# CITY UNIVERSITY OF HONG KONG

香港城市大學

Research on the Effects of Perceived
Functionality of Corporate Group's
Information Systems and Psychological
Ownership on Subsidiary Performance: From
the Perspective of Corporate Group
Subsidiary's General Manager
企業集團子公司總經理的集團信息系統功
能感知及心理所有權對子公司績效的影響
機制研究

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## 摘要

商業全球化進展加速、業務戰略布局更加多元、行業集中度顯著提升的時代背景孕育出了不少規模宏大、實力雄厚的企業集團。企業集團以母子公司爲主體,與其他參股公司及成員企業共同組成企業法人聯合體。企業集團通過風險分擔、協同資源、布局產業多元化發展等方式獲得競爭優勢。然而,隨著規模的不斷擴張,企業集團內部管控出現諸多問題,例如管控過程中出現過度集權、管理鏈條過長、集團內部發生惡性競爭等問題。爲發揮集團化經營的優勢、節約內部運營成本、提高集團化運營效率,設計强有力的母子公司治理機制至關重要。當下最常見的治理模式是母公司(委托方)雇傭并委托經理人(代理方)對子公司進行管理,但這種模式也容易引發母子公司間的委托代理問題,主要表現爲子公司總經理(代理方)可能產生的風險規避傾向(墨守成規、"不求無功,但求無過"、更關注達成短期財務指標等)和投機傾向(濫用職權、以權謀私、費用安排上徇私舞弊、爲己逐利等)。

爲解决母子公司間的委托代理問題,以往研究主要探討了管控機制(母 公司對子公司的單向管控、董事會、監事會)和激勵機制(股權結構、股權 激勵)的作用,但管控機制的效果存在不足,例如單向管控缺乏靈活性,也 不利于發揮子公司的積極主動性,董事會、監事會難以從根本上解决母子公 司間信息不對稱問題;激勵機制的效果也幷不一致,例如以往研究中管理層 股權激勵對子公司績效影響不一致,有正的或負的影響,也可能沒有影響。 以往研究缺乏對子公司總經理這一關鍵行爲主體的關注。母子公司治理過程 中管控機制和激勵機制的效果很大程度上取决于被管控者和被激勵主體(即 子公司總經理) 怎麼想、爲何做、如何做等。此外,隨著互聯網技術的普及, 母公司也在很大程度上依賴于信息系統(Information System, IS)對子公司進 行管控與激勵。企業集團 IS 一方面可以使業務流程更加規範化、透明化,在 一定程度解决了母子公司之間信息不對稱的問題,有助于母公司對子公司的 管控;另一方面也能爲子公司總經理提供更多有關外部市場和環境的重要信 息,利于其優化决策,增强對子公司總經理的激勵作用。鑒于以往研究的不 足和 IS 的優勢,本文旨在從子公司總經理心理認知、動機及行爲導向的視角 幷結合企業集團 IS 優勢探討母子公司更加有效的治理機制。

具體而言,首先基于認知評價理論幷結合 IS 相關研究提出以子公司總經理對集團 IS 感知爲核心的管控機制和信息價值機制,即子公司總經理集團 IS 信息功能感知和集團 IS 控制功能感知,幷探討 IS 控制功能感知與子公司總經理個人私利導向之间,以及 IS 信息功能感知與子公司總經理子公司戰略導向之間的關係,幷進一步檢驗兩種行爲導向對子公司績效的作用。其次,提出以子公司總經理對子公司的心理所有權爲核心的激勵機制,幷探討心理所有權對子公司總經理個人私利導向以及戰略導向的作用。最後,探討子公司總經理的兩種集團 IS 功能感知和心理所有權如何交互共同影響兩種行爲導向及隨後的子公司績效。

爲解决上述問題,本文選取一家具有 74 家子公司的大型企業集團爲調研對象,樣本來源于集團附屬 67 位子公司總經理,符合集團公司-子公司委托代理的治理模式。本文采取多時點、綫下-綫上調研相結合的調研方式來收集子公司總經理心理認知的主觀數據、反映其行爲導向的客觀數據,以及相關的子公司客觀績效數據。數據分析結果表明,子公司總經理集團 IS 控制功能感知可以降低其個人私利導向,子公司總經理集團 IS 信息功能感知可以促進其子公司戰略導向和隨後的子公司績效;子公司總經理集團 IS 功能感知可以促進其子公司戰略導向,降低其個人私利導向。此外,子公司總經理集團 IS 功能感知可以在心理所有權與個人私利導向和戰略導向的關係中發揮調節作用。具體而言,子公司總經理集團 IS 控制功能感知可以替代其心理所有權所發揮出的降低個人私利導向的作用;子公司總經理集團 IS 信息功能感知可以替代其心理所有權所發揮出的促進子公司總經理集團 IS 信息功能感知可以替代其心理所有權所發揮出的促進子公司總經理集團 IS 信息功能感知可以替代其心理所有權所發揮出的促進子公司總經理傳入私利導向的作用。然而,與本文的預測不一致的是子公司總經理個人私利導向與子公司績效之間的關係不顯著。

本文主要包括了以下三個方面的創新工作:

第一,將以往側重于宏觀層面母公司單向治理的研究轉向子公司總經理認知、動機及行爲層面研究,深入揭示管控機制、激勵機制、信息價值機制在代理人微觀個體層面的影響。以往研究主要探討了管控機制(母公司對子公司的單向管控、董事會、監事會)和激勵機制(股權結構、股權激勵)的作用,但忽視了子公司總經理心理認知、動機和行爲的作用機制。本文提出了全新的管控機制(即子公司總經理對集團 IS 控制功能的認知評價),信息價值機制(即子公司總經理對集團 IS 信息功能的認知評價),以及激勵機制

(即子公司總經理對子公司的心理所有權),幷揭示了它們對子公司總經理投 機傾向和風險規避傾向以及子公司績效的重要作用,有效彌補了以往母子公司治理研究的不足。

第二,針對母子公司委托代理問題,從管控機制、激勵機制和信息價值機制的角度加以分析,幷創新性提出管控機制與激勵機制、信息價值機制與激勵機制之間的交互作用過程,幷提供了實證證據的支持。現有研究大多單一地探討管控機制或激勵機制在解决委托代理問題中的作用,本文首次檢驗了母子公司治理過程中不同機制之間的協同作用,突顯了集團 IS 功能評價和心理所有權在打破信息不對稱、解决激勵不相容等委托代理問題中的關鍵作用。

第三,首次將 IS 領域的集團 IS 功能與組織行爲學領域的認知評價理論進行整合,提出了一種新型的跨學科整合研究思路。一方面,本文將 IS 領域的研究拓展到公司治理領域,探討了子公司總經理對 IS 功能的認知評價發揮的作用與效果。另一方面,本文延展了認知評價理論當中只關注情境特徵的信息功能是否凸顯個體能力以及提升其內在動機的部分,創新性地提出集團 IS 的信息功能反映出個體評價集團 IS 在多大程度上快速、及時提供工作業務相關的市場及環境信息,以此降低子公司總經理的風險規避傾向,促進其表現出更多的戰略導向,幷最終提升子公司績效。此外,總經理感知到的集團 IS 控制功能,反映了總經理評價集團 IS 在多大程度上對其行爲和權力進行監控,延展了原有控制功能僅對個體工作內在動機的影響,更多體現在通過對行爲和權力的監控來降低總經理的個人私利導向。

**關鍵詞:**集團信息系統;認知評價;心理所有權;企業集團;委托代理; 母子公司治理

#### **ABSTRACT**

The acceleration of business globalisation, the diversification of business strategies and the significant increase in industry concentration have given birth to many large-scale and powerful enterprise groups. An enterprise group is a corporate legal entity consortium consisting of parent and subsidiary companies as well as other joint-stock companies or constituent companies. Through risk sharing, resource coordination and diversified industrial development, enterprise groups gradually gain competitive advantages. However, many problems associated with internal management and control have emerged as enterprise groups continue to expand, such as excessive centralisation, excessively long management chains, and vicious competition within the group. To take advantage of collectivised operations within the group, such as reducing internal operating costs and improving the group's operational efficiency, it is essential to design a strong parent-subsidiary governance mechanism. The most common governance mechanism is one in which the parent company (the entrusting party) hires and entrusts managers (agents) to manage the subsidiaries. However, some principle-agent problems may arise in such a mechanism. That is, managers (agents) may tend to be risk averse (e.g., adhering to conventions, 'not seeking for nothing, but seeking no fault', and paying more attention to achieving short-term financial outcomes) and opportunistic (e.g., abusing power for personal gain, squandering funds for favouritism, self-serving).

To solve the principal-agent problem between parent and subsidiary companies, previous studies have explored the role of control mechanisms (e.g., parent companies' one-way control of subsidiaries, the role of the board, and the role of the supervisory board) and incentive mechanisms (equity structure, equity incentives). However, the control mechanisms have shortcomings such as a lack of flexibility and harming the proactivity of subsidiaries. In addition, the board and the supervisory board cannot fundamentally solve the problem of information asymmetry between parent and subsidiary companies. Moreover, incentive mechanisms are not always effective. Previous research has revealed paradoxical results for the impact of equity incentives on the performance of subsidiaries, with positive, negative, and non-significant impacts being reported. Previous studies have paid little attention to the key behavioural subject – the general manager of the subsidiary – while the effectiveness of the control mechanism and incentive

mechanism depends largely on what the general manager thinks and does. In the context of the popularisation of Internet technology, the parent company also relies heavily on information systems (IS) to control and incentivise its subsidiaries. An enterprise group's IS can make business processes more standardised and transparent, solve the problem of information asymmetry between parent and subsidiary companies, and help the parent company to control subsidiaries. The group's IS can also provide the general managers of subsidiaries with important information about the external market and environment, which is conducive to optimising decision-making and in turn incentivising the managers. Given the shortcomings of control and incentive mechanisms noted in the literature and the advantages of IS, this study explores the effective governance of parent and subsidiary companies from the perspectives of the general manager of a subsidiary's psychological cognition, motivation and behaviour, combined with the advantages of an enterprise group's IS.

Specifically, this study combines cognitive evaluation theory with IS-related research to creatively propose a control mechanism and an information value mechanism, namely, the general manager's perception of the informational and controlling functions of the group's IS. The relationship between the general manager's perception of the controlling function of the group's IS and self-interest orientation, and the relationship between the perception of the informational function of the group's IS and strategic orientation are explored, and the effects of the two behavioural orientations on subsidiary performance are examined. Second, this research proposes an incentive mechanism centred on the psychological ownership that the general manager of a subsidiary feels toward the subsidiary company he or she works for, and explores the effects of the general manager's psychological ownership on their self-interest orientation and strategic orientation. Third, this study explores how perceptions of the group's IS and psychological ownership interact and jointly affect managers' behavioural orientations and the subsidiary's performance.

A large enterprise group with 74 subsidiaries was selected as the research object. The final sample included 67 general managers of 67 subsidiaries in the group company. To ensure data rigor, seven general managers were eliminated after personnel changes. A multi-wave, multisource, on-site survey method was used to

collect the data. The general managers were asked to report their psychological ownership and perceptions of the group's IS functions at Time 1. Six months later, at Time 2, archival data indirectly reflecting the general managers' behavioural orientation and objective performance data of the subsidiary were collected. The data analysis results showed that the general managers' perceptions of the group's IS control function reduced their self-interest orientation, and perceptions of the group's IS information function enhanced their strategic orientation. The managers' strategic orientation positively predicted the performance of the subsidiary. Their psychological ownership of the subsidiary positively affected their strategic orientation and negatively influenced their self-interest orientation. In addition, the two types of perception of the group's IS had a substitute moderating effect on the relationships between psychological ownership and the managers' self-interest orientation and strategic orientation, respectively. Specifically, perception of the controlling function of the group's IS had a substitute moderating effect on the negative relationship between psychological ownership and self-interest orientation. The perception of informational function had a substitute moderating effect on the positive relationship between psychological ownership and strategic orientation. Unexpectedly, the relationship between self-interest orientation and the performance of the subsidiary was non-significant.

The innovations of this research are as follows:

First, distinct from previous research focusing on one-way governance by parent companies at the macro level, this study pays more attention to the cognition, motivation and behaviours of the general managers of subsidiaries, and reveals the influence of the control mechanism, incentive mechanism, and information value mechanism at the micro level. Previous studies have mainly discussed the role of control mechanisms (one-way control of the parent company over subsidiaries, the role of the board, and the role of the supervisory board) and incentive mechanisms (equity structure, equity incentives), but have ignored the psychological cognition, motivation and behaviours of the general managers of subsidiaries. This study proposes a new control mechanism, general managers' cognitive evaluation of the controlling function of the group's IS; an information value mechanism, the general manager's cognitive evaluation function; and an incentive mechanism, the general manager of the subsidiary company's

psychological ownership of the subsidiary. This research also reveals the effects of these three mechanisms on general managers' speculation tendency and risk aversion tendency as well as the performance of the subsidiary, which remedies the shortcomings of previous corporate governance research.

Second, this research focuses on the principal–agent problem of parent and subsidiary companies, based on the perspectives of control, incentive and information value mechanisms. It innovatively proposes an interaction process among the three mechanisms and provides empirical evidence to support this proposition. Most previous research has explored the roles of control mechanisms and incentive mechanisms in the principal–agent problem separately. This study examines the synergy of different mechanisms in the parent–subsidiary governance process, highlighting the roles of cognitive evaluation of the group's IS function and psychological ownership in solving the problem of information asymmetry and principal–agent problems.

Third, this research integrates a group's IS function with cognitive evaluation theory in organisational behaviour research for the first time, and sheds new light on how to conduct interdisciplinary integrated research. This study extends research in the field of IS to the field of corporate governance and explores the role and effect of subsidiary general managers' cognitive evaluations of a group's IS functions. It also extends cognitive evaluation theory by innovatively proposing that the information function of a group's IS reflects the perception of how quickly the IS can provide timely work-related information. The perception of a group's IS information function can reduce the risk aversion tendency of a subsidiary's general manager, promote strategic behaviour, and ultimately improve the performance of the subsidiary. In addition, the general manager's perception of the group's IS control function reflects the group's IS's monitoring of the general manager's behaviour and power, which extends the original control function's impact on individuals' intrinsic motivation to the concrete control of behaviour and power, and further inhibits the general manager's self-interest orientation, which helps to indirectly improve the performance of the subsidiary.

**Keywords:** Group information system; Cognitive evaluation; Psychological ownership; Enterprise group; Principal–agent; Parent–subsidiary governance

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