

Intro to Automated Portfolio Management in Crypto

1.1 Purpose

As the crypto market develops, there are more projects, ecosystems and in general more people. For ordinary investors, in essence, people are also portfolio managers of their crypto assets since they often invest into many projects and hold many tokens.

But in the market, it lacks proper investment vehicles so we could simplify our crypto investment. That is why we initially designed the DeSyn Protocol to help ordinary investors find right portfolios to invest no matter passive portfolios or active portfolios.

To further our path – simply crypto investment, we plan to design a variety of automated portfolio management strategies to further our purpose, for ordinary investors, for portfolio managers.

1.2 Automated Portfolio Management and Rebalancing strategy

In modern portfolio management, instead of focusing on specific investment decisions, it puts more emphasis on the whole picture, specifically your investment goal (including risk/reward tolerance and else), your asset allocation and how to rebalance and readjust your portfolio to achieve your goal.

In terms of rebalancing strategy, buy-and-hold, constant-mix, constant-proportion, and option-Based are most often ones used by portfolio managers. But it is ignored often by many others although it plays an important role in achieving goals. We think that there are many reasons including time, effort, market influence on emotions, and others.

So we decide to first automate those parts using a smart contract to simply portfolio management for everyone.

1.3 Buy-and-Hold v.s. Constant Mix

Buy-and-hold and constant-mix are among the most popular ones. We will start with those two.

Strategy One: Buy-and-Hold

Buy-and-hold is characterized by initial mix (e.g., 60/40 Major Tokens (BTC, ETH, DeFi Index...) / Crypto MMF (Money Market Funds)) that is bought and then held. And there is no rebalancing. Buy-and-hold is essentially a "do not rebalance" strategy. It is very much suitable for long-term holding of assets no matter how the market performs.

Here are some illustrations of this strategy (see below): Figure 1 and Figure 2 shows that if you hold 100% on major crypto tokens or hold 100% MMF (Money Market Funds) under the Buy-and-Hold strategy, how your performance will be changed relative to the crypto market (value of assets in holding vs value of crypto market) and the value of major tokens positions in holding will be changed relatively the value of total assets in holding.

Those two are the basic benchmarks. Figure 3 and Figure 4 shows that if you do a 60/40 mix Buy-and-Hold strategy, how your performance will be changed relative to the crypto market (the value of assets in holding vs the value of crypto market) and the value of major tokens positions in holding will be changed relative to the value of total assets in holding.

Figure 1. Payoff for Maximum Return and Minimum Risk Strategies

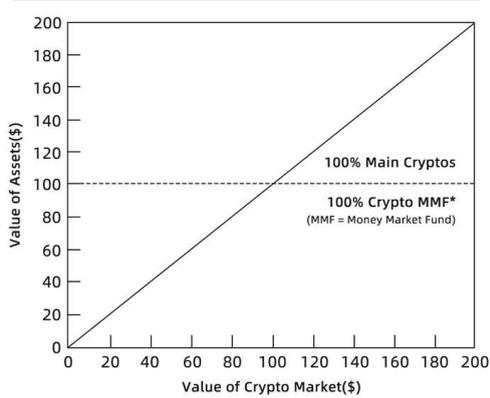


Figure 2. Exposure for Maximum Return and Minimum Risk Strategies

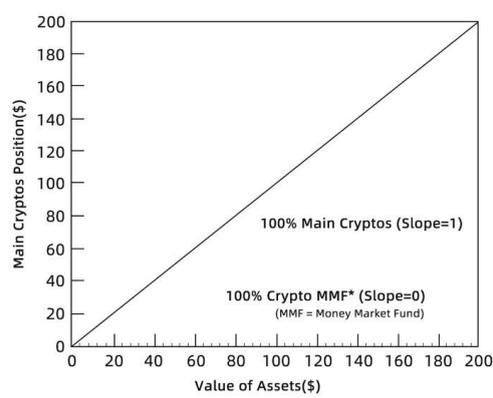


Figure 3. Payoff for 60/40 Main Cryptos/Crypto MMF Buy-and-Hold Strategy

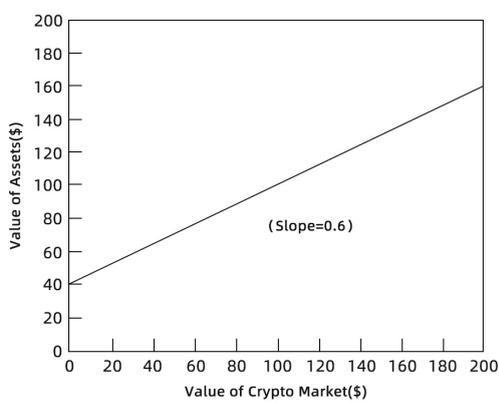
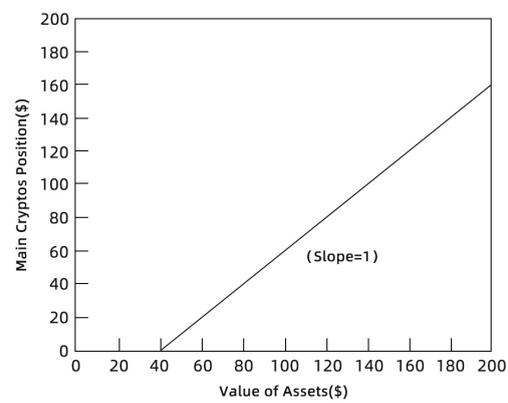


Figure 4. Exposure for 60/40 Main Cryptos/Crypto MMF Buy-and-Hold Strategy



Strategy Two: Constant Mix

The objective of constant-mix is to maintain a ratio of different asset classes (for example, 60% Major tokens and 40% Crypto MMF (Money Market Funds)), and rebalance within a specified Range on the regular basis.

Here are some illustrations of this strategy (see below): Figure 5 and Figure 6 shows that if you hold 100% on major crypto tokens or hold 100% MMF (Money Market Funds) under a constant mix strategy, how your performance will be changed relative to the crypto market (value of assets in holding vs value of crypto market) and value of major tokens positions in holding will be changed to the value of total assets in holding. Those two are basic benchmarks

Figure 5. Exposure for 60/40 Main Cryptos/Crypto MMF Constant-Mix Strategy

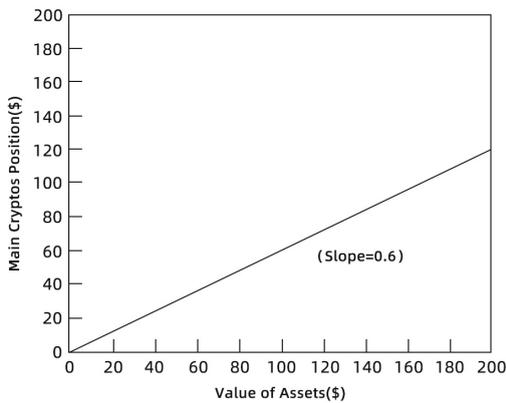


Figure 6. Payoff for 60/40 Constant-Mix Strategy

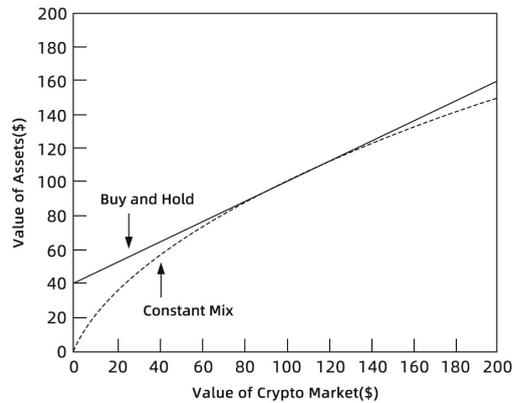


Figure 7 and Figure 8 shows that if you do a 60/40 mix constant mix strategy or 60/40 Buy-and-Hold Strategy, how your performance will be changed relative to the crypto market (the value of assets in holding vs the value of crypto market) and the value of major tokens positions in holding will be changed relative to the value of total assets in holding.

Figure 7. Payoff for 60/40 Constant-Mix and Buy-and-Hold Strategies

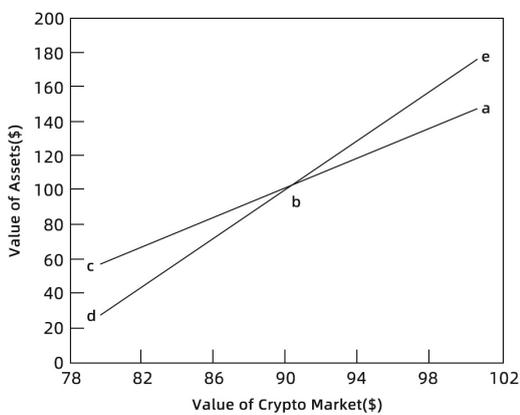
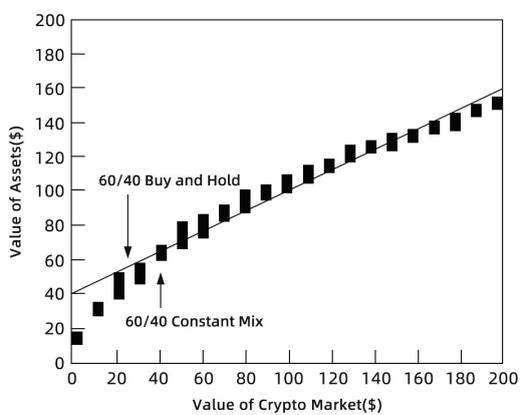


Figure 8. Payoff for Constant-Mix and Buy-and-Hold Strategies



In summary, Constant-mix works better in markets that tend to rise and fall, while buy-and-hold performs better in rising markets.

These two only serve as an intro to a whole basket of rebalancing strategies and other portfolio management strategies we plan to offer in the future.