The Yield Curve Inverted

What it Means and How to Plan Ahead

CLAYTON EAST ADVISORS

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Executive Summary

- Clayton East Advisors ("CEA") is pleased to provide some insight into the recent yield curve inversions and how middle market businesses can prepare for a potential downturn
- The U.S. Treasury ("UST") yield curve inverted, meaning shorter term notes are paying a higher yield than longer term notes
- A yield curve inversion can mean that a recession is on the horizon
- A review of current implied forward short-term yields and short-term yields around prior recessions can provide some insight into what the market is implying concerning the timing of a recession
- Small preparations now can produce large benefits in the future for middle market businesses
- CEA is an investment banking advisory and consulting firm that is ready to assist your business in preparing for and navigating through any potential economic downturn

Yield Curve Inversion

- There has been a significant amount of discussion in the media about the fact that the yield on the 10-year Treasury note dropped below the yield on the 2-year Treasury note
- Earlier this year, the yield on the 10-year Treasury note dropped below the yield on the 3-month Treasury bill
- This is not the normal situation
- Typically, longer duration instruments have higher yields than shorter duration instruments
- This inversion demonstrates that the sum of all investor actions in the UST market produces an anticipated interest rate drop over the next two years and subsequent low yields
- The investor base for UST debt is broad and deep
  - Privately held UST debt is greater than $14 Trillion
  - Nearly all U.S.-based institutional investors hold UST debt
  - Sovereign nations and foreign investors also participate in the market

Why Is Inversion Important?

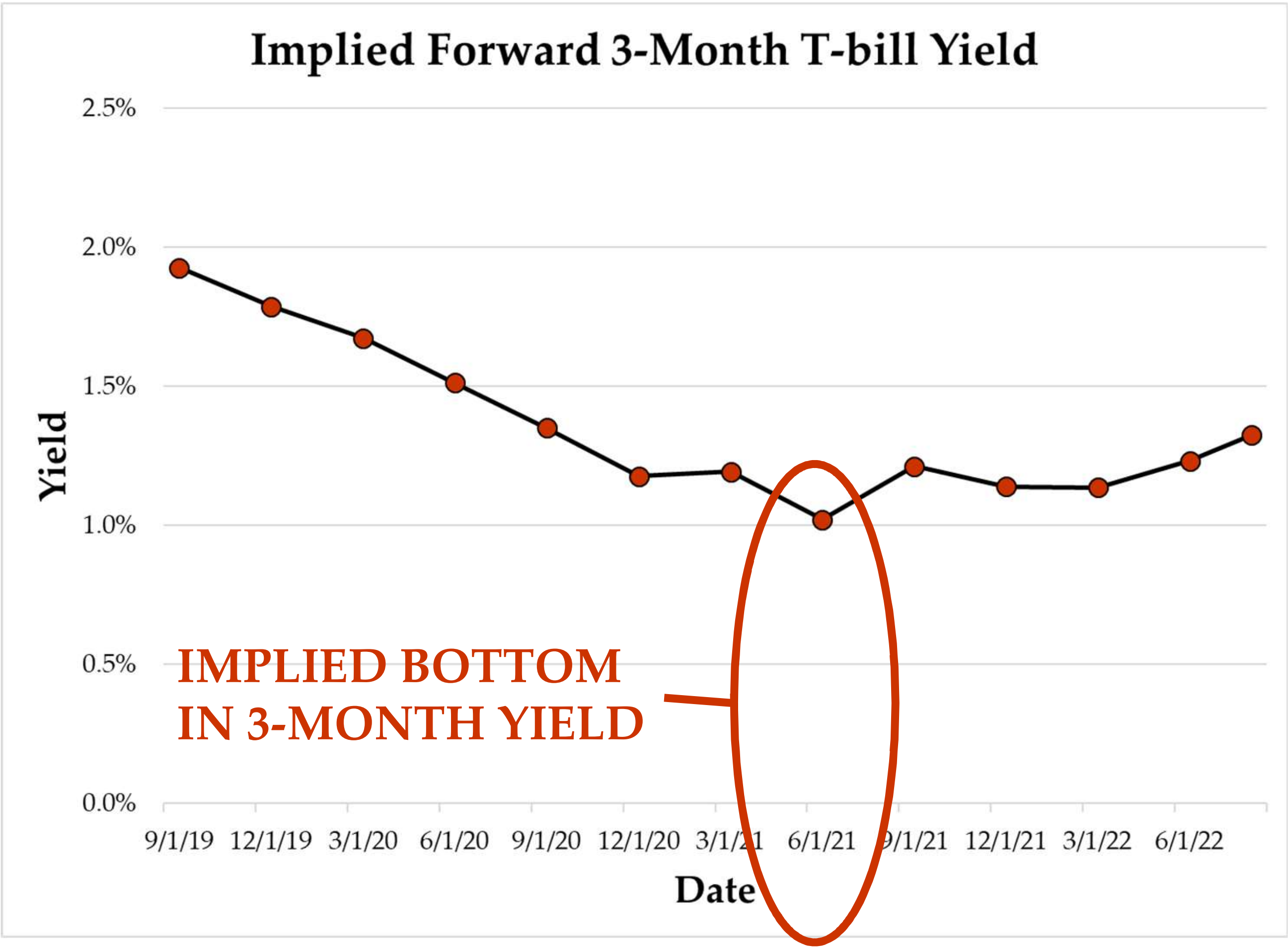
- Over the past 50 years, inversions of the 2-year and 10-year note yields have signaled coming recessions
- Further, it is possible to use the current/spot UST yield curve and historic short-term yield data around prior recessions to estimate the potential timing of a recession
- This can be an important data point in business planning
- The following pages step through our methodology for interpreting the available market data to derive an estimate of when a potential recession may start
- We offer some suggestions as to how businesses should approach a potential economic slowdown
  - Hint: None of them involve ignoring it

What is the Market Implying?

- Digging deeper into the spot UST yield curve provides information to construct the implied forward short-term yield curve
  - This is math, not guesswork
- This is completed by solving equations using two data points on the spot UST yield curve
- For example: If the 3-month yield is 2.0% and the 6-month yield is 1.8%, then the implied 3-month yield in three months is 1.6%
  - 1.8% = (2.0% + 1.6%) / 2
- This calculation can be repeated for longer durations using more of the spot UST yield curve

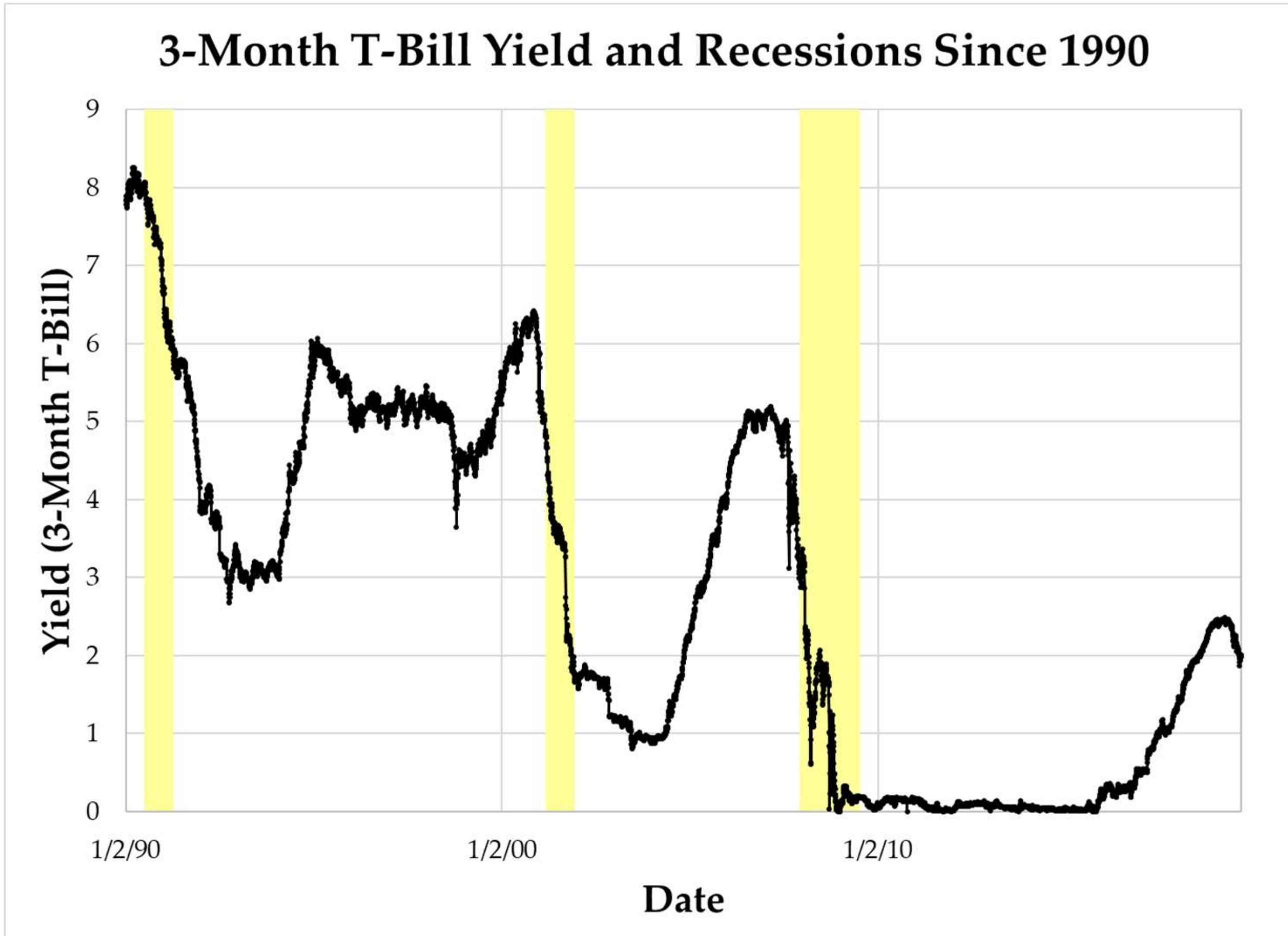
Forward 3-Month T-Bill Curve

- At right is the implied yield of a 3-month T-Bill entered into at future dates
- The yield begins to drop immediately and levels off at year-end 2020 with a minimum in June 2021



Recession + 3-Month Yield Data

- Plotting historical 3-month T-Bill yields against prior recessions shows that the previous three recessions have started BEFORE T-Bill yields hit their minimums
- This implies that the slowdown will occur BEFORE June 2021



Note: Yield data from the U.S. Department of the Treasury and Recession timing data from the National Bureau of Economic Research ("NBER").

Potential Recession Timing

- Based on the current spot UST yield curve, the market is implying that Treasury yields will bottom in June 2021
- In the three recessions since 1990, the NBER estimated start of the recession has begun an average of 11 months <u>BEFORE</u> 3-month T-bill yields bottomed
- 11 months before June 2021 is July 2020
- This is approximately ten months from today
- This provides ample time for businesses to prepare for a potential downturn
- Modest preparation by companies now can provide significant benefits in the future

Summary Recommendations

Capital Expenditures

- Use reasonable assumptions when deploying capital
- Perform stress testing on forecasts to determine the effects of an economic slowdown

Capital Structure

- Start and maintain a robust dialog with your lenders
- Extend your credit facility now - for three years or more
- If equity is required and available, take advantage of it now

Operational Strategies

- Review customer financial strength - obtain financial data where possible
- Review/reduce raw materials and finished products bought on speculation
- Maintain appropriate inventory levels

Capital Expenditures

- Evaluate your capital expenditure programs for 2020 and 2021 closely
- Ensure forecasted improvements are reasonable in light of a potential slowdown/recession
- Target projects with rapid returns
- Consider smaller projects or projects that can be completed in phases
- Perform a downside forecast to show what would happen if your business slows and the capital spent does not achieve its intended goals
- Be flexible and modify plans as more economic data becomes available

Capital Structure

- Start and continue a dialog with your lenders
  - They will be your partner through any slowdown
  - Keep them informed of good and bad developments
- Extend your credit facility now
  - Lenders are still trying to hit targets for 2019
  - Seek a three year term or longer
  - Operating your business will be easier if you do not have to extend your credit facility in the middle of a recession
- If equity is available now and your business will need it, take it
  - Avoid the difficulty and consequences of attempting to close a down round while GDP is stagnant or shrinking
  - Sponsors will be focused on their existing portfolios during a downturn
  - Sponsors will also begin to triage their existing portfolios into survivors and losers early in a downturn

Operational Strategies

- Review your customer concentration and your customers' financial strengths
- Where your customers are public companies, review and record their financial information
- With private customers, request basic financial information periodically as part of your credit process
- Reduce the purchase of raw materials or finished products on speculation
- Develop specific dollar limits and institute controls so that sales, marketing, and operations have to stay within the limits you specify
  - Limit the size of orders that individuals may place without your review
- Watch inventory levels over the coming quarters
  - Do not overproduce for efficiency gains or to build inventory

Conclusions

- This is NOT a Chicken Little moment – The sky is NOT falling
- A potential recession is simply a reduction in business activity
- On average, the reduction is only a few percentage points
- A little caution and foresight now can help prepare your business for a potential economic slowdown
- This preparation will put your business in a stronger position if there is a downturn
- While your competition is fighting to survive a downturn, your business can be more aggressive by:
  - Targeting their high quality customers
  - Acquiring their business or assets

How We Can Help

- Clayton East Advisors is an investment banking advisory and consulting firm here to assist you in preparing your business for a potential downturn
- We provide the following investment banking services:
  - Capital raising
  - Buy-side or sell-side advisory
  - Restructuring advisory
- We also provide consulting services to assist in capital planning, stress testing, forecasting, and strategic planning
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Team

PROFESSIONALS

Steven Gilbertson – Steven has over 25 years of finance and engineering experience and has assisted public and private companies on transactions in excess of $30 billion in the aggregate. In June 2017 he founded Clayton East Advisors. Prior to this from late 2014 to mid-2017, Steven was a Managing Director in the energy investment banking group at D.A. Davidson & Co. From mid-2007 through late 2014, he held a variety of roles of increasing seniority in the investment banking group of Oppenheimer & Co. From 2004 to 2007, Steven was a member of the healthcare investment banking group at WR Hambrecht + Co. Preceding these roles in 2003 and 2004, he was a Manager in Johnson & Johnson's Pharmaceutical Group Strategic Marketing division. Prior to business school, Steven held process and project engineering roles at manufacturing businesses in the plastics and glass industries. He earned his BSE degree in chemical engineering from Princeton University and his MBA in finance from Columbia Business School.

ADVISORY BOARD

Rick Bruce – Rick has over 20 years of experience in operational and business development roles. Since March 2017, he has been heading business development for Exciter Energy Services, a start-up contract driller in the oil & gas space. Prior to this, he was Vice President of Operations & Transportation for Encana Natural Gas and its successor's Liquified Natural Gas fleet. In this role he oversaw all aspects of the business, including operations, sales, and finance. Further, he was instrumental in the transition of the business to a standalone entity called Stabilis Energy Services. Rick has also held a number of roles in business development for a variety of insurance firms in Colorado. He earned his BA degree in political science and economics from the University of Colorado.

Gianni Russello – Gianni is a credit focused restructuring professional with over 20 years of experience in workouts, distressed credit investing, and restructuring and special situations investment banking advisory. He has extensive experience leading and advising distressed creditor groups and issuers, with deep relationships in the leveraged finance, private equity, workout, and restructuring communities. Most recently he was with Z Capital. From 2009 to 2017 Gianni was in the Restructuring Advisory Group at Oppenheimer & Co. From 2007 to 2009 he was an investment professional in the Special Situations Group at Trust Company of the West. From 1997 to 2007, Gianni was a member of the Special Credits Group at JPMorgan Chase Bank. He earned his BBA in finance from Pace University's Lubin School of Business.