



Book Review

Behavioral Finance, Volumes I, II, III, edited by Hersh Shefrin, Edward Elgar Publishing Company, 2001, 648 (+xxxi) pages, 669 (+xxi) pages, and 666 (+xxv) pages, respectively.

In the publisher's series *The International Library of Critical Writings in Financial Economics*, collection nr. 10 covers the field of behavioral finance. As an acknowledged expert in the field, professor Hersh Shefrin has done an outstanding job in compiling and editing this collection. The result is an anthology of 86 papers, covering almost 2000 pages in three volumes, with a comprehensive introduction of each volume by the editor. Reviewing such an extensive collection of research is not an easy task. One might easily get lost in listing and characterizing the array of papers, and consequently make the reader not seeing the wood for the trees. In the following I intend not to focus too much on individual papers. Therefore, references to individual papers will be limited to special cases. My primary aim with this review is to elucidate the selection and composition made by the editor, in order to evaluate the perception of behavioral finance that is reflected in the overall collection.

Since its inception in the 1980s with the first major publications, such as Shefrin and Statman (1984) and DeBondt and Thaler (1985), behavioral finance – BF henceforth – has been developing into an extensive body of research within financial economics. Over the years, behavioral insights have been applied at the micro level of judgment and choice of individual investors and (financial) managers, as well as at the aggregate level of financial market pricing and the behavior (over time and cross sectional) of market prices. Given the large variety of subjects and approaches in BF, it is not an easy task to make an appropriate selection from all the published research, and to organize the selected papers into a logical order. Essentially, the editor has chosen to devote volumes I and II to the research that is focused on financial market level phenomena, and to compose volume III from the research that pertains to the micro level of individual decision making.

Volume I

The first volume consists of 26 papers, organized into four parts. Part I contains six papers under the heading of **Behavioral Foundations**. The first paper is Slovic (1972), which might be considered as a behavioral finance publication *avant la lettre*. The other five papers are from the psychology literature, explaining various heuristics and behavioral biases that play a major role in BF research. Among these are the heuristics of representativeness, of availability, and of anchoring and adjustment. Representativeness refers to stereotypical perception and may lead to an overweighing of new information (relative to prior knowledge), whereas anchoring may lead to the opposite effect; the latter effect is also interpreted in terms of conservatism. Of course, it is important to predict when over- or under-weighing is likely to occur. Behavioral research indicates that, among other factors, this has to do with the perceived salience of the new information. As an important final issue, overconfidence is presented: people tend to be overconfident in the accuracy of their judgments or in the quality of their capabilities. Four of the selected papers in this first part also appear in Kahneman et al. (1982).

Part II is about **Asset Pricing Theory** and has five theoretical papers. A ‘behavioural theory of asset pricing’ is presented, in which noise-trading investors interact with rational investors. In particular, the biases of noise traders are induced by the representativeness heuristic. A crucial issue is under which conditions market efficiency may still be obtained, although some investors hold biased beliefs. In two other papers, the implications of heterogeneous expectations for the efficiency or inefficiency of market pricing are further explored. An important issue here is the relative impact of investors who hold rational beliefs *vis-à-vis* those who hold biased opinions. This issue is analyzed in a fundamental way in the next paper, Shleifer and Vishny (1997). It is explained that, when market prices of securities deviate from their fundamental values, the power of arbitrage is limited due to noise trader risk in the market and the risk aversion of arbitrageurs. Moreover, arbitrage may be severely hampered by the performance requirements of investors that supply the funds to arbitrageurs.¹ Finally, the impact of investor overconfidence is analyzed. Among the implications for market pricing are that asset returns are positively correlated when investors underweight new information.

Part III is on **Studies about Overreaction and Underreaction**. Here we find – in seven papers – important elements of the extensive discussions in the literature, that started with the ‘winner-loser’ effect introduced by De Bondt and Thaler (1985). There are long-term price reversal patterns (due to investor overreaction) and there is short-term price momentum (due to underreaction). And portfolios of ‘value stocks’ outperform portfolios of ‘growth stocks’, providing a basis for contrarian investment strategies. How can the anomalous price patterns (such as short-term momentum and long-term reversal) be explained? What is the role of investor sentiment and how can it be modeled? In elementary pricing models, vari-

¹ See also Shleifer (2000, chapters 2 and 4).

ous behavioral characteristics have been inserted, such as the representativeness heuristic, the conservatism bias, and overconfidence (which may also be due to biased self-attribution). This part is obviously of major importance in the collection, which is also evident from the editor's seven page introduction of it (see pp. xviii–xxiv).

The apparent importance of part III is also related to the subject matter of part IV of the first volume, entitled **Competing Views**. This part consists of eight papers. Its starting point is in the well-known cross-section stock return analysis of Fama and French (1992), showing the dominance of size and the book-to-market ratio over the CAPM beta. Do these and subsequent empirical findings exhibit asset pricing anomalies, and if so, can BF provide useful explanations here? What does this kind of discussion, in general, mean for the position of BF *vis-à-vis* 'traditional' finance: is financial economics experiencing a paradigm shift? In order to understand the editor's intention with the selected papers in this final part of volume I, it is relevant to review his introduction – which will be done below, after the survey of the other volumes is completed.

Volume II

This volume is composed of 28 papers, organized into five parts. Part I is labeled **Prediction** and contains seven papers. Here the focus is on the biased way that market participants form beliefs and expectations, and on the explanation that these biases may have for price patterns. Financial newsletter writers tend to follow the market instead of predicting it. Investors tend to engage in naive trend extrapolation from past information. Investors are also influenced by the salience of available information. Analysts' earnings forecasts may be based on various biases, such as underreaction to new information, over-optimism with respect to earnings prospects of past 'losers', etcetera. An important issue is the distinction between conditions under which the anchoring and adjustment heuristic (related to conservatism) will dominate and when the representativeness heuristic may prevail. These and other related issues are covered in the selected papers of this part.

Part II contains eight papers on **Market Reactions to Predictions and Announcements**, which is a logical complement to the previous part. An important phenomenon here is the post-announcement drift, indicating an initial underreaction to the news from earnings announcements or to changes in analysts' forecasts. This underreaction is hypothesized to be governed by the heuristic of anchoring and adjustment. The degree and timing of investor behavior, as evidenced from market price responsiveness, has also been researched with respect to various corporate announcements and related managerial actions. Underreactions, with subsequent drifts, have been observed with stock repurchases and stock splits, and also with dividend omissions. With seasoned equity offerings, price patterns seem to indicate initial overreaction (however, the effects are strongly influenced by price run-ups prior to the issues). As to the degree of underreaction, there is some evidence – from

closed-end country funds – that the more salient the news, the more responsive the investor reaction will be.

Part III is entitled **Volatility in the Term Structure of Interest Rates** and consists of four papers. The subject matter of this part is closely related to that of the next part, which originates from the volatility study by Shiller (1981). In part III, a paper of this same author shows that long-term interest rates exhibit excess volatility relative to the volatility of short-term interest rates, which is not consistent with the expectations hypothesis. Related research indicates that high yield spreads may, to some extent, be predictive with respect to interest rate movements. Regarding the impact of possible errors by investors, there is evidence that long rates underreact to short rates. Other research indicates that historical term structures of interest rates have been affected by biases in investors' expectations about inflation; investors appear to underreact to changes in inflation.

Part IV contains four papers on **Volatility in Equity Markets**. The work of Shiller (1981), mentioned in the previous paragraph, indicates that stock prices exhibit excessive volatility relative to observed subsequent variations in dividends. This implies that stock prices tend to deviate in reversal patterns from their fundamental values. Based on this implication, recent research indicates that the level of aggregate dividend yield or earnings yield may have predictive value with respect to overall stock prices. Other papers in part IV focus on possible errors that investors may commit in stock valuation. One such error is based in the money illusion, leading investors to erroneously discount real dividends at nominal rates. An additional error may be the use of constant required rates of return; research indicates that the use of time-varying discount rates leads to valuation measures that are more stable over time. A study in experimental markets shows initial excessive volatility of stock pricing, with prices subsequently converging towards rational expectations levels.

The final part V of volume II is labeled **Options and Arbitrage**. It consists of five papers of a somewhat mixed nature. The first paper questions the possibility of creating a risk-free hedge and, consequently, questions the theories that are based on risk-free hedging. According to the editor this may indicate that "there are limits to arbitrage in the pricing of options" (p. xviii). However, two subsequent papers assert that the perceived hedging limitation is based on flawed arguments. The fourth paper is on the U-shaped pattern of implied volatilities in option prices. This 'volatility smile' may stem from heterogeneous beliefs – ranging from pessimism to over-optimism – among investors. The final paper is Froot and Dabora (1999), which analyzes two well-known cases of apparent mispricing of stocks, concerning the Anglo-Dutch firms RoyalDutch/Shell and Unilever. The relative pricing of each of these 'twin stocks' deviates systematically from the proportional claims of the stocks on the cash flows of the underlying firm. This is clear evidence of the existence of limits to arbitrage in international stock markets.

Volume III

The final volume consists of five parts with 32 papers in total. Part I contains **Foundation Works**, with five papers. They reflect the behavioral counterpart to the expected utility model of decision making under uncertainty. Key issues are the role of psychological framing and of specific emotions. The first two papers are real ‘oldies’: Markowitz (1952) and Roy (1952). Roy has developed a safety-first approach to choice behavior under uncertainty, that is surprisingly compatible to the well-known portfolio selection theory. Instead of the optimal mean-variance portfolio, Roy’s approach selects the portfolio that minimizes the coefficient of variation, given a required (aspiration) level of the expected return.² According to the editor “Markowitz (1952) truly qualifies as a behavioral work, with its focus on how people actually behave” (p. xiii). The paper’s analysis centers around the dual risk attitude of people who purchase insurance and at the same time buy lottery tickets. This requires a separate treatment of gains and losses, relative to a reference level of wealth. This type of decision modeling has been developed at great length in the prospect theory of Kahneman and Tversky (1979), which is the third paper in part I, followed by a more general paper of the same authors. Crucial to prospect theory is the framing of outcomes relative to a reference point, with an asymmetric evaluation of gains and losses. Decision makers are risk averse in the domain of gains and risk seeking in the domain of losses. Moreover, they exhibit loss aversion (‘losses loom larger than gains’). The impact of framing is particularly relevant when the decision problem is opaque: the perceived form of a problem matters and may easily dominate its substance. The final paper is Lopes (1987): the psychology of risk taking is rooted in emotions, in particular the opposite emotions of fear and hope. When fear is the dominant emotion, decision makers tend to focus on their need for security (downside protection). When hope is the dominant emotion, the focus is on the desire for upside potential. The actual tolerance for risk at any time reflects a person’s relative feelings of hope and fear. The perceived impact of risk is also related to an aspiration level, basically similar to the approach of Roy (1952).

Part II is labeled **The Structure of Individual Investors’ Portfolios**, and contains seven papers. A behavioral portfolio theory (BPT) is presented, that relies on principles of prospect theory, mental accounting, and the impact of the emotions of hope and fear. Besides a formalized treatment (in order to compare BPT with the ‘standard’ portfolio theory), it is explained that investors typically structure their portfolios into separate layers.³ Each layer is connected to a specific objective; the two basic ones are a ‘bottom’ layer for the provision of downside protection, and a ‘top’ layer for profiting from the upside potential of investments. There is an important survey paper on mental accounting (Thaler, 1999). Mental accounting is a special form of psychological framing, through which decision makers tend

² The relevance of Roy’s approach in the framework of portfolio theory was highlighted already a long time ago by Mao (1969, pp. 281–286).

³ See also Shefrin (2000, chapter 10).

to differentiate between various components of their (expected) decision results. Various applications in the domain of finance are reviewed, most of which are explained in other papers in the present collection. The next topic is security design. After the financial analysis of a typical innovative investment product (the so-called LYONS), a behavioral approach to security analysis and security design is presented. This approach applies elements of prospect theory (with an extension into hedonic editing), mental accounting, self-control, and biases from heuristics (in particular representativeness). A following issue is overconfidence. Investors are apt to excessive trading when they are overconfident – and actual trading volumes are much higher than one should expect from rational financial theory. Using a large set of transaction data of individual investors, it is analyzed that, on average, investors trade so much that the incurred transaction costs significantly lower their portfolio results to underperformance levels. Moreover, overconfident investors tend to concentrate their investments on the more risky securities. A study of the portfolio decisions of members of an investment club also indicates overconfident decision behavior. A final paper illustrates, in a lucid way, the difficulty of practical application of the common distinction in BF between rational traders and noise traders (see also Black, 1986).

Part III is about **The Disposition Effect**; that is, the tendency of investors to sell winning stocks too early and ride their losers too long (as hypothesized by Shefrin and Statman, 1985). The part consists of five papers. From the analysis of a large set of transactions data of individual investors, the disposition effect is confirmed (with exception of the end of the calendar years, which exception was also hypothesized by Shefrin and Statman, 1985). Another paper indicates that, when finally selling their losing stocks, investors tend to sell at the wrong time. Other research, related to the Treasury Bond futures market, also provides support for the disposition effect in securities trading. In an interesting experimental research, the disposition effect is studied in combination with learning about probabilities. Among the various findings, it is observed that inertia towards taking action seems to be important in the disposition effect: subjects appear to be reluctant to take the action that realizes a loss (more than having a ‘positive’ wish to hold on to losers). In a final study – on exercise patterns of employee stock options – it is observed that the reference point is equal to the 18-month highest level of the stock. This finding is of interest with respect to practical applications of prospect theory.

The title of part IV is **Intertemporal Issues**. It contains nine papers. The first two are concerned with the practice of dollar-cost averaging investments over time. It can be shown that this practice is financially inferior to the alternative of lump-sum investing. However, a preference for dollar-cost averaging can be explained using the behavioral concepts of framing, regret avoidance, and self-control. Another study indicates that the way that people save over time for their retirement, is influenced by mental accounting and by rules to avoid self-control limitations. Behavioral characteristics are also applied in order to shed light on the equity premium puzzle. Within the framework of prospect theory it is argued that investors

may suffer from myopic loss aversion, causing them to overlook the benefits of time diversification. From this biased perception, they require a relatively high risk premium. The issue of time diversification is the subject of three other papers as well. Is it rational that a person is unwilling to engage in a specific gamble once, but is willing to play the same gamble repeatedly over time? This behavior can be explained in a similar fashion as has been done in the case of dollar-cost averaging, i.e. applying framing, regret avoidance and rules of self-control. Two final papers concern the natural tendency of people to frame problems in nominal terms, rather than in real terms, and the phenomenon of excessive volatility of closed-end fund returns (relative to the returns on the underlying net assets).

The final part V is concerned with **Managerial Decision Making**. In six papers, three decision topics of financial management are addressed. The first topic is dividend policy. Here the classic study of Lintner (1956) is presented as an example of early research in actual financial behavior. Following is a comprehensive review by Miller (1986) of the dividend problem that is still bothering academic corporate finance. In passing, Miller dismisses the behavioral approach to dividends of Shefrin and Statman (1984). A third study concerns the question whether increases in dividends are a signal of improving future earnings. It appears that changes in dividends signal the past rather than the future. Apparently, financial managers are subject to trend extrapolation. The second topic is earnings management. The presented research indicates the role of threshold reference points: management is inclined to manipulate earnings in order to avoid performing just below a threshold. The final topic is capital investment analysis. A study in this field shows that the disposition effect (see part III) may also govern the decision to terminate projects. Empirical evidence from stock price reactions indicates that investors are aware of this phenomenon. The final paper aims at developing an elementary model to answer the question: how can managers conduct rational project selections in a world of inefficient capital markets?

Introduction by the Editor

As the editor, Hersh Shefrin provides an excellent introduction to the collection of papers. Not only does he characterize the various parts and all their composing papers in each of the three volumes, but in addition he supplies and summarizes numerous additional references that relate to the selected papers. The result is an impressive overall bibliography that is supported by more than 45 pages of introductory text. One could say that Shefrin has written a comprehensive guide to the BF literature 'at large', which, in my opinion, adds significant value to the collection of selected papers.

The introduction to volume I is the most extensive one. A reason is, of course, that this introduction has to cover the overall collection in a general way. Among other considerations, the editor explains the approach to his selection by referring to two other collection works that he has chosen to build on. These are an earlier

collection in the publisher's same *Critical Writings* series by Lo (1997), and the book of readings by Thaler (1993). Relevant papers that have already been reprinted in these two books, do not appear in the present collection on BF. In particular with regard to the book by Thaler (1993) this has substantial importance, as will be explained below.

Another reason of the extensive nature of the introduction to volume I is reflected in the final part of this volume, entitled 'Competing Views'. Shefrin has chosen to pay major attention to epistemological aspects of the development of BF. His introduction to the first volume opens with the observation that "financial economists are in the midst of a debate about a paradigm shift, from a neoclassical-based paradigm to one that is behaviorally based" (vol. I, p. xiii). He embeds this observation in the ideas of Kuhn (1970). The selection of papers in the mentioned part on 'Competing Views' is intended to explicate the paradigmatic debate. The editor's introduction of this part is, therefore, quite extensive. To quote from the opening paragraph: "Part IV focuses on competing views about the meaning of empirical findings on momentum and reversals. The authors of the papers in this section offer mixed views, some advocating that the findings are consistent with market efficiency, and others supporting the arguments against market efficiency. The issues addressed in these contributions lie at the heart of the paradigmatic debate" (vol. I, p. xxiv). As a consequence of Shefrin's focus on paradigmatic aspects, various papers of part IV are basically from outside the BF domain (see nrs. 19, 22, 23, 24 and 25). However, the final paper by Fama (1998) is clearly a must in the present collection, whether one agrees with his arguments or not. According to Shefrin's interpretation, Fama rejects the idea that finance is experiencing a paradigm shift in the Kuhnian sense. From Shefrin's elaborate comments it can be concluded that he considers parts of Fama's criticism of BF rather unconvincing. However, he acknowledges that "Fama raises a germane issue about having testable hypotheses that are well grounded in the behavioral decision literature" (vol. III, p. xxix).

At the end of his introductory section to the final volume, the editor returns to the paradigmatic issue. Here the scope of the issue is clearly extended beyond the one of the debate, as presented in volume I. Shefrin observes the following (vol. III, p. xxii):

There appear to be three questions that define the areas of contention.

First, are the errors committed by participants in financial markets minor and nonsystematic, or are they significant and systematic as the heuristics and biases literature suggests?

Second, are the participants in financial markets expected utility maximizers who are immune from framing effects? Or do participants violate the axioms of expected utility, and behave in ways that conform to psychological theories of risk taking?

Third, do market prices reflect fundamental value? Or do heuristics, biases,

and framing effects cause prices to deviate from fundamental values, perhaps for long periods?⁴

He continues: “The evidence regarding the first two questions is compelling and growing. (...) ...most of the paradigmatic debate has dealt with the third issue, market inefficiency”. Given the broader scope presented here, I think that an important ingredient is missing from the epistemological discussion that Shefrin engages the reader in. This concerns a discussion of the scientific methodology of instrumentalism according to Friedman’s (1953) famous essay, which methodology dominates academic finance. Relevant questions in this discussion are: Should we test the descriptive validity of assumptions directly in the empirical world, or should the relevance and usefulness of assumptions be evaluated indirectly, from the empirical testing of predictions from the theories and models that are based on these assumptions? And what is the role of so-called auxiliary assumptions in this respect (Melitz, 1965)? This kind of discussion relates to the ultimate objective that theorists have in mind. With respect to this, I find the following statement of Miller (1986, p. S467) quite instructive. “That we abstract from all these stories⁵ in building our models is not because they are uninteresting, but because they may be too interesting and thereby distract us from the pervasive market forces that should be our principal concern”. In my opinion, the perception of behavioral finance that some of the leading BF researchers hold, seems to be much closer related to Miller’s statement than one may expect from the adjective ‘behavioral’. I will come back to this opinion in the following section.

Evaluation

Providing a clear and unambiguous ordering of the field of BF is not easy. In various recent publications the issue of inefficient markets is considered to be the core of the field. Shleifer (2000, p. 23) defines BF as “the study of human fallibility in competitive markets”, and distinguishes two main themes, notably limited arbitrage and investor sentiment. A similar approach can be found in Shiller (2002). In their extensive survey paper, Barberis and Thaler (2002) argue that BF has two building blocks: limits to arbitrage and investor psychology. With respect to the latter the authors distinguish between the formation of beliefs and the role of preferences. This approach runs rather parallel to the distinction made earlier by Shefrin (2000), who lists as the three themes of BF: (1) heuristic-driven biases; (2) frame dependence; (3) inefficient markets. However, in Shefrin’s overall approach the limits of arbitrage feature less prominently. This is particularly true in comparison with Shleifer

⁴ It should be noted that the three questions reflect the “three themes of behavioural finance” in Shefrin (2000): Heuristic-Driven Bias, Frame Dependence, and Inefficient Markets.

⁵ These “stories” concern the behavioral motives that investors may have for holding stocks and for being interested in receiving cash dividends. It should be noted that in his introduction to part V of volume III, in particular regarding the dividend issue, Shefrin also quotes a part of Miller’s statement (see vol. III, p. xxi).

(2000). Shleifers's perception of BF typically supports my opinion as mentioned at the end of the previous section. The "pervasive market forces" are at the core of his analysis, and investor biases are only explicated in as far as they can be relevant for the shaping of these forces.⁶ To me, Shefrin's approach is more attractive because of its broader scope. This broad scope is clearly reflected in the present collection.

A disadvantage of a broad scope is that it inevitably creates ambiguities when organizing the overall field. Indeed, the organization of Shefrin's three volumes exhibits some ambiguities. I find the separation of 'Behavioral Foundations' (vol. I, part I) and 'Foundation Works' (vol. III, part I) somewhat artificial. Clearly, it intends to reflect Shefrin's distinction between the themes of heuristic-driven biases and frame dependence. However, in my opinion, these two themes interact with respect to the third theme of inefficient markets, and that is the theme that prevails in volumes I and II. At the specific level, I should have liked Thaler's (1999) exposition of mental accounting to be included in a 'foundations' part (instead of its current position in part II of volume III).

Regarding the organization of parts within the volumes and the allocation of papers across the various parts, many comments could be made – but most of these will undoubtedly reflect my subjective preferences. Nevertheless, a few specific remarks here. The element of arbitrage could have featured in a more focused way, given its dominance in BF research. I find the part 'Option and Arbitrage' (vol. II, part V) not very enlightening in this respect, also given the fact that the landmark paper of Shleifer and Vishny (1997) features under 'Asset Pricing Theory' (vol. I, part II). In my opinion, the analysis of Froot and Dabora (1999) should be positioned close to Shleifer and Vishny's paper, rather than being connected to 'Options and Arbitrage', as Shefrin has done. As a further minor comment, one can wonder why a study on 'excess volatility and closed-end funds' has been included in the part on 'Intertemporal Issues' (vol. III) instead of the part on 'Volatility in Equity Markets' (vol. II). And: the title of part II in volume III (The Structure of Individual Investor's Portfolios) appears to be rather narrow, since there are also some papers in this part about overconfidence and noise trading. In general, the topic of overconfidence features in a rather 'scattered' way, across at least four parts: parts I and II of volume I (papers 5, 6, 11) and parts II and III of volume III (papers 10 and 14). Given the increasing importance of this human characteristic in BF research, a more focused position of the role of overconfidence might have been relevant. As a final comment, part IV of volume I on 'Competing Views' is questionable, both in terms of its relevance (see above) and its scope. As to the latter: there is more BF work to be debated in terms of paradigm; for example, regarding dividend policy and merger activities of firms, or asset allocation decisions by investors.

However, the essential job of an editor is to make choices. And Shefrin has clearly made his choices, resulting in an impressive collection of interesting works.

⁶ There should be no misunderstanding, though, about my opinion that Shleifer's analysis and all the research that is underlying his book, is of impressive quality and highly convincing for the case of BF with respect to the inefficiency of financial markets.

In the final part of this evaluation section, I will indicate some of my personal preferences with respect to papers.

As has been indicated in the above, I like the broad scope that the editor takes in his approach of BF. In particular his attention to some ‘old’ papers that, in hindsight have a lot to tell about financial behavior and behavioral finance, is enriching. See Markowitz (1952), Roy (1952), Lintner (1956), and Slovic (1972). I also like Shefrin’s concern with emotional factors that might serve to explain financial behavior, as presented in the work of Lopes (1987), for example. However, it should be noted that, besides in some of Shefrin’s own work, this approach has gained very limited attention among BF researchers so far. Seen from this perspective, it seems that the editor has not been shying away from personal preferences in making his selections. In general, the focus that the collection has on research regarding individual judgments and choices by investors and managers (see volume III) is to be welcomed. As has been indicated in the above, there is a strong tendency to concentrate on “market forces” research in BF. In my opinion, this should not distract us from also continuing to focus on micro decision level research. With the present collection, Shefrin contributes to a balanced perception of the relevant issues of concern in BF.

Are there important papers missing from this collection? Unfortunately there are, but the editor has explained his reason for their omission. Early in his introduction, he explicates the choice to build on two previous collections, notably Thaler (1993) and Lo (1997). Although understandable, I regret this choice, in particular with respect to Thaler (1993).⁷ As a result the current collection does not include important – and by now ‘classic’ – papers such as Shiller (1981), Shefrin and Statman (1984), DeBondt and Thaler (1985), Shefrin and Statman (1985), Black (1986), and various others. This means that the collection cannot serve as a stand-alone anthology, which I consider to be an important characteristic of this set of books. Another paper that, in my opinion, is missing and that might have been included in a ‘foundations’ part is Thaler and Shefrin (1981).

Of course, one could object that including another set of papers results in an unacceptable expansion of the collection. In this respect, I would favor to include the mentioned papers on the expense of various papers that do not pertain to BF in a narrow sense, such as papers nr. 19, 22, 23, 24 and 25 of volume I. This comment refers to my earlier discussion of the relevance and scope of the ‘Competing Views’ section. I wish to emphasize that the underlying debate that the editor has introduced with this section, is of great importance. However, in my opinion, this importance may be better served with a separate publication that should also include other topics of debate, such as the equity premium puzzle, the closed-end

⁷ I have learned that the editor had no free choice in this respect, being subject to specific constraints set by the publisher. These constraints also explain, for example, why the paper by Thaler and Shefrin (1981), mentioned in the following, is absent from the current collection. My related comments, therefore, pertain to the publisher.

funds puzzle, the asset allocation puzzle and the dividend puzzle. I realize, though, that it is much easier to propose such idea than to work it out. In any case, Shefrin is to be credited for having raised the ‘debate issue’. As with any debate, we should expect more on this in the near future.

To conclude: how does the present collection tell the story of behavioral finance? I think that with this collection Hersh Shefrin has done an excellent job in documenting and explaining the state of the art in BF. My previous comments indicate that his work as editor may not be free from biases. However, undoubtedly my comments are not free from biases as well. After all, this is what BF should make us expect in the first place, isn’t it?

Biased or not, I fully agree with the series editor, Richard Roll, when concluding his foreword that the current collection on behavioral finance is “a landmark [that] should be on the shelf of every scholar and student interested in this controversial and fascinating field”.

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