MarketDesk

Quant Pack Leading Indicators

# U.S. Unemployment Leading Indicator

12-Month Forecast of the Unemployment Rate

The information herein was obtained from sources which MarketDesk Research LLC (MDR) believes to be reliable, but we do not guarantee its accuracy. Neither the information, nor any opinions expressed, constitute a solicitation of the purchase or sale of any securities or related instruments. MDR is not responsible for any losses incurred from any use of this information.

# Key Topics Covered


3. **Overview** – U.S. Unemployment Leading Indicator

4. **Background** – What is the Unemployment Rate?

5. **Market Impacts** – How Does It Impact Your Investment Portfolio?

6. **Actionable Model Signals** – Implementing the Indicator's Forecast

9. **Key Takeaways** – Recap

10. **[BONUS]** U.S. Macro Regime Indicator

11. Next Steps and **Discount Code** for Quant Pack Subscription


**Quant Pack Overview**

The Quant Pack is a data subscription with access to 20+ proprietary leading indicators built to guide asset allocation decisions, eliminate guesswork, enhance investment returns, and decrease your research workload.

**Research Coverage**

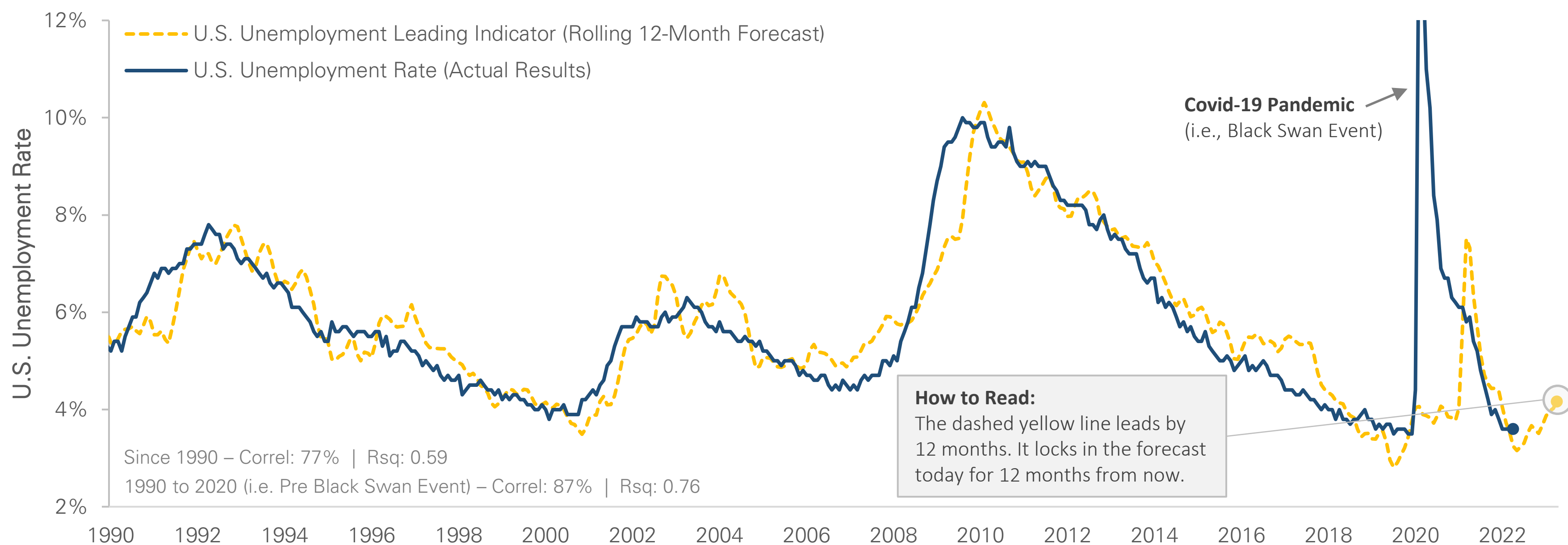
- Equities Markets
- Global Economics
- Credit Markets
- Asset Allocation
- Market Trading Tools

**Learn More**

www.QuantPack.com

# Indicator Overview

- The *U.S. Unemployment Leading Indicator* provides a 12-month forecast of the unemployment rate
- Based on a composite of 6 macro inputs (housing activity, industrial production, consumer sentiment, small business surveys, etc.) that exhibit a high statistical correlation with future changes in the unemployment rate.
- The leading indicator (1) provides a long-term view into the overall health of the U.S. economy and future economic activity, which (2) informs investment portfolio positioning across asset classes. The indicator is not designed to predict with precision, but that is typically not needed. Instead, investors should focus on the direction and magnitude of the 12-month forecast.




Data as of 6/30/2022. Visit www.QuantPack.com/plans to see the indicator's latest forecast.

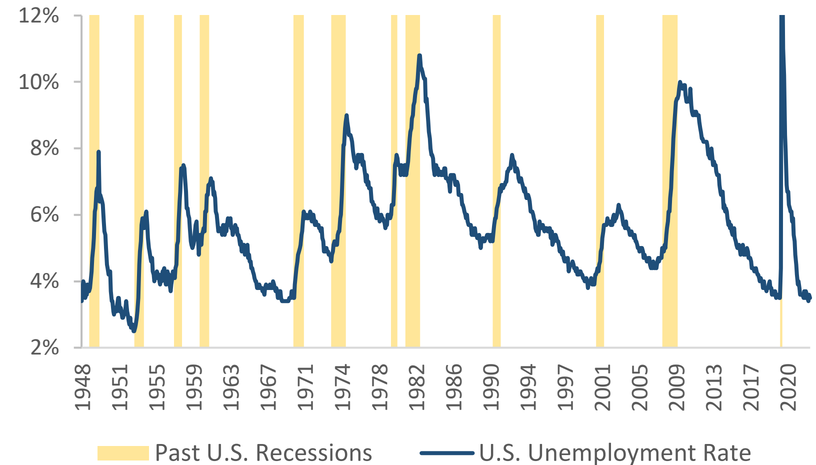
# What is the Unemployment Rate?

- Unemployment Rate = % of labor force that is currently unemployed and actively seeking jobs
- The Bureau of Labor Statistics calculates the unemployment rate by conducting a monthly survey of households. Historically, unemployment has averaged 4-5%. During the Financial Crisis, unemployment reached a peak of 10.0% in October 2009.
- Unemployment is a key measure of the overall health of the economy. Changes in unemployment carry ripple effects across housing activity, retail spending, business loan defaults, and consumer sentiment.

# Market Impacts

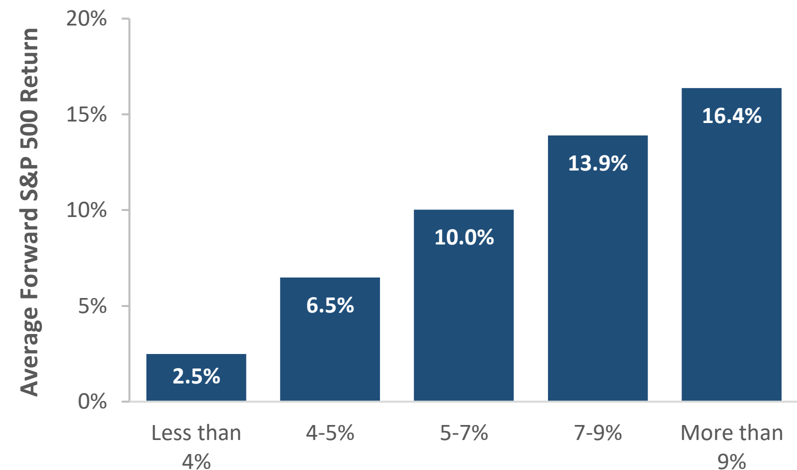
## Figure 1 – Recessions Start When Unemployment Troughs

- The chart graphs the historical U.S. Unemployment Rate against past U.S. Recessions since 1948.
- The unemployment rate historically troughs (i.e., reaches a low point and starts reversing higher) at the beginning of a recession. Once the unemployment rate starts to rise it often triggers ripple effects across every aspect of the economy.




## Figure 2 – Future S&P 500 Performance

- The chart graphs the forward 12-month average return for the S&P 500 Index based on various levels of the unemployment rate since 1980.
- As the unemployment rate rises, the potential for above average future S&P 500 returns increases as investors have likely already priced bad news into the market. As the unemployment rate falls, the potential for above average future S&P 500 returns decreases as investors have likely already priced in the improving economic outlook.

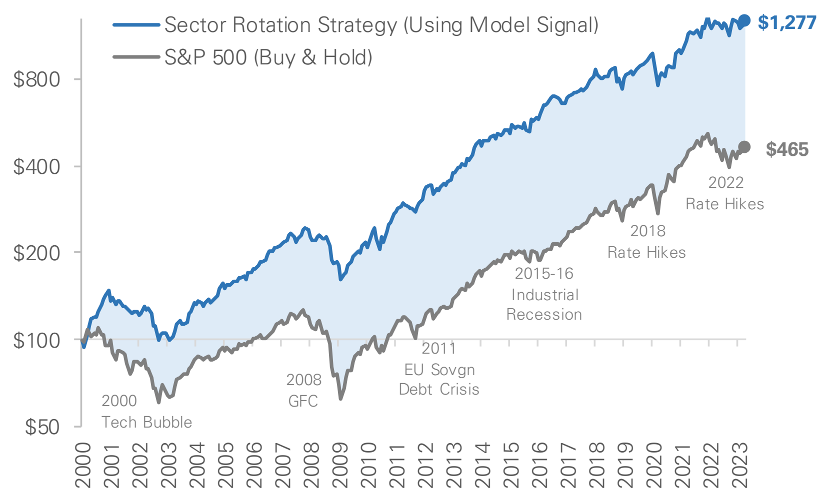



Data as of 4/30/2023

# Model Signal #1 – Sector Rotation Strategy

- **Model Signal** – When *U.S. Unemployment Leading Indicator's* 12-month forecast shows the Y/Y change in unemployment will rise above zero (page 3), own Defensive Sector ETFs (XLU, XLV, XLP). When it shows the Y/Y change in unemployment will fall below zero, own Cyclical Sector ETFs (XLB, XLI, XLY). The portfolio is rebalanced monthly to equal weight.
- Compared to a buy and hold S&P 500 strategy, the model signal produces a higher average annual return, higher net capture ratio, lower down capture ratio, and higher max risk / reward ratio.

**Total Returns – U.S. Sector Rotation Model**




Source: MarketDesk Quant Pack. Defensive Sector ETFs: XLU, XLV, XLP. Cyclical Sector ETFs: XLB, XLI, XLY. The portfolio is rebalanced monthly to equal weight.

**Performance Statistics – U.S. Sector Rotation Model**

| Annual Statistics of Returns & Risks | S&P 500 (Benchmark) | U.S. Sector Rotation Model |
|---|---|---|
| Average Return | 8.2% | 13.1% |
| **Strategy CAGR** | **6.8%** | **11.6%** |
| Max Drawdown | -51% | -34% |
| **% of Positive Years** | **74%** | **78%** |
| Up Capture | 100% | 112% |
| Down Capture | 100% | 19% |
| **Net Capture** | **-** | **+93%** |
| Max Positive Year | 32% | 49% |
| Max Negative Year | -37% | -22% |
| **Max Risk / Reward** | **0.88** | **2.19** |

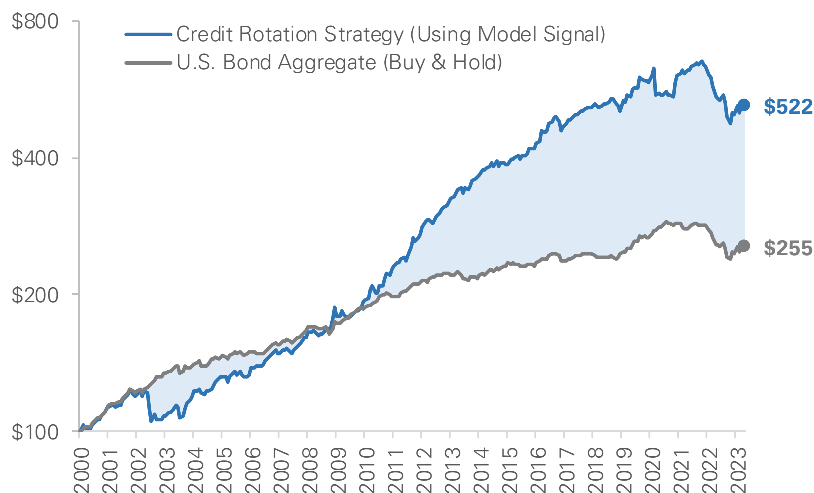
Source: MarketDesk Quant Pack. Based on annual calendar year returns.

Data as of 4/30/2023. Past performance does not guarantee future results. The performance information shown herein does not reflect the deduction of advisory and/or other fees normally incurred in the management of a portfolio. Hypothetical performance results are presented for illustrative purposes only.

# Model Signal #2 – Credit Rotation Strategy

- **Model Signal** – When *U.S. Unemployment Leading Indicator's* 12-month forecast shows the Y/Y change in unemployment will rise above zero (see page 3), own High-Quality Credit Sectors (MBS and U.S. Treasuries). When it shows the Y/Y change in unemployment will fall below zero, own Low-Quality Credit Sectors (High Yield, Fallen Angels, and Convertible Bonds). The portfolio is rebalanced monthly to equal weight.
- Compared to a buy and hold Bond Aggregate strategy, the model signal produces a higher average annual return, higher percentage of positive returns, higher up capture ratio, lower down capture ratio, and higher max risk / reward ratio.

**Total Returns – Credit Sector Rotation Model**




Source: MarketDesk Quant Pack. High-Quality Credit Sectors: 10Y U.S. Treasuries and Mortgage Backed Securities (MBS). Low-Quality Credit Sectors: High Yield, Fallen Angels, and Convertibles. The portfolio is rebalanced monthly to equal weight.

**Performance Statistics – Credit Sector Rotation Model**

| Annual Statistics of Returns & Risks | Bond Aggregate (Benchmark) | Credit Sector Rotation Model |
|---|---|---|
| Average Return | 4.1% | 7.7% |
| **Strategy CAGR** | **4.1%** | **7.4%** |
| Max Drawdown | -17% | -27% |
| **% of Positive Years** | **87%** | **87%** |
| Up Capture | 100% | 161% |
| Down Capture | 100% | 20% |
| **Net Capture** | **-** | **+141%** |
| Max Positive Year | 12% | 20% |
| Max Negative Year | -13% | -21% |
| **Max Risk / Reward** | **0.92** | **0.95** |

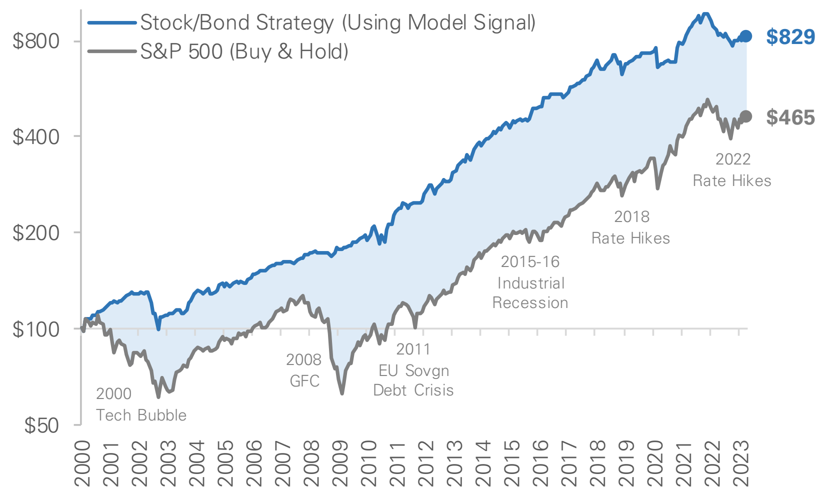
Source: MarketDesk Quant Pack. Based on annual calendar year returns.

Data as of 4/30/2023. Past performance does not guarantee future results. The performance information shown herein does not reflect the deduction of advisory and/or other fees normally incurred in the management of a portfolio. Hypothetical performance results are presented for illustrative purposes only.

# Model Signal #3 – Stock / Bond Rotation Strategy

- **Model Signal** – When *U.S. Unemployment Leading Indicator's* 12-month forecast shows the Y/Y change in unemployment will rise above zero (see page 3), own 100% Bond Exposure (AGG ETF). When it shows the Y/Y change in unemployment will fall below zero, own 100% Stock Exposure (SPY ETF). The portfolio is rebalanced monthly.
- Compared to a buy and hold S&P 500 strategy, the model signal produces a higher average annual return, higher percentage of positive returns, higher up capture ratio, lower down capture ratio, and higher max risk / reward ratio.

**Total Returns – Stock/Bond Rotation Model**




Source: MarketDesk Quant Pack. Stock exposure: S&P 500 (SPY ETF). Bond exposure: U.S. Bloomberg Bond Aggregate (AGG ETF). The portfolio is rebalanced monthly.

**Performance Statistics – Stock/Bond Rotation Model**

| Annual Statistics of Returns & Risks | S&P 500 (Benchmark) | Stock / Bond Rotation Model |
|---|---|---|
| Average Return | 8.2% | 10.0% |
| **Strategy CAGR** | **6.8%** | **9.5%** |
| Max Drawdown | -51% | -24% |
| **% of Positive Years** | **74%** | **87%** |
| Up Capture | 100% | 82% |
| Down Capture | 100% | 4% |
| **Net Capture** | **-** | **+78%** |
| Max Positive Year | 32% | 32% |
| Max Negative Year | -37% | -17% |
| **Max Risk / Reward** | **0.88** | **1.87** |

Source: MarketDesk Quant Pack. Based on annual calendar year returns.

Data as of 4/30/2023. Past performance does not guarantee future results. The performance information shown herein does not reflect the deduction of advisory and/or other fees normally incurred in the management of a portfolio. Hypothetical performance results are presented for illustrative purposes only.

# Key Takeaways

- The unemployment rate is a key measure of the overall health of the economy

- Key Market Impacts:
  1. The level of unemployment is a key input for U.S. monetary policy due to the Federal Reserve's mandate
  2. Changes in unemployment carry ripple effects across every aspect of the economy
  3. Provides early signals into which sectors and asset classes you should own in your portfolio

- Model Signals Average Annual Returns:
  1. Sector Rotation Strategy +13.1% (vs S&P 500 8.2%)
  2. Credit Rotation Strategy +7.7% (vs Bond Aggregate 4.1%)
  3. Stock/Bond Rotation Strategy +10.0% (vs S&P 500 8.2%)

- The *U.S. Unemployment Leading Indicator* provides a 12-month forecast of the unemployment rate, allowing you to proactively manage risk and optimize portfolio positioning. The *Quant Pack* is a data subscription with access to 20+ proprietary leading indicators built to guide asset allocation decisions, eliminate guesswork, enhance investment returns, and decrease your research workload.

# [BONUS] Free Copy of the U.S. Macro Regime Indicator

## MarketDesk U.S. Macro Regime Indicator (USMRI)

Primer Report

A Framework for Managing Portfolios Throughout Economic Cycles

### What is a "Macro Regime"?

Macro regime refers to the prevailing set of macroeconomic trends within a particular time frame. It represents the broader market environment, which is characterized by factors such as economic growth, inflation, interest rates, fiscal and monetary policy, and global trade. Macro regimes hold significance for investment committees, as they influence how various asset classes perform and provide a roadmap to guide asset allocation decisions.

### Understanding Macro Regimes is Key to Portfolio Management

Macro regimes are classified as either "Risk-On" (i.e., increase portfolio beta) and "Risk-Off" (i.e., decrease portfolio beta). The two regime styles impact markets in different ways, including which asset classes outperform, the degree of market volatility, and the risk of a major market sell-off. The MarketDesk U.S. Macro Regime Indicator (USMRI) allows investors to manage the portfolio beta exposure of their equity (i.e., large vs small, cyclical vs defensive) and credit (i.e., investment grade vs high yield corporate bonds) allocations in response to changes in the macro regime. Aligning portfolios with the correct macro regime improves risk-adjusted returns and decreases portfolio drawdown risk, while mismanaging betas produces lower risk-adjusted returns and is the equivalent of swimming against the current. This primer explains the USMRI, discusses how the two regime styles impact financial markets, and provides a portfolio guide for each regime.

### How is the USMRI Framework Different from my Current Process?

The reality is most investors incorporate data that is already known by the majority of market participants (i.e., therefore also largely priced into markets), which means its holds little to no explanatory power regarding future performance. Regardless of your investment style (i.e., Growth, Value, Momentum, or Technicals), the USMRI framework is built to be additive to your process as it solves for the above flaws. USMRI is fundamentally different in that only uses 6- to 12-month leading indicators, which have a proven track record since 1980 of accurately forecasting the trajectory of the U.S. economy. History doesn't repeat, but it often rhymes, and the USMRI's data-driven approach provides a robust, repeatable framework to manage portfolios throughout business cycles.

**Table of Contents**

1 - Report Overview
2 - Implementing the USMRI Framework
3 - History Lesson
4 - Risk Management & Volatility
5 - U.S. Equity Markets
6 - Earnings Growth & Valuations
7 - Credit Markets
8 - Economic Trends
9 - Turnkey Equity & Credit Models
10 - Disclosures

**Figure 1 – MarketDesk U.S. Macro Regime Indicator (USMRI)**



| Indicator Components (Equal-Weighted) | Reading | Status |
|---|---|---|
| Business & Consumer Demand | -1.28 | Risk-Off |
| Manufacturing Activity | -0.87 | Risk-Off |
| Corporate Earnings | -0.80 | Risk-Off |
| Labor Market | -0.67 | Risk-Off |
| Interest Rates | -0.82 | Risk-Off |

Source: MarketDesk Quant Pack. As of 4/9/2023.

**Figure 2 – Historical U.S. Macro Regime Indicator (USMRI)**

Historical USMRI Since 1980 and Next 12-Month Forecast



Source: MarketDesk Quant Pack. As of 4/9/2023. Refer to the next page for key dates.

The information herein was obtained from sources which MarketDesk Research LLC (MDR) believes to be reliable, but we do not guarantee its accuracy. Neither the information, nor any opinions expressed, constitute a solicitation of the purchase or sale of any securities or related instruments. MDR is not responsible for any losses incurred from any use of this information. The indicators discussed in this report are intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of MDR. The indicators discussed in this report were not created to act as a benchmark.



## Report Overview

This primer provides an overview of the macro regime indicator and how to implement it into your portfolio management process.

## MarketDesk U.S. Macro Regime Indicator

The MarketDesk U.S. Macro Regime Indicator (USMRI) utilizes a data-driven process to (1) define the current macro environment and (2) forecast the trajectory of the U.S. economy over the next 12 months. It aggregates 20+ Quant Pack indicators to produce one straightforward signal to increase or decrease your portfolio risk.

## Free Download *(No Email Required)*

Visit [www.QuantPack.com/primer](www.QuantPack.com/primer)

# Next Steps

1

### Visit Resource Library

Complimentary access to Case Studies, Whitepapers, and Educational Presentations.

**See Downloads →**

www.QuantPack.com/library

2

### Schedule a Free Demo

Our team is available to walk through the platform and answer your questions.

**10 Minute Demo →**

www.QuantPack.com/demo

3

### Start Your Subscription

Enter the code "SAVE100" to save $100 when you start your Quant Pack subscription.

**Save $100 →**

www.QuantPack.com/plans

**Questions?** Email support@QuantPack.com

# Disclosures and Important Notice

MarketDesk Research is wholly-owned by MarketDesk Research, LLC ("MarketDesk Research"). MarketDesk Research has an affiliated registered investment adviser, which serves as the sub-adviser to an exchange traded fund. This affiliated investment adviser does not provide advice to individual investors.

This research is for MarketDesk Research clients only. This research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates, and forecasts contained herein are as of the date hereof and are subject to change without prior notification, and there is no guarantee that any future event discussed herein will come to pass. MarketDesk Research disclaims responsibility for updating information. In addition, MarketDesk Research disclaims responsibility for third-party content, including information accessed through hyperlinks.

MarketDesk Research provides "impersonal advisory services" to its subscribers, defined as services that do not purport to meet the objectives or needs of specific clients, and statistical information containing no expression of opinions as to the investment merits of particular securities. MarketDesk Research does not provide personalized investment advice; all content, opinions and recommendations are impersonal and are not tailored to meet individual subscribers' investment needs. The information and opinions provided herein are provided as general market commentary only.

MarketDesk Research is not offering advisory services through nor soliciting any action based upon this report. Recipients of the information provided herein should consult with a financial advisor before purchasing or selling a security. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. The comments may not be relied upon as recommendations, investment advice or an indication of trading intent.

Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only and does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Index performance does not represent the actual performance that would be achieved by investing in a fund.

No mention of a particular security, index, or other instrument in this report constitutes a recommendation to buy, sell, or hold that or any other security, nor does it constitute an opinion on the suitability of any security or index. The report is strictly an informational publication and has been prepared without regard to the particular investments and circumstances of the recipient. SUBSCRIBERS SHOULD VERIFY ALL CLAIMS AND COMPLETE THEIR OWN RESEARCH BEFORE INVESTING IN ANY INVESTMENTS MENTIONED IN THE PUBLICATION. INVESTING INVOLVES RISK, INCLUDING THE POSSIBLE LOSS OF PRINCIPAL AND FLUCTUATION OF VALUE.

Please refer to www.QuantPack.com/terms for the complete list of terms and disclaimers.

© MarketDesk Research LLC. All Rights Reserved.