CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Many studies on small firms have been carried out in the United States since early 1900s. However, not many of these studies have attracted much attention until the late 1970s. This was largely as a result of the research done by David Birch. Birch pieced together an extremely rich and powerful data set that for the first time allowed researchers to study the business dynamics of the full spectrum of firms in the US. Until Birch it was virtually impossible to measure US economic activity for both small and large firms and to make comparison over time. As a result of his pioneering work, Congress passed the Economic Policy Act of 1980 which commission the US Small Business Administration to create the Small Business Database (SBDB) in order to better understand the economic impact of small firms on the economy.

Among the studies carried out, only a handful were related to the issue of entry, exit, growth and survival of small firms. Among them were Evans (1987), Dunne, Roberts and Samuelson (1988, 1989) and Tito Boeri (1994) . Numerous studies centered around the issue of job generation (Armington and Odle (1982), Brown, Hamilton and Medoff (1990), Davis and Haltiwanger (1992), Rondinelli and Kasarda (1992) and Fritsch (1993) ). However, none of the studies touched on the issue of entry and exit of small firms in relation to the economic factors such as the rate of inflation, the interest rate, the company tax rate and the GDP growth rate.

The decision to enter the market place as a self-employed owner of a small firm (thus make up the entry rate) may be determined by factors such as education, age and capital. The two opposing views on self-employment as well
as the literatures on age and capital constraints in relation to self-employment are reviewed in section 2.2. They served to remind us the fact that the entry, exit, growth and survival of small firms are also affected or constrained by various personal characteristics of the would-be-entrepreneurs themselves. Section 2.3 reviews entry, exit, growth and survival of small firm in relation to firm growth, firm age and firm size. In this section, different types of entries as well as the pattern of entries and exits across industries were also reviewed. The literature reviews on the role of small firms is covered in section 2.4.

2.2 The Employment Decision

The question of who becomes self-employed and why they do so has received little attention in the contemporary literature of economics. The discussions about self-employment are generally divided into two different sets of assumptions. One theory regards entrepreneurs as individuals with particular abilities. Casson (1982) hypothesizes that the entrepreneur has a perception that he or she is uniquely right for entrepreneurial enterprise and hopes on this account to profit from that perception. According to this theory, self-knowledge of these motivates individuals to establish their own enterprises, usually as self-employed persons. On the other hand, Mahmood (1990) found out that the non-bumiputra entrepreneurs are more outgoing, spontaneous, unconventional and less sentimental than the bumiputra entrepreneurs.

The contrasting view assumes that self-employment is largely opportunistic. Some earlier writers (Oxenfeldt 1943; Phillips, 1962) have taken the position that the self-employed are irrational perhaps because they lack adequate information about market opportunities and risk or have been forced into self-employment by unemployment or adverse personal circumstances such as ill health and disability. According to them, the self-employed are not endowed

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7 Blau (1987) used personal income tax rates at the real equivalents of US$7,000 and US$17,000, 1967 dollars. He discovered that an increase in the personal income tax rate has contributed to the rising trend in self-employment.
with special abilities that differentiate them from individuals in wage and salary jobs but instead are merely responding to the environmental circumstances in which they find themselves in a particular place or at a particular time.

Who are likely to be self-employed? Evans and Leighton (1989) found that for a pooled sample of white males drawn from 1968-87, the likelihood of entering self-employment from wage work in any given year was independent of age. The positive reasons for entering self-employment at a later age involve two principal factors. First, time is needed to build the human capital (i.e., skill and experience) and the means (i.e., personal savings) required to establish one's own business. In the same study, Evans and Leighton found that men with greater family net worth were more likely to become self-employed. Also, in their cross-sectional analysis using data from the National Longitudinal Survey of Young Men (1981), they discovered that time in the labor force had a strong positive influence on the probability that white males would become self-employed.

Brock, Evans and Phillips (1986) found age to be a statistically significant and positive influence on the likelihood of self-employment among full-time employed males\(^9\), they also reported that this effect tended to decline with advancing years.

Iams's study of Social Security sample data (1987) also found that the relationship between age and self-employment tended to stabilize, though in that case among workers in their late forties.

Fuchs (1982) found that mandatory retirement policy to be statistically significant for men who switched from wage jobs to self-employment.

Rees and Shah (1986) found that the probability of self-employment depends positively on the earnings difference between self-employment and paid employment. Apart from that, they discovered that the more educated and they younger ones are more likely to be self-employed.

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\(^8\) See Casson (1982) and Burgess (1988). While these authors recognize that costs and risks are also attendant on self-employment, they incline to a more optimistic viewpoint.

\(^9\) They exclude professional workers, farmers and workers over age sixty-five from the sample.
Capital is essential for starting a business. So, to answer the question "Does a person have to be wealthy before he or she can start a business?", Evans and Jovanovic (1989) found that: 1) there is a positive correlation between starting a business and assets, 2) the correlation between entrepreneurial earnings and initial assets is positive since wealthier people start businesses with more efficient capital levels, 3) people with smaller assets are forced to devote a larger proportion of those assets to their business.

2.3 Firms – Entry, Exit, Growth and Survival

David S. Evans examined the relationship between firm growth, firm size, and firm age for a sample of manufacturing firms between 1976 and 1982. Firm growth is found to decrease with firm age and firm size. Dunne, Roberts and Samuelson (1988) examined the relative importance of different types of entrants (entry of new firm and entry of existing firm into new industries through diversification), the persistence of industry entry and exit patterns over time, the correlation between industry entry and exit rates, and the post-entry performance of entrants. They found, firstly, the vast majority of the new entrants are new firms, but diversifying firm entrants are larger and account for almost half of entrant output. Secondly, they found substantial and persistent differences in entry and exit rates across industries. Entry and exit rates at a point in time are also highly correlated across industries so that industries with higher than average entry rates tend to also have higher than average exit rates. Third, they found a large number of exits with the young smaller firms having the highest failure rate.

What is the probability that a firm will grow or exit? Dunne, Roberts and Samuelson (1989) examined the growth and exit of over 200,000 plants that enter the U.S. manufacturing sector in the 1967-1977 period. They found that exit rate decline with increases in plant size and age and differ with ownership type.
They also found that the growth rate of the non-failing small firms decline with age and size of the plant.

2.4 The Small Firms and Economy

Galbraith (1956) pointed out that there were strong reasons to believe that large firms were superior to small ones in virtually every aspect of economic performance – productivity, technological progress, job security and compensation. Brown and Medoff (1990) find that smaller firms pay lower wages, offer fewer and less comprehensive fringe benefits, and have higher turnover rates than larger firms. However, according to Evans and Leighton (1988, p309) "....small firms are less capital intensive than large firms. To the extent that capital and ability are complements, larger firms would be expected to pay more for ability than smaller firms and to have a disproportionate number of more able and better paid workers."

How many jobs are created by the small business? Catherine Armington and Marjorie Odle (1982, p 15) found that small firms (firms with fewer than 100 employees) in United States employ 36% of the American labor force and generate 39% of the net new jobs. They also found that small firms made up 86% of the business establishments in United States.

Lawrence White (1982) examined the relative importance of small firms in the US. White finds that if small firms were to be defined as firms with annual sales at or below $500,000, then small firms contribute relatively more to the economy in the agriculture, construction, wholesale and retail trade sector and thus are regarded as important in these sectors. White also finds that small firms are deterred from entering industries that have a high capital-labor ratio or are capital intensive; they are also being discouraged by high levels of research, development and advertising expenditures. So, how do small firms survive? Bradburd and Ross (1989)\textsuperscript{10} examined the ability of small firms to defend

\textsuperscript{10} According to Michael Porter, market share need not positively related to profitability. Bradburd and Ross decided to test the Porter hypothesis.
strategic niches. The results show that it is possible because small firms do not compete directly with large firms.

In terms of job generation, David birch (1981, p.8) found that "......whatever else they are doing, large firms are no longer the major providers of new jobs for American". Instead he discovered most new jobs emanated from small firms. While his exact methodology and application of underlying data has been a source of considerable controversy (Armington and Odle), as have his exact quantitative estimates, Birch's qualitative conclusion that the bulk of new jobs emanate from small and medium-size enterprises has been largely substantiated. Storey (1994) found that the small firms in the US make a disproportionately large contribution to net job creation. Moreover, while the net job generation varies little over the cycle, the large firm share does.