CFA Society Chile

FINANCIAL EDUCATION

COMPETITION ANALYSIS IN FINANCE (PART 2)

In the second part of this series - on how to integrate competition economics concepts into the investment process - Daniel reviews case studies of companies that lost *market power* and posted heavy losses in the last decade. He also points out the warning signs to determine if a company is at risk of losing its competitive moat.

By Daniel Urdaneta, CFA

For some, competition is a losing game

Competition in a contemporary market economy considers a multitude of strategic decisions by firms (e.g., levels of CAPEX and R&D, M&A activity, entry/exit to certain markets or product lines, etc.). The combination of decisions of each firm with respect to its competitors, as well as exogenous factors (such as innovation *shocks*) lead to a constant process of "*creative destruction*", with winners and losers within each industry.

The first column, in the June Newsletter, focused on the "winners" - companies with total returns in excess of 1,000% over the last decade, highlighting companies such as Microsoft, Apple, NVIDIA and Tesla that were winners in this process of creative destruction. This column will focus on the "losers" - the companies that were unable to adapt to the wave of innovation in their industries.

Risk signs of a "losing" company

The key element in determining whether or not a company is at risk of becoming a "loser" lies in analyzing the strength of its competitive moat. There are several signs of a fragile moat:

1. **Non-exclusive Intellectual Property:** Not owning an exclusive patent on products, or having patents close to their expiration period (which opens the door to *generic* competitors offering a product with similar characteristics at lower cost)[1] .

2. **High competitive rivalry:** This characteristic is observed in markets with many suppliers and similar cost structures; with a wide range of substitute goods; in markets characterized by large-scale buyers (such as corporations or government entities) with high bargaining power; or in markets where there are no high entry barriers to potential competitors[2] .

3. **Pace of Innovation:** Technological advances may allow new players to enter an industry that was previously considered uncontestable. Provided that natural monopoly conditions do not exist, there is always a risk of future entry by new competitors amid a wave of innovation; most often than not, the historical incumbents as the main "losers" in this context[3] .

4. **Lack of differentiation:** Generally speaking, the more difficult it is for each firm to differentiate its value proposition from its rivals, or to secure a more efficient scale of production than its competitors, the more inherently competitive the market will tend to be, resulting in fierce competition in the market lower margins for all competitors. An extreme

[1] This is seen in the pharmaceutical industry, with high levels of generic drug competition. See Grabowski, Henry G., and John M. Vernon. "Brand loyalty, entry, and price competition in pharmaceuticals after the 1984 Drug Act." *The journal of law and economics* 35.2 (1992): 331-350, available at: https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/2611/Grabowski1984DrugAct.pdf.

[2] An example in Chile is the e-commerce logistics market, with a high level of competitive rivalry and low profitability. See: https://www.df.cl/empresas/retail/una-burbuja-logistica-crece-la-feroz-competencia-en-la-industria-de.

[3] This factor is observed in industries with a high level of innovation, such as information services and telecommunications. An illustrative example comes from streaming video-on-demand (SVOD) platforms displacing traditional pay TV amid a fierce competitive environment; see: https://seekingalpha.com/article/4360957-streaming-wars-tale-of-creative-destruction.

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example is seen in commodity-based industries, where all suppliers produce homogeneous goods and to some extent cannot compete on the basis of quality of other differentiating attributes. In these markets, players with less efficient organizations, smaller scale, less productive fields or higher levels of leverage tend to have high risks of financial stress in the downturn phase of the economic cycle, and have very little ability to protect themselves from the risk of bankruptcy[4].

5. **Dependence on large suppliers or clients:** For example, if a company needs to contract the services of another company to reach end consumers (e.g., sellers of consumer products need to negotiate with supermarket chains and stores; content providers must negotiate with TV operators or streaming platforms); or if its production depends on certain "essential inputs" that are difficult to substitute (and whose sellers have market power); or if its sales depend on a few customers with high bargaining power[5].

6. **(Lack of) vertical integration:** Although there is always the option of developing direct sales channels (or its own supply chains), a company at risk of being a "loser" usually has a high dependence on its operations in traditional business channels. For these companies, although it's usually not convenient to "cannibalize" their businesses by integrating activities in which they have little or no expertise, they may sometimes need to integrate backward or forward to remain viable in the market, but always at a disadvantage versus established integrated players. A corollary of this is that not all vertical mergers are successful (Remember AT&T-Time Warner? [6]). Generally speaking, if the merger does not generate an increase in the market power of the integrated company, or does not generate synergies inherent to the combination of both businesses, it will not be possible to increase profits after the merger[7].

7. **(Lack of) control over data:** If a company is not able to somehow monetize the data it receives from its users (or if it cedes control of this data to a larger platform - *privacy policy tying*[8]), it would hardly be able to compete effectively with data-rich incumbents on any meaningful dimension. This is a very recent risk factor, relevant in industries with platform characteristics (e.g., social networks, marketplaces, search portals, etc.), characterized by markets concentrated in one or a few players (with low interoperability among them) in equilibrium[9].

Case studies

Let's now go over a brief summary of 7 case studies of "*loser*" companies in the US over the last decade. This list is comprised of companies that were at one time part of the S&P 500 index (or very close to inclusion) and posted total returns of -66% or worse between August 2013 and August 202 [10], [11] and the economic fundamentals behind their poor performance. These companies provide very clear examples of companies

[4] An example is seen in the US oil industry. More than 60 small-scale producers filed for bankruptcy in 2020 due to the drop in oil prices at the onset of the COVID-19 pandemic. See: https://www.reuters.com/article/us-global-oil-usa-restructuring-focus-idUSKCN2250FQ.

[5] This factor is seen in industries such as retail, media entertainment, sports and digital platforms, as well as some manufacturing industries. Bidders with low bargaining power are exposed to abuses by *gatekeepers* (i.e., intermediaries between bidders and final consumers with market power) or providers of essential inputs. See: Grimes, Warren S. "Buyer power and retail gatekeeper power: protecting competition and the atomistic seller." *Antitrust LJ* 72 (2004): 563, available at: https://heinonline.org/HOL/LandingPage?handle=hein.journals/antil72&div=24&id=&page=.

[6] See New York Times, " Was This $100 Billion Deal the Worst Merger Ever?" (28 Nov 2022) on: https://www.nytimes.com/2022/11/19/business/media/att-time-warner-deal.html.

[7] This conclusion comes from the specialized literature. In this regard, see Kedia, Simi, S. Abraham Ravid, and Vicente Pons. "When do vertical mergers create value?" *Financial Management* 40.4 (2011): 845-877, available at: http://bit.ly/3YuPkfJ.

[8] In this regard, see Condorelli, Daniele, and Jorge Padilla. "Data-driven envelopment with privacy-policy tying." *Available at SSRN 3600725* (2020), *available at:* https://www.condorelli.science/PEPPT.pdf.

[9] In this regard, see Dubé, Jean-Pierre H., Günter J. Hitsch, and Pradeep K. Chintagunta. "Tipping and concentration in markets with indirect network effects." *Marketing Science* 29.2 (2010): 216-249, available at: https://www.jp-dube.com/research/papers/216full.pdf.

[10] Capital appreciation + dividends, considering dividend reinvestment. Estimate based on DQYDJ available at: https://dqydj.com/stock-return-calculator/. Updated: August 7, 2023.

[11] Several related cases fulfilling the conditions (Silicon Valley Bank, First Republic Bank and Signature Bank New York) were excluded because their decline was due to financial risk management failures rather than pure loss of competitiveness.

that were unable to reinvent themselves in the face of innovation and changing competitive dynamics in their respective industries.

1. Bed, Bath & Beyond (OTCMKTS:BBBYQ)
Total return (August 2013-August 2023): -99,6%

Bed, Bath & Beyond never specialized in a specific niche market - its stores sold "home varieties" chosen by the local management of each branch - and was unable to counterbalance the fierce *e-commerce* competition in its segment (Amazon, Wayfair, Target, Walmart, etc).

One of its last attempts to remain viable was to exercise its market power as a platform - by replacing third-party products with higher-margin *private label* goods- which proved disastrous, as the attempt to integrate upstream activities coincided with the crisis in supply chains due to the COVID-19 pandemic. The company finally filed for bankruptcy in April 2023[12].

2. Groupon, Inc. (NASDAQ:GRPN)
Total return (June 2013-June 2023): -96,1%

Groupon went from being one of the most valued tech startups in the past decade - garnering a valuation of USD 17.8 billion at its IPO in 2011 - to a company on the verge of bankruptcy in 2023[13]. In 2010, Groupon resisted Google's acquisition attempts (for USD 6 billion) and a year later went public[14] - perhaps not the best decision in hindsight.

Groupon's negative performance is mostly driven by the fact that its business model - a platform that connects merchants with potential customers through "exclusive" promotional discounts – inherently lacks a competitive moat. Indeed, in the last decade, multiple companies have iterated on the retail digital platform concept - including both major retail chains and new platforms with specialized segments (Uber, Booking, Expedia, Airbnb). On the other hand, discount platforms such as Groupon's fostered very bad agency issues on the supply side (e.g., misleading offers; sustained quality decreases; service problems due to congestion; self-selection towards the lowest quality providers; etc.). The straw that broke the camel's back was that, in 2013, Google implemented changes to Gmail functionality that substantially limited the reach of Groupon's email chains (its main historical marketing channel)[15]. Groupon was never able to integrate downstream distribution channels in a meaningful way, so it lost the attention of their consumers very quickly after the Gmail's "*shadow ban*".

3. Lumen, Inc. (NYSE:LUMN)
Total return (June 2013-June 2023): -89,0%

Lumen (formerly CenturyLink) is one of the world's largest companies in wholesale internet infrastructure (e.g., submarine fiber optic cables and long-haul transmission networks). The company has been in a negative trend since the Great Recession (the stock reached an all-time high price in July 2007 and is down ~98% since then), and its rate of decline has accelerated substantially over the past five years.

The analyst consensus is that the company lacks market power, as it is subject to an "*intensely competitive Internet market, increasingly standardized and characterized by high fixed costs and low variable costs*", and that its negative performance will continue through the vicious circle of falling gross margins, rising debt, forced sales of strategic assets to pay off debts, further fall in margins, etc.[16]

4. Dish Network (NASDAQ:DISH)
Total return (June 2013-June 2023): -81,6%

Like Lumen, Dish is another company in the telecommunications industry that lost out in the most recent wave of innovation. Dish's problems can be summarized in a "double whammy". On the one hand, the traditional business (satellite TV and Internet TV) is in decline – Dish has experienced annual churn rates above 10% in recent years – and increasing competitive

[12] See: https://www.npr.org/2023/04/24/1152070914/bed-bath-the-great-beyond-how-the-home-goods-giant-went-bankrupt.
[13] See: https://thehustle.co/whatever-happened-to-groupon/.
[14] Sources consulted by the press at the time state that Google desisted from acquiring Groupon due to risks of antitrust intervention. See: https://www.businessinsider.com/why-groupon-said-no-to-google-2010-12.
[15] This risk factor was first raised in 2013 by Groupon's board. See: https://www.digitalcommerce360.com/2013/11/14/groupon-hit-hard-gmails-changes-rethinks-e-mail/.
[16] See: https://www.marketwatch.com/story/lumen-stock-plunges-toward-levels-not-seen-in-34-years-amid-a-reset-11675872346.

pressure from streaming alternatives[17] . On the other hand, the future growth area (5G mobile services) has represented an unprecedented multi-billion dollar investment in spectrum, radio stations and connectivity technology in the US, but its deployment began much later than the 5G networks of the incumbents (AT&T, Verizon, T-Mobile) and has only started activities in June 2023 [18] , in a market with fierce downstream competition and increasingly narrower margins. Dish is also in a debt vicious cycle of debt like Lumen, and may be forced to sell strategic assets in the near future – including their spectrum licenses– to stay alive.

5. Teva Pharmaceutical Industries Ltd (TLV:TEVA) Total return (June 2013-June 2023): -72,2%

Since its inception, Israel's Teva - one of the world's leading generic drug producers - does not command a moat for proprietary rights as, except for a multiple sclerosis drug - Copaxone - it mostly specializes in generic drugs. After a history of failed acquisitions (most notably the USD 40.5 billion purchase of Actavis from Allergan in 2015) and strategic mistakes by the company, Teva has been facing high debt loads, margin erosion (due to increased competition in the generics market) and increased market power on the demand side (due to partnerships between healthcare providers and insurers in the US)[19].

Teva also has other challenges: an antitrust lawsuit in the US for collusion in the generic drug market[20] and lawsuits in the European Union[21] and the US[22] linked to "*pay for Delay"* practices (i.e., out-of-court settlements with potential entrants to delay the launch of generic versions of Copaxone and HIV drugs to the EU and US markets, respectively).

6. Warner Bros. Discovery, Inc. (NASDAQ:WBD) Total return (June 2013-June 2023): -67,7%

Discovery Inc. became Warner Bros Discovery in 2022, following the merger of two of the world's leading producers of pay TV, film and streaming content. The company nominally commands a moat based on its portfolio of iconic IPs in movies and series. However, WBD has been facing increasing competitive pressure on the streaming side (where other players such as Netflix, Disney, Amazon and Apple compete with larger budgets than WBD, and without cannibalization problems in its core business) and continues to be affected by cord-cutting in traditional TV, which to date remains its main line of business[23] .

7. Sabre Corporation (NASDAQ:SABR) Total return (June 2013-June 2023): -66,3%

Sabre specializes in providing IT services for select industries. Its main product is a platform that connects airlines with travel agencies, allowing agencies to access "preferential" airline ticket prices that are generally not available through other sales channels. This business model was hit hard by the COVID-19 pandemic (due to the decline in the flow of tourists globally, which has not yet recovered), but also by increasing competitive pressure from online rivals (e.g., Booking, Expedia, Despegar), and the airlines' own direct sales channels.

Last year it suffered a setback when it was found guilty of antitrust violations in the U.S. (for applying an exclusive distribution model that increased airfare prices for end customers)[24]. It is difficult for Sabre to sustain itself in the long term in the airline ticket market, as it is no longer a gatekeeper for end consumers.

Conclusions

The case studies of "loser" companies allowed us to see in practice what are the main vulnerabilities faced by firms in today's market economy. Cases stand out in which the fate of the company was defined by strategic

[17] See: https://www.lightreading.com/videomedia/dishs-satellite-tv-biz-isnt-going-away-ergen-says-/d/d-id/784780.
[18] See: https://www.fiercewireless.com/5g/dish-5g-network-now-available-over-70-us-population.
[19] See: https://www.nytimes.com/2017/12/27/business/teva-israel-layoffs.html.
[20] See: https://www.justice.gov/opa/pr/seventh-generic-drug-manufacturer-charged-ongoing-criminal-antitrust-investigation.
[21] See: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6062.
[22] See: https://www.fiercepharma.com/pharma/gilead-tevas-hiv-antitrust-trial-kicks-california.
[23] See: https://www.fool.com/investing/2023/03/31/warner-bros-discovery-is-down-40-since-its-debut-t/.
[24] See: https://www.reuters.com/business/aerospace-defense/american-airlines-gets-favorable-antitrust-verdict-1-damages-2022-05-19/.

decisions that either marked a before and after in the company for the worse (Groupon, Teva), or reflected the futility of efforts to reestablish a competitive *moat* destroyed by new technologies (Warner Bros-Discovery, Dish). It also shows how changes in the industry led certain companies to irrelevance (Sabre, Lumen) or bankruptcy (Bed, Bath & Beyond).

As an honorable mention, we highlight other "losers": telecom and media companies (Altice, Paramount Global, AMC Networks, AMC Theaters, Frontier Communications); another pharmaceutical company specialized in generic drugs (Perrigo); and equipment leasing and technical services companies to the oil industry (Schlumberger, Baker Hughes, National Oilwell-Varco). In all these cases, the negative performance can be explained by a loss in market power, either by the entry of substitutes (e.g., streaming platforms and decline of linear TV; mass-produced generic drugs in emerging markets); by pressure from key buyers/suppliers; or by high intra-industry rivalry in a context of stagnating or declining industry revenues.

Bonus: Suggested reading

Both competition economists and finance professionals will find much value in this selection of academic articles (with little math, I promise!).

1. On "*creative destruction*"

A *paper* by Professor Tom Nicholas of Harvard Business School on the historical evidence of the process of "*Creative Destruction*" in the U.S. stands out[25]. This concept, attributed to Austrian economist Joseph Schumpeter, refers to the dynamics of contemporary capitalist economies, in which large firms compete through innovation, and new, more efficient technologies frequently "destroy" entire industries that become obsolete.

2. *Intra-industry* competition, corporate governance and returns.

Regarding the relationship between industry concentration and stock returns, an influential paper by Kewei Hou (Oklahoma State University) and David Robinson (Duke)[26] stands out. The authors conclude that the relationship is *negative* (i.e., more concentrated industries generate lower returns), which they attribute to two possible hypotheses:

- More concentrated industries have lower levels of innovation on average (and thus lower expected returns),
- or more concentrated industries are characterized by lower risks of bankruptcy (i.e., the industry is protected from "*Creative Destruction*", but earns lower profits in return).

At first glance, this result seems counter-intuitive (isn't it assumed that, the higher the concentration, the greater the collective market power of the firms?), but looking deeper, the result makes perfect sense: if an industry is concentrated in a few players who face no external incentives to innovate, it is very unlikely to expect a stellar performance from its management team - which is living "*the quiet life*", as John Hicks would say[27].

To complement this line of argument, I recommend an article by Xavier Giroud (Columbia Business School) and Holger Mueller (NYU Stern)[28] where they focus on differences in returns among the subset of firms in concentrated industries. According to the authors, firms with better corporate governance practices (i.e., more "democratic" firms, as opposed to "dictatorial" firms with weak corporate governance) generate higher stock returns in equilibrium, which is because strong corporate governance protects investors from managers who pursue objectives other than profit

[25] Nicholas, Tom. "Why Schumpeter was right: innovation, market power, and creative destruction in 1920s America." The Journal of Economic History 63.4 (2003): 1023-1058. Disponible en: https://www.hbs.edu/ris/Publication%2520Files/JEH03_237b9530-3add-40c3-b74b-cb9c3cd43360.pdf.

[26] Hou, Kewei, and David T. Robinson. "Industry concentration and average stock returns." *The journal of finance* 61.4 (2006): 1927-1956. Available at: https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d31ffbd6e2adbeeb2a3c76cdabc48eba036a33de.

[27] John Hicks (Nobel Prize in Economics in 1972) once said that "*the best of monopoly rents is a quiet life*". For more information: https://www.landfallstrategy.com/commentary/2018/4/21/the-best-monopoly-profit-is-a-quiet-life.

[28] Giroud, Xavier, and Holger M. Mueller. "Corporate governance, product market competition, and equity prices." *the Journal of Finance* 66.2 (2011): 563-600. Available at: https://archive.nyu.edu/bitstream/2451/27860/2/wpa08017.pdf.

maximization. Interestingly, this result is not observed in highly competitive (i.e., low concentration) industries - since, in the case of these, competitive pressure from rivals exerts a disciplining effect similar to that of strong corporate governance.

3. Differences in competitive intensity between countries

The relationship between differences in competitive intensity and stock returns has not been systematically studied in the economic literature due to two challenges linked to the impact of globalization:

- The trend towards greater competition in product markets - as more and more countries open their markets to foreign competition; and
- Increased concentration reflected in stock market indexes – as major corporations have increased their global market share by expanding into more and more countries, leading to the returns of the stock index of a country such as the US (with a high share of multinational firms, especially among large- and mega-caps) incorporating the global performance of its constituents.

A CEPR *think thank* article on the subject suggests that the pro-competitive effect of globalization is still the most important driving force, offsetting the trend towards greater concentration among industries globally[29].

4. *Peer Group Analysis* (margins)

At the portfolio construction level, the most direct way to implement an investment strategy based on competitive fundamentals is to buy the market portfolio (since, by establishing weights according to market capitalization, a higher percentage of the amount invested is being allocated to the "winning" companies of the moment), in contrast to an equal-weight portfolio. At the stock selection level, the strategy of buying "winning" companies shares certain similarities with the *"Momentum[30,31]"* and *"Quality"[32]* factors of the financial economics literature. In principle, these factors encompass the desirable attributes of a company with a strong moat: above-average (and growing) earnings and strong cash flows (i.e., not just positive accounting earnings). Ultimately, the portfolio manager's judgment in selecting assets will make the difference, and there is no one clear-cut way to select stocks under this criterion. An approach solely limited to sorting companies by margins or earnings growth may not capture subtle differences in their competitive dynamics; on the other hand, a strictly qualitative approach may overestimate or underestimate certain companies depending on the analyst's judgment of certain companies or industries.

5. Experience in M&A transactions

Finally, an article by Aswath Damodaran explains that the key element in predicting the outcome of a merger - *synergies* - is difficult to measure *ex ante* and is often overestimated by the parties prior to the merger, so that in practice most M&A transactions often generate worse results than estimated (in fact, firms more often than not end up "overpaying" for the right to exploit these hypothetical synergies)[33] .

Disclosure

Daniel Urdaneta is en Economist in the Chile Affiliate Network of Compass Lexecon, an economic consultancy firm specialized in, among other areas, antitrust and competition analysis, international arbitration and financial valuation. The opinions expressed in this article belong to Daniel only and do not represent the views or positions of Compass Lexecon. Professional profile available at:

https://www.compasslexecon.com/professionals/daniel-urdaneta/

[29] See Crinò, Gancia and Bonfiglioli, "*International competition and national concentration"* (VoxEU-CEPR, 2019), available at: https://cepr.org/voxeu/columns/international-competition-and-national-concentration.

[30] See Jegadeesh, Narasimhan, and Sheridan Titman. "Returns to buying winners and selling losers: Implications for stock market efficiency." *The Journal of finance* 48.1 (1993): 65-91.

[31] See Novy-Marx, Robert. *Fundamentally, momentum is fundamental momentum.* No. w20984. National Bureau of Economic Research, 2015, available at: https://www.nber.org/system/files/working_papers/w20984/w20984.pdf.

[32] See Sloan, Richard G. "Do stock prices fully reflect information in accruals and cash flows about future earnings?" *Accounting review* (1996): 289-315.

[33] See Damodaran, Aswath. "The value of synergy." *Available at SSRN 841486* (2005).