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SURVIVAL DURING ECONOMIC SHOCK: THE ROLE OF FIRM EXPERIENCE

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Abstract

Based on organizational ecology and other management theories, this paper aims at finding a relationship between organizational aging and firm survival during economic shocks. There is differing evidence on whether organizational aging has a positive or negative effect on firm survival. Thus looking at this issue, from an economic shock perspective, merits attention. After analyzing the existing literature, this study puts forward two propositions that might be used for further empirical research.

Key Words: Aging, Survival, Firm Size, Economic Shock

Introduction

An ecology of organization seeks to understand how social conditions affect the rates at which new organizations and new organizational forms arise, the rates at which organizations change forms, and the rates at which organizations die out (Hannan and Freeman, 1989). In our paper, we look into the last part of the above mentioned definition. The paper tries to find out the relationship between organization's experience and the possibility of its survival during an economic shock. Literature review on this area has revealed that no significant study has been conducted looking at this specific issue. Thus, linking the prevailing theory to the phenomenon of economic shocks may reveal new insights into this field of study and may eventually facilitate further research.

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Economic Shock

Economic shocks are events that impact the economy but originate outside it. The examples of economic shocks include the rise of oil prices by OPEC in 1974, Hurricane Andrew in 1991 etc. Economy-wide shocks tend to be systemic - broadly affecting businesses and industries in a country or region; and such shocks tend to be radical, creating discontinuities that disrupt firms, industries, markets, and economies (Chakrabarti, Singh and Mahmood, 2007). All kinds of economies may go through economic shocks. However, small and poorly diversified economies with spatially concentrated productive assets may be more vulnerable to exogenous economic shocks (Pelling, Ozerdem and Barakat, 2002). It is not unusual for firms to stop operating and industries to go through significant changes after economic shocks take place. The 1974 Oil Crisis saw a major change in the Auto Industry as Japanese fuel efficient cars began to dominate the market. The September 11 terror attack saw many airlines stop operating as a result of decreased customer confidence in air travel.

The survival of firms during uncertainties such as economic shocks can depend on different attributes of firms. Some studies suggest that it might be the size of the firms. According to Carroll and Hannan (2000), the most important unobserved variable in many studies of firm's mortality is organizational size. Small size increases the possibility of failure as the smallness may deter firms from coping with small environmental shocks. As large firms generally find it easier to secure external finance, it is less likely for them to rely heavily on bank borrowing for their financing. These firms will have smaller informational asymmetries and they are more established than smaller firms. They also tend to have a large asset base that can be used as collateral. All these factors suggest that large firms are less vulnerable to external shock (Baek, Kang and Park, 2004). Innovation capability may be another reason why firms may survive during economic shocks. In situations like this, the environment becomes very volatile. The ability of firms to bring

about the necessary changes in their products and processes may play a vital role in ensuring that their competitive advantages do not erode and they do not succumb to the external pressures created due to such volatility. However, the effect of innovation on firms should be considered carefully as McKendrick and Wade (2005), in their study on the Floppy Disk Industry, found that the more frequent innovations a firm makes, the more likely it is to fail. Other attributes such as previous experience of shocks, general industry condition and support from government agencies may also help firms cope better during economic shocks. The specific attribute that this study will look into is the effect of firm experience, measured in terms of age.

Aging and Survival

The effect of aging on firms drew lot of attention from scholars in the past. However, no consensus on exactly what happens when a firm ages has been found. If the hazard of mortality declines with age (net of the effects of other relevant conditions), then the early movers into a realm of activity will generally dominate for long periods. If, on the other hand, the hazard rises with age, then the picture more closely resembles Schumpeterian creative destruction with waves of new entrants displacing earlier cohorts (Hannan 2005). Some scholars believe that matured organizations are more likely to cope with changing environment than younger ones. The same shock, say a coup d'état, a financial panic, or a major strike, apparently has much more devastating effects on new organizations than on old ones (Hannan and Freeman, 1989). Stinchcombe (1965) argued that new organizations are vulnerable because their participants are strangers and they have to create organizational roles and routines. Thus, he claims that organizations face a liability of newness resulting in new organizations failing at higher rates than old ones. Carroll (1983); and Freeman, Carroll, and Hannan (1983) explored the claims made by Stinchcombe and found support for it. Hannan and Freeman (1984) argued that social selection processes favor organizations and organizational forms that have high reliability and accountability. According to them, reliability and

accountability increases with age resulting in decreased mortality hazards. As organizations gain experience through aging, if they are simultaneously able to transfer knowledge across and within subunits, they may develop absorptive capacity. And this absorptive capacity may prove very useful when operating in uncertain periods as it facilitates further learning needed to cope with the changes in the external environment (Cohen and Levinthal, 1990).

As mentioned before, there exists opposing views to the negative age dependence of mortality as well. As organizations grow older, they learn from their own experience. Ingram and Baum (1997) found that, at the level of own operating experience; organizations initially benefit (in the form of a decrease in the failure rate) from their own operating experience, but eventually own operating experience comes to hurt the organization. Often old organizations suffer from inertia during environmental change and may also lack efficiency due to higher level of bureaucracy and size, and this may decrease their chance of survival during such periods (Barron et al., 1994). New organizations have the luxury of choosing designs that fit the current social, cultural and political environments; old organizations find themselves trapped by their origins (Hannan 2005). According to Carroll (1983), if core structures are imprinted in youth, then older cohorts of organizations have lower fitness in the current environment, which may result in increased mortality rate. As organizations need to continuously cope with the changing environments, a high level of innovativeness might be of help in this regard. In their study on the effect of aging on organizational innovation, Sorensen and Stuart (2000) found that older organizations gain more patents than young ones but tend disproportionately to base their innovations on their own prior innovations. The problem with such innovations is that they may not be the best ones to cope with recent environmental changes. Hannan and Freeman (1984) argued that because change disrupts both internal routines and external linkages, organizational change is hazardous. In their study of 1,011 Finnish newspaper organizations over a period of

193 years, Amburgey et al. (1993) found that the disruptive effect of organizational change increases with the age of the organization. This may result in the failure rate of older organizations during increased environmental uncertainty.

Propositions

Based on the findings of the literature review, it can be fairly said that there's no direct answer to the question of whether firm aging has a positive effect on firm survival or not. An empirical study might provide some insight on this issue. From a positive perspective, firm aging increases the level of innovation, allows it to experience different complex environments and helps it to build a reputation. Cattani (2005) found that "preadapted" firms that consistently leveraged their prior experience achieved higher levels of performance than did firms that did not leverage that experience or did not have prior experience. Thus having prior experiences helped firms remain more competitive. As organizations become more experienced, their network also broadens. This opens up the possibility of inter-firm learning. Shared learning can reduce costs which can be particularly useful for small and medium enterprises (SMEs), in general, and for firms in developing countries, in particular (Bessant, Kaplinsky and Morris, 2003). This subsequently may lead to competitive advantage and may enhance the possibility of survival in difficult times. This leads to the first proposition of this study -

Proposition 2: The combined effect of firm size and experience is positively related to firm survival during an economic shock.

Our analysis of the past studies suggests that social selection processes favor organizations and organizational forms with high reliability and accountability which increases with age; and with experience they develop absorptive capacity, which may prove useful in coping with uncertainty. A firm seasoned from experience with difficult times gains reputation as well as learns to increase efficiency. So an experienced firm is more likely to survive during an economic shock, although a detailed study

needs to be done to establish this proposition. Various studies support the requirement to combine the size of the organizations with experience while trying to determine the trend amongst the survivors. We believe that further studies in this area will help the researchers to develop a trend which can benefit the firms during a financial crisis by guiding them through such disaster. Most of the studies observed did not include firms from developing economies, where economic shocks can have more devastating effects. This limitation in our study opens up an opportunity for future research as well. We suggest a detailed study on the firms of various sizes and length of operation from various developing economies, findings from which might indicate the robustness of our proposition.

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