The ECRI Perspective

Our Philosophy

- We believe that economic cycles are part and parcel of the way market-oriented economies function.
- The timing of that ebb and flow is the critical determinant of economies' resilience or vulnerability to recessionary shocks.
- We believe that our approach, including our array of cyclical indexes, is the best way to monitor the risk of cyclical turns in economic growth and inflation.

ECRI

A Century of Monitoring Business Cycles

- ECRI today represents the third generation of research into business cycles.
- The first generation was led by Arthur F. Burns and Wesley C. Mitchell, who in the 1920s defined what a recession is.
- The second generation was led by their protégé and ECRI co-founder Geoffrey H. Moore, whom *The Wall Street Journal* called the "father of leading indicators."
- ECRI monitors economic cycles in 21 economies, and constructed the first leading indicator systems for each of the BRICS economies.

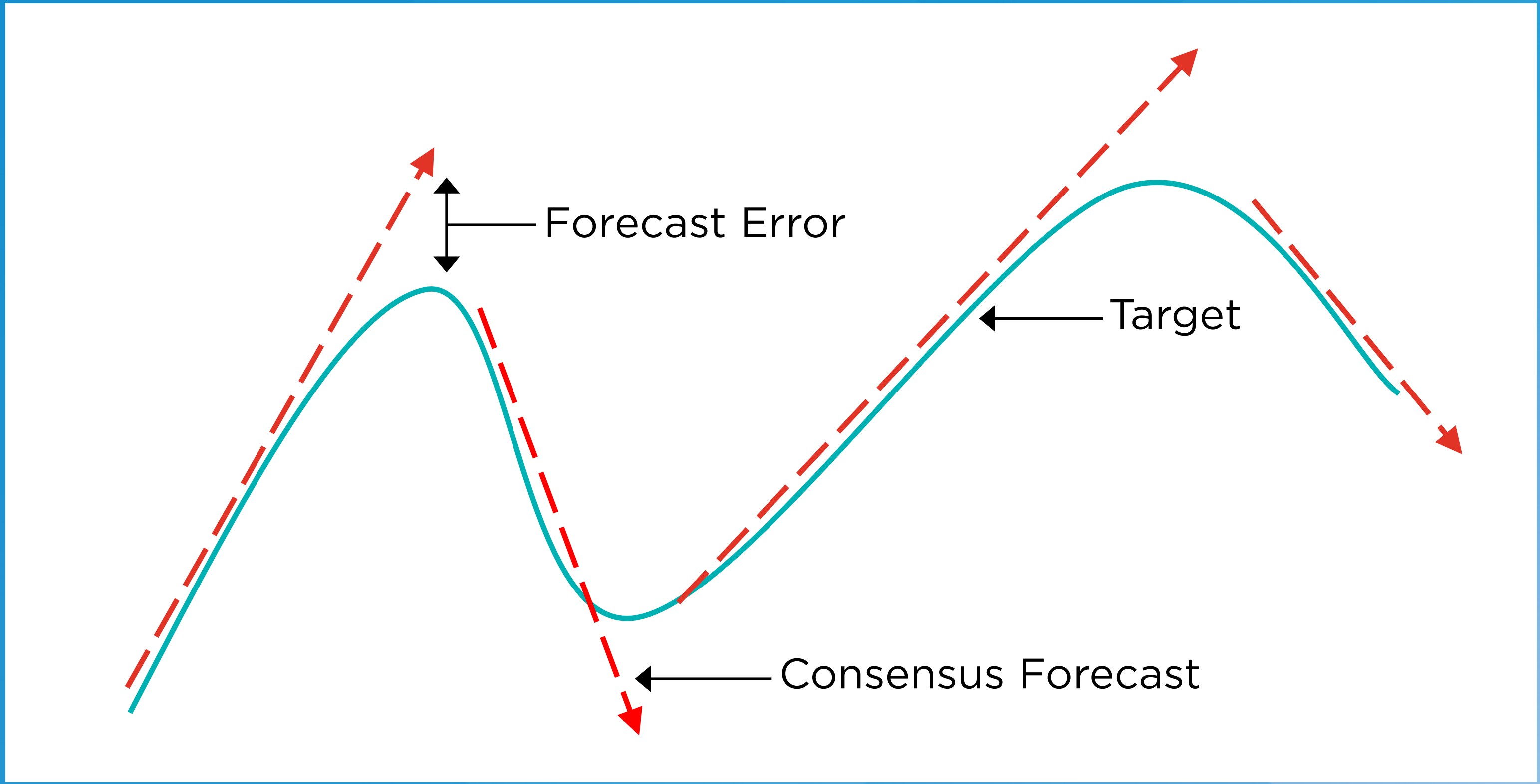
ECRI

What Makes ECRI Different

- We do not make market calls.
- We are independent and non-partisan, and strive for objectivity.
- We are not economists, and do not rely on back-fitted econometric models. Rather, we are students of the business cycle.
- Our approach is the most reliable way we know of to measure the risk of a cycle turn, which is the Achilles' heel of economic forecasting.
- Our understanding of what is cyclical lets us strip out the cyclical component, leaving behind what is structural. This provides us with timely insights into structural changes.

ECRI

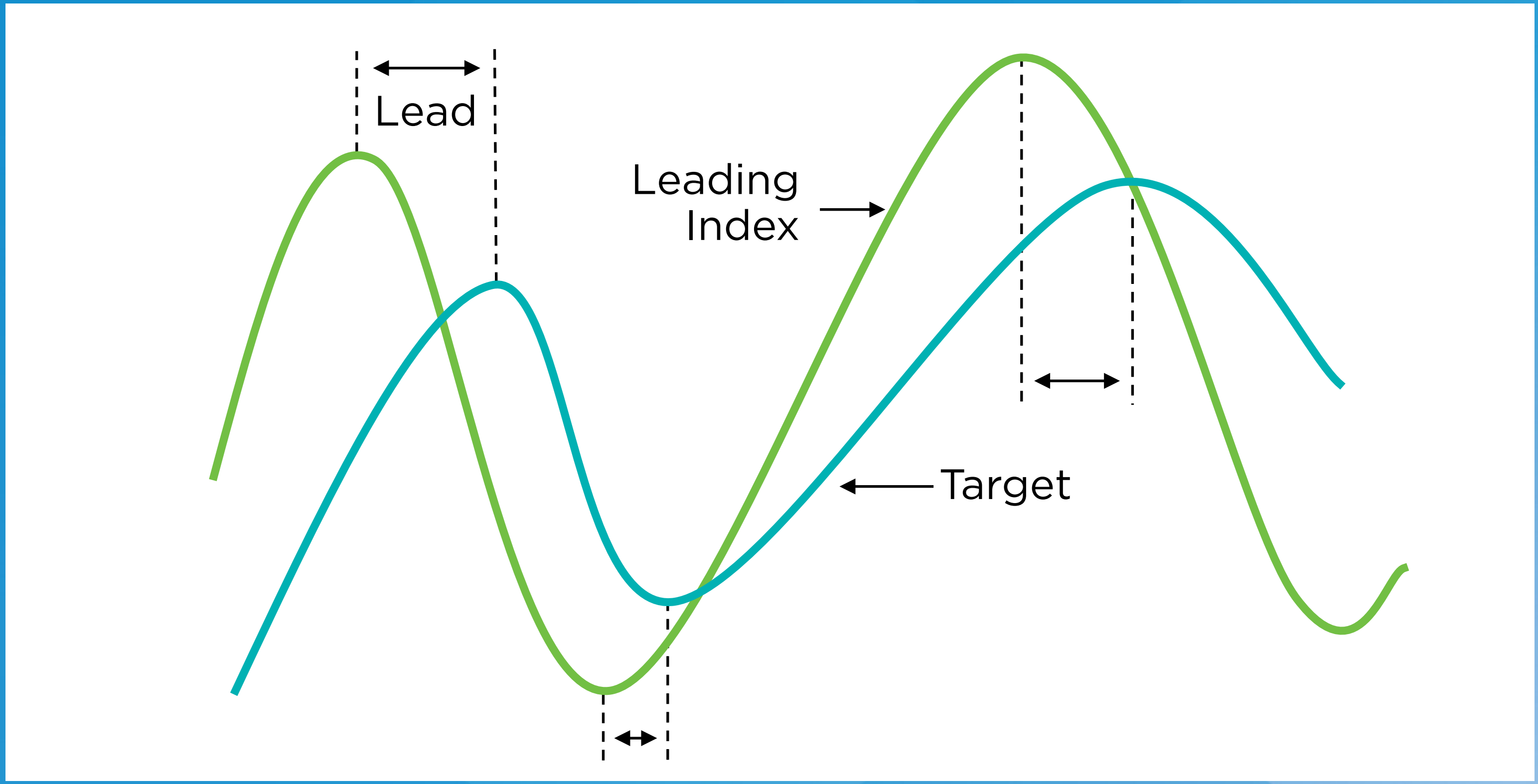
The Problem: Turns Are Hard to Predict



Extrapolative forecasts systematically miss cycle turning points.

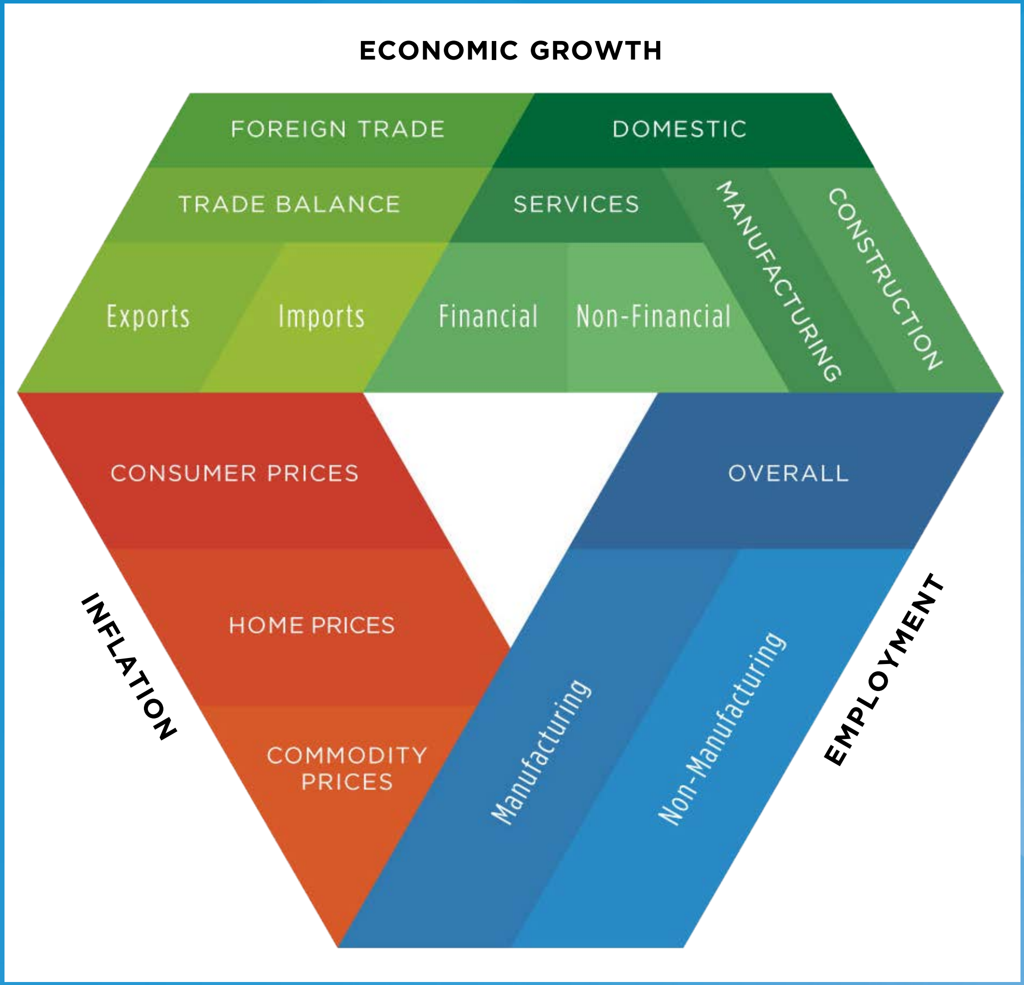
ECRI

Leading Indexes Can Time Turns



ECRI's leading indicator approach is designed to monitor the risk of cycle turns.

The ECRI Framework



ECRI

The Cyclicality Continuum: A Risk vs. Reward Matrix

	Investment Type	
	More Cyclical	Less Cyclical
Around Cycle Peak	Maximum Downside Risk	Elevated Downside Risk
Away from Cycle Turns	Limited Cycle Risk	Minimal Cycle Risk
Around Cycle Trough	Maximum Upside Potential	Elevated Upside Potential

ECRI

Cycles to Watch

ECRI indicators highlight opportunities for investment managers, spanning key economic cycles:

- *Commodities:* Commodity prices are sensitive to cycles in global industrial growth.
- *Fixed Income:* Fixed income markets are sensitive to both inflation cycles and growth rate cycles.
- *Stocks:* Since the financial crisis, stock price corrections have occurred around growth rate cycle downturns.

ECRI

Key Points

- ECRI's strength is its ability to assess cyclical risk – the blind spot of consensus forecasts.
- ECRI has a long track record of correctly anticipating major turning points in U.S. and global economic cycles.

ECRI Co-Founders

Lakshman Achuthan is the Co-founder & Chief Operations Officer of ECRI. Achuthan is the managing editor of ECRI's forecasting publications. He is also a member of *Time* magazine's board of economists and the Levy Economic Institute's Board of Governors, and serves as a trustee on the boards of several foundations. He received an undergraduate degree from Fairleigh Dickinson University in 1989 and a graduate degree from Long Island University in 1991. Achuthan joined Geoffrey H. Moore at Columbia University's Center for International Business Cycle Research in 1991. In 2004, he co-authored *Beating the Business Cycle: How to Predict and Profit from Turning Points in the Economy*.

Anirvan Banerji is the Co-founder & Chief Research Officer of ECRI. Banerji is the editor-in-chief of ECRI's forecasting publications. He is also a past President of the Forecasters Club of New York and serves on the New York City Economic Advisory Panel. He received an undergraduate degree from the Indian Institute of Technology, Kharagpur in 1977, and graduate degrees from the Indian Institute of Management, Ahmedabad in 1979 and Columbia University in 1985. Banerji worked closely with Geoffrey H. Moore since 1986 at Columbia University's Center for International Business Cycle Research. In 2004, he co-authored *Beating the Business Cycle: How to Predict and Profit from Turning Points in the Economy*.

Geoffrey H. Moore (1914 – 2000), Co-founder, whom *The Wall Street Journal* called "the father of leading indicators," spent several decades working on business cycles at the National Bureau of Economic Research, where he helped build on the work of his mentors, Wesley Clair Mitchell and Arthur F. Burns. Moore also served as commissioner of the Bureau of Labor Statistics from March 1969 to January 1973. In 1946 Moore was teaching statistics at New York University and one of his students was Alan Greenspan, later chairman of the Federal Reserve, who would tell *The New York Times* that Moore was "a major force in economic statistics and business-cycle research for more than a half-century." In 1995 he was elected Distinguished Fellow of the American Economic Association. In 1996 Moore co-founded the Economic Cycle Research Institute in New York City.

ECRI