It's the Goals Management Process, Stupid

Ron Madey, CFA®, Chief Investment Officer

March 22, 2018

The Challenge

In the 1992 presidential campaign, strategist James Carville coined a variation of the phrase, "It's the economy, stupid." The phrase was meant for the internal audience of Bill Clinton's campaign workers, but it became the de facto slogan for the entire campaign. In a recent article on kitces.com, Michael Kitces asks the question in the title: "Is Financial Planning Software Incapable of Formulating an Actual Financial Plan?" He went on to answer the question with a resounding yes – "… ***virtually*** (emphasis added) *no financial plan today actually constitutes a real 'plan' for anything. After all, the whole point of planning is to formulate the strategy of how to handle a range of possible future scenarios.*" Here, he is talking about scenario planning. More generally, he's talking about the goals management process.

The industry veteran goes on to share many insights in the article. Here are a few:

1. "In reality, most people don't even know how to set long-term financial planning goals in the first place, until they actually see what the possible scenarios are!"
2. No financial plan ever survives contact with real life - formulating a real plan to achieve goals requires real plan monitoring that enables clients to make adjustments as real life unfolds.
3. There is a difference between uncertainty *about* the future and uncertainty about what to *do* in the future.

We generally agree with these insights. However, we appear to have been remiss in getting our message out to Mr. Kitces or he would have noticed that *the Wealthcare process does in fact produce a real plan and real monitoring that allows clients to make adjustments as life unfolds.* In fairness, he did say "virtually" which gives him some wiggle room, and we don't have a process that considers contingency plans for just a downside scenario or two. We have a process that considers many the downside scenarios (and upside ones), as well as the panoply of choices the client has available to make plan and/or lifestyle adjustments as life unfolds. We will have to invite him for a demo.

The Great Conversation

In the meanwhile, let's take a closer look at his insights above and how we address them with our patented process. First, to the point that most people don't know how to set goals until they see what the possible scenarios are, we would add that most planning software does not effectively help people set financial goals, nor manage them as life unfolds. *A couple reasons why most financial planning software misses the mark is that it frames 1) goals as point estimates and 2) priorities in simple, absolute rank order terms. There is never a single number for each goal, nor a rank absolute set of priorities. In reality, people think of goals in terms of ranges and of priorities relative to* progress – meaning your relative priorities change as you progress from acceptable to ideal.

Think of that upcoming holiday party where you catch up with friends. The conversation turns to retirement dreams and plans… and we start talking about life scenarios, not market scenarios… how, when and where your friends want to retire and what is on their bucket list:

Friend: "We really want to go to the Galapagos and the Great Barrier Reef. It would be nice to go to a few European ski destinations too, Zermatt perhaps. When we retire, it would be nice to have a $50,000 a year travel budget, but we could probably hit the high points on $15,000 a year."

You: "I would love to ski Zermatt too. When do you think you can retire?"

FOR INVESTMENT PROFESSIONAL USE ONLY

Friend: "Five years from now would be nice, but if I work all the way to 65, that would be OK if it gets us our travel budget. We don't spend that much on basic lifestyle, maybe $75,000 a year, but we could cut that back to $40,000 or $50,000 once the kids are launched and the mortgage is paid or we downsize… maybe a small condo at the beach! We are more about the experience than the possessions. We have enough things and we have a great retiree medical plan, which is a relief!"

You: "Ah, the kids. Where do you see them going to school?"

Friend: "If they can get into an Ivy, I'd love to be able to support that, but $65,000 a year for two kids is a big nut. We might have to stick with the state school budget. I'll let you know when one gets into Stanford and the other-Harvard. Ha!"

You: "Yeah, if they get into a great school, you want them to be able to take full advantage and not come out burdened with loans. Ours are looking at California schools. We might have to move there for the in-state tuition. Otherwise, we will probably leave them less than we'd like to. "

Friend: "I hear you. We would like to leave the kids $1,000,000, but if it is just $250,000, that's OK."

What a great conversation! You have almost everything you need to build a financial plan. Just add assets and perhaps a few more goals and *relative* priorities. If you let-no-*encourage* people to dream, then there will be goals that are not attainable today that may be attainable tomorrow. If you don't capture these dreams, then they are not in your contingency plans. Not all contingency plans have to focus on failure. The problem is that virtually all the financial planning software I have come across in my 30-year career is not able to handle the goal ranges to produce a single, *unified*, goal management plan. Instead, you need Plan A, B, C… and Z… the permutations of alternative scenarios of goal packages are endless, and we haven't even started talking about market scenarios.

Surprise! Software that Works the Way People Think

What's the alternative? A financial plan and a *goals management process* by Wealthcare. Weathcare's financial planning software is *designed to work with the way people think*. Our patented process uses an *acceptable to ideal range for every goal*, but it doesn't stop there. You have to establish *relative* priorities among the goals, not just a simple rank order of which goal is most important to the least, as relative priorities change as you progress from acceptable to ideal. Further, the process of pairwise rankings of one goal to another is a powerful goal clarification exercise. After all, if we want to help people set and manage to long-term financial goals, we want to be sure the targeted financial goals reflect what they value most… right?

So, once the range from acceptable to ideal is established for each goal, we ask a series of questions. For example, to retire earlier, would you be willing to save more now, spend less in retirement, leave less to your kids, or take more risk? This is just one set of questions to determine the relative priority of one goal – retiring earlier relative to other goals. We need to do this with each goal. We call the framework for setting the relative priorities the Goals Exchange. Note the risk level is part of the Goals Exchange.

How much risk a client takes is usually tied to a risk tolerance assessment that expresses benefit and cost in terms of expected return and potential loss, but not in terms of client goals. *The Goals Exchange re-expresses risk tolerance in terms of client goals and what they value most*. For more on risk tolerance and the advantage of the goals exchange, see *Risk Tolerance Revisited*.

Now that we have a clear understanding of client dreams, goals and priorities, we can turn our attention to creating a unified plan that reflects what they value most today and provide them with a process that helps them reach for their ideals

while managing the risk of unacceptable outcomes as life unfolds. *It's time to add market scenarios and build the unified goal management plan.*

Enter the World of Monte Carlo

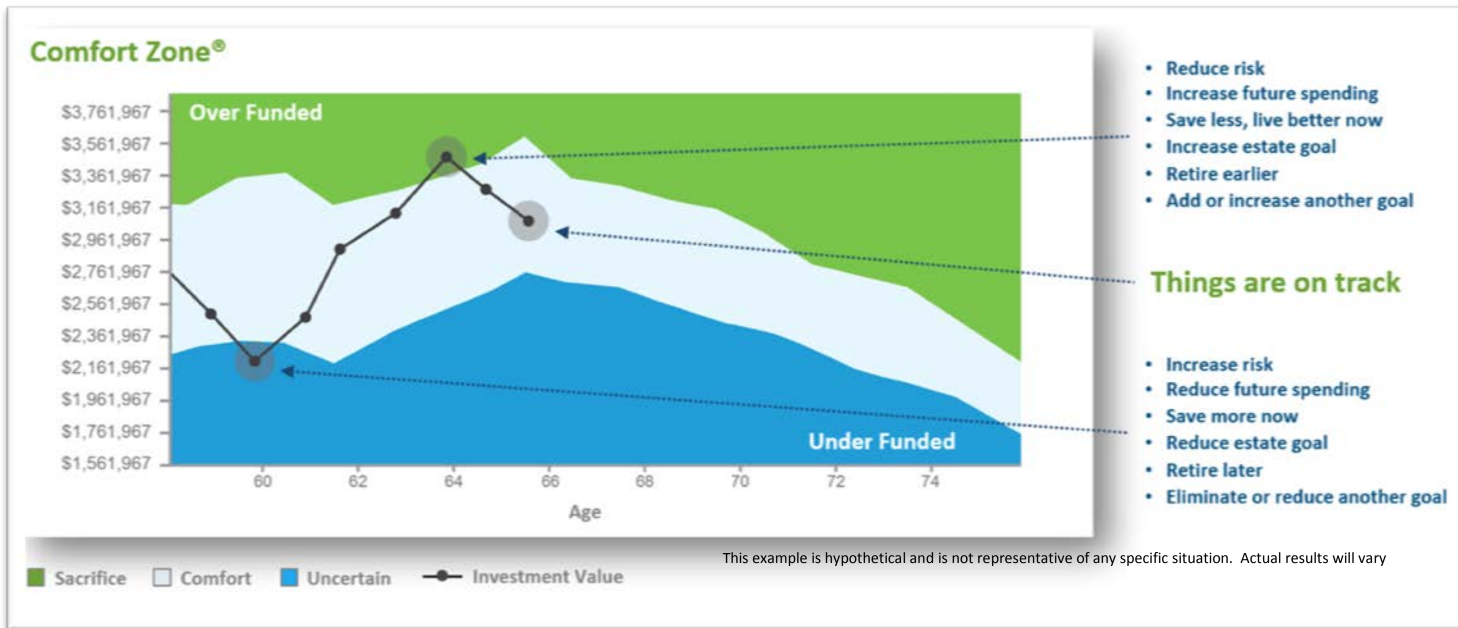
The shift in financial planning from straight-line planning based on an average expected return to Monte Carlo simulations was a major leap forward in risk assessment of a client's financial plan. As we all know, you rarely earn the *long-term* average return, and you never experience it each and every year. Yet, straight-line planning assumed just that. Of course, we could use the straight-line method to stress test a scenario using lower than average returns, or to test a scenario where there is a big market drop in the early years of the plan, but these are just a couple of special case scenarios that can occur from an infinite set of possibilities. What about a scenario where the big drop occurs just as your kids enter school? The year before you retire? What about a scenario of a crash followed by a raging bull market like we experienced from 2008/09? Or a raging bull market that ends in a crash like 2000? The possible scenarios one can explore and test are endless. The good news is that a good Monte Carlo tool lets you test them all. If you want to cherry pick a few bad market scenarios to explore, perhaps the ones you fear the most, you can but chances are you will experience a different bad market scenario than the one or two you chose. *The overall process of how you work with a Monte Carlo tool is what really matters and it is here that the Wealthcare process excels.*

With the goals exchange and acceptable to ideal goal ranges established, the Monte Carlo engine produces five alternative plans:

1. **The Ideal Plan** – Sets all your client's goals at the ideal level, including how much risk they take. Of course, if you really encourage your client to dream, this plan will have little chance of being successful… today, and that is a good thing. It gives you something to work toward with your client.
2. **The Acceptable Plan** – Sets all your client's goals at the acceptable level, including how much risk they take. If you help your client really explore their minimum acceptable needs, then for people with reasonable resources, this plan will have a near certain likelihood of success. This is not the client plan, but the minimum acceptable contingency plan. This plan provides the options for what the client might do in the case of adverse market scenarios and life events.
3. With the ideal and acceptable bounds defined, three additional plan choices are produced, all with similar probability of success – 82% to 83% (this is the middle of the Comfort Zone® discussed below).
    a. One that follows the strict rank order priorities subject to the minimum acceptable level for each goal.
    b. A second that bargains shops among the goals based on relative priority and the sensitivity of the probability of success to changes in each goal, with eye toward increasing the overall well-being of the client.
    c. The third depends on the plan characteristics presented. It may be the minimum risk plan or it may be another plan that seeks to make additional goal compromises.

The Comfort Zone® Framework

The advisor reviews the alternative plan choices with the client and the one that best matches the client preferences is selected for final adjustments. Once the final adjustments are made, a Comfort Zone is produced that shows the asset values required throughout the plan to remain between 75% and 90% confidence. Every quarter, the client receives a report that shows where the client's portfolio value plots. If their asset value remains in the Comfort Zone, no action is required. If it falls out of the zone, then new advice is provided and the client decides which goals are most important to preserve or expand at that time, and to what level. Yes… preserve or *expand*, because the client can be overfunded relative to their starting goals, and the overfunded status creates an opportunity to reach for more of their dream. The chart below illustrates:



Using the Comfort Zone framework, we identify an underfunded plan as one with less than a 75% chance of success – defined in the chart as the line separating the lighter blue and darker blue colors. We identify an overfunded plan as one with more than a 90% chance of success. The Comfort Zone is the lighter blue region representing the probability of success region ranging from 75% to 90%. We identify the asset value required to stay in the Comfort Zone throughout the length of the plan, and we track asset values against the plan every quarter or when there is a major event. The updated Comfort Zone is a key summary page of our quarterly report. *Not only do we show the client the path their assets need to follow to stay on track, we also enable them to make adjustments as life unfolds based on what matters most to them at the time. While there will always be uncertainty about the future, clients using this process have little doubt about what they can do in the future to stay on track, helping them make the most of their life with the resources they have at their disposal.*

The Elephant in the Room

So, let's deal with the elephant in the room. While most of the industry is focused on crafting plans that offer a 90% or 95% probability of success (5-10% probability of failure), we describe this probability level as overfunded. Why? The main reason is that a *95% probability of success is also a 95% probability of excess.* When you run 1,000 simulations and 950 of them meet or *exceed* your goals, you have a 95% probability of excess, *and the excess can be BIG*. The probability does not care whether you exceed your goals by one dollar or $10,000,000, but you should. You only live once. Does your client really want to live miserly, limit their life experiences, limit what they can do for their children, etc. and die on a mattress filled with $1,000 bills?

Here is a simple example of a "95% Confidence Plan." Let's say you have a client with $1,000,000. She wants to know how much she can withdraw each year for the next 30 years and still be able to leave the $1,000,000 to her children. She is comfortable with a balanced portfolio. Using your capital market assumptions, you determine the portfolio has an annual expected return of 7% and an annual risk of 10%. You run the simulation and tell her that if she wants to be 95% confident that she will leave at least $1,000,000, she can withdraw $35,000 a year, or a 3.5% withdrawal rate, but some of that will go to pay taxes. You can also estimate this number using the 30-year geometric return distribution based on the annual risk and return inputs.[1]

[1] See Michaud, Richard. "A Practical Framework for Portfolio Choice." Journal of Investment Management (2003).

The 30-year geometric return distribution for her portfolio has a mean of 6.5% and a risk of 1.8%. The 5th percentile return is 3.5%. Since she can be 95% sure she will earn at least 3.5% on her portfolio, she can withdraw $35,000 each year and leave $1,000,000 to her kids with only a 5% chance that she will have to make a reduction in her withdrawal amount to preserve the $1,000,000 bequeath.

But… what if she happens to earn the median return? She does have a 50% chance of earning at least the 6.5% 30-year geometric return. The 95th percentile return is 9.5%, meaning she also has a 5% chance of earning at least a 9.5% 30-year geometric return*. If she withdraws the $35,000 a year under the 95% Confidence Plan and earns the median return, then she will leave her kids over $3.6 million.* If she happens to earn the 95th percentile return, she will leave her kids more than $10 million… *a bit of an overshoot on her original $1 million goal.* Clearly, depending on how real life unfolds, there will be opportunities to revisit and update her goals to better align her money with her intentions – in the upside case, either by increasing her spending or increasing the amount *explicitly* intended for her children, or perhaps a little of both.

The Comfort Zone-based goals management process directly addresses the likelihood of both upside and downside adjustments, and when the need or opportunity arises, the client is prepared. They know at the start of the process what the likelihood is that the plan will need an adjustment, either up or down, within the next one, three and five years. They also know which levers they can pull – savings, retirement spending, retirement date, risk level, estate or other goal – to keep their resources aligned with what they value most and stay on track.

Target Date Funds, Living Dead and Other Oxymorons

How does this work over time? We are about to show you a "real world simulation." Yes, like jumbo shrimp, a real world simulation is an oxymoron. Perhaps less obvious, but as we will soon show you, a target date fund is not an effective strategy for goals-driven retirement investing, making a "target date strategy" another oxymoron. We will provide additional evidence of this in future research, but for now, we simulated a Comfort Zone based process in a backtest versus the popular target date approach. Here are the inputs, rules and results:

1. **The Plan Basics:**

People:	2 clients both aged 50
Retirement Age:	65 for both
Plan Length:	46 years (ends when female client dies at age 95)
Assets:	$1 Million in tax-deferred accounts
Saving Regimen:	$10,000 per year until retirement
Retirement Spending:	$105,000 per year beginning at retirement
Retirement Income:	Taxable Social Security income of $30,000 per year beginning at retirement
Estate Goal:	$1 Million

2. **The Allocation Process:**

   Target Date Glide Path: Start at 80% equities, decrease by 2% every year until 40% is reached, then decrease by 1% every year until 30% is reached, then constant at 30%.

   Comfort Zone Allocation Path: Start at 65%, then adjust dynamically among choices of 80%, 65%, 50% & 30% equities. Choice depends on the confidence level and priority of adjustment rules below.

3. Priority of Adjustment Rules for Comfort Zone Framework

A Comfort Zone plan starts with a confidence level in the middle of the Comfort Zone (about 82 to 83%). The plan is then subjected to the given historical market returns for the next historical year in the trial, and the plan confidence level is assessed. If it is above 90% or below 75%, adjustments are made using one or more of the following levers: a) retirement spending level b) estate target c) risk level (i.e., allocation % equity). In addition, when the plan's confidence is too high, the clients are advised to take a $10,000 bonus vacation during the year. Note that the priority of adjustment rules below reflect how a client *may* choose to make adjustments. While plausible, the rules below do not reflect any specific client. What clients actually do will depend on their preferences and situation.

Confidence Level Too High (Overfunded/Sacrifice):
When the plan's confidence level is too high, here is the order of the adjustments:

1) Bonus Vacation ($10,000)
2) Increase Retirement Spending by $10K per year
3) Increase Estate Goal by $200K
4) Decrease Risk by one allocation (e.g., from 65% to 50%)

Adjustments 2 thru 4 are repeated in order until the confidence level is as close to 83% as possible. These adjustments never exceed the following limits:

Retirement Spending:	$60K to $250K
Estate Goal:	$200K to $5 Million
Allocation:	30% to 80% equities

Confidence Level Too Low (Underfunded/Uncertainity):
When the plan's confidence level is too low, here is the order of the adjustments:

1) Increase Risk by one allocation (e.g., 65% to 80%)
2) Decrease Estate Goal by $200K
3) Decrease Retirement Spending by $10K/yr

Adjustments 1 thru 3 are repeated in order until the confidence level is as close to 83% as possible. These adjustments never exceed the limits given above.

4. The Simulation Process

Using annual market returns from 1926 to 2013 for Broad Domestic Equities, 7-10 Year Treasuries and Cash, we subject the plans described above to the market returns they would have experienced had the plan started at the beginning of a given historical year. We can use this technique to test the complete 46-year plan over many different starting years, ranging from 1926 to 1968. The first trial starts in year 1926 and ends in year 1971. The last trial starts in 1968 and ends in 2013. These returns are used to test both the Target Date Fund approach and the Comfort Zone approach to advising. All results are expressed in real terms.

5. The Results

Success Rates

Strategy	Ending Balance		Total Spending		Balance+Spending		Bankruptcies (<$0)		Under Target (<$1 Mil.)	
	Wins	Win%	Wins*	Win%	Wins	Win%	# Trials	% Trials	# Trials	% Trials
Target Date	35	81.4%	0	0.0%	9	20.9%	3	7.0%	6	14.0%
Comfort Zone	8	18.6%	43	100.0%	34	79.1%	0	0.0%	0	0.0%

Looking only at success rates, not dollar amounts, the Comfort Zone framework is clearly superior to the Target Date process. While the Target Date process has a higher ending balance more than 81% of the time, when total spending over the client lifetimes is added to the ending balance, reflecting total value to the client, the Comfort Zone framework wins almost 80% of the time. The Comfort Zone framework wins on total spending 100% of the time, yet has no bankruptcies, whereas the Target Date process has the clients going bankrupt 7% of the time, and missing the $1 million estate target 14% of the time.

Spending

Strategy	Avg Bonus	Avg Ret Spending				Actual Spend > Planned	
	Vacations	Wins	Win%	Avg Planned	Avg Actual	# Trials	% Trials
Target Date	0.0	0	0.0%	$105,000	$105,000	0	0.0%
Comfort Zone	12.2	43	100.0%	$111,744	$165,090	43	100.0%

"Avg. Planned" is average across all trials of the planned retirement spending amount at the time of retirement. "Avg. Actual" is average across all trials of retirement spending throughout retirement.

Spending is where the Comfort Zone framework is truly effective, giving clients confidence to make spending decisions without free floating anxiety about running out of money… everything is measured and adjustments are made as life unfolds. In the simulated backtest, the Comfort Zone framework dominates the Target Date, winning on average spending 100% of the time while also providing twelve $10,000 bonus vacations along the way. The difference in retirement spending is substantial, with the Comfort Zone framework providing almost 60% more in average annual spending in retirement.

Ending Balance – Estate Goal

Strategy	HIGH	AVG	LOW
Target Date	9,058,424	4,771,636	(486,360)
Comfort Zone	6,679,093	3,632,356	1,191,111

The first thing to notice about the ending balances is that both the Target Date and Comfort Zone processes grossly overshot the goal of $1,000,000 on average. This suggests even more spending would be possible in the real world, or the client would raise the estate goal. However, when looking at the low ending balance, the Comfort Zone framework still meets, actually marginally exceeds, the goal, whereas the Target Date process goes bankrupt and misses the mark completely.

The Journey and the Endgame

The above analysis demonstrates the power of the Wealthcare's patented goals management process and Comfort Zone framework. The framework not only helps clients manage the endgame, the destination that is retirement, but also puts them in control of the journey so they make the most of their one and only life. I for one want to make the most of mine, and the Comfort Zone framework is a tool to help me do so. Thanks Dave![2]

You cannot change your destination overnight, but you can change your direction overnight.
~Jim Rohn

[2] Dave Loeper is retired founder of Wealthcare and creator of our planning software and the Comfort Zone

©2018 Wealthcare Capital Management LLC and Wealthcare Advisory Partners LLC (collectively, "Wealthcare", "WCM", "WCAP", "we", "our", "us") are registered investment advisors with the U.S. Securities and Exchange Commission (SEC) under the Investment Advisors Act of 1940. All Rights Reserved.

GDX360® is Wealthcare's fiduciary process that integrates goals based planning with investment implementation that includes cost and tax management services designed to put clients first.

This content is intended to provide general information about GDX360™ as a Wealthcare service. It is not intended to offer or deliver investment advice in any way. Information regarding investment services are provided solely to gain an understanding of our investment philosophy, our strategies and to be able to contact us for further information. Results, views and opinions are subject to change at any time based on your investor profile, market and other conditions.

Examples and concepts used in this presentation are for illustrative, educational purposes and are not a representation or guarantee of specific results for any one specific existing client of Wealthcare Capital Management LLC or any of its other DBAs. In addition, Wealthcare Capital Management cannot guarantee any specific financial return results for any client or guarantee a client will in all circumstances of changing personal financial goals and market conditions be able to remain in a client's Wealthcare Plan "Comfort Zone®," as that term is illustrated in this presentation. Past performance is not a guarantee of future performance. Illustrative data used in the presentation regarding market, asset class or other investment returns or other investment statistics on exchange-traded funds and mutual funds, including average investor returns, is from sources believed reliable but not verified independently by Wealthcare Capital Management.

WealthcareGDX® and GDX360® are trademarks of Wealthcare Capital Management IP LLC.

TWO JAMES CENTER |1021 EAST CARY STREET, SUITE 1120 | RICHMOND, VA 23219 | 804.644.4711

WEALTHCAREGDX.COM