Optimizing Your Portfolio for Higher Rates

Presented By PFM Asset Management LLC

April 21, 2022

pfmam.com
Market Update
The Fed’s Dual Mandate
Fed Participants’ Assessments of ‘Appropriate’ Monetary Policy

Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members’ judgement of the midpoint of the appropriate target range for the Federal Funds rate at each year-end.
Fast Forward to Now: Federal Reserve Officials Project at Least 7 Rate Hikes in 2022

Fed Participants’ Assessments of ‘Appropriate’ Monetary Policy

Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members’ judgement of the midpoint of the appropriate target range for the Federal Funds rate at each year-end.
U.S. Economy Added 431,000 Jobs in March; Unemployment Rate Falls to 3.6%

Unemployment Rate

March 22 3.6%

April 20 14.7%

Monthly Change In Nonfarm Payrolls

Source: Bloomberg, as of March 2022. Data is seasonally adjusted.
Consumer Inflation Skyrocketed to 8.5%

Source: Bloomberg, as of March 2022.
Short-End Yields Rise at Fastest Pace in Recent Memory

2-Year U.S. Treasury Yield
January 2015 – April 2022

Source: ICE BofAML Indices as provided by Bloomberg.
Treasury Curve Remains Steep on the Front End

Yields on intermediate-term (2 – 7 year) maturities have risen the most.

Source: Bloomberg, as of 4/18/2022.
Credit Spreads Remain at Attractive Levels

Corporate Yield Spreads
1 – 3 Yr. AAA-A (OAS)

Current Spread: 52 bps

Money Market Yield Curves

Source: Bloomberg, ICE BofAML 1 – 3 Year Index, as of 4/18/2022. PFMAM Trading Desk, as of 4/18/2022. Yields are for indicative purposes only; actual yields may vary by issue.
Optimizing Your College’s Portfolio
“My short-term financial goal is to survive until Tuesday. My long-term financial goal is to survive until Friday.”
Cash Flow Analysis Leads to Longer Term Investing

**Overnight**
- Cash and equivalents, providing immediate availability
- Manage liquidity needs

**Liquidity**
- Laddered investments to known and expected cash flows
- High-quality fixed income

**Core**
- Reserve funds not expected to be spent for the foreseeable future
- Intermediate and longer-term investments

Sample Cash Flow Analysis

For illustrative purposes only.
Investment Opportunities in Longer Maturities

- Longer strategies can increase earnings potential, however they also come with increased risk.

<table>
<thead>
<tr>
<th>Bank of America Merrill Lynch Treasury Index</th>
<th>Duration (years)</th>
<th>Annualized Total Return</th>
<th>Cumulative Value of $40 Million</th>
<th>Quarters With Negative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M T Bill</td>
<td>0.24</td>
<td>1.29%</td>
<td>$51,677,519</td>
<td>1 out of 80</td>
</tr>
<tr>
<td>6M T Bill</td>
<td>0.49</td>
<td>1.54%</td>
<td>$54,259,840</td>
<td>1 out of 80</td>
</tr>
<tr>
<td>1 Yr Treasury</td>
<td>1.00</td>
<td>1.67%</td>
<td>$55,772,262</td>
<td>8 out of 80</td>
</tr>
<tr>
<td>1-3 Treasury</td>
<td>1.88</td>
<td>2.16%</td>
<td>$61,387,613</td>
<td>15 out of 80</td>
</tr>
<tr>
<td>1-5 Treasury</td>
<td>2.64</td>
<td>2.65%</td>
<td>$67,473,491</td>
<td>23 out of 80</td>
</tr>
<tr>
<td>1-10 Treasury</td>
<td>3.92</td>
<td>3.25%</td>
<td>$75,796,194</td>
<td>26 out of 80</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Bank of America / Merrill Lynch Global Indices; based on historical results – future results may vary. As of December 31, 2021.
## Optimizing Short Term Balances

### Cash Management To Do

<table>
<thead>
<tr>
<th>SAFETY</th>
<th>Understand bank financials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit ASAP</td>
<td>Streamline collection process</td>
</tr>
<tr>
<td>Disbursement Trickle</td>
<td>Spread payables run (bi-monthly, etc.)</td>
</tr>
<tr>
<td>Control Costs</td>
<td>Regular review of analysis</td>
</tr>
<tr>
<td>Automate</td>
<td>Utilize bank services for efficiency</td>
</tr>
<tr>
<td>Earn ECR / Interest</td>
<td>Use LGIP / TERM</td>
</tr>
<tr>
<td>Relationship</td>
<td>Develop trust with advisor</td>
</tr>
</tbody>
</table>

### Samples
What Can You Do?

1. **Analyze your banking relationships regularly; monthly is best**
   - Make sure to look at the rates offered and monthly charges
   - Determine the “Net” Earnings Credit Rate your bank is paying
   - Ensure that you are not earning more credits than you can use

2. **Maintain frequent communication with your banker(s)**
   - Monitor changes in rates and discuss your objectives regularly

3. **Understand your options for short-term balances**
   - Be nimble and prepared to capture increased earnings through alternative options like Money Market Funds, LGIPs, and Managed Portfolios
# Eligible Investment Types

**Source:** Illinois Public Funds Investment Act

<table>
<thead>
<tr>
<th>Sector</th>
<th>Allowed By IL Statutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Market Funds / LGIP (cash)</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>TERM (Fixed Maturity LGIP 2-12 months)</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>Certificates of Deposit</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>U.S. Treasuries</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>U.S. Agencies</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>Supranational (e.g., World Bank)</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>Municipal Bonds (taxable)</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>U.S. Agency Mortgage-Backed Securities</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>Corporate Notes</td>
<td>Yes ✓</td>
</tr>
<tr>
<td>Corporate Bond Fund</td>
<td>Yes ✓</td>
</tr>
</tbody>
</table>
Sample Portfolio: Investment Grade 1 – 3 Year

**Portfolio Statistics**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Duration</td>
<td>1.8 years</td>
</tr>
<tr>
<td>Gross Yield</td>
<td>2.52%</td>
</tr>
</tbody>
</table>

**Sector Allocation**

- US Treasury 40%
- Federal Agency 10%
- Corporate Notes 17%
- Agency MBS 13%
- Supranational 7%
- Municipal 8%
- Corporate ETF 5%
- Corporate Notes 17%

**Credit Quality (S&P Ratings)**

- AA 70%
- A 21%
- AAA 9%

**Duration Distribution**

- 0-1 yr 64%
- 1-2 yr 36%

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- Data Source: Bloomberg. Data as of April 14, 2022. “Corporate ETF” is representative of the SPDR Short-Term Corporate Bond ETF. As of 4/13/22 the current yield to maturity was 2.94% and the current effective duration was 1.88 years.
- Sample portfolio structured by PFMAM. Please see important disclosures at the end of this presentation.
Sample portfolios are provided for illustrative purposes only and are not a recommendation.

Portfolios based on assumed investment noted on each respective page.

Yield source Bloomberg as of April 14, 2022.

Security universe sourced from Bloomberg and Market Axess and further limited to those issuers permitted by PFMAM’s internal Approved Credit List.

Actual yields and security availability may vary at time of purchase.

As economic and market conditions may change in the future, so may PFMAM’s recommendations as to the sale and purchase of securities in the portfolio.
<table>
<thead>
<tr>
<th>Maturity</th>
<th>Date</th>
<th>Net Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 Days</td>
<td>June</td>
<td>0.47%</td>
</tr>
<tr>
<td>90 Days</td>
<td>July</td>
<td>0.73%</td>
</tr>
<tr>
<td>120 Days</td>
<td>August</td>
<td>0.91%</td>
</tr>
<tr>
<td>150 Days</td>
<td>September</td>
<td>0.98%</td>
</tr>
<tr>
<td>180 Days</td>
<td>October</td>
<td>1.19%</td>
</tr>
<tr>
<td>210 Days</td>
<td>November</td>
<td>1.30%</td>
</tr>
<tr>
<td>240 Days</td>
<td>December</td>
<td>1.40%</td>
</tr>
<tr>
<td>270 Days</td>
<td>January</td>
<td>1.52%</td>
</tr>
<tr>
<td>300 Days</td>
<td>February</td>
<td>1.56%</td>
</tr>
<tr>
<td>330 Days</td>
<td>March</td>
<td>1.65%</td>
</tr>
<tr>
<td>365 Days</td>
<td>April</td>
<td>1.76%</td>
</tr>
</tbody>
</table>

Source: Illinois Term Portfolio, as of April 18, 2022
Summary Takeaway

▸ Short-term interest rates will rise
  ▹ How fast?
  ▹ When will they level off?

▸ There are opportunities for your investment program:
  ▹ Active maturity management
  ▹ Diversification – evaluation of sectors
  ▹ Portfolio segmentation – understanding opportunity costs of excess liquidity

▸ Cash Flow is Key
  ▹ Balances available for longer term investing versus short term funds

▸ Investment Policy
  ▹ Defines allowable investment types and any additional parameters

“Best time to invest was yesterday.
Next best time to invest is today.
Worst time to start investing is tomorrow.”
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