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Consequences of Paying High Dividends to Shareholders and/or Share Buybacks on a Firm's Competitive Advantage

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Abstract

Fortune magazine published an article in February 2020 titled, "Boeing's Long Descent", regarding Boeing's focus on paying high dividends to its shareholders at the expense of R&D. If Boeing had not been paying high dividends to its shareholders, it could have invested on R&D, which would have been much more beneficial to Boeing in the long run. Is this phenomenon limited just to Boeing, or do other firms who pay high dividends to their shareholders do it at the expense of R&D and Marketing, which may give them a competitive advantage over other firms (their competitors) in the marketplace? This author thinks that the same principle applies to firms who are involved in share buybacks. That is, firms who buy back their shares also do so at the expense of R&D and Marketing, thus risking the long-term competitive advantage of the firm.

1. Background

Firms that cut R&D and marketing budgets to gain short term advantage are myopic in their management style, i.e., they risk the long-term performance of the firm (Catchpole, 2020; R. Srinivasan et al., 2011; R. Srinivasan & Ramani, 2019). Between 2009 and 2018, 465 firms in the S&P 500 Index spent \$4.3 trillion on stock buybacks (68% of net income) and \$3.3 trillion on paying dividends (41% of net income) to their shareholders (Lazonick & Tulum, 2011). By doing so, they spend less resources on R&D and advertising and risk losing long term comparative advantage (Erickson & Jacobson, 1992). This paper explores whether firms who give high dividends to their shareholders, and firms who spend money on stock buybacks, do so

by taking money away from R&D and other investments like marketing and advertising, and consequently risk the long-term health (competitive advantage) of the firm.

Giving High Dividends to Shareholders and Its Effects on a Firm

Giving excessive dividends to shareholders takes money away from productive capabilities of its labor force and negatively affects the growth of a firm (Lazonick et al., 2020). This does not benefit long term shareholders/investors who would rather have the firm invest the money in productive capabilities that gives it sustainable competitive advantage. These long-term shareholders can then enjoy long term capital gains when they decided to sell their shares in the company (Lazonick

et al., 2020).

There are two competing hypotheses for dividend policy. The first is the managerial opportunistic hypothesis proposed by Jensen (1993), which states that managers opportunistically retain cash within their firm to pay themselves, build empire, and invest in projects to enhance their personal prestige. The second is the substitution hypotheses proposed by La Porta et al. (2000) that firms with weak shareholder rights do not want to show that they are exploiting their shareholders, and thus tend to pay very generous dividends than firms with strong shareholder rights. This is also consistent with substitution theory.

There is an inverse relationship between high dividends and shareholder rights, and this may not be in the best interest of shareholders (Jiraporn & Ning, 2006). Based on agency theory, high dividend paying firms want to avoid conflicts between management and shareholders and thus pay higher dividends to its shareholders resulting in lower investments like R&D and marketing (Gompers et al., 2003; Jiraporn & Ning, 2006). Regulation also affects dividend policy, i.e., managers of regulated firms are prevented from benefiting themselves at the expense of shareholders (Booth et al., 2002; Kole & Lehn, 1997).

Share Buybacks and Its Effects on a Firm

In the last ten years, US corporations have spent trillions of dollars in buying back their own stocks, and in 2018, companies in the S&P 500 Index spent more than \$1 trillion in buying back their own stocks in the open market (Lazonick et al., 2020; Swift, 2018). Companies have returned a lot of money to shareholders in the form of stock buybacks and dividends - it nearly quadrupled from 38% in 1990 to 113% from 1990 to 2010 as a percentage of capital spending (Kramer, 2016). In the 1980s, stock buybacks were negligible, however, it increased to 38% of earnings in 2000, 79% in 2011, and 110% of earnings in 2015 (Morgenson, 2017). Firms engage in stock buybacks for a variety of reasons - if their stock price is undervalued (Peyer & Vermaelen, 2009), to signal good performance in the future (Lie, 2005), to boost employee incentives (Babenko, 2009), and to distribute excess

capital (Dittmar, 2000). Stock buybacks have been criticized for undermining economic growth because firms sacrifice long term-investments to pursue short term goals like earnings per share (Luce, 2015; Rieder, 2015). Companies with small negative earnings per share tend to decrease employment, capital expenditures, and R&D. This supports the view that companies are willing to lower employment and investments to buy back their stocks (Almeida et al., 2016). Stock buybacks do not contribute to the productive capabilities of a firm, in fact they deprive a firm from investing in such productive capabilities (Lazonick et al., 2020). Stock buybacks lead to declining R&D investment which suppress corporate innovation (Swift, 2018), and this has happened especially in the pharmaceutical industry (Lazonick & Tulum, 2011). Companies that are involved in stock buybacks do so at the expense of long-term investment to achieve short-term goals like earnings per share (Luce, 2015), and artificially raise stock prices in the short-term by hurting shareholder value in the long-term (Voth, 2008). However, others like Satell (2015) argue that firms like Apple who engage in stock buybacks have enough money for R&D and for stock buybacks.

Long term returns of stock buyouts can be explained by takeover activity and may not create value for shareholders (Bargeron et al., 2017; Lin et al., 2014). Share buybacks do not prove that they create shareholder value, it simply means that the stock was undervalued to begin with, and buyback completion rates have a negative correlation to long-term stock returns (Manconi et al., 2019). Firms that would have just missed EPS tend to buy back shares much more than firms that just beat EPS (Heitor et al., 2016). Announcements of share buy backs lead to increase in operating performance (Grullon & Michaely, 2004). Smaller, beaten-up value firms have higher long-term excess returns (Brav et al., 2005; Peyer & Vermaelen, 2009). However, excess returns may also be an indication of less efficient markets (Manconi et al., 2019). Stock buybacks have strongly declined due to market efficiency (Fu & Huang, 2016). Some scholars report that stock buybacks are associated with stock price increases and with posi-

tive long-term returns (Dittmar, 2000; Ikenberry et al., 1995; Peyer & Vermaelen, 2009). However, the literature is more supportive of the argument that stock buybacks do not create higher shareholder value in the long run.

R&D's Impact on a Firm

The market cap of the top twenty firms traded in the U.S. stock exchange would increase by \$1 trillion if they had optimized their R&D spending in 2010 (Knott, 2012). The longer-term benefits of investing in R&D are even more impressive since changes in R&D strategy can be linked to profitability and firm value, unfortunately, R&D is the first to get cut since firms are constantly under pressure to meet quarterly earnings target (Knott, 2012). Firms can create value by investing in R&D, process development and advertising to build brands (Currim et al., 2012). The amount of money allocated to R&D affects product development which in turn contributes to firm value (Ramaswami et al., 2009). R&D helps a firm develop its technologies, processes, and its product/service offerings which helps it meet customer expectations, giving it a competitive advantage in the marketplace (Jindal, 2020) and market leadership (Appleyard et al., 2020). R&D also helps a firm develop its intellectual property and patents which increases the firm's future cash flows (Rubera & Kirca, 2012). Higher R&D expenditures in the pharmaceutical industry lead to higher blockbuster drugs and to higher returns on equity in the future (Feyzrakhmanova & Gurdgiev, 2016). R&D's financial returns increase significantly when firms use Six Sigma to improve efficiency in operations, quality and efficiency also improve significantly through R&D investments (Yiu et al., 2020).

Stock prices of firms that cut either capital expenditure or R&D are 0.23% lower than firms that don't cut their capital expenditure or R&D (Almeida et al., 2016). Investments in R&D increases sales and shareholder value (Jindal, 2020; Joshi & Hanssens, 2010; Rubera & Kirca, 2012). R&D improves a firm's financial performance (Edeling & Fischer, 2016; Jindal & McAlister, 2015). However, McAlister et al. (2007) find that R&D negatively affects stock returns. McAlister et al. (2016)

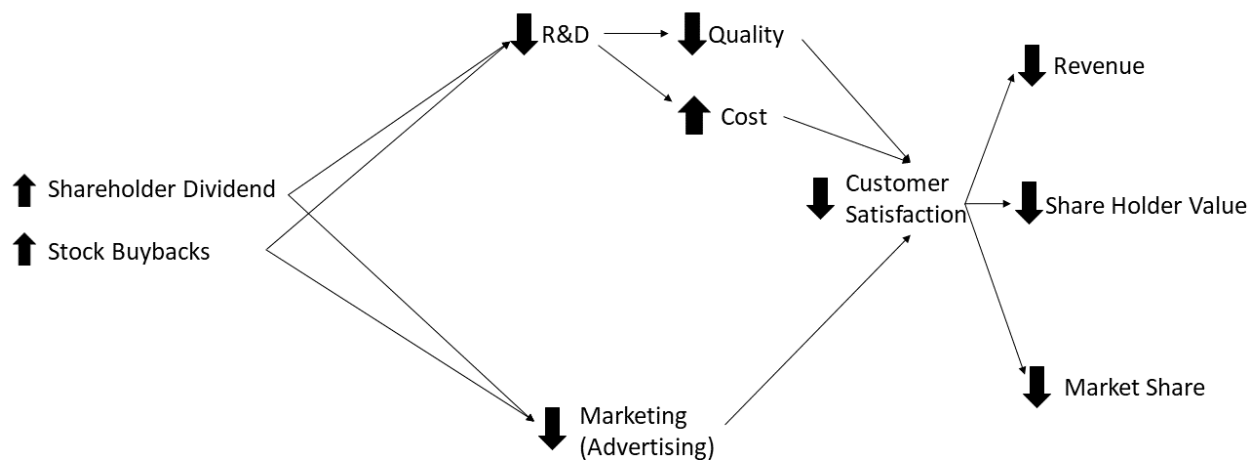
and Steenkamp and Fang (2011) find that a firm's expenditure on R&D positively affects its sales and market share. Increasing R&D spending during recessions increased profits and intangible value of firms (Graham & Frankenberger, 2011). Increase in R&D spending results in positive stock return in some B2B goods firms (R. Srinivasan et al., 2011).

Advertising and Marketing's Impact on a Firm

Marketing creates shareholder value by building brand equity, customer equity, and customer satisfaction (S. Srinivasan & Hanssens, 2009). Increases in R&D and advertising result in positive stock returns in many B2C firms (R. Srinivasan et al., 2011). Marketing contributes to a firm's value and financial performance through customer management, product development and supply chain management strategies (Ramaswami et al., 2009). Customer management helps companies in selecting high value customers (Zhou et al., 2005). Awareness of a firm's product/service offerings increases through advertising, and this enhances its brand equity, customer, and channel relationships (Jindal, 2020). This increases the firm's future financial performance and its shareholder value (McAlister et al., 2016). Firms who spend/invest money on advertising increase shareholder value, and their financial performance (Edeling & Fischer, 2016; Frennea et al., 2019; Jindal, 2020; Jindal & McAlister, 2015; Joshi & Hanssens, 2010; McAlister et al., 2016; Rubera & Kirca, 2012; Sethuraman et al., 2011; Sridhar et al., 2016).

Marketing involves the process of managing customers, using insights from customer interactions to identify customer needs to meet them (Sheth & Parvatlyar, 1995). Osinga et al. (2011) find that advertising increases stock returns. Siemen company's molecular imaging group regained its market leadership by requiring the engineering team to develop new product system and components based on customer feedback (through marketing communication (Appleyard et al., 2020). Kamber's (2002) study supports that view, and finds that firms who increased their advertising during recession saw increased earnings. Product innovations and marketing investments improve stock returns

Figure 1: Consequences of Increased Spending on Shareholder Dividend and Stock Buybacks



(S. Srinivasan et al., 2009).

2. Model and Propositions

Should the objective of an organization be to maximize shareholder wealth (satisfaction) or customer satisfaction? Does maximizing short term shareholder satisfaction mean that the firm should give out high dividends to its shareholder and buy back stock at the expense of investments in activities that will give it competitive advantage in the long run? This author believes that the objective of maximizing customer satisfaction will lead to the objective of maximizing shareholder wealth in the long run. This author proposes the following model in Figure 1.

Based on Figure 1, the following propositions are offered:

Proposition 1a. *Firms that pay higher dividends to shareholders (and spend less on R&D and marketing/advertising) will have lower quality.*

Proposition 1b. *Firms that buy back stocks (and spend less on R&D and marketing/advertising) will have lower quality.*

Proposition 2a. *Firms that pay higher dividends to shareholders (and spend less on R&D and marketing/advertising) will have higher cost.*

Proposition 2b. *Firms that buy back stocks (and spend less on R&D and marketing/advertising) will have higher cost.*

Proposition 3a. *Firms that pay higher dividends to shareholders (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, and thus lower customer satisfaction.*

Proposition 3b. *Firms that buy back stocks (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, and thus lower customer satisfaction.*

Proposition 4a. *Firms that pay higher dividends to shareholders (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, lower customer satisfaction, and thus lower revenue.*

Proposition 4b. *Firms that buy back stocks (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, lower customer satisfaction, and thus lower revenue.*

Proposition 5a. *Firms pay higher dividends to shareholders (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, lower customer satisfaction, and thus lower market share.*

Proposition 5b. *Firms that buy back stocks (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, lower customer satisfaction, and thus lower market share.*

Proposition 6a. *Firms that offer higher dividends to shareholders (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, lower customer satisfaction, which in turn will lead to lower shareholder value in the long run.*

Proposition 6b. *Firms that buy back stocks (and spend less on R&D and marketing/advertising) will have lower quality, higher cost, lower customer satisfaction, which in turn will lead to lower shareholder value in the long run.*

3. Discussions and Implications

CEOs and VPs need to think twice before they pay higher than normal dividends to their sharehold-

ers or if they buy back stocks of their companies in the open market. Researchers have cited a few reasons why companies give higher dividends and buy back their stocks, the primary being that they want to please and keep shareholders happy/satisfied. However, do these come at the expense of losing competitive advantage in the long run? Keeping shareholders happy/satisfied in the short run can hurt the firm (and shareholders) in the long run. By giving money to shareholders the company takes resources away from R&D and advertising which hurts the company's competitive advantage in the marketplace in the long run. A model of the consequences of giving high dividends and buying back stocks was presented in this paper. The paper also offered propositions related to the model. Researchers may want to test the model and the propositions using data from a diverse group of industries.

References

- Almeida, H., Fos, V., & Kronlund, M. (2016). The real effects of share repurchases. *Journal of Financial Economics*, 119(1), 168–185. <https://doi.org/10.1016/j.jfineco.2015.08.008>
- Appleyard, M. M., Enders, A. H., & Velazquez, H. (2020). Regaining R&D leadership: The role of design thinking and creative forbearance. *California Management Review*, 62(2), 12–29. <https://doi.org/10.1177/0008125619897395>
- Babenko, I. (2009). Share repurchases and pay-performance sensitivity of employee compensation contracts. *The Journal of Finance*, 64(1), 117–150. <https://doi.org/10.1111/j.1540-6261.2008.01430.x>
- Bargeron, L., Bonaime, A., & Thomas, S. (2017). The timing and source of long-run returns following repurchases. *Journal of Financial and Quantitative Analysis*, 52(2), 491–517. <https://doi.org/10.1017/S0022109017000084>
- Booth, J. R., Cornett, M. M., & Tehranian, H. (2002). Boards of directors, ownership, and regulation. *Journal of Banking & Finance*, 26(10), 1973–1996. [https://doi.org/10.1016/S0378-4266\(01\)00181-9](https://doi.org/10.1016/S0378-4266(01)00181-9)
- Brav, A., Graham, J. R., Harvey, C. R., & Michaely, R. (2005). Payout policy in the 21st century. *Journal of Financial Economics*, 77(3), 483–527. <https://doi.org/10.1016/j.jfineco.2004.07.004>
- Catchpole, D. (2020). The forces behind Boeing's long descent [Publication Title: Fortune]. Retrieved April 25, 2023, from <https://fortune.com/longform/boeing-737-max-crisis-shareholder-first-culture/>
- Currim, I. S., Lim, J., & Kim, J. W. (2012). You get what you pay for: The effect of top executives' compensation on advertising and R&D spending decisions and stock market return. *Journal of Marketing*, 76(5), 33–48. <https://doi.org/10.1509/jm.11.0225>
- Dittmar, A. K. (2000). Why do firms repurchase stock? *The Journal of Business*, 73(3), 331–355. <https://doi.org/10.1086/209646>

- Edeling, A., & Fischer, M. (2016). Marketing's impact on firm value: Generalizations from a meta-analysis. *Journal of Marketing Research*, 53(4), 515–534. <https://doi.org/10.1509/jmr.14.0046>
- Erickson, G., & Jacobson, R. (1992). Gaining comparative advantage through discretionary expenditures: The returns to R&D and advertising. *Management Science*, 38(9), 1264–1279. <https://doi.org/10.1287/mnsc.38.9.1264>
- Feyzrakhmanova, M., & Gurdgiev, C. (2016). Patents and R&D expenditure effects on equity returns in pharmaceutical industry. *Applied Economics Letters*, 23(4), 278–283. <https://doi.org/10.1080/13504851.2015.1071460>
- Frennea, C., Han, K., & Mittal, V. (2019). Value appropriation and firm shareholder value: Role of advertising and receivables management. *Journal of Marketing Research*, 56(2), 291–309. <https://doi.org/10.1177/0022243718822506>
- Fu, F., & Huang, S. (2016). The persistence of long-run abnormal returns following stock repurchases and offerings. *Management Science*, 62(4), 964–984. Retrieved April 28, 2023, from <https://www.jstor.org/stable/43835033>
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107–156. <https://doi.org/10.1162/00335530360535162>
- Graham, R. C., & Frankenberger, K. D. (2011). The earnings effects of marketing communication expenditures during recessions. *Journal of Advertising*, 40(2), 5–24. <https://doi.org/10.2753/JOA0091-3367400201>
- Grullon, G., & Michaely, R. (2004). The information content of share repurchase programs. *The Journal of Finance*, 59(2), 651–680. <https://doi.org/10.1111/j.1540-6261.2004.00645.x>
- Heitor, A., Fos, V., & Kronlund, M. (2016). The real effects of share repurchases. *Journal of Financial Economics*, 119(1), 168–185. <https://doi.org/10.1016/j.jfineco.2015.08.008>
- Ikenberry, D., Lakonishok, J., & Vermaelen, T. (1995). Market underreaction to open market share repurchases. *Journal of Financial Economics*, 39(2-3), 181–208. [https://doi.org/10.1016/0304-405X\(95\)00826-Z](https://doi.org/10.1016/0304-405X(95)00826-Z)
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831–880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- Jindal, N. (2020). The impact of advertising and R&D on bankruptcy survival: A double-edged sword. *Journal of Marketing*, 84(5), 22–40. <https://doi.org/10.1177/0022242920936205>
- Jindal, N., & McAlister, L. (2015). The impacts of advertising assets and R&D assets on reducing bankruptcy risk. *Marketing Science*, 34(4), 555–572. <https://doi.org/10.1287/mksc.2015.0913>
- Jiraporn, P., & Ning, Y. (2006). Dividend policy, shareholder rights, and corporate governance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.931290>
- Joshi, A., & Hanssens, D. M. (2010). The direct and indirect effects of advertising spending on firm value. *Journal of Marketing*, 74(1), 20–33. <https://doi.org/10.1509/jmkg.74.1.20>
- Kamber, T. (2002). The brand manager's dilemma: Understanding how advertising expenditures affect sales growth during a recession. *Journal of Brand Management*, 10(2), 106–120. <https://doi.org/10.1057/palgrave.bm.2540109>
- Knott, A. M. (2012). The trillion-dollar R&D fix. *Harvard Business Review*. Retrieved April 28, 2023, from <https://hbr.org/2012/05/the-trillion-dollar-rd-fix>
- Kole, S., & Lehn, K. (1997). Deregulation, the evolution of corporate governance structure, and survival. *The American Economic Review*, 87(2), 421–425. Retrieved April 28, 2023, from <https://www.jstor.org/stable/2950958>
- Kramer, M. R. (2016). How big business created the politics of anger. *Harvard Business Review*. Retrieved April 28, 2023, from <https://hbr.org/2016/03/how-big-business-created-the-politics-of-anger>

- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1–33. <https://doi.org/10.1111/0022-1082.00199>
- Lazonick, W., Sakinç, M. E., & Hopkins, M. (2020). Why stock buybacks are dangerous for the economy. *Harvard Business Review*.
- Lazonick, W., & Tulum, Ö. (2011). US biopharmaceutical finance and the sustainability of the biotech business model. *Research Policy*, 40(9), 1170–1187. <https://doi.org/10.1016/j.respol.2011.05.021>
- Lie, E. (2005). Operating performance following open market share repurchase announcements. *Journal of Accounting and Economics*, 39(3), 411–436. <https://doi.org/10.1016/j.jacceco.2005.04.001>
- Lin, J.-C., Stephens, C. P., & Wu, Y. (2014). Limited attention, share repurchases, and takeover risk. *Journal of Banking & Finance*, 42, 283–301. <https://doi.org/10.1016/j.jbankfin.2014.02.004>
- Luce, E. (2015). US share buybacks loot the future. *Financial Times*.
- Manconi, A., Peyer, U., & Vermaelen, T. (2019). Are buybacks good for long-term shareholder value? Evidence from buybacks around the world. *Journal of Financial and Quantitative Analysis*, 54(5), 1899–1935. <https://doi.org/10.1017/S0022109018000984>
- McAlister, L., Srinivasan, R., Jindal, N., & Cannella, A. A. (2016). Advertising effectiveness: The moderating effect of firm strategy. *Journal of Marketing Research*, 53(2), 207–224. <https://doi.org/10.1509/jmr.13.0285>
- McAlister, L., Srinivasan, R., & Kim, M. (2007). Advertising, research and development, and systematic risk of the firm. *Journal of Marketing*, 71(1), 35–48. <https://doi.org/10.1509/jmkg.71.1.035>
- Morgenson, G. (2017). Big pharma spends on share buybacks, but R&D? Not so much. *The New York Times*. Retrieved April 28, 2023, from <https://www.nytimes.com/2017/07/14/business/big-pharma-spends-on-share-buybacks-but-rd-not-so-much.html>
- Osinga, E. C., Leeflang, P. S., Srinivasan, S., & Wieringa, J. E. (2011). Why do firms invest in consumer advertising with limited sales response? A shareholder perspective. *Journal of Marketing*, 75(1), 109–124. <https://doi.org/10.1509/jm.75.1.109>
- Peyer, U., & Vermaelen, T. (2009). The nature and persistence of buyback anomalies. *Review of Financial Studies*, 22(4), 1693–1745. <https://doi.org/10.1093/rfs/hhn024>
- Ramaswami, S. N., Srivastava, R. K., & Bhargava, M. (2009). Market-based capabilities and financial performance of firms: Insights into marketing's contribution to firm value. *Journal of the Academy of Marketing Science*, 37(2), 97–116. <https://doi.org/10.1007/s11747-008-0120-2>
- Rieder, R. (2015). Winners and losers from share buybacks. *Financial Times*.
- Rubera, G., & Kirca, A. H. (2012). Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration. *Journal of Marketing*, 76(3), 130–147. <https://doi.org/10.1509/jm.10.0494>
- Satell, G. (2015). Stock buybacks aren't hurting innovation. *Harvard Business Review*. Retrieved April 28, 2023, from <https://hbr.org/2015/03/stock-buybacks-arent-hurting-innovation>
- Sethuraman, R., Tellis, G. J., & Briesch, R. A. (2011). How well does advertising work? Generalizations from meta-analysis of brand advertising elasticities. *Journal of Marketing Research*, 48(3), 457–471. <https://doi.org/10.1509/jmkr.48.3.457>
- Sheth, J. N., & Parvatlyar, A. (1995). Relationship marketing in consumer markets: Antecedents and consequences. *Journal of the Academy of Marketing Science*, 23(4), 255–271. <https://doi.org/10.1177/009207039502300405>
- Sridhar, S., Germann, F., Kang, C., & Grewal, R. (2016). Relating online, regional, and national advertising to firm value. *Journal of Marketing*, 80(4), 39–55. <https://doi.org/10.1509/jm.14.0231>

- Srinivasan, R., Lilien, G. L., & Sridhar, S. (2011). Should firms spend more on research and development and advertising during recessions? *Journal of Marketing*, 75(3), 49–65. <https://doi.org/10.1509/jmkg.75.3.49>
- Srinivasan, R., & Ramani, N. (2019). With power comes responsibility: How powerful marketing departments can help prevent myopic management. *Journal of Marketing*, 83(3), 108–125. <https://doi.org/10.1177/0022242919831993>
- Srinivasan, S., & Hanssens, D. M. (2009). Marketing and firm value: Metrics, methods, findings, and future directions. *Journal of Marketing Research*, 46(3), 293–312. <https://doi.org/10.1509/jmkr.46.3.293>
- Srinivasan, S., Pauwels, K., Silva-Risso, J., & Hanssens, D. M. (2009). Product innovations, advertising, and stock returns. *Journal of Marketing*, 73(1), 24–43. <https://doi.org/10.1509/jmkg.73.1.024>
- Steenkamp, J.-B. E. M., & Fang, E. (2011). The impact of economic contractions on the effectiveness of R&D and advertising: Evidence from U.S. companies spanning three decades. *Marketing Science*, 30(4), 628–645. <https://doi.org/10.1287/mksc.1110.0641>
- Swift, T. (2018). Do share buybacks suppress corporate innovation? *Academy of Management Proceedings*, 2018(1), 12955. <https://doi.org/10.5465/AMBPP.2018.12955abstract>
- Voth, H.-J. (2008). *Transparency and fairness in the European capital market*. Düsseldorf: Hans-Böckler-Stiftung.
- Yiu, L. M. D., Lam, H. K. S., Yeung, A. C. L., & Cheng, T. C. E. (2020). Enhancing the financial returns of R&D investments through operations management. *Production and Operations Management*, 29(7), 1658–1678. <https://doi.org/10.1111/poms.13186>
- Zhou, K. Z., Yim, C. K. (, & Tse, D. K. (2005). The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of Marketing*, 69(2), 42–60. <https://doi.org/10.1509/jmkg.69.2.42.60756>