

**Nothing But The Facts**  
**Common Ownership: Theory Meets Reality**

**FACT:** The common ownership *theory* posits that when investors own equity in multiple competing firms (“common owners”), then management of the competing firms will reduce competition with each other. This theory was initially advanced in 1984 in an entirely *theoretical* piece by Professor Julio Rotemberg.<sup>1</sup>

**FACT:** The common ownership theory *requires* that common owners have both the *economic incentive* to decrease competition among competing firms and the *control* necessary to exert that incentive. When both of these conditions are met, the theory posits that firm management will reduce competition with other firms where this is feasible, i.e. in concentrated industries.

**FACT:** Common ownership has **NOT** been empirically proven to reduce competition in even the most concentrated industries. However, recent academic studies, most prominently by José Azar, Martin Schmalz and Isabel Tecu (“AST”),<sup>2</sup> have purported to provide *evidence* that common ownership is producing anti-competitive effects in the airline industry.

**FACT:** AST’s study does so by attempting to measure common ownership by *institutional* investors and making assumptions about the economic incentives and control of these investors in the concentrated airline industry. AST’s study concludes that increases in institutional common ownership have resulted in an increase in the cost of airline tickets by 3-7%.<sup>3</sup>

**FACT:** AST’s findings depend on implausible assumptions about the economic incentives of asset managers and their ability to exercise control over firm management. AST’s study therefore fails to provide meaningful evidence that common ownership has anti-competitive effects.

***Economic Incentives***

**FACT:** AST’s measurement of common ownership assumes that asset managers (and the index funds and active funds that they manage) have the economic incentive to reduce competition among airlines by increasing airline ticket prices because doing so will increase the overall value of airline industry holdings in the portfolios of funds that they manage.<sup>4</sup>

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<sup>1</sup> See Julio J. Rotemberg, *Financial Transaction Costs and Industrial Performance*, MIT Sloan School of Management Working Paper No. 1554-84 (1984). See also Ariel Rubinstein and Menahem Yaari, *The Competitive Market as Cartel Maker: Some Examples*, London School of Economics Working Paper 83/84, (1983); Joseph Farrell, *Owner-Consumers and Efficiency*, *Economics Letters* 19, 303. (1985).

<sup>2</sup> José Azar, Martin Schmalz and Isabel Tecu, *Anticompetitive Effects of Common Ownership*, *Journal of Finance* 73, 1513 (2018).

<sup>3</sup> See Azar, Schmalz and Tecu, *Journal of Finance* 73 at 1517.

<sup>4</sup> Schmalz and Tecu, *Journal of Finance* 73 at 1525-28.

**FACT:** Asset managers constitute between 75-85% of institutional ownership in airlines and therefore assumptions regarding asset managers' economic incentives are highly consequential to AST's results.<sup>5</sup>

**FACT:** The primary economic incentive of an asset manager is to increase total assets under management ("AUM") in order to materially increase the management fees that they earn. Increasing the price of airline tickets does not serve this purpose. For example, State Street or Vanguard are unlikely to increase total AUM by increasing the price of airline tickets because the portfolios that they manage have similar, if not identical holdings, so increasing the stock price of one or more airlines does not affect each manager's performance relative to its peers.

**FACT:** Increasing airline ticket prices is likely to have *negative* financial effects on asset managers since airline tickets are a cost borne by most of the companies in which asset managers invest. Indeed, airlines constitute less than 1% of the most frequently used equity indexes, such as the S&P 500.<sup>6</sup> Higher airline ticket prices have negative effects on the remaining 99% of an S&P 500 index fund's portfolio, which consists of firms that consume airlines services (business travel). Such negative effects could depress the value of an index fund's overall holdings, thus reducing its manager's AUM and its management fees.

### *Control*

**FACT:** The theory that common ownership of firms results in anticompetitive behavior requires that common owners have some form of "control" over the firms that they own (such as voting rights). That is because without control, firm management would ignore the economic incentives of their common owners to reduce competition.

**FACT:** Although AST have clarified that institutional common owners need not actually exert that control in order to encourage anticompetitive behavior,<sup>7</sup> their application of the theory still depends on the existence of such control.<sup>8</sup>

**FACT: Asset managers do not have control over companies when they do not own them.**

**FACT:** When a public company goes bankrupt it is removed from the S&P 500 and other frequently-used stock market indices.<sup>9</sup> As a result, asset managers that manage index funds must sell their stock in these bankrupt public companies to continue to track their target index.

<sup>5</sup> Based on data provided by Thomson Reuters Spectrum and the replication package published by AST.

<sup>6</sup> State Street Global Advisors, "Annual Report: SPDR S&P 500 ETF Trust: A Unit Investment Trust", September 30, 2018, p. 8. Vanguard, "Annual Report: Vanguard 500 Index Fund", December 31, 2017, pp. 13-19.

BlackRock, "Annual Report: BlackRock Funds III: iShares S&P 500 Index Fund", December 31, 2017, p. 21.

<sup>7</sup> Azar, Schmalz and Tecu, *Journal of Finance* 73 at 1552-53.

<sup>8</sup> *Id.* at 1525, 1544-46.

<sup>9</sup> See S&P Dow Jones Indices, *S&P U.S. Indices Methodology* 26 (January 2019), available at <https://us.spindices.com/documents/methodologies/methodology-sp-us-indices.pdf>; FTSE Russell, *Russell U.S. Equity Indexes Construction and Methodology* 16 (August 2018), available at <https://www.ftse.com/products/downloads/Russell-US-indexes.pdf>.

**FACT:** During 28 of the 56 quarters covered by AST's study, an airline company was bankrupt.<sup>10</sup>

**FACT:** AST's findings depend on the incorrect assumption that each institutional investor's holdings during the period of bankruptcy were consistent with the investor's holdings in the quarter prior to the bankruptcy.<sup>11</sup> Even when specifically testing for the effects of airline bankruptcies, AST assumed that asset managers and the index funds that they manage did not sell any shares in an airline when it went bankrupt.<sup>12</sup>

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<sup>10</sup> Azar, Schmalz and Tecu, *Journal of Finance* 73 at 1531

<sup>11</sup> *Id.* at 1525.

<sup>12</sup> *Id.* at 1531-35.