

The Market for Retirement Financial Advice

EDITED BY

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OXFORD
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Great Clarendon Street, Oxford, OX2 6DP,
United Kingdom

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First Edition published in 2013

Impression: 1

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Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data

Data available

Library of Congress Cataloging in Publication Data

Data available

ISBN 978-0-19-968377-2

Printed in Great Britain by
CPI Group (UK) Ltd, Croydon, CR0 4YY

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Chapter 3

Explaining Risk to Clients: An Advisory Perspective

Paula H. Hogan and Frederick H. Miller

The field of financial planning embodies a shifting mosaic of theoretical models. Nevertheless, risk management is a fundamental component of financial planning. This chapter examines current advisory practice with particular emphasis on risk management. We then apply this information to identify questions for further discussion and research. Our views are based on perspectives derived from our ongoing discussions with clients and colleagues,¹ and this chapter seeks to further dialogue between practitioners and academics.

In what follows, we first paint a picture of how financial planning is defined and delivered through three distinct theoretical paradigms. Next, we describe each paradigm, with particular emphasis on how each treats risk tolerance, risk capacity, and risk perception. In doing so, we identify the contributions of each paradigm and also the real-world problems of applying each of them in our daily work with clients. A fourth planning paradigm details several real-world challenges advisors face every day, which the other approaches do not incorporate. We find that unresolved real-world issues confound our daily work along most of the dimensions we use to describe the theoretical models, including, for example, the information clients are assumed to be able to provide and the presumed unit of analysis. Finally, we illustrate some practical implications of each paradigm by suggesting how advisors employing the paradigms would handle three common planning challenges: investment risk management, longevity risk management, and the appropriate planning strategy when the client has more than enough (or less than enough) personal wealth.

It is worth noting that most standard economic models assume consumers know both their utility functions and the world in which they operate; moreover, the models assume them to be capable of perceiving and managing personal risk effectively. In that world, the consumer's task is simply to map personal choices and actions onto the economic model, and then follow what the model provides. In practice, however, advisors help clients every day with such strategic economic decisions as how much to

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spend, and thus, how much to save; what kinds of insurance to buy, and how much of each; what to do with their savings (how to invest); and, increasingly, how to manage their human capital.

In our daily work, we rely on insights from the academic community and struggle to bridge the gap between theory and practice. This chapter contributes to the ongoing conversation between practitioners and academics.

Planning paradigms

Financial advisors use four main paradigms in their practices: the Traditional paradigm, the Life Cycle paradigm, the Behavioral paradigm, and the Experienced Advisor paradigm. We describe each in turn (see Table 3.1).

The Traditional or Accounting/Budgeting/Modern Portfolio Theory paradigm

The most prominent and dominant approach to financial planning in existence today has been assembled from a variety of sources, and it has brought significant benefits to its practitioners' clients. Clients have become alert to the importance of saving for retirement and other goals, diversifying investment portfolios, managing investment costs, and insuring against loss of income.

Much of modern financial planning draws on stock brokerage and investment advice, perhaps because many clients articulate a desire for assistance with their financial portfolios. In the 1970s, leading-edge investment advisors began to adopt Modern Portfolio Theory, as initiated by Markowitz (1952), elaborated by Sharpe (1964) and others, and popularized by Ibbotson and Sinquefeld (1977),² as the basis for investment advice; today, most personal financial advisors use this approach.³ For example, Morningstar's Principia software, which has a strong market position among investment advisors, implements Mean Variance Optimization as its primary method of asset allocation; Morningstar's 'style boxes' for classifying equity securities are also direct descendants of Modern Portfolio Theory as extended by Fama and French (1992) and others.

The theoretical basis of the non-investment aspects of financial planning advice in the Traditional paradigm is less clear. For want of a better term, we call it the 'accounting/budgeting' approach. Most commercial financial planning software adds up income from all sources, subtracts the costs of discretionary and non-discretionary spending and client goals (e.g., college, spending in retirement, etc.), and tracks the net impact on a client's

TABLE 3.1 The current financial planning mosaic

	TRADITIONAL Accounting/ Budgeting/Modern Portfolio Theory	RATIONAL Life Cycle Theory of Saving and Investing	BEHAVIORAL Prospect Theory and Framing	ADVISOR EXPERIENCE Life in the Trenches
Key contributions	Identifies and legitimizes personal financial planning	Human capital and standard of living take center stage	Highlights non-rational aspects of human decision-making, including the propensity for loss aversion, and the central role of framing in decision-making	As we move from left to right, quantitative financial analysis cedes importance to psychology and overall client well-being
Utility	Linear (implicitly a function of wealth)	Nonlinear; diminishing marginal (explicitly a function of consumption and perhaps leisure, wealth is indirect)	Prospect theory—risk aversion at a reference point. Experienced vs. remembered/‘mis-wanting’	Economics strives to predict behavior of groups of people. Most empirical work focuses on a point in time (cross-sectional). Advisors deal with individuals, over a long period of time (longitudinally)
Unit of analysis	Portfolio	Rational consumer	Human (frequently not rational) consumer	Many clients are couples, not individuals. Many clients must deal with family member issues, not all of which are obvious to the advisor
Client/advisor goal	Maximize portfolio	Smooth utility (consumption)	Understand and then optimize utility/well-being	Integrate personal values with the management of human and financial capital
Approach to risk	Each risk is discrete. Risk management is comprehensive but not integrated. Primary focus may depend on the	Utility function affords an integrated view of all risks. Risk impact is goal specific, measured through the lens of personal goal priority	Client risk <i>perception</i> , both directly and as interpreted through the utility function, becomes more important. Risk is poorly understood and risk	Advisors do not know the probabilities or costs associated with many risks. Advisors are subject to the same (irrational) behavioral heuristics and biases as clients

<p>advisor's background, e.g., investments vs. insurance. Risks are objective—quantifiable</p>	<p>and risk capacity. Risks are objective—quantifiable</p>	<p>perception is greatly influenced by cultural trends, the economic environment, personal history, and the advisory relationship</p>
<p>Risk tolerance</p>	<p>Clients assumed to have a measurable risk tolerance, which can be applied to select an appropriate level of (investment) risk from choices based on securities market benchmarks</p>	<p>Risk assessment and tolerance depend on the frame and can be internally inconsistent. Rational and human assessments can differ. Clients come in with notions of what risk level they 'should' be comfortable with (anchoring). They also define loss in a variety of ways: relative to market, their neighbor, their understanding of a 'good' return, dollars, and sometimes specific goal achievement</p>
<p>Risk capacity</p>	<p>Risk capacity is not a distinct concept. However, age-based rules of thumb for risk tolerance suggest the need for the concept</p>	<p>Risk capacity is a slippery concept when risk perception is changeable</p>
<p>Importance of language/framing</p>	<p>None</p>	<p>Clients are not used to thinking about the difference between risk capacity and risk tolerance</p>
		<p>Advisors can confuse their own professional 'knowledge' with their own personal risk tolerance. The quality of the client-advisor relationship—and especially the trust between the client and advisor—is a powerful influence during risk discussions</p>
		<p>Language matters: Framing changes client perception of risk and choices. Advisors 'nudge' clients to a particular point of view, both deliberately and unwittingly</p>

(Continued)

TABLE 3.1 Continued

	TRADITIONAL Accounting/ Budgeting/Modern Portfolio Theory	RATIONAL Life Cycle Theory of Saving and Investing	BEHAVIORAL Prospect Theory and Framing	ADVISOR EXPERIENCE Life in the Trenches
Model assumptions about clients	Clients understand risk very well, and can specify their tolerance for it. The concept of 'risk capacity' is blended in with and even used interchangeably with 'risk tolerance'	Clients assumed to be able to specify goals and preferences (about risk)	Clients do not have an accurate understanding of their own utility functions or risk	Advisors have learned that client-provided information requires interpretation; expressed goals and preferences can change over time. Clients are in different stages of personal change
Advisor questions (of clients)	What are the facts? What are the numbers? (Spending, assets.) What is your risk tolerance—framed as ability to withstand market volatility?	What is your utility function? What is your risk aversion (parameter)? What are your specific personal goals and likely pattern of lifetime earnings? How much more could you save?	Are we optimizing utility of experiencing, future, or remembering self? What framing do the advisor and the environment (economy and culture) create?	Advisors must frequently define the advisory deliverable for new clients (many believe it is solely portfolio performance). Clients typically first come to an advisor because of some kind of personal change. Sometimes the first part of the client engagement is analogous to a visit to the ER, i.e., quick diagnostics and triage before real planning
Advisor-client relationship focus	Investments and other financial products, in a comprehensive but not integrated manner	Understanding the risk and return features of the client's human capital, and tailoring financial strategies to that human capital. Comprehensive, integrated risk management, centered on goals-based planning	Understanding and improving the client's decision-making ability, 'nudging' client toward better decisions. Framing advice when appropriate as a counterpoint to the environment (economy, personal history, cultural milieu)	Values clarification as a precursor for the goal-setting foundation for the financial plan

Advisor role	Data and analysis provider, and authority who advises mainly about investments and the economy	An authority who provides the calculated result of a goals-based planning process	A coach, resource, and authority for improved decision-making	The advisor shifts from authority figure/technical expert to more of an informed resource, facilitator, and coach (and with couples, sometimes a mediator)
Advisor deliverable	The advisor strives to optimize the financial portfolio. <i>Deliverable: Product (maximized financial wealth)</i>	The advisor strives to manage income and outflows/protect financial safety. <i>Deliverable: Policy (goals-based lifetime consumption [utility] smoothing)</i>	The advisor strives to clarify decision-making. <i>Deliverable: Process (improved decision-making around values and goals and risk management)</i>	The advisor facilitates values clarification to support a personally grounded comprehensive goals-based financial plan, then coaches implementation according to client readiness. <i>Deliverable: Trust-Based Process (integrating personal values with comprehensive goals-based financial planning). The deliverable becomes less distinct and measurable—and less of a commodity</i>
Advisor–client relationship issues	The intertwining of product sales and advice can compromise the deliverable	The process is dependent on the quality of data from the client	The advisor is just as human as the client	Clients are unclear about the purpose of the relationship: many clients expect the conversation to be solely about investments. Clients are in different stages of personal change and advisors must give financial advice calibrated to their perception of the client’s personal stage. Advisor training does not include skills for exploring purpose and meaning or motivation for change

Source: Authors’ tabulations (see text).

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portfolio over time. A plan is said to succeed if the portfolio balance is positive at death (or large enough to produce the desired inheritance), and it fails otherwise.

In the Traditional paradigm, most advisors address primarily investment risk, which they frequently evaluate using the Monte Carlo analysis. Measures of success are the size of the portfolio balance at the conclusion of the plan, and the probability of a positive (or sufficiently large) balance. In determining how much investment risk to recommend that a particular client should retain, a Traditional Advisor will attempt to assess the client's comfort with risk, or 'risk tolerance.' Advisors label clients willing to accept large amounts of risk as 'aggressive' or 'growth' investors, while those willing to accept less risk are 'conservative' or 'income' investors. Advisors also consider mortality risk, which can threaten income earning ability. In this paradigm, advisors see life insurance sufficient to cover specific expenses and goals (e.g., including funding the mortgage and college education) as the solution. Disability insurance replaces income lost due to illness or other sources of incapacity to work, and long-term care insurance funds all or some of the cost of custodial care in order to preserve the estate and ensure the desired quality of care in the event care is needed.

Importantly, the Traditional paradigm employs two contrasting approaches to risk management. For 'insurable' risks (for which commercial insurance is available), an advisor is likely to recommend full insurance. That is, the advisor recommends sufficient insurance coverage to produce substantially equal resource levels in both the 'good' and 'bad' states of the world. For investment risk, however, advisors are likely to select a non-zero failure target; for example, an advisor may deem a 5 or 10 percent failure probability to be acceptable. Thus, in 'good' investment states, a client may have very large (unused) resources, while in 'bad' states, a client may exhaust his resources entirely before dying (in some cases several years before) (Scott et al., 2008). In other words, it is not unusual for Traditional Advisors to recommend insurance to transfer as much of insurable (financial) risks as possible, while recommending that clients retain (potentially very) significant amounts of investment risk.

In the Traditional model, the term *risk tolerance* conflates the notion of being able to accept or 'afford' risk (sometimes called risk capacity) and the client's level of comfort with asset price volatility. While both of these concepts are important to advisors and their clients, and it is essential to distinguish between them, the Traditional paradigm does not do so as the use of one term to stand for both concepts suggests.⁴ Furthermore, at least in the advisor community, neither concept is well defined by any of the paradigms we consider.

'Risk capacity' in the Traditional paradigm roughly refers to the maximum amount of risk a client can retain, while ensuring that a bad outcome

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of the risk in question will not impose unacceptable harm. With investments, unacceptable harm occurs when the money runs out before the end of retirement. At least in concept, risk capacity is computable, quantifiable, and related to the client's time horizon. This notion is the root of the rule of thumb that the proper allocation to stocks in a portfolio is 100 minus the client's age, and more generally that younger clients can afford more risk.

The Traditional Advisor also seeks to assess and manage the client's ability to contain his anxiety through the ups and downs of the stock market. Accordingly, advisors will speak of a client's 'stomach' for risk. Clients with high risk tolerance will be psychologically comfortable with maintaining their stock holdings even in the face of sharp stock market price declines, clients with low risk tolerance will not.

Moreover, the Traditional Advisor usually holds a strong belief in the long-term advantage of stocks over bonds and in reversion to the mean in stock returns; this view is implicit in the typical application of the concept of risk tolerance.^{5,6} Since stocks are deemed less risky in the long run, boosting client stock exposure to improve the odds of meeting financial goals can be seen as prudent, and stock market price declines mainly trigger advisor coaching to 'stay the course.' Thus, in the Traditional paradigm, risk perception is skewed to the extent of the belief that stocks are not risky in the long run.

Developing a financial plan and investment strategy is straightforward in the Traditional paradigm. The advisor elicits data from the client about goals, resources, risk tolerance, and required retirement income. Then the advisor calculates the impact on the investment portfolio of the implicit plan (funding all of the goals); and discusses which goals to eliminate (if the portfolio is exhausted too early or with too much frequency according to the Monte Carlo analysis) or which to add (in the fortunate circumstance that extra funds are projected with high frequency). Software calculations implicitly assume a linear utility function and usually solve for one gross asset allocation across the entire portfolio. The Traditional Advisor then recommends an asset allocation consistent with the client's risk tolerance and deemed likely to produce the investment returns required to accomplish the plan. He will also recommend specific investments to implement the asset allocation. The discussion then moves to protecting the family against insurable risks with the appropriate insurance products.

In line with the central importance of the financial portfolio, many Traditional Advisors view excellent portfolio management as a key if not the core deliverable. They believe their clients also evaluate their advisors on this basis, speaking about advisors who have 'done well' or 'done poorly' for them in managing their investments. In reality, however, the most important criterion for assessing advisor performance often focuses on advisor attentiveness and service. Many advisors devote considerable time

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and effort to selecting the investment vehicles and managers that they expect to perform well.⁷

Thus, investment management dominates the Traditional paradigm, with insurance coverage appended to it. Comprehensive personal financial planning is a marginal component, measured as a fraction of revenue or advisor attention, and even of regulatory attention. FINRA and SEC examinations of advisors focus solely on factors relating to portfolio management and associated activities, distinguishing mainly between advisors held to a fiduciary standard and/or those held to a sales suitability standard. Perhaps catering to consumer demand, however, the advertising by Traditional Advisors emphasizes the promise of personal, comprehensive advice designed to make one's lifetime dreams come true. Since there is as yet no legally enforceable definition for the word 'financial advisor,' consumers are left to figure out for themselves which business model provides context for the advice offered, including whether the focus is primarily on portfolio management or comprehensive planning, and whether the advisor is held to a fiduciary and/or a sales suitability standard (Turner and Muir, 2013).

Two factors challenge the Traditional paradigm. One pertains to advisors' compensation and arrangements. Traditional Advisor compensation often depends in (large) part on their investment product sales, via transaction commissions (retail stock brokers), product sales commissions and revenue sharing (retail stock brokers and some investment advisors), and fees proportional to assets (other investment advisors). Important conflicts of interest can arise if clients purchase investment products recommended by advisors rewarded for investment product sales (Bromberg and Cackley, 2013). Perhaps in response, there has been some recent migration toward advisory business models with hourly or flat retainer fees.

Secondly, clients cannot always provide the facts of their financial situation and their personal preferences. Instead, our experience is that a combination of client's unfamiliarity with financial matters and their trust in the advisor can place the advisor in a powerful and influential position. In particular, clients are often unlikely to identify and question this paradigm's inconsistent approach to investment risk (risk retention) and other risks (full insurance).

The Life Cycle paradigm

The Life Cycle approach to planning applies economic analysis and pension fund management perspectives to clients' lifetime financial problems (Bodie et al., 2008),⁸ bringing greater coherence and integration to comprehensive financial planning, and highlighting the value and mechanics of goals-based investing. It does so in two ways (Hogan, 2007, 2012). First, it

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focuses on lifetime income and spending, and thus recognizes human capital, the net present value of lifetime earnings, as the central asset. Absent a large inheritance, human capital is the primary determinant of a client's lifetime standard of living. This emphasis on human capital shifts the planning spotlight from the investment portfolio to the consumer herself, and broadens the scope of the advisory engagement, focusing advisor attention on understanding and managing the client's career path, protecting earned income with appropriate disability and life insurance, and tailoring financial capital to the expected risk and return of the human capital.

Clients are often surprised to learn that their financial portfolio allocation should depend on the expected risk and return of their human capital. For example, a person with the same taste for risk and risk capacity as his friend, but with riskier human capital, should be advised to select less risky asset allocations. In addition, as human capital resiliency lessens (i.e., as the client's ability or willingness to continue earning income declines over time), there is typically a commensurate need to reduce risk in the financial portfolio.⁹

Another insight from the Life Cycle paradigm is that people care more about their lifetime standards of living than about their wealth. This shifts the advisory focus from return management to risk management: from building the largest possible portfolio constrained by risk tolerance to arranging lifetime consumption in the safest way possible given finite lifetime income. One of the most common statements that clients make to advisors is: 'I just want to know how much I can spend and still be safe.' In the Traditional paradigm, an advisor's response to this question is framed in terms of a return target and the implied level of portfolio risk. By contrast, the Life Cycle Advisor frames his response in terms of risk management, by discussing recommended levels of working, saving, insuring, and hedging.

A preference for a stable living standard over time implies consumption smoothing, so that purchasing power is transferred from periods of high earnings (the working years) to those of low earnings (retirement). When health risk is added to the model, this approach also implies moving purchasing power from states of the world with good health (and high earnings capability) toward those with poor health (and low earnings capability). The Life Cycle approach can also incorporate leisure, explaining post-retirement consumption spending declines.¹⁰

Advisors' practical implementation of the Life Cycle paradigm requires simplifying the economic Life Cycle model. Rather than attempt to estimate risk aversion, advisors instead calculate sustainable levels of consumption, and they illustrate for clients the range of consumption outcomes associated with various portfolio alternatives. Accordingly, clients reveal their risk aversion and risk tolerance levels by selecting the alternatives associated with preferred range of consumption outcomes. Goals-based

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investing requires that each goal be assigned a distinct investment allocation based on risk capacity, not just risk tolerance; and furthermore that these allocations when optimally set tend to become less risky over time as the share of human capital in the portfolio declines. By contrast, Traditional software programs often assign a global portfolio allocation to address all goals, fixed in time, and based mainly on assessed risk tolerance, not risk capacity.

Because of this goal of smoothing lifetime consumption, Life Cycle Advisors tend to favor inflation-indexed immediate income annuities as a core retirement income vehicle more than advisors who apply the Traditional paradigm (Hogan, 2007). In addition, the development of the derivatives markets opens an array of new possibilities for implementing Life Cycle goals-based planning, as they make it possible to tailor financial products more directly to specific goals. Structured products can allocate each risk to the party most willing and able to bear it, and they allow clients to avoid risks extraneous to accomplishing their objectives. Nevertheless, many advisors have concerns—and lack education—about current structured product packaging, pricing, and distribution. Structured products also create dissonance with most advisory business models; few advisors have malpractice insurance for providing structured product advice and fee-only advisors do not accept product commissions.

The Behavioral paradigm

If the Life Cycle approach focuses a planner's attention on human capital and its implications for consumption smoothing and saving behavior, the Behavioral approach adds prospect theory and loss aversion. That is, the Behavioral approach raises questions not only about clients' rationality but also about what utility function they are and should be maximizing. This approach notes that clients employ heuristics and have biases that produce suboptimal decisions given their utility functions, and that they likely do not fully understand what increases their utility. In the Behavioral paradigm, therefore, it is not enough for advisors to help their clients make more rational decisions. It is also valuable to help clients figure out what will actually make them happier. Moreover, the Behavioral approach emphasizes the importance of communication between advisors and their clients. That is, advisors can influence client decisions not only with accurate analysis and persuasive presentation but also with how they compare and contrast the alternatives they present (framing). Furthermore, apparently irrelevant and innocent comments can also influence client perspectives (anchoring).

Behavioral finance insights help advisors recognize certain human aspects of client thought process and psychology, and even use them to

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their client's advantage. For example, advisors can take advantage of mental accounting by recommending special savings accounts targeted to specific goals, and by identifying 'savings' (unnecessary spending) that can be used to make previously 'unaffordable' purchases. On the other hand, a client's overconfidence can make it difficult for the advisor to advocate for diversification and a buy and hold investment strategy versus the day trading that the client 'knows' to be successful. It is also not unusual for a client to profess being sufficiently knowledgeable about real estate to identify neighborhoods where housing prices will 'never' go down.

The 'life planning' school of modern financial planning¹¹ is perhaps the most fully developed form of the Behavioral paradigm. A basic tenet of this approach is that many clients fall into financial behavior inconsistent with their own values and preferences. Accordingly, in a life planning engagement, the advisor facilitates a self-discovery process in which clients identify specific preferences for what they want to be doing with their lives and the implications of those preferences for their personal planning. Life planning, however, is not typically linked to an economic model for financial planning.

From an economic perspective, advisors attempting to apply the Behavioral paradigm face a fundamental unanswered question: What utility function should they be helping their clients maximize? For example, for younger clients, the far future is an unknown country. Some may think that they wish to retire 'early,' or they may believe that they want to stay in the (expensive) part of the country in which they currently live throughout their entire lives. Both of these choices have real consequences, requiring more saving and less spending than an alternative plan. The Behavioral paradigm forces the advisor to ask whether this is a case of 'mis-wanting' or an accurate assessment of preferences.

Furthermore, there is the question of dealing with downside risk aversion. Is this a temporary phenomenon or long-term irrationality? Is the reference point a feature of the moment, the day, the month, the year, or the lifetime? Behavioral finance research suggests that expressed preferences can change when a positive expected value gamble is repeated many times, suggesting that downside risk aversion is short-term irrationality. But this approach does not help much with the investment choices facing a client—since an advisor cannot replicate a repeated game. The client's situation changes from year to year, and the market situation is never the same from one day to the next, let alone at yearly intervals.

When we come to risk tolerance (again focusing on the investment portfolio) in the Behavioral paradigm, the complexity mounts rapidly. Especially early in a client's working life, a relatively large percentage loss in the investment portfolio implies a much smaller percentage decline in lifetime consumption. Rationally, it would seem that sustainable or

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smoothed consumption spending is the more relevant measure. Moreover, a client's risk assessment and tolerance depend on the advisor's framing of the situation, and can also be internally inconsistent. (For example, the advisor probably could encourage more conservative decision-making by framing the potential loss in terms of the investment portfolio instead of in terms of likely lifetime consumption.) Ideally, an advisor will frame the decision so that the client makes the best (most rational) decision. However, if the client is overconfident (and how will the advisor know just how overconfident the client is?), perhaps the advisor should adopt a framing strategy to counteract the overconfidence.

Furthermore, clients enter advisory relationships with notions of what risk level they 'should' be comfortable with. These initial notions can be based on discussions with colleagues, friends and family, previous advisors' advice, research on investment company websites, the opinions of 'experts' quoted in the media, or just their current level of risk exposure. To some extent, these initial notions are anchors—the client starts from the initial 'should' level and adjusts in the direction the analysis suggests or the advisor recommends.

In the Behavioral paradigm, clients are seen as less reliable information sources than in either the Traditional or the Life Cycle paradigms. Clients may have imperfect understandings of their own utility functions, their capabilities, and of the ways that probability distributions associated with risks influence the opportunities available to them and the risks they face. For this reason, practitioners of the Behavioral paradigm need to distinguish between risk tolerance and risk capacity, as well as do a careful job communicating and presenting recommendations, as all of these may influence client decisions.

Advisors 'nudge' their clients toward the views they finally adopt and the decisions that they make, both deliberately and unwittingly.¹² For example, the client may accept or reject a particular investment alternative depending upon whether the advisor frames the potential outcomes as gains or losses (by choosing different reference points), and introducing selected data about choices can influence clients to adjust their view about what amounts are appropriate. This changes the nature of the advisor–client conversation in ways we are just beginning to understand. Indeed, now the advisor takes on the new roles of process facilitator and counselor. Moreover, advisors are just as human as the clients and may display the same—or other—behavioral biases. In the future, we must learn more about the conditions under which advisors learn from their professional experience.

In summary, advisors have more questions about applying the Behavioral paradigm than concrete tools. Just having the questions is very helpful. And knowing about the pitfalls encourages advisors to be more cautious with communication, persuasion, and advice. It is also clear that behavioral

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economics research focused on improving the effectiveness of the advisor–client process and relationship could be enormously productive.

The Experienced Advisor paradigm

As practicing advisors, we wrestle with a number of issues that the economic models do not yet address. Accordingly, we propose that a new paradigm can fruitfully be added to the set of advisor practices. Specifically, we believe that advisors are moving beyond providing mainly portfolio management, and toward the role of financial counselors who facilitate a process designed to both define and support client financial safety and well-being. Advisors who participate in this emerging trend increasingly describe themselves as *comprehensive planners*, and especially *holistic comprehensive planners*.

Here the focus is on a client's well-being, and quantitative financial analysis cedes importance to psychology (Anderson and Sharpe, 2008), requiring values clarification and personal coaching as supplements to economic models and methodologies. Human capital is deemed to be both of central importance and also personal. Hence, the advisor becomes a counselor and process facilitator in addition to offering expert advice. As a result, the Experienced Advisor deliverable becomes more process based, less measurable, and more valued.¹³

Values clarification precedes goal-setting

In the Experienced Advisor paradigm, values clarification is a prerequisite for goal-setting, and it is also a risk management strategy. Advisors invite their clients to discuss such questions as: 'What do I care about and value? Where do I find meaning and purpose? How can I align meaning and purpose with money habits? How do I go about bringing about the personal change that I desire? What is the difference between my needs and my wants?' Values clarification leads to a more robust goal-setting process and hence it improves the quality of the data input for the economic model. In addition, the values clarification process is a self-discovery process, serving as a foundation for positive personal change (Hogan, 2012). The resulting self-knowledge and personal resiliency influence decisions about investment risk and about tailoring personal habits for earning, saving, and spending. Absent such a process, clients may not be well prepared to articulate personal goals reliably. For example, it is not unusual that, after the advisor asks a client couple about the family's goals for financing their children's schooling, the spouses will look at each other and comment: 'We've never talked about that.' Asking a client to describe a desired typical day in retirement can be similarly startling and

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confusing, as is the question ‘What is your preferred living arrangement if you were to need custodial care?’

Plan implementation is part of the planning process

In the Experienced Advisor paradigm, implementation of the plan following the economic modeling is also a core part of the planning process, and as with the values clarification process, is also personal. After the client envisions his desired future, and after the economic modeling, the advisor helps the client specify and then take a series of frequently small steps that cumulatively result in plan implementation. Along the way, the advisor offers encouragement, information, affirmation, motivation, measurement, and accountability. This implementation process is an extension of traditional risk management; it is designed to align spending habits and investment risk choices with money values and personal safety.

Client engagement relies on iterative small steps

Perhaps analogous to the behavioral finance discovery that people get better—more rational—when allowed to repeat a game of chance, it may be that people get better at the game of life when they have repeated small opportunities to make informed and meaningful choices. Absent a focus on a series of small meaningful choices derived from the plan, the client may not feel a part of the planning process. Successful plan implementation usually involves some combination of nudged default decisions with a series of small and manageable decisions usually cash-flow related, made in context and in real time. For example, reducing spending in order to increase savings to the desired level usually requires identifying specific habit changes in addition to setting up nudged default saving policies. Daily cash-flow management is central to the values clarification process.

The client is at the center of the planning process; the advisor is a trusted counselor

A core assumption in the Experienced Advisor paradigm is that an iterative process of putting the client at the center of values clarification, goal specification, and plan implementation will result in the client getting better at personal wealth management and more resilient as the client’s life unfolds. The advisory deliverable shifts strongly toward process and the advisor’s role shifts toward counselor and process facilitator, in addition to expert resource and technical consultant. Personal trust as the foundation for the advisory relationship rises in importance.

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The Experienced Advisor paradigm incorporates the fact that many clients are couples. Rarely do partners have identical goals and values, nor do they necessarily grow and change in sync with each other with respect to either speed or direction. In this model, the advisor will thus also interact with couples as coach, and sometimes ad hoc mediator, in order to help them make fundamental planning decisions, including decisions about personal risk management. A common challenge arises when one partner has higher risk tolerance than the other.

Clients are often undergoing change

In our experience, clients often seek financial advice in response to a dramatic life transition, such as new widowhood, or a sudden wealth loss or gain. In these cases, the first part of the advisory relationship can be analogous to a hospital emergency room visit: the focus is on quick diagnostics, addressing life-threatening conditions, stabilizing, and then triaging or specifying further follow-up. Advisors often do not see clients at their best at the beginning of the financial advisory relationship, and we have found that risk perceptions, goals, and decision-making abilities shift as clients begin to feel calmer and safer. Often of equal impact are the subtler changes in preferences and judgments that can develop as a client ages, with the consequent impact on financial planning. In the Experienced Advisor paradigm, deciding when and how and how fast to get the client into the driver's seat for planning decisions is a routine challenge confounded by the client being in a constant state of personal change.

Clients often cannot accurately articulate basic facts about their finances

Clients are busy people, and their financial situation represents only one dimension of their lives. In practice, it is unusual that clients can accurately report all of the basic facts, including their total income, how much debt they have and what it costs, details of their employee benefit package, insurance coverage in place, the substance of their estate plan, how much they pay in taxes, and how their portfolio has performed over time, or how much they spend on needs versus wants. Most clients are also unable to report accurately where their money goes each year for discretionary spending. Most have no idea how much a change in income would change their standard of living, and many do not know whether they are currently living within their income or not. Clients often cannot accurately report the value of their financial assets, and sometimes do not have a full list of assets. Discovering 'lost' or forgotten assets during a client engagement is not uncommon.

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Data collection is also confounded by lack of financial education. Most advisors have learned, after asking a client whether he has any debt, to ask the follow-up question: ‘Do you have a mortgage?’ Clients do not always perceive mortgage as debt.

Several implications follow from client’s unfamiliarity with financial matters. First, financial plans are vulnerable to inaccurate data inputs, so advisors must often look hard to confirm the data. Second, the results of a financial plan can be difficult for a client to understand, if the advisor does not address from the outset the client’s unfamiliarity with their current situation. In addition, client ignorance of finances combined with trust in the advisor places the advisor in a very powerful position, not dissimilar to that of physicians, attorneys, and other professionals with specialized knowledge. For many clients, the simple process of getting their finances organized is a highly valued feature of the advisory deliverable, and indeed for some clients, almost sufficient to justify the whole planning engagement. It is not unusual to hear a client express gratitude for showing them the facts about their own finances.

Clients may see the financial advisor as ‘healer’

In this context, ‘healer’ implies someone experienced by members of the culture as the ‘go-to’ source for wisdom and knowledge. The value of the healer comes from the sense that this person represents the wisdom of the culture, offers a trusted relationship, and will be there through life events. We believe that clients often relate to advisors as healers, and a large part of our value is simply to provide a connection or affirmation, known in the field as ‘unconditional positive regard.’ Advisors sometimes take on this role in lieu of medical, legal, and in some instances, religious entities, and also because of the reduced emphasis on extended family connections today.

Information gaps confound risk measurement

It is challenging to measure human capital risk precisely, especially as clients develop interests and skills over a period of years. It is also difficult to assign precise probabilities for many risks, such as disability or the need for custodial care. Nor can advisors reliably predict the financial value and cost of divorce or a successful marriage, or the odds of remarriage subsequent to the loss of a spouse. Given such incomplete knowledge, advisors may sometimes confuse their own personal experiences and risk tolerance levels with actual expert knowledge, just as behavioral finance suggests will happen. Thus, advisors offer the best advice they can, based on limited data and with few reference points, to help people manage well-being over their lifetimes.

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The advisory deliverable is changing faster than advisor training

The psychology literature offers insights about typical stages of personal change and effective strategies for fostering positive personal change. For example, the Prochaska model makes the point that the stages of personal change are recognizable, reliable, and repeating, and that counseling and advising should be specific to each stage of change (Prochaska et al., 1994). Counselors and medical professionals are specifically trained and tested for this skill. By contrast, most financial advisors have no formal training in this area, yet we routinely coach clients through personal change as a part of our daily work. This means that our financial advice is calibrated to what we perceive to be a client's state of mind, though our training may not include psychology.

On a positive note, the financial advisory industry is beginning to focus on the emerging field of *life planning*. This is designed to develop effective processes for clarifying personal values and coaching clients toward positive personal change. Nevertheless, life planning is not linked to any economic model, and hence may become disassociated with the delivery of financial advice.

Within the financial realm, the growth of the derivatives market and the many other new possibilities for structured products and insurance represents another area where the deliverables are outpacing advisor training. Only a small subset of advisors has substantive training in finance, and yet advisors are increasingly in a position where they are asked to evaluate structured products.

Lack of advisory standards creates confusion

Best practice standards for advisors are similarly changing and under construction. As a result, clients do not know what to expect when they go to an advisor's office. The deliverable could be anything from portfolio management with little to no values clarification, to data-driven goals-based projections, to a full-blown values clarification process with some appended planning calculations and portfolio management that may or may not be goals based.

Three tasks as viewed by each paradigm

Next we offer a brief look at how three very typical planning challenges might be addressed through the lens of each paradigm. Table 3.2 illustrates the outlines.

TABLE 3.2 How it all plays out

	TRADITIONAL	RATIONAL	BEHAVIORAL	ADVISOR EXPERIENCE
	Accounting/ Budgeting/Modern Portfolio Theory	Life Cycle Theory of Saving and Investing	Prospect Theory and Framing	Life in the Trenches
Investment risk management	Diversification—'stay the course.' Precautionary saving. Relatively high comfort level with stock investing	Hedging and insuring. Identifying human capital as the central asset and tailoring financial capital to it. Asset liability matching (TIPS)	Guarantees	Clients expect only portfolio management from their advisors. Early conversations can be confused as advisor strives to establish expectations about nature of the service. Clients present with investment opinions already framed by the trends in the economy, current culture, and personal history
Longevity risk management	Sustainable withdrawal program	Annuitization	Annuitization with guarantees and upside potential	Perceptions and feelings about aging create denial and unrealistic expectations
Strategy when there is more than or less than enough	Change level of saving or gifting. Change level of risk	Change level of saving or gifting. Change level of risk. Work shorter/longer/ differently	Change level of saving. Change level of risk. Work shorter/ longer/differently. Choose to spend less. Recheck values and framing. Are you sure there is not enough for your well-being? And which well-being are we optimizing: experiencing self, remembering self, future self, or legacy?	Help client with: What do I care about and value? Where do I find meaning and purpose? What are my money values? How can I align meaning and purpose with money habits? How do I bring about the personal change that I desire?

Source: Authors' tabulations (see text).

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Investment risk management

When designing portfolio strategy, the Traditional paradigm advisor would focus on building a large portfolio, mainly using the strategies of diversification and precautionary saving. Financial risk would be tailored to perceived risk tolerance. The Traditional Advisor would emphasize the expected outperformance of stocks over the long run, would tend to advise ‘staying the course’ when markets are volatile, and would feature his authoritative view on investments as the central deliverable. A colleague coming from the Life Cycle viewpoint would reframe the portfolio goal to funding highly valued personal goals with the least possible risk, and so would add hedging and insuring, and asset/liability matching to standard risk management strategies. The Life Cycle Advisor would also tailor risk in the client’s financial capital to the expected risk and return of the client’s human capital, using safety of lifetime spending as a key measure of success. The advisor informed by the Behavioral approach would emphasize portfolio guarantees, to address the possibility of loss aversion. He would also seek to frame decisions correctly about how much portfolio risk to take and how to view portfolio performance. Finally, an advisor from the Experienced Advisor paradigm would devote effort at the outset to discovering and resetting as necessary client preconceptions about risk, return expectations, and benchmarking.

Longevity risk management

A Traditional Advisor would be likely to design a portfolio withdrawal program centered on, for example, a simple 4 percent per year withdrawal pattern and rising with inflation thereafter. Variations on the fixed percentage withdrawal strategy could include a buffer of cash reserves, smoothed withdrawal rates, and/or withdrawal rates adjusted in response to market valuations. Long-term care insurance might be suggested as a complement to portfolio wealth. The Life Cycle Advisor would fund the most highly valued personal goals first, seeking to match assets and liabilities through some combination of TIPS ladders and immediate inflation-protected annuities. More aspirational goals would be funded with commensurately riskier investment strategies. The Behavioral Finance Advisor would tend to focus on annuitization strategies with downside protection guarantees paired with some upside potential, after sorting through client and advisor biases. And unless the client had been close to someone needing custodial care in old age, both the Behavioral Advisor and the Advisor Experience advisors would likely devote attention to client denial or implausible expectations about aging before developing an appropriate recommended financial strategy.

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Planning strategy for when the client has more than (or less than) enough

If the economic analysis suggests that a client has too little or too much wealth relative to the client's notion of financial sufficiency, some aspect of the plan must change. The Traditional Advisor might propose ramping up risk and advise changing saving or gifting as well. The Life Cycle Advisor will instead illustrate which goals may not be feasible in the case of too little wealth and might suggest working shorter, longer, or differently as a core strategy. A Behavioral Finance Advisor would also suggest changing the levels of saving, risk-taking, and work duration, but he will also work with the client to recheck values and framing around money issues to improve decision-making. The advisor informed by the Experienced Advisor paradigm would also deploy strategies of changing the levels of saving, spending, working, and risk-taking, but he will also initiate a valued discussion and also a personal action plan likely characterized by measured small step progress.

Conclusion

Advisors seek an integrated approach that improves our ability to produce better outcomes for clients. This requires selecting from various paradigms, incorporating increased realism (as illuminated by the advisor experience), and recognizing that the financial advisory problem is more complex than extant models allow. The financial planning problem is fundamentally about resource allocation over time and matching personal values to the management of both financial and human capital. To do so, advisors and their clients need to understand the value of the resources, the risks to that value, the terms under which the value can be moved from one point in time to another, and the ideal resource allocation over time.

Rigorously addressing these issues, especially given the implications of behavioral finance discoveries, will help advisors develop more effective strategies and tactics for serving their clients. It will also pave the way for consistent practice standards which are essential for better consumer protection. It is also worth noting that the rapidly declining cost of analytical software should allow personalized rational advice to become less expensive. Internet communications software and social media should allow personal advice to become less expensive. Yet until 'the answer' to behavioral economic biases in the financial planning setting is developed, it is not clear how much technology can facilitate planning. Research is needed on which components of financial planning are essentially personal versus product, policy, and process that can be delivered through technology. Additionally, the answers to these questions may change as Baby Boomers age, and the next generation of clients grows dominant.

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1. One author (Miller) served on the 2009 Certified Financial Planner Board of Standards Job Analysis Task Force which assessed then-current Certified Financial Planner practices. Both authors served on the 2009 Certified Financial Planner Board of Standards Task Force on the Future of Financial Planning.
2. This seminal work remains popular today, and updated editions are published annually.
3. There are many descriptors for personal financial advisors in use today. To list just a few: 'financial planners' adopt a holistic approach to financial advice, incorporating retirement or cash-flow planning, investments, insurance, taxes, estate planning, and employee benefits (this is the CFP Board's definition); investment advisors focus on investments; 'wealth managers' apply a holistic approach for clients with higher net worth; 'life planners' emphasize values clarification (about which more below); 'financial advisor' is less specific, and could encompass all of the foregoing. We will use 'advisor' to stand for a practitioner who advises clients about financial issues.
4. For example, see Kiplinger (2012). The six-question quiz includes 'quantitative' questions about age and home equity, and 'qualitative' questions about the respondent's ability to stay with a strategy.
5. See for instance Siegel (1994).
6. Each year, an updated 'Ibbotson chart' (e.g., Ibbotson and Sinquefeld, 2012) is published, and many Traditional investment advisors refer to it regularly.
7. The popularity of the Morningstar Principia software (used largely to compare stocks, mutual funds, and variable annuity accounts) with advisors, and the prevalence of investment managers among sponsoring vendors at advisor conferences both support this view.
8. The economics Life Cycle literature goes back at least to Fisher (1930), with notable contributions from Modigliani and Brumberg (1954), Friedman (1957), Heckman (1974), and Bodie et al. (1992).
9. Lower remaining potential income means less ability to recover from a poor financial investment outcome, thus less risk capacity. Also, as the client ages, human capital declines and financial capital tends to grow, the importance of human capital in the total portfolio diminishes. To keep the portfolio risk level the same, the client must reduce the risk of the financial component, since for most clients, human capital is less risky than stocks. See Taleb (2001); Ibbotson et al. (2007); and Milevsky (2008).
10. Chai et al. (2011) suggest that if leisure and consumption are substitutes, it is natural for consumption to decline post-retirement, when leisure increases.
11. Anthes and Lee (2001) provide an introduction to life planning.
12. Thaler and Sunstein (2008) introduce the notion that the emerging understanding of how people make choices allows 'choice architects' to purposefully influence the choices users of their architectures ultimately make.
13. Anderson (2012) is a prominent resource for life planning process.

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References

- Anderson, C. (2012). Money Quotient website. <http://moneyquotient.org/>
- D. L. Sharpe (2008). ‘The Efficacy of Life Planning Communication Tasks in Developing Successful Planner-Client Relationships,’ *Journal of Financial Planning*, 21(June): 66–77.
- Anthes, W., and S. A. Lee (2001). ‘Experts Examine Emerging Concept of Life Planning,’ *Journal of Financial Planning*, 14(June): 90–101.
- Bodie, Z., R. C. Merton, and W. Samuelson (1992). ‘Labor Supply Flexibility and Portfolio Choice in a Life-Cycle Model,’ *Journal of Economic Dynamics and Control*, 16(3–4): 427–49.
- L. B. Siegel, and R. N. Sullivan, eds. (2008). *The Future of Life Cycle Saving and Investing*, Second Edition. New York, NY: The Research Foundation of CFA Institute. <http://www.cfapubs.org/toc/rf/2008/2008/1>
- Bromberg, J., and A. P. Cackley (2013). ‘Regulating Financial Planners: Assessing the Current System and Some Alternatives,’ in O. S. Mitchell and K. Smetters, eds., *The Market for Retirement Financial Advice*. Oxford, UK: Oxford University Press.
- Chai, J., W. Horneff, R. Maurer, and O. S. Mitchell (2011). ‘Optimal Portfolio Choice over the Life Cycle with Flexible Work, Endogenous Retirement, and Lifetime Payouts,’ *Review of Finance*, 15(4): 875–907.
- Fama, E. F., and K. R. French (1992). ‘The Cross-Section of Expected Stock Returns,’ *Journal of Finance*, 47(2): 427–65.
- Fisher, I. (1930). *The Theory of Interest*. London: Macmillan.
- Friedman, M. (1957). ‘The Permanent Income Hypothesis,’ in M. Friedman, ed., *A Theory of the Consumption Function*. Princeton, NJ: Princeton University Press, pp. 20–37.
- Heckman, J. (1974). ‘Life Cycle Consumption and Labor Supply: An Explanation of the Relationship between Income and Consumption Over the Life Cycle,’ *The American Economic Review*, 64(1): 188–94.
- Hogan, P. (2007). ‘Life Cycle Investing Is Rolling Our Way,’ *Journal of Financial Planning*, 20(May): 46–54.
- (2012). ‘Financial Planning: A Look from the Outside In,’ *Journal of Financial Planning*, 25(June): 54–60.
- Ibbotson, R. G., P. Chen, M. A. Milevsky, and X. Zhu (2007). *Lifetime Financial Advice: Human Capital, Asset Allocation, and Life Insurance*. Charlottesville, VA: The CFA Institute.
- R. A. Sinquefeld (1977). *Stocks, Bonds, Bills, and Inflation: The Past (1926–1976) and the Future (1977–2000)*. Charlottesville, VA: Financial Analysts Research Foundation.
- — (2012). *Stocks, Bonds, Bills, and Inflation 1926–2011*. Chicago, IL: Morningstar. http://corporate.morningstar.com/ib/documents/Brochures/2012_SBBIHandout_SAMPLE.pdf
- Kiplinger (2012). Test Your Risk Tolerance. <http://www.kiplinger.com/tools/risk-find.html>
- Markowitz, H. M. (1952). ‘Portfolio Selection,’ *Journal of Finance*, 7(1): 77–91.
- Milevsky, M. A. (2008). *Are You a Stock or a Bond? Create Your Own Pension Plan for a Secure Financial Future*. Upper Saddle River, NJ: FT Press, pp. 13–45.

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- Modigliani, F., and R. H. Brumberg (1954). 'Utility Analysis and the Consumption Function: An Interpretation of Cross-section Data,' in K. K. Kurihara, ed., *Post-Keynesian Economics*. New Brunswick, NJ: Rutgers University Press.
- Prochaska, J. O., J. C. Norcross, and C. Diclemente (1994). *Changing for Good*. New York: William Morrow.
- Scott, J. S., W. F. Sharpe, and J. G. Watson (2008). 'The 4% Rule—At What Price?' *Journal of Investment Management (JOIM)*, 7(3): 1–18.
- Sharpe, W. F. (1964). 'Capital Asset Prices—A Theory of Market Equilibrium Under Conditions of Risk,' *Journal of Finance*, 19(3): 425–42.
- Siegel, J. J. (1994). *Stocks for the Long Run*. New York: McGraw-Hill.
- Taleb, N. N. (2001). *Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets*. New York: Random House.
- Thaler, R., and C. Sunstein (2008). *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven, CT, and London: Yale University Press.
- Turner, J. A., and D. M. Muir (2013). 'The Market for Financial Advisers,' in O. S. Mitchell and K. Smetters, eds., *The Market for Retirement Financial Advice*. Oxford, UK: Oxford University Press.