RESEARCH SPOTLIGHT

UNDERSTANDING MACROECONOMIC RISK AND ITS IMPACT ON ASSET ALLOCATION

Since 2009, many institutional investors have introduced macroeconomic scenarios in their asset allocation process. The 2008 global financial crisis has proven to have a long tail, and investors want to manage the risks raised by macroeconomic events with an eye on long horizon investments.

Economic growth (real GDP) and inflation are the key macroeconomic drivers of asset returns with their impact apparent only over long horizons. And what about drivers of risk? MSCI defines macroeconomic risk as the change in asset value due to persistent shocks to the real economy (meaning growth and inflation).

Using a set of new models, MSCI can forecast the long-term impact of macroeconomic shocks on asset prices, examining those prices relative to asset cash flows and discount factors.

In this Research Spotlight, we have compiled a short guide to all white papers published on Macroeconomic Risk. For each paper, you will find the full title, the credited authors, a short abstract, and a quick hyperlink to the full publication.

Starting in 2012, MSCI Research began exploring the impact of macroeconomic events on asset valuation and strategic asset allocation. The white papers summarized in this Research Spotlight explain the core findings in a continuing series, and are the basis of our growing suite of 'macro models.' Based on this innovative research, MSCI offers Macroeconomic Consulting for institutional investors interested in a macro framework for portfolio construction.

KEY BENEFITS OF MSCI MACROECONOMIC RISK MODELING

- Connects asset allocation strategies to investor views of the economy
- Models the relationship of macroeconomic events to asset prices
- Allows investors to evaluate the likelihood of emerging macroeconomic trends, which enables more responsive asset allocation tactics
- Accounts for horizon in the investment decision process, informing strategies for the management of long-term risk
- Provides an economic rationale for risk factor premia, using macro risk factors to model expected cash flows and discount rates

OCTOBER 2012

RISK MANAGEMENT AND MACROECONOMIC UNCERTAINTY: SHORT-TERM CONSEQUENCES OF LONG-TERM RISK

Kurt Winkelmann

During a strong global equity market in 2012, the daily VIX suggested that risk levels were declining, while estimates of equity risk premia indicated higher levels of uncertainty. In this paper, first in a series on macroeconomic themes, we explore reasons for these mixed signals and examine the various challenges of measuring risk. We propose that many risk management issues can be addressed by understanding the drivers of asset valuation.

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NOVEMBER 2012

MACRO-SENSITIVE PORTFOLIO STRATEGIES: HOW WE DEFINE MACROECONOMIC RISK

Kurt Winkelmann, Ludger Hentschel, Raghu Suryanarayanan and Katalin Varga

Macro-sensitive portfolio strategies rely on how we measure the relationship between asset prices and macroeconomic risk. In this paper, we define macroeconomic risk as the change in asset value due to persistent shocks to real economic growth. How might investors allocate assets in response to large macroeconomic shocks? We return to the basics of asset pricing and analyze the impact of macro shocks on both asset cash flows and discount factors.

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MARCH 2013

MACRO-SENSITIVE PORTFOLIO STRATEGIES: MACROECONOMIC RISK AND ASSET CASH-FLOWS

Kurt Winkelmann, Raghu Suryanarayanan, Ludger Hentschel and Katalin Varga

We find that cash flows earned by different equity portfolios can respond differently to persistent macroeconomic shocks to real output, with results emerging over longer horizons. Portfolios with cash flows that exhibit a greater long-run response to macro shocks can command a higher expected return over time, which is compensation for risk – in this case, the risk of a persistent shock to trend growth in real GDP.

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APRIL 2013

MACRO-SENSITIVE PORTFOLIO STRATEGIES: PRICING AND ANALYZING MACRO RISK

Kurt Winkelmann, Raghu Suryanarayanan, Ludger Hentschel and Katalin Varga

Previous papers in this series show that cash flow betas relative to economic growth vary by asset class and portfolio type. In this paper, we show that assets with higher cash flow betas receive a higher long-term return, which is compensation for the macro risk exposure. We find that long-term portfolio risk can be attributed to persistent shocks to real GDP and inflation, demonstrating that portfolios tilted towards risk premium strategies receive a higher return than the market portfolio.

READ MORE

JUNE 2013

MACRO RISK AND STRATEGIC ASSET ALLOCATION: DECONSTRUCTING RISK PARITY PORTFOLIOS

Kurt Winkelmann, Raghu Suryanarayanan, Ludger Hentschel and Katalin Varga

In previous papers, we show how portfolio returns vary in correlation to macroeconomic shocks, implying that "high cash flow beta" assets receive a premium. In this paper, we apply the same framework to strategic asset allocation, analyzing a risk-parity portfolio. We conclude with a methodology for designing and testing macroeconomic shocks.

READ MORE

NOVEMBER 2013

THE END OF QUANTITATIVE EASING: TAPERING AND ITS EFFECT ON BONDS AND EQUITIES

Attila Agod, Ludger Hentschel, Raghu Suryanarayanan and Kurt Winkelmann

In late 2013, investors remained uncertain about the tapering of the Fed's quantitative easing policy. Using the MSCI Macroeconomic Model, we explore how evolving economic conditions might motivate the Fed to start tapering. We combine this analysis with the Barra Integrated Model to test how economic improvements and tapering might impact stock and bond markets.

READ MORE

APRIL 2014

INDEX PERFORMANCE IN CHANGING ECONOMIC ENVIRONMENTS: A MACROECONOMIC FRAMEWORK

Abhishek Gupta, Altaf Kassam, Raghu Suryanarayanan and Katalin Varga

After the turmoil of 2008, institutional investors started accounting for macroeconomic conditions in their asset allocation decisions. For investors designing macro-sensitive portfolios, this paper offers a framework based on 40+ years of MSCI Factor and Sector Index history, plus long-term analysis based on forecasts from the MSCI Macroeconomic and Asset Pricing Models. We model historically plausible growth and inflation regimes and show how our factor and sector indexes differ in their response to changes in these regimes.

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SEPTEMBER 2014

CHINA: HARD LANDING OR GENTLE DESCENT?

Kurt Winkelmann, Raghu Suryanarayanan, Katalin Varga and Jahiz Barlas

With global investors concerned about an imminent hard landing in China's economy (and its potential long-term effects global growth and global equity returns), we employed the MSCI Macroeconomic Model to examine the factors driving this possible event. Our model indicates that an imminent hard landing in China is unlikely, since GDP growth in China could meet the official target of 7.5 percent by the end of 2014; moreover, the MSCI Asset Pricing Model indicates that Chinese real growth risk is a small contributor to long-term global equity risk.

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