Incrementum Chartbook # 2:

Monetary Tectonics

50 Slides Illustrating The Tug Of War Between Inflation And Deflation

Ronald-Peter Stoeferle & Mark J. Valek

January 2014

Incrementum Liechtenstein

Please Note: In our publications we distinguish the terms 'monetary inflation/deflation' and 'price inflation/deflation'.
For more information on that topic please visit: http://www.incrementum.li/austrian-school-of-economics/monetary-inflation-versus-price-inflation/

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Our Conviction

Due to structural over-indebtedness and the resulting addiction to low/negative real interest rates, we are certain that the traditional way of thinking about financial markets and asset management is no longer beneficial for investors.

Therefore, at Incrementum we evaluate all our investments not only from the perspective of the global economy but also in the context of the current state of the global monetary regime. This analysis produces what we consider a truly ***holistic view*** of the state of financial markets.

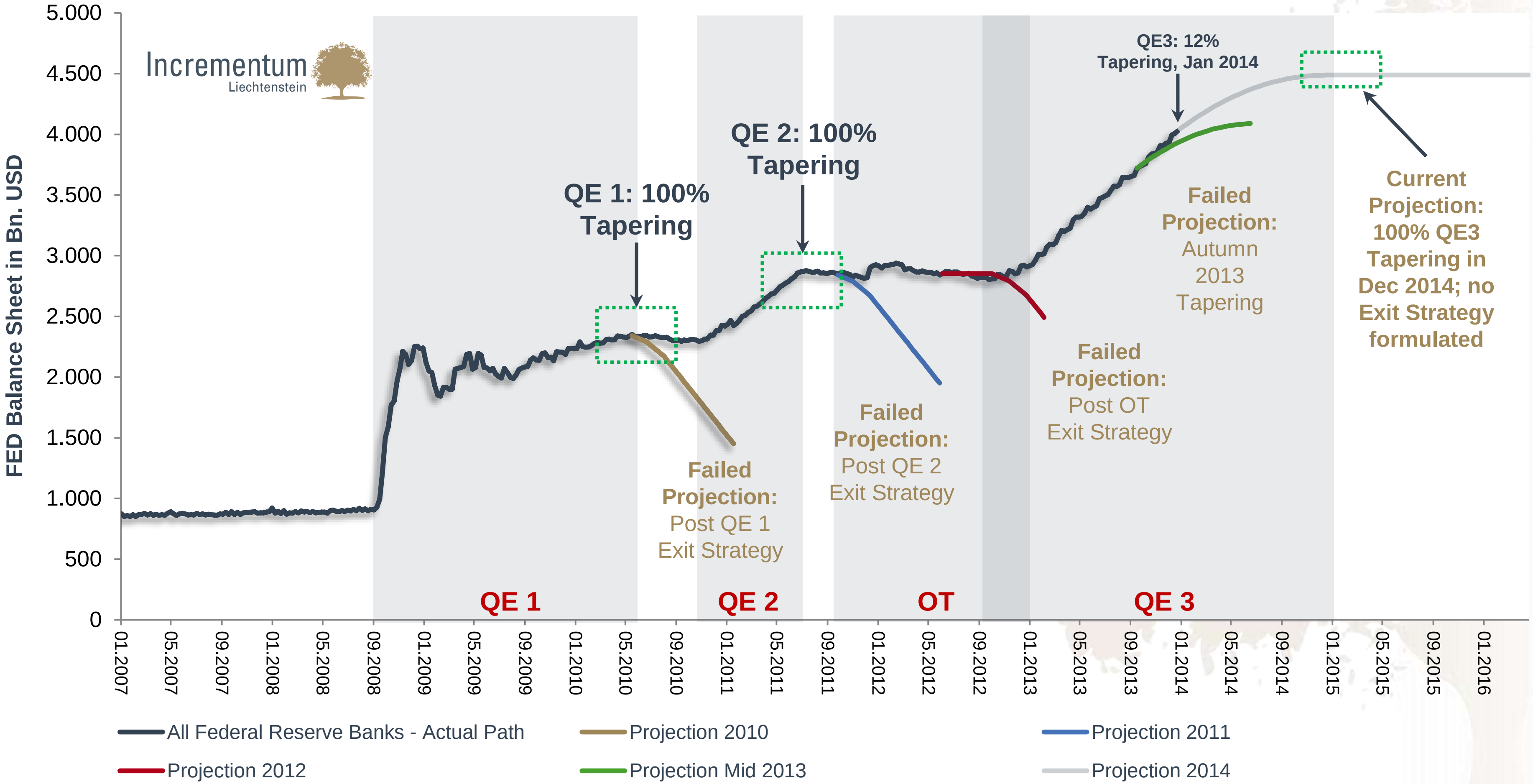
Financial markets have become highly dependent on central bank policies. Grasping the consequences of the **interplay between monetary inflation and deflation** is crucial for prudent investors.

We sincerely believe that the Austrian School of Economics provides us with the appropriate intellectual foundation, especially in this demanding financial and economic environment.

Ronald-Peter Stoeferle, Mark J. Valek

I. Recent Developments

The History Of UnderQEstimation
Is This Time Really Different?



Sources: Federal Reserve St. Louis, Incrementum AG

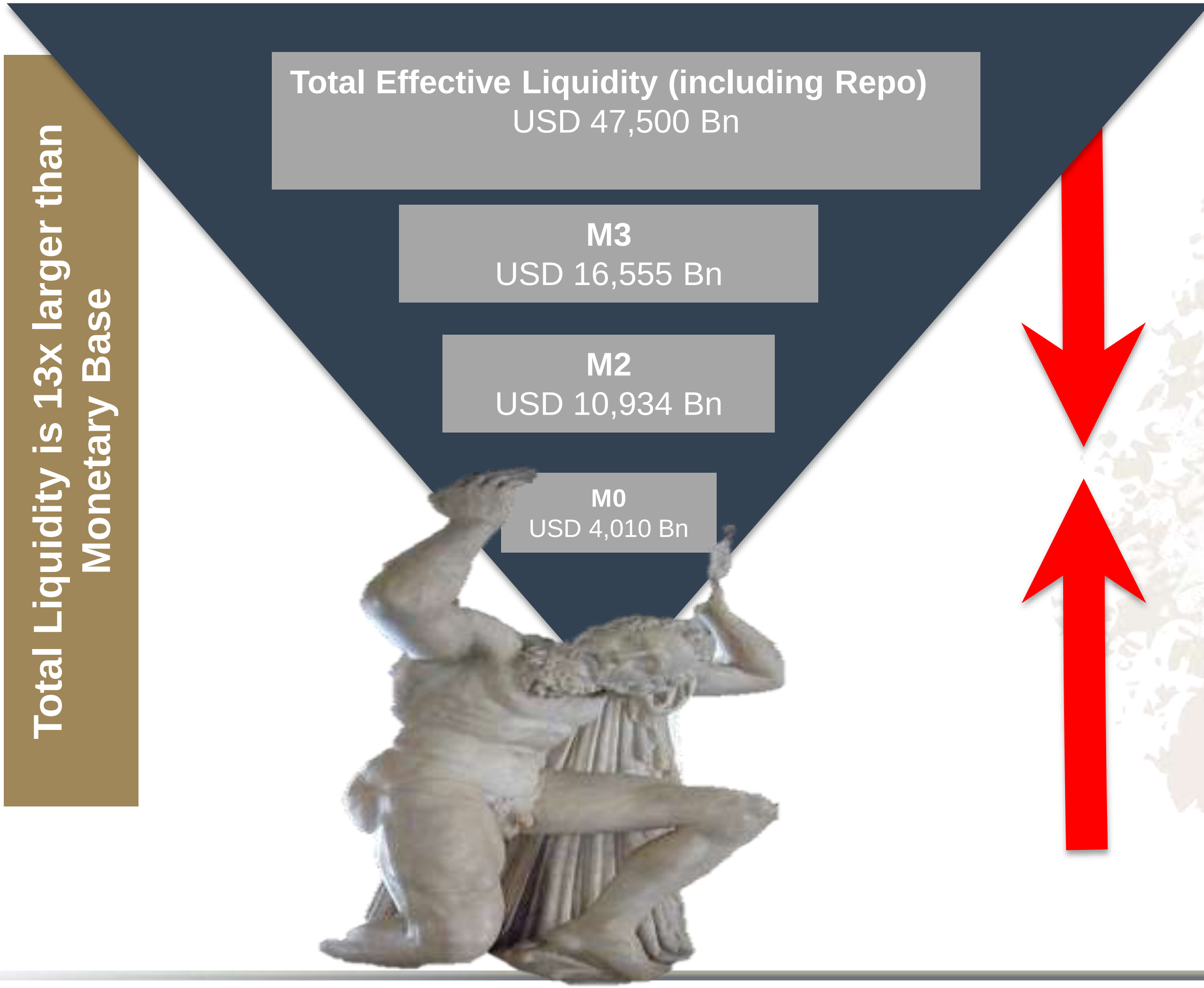
Back To Normal Again? …Putting Tapering Into Perspective

- Cutting Interest Rates (2007-2008)
- Zero Interest Rate Policy (since 2008)
- Forward Guidance (since 2008)
- QE I (2008-2010)
  - ✓ Successful Tapering (100%)
  - ✓ Talking about Exit Strategy → **Failed Projection:** Post QE 1 Exit Strategy
- QE II (2010-2011)
  - ✓ Successful Tapering (100%)
  - ✓ Talking about Exit Strategy → **Failed Projection:** Post QE 2 Exit Strategy
- Operation Twist (2011-2012)
- QE III (since 2012)
  - ✓ Starting Small Tapering Jan 2014 (11.7%) → **IF this is the first step to policy normalization, we are light-years away from normal policy!**

To do:

- Complete Tapering (current projection: Nov 2014)
- Reduce Forward Guidance (best 2016)
- Communicate Exit Strategy
- Sell bonds worth approx. 3,000 bn into the market!
- Reverse Zero Interest Rate Policy

The 'Monetary Atlas' Shrugs…
So Much Easing, And Still No Price Inflation?



Monetary Deflation:

Credit deleveraging e.g. due to regulatory changes and sluggish credit growth means currency supply is being reduced.

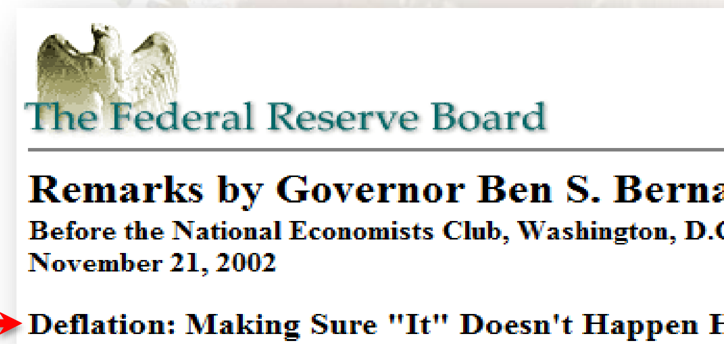
Monetary Inflation:

Central bank (directly) only controls a tiny part of the total effective liquidity!
Monetary Inflation of the FED intends to offset deflationary forces.

Sources: Nowandfutures.com, UBS Research, Federal Reserve St. Louis, Incrementum AG

Preventing Price Deflation, Creating Asset Price Inflation?

- **In a highly leveraged world, price deflation is – from a political viewpoint – a horror scenario that has to be averted *whatever it takes*, due to the following reasons:**
  - Deleveraging* leads to consumer price deflation and asset price deflation. Tax revenue declines significantly. Asset price inflation is taxed, asset price deflation cannot be.
  - Falling prices result in **real appreciation of nominal denominated debt**. Increasing amounts of debt can therefore no longer be serviced.
  - Debt liquidation and price deflation have fatal consequences for large parts of the banking system, in an over-indebted world.
  - Central banks also have the mandate to guarantee ‘financial market stability’ and to make sure “It” doesn’t happen here…



The Federal Reserve Board

Remarks by Governor Ben S. Berna

Before the National Economists Club, Washington, D.C.
November 21, 2002

Deflation: Making Sure "It" Doesn't Happen H

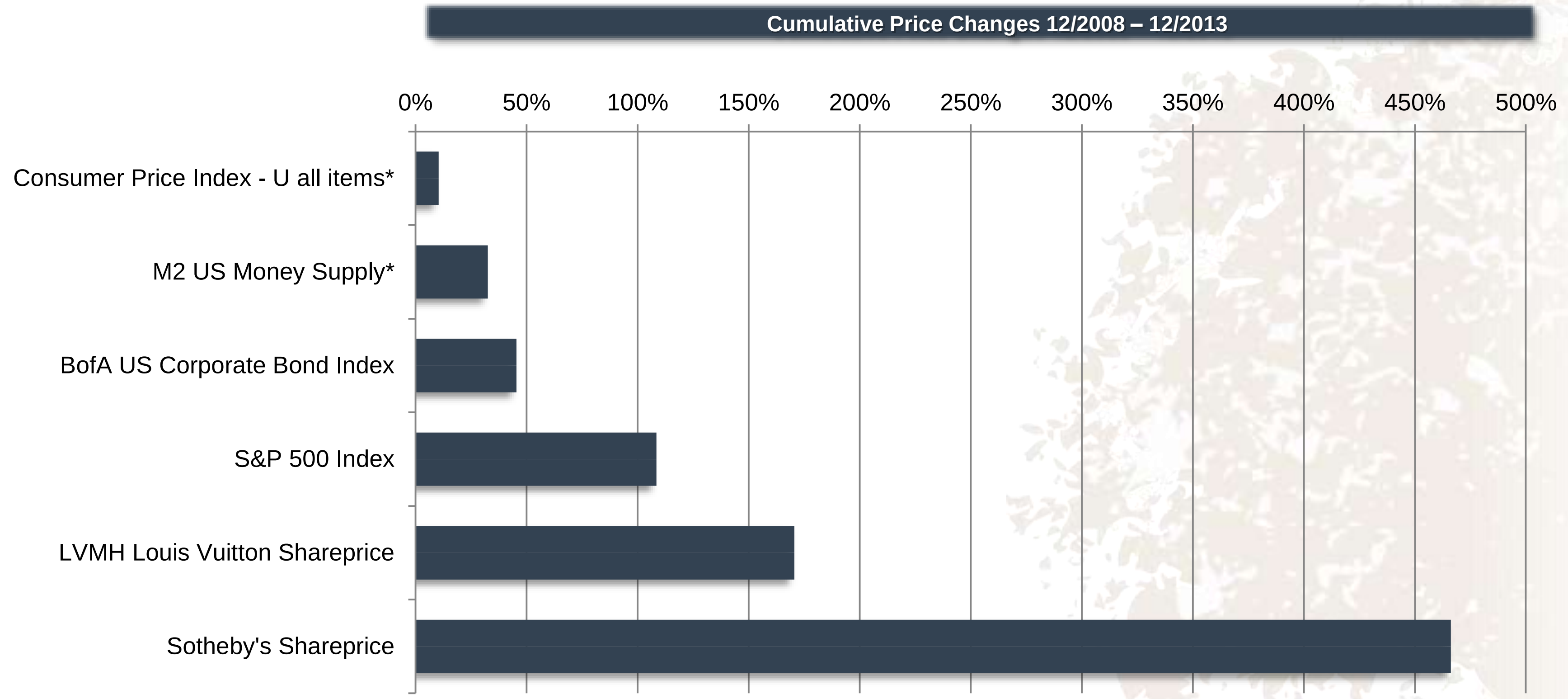
Translation: “Make sure to keep currency and credit supply growing exponentially”

- **There is no inflation? False!**
- **‘Successful’ prevention of price deflation via monetary inflation has led to massive asset price inflation!**

*Note: Deleveraging may have taken place in some parts of the economy but in aggregate the total debt/credit has kept on growing
Please refer to: http://www.federalreserve.gov/boarddocs/speeches/2002/20021121/

Where Did All The Money Go?

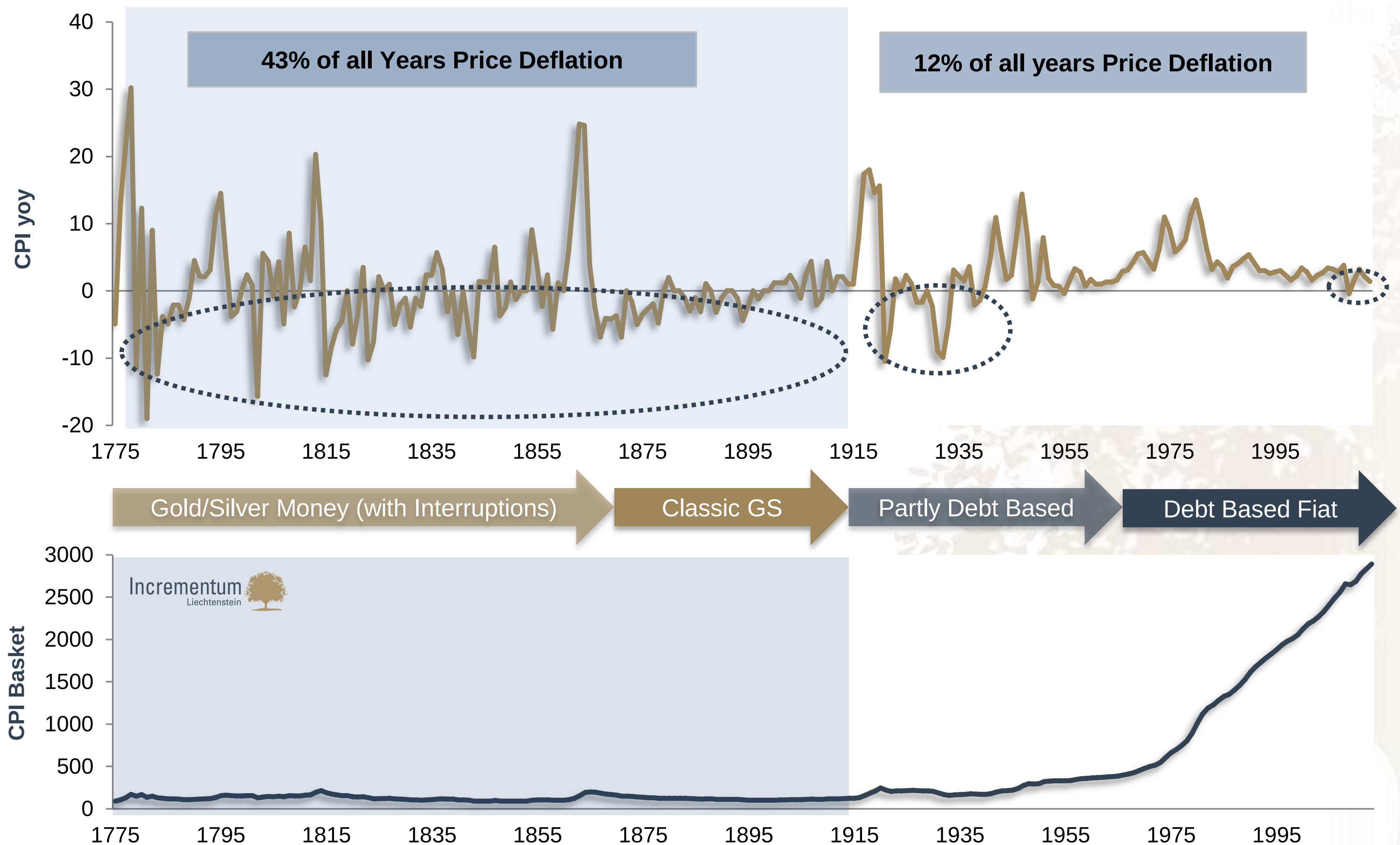
Financial Assets And Luxury Goods Profit From Monetary Inflation



*Latest data available, Nov, 2013

Sources: Federal Reserve St. Louis, Incrementum AG

Monetary Regimes & Price Inflation
Price Deflation Was Common Before The Fed Was Established



Source: Measuringworth.com, Incrementum AG

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II. Monetary Tectonics

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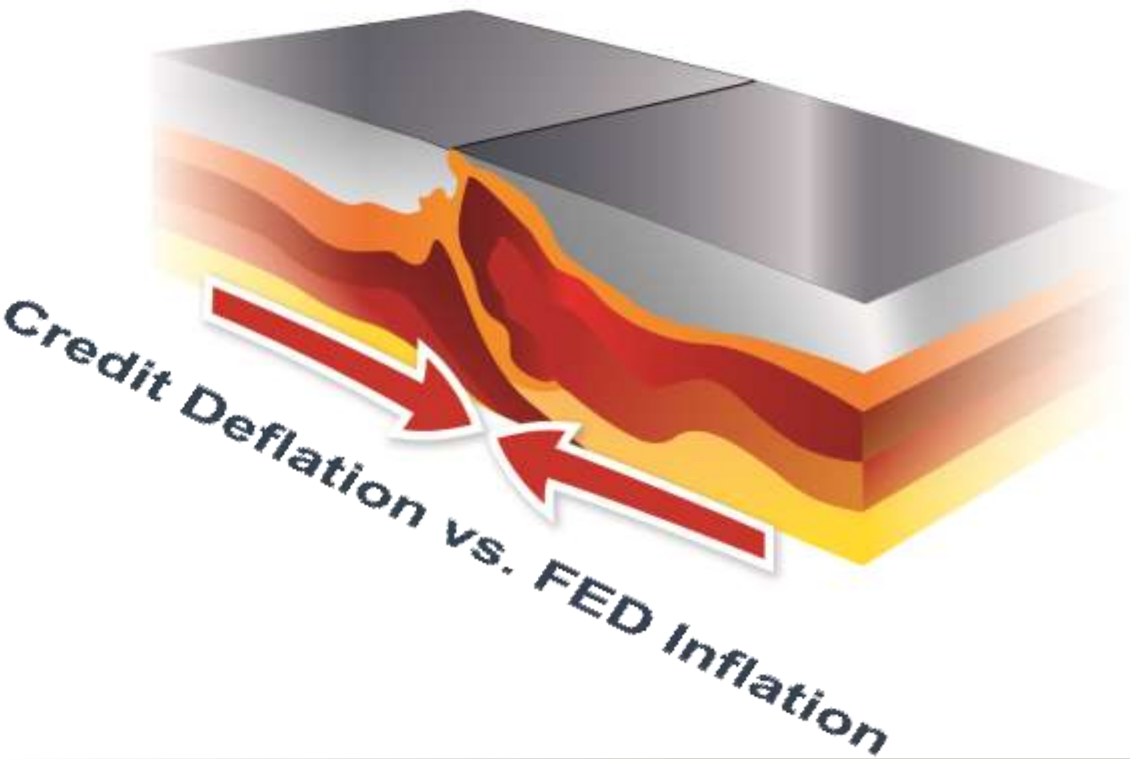
What Are Monetary Tectonics?

▸ **The interplay between inflation and deflation can be compared to the permanent reciprocal pressure of two tectonic plates.**

▸ Fiduciary media (currency) is being created (monetary inflation) and destroyed (monetary deflation) within the commercial banking system and by the Central Bank.

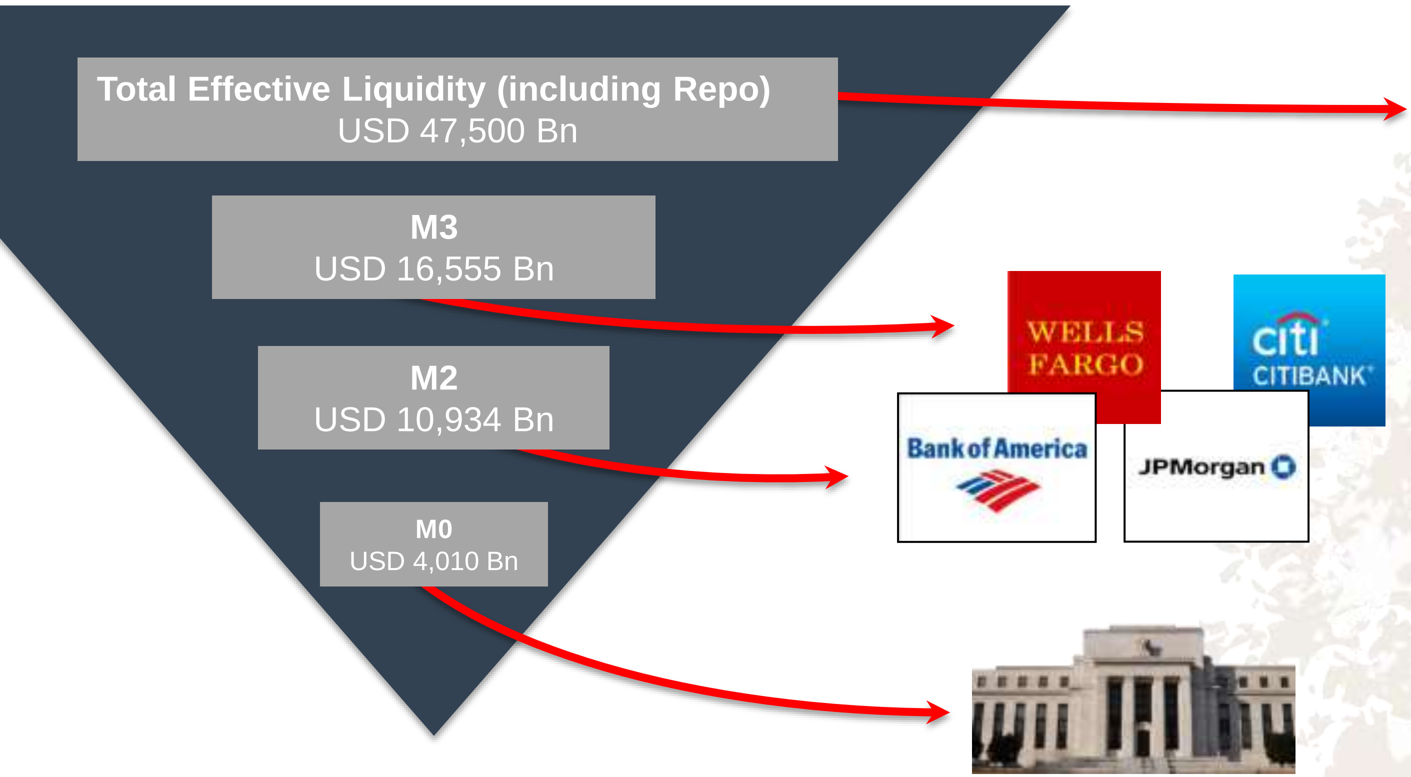


▸ Preventing a deflationary collapse of the inverted monetary pyramid due to deleveraging in the commercial banking sector has been a main objective for policy makers

▸ Balancing the two heavy forces will be increasingly difficult to manage.

▸ **Investors should prepare for both scenarios: inflationary AND deflationary periods**

Comprehending The Currency Composition*



Total liquidity, including liquidity created trough financial markets (repo markets)

Fiduciary media lent into existence by commercial banks, through fractional reserve system.

The broader currency supply can be calculated according to different methodologies (e.g. M2, M3, TMS…)

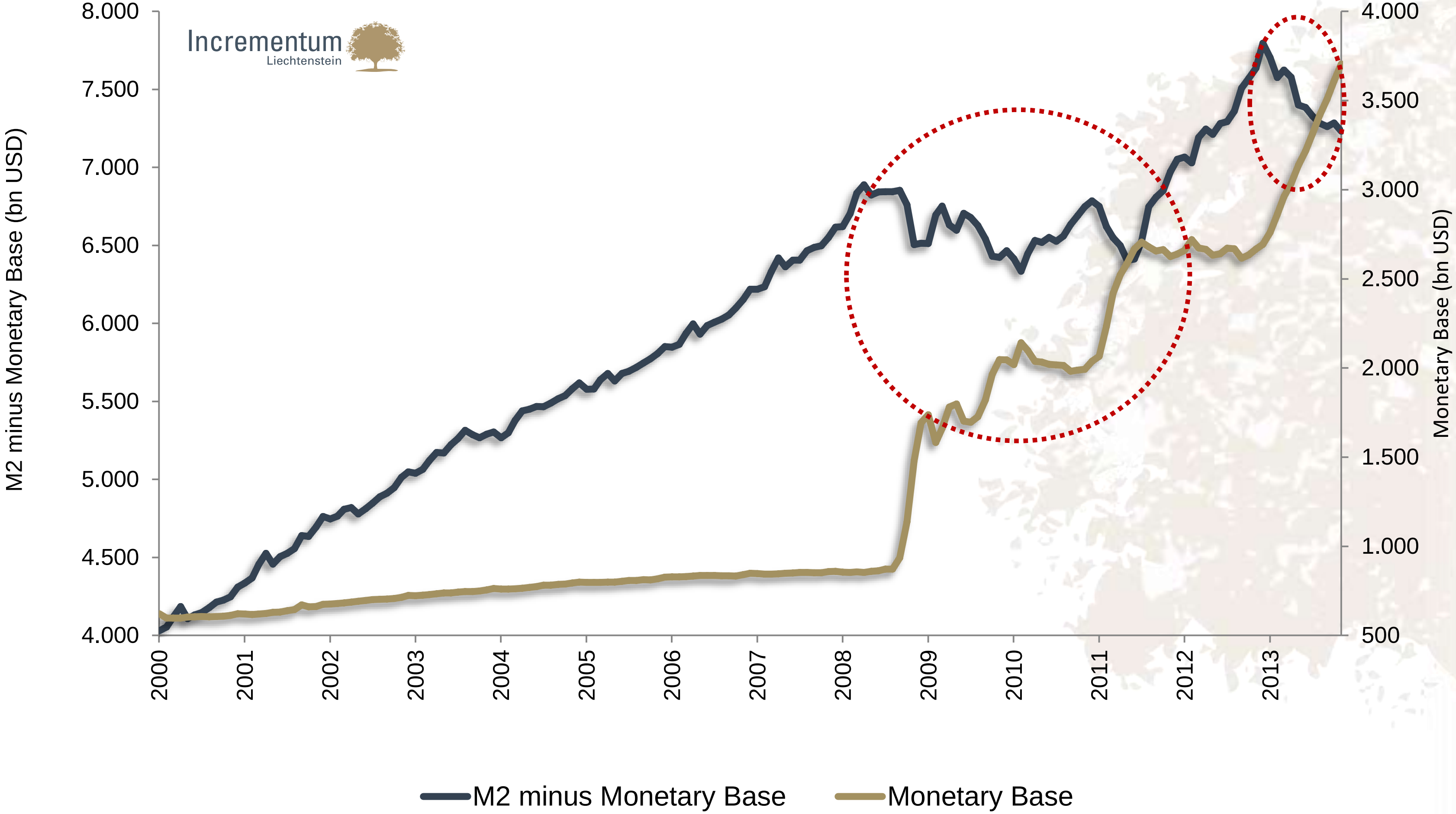
M0 or 'base money' is directly created by the FED

The Central bank (directly) only controls a small part of total effective liquidity!
It is important to remember that, due to the fractional reserve banking system, most of the currency is lent into existence through the commercial banking system.

*Note: We encourage the interested reader to look up what F.A.Hayek wrote about the concept of the inverted pyramid: http://mises.org/books/pricesproduction.pdf

Sources: Nowandfutures.com, UBS Research, Federal Reserve St. Louis, Incrementum AG

Deflating Credit vs. Inflating Monetary Base



Sources: Federal Reserve St. Louis, Incrementum AG

The Tug Of War*

Team Blue: Deflationary Forces

- Balance Sheet Deleveraging: Undercapitalized banks – still recovering from the crisis – are reluctant to lend
- Sluggish Credit Growth: Over-indebted consumers are reluctant to borrow
- Regulation: Basel III
- High Demand to hold Money (low inflation exp.)**
- Productivity gains
- Defaults and Bail-ins (Europe: Greece, Cyprus)
- Demographics

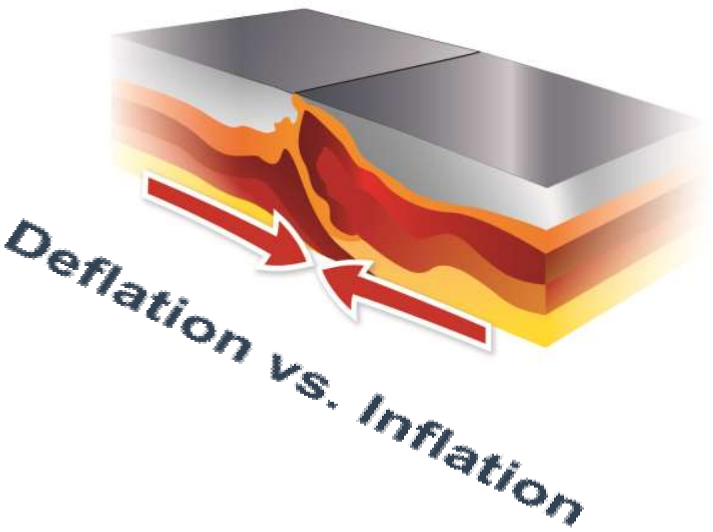
Team Red: Inflationary Forces

- Zero interest rate policy
- Communications Policy (forward guidance)
- Operation Twist
- Quantitative Easing
- Currency Wars
- Eligibility Criteria for Collateral (ECB)

* Please also refer to another outstanding speech of James Rickards here: http://www.youtube.com/watch?v=9fXHV6MnP0E
** Low velocity according to the Monetarist Paradigm

II. Monetary Tectonics

I. Deflationary Forces



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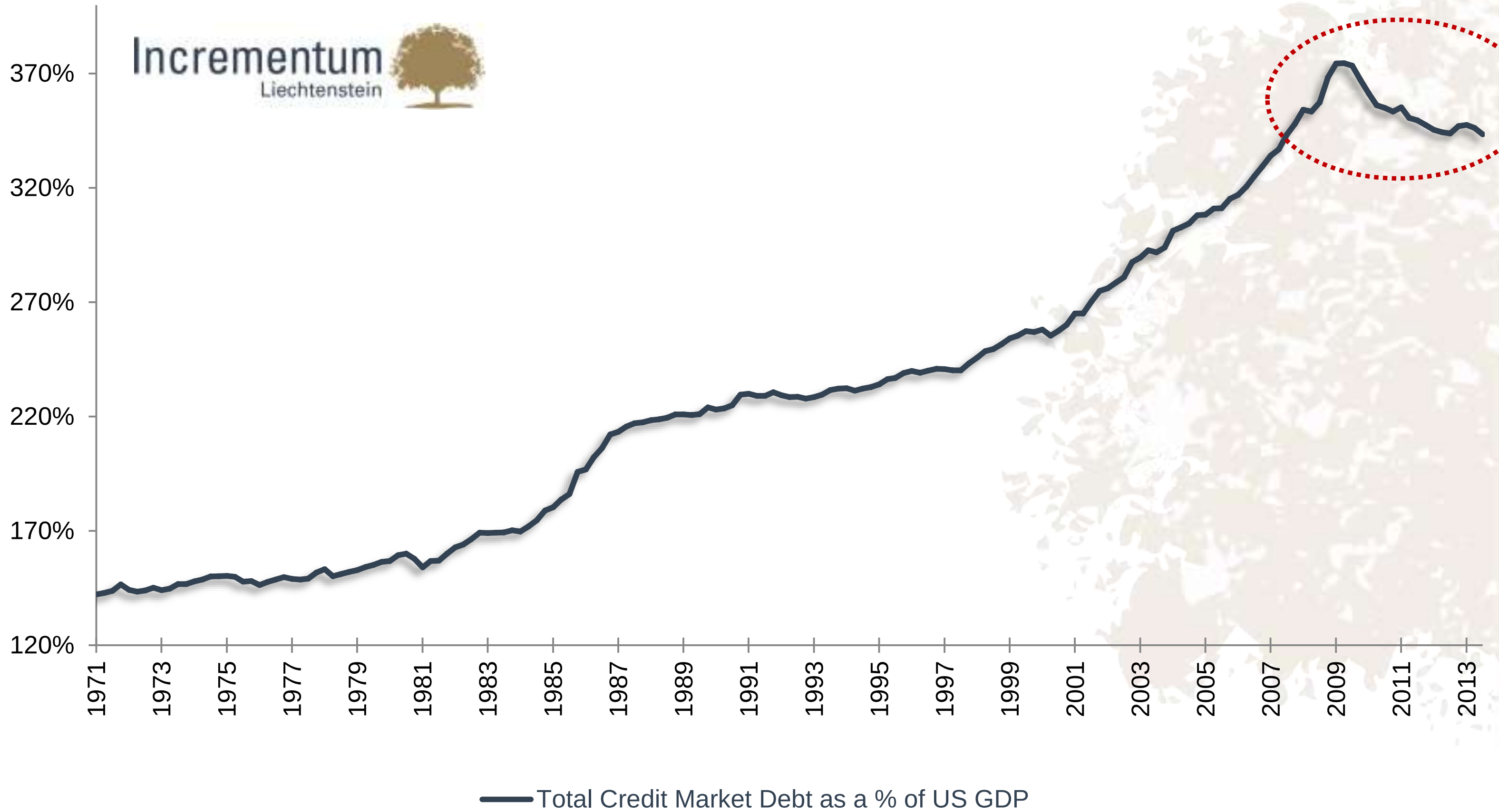
"Falling prices or price deflation are not the cause *of economic and financial crises, but their consequences - and at the same time their cure.*"

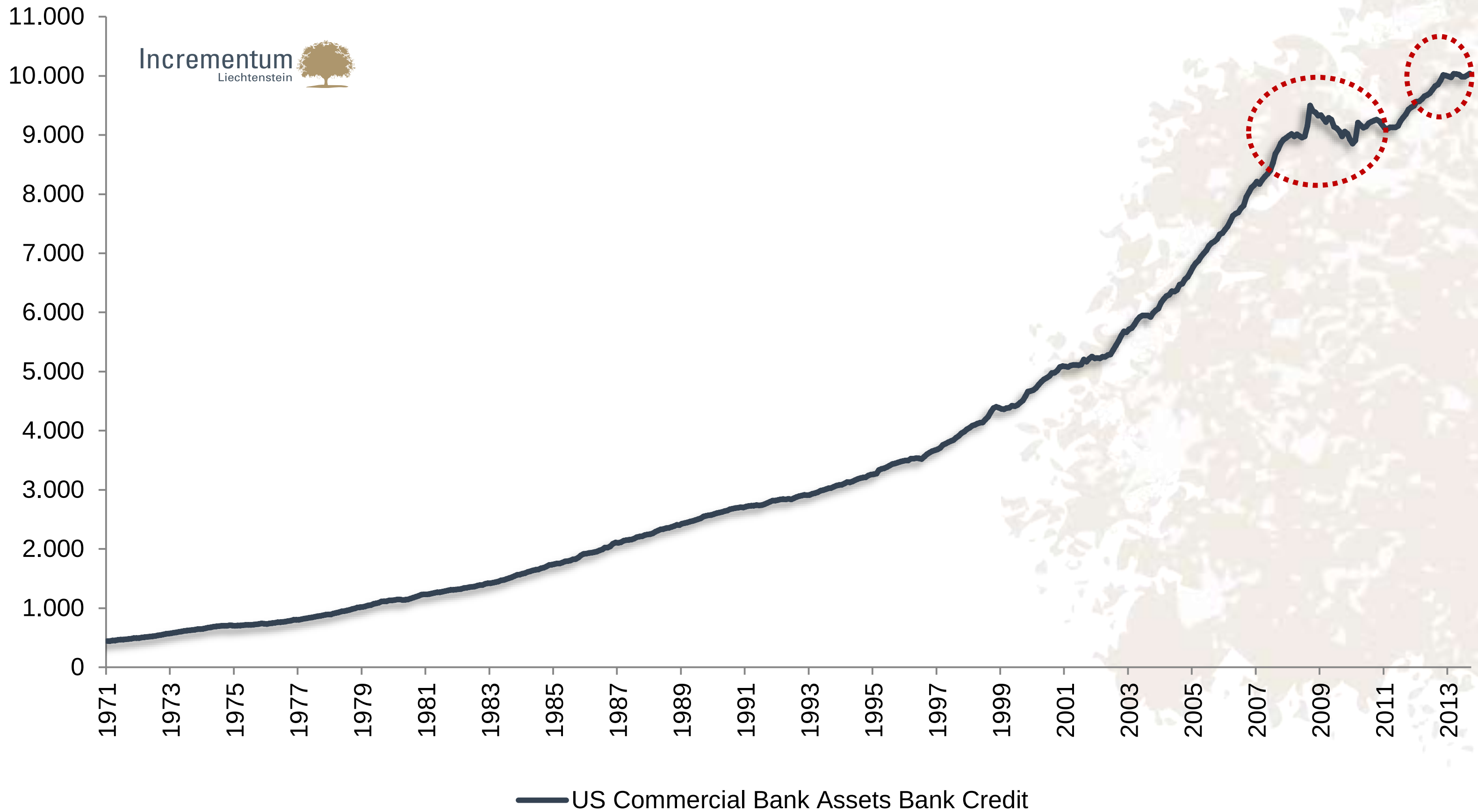
Roland Baader

Total Credit Market Debt In Percent Of US GDP: Ratio Reduced Slightly Since 2007 – Still Close To Record Highs



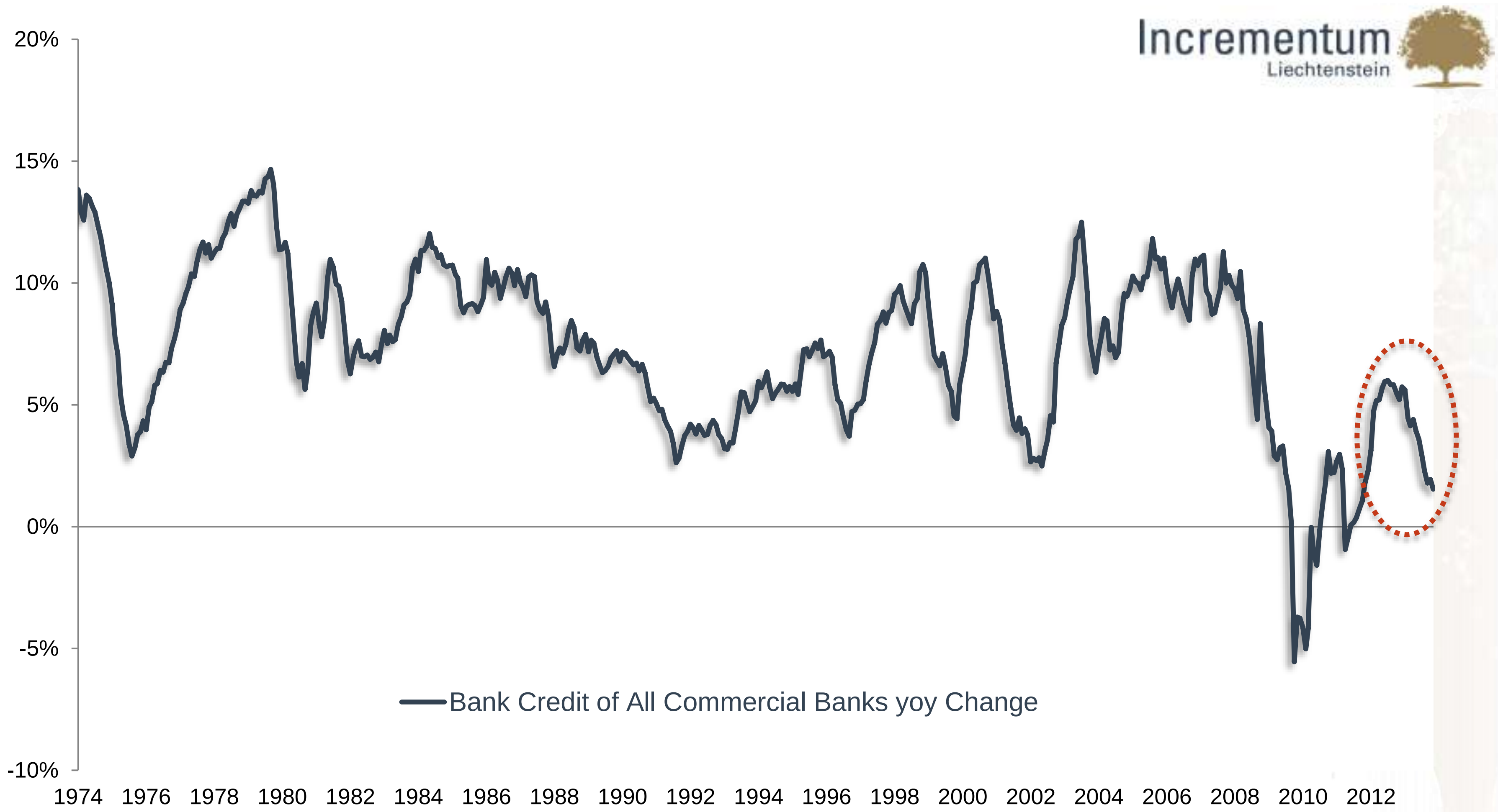
Sources: Federal Reserve St. Louis, Incrementum AG

US Bank Credit Of All Commercial Banks (bn USD): Sluggish Growth, Deceleration Reminds Us Of 2007/2008



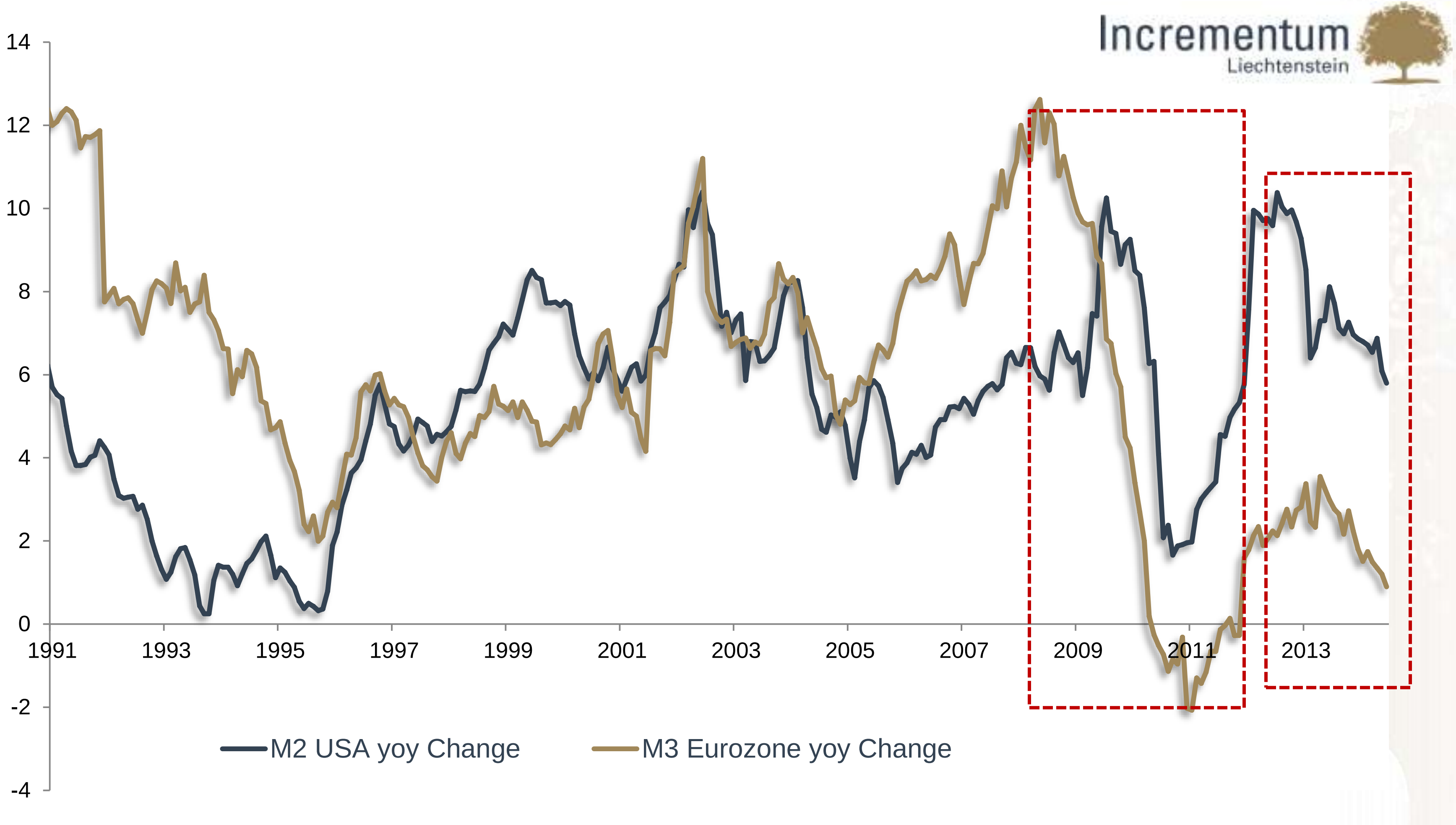
Sources: Federal Reserve St. Louis, Incrementum AG

US Bank Credit Of All Commercial Banks yoy Change: Lending Growth Rate Decreasing



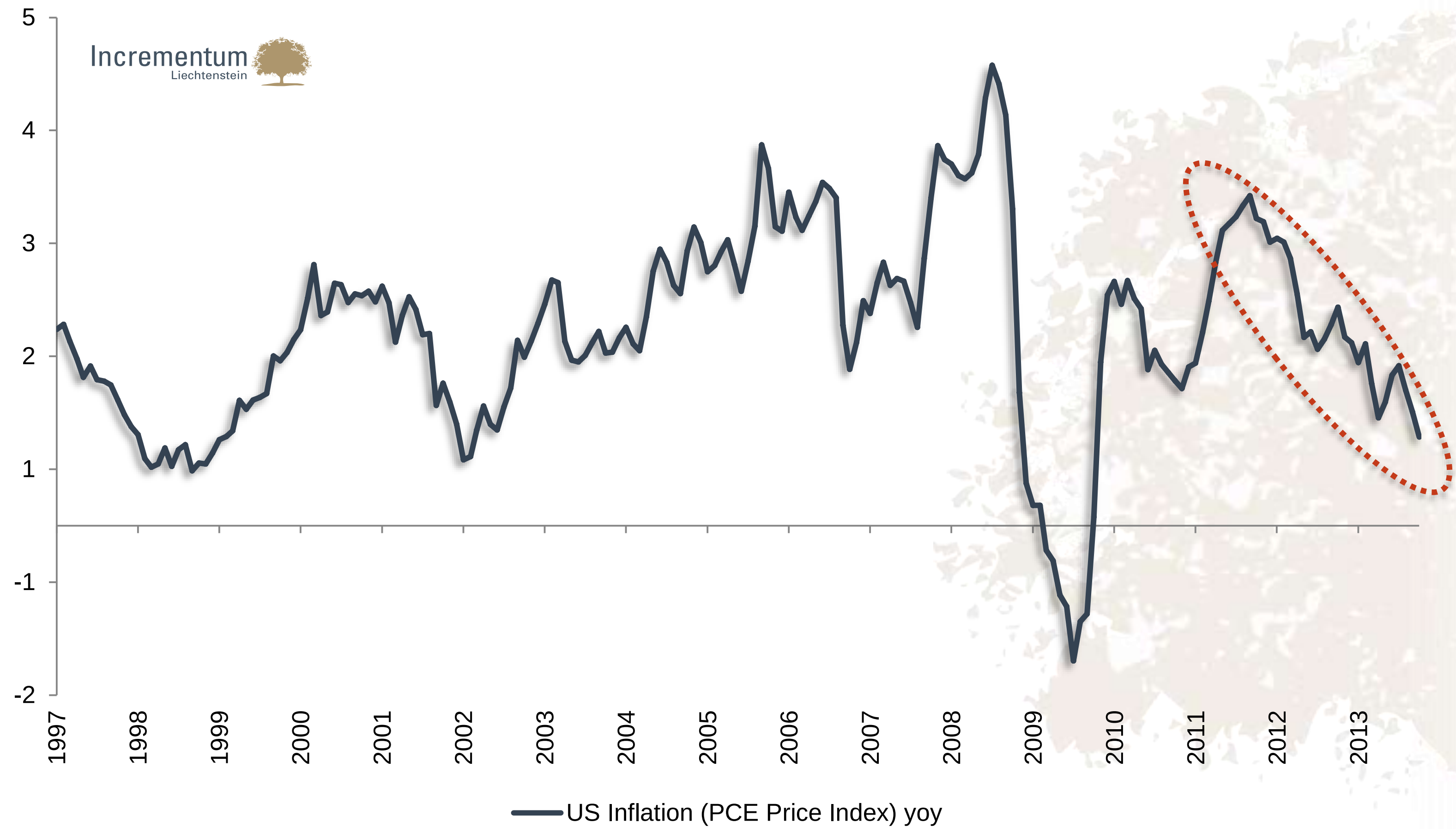
Sources: Federal Reserve St. Louis, Incrementum AG

Money Supply Growth In US & Eurozone Trending Lower: Central Banks Will Take Aggressive Countermeasures



Sources: European Central Bank, Federal Reserve St. Louis, Incrementum AG

US Price Inflation:
Personal Consumption Expenditures Exhibiting Disinflation



Sources: Federal Reserve St. Louis, Incrementum AG

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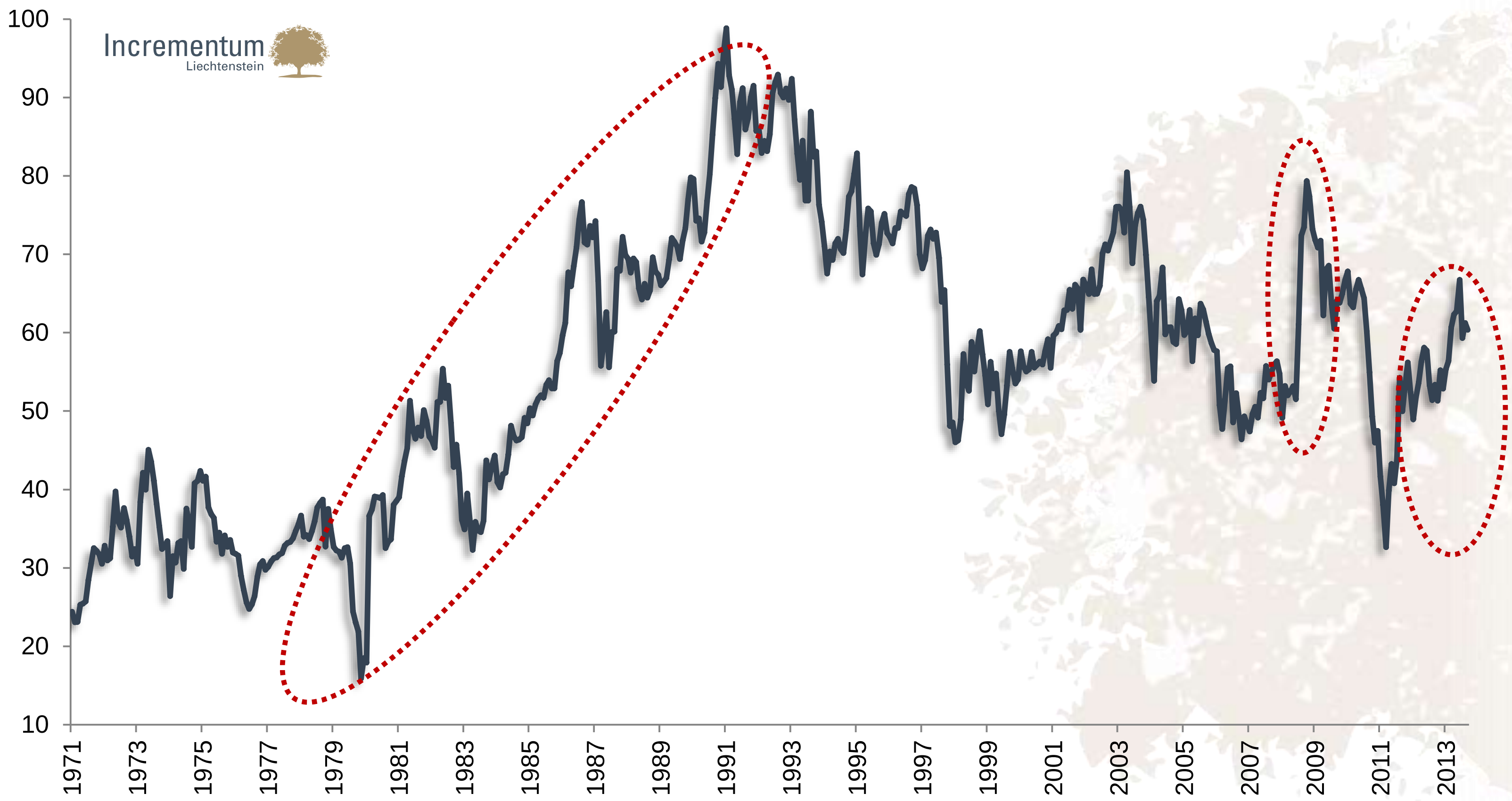
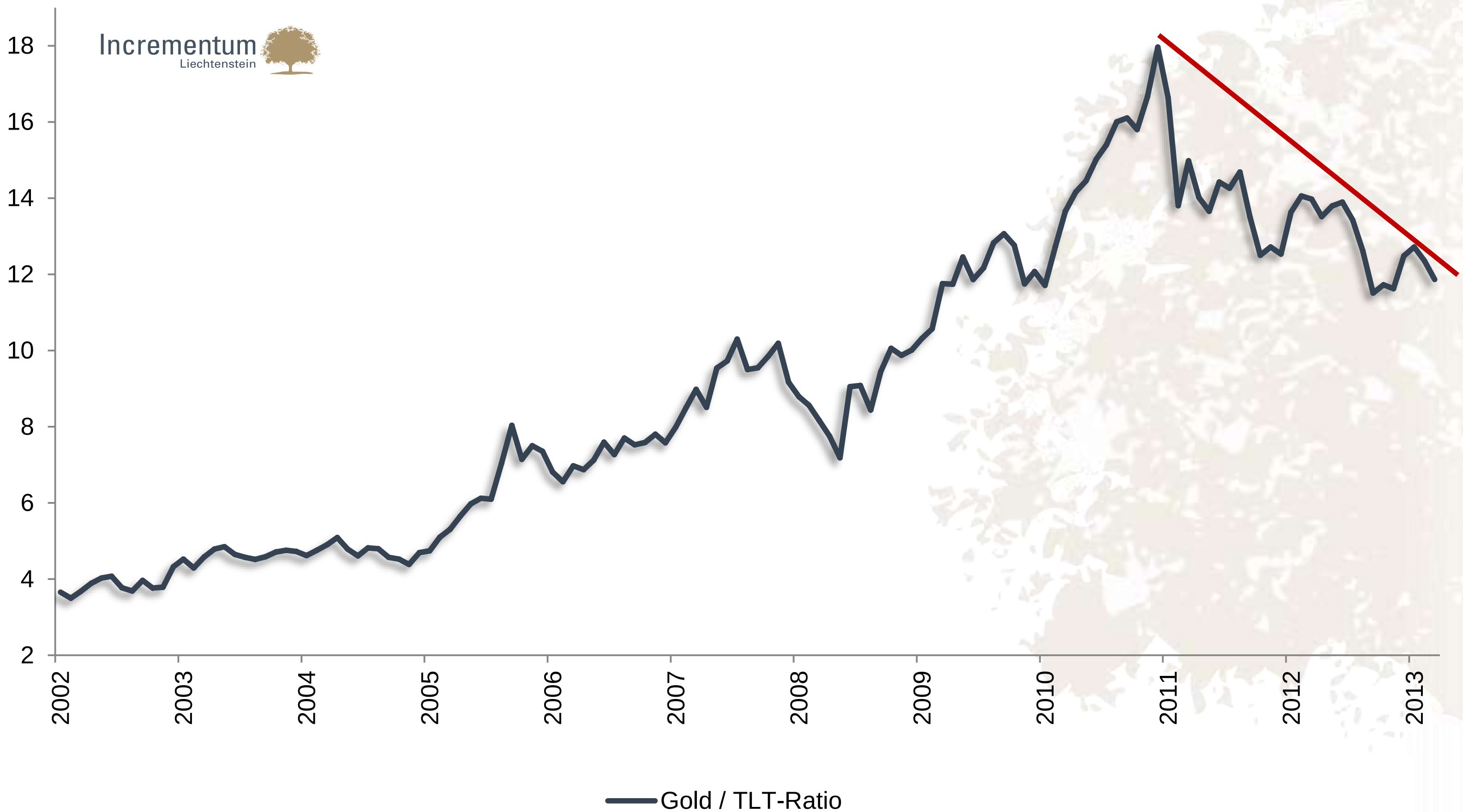
Gold/Silver-Ratio:
Gold Outperforms Silver During Disinflationary/Deflationary Periods



Sources: Federal Reserve St. Louis, Incrementum AG

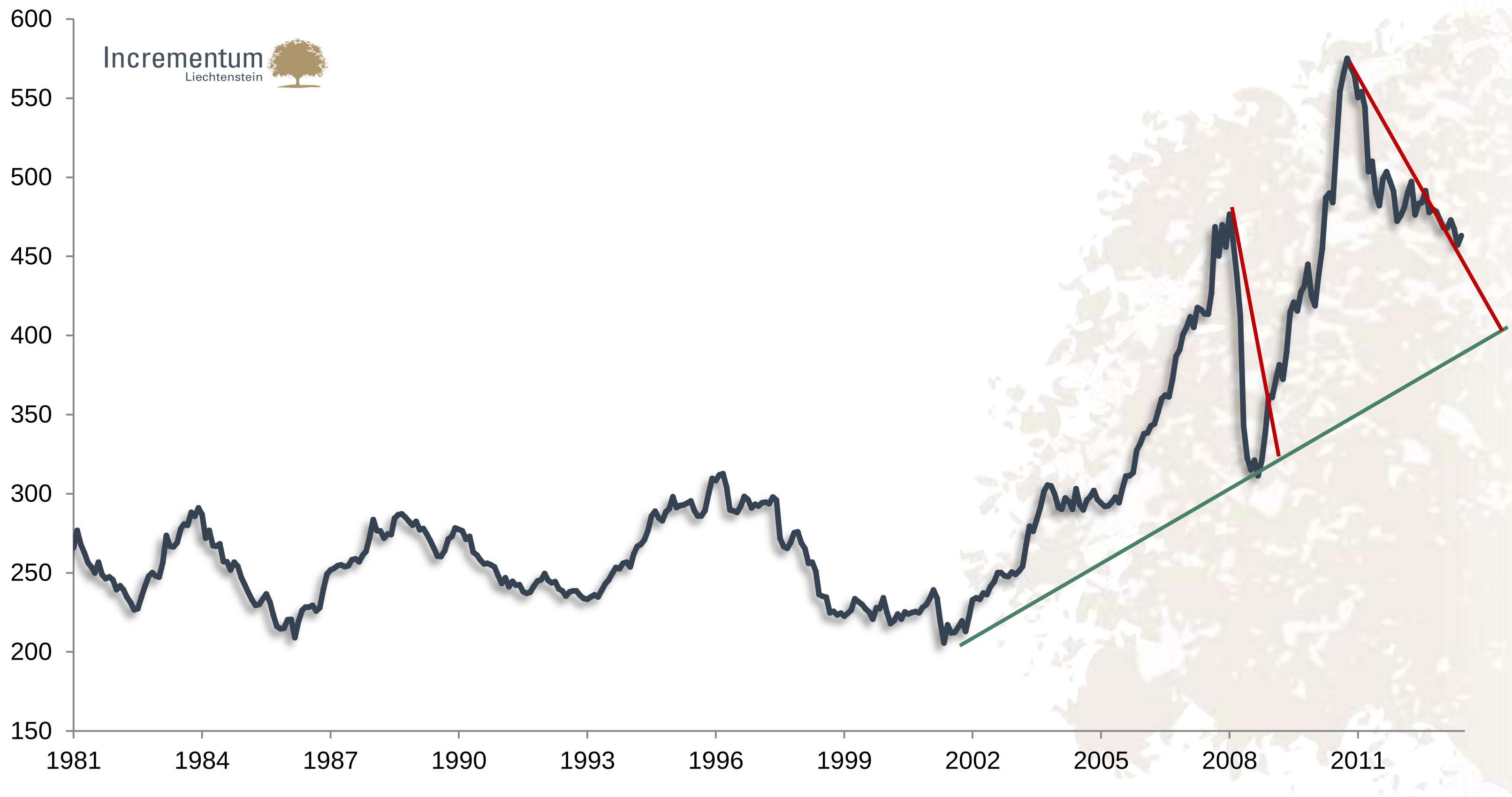
Gold / TLT*-Ratio
Gold To Bond Ratio Confirming Deflationary Pressure



*TLT: iShares 20+ year Treasury bond ETF

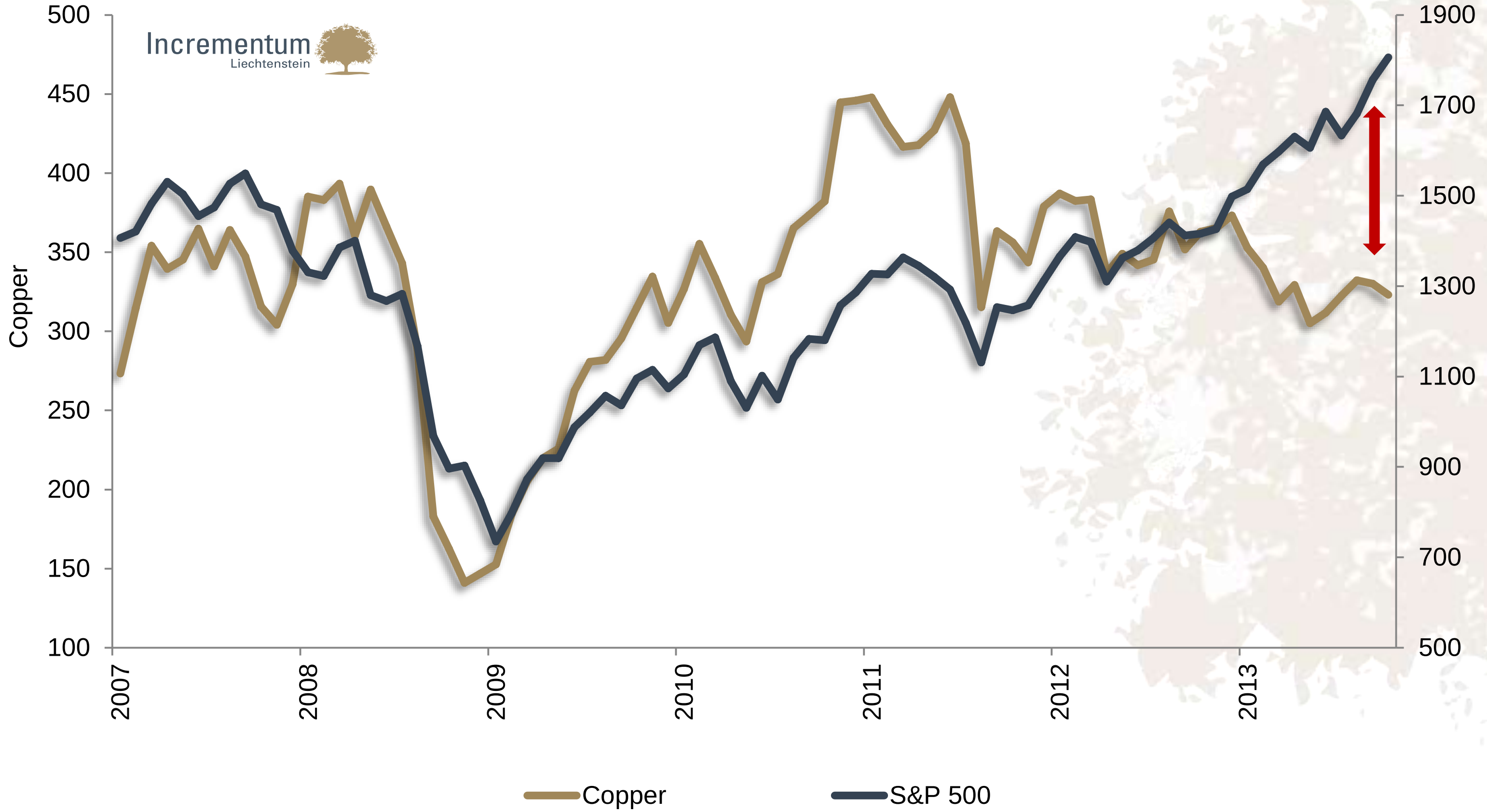
Sources: Paul Mylchreest – Thunder Road Report, Federal Reserve St. Louis, Incrementum AG

Continuous Commodity Index (CCI) Since 1971
Commodity Bull Market Over?



Sources: Paul Mylchreest – Thunder Road Report, Federal Reserve St. Louis, Incrementum AG

Copper yoy Change Vs. S&P 500 yoy Change
Growing Divergence: Who's right? Dr. Copper Or Equities?



Sources: Federal Reserve St. Louis, Incrementum AG

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The Consensus View: No Inflation!

CNBC

HOME INTL NEWS MARKETS INVESTING TECH SMALL BUSINESS VIDEO

ECONOMY

Forget the currency war, now it's a deflation war

CNBC Text Size

REUTERS EDITION: U.S.

HOME BUSINESS MARKETS WORLD POLITICS TECH OPINION BREAKINGVIEWS

U.S. wholesale prices point to mute inflation pressures

BY LUCIA MUTIKANI

WASHINGTON | Fri Dec 13, 2013 11:31am EST

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TRENDING Northern Gateway | Fed Tapering | BlackBerry | Canadian dollar | Investing 2014 | Pensions

Inflation is almost non-existent, no matter what consumers think

FP Gordon Isfeld | November 22, 2013 | Last Updated: Nov 22 5:42 PM ET

More from Gordon Isfeld

Inflation Fears?
Not Even The Germans Are Afraid Anymore!

Bloomberg

Germans Bury Inflation Angst as Merkel Offers New Agenda

By Birgit Jennen - Dec 29, 2013

When Walter Baltes was five years old, he thought money came in bundles of banknotes. His grandmother carried them in her arms to the bakery to pay for bread. It was 1923, in the German town of Witten.

"I am very careful with money, which probably has something to do with the inflation experience," Baltes, 95, said in a phone interview. Yet those days aren't coming back, he says. "We will never experience this kind of inflation again. I absolutely don't see any risk of inflation."

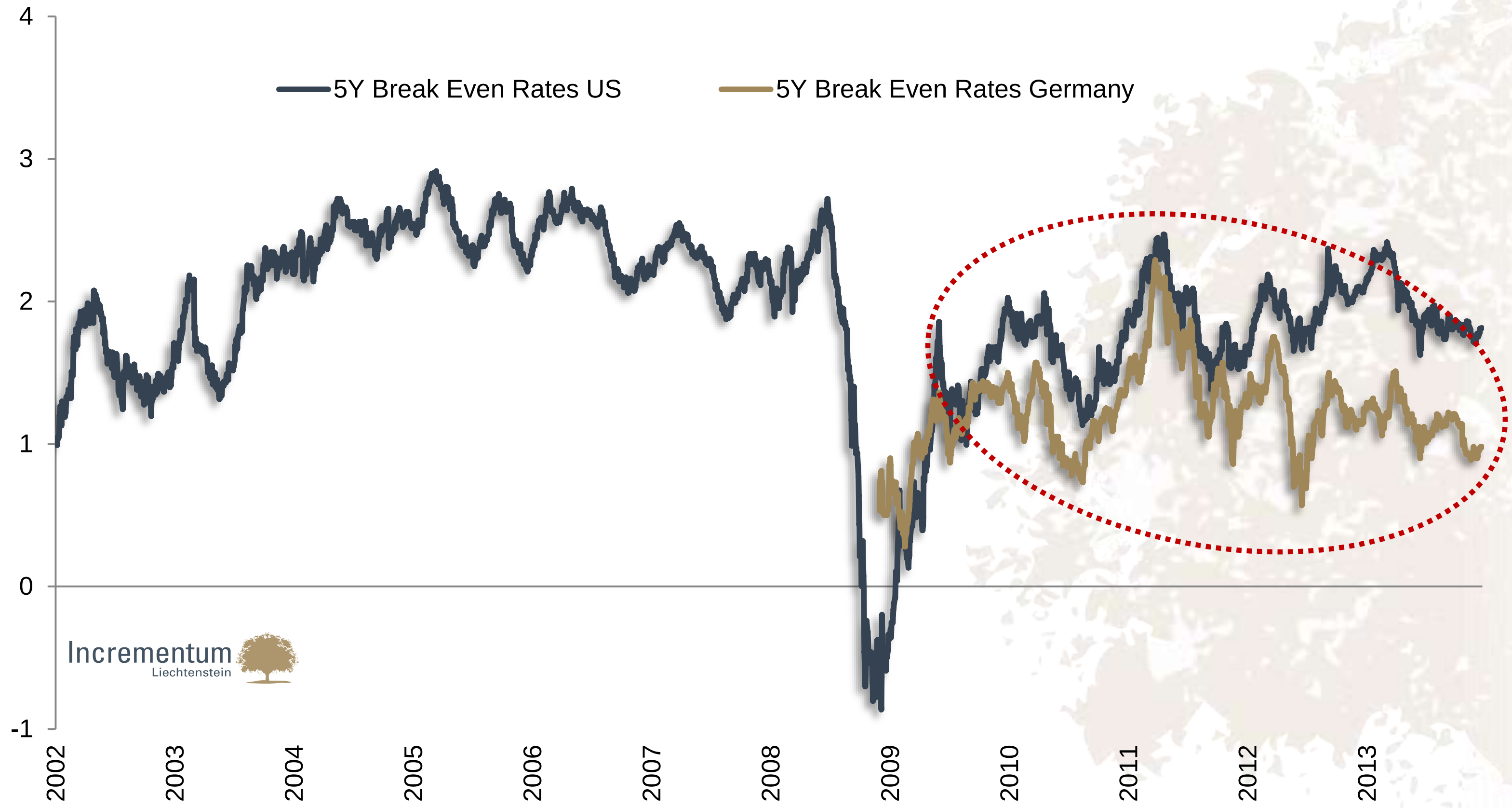
Ninety years after a generation's savings were wiped out, the German preoccupation with inflation is giving way. A Hamburg University study published by the Bundesbank shows that any anxiety that inflation will erode savings is concentrated among senior citizens, the unemployed and those on lower incomes. The majority surveyed anticipate inflation at about 2 percent in the coming 12 months.

Polls now reveal that inflation concerns have been supplanted by the consequences of deleveraging from the euro area's debt crisis. A growing number of young people don't even know what the word "inflation" means, according to the BdB banking lobby in Berlin.

"Our studies show the Germans have no particular fear of inflation," Rolf Buerkl, a researcher for Nuremberg-based GfK SE, which produces data on consumer purchasing behavior, said by phone. Whereas Germans' traditional sensitivity about the risk of soaring prices was fanned during the introduction of euro cash in 2002, "those fears have ultimately not been realized."

Source: http://www.bloomberg.com/news/2013-12-29/germany-abandons-inflation-angst-with-merkel-offering-new-agenda.html

Inflation Expectations:
Stable, Or Grinding Lower For EUR & USD



Sources: Bloomberg, Incrementum AG

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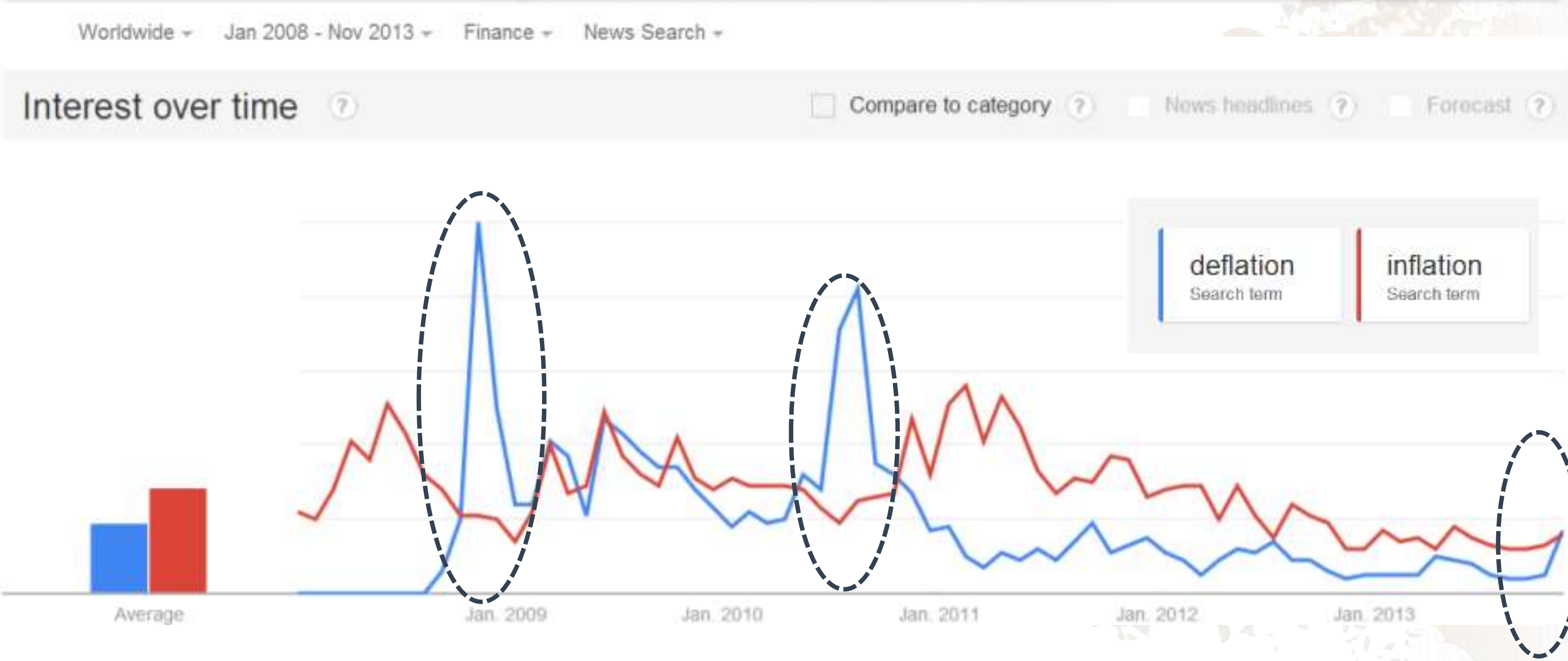
Deflation Fears Inch Up Again?

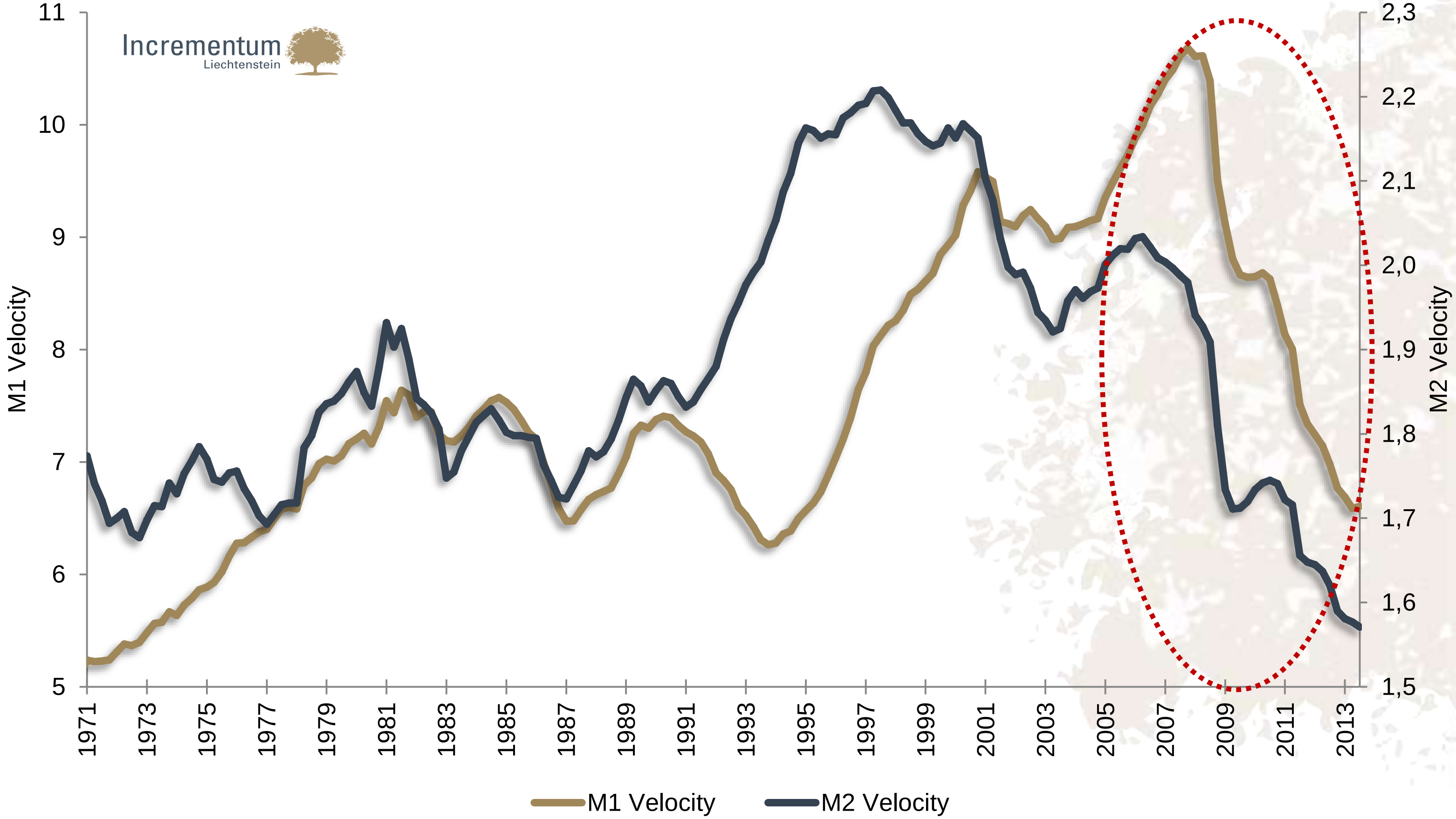
Google Search Terms for Financial News: „Inflation“ vs. „Deflation“



Note: The numbers on the graph reflect how many searches have been done for a particular term, relative to the total number of searches done on Google over time. They don't represent absolute search volume numbers, because the data is normalized.

Source: Google Trends, Incrementum AG

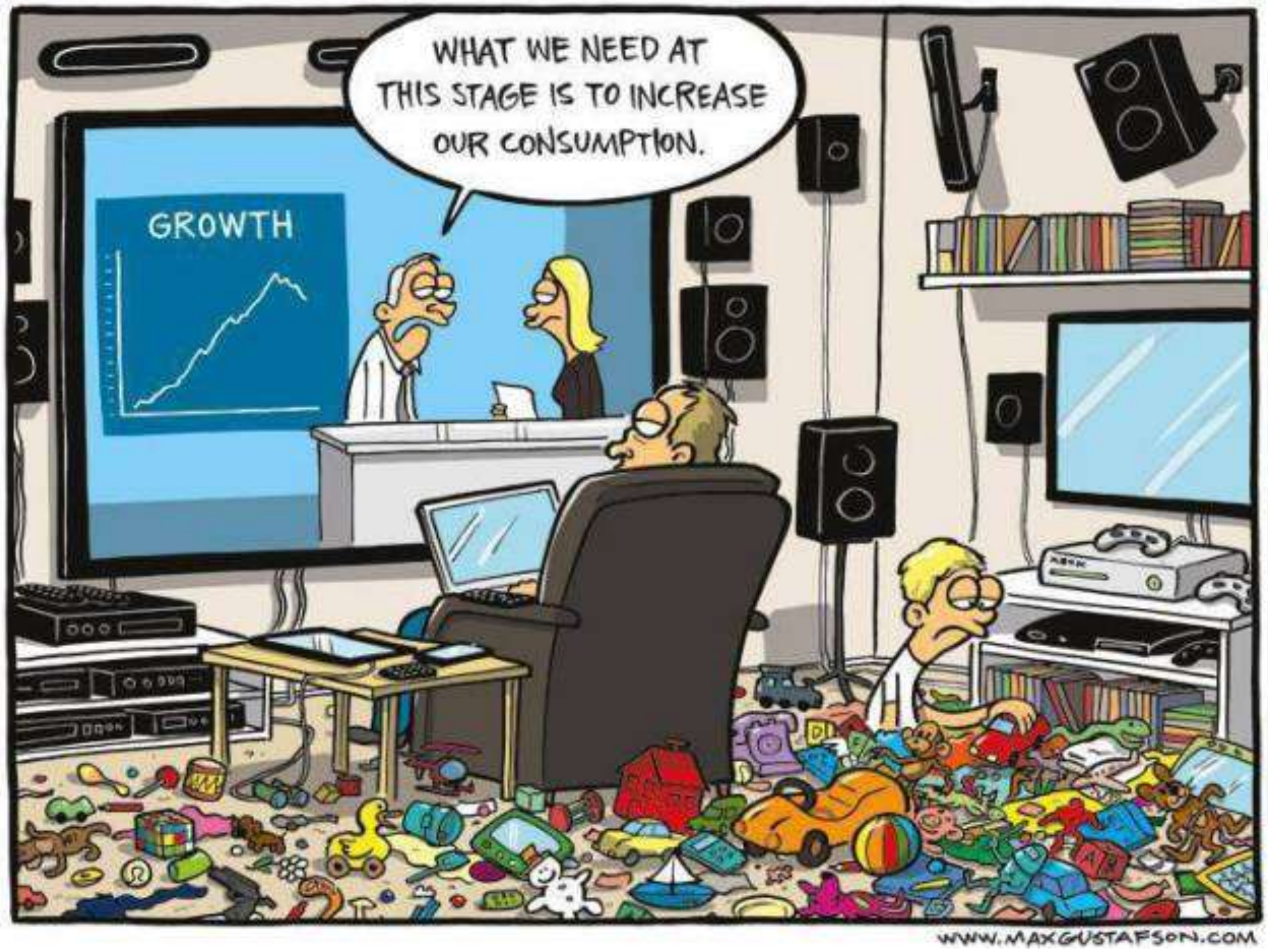
Demand To Hold Currency (Currently) High -> Velocity Low*
… Watch Out When This Dynamic Changes!



* According to the Austrian School the concept of quantifying an exact figure for velocity is questionable, due to several issues, partly regarding the accounting of the money supply and the calculation of GDP. However the demand to hold currency is currently extremely high i.e. velocity low!

Sources: Federal Reserve St. Louis, Incrementum AG

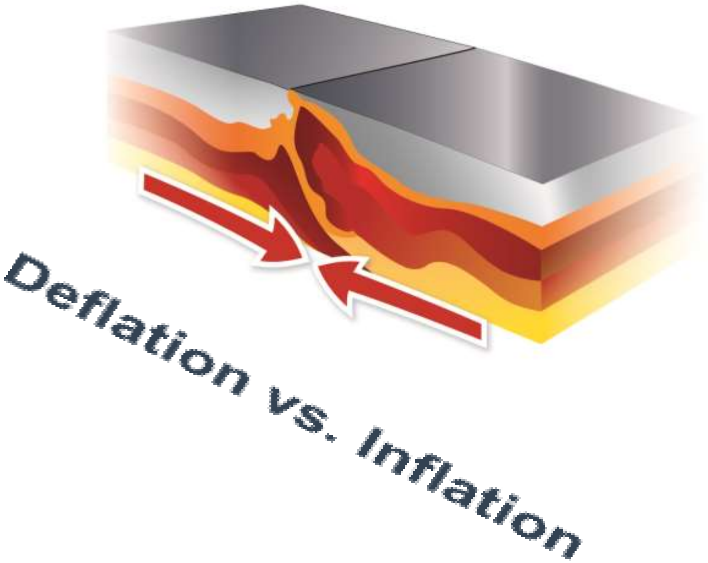
Deflation…In One Picture



Note: Perhaps we just should have bought more Christmas presents for ourselves? Have a look at this:
http://www.youtube.com/watch?v=TM8L7bdwVaA

II. Monetary Tectonics

II. Inflationary Forces

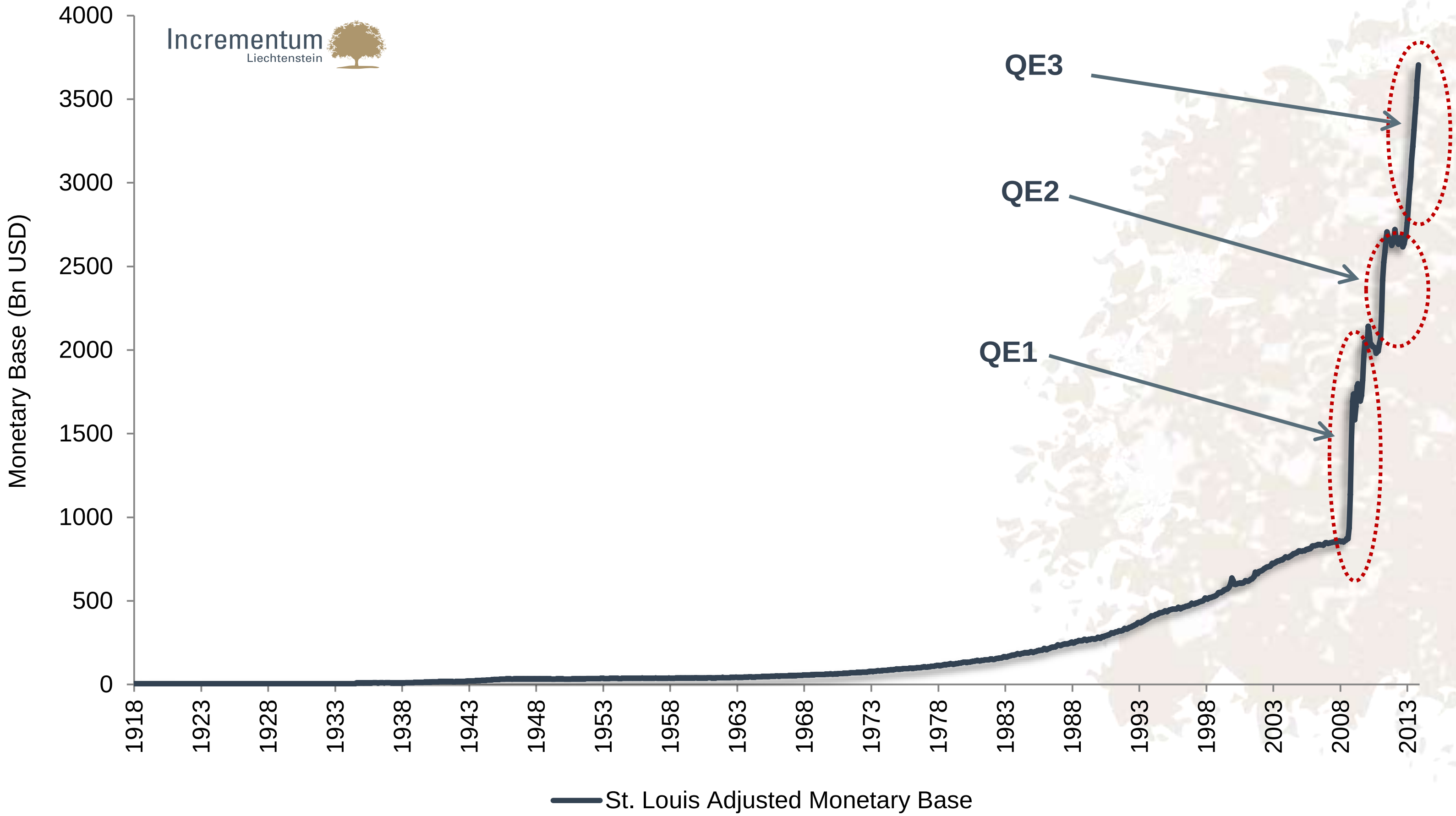


"The most important thing to remember is that inflation is not an act of God, that inflation is not a catastrophe of the elements or a disease that comes like the plague.

***Inflation is a policy**."*

Ludwig von Mises,
Economic Policy

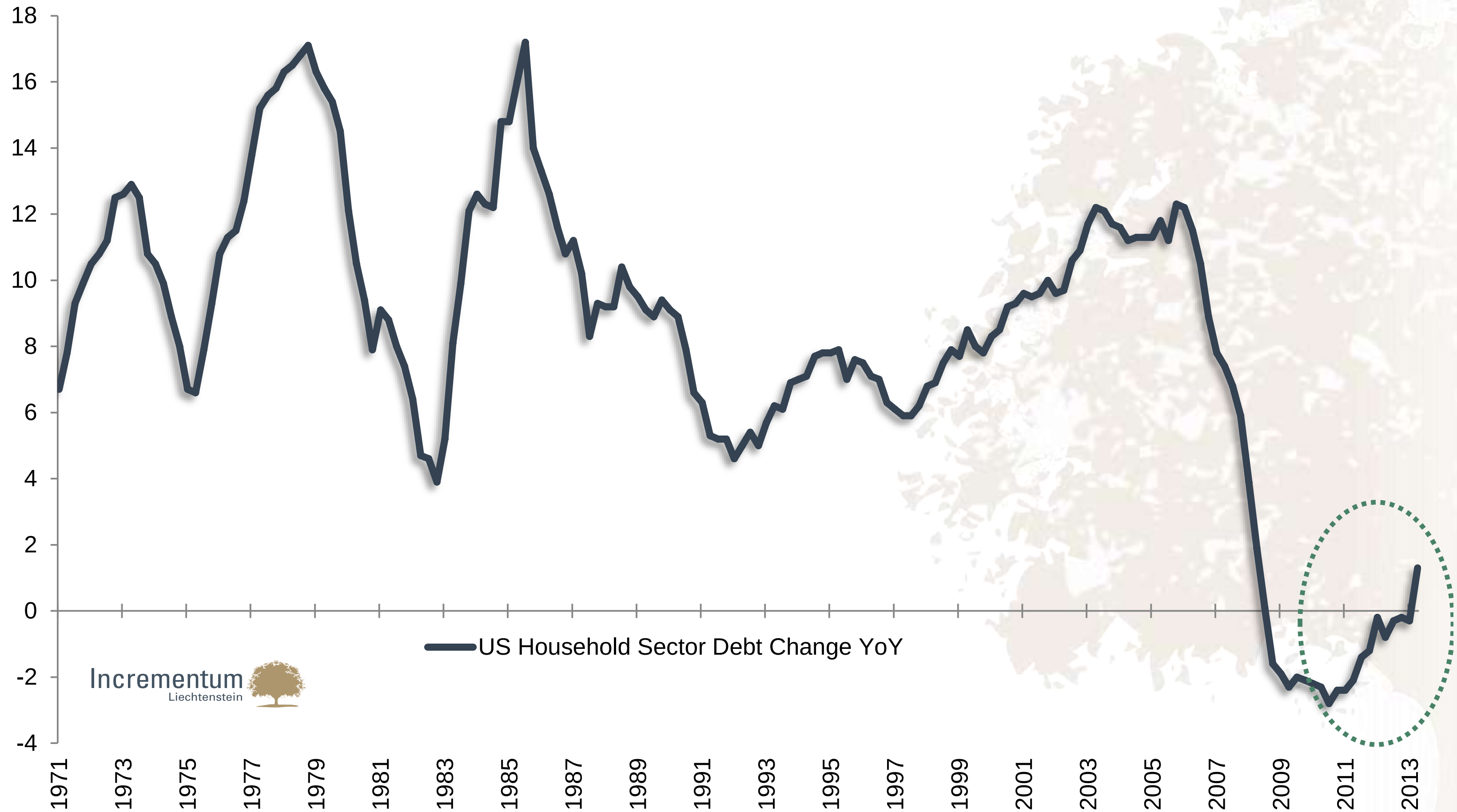
Monetary Base Since 1918



Sources: Federal Reserve St. Louis, Incrementum AG

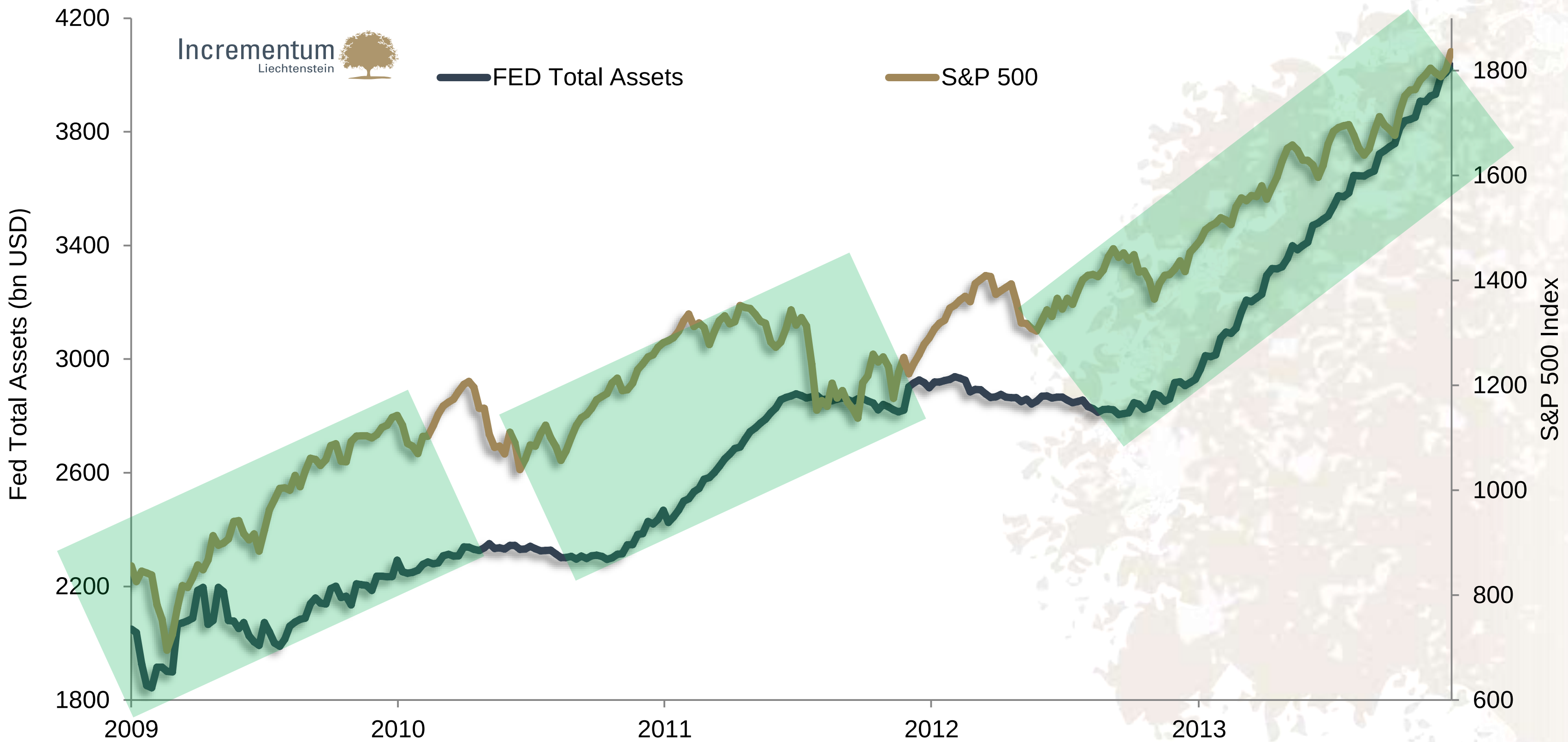
U.S. Households Stop Deleveraging

Households And Nonprofit Organizations: Credit Market Instruments yoy Change



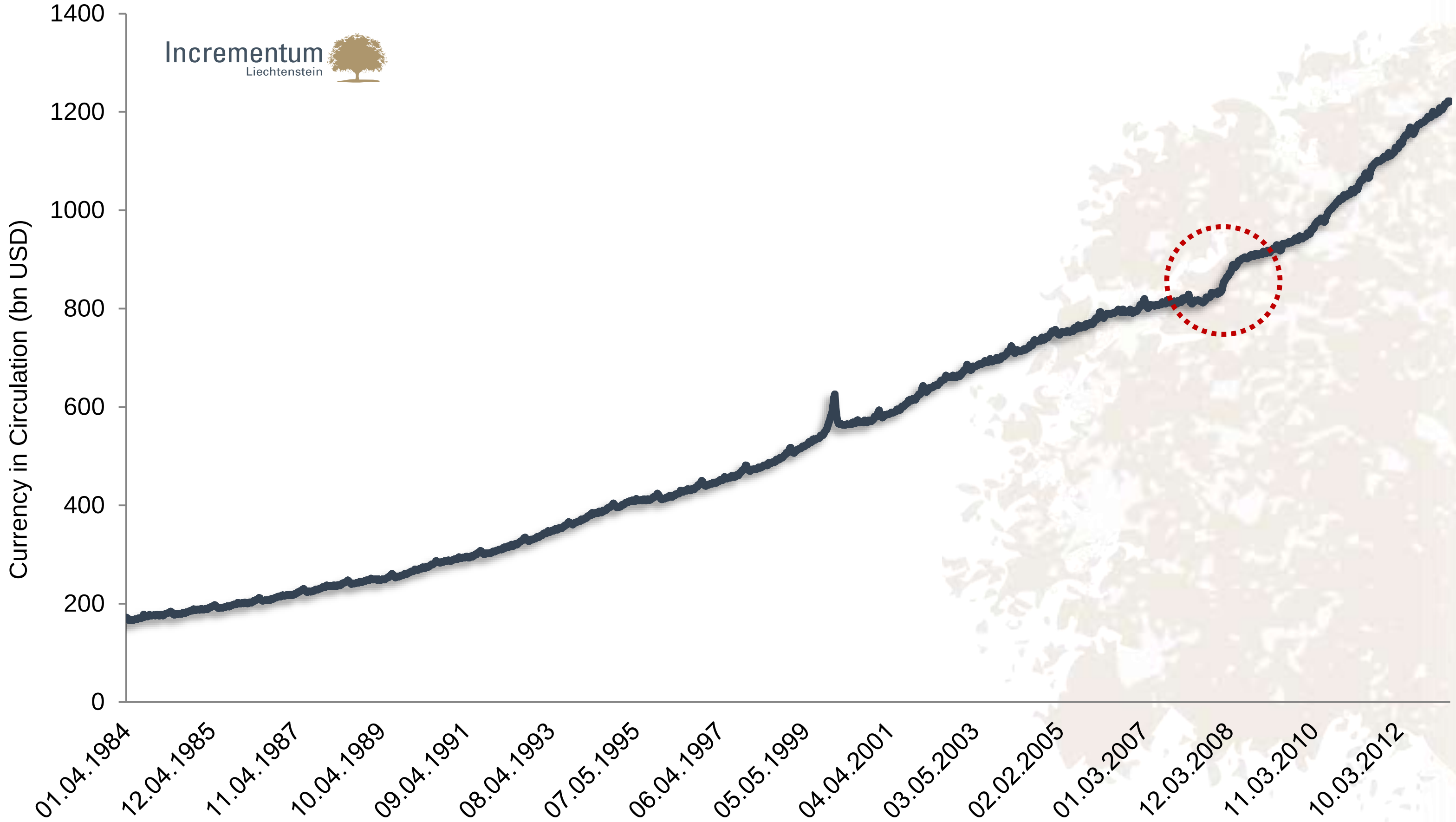
Sources: Federal Reserve St. Louis, Incrementum AG

QE And S&P 500
The Wealth Effect Is Working… At Least For The Wealthy



Sources: Federal Reserve St. Louis, Incrementum AG

Currency In Circulation



Sources: Federal Reserve St. Louis, Incrementum AG

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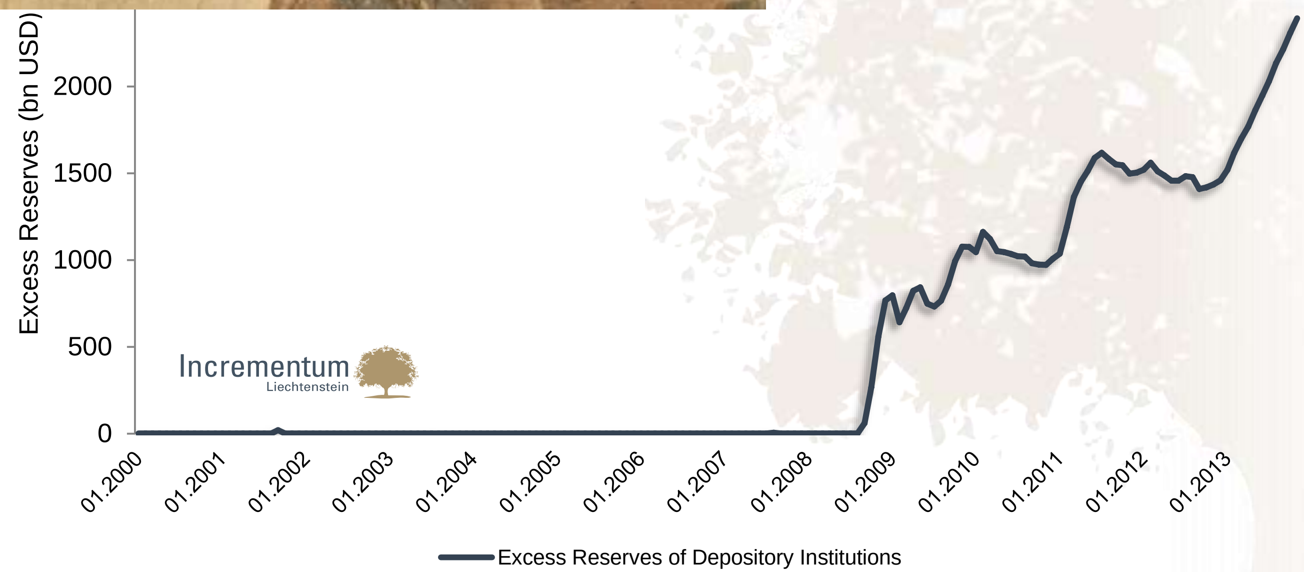
A Flood Of Reserves Has Been Dammed Up….
Watch Out For Rates Reduction On Reserves



Sources: Federal Reserve St. Louis, Incrementum AG

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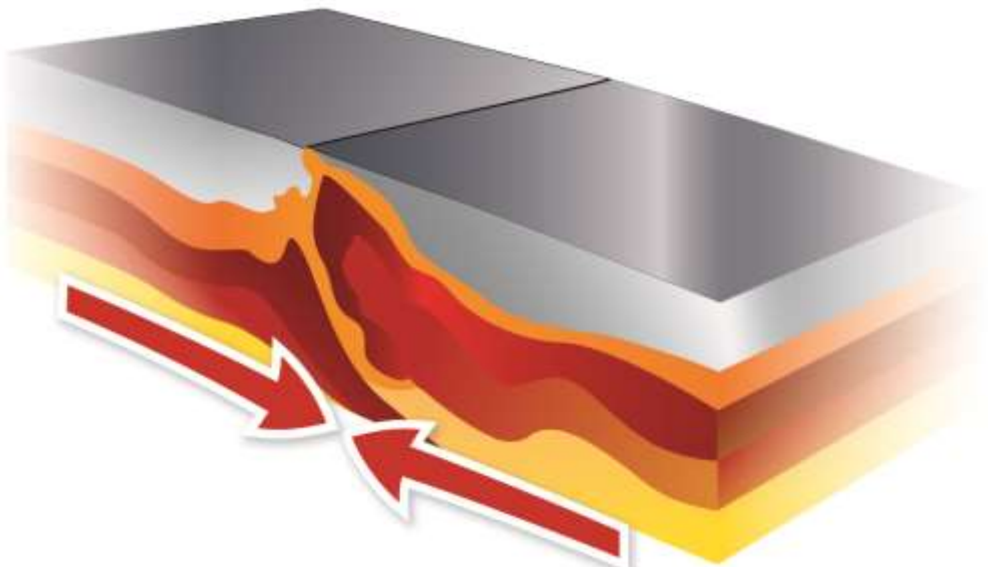
III. Outlook and Conclusions

Conclusion:
Inflation Or Deflation?

Monetary Tectonics - Pressure building up



- The **natural market adjustment process** of the current crisis would be highly deflationary.
- The reason for this lies within the **fractional reserve banking system**, as the largest part of money in circulation is created by credit within the commercial banking sector. The much smaller portion is created by central banks.
- As the financial sector in most parts of the world reversed its preceding credit expansion, overall **credit supply is reduced** significantly.
- This **(credit) deflation**, respectively deleveraging, is compensated **by very expansionary central bank policies**.

- The unintended consequences of these **monetary interventions** will result in increasing volatility, potentially further disinflationary /deflationary phases and eventually (highly) inflationary phases!

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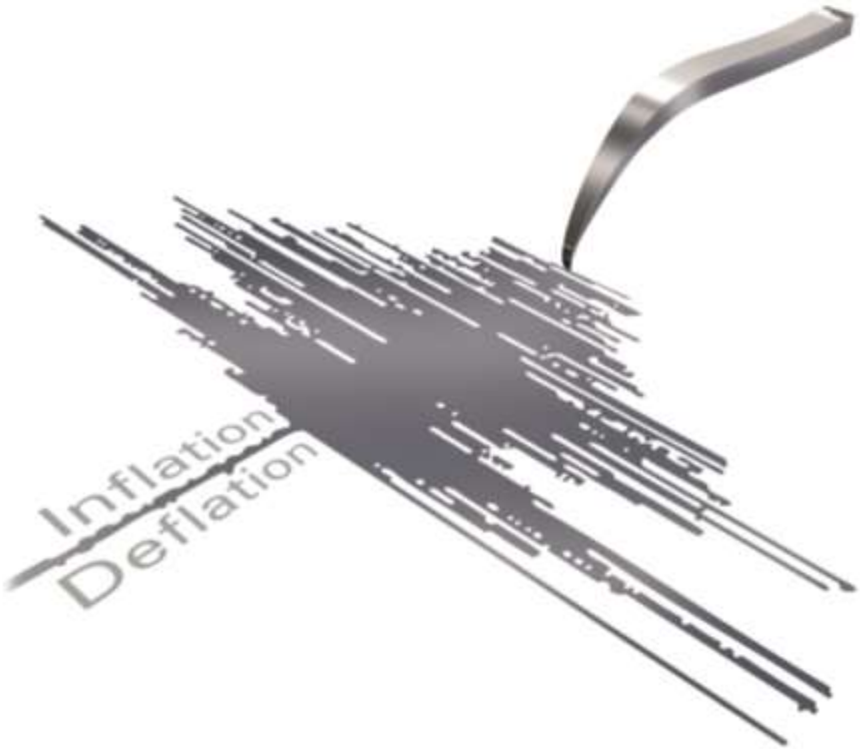
Our Approach:
Being Prepared For Inflation And Deflation!

Monetary Seismograph



- Price inflation is a monetary phenomenon. **Due to the fractional reserve banking system and the dynamics of 'monetary tectonics', inflationary and deflationary phases may alternate.**

- To measure how much monetary inflation is spilling into the markets, we utilize a number of market-based indicators, which are combined in a proprietary signal. This method of measurement can be compared to a *monetary seismograph*.

- The measurement results in the "**Incrementum-Inflation Signal**", indicating the current momentum of inflation.

- From our point of view, it is not the absolute level of inflation but rather the change of inflation that matters. **According to the respective signal we position ourselves for rising, neutral or falling inflation trends.**

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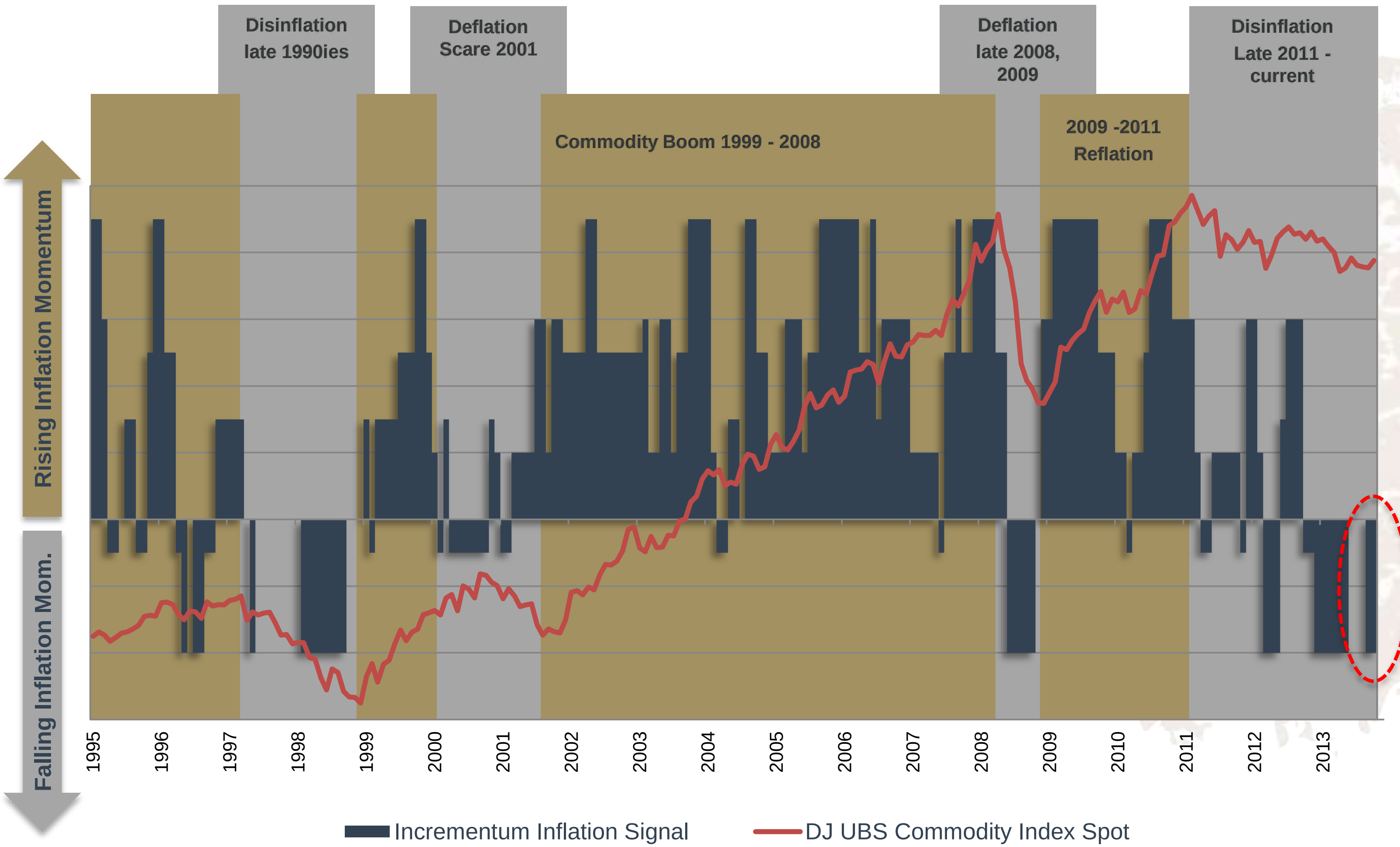
Monetary Seismograph:
Currently Still Signalling Falling Inflation



No green light yet, for inflation protecting asset classes.

However, the last days have brought us closer to a neutral signal!

Sources: Bloomberg, Incrementum AG

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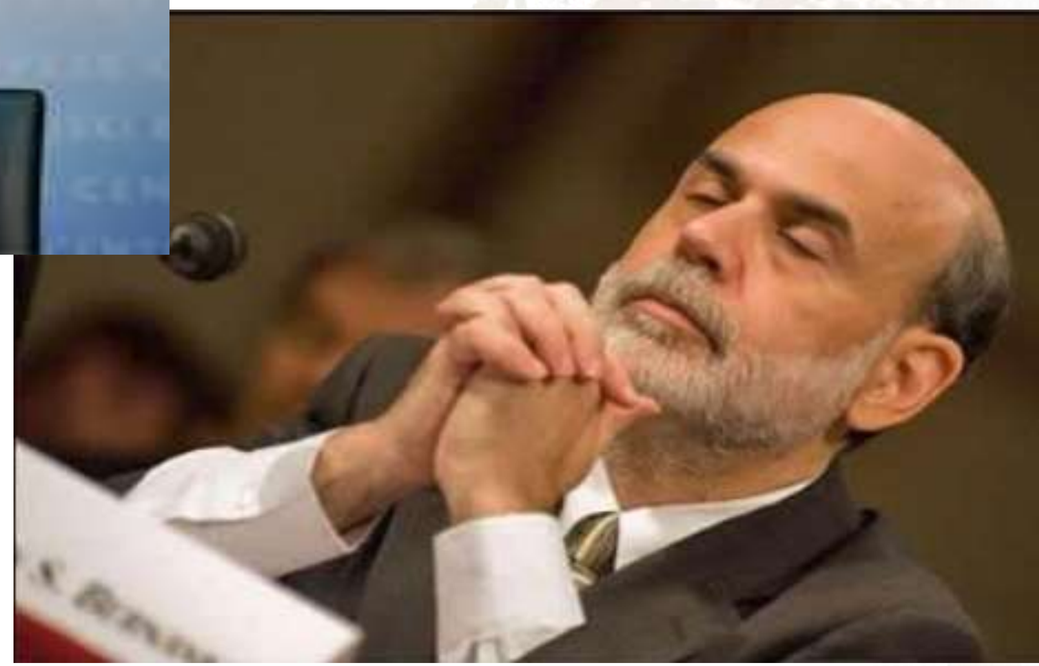
Outlook: Policy Strategy Nr. 1: Prayer
Dear Lord, please let Monetary Stimuli Work This Time



Outlook: Policy Strategy Nr. 2: Unconventional Measures
How To Achieve Higher Price Inflation?

- ✓ Cutting Interest Rates (2007-2008)
- ✓ Zero Interest Rate Policy (since 2008)
- ✓ Communications Policy (since 2008)
- ✓ QE I (2008-2010)
- ✓ QE II (2010-2011)
- ✓ Operation Twist (2011-2012)
- ✓ QE III (since 2012)

What More Is To Come?

- 'Strengthening guidance'
  - Change of the definition/threshold of unemployment
  - Change of the inflation threshold
- More direct Measures (e.g. Funding for Lending Program; Helicopter Money)
- More QE (if 'required')
- **Changing Interest Rates on Reserves**

We encourage interested readers to watch the Dec. 2013 FED Press Conference, especially relevant starting from min. 20:00
Click here: http://www.youtube.com/watch?v=J0Ma3twcFkY

Outlook: Policy Strategy Nr. 3: Despair
The Keynesian Endgame In One Picture*

* Haruhiko Kuroda, Governor of the Bank of Japan, elaborating on the projected development of the Japanese Currency Supply

"… but it is not that certain that in the long run deflation is more harmful than inflation. [...] Because moderate inflation is always pleasant as and when it is happening, whereas deflation is direct and painful. There is no need to take precaution against a situation whose unpleasant effects can be felt immediately and sharply; however, precaution is necessary for a measure that is immediately pleasant or helps alleviate problems but that entails a much more substantial damage which can only be felt later.

The difference is that in case of inflation, the pleasant surprise comes first and is followed by the reaction later, whereas in case of deflation the first effect on business activity is depressive."

Friedrich August von Hayek,
The Constitution of Liberty

IV. APPENDIX

About Us

- *Incrementum AG* is an owner-managed **asset management boutique** based in the Principality of Liechtenstein.

- Our Investment Principles are based on the **Austrian School of Economics.** We sincerely believe that the Austrian School of Economics provides us with the appropriate intellectual foundation especially in this highly demanding financial and economic environment.

- **Independence is a main Pillar of our Philosophy**

- Our **Core Competences** are :

    - *Austrian Investing*
    - Precious Metals
    - Absolute Return
    - Bottom Up Fundamental Research

- Incrementum AG's partners are highly qualified and have over 140 years of combined banking experience. Prior to joining the company, the partners held positions at UBS, Dresdner Bank, Lombard Odier, Darier Hentsch & Cie., Cantrade Private Bank, PBS Private Bank, Bank Leu, Pictet & Cie., Bank Sal. Oppenheim, Merrill Lynch, Raiffeisen Capital Management, Erste Group and Société Générale.

- For further information please visit: www.incrementum.li

Our Philosophy At Incrementum: The Austrian School Of Economics

- The Austrian School of Economics originated in Vienna in the late 19th century and provides an **alternative assessment of economic affairs**. Contrary to mainstream economics, this analysis produces a truly holistic view of financial markets, because it integrates the current state of the monetary regime.
- Followers of the Austrian School have been **extremely successful at anticipating major economic events** like the Great Depression, the stagflationary environment of the 1970s, the Dotcom Bubble and the Housing Bubble.
- The insights of this school of thought offer exceptional understanding and superior interpretation of the **interdependencies between money supply and price inflation**.
- This knowledge is valuable especially nowadays, as central bank policies massively distort and influence financial markets. **Grasping the consequences of the interplay between monetary inflation and deflation will be crucial for prudent investors.**
- Scholars of the Austrian School are convinced, that today's radical monetary and fiscal policy interventions will not lead to a self-sustained recovery of the economy, **but to further turmoil in financial markets.**

For further information about the Austrian School please visit our webpage:
http://www.incrementum.li/austrian-school-of-economics/an-introduction-to-the-austrian-school-of-economics

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