A Family Tale: Behavioral Finance and the Seagram-Vivendi Merger

Lawrence J. Raifman
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by Lawrence J. Raifman, J.D., Ph.D.

The use of cognitive heuristics to explain the Seagram-Vivendi merger provides more valuable insights than those found in traditional pop psychology or economic decision analysis.

The famed 22 foot high “Le Tricorne” Picasso curtain painting in the Seagram Building, visible from New York City’s Park Avenue since 1959, along with the entire Joseph E. Seagram and Sons modern art collection, is on the auction block. The $15 million art collection is no longer regarded as a “strategic asset” in Vivendi Universal’s portfolio, and will be sold as part of its downsizing efforts in response to Vivendi’s serious financial troubles. Vivendi absorbed Seagram in a merger several years ago at the height of the frenetic communications market mania. Ms. Phyllis Lambert, the daughter of Samuel Bronfman, the Seagram patriarch, commented in the New York Times on December 12, 2002, “This is part of a Greek tragedy” for the Bronfman family, “I’m heartbroken.” She was active in the Seagram Building design and formation of the art collection. Her sentiments were echoed by other prominent New Yorkers, including Robert A. M. Stern, Dean of the Yale School of Architecture, who noted that losing the “Le Tricorne” by Picasso from the Seagram Building “would be like taking the ceiling off the Sistine Chapel.”

The media in Canada and the United States have been drawn to the dramatic rise and disastrous fall of one of Canada’s preeminent families of finance. Magazine articles are fond of quoting Samuel Bronfman’s now prophetic comment made to Fortune Magazine in 1966: “...shift sleeves to
shirtsleeves in three generations. I'm worried about the third generation. Empires have come and gone.” Samuel Bronfman built a business empire in North America during prohibition more than two generations ago, when he sold Canadian whiskey to U.S. bootleggers. Bronfman succeeded in taking as much as twenty percent of the American liquor market, expanding the Montreal based company with name brand whiskey like Chivas Regal and Seagram's V.O. Seagram prospered with sustained growth over the next generation under his son, Edgar Bronfman, Senior. Edgar Bronfman, Jr.'s decisions made just prior to the bursting of the Internet bubble caused his family the loss of billions. When “exuberance” was replaced by fear, Edgar Bronfman, Jr. and his family felt the loss more so than most. Edgar Bronfman, Sr. considered the real tragedy to be, not the loss of wealth, estimated as being a drop from $6.9 billion to $1 billion, but the failure of judgment. “Not to pooh-pooh the money, but that's not the real disaster. The real disaster is bad judgment. We took something my father had built and my son converted into something, which was really dynamic, and put it in with these guys to get the kind of size we needed. And suddenly it blew up in our faces.”

In sync with Phyllis Lambert, the popular media depicts the Bronfman’s downfall as a modern morality play. A Fortune article noted, “The oracles predicted his (Edgar Bronfman Jr.’s) disgrace, he devoted his career to preventing it, and it’s happened anyway, because of his own action.” Brian Milner's article on the Bronfman financial failure entitled “Broken Spirits” is typical of the present genre. Mr. Milner could not resist the temptation to over-weight personality and family dynamics when writing about the Bronfmans. The result is an inherently entertaining presentation, centered on a psychological analysis of the Bronfman family, putting special emphasis upon family generational conflicts. It is a formula the public is comfortable with. Our pop psychology culture has begun to pay attention to finance. CEOs are the new celebrities, showcased on financial cable stations like CNBC, business talk shows, print media, and in the popular press. Their current problems, both at home and at work, provide an unending series of human-interest stories. Media interest currently runs to family feuds, generational conflicts, and disordered thinking due to personality failings. Over the past three generations, the Bronfmans displayed the full panoply of human foibles. Reporting on their success and failure took place in the context of a public’s near obsession with finance during the Internet craze.

As entertaining as this “tabloid press” coverage is, a more valuable psychology of finance exists which is different from pop finance psychology. The finance psychology I am speaking of is behavioral finance. Behavioral finance has captured the imagination of many prestigious university finance

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scholars and high profile money managers. Behavioral finance is equally as interesting as pop finance psychology, though more beneficial because it offers insights that can be useful. Rather than merely a recounting of attention-getting human tragedy, like a wreck on the road, behavioral finance provides an analysis of practical value.

Psychological contributions to understanding decision-making implicit in behavioral finance were recognized worldwide when a Princeton University psychologist won the Nobel Memorial Prize in Economic Sciences. In October 2002, Daniel Kahneman, Ph.D., was awarded the Nobel Memorial Prize in Economic Sciences for his work in testing the limits of the standard economic theory of choice in predicting the actions of real people. Basically, Kahneman discovered a discrepancy between the optimal (normative) decision making expected by economic theory and the actual (descriptive) decisions taking place in the real world. Together with Amos Tversky, Ph.D., who died in 1996, Daniel Kahneman completed groundbreaking work that challenged assumptions of rationality and self-interest choices, long assumed in economics. Kahneman and Tversky proposed that decision makers do not fully compare decision options, probabilities, and utilities prior to making decisions as called for by optimal rules of decision-making. Rather they use mental short cuts (heuristics), and their decisions become sub-optimal, boundedly rational. Building upon the ground-breaking work of H. Simon (a 1978 Nobel Prize Winner in Economics), Kahneman sparked an investigation into human strategies of reasoning and the use of heuristics to resolve complex judgment tasks. He found that people have “optimistic overconfidence,” a condition in which people generally believe that they can do what most people are not able to do. Just as not everyone is an above average driver, not everyone is capable of being a success in business or the markets.

Behavioral finance assumes there are no optimal decisions in business. Decisions are impacted by cognitive heuristics or mental shortcuts, and subtle personal biases, which are influenced by the prior pattern of decisions by the decision maker and uncertainty and ever-changing contingencies of the decision context. Kahneman and Tversky developed “prospect theory,” a theory of human decision-making has been characterized by three key features: (1) people are risk averse—they are unhappier with losses than pleased with gains; (2) people are willing to take risks to avoid realizing (paper) losses; and (3) losses loom larger than gains in human judgment when the prospects of either are equally probable.4

Behavioral finance researchers, interested in explaining many market anomalies, have generated a new descriptive vocabulary to explain investment decision heuristics. The endowment effect, representativeness heuristic, myopic loss aversion, disposition effect and house money effect are a few examples. This often occurs at the time of a scientific paradigm shift. In addition to cognitive psychological constructs, behavioral finance borrows heavily from

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social psychology to explain marketplace manias and volatility. What is needed is an alternative to journalists who fancy themselves as clinical psychologist experts, analyzing celebrity CEOs.

Behavioral finance reassigns the focus to the decision, and secondarily to the decision-maker, and only peripherally to the role of remote factors like parent/child relationships. Thus, Edgar Bronfman, Jr.'s decision to merge with Vivendi in 2000 was the critical event. It eventually had very real adverse consequences for Seagram, its employees, the media industry, the Bronfman family, and the market. He should have decided to forego the merger, but he did not. What caused him choose to merge with Vivendi? Although it is true that being a third generation Bronfman made him anxious to succeed and honor the Bronfman family's legacy, this fact does not really explain the decision to merge with Vivendi. To label the decision a modern day "Greek tragedy" is more distracting than informative; it is more important to discern how the decision was made, and what can we learn from it.

This article applies a behavioral finance analysis in an attempt to understand how the decisions of Edgar Bronfman, Jr. were made just at the time the Internet bubble burst. Edgar Bronfman, Jr. embarked on a treacherous venture in the communications/media industry with disastrous results. The insights of behavioral finance offer an explanation for his decision errors, and guidance to business leaders seeking ways to minimize to prevent similar mistakes from occurring in the future.

Edgar Bronfman's Decision

Edgar, Jr. was twenty-six years old when he first began to work at Seagram in 1982. His resume read more like that of a sixties hipster than a budding executive. Edgar Jr. wanted to become a movie producer, and, rather than go to college, he made a film with Jack Nicholson in 1982 called "The Border." He also was a songwriter. His father, Edgar Sr., whose family had control of 38.5% of Seagram, put him in line to become chief executive officer of the company after his Hollywood career fizzled, four years later. He could have chosen among ten other members of his Bronfman generation, but Edgar Sr. selected Edgar, Jr. over Sam, his first child. At the time, Seagram had sales of $2.9 Billion, and profits of nearly $75 million.

Edgar, Jr. became the third generation Bronfman to head the company. His ascension to Seagram's CEO throne naturally raised doubts about whether it was appropriate for his father to put him into a job that he had not earned. Was he to be a wealthy dilettante or successful in his own right? After all, Sam Bronfman established family trusts in the names of all his heirs. Edgar, Sr. and Charles, his brother, together received sixty percent of the estate. Eventually

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5 In actuality many others including the members of the Board of Seagram as well as the company's business and financial advisors appear to have also reached the conclusion that a merger with Vivendi was a reasonable and prudent business strategy.
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Edgar, Jr. and his siblings would have this wealth. Edgar, Sr., during his twenty-three year tenure as CEO, diversified Seagram's business beginning in 1981 by joining with Dupont in its effort to take over Conoco. As a result, following the successful takeover by Dupont, Seagram acquired twenty percent of Dupont, at that time valued at over $300 million. (By the time Edgar Jr. sold Dupont's stock, Dupont was contributing nearly $300 million per year in dividends to Seagram.) Edgar, Sr. had distinguished himself as a capable, qualified CEO prior to turning the reins over to his son.

Edgar, Jr. acted decisively to mute his critics. He ended Seagram's relationship with Lord Calvert and Wolfschmidt vodka brands, and redoubled his efforts to grow profits on brands like Chivas Regal, which had higher profit margins. He won the right to distribute the Swedish vodka, Absolut. He bought Tropicana, the American orange juice concern, and within a decade divested it to PepsiCo for a $1.1 billion profit. Edgar, Jr. had achieved success in the top job. His stature had grown to the point that he had nearly matched his father's. What was to be next? Consistent with Edgar, Jr.'s prior attraction to Hollywood, he decided he was going to become a media mogul. He reasoned that by the mid 1990's liquor consumption was on the skids, and entertainment had an unlimited growth potential. In 1995, Edgar Jr. zeroed out Seagram's Dupont investment for $8 billion, and used $5.5 billion to purchase 80 percent of MCA, the owner of movie, music, theme park and television assets. He was especially attracted to MCA because it owned Universal Studios and theme parks. He also purchased from Time Warner the Interscope, Snoop Dogg's rap music label, for $200 million. In effect, Edgar Jr.'s 1995 decision to sell Dupont and buy MCA was his bid to transform Seagram into a media giant like Disney or Time Warner.

In his article, Mr. Milner places undue emphasis upon personal family relations as the primary motivation for this decision. Milner needs to be reminded as Sonny Corleone was in the Godfather movie: "[i]t's not personal, it's strictly business." Milner leads us astray by drawing parallels from Edgar, Jr.'s bid to take over MCA to that of his father's failed bid a generation ago to buy MGM. Just as Sam Bronfman complained to Edgar, Sr. that his interest in Hollywood was misguided, Edgar, Sr. may well have wondered whether Edgar, Jr. was seduced by Hollywood. Like his father a generation before him, Edgar, Jr. likely brushed off the speculation.

Such psychological factors are not relevant. Nor was it appropriate to read into an analysis of Edgar Jr.'s decision to buy MCA his father's unwillingness to second-guess his son. Edgar Sr. had chosen to avoid his own father's way of being over-controlling, according to Milner. He speculated that Edgar Sr. approved Edgar Jr.'s decision to sell Dupont shares and buy MCA because he did not want to be like Sam. This diminishes the legitimacy of Edgar, Jr.'s business purpose. Perhaps David Leonard in Fortune Magazine got it right when he speculated that Edgar, Sr. genuinely did not care about the sale of Dupont, and, agreeing with Edgar, Jr. that it was a very boring company, understood his son's purpose in moving on. Also much has been made of the relationship between Edgar, Sr. and his brother, Charles. Charles Bronfman had
been receptive when his older brother, Edgar, Sr. was made CEO of Seagram. Charles was content to remain in Montreal and spend his time running the local baseball team, the Expos.

Charles reportedly opposed the shift to entertainment but remained unwilling to engage in a family disagreement over Edgar, Jr.’s decision. Charles considered the family investment in Dupont to be a safe haven where the family’s wealth would be secure into the future. His silence and the eventual disastrous consequences of Edgar, Jr.’s decision to buy MCA and later merge with Vivendi led to bad blood between the two brothers. Was Edgar Jr.’s purpose to succeed as an entertainment mogul where his father, Edgar, Sr. had once failed many years before? Did Edgar, Jr. need to move the business into new territory so as to define his reign as distinct from his father’s and grandfather’s? Why wasn’t relying on the dividends from Dupont sufficient? Attributing psychological, personal or family motivations to Edgar, Jr.’s decision to become a media mogul, though entertaining itself, is shallow and uninformed.

What is getting lost is the signal in all this noise. What is needed is an assessment of Edgar, Jr.’s decision, i.e. the weight given to the risks associated with the entertainment business, and the pros and cons of risking the family wealth on this venture. Behavioral finance analysis of Edgar, Jr.’s decision to sell Dupont and buy MCA is distinct from the analysis of family dynamics presented by Milner and others, and more appropriately psychological in nature. Edgar, Jr. was intending to improve the bottom line of a family controlled business. Sure, he was ambitious; being ambitious is a prerequisite for running a company. This psychological theme is what motivates most if not all major business entrepreneurs. Edgar, Jr.’s relationship to his family is not particularly special in that all families have family politics, no matter how successful, and the Bronfmans were no different. What was special was the massive losses he suffered. How could he have been so wrong? What really caused this mistake?

Edgar Bronfman, Jr. chose to bet his family’s wealth on a risky proposition—that the entertainment industry would provide him with financial success beyond that which his father had achieved by his investment in Dupont Chemicals. He assumed that, over the next years, Entertainment Company would become a hot sector in the marketplace. He anticipated the merger frenzy to sweep the entertainment industry. If he were right, his decision would prove brilliant and highly lucrative, far more so than the billion plus he had make for Seagram’s coffers by acquiring and then divesting Tropicana. By contrast, holding Dupont stock and receiving periodic dividends was a far less risky business proposition, and potentially less profitable. Dupont’s stock fluctuated far less than most, especially the more volatile entertainment industry stocks like AOL/Time Warner, Viacom, Disney, and others. In retrospect, Edgar, Jr. was right about entertainment stocks in 1995 when he bought MCA. Time Warner was about to embark upon a hot streak, climbing 197% in the five years between 1995 and 2000. Viacom appreciated 125% in that time.

What happened to Seagram/MCA? Over the next five years, Seagram’s investment in entertainment doubled from $3 billion in 1997 to $6 billion by the
year 2000. Edgar, Jr. obtained a stake in Barry Diller’s company, USA Interactive. His hand picked choices, Ron Meyer and Stacey Snider, at Universal Studios, turned the studio into a motion picture powerhouse, which was earning $34 million per year by 2000. Doug Morris and Jimmy Iovine were tapped to lead Universal Music Group, which brought about 38% more in profits than the spirits and wine division, or $1 billion. Harvey Weinstein, Co-Chairperson, Miramax Films recently noted, “These management moves were brilliant.” Edgar Bronfman, Jr. was on his way toward his goal.

Still, he was cornered. Notwithstanding his great successes, Edgar Jr. was unable to compete with Viacom or Time Warner. During this time, Disney bought ABC; Viacom bought CBS; AOL bought Time Warner. Even though Universal had better assets than Warner Music, Bronfman was concerned that AOL would deliver Time Warner music and film content to millions of AOL subscribers, something he could not do. Edgar, Jr. decided that his company had to find a partner to distribute its artists’ works to the masses. He needed Comcast or Yahoo. He entered into talks with News Corporation and Comcast. He was willing to sell Seagram’s liquor assets in order to make himself competitive with Disney, Viacom, or AOL-Time Warner.

The Vivendi Seagram merger fiasco

The strategy in place, Edgar, Jr. approached the coming millennium in the company of a new suitor: Jean Marie Messier, a French dealmaker and CEO of Vivendi. The plan Edgar Jr. and Jean Marie had devised was to bring together Universal Studios and Universal Music Group with Vivendi’s European Internet, cable television, and wireless divisions. Edgar, Jr. would have to divest Seagram’s spirits division. The deal, struck on June 20, 2000, was an exchange of stock, valued at $34 billion. Edgar, Jr. agreed to trade his Seagram shares for Vivendi’s stock. Seagram, which was worth $13 billion in 1995, now was being traded for shares of Vivendi stock, fixed at $77 per share. Edgar, Jr. was to become Vivendi’s vice chairman, second in command behind Messier. He was to be responsible for its Internet and music divisions.

But it was not Edgar, Jr. who achieved collegial status with the likes of Rupert Murdock, Steven Case, Jerry Levine, and the select few of media mogul celebrity. Over the next fifteen months, by August 2001, the stock at Vivendi dropped nearly one third. In the meantime, Messier went on a buying spree. He purchased Houghton Mifflin, and USA networks, the latter in a deal which valued Seagram’s former television assets at $10 billion, considered far too costly by Edgar, Jr. Messier lost $1 billion in options trading as well. Charles Bronfman, Edgar, Jr. ’s uncle, resigned his seat on the board in disgust. By July 2002, the damage caused by Messier was complete. By the time of his highly public ouster from the company, Vivendi was in trouble. Vivendi sold

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Houghton Mifflin to raise cash, and sought a bank line of credit of $1 billion to survive.

When Charles Bronfman finally dumped 2.7 million shares in August 2002, Vivendi was selling for $12 a share, down over eighty percent from the share price at the time of the merger. Edgar, Sr. and Edgar, Jr. had sold $1 billion worth of Vivendi stock following the 90-day lock up period in 2001—ten times the amount sold by Charles Bronfman at that time. Today the goal is to repair the damage caused between the American (Edgar, Jr. and Edgar, Sr.) and Canadian (Charles) branches of the Bronfman family, and get the stock price up at Vivendi. At one point in 2002, Edgar, Jr. had considered a plan to spin off an IPO to be run by Barry Diller, CEO of Vivendi’s Universal Entertainment. It would create a company almost identical to the one Edgar, Jr. built at Seagram before the Vivendi deal.

A Behavioral Finance Analysis

Behavioral finance, and its focus upon decision-making heuristics, would analyze Edgar, Jr. decisions by: (1) undertaking a “reference point” analysis; (2) identifying specific heuristic thinking errors each was vulnerable to, and comparing these decision heuristics to others embraced by their fathers; (3) evaluating the basis of their willingness to seek risk, and; (4) making recommendations to prevent future decision bias.

1. Reference point analysis.

Behavioral finance’s descriptive, empirically derived, approach to decision choice under uncertainty is applied through Prospect Theory. Prospect Theory frames decision-making by recognizing that decision success and failure is subjective; decision outcomes are dependent upon a comparison to a reference point. Gains and losses are defined relative to a reference point. A simple example illustrates Prospect Theory.

Two investors, Bob and Sue, have purchased two different stocks each at 100. Bob observed the stock to appreciate to 240 in a matter of weeks, then to plummet to 100, before it was sold at 102. Sue observed her stock to slowly appreciate from 100 to 102 in the same time period and then she sold the stock at 102. Even though each investor has made two dollars per share, Prospect Theory indicates that Bob and Sue do not have the same attitude about their decision to sell at 102. Bob will experience the sale as a loss because he has fixed a reference point above 102 (somewhere closer to 200 or more), whereas Sue experiences the sale as a gain because her reference point is 100.

Under Prospect Theory, the value of an asset, like a stock, is not regarded in absolute terms. Prospect Theory rejects the presumption that people behave optimally by choosing to be insensitive to small changes of their wealth. Instead, investors, even extremely wealthy investors, remain sensitive to changes in a specific asset value or their portfolio wealth, because of implicit reference points. Their focus is gains and losses, i.e., changes in wealth, instead
of states of wealth.\(^7\) What matters to them is how the stock performs relative to a benchmark or reference point.\(^8\)

Edgar, Jr. redefined what it meant to achieve success. He chose a new and similar personal point of reference, different from that of his own father, and more akin to that of the then current CEO celebrities in the entertainment sector of the marketplace. Edgar, Jr. defined success as assembling an expansive media conglomerate, which owned both content and delivery apparatus (i.e., to achieve convergence). That was his personal reference point. He compared himself to Gerald Levine, Sumner Redstone, and Mark Eisner, the celebrities at Time Warner, Viacom, and Disney, who were actively involved in concluding mega merger deals. Edgar, Jr. wanted to be like Gerald, Sumner, or Mark. If he could do that, he would be a success. Whatever else he had already achieved mattered little in relation to this reference point. As the chief executive, Edgar, Jr., was ready to focus upon the big picture, to become a visionary. The deal making in the marketplace struck by media moguls was a vivid, dramatic illustration of what it took to be successful.

The essence of a behavioral decision analysis is found in the distinction between Edgar, Jr.'s and Edgar, Sr.'s points of reference. Each approached the information cascade that dominated the Internet bubble by a "confirmatory" bias. Each one identified the existing information in a manner that confirmed or justified his end goal: whether that was to transition Seagram into entertainment or grow Seagram larger as a liquor distributing company. In doing so, each one revealed a particular cognitive heuristic. It is not accurate to say that the distinction between Edgar, Jr. and his father was that Edgar the younger was more ambitious, more aggressive, more willing to take risks. According to Prospect Theory, reference points define decisions. For example, Edgar, Jr. was a billion dollar success, were he to have chosen to regard his decision to buy and later sell Tropicana as having been career defining in the same way that his father's decision to obtain Dupont stock was career defining. Unfortunately, in retrospect, for Edgar, Jr. that reference point (making a billion dollars for Seagram) was not significant within the point of reference he had chosen, whereas it would have been very relevant to his father, who valued steady growth.

Gary Belsky and Thomas Gilovich illustrate the point by noting that the typical head of an American family, with a net worth of $200,000, does not see a $500 loss or gain as being one-fourth of one percent of the overall financial asset worth. Instead he or she sees it as $500 that she did or didn't have five minutes before she lost or gained it. They conclude, "[i]t is the actual gaining or losing--and our feelings about it--that matter more to us, rather than how those gains or losses leave us in terms of our overall financial position." See, Gary Belsky and Thomas Gilovich, Why Smart People Make Big Money Mistakes, Simon and Schuster Press, 1999 (p. 56).

For example: an investment advisor is trying to decide whether to recommend Johnson and Johnson or a start up biogenetic company to a client. Both companies do well after the recommendation to purchase Johnson and Johnson is made. However, the start up company outperforms by doubling its share price whereas Johnson and Johnson earns a solid 15% return over the next three months. Rather than celebrate a 15% return, the client responds coolly and concludes the advisor made the wrong recommendation. In retrospect, the broker regrets having openly made the comparison prior to recommending Johnson and Johnson.

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2. Heuristic decision analysis.

Cognitive decision analysis presumes that people simplify decisions, relying upon information-processing short cuts or mental heuristics rules of thumb. Heuristics play a role because people don't have the time or analytic capacity to optimize decisions. After all, optimal decisions are time consuming, requiring exhaustive research. Each and every decision option must be extensively evaluated on numerous criteria by sophisticated methodology. In actuality the marketplace does not permit decision makers the freedom to effectively process the mountain of information available to make fully informed decisions. Their decisions therefore are bounded by such limitations and are sub-optimal. For example, Richard Shiller attributed market volatility to problems of bounded rationality. He described market movements as being a "reluctant slave" to both the over-reaction and under-reaction of investors. His work indicated that markets were like the story of Goldilocks and the Three Bears: market sentiment was either a little too hot or a little too cold when fixing stock prices. Professor Shiller emphasized the importance of social fads and specifically the herd mentality in describing investor behavior in the stock market.

As behavioral finance came into prominence, the focus shifted away from optimal decision making theory toward an effort to "enrich our economic understanding by incorporating what we know about human nature into financial models." Research centered on uncovering the many ways in which investors depart from optimal decision-making, referred to as "anomalous behavior" by efficient market hypothesis adherents. The existence of anomalies pointed to the significance of investor overconfidence, excessive trading, and over- and under-reaction in pricing stocks to explain marketplace volatility. Further, marketplace anomalies were regarded with interest because, if these deviations followed a predictable pattern, they could be anticipated and exploited to reap benchmark-beating returns. Assisted by psychologists Amos Tversky and David Kahneman, work in decision theory helped to blur the boundaries between economists, psychologists, and financial analysts, and a paradigm shift appeared imminent.

Prestigious academic finance researchers turned their attention to identifying anomalies in the marketplace, producing articles in high profile journals with names like "High Stock Returns before Holidays: Existence and Evidence on Possible Causes," "Winter Blues: Seasonal Affective Disorder (SAD) and Stock

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10 Brad Barber and Terrance Odean, "The Courage of Misguided Convictions: The Trading Behavior of Individual Investors," July 1999, p. 1. This article was found in the JSTOR electronic archive at www.jstor.org/journals.
11 Professor Nau described the times as follows. Each new proof of empirical violations of the Von Neumann-Morgenstern or Savage axioms, and each new relaxation of the axioms to accommodate those violations, was greeted with intense interest. Bernoulli centuries ago reasoned that notwithstanding the fact that money has absolute value, the utility of money declines with increased wealth, such that an increase of $100 to a portfolio having only $100 means something significantly more than an increase of $100 to a portfolio of one million dollars.
Edgar Bronfman, Jr.’s decisions to expand to achieve convergence between communications and entertainment may have been tainted by cognitive bias. Edgar, Jr. may have unrealistically simplified his thinking and in doing so, may have made sub-optimal, bad decisions, having grave consequences. If he had chosen to avert his thinking pattern to first include an analysis of his decision-heuristics, horrific losses also may have been averted. It appears that Edgar Bronfman, Jr. may have made heuristic-thinking errors, referred to specifically as: the representativeness heuristic, availability heuristic, and insensitivity to the endowment effect. Bronfman, Jr. also appears to have abandoned the natural human tendency to be risk averse. He may have done so because of the “house money effect.” As a result, his willingness to take these particular decision risks made him highly vulnerable.

Representativeness heuristic, in statistical analysis also known as the “Law of Small Numbers,” is a tendency by decision makers to overstate commonly held attitudes derived from inadequate (small) sampling. Sampling is defined as discrete prior experiences that help form an opinion. It is presumed that the larger the sampling and/or the longer the time period for sampling, the more accurate the sample will be in describing the population from which it is drawn. For example, the Vanguard Total Stock Mutual Fund, containing 5000 individual stock companies randomly drawn from the marketplace, is far more likely to reflect the marketplace than the S&P 500, containing 500 stocks of large capitalization companies. Thus, the smaller the sampling or shorter the period of sampling, the more likely the findings are related to chance rather than a true reflection of the targeted population. At the time of Edgar, Jr.’s forays into communications and entertainment, his analysis was in line with the then positive investor sentiment toward both entertainment and communication sector stocks. This was no different than the existing public’s fascination with enhanced communication and entertainment (with reality simulation and special effects) delivered through computers, even wireless devices. Harbor ing recognition of the popular positive regard for entertainment and communications sectors beginning in 1995 and extending over the next five years, investors began to behave as an unthinking herd. It is likely that Edgar Jr. was convinced

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13 Amos Tversky and Daniel Kahneman coined the phrase “the Law of Small Numbers.”
that he had accurately observed investor herding, and presumed the herd would run toward the new next thing, convergence. Actually, the herd, lacking any vision into the future, stampeded off the cliff. Unfortunately, it appears that his sampling of business trends persuaded Edgar, Jr. to conclude convergence was the future. His sampling of the marketplace trends may have been limited to events that were taking place over the time period leading up to the new millennium, rather than other times when the market was not affected by mania. To the extent that this is so, a failure to review a representative sampling of marketplace behavior would have made Edgar, Jr. vulnerable to the representativeness heuristic: an over-reliance upon inadequate sampling may have led to errors in judgment. Edgar, Jr. was swept up by the herding mentality and positive investor sentiment of the times.

Edgar, Jr. was tantalized. He appeared to have relied excessively on the strength of the information signal and insufficiently on the weight of the signal. The importance of merging now, “the others are doing it, and I don’t want to be left out,” may have taken precedence over substantive considerations or the weight of the signal. Consistent with the availability heuristic, he appeared to have embraced the prevailing view to grab market share, even if it meant to diminish profits or create debt. Prior large merger catastrophes were pushed far back, away from public consciousness, hidden in the history of the 1970s. Edgar, Jr. may have over-weighted the importance of a few just concluded merger transactions (i.e. AOL and Time Warner, Viacom and CBS). The Law of Small Numbers may have led Edgar, Jr. to make the deal. He appeared to have under-weighted a well-recognized principle in business: mega-mergers between large corporations do not generally succeed. The more complicated the project, the more numerous the details, as with a merger between two large independent cultures, the more likely it is to fail. This is known as the conjunction fallacy.

Edgar, Jr. appears to have broken from the decision heuristics used by his father, which had initially guided them. Specifically, Edgar, Jr.’s decision heuristics differed from those of his father beginning with the MCA deal. For Edgar, Jr., to achieve success meant to learn a new business and enter a capricious, highly volatile sector of the market. Edgar, Sr. had been comfortable with defining success as akin to growing Seagram, expanding its market share while maintaining its identity as the premier liquor distributing company. This tendency, to build upon what already has gone before, is an example of the endowment effect or anchor heuristic. Anchoring is the tendency to make decisions by holding on to one’s traditions, as well as a failure to integrate new and critical information. For example, the anchoring heuristic is a bias in favor of what has previously worked or what is owned. The endowment effect explains that investors have a more difficult time selling off an asset previously purchased and contained in the portfolio. They over weight an asset already in the investor's portfolio (endowment). An investor subjectively values the asset
more if it is already in his portfolio than he would if it were not in his portfolio but available for purchase.14

The endowment heuristic appears to have led Edgar, Sr. to conclude that selling Dupont would be a mistake. He had been unwilling to sell Dupont stock, a boring old world company, whose yearly dividends were as lackluster as they were predictable. If the two Bronfmans were asked in 1995 whether Dupont was a good stock to own, the father and the son would likely have given different answers because each was using a different heuristic to guide his decision. After all, the elder Bronfinan secured the family's wealth by ownership of Dupont stock. It was at the center of their success, that is, his personal reference point for good leadership.

3. Overconfidence and a willingness to seek risk

Edgar, Jr. appeared to have embraced a willingness to "dump out" or gloss over detail in favor of the big picture fallacy and substitute overconfidence and risk seeking for critical analyses. Overconfidence and risk seeking appear to have been reflected in a willingness to: (1) enter a volatile area of the marketplace, (2) concentrate assets under one visionary rubric like "convergence" and fail to diversify or hedge, (3) choose not to protect against a downside risk, (4) be in a "hot area," (5) believe in having a "hot hand," and (6) "partner up" and make deals. These attitudes of overconfidence may have led to a self-deception allowing an avoidance of the natural tendency toward risk aversion. Their aggressive posture, and seduction by the current fad, may have been the result of the "house money" effect (see discussion, infra).

Risk aversion is the tendency for individuals to be more sensitive to reductions than to increases in their level of well-being. Investors are risk seeking with losses, and risk averse with gains. A simple illustration helps to make the point.

For example, an investor must choose one of two options. Alternative A is a fifty percent chance of gaining $1000; whereas alternative B is a sure gain of $500. Expected utility theory predicts each option is equally attractive, given that the expected values of each ($500 = \frac{1}{2} \times 1000$) are the same. In practice, most people will choose certainty, "B" (84% vs. 16%). Prospect Theory would predict this result because a sure gain is consistent with the tendency to be risk averse with gains. When it comes to losses, investors will avoid a sure loss, say of $500, in favor of a 50% chance of losing 1000, 50% of losing nothing, in an effort to break even (69% to 31%).

Richard Thaler summed investors' thinking by suggesting that investors would become more cautious about losses (risk averse), but would likely accept a risk that would give them a chance of getting back to break-even, which they would regard as very attractive (risk seeking).15 Investors are prone

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14 Consistent with the endowment effect, portfolio managers weight the potential loss from an unfavorable sale of a stock more heavily than the potential gain from a positive buy in a new stock.
to sell their winning stocks and hold paper losses (that latter situation is known as the disposition effect).

Edgar, Jr. had participated in the marketplace ground swell and benefited greatly prior from his decisions to aggressively pursue convergence. He had made gains, based upon good decisions. According to Prospect Theory, prior gains should have led him to be risk averse with their gains as his father had been. But that was not the case. Why not?

The answer is found in an understanding of the impact of a history of prior gains upon decision-making.

The “House Money” Frame: Dynamic Loss Aversion

Although investors are generally risk averse with gains, the “house money” frame proposes that investors are risk seeking with newly and easily acquired money. The “house money” frame was derived simply enough from a card game. Richard Thaler and his colleagues in the Department of Economics at Cornell University frequently played low stakes poker games. Thaler observed that players with winnings from previous games bet more aggressively, "feeling perhaps that they could only lose the money that they had just won. In casinos, gamblers call these winnings 'house money' (as opposed to 'real money').”

The investors are ahead, although their behaviors are different—one motivated by risk aversion, the other by risk seeking behavior. The distinction is that risk aversion occurs with one-shot gambles; the house money frame presumes a sequence of prior winning gambles.

Richard Thaler and Eric J. Johnson investigated whether investors who had already experienced a sequence of profitable (or alternatively losing) investment decisions were more risk seeking (or alternatively risk averse). Thaler and Johnson concluded that the degree and extent of the loss aversion experienced by the investor depended on the history of prior investment decision successes or failures. They found that the level of risk aversion is reduced by a prior investment gain, which they labeled the house money effect, due to the investor’s increased willingness to take risks when ahead.

Kahneman and

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18 Id. Thaler and Johnson asked an investor to assume that he/she was already $300 richer prior to the onset of the experiment. As noted, nearly three out of four respondents selected the certainty of the first option, a sure gain of $100, indicating risk aversion, whereas approximately a quarter of the respondents had chosen the risk seeking choice (see Example 1). In each of the options available the investors did not risk losses. They merely risked omitting future gain opportunities; the chance to lock in what had been a paper gain. Following successful prior gains, investors behaved in an expected risk averse manner. Prospect Theory predicts this, even though the expected values for each option are equivalent, and not predicted by Efficient Markets Hypothesis. If given the choice to make a further selection (play on) or keep the already won $300, as little as thirty percent of the respondents preferred to keep the $300 previously obtained. This is a smaller percentage than was expected for anticipated gains (i.e. a smaller than expected percentage were risk averse) Given the Prospect Theory presumption that investors are risk averse with gains, what accounts for the low
Tversky's research suggested that people were willing to take risks in order to avoid being tagged with a loss; Thaler and Johnson’s research suggested that if risk seeking efforts to avoid a loss were unsuccessful and the investor compounded the loss, he would subsequently suffer a severe risk aversion. Likewise, according to Thaler and Johnson, following a series of successful investment choices, an investor would be more risk seeking than would be predicted by Prospect Theory. While a loss that comes after a series of prior gains is regarded as less painful than without the prior gains, because the loss is cushioned by the earlier gains. Whereas, a loss that follows after a series of prior losses is regarded as more painful than if not cushioned by the prior losses.

In summary, Thaler and Johnson have shown the importance of an investor’s prior success or failure, noting that extreme success or prior failure builds upon itself edging the investor toward risk seeking behavior. Eventually, unless the investor withdraws his winnings, losses will neutralize, or overwhelm any prior gains or merely compound prior losses. When that occurs, the investor is likely to become very risk averse. That may have been what happened to Edgar, Jr. Edgar, Jr. was very successful in prior business dealings and had amassed large amounts of capital. He risked this newly gained capital, along with their financial legacies, on overly risky decisions.

Once he experienced the series of graduated declines in the shares of his acquired company, Edgar, Jr. appeared to have become very sensitive to risk. Edgar and his father sold a large portion of his stock portfolio in Vivendi when they recognized the risk of continuing to concentrate their wealth in the company. The “sunk cost effect” would explain Charles Bronfman’s decision to remain with the Vivendi stock investment after recognizing that the stock price had started its downward course. As noted above, Charles reluctantly embraced Edgar, Jr.’s merger with Vivendi, expressing his doubts to his brother. However, once the deal was struck, Charles failed to sell the majority of Vivendi shares. Like his brother, Edgar, Sr. he was faced with an uncomfortable decision: whether or not to sell the Vivendi stock. Charles’ decision to maintain

percentage of risk averse respondents? This conclusion can be interpreted to mean investors are risk seeking with money that they have previously gained, which they frame as not theirs but the "house money," whereas, if they regard the gains as their own money, they would be risk averse. Assume that the same question is framed differently. That is, say the investor has previously gained a certain $300 on a prior task, rather than merely receiving the money. Further, assume that the prospective choice is between refusing to participate (being risk averse) and flipping a coin that either adds $390 if the outcome is heads or adds $210 if the outcome is tails (see Example 3). Is this a risk seeking option? Here the choices are two competing winning certainties. And yet, when compared to the option above, a larger percentage of investors choose to retain the $300, a risk averse posture. They framed option 2, between two competing certainties, as if there was risk involved. Finally, the last frame is provided as follows: “Assume yourself to be richer by $500 than you were yesterday. You have to choose between a sure loss of $100, or a fifty percent chance to lose nothing and a 50% chance to lose $200.”(Example 4). The expected values for these risk options are the same. The results diverge from the expectation of a 50-50 split. Because of prior winnings, investors are less inclined to be risk seeking, as expected by Prospect Theory, though two thirds of the respondents were.

ownership over the shares was influenced by the sunk-cost effect. Sunk cost is akin to the endowment effect. It presumes that prior decisions are not likely to be overturned (as is the case with the endowment effect) once those decisions have required a personal or financial commitment. Sunk cost is the additional experience of pain associated with selling a loser, referred to as closing an account at a loss. Unlike his brother, Edgar, Sr. and Edgar, Jr. did sell a large portion of their Vivendi shares when it was evident that the shares were going to continue to drop further. They “closed the losing account” which is recognized as most painful of all decisions.

4. Recommendations

By relying upon the application of behavioral finance, especially the influential work of Daniel Kahneman and Amos Tversky on prospect theory, several theories may be articulated concerning Edgar Bronfman, Jr., and his father. This analysis concludes that Edgar Jr. was likely vulnerable to the representativeness heuristic, and this tendency distinguished him from his father who was more comfortable with the anchoring heuristic and the endowment effect. Edgar, Jr. appeared to have overestimated the importance of the AOL Time Warner merger, as well as business models used by Disney and Viacom that celebrated convergence, acquisitions, and the “vision thing,” that is, reliance upon the big (global) picture and avoidance of details (conjunction fallacy). Edgar, Jr. may well have been seduced by the then popular marketplace fad that emphasized market share over market profits.

In retrospect, had Edgar, Jr. undertaken an analysis of his decision heuristics, he might have avoided the decision he ultimately made. He may have recognized a commitment to ride the convergence train and not be “left behind,” a desire to be viewed as a visionary and leave a personal legacy, and a willingness to bet the company on their vision of the future. These tendencies have one thing in common, the representativeness heuristic: a predisposition to make decisions without an adequate basis for predicting the decision outcomes. For example, in embracing convergence, Edgar, Jr. appeared to have under weighted or minimized available knowledge of failed business efforts. Disney’s Michael Eisner failed at a convergence strategy, which cost him dearly. Mr. Eisner launched the “Go To” Internet portal, which was a failure. To his credit, although he was willing to acquire ABC as a distribution platform for Disney content, which has not panned out, Mr. Eisner accepted the “Go To” Internet portal loss, and chose not to bet the company on this untried Internet based convergence strategy.

How would I have advised Edgar, Jr. at the time he was initially contemplating convergence strategies for his companies? Based upon an assessment of the decision heuristics employed, I would have made the following points. First, increasing levels of personal confidence show no correlations with great decision success. Hardwired into our brains is a predisposition to be optimistic. Second, many investors believe that they can time the financial markets when the overwhelming amount of evidence is to the contrary. The human brain is reluctant to receive information that will cause
anxiety (cognitive dissonance), and underestimates the range of variability around an outcome they foresee. Third, people typically give too much weight to recent experience. Fourth, people take greater risks when they have previously done well. Fifth, how people frame a question often predetermines the response. Finally, there is a tendency to focus myopically upon short-term results.

Primarily, it is the application of these behavioral finance platitudes that counts. "The devil is in the details." Edgar, Jr. could have incorporated into his decision making process a behavioral finance decision tool designed to detect inherent human predispositions toward decision error. The decision tool, the Bias Avoidance Model ("BAM"), would be part of a new framework for evaluating crucial business decisions. While decisions regarding acquisitions and mergers are crossroads type decisions that would benefit from the use of this behavioral finance decision tool, the fact is that most decisions regarding introduction of a new product, annual budgets, and/or five year plans, etc. are vulnerable to human thinking frailties, and would benefit as well. In sum, the bias avoidance model behavioral finance decision tool would act as an accountability check to minimize the risk of decision heuristics or bias impacting upon the business case evaluation by consultants or in-house committee.

As is the usual case, business leaders rely upon consultants or in house committees infected by confirmation bias. When formulating the pros and cons of a business decision, the tone and decision analysis inherently reflects either a sympathetic or critical bias toward the project through choosing to downplay or highlight potential decision risks. Confirmatory bias is most common because consultants or employees who sense interest in the acquisition by decision makers will avoid displeasing the decision makers by choosing to confirm their client's interest, essentially justifying the decision that they perceive to have already been made. Confirmation bias is an insidious problem for business companies, which spend significant time and resources for essentially little or no value.

Confirmation bias can be avoided through the use of a behavioral finance decision tool to detect faulty decision-making. The tool would achieve the following results: (1) identify the heuristic decision biases and offer suggestions to avoid the types of cognitive thinking errors they typical produce; (2) clarify the specific frame of reference used by the decision maker which reveals his or her risk comfort level; and (3) guard against common human

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20 The Bias Avoidance Model ("BAM") is a decision tool adapted from Behavioral Finance research. My colleague, David Miller, and I have developed a checklist measure to assist in optimizing business decisions.

21 "Business case" is defined as the rationale advanced by management for a decision, such as its benefit to the company, such as, its synergies, additional revenues, etc. It is the write up that sets out the benefits of the deal weighed against its potential risks.

22 Confirmation bias is often associated with an investment broker's role of providing an investor a person to blame if the investment goes poorly, though rarely someone to praise when the investment goes well.
decision errors, such as disposition effect, hot hand fallacy,\(^{23}\) the problem of closing an account out at a loss, sunk costs, house money effect, endowment effect, risk aversion, etc.

As noted above, Edgar, Jr. appears to have been prone to making representativeness heuristic errors. The application of the behavioral finance decision tool to Edgar, Jr. points to a specific intervention strategy, which makes it possible to safeguard decisions from the deleterious effects of this kind of cognitive thinking error. The work of Gird Gigerenzer and his colleagues has addressed the heuristic in which decision makers are seduced by the current fad, and become prone to decision errors of under weighting evidence that opposes the popular fad.\(^{24}\) Gigerenzer evaluated the conclusion that decision makers make consistent and predictable errors based on the availability and representativeness heuristics. He found that decision makers prone to representativeness heuristics that choose to frame the decision outcomes in probabilities, rather than frequencies, made a difference.\(^{25}\)

Thinking with probabilities differs from thinking with frequencies. For example, the public response to exposure to minute amounts of chemicals in air, food, and water is different when portrayed by frequency statistics, i.e. out of one million people exposed, there will be one additional cancer death, rather than probability measurements, i.e. each exposed individual has an additional chance of .000001 or .0001% of getting cancer. Purchase and Slovic\(^{26}\) (1999) found that frequency statistics of exposure risk frighten people. Torrey and Zdanowicz\(^{27}\) likewise noted that advocates for longer hospital stays bent on frightening the general public about violence by people with mental disorder frame their arguments in terms of frequencies rather than probabilities: "Approximately 1000 homicides a year are committed nationwide by seriously mentally ill individuals who are not taking their medication," and not "the

\(^{23}\) The hot hand fallacy is another example of being fooled by randomness. The often drawn, but inaccurate conclusion is that the investor is successful in streaks, as with a hitting streak. In actuality, what is interpreted as success or skill is rather a random distribution not easily detectible to the observer.


\(^{25}\) Gigerenzer’s found that decisions made from probabilistic reasoning are very sensitive to the format in which information is presented. So that if a question which calls for a probability answer is posed, such as, “what is the chance that a person who tests positively for a disease actually has that condition? The answer is often biased by the way the question is asked. On the other hand, if the question posed requires the decision maker to judge event frequencies, such as, “how many people who test positive for the disease will actually have the condition?” then the biases are less influential.


annual likelihood of being killed by such an individual is approximately 0.0000036 (1000 deaths out of the total population of the US or 273,000,000).”

The point is that it would have been easier for Edgar, Jr. to have ignored the evidence that mergers between companies of two separate and distinct cultures do not work, if that evidence was presented in terms of probabilities (i.e., out of the largest mega mergers, ninety percent of mega mergers will fail to succeed). However, by revising the statement slightly to emphasize event frequencies, (i.e., of the ten largest mega mergers that have been completed, nine mega mergers have been unsuccessful), Gigerenzer has shown that a decision maker would value and incorporate the information far more. In effect, it would grab his attention and promote the desired fear arousal needed to displace the representativeness heuristic. If Edgar, Jr. had asked: “How many people who try this type of merger are actually successful?” and heard, “One out of ten,” he would have been more likely to avoid the merger, labeling it as a risky choice. The more commonly asked question is: “[W]hat is the chance (probability) of this anticipated merger will result in a business success?” The problem is an overconfident decision maker won’t recognize the small probability of success associated with mega merger activity, by suggesting that he will beat the odds because he is special.

Paul Slovic, John Monahan, and Donald MacGregor,28 in a study of communicating violence risk assessment of mental patients, conclude: “[O]ur findings suggest that probabilities and frequencies each come with a complex set of advantages and disadvantages as formats...Neither is inherently superior to, or less susceptible to bias, than the other.” They recommend that decision makers employ multiple formats. Thus, when deciding to embark upon a mega merger type acquisition, Edgar, Jr. might be presented with the following statements, “Of every 10 mergers similar to that contemplated here, one is expected to succeed. In other words, this anticipated merger is estimated to have a ten percent likelihood of success” — and a 90 percent likelihood of failure.

In order to best protect executives, they need to recognize the conditions under which different heuristics can be muted, their decisions from cognitive error. It is easy to identify decision errors with the benefit of hindsight. The goal is to establish a preventive, protective decision making strategy to mitigate against specific decision heuristics. As noted above, employment of a behavioral finance decision tool can help minimize the pernicious effects of representativeness or availability heuristics, and insulate decision makers from problems of “hot hand” fallacy, endowment effect, house money effect, and other behavioral finance constructs. This approach is superior to an attempt to analyze traits of character, such as honesty, or traits of personality,29 such as an


29 Jonathan Myers has described several personality classification systems applied to investor behavior. For example, the Barnwell Two Way Model classifies investors either as passive or active. Developed in 1987 by Marilyn MacGruder Barnwell of the MacGruder Agency, this simply format is at work in many circles today. Similarly, the Bailard, Biehl and Kaiser Five Way model
approaches investors as having five personalities: adventurers, celebrities, individualists, guardians, straight arrows. Kathleen Gumery of the Financial Psychological Corporation identifies nine money personalities including: safety players, entrepreneurs, optimists, hunters, achievers, perfectionists, producers, high rollers, and money masters. The Psychonomic Investor Profile relies upon six personalities: cautious, emotional, technical, busy, casual, and informed.