# Cash Balance Plan Risk-Guard Overview

by Rick Keast





## **Risk-Guard principals.**

Wouldn't you want your cash balance plan account to participate in a bull market, when prices are rising or are expected to rise? Wouldn't you want your cash balance plan account to go defensive and preserve capital in a bear market, when a market experiences prolonged price declines? To answer these questions, let us look at our Risk-Guard tactical asset allocation strategy.

### **Risk-Guard Phases**

Risk-Guard has three levels of algorithms that are used when managing risk for cash balance plans. These three phases tell us whether we are on the offense and fully invested in the market or are in a defensive position.



**Risk On** – when the market is relatively calm. The cash balance plan is fully invested in the equity markets.



**Risk Watch** — when the market is experiencing volatility and uncertainty. The "risk watch" signal has tripped, but not enough to go into full risk off mode. The algorithms will gradually go defensive when going from risk on to risk off. Conversely, the algorithms will gradually go back into the equity markets when going from risk off to risk on.



**Risk Off** – when the market is experiencing heightened volatility. The algorithms fully kick in and change the allocations in the cash balance plan to defensive mode and invests in those asset classes that are doing well in a down market or a stable value fund. The algorithms only move to "risk off" mode when the signals indicate the potential for a significant and prolonged market downturn.

When the algorithms are "risk on," the tactical asset allocation strategy is an active management style that looks for investment opportunities in the market. For example, it might be that within equities, it may be beneficial to own more small-cap companies than large-cap companies because small-caps are a better investment opportunity during a particular trend. The Risk-Guard algorithms provide an opportunity to invest the cash balance plan in the top performing funds available in the market.

Under this active type of strategy, the cash balance plan assets are in growth mode when the market is doing well and go to defensive mode when the market is not doing well. This strategy creates extra value by leveraging certain situations in the marketplace and employ a quantitative investment model to expose the imbalances among different asset classes. Let us take a closer look at the main objectives of the Risk-Guard principals.

## **Risk-Guard Objectives**

As mentioned above, Risk-Guard is a tactical asset allocation strategy that is an effective means to limit the drawdown risk in a cash balance plan. The Risk-Guard philosophy prioritizes managing drawdown risk as a key component for success and has been designed to have two distinct advantages:

- 1. *Managing Drawdowns:* By going to "risk off" mode during severe bear markets. This defensive posture is intended to mitigate downside risk when markets are volatile.
- 2. Range of Expected Returns: It is important to understand that the performance of the cash balance plan is designed to have expected returns based on the risk number of each portfolio. The objectives of the portfolios are not designed to consistently target or beat the returns of the S&P 500 or other major indexes; it is to pursue returns that are in the range of expected returns based on the risk of the portfolio.

# You can't control performance, but you can manage risk.

Investment returns are not linear. While any portfolio may have an average annual historical return, it is important to note that every year is different. When a portfolio is on its intended track, the expectation for any rolling time frame (let's say the next six months) will have a range of returns from negative to positive. You should recognize that this is normal and that our risk-managed portfolios are engineered to operate within an expected range.

Additionally, performance is an uncontrollable variable. Yet the industry always seems to focus on backward-looking historical performance. Unfortunately, you can never have the performance that already occurred. For most investors, when actual performance differs from their expectations based on past returns, they often make emotion-driven decisions such as chasing returns at market highs or selling in fear near market bottoms. Instead of focusing on the past, our approach is to manage your cash balance plan account based on drawdown risk. We strongly believe that maximum drawdown risk is a variable that can be effectively managed.

Given the fact that no one can predict future returns, it is important to understand that our cash balance portfolios have a range of expected return outcomes. The graphics shown below are our conservative (RSPC), moderate (RSPM), and aggressive (RSPA) portfolios that we manage for cash balance plans. The conservative portfolio (RSPC) has a risk score of 49 (out of 99) and the expected return over the next six months is between -9.45% to 13.22%. You can see the expected returns for the moderate (RSPM) and aggressive (RSPA) portfolios

as well. The risk scores and expected returns will change over time based on the historical performance of the funds that are included in the portfolio.



# Avoiding market drawdowns are your top priority.

Some view it as luck of the draw. You may retire after a lifetime of hard work just as the market falls. Your cash balance plan account balance would therefore be negatively impacted, and the potential effect could come as a total shock.

It would be bad luck that as you begin retirement and start withdrawing assets from your cash balance plan account for day-to-day living expenses the value of your account decreases significantly. Too many cash balance plan participants fail to realize that it is not only about the losses in one's account, but also the loss of time in which to recover.

## Losses have more of an impact than gains

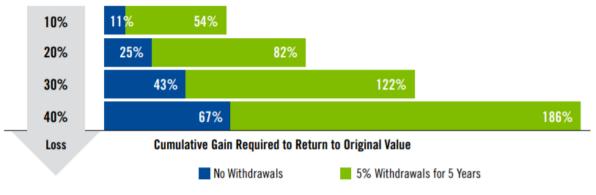
For example, if your \$100,000 cash balance plan account lost 20%, it would require a 25% gain to make up for the loss (see the following chart)<sup>1</sup>. After a loss, it takes a greater gain to return to your original value.



Source: Franklin Templeton

## Mathematical catch-up game

Let's look at some more examples (see the chart below). If your cash balance plan account lost 40%, it would require a 67% gain, without taking any withdrawals, to return to the original value<sup>1</sup>. What is even more worrisome is that if you were in retirement and taking 5% out of your cash balance plan account for living expenses, it would take a gain of 186% to make up for the sizeable loss! The math shows how important it is to avoid large downturns in the market, especially during the withdrawal phase.



Source: Franklin Templeton

### Risk-Guard – when our defense is your offense

Risk-Guard is a set of algorithms and an established process to determine when your cash balance plan account should be in "risk on" mode, meaning that it is in growth orientated equities, or it is in "risk off" mode and invested in a defensive stable value fund.

The underlying premise of Risk-Guard is that up-trending markets tend to have lower volatility and that is when you want to stay invested for as long as possible. Conversely, down-trending markets tend to have higher volatility and you want to go defensive to preserve capital.

It is important to note that our Risk-Guard process is not trying to time the market and pick market tops or bottoms or change with every 5-10% correction. Most strategies that try to pull this off end up over-trading and under-delivering. Risk-Guard is set up to avoid a severe loss like what happened in 2020 when the S&P 500 dropped over 30% due to COVID-19 (see the chart below). You can never time these moves perfectly but the goal of Risk-Guard is to avoid a substantial part of a huge drawdown.

S&P 500 1/1/2020 - 6/11/2020



Source: Redhawk Wealth Advisors, Inc.

Drawdowns are the most problematic risk for your cash balance plan account. Put a different way, the most important risk to you is the loss of capital, which is measured by peak-to-trough drawdown (from when the market reached its highest to when it reached its lowest point). Managing drawdown within predefined limits that you can understand will keep you on track toward your financial goals.

Our cash balance plan portfolios are built based on risk-tolerance objectives and are designed to perform within drawdown guidelines. Our stated drawdown risk objectives help you understand when a portfolio is performing within guidelines to stay on track to meet your long-term financial goals. Our approach involves re-engineering an asset allocation portfolio and relabeling its components based on risk from a quantitative perspective. The result is an intelligent portfolio, dynamically managed to fit your needs.

# Understanding your time horizon and risk number are key.

## What is your time horizon?

The amount of time you have until retirement is considered your time horizon and it is instrumental in determining how you should manage risk. The more time you have, the easier

it will be for your cash balance plan account to absorb risk. To balance both the income and growth levels of your cash balance plan account you will need to allocate your money according to your level of acceptable risk as well as the amount of time you have available to achieve your goals.

Remember, the longer your time horizon, the more volatility you can tolerate in your portfolio. For example, if you are pursuing a longer-term goal such as retirement, you will be most concerned with long-term growth and managing inflation risk. Your portfolio should be more heavily weighted in equities as these have historically provided the highest long-term returns and outpaced inflation by the widest margin. You may also want to put some money into fixed income to help mitigate the higher risks associated with equities. Keep in mind that equity funds offer long-term growth potential but will fluctuate widely and as such it is prudent to buffer the volatility with an allocation to the fixed income investments.

On the other hand, if you are already in retirement, you may need to rely heavily on the income from your cash balance plan account. Therefore, you may seek to manage income and manage risk of short-term losses. Your cash balance plan account will likely be weighted in fixed income investments (including a stable value fund), with some equities in the mix to maintain growth potential.

To create a portfolio based on time, you must realize that volatility is a bigger risk short term than long term. If you have 30 years to reach a goal, such as retirement, a market move that causes the value of your investments to plunge is not as big a danger, given that you have decades to recover. Experiencing the same volatility, a year before you retire, though, can seriously derail your plans.

To balance both the income and growth levels of a portfolio you will need to allocate your investment assets according to both your level of acceptable risk as well as the amount of time you have available to achieve your goals. To help determine the time frame you need for your investments, consider the following definitions:

- Long-Term Investor if your time horizon is more than fifteen years, then you should consider yourself a long-term investor.
- Intermediate-Term Investor if your time horizon is a minimum of five years and a maximum of fifteen years, then you should consider yourself an intermediate-term investor.
- *Short-Term Investor* if your time horizon is a period of one to five years, then you are a short-term investor.

## What is your risk number?

Your risk tolerance is the degree of variability in investment returns that you are willing to live with. You should have a realistic understanding of your ability and willingness to stomach large swings in the value of your cash balance plan account. For example, if you take on too much risk, you might panic and sell at the exact same time everyone else is panicking, thus locking in extensive realized losses.

Diversifying your cash balance plan account among several funds plays a major role in reducing risk. For instance, if one of your cash balance plan funds experiences a loss, the other funds may have a positive return at the same time, thus balancing out your risk. Having a diversified cash balance plan account is a wise practice and the benefits of diversification generally outweigh the risks.

If you invest all your money in a single fund and it has a bad year, you could lose a sizeable portion of your account. However, if only 20% of your money was in that fund, you still have the other 80% of your account working for you.

We use an application called Riskalyze<sup>2</sup> to help you see just how much risk you are taking or need to take in your cash balance plan account. Riskalyze provides you with a clear picture of

where you are in the risk spectrum and where you need to be. Simply put, it does a better job at capturing your appetite and capacity for risk.

A major mistake made by many cash balance plan participants is that when the markets pull back, they sell to protect their account and lock-in material losses. To exacerbate this ill-fated strategy, they then most likely sit out some or all of the ensuing recovery and then wait until they feel comfortable to get back in the market which is usually at or near the top.

The Riskalyze Risk Number<sup>3</sup> and corresponding risk/reward range (your comfort zone) allows you to quantify your level of risk. Most risk tolerance questionnaires are very subjective and do a poor job of accurately pinpointing your appetite for risk. With Riskalyze you are empowered by transparent, objective, well-defined, actionable expectations and the probability of success is quantified and unemotional.



Riskalyze is a great tool to quantify your risk, but what does your Risk Number mean? As you can see in the graphic above, if you score a 54 out of a maximum score of 99, you are

comfortable with the risk of possibly losing 11% while having the opportunity to gain 17% over the next six months.

If you can understand your appetite for risk, then you won't feel panicked at every bump or blip in your cash balance plan account. To help determine your risk profile, consider the following definitions:

- Conservative You can withstand and recover from losses up to a maximum of 5% of your cash balance plan account within a given year. Risk Number Range: 1-40.
- *Moderate* You can withstand and recover from a 5% to 15% loss in your cash balance plan account within a given year. Risk Number Range: 40-65.
- Aggressive You can withstand and recover from a 15% or more loss in your cash balance plan account within a given year. Risk Number Range: 65-99.

## Risk-Guard in action during COVID-19.

So, let's see how Risk-Guard operated during 2020 when COVID-19 rocked the markets<sup>4</sup>. As a company founded just prior to the 2008 financial crisis, Redhawk knows market turbulence is an inevitable part of a long-term investment strategy. We also understand that the emotional wear and tear of rocky markets can make it even more challenging to stomach.

#### The pandemic that changed everything

As you remember, in just a few short months, COVID-19 wreaked havoc on savings and investing for retirement:

- Non-essential businesses were forced to shut down and employees were either furloughed, laid-off, or worked from home.
- People that were unemployed could not contribute to their workplace retirement plan or receive company matching contributions.
- People that lived from paycheck to paycheck did not have any extra money put away to weather the storm.
- People had to take distributions or loans from their retirement plans, which lowered their potential returns in the long run.
- Assets significantly declined in personal and retirement plan accounts.

Also, many large employers decided to suspend matching contributions to retirement plans including Amtrak, Marriott, Macy's, La-Z-Boy, Expedia, Hilton, and Best-Buy. As of late April

2020, 12% of 816 companies representing 12 million workers had suspended matching contributions, according to a Willis Towers Watson survey. An additional 23% said they would or may halt them later in the year. Some workers were forced into retirement and started claiming Social Security benefits earlier than anticipated. When people claim Social Security before their "Full Retirement Age," they receive less in payments than if they had waited.

Between March 4 and March 11, 2020, the S&P 500 index dropped by 12%, landing in bear market territory. On March 12, 2020, the S&P 500 plunged 9.5%, its steepest one-day fall since 1987. Stock markets plunged in the wake of the coronavirus pandemic, with investors fearing that its spread would destroy economic growth. Supported by figures that suggested cases were leveling off in China, investors were initially optimistic about the virus being contained. However, confidence in the market started to wane as the number of cases increased worldwide. Investors were deterred from buying stocks, and this was reflected in the initial downward spiral of the markets. Remember, this is when the S&P 500 lost over 30% in just a few weeks.

Thankfully, the Federal Reserve (the Fed) acted swiftly and began to provide liquidity into the market and started to purchase Treasuries. In a matter of three months, the markets were back to where they started. This was the quickest rebound in the history of the markets.

The markets were very volatile during this period with the volatility index (VIX) ranging from 25.03 to 82.69 (the VIX is an implied volatility value calculated using specific S&P 500 Index option contracts and is used as a sentiment indicator). An index option contract gives the buyer the right, but not the obligation, to buy or sell an underlying index at a strike price on an expiration date. Therefore, a climbing VIX reflects bearish conditions in the S&P 500 and typically the markets. The VIX reached its highest level on 3/16/2020 when it hit 82.69. This was the highest reading for the VIX since 11/20/2008 when it closed at 80.86, which was at its highest during the financial crisis.

On June 8, 2020, the S&P 500 climbed back above where it began the year before the pandemic brought the United States economy to a standstill. After a few weeks of volatility when the market dropped over 30%, it became resistant to bad news. On April 29, 2020, when the Commerce Department announced that the economy shrank at a nearly 5% annual rate (its fastest drop since the 2008 recession) stocks rose 2.7%. When the Bureau of Labor Statistics published what was essentially the worst employment report on record which showed that more than 20 million jobs were lost in April 2020 driving unemployment to 14.7% (the highest since the Great Depression), stocks rose 1.7%.

As you can see in the following diagram, the S&P 500 reached its (then) all-time high on 2/19/2020. Then on 3/23/2020, the S&P 500 reached its lowest point during the pandemic. So, let's see how Risk-Guard behaved in the general market:

• On 2/24/2020, the algorithms went to "risk off" and exited equities and went into treasuries.

- On 3/23/2020, the S&P 500 went down 30.64% from its previous high.
- On 4/13/2020, the algorithms went to "risk on" and sold the positions in treasuries and invested back into equities. Accounts only experienced a 14.39% loss versus the 30.64% loss of the S&P 500.

In summary, Risk-Guard did its job and avoided most of the downturn!



Source: Redhawk Wealth Advisors, Inc.

Remember, the markets are always forward-looking, and discounts or rewards are based on anticipated headwinds and tailwinds. The markets become extremely volatile when uncertainty exists and is difficult to measure. During the pandemic, stocks swung wildly and often suggesting a disconnect with the terrible economic and public health news of the moment. A steady hand is necessary to navigate troubled markets, and with Risk-Guard we continue to monitor the market and err on the side of caution via downside protection.

## What Could Your Cash Balance Plan Look Like?

Just by *restating your plan* to allow for the market return interest credit method and *utilizing our Risk-Guard process*, your account balance could grow as shown in the chart below (see column circled in green compared to the column circled in blue).

**Putting it all together...an extra \$251,629 in retirement in just eight years** (see column circled in brown)!

	Fixed Rate Interest Credit Contribution	Fixed Rate Interest Credit Promise	Fixed Rate Interest Credit Fluctuating Contribution	Fixed Rate Interest Credit Promised Account Balance	Market Return Interest Credit Predictable Contribution	Risk-Guard Returns	Market Return Interest Credit Account Balance	Account Balance Difference with Market Return Interest Credit and Risk-Guard
Year 1	\$100,000	N/A	\$100,000		\$100,000	N/A		\$0
Year 2	\$100,000	4.00%	\$97,000	\$104,000	\$100,000	11.04%	\$111,040	\$7,040
Year 3	\$100,000	4.00%	\$108,160	\$212,160	\$100,000	31.45%	\$277,412	\$65,252
Year 4	\$100,000	4.00%	\$124,973	\$324,646	\$100,000	18.16%	\$445,950	\$121,304
Year 5	\$100,000	4.00%	\$66,028	\$441,632	\$100,000	-5.95%	\$513,466	\$71,834
Year 6	\$100,000	4.00%	\$110,833	\$563,298	\$100,000	22.02%	\$748,551	\$185,254
Year 7	\$100,000	4.00%	\$166,330	\$689,829	\$100,000	8.41%	\$919,914	\$230,085
Year 8	\$100,000	4.00%	\$44,712	\$821,423	\$100,000	5.21%	\$1,073,052	\$251,629

Source: October Three and Redhawk Wealth Advisors, Inc., 2022. The Risk-Guard annual returns are actual returns of Redhawk's S&P 500 Aggressive portfolio (RSPA) from 2015 to 2021.

# Give the Cash Balance Plan Risk-Guard a try!

You have nothing to lose by giving our process a try. We have made it easy for you to get started. When you think about it, we are really acting as co-fiduciaries with you. For our part, you can count on us to deliver the following:

- A free cash balance assessment.
- A complimentary investment analysis, potential future income projection, and a risk number you can keep (even if you do not use our service).
- If you do use our service, we do it all for you.

Have Questions? Please call Redhawk Wealth Advisors, Inc. at (833) 693-3388.

Visit our website to download a FREE report:



Schedule a 10-minute call to see if you qualify:



# **Acknowledgements**

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