

Balance Sheet Repair Mode

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RGE 2011 Global Themes

Triple Trouble

➤ Old headwinds to the global recovery:

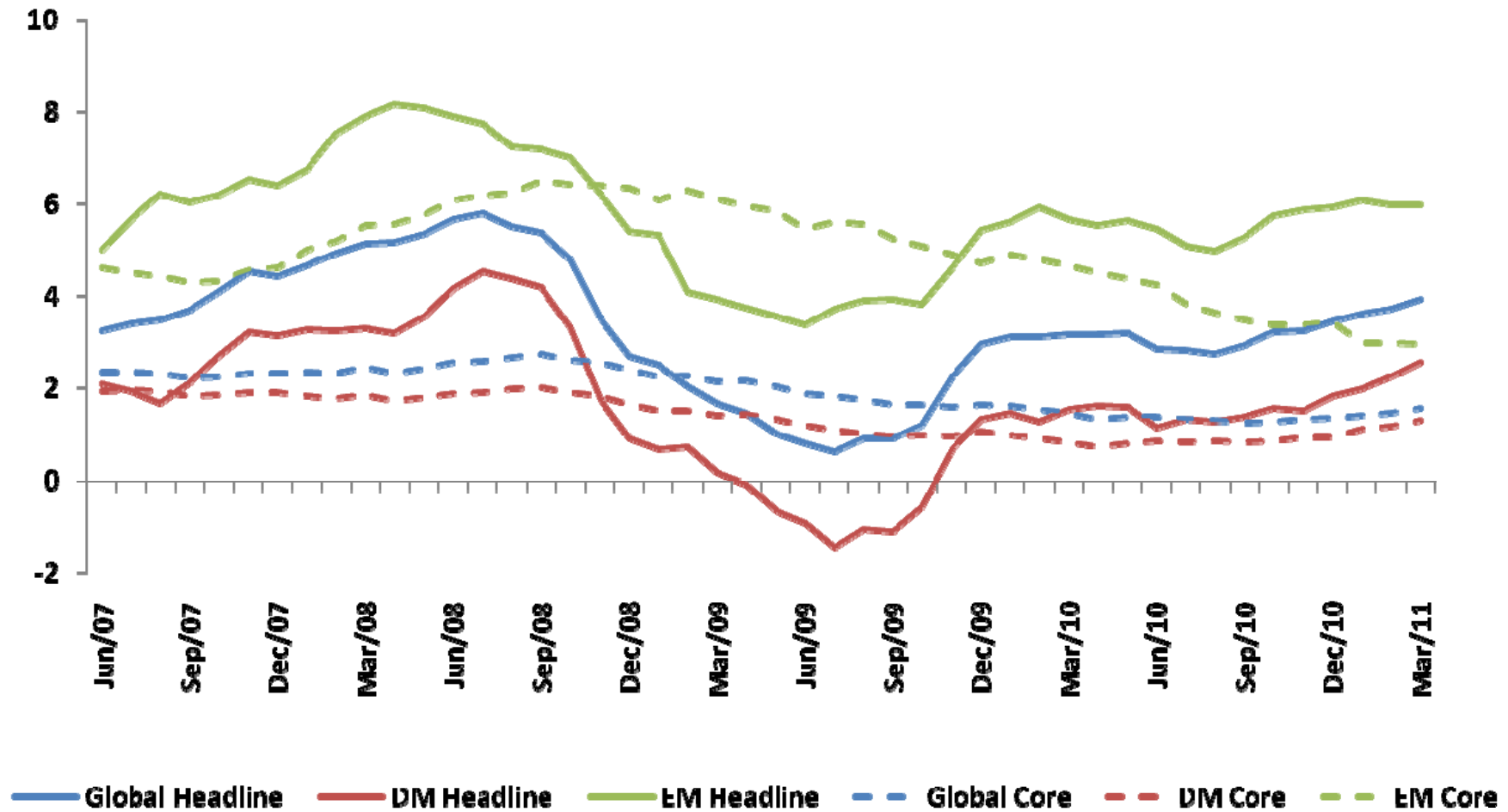
1. Navigating towards the end of the **Debt Supercycle given the Excessive debt/Balance sheet repair**, condemning DMs to a U-shaped, weak recovery;
2. **Triple, trenchant EZ fiscal/financial/structural crisis**, now becoming perennial; and
3. **EM inflation trends**, confirming that the EM V-shaped recovery is past its peak.

RGE 2011 Global Themes

- New headwinds to the global recovery:
 - **Middle East** political crisis, which portends protracted regional geo- and domestic political instability and hence a sustained elevation in the oil price fear premium;
 - **Policy tightening** , given the forthcoming monetary tightening across major DM economies—in order ECB, BoE, Fed (not before well into 2012), last and least BoJ; and fiscal cuts in the EZ, UK, U.S....;
 - **Japan's** triple-whammy—earthquake/tsunami/nuclear—reconstruction costs will not affect global activity much, but nuclear and supply-chain fallout will have global reach

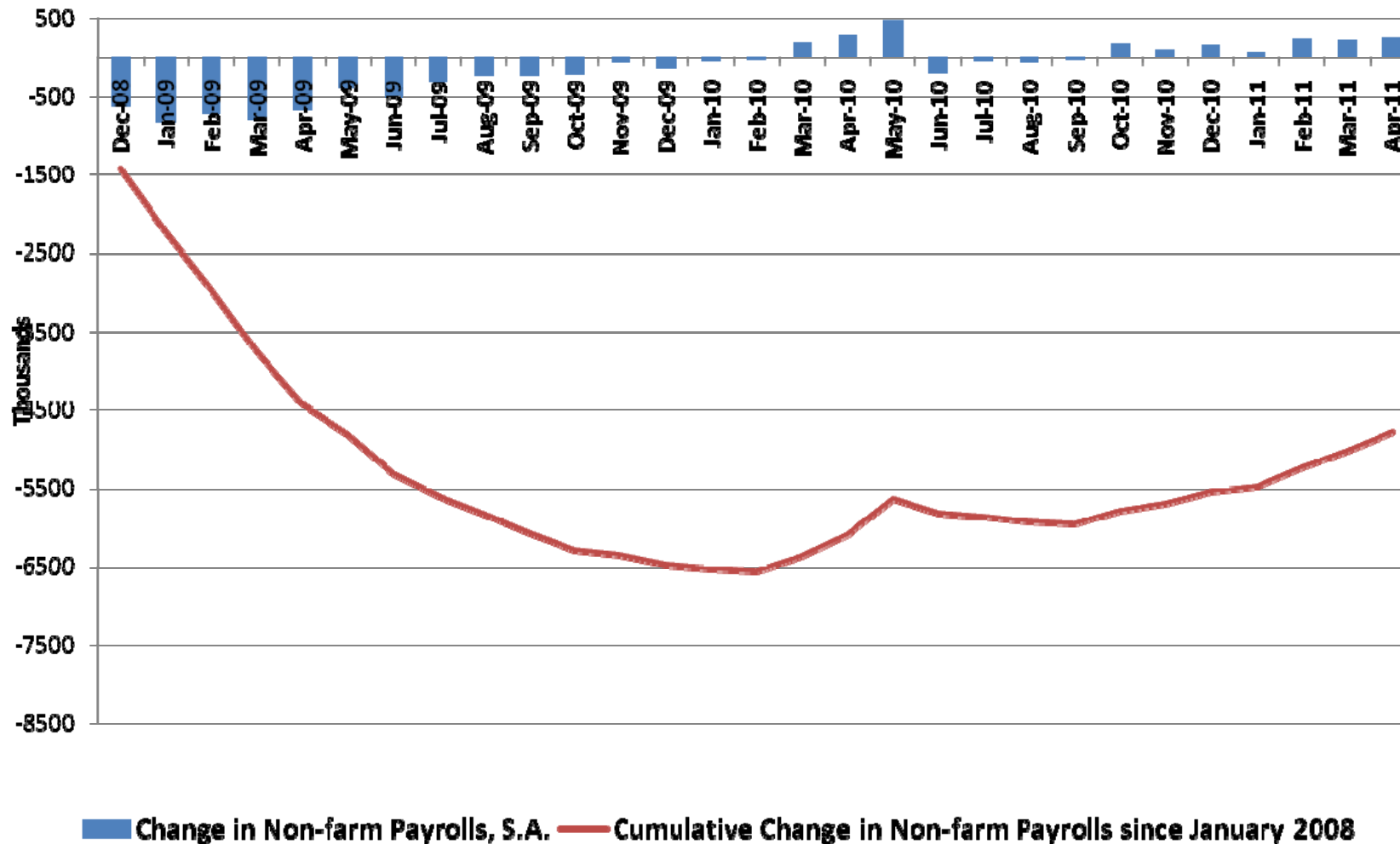
Inflation or Deflation?

Global inflation on the rise



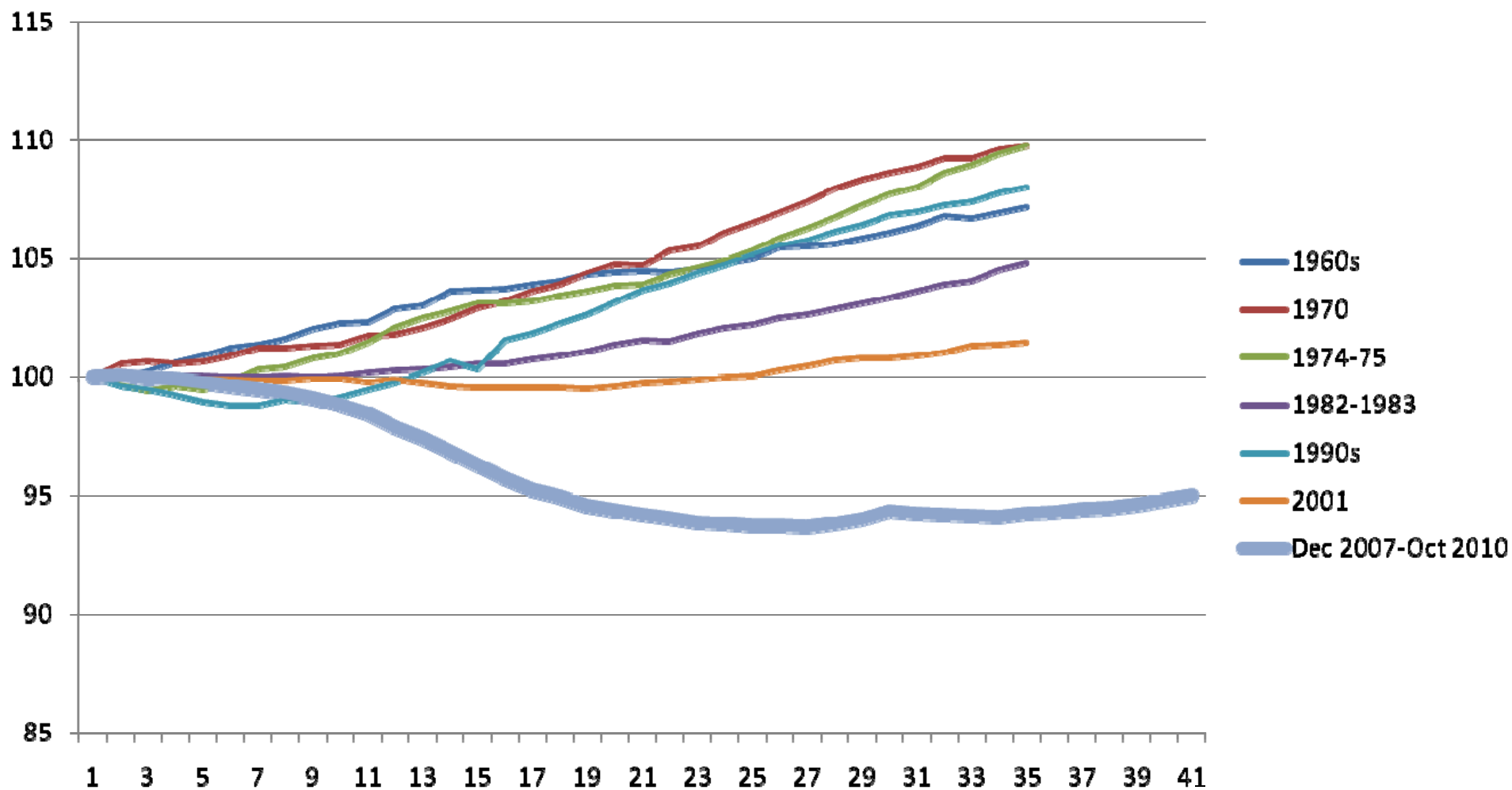
No Inflation in USA and Not Much in Other DM

Not exactly what you call a recovery...



Not Exactly What You Call a Recovery...

De/Dis-inflation is what's ahead for a while



Eurozone Political Economy Problem



EZ Scenario Analysis: Short Term Muddling Through

European Endgame Scenarios

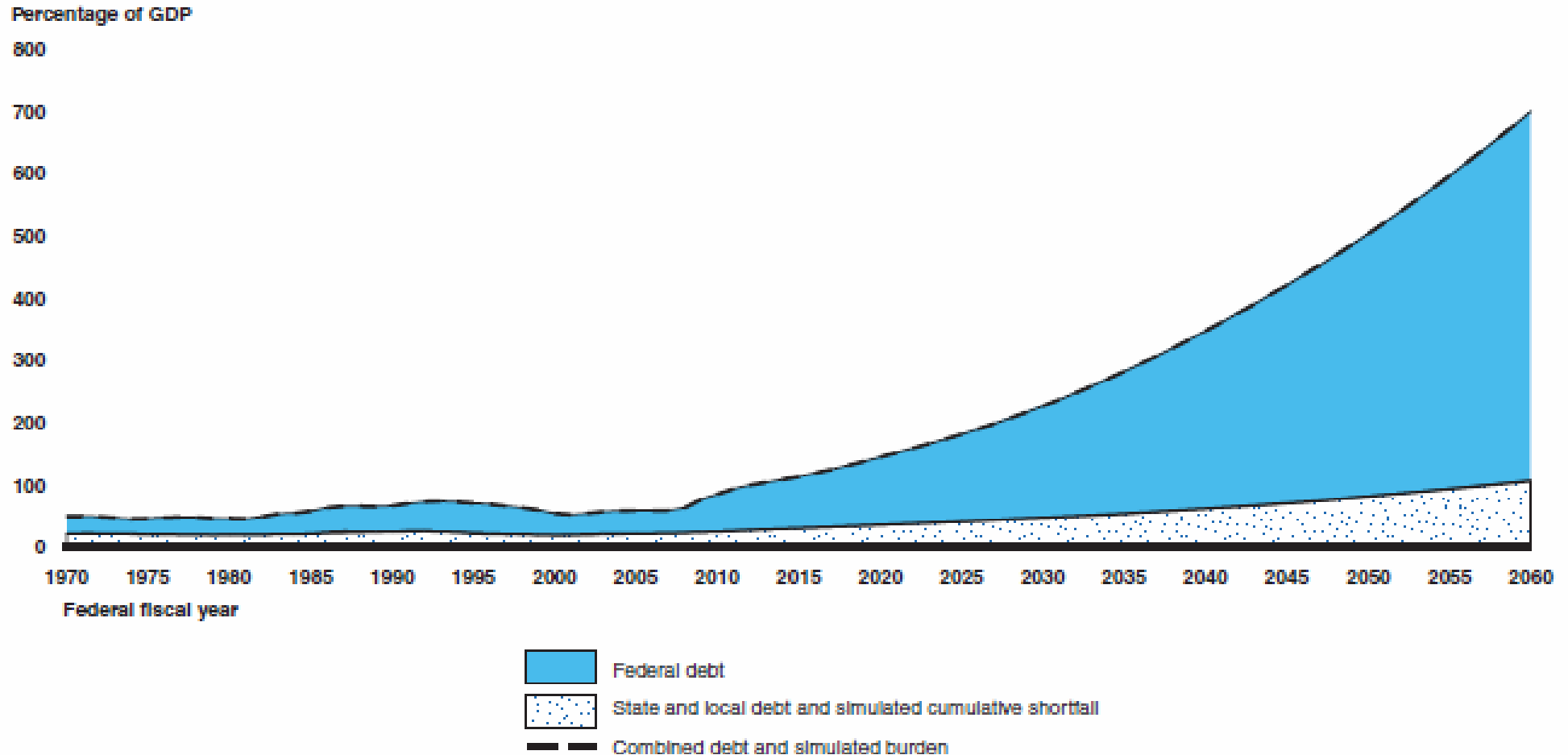
| Scenario Block | EZ Policy Response | RGE Diagnosis |
|--|---|--|
| Breakdown (with one or multiple exits) | Deflationary fiscal, structural adjustment | <ul style="list-style-type: none"> • EMU unsustainable - nationalism trumps regionalism |
| | | <ul style="list-style-type: none"> • Greece cannot adjust; rest of Periphery gives up too |
| | | <ul style="list-style-type: none"> • Liquidity / partial solvency / competitiveness problem |
| | | <ul style="list-style-type: none"> • EZ members cooperate to separate given political constraints to integration |
| Muddle Through | Financial engineering; fiscal / structural adjustment fudges | <ul style="list-style-type: none"> • Liquidity problem |
| | | <ul style="list-style-type: none"> • Liquidity / partial solvency / competitiveness problem |
| Deeper Integration | Structural reform; cyclical adjustment - intra-EZ rebalancing | <ul style="list-style-type: none"> • EU/EZ commitment overcomes national sovereignty constraints |
| | A more perfect Economic and Monetary Union with a partial fiscal union | <ul style="list-style-type: none"> • EU/EZ commitment so strong that member states cede sovereignty enough to deploy tax/spending to manage asymmetric shocks |

EZ Scenario Analysis: Short Term Muddling Through

| RGE Prognosis | | | RGE Probability | | |
|--|---|--|-----------------|----------------|-------------------|
| Macro Factors | Denouement | Market Conditions | Scenario | By end of 2012 | Between 2013-2020 |
| <ul style="list-style-type: none"> Politically unsustainable; economically destructive | <ul style="list-style-type: none"> Germany/North exit, sparking run on Periphery | <ul style="list-style-type: none"> Escalating risks precipitate capital flight, financial crisis | 1 | 2.0% | 3.0% |
| <ul style="list-style-type: none"> Intra-EZ divergences persist, escalate as demand is weak | <ul style="list-style-type: none"> Greece defaults/exits disorderly; contagion, Periphery domino effect | <ul style="list-style-type: none"> Steepening Periphery government, financials long-term curves point to refinancing crisis | 2 | 12.0% | 20% |
| <ul style="list-style-type: none"> Greece proves insolvent and unable to stay in the EZ; but rest of Periphery adjusts successfully | <ul style="list-style-type: none"> Greece restructures/exits orderly; Periphery ring-fenced; EZ survives. Threat of exit constrains policy, imbalances | <ul style="list-style-type: none"> High volatility before exit subsides after, but national risk premia divergences are both structural and cyclical | 3 | 20% | 20% |
| <ul style="list-style-type: none"> Growth prospects lowered; EZ faces weak domestic & global demand | <ul style="list-style-type: none"> Orderly separation, as with EMU creation; high EU/IMF funding to avoid crisis | <ul style="list-style-type: none"> High volatility, diverging risk premia amid huge uncertainty about success | 4 | 1.0% | 2.0% |
| Breakdown Probability | | | | 35% | 45% |
| <ul style="list-style-type: none"> Bank stress tests fudged; fiscal/structural measures accepted as ESM/EFSF, easy money/global recovery restore EZ stability | <ul style="list-style-type: none"> Current crisis contained but EZ viability / governance & national weaknesses not fully addressed, may resurface | <ul style="list-style-type: none"> Volatility remains high; moral hazard remains the main anchor for divergent national risk premia | 5 | 10% | 5.0% |
| <ul style="list-style-type: none"> Greece proves insolvent; rest of Periphery adjusts successfully | <ul style="list-style-type: none"> Current crisis contained but EZ viability / governance & national weaknesses not fully addressed, may resurface | <ul style="list-style-type: none"> Volatility remains high; moral hazard remains the main anchor for divergent national risk premia | 6 | 30% | 10% |
| Muddle Through Probability | | | | 40% | 15% |
| <ul style="list-style-type: none"> Insolvency regime mitigates moral hazard of a permanent ESM/EMF type BoP/fiscal financing facility | <ul style="list-style-type: none"> Economic & Monetary Union with harmonized economic structure and strong, credible fiscal rules | <ul style="list-style-type: none"> Volatility subsides; national risk premia converge once again, but less than before, and with cyclical variability | 7 | 20% | 25.0% |
| <ul style="list-style-type: none"> Gradual, thorough EZ governance, national compliance, structural reform, with popular legitimacy via Treaty change | <ul style="list-style-type: none"> Structural / fiscal convergence enhanced by partial fiscal union so that the EZ becomes fully credible and viable | <ul style="list-style-type: none"> Volatility subsides; national risk premia converge significantly and permanently | 8 | 5% | 15.0% |
| Deeper Integration Probability | | | | 25% | 40% |
| Cumulative Probability | | | | 100% | 100% |

U.S.: On the Way to Greece

Federal Debt and State and Local Debt and Simulated Cumulative Shortfalls as a Percentage of GDP



Source: United States Government Accountability Office
Available at: <http://www.gao.gov/new.items/d10899.pdf>

Four Ways to Shrink Your Debt...

- Grow your way out of it
- Inflate your way out of it
- Fiscal adjustment (austerity)
- Restructuring (reprofiling, rescheduling)

Irrationally Exuberant or Fundamentally Viable?

The Fundamentals (negative)

- **Demand destruction** as seen already in gasoline in US with average price approaching \$4/gal, even with crude prices falling, as crack spreads have increased and tornados/flooding disrupt US refining.
- **End of QEII** in June.
- An overriding belief (myopic) that **OBL's death** could reduce oil and other commodity supply risks, and hopeful that Gaddafi is next.
- Concerns of a **lack of physical supply in gold** funds to back ETFs
- **China's** 5th reserve requirement hike, and slowing of commodity imports as noted last month.
- **Regulatory** concerns: 17 US senators urge fed regulator crackdown on speculators & trade limits.
- Signals point to **EM inflation slowing** H2 2011 while EM food prices are stabilizing.
- **Baltic Dry Index** continues to suffer with oversupply of ships and falling demand.
- **US crude inventory builds** while BP expects to resume drilling in Gulf of Mexico H2

Irrationally Exuberant or Fundamentally Viable?

The Fundamentals (positive)

- Continued **EM purchasing** of commodities, with some nations showing no signs of slowing
- Continued **MENA troubles** still persist and **Pakistan** becoming more problematic.
- Higher **fiscal breakevens**
- **Nationalization** – capital controls and subsidies keep international prices (artificially) high.
- Greater attention paid to **environmental** risks (fracking now a big focus).
- Continued interest in markets to hold **hard assets** as hedge against fiat currency and inflation, **USD's weakness** supports higher prices as do negative real **interest rates**.
- **Broken supply chains** from Japan's disaster, and future fiscal stimulus support market.
- **Marginal cost of production** climbs with higher cost of labor and other inputs (energy), scarcer resources and reduction of land and water sources.

Irrationally Exuberant or Fundamentally Viable?

RGEDATAVIEW

| Commodity | Unit Price | Average 2010 | Average 2011 (thru Apr 8) | Average 2011 (forecast) | Average 2012 (forecast) |
|----------------------------|------------|--------------|------------------------------|----------------------------|----------------------------|
| Natural Gas U.S. | \$/MMBtu | 4.38 | 4.20 | 4.30 | 4.40 |
| Natural Gas UK | GBP/therm | 41.22 | 57.47 | 65.00 | 70.00 |
| WTI | USD/bbl | 79.61 | 95.89 | 98.00 | 105.00 |
| Brent | USD/bbl | 80.33 | 105.75 | 110.00 | 115.00 |
| Dubai Fateh | USD/bbl | 78.52 | 102.13 | 105.00 | 110.00 |
| Heating Oil | USD/gal | 214.60 | 285.48 | 310.00 | 320.00 |
| Gasoline | USD/gal | 212.43 | 272.62 | 305.00 | 315.00 |
| Ethanol | USD/gal | 1.79 | 2.39 | 2.50 | 2.70 |
| Diesel | USD/gal | 217.71 | 288.65 | 315.00 | 325.00 |
| Coal Central Appalachia | USD/T | 61.61 | 73.78 | 80.00 | 85.00 |
| Coal New Castle | USD/T | 98.53 | 123.49 | 128.00 | 135.00 |
| Uranium | USD/lb | 46.36 | 65.95 | 65.00 | 75.00 |

G10 FX

RGEDATAVIEW

| | Current 18/04/2011 | Jun '11 | Sep '11 | Dec '11 | Dec '12 | Return 2011 | Return 2012 |
|--------------------|-----------------------|---------|---------|---------|---------|----------------|----------------|
| USD-Crosses | | | | | | | |
| EURUSD | 1.42 | 1.40 | 1.38 | 1.36 | 1.30 | 1.6% | -4.4% |
| USDCAD | 0.97 | 0.99 | 0.98 | 0.97 | 0.98 | -2.8% | 1.0% |
| GBPUSD | 1.63 | 1.63 | 1.64 | 1.58 | 1.53 | 1.3% | -3.3% |
| USDCHF | 0.90 | 0.89 | 0.89 | 0.90 | 0.98 | -4.1% | 8.9% |
| USDSEK | 6.31 | 6.29 | 6.30 | 6.32 | 6.54 | -5.8% | 3.4% |
| USDNOK | 5.49 | 5.36 | 5.51 | 5.59 | 5.77 | -4.0% | 3.2% |
| USDJPY | 82.4 | 85 | 87 | 90 | 94 | 10.9% | 4.4% |
| AUDUSD | 1.05 | 0.97 | 0.99 | 1.00 | 1.02 | -2.3% | 2.0% |
| NZDUSD | 0.79 | 0.75 | 0.76 | 0.78 | 0.80 | 0.0% | 2.6% |
| DXY | 75.6 | 75.6 | 77.3 | 79.8 | 83.3 | 0.9% | 4.4% |

Equities

- We continue to be **overweight emerging markets** (EMs) as easy money keeps a lid on developed market (DM) yields and the outlook for growth remains much rosier than in DM equities.
- We remain **overweight the U.S. versus Europe**.
- **Canada and Norway** continue to offer good value per risk unit. However, we recommend reducing **LatAm and DM energy and materials to neutral**, based on valuation.
- Unresolved issues in Europe continue to justify our **overweight in Switzerland**; however, while our underweight in Ireland and Portugal seems justified, we recommend reducing the size of the bet on **Greece, Italy and Spain to neutral** as pricing in these countries reflects our fundamental views. We continue to **underweight in financials**.
- **S&P 500 target 1350 to 1400 (70% probability)**; Best case 1500 (20% probability); Worst Case 1200 (10% probability)

Some Themes for the Decade

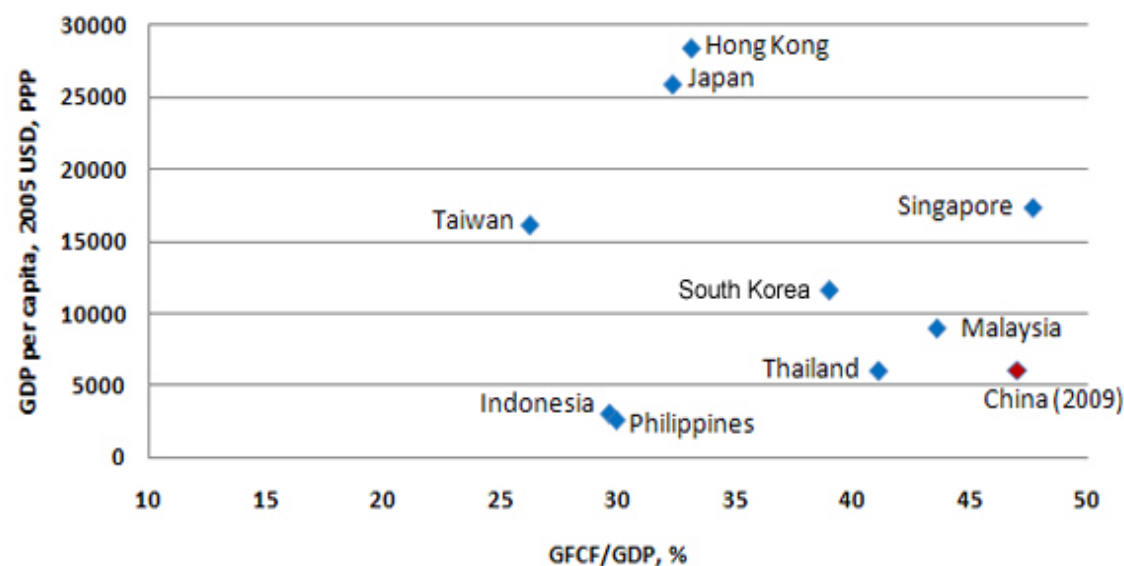
- CNY undervaluation (nominal, inflation, no change, crisis & DE-val?)
- DM debt levels' trajectory. Private (household, business) and Public.
- Imbalances:
 - FLOW: EM CA surpluses, U.S. and other deficits.
 - STOCK: NIIP deficits (US, Eurozone,...); Surpluses (China, Japan...)
- Demographic and Pension time bombs (U.S., W Europe, Japan, China, Russia, ...)
- Trade agreements, cartels, coming shortages of key commodities
- Japan's ultimate resolution to debt and deflation
- Infrastructure -- what are LT needs for EM, DM? Where will funds come from
- Energy, environment, climate change; regulations
- Political change: freedom in China, NKorea, Iran, Arab world, Venezuela? Centralization in more EMs? Arab-Israel: standoff, resolution, crisis?

Precedents Suggest Chinese Slowdown

| Country | Peak Year | Growth Before | Growth After |
|-------------|-----------|---------------|--------------|
| Hong Kong | 1997 | 4.9 | 1.3 |
| Indonesia | 1996 | 7.1 | 0.4 |
| Malaysia | 1995 | 9.3 | 5.0 |
| Thailand | 1995 | 9.0 | 0.6 |
| South Korea | 1991 | 9.7 | 7.3 |
| Japan | 1990 | 5.1 | 1.5 |
| Singapore | 1984 | 8.7 | 5.8 |
| Philippines | 1983 | 4.6 | 0.0 |

- Where I/GDP has peaked, growth has slowed
- China is near this structural turning point
- Current account surplus and financial repression will prevent liquidity crisis but not domestic banking problems

RGEDATAVIEW



Source: National Statistics, Gapminder, RGE.
 Note: average growth rates 5 years before/after

Sticking with Investment-Led Growth... Not Much Rebalancing Yet

- Once again, local leaders are not on board with Beijing's rebalancing efforts in 5YP
- Local officials oversee 90% of China's fixed-asset investment and control 80% of government spending
- No country can be productive enough to take 50% of GDP and reinvest it into new capital stock without eventually facing massive overcapacity and a staggering nonperforming loan problem
- According to the PBoC's total financing metric, it took 1.2 RMB of credit to generate 1 RMB in nominal GDP in 2006-07. In 2009, this ratio increased to 5.3
- Assuming most of the bank loans were bullet loans with 3-5 year maturities, we expect 2012-15 to be especially fraught for the banking sector

...Only Increases the Eventual Cost of a Bust

- **Dollar pegging / dirty floating leads to unacceptably high inflation**
- China then follows the script and **loosens the currency peg (end of BWII) as it tightens monetary policy** (the storied trajectory of other major net creditors with fixed exchange rates...)
- **Bubble gives way to bust**, as tightening deflates assets and FX strength imports deflation
- **Deflation is exacerbated by “overcapacity”** arising from over-investment. (However, the RoW initially experiences “cost-push” inflation and imported inflation pressures as a result.)
- The **domestic deflation that follows the inflation aggravates the NPL problem** beyond the capacity of the state to absorb it.
- Does the capacity of the state get buttressed or weakened by international reserves (claims on a credible or bankrupt United States?)
- This is not a standard EM crisis, but much **more like the Japanese crisis**...domestic banking crisis.

Thinking About Which Side is Up...

Growth drivers

1. Demographics
2. Human capital endowments & development/productivity
3. Sectoral mix
4. Availability of enabling infrastructure
5. Effect of fiscal burdens
6. Enabling government environment

Targets models

- A** The prosperous shrinking (and aging) developed nation
- B** The diversified resource-based economy
- C** Innovation-driven nation-state
Populace, high-growth
- D** developing economy

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