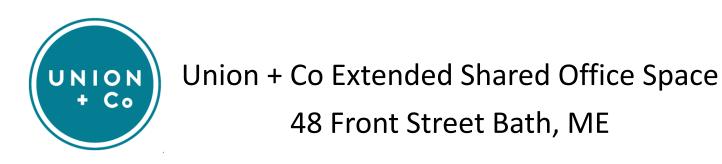
Economic Forecast Using the "Yield Curve"

A Real Estate Perspective



FREE 1 Hour Brown Bag Lunch + Learn event Noon on September 19, 2019





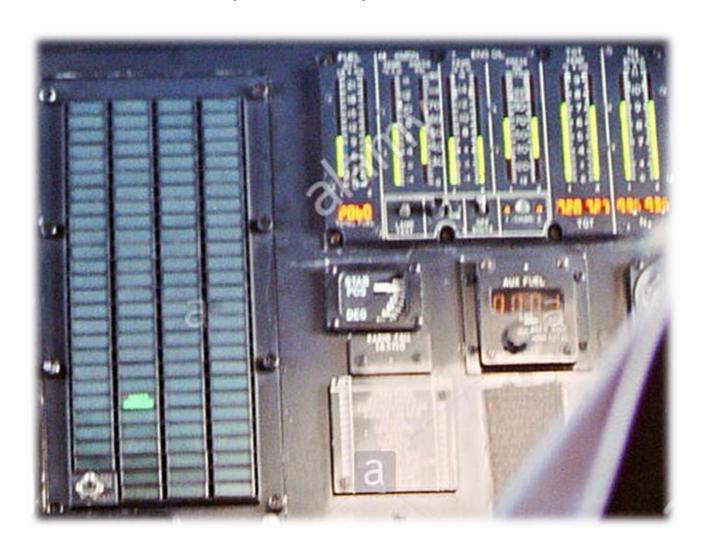
All About Me!



Dealing With Complexity



Dealing With Complexity

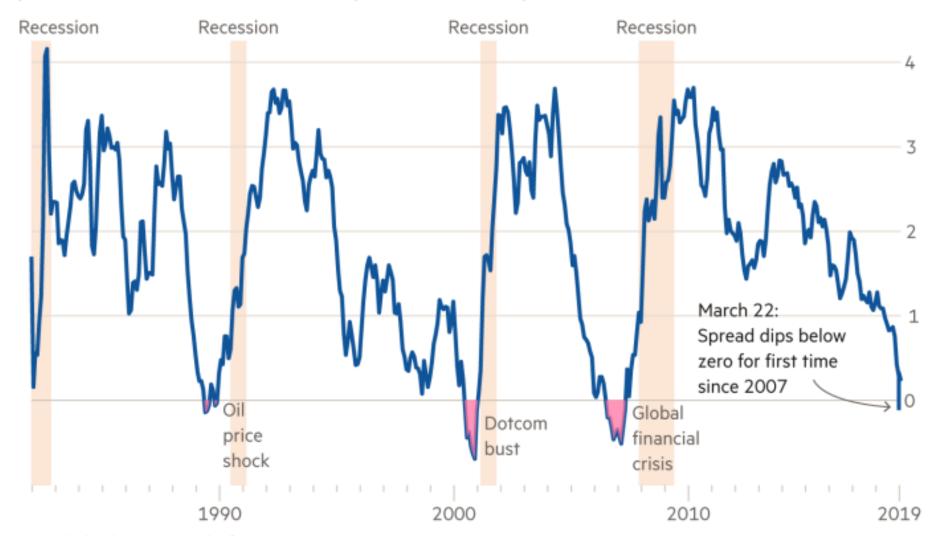


Dealing With Complexity – Pilot's Scan



The yield curve's track record is impressive

Spread between three-month and 10-year Treasuries (% points)



Source: Federal Reserve Bank of St. Louis

Yield Curve — What is it?

- A Chart, Graph, or Snapshot Picture of:
 - Safe Investment Instruments
 - Maturities
 - Interest Rates
 - Think Prices and Costs
 - Standing in a Line at a Bank Buying CDs

Yield Curve — What is it?

- US Treasuries
 - Month
 - 1..2..3..6
 - Year
 - 1..2..3..4..5..7..10..20..30

US Treasury - Source Data



https://www.treasury.gov/resource-center/data-chart-center/interest-rates/pages/TextView.aspx?data=yield

Date	1 Mo	2 Mo	3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
09/03/19	2.06	2.01	1.98	1.88	1.72	1.47	1.38	1.35	1.42	1.47	1.77	1.95
09/04/19	2.05	2.02	1.97	1.87	1.69	1.43	1.36	1.32	1.40	1.47	1.77	1.97
09/05/19	2.05	2.01	1.97	1.88	1.73	1.55	1.47	1.43	1.51	1.57	1.86	2.06
09/06/19	2.05	2.00	1.96	1.88	1.73	1.53	1.46	1.42	1.50	1.55	1.83	2.02
09/09/19	2.04	1.99	1.96	1.87	1.74	1.58	1.52	1.49	1.57	1.63	1.91	2.11
09/10/19	2.04	1.99	1.95	1.89	1.81	1.67	1.61	1.58	1.66	1.72	2.00	2.19
09/11/19	2.01	1.97	1.96	1.88	1.79	1.68	1.62	1.60	1.68	1.75	2.02	2.22
09/12/19	1.99	1.97	1.95	1.90	1.82	1.72	1.67	1.65	1.72	1.79	2.06	2.22
09/13/19	1.99	1.98	1.96	1.92	1.88	1.79	1.76	1.75	1.83	1.90	2.17	2.37
09/16/19	2.08	2.02	1.99	1.93	1.86	1.74	1.71	1.69	1.77	1.84	2.11	2.31
09/17/19	2.10	2.06	1.99	1.93	1.87	1.72	1.68	1.66	1.75	1.81	2.08	2.27
09/18/19	1.94	1.93	1.95	1.91	1.87	1.77	1.72	1.68	1.76	1.80	2.06	2.25

Wednesday Sep 18, 2019

Yield Curve September 18, 2019

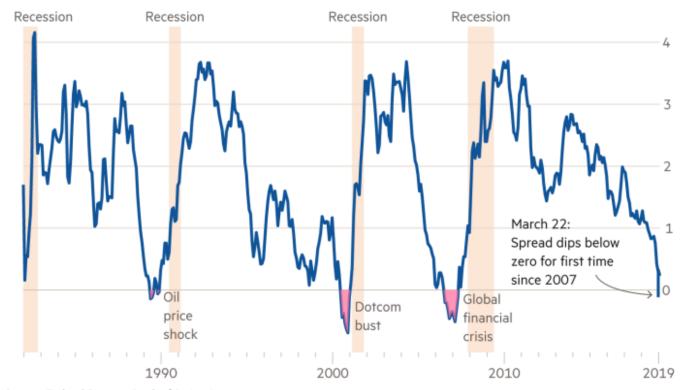
Yield Curve September 18, 2019



Remember This Slide? "The Spread"

The yield curve's track record is impressive

Spread between three-month and 10-year Treasuries (% points)



Remember This Slide? Calculate "The Spread"

U.S. DEPART	MENT OF THE T	TREASURY						•				
Date	1 Mo	2 Mo	3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
09/03/19	2.06	2.01	1.98	1.88	1.72	1.47	1.38	1.35	1.42	1.47	1.77	1.95
09/04/19	2.05	2.02	1.97	1.87	1.69	1.43	1.36	1.32	1.40	1.47	1.77	1.97
09/05/19	2.05	2.01	1.97	1.88	1.73	1.55	1.47	1.43	1.51	1.57	1.86	2.06
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09/18/19	1.94	1.93	1.95	1.91	1.87	1.77	1.72	1.68	1.76	1.80	2.06	2.25
											Wednesda	y Sep 18, 20

Calculate "The Spread"

Formula

• 10 Year Note – 3 Month Note = "The Spread"

 \bullet 1.80 - 1.95 = (-0.15)

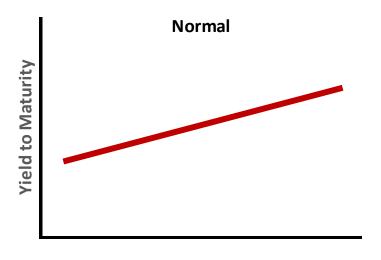
•On March 22, 2019 "The Spread" = (-0.02)

Yield Curve — Shapes

- Normal
- Flat or Humped
- Inverted
- Steep

Yield Curve – Shape: Normal

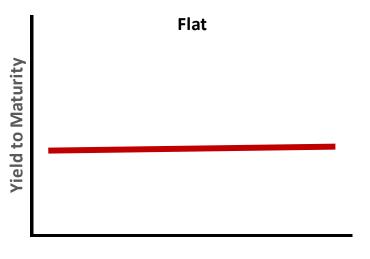
- Long-term rates are above short-term rates
- The longer you tie up your cash, the theory goes, the more you should be rewarded for the risk you are taking.



Treasury Instrument Term to Maturity

Yield Curve – Shape: Flat or Humped

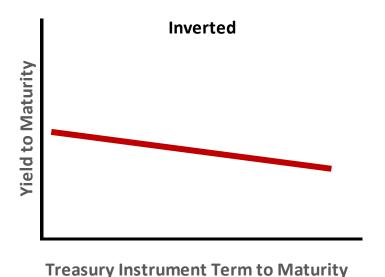
- Short and long-term rates are the same
- Not all flat or humped curves turn into fully inverted curve



Treasury Instrument Term to Maturity

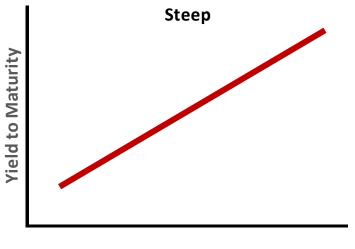
Yield Curve — Shape: Inverted

- Long-term rates are below short-term rates
- Long-term investors are betting that this is their last chance to lock in rates before the bottom falls out



Yield Curve — Shape: Steep

- Long-term rates are above short-term rates
- Long-term bond holders are sending a message that they think the economy will improve quickly in the future



Treasury Instrument Term to Maturity

Yield Curve — In Context

- Stockcharts: Jan '99 Today with Splitscreen of S&P 500
 - https://stockcharts.com/freecharts/yieldcurve.php

- Free Range Stats: Dec '90 Today
 - http://freerangestats.info/blog/2019/04/20/yield-curve

or

https://www.youtube.com/watch?time continue=4&v=fJ6BqrihUBA

Yield Curve – In Context

- Baseline and Rate of Change (BaR) Analysis Grid[©]
 - The BaR Analysis Grid© clarifies current economic conditions and signals how near the economy is to a recession. The mean of coordinates (MoC) is the average of all plotted points. It indicates the overall health of the economy. Leading indicators (LD) are a unique subset that apply strictly to the BaR, providing insight into emerging trends (business cycles are comprised of multiple mini-cycles). Click here to learn how to read the BaR grid. The BaR is updated every Friday.
- Copyright © 2017 2019 econpi.com All Rights Reserved

BaR Analysis Grid ©- Source Data



Economic Indicators	Grid Abbreviation	Sector		
Consumer sentiment	Cnsmr Sntmt	Consumer		
Existing home sales	Ex. Home Sales	Consumer		
Real retail sales per capita	Rtl Sales	Consumer		
Total vehicles sales	Vehicle Sales	Consumer		
ISM Non-manufacturing	Non-Mfg	Services		
New private building permits	Bldg Permits	Manufacturing		
ISM manufacturing	Mfg	Manufacturing		
Industrial capacity utilization	Ind. Cpcty Util.	Manufacturing		
Industrial production	Ind. Prod.	Manufacturing		
Small business optimism	Small Bus. Optm	Services/Mfg		
Chicago Fed National Activity Index	CF Nat. Act. Indx	Services/Mfg		
Total nonfarm hires per 100 workers	Hires	Services/Mfg		
Total nonfarm job openings per 100 workers	Job Openings	Services/Mfg		
Real nonfinancial corporate profits1	Nonfin. Profits	Services/Mfg		
Temporary employment	Temp. Emplymnt	Services/Mfg		
Unemployment claims ²	Unemp. Claims	Services/Mfg		
Credit managers' index	Crdt Mgr Indx	Financial		
St. Louis Fed Financial Stress Index ³	STL Fin. Stress	Financial		
Yield curve spread (10-yr minus 3-month)	Yield Crv Sprd	Financial		

BaR Analysis Grid[©]

Upper, left quad:

- Above baseline
- Negative rate of change

Upper, right quad:

- Above baseline
- Positive rate of change

Baseline

Lower, left quad:

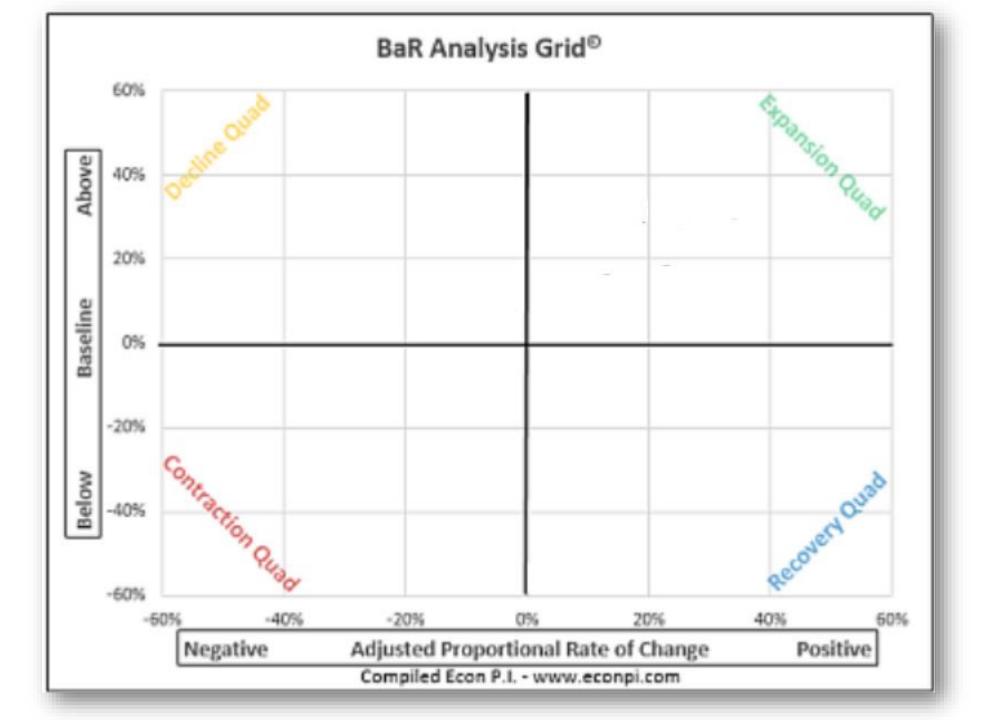
- Below baseline
- Negative rate of change

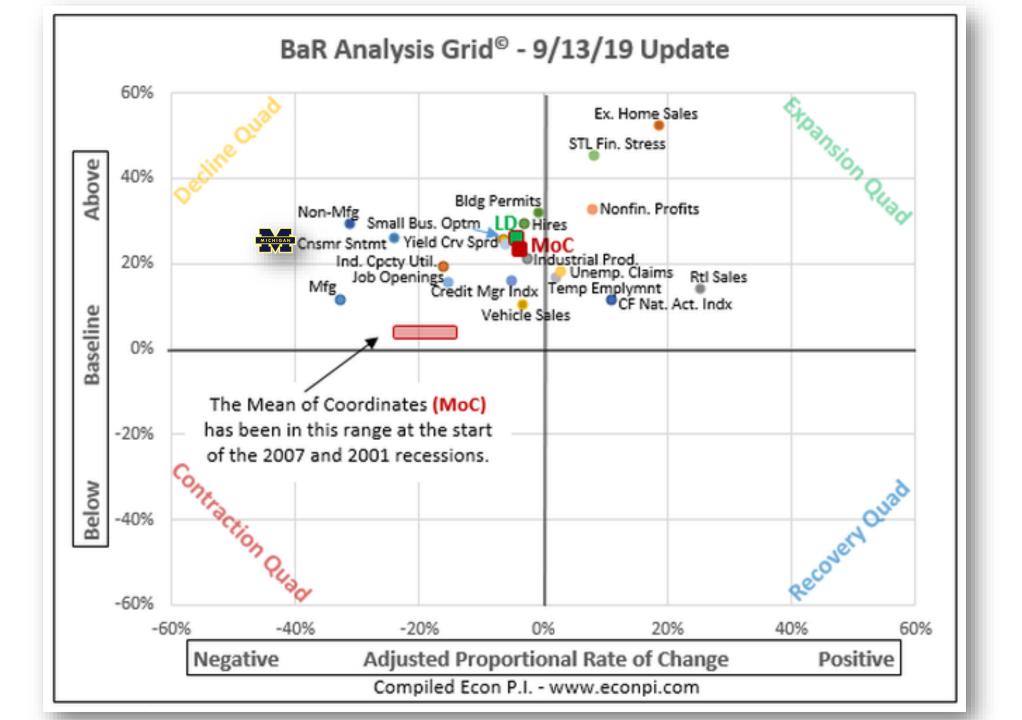
Lower, right quad:

- Below baseline
- Positive rate of change

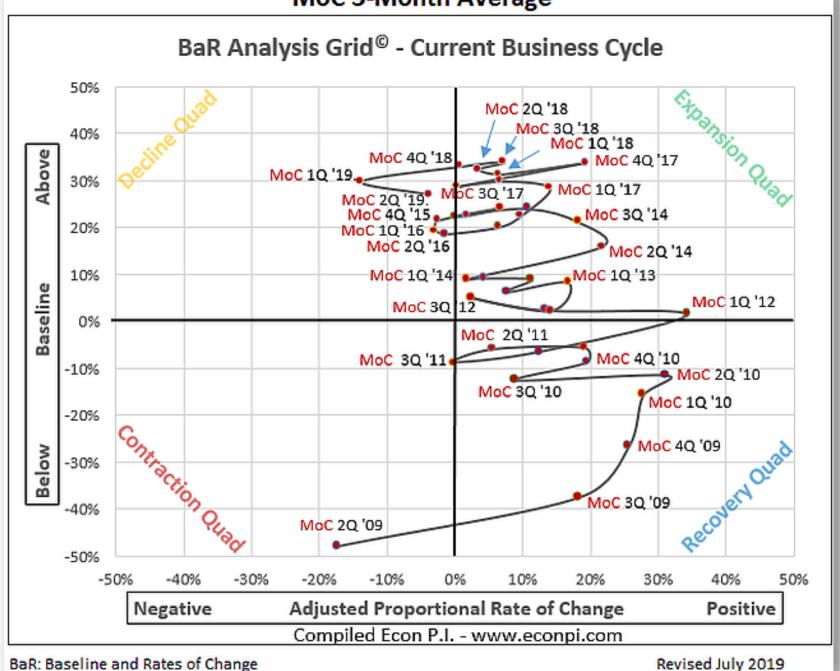
Rate of Change

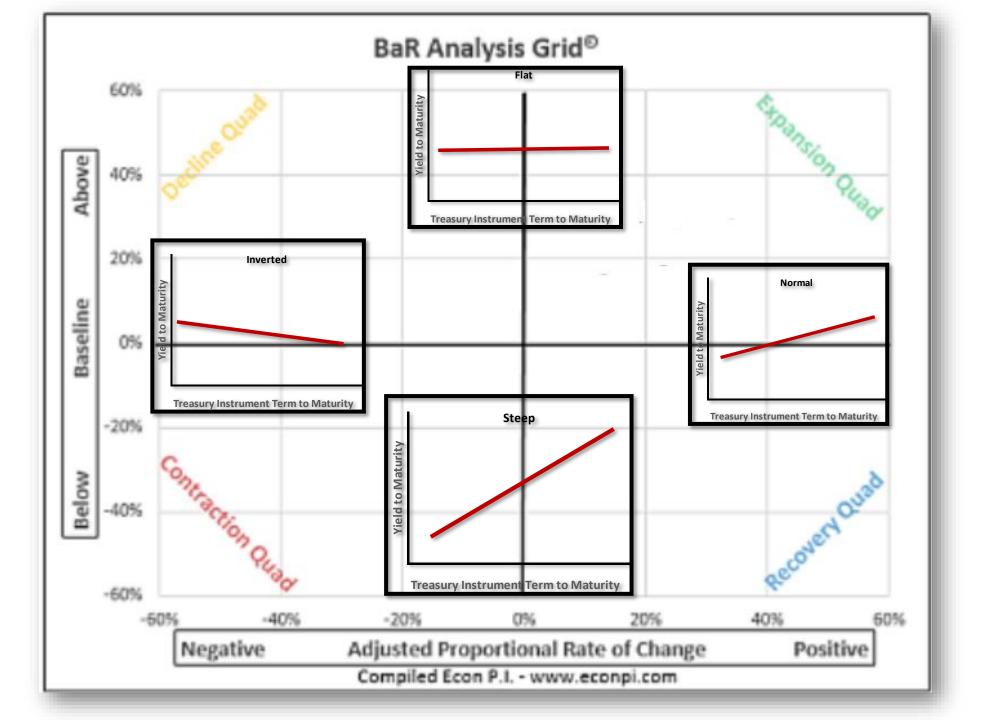
BaR: Baseline and Rate of Change



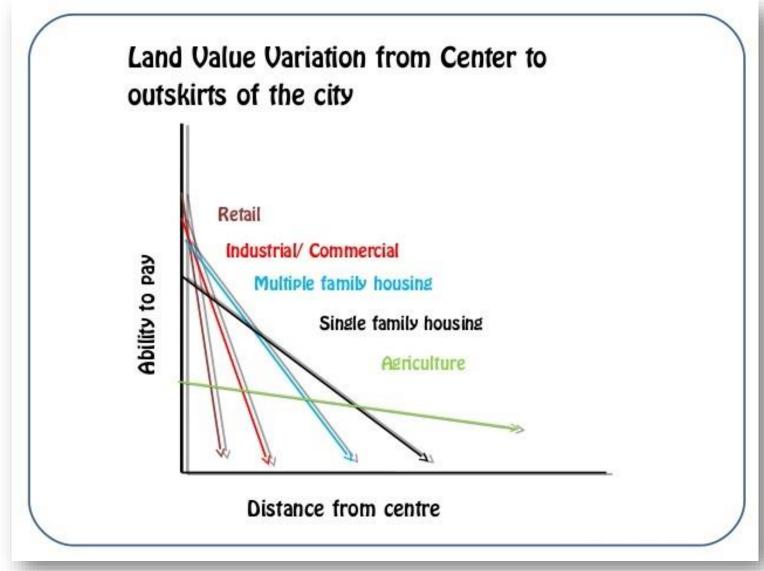


MoC 3-Month Average





Yield Curve - Real Estate Perspective?



Yield Curve - Real Estate Perspective?



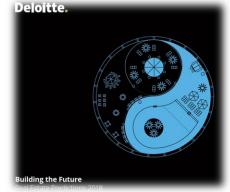
Yield Curve - Real Estate Perspective?

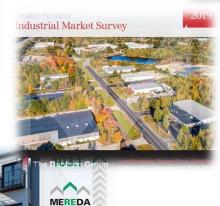
- Land
 - Hold Continue with Due Diligence
- Single Family Residential Housing
 - Price and Emotion Sensitive
 - SFR May be a little more inelastic
- Multi-Family Residential Housing
 - Acquire!
 - Rent Rolls afford flexibility
 - Lower prices to match current demand curve
 - Less sensitive to vacancy risk (Multiple units means diversify risk!)
- Industrial & Commercial Office
 - Monitor Rent Roll, Have conversations, Read their industry literature
- Retail
 - Risky Pricing pressure from vertical integration. Think service and experiential.

Yield Curve - Real Estate Indicators









INDEX WINTER EDITION

2019







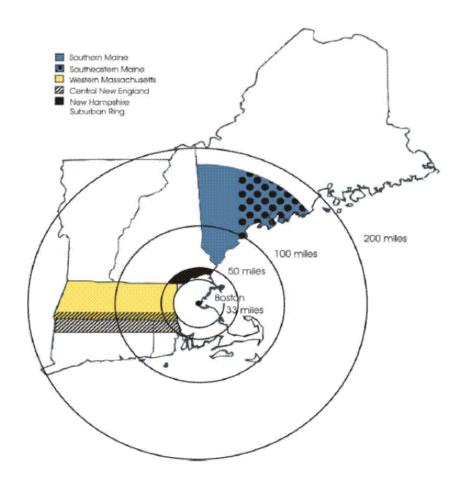




Real Estate Indicators – View of Maine

Maine is a "Sub Market" of Boston

 Portland is <u>beginning</u> to show up on the radar of these reports



Recession Indicators

- Yield Curve Inversion
- Bubble in the Economy
- Statements from the Fed
- •War

References

- US Treasury Source Data
 - https://www.treasury.gov/resource-center/data-chart-center/interest-rates/pages/TextView.aspx?data=yield
- Awesome Macro Animations
 - https://stockcharts.com/freecharts/yieldcurve.php
 - http://freerangestats.info/blog/2019/04/20/yield-curve
- Incredible Aggregation of Economic Indicators BaR Analysis
 - www.econpi.com/index.php
- Real Estate Indicators: eMail Frank Carr frank@mainerealtyadvisors.com

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