

# Cash Management for Camps

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# Backdrop

- When we first had the idea for this call, our point was:
  - Camps get large tuition inflows starting in early spring that they don't use until late-June
  - In prior years, when interest rates were close to zero, keeping this money in the bank was costless since non-bank options paid very close to zero as well
  - But given where interest rates are now (around 4.5%), if you are earning zero in your deposit account, you are leaving a lot of money on the table
- We wrote in [our piece](#) from March 1<sup>st</sup> that “you can keep \$250,000 in your bank, since that is the FDIC insurance cap, and invest the remainder in a U.S. government money market fund”
- Little did we (or anyone else) know, Silicon Valley Bank – the 16<sup>th</sup> largest bank in the U.S. – would see a depositor run and be seized by the FDIC on Friday, March 10, 2023
- This has made the issues we wanted to discuss even more timely



# Outline of presentation

- U.S. banks
- How much are you giving up?
- Money market funds
- U.S. Treasuries
- Summing up



# U.S. banks

- The state of the U.S. banking system is robust
  - For [many reasons](#), this is nothing like the [Global Financial Crisis of 2008-2009](#)
- While there are issues with Silicon Valley Bank (SVB), Signature Bank, and First Republic Bank, in many ways, Silicon Valley Bank was unique:
  - A large concentration of depositors from the same industry with the same small set of advisors
  - An unusually large exposure to long-term U.S. Treasury bonds which saw steep price drops in 2022
- Other banks [do not have similar issues](#)
- The regulators have stepped in [to guarantee all deposits](#) at SVB and Signature Bank
  - Typically, deposits are automatically [insured up to \\$250,000](#)
- Regulators are now discussing [extending this protection](#) to *any* bank if the need arises
  - U.S. Treasury Secretary Janet Yellen on 3/21/2023: “And similar actions could be warranted if smaller institutions suffer deposit runs that pose the risk of contagion”
- Given the scope of the problem and the regulatory response, a systemic banking problem is highly unlikely



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# How much are you giving up?

- Say you have \$1,000,000 in the bank for part of March, all of April and May, and part of June
- If you earn a 0.5% annual rate, this translates to \$1,250 in earnings over three months
- If you can earn 4.5% (the current rate of return on U.S. Treasury bills), you would earn \$11,250
- As long as you are not taking on any more risk, this should be very attractive
- Some banks [pay more](#) than 0.5% (and some less)
- More information is available in the [article](#) on our website

Tuition deposits:	\$1,000,000	
Months invested:	3	
Interest rate:	<b>0.50%</b>	<b>4.50%</b>
Earnings:	\$1,250	\$11,250

If  $R$  is the interest rate, the calculation is:

$$R \times \frac{3}{12} \times 1,000,000$$



# Next steps

Advantages of keeping deposits in the banks:

- Convenient to handle outgoing payments
- High liquidity – you can get your money whenever you want
- Completely safe up to \$250,000 FDIC limit; very safe for amounts about \$250,000

What are your options?

- Talk to your bank and see if they can give you a better rate. You have a strong negotiating posture give recent events.
- You can move money above the \$250,000 FDIC limit to a money-market fund.
- You can use money above the \$250,000 FDIC limit to buy Treasury bills.



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# Money market funds



- [Money market funds](#) are a type of mutual fund which invests in short-term, highly liquid securities
- There are many types of money market funds, but the safest invest only in U.S. Treasury (or closely related) securities
- One is the Vanguard Treasury Money Market Fund ([VUSXX](#)). According to Vanguard:

*As a government money market fund, this fund is required to invest at least 99.5% of its total assets in cash, U.S. government securities, and/or repurchase agreements that are collateralized solely by U.S. government securities or cash (collectively, government securities). As such it is considered one of the most conservative investment options offered by Vanguard. Although the fund invests primarily in short-term U.S. Treasury bills, the amount of income that a shareholder may receive will be largely dependent on the current interest rate environment. Investors who have short-term savings goals and want the added security of investing in a fund in which the majority of the underlying securities are backed by the full faith and credit of the U.S. government may wish to consider this option.*

- VUSXX yields, after-fee 4.59% per year (like U.S. Treasury bills) and its expense ratio is 0.09% per year
- Fidelity's Treasury Only Money Market Fund ([FDLXX](#)) is a comparably safe fund
  - It has a lower yield (4.16%) because it has a higher expense ratio (0.42%)
- Be careful to invest only in money market funds that hold U.S. government securities, and not those that hold corporate debt (which is safe, but not as safe as U.S. government debt)



# Investing in money market funds

- Money market funds (almost) always trade at \$1 per share
- With \$500,000 you would buy 500,000 shares of the fund at a price of \$1 per share
- If you invest when the fund has a 4.59% yield, over the next three months you will earn approximately  $\$500,000 \times 4.59\% \times \frac{1}{4} = \$5,737.50$  in interest
  - Approximate because the 4.59% fund yield may change slightly over time
- When you need the money back in three months, you sell your 500,000 shares of the fund to recoup your \$500,000 investment
  - You keep the earned interest
- There is a very small chance that the price of each share can “break the buck” (fall below \$1),\* but this never happened for the Vanguard fund



Source: Bloomberg

- This is the price of VUSXX going back to 1992
- Through the dot-com bubble, the Global Financial Crisis, COVID-19, and the recent banking mini-crisis, VUSXX never broke the buck

\*It rarely happens overall, and when it does, it usually happens for money market funds that own short-term corporate bonds. For example, in September 2008, the Reserve Primary Fund went to \$0.97.



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# U.S. Treasuries

- Treasury bills (T-bill) have the full faith and credit of the U.S. government – essentially the same level of protection as FDIC insurance
- When you buy a T-bill, you pay \$98.95 now (for example) to receive \$100 in three months
- If you have \$500,000 to invest, you could buy 5,053 T-bills
- When they T-bills mature (in three months), each will pay you \$100, so you will have \$505,300 in three months
- This is a return of 1.06% for three months (or 4.24% per year)
- Current T-bill yields are given in the table
- Note T-bills have different maturities, so choose the one that pays prior to when you need the money
- You can buy staggered maturities to match the timing of your cash flows

Actives	Bills	Notes	TIPS	Strips	Sprds	Curves	FRN	Bfly	WI
40	1M ROLL	/				64	06/27/23	4.725 / 4.288	4.397 -0.142
41	04/20/23	4.163 / 3.790	3.854	-0.080		65	06/29/23	4.685 / 4.283	4.393 -0.120
42	04/25/23	4.238 / 3.863	3.930	-0.150		66	07/05/23	4.880 / 4.448	4.580 -0.175
43	04/27/23	4.267 / 3.920	3.990	-0.097		67	07/06/23	4.818 / 4.418	4.537 -0.157
44	05/02/23	4.378 / 4.052	4.127	-0.070		68	07/11/23	4.913 / 4.523	4.662 -0.170
45	05/04/23	4.413 / 3.995	4.069	-0.125		69	07/13/23	4.885 / 4.485	4.612 -0.137
46	05/09/23	4.510 / 4.090	4.169	-0.200		70	07/18/23	4.827 / 4.595	4.742 -0.068
47	05/11/23	4.540 / 4.120	4.201	-0.158		71	WI 4MTH	4.770 / 4.735	4.890 +0.055
48	05/16/23	4.392 / 4.205	4.290	-0.058		72	4M ROLL	/	
49	WI 2MTH	4.410 / 4.365	4.456	-0.020		73	07/20/23	4.903 / 4.470	4.600 -0.170
50	2M ROLL	/				74	07/27/23	4.858 / 4.465	4.599 -0.122
51	05/18/23	4.515 / 4.170	4.256	-0.142		75	08/03/23	4.860 / 4.435	4.572 -0.140
52	05/23/23	4.568 / 4.160	4.248	-0.150		76	08/10/23	4.858 / 4.460	4.602 -0.142
53	05/25/23	4.540 / 4.240	4.332	-0.083		77	08/17/23	4.913 / 4.488	4.635 -0.172
54	05/30/23	4.568 / 4.165	4.256	-0.188		78	08/24/23	4.943 / 4.505	4.657 -0.210
55	06/01/23	4.590 / 4.222	4.317	-0.150		79	08/31/23	4.940 / 4.495	4.664 -0.188
56	06/06/23	4.625 / 4.215	4.311	-0.192		80	09/07/23	4.892 / 4.508	4.668 -0.157
57	06/08/23	4.625 / 4.260	4.359	-0.125		81	09/14/23	4.878 / 4.525	4.704 -0.180
58	06/13/23	4.628 / 4.238	4.338	-0.147		82	09/21/23	4.802 / 4.620	4.809 -0.060
59	06/15/23	4.680 / 4.298	4.402	-0.160		83	WI 6MTH	/	
60	06/20/23	4.680 / 4.270	4.376	-0.170		84	6M ROLL	/	
61	06/22/23	4.690 / 4.425	4.537	-0.075		85	10/05/23	4.508 / 4.100	4.246 -0.040
62	WI 3MTH	/				86	11/02/23	4.645 / 4.245	4.403 -0.110
63	3M ROLL	/				87	11/30/23	4.628 / 4.258	4.422 -0.107

Source: Bloomberg (as of 3/22/2023)



# Mechanics of investing in Treasuries

- You open up a brokerage account (for example, with Fidelity, Vanguard, Schwab, Merrill Lynch, JP Morgan, or a broker affiliated with your local bank)
- You link the brokerage account to your bank account
- When you have cash in your bank account, you can transfer it electronically into your brokerage account, and then buy T-bills
- Note that your broker will charge you a price for the T-bills that is higher than what they paid for it
  - This is how they make money on the transaction without charging a commission
  - You should ask them how much they are charging you, i.e., their markup, for the transaction
- The way these securities are held at the broker is very safe for customers
- When the T-bills mature (and each pays you \$100) you can electronically send the money back to your bank account



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# Summing up

- You have many options for how to invest your camp's cash
- Three important ones are:
  - Bank deposits
  - Money market funds
  - Directly buying Treasuries
- The preferred method for many camps will be some combination of these three
- Talk to your financial advisor to find out what is the right option for your camp



# Q & A

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# Bank stock prices: Then and now



Source:  
Bloomberg

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# Bank rates

## Business Savings Account Rates

If you're enrolled in Preferred Rewards for Business<sup>[9]</sup> [9]

Select average daily balance	Interest Rate	APY <sup>[10]</sup> , <sup>[11]</sup>	Gold Tier APY <sup>[10]</sup> , <sup>[11]</sup>	Platinum Tier APY <sup>[10]</sup> , <sup>[11]</sup>	Platinum Honors Tier APY <sup>[10]</sup> , <sup>[11]</sup>
Less than \$99,999 ▾	0.01%	0.01%	0.02%	0.03%	0.04%

Preferred Rewards for Business clients get extra interest based on their relationship tier.

[How to qualify](#)

<https://www.bankofamerica.com/smallbusiness/deposits/savings-accounts/business-advantage-savings/>

### Business Platinum Savings

Avoid the \$15 monthly service fee with one of the following each fee period:

- Linked to Navigate Business Checking®
- Linked to Optimize Business Checking®
- \$10,000 minimum daily balance

Minimum Opening Deposit: \$25

Balance	Standard Interest Rate <sup>1</sup>	Annual Percentage Yield (APY)
\$0 - \$99,999.99	0.25%	0.25%
\$100,000 - \$499,999.99	1.00%	1.01%
\$500,000 - \$999,999.99	1.98%	2.00%
\$1,000,000 or more	2.47%	2.50%

The Bank may limit the amount you may deposit in this product to an aggregate of \$5 million.

<https://www.wellsfargo.com/biz/savings/rates/>

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- There are also [CDARS](#) programs (Certificate of Deposit Account Registry Service)
- But you need to be pretty big for this to make sense
- And these lock up the money for some number of months



# Are bank deposits totally riskless?

- Description of priority of claims in a bank insolvency
  - Insured deposits come first
  - The uninsured deposits
  - Then all other creditors
- Past instances of closed banks and recoveries for uninsured depositors
  - Given the current market and regulatory climate, even uninsured depositors are likely to get fully paid back in the very unlikely event of other bank failures

# Treatment of securities in brokerage accounts



- Client securities held at brokerage firms are treated differently than bank deposits.
- According to the SEC's [Customer Protection Rule](#), broker-dealers must keep client securities (those that are fully paid and not owned using margin borrowing) in segregated accounts that can only be used to return securities to the firm's clients, and which cannot be used to repay any obligations that Schwab has to its own creditors.
  - This is what happens in the very unlikely case a [broker shuts down](#).
  - [Excess margin securities](#) are treated the same as fully paid securities.
- For example, this is described in Schwab's Asset Protection document, which you can read [here](#). You should ask your broker for their version of this document.
- The punchline is that the way securities are custodied at U.S. broker/dealers is extremely safe for clients.

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