## Economic and Technological Importance of Innovations in Large Family and Founder Firms: An Analysis of Patent Data

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Even though past research has shown that family firms have lower research and development spending than other firms, this article addresses the following questions:

- How does the economic and technological importance of innovations produced in family firms compare to the economic and technological importance of innovations produced in non-family firms?
- What differences exist between family and founder firms in this regard?
- To what degree can differences in the economic and technological importance of innovations between family, founder, and other firms be attributed to ownership or management dimensions of these types of firms?

Data for this study included patent data, ownership and management data, and accounting and financial data. A data set consisting of 1,659 observations from 248 firms in the S&P 500 concluded the following:

- Founder-managed firms produce innovations with high economic and technological importance, while family-managed firms are less likely to produce innovations of a radical and exploratory nature.
- Socio-emotional wealth (SEW) concerns may bias family firms toward incremental rather than radical innovation projects. In contrast, founders as managers, who favor an entrepreneurial orientation, appear to be gain seeking rather than loss averse.
- These motivational differences explain why founder-managed firms and familymanaged firms approach innovations differently, having distinctive consequences on a firm's performance.

Practitioners should help their clients realize that SEW concerns may have an impact on innovation. Family firms in industries which require radical innovations need to be aware of this bias and actively monitor their competitors. The article suggests that hiring an expert to review the family firm's innovation portfolio might be a good idea.

The "Discussion" section of this article provides an excellent summary of the research findings and additional implications for practitioners and family businesses.