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```sql
use invest;
CREATE VIEW Adam_Svec_C148_update AS
SELECT
    -- Customer Information
    cd.customer_id,
    cd.full_name,
    cd.customer_location,
    -- Account Information
    ad.account_id,
    ad.acct_open_date,
    ad.acct_open_status,

    -- Holdings Information
    hc.ticker,
    hc.quantity,
    hc.value,
    hc.price_type,

    -- Security/Asset Information
    sm.security_name,
    sm.sec_type,
    sm.major_asset_class,
    sm.minor_asset_class,

    -- Pricing Information
    pd.date AS price_date,
    pd.value AS price_value,
    pd.price_type as price_type_i

FROM invest.customer_details cd
-- Join to accounts
INNER JOIN invest.account_dim ad
    ON cd.customer_id = ad.client_id
-- Join to current holdings
INNER JOIN invest.holdings_current hc
    ON ad.account_id = hc.account_id
-- Join to security master list for asset classifications
INNER JOIN invest.security_masterlist sm
     ON hc.ticker = sm.ticker
-- Join to pricing data for historical prices
INNER JOIN invest.pricing_daily_new pd
    ON hc.ticker = pd.ticker
-- Filter for Customer #148
WHERE cd.customer_id = 148
  AND hc.price_type = 'Adjusted'
  AND pd.price_type = 'Adjusted'
  AND pd.date > '2018-09-20' -- first date client opened his first account
  AND pd.value IS NOT NULL -- to fitler datas on tickers after client opened account
-- Order by date
ORDER BY pd.date DESC;
```

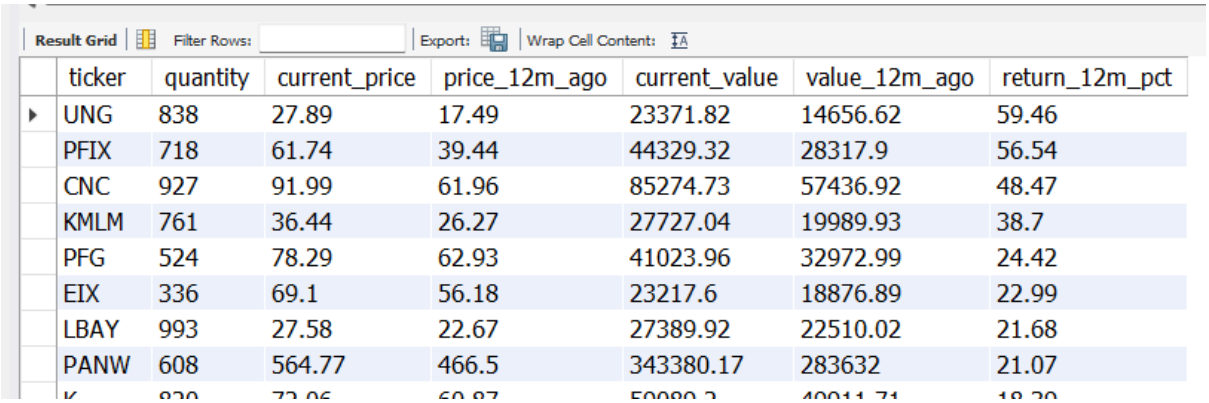
PART 1: SQL ANALYSIS

12-MONTH, 18-MONTH, AND 24-MONTH RETURNS

SQL SCRIPT - RETURNS 12M

```sql
USE invest;
-- This script calculates the 12-month return.
WITH date_bounds AS (
    SELECT
        MAX(price_date) AS latest_date,
        DATE_SUB(MAX(price_date), INTERVAL 365 DAY) AS target_12m_ago
    FROM client_148
),
price_data AS (
    SELECT
        ticker,
        MAX(CASE WHEN price_date = db.latest_date THEN quantity END) AS quantity,
        MAX(CASE WHEN price_date = db.latest_date THEN price_value END) AS current_price,
        MAX(CASE WHEN price_date = db.target_12m_ago THEN price_value END) AS price_12m_ago
    FROM client_148
    CROSS JOIN date_bounds db
    WHERE price_date = db.latest_date
       OR price_date = db.target_12m_ago
    GROUP BY ticker
)
SELECT
    ticker,
    quantity,
    ROUND(current_price, 2) AS current_price,
    ROUND(price_12m_ago, 2) AS price_12m_ago,
    ROUND(current_price * quantity, 2) AS current_value,
    ROUND(price_12m_ago * quantity, 2) AS value_12m_ago,
    ROUND(
        IFNULL(
            ((current_price - price_12m_ago) * quantity) / (price_12m_ago * quantity) * 100,
        0),
    2) AS return_12m_pct
FROM price_data
WHERE current_price IS NOT NULL
AND price_12m_ago > 0
ORDER BY return_12m_pct DESC;
```

RETURNS 12M



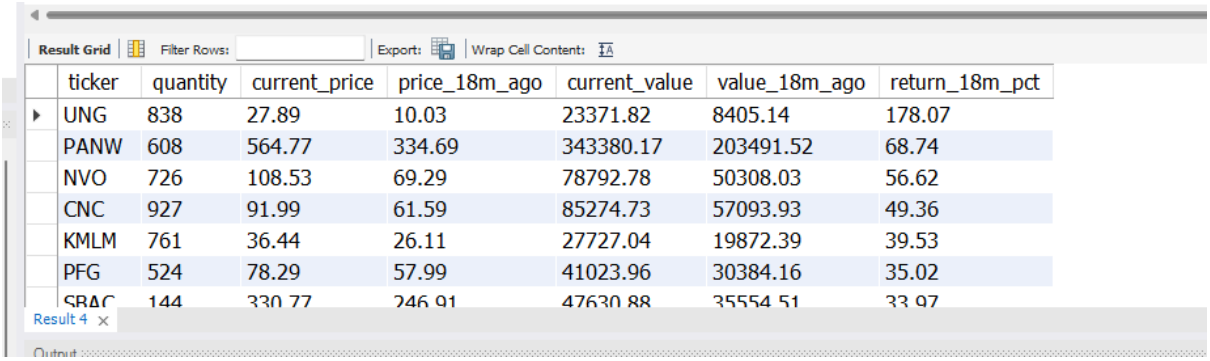
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ticker	quantity	current_price	price_12m_ago	current_value	value_12m_ago	return_12m_pct
UNG	838	27.89	17.49	23371.82	14656.62	59.46
PFIX	718	61.74	39.44	44329.32	28317.9	56.54
CNC	927	91.99	61.96	85274.73	57436.92	48.47
KMLM	761	36.44	26.27	27727.04	19989.93	38.7
PFG	524	78.29	62.93	41023.96	32972.99	24.42
EIX	336	69.1	56.18	23217.6	18876.89	22.99
LBAY	993	27.58	22.67	27389.92	22510.02	21.68
PANW	608	564.77	466.5	343380.17	283632	21.07

SQL SCRIPT - RETURNS 18M

```sql
USE invest;
-- This script calculates the 18-month return.
WITH date_bounds AS (
    SELECT
        MAX(price_date) AS latest_date,
        DATE_SUB(MAX(price_date), INTERVAL 548 DAY) AS target_18m_ago
    FROM client_148
),
price_data AS (
    SELECT
        ticker,
        MAX(CASE WHEN price_date = db.latest_date THEN quantity END) AS quantity,
        MAX(CASE WHEN price_date = db.latest_date THEN price_value END) AS current_price,
        MAX(CASE WHEN price_date = db.target_18m_ago THEN price_value END) AS price_18m_ago
    FROM client_148
    CROSS JOIN date_bounds db
    WHERE price_date = db.latest_date
       OR price_date = db.target_18m_ago
    GROUP BY ticker
)
SELECT
    ticker,
    quantity,
    ROUND(current_price, 2) AS current_price,
    ROUND(price_18m_ago, 2) AS price_18m_ago,
    ROUND(current_price * quantity, 2) AS current_value,
    ROUND(price_18m_ago * quantity, 2) AS value_18m_ago,
    ROUND(
        IFNULL(
            ((current_price - price_18m_ago) * quantity) / (price_18m_ago * quantity) * 100,
        0),
    2) AS return_18m_pct
FROM price_data
WHERE current_price IS NOT NULL
AND price_18m_ago > 0
ORDER BY return_18m_pct DESC;
```

RETURNS 18M

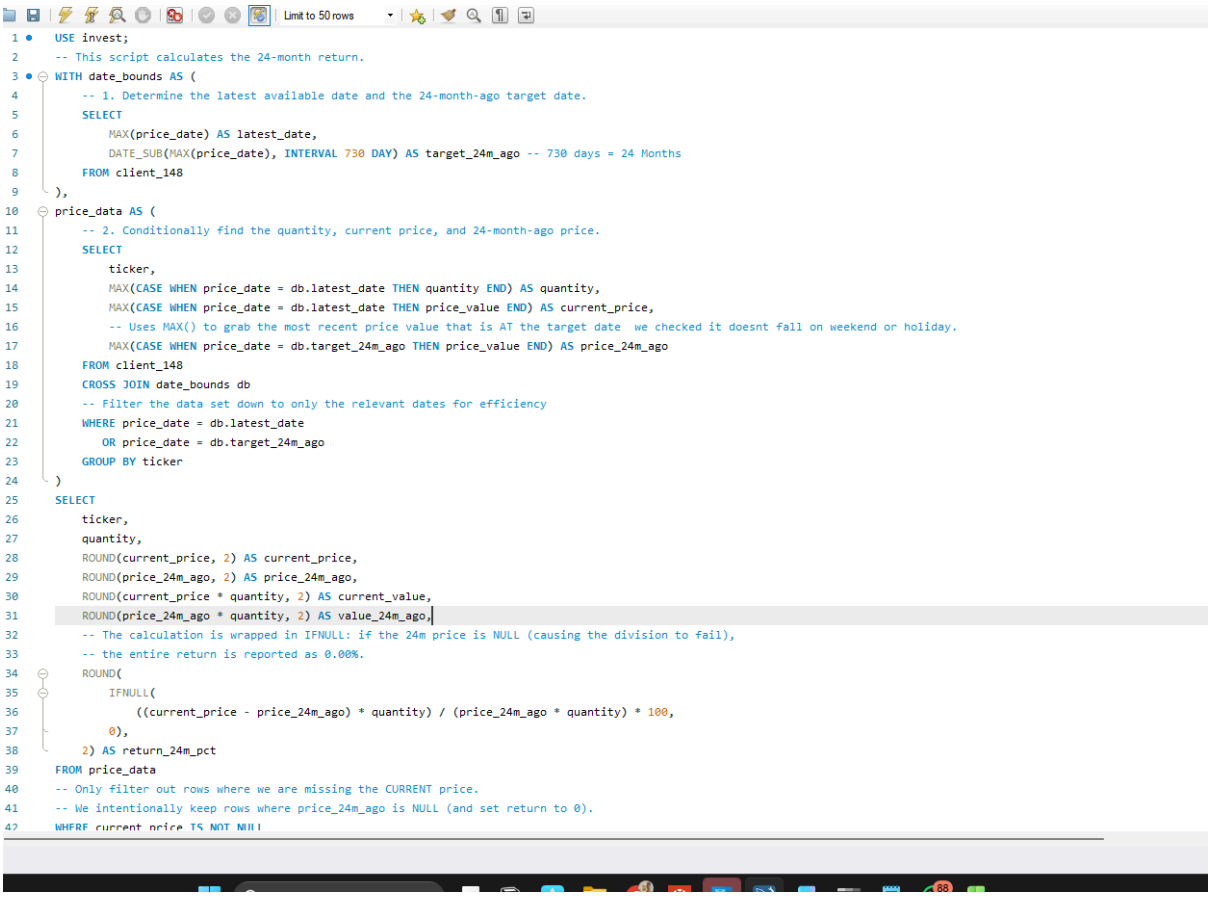


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ticker	quantity	current_price	price_18m_ago	current_value	value_18m_ago	return_18m_pct
UNG	838	27.89	10.03	23371.82	8405.14	178.07
PANW	608	564.77	334.69	343380.17	203491.52	68.74
NVO	726	108.53	69.29	78792.78	50308.03	56.62
CNC	927	91.99	61.59	85274.73	57093.93	49.36
KMLM	761	36.44	26.11	27727.04	19872.39	39.53
PFG	524	78.29	57.99	41023.96	30384.16	35.02
SBAC	144	330.77	246.91	47630.88	35554.51	33.97

Result 4 | Output

SQL SCRIPT - RETURNS 24M



Limit to 50 rows

```sql
USE invest;
-- This script calculates the 24-month return.
WITH date_bounds AS (
    -- 1. Determine the latest available date and the 24-month-ago target date.
    SELECT
        MAX(price_date) AS latest_date,
        DATE_SUB(MAX(price_date), INTERVAL 730 DAY) AS target_24m_ago -- 730 days = 24 Months
    FROM client_148
),
price_data AS (
    -- 2. Conditionally find the quantity, current price, and 24-month-ago price.
    SELECT
        ticker,
        MAX(CASE WHEN price_date = db.latest_date THEN quantity END) AS quantity,
        MAX(CASE WHEN price_date = db.latest_date THEN price_value END) AS current_price,
        -- Uses MAX() to grab the most recent price value that is AT the target date  we checked it doesnt fall on weekend or holiday.
        MAX(CASE WHEN price_date = db.target_24m_ago THEN price_value END) AS price_24m_ago
    FROM client_148
    CROSS JOIN date_bounds db
    -- Filter the data set down to only the relevant dates for efficiency
    WHERE price_date = db.latest_date
       OR price_date = db.target_24m_ago
    GROUP BY ticker
)
SELECT
    ticker,
    quantity,
    ROUND(current_price, 2) AS current_price,
    ROUND(price_24m_ago, 2) AS price_24m_ago,
    ROUND(current_price * quantity, 2) AS current_value,
    ROUND(price_24m_ago * quantity, 2) AS value_24m_ago,
    -- The calculation is wrapped in IFNULL: if the 24m price is NULL (causing the division to fail),
    -- the entire return is reported as 0.00%.
    ROUND(
        IFNULL(
            ((current_price - price_24m_ago) * quantity) / (price_24m_ago * quantity) * 100,
        0),
    2) AS return_24m_pct
FROM price_data
-- Only filter out rows where we are missing the CURRENT price.
-- We intentionally keep rows where price_24m_ago is NULL (and set return to 0).
WHERE current_price IS NOT NULL
```

RETURNS 24M

ticker	quantity	current_price	price_24m_ago	current_value	value_24m_ago	return_24m_pct
PANW	608	564.77	238.4	343380.17	144947.2	136.9
UNG	838	27.89	12.79	23371.82	10718.02	118.06
PFG	524	78.29	38.79	41023.96	20323.38	101.86
KRBN	362	38.58	20.62	13965.96	7464.29	87.1
NVO	726	108.53	64.39	78792.78	46745.16	68.56
CNC	927	91.99	57.35	85274.73	53163.45	60.4
COF	684	108.32	68.27	74090.88	46695.57	58.67
AXP	833	158.44	101.23	131980.52	84328.23	56.51
GE	765	74.04	48.9	56640.6	37405.82	51.42
ETN	379	145.71	98.22	55224.09	37226.32	48.35

SQL SCRIPT - PORTFOLIO RETURNS

```sql
Use invest;
WITH date_bounds AS (
    -- 1. Define the exact date boundaries for each return period.
    SELECT
        MAX(price_date) AS latest_date,

        -- 12 MONTHS (Using 365 days ago for a single point) for each date we checked wether it does or does not fall on weekend or holiday
        DATE_SUB(MAX(price_date), INTERVAL 365 DAY) AS date_12m,

        -- 18 MONTHS (Using 548 days ago, which is approximately 1.5 * 365)
        DATE_SUB(MAX(price_date), INTERVAL 548 DAY) AS date_18m,

        -- 24 MONTHS (Using 730 days ago, which is 2 * 365)
        DATE_SUB(MAX(price_date), INTERVAL 730 DAY) AS date_24m
    FROM client_148
),
security_data AS (
    -- 2. Aggregate security data and conditionally pull prices from the defined single dates.
    SELECT
        ticker,
        -- MAX(value) should represent the current holding value
        MAX(value) AS holding_value,

        -- Current price (from the latest date)
        MAX(CASE WHEN price_date = db.latest_date THEN price_value END) AS p_now,

        -- Historical prices (using the defined exact dates)
        -- Note: If an exact price_date is missing, p_12m/p_18m/p_24m will be NULL.
        MAX(CASE WHEN price_date = db.date_12m THEN price_value END) AS p_12m,
        MAX(CASE WHEN price_date = db.date_18m THEN price_value END) AS p_18m,
        MAX(CASE WHEN price_date = db.date_24m THEN price_value END) AS p_24m

    FROM client_148
    CROSS JOIN date_bounds db
    -- Filter the total dataset down to only the relevant dates to boost performance
    WHERE price_date = db.latest_date
        OR price_date = db.date_12m
        OR price_date = db.date_18m
        OR price_date = db.date_24m
    GROUP BY ticker
),
```

```sql
returns_data AS (
    -- 3. Calculate the absolute percentage return for each individual security.
    SELECT
        ticker,
        holding_value,
        -- 12M Return: ((P_Now - P_Old) / P_Old) * 100
        ((p_now - p_12m) / p_12m) * 100 AS return_12m,
        ((p_now - p_18m) / p_18m) * 100 AS return_18m,
        ((p_now - p_24m) / p_24m) * 100 AS return_24m
    FROM security_data
    -- Exclude securities where we don't have both the current price and the historical price
    -- NOTE: By using exact dates, we are more likely to have NULL historical prices if the price data is sparse.
    WHERE p_now IS NOT NULL
        AND p_12m IS NOT NULL
        AND p_18m IS NOT NULL
        AND p_24m IS NOT NULL
)
-- 4. Calculate the Final Portfolio-Level Weighted Average Returns
SELECT
    'TOTAL PORTFOLIO' AS description,
    COUNT(ticker) AS num_securities,
    ROUND(SUM(holding_value), 2) AS total_value,

    -- Weighted average return = SUM(Individual Return * Weight) / SUM(Weight)
    ROUND(SUM(return_12m * holding_value) / SUM(holding_value), 2) AS portfolio_return_12m_pct,
    ROUND(SUM(return_18m * holding_value) / SUM(holding_value), 2) AS portfolio_return_18m_pct,
    ROUND(SUM(return_24m * holding_value) / SUM(holding_value), 2) AS portfolio_return_24m_pct
FROM returns_data;
```

PORTFOLIO RETURNS

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

description	num_securities	total_value	portfolio_return_12m_pct	portfolio_return_18m_pct	portfolio_return_24m_pct
TOTAL PORTFOLIO	67	5592.18	-5.15	8.33	22.26

Comment

**The server was unable to process many of our queries, so we decided to download the client data, holdings, and all other required information and transfer it to a local server.*

** The scripts for the 12-, 18-, and 24-month periods are almost identical. You can find the comments in the 24-month script.*

The client's portfolio shows high volatility, characterized by extreme opposing returns such as +59.46% versus -63.52% over 12 months, and a maximum gain of +178% against a -75% loss over 18 months. This volatility has weakened short-term performance and undermines overall portfolio health. The instability stems primarily from smaller, speculative holdings that generate outsized gains and losses, while larger core investments deliver only marginal returns. UNG remains the critical driver of long-term performance.

Notably, several holdings are consistently underperforming across all time periods. CNBS is generating losses in each period, as is MJ and TOKE. These chronic underperformers are creating significant drag on overall portfolio returns and diluting gains from stronger positions.

Client should consider selling these investments.

Most recent 12M risk and average daily return for each of the securities

SQL SCRIPT

```sql
use invest;

WITH latest_date_cte AS (
    -- Get the absolute most recent price date in the entire dataset (our end date)
    SELECT MAX(price_date) AS latest_date
    FROM client_148
),
DateBounds AS (
    -- Define the 365-day lookback date boundary based on the latest date
    SELECT
        latest_date,
        DATE_SUB(latest_date, INTERVAL 365 DAY) AS lookback_start_date
    FROM latest_date_cte
),
DailyPrices AS (
    -- Step 1: Calculate the daily return (percentage change in price)
    SELECT
        t1.ticker,
        t1.price_date,
        t1.price_value,
        LAG(t1.price_value, 1) OVER (
            PARTITION BY t1.ticker
            ORDER BY t1.price_date
        ) AS previous_day_price
    FROM
        client_148 t1
),
DailyReturns AS (
    SELECT
        dp.ticker,
        dp.price_date,
        (dp.price_value - dp.previous_day_price) / dp.previous_day_price AS daily_return
    FROM
        DailyPrices dp
    WHERE
        dp.previous_day_price IS NOT NULL
),
TwelveMonthData AS (
    -- Step 2: Filter the daily returns to only include the most recent 365 days
    SELECT
        dr.ticker,
        dr.daily_return,
        dr.price_date -- Keep price_date to determine the actual first date used
```

```
    FROM
        DailyReturns dr
    CROSS JOIN
        DateBounds db
    WHERE
        -- Filter dates greater than or equal to 365 days before the latest observed date.
        dr.price_date >= db.lookback_start_date
)
-- Step 3: Compute the required statistics (Sigma and Average Return) and display the dates
SELECT
    tmd.ticker,
    -- Find the actual earliest date used for this specific ticker's returns
    MIN(tmd.price_date) AS data_start_date,
    -- Get the overall latest date (end date) from the DateBounds CTE
    db.latest_date AS data_end_date,
    -- Sigma (Risk) is the Standard Deviation of the Daily Returns
    ROUND(STDDEV_SAMP(tmd.daily_return), 8) AS most_recent_365day_sigma,
    -- The Average Daily Return
    ROUND(AVG(tmd.daily_return), 8) AS average_daily_return
FROM
    TwelveMonthData tmd
CROSS JOIN
    DateBounds db -- Cross join to bring the single-row dates into the final result set
GROUP BY
    tmd.ticker, db.latest_date -- Must group by the non-aggregated column (db.latest_date)
ORDER BY
    tmd.ticker;
```

12months risk and average daily return for each of the securities

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ticker	data_start_date	data_end_date	most_recent_365day_sigma	average_daily_return
AAAU	2021-09-09	2022-09-09	0.0085759	-0.00013131
ACN	2021-09-09	2022-09-09	0.01873282	-0.00040206
ARB	2021-09-09	2022-09-09	0.00399011	0.00018748
AXP	2021-09-09	2022-09-09	0.02220382	0.00028028
BAR	2021-09-09	2022-09-09	0.00862487	-0.00013795
BIL	2021-09-09	2022-09-09	0.00011858	0.00001565
BNDX	2021-09-09	2022-09-09	0.00373268	-0.00050046
BTAL	2021-09-09	2022-09-09	0.01194356	0.00046836

Result 7

When analyzing sigma and returns, we seek an optimal balance between strong average daily returns and low volatility. For example, investment ACN exhibits low daily returns coupled with high sigma, making it an unfavorable risk-adjusted position. Similarly, investment AAAU demonstrates low returns but with moderately lower sigma. While AAAU represents slightly better risk management than ACN, it remains suboptimal.

The client should prioritize investments with low sigma and high returns. These positions offer the best risk-adjusted performance and will significantly improve the portfolio's Sharpe ratio and overall stability.

New investment

SQL SCRIPT

```
    SELECT
        t1.ticker,
        t1.price_value,
        t1.price_date,
        -- Calculate the lagged price and move it to a column
        LAG(t1.price_value, 1) OVER (
            PARTITION BY t1.ticker
            ORDER BY t1.price_date
        ) AS previous_month_price
    FROM
        pricing_and_asset_class_eom_views_m2021_s t1
),
MonthlyReturns AS (
    -- calculate the monthly return.
    SELECT
        pp.ticker,
        (pp.price_value / pp.previous_month_price) - 1 AS monthly_return
    FROM
        PreviousPrice pp
),
PerformanceMetrics AS (
    -- Aggregate all performance metrics in a single pass per ticker
    SELECT
        ticker,
        -- Annualized Average Return
        (AVG(monthly_return) * 12) AS annualized_average_return_rp,
        -- Annualized Standard Deviation (Sigma)
        (STDDEV_SAMP(monthly_return) * SQRT(12)) AS annualized_stddev_sigma,
        -- Count records to ensure sufficient data
        COUNT(monthly_return) AS num_months
    FROM
```

```
    FROM
        MonthlyReturns
    GROUP BY
        ticker
    -- Require at least 12 months of data
    HAVING COUNT(monthly_return) >= 12
)
-- Calculate Sharpe Ratio, Rank, and Pick the top 10
SELECT
    ticker,
    ROUND(
        annualized_average_return_rp / annualized_stddev_sigma,
        4
    ) AS sharpe_ratio,
    ROUND(annualized_average_return_rp * 100, 2) AS annualized_return_pct,
    ROUND(annualized_stddev_sigma, 2) AS annualized_risk,
    num_months
FROM
    PerformanceMetrics
ORDER BY
    sharpe_ratio DESC
LIMIT 10;
```

New investment options

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ticker	sharpe_ratio	annualized_return_pct	annualized_risk	num_months
MCK	2.5271	47.78	0.19	20
DVN	2.3554	105.69	0.45	20
HSY	2.2217	29.69	0.13	20
DBMF	1.8573	21.79	0.12	20
COP	1.8174	74.61	0.41	20

To identify the optimal next investment, we evaluated opportunities based on their Sharpe ratios. We gathered 20 months of performance data for potential investments to calculate sigma and average returns. Based on this analysis, MCK presents the best Sharpe ratio and represents the strongest risk-adjusted opportunity.

The client should consider investing in opportunities like MCK while divesting from positions that have demonstrated losses over prolonged periods. This strategic reallocation will improve overall portfolio performance by replacing underperformers with investments offering better risk-adjusted returns. It will contribute to the portfolio with annualized sigma of 0.19 or with daily sigma of 0.01197.

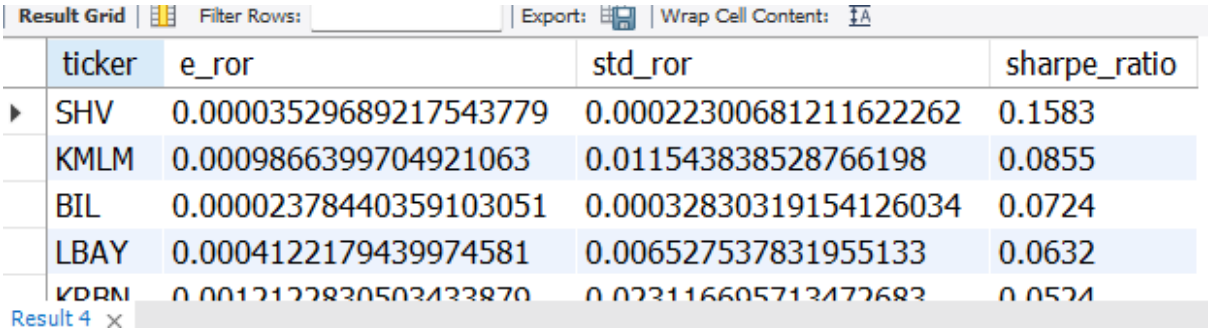
Best security with highest risk adjusted returns

SQL SCRIPT

```sql
use ivnest;
WITH PreviousPrice AS (
    -- Get the end of month price (P0)
    SELECT
        t1.ticker,
        t1.price_value AS p1,
        t1.price_date,
        LAG(t1.price_value, 1) OVER (
            PARTITION BY t1.ticker
            ORDER BY t1.price_date
        ) AS p0
    FROM
        client_148 t1
),
LogReturns AS (
    -- Calculate the Logarithmic Rate of Return (ror = LN(P1/P0))
    SELECT
        pp.ticker,
        -- Calculate the monthly logarithmic return
        LN(pp.p1 / pp.p0) AS ror
    FROM
        PreviousPrice pp


)
-- Aggregate all metrics
SELECT
    z.ticker,
    AVG(z.ror) AS e_ror, -- Average Monthly Log Return
    STD(z.ror) AS std_ror, -- Standard Deviation of Monthly Log Return
    -- The ratio of the two metrics
    ROUND(AVG(z.ror) / STD(z.ror), 4) AS sharpe_ratio
FROM
    LogReturns AS z
GROUP BY
    z.ticker
-- Ensure there is enough data for a stable STD calculation
HAVING
    COUNT(z.ror) >= 12
ORDER BY
    sharpe_ratio DESC;
```

Best security - based on Sharpe ratio


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

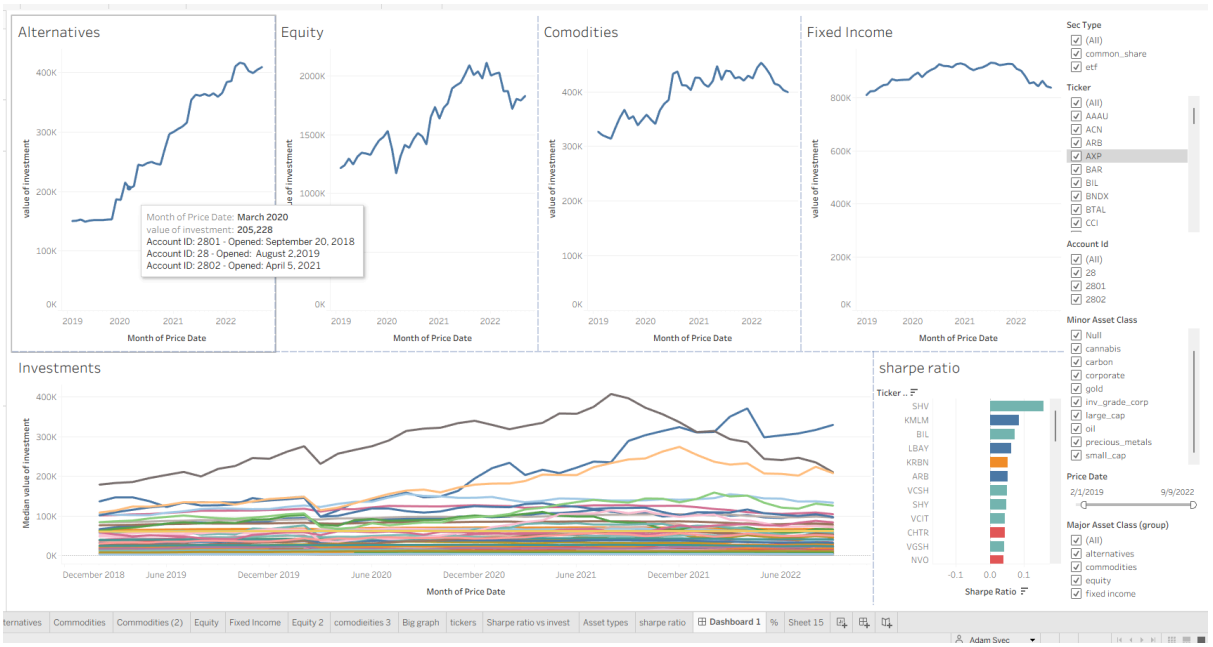
ticker	e_ror	std_ror	sharpe_ratio
SHV	0.00003529689217543779	0.00022300681211622262	0.1583
KMLM	0.0009866399704921063	0.011543838528766198	0.0855
BIL	0.00002378440359103051	0.00032830319154126034	0.0724
LBAY	0.0004122179439974581	0.006527537831955133	0.0632
KRBN	0.0012122830503433870	0.0231166057134726 83	0.0524

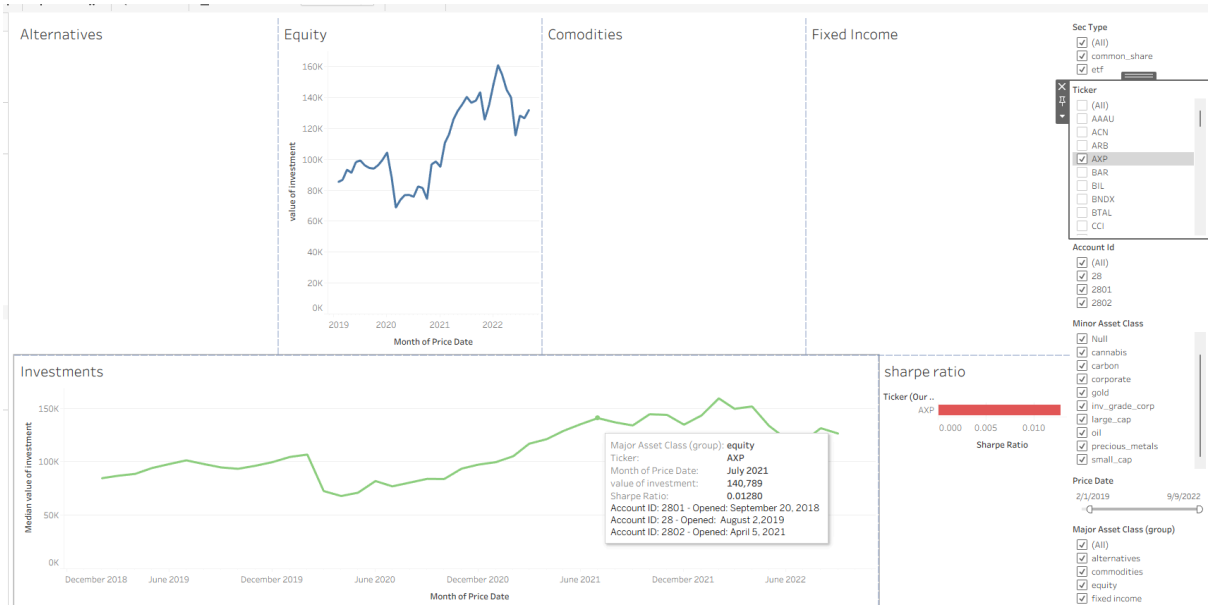
Result 4

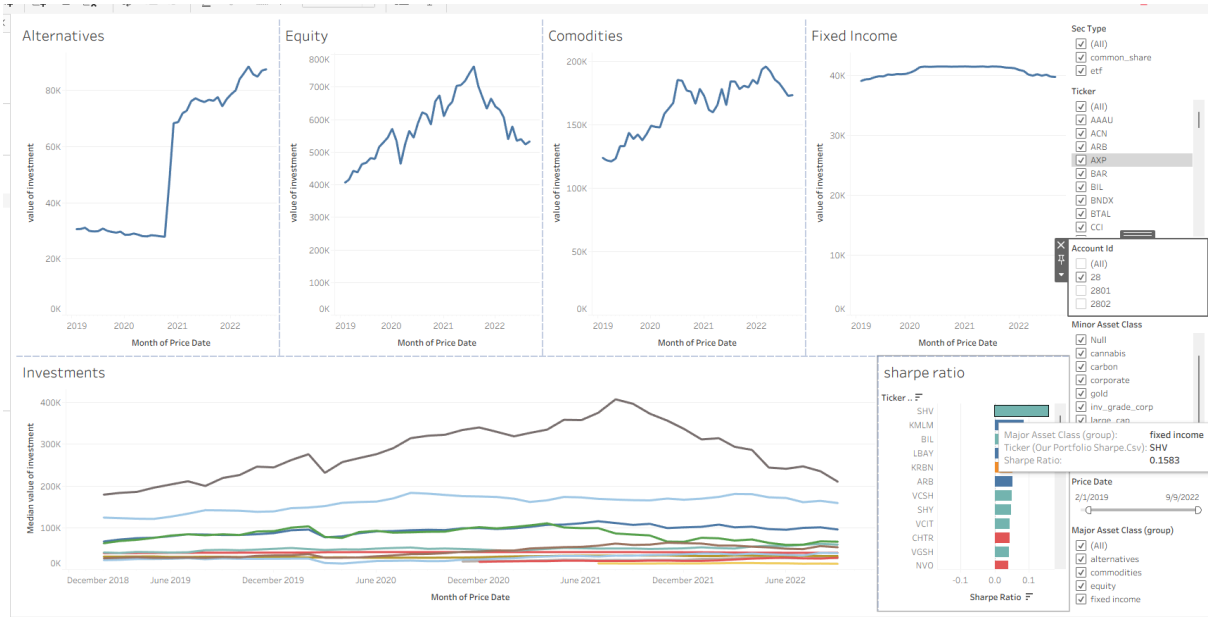
Based on monthly Sharpe ratio analysis (this differs from the annualized ratios used previously), SHV presents the strongest risk-adjusted performance. While SHV's returns are modest, its exceptionally low volatility gives it the portfolio's best Sharpe ratio.

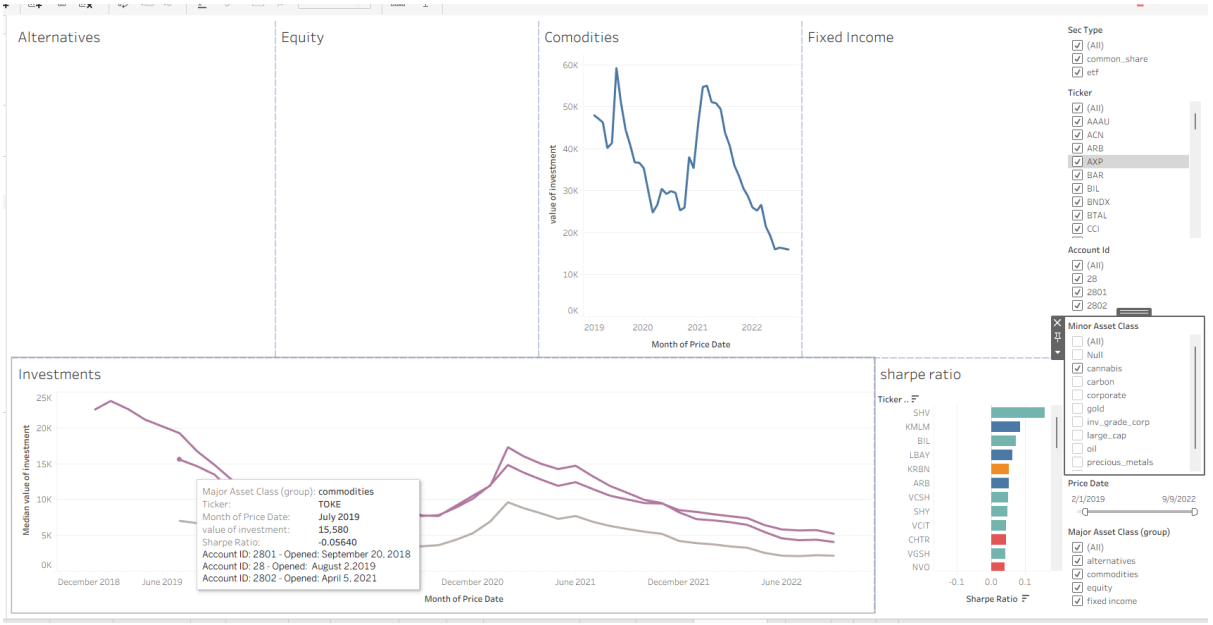
At the opposite end, TOKE exhibits a negative Sharpe ratio, confirming its status as a portfolio drag. More notably, UNG also shows a negative Sharpe ratio despite its excellent performance for last 12M. This indicates that UNG's gains have been accompanied by significant volatility, resulting in poor risk-adjusted returns. The client should exercise caution with UNG and consider whether its historical performance justifies the heightened risk it introduces to the portfolio.

PART 2 Analysis






Alternatives
Equity
Comodities
Fixed Income
value of investment
Month of Price Date
Investments
Median value of investment
sharpe ratio
Ticker ..
Sharpe Ratio
Major Asset Class (group): fixed income
Ticker (Our Portfolio Sharpe.Csv): SHV
Sharpe Ratio: 0.1583
Sec Type
(All)
common_share
etf
Ticker
Account Id
Minor Asset Class
Price Date
2/1/2019
9/9/2022
Major Asset Class (group)
alternatives
commodities
equity
fixed income


Alternatives
Equity
Comodities
Fixed Income
value of investment
Month of Price Date
Investments
Median value of investment
Major Asset Class (group): commodities
Ticker: TOKE
Month of Price Date: July 2019
value of investment: 15,580
Sharpe Ratio: -0.05640
Account ID: 2801 - Opened: September 20, 2018
Account ID: 28 - Opened: August 2,2019
Account ID: 2802 - Opened: April 5, 2021
sharpe ratio
Ticker ..
Sharpe Ratio
Sec Type
Ticker
Account Id
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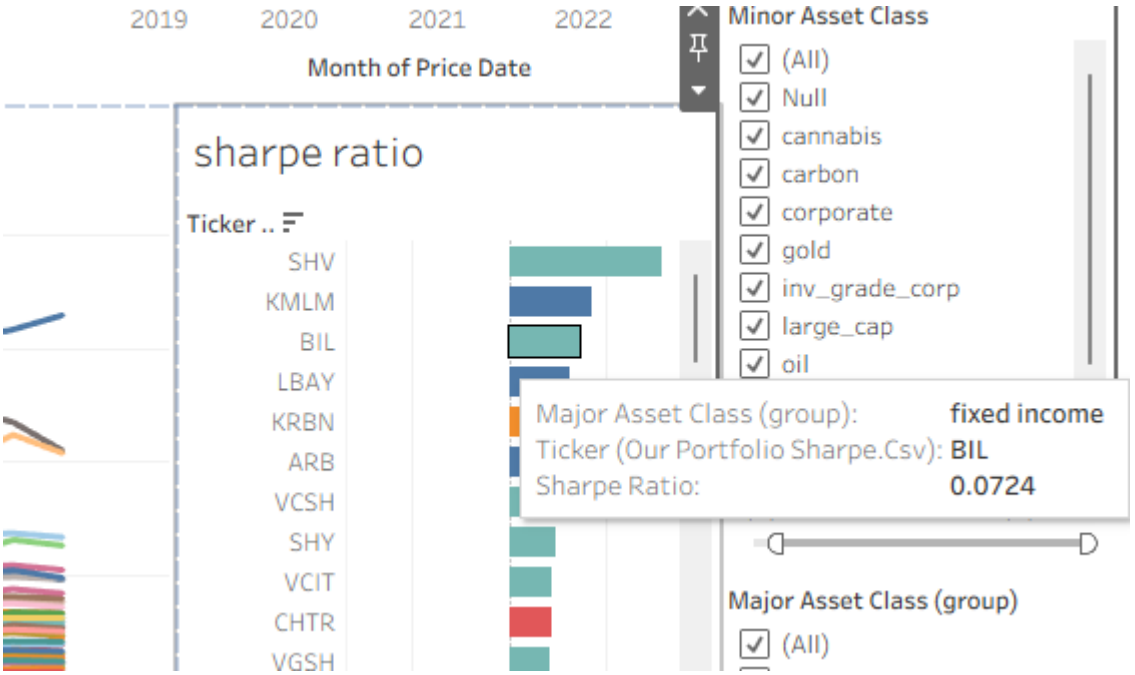
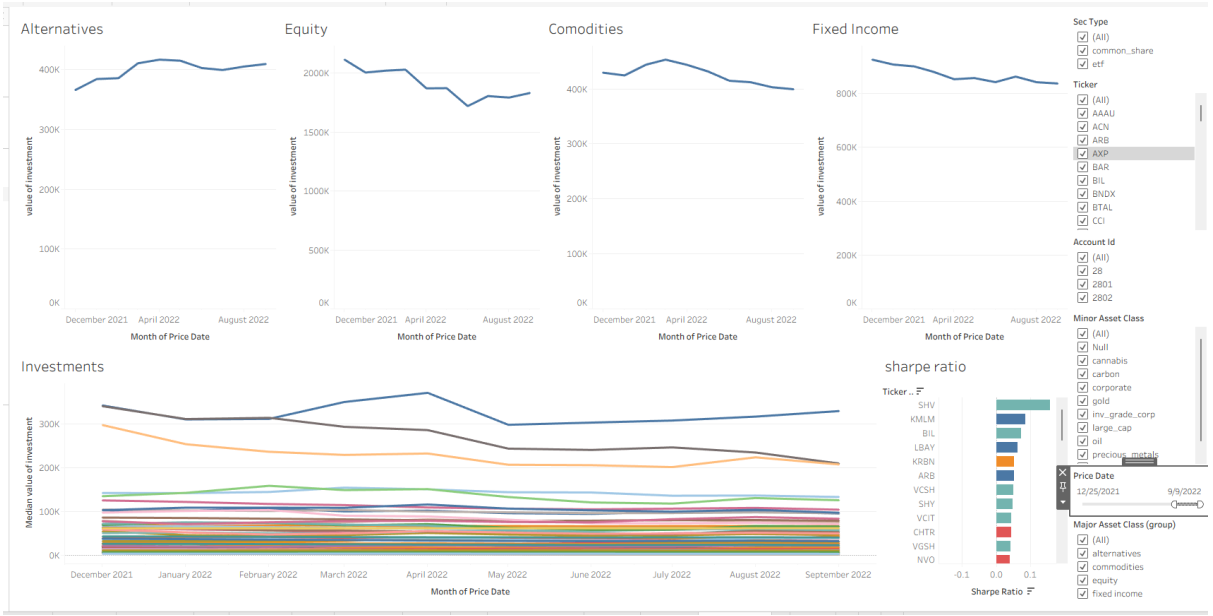
alternatives
commodities
equity
fixed income





https://public.tableau.com/app/profile/adam.svec/viz/Investmentdashbaords/Dashboard1

Analysis

Paul Bistre's portfolio is currently telling two very different stories at the same time. When we look at the big picture over the last two years, the results are excellent: the portfolio has grown by 22.26%. However, if we zoom in on just the last 12 months, the portfolio has actually lost value, dropping by -5.15%.

This creates a confusing situation where the long-term trend looks healthy, but the recent performance is bleeding value. Our analysis shows some reasons why this is happening. The portfolio has effectively split into two distinct parts. One part is led by Alternative investments and Energy; this is driving massive growth. The other part is specifically speculative bets in the Cannabis sector is acting like a dead weight, dragging down the overall returns.

The goal of this report is to explain exactly why this split is happening and to propose a clear plan to fix it. We need to cut the parts of the portfolio that are taking risks without giving us any reward, and we need to double down on the strategies that are actually working.

Findings

In October 2018, the client held approximately $146,000 in alternative assets, and by August 2022 this amount had increased significantly to $404,000. Other major asset classes experienced growth as well. Equity holdings rose from $1.1 million in October 2018 to $1.8 million in August 2022. Commodities increased from $301,000 to $403,000, and fixed income positions grew from $786,000 to $841,000 over the same period.

Sector Analysis: The Winner vs. The Loser (Insights)

To understand why the portfolio lost five percent in the last year despite strong long-term growth, it is necessary to examine the specific sectors included in the investment strategy. The data shows a clear contrast between two commodity-driven sectors, oil and cannabis. The oil and energy sector has been the strongest performer. Investments in assets such as UNG, which tracks natural gas, helped shield the portfolio from inflation because energy prices typically rise when the cost of living increases. This part of the portfolio has grown significantly over the past 12-month. Although energy investments are highly volatile, the long-term risk has been rewarded. It is important to note, however, that UNG has still not fully recovered the value of the original investment made in 2018, when the security declined sharply. It only began returning to its initial value in March 2021, illustrating the substantial volatility associated with this type of investment.

The cannabis sector shows the opposite trend. Holdings such as CNBS, MJ, and TOKE have posted consistent losses across all time periods measured, including twelve, eighteen, and twenty-four months. This represents destructive volatility. These assets display similar levels of risk and price movement as the oil sector, but instead of recovering or appreciating, they continue to decline. Keeping capital in these underperforming cannabis holdings reduces the overall effectiveness of the portfolio. Every dollar tied up in a declining cannabis asset is a dollar that could be generating returns in a stronger, more resilient sector.

The "Equity Gap"

In this portfolio, the strongest risk-adjusted results come from two areas. The best performer is fixed income, represented by SHV, which is a conservative Treasury bond fund. Its score

is the highest because it very rarely loses value, and in an unstable market this level of safety effectively becomes a form of outperformance. The second strongest performer is the alternatives category, represented by KMLM, a managed futures fund. Its strong score reinforces the conclusion that the most strategically positioned assets in the portfolio are within the alternatives segment. The stocks currently held in the portfolio carry more risk than the returns they generate. They show considerable volatility but do not provide consistent growth in exchange for that risk. The overall picture suggests that, at this moment, the safest and most efficient places for the client's capital are in stable fixed income instruments and advanced alternative strategies rather than in selecting individual equities or focusing on stocks with favorable Sharpe ratios.

3. Strategic Recommendations

We need to realign the portfolio to match what the data is telling us. We propose a three-step plan to stop the short-term bleeding and protect the long-term gains.

Step 1: Cut the Dead Weight (The Sell)

Recommendation: Sell all positions in the Cannabis sector immediately (CNBS, MJ, and TOKE).

Why: There is no financial reason to keep holding these. They are increasing the portfolio's risk while reducing its value. By selling them, we stop the "drag" on the portfolio's performance. It also frees up cash that is currently trapped in losing positions so we can put it to work in better investments. This is the quickest way to fix the negative 12-month return figure.

Step 2: Fix the Equity Gap (The Buy)

The cash generated from selling the cannabis holdings should be reinvested in McKesson Corporation. This recommendation is based on the need for an equity position that offers both growth and stability, especially since the current stocks in the portfolio carry more risk than their returns justify. McKesson is an ideal candidate because it delivers exceptional performance with far lower volatility than most equities. It has an annualized return of more than 47% and an annualized Sharpe ratio of 2.53, indicating strong risk-adjusted efficiency. This investment effectively bridges the equity gap by providing exposure to the stock market while maintaining volatility levels closer to fixed income. McKesson strengthens the portfolio by adding an equity position that finally compensates for its risk and contributes consistent, reliable growth.

Step 3: Anchor the Wins (The Hold)

The portfolio should retain its allocation to alternative investments, but these positions should be paired intentionally with a strong foundation in fixed income, particularly SHV. Alternatives can remain a core component, yet their weight should be capped at sixty percent to prevent excessive concentration. If the allocation rises above this level, gradual trimming is recommended, with the proceeds redirected into high-quality equities such as MCK. Within the alternatives category, exposure to proven managers like KMLM, which has demonstrated steady risk-adjusted performance, should be maintained or increased, while speculative positions without an established track record should be avoided. Fixed income should remain the portfolio's anchor. SHV, which has the highest Sharpe ratio of all holdings, provides essential stability and should represent ten to fifteen percent of the total allocation.

This position should not be reduced in pursuit of higher yields. The oil and energy sector should also be maintained, as these assets offer inflation protection and have produced positive risk-adjusted returns. Their volatility has been constructive rather than harmful, though a maximum allocation of twenty percent is advisable to prevent concentration risk.

Conclusion

While Paul Bistre's portfolio has demonstrated exceptional long-term success , preserving this wealth requires a strategic shift toward maturity. The portfolio can no longer justify holding speculative assets like Cannabis that consistently generate losses, nor can it rely on uncompensated volatility. By divesting from these underperformers and reallocating capital into superior risk-adjusted assets like MCK , while simultaneously anchoring the portfolio with bonds to limit downside exposure, we will ensure the portfolio is robust enough to thrive in its next phase.