UNIX CAPITAL

This Executive summary will summarize certain market details of 2022, and market outlook for 2023, followed by methodology, investments strategies and principles.

Year	**2022**	**2023**
S&P	- 14.97%	+3.33% (YTD)
DOW	- 15.64%	-2.69% (YTD)
NASDAQ	- 26.50%	+12.41% (YTD)
HANG SENG	- 16.89%	-5.38% (YTD)
STI	+ 0.05%	-2.00% (YTD)
SZE	- 17.35%	+1.90% (YTD)
US T-Bills (1 year)	0.61% (Jan) / 4.5% (Dec)	4.75% (Feb)
US T-Notes (7 years)	1.70% (Jan) / 4.859% (Dec)	3.972% (Feb)
US T-Bonds (20 years)	2.33% (Feb) / 4.01% (Nov)	3.9% (Feb)

Market review for 2022:

The global economy is facing a severe slowdown and high inflation rates due to various factors such as the COVID-19 pandemic, inflation crisis, and Russia's invasion on Ukraine. Global growth is expected to decline, and inflation is expected to rise. Federal banks increased their interest rates to try combat inflation. As such the general market saw many price cuts and revaluation. Fiscal policy should aim to alleviate the burden of rising costs of living. Structural reforms and multilateral cooperation are also necessary to expedite the transition to green energy and prevent fragmentation.

Market outlook for 2023:

Due to the closure of many regional banks and financial institutions the fed is likely to reduce its pressure on the interest rates and slow down or even reduce interest rates and thus create a more conducive environment for a bull market. But even with this we will not twerk the model, as it moves in increments according to interest rates movements.

Methodology

We found that predicting stock prices based on interest rates is simple, but predicting interest rate randomness is challenging. Therefore, we decided to use *Monte Carlo Simulation* to simulate market randomness and use probability to summarize expected returns. This allowed us to create a Cumulative Distribution table and determine the range of investment strategy manipulation for maximum agility and returns. Back testing revealed that our model outperformed the S&P by 3%, achieving a 215% ROI, in a 10-year period, with relatively low risk.

Investment strategies

Unix capital portfolio is designed to juggle liquidity and take profits while achieving acceptable returns. Limiting the emotional bias, Unix capital makes rational and analytical financial investments based solely on interest funds rates. As interest rates approach 4.58%, the market faces a downturn; the portfolio will capitalize on opportunities and buy in. Maximising the value segment to 36% total AUM value. As interest rates ease, the portfolio will resize its assets in line with interest rates. It will reduce its exposure in the value segment to 27% and take profits. These profits will then be allocated to higher-risk assets and stable assets like cash and fixed income. Constant rebalancing of the portfolio allows for better risk management and resource deployment.

Although we cannot predict returns with absolute certainty, we believe that on average we will make a return of less than 8%. With time, our machine learning model (ARIMA) and financial experience will improve, giving us a better understanding of the market and how to predict and capitalize on events.

Lucas Yap - Team Leader, Portfolio Analyst
Marcus Ng - ML & Data Engineer
Hilman Hung - Quantitative Analyst
James Teo - Research Analyst