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May 3, 2023

Meet the Money Conference

Paul Single
Managing Director and Senior Economist
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Recent News

Discount Window Borrowings
$, billions, not seasonally adjusted

Borrowing at the Fed
$, billions, not seasonally adjusted

Data current as of April 30, 2023
Source: Federal Reserve Bank
Information is subject to change and is not a guarantee of future results.
The “Godot” Recession

Google Search: "Are we in a recession?"

Data current as of April 30, 2023
Source: Google
Information is subject to change and is not a guarantee of future results.
“In economics, things take longer to happen than you think they will, and they happen faster than you thought they could.”

-Rudi Dornbusch, MIT Economist
Recession
Recession

A significant decline in economic activity spread across the economy, lasting more than a few months.

It is normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.

Source: National Bureau of Economic Research
Information is subject to change and is not a guarantee of future results.
Recession

NBER - Recession Indicators
% three month change, annualized

- Emp.-Payroll: 2.7%
- Emp.-Household: 4.2%
- Agg. Hours Worked: 2.5%
- Real Income: 0.5%
- Ind. Production: 6.2%
- Mfr. & Trade Sales: 4.4%

Data current as of April 30, 2023
Labor reports (April), Income report (March), Industrial Production (March), and Mfr. & Trade sales (January)
Information is subject to change and is not a guarantee of future results.
GDP
GDP

GDP: Actual and Forecast
% change, q-o-q, seasonally adjusted annualized rate

Data current as of April 30, 2023
Source: Bureau of Economic Research, Bloomberg
Information is subject to change and is not a guarantee of future results.
GDP - Leading Indicators of a Recession

Slope of the Treasury Yield Curve
%
3-mo. / 10-yr.

U.S. Leading Index 6-month Change
%
seasonally adjusted annualized rate

Data current as of April 30, 2023
Source: Conference Board, Bloomberg
Information is subject to change and is not a guarantee of future results.
GDP - Leading Indicators of a Recession

Data current as of April 30, 2023
Source: Institute of Supply Management, St. Louis Fed
Information is subject to change and is not a guarantee of future results.
Labor
Labor

Unemployment Rate  
%\text{, seasonally adjusted}

Job Openings and Unemployed Workers  
millions\text{, seasonally adjusted}

Data current as of April 30, 2023
Source: Bureau of Labor Statistics
Information is subject to change and is not a guarantee of future results.
Job Opening by Company Size
'000, seasonally adjusted, February 2023

<table>
<thead>
<tr>
<th>Company Size</th>
<th>Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>1.7</td>
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<tr>
<td>10-49</td>
<td>3.0</td>
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<tr>
<td>50-249</td>
<td>2.4</td>
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<tr>
<td>250-999</td>
<td>1.0</td>
</tr>
<tr>
<td>1,000-4,999</td>
<td>0.6</td>
</tr>
<tr>
<td>5,000+</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Job Openings: February 2023
'000, seasonally adjusted

- Government: 995
- Mining & Logging: 35
- Construction: 412
- Manufacturing: 694
- Edu. & Health Service: 1,862
- Information: 147
- Fincl. Activities: 476
- Leisure & Hosp.: 1,501
- Trade, Trans & Util.: 1,627
- Other Services: 360

Data current as of April 30, 2023
Source: Bureau of Labor Statistics
Information is subject to change and is not a guarantee of future results.
Labor

Job Cut Announcements
Challenger, Gray & Christmas, ’000

Initial Claims for Unemployment Insurance
’000, seasonally adjusted

Data current as of April 30, 2023
Source: Challenger, Gray & Christmas, Bureau of Labor Statistics
Information is subject to change and is not a guarantee of future results.
Inflation
Inflation

Data current as of April 30, 2023
Source: Bureau of Labor Statistics
Information is subject to change and is not a guarantee of future results.
Inflation

CPI: Services less Shelter (SuperCore)
% change, y-o-y, seasonally adjusted

Data current as of April 30, 2023
Source: Bureau of Labor Statistics
Information is subject to change and is not a guarantee of future results.
Inflation

CPI - Food at Home
% change, seasonally adjusted

Data current as of April 30, 2023
Source: Bureau of Labor Statistics
Information is subject to change and is not a guarantee of future results.

Various Food Commodities
% change since December 2021 a/o March 2023

Data: Corn @ 14.5  Wheat @ -1.7
Chicken @ 9.8  Eggs @ 44.3
Beef Steaks @ -2.6  Bacon @ -4.7
Inflation

Eggs v. Bitcoin
% change, indexed at "0" on March 2021

Data current as of April 30, 2023
Source: Bureau of Labor Statistics, Bloomberg, spot price
Information is subject to change and is not a guarantee of future results.
Housing
Housing

Mortgage Rates
%, 30-year Fixed Rate Mortgage

Monthly Mortgage Payment - Median Existing Home
$, 30-year fixed rate mortgage, 80% financing

Data current as of April 30, 2023
Source: FreddieMac, National Association of Realtors, CNR Research
Information is subject to change and is not a guarantee of future results.
Housing

Existing One Family Home Sales
"cumulative % change since start of Fed hiking cycle"

Data current as of April 30, 2023
Source: FreddieMac, National Association of Realtors
Information is subject to change and is not a guarantee of future results.
The Fed
Federal Funds Rate Across Tightening Cycles
change in percentage points, months

2022, with Fed planed future hikes

Data current as of March 31, 2023
Source: Federal Reserve
Information is subject to change and is not a guarantee of future results.
The Fed

Median Federal Funds Rate
% federal funds cycle and major financial failures

Data current as of March 31, 2023
Source: Federal Reserve, dates for financial failures are from Wikipedia
Information is subject to change and is not a guarantee of future results.
The Fed
The Three “P’s” of the Fed, peak, pause pivot.
The federal funds rate is near its peak, so the Fed will pause from future hikes to observe how the economy will respond to cumulative interest rate changes. The Fed believes they will wait until next year before the pivot toward a lower federal funds rate.

Data current as of April 25, 2023
Source: Federal Reserve
Information is subject to change and is not a guarantee of future results.
Banking
Banking System

Bank Deposits: U.S. Commercial Banks
$ trillions, % change y-o-y, not seasonally adjusted

Data current as of April 30, 2023
Source: Federal Reserve Bank of New York
Information is subject to change and is not a guarantee of future results.
Banking System
Banks are competing with government money market funds that offer substantially higher yields. It is causing some depositor to move their money.

Selected Short-Term Interest Rates

Bank Deposits and Gov’t Money Market Funds change in value, since January 2022, $, billions

Data current as of April 30, 2023
Source: FDIC, Bloomberg Composite Rate,
Information is subject to change and is not a guarantee of future results.
Banking

Interest Rate on Popular Loans (%)

- Recession
- Credit Card: Mar @ 19.1
- 5-yr. Auto Loan: Mar @ 6.9
- 30-year Fixed Rate Mortgage: Mar @ 6.3

Tightening of Credit Standards
% not seasonally adjusted

- Recession
- Q4: 2022 @ 44.8

Data current as of April 30, 2023
Source: Federal Reserve, Bankrate.com, FreddieMac
Information is subject to change and is not a guarantee of future results.
Banking

Lending at Commercial Banks
change in value since January 5, 2022 $, billions

Data current as of April 30, 2023
Source: Federal Reserve
Information is subject to change and is not a guarantee of future results.
Banking System

Allowance for Loan and Lease Losses
Domestic Commercial Banks
$, billions, not seasonally adjusted

Data current as of April 30, 2023
Source: Federal Reserve, Nareit, CoStar
Information is subject to change and is not a guarantee of future results.
Banking System

Bloomberg REIT Office Property Index
price and % change, y-o-y

Data current as of April 30, 2023
Source: Bloomberg, not for use as a financial benchmark
Information is subject to change and is not a guarantee of future results.
Banking System

Bloomberg REIT Hotels Index

(price & percent change, y-o-y)

Data current as of April 30, 2023
Source: Bloomberg, not for use as a financial benchmark
Information is subject to change and is not a guarantee of future results.
REIT: Selective Relative Performance
% change since December 31, 2019 to April 30, 2023

Hotel @ -30.4
Office @ -56.1
Warehouse @ 31.1
Mall @ -23.4
Single Tenant @ -12.4

Data current as of April 30, 2023
Source: Bloomberg, not for use as a financial benchmark
Information is subject to change and is not a guarantee of future results.
Federal Debt
Federal Debt

Federal Deficit and Debt
%, millions of dollars

Federal Debt
percent of GDP

Data current as of April 30, 2023
Source: Federal Reserve
Information is subject to change and is not a guarantee of future results.

Annual Deficit (rs): 2022 FY @ 1,375

Actual: 2022 @ 106.0
Conclusion
Data current as of April 30, 2023
Source: Federal Reserve, Bureau of Economic Research
Information is subject to change and is not a guarantee of future results.
Conclusion

Available Cash & Money Market Funds

$ trillion

Since recession start
+ 4.1 trillion

Since recession start
+ 1.6 trillion

Source: Federal Reserve, Investment Company Institute,
Information is subject to change and is not a guarantee of future results.

Delinquency Rates for All Consumer Loans

%, seasonally adjusted

Data current as of April 30, 2023

Recession
Commercial Bank Deposits: Mar @ 17.4
Gov’t MMF: Mar @ 4.3

Since recession start
+ 4.1 trillion

Since recession start
+ 1.6 trillion

Recession
Dec @ 2.1
Average @ 3.1
Conclusion

Household Net Worth
% cumulative change, indexed at 0.0 at pre-recession level, NSA

-20 -10 0 10 20 30 40 50

0 4 8 12

Range of five previous recessions
Current: Sep @ 27.0
Average of five previous recessions

Data current as of April 30, 2023
Source: Federal Reserve
Information is subject to change and is not a guarantee of future results.
CITY NATIONAL ROCHDALE, LLC NON-DEPOSIT INVESTMENT PRODUCTS ARE:
• NOT FDIC INSURED
• NOT BANK GUARANTEED
• MAY LOSE VALUE

Q&A
Index Definitions

Consumer Price Index (CPI). A consumer price index (CPI) measures changes in the price level of a market basket of consumer goods and services purchased by households. The CPI is a statistical estimate constructed using the prices of a sample of representative items whose prices are collected periodically.

Real estate sector or REITs. Concentrating assets in the real estate sector or REITs may disproportionately subject a portfolio to the risks of that industry, including the loss of value because of adverse developments affecting the real estate industry and real property values. Investments in REITs may be subject to increased price volatility and liquidity risk; concentration risk is high.
Important Disclosures

Non Deposit Investment Products are: Not FDIC Insured, Not Bank Guaranteed, May Lose Value

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Past performance or performance based upon assumptions is no guarantee of future results. Indices are unmanaged and one cannot invest directly in an index. Index returns do not reflect a deduction for fees or expenses.

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There are inherent risks with fixed income investing. These risks may include interest rate, call, credit, market, inflation, government policy, liquidity or junk bond risks. When interest rates rise, bond prices fall. This risk is heightened with investments in longer-duration fixed income securities and during periods when prevailing interest rates are low or negative.