from agricultural and small scale manufacturing towards large scale manufacturing with a consequent reduction in self-employment rates. At a later stages of economic development however, technological changes again gives rise to the services and self employment rate recover.

Knowledge spillovers and growth

Some studies on entrepreneurship show evidence of knowledge spillover theory of entrepreneurship. This theory predicts that entrepreneurs will locate close to sources of knowledge spillovers resulting into formation of new organization in order to exploit them thereby generating economic growth. For example, Audretsch, Keilbach and Lehmann (2006) observe that publicly held German SMEs are attracted by access to universities supplies of graduates and their production of tacit knowledge. Some of the knowledge spillover theory’s implication appears to carry through to more aggregated industry and regional settings. Several researchers have found that new firm formation rates are higher in regions where higher proportions of adults hold college degrees and where local densities of firms and personnel are greater.24

There is now an extensive literature on the relationship between entrepreneurship and unemployment study of this kind attracts researchers on two aspects. First there is the direct effect of removing unemployment through self-employment. Second there is the indirect effect of eventual job creation by entrepreneurs who hire outside labour. Shane (2003) has given a contrary opinion as there is actually no clear-cut theoretical or empirical relationship between entrepreneurship and unemployment. Unemployment may affect entrepreneurship in two diametrically appositive ways: one is the ‘recession-push’ and the other ‘prosperity-pull’ effects. According to recession-push hypothesis, unemployment reduces the opportunities of gaining paid

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employment and the expected gains from job search which ‘pushes’ people into entrepreneurship. A second related effect is that as firms close down in recessions, the availability of second-hand capital equipment increases, reducing barriers to entry (Binks and Jennings, 1986). Both of these effects imply a positive relationship between entrepreneurship and unemployment.

Similarly, the prosperity-pull hypothesis explains that at times of high unemployment the products and services of entrepreneurs face a lower market demand. This reduces incomes in entrepreneurship and possibly also the availability of capital. Then under such circumstances individuals are ‘pulled’ out of entrepreneurship.

Furthermore, the evidence of longer unemployment durations leading to entrepreneurial motivation exists (Evans and Leighton (1989).

**Pull Versus Push Factors**

Entrepreneurship is influenced by push and pull factors at both cultural and economic levels. These factors play a central role in explaining as to why some persons are more entrepreneurial in their behavior than others. In other words what motivates these people to take a plunge in entrepreneurship? Pull factors comprise individuals’ expectation of being better off as entrepreneurs from both material (profit etc.) as well as non-material (status and respect) perspectives. Pull factors are therefore treated as ‘positive’ motivators for independence, status, job satisfaction and technical skills. Push factors, on the other hand, are characterized by negative reasons such as job insecurity and dissatisfaction (Shapero and Sokol, 1982). These negative reasons, including personal crisis have been reported in eleven countries as the most important determining factor in the decision to become self-employed (Audreestch and Thurik, 1998). Audreestch et, al. (2001). Other negative reasons such as income necessity, unemployment and discrimination are major push factors as well.

Shapero and Sokol (1982) assert: “Research data show that individuals are much more likely to take action upon negative information rather then positive and the data on company formations support that conclusion.” They conclude that individuals with a high sense of self-efficiency are more often motivated by dissatisfaction. Therefore, at
individual level, it is likely that dissatisfaction with life in general is paired with a stronger propensity for entrepreneurial engagement.

**The Role of Culture**

Several studies show that culture plays a pivotal role in individuals’ orientation towards entrepreneurship. The high degree of cross-country variations and intra-community variation within a nation (e.g., India) cannot be explained by economic factors alone. The importance of culture in explaining new firm start-ups can be viewed by the extent to which societies value entrepreneurial behavior, such as risk-taking and independent thinking to be desirable. Civilizations that value and reward such behavior promote the propensity to develop and introduce radical innovation, whereas cultures that reinforce conformity, group interests, and control over the future are not likely to show risk-taking and entrepreneurial behavior (Hofstede, 1980).

Shane (1993) uses Hofstede’s cultural indices to test the influence of culture on innovations and finds uncertainty avoidance has a strong negative impact on innovation even more so than per capita income. Lower power distance and a high degree of individualism are also force to be significant although to a lower extent. Other studies conclude that higher uncertainty avoidance and individualism, paired with a lower degree of power distance and masculinity typically promote higher levels of innovation and entrepreneurship (Aikta Ahluwalia, 2007).

This section of the chapter presented an extensive body of evidence about the determinants of entrepreneurship. In fact most of the studies from which the evidence has been drawn are underpinned by the connected theories on them. The most important determinants of entrepreneurship inter alia, are age, parental economic status, level of income, social groups.

III

**EMPIRICAL METHODS IN ENTREPRENEURSHIP RESEARCH**

The use of advanced statistical techniques become a necessity because of self-serving bias responses from the respondent entrepreneurs on questions relating to the research subjects on entrepreneurship. Use of econometric tools attempt to address the
problems that might otherwise vitiate empirical estimates. Examples of such problems may be due to: (a) sample selection bias; (b) Unobserved heterogeneity; (c) Endogeneity; and (d) Non-stationarity. Whereas in case of sample selection of bias, sample membership is not random but instead is generated by some observed systematic process; incase of unobserved heterogeneity important unmeasured variables are ignored in a regression model; an independent variable in itself code determined within the structural model of interest in case of endogeneity; and in case of non-stationarity time-series variables follow unit root process that violate a key assumption of the classical linear regression model which has potential for invalid statistical inferences.

In this section of this chapter an analysis of empirical models in the economics of entrepreneurship which attempts to address all the aforesaid problem are drawn.

**Cross-section regression models: sample selection & Instrumental variables (IV).**

\[ Y_i = Y' X_i + V_i, \quad i=1\ldots n. \]

Where \( Y_i \) is some continuous variable \( X_i \) is a set of regressors (including a column of ones for an intercept), \( Y' \) is a vector of parameters to be estimated and \( V_i \) is a random disturbance assumed to be normally distributed. Each observation is denoted by \( i \); the sample size is \( n \). For example, \( Y_i \) might be the financial performance of entrepreneur \( i \) at a given point in time, while \( X_i \) continuous relevant individual and venture specific characteristics. Such models are generally estimated by ordinary least square (OLS) method.

The objective of OLS estimation is to find an unbiased or at least consistent estimates (\( \hat{Y} \)) of the true but unknown parameter vector \( Y' \).

**Cross-section binary models of occupational choice**

Binary limited dependent models are especially widely used in entrepreneurship research. The most commonly used binary models – probit & logit are explained here under. Binary models are mainly (although not exclusively) used to model entrepreneurship as an occupational choice.
Let us consider two occupations denoted by \( j \); entrepreneurship, \( E \), and paid employment, \( P \). Each individual has a vector of observed characteristics \( W_i \) and derives utility \( U_{ij} + U(W_{ij}) + u_{ij} \) if they work in occupation \( J \), where \( U('j') \) is utility that can be observed by econometrician and \( u_{ij} \) in idiosyncratic unobserved utility. Denote by \( Z_i^* \) a ‘latent’ variable which measures the relative utility advantage to \( i \) of being in occupation \( E \) relative to \( P \). That is

\[
Z_i^* = U(W_i;E) - U(W_i;P) + u_{iE} - u_{iP}.
\]

If we assume that \( U('j') \) is linear, taking the form \( U(W_{ij}) = \beta_j W_i \); where \( \beta_j \) are vectors of coefficients, then we can write

\[
Z_i^* = \alpha + \beta' W_i + V_i
\]

Where \( \beta' = \beta'E - \beta'P \) is another vector of coefficient; \( \alpha = E [ u_{iE} - u_{iP} ] \) is an intercept; and \( V_i = u_{iE} - u_{iP} - \alpha \rightarrow N(0,\sigma^2) \) is a disturbance term.

Henceforth the intercept term is incorporated in \( W_i \) as a column of ones, so \( \beta \) will be treated as the complete set of coefficient.

Individual \( i \) chooses entrepreneurship over paid employment if \( Z_i \geq 0 \). Hence defined the observable binary occupational indicator variable.

\[
Z_i = \begin{cases} 
1 & \text{if individual } i \text{ is observed in } E, \text{i.e., if } Z_i^* \geq 0 \\
0 & \text{if individual } i \text{ is observed in } P \text{ i.e. if } Z_i^* < 0
\end{cases}
\]

Therefore, the probability that an individual is observed as an entrepreneur in a representative sample with characteristic vector \( W_i \) is

\[
Pr (Z_i = 1) = Pr (Z_i^* \geq 0)
\]

The probit model assumes that the distribution of the disturbance term \( V_i \) is normal. Hence \( Pr (Z_i = 1) = \Phi (\beta' W_i / \sigma) \) and \( Pr (Z_i = 0) = 1 - \Phi (\beta' W_i / \sigma) \) where \( \Phi(.) \) is the cumulative distribution function of the normal distribution. The model is estimated numerically by Maximum Likelihood (ML) and is programmed in most modern software packages.
The logit model arises if the distribution function of $V_i$ is assumed to be that of the logistic distribution which in that case becomes:

$$\Pr (Z_i = 1) = \frac{\exp(\beta'W_i)}{1+\exp(\beta'W_i)}$$

A likelihood function can be formed in a similar way as for the probit model and $\beta$ is estimated as already explained. Logit models are routinely programmed with ease in its application. Both probit and logit dominate OLS estimation of $Z_i = \beta'W_i + V_i$ (called the linear probability model), since OLS is an inefficient and heteroscedastic estimator & problematically can predict probabilities outside the unit interval (see e.g Maddala, 1983). Whether it is probit or logit model, practically it makes no difference on the outcome as estimates of $\beta$ are relatively insensitive to this choice.

Econometricians in general and Researchers in particular, have taken a general approach while using these model in research. This is because the logit and probit empirical specifications are derived from a utility maximization problem in which the indirect utility function $u(W_{ij})$ is simply assumed to depend on several observable covariates in a convenient way. In contrast structural occupational choice models relax this assumption and instead either estimate or calibrate the parameters of agents’ objectives and constraints. In any case a vast number of studies have implemented probit and logit binary choice models. References may be made to studies conducted by: Parker (2004); Borjas (1986); Macpherson (1988); Evans & Leighton (‘1989, 1990); Audretsch & Fritsch (1994); Davidson et al. (1994); Robinson and Sexton (1994); Bates (1995); Kangasharju (2000); Taylor (2001); Burke et al. (2002); Taniguchi (2002); Acs and Armington (2004); Blanchflower (2004); Perry & Rosen (2004); Puri & Robinson (2005); Mohapatra et al. (2007); Parker (2008); Thurik et al. (2008).

**Time-series models**

The time series data used as an aggregate measure of entrepreneurship in a country such as the self employment rate, which is related to a set of economic conditions in that country. One advantage for estimating a time-series model of entrepreneurship is that, unlike cross-section studies, it becomes possible to analyse trends in entrepreneurship. Also it is useful to apply in entrepreneurial research as it can
identify determinants of entrepreneurship which are uniform for all or most members of a cross section sample at a given point of time.

**Panel – data models**

When time-series data are available for the same set of individuals (or ventures or countries) it is termed as ‘panel’ of data. Panel data combines the advantages of the rich case-specific variation of cross-section data with the temporal variation of time-series data. It also enable the researchers to control for cohort – and unobserved person – specific effects – something which cannot be done with repeated cross-section. Furthermore, panel data can increase the explanatory power of cross-section binary choice models which often lack predictive power (Raynolds, 1997).

Suppose that a panel comprises in individuals i observed over T time periods. A simple pooled regression model that can be desired is :

\[ Y_{it} = Y'X_{it} + \alpha + V_{it}. \]

Where \( \alpha \) is an intercept common to all individuals. A more general specification allows the intercept to vary across individuals, giving rise to the fixed – effects model:

\[ Y_{it} = Y'X_{it} + \alpha_i + V_{it}. \]

For example consider an application in which \( Y_{it} \) measures the rate of entrepreneurship in region \( i \) at time \( t \). Then the \( \alpha_i \) can be interpreted as the net effects of unobserved (and time in – variant) cultural or institutional factors affecting entrepreneurship in region \( i \) (Grilo & Thurik, 2006; Freytay and Thurik, 2007).

Audretsch and Thurik (2001), Acs et al. (2004) and Mueller (2006) all have analysed the relationship between entrepreneurship and cross country economic growth.

**IV**

**SOME FINDINGS OF ENTREPRENEURIAL RESEARCH ON SOCIALLY AND ECONOMICALLY BACKWARD CLASS**

Literature on entrepreneurship by socially and economically marginalized class both in India and other parts of the World is in nascent state. Historically there is hardly
any evidence of entrepreneurial activity of this class in India. In fact being part of the weaker section of the country, this class never has had the freedom making occupational choice for them. Social barriers to becoming entrepreneurs were practiced at large. The Malaysian experience of promoting locals (Bumi Putra) for entrepreneurial engagement confirms ethnic differentiation towards promoting entrepreneurial behavior as well. Malaysia’s New Economic Policy for the first time attempted to uplift the lowest contributor to economic growth despite being numerically dominant original inhabitants of that country. The ethnic Malays being son of the soil (Indigenous People) hold only 1.5 per cent of corporate equity. After four decades of affirmative actions through policy support, the share of “bumi” ownership increased to 21 per cent, which was impressive even if below its target of 30 per cent (Gomez, 1999 and 2011).

Malaysian case is an indicator of legitimization of the State’s role in dismantling the traditional barriers to entrepreneurship. Although economists have not focused on the issue of entrepreneurship of the marginalized class, several studies examined cross country determinants of this topic. These studies do show that excessive regulations deter entrepreneurship (Klapper et al. 2006). Kaivan Munshi’s study on linking social networks helps in finding jobs or climbing out of poverty (Munshi, 2003 and 2011). Similarly, Iyer and Scholar (2010) show that community ties influence the types of business behavior in a controlled setting in India. Role of community network certainly play an important role in entrepreneurial orientation as was found among the Marwari Community in India (Panda, 1991). Perhaps the best theoretical presentation of the importance of community, though, comes from several early studies in so called ethnic enclaves by Alejandro Portes, where he shows the communities’ interest in public goods to over come barriers to entrepreneurship, particularly in the informal economy and among disadvantaged communities (Portes and Sensenbrenner, 1993). Panagaria and Dehejia (2011), found a change in the attitude among the socially marginalized groups and explained their interest in taking a plunge in to entrepreneurship.

Through an empirical study conducted under the Major Project awarded by UGC along with Professor Paramjit S. Judge to study “Education, Empowerment, Emigration and Entrepreneurship: A Study of Social Mobility among the Scheduled
Castes in Punjab, 2004-2006”, Gurpreet Bal, Department of Sociology, Guru Nanak Dev University, Amritsar, Punjab, in his article on “Dalit Empowerment through Entrepreneurship: A Case of Punjab” sums the result as follows.

“By way of concluding the discussion on empowerment through entrepreneurship, we may discern certain features of their entrepreneurship. Boota Mandi a native place of most of the entrepreneurs has emerged as the most important economic and political centre of Ad-dharmis in Punjab. Here everyday trade of rawhides worth lakhs of rupees takes place. Now trading of rawhides has concentrated in the hands of big merchants who after its semi finishing and processing send it to far off places. The traditional vegetable tanning of the hides has been replaced by the use of modern chemicals and techniques to make it compatible in the national and international market. The enterprising Ad-dharmis finding the avenues modified their skills and ventured into leather and sports goods industries. They have started manufacturing leather garments, shoes, accessories, and other export-oriented products. As a result of diversification in their work they have been able to earn more profits, which raised their standard of living and they moved up in the social hierarchy. All those artisans who could not cope up with the brunt of industrialisation have become skilled workers in leather-based industries, tanneries and sports industries. They have utilized their traditional skills through industries. Leather being such a commodity that still has relevance, usefulness and is expensive; the Ad-dharmis find much demand for their work. Due to their affluence as a result of entrepreneurship and political representation, they have started asserting their caste status. Assuming their caste differences, they have been able to, though not uniformly; get equal economic status, political representation and social mobility in the society.”

Conducting a case study in Uganda which was published in the United Nation University-WIDER (Research Paper No. 2009/09), March 2009 with the title “The Interplay of Human and Social Capital in Entrepreneurship in Developing Countries- The Case of Uganda”, the authors Gerrit Rooks, Adam Szirmai, and Arthur Sserwanga discussed the interplay of human and social capital in small firms in Uganda. The study was based on a new representative survey amongst
entrepreneurs, executed by the authors in May 2008. In their own words the authors summarize the findings in the following manner.

“We find that the enterprises are predominantly very small and not very dynamic. Most enterprises are young: 81 of the 733 entrepreneurs in the sample had started their enterprise in 2008, and over half the enterprises (55 per cent) had been set up in the last three years. In most cases, there was little or no growth of employment since start-up in the four years between 2005 and 2008. Where employment growth does take place, it is usually restricted to the addition of one or two employees. The amounts of funds invested in the enterprises are modest, but not negligible, averaging UGX 780,000(approximately €340). Although it is difficult to define dynamic entrepreneurs, we suggest that only a very small subset of our 733 entrepreneurs could be qualified as dynamic Schumpeterian entrepreneurs. In terms of size, employment growth and invested funds, only some 25-40 firms are in this category.

Our data contradict the network compensation hypothesis, which suggests that entrepreneurial individuals have a choice between investing scarce time, energy and resources in the accumulation of human capital or in building social capital. The hypothesis suggests negative correlations between indicators of human and social capital. We find that there are significant positive correlations, though not very high ones. Higher human capital tends to be associated with more social capital.

The answer to the question of the substitutability or complementarily of human and social capital influencing entrepreneurial behaviour depends on the dependent variable. In the analysis of objective success, we find neither complementarily nor substitutability for the first-order terms. The interaction terms are no significant and there is no evidence of a direct significant influence of social capital on performance. The examination of the squared non-linear terms points to some degree of substitutability between years of education and network resources for higher levels of education.

In the case of gestation activities, there are no significant effects of network size, so that there can be no question of substitutability or complementarity with human capital. But the interaction term between years of education and network resources is positive and significant, pointing to complementarity between human and social
capital. Also, the first-order coefficients of years of education and network resources are positive, pointing to substitutability at the margin. The most interesting results are found for innovative performance. Here there are significant positive effects of both years of education and network resources and significant negative effect of network size. The negative effect of network size on innovativeness indicates that there can be no substitutability with human capital. But in the case of network resources, there is clear substitutability. A given degree of innovativeness can be achieved with either more human capital or more network resources.

We find hardly any effects for objective success, complementarily with substitution at the margin for gestation activities and substitution for innovative performance. An important general insight emerging from our analysis is the need to distinguish between network size and access to network resources. Controlling for access to network resources, network size is either no significant or significantly negative in influencing various dimensions of entrepreneurial performance. In the case of innovative behaviour, the size of a network is even an obstacle to entrepreneurial dynamism, and can be perceived as a kind of negative social capital. This finding is consistent with the older literature on entrepreneurship in developing countries, where extended family networks in Africa and the Middle East are seen as a major obstacle to entrepreneurial success. It is an important observation for modern quantitative network research.

Years of education have an important positive effect on all three dimensions of entrepreneurial behaviour. There are persistent negative effects of gender. Females have significantly smaller networks than males and have significantly less access to resources. Female entrepreneurs engage in less gestation activities and exhibit less innovative behaviour. There are also systematic effects of the urban-rural divide. Rural entrepreneurs have significantly more access to network resources than their urban counterparts. They engage more in gestation activities and show more innovative behaviour than urban entrepreneurs. This contradicts common sense expectation that more dynamism will be found in urban areas.”

There are lot of organizations in India which play vital role in promoting entrepreneurial culture in terms of providing training, finance, marketing assistance
etc. In this regard in important micro level study on “Role of Mahatma Phule Backward Class Development Corporation in Economic Development of Backward classes in Maharashtra with Special Reference to Nanded District.” was conducted by Dr.B.R.Suryawanshi Associate Professor S.R.T.M.University, Nanded. (India). His findings are reproduced below.

“Average age of the sample is 35 years, The average annual income of the beneficiaries from all sources is Rs.25, 900/-, Only four among the sample are income tax payers meaning thereby 96 per cent samples are non-income tax payers, Most of the beneficiaries have availed subsidy from the corporation for the investment, The mode of monthly repayment of the corporation loan is comfortable for the beneficiaries. The majority of the beneficiaries have difficulties that delay by sanctioning loan authority and less provision of government funds are the main difficulties, the beneficiaries suggest that corporation should increase subsidy for the economic upliftment of the backward class and apply easy method of document collection, The backward class beneficiaries tend to be defaulters as they are not paying loan installment regularly and low repayment of the corporation.”

The paper titled “Entrepreneurship Development: A Panacea for Unemployment Reduction in Nigeria.” By Oladele, P. O; Akeke, _ I and Oladunjoye, O.Department of Business Administration, University of Ado-Ekiti, Ado Ekiti, Yaba College of Technology, Lagos as appeared in the Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 2 (4): 251-256, examines the need for promoting employment in Nigeria through the development of entrepreneurship. This paper relied on secondary data from the Central Bank of Nigeria’s Statistical Bulletin and CIA Fact Sheet and other institutional publications to provide empirical basis for the study. Multiple regression (Linear, Semi-Log, exponential and Double-log forms) statistical tools were used for analysis after which the one that had the highest R2 and better F ratio, the linear form, was selected as the primary model.

According to the authors “The result did not support the theoretical formulation in the study. The results indicate that 90.5 percent variations in entrepreneurship development are explained by the explanatory variables. The results indicate that of all the explanatory
variables specified, agricultural production index is the only significant variable influencing entrepreneurship development. The variable is significant at 5% level. The positive sign indicate that an increase in agricultural production index would increase entrepreneurial development. This finding could have been due to significant percentage of workers engaged in agricultural activities. The rate of inflation was found to be negative and non-significant influence of entrepreneurial development. Similarly unemployment rate was found to be negatively related to entrepreneurial development. This finding agrees with works like Solomon et al. (2004). High rate of unemployment has been associated with low level of entrepreneurial development in any economy. This justifies the need to increase entrepreneurial activities to reduce high rate of unemployment. The paper concludes that the government and its agencies should deliberately encourage entrepreneurial culture and skills in Nigeria in order to attack the level of unemployment situation in the country.”

Dr Richard S Tay, Department of Economics and Marketing, Lincoln University, Canterbury in his study on “Degree of Entrepreneurship: An Econometric Analysis Using the Ordinal Probit Model” in November 1996 developed an ordinal probit model of entrepreneurship to calibrate the level of entrepreneurship of individuals in appropriate samples. To quote Dr. Tay “In addition, the model also enables us to perform multivariate analysis on the determinants of entrepreneurship and to compute the relevant elasticities with respect to these determinants. This information will be valuable to policy makers in targeting the appropriate population, prioritizing programs, and in designing their strategies in promoting entrepreneurship.

As an illustration, the model is estimated using a random sample of 500 adult Singaporeans engaged in full-time employment to investigate the socio-demographic determinants. Similar to previous findings in the literature, the presence of entrepreneurial role models in an individual's family, the individual's sibling rank, gender, level of education and number of children are found to be significant determinants. On the other hand, in contrast to previous studies, age, ethnicity, years
of working experience, marital status, number of dependents and the presence of non-family entrepreneurial role models are found to have only minimal influences.

Policies promoting enterprise development in Singapore should be designed with the appropriate targets or segments of the population to achieve higher effectiveness; in particular, males who are the eldest sibling and who have family members operating their own businesses. On the other hand, for a more efficient allocation of resources and a better long-term strategy, policy-makers should also be concerned about promoting entrepreneurship among the females who are increasingly going into the workforce and those with higher education to improve the quality and scope of new enterprises.

It should be noted that only socio-demographic variables were analysed in this study which, though eases segmentation, is nevertheless rather restrictive. A more complete study that includes other important determinants like attitudes and motivations of individuals, career and incubator organisations, economic, political, and cultural environments should be conducted to provide better insight into the process of enterprise development.

In her article entitled “An Account of Women Entrepreneurship Development in India: Challenges, Opportunities and Future Prospects”, Professor Neelam Choudhary, Department of Economics, M.D University, Rohtak, Haryana, India concludes “There has been a steady increase in the participation of women in small business indicating immense potential for entrepreneurial development among them. From the point of view of performance, it was observed that the women enterprises in India have made significant contribution towards generation of employment (8.14 per cent in the MSME sector), gross out put (7 per cent of total MSME out put), asset creation (4.63 per cent of total Fixed asset in the small enterprise sector) and exports (2.37 per cent of total MSME export). Women form the family, which participate to develop society and Nation. Entrepreneurial movement among women started late and is still in its infancy. Changes in the global and domestic environment have
contributed towards the growth of women entrepreneurship in India. As observed the success of women entrepreneurs differs from State to State in India. It was also observed that women enterprises are concentrated in the micro segment of the MSME sector. To enlarge their participation in small and medium segments a stronger coordinated role of Indian Government, financial institutions, voluntary agencies and educational institutions with an integrated approach is necessary. Young female entrepreneurs should share their success stories in the world of e-commerce to speed up entrepreneurial movement in India. Women entrepreneurs will be better understood and encouraged by studying and focussing (i) their social and cultural background including family system (ii) religion and caste and (iii) location where they are staying, e.g., whether it is urban area or rural area or district or block.”

In a study by Iyer Lakshmi, Khanna Tarun and Varshney Ashutosh (2013) on “Caste and Entrepreneurship in India”, published in Economic and Political Weekly, XLVIII (6), 52-60. addresses two key points with reference to Indian Economy. First one being concerned with-not all the sections of society have benefitted equally from India’s rapid economic growth over last few decades. And the second point focusing on Caste differences in the ownership of enterprises across the country.

The reservations for Scheduled castes (SCs) and Scheduled Tribes (STs) has enabled them secure notable share ,as far as Representative Assemblies are concerned. But this is not the case at the economic front. The inference so drawn is based upon the data from the Economic Census of India (2005), which covered 42 million enterprises employing approx.. 99 million workers. The analysis focuses on ownership of private enterprises of 19 large States of India, which accounts for 96% of India’s population and 95% of total enterprises. Further it is augmented with the data from Population Census (2001) for population shares of SC and ST and National Sample Survey (2009-10) for OBC population shares. And the findings indicate that in 2005, SCs representing 16.4% of total population, owned only 9.8% of total enterprises, so is the case with STs who owned only 3.7% enterprises despite of their 7.7% share in population, clearly reflecting under representation of SCs and STs in ownership of Private enterprises. And the reason behind this varying business possession doesn’t lie
only with economic factors like Literacy rates or with some demographic factors as this variation is more prominent in urban areas where lesser social discrimination is expected, suggesting the need to examine the observations to unveil the reasons behind. However in the case of OBC (representing 42.7% of population), their 43.5% share in enterprise ownership is quite close to General population share of 43%.

Further it has been stated that this under representation of SCs and STs in ownership patterns is pervasive even across the states, indicating that the results are not based on any particular sector. Even the states like Gujarat and Maharashtra, ones which experience high economic growth rates and well known for putting forward progressive policies for SCs and STs showed an increase in workforce in OBC owned enterprise (22% to 39%) over 1998-2005 period, the share in SC owned enterprises remained at 7% only over the same period, indicating that SCs failed at unshackling the entrepreneurial obstacles.

The author concludes with examining the reasons behind these entrepreneurial gaps between SC/ST and other castes. Besides social discrimination, this lag can be attributed to several other factors like restricted access to various sources of finance especially Government Financing Programmes and Institutional sources of finance. Also the growth and success of enterprises depends upon networks, both for finding the right members to work with and for making links with market players. SC and ST enterprise owners might be disadvantaged because of their smaller networks particularly in urban areas and thus face constraints in hiring beyond family labour. While observing the determinants of SC/ST shares in enterprise ownership at the state level, variables like educational attainment, access to land, proportion of population engaged in farming, urbanisation are not found to have much power in explaining these lags. The author find their work to be a preliminary analysis, providing a basis for more detailed examination of determinants of entrepreneurship.

(9), 35-37, focuses on analysing the level of caste-based discrimination in the job market in India. The author has made a chapter-wise analysis, first chapter seeking to establish the fact of discrimination against low-caste candidates in hiring for entry-level white-collar positions in private sector firms, by conducting an experiment. In the experiment, advertisements announcing vacancies for white-collar jobs were collected and classified on the basis of education and specialisation. For each of the position, then an artificial application having similar academic performance and professional experience was generated. A remarkable difference, however, was that researchers applied for each position either with a high caste Hindu name, Dalit or a Muslim name. The outcomes being based on the interview callbacks for each caste category having same educational qualifications and experience. And the results indicate that Dalit and Muslims face noteworthy prejudices. While addressing the question: Why this discrimination occurs, author mentions the model of Statistical Discrimination where employers use characteristics like language fluency, ability to adapt to professional workplace, which are unobservable on a job application, for caste-based discrimination between the candidates having same observable education and experience (Phelps, 1972). Another point addressed in the article is that, why SC workers experienced high levels of unemployment and that of job quotas for SC and ST workers. And the examination reveals that employers prefer trained and professional people and they all belong to higher castes.

Further, the article highlights the hardships being faced by master’s degree Dalit students during job search process. Caste being the point of discussion, their appointment is manipulated without even being provided with a fair chance to show their proficiencies. In addition to discussing the findings and contributions, article concludes by suggesting that the caste-based discrimination can be dealt with to a great extent if Indian Universities arrange for hiring process for new graduates, where all students have equal access to advertisements for vacancies in private sector. Also it suggests potential future topics like magnitude of wage difference by caste, labour market discrimination experienced by women or other ethnic groups for related research.
Rajiv Daheja (New York University) and Arvind Panagariya (Columbia University) in their paper on “Entrepreneurship in Services and Socially Disadvantaged” available on the web site www.Indianeconomy.columbia.edu, provide the following findings.

“Consistent with the data in other spheres of life such as poverty alleviation and wage and education outcomes, the SC and ST groups are behind other social groups in entrepreneurship but their presence is not negligible. At the aggregate level, the SC account for approximately the same proportion of enterprises and worker employment as their share in the total population according to the 2001 census. Their share in the gross value added is, however, only half implying at a crude level that the enterprises they own are subject to lower productivity than an average enterprise.

- As regards the ST, their presence is considerably below their share in the total population. In part, this reflects the disproportionate concentration of the ST in the rural areas, often outside the mainstream of even the rural economy.

- The OBC do much better than the SC and ST though not as well as the forward castes. By 2006-07, their share in the gross value added had risen to almost 37 percent, approximately equal to their share in the population. On the whole, the sharp differences are those between the SC and ST on the one hand and the OBC and FC on the other rather than those between the OBC and the FC.

- All groups have shared in growth though not to equal extent. In terms of gross value added, the ST enterprises have grown the fastest followed by the OBC, SC and FC in that order. The ST started with low shares in the value added, workers employed and the number of enterprises owned in 2001-02 but have experienced the sharpest increases in all shares. The SC, by contrast, have increased the shares in workers employed and enterprises owned but lost the share in terms of gross value added by a hair’s breadth. The main competition to the SC has come from the OBC rather than the FC.

- The shares of the SC and ST steadily decline as we move from smaller to larger enterprises. Their shares are much smaller in the establishment enterprises, which employ one or more hired workers on a regular basis, than in own
account enterprises, which do not employ any hired workers on a regular basis. The shares decline even further when we limit ourselves to enterprises with five or more workers. Thus, the SC and ST are heavily concentrated in the smaller enterprises, which are characterized by lower productivity on average.

- The OBC do particularly well in the urban areas. Whereas the SC and ST have gained shares at the expense of both OBC and FC in the rural areas, the SC have lost share to the latter groups in urban areas. Remarkably, the ST group has gained share in both rural and urban areas though starting from a very low level.

- The ST group has made very substantial gains in all six sectors covered by our data between 2001-02 and 2006-07. In five out of six sectors, growth in gross value added in ST-owned enterprises exceeds that associated with any other social group. In the remaining sixth case, the SC-owned enterprises barely edged it out.

- An extremely interesting feature of the data is that the SC group seems to be now exiting “sewage and refuse disposal, sanitation and similar activities” while entering “transport, storage and communications” in a major way. This development can be expected to contribute to the breaking down of stereotypical attitudes that associate the SC members with sewage and refusal disposal.

- The OBC group has a strong presence in all six broad sectors. Moreover, they have either held their shares or improved them in all of sectors between 2001-02 and 2006-07. At least these data do not provide support to the hypothesis that they are seriously disadvantaged. The short conclusion from this study is that as in other areas such as poverty, wages and educational achievements, the SC and ST are well behind the OBC and FC in the area of entrepreneurship. But there is no support whatsoever for the assertions often made by the leftwing authors that growth has left these disadvantaged groups behind. Both groups have shared in the growth with the ST group, which is farther behind than the SC, gaining the most in the service enterprises we have studied. We also find at best limited evidence of the OBC population as being at a significant disadvantage. Indeed,
it has a presence commensurate with its population share and has been rapidly displacing the FC entrepreneurs in the enterprises we have studied.”

The present study makes an attempt to include dimensions such as inter alia, demographic factors, social capital formations and government support system through survey of entrepreneurs belonging to socially and economically backward class in order to examine the propensity of this class towards entrepreneurial orientation. The findings of this research will certainly add to the existing valuable works in the same area.