Applying Real Options Theory to HRM: An Empirical Study of IT Firms in India

ABSTRACT

Environmental uncertainties can make return on investments in human assets, like in any other firm assets, uncertain; leaving room for both downside losses and upside gains. However, the strategic HRM literature has so far considered almost exclusively only the upside value of human assets of a firm. Like any other strategic investments made under uncertainty, investments in human assets can be designed and managed to protect the firm's human assets from downside risks (e.g., obsolescence) and to exploit upside opportunities created by uncertainties (e.g., development of new products).

Real options theory that deals with managing investments in physical and human assets under uncertainty, offers enormous potential for guiding investments in human assets for creating sustainable market value for firms operating in uncertain environments. However, in spite of the growth in popularity of the real options approach to value a firm's strategic investment decisions under uncertainty, no meaningful progress has been made towards application of this approach to investments in human assets.

This study, using data from 108 IT-software development firms in India, seeks to address this gap and make three important contributions to the SHRM literature: a) operationalise the concept of *HR options* by identifying the HR practices that possess option value; b) investigate how use of HR options affects firm-level performance; and c) develop and test a causal model that links the various types of HR options that firms use to exploit uncertainties faced by them with the firm-level operational and financial outcomes, using structural equation modelling technique.

The concept of HR options was operationalised based on an extensive literature survey followed by semi-structured interviews with a select group of senior managers of IT software firms. The scales measuring the use of HR options and operational and financial performance of the firms were developed and validated using the prescribed protocol. Thereafter, a questionnaire based field survey was carried out with heads of operations and HR in each participating firm as respondents.

The hypotheses relating to the linkages between environmental dynamism, use of HR options, and firm performance were tested using hierarchical regression and structural equation modelling techniques. The former was used for testing the individual hypotheses and the latter was used for identifying the best-fit causal model that linked the variables of interest.

The results supported the central hypotheses of this dissertation that a) the use of HR options would mediate the effect of environmental uncertainties on operational- and financial- performance of the firms, and b) that the firms using greater number of HR options of various types would show higher levels of operational and financial performance than those using less number of such options.