

Sources: Reuters Photography

## Understanding the Psychology of the Markets Sentiment Analysis Symposium

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Head of Quantitative Research  
Elektron Analytics  
October 30, 2012



Best News  
Analytics  
Software

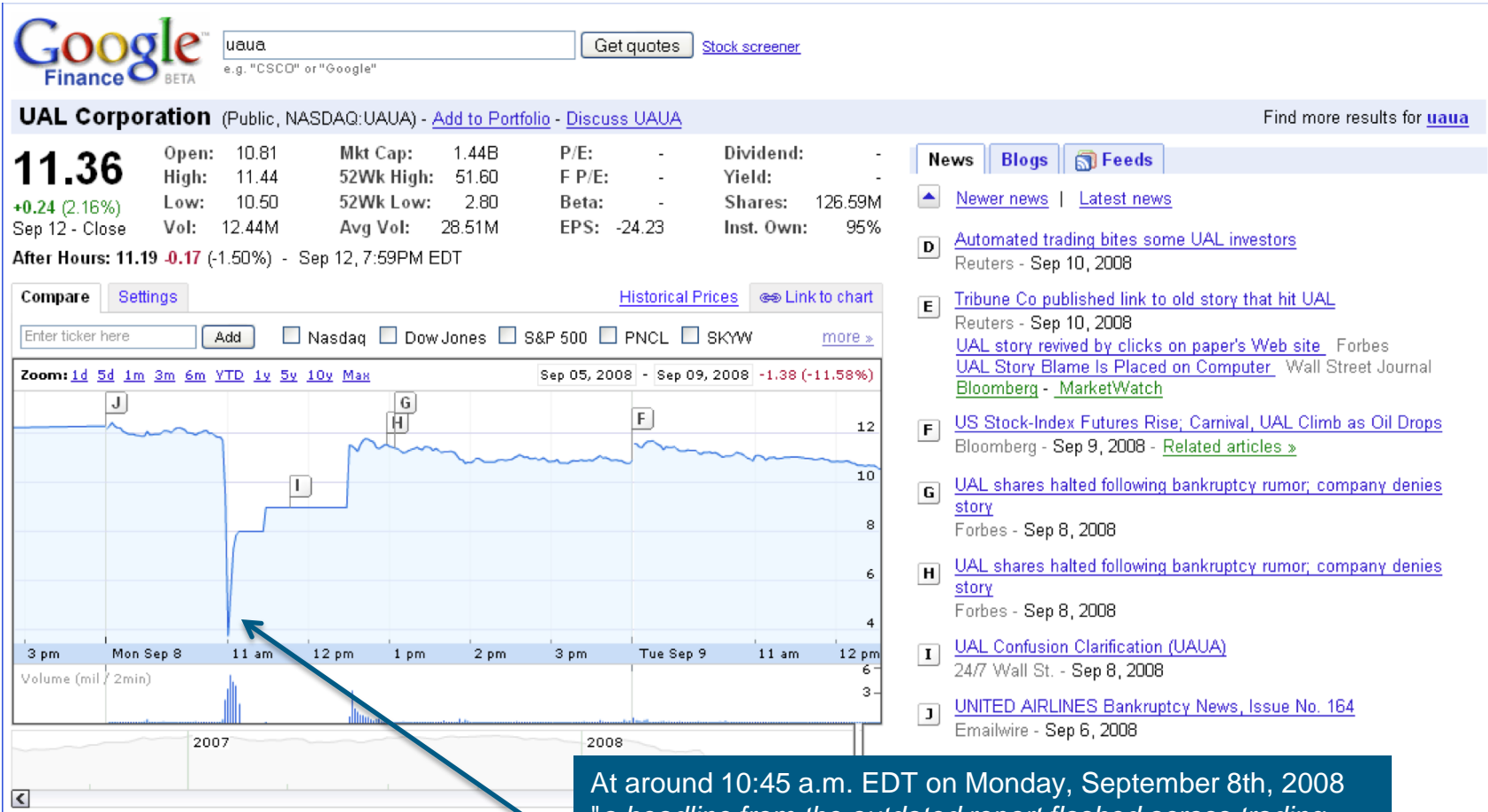


Best Use of  
Social Media  
in Trading  
Technology



THOMSON REUTERS

# News Move Financial Markets



# Reuters News

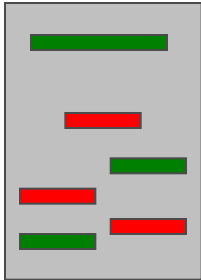
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- A 160 Year Old Culture Of Beats  
And Exclusives:
  - 1850's – Carrier pigeons
  - 1860's – Telegraph
  - 1960's – Teleprinter
  - 2000's – Machine Readable News

# Thomson Reuters Machine Readable News

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- Sentiment analysis:
  - Thomson Reuters News Analytics measures the author's tone in the news story, put into context by part of speech, surrounding words, proximity of words to one another, and other sophisticated linguistic cues:



"...Vodafone **upgraded** to **outperform.**"

"...EPS was **higher than** **expected..**"

"...and **litigation increased..**"

"...**EPS of 20p**/share beat analyst consensus of 15p/share..."

"...but sales **growth** was **disappointing..**"

# How Can We Make Sentiment Analysis Better?

single-dimensional



vs.

multi-dimensional



# Understanding the Market Psychology Can Present Opportunities to Time the Market

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Source: Westcore Funds/Denver Investment Advisors LLC, 1998.

# Thomson Reuters MarketPsych Indices by Category

Agricultural  
commodities

Materials  
and Energy

Countries

US Equities

Currencies

Sentiment, Conflict, Fear, Joy, Optimism, Trust, Uncertainty, Urgency, Violence

PriceUp  
MarketForecast  
RegulatoryIssues  
ProductionVolume  
ConsumptionVolume  
SurplusVsShortage  
SupplyVsDemandForecast  
AgriculturalDisease  
WeatherDamage  
Subsidies  
SubsidiesIncreasing  
AcreageCultivated

PriceUp  
MarketForecast  
RegulatoryIssues  
ProductionVolume  
ConsumptionVolume  
SurplusVsShortage  
SupplyVsDemandForecast  
SafetyAccident  
NewExploration  
ProductionCost

MarketRisk/Bubbleometer  
BudgetDeficit  
CreditEasyVsTight  
CentralBank  
ConsumerSentiment  
EconomicConflict  
EconomicUncertainty  
ElectionSentiment  
FinancialSystemInstability  
GovernmentAnger  
GovernmentCorruption  
GovernmentInstability  
InterestRate  
FiscalPolicyLooseVsTight  
RegimeChange  
SocialInequality  
SocialUnrest  
MonetaryPolicyLooseVsTight  
InvestmentFlows  
BalanceOfTrade  
EconomicGrowth  
Inflation  
Defaults  
NaturalDisasters

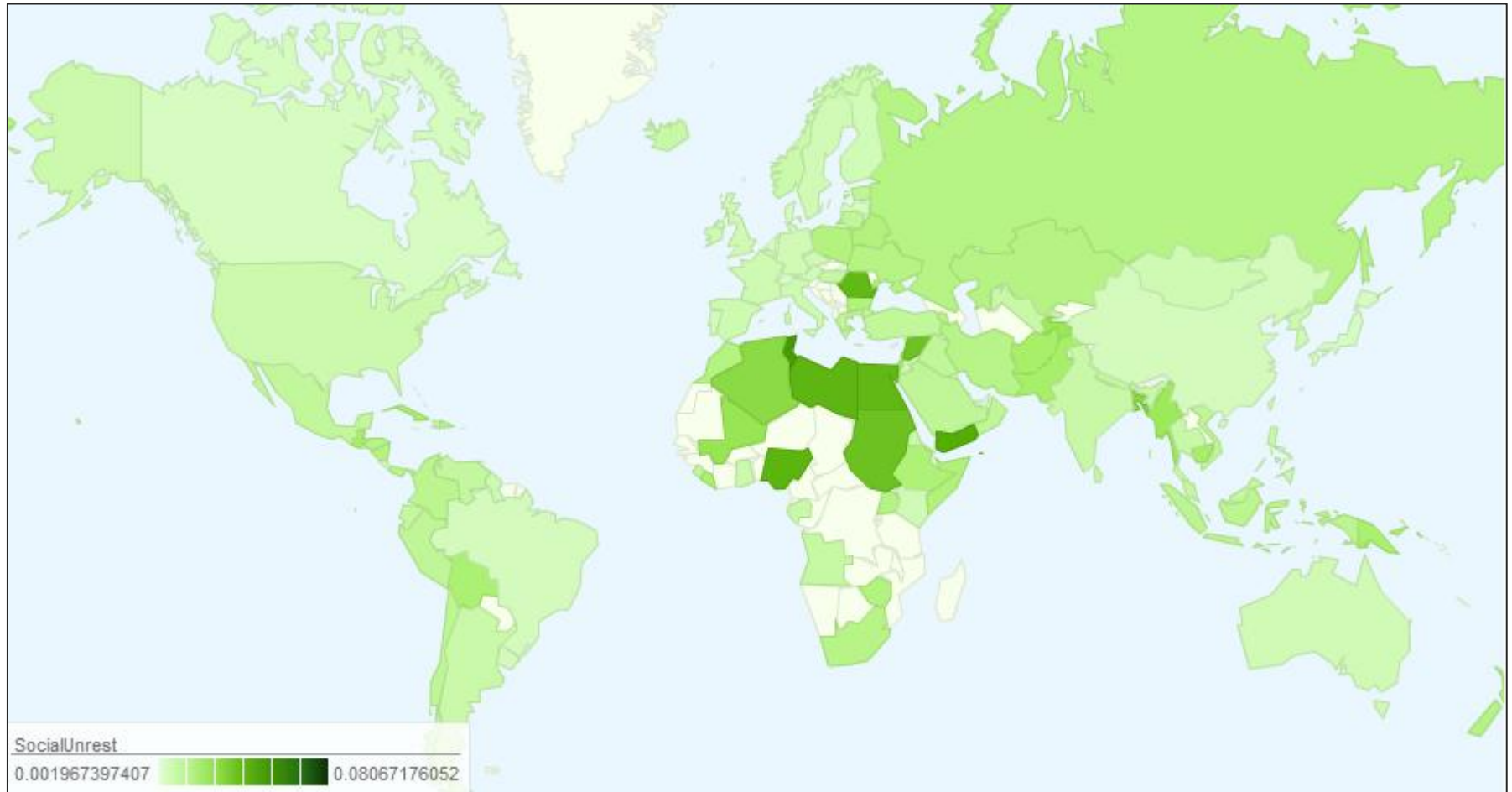
PriceUp  
MarketForecast  
MarketRisk/Bubbleometer  
Gloom  
Anger  
Innovation  
Stress  
FundamentalStrength  
EarningsExpectations  
Mergers  
Layoffs  
Litigation  
UpgradeVsDowngrade  
Volatility

PriceUp  
MarketForecast  
CarryTrade  
CurrencyPegInstability  
CurrencyPriceMomentum



# Social Unrest by Country

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# Egypt - Early 2011



REUTERS/Mohamed Abd El-Ghany



REUTERS/Muhammad Salem



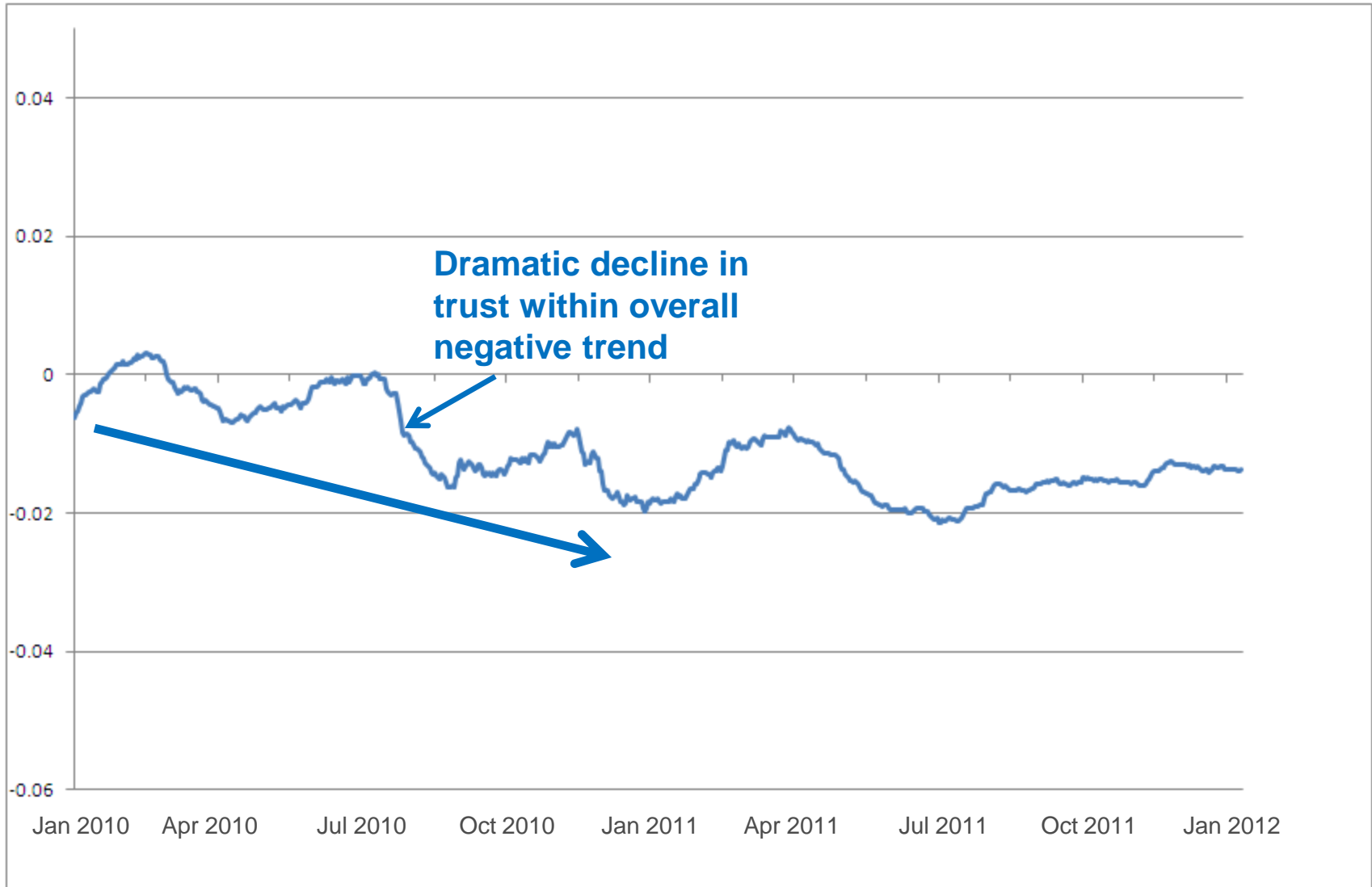
REUTERS/Kenneth Tomlinson



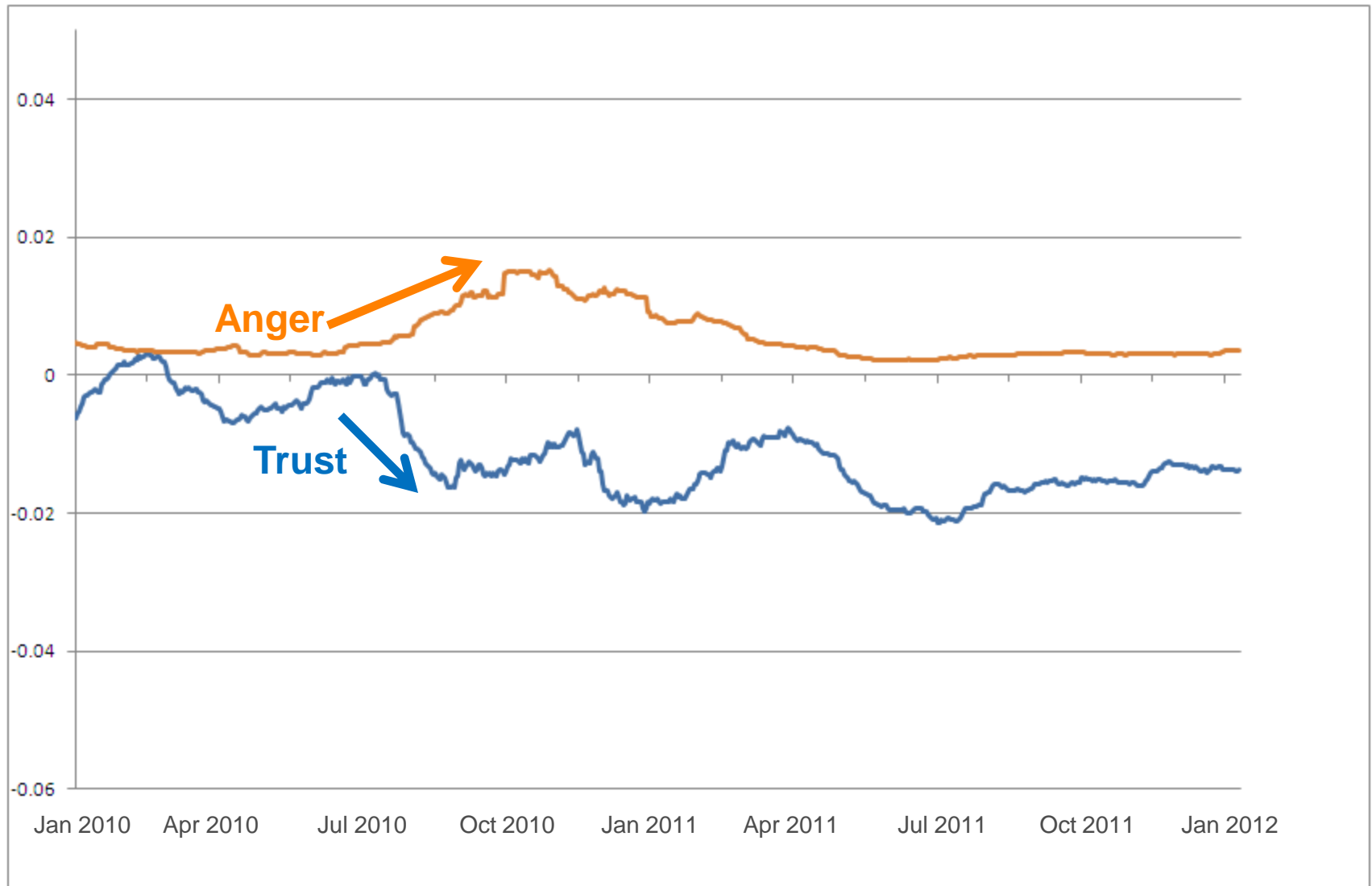
REUTERS/Petar Anđrić



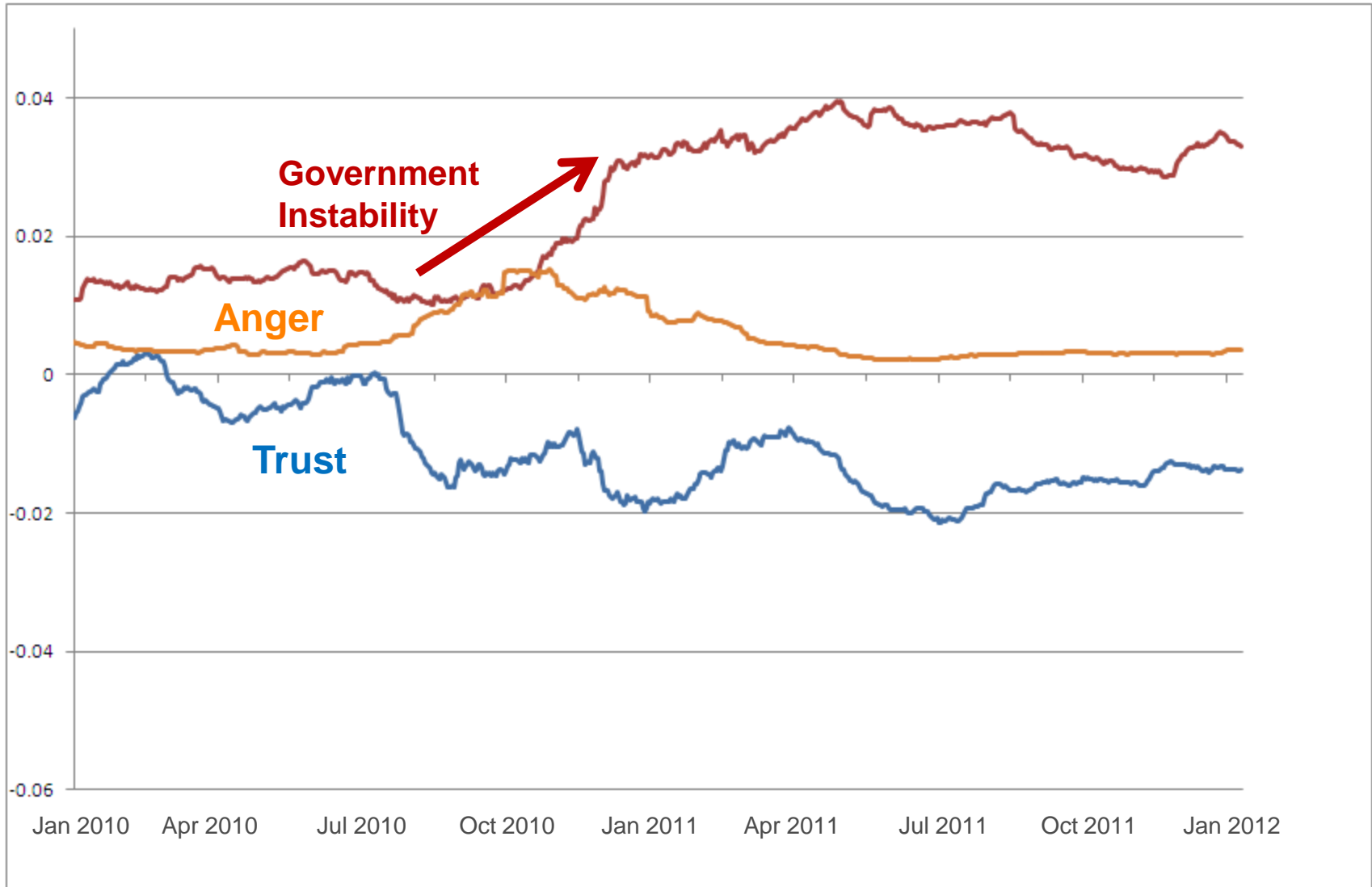
# The Evolution of a Revolution: Trust Declines in Egyptian Society



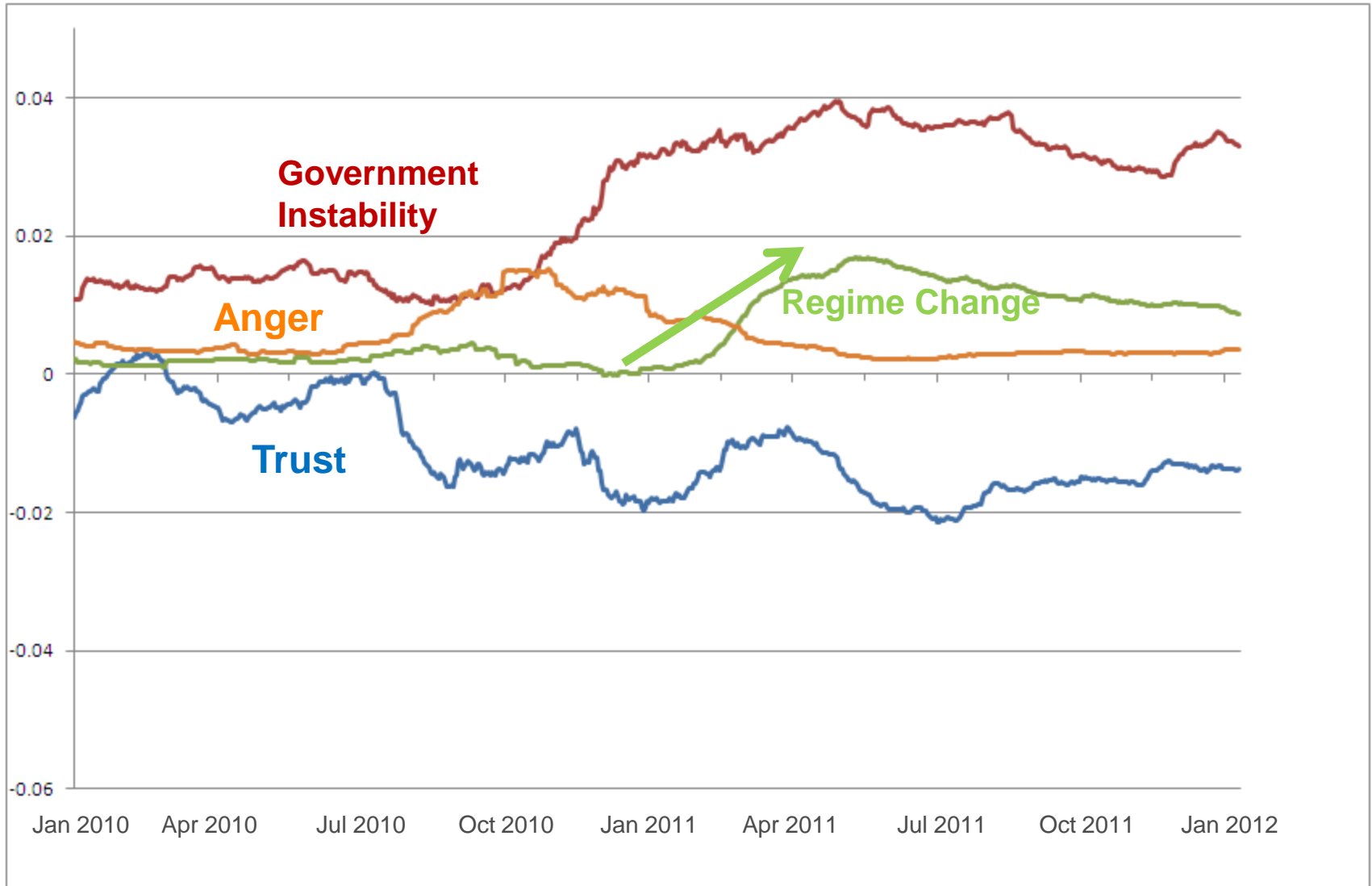
# The Evolution of a Revolution: Increased Anger Directed at the Egyptian Government



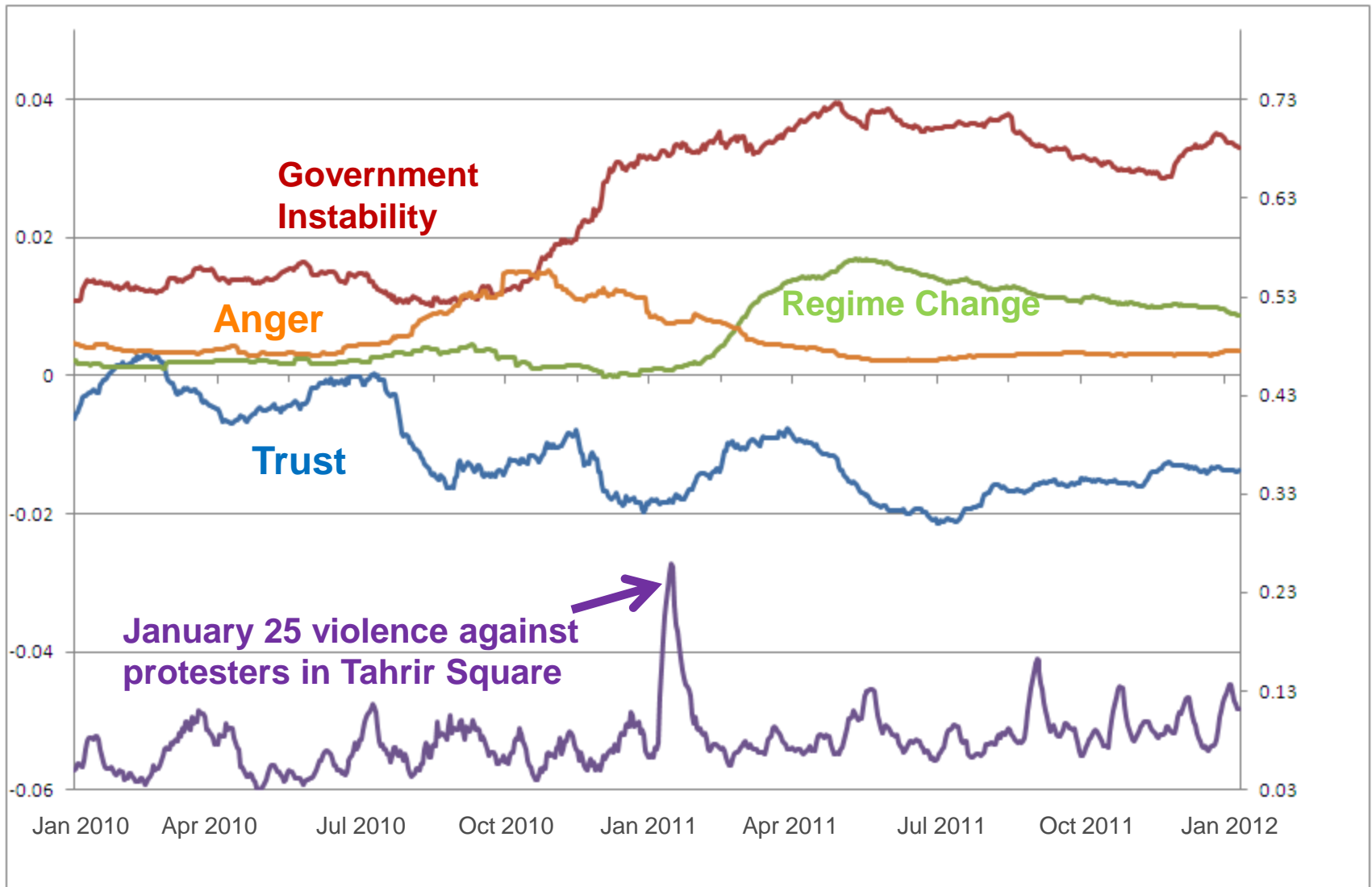
# The Evolution of a Revolution: Increased Chatter on Government Instability



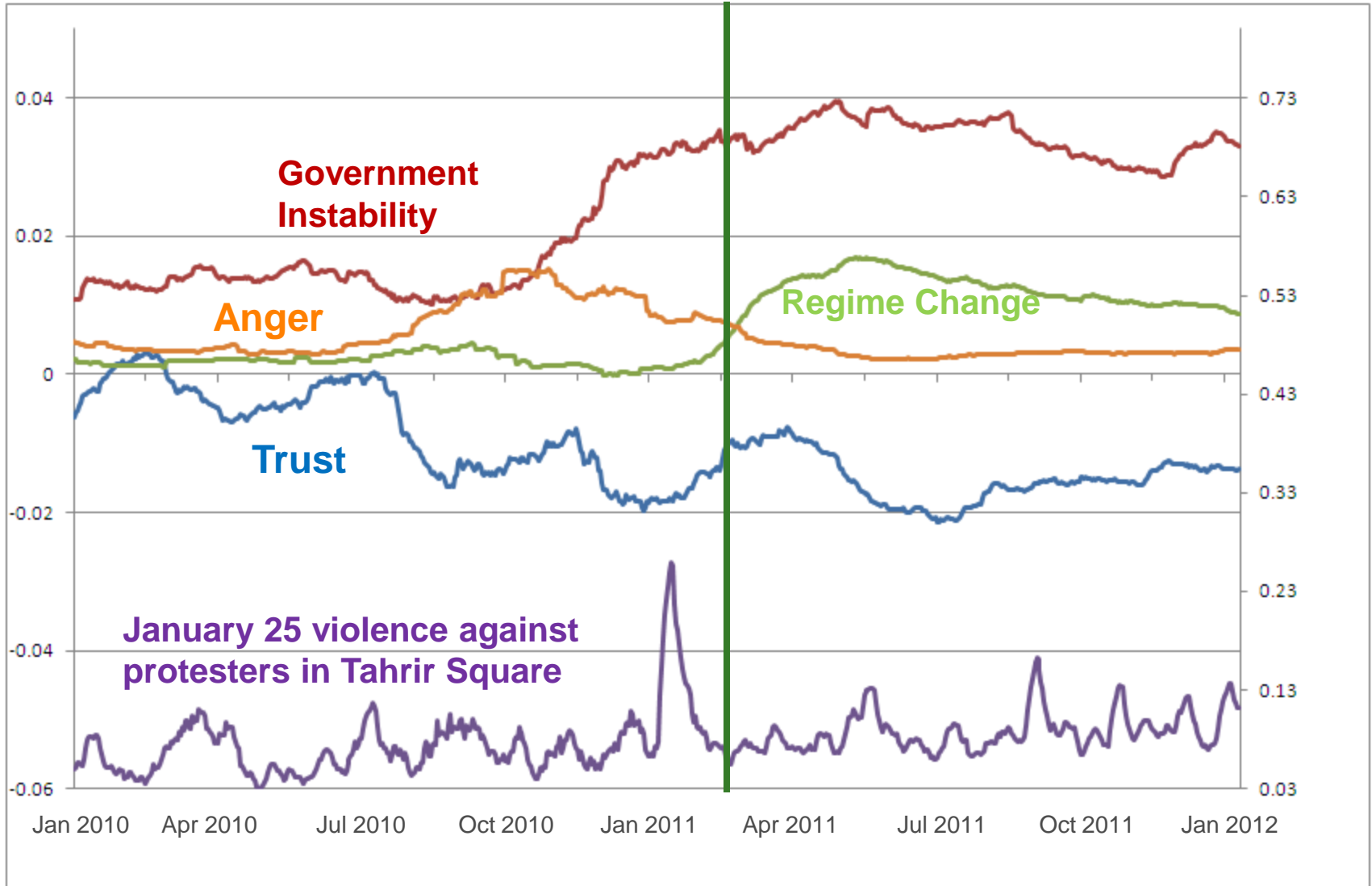
# The Evolution of a Revolution: Increased Commentary on Regime Change



# The Evolution of a Revolution: Violence Breaks Out



# The Evolution of a Revolution: The Fall of Mubarak – February 12, 2011



# Understanding the Psychology of Bubbles Can Help Predict Market Swings: Utilizing the “Bubbleometer”

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Source: Thomson Reuters MarketPsych Indices

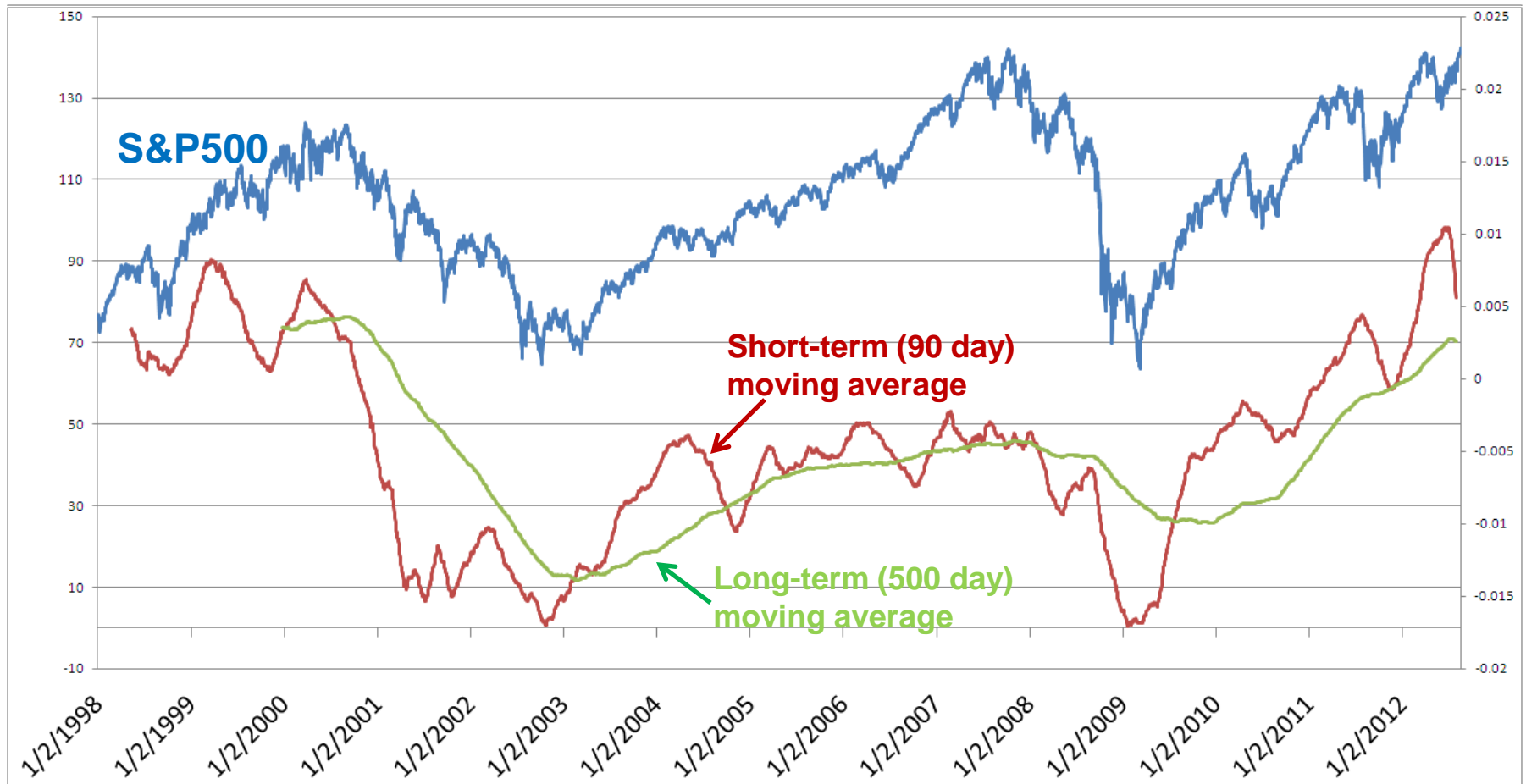


# Understanding the Psychology of Bubbles Can Help Predict Market Swings: Utilizing the “Bubbleometer”



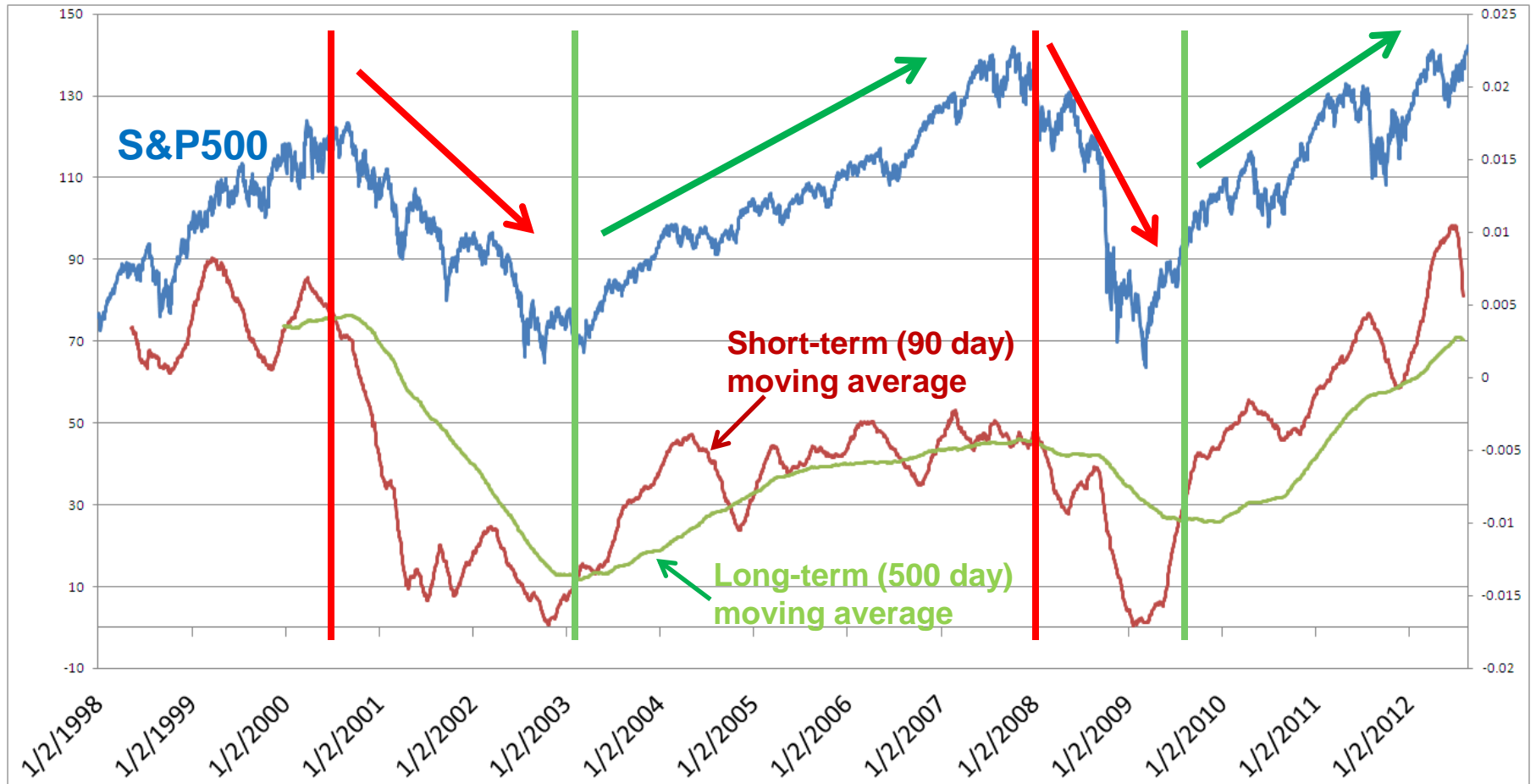
Source: Thomson Reuters MarketPsych Indices

# Understanding the Psychology of Bubbles Can Help Predict Market Swings: Utilizing the “Bubbleometer”



Source: Thomson Reuters MarketPsych Indices

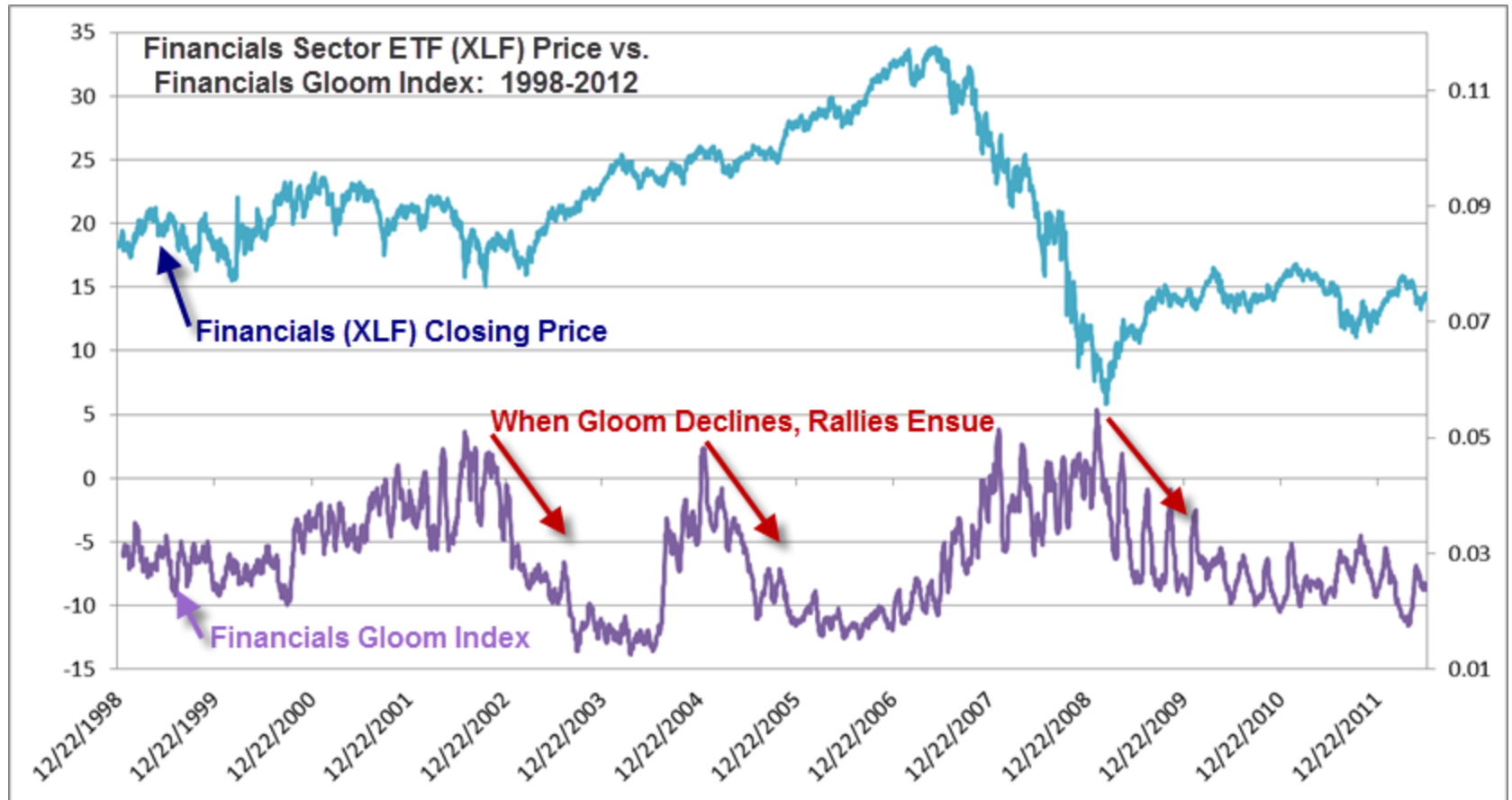
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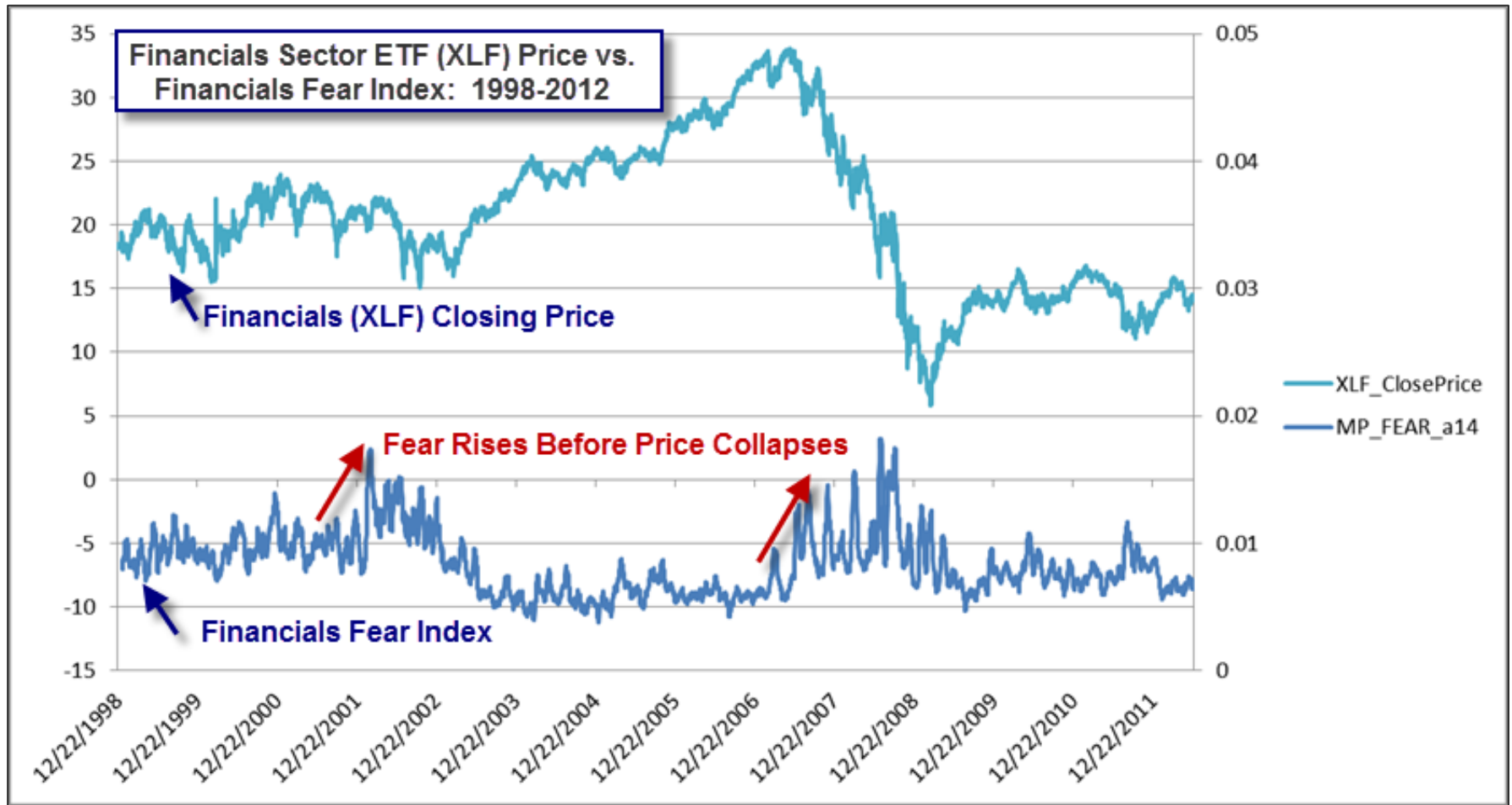
Source: Thomson Reuters MarketPsych Indices

When short-term trends cross long-term ones, it's time to act.

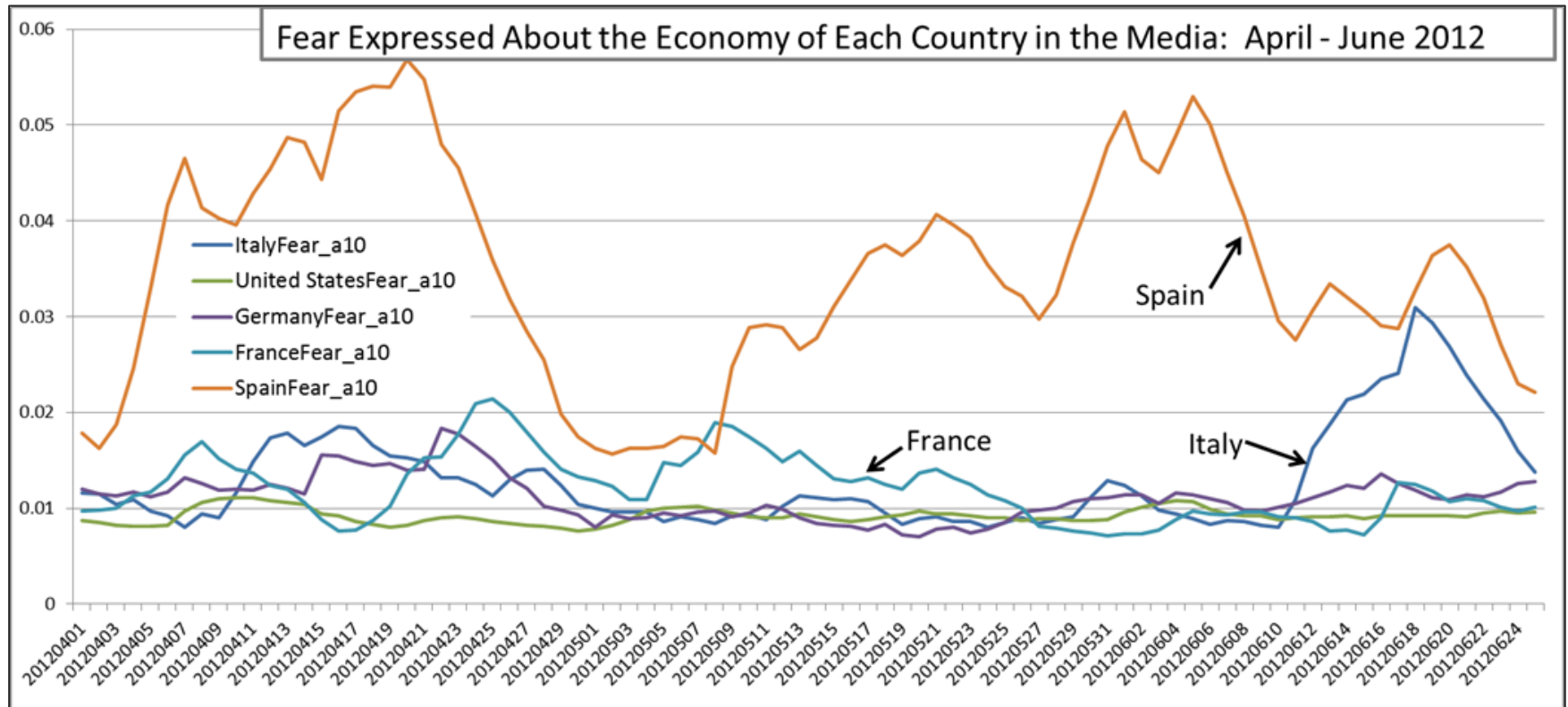
# Measuring Gloom in Financials



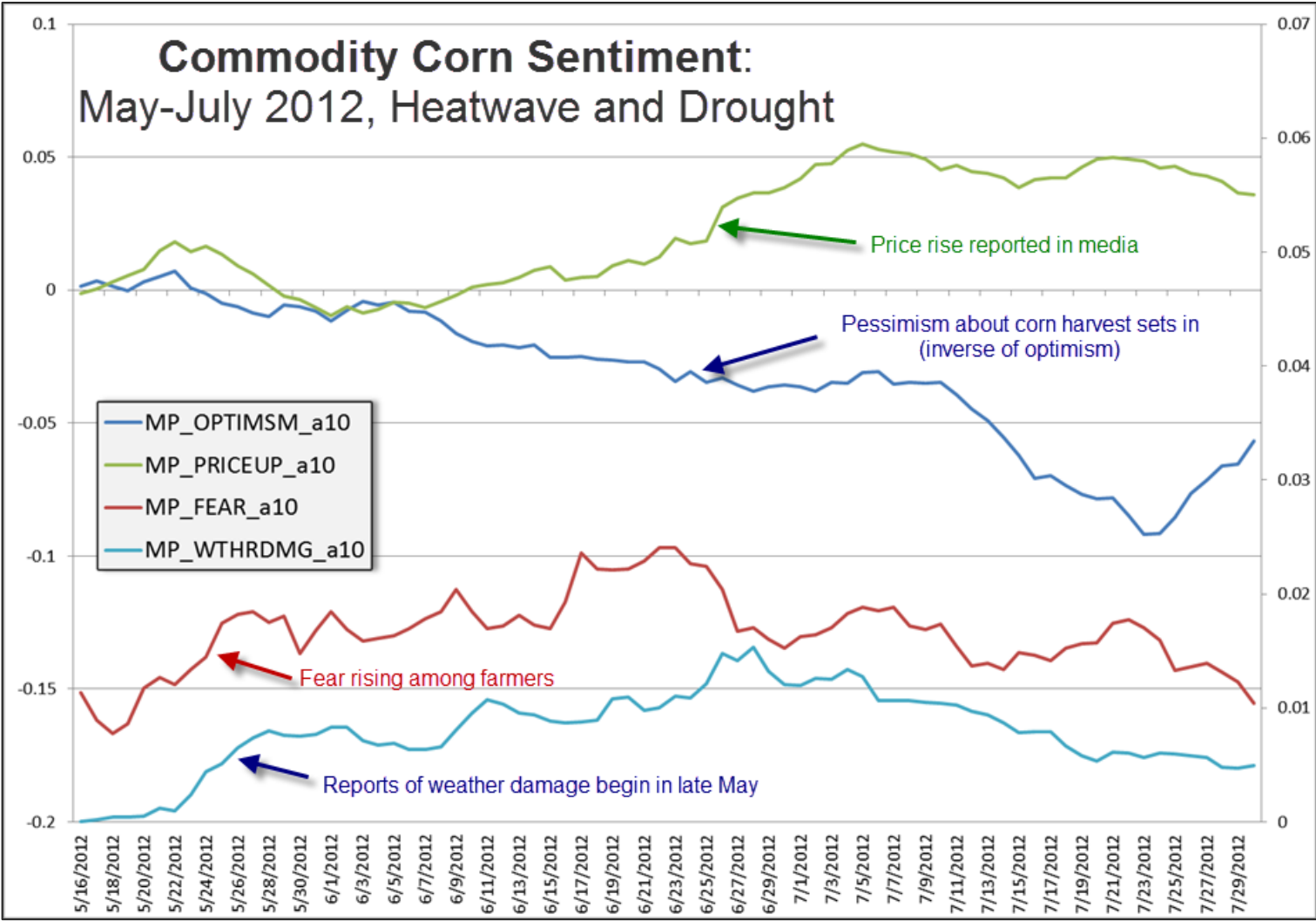
# Measuring Fear in Financials



# Economic Fear by Country



# Psychology and Weather Damage for Corn



# QUESTIONS?

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