

PRATE 1.75% For May 6 Next Release 08 Jul 15:00 Survey --
aysia Overnight Policy Rate Bank Negara Malaysia

Rate Index suggested charts 90 Actions 97 Edit

2021 05/31/2021 Last Px Local CCY Mov Avgs Key Events

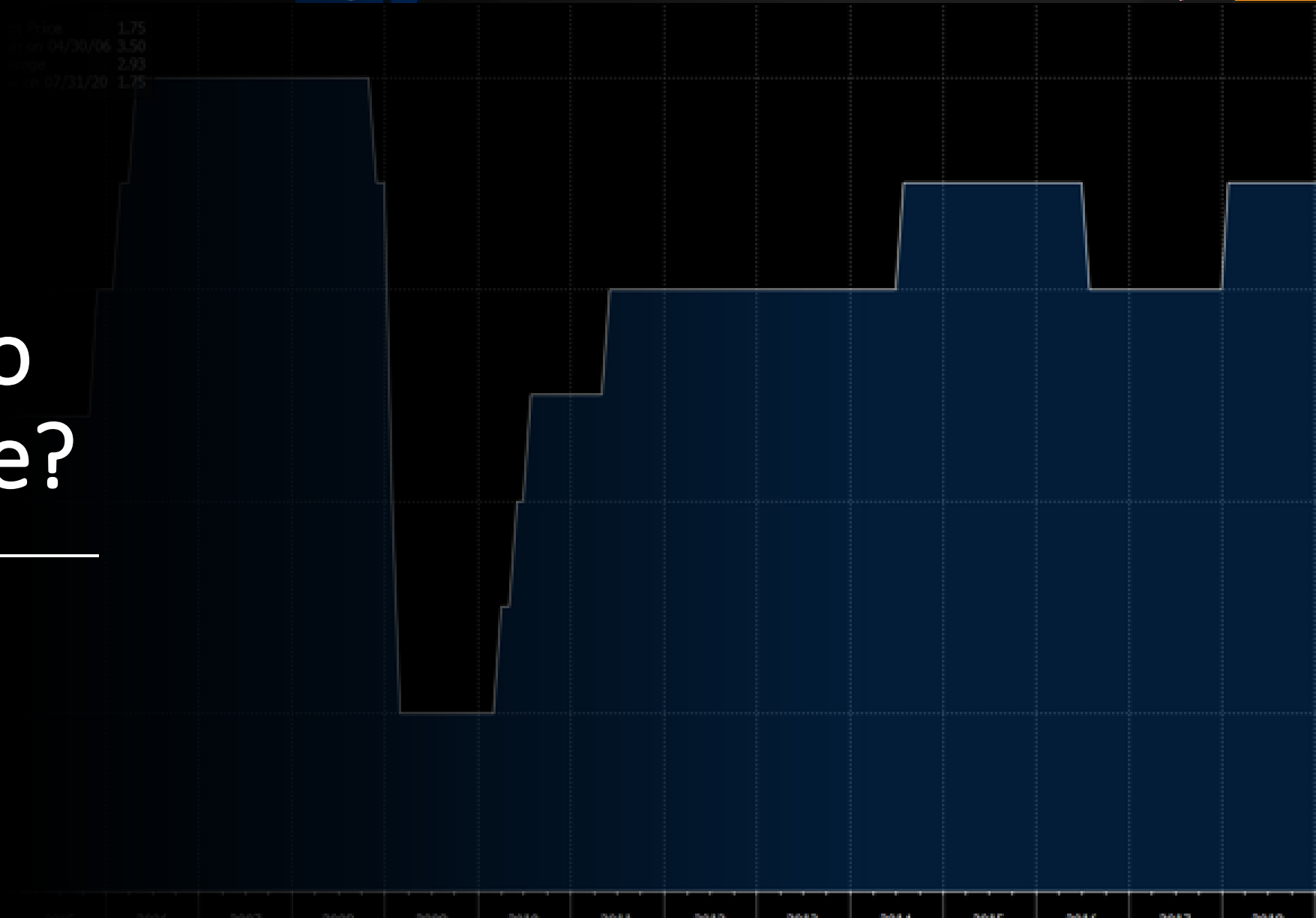
1M 6M YTD 1Y 5Y Max Monthly Table Compare Add Data

Rate 1.75
04/30/06 3.50
07/31/20 1.75

Low Interest Rates: How do they affect me?

Reza Baharin, CFP, IFP

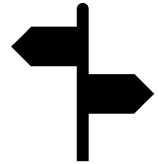
22 May 2021



Contents



Part I: Theory



Part II: A look to the past



Part III: A look to the future

Risk is fundamental to investing...

Unsystematic Risk

A new competitor enters the market

Change in company leadership

New technology driving company innovation

Risk associated with the investment that can be diversified away

Systematic Risk

Institution of MCO 1.0... 2.0... 3.1...

BNM cuts interest rates

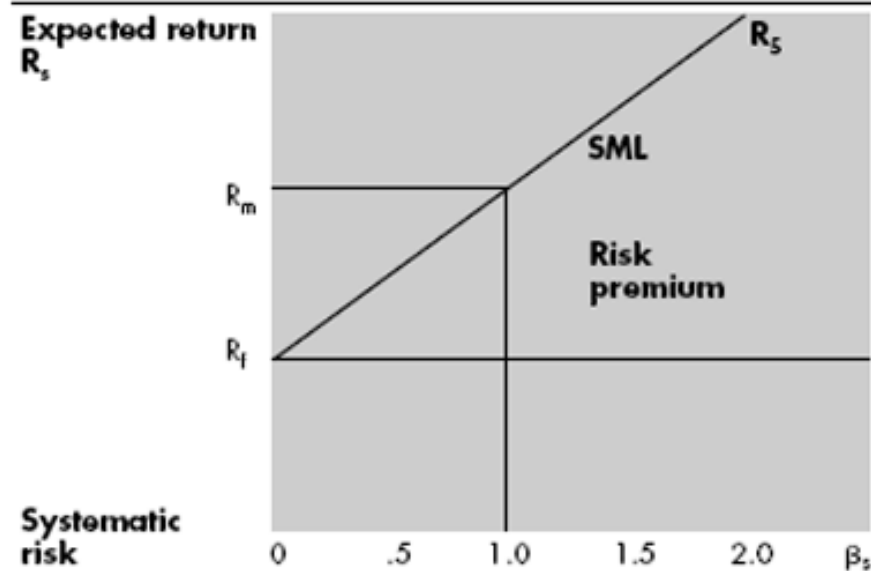
Change of government

Nondiversifiable risk that is unavoidable

... so we ought to be compensated for it

Assuming the Capital Asset Pricing Model (CAPM) is true...

Exhibit III The security market line



$$R_s = R_f + \text{risk premium} \text{ or } R_s = R_f + \beta_s (R_m - R_f)$$

R_s = the stock's expected return

R_f = the risk-free rate

R_m = the expected return on the stock market as a whole.

β_s = the stock's beta

Source: HBR (<https://hbr.org/1982/01/does-the-capital-asset-pricing-model-work>)

“Applying” the risk free rate to investing...

When RFR is important

Discounted cashflow models in valuing companies

Anchors the floor for borrowing

Sets the baseline for personal investing

How much return should buying a stock or bond be?

If OPR ↓, then my loan payments also go ↓

Deposit rates are so low!
ASB (!!!) returns are getting lower
Compare it to the IRR of an asset

Low i-rates will drive investors to seek risk elsewhere

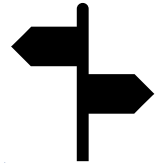


Bitcoin @ USD37k
+548% since March 2020
+381% annualized

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Part I: Theory

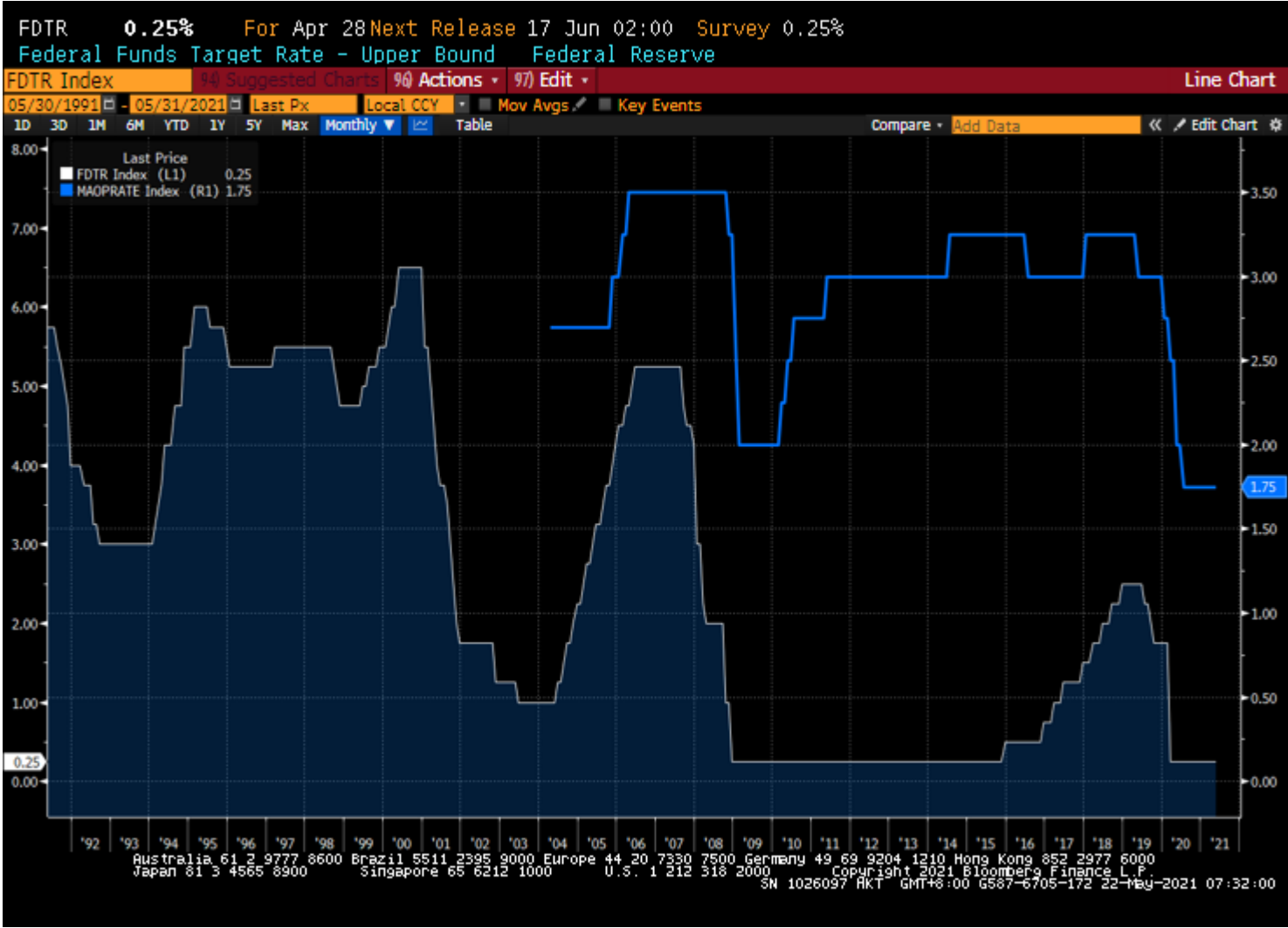


Part II: A look to the past



Part III: A look to the future

The Risk Free Rate is your baseline return...



BNM's Overnight Policy Rate @ 1.75%

Fed Funds Rate upper bound @ 0.25%

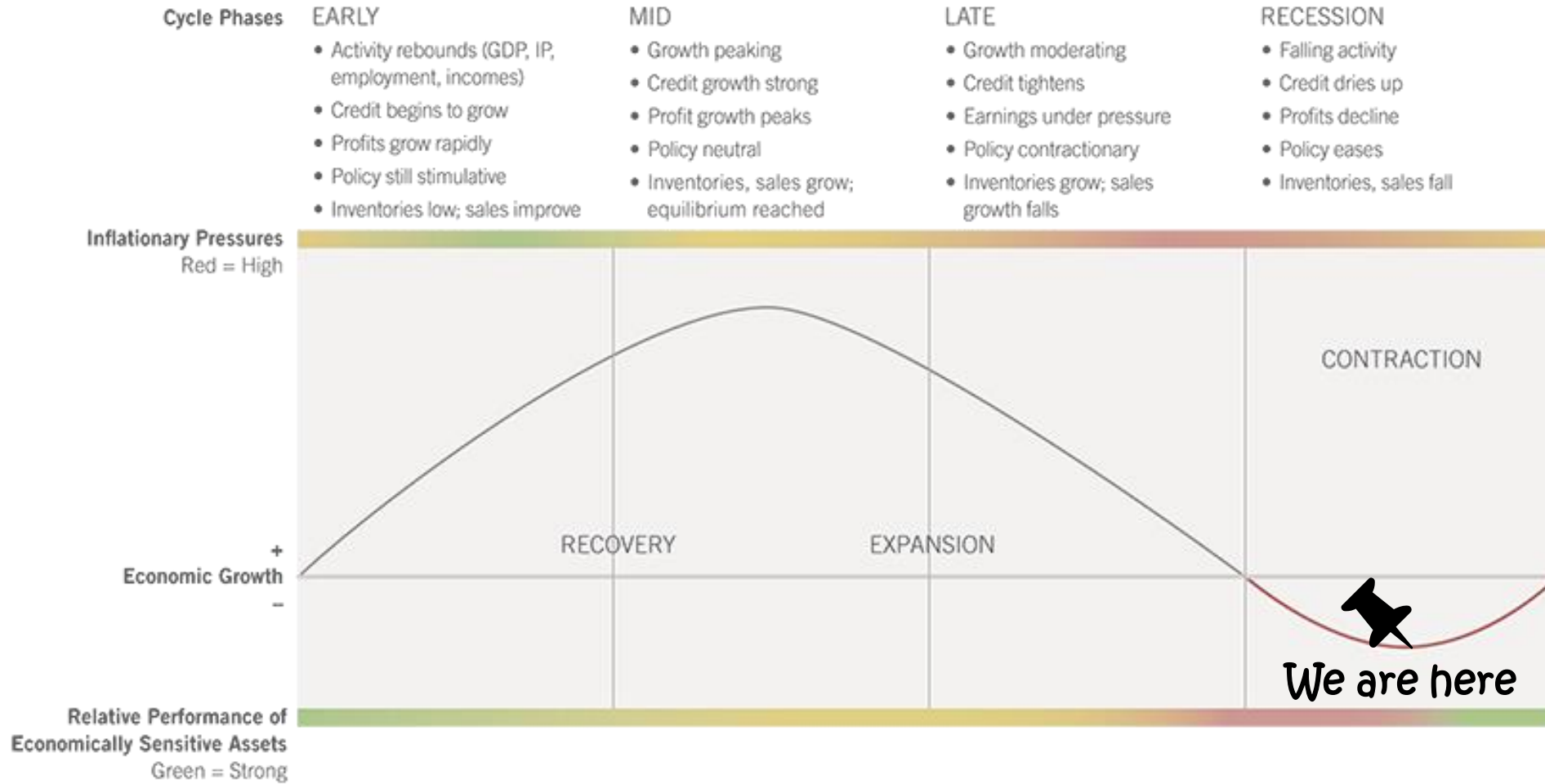
... and an anchor for all other asset returns



10y MGS @ 3.21%

10y Treasuries @ 1.62%

Where we are in the economic cycle...



Source: <https://www.fidelity.com/learning-center/trading-investing/markets-sectors/intro-sector-rotation-strats>

... gives us different 'winners' each year

Asset Class Returns

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------|--------------------|---------------------|--------------------|-------------------|---------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-----------------|---------------------|--------------------|-------------------|
| REIT 35.1% | EM 39.8% | HG Bnd 5.2% | EM 79.0% | REIT 28.0% | REIT 8.3% | REIT 19.7% | Sm Cap 38.8% | REIT 28.0% | REIT 2.8% | Sm Cap 21.3% | EM 37.8% | Cash 1.8% | Lg Cap 31.5% | Sm Cap 20.0% |
| EM 32.6% | Int'l Stk 11.6% | Cash 1.7% | HY Bnd 57.5% | Sm Cap 26.9% | HG Bnd 7.8% | EM 18.6% | Lg Cap 32.4% | Lg Cap 13.7% | Lg Cap 1.4% | HY Bnd 17.5% | Int'l 25.6% | HG Bnd 0.0% | REIT 28.7% | EM 18.7% |
| Int'l Stk 26.9% | AA 7.6% | AA -22.4% | Int'l Stk 32.5% | EM 19.2% | HY Bnd 4.4% | Int'l Stk 17.9% | Int'l Stk 23.3% | AA 6.9% | HG Bnd 0.6% | Lg Cap 12.0% | Lg Cap 21.8% | HY Bnd -2.3% | Sm Cap 25.5% | Lg Cap 18.4% |
| Sm Cap 18.4% | HG Bnd 7.0% | HY Bnd -26.4% | REIT 28.0% | HY Bnd 15.2% | Lg Cap 2.1% | Sm Cap 16.4% | AA 11.5% | HG Bnd 6.0% | Cash 0.0% | EM 11.6% | Sm Cap 14.7% | REIT -4.0% | Int'l Stk 22.7% | AA 9.8% |
| AA 16.7% | Lg Cap 5.5% | Sm Cap -33.8% | Sm Cap 27.2% | Lg Cap 15.1% | AA 0.3% | Lg Cap 16.0% | HY Bnd 7.4% | Sm Cap 4.9% | Int'l Stk -0.4% | REIT 8.6% | AA 14.6% | Lg Cap -4.4% | AA 18.9% | Int'l Stk 8.3% |
| Lg Cap 15.8% | Cash 4.4% | Lg Cap -37.0% | Lg Cap 26.5% | AA 13.5% | Cash 0.1% | HY Bnd 15.6% | REIT 2.9% | HY Bnd 2.5% | AA -1.3% | AA 7.2% | REIT 8.7% | AA -5.6% | EM 18.9% | HY Bnd 7.5% |
| HY Bnd 11.8% | HY Bnd 2.2% | REIT -37.7% | AA 24.6% | Int'l Stk 8.2% | Sm Cap -4.2% | AA 12.2% | Cash 0.1% | Cash 0.0% | Sm Cap -4.4% | HG Bnd 2.7% | HY Bnd 7.5% | Sm Cap -11.0% | HY Bnd 14.4% | HG Bnd 6.1% |
| Cash 4.7% | Sm Cap -1.6% | Int'l Stk -43.1% | HG Bnd 5.9% | HG Bnd 6.5% | Int'l Stk -11.7% | HG Bnd 4.2% | HG Bnd -2.0% | EM -1.8% | HY Bnd -4.6% | Int'l Stk 1.5% | HG Bnd 3.5% | Int'l Stk -13.4% | HG Bnd 8.7% | Cash 0.6% |
| HG Bnd 4.3% | REIT -15.7% | EM -53.2% | Cash 0.1% | Cash 0.1% | EM -18.2% | Cash 0.1% | EM -2.3% | Int'l Stk -4.5% | EM -14.6% | Cash 0.3% | Cash 0.8% | EM -14.3% | Cash 2.2% | REIT -5.1% |

Even professionals find it difficult to beat the market

Are you astute enough to pick winners consistently?

| Abbr. | Asset Class - Index | Annual | Best | Worst |
|-----------|---|--------|-------|--------|
| Lg Cap | Large Cap Stocks - S&P 500 Index | 9.88% | 32.4% | -37.0% |
| Sm Cap | Small Cap Stocks - Russell 2000 Index | 8.91% | 38.8% | -33.8% |
| Int'l Stk | International Developed Stocks - MSCI EAFE Index | 4.97% | 32.5% | -43.1% |
| EM | Emerging Market Stocks - MSCI Emerging Markets Index | 6.95% | 79.0% | -53.2% |
| REIT | REITs - FTSE NAREIT All Equity Index | 7.15% | 35.1% | -37.7% |
| HG Bnd | High Grade Bonds - Bloomberg Barclays U.S. Agg Bond Index | 4.40% | 8.7% | -2.0% |
| HY Bnd | High Yield Bonds - ICE BofA US High Yield Index | 7.44% | 57.5% | -26.4% |
| Cash | Cash - S&P U.S. Treasury Bill 0-3 Mth Index | 1.11% | 4.7% | 0.0% |
| AA | Asset Allocation Portfolio* | 7.02% | 24.6% | -22.4% |

Past performance does not guarantee future returns. The historical performance shows changes in market trends across several asset classes over the past fifteen years. Returns represent total annual returns (reinvestment of all distributions) and does not include fees and expenses. The investments you choose should reflect your financial goals and risk tolerance. For assistance, talk to a financial professional. All data are as of 12/31/20.

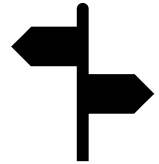
*Asset Allocation Portfolio is made up of 15% large cap stocks, 15% international stocks, 10% small cap stocks, 10% emerging market stocks, 10% REITs, 40% high-grade bonds, and annual rebalancing.

Source: <https://novelinvestor.com/asset-class-returns/>

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Part I: Theory

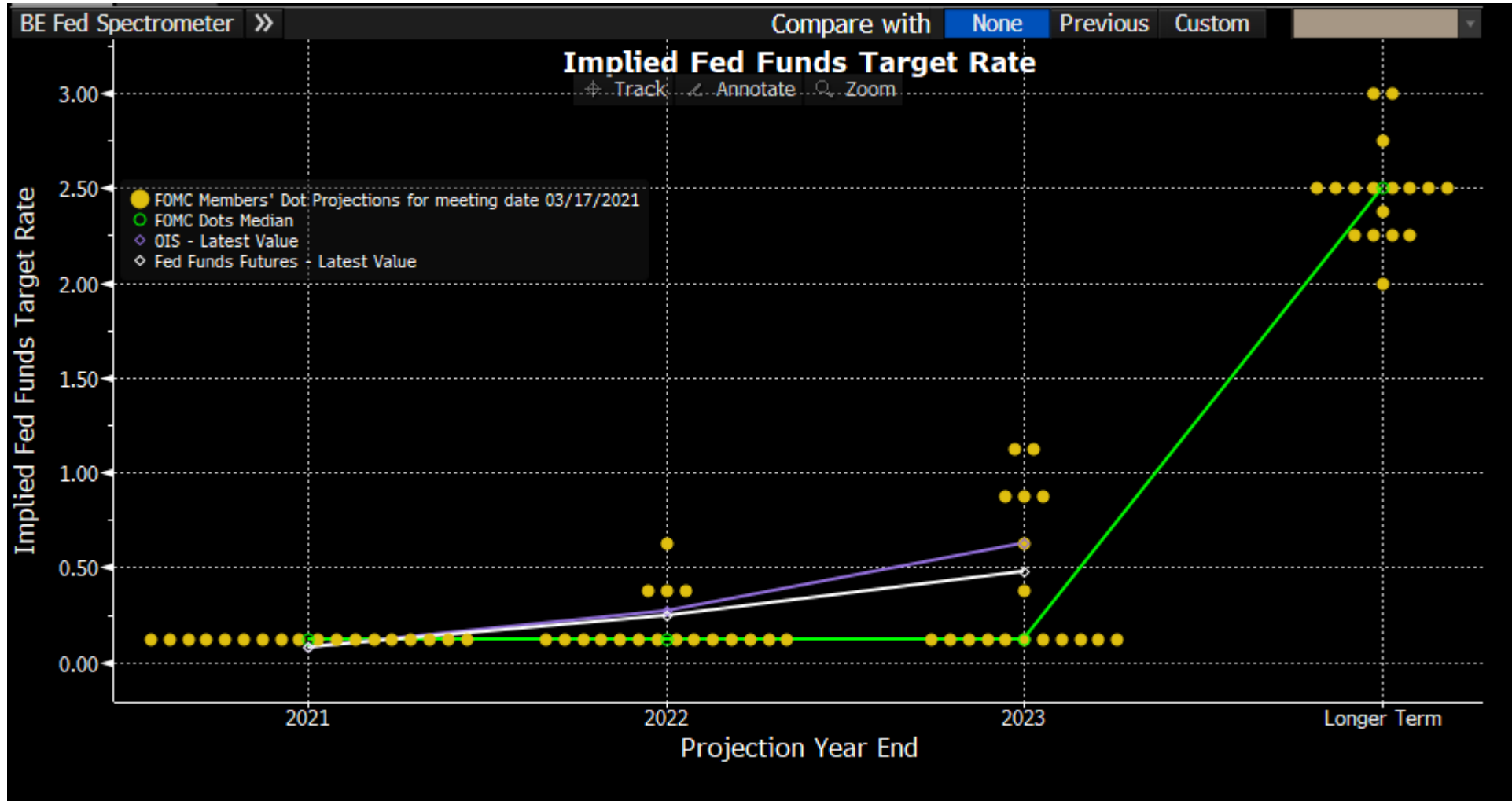


Part II: A look to the past



Part III: A look to the future

Even the Fed members are not unanimous on rates



And don't get me started on economic forecasts... (1)

Invalid country or region entered. Entry reverted.

96) Chart 97) Set as Default View Disclaimer Economic Forecasts

Country/Region/World Contributor Contributor Composite Yearly Quarterly

Malaysia Browse Private Official

Actual/Forecasts Probability of Recession 15.0%

| Indicator | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|
| Economic Activity | | | | | | | | | | |
| Real GDP (YoY%) | 6.0 | 5.1 | 4.5 | 5.7 | 4.7 | 4.3 | -5.6 | 5.7 | 5.3 | 4.8 |
| CPI (YoY%) | 3.2 | 2.1 | 2.1 | 3.8 | 1.0 | 0.7 | -1.1 | 2.3 | 1.8 | 2.1 |
| Unemployment (%) | 2.9 | 3.1 | 3.4 | 3.4 | 3.3 | 3.3 | 4.5 | 4.4 | 3.7 | 3.6 |
| External Balance | | | | | | | | | | |
| Curr. Acct. (% of GDP) | 4.4 | 2.8 | 2.0 | 3.0 | 2.3 | 3.3 | 4.3 | 3.4 | 3.3 | 2.7 |
| Fiscal Balance | | | | | | | | | | |
| Budget (% of GDP) | -3.4 | -3.2 | -3.1 | -2.9 | -3.7 | -3.4 | -6.0 | -6.0 | -4.5 | -3.3 |
| Interest Rates | | | | | | | | | | |
| Central Bank Rate (%) | 3.23 | 3.04 | 3.00 | 2.91 | 3.18 | 3.00 | 1.75 | 1.75 | 2.10 | |
| 3-Month Rate (%) | 3.86 | 3.84 | 3.41 | 3.44 | 3.69 | 3.35 | 1.94 | 2.00 | 2.28 | |
| 2-Year Note (%) | 3.55 | 2.88 | 3.42 | 3.14 | 3.53 | 3.01 | 1.83 | | | |
| 10-Year Note (%) | 4.15 | 4.19 | 4.23 | 3.91 | 4.08 | 3.31 | 2.65 | 3.36 | 3.68 | |
| Exchange Rates | | | | | | | | | | |
| USDMYR | 3.50 | 4.29 | 4.49 | 4.05 | 4.13 | 4.09 | 4.02 | 4.08 | 3.96 | 3.91 |

50) News Headlines | NSE »

- 51) SURVEY REPORT: Malaysia Economic Forecasts in Q2 2021 BN 05/18
- 52) SURVEY REPORT: Malaysia Economic Forecasts in Q2 2021 BN 05/18
- 53) Malaysia, Thailand to See Largest Price Increases in Asia: Chart BN 03/02
- 54) SURVEY REPORT: Malaysia Economic Forecasts in Q1 2021 BN 02/18
- 55) SURVEY REPORT: Malaysia Economic Forecasts in Q4 2020 BN 11/20

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 4565 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2021 Bloomberg Finance L.P.
 SN 1026097 AKT GMT+8:00 6587-6705-164 22-May-2021 08:15:20

*“The MPC considers the stance of monetary policy to be **appropriate and accommodative**. Given the uncertainties surrounding the pandemic, the stance of monetary policy going forward will **continue to be determined by new data and information**, and their implications on the overall outlook for inflation and domestic growth. The Bank remains committed to utilise its policy levers as appropriate to foster enabling conditions for a sustainable economic recovery.*

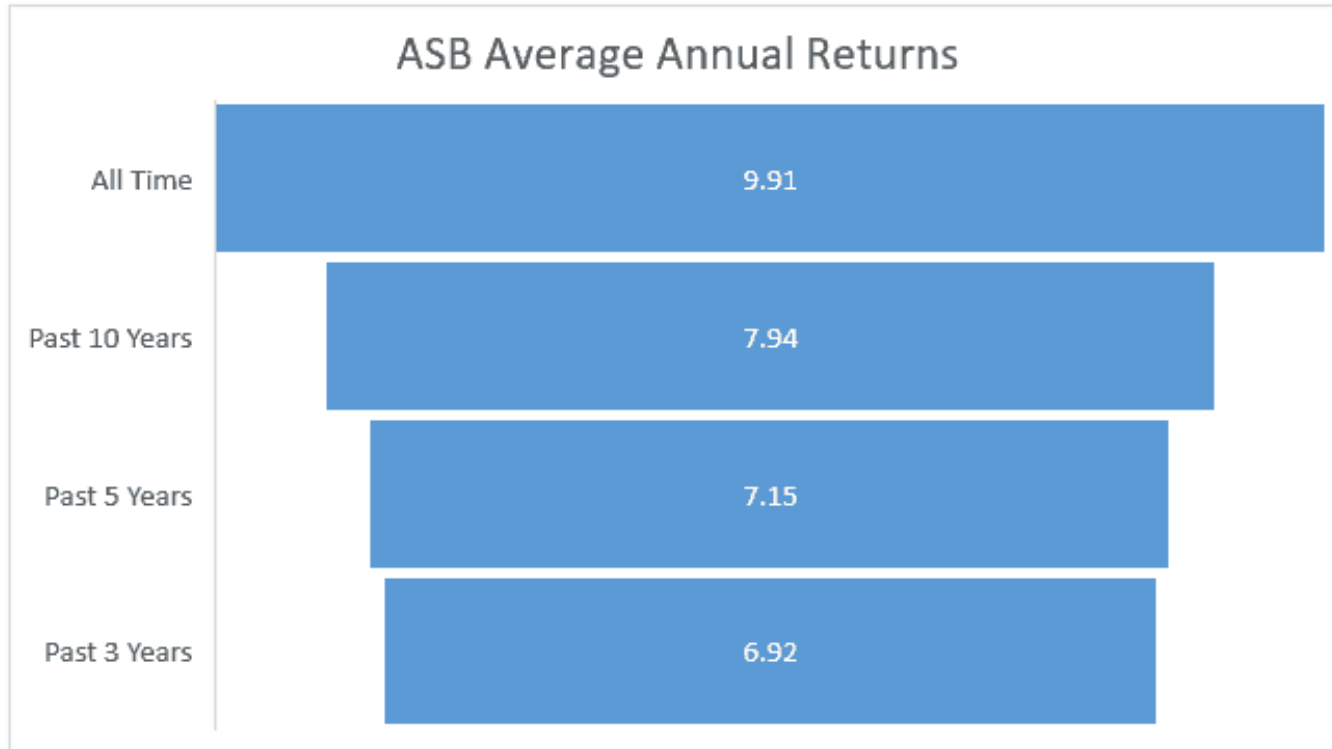
- Bank Negara Malaysia, 6 May 2021

And don't get me started on economic forecasts... (2)

Enter # <GO> to view analyst forecast, <Back> to Return

| Chart Analysts | | Forecast Histogram | Export | Disclaimer | Bond Yield Forecasts: Analysts | | | | | | | | | |
|--|----------------|-----------------------|--------|------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Malaysia | | | | | Q2 21 | Q3 21 | Q4 21 | Q1 22 | Q2 22 | Q3 22 | Q4 22 | Q1 23 | Q2 23 | Q3 23 |
| Malaysia 10-Year | | Bloomberg Wgt Avg | | | 3.18 | 3.30 | 3.36 | 3.40 | 3.55 | 3.60 | 3.68 | | | |
|  Market Yield 3.20 | | Implied Forward Yield | | | 3.22 | 3.29 | 3.36 | 3.43 | 3.50 | 3.57 | 3.63 | | | |
| | | Median Forecast | | | 3.25 | 3.30 | 3.35 | 3.40 | 3.55 | 3.60 | 3.68 | | | |
| | | Average Forecast | | | 3.18 | 3.30 | 3.36 | 3.40 | 3.55 | 3.60 | 3.68 | | | |
| | | High Forecast | | | 3.30 | 3.40 | 3.50 | 3.40 | 3.60 | 3.60 | 3.75 | | | |
| | | Low Forecast | | | 3.00 | 3.20 | 3.25 | 3.40 | 3.50 | 3.60 | 3.60 | | | |
| Recent Updates | | Responses | | | 3 | 3 | 4 | 2 | 2 | 1 | 2 | | | |
| No Update Since Last Official Survey | | May Survey Median | | | 3.25 | 3.30 | 3.35 | 3.40 | 3.55 | 3.60 | 3.68 | | | |
| | | Feb. Survey Median | | | 2.83 | 2.95 | 3.05 | 3.08 | 2.80 | 2.95 | 3.00 | | | |
| | | Change in Medians | | | 0.42 | 0.35 | 0.30 | 0.32 | 0.75 | 0.65 | 0.67 | | | |
| Firm Name | Analyst | As of | Q2 21 | Q3 21 | Q4 21 | Q1 22 | Q2 22 | Q3 22 | Q4 22 | Q1 23 | Q2 23 | Q3 23 | | |
| 1) ING Groep NV | P. Sakpal | 05/18 | 3.25 | 3.30 | 3.40 | 3.40 | 3.50 | 3.60 | 3.60 | | | | | |
| 2) Malayan Banking Bhd | W. Phoon | 05/18 | 3.30 | 3.40 | 3.50 | | | | | | | | | |
| 3) Standard Chartered PLC | E. Lee Wee Kok | 05/18 | 3.00 | 3.20 | 3.30 | 3.40 | 3.60 | | | | | | | |
| 4) UBS AG | E. Teather | 05/18 | | | 3.25 | | | | 3.75 | | | | | |

Past performance is no indicator of future performance



MyPF.my

ASB Average Historical Returns

| Average Returns | Dividend (cents) | Bonus (cents) | Total (cents) |
|-----------------|------------------|---------------|---------------|
| All Time | 7.84 | 2.07 | 9.91 |
| Past 10 Years | 7.06 | 0.88 | 7.94 |
| Past 5 Years | 6.50 | 0.65 | 7.15 |
| Past 3 Years | 6.17 | 0.75 | 6.92 |

Market conditions change

Investor expectations also change

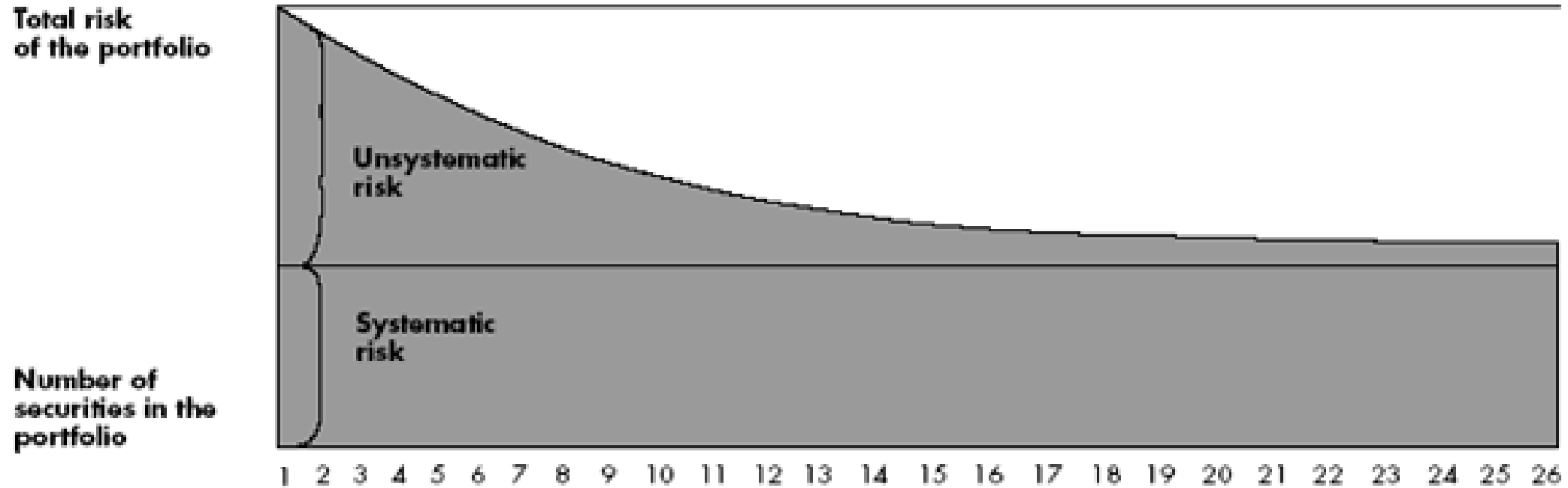
*“PNB will continue to navigate these challenging times, as we have done for more than 40 years, to ensure we continue to **deliver sustainable returns to our unit holders**. We will continue to strengthen our investment portfolio in this challenging period via our **diversification strategy**, tighter risk management and enhancing our internal capabilities through a progressive organisational transformation plan.”*

- Tan Sri Dr. Zeti Aziz, PNB Group Chairman (2020)

2020 @ 4.25% incl bonus

So the best way to de-risk, is to diversify

Exhibit II Reduction of unsystematic risk through diversification



Source: HBR (<https://hbr.org/1982/01/does-the-capital-asset-pricing-model-work>)

Low interest rates and how they affect me...

Effect of low interest rates

Passive, low-risk investments unlikely to beat inflation in the long run

Asset managers have to work harder for extra % return. Diversify into 'riskier' assets, bonds, stocks

Want to DIY? A hands-on approach requires you to be 'turned on' all the time

| Tenure | Interest Rates (% p.a) |
|----------|------------------------|
| 1 month | 1.50 |
| 2 months | 1.65 |
| 3 months | 1.70 |
| 4 months | 1.70 |
| 5 months | 1.70 |
| 6 months | 6m @ 1.80% |

The effect of **high fees** detracts away from your returns

Want higher return? Need to assume higher risk.

Are you cognitively capable of this?