Al Rodack, CTP
Treasury Institute of Higher Education

Jeff Rayis, CTP CPA
Indiana Wesleyan University

Financial Asset and Liability Management

The Challenge Before Us

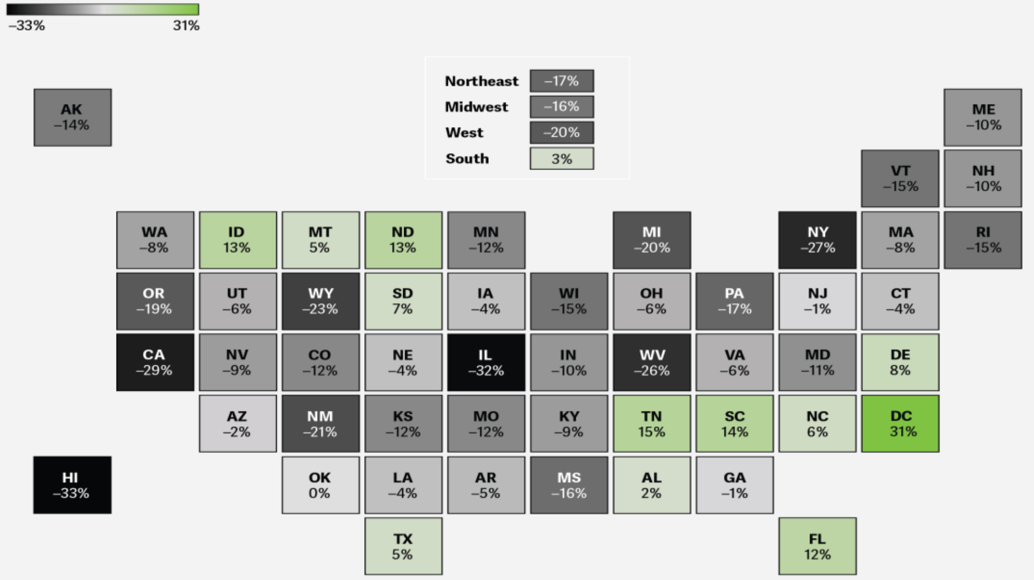
Nearly 20% of college presidents called it somewhat or very likely that their institution will merge or be acquired in the next five years.

–Inside Higher Ed and Hanover Research

Figure 2

The United States is projected to see a 13% decline in college enrollment from 2023 through 2041

Projected percentage change in high school graduates

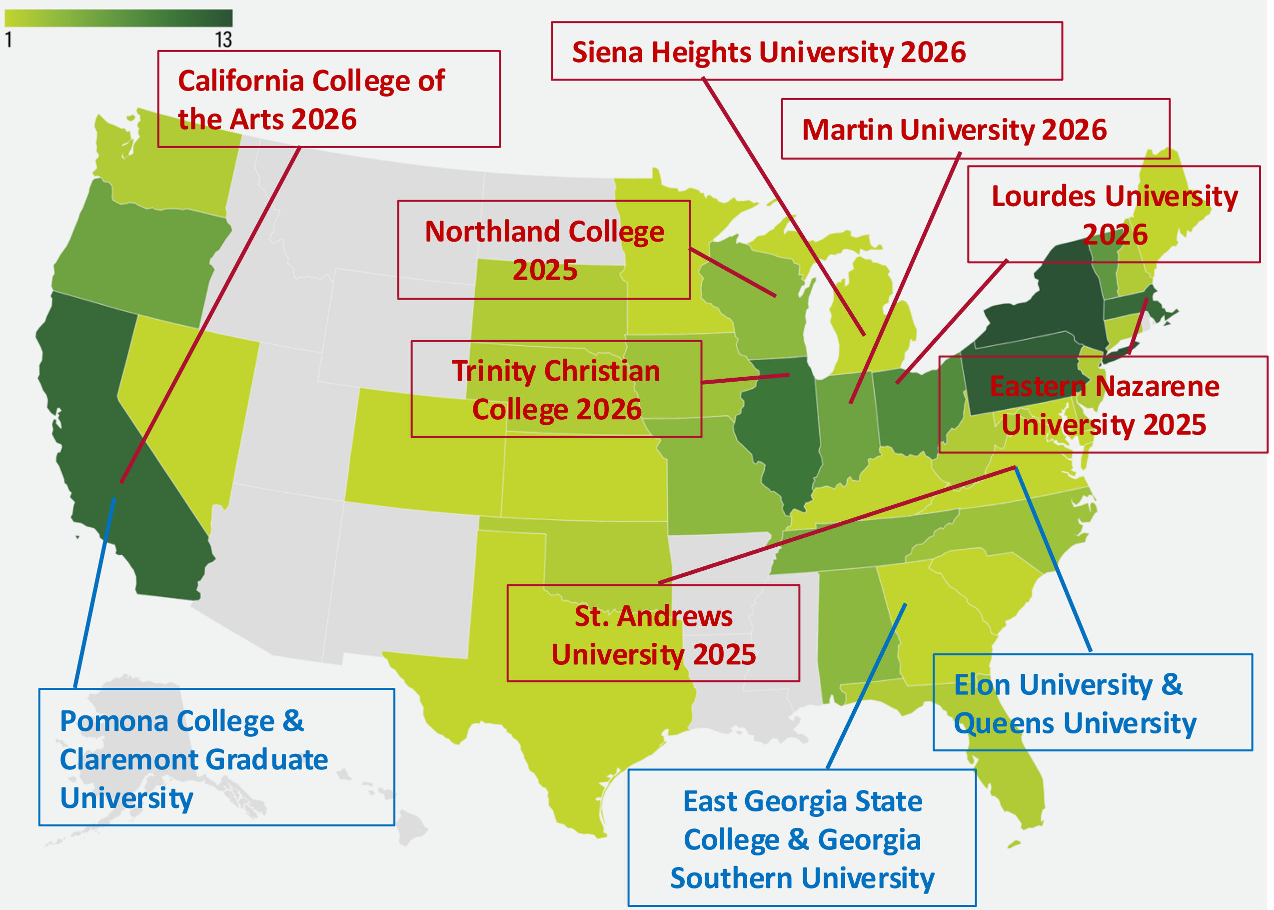


Source: Patrick Lane, Colleen Falkenstern, and Peace Bransberger, "Projections of high school graduates," Knocking at the College Door, December 2024.

Deloitte. | www.deloitte.com/cgi

Figure 4

College closures and mergers across the United States between 2016 and 2026



Source: *Higher Ed Dive*, "A look at trends in college consolidation since 2016," Feb. 11, 2026.

Deloitte. | www.deloitte.com/cgi

The Challenge Before Us

12-11-2024 FAST COMPANY

80 colleges could close by 2029, even as elite Ivy League schools thrive

Many colleges are struggling financially as enrollment falls. Blame skyrocketing tuition and growing doubts about the value of a degree.

[Images: NINJA Graphic/Adobe Stock, NansiPhoto/Adobe Stock]

BY JENNIFER MATTSON 2 MINUTE READ SHARE

American higher education is in crisis.

This year, some two dozen colleges shut their doors and more are forecast to close in 2025, CNBC reports. According to new research from the Federal Reserve Bank of Philadelphia, as many as 80 colleges and universities are expected to close in the next five years.

That working paper from the Fed based its analysis on a massive dataset of college and university information from 2002 to 2023, which predicted future closures through a model using machine learning. It found that of the 100 riskiest institutions it assessed, 84 closed within a three-year period. Researchers then predicted the likelihood of future closures, factoring in a 15% decline in enrollment between 2025 and 2029.

• March 14, 2025

Inside Higher Ed

More Colleges Freeze Hiring Amid Federal Funding Uncertainty

The latest wave of cost-cutting measures comes after the Trump administration pulled $400 million from Columbia University and $800 million from Johns Hopkins.

By Katherine Knott

University Business

Is this the first college closing announced in 2025?

Feb 24, 2025: Despite recent attempt to save Northland College from financial exigency, the Board of Trustees announced on February 19 that the 133-year-old school will close at the end of the academic year.

HIGHER ED DIVE Deep Dive Opinion Library Events Press Releases

Ed Tech Policy & Legal Leadership Students Enrollment For-Profit Faculty and Staff Finance

Colleges tighten budgets amid NIH funding uncertainty

From hiring freezes to spending cuts, research universities are trying to manage their finances amid a fluid and harrowing situation.

Published Feb. 20, 2025

Ben Unglesbee
Senior Reporter

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The Challenge Before Us

- Since 2020: 49 closures of institutions of higher education
- Increasing costs, including wages and NIL
- Limited tuition increases and aggressive tuition discounting
- Backlog of capital projects and deferred maintenance
- Geopolitical impacts on international recruitment
- Domestic enrollment declines
- Increasing compliance
- Reduced federal funding

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Increasing Costs, Including Wages

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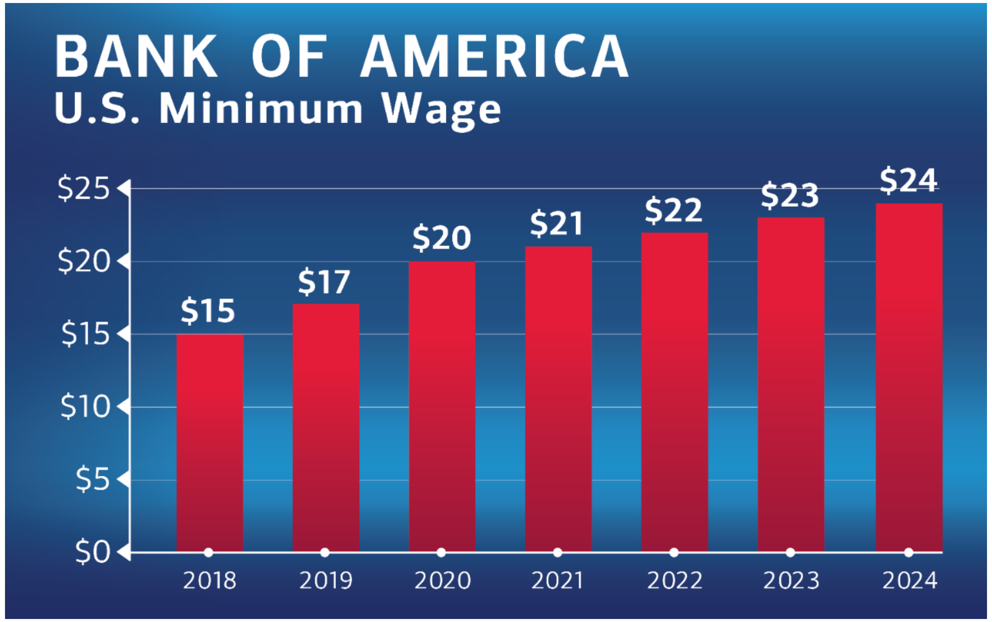
Increasing Costs, Including Wages



MONEY MATTERS

Aldi raising minimum wage to $23 an hour

by: Will Conybeare
Posted: Sep 12, 2024 / 08:10 AM EDT
Updated: Sep 12, 2024 / 08:10 AM EDT

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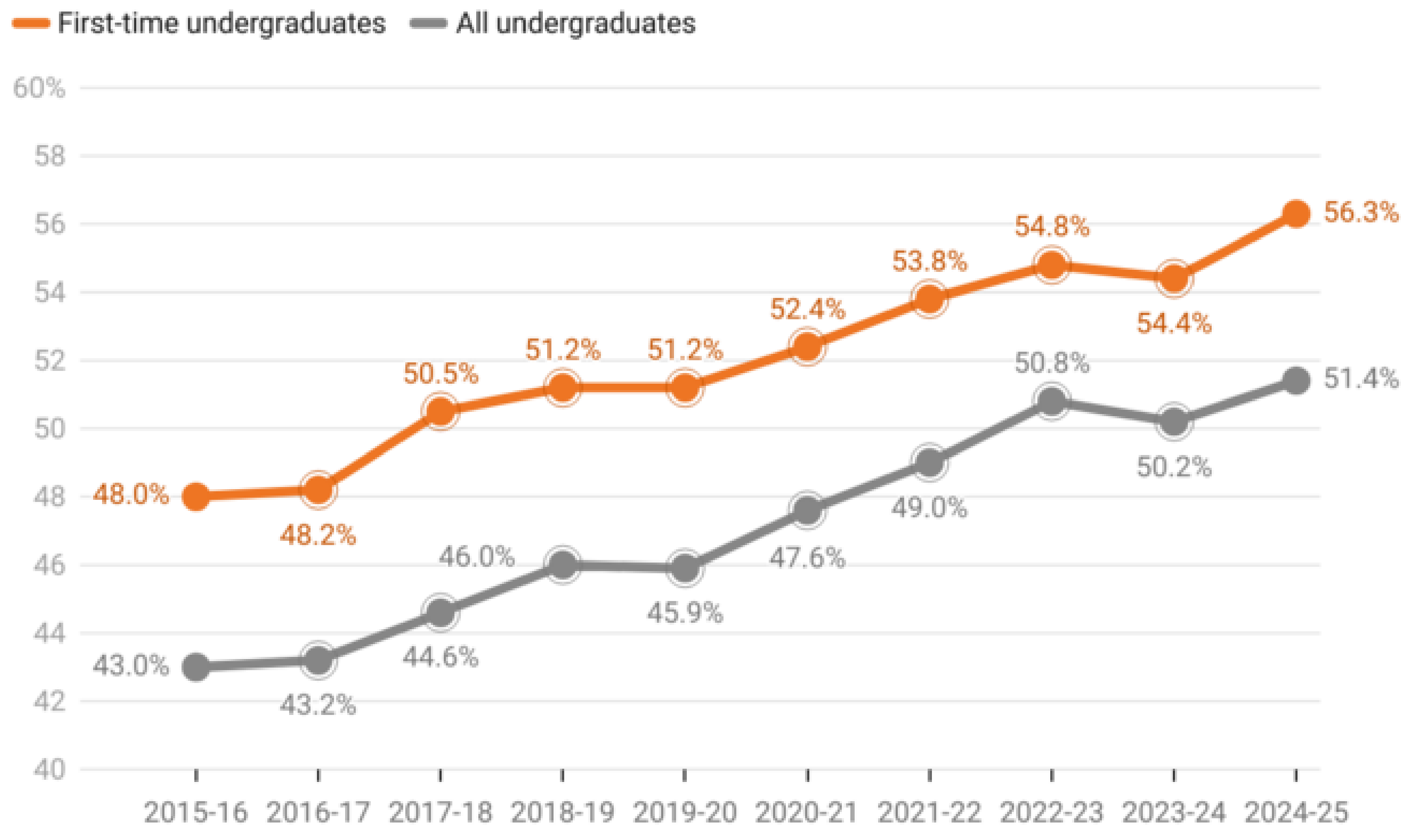
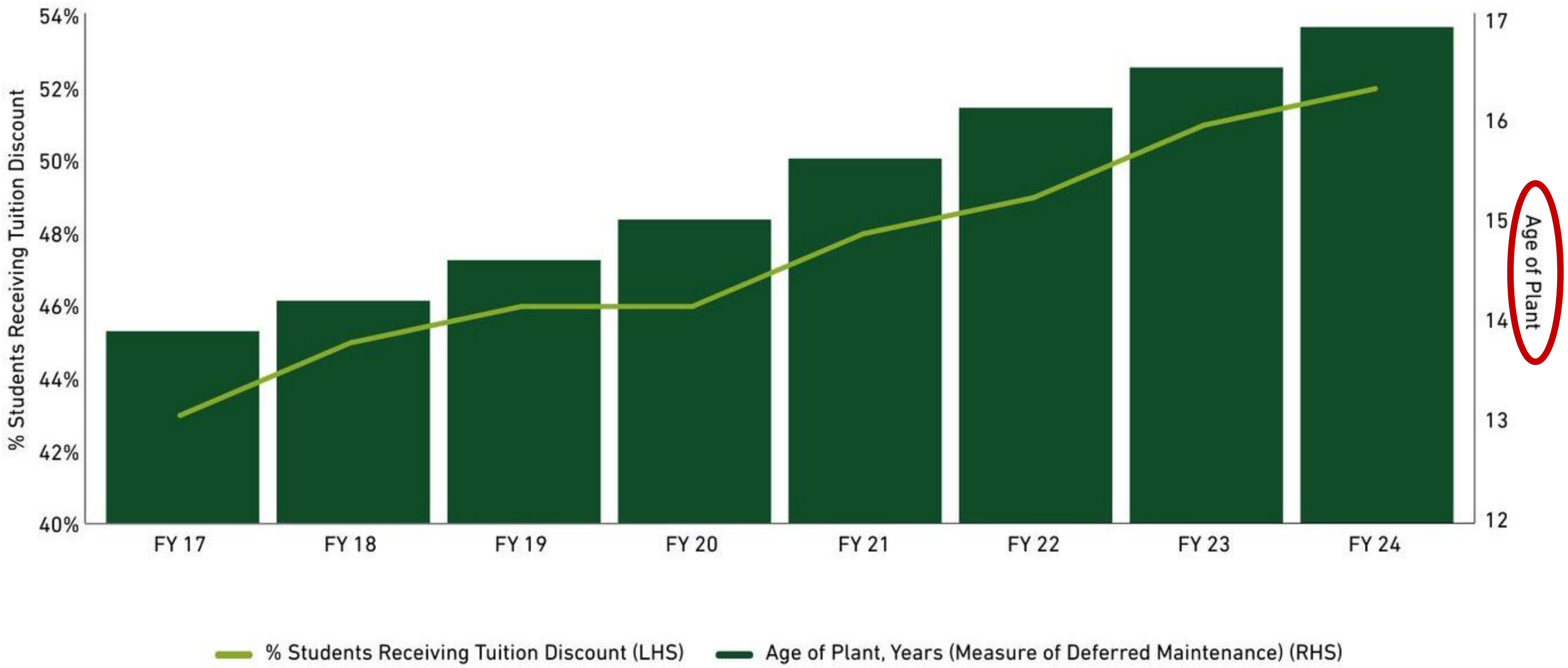
Aggressive tuition discounting



Source: NACUBO Tuition Discounting Study, data as of May 2025. • Created with Datawrapper

Backlog of Deferred Maintenance



Source: Merritt Research Services and Breckinridge Capital Advisors, Inc., as of November 2025.

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The Opportunity Before Us

- **Liquidity base of higher education**
- **Identifying the liquidity level of your institution**
- **The concept of an internal bank**

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Higher Education's Unique Characteristics

- Stable deposit base
- Predictable cashflows
- Separation of endowment and non-endowment funds
- Restricted and Unrestricted Funds
- Highly decentralized organizations
- Mostly nonprofit and tax exempt

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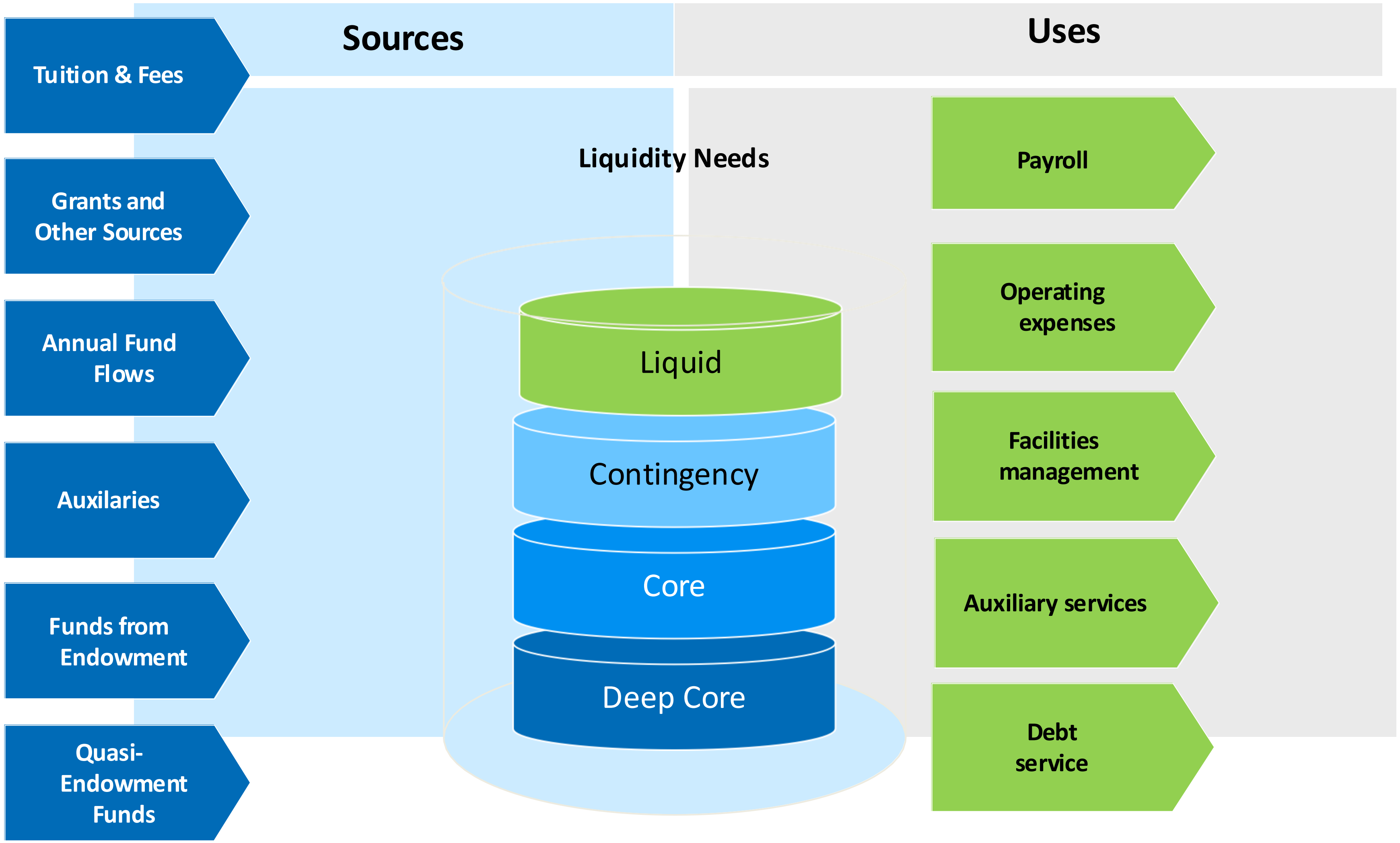
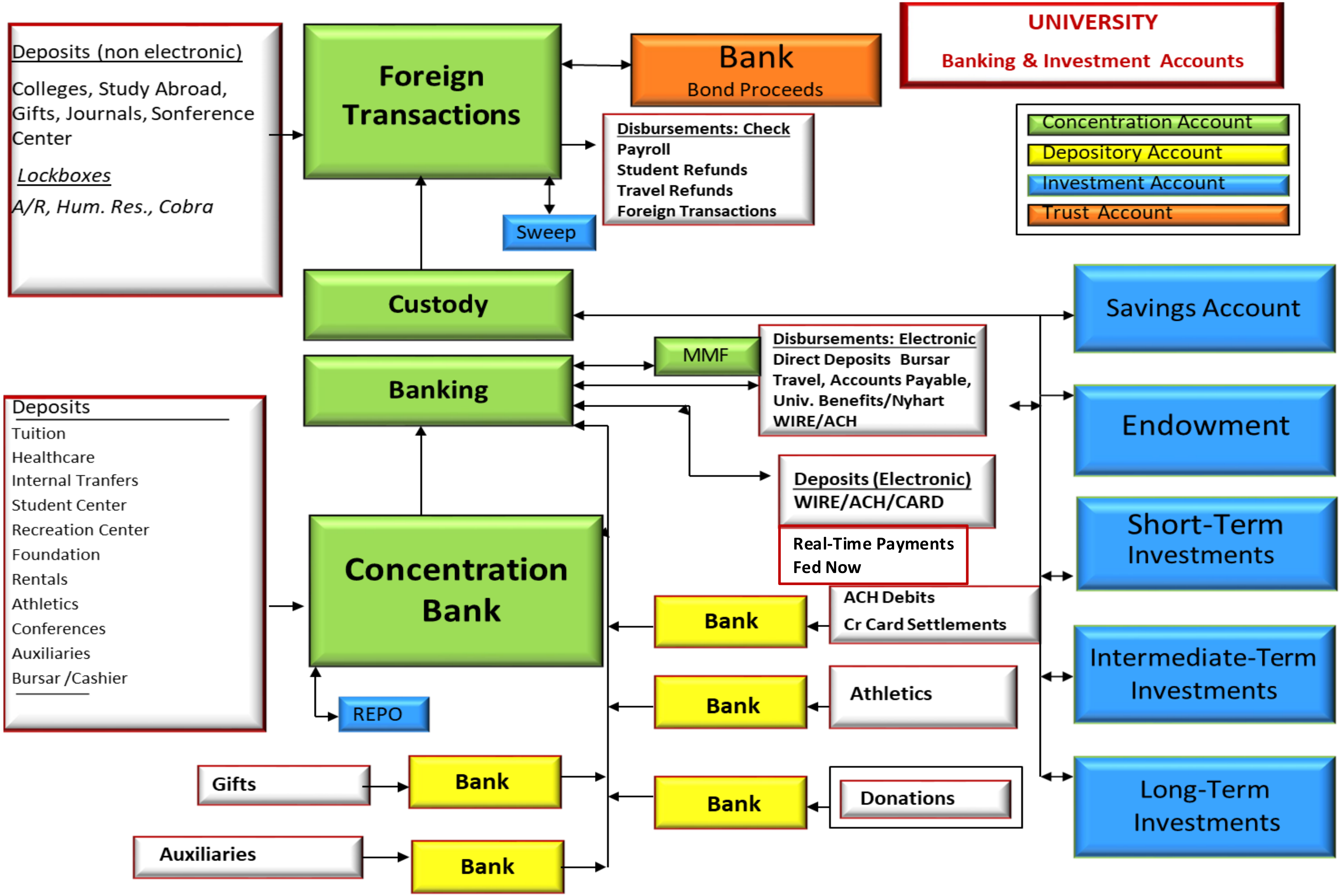
University Cash Flows



Other: Extraordinary Events

Other: Monetization, Healthcare, Advancement, Athletics



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Cash Flow Challenges

Unsynchronized
- Payment plans
- External Aid
- Conferences

Uneven
- Semesters
- Athletics

Uncertain
- Grants
- Gifts
- Discounting

Unexpected
- Geopolitical Events
- Lawsuits
- Cybercrime (CANVAS)
- Regulatory
- Pandemics

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Objectives of Cash Forecasting

- **Survival**
- Liquidity Management
- Financial Control
- Strategic Objectives
- Capital Budgeting
- Cost Management
- Currency Exposure

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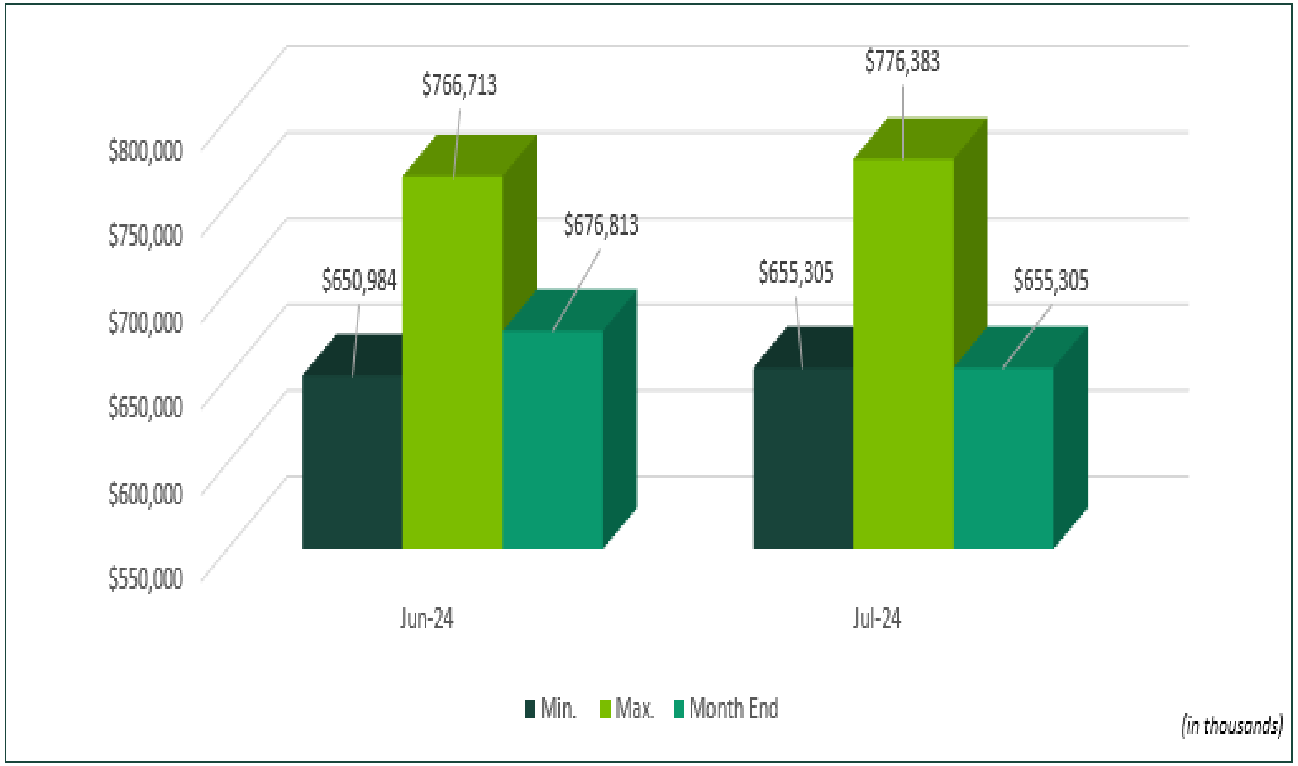
Short-Term Forecasting

Good Morning!
Liquidity Pool Operating - $711,890,560
Days Cash on Hand – 96
Target 30-60 days = Above Range

Upcoming large money movements:
7/5/2024 – ($3,400,000) – Insurance payments
7/11/2024 – ($2,800,000) - BiWeekly Payroll tax pull
7/12/2024 – ($11,100,000) – BiWeekly Pay + Retire
7/16/2024 - $35,495,691 – SOM July Appropriation
7/25/2024 – ($2,800,000) – BiWeekly Payroll tax pull
7/26/2024 – ($11,100,000) – BiWeekly Payroll + Retirement
7/30/2024 – ($27,000,000) – Salary Payroll tax pull
7/31/2024 – ($70,000,000) – Salary Payroll + Retirement
8/8/2024 – ($2,800,000) – Biweekly payroll tax pull
8/9/2024 – ($11,100,000) - Biweekly pay + retirement
8/14/2024 – ($75,000,000) – BiAnnual Debt P&I payments

Cash Trend:
Tue Jul 2, 2024 - $693,754,878
Mon Jul 1, 2024 - $691,119,814
Fri Jun 28, 2024 - $676,813,009
Thur Jun 27, 2024 - $766,712,727
Wed Jun 26, 2024 – $728,104,789



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Intermediate-Term Forecasting

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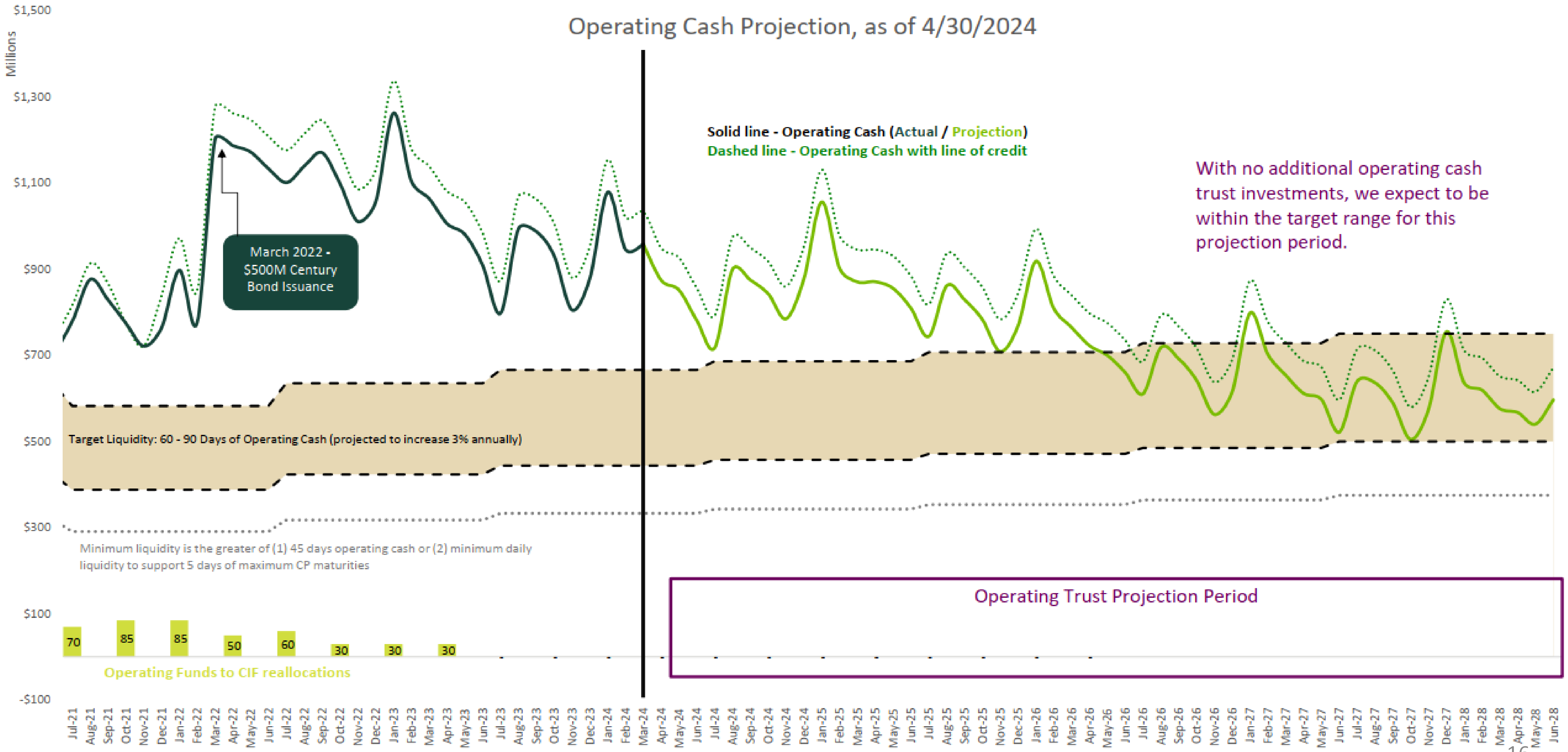

Long-Term Forecasting

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Normal Environment

Date	CURRENT YEAR 2024	2025	2026	2027	2028
01/01	720,371,915.26	709,330,603.00	608,502,356.60	465,494,713.27	420,388,990.22
01/02	719,744,633.60	724,927,819.01	611,145,980.95	469,037,428.32	424,640,248.29
01/03	749,802,686.74	742,700,772.98	622,488,600.20	480,449,343.90	438,329,571.47
01/04	792,626,364.07	748,567,797.58	629,401,486.67	500,484,939.46	461,751,927.90
01/05	811,783,043.86	764,145,515.66	649,040,973.00	524,052,323.06	479,931,049.79
01/06	811,783,043.86	777,978,954.36	665,641,099.44	543,972,474.78	497,465,962.94
01/07	811,783,043.86	820,051,825.78	716,128,545.14	580,015,359.54	523,186,603.31
01/08	776,315,860.25	813,908,907.10	708,263,081.61	570,120,246.37	511,312,467.52
01/09	963,824,173.28	846,129,569.17	746,163,570.11	615,773,331.68	566,096,169.88
01/10	967,753,636.73	897,634,404.31	794,087,108.52	672,243,998.09	628,397,143.40

University Treasury as a “Bank”

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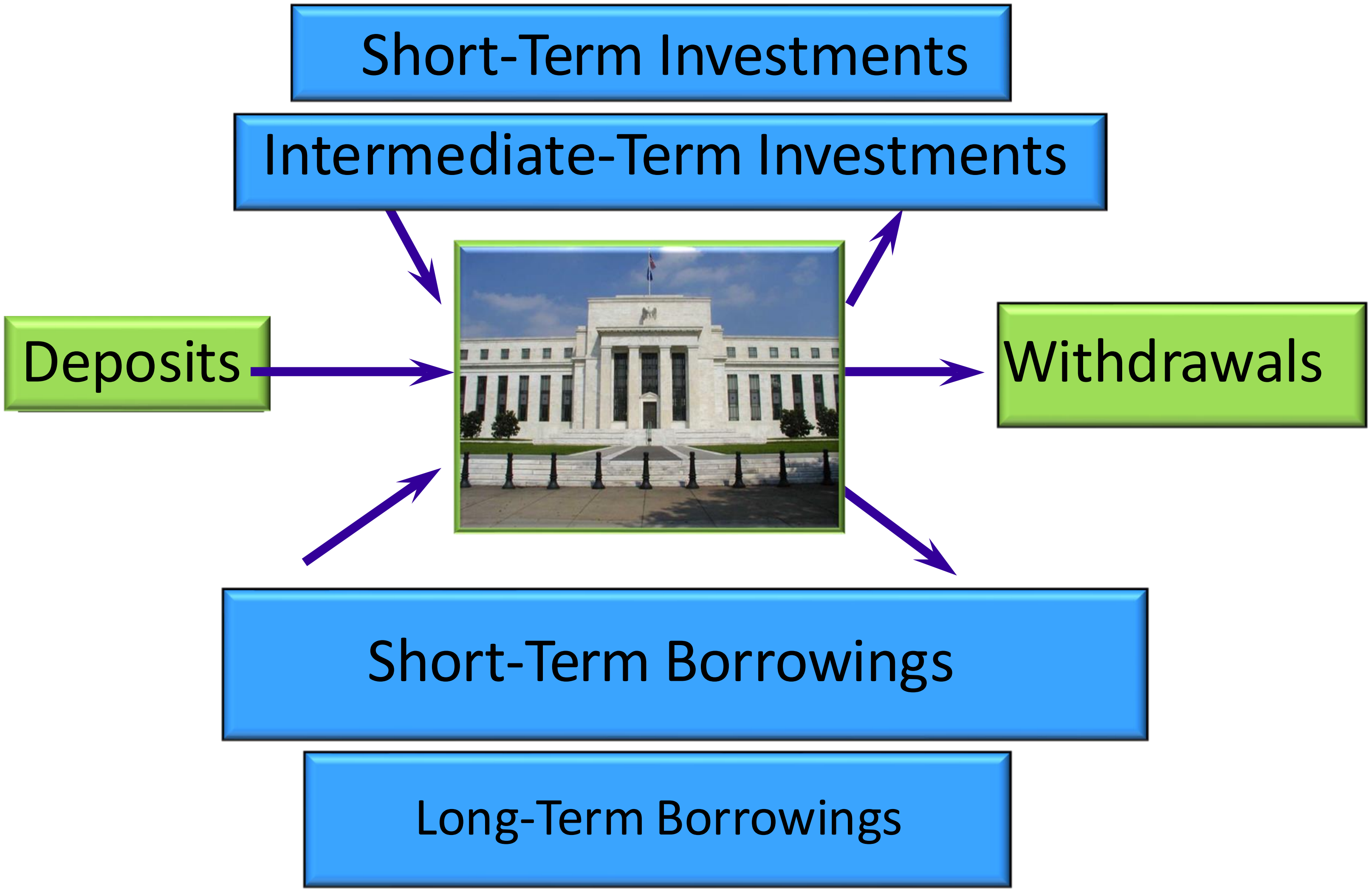

Asset and Liability Management Overview

What is ALM?

- Coordinate management of operating investments and debt.
- View assets and liabilities as a whole, rather than as unrelated portions of the balance sheet.

Asset and Liability Management Overview

ALM Objectives

- Reduce **net** interest expense, the difference between interest paid on debt and interest earned on investments.

- Mitigate impact of interest rate changes on net interest expense by using variable debt to offset short-term investments, or longer-term investments to offset long-term fixed-rate debt.

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Asset and Liability Management Overview

Evaluate as a bank would do

- When contemplating new debt, the amount of fixed and variable rate debt will also affect the amounts invested within the three investment portfolios and vice versa.
  - Liquidity
  - Repayment schedules
  - Interest rate risk

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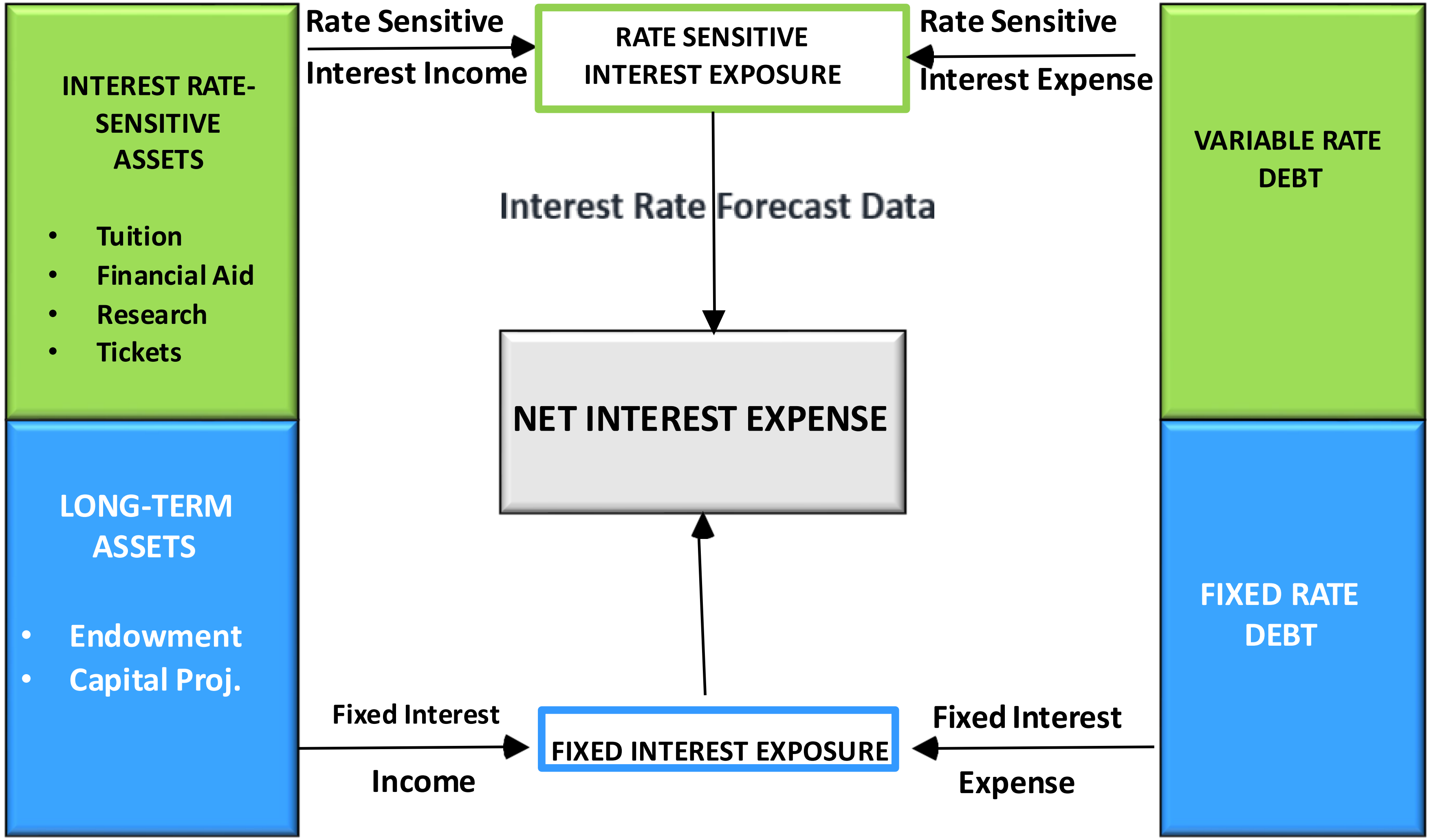
Closely Matching Asset and Liability Duration Reduces Net Interest Expense Volatility



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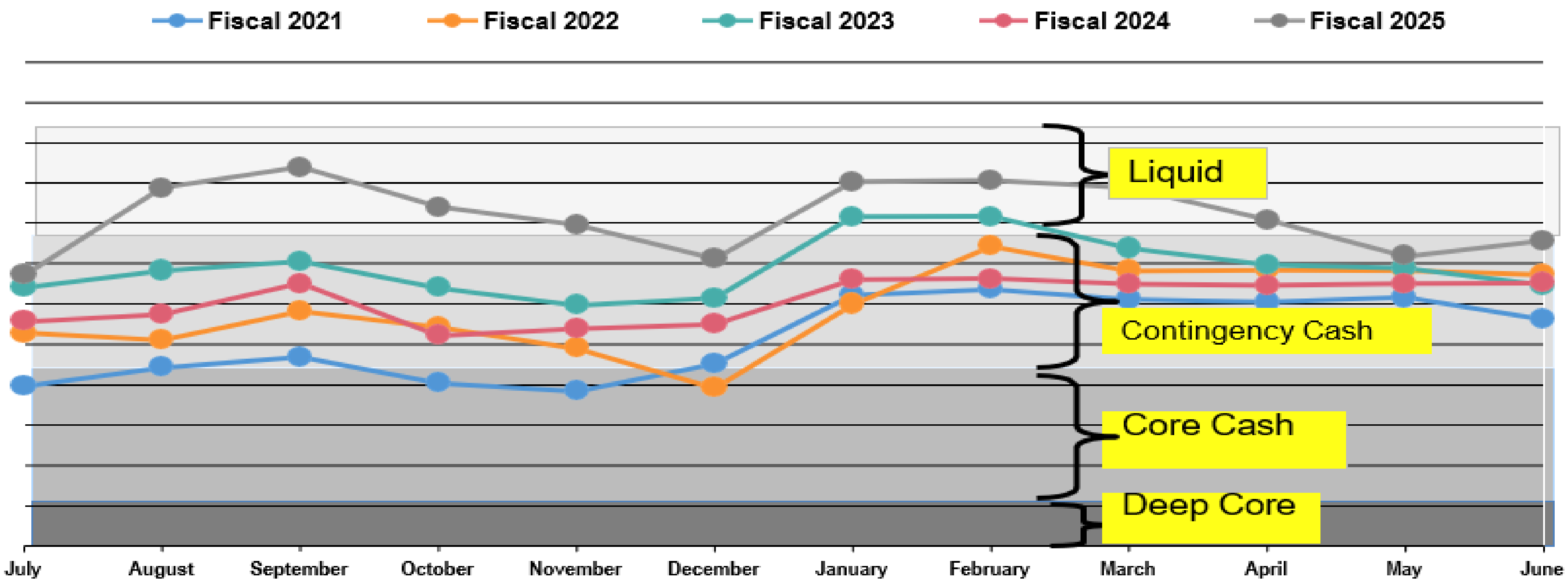
Determining Real Liquidity Needs



Daily Liquidity Needs – assets that are accessed on a routine basis

Contingency Assets – assets unlikely to be accessed in the next 1 to 3 years

Core Cash – assets <u>NOT</u> likely to be accessed in the next 3 to 5 years

Deep Core Cash – restricted assets or excess cash beyond needs

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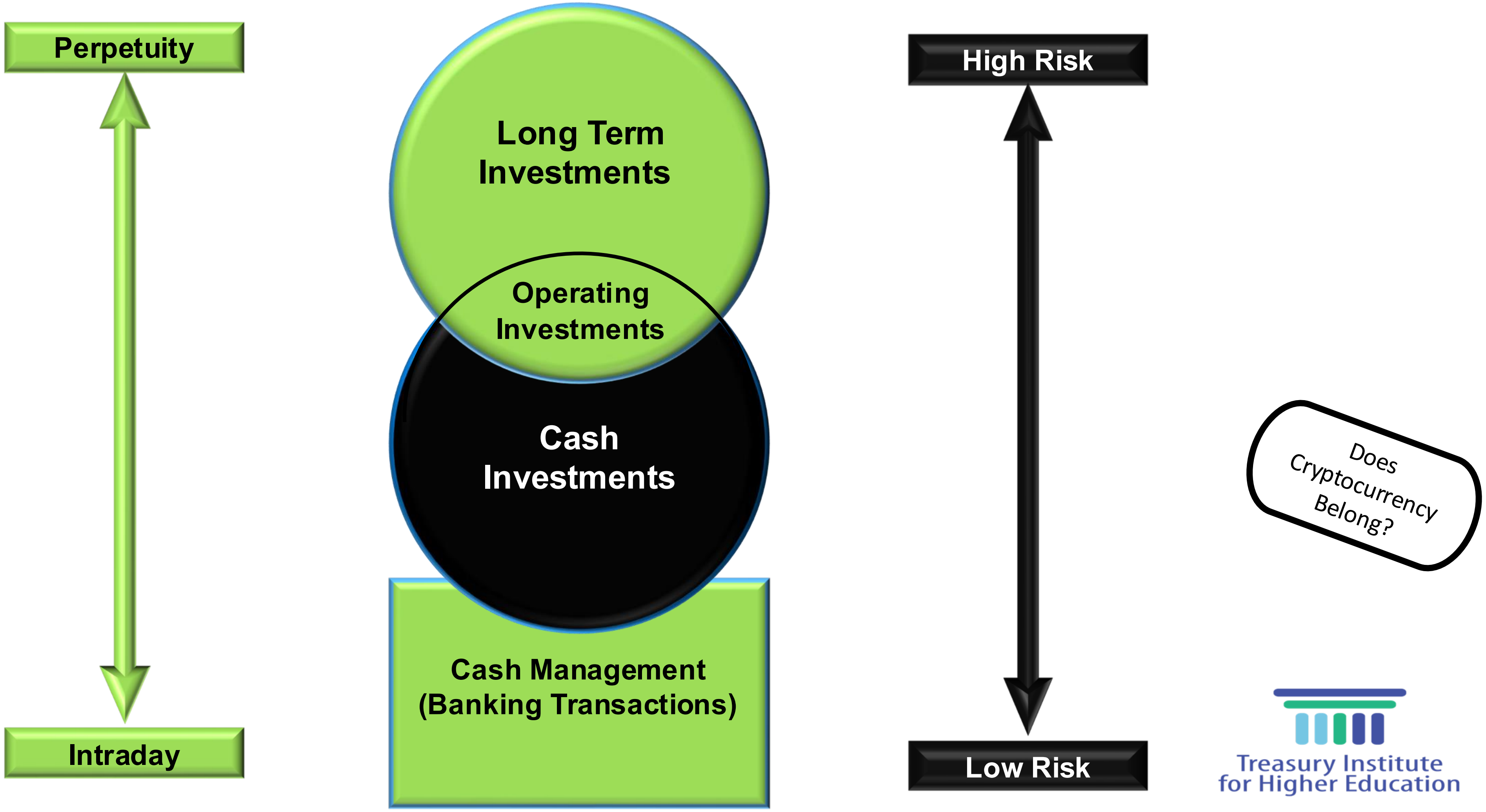
Your Organization's Financial Assets



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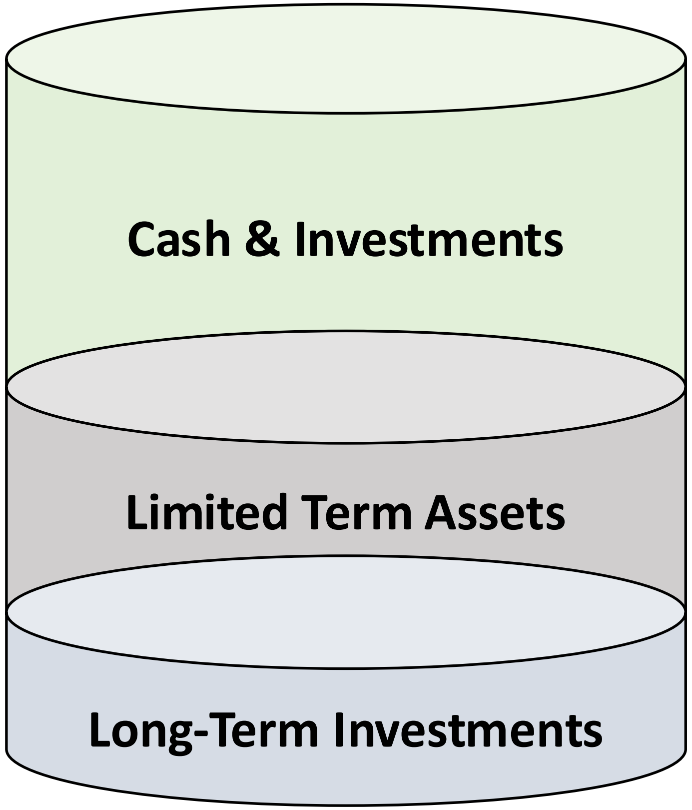
External Environment Awareness



Economic Influences on Operating Assets

- ❑ Endowment performance
- ❑ Access to debt and rating changes
- ❑ Enrollment
- ❑ State appropriations
- ❑ Advancement
- ❑ Auxiliary income
- ❑ Pandemics
- ❑ Natural Disasters

Cash Review

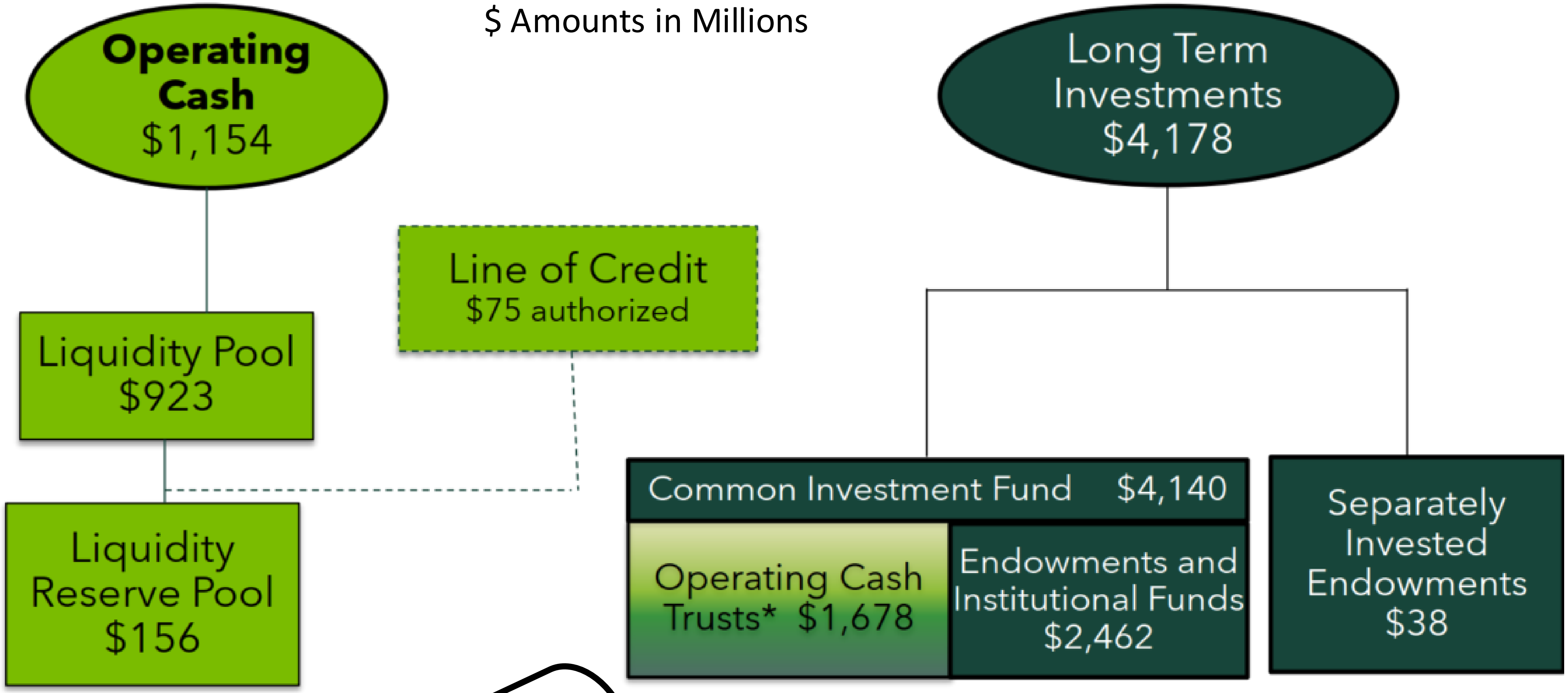
- Concentrate All Operating Funds

- Define Allocations

  – Liquidity program - daily needs
  – Contingency program - annual needs
  – Core Cash program - all other funds

Cash Review

$ Amounts in Millions



Whose money is it?

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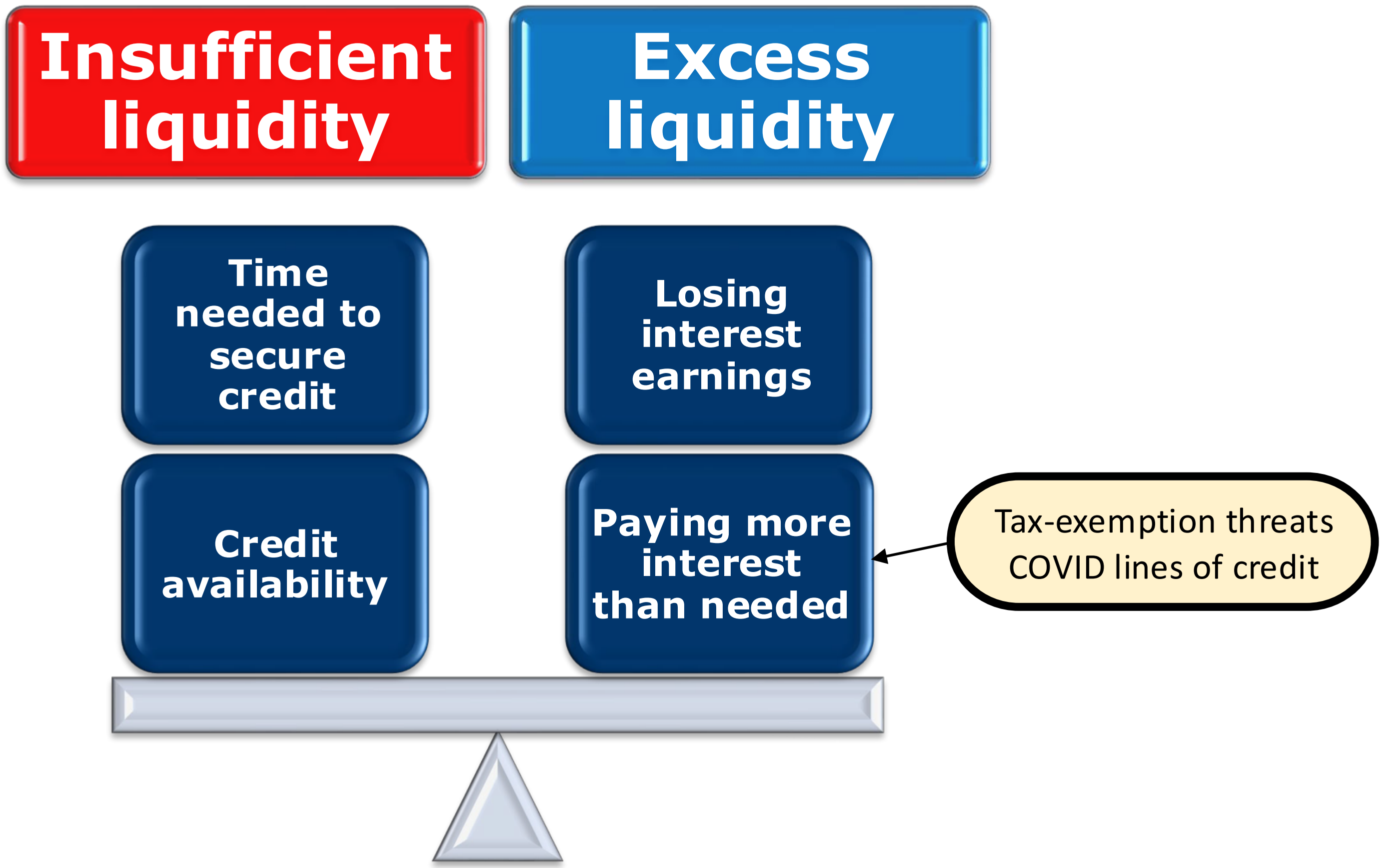
Maintaining Proper Levels of Liquidity

Maintain adequate, but not excessive, liquidity



Maintaining Proper Levels of Liquidity

The Detroit News
SERVING MICHIGAN SINCE 1873

[News] Sports Autos Business Michigan Life + Home Entertainment Opinion Obituaries

MICHIGAN

UM regents OK $1 billion in credit lines amid pandemic

Kim Kozlowski
The Detroit News

Published 7:21 p.m. ET March 26, 2020

The University of Michigan Regents met virtually on Thursday amid the global COVID-19 pandemic and approved establishing stand-by lines of credit for up to $1 billion for general operating purposes in the event of a financial emergency.

Kevin Hegarty, UM executive vice president and chief financial officer, said the university would first look to balance sheet reserves to fund its operations.

"To be clear, the university would hope to not have to draw on these lines," said Hegarty. "But in the event of a financial emergency, having $1 billion in standby lines would be a highly-valued addition to our safety net."

Kevin Hegarty *University Of Michigan*

In a letter outlining the purpose of the lines of credit, Hegarty wrote: "Having standby lines of credit available for general operating purposes will reinforce the overall liquidity position of the University, help support the University's credit ratings, and hedge the impact of potential catastrophic events, such as a pandemic, global financial crisis, or federal government shutdown."

News

WTIU wfiu

IU Trustees Approve University Request To Seek Billion-Dollar Line Of Credit

By MATT RASNIC
Posted April 10, 2020

Like Sign Up to see what your friends like. Post

Trustees also approved two new degrees during their meeting. *(Steve Burns, WFIU/WTIU News)*

The Indiana University Board of Trustees gave the go-ahead for the university to seek a billion-dollar line of credit at its virtual meeting Friday.

IU Treasurer Don Lukes told the trustees that the university would spend around two-million dollars to secure this line of credit from JP Morgan. The credit would be used as a reserve until the complete financial effects of the COVID-19 pandemic are known.

Any use of the line of credit would require board approval.

The board also approved the early granting of degrees to IU medical school students who have met requirements so they may begin practicing in response to the current pandemic.

Design approval was given for two projects on the Bloomington campus including renovations to the IU Museum of Archaeology and Anthropology and the McCalla complex.

The board voted to pause the construction of the International Center on the Bloomington campus.

Tax-exemption threats
COVID lines of credit

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Maintaining Proper Levels of Liquidity

Approved by the Regents
July 21, 2022

THE UNIVERSITY OF MICHIGAN
REGENTS COMMUNICATION

REQUEST FOR ACTION

Subject: Lines of Credit Authorization

Action Requested: Authorization to Establish Additional Lines of Credit

Background and Summary:

The University seeks authorization to establish additional standby lines of credit up to an amount not to exceed $1.0 billion to be available for use for general operating purposes and other general corporate purposes. This authorization will supplement the existing authorization for lines of credit of up to $1.0 billion available for general operating purposes granted under the March 26, 2020 resolution titled "Resolution of the Regents of the University of Michigan Authorizing the Borrowing of Funds Under Revolving Lines of Credit and Providing for Other Matters Relating Thereto".

This action will be accomplished by adding one or more new lines of credit with one or more additional banks or financial institutions and/or amending one or more of the existing lines of credit. These lines of credit will be used primarily for contingent liquidity support for general corporate purposes. We believe this expansion to be a prudent and proactive course of action, at relatively inexpensive pricing, in light of significant uncertainty during an unprecedented period of inflation, supply chain disruption, geopolitical tensions, and lingering COVID impact.

Should the university ever draw on these new lines of credit, the unpaid principal and interest on amounts used for general operating purposes would be due and payable no later than December 31, 2032. These new lines of credit, like the existing lines of credit and outstanding bonds and commercial paper notes of the University, will be supported by a pledge of the University's

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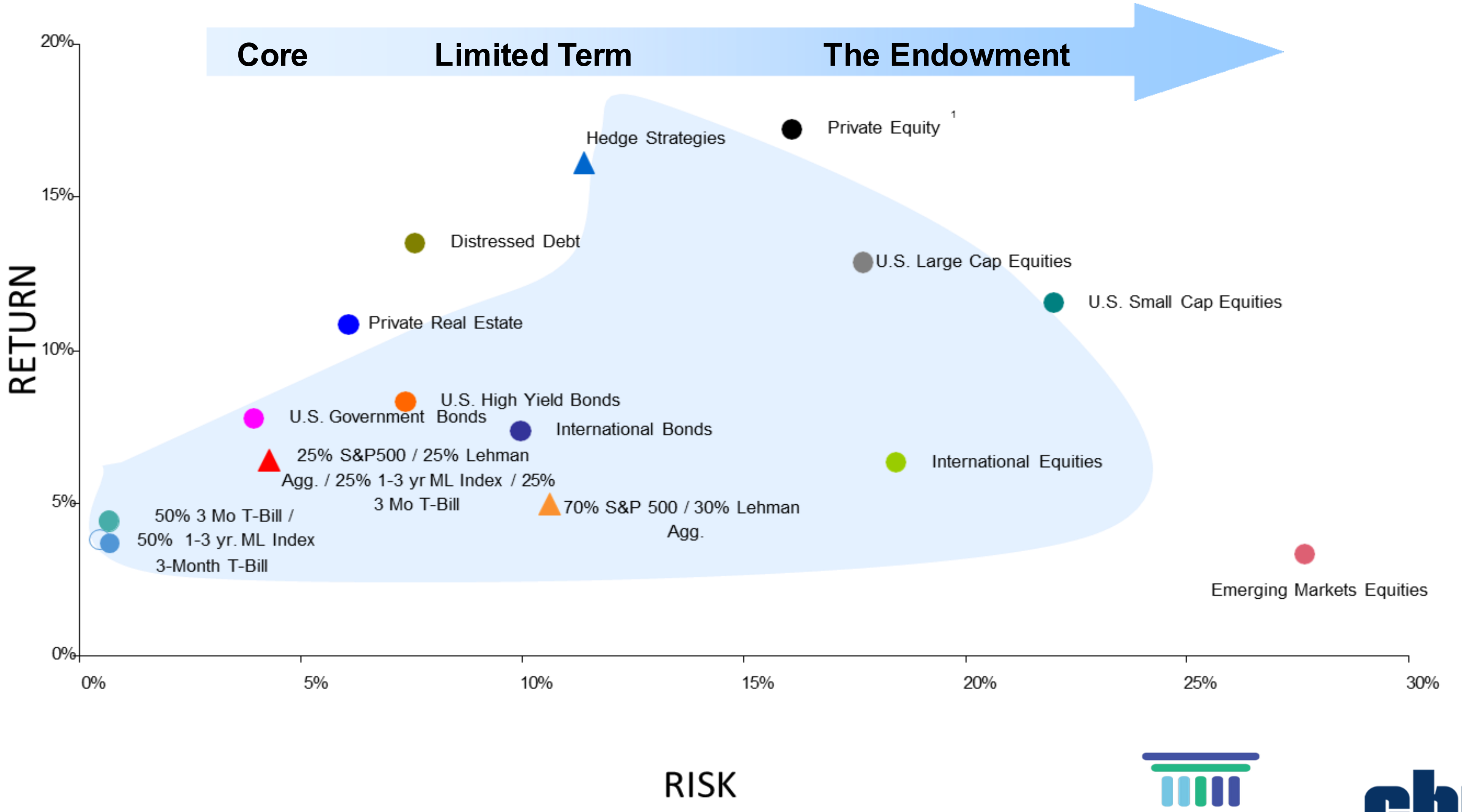
Liquidity Dynamics

A sliding scale based on investment policy / current operating needs



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Developing an Investment Plan

- Objectives
- Investment Policy
- Risk Tolerance
- Cash Flow Analysis
- Implementation

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Using Short-Term Investments for Liquidity Management

- Precautionary and opportunistic requirements
- Earmarked funds
- Temporary surplus funds
  - Ongoing operations
  - Asset sales
  - Securities issuance
  - Swap Returns
  - Seasonal performance
- Short-term / Intermediate-term / Long-term Investments
  - Price risk
  - Yield ladder

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Limited Term Assets

Assets with a 3-5-year time horizon

- Cash (Operating & Endowment) makes up the largest portion
- Operating Reserves
- Surplus Proceeds from Liability Management
- Quasi Endowments
- Self-Insurance Reserves
- Committed Grants not disbursed
- Construction Project Funds
- Bond Proceeds.

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Determining your Limited Term Assets

- Determining your Total Liquidity Pool
  - Commercial paper / debt issuance / credit lines
  - Internal concentration of all limited term assets
  - Gifts / fundraising proceeds / other sources of incoming cash
- Looking at the Future Demands on Cash flows
  - Daily / Weekly / Monthly expenditures
  - Capital Projects
  - Debt Repayment
- Efficiently Managing Limited Term Portfolios
  - Liquidity needs – current vs. long term
  - Credit quality constraints
  - Volatility limits & asset class restrictions
  - Discussion and/or development of Operating Funds Policy

Limited-Term & Long-Term Operating Investments

Reality

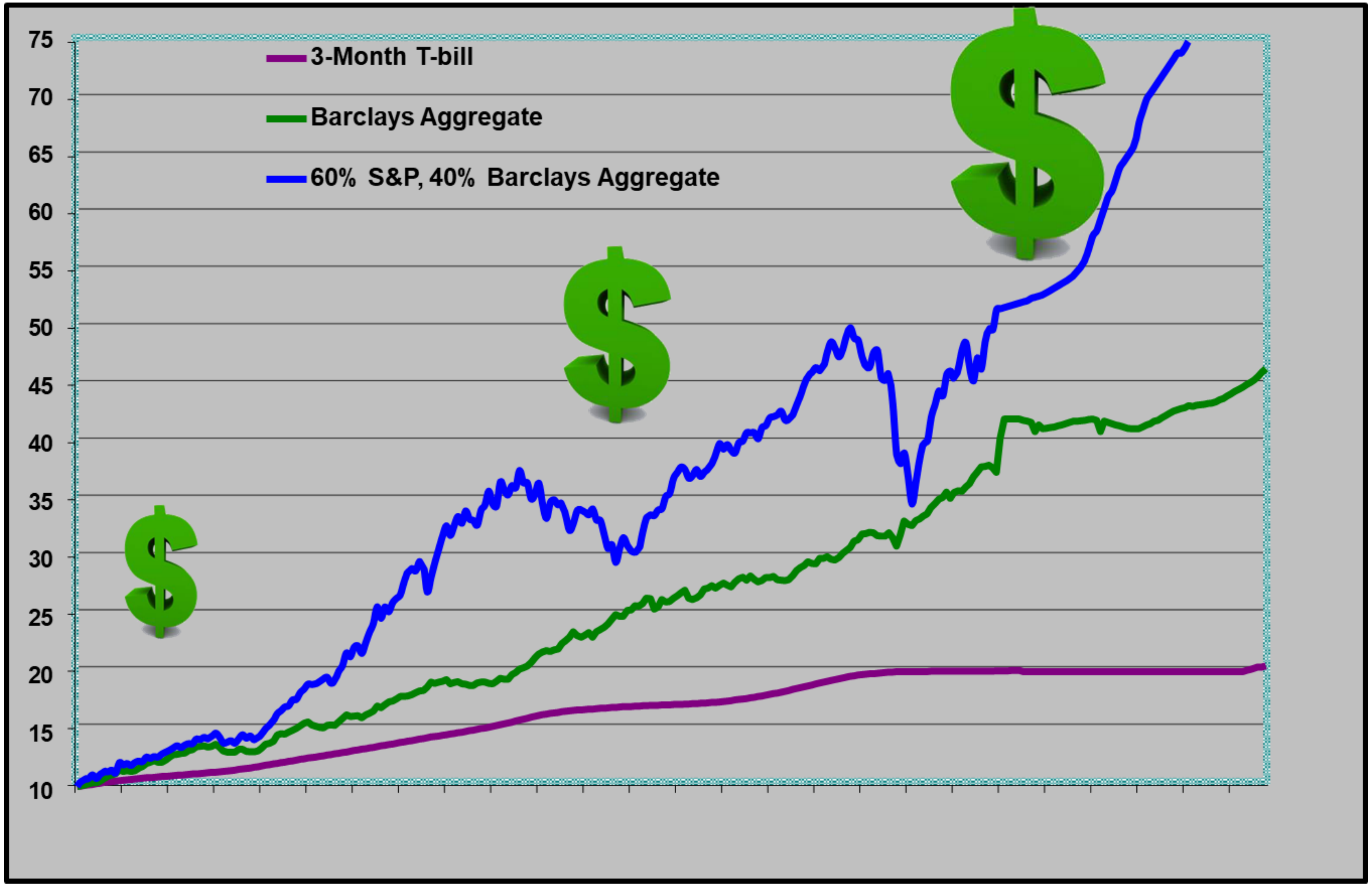
- Potential for significant losses
- Accuracy of forecasts
- Illiquidity

Significance

- Non-cash investments are not a reliable source of liquidity
- What risk tolerance/return objective is appropriate for Operating Assets?
  - Need organizational commitment to longer time horizon
- Accounting and budget implications
  - Lack of a smoothing mechanism
- Are investments alongside the endowment appropriate?
  - Institutions are inherently exposed to risks in the endowment

The Opportunity Cost of “Cash”

Growth of a Dollar



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Funding Capital Budgets

HOW CAN CAPITAL PROJECTS BE FUNDED?

- Debt
- Tuition
- Other Fees
- State appropriations
- Gifts and Grants
- Endowment Income
- Earnings

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Funding Capital Budgets

Sources of Capital

- **Cash**
- **Reserves**
- **Internal Loans**
- **Bank Loans**
- **Bonds**
- **Leases**
- **State Appropriations**
- **Grants**
- **Donations**

Funding Capital Budgets

IWU Momentum Plan (2024 - 2029) 12 Strategic Initiatives	Funding from Operational Budgets	Approved Excess Revenue	Grant Funding Secured	Approved COVID Fund	Donor Funding Secured	Approved for Fundraising	TOTALS
(5) I Am Third Arena		$ 6,000,000.00	$ 10,109,926.00		$ 8,000,000.00	$ 5,890,074.00	$ 30,000,000.00
(11a) Indy North Tech Center	$ 10,000,000.00			$ 1,000,000.00		$ 18,000,000.00	$ 29,000,000.00
(11b) Ft. Wayne Integrated Health Hub				$ 500,000.00		$ 10,000,000.00	$ 10,500,000.00
(6a) Hospitality Center (Hotel)		$ 1,500,000.00		$ 500,000.00		$ 3,500,000.00	$ 5,500,000.00
(7) Early Childhood Education Center		$ 1,000,000.00	$ 546,936.00	$ 300,000.00			$ 1,846,936.00
(8) Center for Faith & Learning				$ 600,000.00			$ 600,000.00
(9) 21st Century Church Project			$ 175,000.00	$ 250,000.00		$ 200,000.00	$ 625,000.00
(12) Vocational Apprenticeship Program				$ 1,000,000.00			$ 1,000,000.00
(3b) Expansion of International Education	$ 250,000.00			$ 2,000,000.00			$ 2,250,000.00

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Why Borrow ?

Facilities and Capital Budgeting

- Long term expenditures
- Buy or build assets
- Renovate assets
- Major maintenance
- Large equipment purchases

Why Borrow ?

Borrowing for Operations?!?!?!?!?!

- Strategic planning
- Short-term Staff/Faculty initiatives
- System and process implementations
- Consulting fees
- Arbitrage
- Long-term funding

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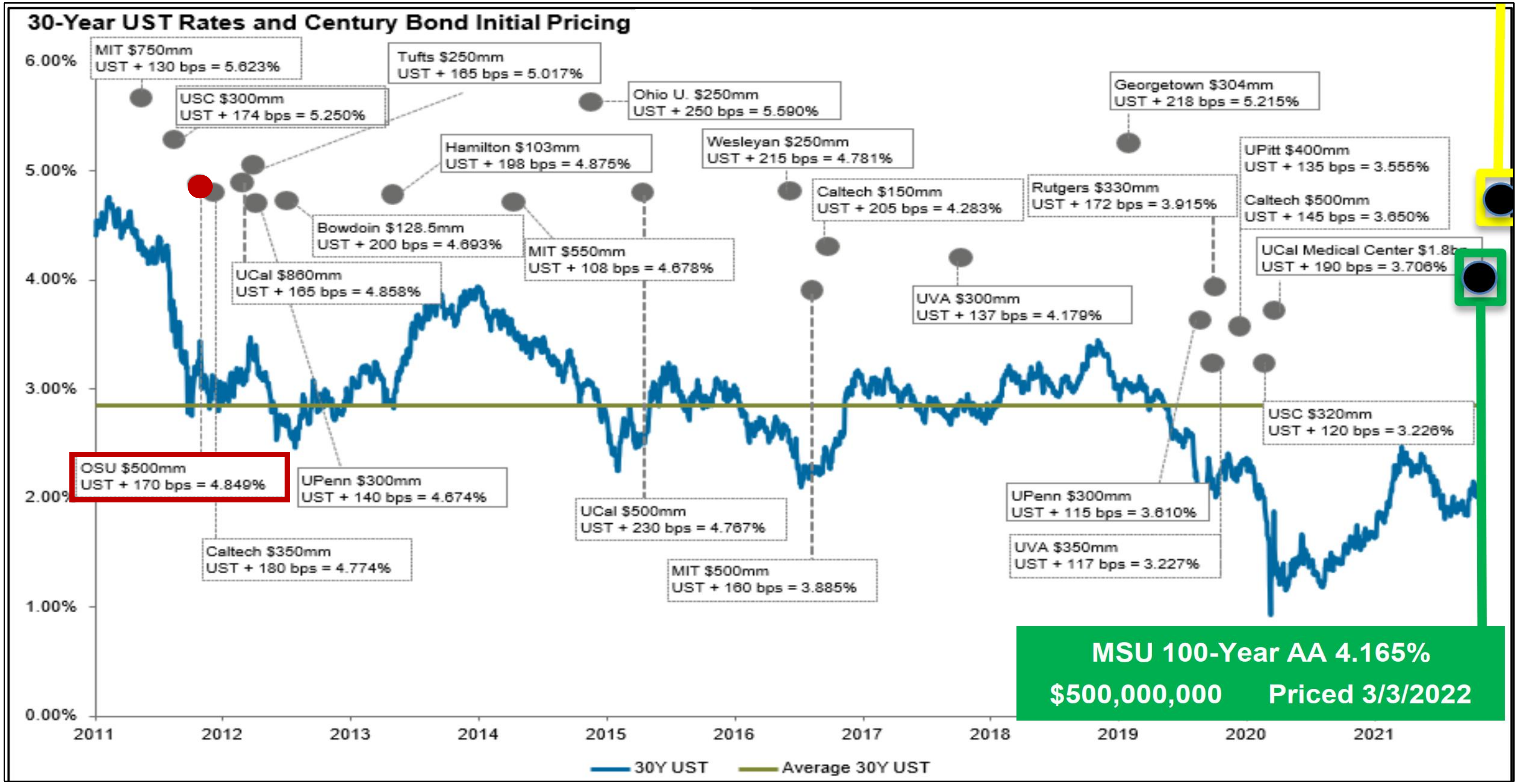
Borrowing for the Long-Term



Higher Education Bond Market

Increased dramatically in 1980’s

Before then:

- **Private institutions relied on fund raising**
- **Public institutions relied on state appropriations**
- **Limited Buyers**

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Overall Borrowing Strategy

- **Access to Capital**
- **Benefits of Using Financial Leverage**
- **Coordination with Capital Budgeting**
- **Borrowing Preference**
  - CFO.com article: “Is Financial Leverage Good for Shareholders?”
  - Leaders who are personally highly leveraged tend to lever up their organizations

Decisions/Issues to Consider in Borrowing Strategy

- Source - Debt vs. Cash
- Maturity - Short or Long
- Interest Rate Characteristics
- Secured vs Unsecured
- Taxable or Tax Exempt
- On-and Off-Balance Sheet Financing

Principles Regarding Use of Debt

- Unit access (Academic or Auxiliary)
- Institutional Approvals
- Credit Rating
- Debt Capacity
- % of Annual Operating Expenditures for Debt Service
- Useful Life of Asset
- Capitalization of Interest

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Higher Education Debt Categories

- **Fixed Rate Notes**
- **Variable Rate Notes**
- **Lines of Credit**
- **Commercial Paper**
- **Government Loans**
- **Leases**
  - Taxable or Tax-exempt

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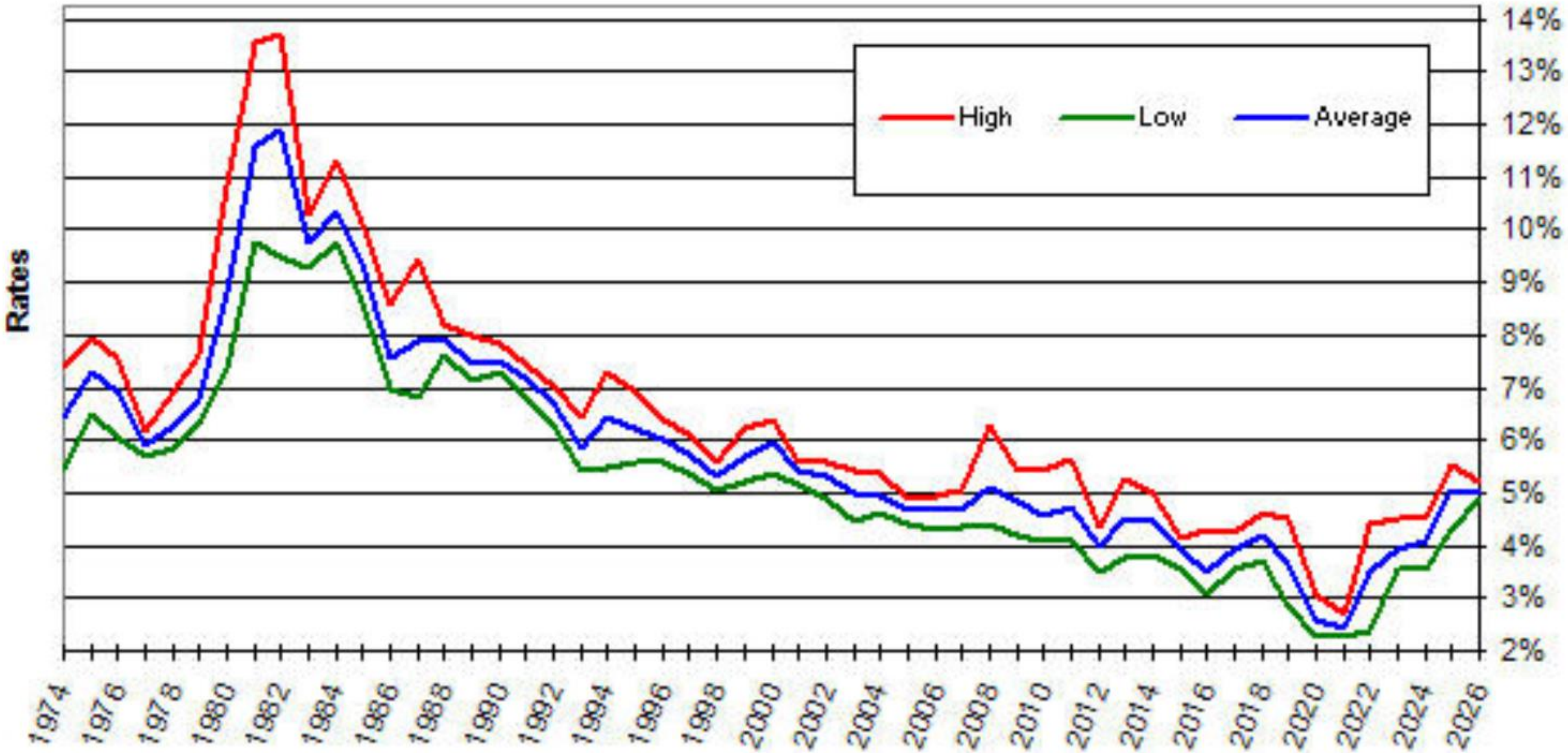
20-Year Bond Buyer Index 1973-Present



WM Financial Strategies

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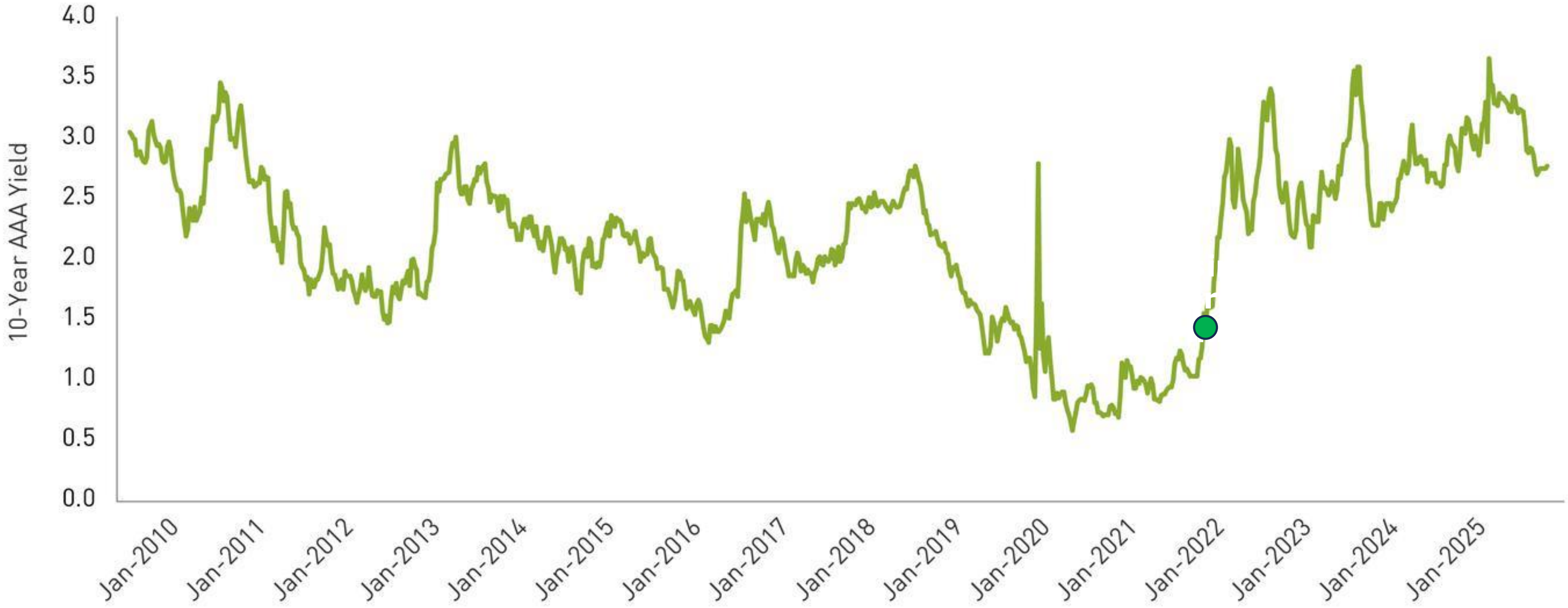
Historical Municipal Bond Yields



Source: Refinitiv and Breckinridge Capital Advisors, Inc., as of December 2025.

Loomis Sayles

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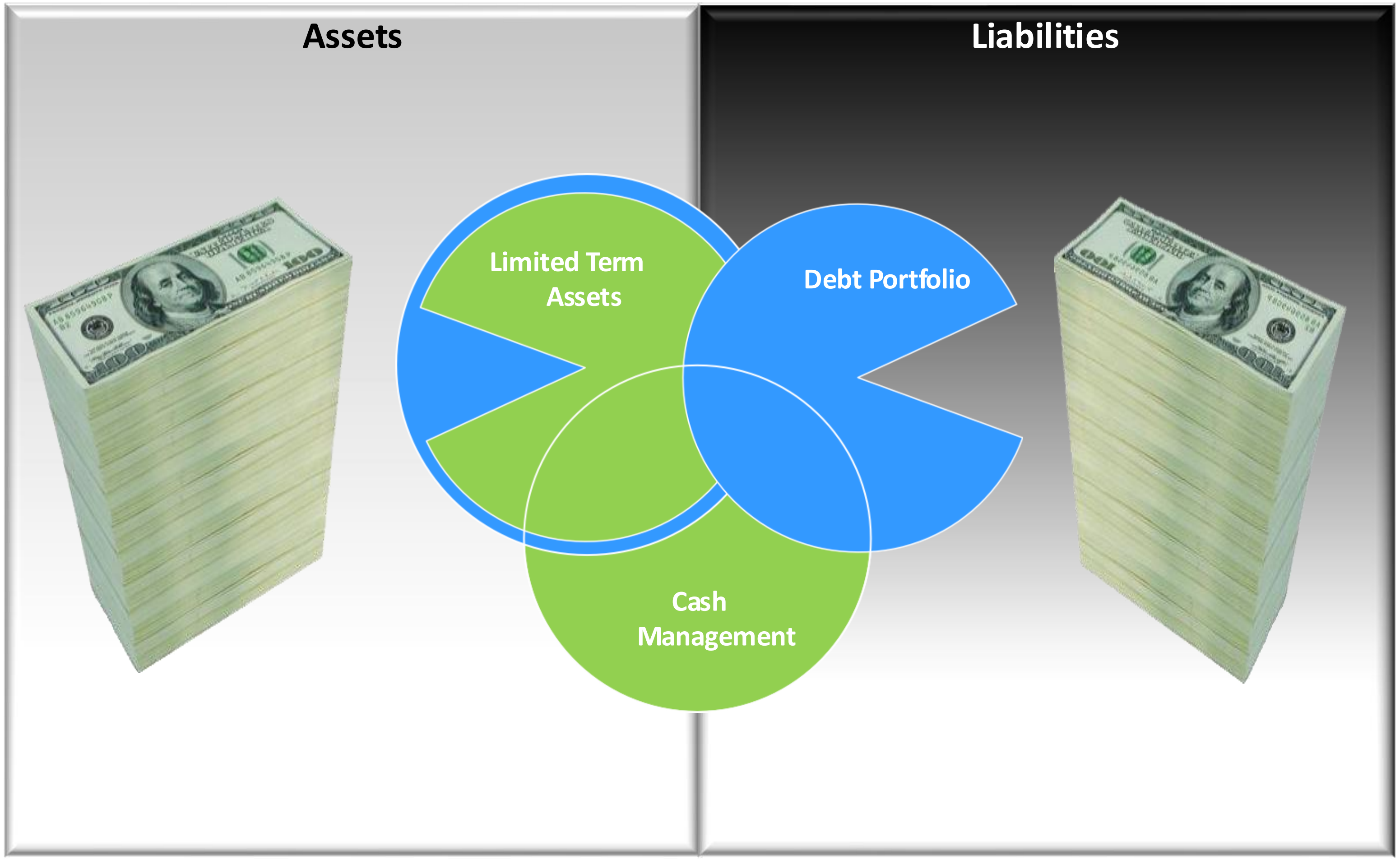
Building Blocks of the Internal Bank



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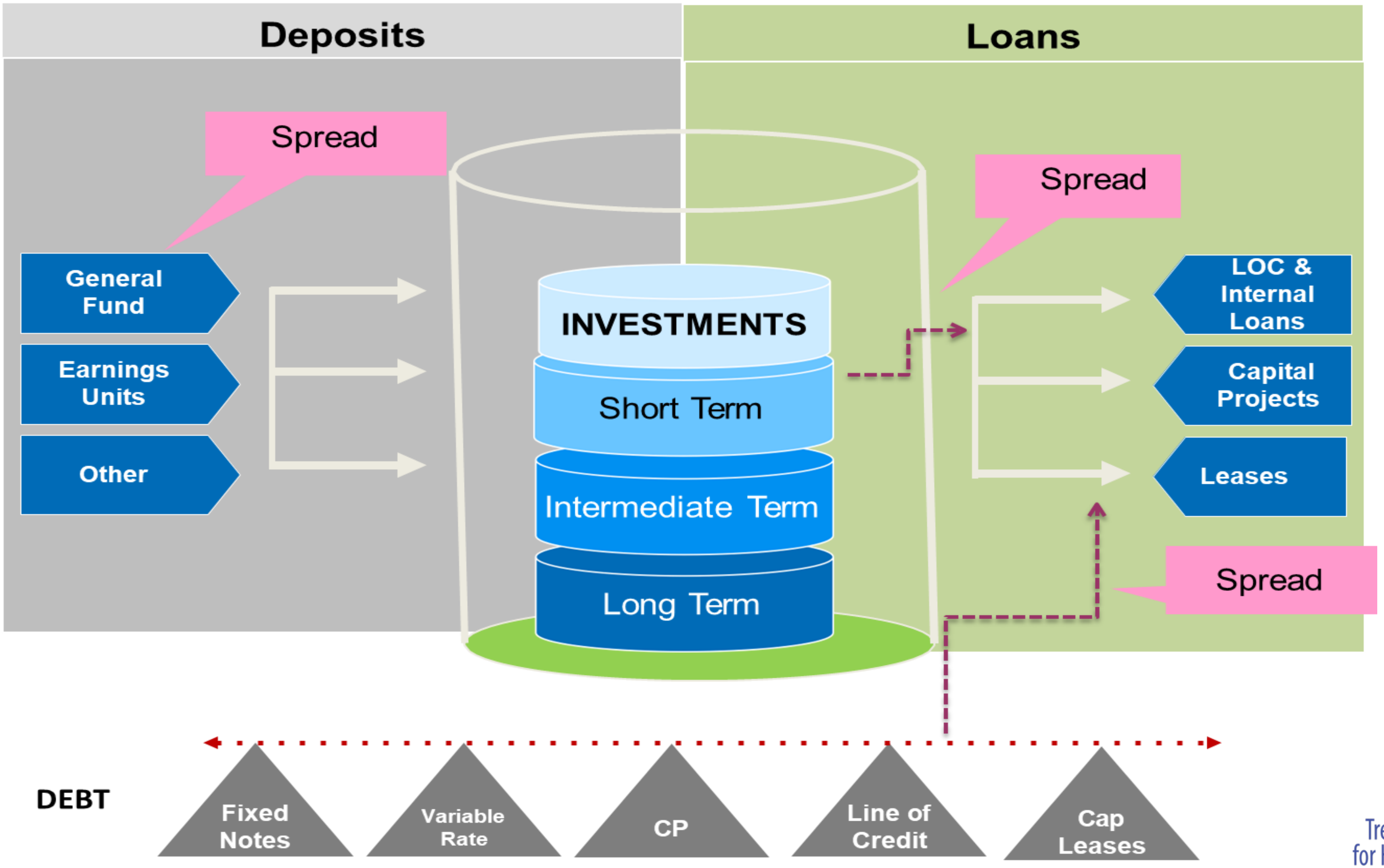
Internal Bank



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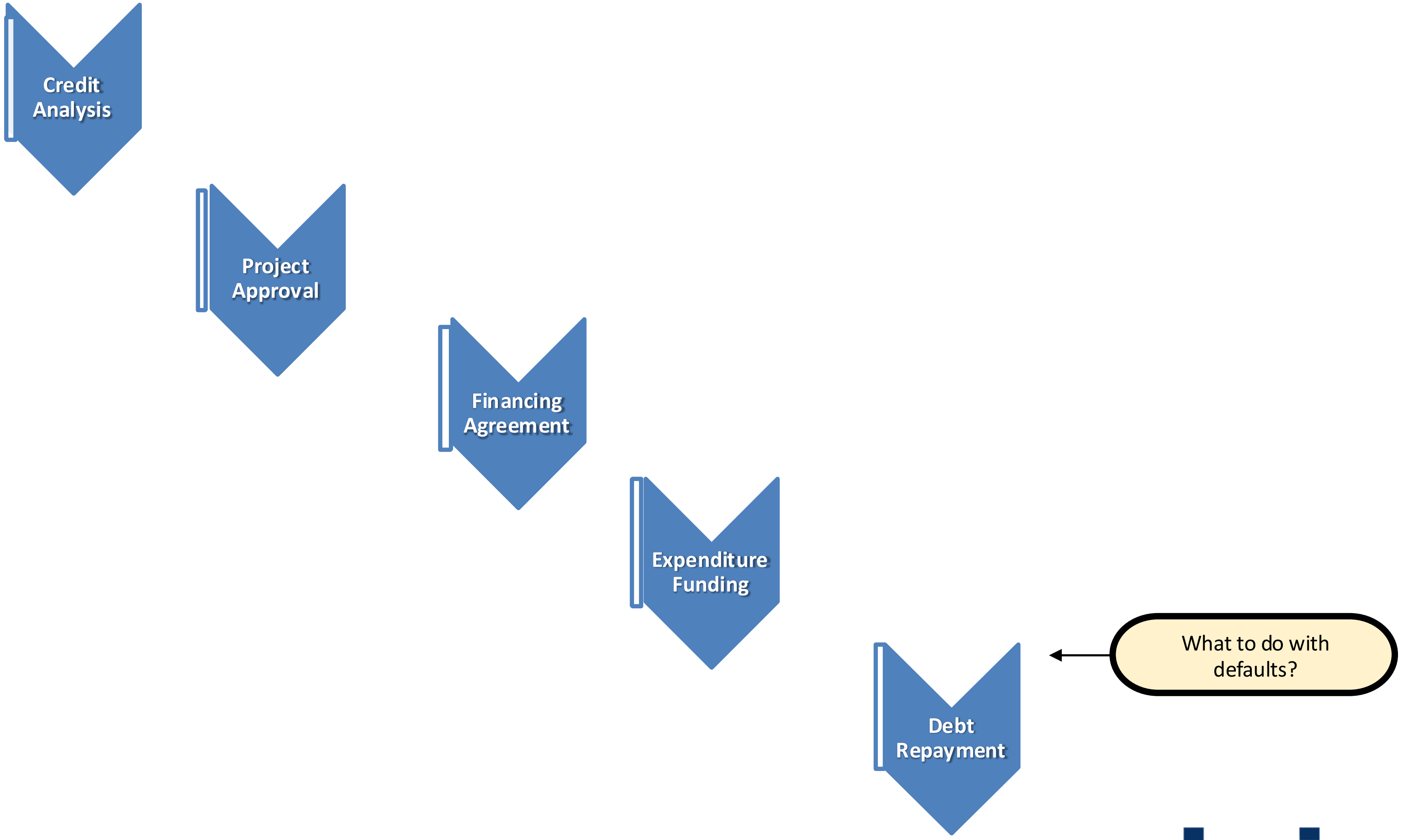
Internal Lending Process



Internal Bank Term Sheet

April 1, 2026, to June 30, 2026

Apply for an Internal Bank Loan

- Internal Bank Loan Application
- Operating Budget Template

Capital Project Loan/Lease Rates

Term	Rate
Up to 5 years	4.25%
More than 5 years up to 10 years	4.50%
More than 10 years up to 20 years	5.00%
More than 20 years up to 30 years	5.25%

- Draws on internal bank loans will be set forth in a Memorandum of Understanding (MOU). Interest and principal will be repaid based on a schedule set forth in the MOU. Typically, loan repayments are made monthly and lease repayments are made quarterly.
- Lease rates may be adjusted to reflect the specific terms and conditions of each requested lease on a case-by-case basis.
- Interest on internal bank capital project cash-flow ('gap') loans will carry the rate of interest in effect for capital project loans based on the expected term of the cash-flow loan.

https://busfin.osu.edu/university-business/debt-management/internal-bank

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Asset Opportunities

- Strategic acquisition opportunities
- Opportunities to establish partnerships
- What assets do we manage well
- Can assets be sold, outsourced or monetized
- Look at all university assets
- Determine what is core to the university

Asset Opportunity Examples

- Office
- Housing
- Energy
- Parking
- Trademarks & Licensing
- Bookstores
- Banking
- Insurance
- Data Centers
- Facilities

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