

PART

# One

## Framing the Problem

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# Portfolio Focus and Stage of Life

## Objectives

- Why retirement income planning differs from accumulation
- The danger of drawdown plans

In the same way that saving for a child's wedding is different from actually planning the wedding, planning to live *in* retirement is different from planning for the far-off act of retiring. Every few years a new financial panic ushers in a series of stories about retirees and those nearing retirement having their fears raised and their hopes dashed because their portfolios are not set up to protect their lifestyle during retirement. The goal of this book is to help you transition and manage your client's (or your own) portfolio from a generic retirement fund to a portfolio that will see them through to the end. So let's get to it.

For most of your clients, retirement isn't just another stage in the evolution of their portfolios. It is a main reason why they saved part of their incomes and created their portfolios. The point of this brief chapter is to introduce you to some of the reasons for rethinking the construction of such portfolios so that they meet this objective and other objectives your clients desire. At some point, the client's priorities will begin to shift from accumulation of assets to maintenance of lifestyle. As you will see, switching the focus of the portfolio may utilize familiar products but requires changes in portfolio management. In later chapters, we'll discuss methods for transitioning clients and building "normal" looking portfolios designed for maintenance of lifestyle without foregoing aspiration. In this chapter, we focus on reasons that retirement requires a different approach from that of shifting the accumulation portfolio into reverse.

In this first chapter, we walk through examples to sow the idea of why a "balanced" portfolio may not last through retirement; how retirement saving differs from creating retirement income; how fixing the spending

level (variable weights) of a typical portfolio can leave the client vulnerable to running out of money too soon; how fixing the depletion weights (variable spending) in a typical portfolio can lead to undesirable swings in the client's lifestyle; a section on retiring at the wrong time—which I call the Murphy's Law of timing retirement.

We also discuss the production industry's tendency to focus on single products that are supposed to act as magic bullets but usually only appeal to a narrow segment of the client base. In brief, we will contrast products with solutions. Clients want solutions, products may enable or be part of solutions, but it is rare that a product is the solution.

## **A "BALANCED" PORTFOLIO APPROACH MAY NOT LAST THROUGH RETIREMENT**

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Balanced portfolios are great for accumulating wealth within one's comfort level, but eventually collecting assets must give way to deploying assets. Much of the inadequacy of maintaining balance as the goal will be fleshed out in later chapters. What I mean by this section's provocative heading is that most of *Modern Portfolio Theory* (MPT), and the portfolio advice that flows from it, is geared toward an arbitrary accumulation portfolio. An accumulation portfolio is unconstrained by the need for meeting drawdown cash-flow needs. For an accumulation portfolio, the main concern is maintaining a portfolio's balance of risky and safe assets to let the portfolio grow at a rate and risk level at which the client is comfortable. In accumulation, the problem is how to make the client's portfolio grow while letting both of you sleep at night. In retirement, the game is to enable the client to meet or exceed lifestyle needs each and every year, while making sure that the money and aspirational goals will survive. Sports metaphor: Saving for retirement is largely an offensive game and retirement income planning is a combination offensive–defensive game.<sup>1</sup> We show you how to implement both static and active accumulation plans and provide you with the means to defend them not just for the average retirement, but for every retirement.

In retirement, the problem is to maintain a lifestyle; a lifestyle that must be funded and defended. It can be funded partially from Social Security and defined benefit pensions, but also from the client's portfolio. The idea of risk versus return is not wrong; however, in retirement, the probability of outliving one's money becomes a very serious issue, especially when markets are stressed. Drawdown plans are very sensitive to down-market conditions early in retirement. Defending a lifestyle against unforeseen liabilities such as health or personal injury problems will be discussed, but the focus of

this book is on things within your control as a financial adviser and having flexibility designed into the portfolio for the things that are out of your or your client's control.

### **Fixed Spending Levels (Variable Weights) and Shortfall Risk**

Why worry so much about the defensive game? If the market tanks right before or just after retirement (as in 1973, 2000, or 2008), then your client may end up in a big hole and forced to eat “seed corn” in order to maintain lifestyle. On the other side, if the defensive stance is too rigid, you will be unable to adjust for contingencies and opportunities. To harp on the downside for a moment: Depending on how and how fast the market and portfolios recover determines whether eating the seed corn was merely a dangerous or a fatal mistake. Improperly defended, your client risks what is termed a *shortfall*. Shortfall risk can become an existential problem once your client stops generating outside income.

Consider the lucky, the unlucky retiree, and the average retiree who each need the money to last for 20 years (Table 1.1). A string of positive returns during the first 10 years of retirement means that this lucky individual is able to withdraw \$50,000 per year without running out of money.

Table 1.1 shows the lucky retiree who gets a ride on a bull market early and is able to make the money last with plenty of room to spare. Note that in the remaining amount, after taking a withdrawal at the end of the year, is the amount with which you begin the next year. Table 1.2 shows the unlucky retiree who attempts the same drawdown strategy but retires into the teeth of a bear market. Here, a string of negative returns at the beginning of retirement means that this unlucky individual runs out of money after 11 years. This performance is worse than having put the money in a mattress. It begs the question that if keeping cash would work with certainty, what would it take to secure the lifestyle but keep open the opportunity for upside?

In both cases (Table 1.1 and Table 1.2), the average return was zero and only the ordering of the returns differed. In a later chapter, we'll return to this individual who started with \$1 million and needed \$50,000 per year for 20 years. We will show that this individual's retirement was fully funded and that making it work should have been a no brainer.

Suppose now we consider the “average” retiree. For this person, we assume that the rate of return is always the average return. In this case, with an average rate of return of 0 percent, starting at \$1 million and taking out \$50,000 per year will last exactly 20 years. Although the returns data are contrived, these examples demonstrate clearly that a standard drawdown strategy has potentially large risks for a retiree. In any drawdown

**TABLE 1.1** The Lucky Retiree Whose Funds Will Last

Period	Beginning Amount	Lucky Return	End of Period	Withdrawal	Remaining
1	\$1,000,000	10%	\$1,100,000	\$50,000	\$1,050,000
2	\$1,050,000	10%	\$1,155,000	\$50,000	\$1,105,000
3	\$1,105,000	10%	\$1,215,500	\$50,000	\$1,165,500
4	\$1,165,500	10%	\$1,282,050	\$50,000	\$1,232,050
5	\$1,232,050	10%	\$1,355,255	\$50,000	\$1,305,255
6	\$1,305,255	10%	\$1,435,781	\$50,000	\$1,385,781
7	\$1,385,781	10%	\$1,524,359	\$50,000	\$1,474,359
8	\$1,474,359	10%	\$1,621,794	\$50,000	\$1,571,794
9	\$1,571,794	10%	\$1,728,974	\$50,000	\$1,678,974
10	\$1,678,974	10%	\$1,846,871	\$50,000	\$1,796,871
11	\$1,796,871	-10%	\$1,617,184	\$50,000	\$1,567,184
12	\$1,567,184	-10%	\$1,410,466	\$50,000	\$1,360,466
13	\$1,360,466	-10%	\$1,224,419	\$50,000	\$1,174,419
14	\$1,174,419	-10%	\$1,056,977	\$50,000	\$1,006,977
15	\$1,006,977	-10%	\$906,279	\$50,000	\$856,279
16	\$856,279	-10%	\$770,652	\$50,000	\$720,652
17	\$720,652	-10%	\$648,586	\$50,000	\$598,586
18	\$598,586	-10%	\$538,728	\$50,000	\$488,728
19	\$488,728	-10%	\$439,855	\$50,000	\$389,855
20	\$389,855	-10%	\$350,869	\$50,000	\$300,869

**TABLE 1.2** The Unlucky Retiree Whose Funds Run Out Too Soon

Period	Beginning Amount	Unlucky Return	End of Period	Withdrawal	Remaining
1	\$1,000,000	-10%	\$900,000	\$50,000	\$850,000
2	\$850,000	-10%	\$765,000	\$50,000	\$715,000
3	\$715,000	-10%	\$643,500	\$50,000	\$593,500
4	\$593,500	-10%	\$534,150	\$50,000	\$484,150
5	\$484,150	-10%	\$435,735	\$50,000	\$385,735
6	\$385,735	-10%	\$347,162	\$50,000	\$297,162
7	\$297,162	-10%	\$267,445	\$50,000	\$217,445
8	\$217,445	-10%	\$195,701	\$50,000	\$145,701
9	\$145,701	-10%	\$131,131	\$50,000	\$81,131
10	\$81,131	-10%	\$73,018	\$50,000	\$23,018

strategy, it is not sufficient to look at the average case; the order of returns will matter, and it will matter a lot.

Another way of saying what I'm trying to get across is that modern portfolio theory creates good portfolios that work *on average*. For retirement income, however, the problem switches to ensuring that the income generating capacity of the portfolio works *regardless* of the path taken by the market but still has almost the same upside potential. There are both simple, passive methods for ensuring sufficient yearly income and methods that require more activity and thereby put more at risk that may or may not provide greater upside. The best approach for a particular person requires knowledge about that person; but we'll go through a variety of approaches that you and your client may want to use.

Making your client's money last does not mean putting everybody in bonds or annuities. It means managing their funds in a way that has them prepared for each year's needs. In many cases, it merely means taking advantage of the fact that bonds don't just dampen portfolio volatility, but they are generally scheduled to pay fixed amounts on set dates plus their face value on maturity.<sup>2</sup> Throughout the book, we explore both passive and active ways to take and maintain control of a portfolio throughout retirement. Advisers should come away with a firm grasp on how to help their clients, and frankly, *sell* the proposition. If you're not an adviser and not the type to do it yourself, you'll come away knowing how to interact more productively with your adviser, so that your adviser can act as an agent able to understand and meet your goals.

Here's the key concept: Once your client begins thinking of retirement, you want to help them to understand what they need as a lifestyle *floor* (the minimum amount of funding required for the client to keep their lifestyle viable) and begin to shift their portfolio's focus from pure accumulation, with its emphasis on maintaining balance, to a stance that protects their lifestyle while still offering the potential for upside. This floor isn't necessarily what they want to spend to maintain a lifestyle; it is what they need to spend to maintain their lifestyle. Protecting a lifestyle floor means changing the rebalancing rules that are used in accumulation to ensure that floor's protection.

### **Fixed Depletion Weights (Variable Spending) and Lifestyle Risk**

There is an alternative that some of you may have already considered. It is possible to take a fixed proportion each year, while letting the amount vary depending on market conditions. If you think of someone starting out with 100 shares and they want to make the funds last for 20 years, then you could sell 5 shares per year. In such a case the fund will last, but they may

end up with a few lean years and a few fat years along the way. For example, we consider our lucky, unlucky, and average retirees using this approach. With an average return of zero, our average retiree will take out \$50,000 per year. But our lucky and unlucky retirees will end up with the consumption paths shown in Table 1.3.

A string of positive returns during the first 10 years of retirement means that except for the final year this individual supports a lifestyle greater than \$50,000 per year.

Having the bull market at the beginning of retirement, “Lucky” was able to maintain a lifestyle that provided little in the way of income stability for planning but did provide a few fat years along the way. However as with drawdown plans, for the unlucky retiree of Table 1.4 who follows the same rule but gets hit by very different market dynamics, the scheme does not work nearly as well.

With the first 10 years of Table 1.4 sporting negative returns, this individual supports a lifestyle that can only be described as grim relative to sticking the money in a mattress.

**TABLE 1.3** The Lucky Retiree Enjoys a Well-Funded Lifestyle

Period	Beginning Amount	Return	End of Period	Lucky's Withdrawal	Remaining
1	\$1,000,000	10%	\$1,100,000	\$55,000	\$1,045,000
2	\$1,045,000	10%	\$1,149,500	\$60,500	\$1,089,000
3	\$1,089,000	10%	\$1,197,900	\$66,550	\$1,131,350
4	\$1,131,350	10%	\$1,244,485	\$73,205	\$1,171,280
5	\$1,171,280	10%	\$1,288,408	\$80,526	\$1,207,883
6	\$1,207,883	10%	\$1,328,671	\$88,578	\$1,240,093
7	\$1,240,093	10%	\$1,364,102	\$97,436	\$1,266,666
8	\$1,266,666	10%	\$1,393,333	\$107,179	\$1,286,153
9	\$1,286,153	10%	\$1,414,769	\$117,897	\$1,296,871
10	\$1,296,871	10%	\$1,426,558	\$129,687	\$1,296,871
11	\$1,296,871	-10%	\$1,167,184	\$116,718	\$1,050,466
12	\$1,050,466	-10%	\$945,419	\$105,047	\$840,373
13	\$840,373	-10%	\$756,335	\$94,542	\$661,793
14	\$661,793	-10%	\$595,614	\$85,088	\$510,526
15	\$510,526	-10%	\$459,474	\$76,579	\$382,895
16	\$382,895	-10%	\$344,605	\$68,921	\$275,684
17	\$275,684	-10%	\$248,116	\$62,029	\$186,087
18	\$186,087	-10%	\$167,478	\$55,826	\$111,652
19	\$111,652	-10%	\$100,487	\$50,243	\$50,243
20	\$50,243	-10%	\$45,219	\$45,219	\$—

**TABLE 1.4** The Unlucky Retiree Lives a Constrained Lifestyle

Period	Beginning Amount	Return	End of Period	Unlucky's Withdrawal	Remaining
1	\$1,000,000	-10%	\$900,000	\$45,000	\$855,000
2	\$855,000	-10%	\$769,500	\$40,500	\$729,000
3	\$729,000	-10%	\$656,100	\$36,450	\$619,650
4	\$619,650	-10%	\$557,685	\$32,805	\$524,880
5	\$524,880	-10%	\$472,392	\$29,525	\$442,868
6	\$442,868	-10%	\$398,581	\$26,572	\$372,009
7	\$372,009	-10%	\$334,808	\$23,915	\$310,893
8	\$310,893	-10%	\$279,804	\$21,523	\$258,280
9	\$258,280	-10%	\$232,452	\$19,371	\$213,081
10	\$213,081	-10%	\$191,773	\$17,434	\$174,339
11	\$174,339	10%	\$191,773	\$19,177	\$172,596
12	\$172,596	10%	\$189,855	\$21,095	\$168,760
13	\$168,760	10%	\$185,636	\$23,205	\$162,432
14	\$162,432	10%	\$178,675	\$25,525	\$153,150
15	\$153,150	10%	\$168,465	\$28,078	\$140,388
16	\$140,388	10%	\$154,426	\$30,885	\$123,541
17	\$123,541	10%	\$135,895	\$33,974	\$101,921
18	\$101,921	10%	\$112,113	\$37,371	\$74,742
19	\$74,742	10%	\$82,217	\$41,108	\$41,108
20	\$41,108	0%	\$41,108	\$41,108	\$—

Fixing the depletion weights and allowing the amount consumed to vary each year will always stretch the funds as far as needed, but is not always a satisfying approach. When returns are constant and without volatility, flexible withdrawals provide stable consumption. However, for portfolios having elements of risk, anyone who is even moderately risk averse will prefer a smoother, more predictable consumption path.

### Falling for Murphy's Law of Timing Retirement

For most people, retirement isn't a spur of the moment act but part of a premeditated plan. Often the premeditation is colored by the current state of the economy as a whole and portfolio performance in particular. When markets are booming, people have a sense of financial well-being. That may lead some to underweight the probability or suddenness of a market downturn. This sense of well-being may make some more prone to choose early retirement after a long period of prosperity and near a market peak. This would be Murphy's Law of retirement: People tend to retire just before a

market downturn and are thus more likely to be unlucky. We want to show you how to protect their gains in a way that allows for participation in opportunities for growth while managing against the risk of degradation in lifestyle. This further helps avoid the blame game and the potential for questions about suitability.

### **Drawdown Plans Are Sensitive to Longevity**

All drawdown plans, whether fixing spending levels or fixing portfolio weights, are sensitive to longevity. The more that an adviser tries to optimize a drawdown plan to cover a retirement span, the greater the sensitivity of the plan's likelihood of success to living past the expected span's terminus.

For the fixed spending level plans, the longer the stream of income is expected to flow, the greater the probability that any depletion rate will fail. Few people want to constrain their lifestyle needlessly. That means that there is an incentive to seek the highest rate of drawdown that will be expected to work. But the rate that ought to work for a 10-year span is unlikely to be successful for a 30-year span. Advisers run the risk that the higher they try to manage or optimize a drawdown plan's cash flows, the greater the probability that the plan will run out of money if the client is blessed with longevity.

For the variable spending plans, there is also a danger in longevity. In a mathematical sense, the risk here can be somewhat mitigated by adjusting the drawdown rate to reflect conditional life expectancy at each point in time. However, what works mathematically is not necessarily sensible. The level of spending that falls mathematically out of a variable spending plan may not be high enough to sustain lifestyle. The likelihood that a variable spending plan will yield cash flows that are too low to sustain lifestyle is greater when the plan is adjusted for longevity.

### **RETIREMENT SAVING VERSUS RETIREMENT INCOME: AN ILLUSTRATION**

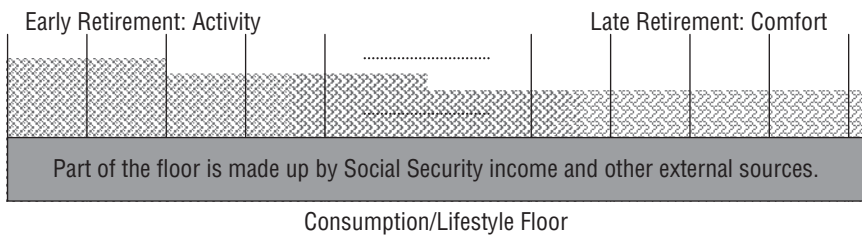
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Conceptually, the retirement saving problem is a problem of growing as big a pot as possible given a client's level of risk aversion. Once retired however, each client needs to maintain a lifestyle that works for him or her. Instead of thinking of the metaphor of the pot that keeps growing, what you want to do is begin to think of a problem where you create a floor amount of income for each year of retirement and your goal is to never let the client fall below the floor. As shown in Figure 1.1, accumulation eventually gives

**Before the Retirement Planning Phase: Grow the Portfolio**



**Beginning with Retirement Planning: Protect the Lifestyle**



**FIGURE 1.1** Growing the Portfolio and then Protecting the Lifestyle

way to decumulation. It is useful to lay out assets and match desires against abilities, recognizing that some of their income may come from external sources and that the client may anticipate a slowing down of their lifestyle.

If your clients have been contributing to Social Security, or have other forms of social income such as veteran’s benefits, then they will be eligible to receive benefits that can defray some of their lifestyle costs. In addition, although the participants of defined benefit retirement plans have become rare outside of governmental employment, some clients may get such income. Social Security and defined benefit plans aside, it’s all up to remaining financial and human capital sources.

**PRODUCTS VERSUS SOLUTIONS**

Retirement income is a multifaceted problem. The objectives include securing a lifestyle, having the ability to meet contingencies, and being able to aspire to an improved lifestyle. The difficulties that people face include risks that the adviser can control and risks outside the adviser’s control. The adviser can help mitigate market risks, credit risks, longevity risks, inflation

risks, some of the risks associated with changing tax laws, and certain health risks. But he or she cannot control spending risks, public policy risks, and uninsurable catastrophic events. The focus of this book is on managing for and through the difficulties and finding solutions that help prevent difficulties.

Products are not solutions, but they help to effect solutions. With different segments for lifestyles relative to wealth, risk aversion, health, and longevity, there will be different solutions. Quite often products are touted as solutions. In a few cases, products exist that meet the needs of a particular slice of a segment. This book, however, does not endorse individual products. There are no products that offer solutions for all segments. Products have pros and cons for particular segments. For some segments, annuities are perfect, for others capital markets products are a better choice, for still others a hybrid approach combining capital market products with insurance-related products can be appealing.

This book weighs product types for their ability to help effect solutions for individuals. We show how to build portfolios and, where necessary, manage the risk within the portfolios. In most cases, the right solution is static or, with occasional rebalancing, nearly static. There are solutions where the risk needs to be actively managed.

## **SUMMARY**

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This chapter showed that traditional portfolios, built for accumulation of wealth, frequently fail during withdrawal in retirement. In a nutshell, the problem is that traditional portfolios are designed around the principle of finding what is, on average, the best alternative—and finding the best portfolio for an individual client out of those that will not fail. These first few examples are designed to reinforce the notions that drawdown plans suffer from major weaknesses.

- When making withdrawals the order of returns matters
- The timing of retirement can have a significant impact on the likelihood of success or failure
- Unexpected shocks, even one-time shocks, can destroy a plan
- Outliving ones assets becomes a more acute risk for an “optimized” withdrawal strategy