

# ***CASH MANAGEMENT***

# Why Care About Excess Cash?

- Free cash can earn a low risk yield!
  - Covers commissions
  - Adds to the bottom line
- This hasn't been a big deal since the 2008 financial crisis because of our ZIRP and NIRP environments
- But now things have changed...



# Why Macro Traders Are Cash Heavy

- Positions are taken opportunistically
  - Not asset allocation with requirement to be “fully invested”
- Derivative positions require barely any cash outlay
- Traditional global macro uses a lot of derivatives so there’s always cash on hand

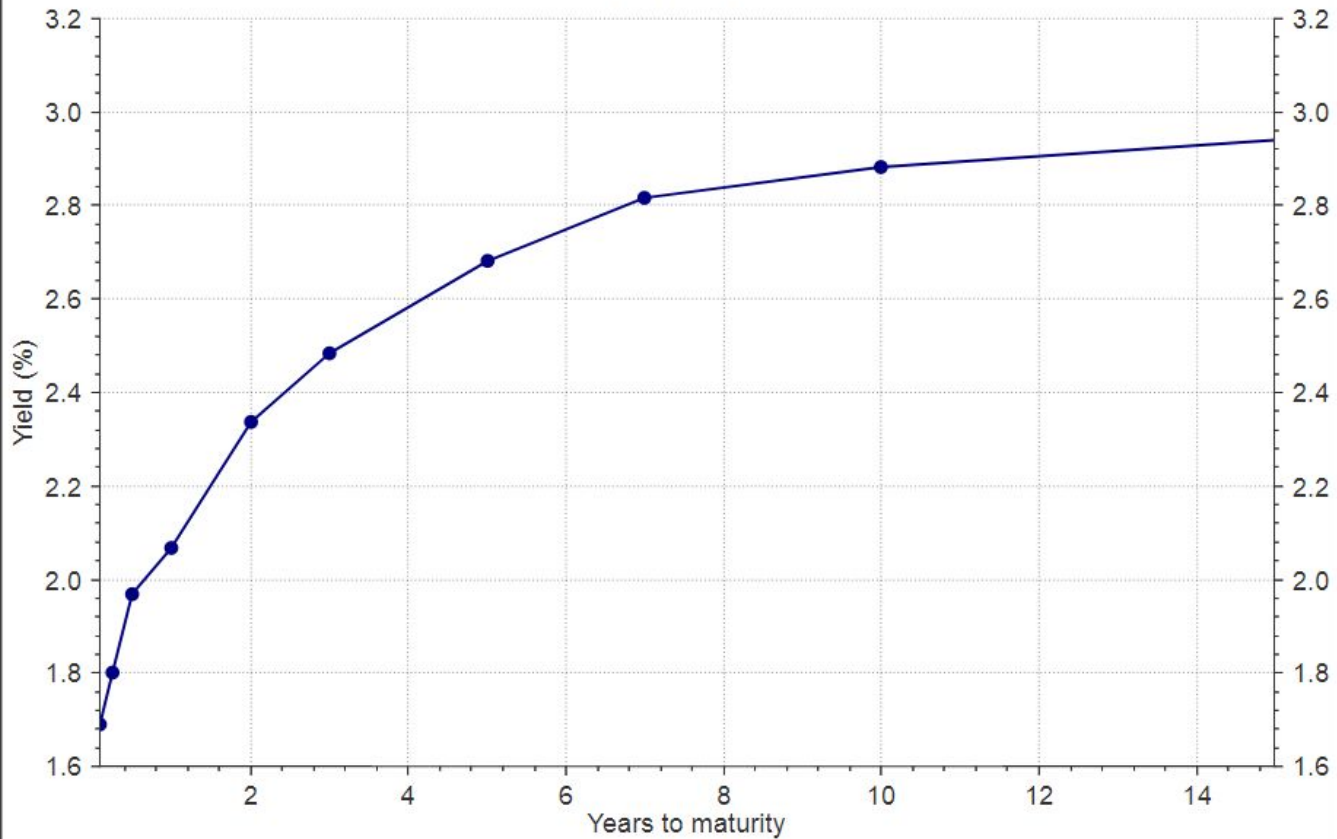
# Old School Macro

- Take most of the fund and pile it into short rates that earn 3-5%
- Use proceeds from interest to buy convex out-of-the-money options
- If you're right on one of the option plays make a killing
- If you're wrong on everything you scratch the year, interest income makes up for option losses

# Duration Is Important!

- Parking money in fixed income requires a basic understanding of duration
- Bonds that have a long time until maturity are more volatile than bonds that mature sooner
- Longer-term bonds also yield more
- **Central Tenet of Finance: More volatility = more reward**
  - This is why the yield curve usually slopes up and to the right!

# US Treasury Yield Curve



● US Yield Curve

Source: Thomson Reuters Datastream / Macro Ops

# Duration Rule of Thumb

*For every 1% change in interest rates (increase or decrease), a bond's price will change approximately 1% in the opposite direction, for every year of duration*



# Duration Example

- 5 Yr Bond
  - Interest rates increase 1%,
  - Bond's price will drop by approximately 5%
  - Interest rates fall by 1%,
  - Bond's price will increase by about 5%

# Duration

- <http://graphics.wsj.com/government-bond-duration-calculator/>

# Key Drivers Across The Curve

- Short rates move based on Fed actions and perceptions of monetary policy
- Long rates move based on inflation expectations and long-term GDP expectations
- Make sure you know what game you're playing before jumping in!

# Vehicles

- **Underlying Bonds** - Actually Purchase  
T-Bills, T-Notes, T-Bonds
- **ETFs**
  - TLT: 20 Yr.+
  - IEF: 7-10 Yr.
  - IEI: 3-7 Yr.
  - SHY: 1-3 Yr.

# Vehicles

## ➤ Futures

- ZN: 10 Yr.
- ZF: 5 Yr.
- ZT: 2 Yr.
- GE (Eurodollars): 3 month - 5 Yr.

## Underlying Bonds

Pros	Cons
No management fees	Decision fatigue - lots of options
Exact maturity precision	Duration changes as bond matures
	Hard to execute

## ETFs

Pros	Cons
Easy to execute	Management fees
“Set and forget” no rolling required	
No minimum size - good for small accounts	

## Futures

Pros	Cons
Easy to execute	Large minimum size \$100k-\$200k notional
24/5 Trading	Rolling required at every expiry
Good tax treatment (60/40) blend in US	

# How ETFs Pay Interest

- Simple. ETFs pay out the interest via monthly distributions
- Schedule of SHY pictured right

Distributions ✕

[Distributions Schedule](#) ⚙️ Custom Columns

Ex-Date ▼	Total Distribution ⓘ▶	Income▶	ST Cap Gains▶	LT Cap Gains▶	Return of Capital▶
Mar 01, 2018	\$0.086349	\$0.086349	\$0.000000	\$0.000000	\$0.000000
Feb 01, 2018	\$0.086192	\$0.086192	\$0.000000	\$0.000000	\$0.000000
Dec 21, 2017	\$0.094086	\$0.094086	\$0.000000	\$0.000000	\$0.000000
Dec 01, 2017	\$0.078527	\$0.078527	\$0.000000	\$0.000000	\$0.000000
Nov 01, 2017	\$0.078435	\$0.078435	\$0.000000	\$0.000000	\$0.000000
Oct 02, 2017	\$0.072561	\$0.072561	\$0.000000	\$0.000000	\$0.000000
Sep 01, 2017	\$0.072044	\$0.072044	\$0.000000	\$0.000000	\$0.000000
Aug 01, 2017	\$0.070877	\$0.070877	\$0.000000	\$0.000000	\$0.000000

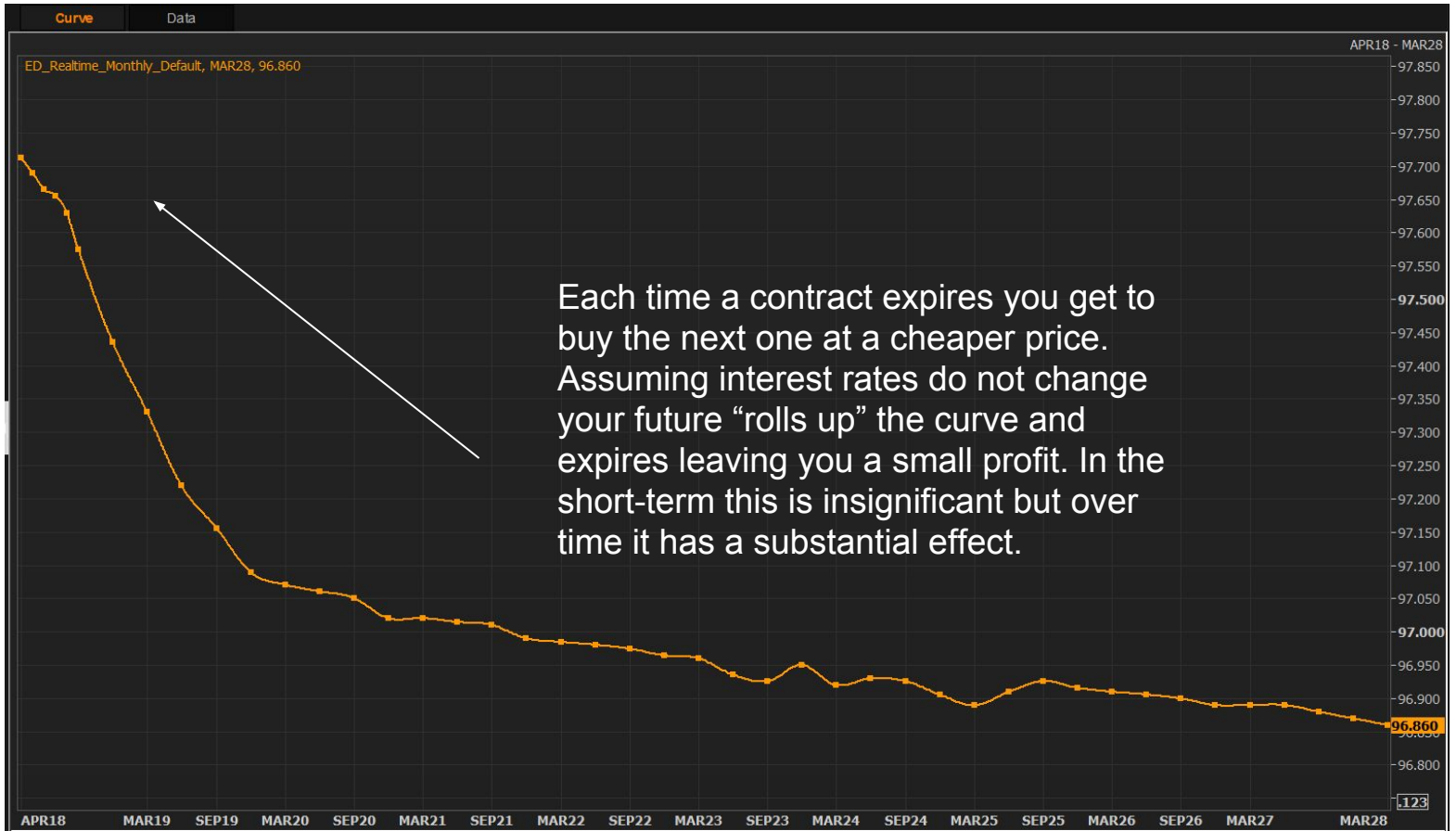
1 to 8 of 187 ◀ 1 2 3 4 5 ... 24 ▶ Show All

Past distributions are not indicative of future distributions.  
Click [here](#), for the most recent distributions.

# How Futures “Pay” Interest

- When long a rates future no interest is paid out
- Instead the interest is realized during the roll process
- Rate futures are always in backwardation which means you get to buy the next contract out at a discount







## Eurodollar 3m – Point Value: 2500

Zoom

1m

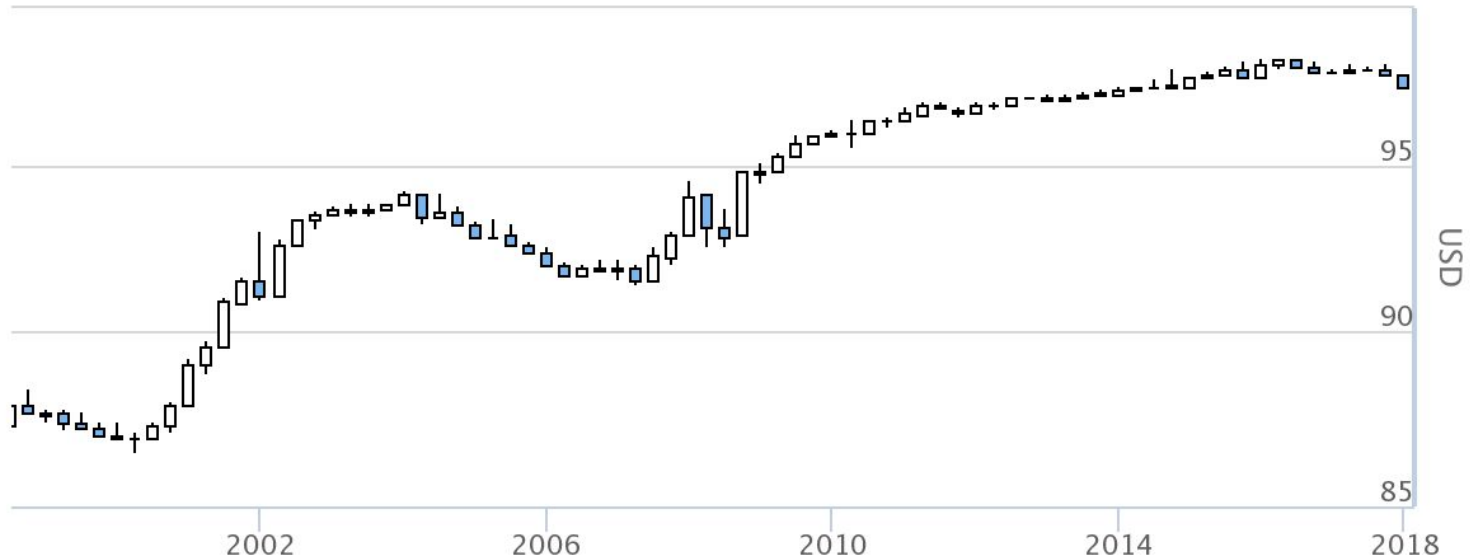
3m

6m

YTD

1y

All

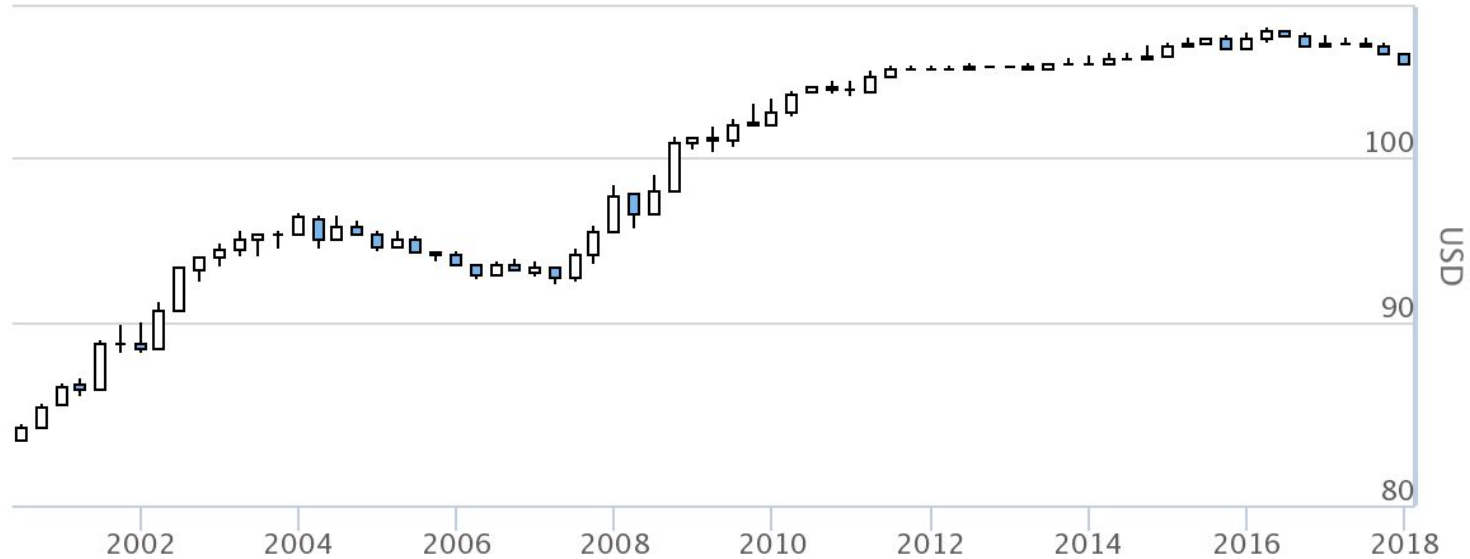


If you adjust for the roll you get a “Total Return” chart that looks much different. Eurodollar futures have delivered consistent profits to long holders.



# US Treasury Note 2yr – Point Value: 2000

Zoom 1m 3m 6m YTD 1y All



Roll adjusted shows completely different picture again.

# Macro Ops Cash Management

- We prefer to use short-term interest rate futures like GE and ZT to harvest interest
- Super easy to execute and manage along with fantastic capital efficiency to allow for further leveraging in other areas of the book
- Our aggressiveness and attentiveness to cash management is completely dependent on the macro environment

# Macro Scenario #1

- Low interest rates (ZIRP, NIRP), bullish equity environment
- \$1,000,000 account
- \$900,000 in equities
- \$100,000 cash left alone waiting to get allocated into the next equity
- Little to no cash management

# Macro Scenario #2

- Interest rates low to mid, bullish equities but expressed via DOTM calls
- \$1,000,000 account
- \$100k in option premium
- \$900k in ZT futures earning 2.5% a year



# Macro Scenario #3

- High interest rates, bearish equity environment, bullish dollar environment
- \$1,000,000 account
- \$100k of planned risk in currency trades
- \$900k in GE futures 3-month earning 8% a year

# Takeaways

- As short-end rates increase put more thought into how you manage your cash
  - Not a big deal when Fed Funds is 0.5%
  - Big deal when Fed Funds is 5%-8%
- Consider rolling long positions in futures such as GE and ZT to harvest the yield
- Smaller accounts can use ETFs like SHY to accomplish the same thing on a smaller scale