The Influence of External Environment on the Launch of Foreign Automobile Models

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ABSTRACT

This study based on organizational ecology examined the effects of task environ-ments and ecological environments on new product launch. The sample consists of 777 foreign automobile models and data were collected from 1987 to 2008 by using Nega-tive binomial regression models. There are fours major findings: (1)The higher envi-ronment complexity is, the higher new product launch is. (2)There is a U shape rela-tionship between new product launch and population density. (3)New product launch has a positive relationship with the number of product introduction in the previous year. (4)The number of product mortality in the prior year is related to new product launch.

Keywords: environmental munificence、environmental dynamism、environmental complexity、population density、population dynamic

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REFERENCES

一、中文部份行政院新聞局(2003),2003出版年鑑,台北:行政院新聞局。行政院新聞局(2007),2007出版年鑑,台北:行政院新聞局。行政院新聞局(2008),2008出版年鑑,台北:行政院新聞局。朱錦忠(1999),生態學,台北:高立圖書有限公司。吳孟玲,林月雲(2002),台灣自行車產業之組織死亡率分析-組織生態觀點,管理評論,21(3),115-136。葉慧敏(2007),製藥產業藥品通過核准上市宣告效果之研究,國立高雄應用科技大學商務經營研究所未出版之碩士論文。二、英文部份Aldrich, H. E. (1990). Using an ecological perspective to study organizational founding rates. Entrepreneurship: Theory and Practice, 14(3), 7-24.Aldrich, H., & Ruef, M. (2006). Organizations Evolving (2nd

ed.). London: Sage.Anderson, P., & Tushman, M. L. (2001). Organizational environ- ments and industry exit: The effects of uncertainty, munificence and complexity. Industrial and Corporate Change, 10(3), 675-711. Archibald, M. E. (2008). The impact of density dependence, sociopolitical legitimation and competitive intensity on self-help/mutual-aid formation. Organization Studies, 29(1), 79-101. Audia, P. G., Freeman, J. H., & Reynolds, P. D. (2006). Organizational foundings in community context: Instrum- ents manufacturers and their interrelationship with other organizations. Administrative Science Quarterly, 51, 381-419. Arrow, K. (1962). Economic welfare and the allocation of resources for invention. In R. Nelson (ed.), The rate and direction of inventive activity. Princeton University Press, Princeton, New Jersey. Barnett, W. P., & Amburgey, T. L. (1990). Do large organizations generate stronger competition? In J. V. Singh, eds. Organizational Evolution: New Directions (pp. 78-102). Newbury Park, California: Sage.Baum, J. A. C., & Singh, J. V. (1994). Organizational niches and the dynamics of organizational founding. Organization Science, 5(4), 483-501.Barczak, G. (1995). New product strategy, structure, process and performance in the telecommunications industry, Journal of Product Innovation Management, 12, 2, 224-234. Baker, W. E., & Sinkula, J. M. (2005). Environmental marketing strategy and firm performance: Effect on new product performance and market share. Journal of the Academy of Marketing Science, 33, 461-475. Bayus, B. L., Erickson, G., & Jacobson, R. (2003). The financial rewards of new product introductions in the personal computer industry. Management Science, 49(2), 197-210. Bogue, J., & Delahunty, C. (1999). Market-oriented new product development: Cheddar-type cheese. Agri-business dis-cussion paper no. 23, Department of Food Economics UCC, UCC, Cork.Boyd, B. K. (1995). CEO duality and firm performance: A contingency model. Strategic Management Journal, 16(4), 301-312. Bourgeois, L. J. (1981). On the measurement of organizational slack. Academy of Management Review, 6, 29-39. Budros, A. (1984). Analyzing unexpected density dependence effects on organizational births in New York's life insurance industry, 1842-1904. Organization Science, 5(4), 541-553. Burns, T., & Stalker, G. (1961). The Management of Innovation, Tavistock, London.Cameron, A., & Trivedi, P. (1986). Econometric models based on count data: Comparisons and applications of some estimators and tests. Journal of Applied Econometrics, 1, 29-53. Cannon, A. R., & St. John, C. H. (2007). Measuring environ- mental complexity: A theoretical and empirical assessment. Organizational Research Methods, 10(2), 296-321. Carroll, G. R., & Swaminathan, A. (1991). Density dependent organizational evolution in the American brewing industry from 1633 to 1988. Acta Sociologica, 34(3), 155-175Carroll, G. R., & Khessina, O. M. (2005). The ecology of entrepreneurship. In S. A. Alvarez, R. Grwal, & O. Sorenson (Eds.), The handbook of entrepreneurship research: Disciplinary Perspectives, (pp. 167-200). New York: Springer. Castrogiovanni, G. J. (1991). Environmental munificence: A theoretical assessment. The academy of management review, 16(3), 542-565. Castrogiovanni, G. J., & Vozikis, G. S. (2000). Foreign franchisor entry into developing countries: Influences on entry choices and economic growth. New England Journal of Entrepreneurship, 3(2), 9-19. Castrogiovanni, G. J. (2002). Organization task environments: Have they changed fundamentally over time? Journal of Management, 28(2), 129-150. Chung, Y. C., & Tsai, C. H.(2007). The effect of green design activities on new product strategies and performance: An empirical study among high-tech companies. International Journal of Management, 24(2), 276-288. Chakravarthy, B. S. (1982). Adaptation: A promising metaphor for strategic management. Academy of Management Review, 7, 35-44. Child, J. (1972). Organization structure, environment, and perfor- mance: The role of strategic choice. Sociology, 6, 1-22. Child, J., & Kieser, A. (1981). Development of organizations over time. In P. Nystrom & W. Starbuck (Eds.), The handbook of organizational design, (pp. 28-64). New York: Oxford University Press. Chou, H. J. (2009). The effect of market orientation intention and superiority on new product performance. The Journal of American Academy of Business, 14(2), 93-97. Cyert, R., & March, J. (1963). A behavioral theory of the firm, Englewood Cliffs, New Jersey: Prentice-Hall, Carroll, G. R. (1984), Organizational ecology, Annual Review of Sociology, 10. 71-93. Debruyne, M., Moenaert, R., Griffin, A., Hart, S., & Hultink, E. J. (2002). The impact of new product launch strategies on competitive reaction in industrial markets. The Journal of Product Innovation Management, 19, 159-170. Delacroix, J., & Carroll, G. R. (1983). Organizational foundings: An ecological study of the newspaper industries of Argentina and Ireland. Administrative Science Quarterly, 28, 274-291. Delacroix, J., Swaminathan, A., & Solt, M. E. (1989). Density dependence versus population dynamics: An ecological study of failings in the California wine industry. American Sociological Review, 54(2), 245-262. Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. Administrative Science Quarterly, 29, 52-73.Di Benedetto, C. A. (1999). Identifying the key success factors in new product launch. Journal of Product Innovation Mana-gement, 16, 530-544. Dobrey, S. D. (2000). Decreasing concentration and reversibility of the resource partitioning process: Supply shortages and deregulation in the Bulgarian newspaper industry, 1987- 1992. Organization Studies, 21, 383-404. Dobrev, S. D. (2001). Revisiting organizational legitimation: Cognitive diffusion and sociopolitical factors in the evolution of Bulgarian newspaper enterprises, 1846-1992. Organization Studies, 22(3), 419-444. Dollinger, M. J., & Golden, P. A. (1992). Interorganizational and collective strategies in small firms: Environmental effects and performance. Journal of Management, 18(4), 695-715. Dougherty, D., & Hardy, C. (1996). Sustained product innovation in large, mature organization: Overcoming innovation-to- organization problems. The Academy of Management Journal, 39(5), 1120-1153. Duncan, R. B. (1972). Characteristics of organizational environ- ments and perceived environmental uncertainty. Admini-strative Science Quarterly, 17, 313-327. Dyer, L. M. (2008). Seeking advice in a dynamic and complex business environment: Impact on the success of small firms. Journal of Developmental Entrepreneurship, 13(2), 133-149. Finger M. (2009). Industry Analysis and Trends. College of Management of Technology Institute of Technology Policy. Fuentes-Fuentes, M. M., Albacete-Saez, C. A., & Llorens-Montes, F. J. (2004). The impact of environmental characteristics on TQM principles and organizational performance. Omega, 32, 425-442. Galvin, T. L. (2002). Examining institutional change: Evidence from the founding dynamics of U.S. health care interest associations. The Academy of Management Journal, 45(4), 673-696. Gatignon, H., Weitz, B., & Bansal, P. (1997). Brand introduction strategies and competitive environments. Journal of Marketing Research, 27, 390-401. Goll, I., & Rasheed, A. M. A. (1997). Rational decision-making and firm performance: The moderating role of environment. Strategic

Management Journal, 18(7), 583-591. Henard, D. H., & Szymanski, D. M. (2001). Why some new products are more successful than others. Journal of Marketing Research, 38(3), 362-375. Hopkins, W. E., & Hopkins, S. A. (1997). Strategic planning- financial performance relationships in banks: A causal examtion. Strategic Management Journal, 18(8), 635-652. Hoonsopon, D., & Ruenrom, G. (2009). The empirical study of the impact of product innovation factors on the performance of new products: Radical and incremental product innovation. The Business Review, 12(2), 155-162. Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. Journal of Marketing, 59, 1-15. Irwin, J. G., Hoffman, J. J., & Geiger, S. W. (1998). The effect of technological adoption on organizational performance: Organization size and environmental munificence as moderators. International Journal of Organizational Analysis, 6(1), 50-64. Karimi, J., Somers, T. M., & Gupta, Y. P. (2004). Impact of environmental uncertainty and task characteristics on user satisfaction with data. Information Systems Research, 15(2). Keats, B. W., & Hitt, M. A. (1988). A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. The Academy of Manage- ment Journal, 31(3), 570-598. Klastorin, T., & Tsai, W. Y. (2004). New product introduction: Timing, design, and pricing. Manufacturing & Service Operations Management, 6(4), 302-320. Koberg, C. S. (1997). Resource scarcity, environmental un-certainty, and adaptive organizational behavior. Academy of Management Journal, 30, 798-807. Kropp, F., & Zolin, R. (2005). Technological entrepreneurship and small business innovation research programs. Academy of Marketing Science Review, 7, 1-14. Lawrence, P. R., & Lorsch, J.W. (1967). Organization and environment. Boston, Massachusetts: Harvard Business School Press.Liao, T. F. (1994). Interpreting probability models: Logic, profit and other generalized linear models. Thousand Oaks, California: Sage.Ledwith, A., & O 'Dwyer, M. (2008). Product launch, product advantage and market orientation in SMEs. Journal of Small Business and Enterprise Development, 15(1), 96-110.Li, L. (2000a) An analysis of sources of competitiveness and performance of Chinese manufacturers. International Journal of Operations & Production Management, 20(3), 299-315.Li, M., & Simerly, R. L. (1998). The moderating effect of environmental dynamism on the ownership and performance relationship. Strategic Management Journal, 19(2), 169-179.Li, Y., Li, L., Liu, Y., & Wang, L. (2005). Linking management control system with product development and process decisions to cope with environment complexity. Interna- tional Journal of Production Research, 43(12), 2577-2591.Lomi, A. (1995). The population and community ecology of organizational founding: Italian co-operative banks, 1936- 1989. European Sociological Review, 11(1), 75-98. Messallam, A. A. (1998). The organizational ecology of investment firms in Egypt: Organizational founding. Organization Studies, 19(1), 23-46.Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: The third link faculty of Management. Strategic Management Journal, 4(3), 221-235. Miller, D. (1987). The structural and environmental correlates of business strategy. Strategic Management Journal, 8(1), 55-76. Mintzberg, H. (1990). The design school: Reconsidering the basic premises of strategic management. Strategic Management Journal, 11(3), 171-195. Newkirk, H. E., & Lederer, A. L. (2007). The effectiveness of strategic information systems planning for technical resources, personnel resources, and data security in environments of heterogeneity and hostolity. The Journal of Computer Information Systems, 47(3), 34-44. Nownes, A. J. (2004). The population ecology of interest group formation: Mobilizing for gay and lesbian rights in the United States, 1950-1998. British Journal of Political Science, 34, 49-67. Panwar, J. S., & Bapat, D. (2007). New product launch strategies: Insights from distributors' survey. South Asian Journal of Management, 14(2), 82-91. Pennings, J. M. (1975). The relevance of the structural- contingency model of organizational effectiveness. Administrative Science Quarterly, 20, 393-410. Ranger-Moore, J., Banaszak-Holl, J., & Hannan, M. T. (1991). Density-dependent dynamics in regulated industries: Founding rates of banks and life insurance companies. Administrative Science Quarterly, 36(1), 36-65. Renzulli, L. A. (2005). Organizational environments and the emergence of charter schools in the United States. Sociology of Education, 78(1), 1-26. Sharfman, M. P., & J. W. Dean, Jr. (1991). Conceptualizing and measuring the organizational environment: A multidimen-sional approach. Journal of Management 17(4), 681-700. Sengupta, S., & Bushman, F. A. (1998). Organizational culture and new product performance: An exploratory investigation in high-technology firms. American Marketing Association. Conference Proceedings, 9, 391-398. Specht, P. H. (1993). Munificence and carrying capacity of the environment and organization formation. Entrepreneurship Theory and Practice, 17(2), 77-86. Srinivasan, R., Haunschild, P. & Grewal, R. (2007). Vicarious learning in new product introductions in the early years of a converging market. Management Science, 53(1), 16-28. Storey, C., & Easingwood, C. (1996). Determinants of new product performance: A study in the financial services sector. International Journal of Service Industry Manage- ment, 7(1), 32-55Staber, U. (1989). Organizational foundings in the cooperative sector of atlantic Canada: An eological prspective. Organization studies, 10(3), 381-403. Steiner, G. S. (1979). Strategic planning. New York: Free Pree, Swaminathan, A. (1995). The proliferation of specialist organizations in the american wine industry, 1941-1990. Administrative Science Quarterly, 40(4), 653-680. Thompson, J. D. (1967). Organizations in Action. New York: McGraw-Hill. Tsai, C. C., & Chuang, S. C. (2006). The impact of launch products (new and established products) on the effect of terminology in advertising. Journal of American Academy of Business, 9(1), 220-223. Tucker, D. J., Singh, J. V., & Meinhard, A. G. (1990). Organizational form, population dynamics, and institutional change: The founding patterns of voluntary organizations. The Academy of Management Journal, 33(1), 151-178. Tung, R. L. (1979). Dimensions of organizational environments: An exploratory study of their impact on organization structure. Academy of Management Journal, 22, 679-693. Tushman, M. L. (1977). Special boundary roles in the innovation process. Administrative Science Quarterly, 22, 587-605. Wang, Q., & Montaguti, E. (2002). The R&D-marketing interface and new product entry strategy. Marketing Intelligence & Planning, 20(2), 82-85.Wezel, F. C. (2005). Location dependence and industry evolution: Founding rates in the United Kingdom motorcycle industry, 1895-1993. Organization Studies, 26, 729. Wiersema, M. F., & Bantel, K. A. (1993). Top management team turnover as an adaptation mechanism: The role of the environment. Strategic Management Journal, 14(7), 729-754. Wholey, & Brittain. (1986). Organizational ecology: Finding and implications. The Academy of Management Review, 11(3), 513-533. Yasai-Ardekani, M. (1989). Effects of environmental scarcity and munificence on the relationship of context

to organizational structure. The Academy of Management Journal, 32(1), 131-156. Zhou, K. Z., Yim, C. K., & David, K. T. (2005). The effects of strategic orientations on technology- and Market-Based Breakthrough Innovations. Journal of Marketing, 69, 42-60.