



"Risico, return en beleggingsstrategie in tijden van beperkte groei"

Frank Maet, Senior Macro Econoom
Belfius Bank

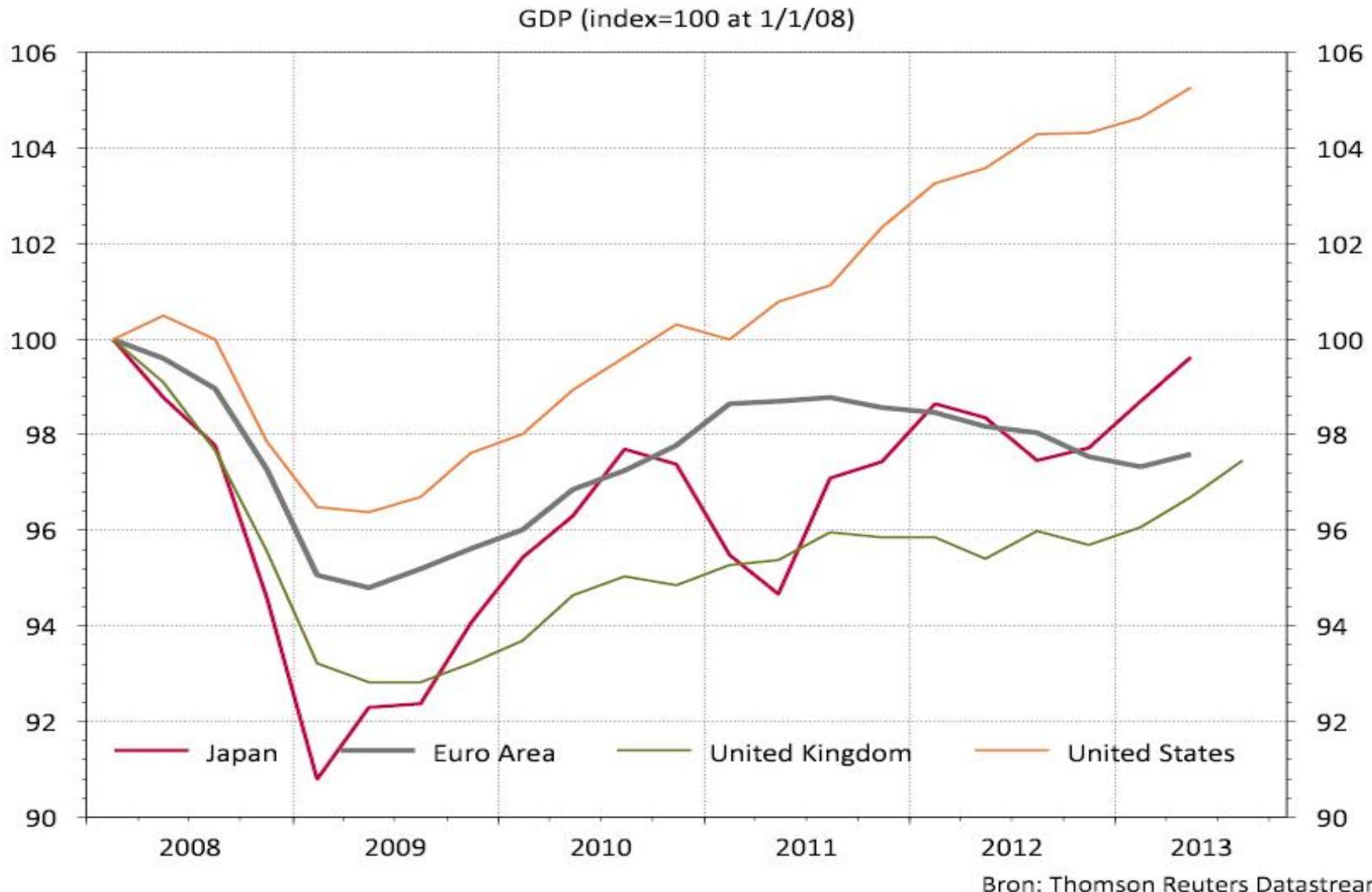
Financieel Forum Gent
14 november 2013

Macro-economie: actuele thema's.

-  V.S: minder consument, meer producent.
-  B.R.I.C.: op weg naar een meer duurzame groei.
-  Eurozone: einde van de recessie
-  Rentemarkten: de bodem voorbij.
-  Vooruitzichten.

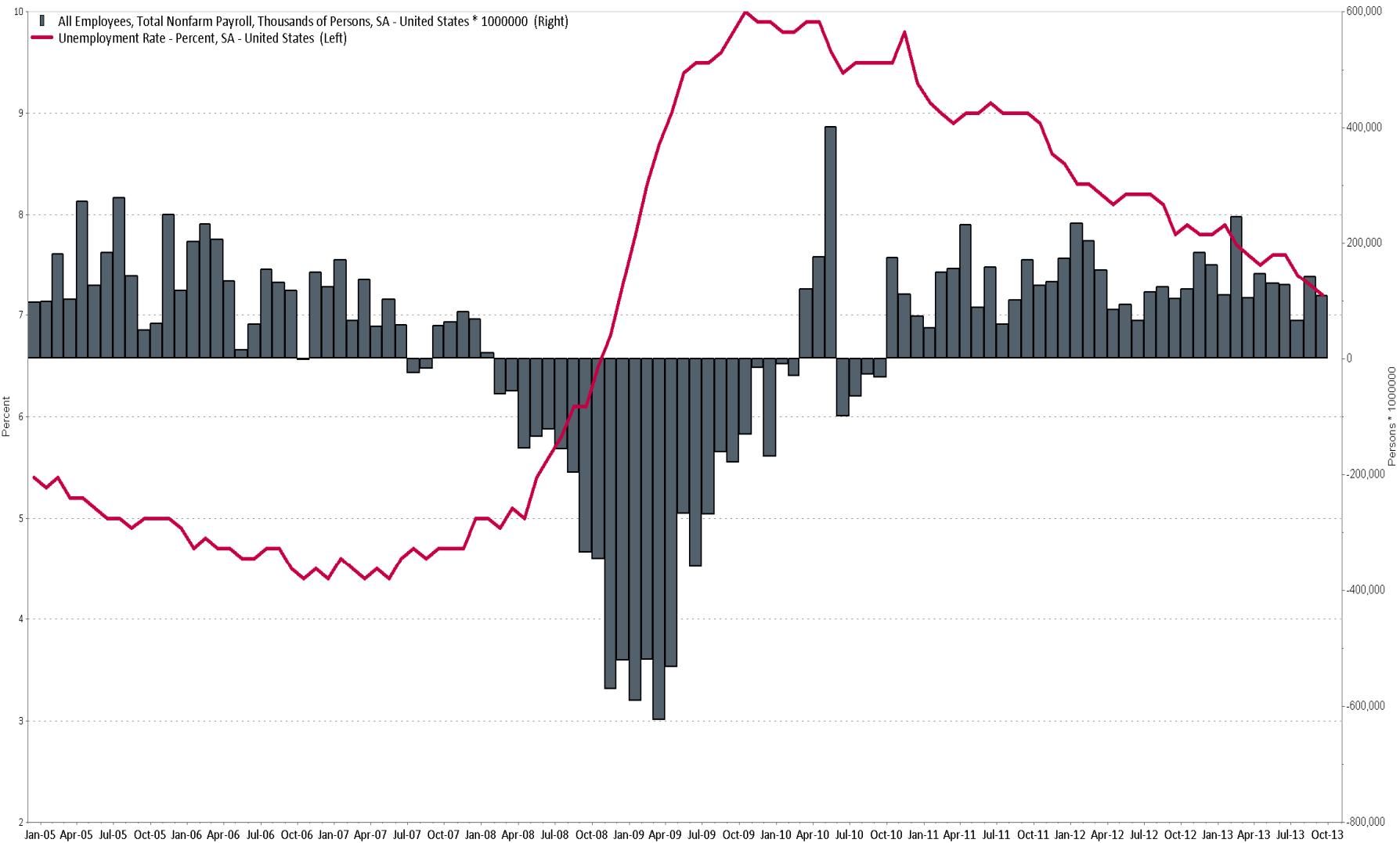
Macro-economie: actuele thema's.

Globaal: ongelijk herstel post-Lehmancrisis.



Macro-economie: actuele thema's.

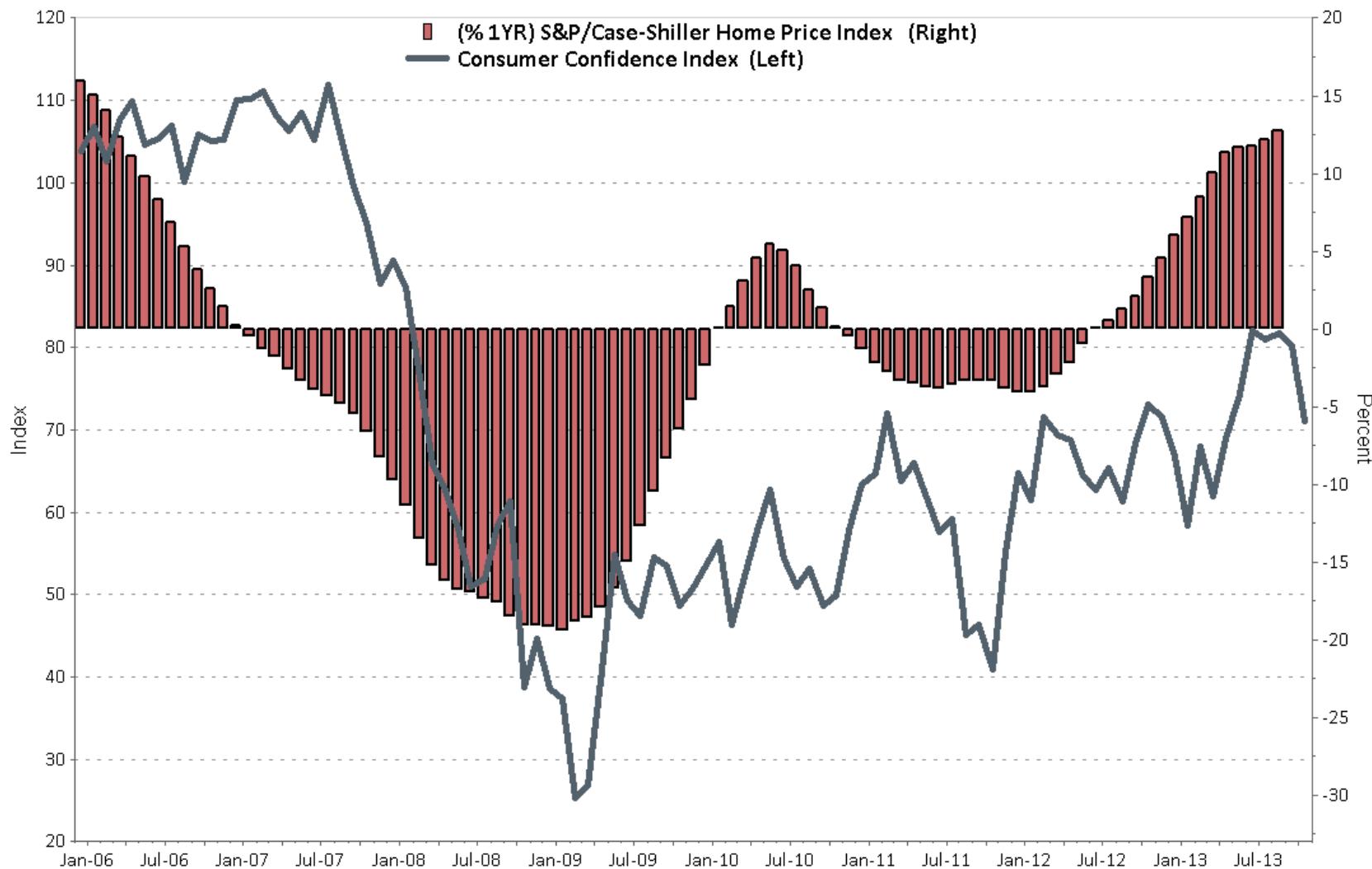
V.S.: de daling van de werkloosheidsgraad naar 7,2% ondersteunt het sentiment.



Bron : FACTSET

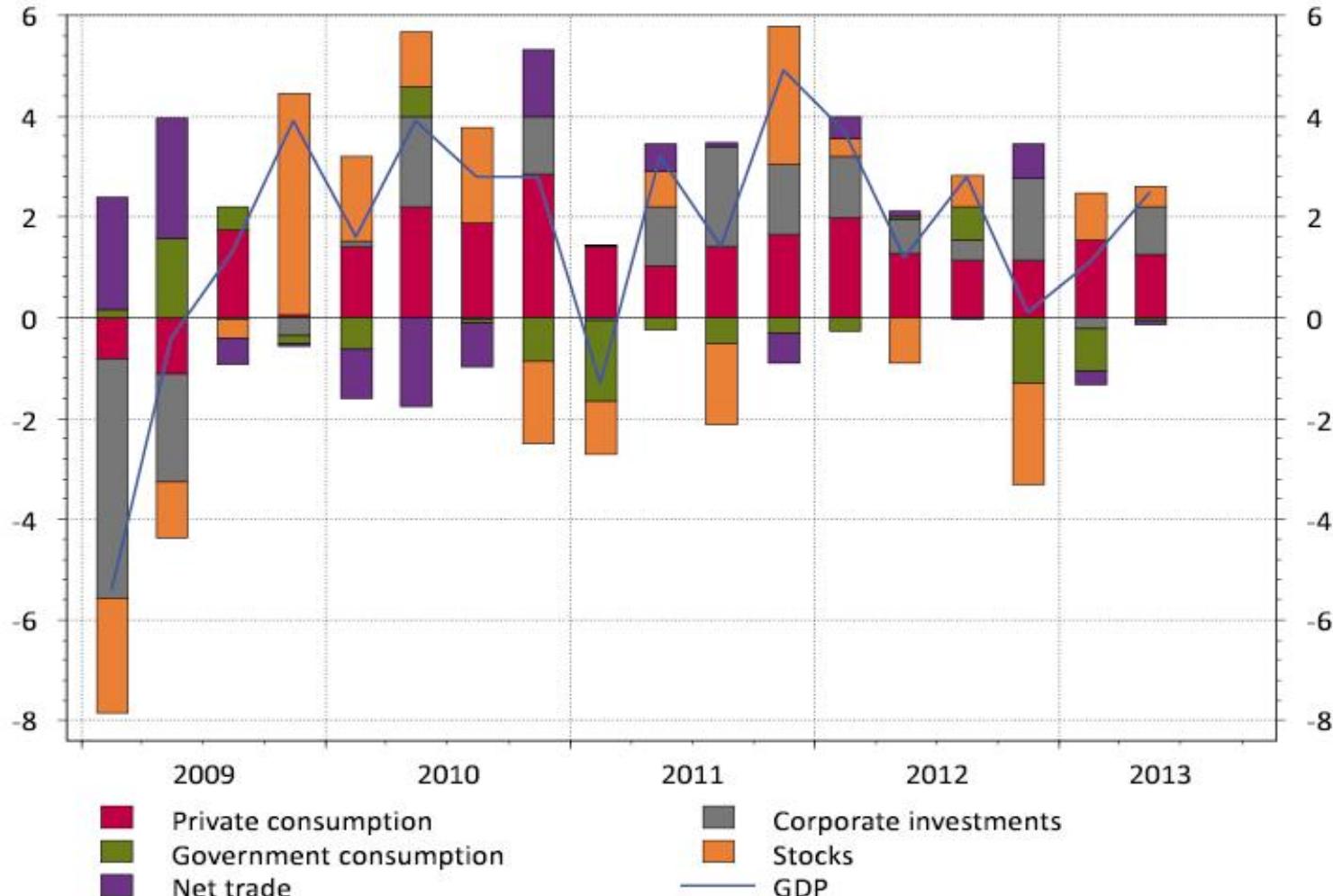
Macro-economie: actuele thema's.

V.S.: maar ook de hogere huizenprijzen voeden het vertrouwen .



V.S.: meer producent, minder consument.

V.S.: naar een hoger groeitempo dankzij een grotere investeringsgroei.

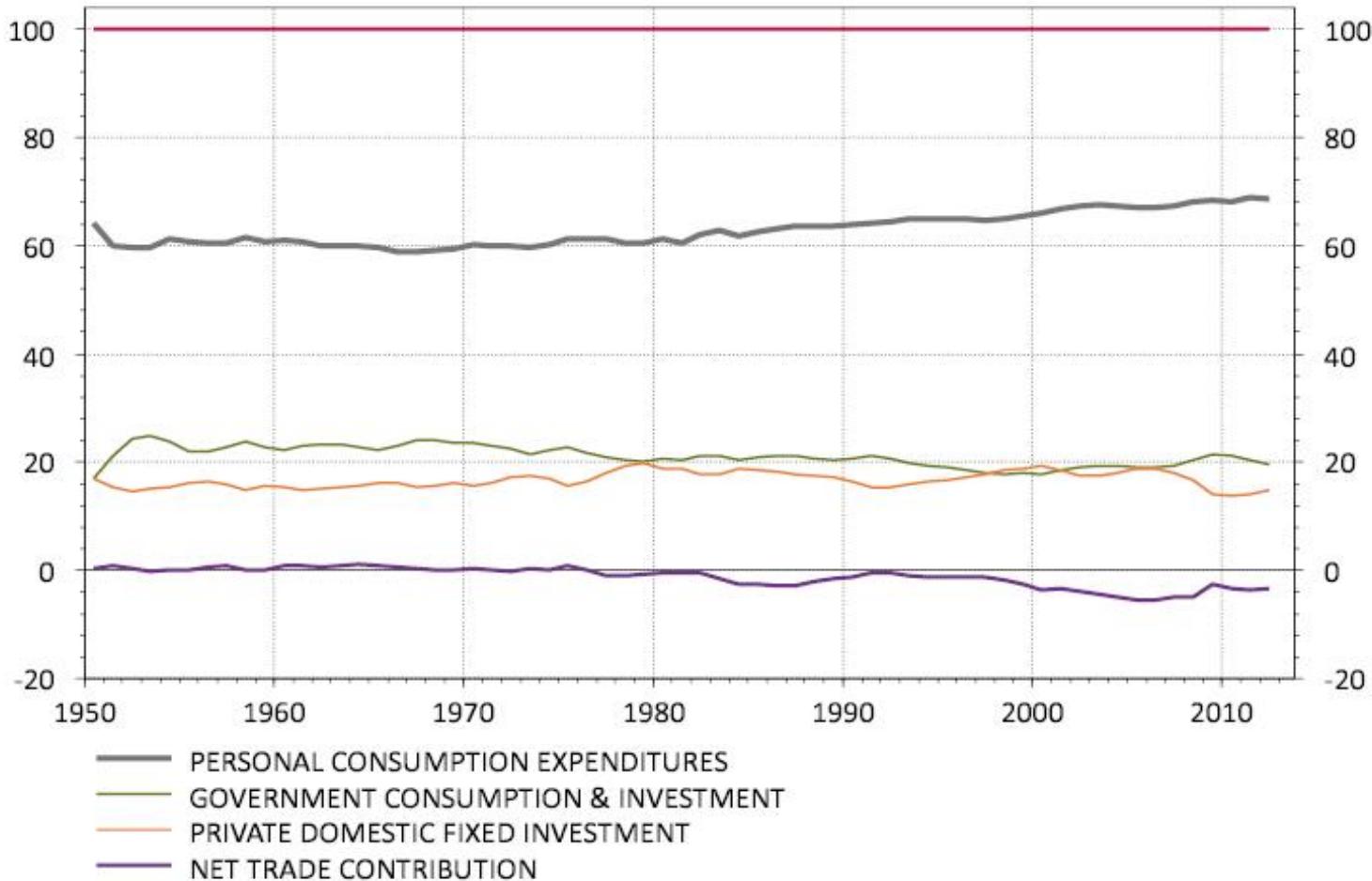


Bron: Thomson Reuters Datastream

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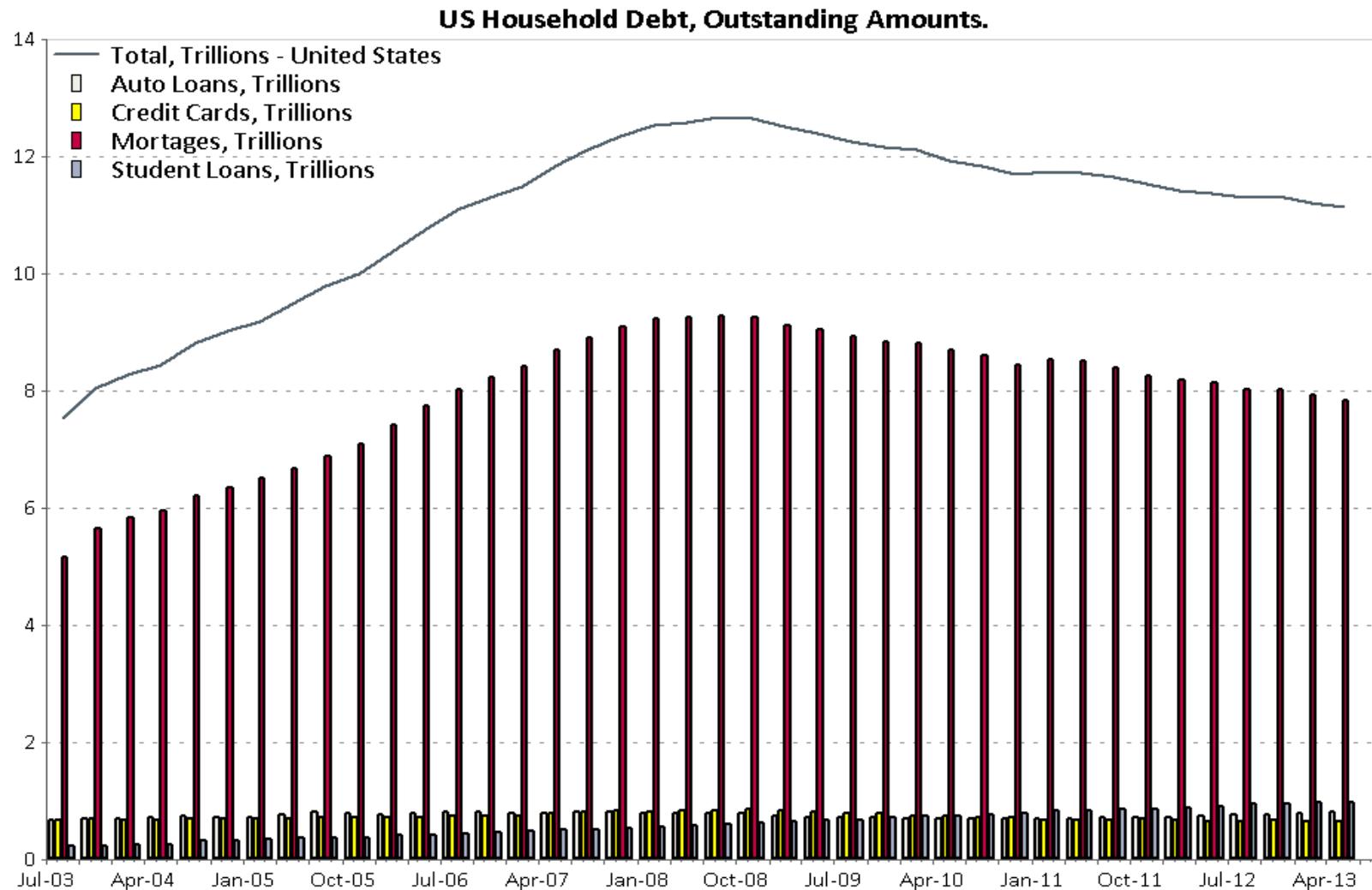
relative weight in % of total GDP



Bron: Thomson Reuters Datastream

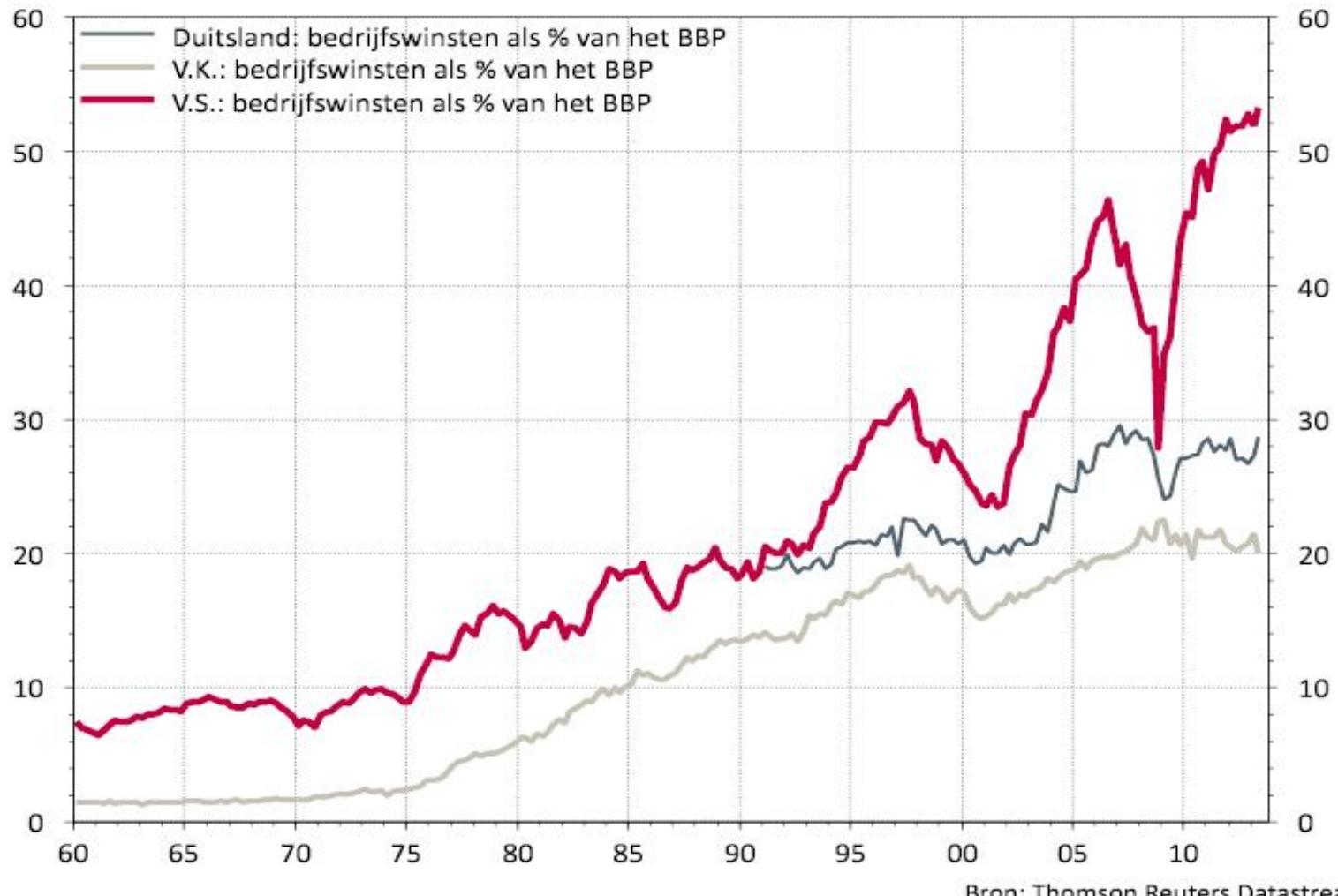
V.S.: meer producent, minder consument.

V.S.: de afbouw van de berg aan gezinsschulden gaat onverminderd voort.



V.S.: meer producent, minder consument.

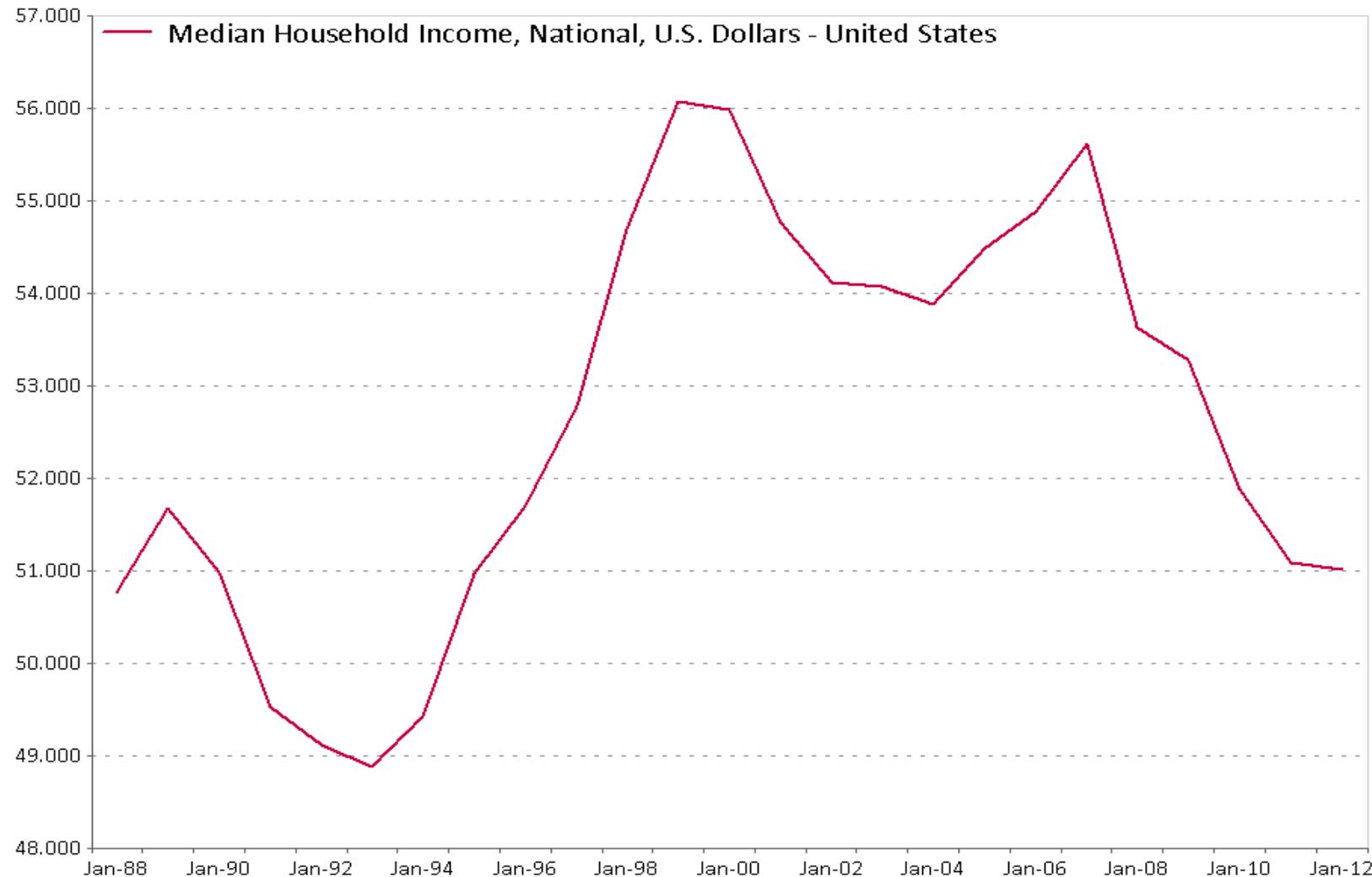
V.S.: bedrijven hebben een grote oorlogskoffer aan cash.



Bron: Thomson Reuters Datastream

V.S.: meer producent, minder consument.

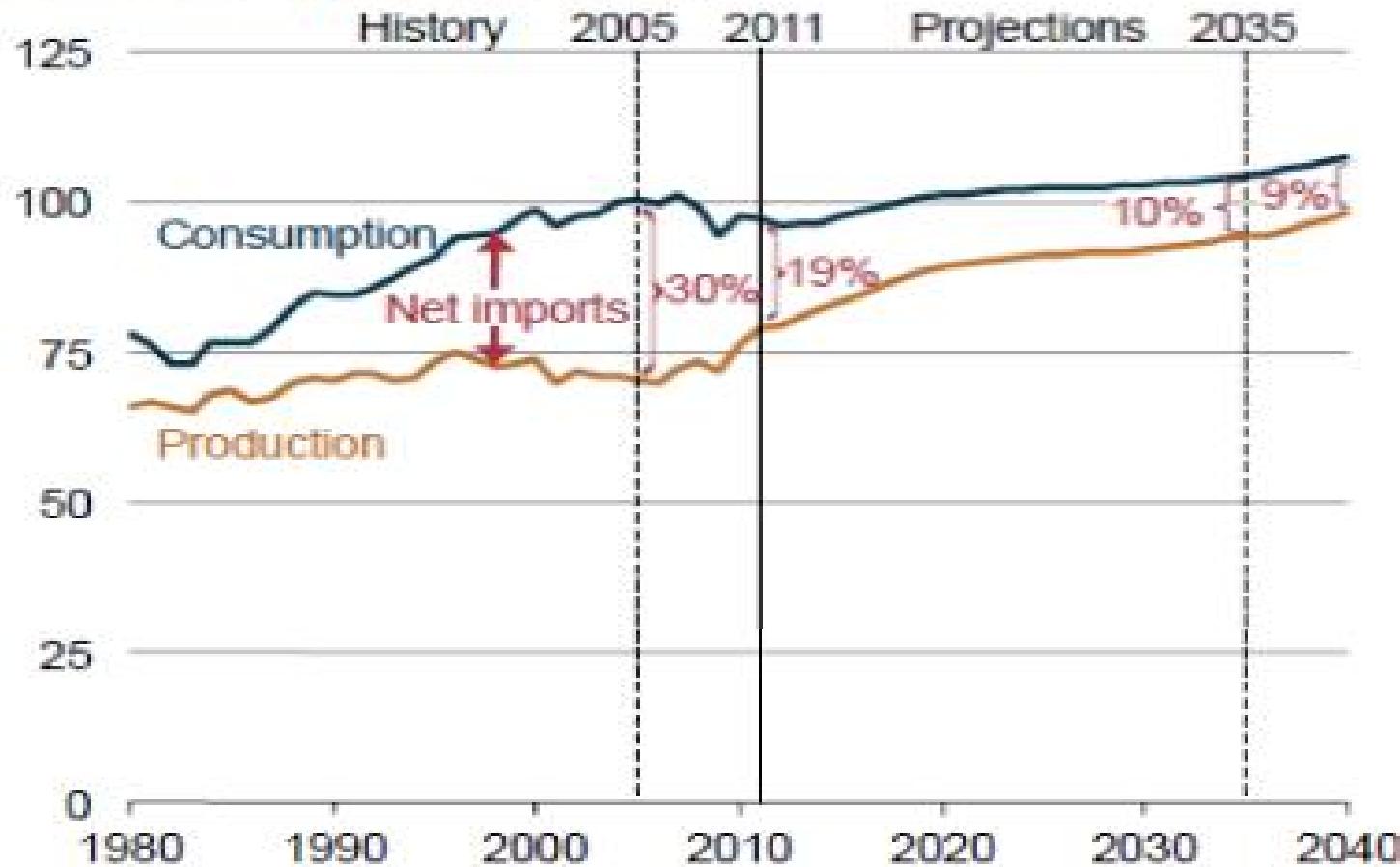
V.S.: maar het doorsnee gezinsinkomen valt terug naar het niveau van 1989.



V.S.: meer producent, minder consument.

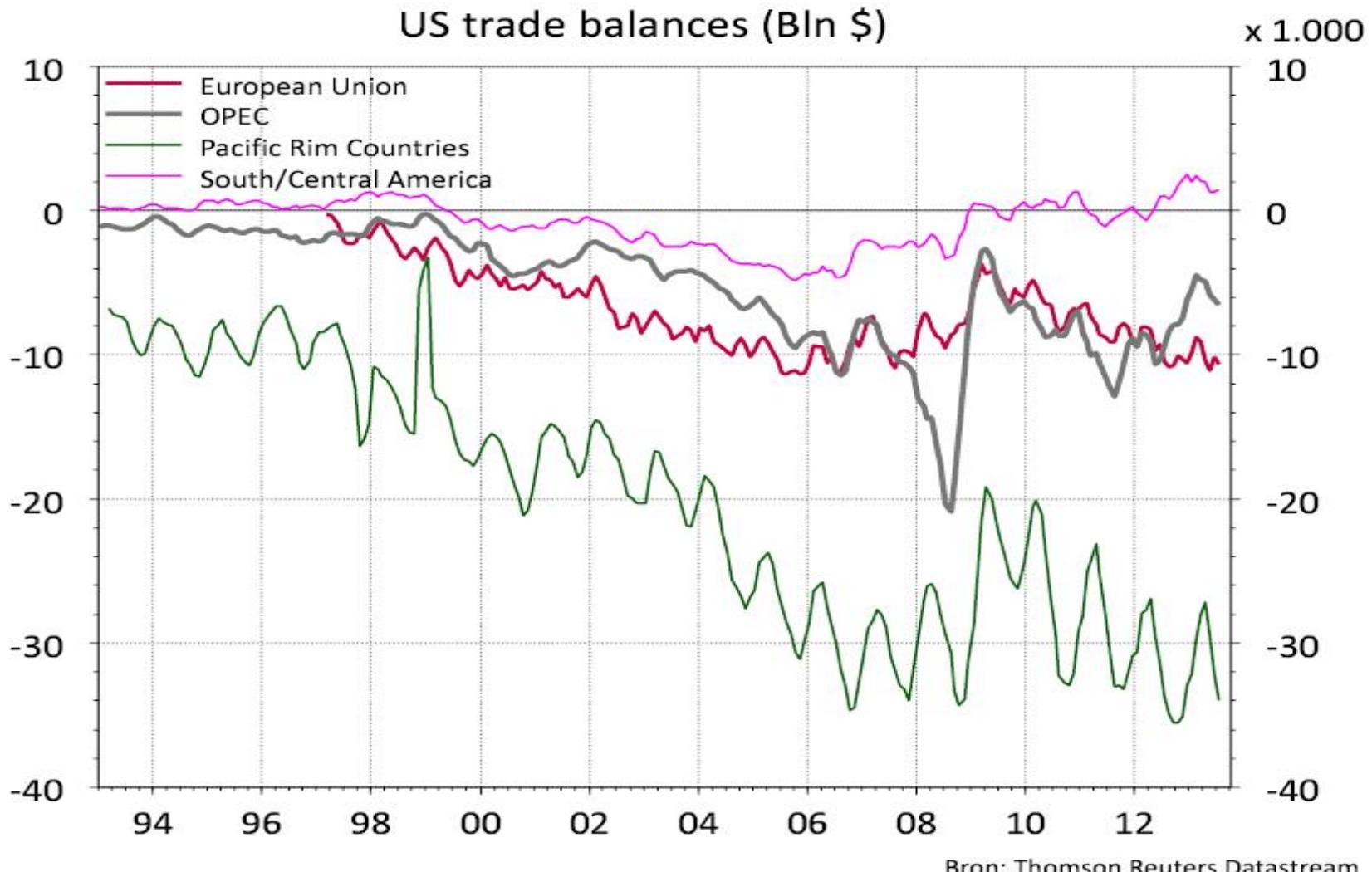
V.S.: minder nood aan import van energie/olie.

**Figure 9. Total energy production and consumption,
1980-2040 (quadrillion Btu)**



V.S.: meer producent, minder consument.

V.S.: naar een lager handelstekort met de rest van de wereld.



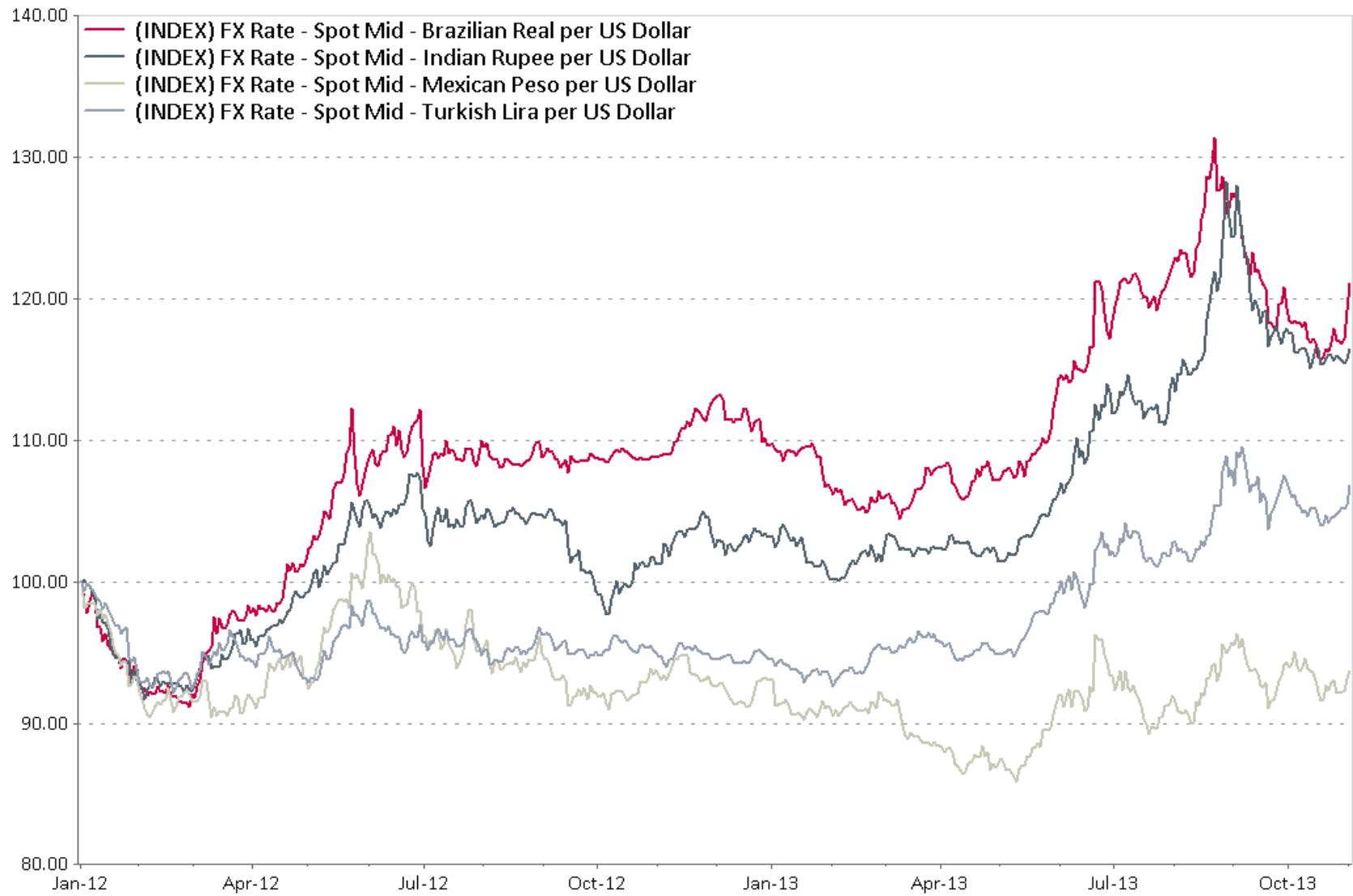
Bron: Thomson Reuters Datastream

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-  Rentemarkten: de bodem voorbij..
-  Vooruitzichten.

B.R.I.C.: op weg naar een meer duurzame groei.

EM: groeilanden kwetsbaar voor de vlucht naar Treasuries.

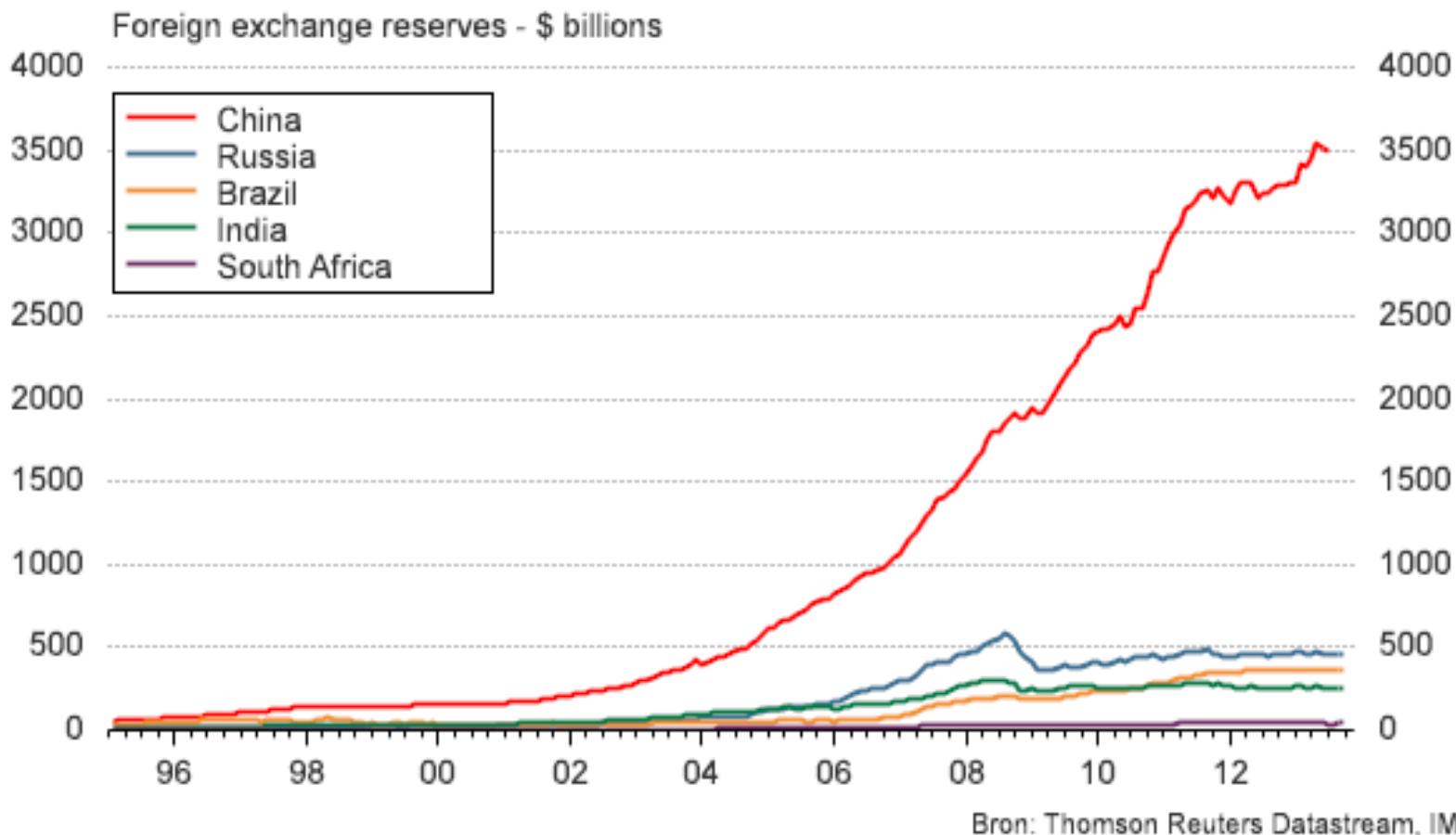


Bron : FACTSET

B.R.I.C.: op weg naar een meer duurzame groei.

EM: groeilanden beter gewapend tegen muntspeculatie.

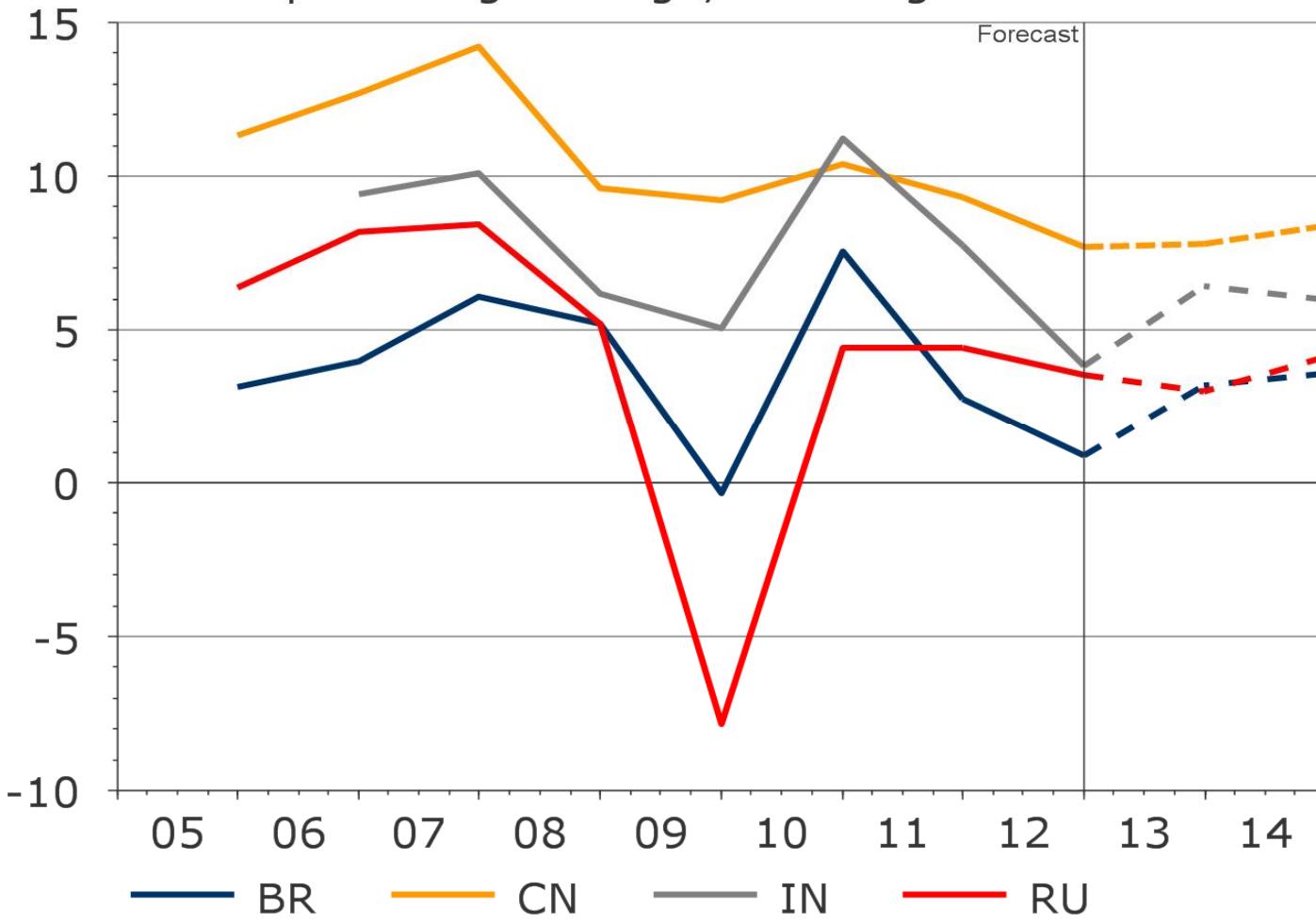
BRICS FX reserves



B.R.I.C.: op weg naar een meer duurzame groei.

Emerging economies GDP

Annual percentage change, including fathom forecast

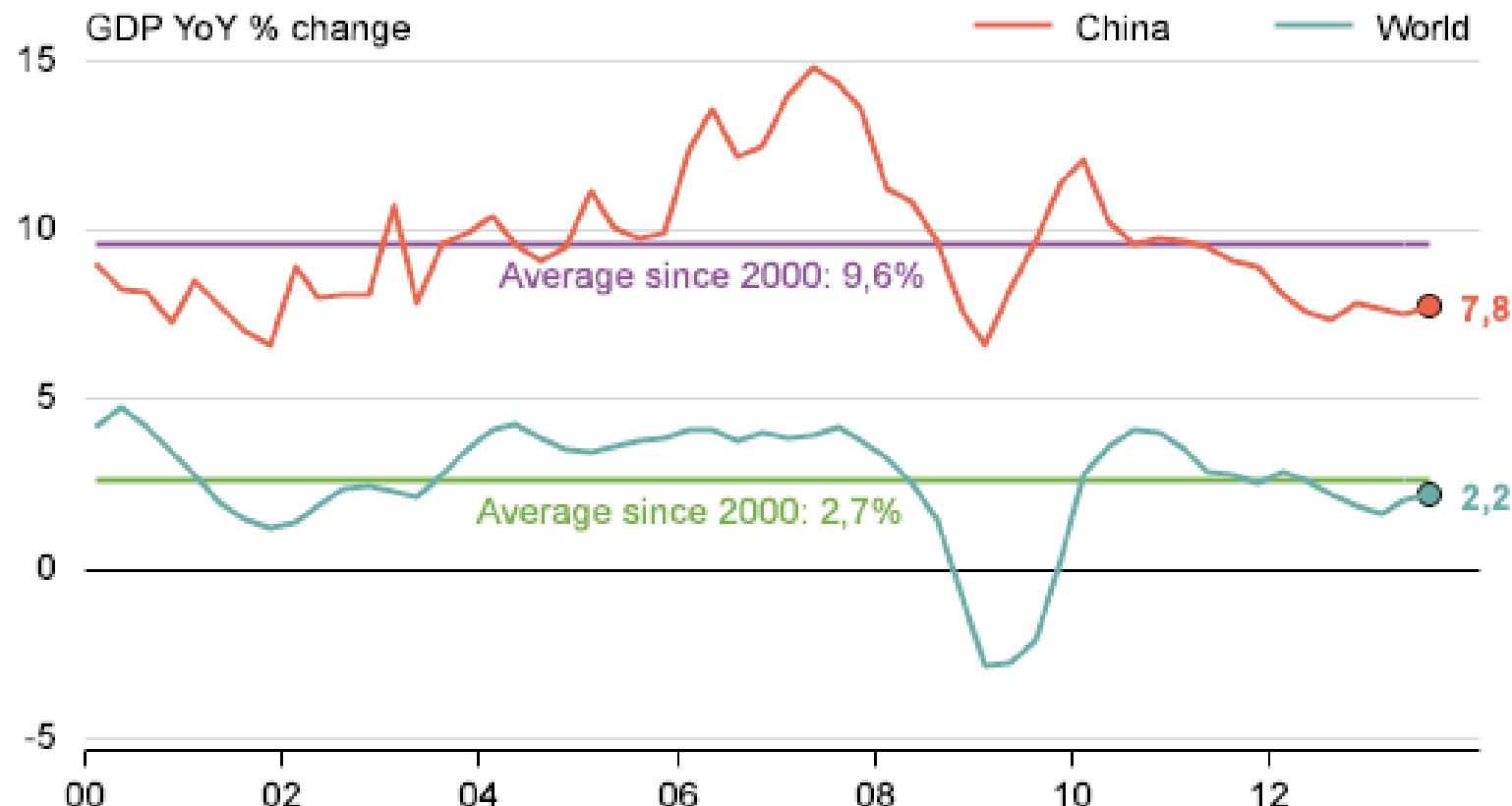


Bron: Thomson Reuters Datastream / Fathom Consulting

B.R.I.C.: op weg naar een meer duurzame groei.

China:groei verstevigt na teleurstellende eerste jaarhelft.

China GDP growth vs the World

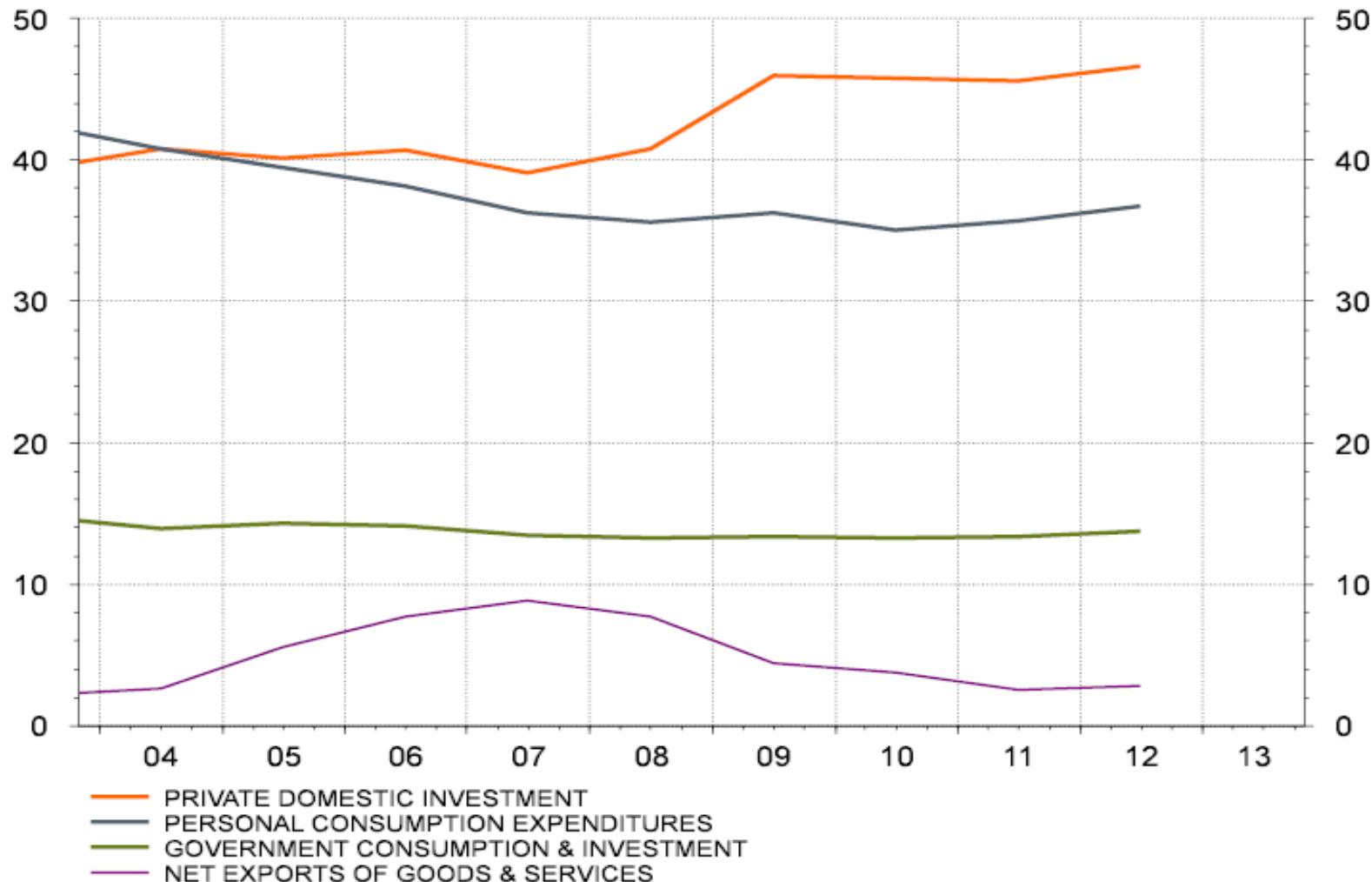


Bron: Thomson Reuters Datastream, Oxford Economics

V. Flasseur, data to Q3 13

B.R.I.C.: op weg naar een meer duurzame groei.

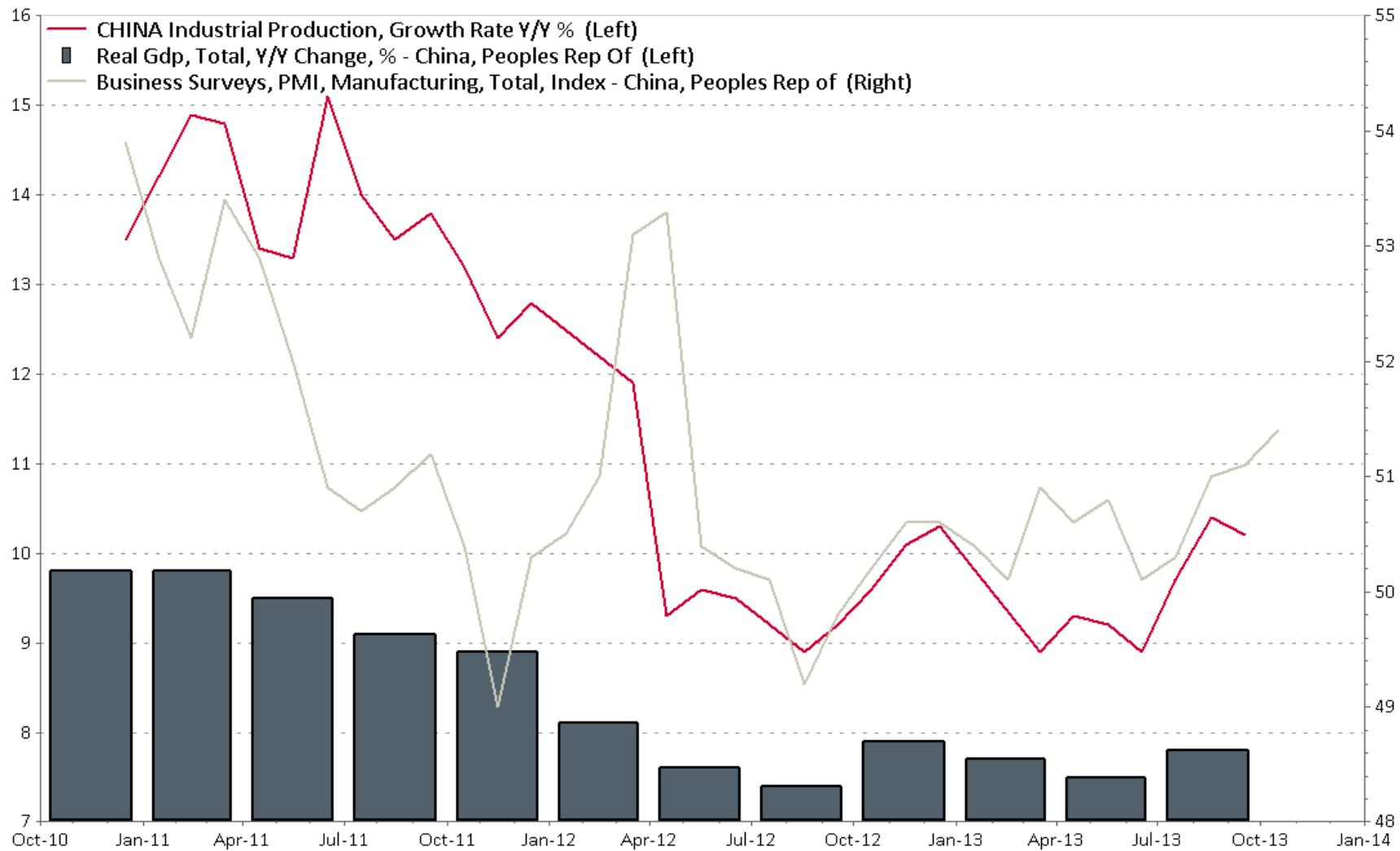
China: meer consumptiegroei gewenst i.p.v. investeringen.



Bron: Thomson Reuters Datastream

B.R.I.C.: op weg naar een meer duurzame groei.

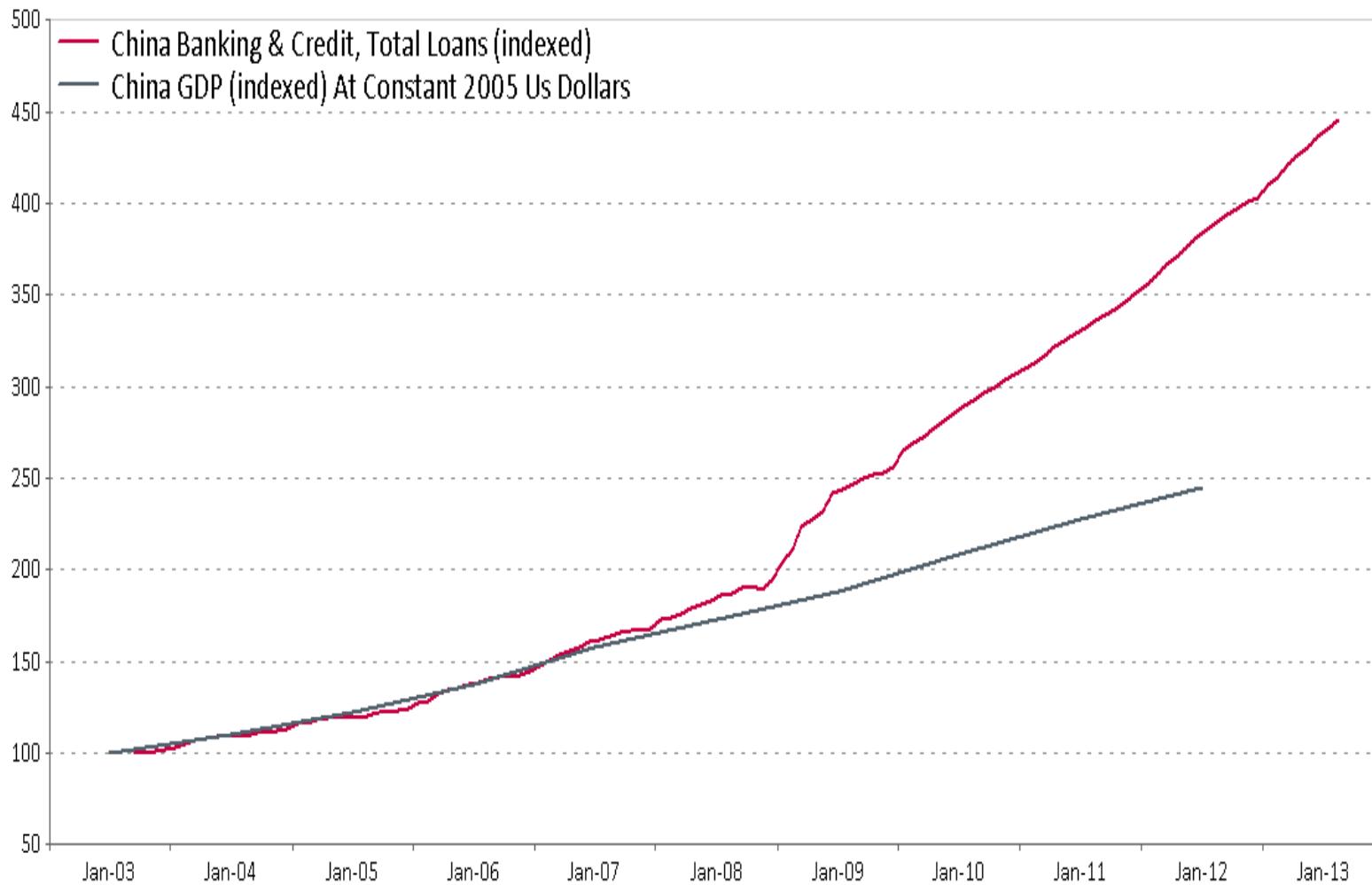
China: bedrijfsactiviteit krabbelt terug na teleurstellende eerste jaarhelft.



Bron : FACTSET

B.R.I.C.: op weg naar een meer duurzame groei.

China: hou de 'credit bubble' in de gaten.

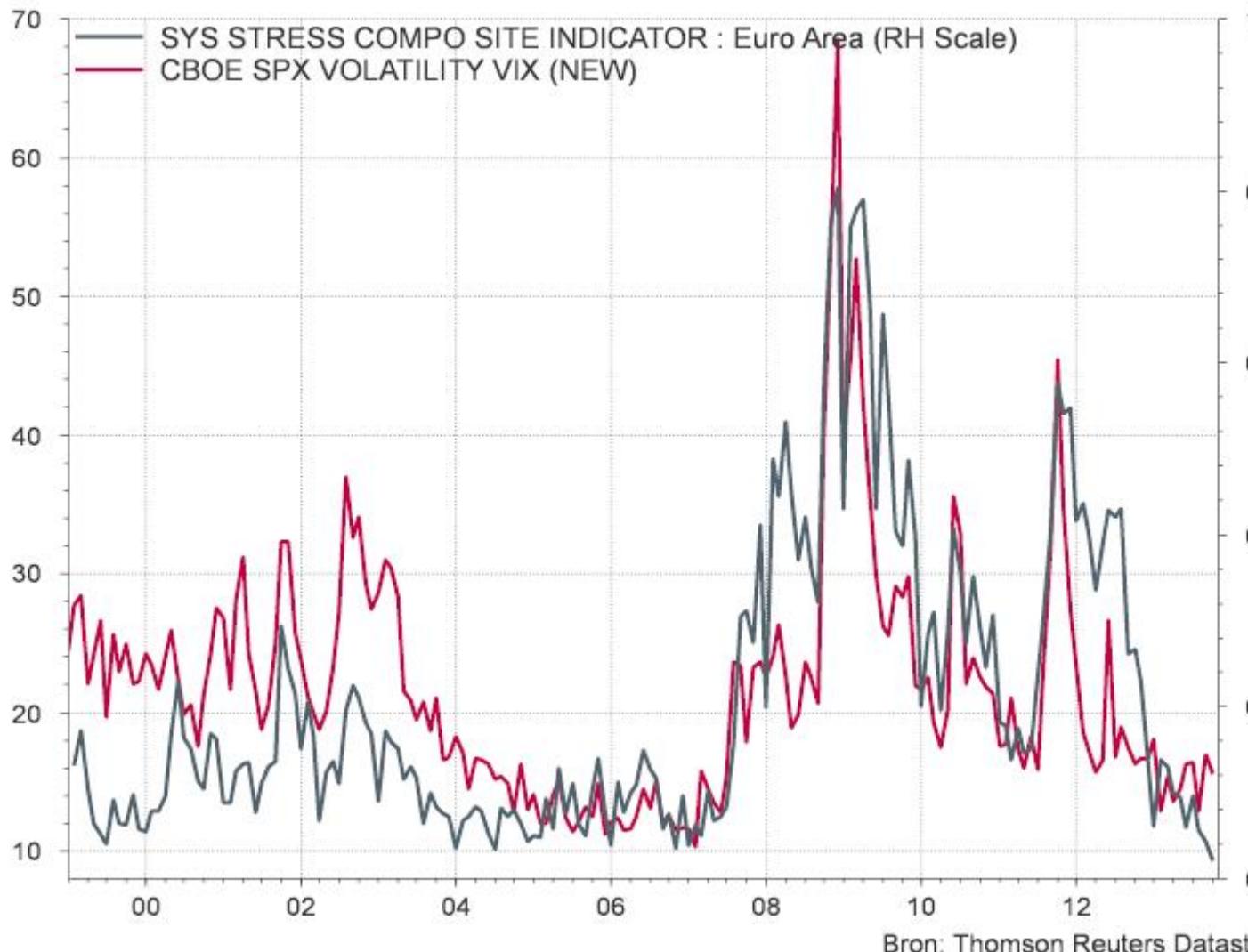


Macro-economie: actuele thema's.

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Eurozone: einde van de recessie.

Eurozone: de eurocrisis lijkt helemaal van de radar verdwenen.



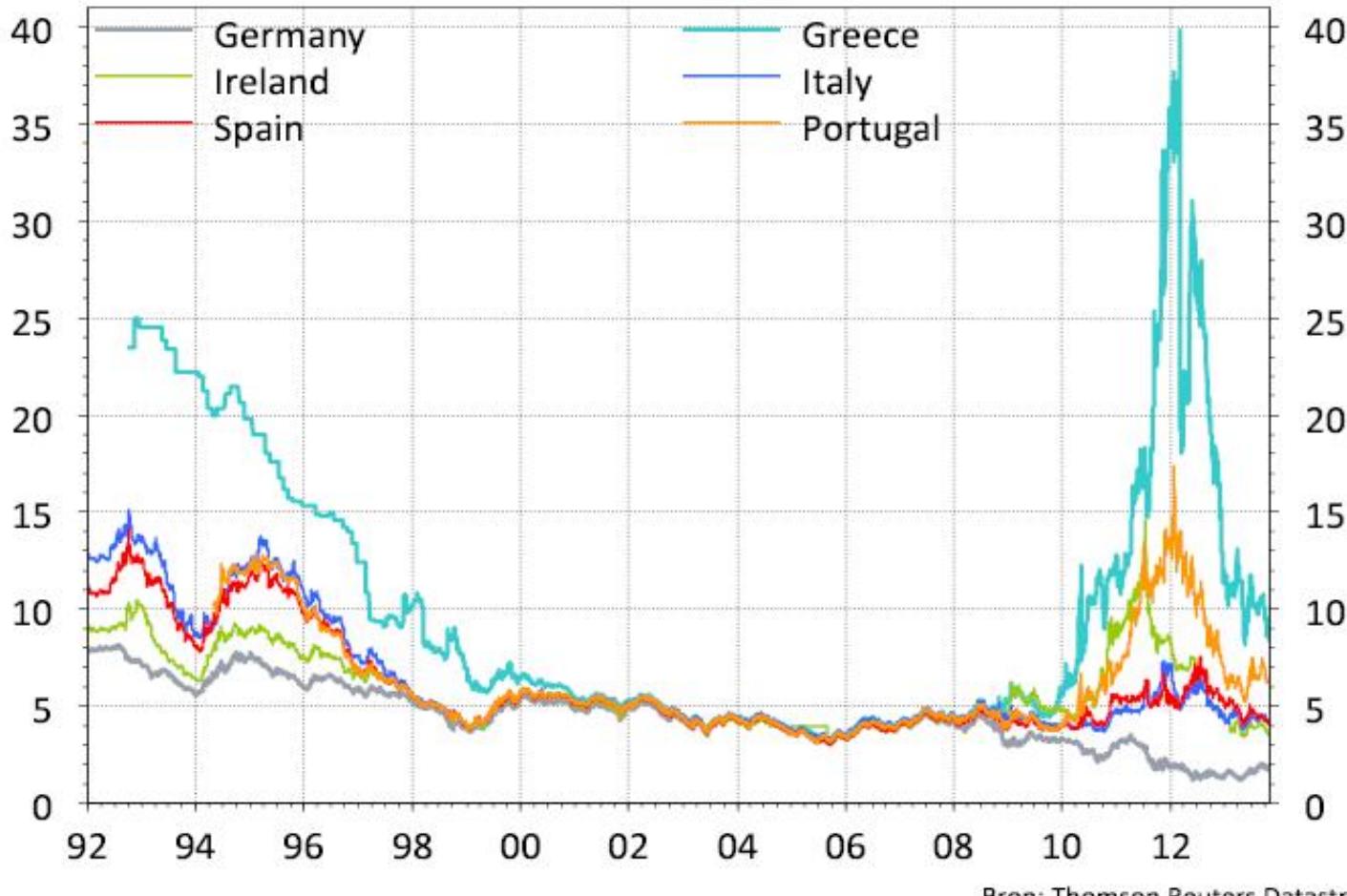
Systemic Stress Indicator (ECB): realised volatility of the German 10-year benchmark government bond index, yield spread between A-rated non-financial corporations and government bonds (7-year maturity bracket), and 10-year interest rate swap spread

Eurozone: einde van de recessie.

Eurozone: de eurocrisis lijkt helemaal van de radar verdwenen.

Government bond yields history

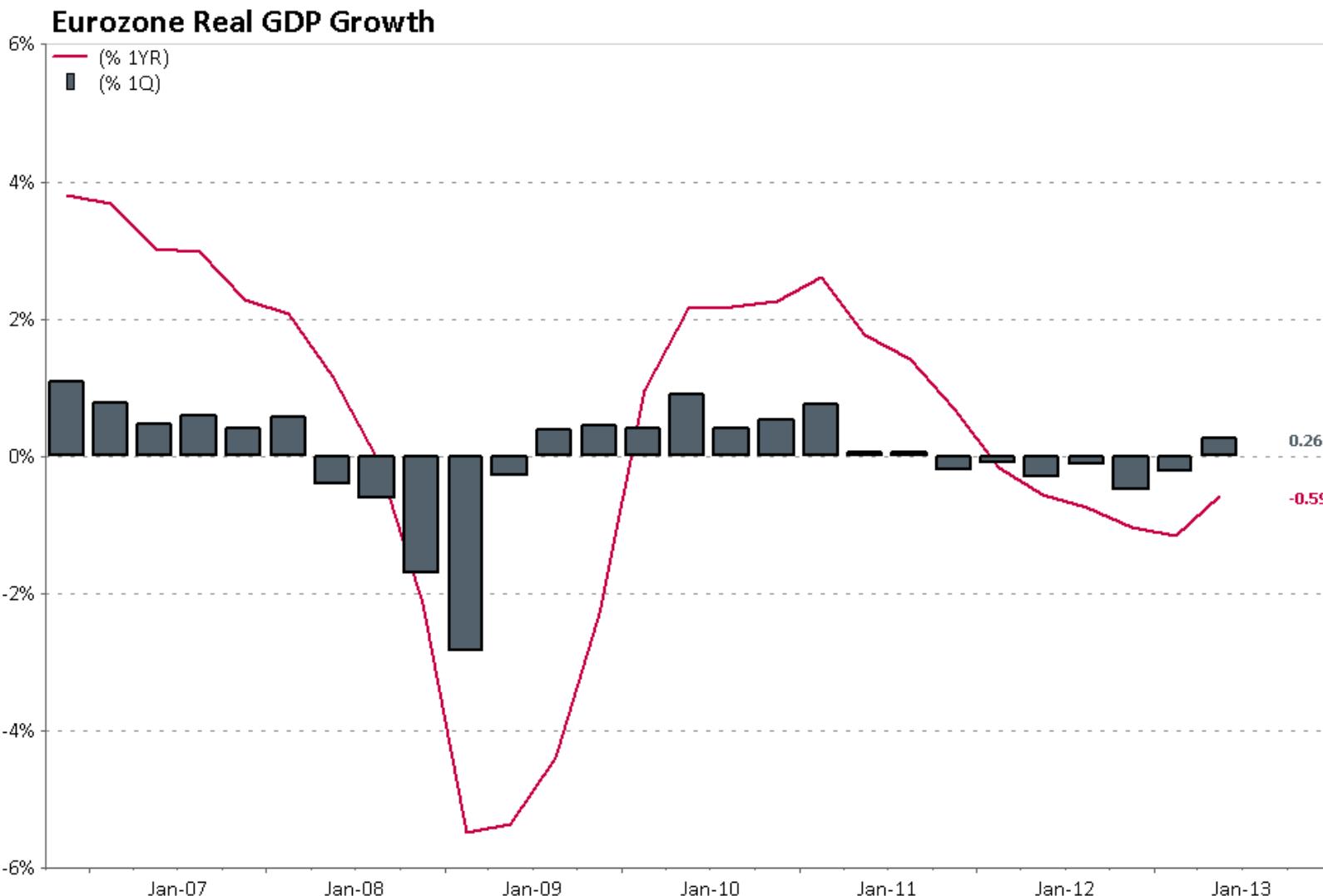
10-year yield, per cent



Bron: Thomson Reuters Datastream

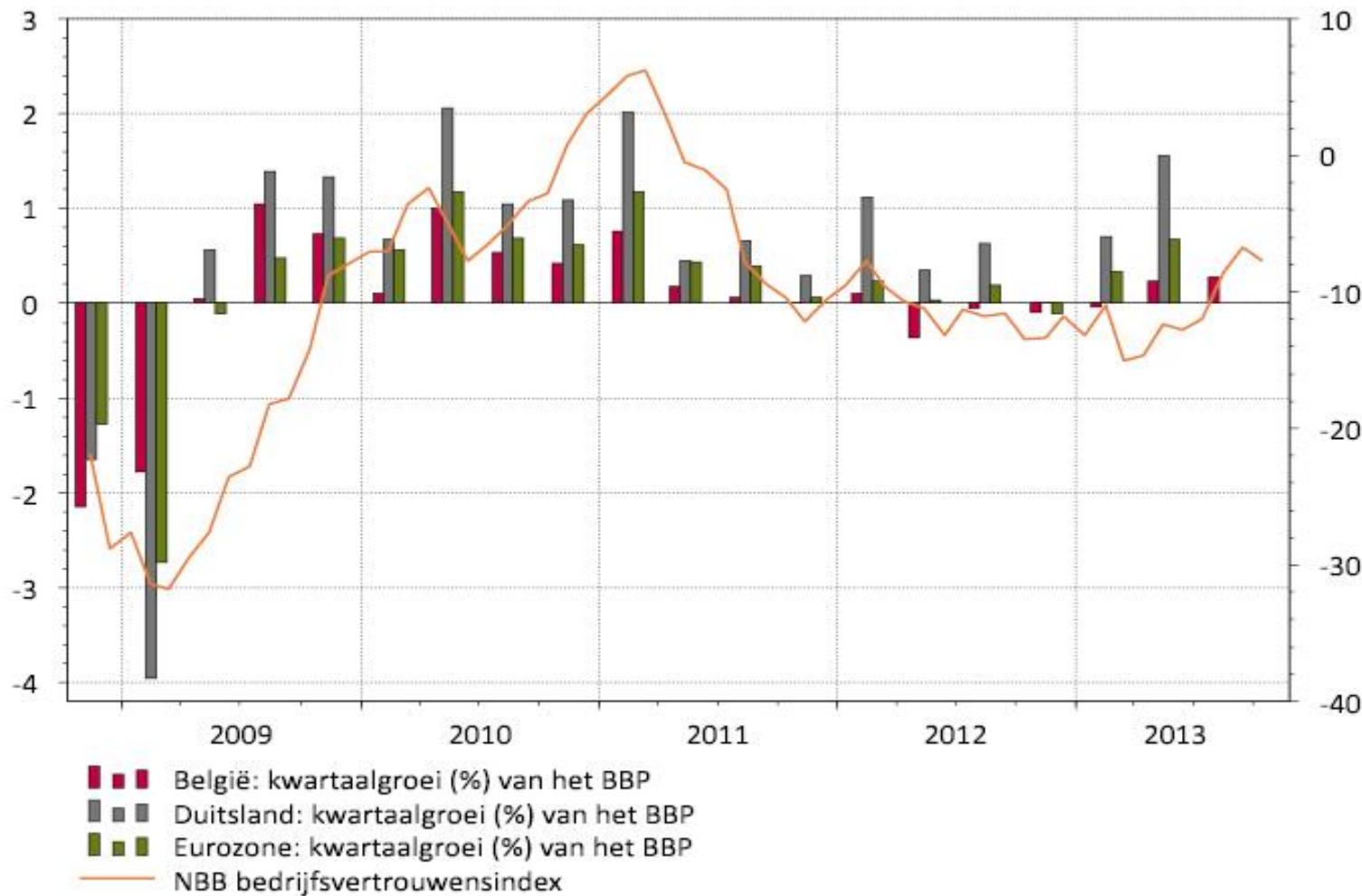
Eurozone: einde van de recessie.

Eurozone: terugkeer naar (zwakke) groei na zes kwartalen contractie.



Eurozone: einde van de recessie.

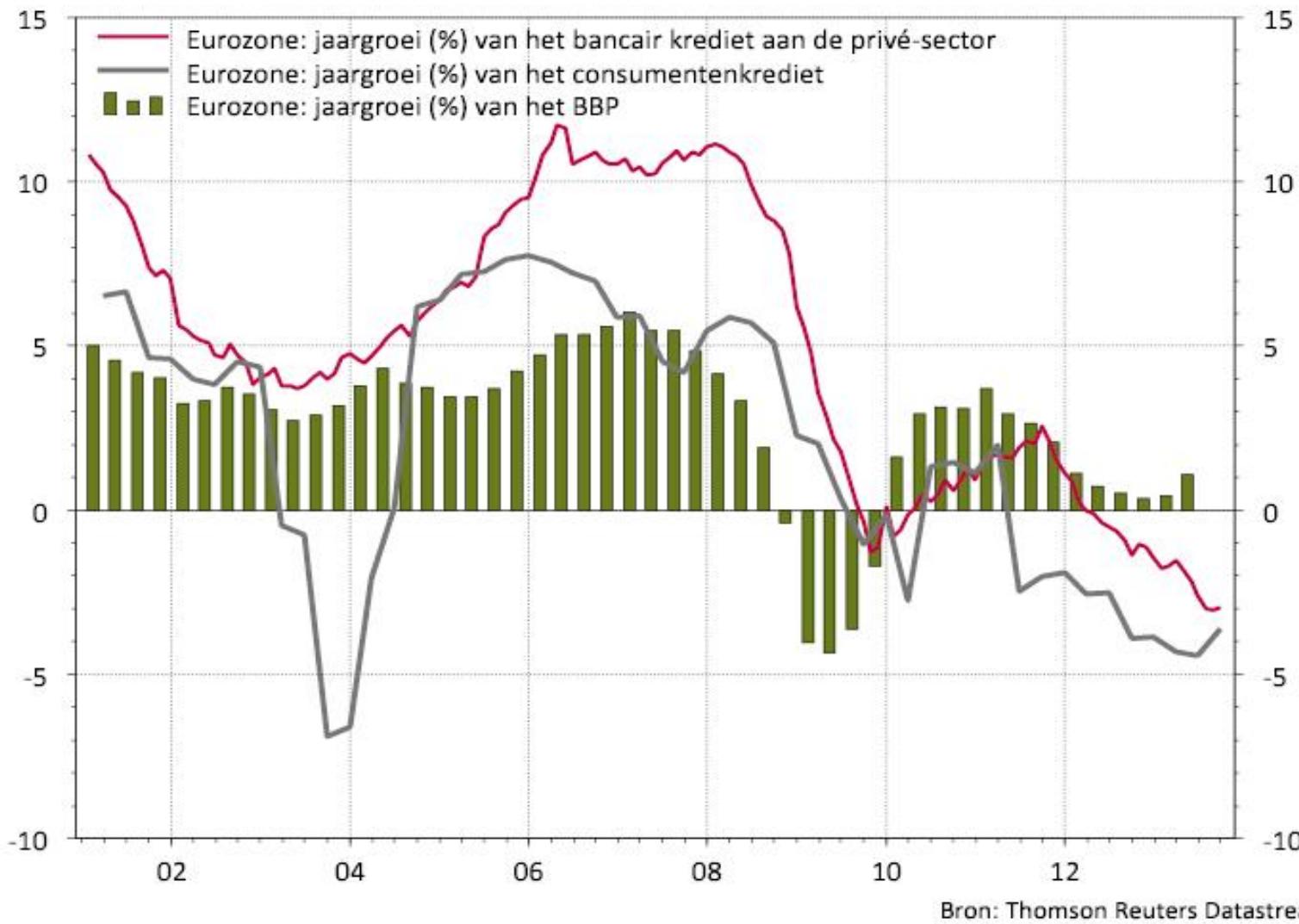
Eurozone: klim van de NBB-index suggereert ook positieve groei in H2 2013.



Bron: Thomson Reuters Datastream

Eurozone: einde van de recessie.

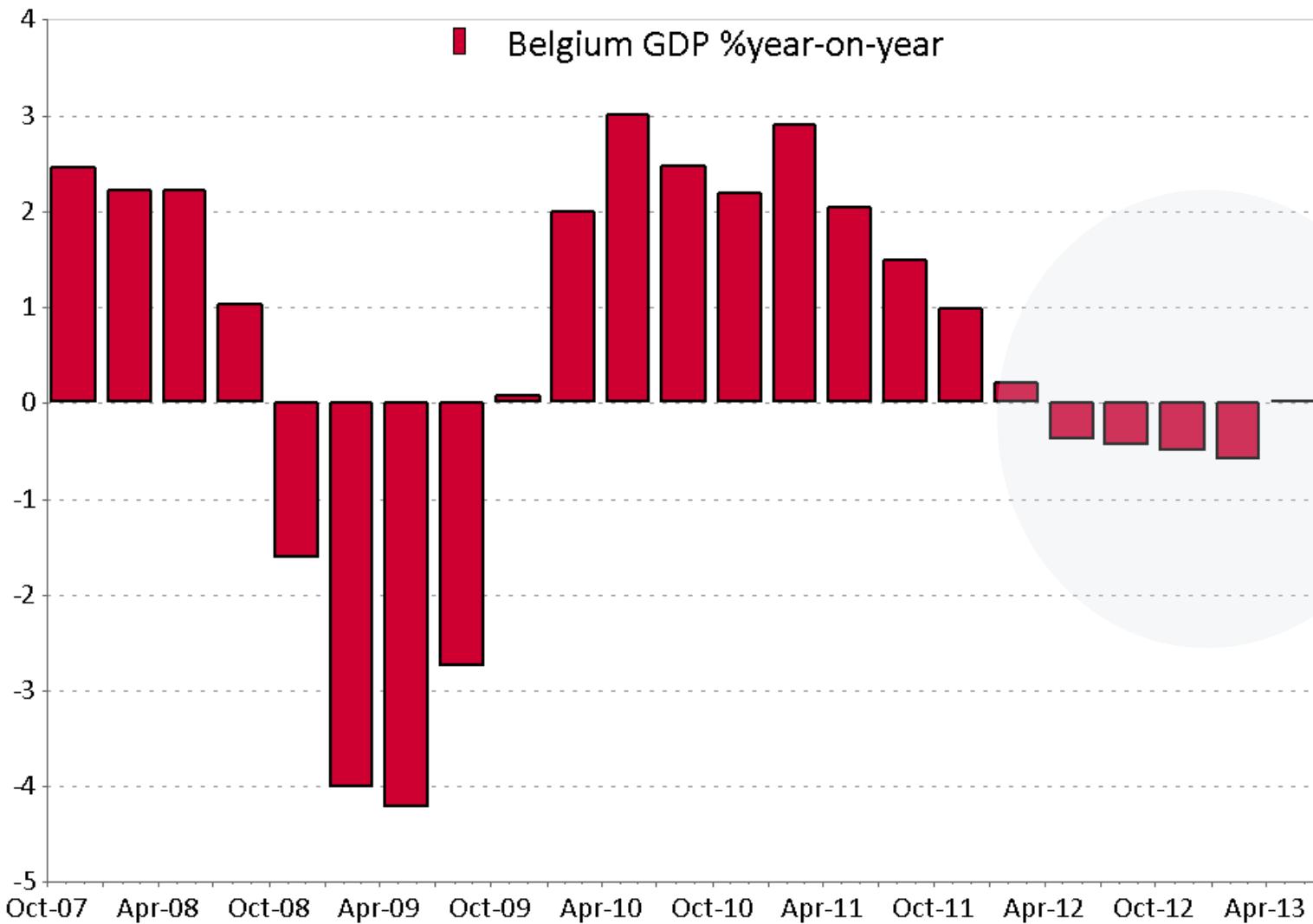
Eurozone: de 'credit crunch' is echter nog niet voorbij.



Bron: Thomson Reuters Datastream

Eurozone: einde van de recessie.

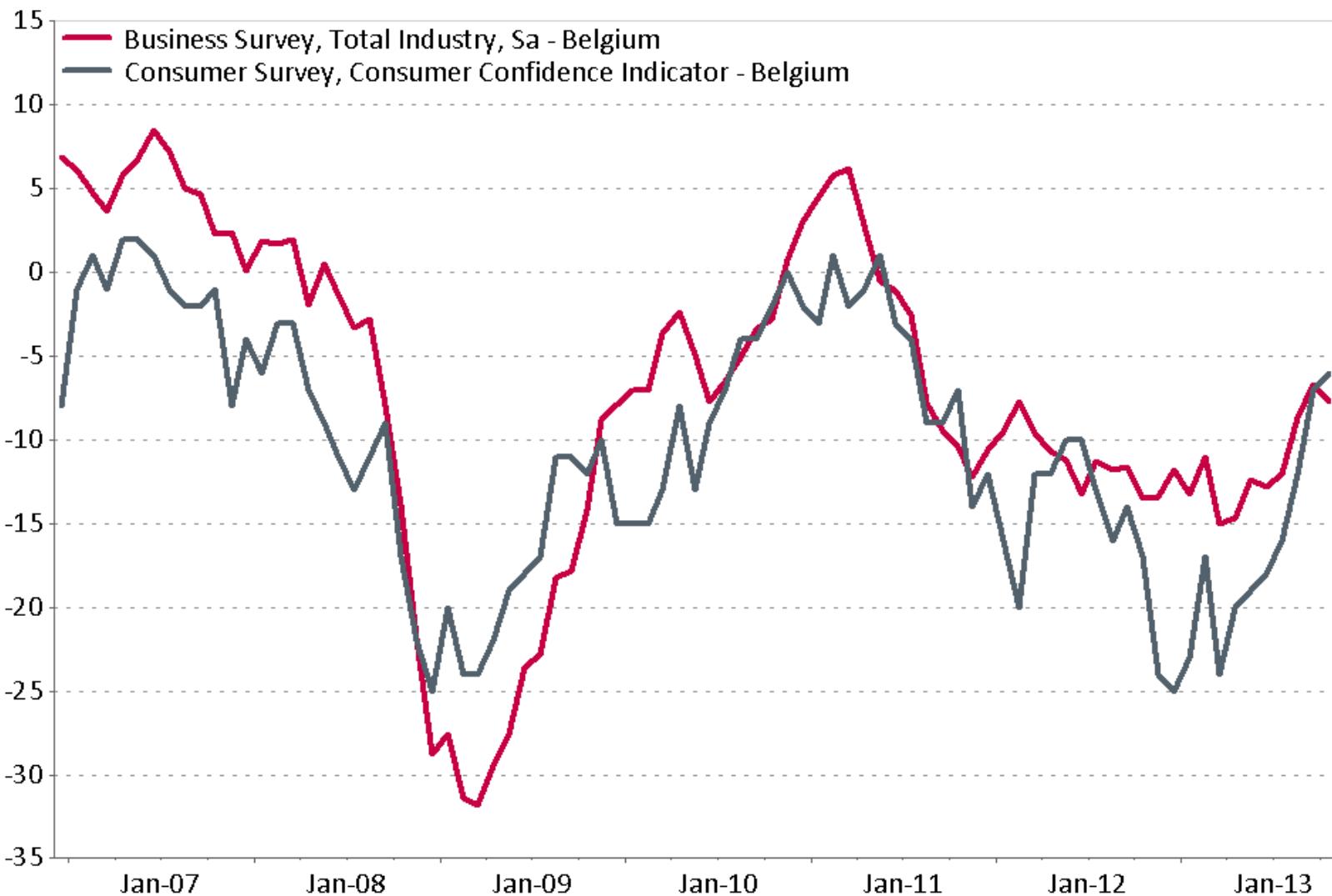
België: het ergste achter de rug?



Bron : FACTSET

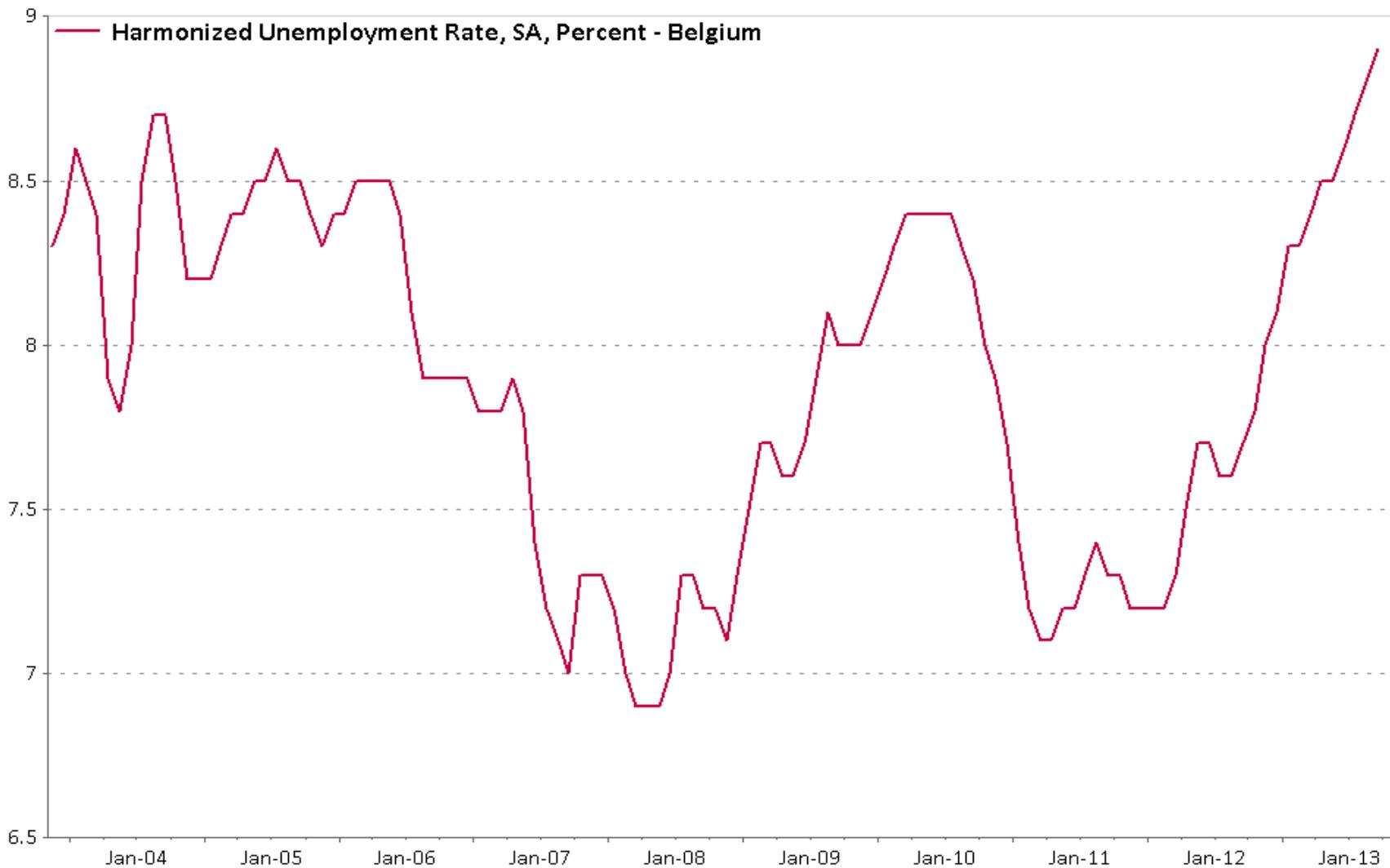
Eurozone: einde van de recessie.

België: economisch vertrouwen in de lift.



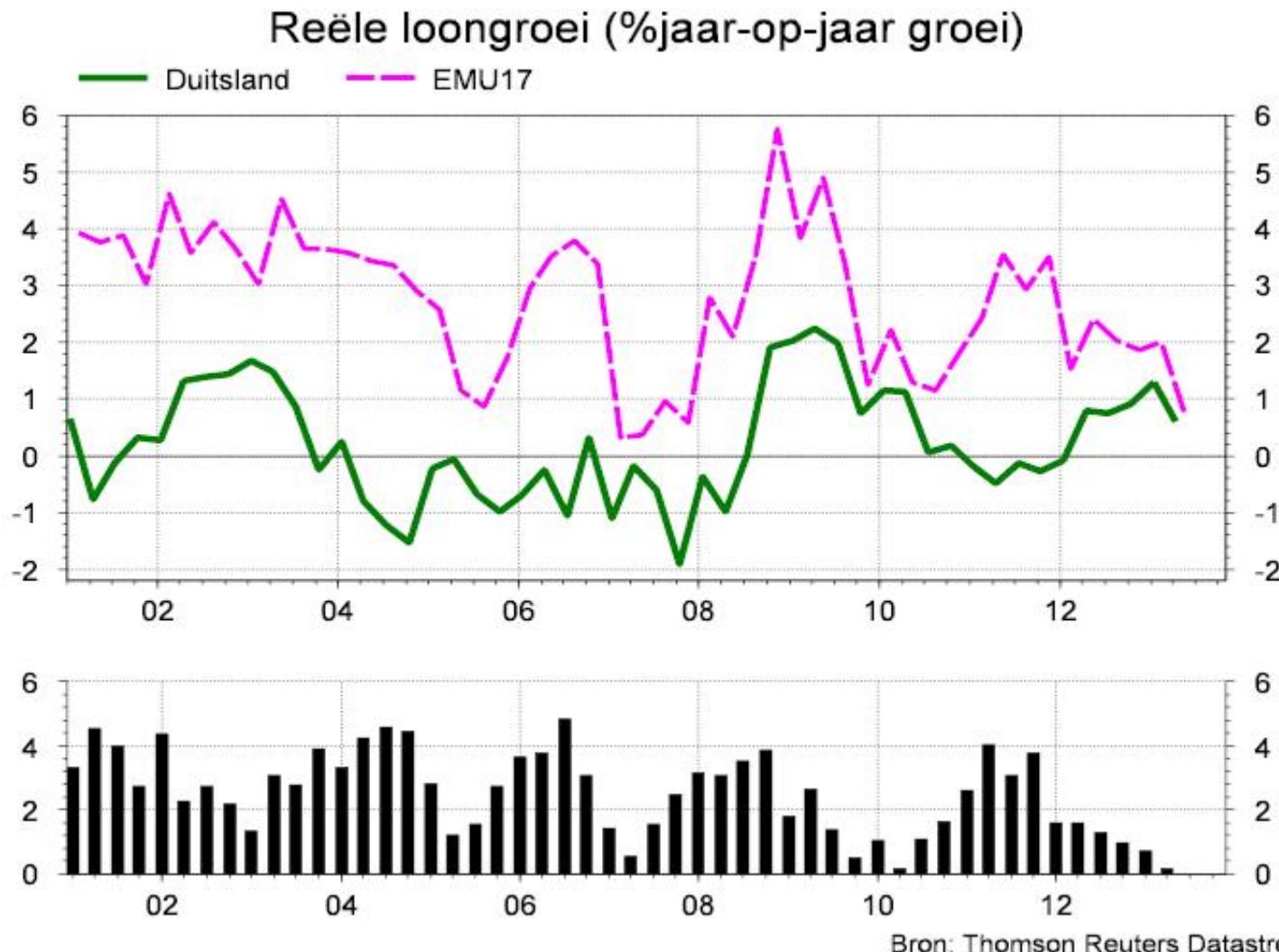
Eurozone: einde van de recessie.

België: ondanks de klim van de werkloosheidsgraad richting 9%.



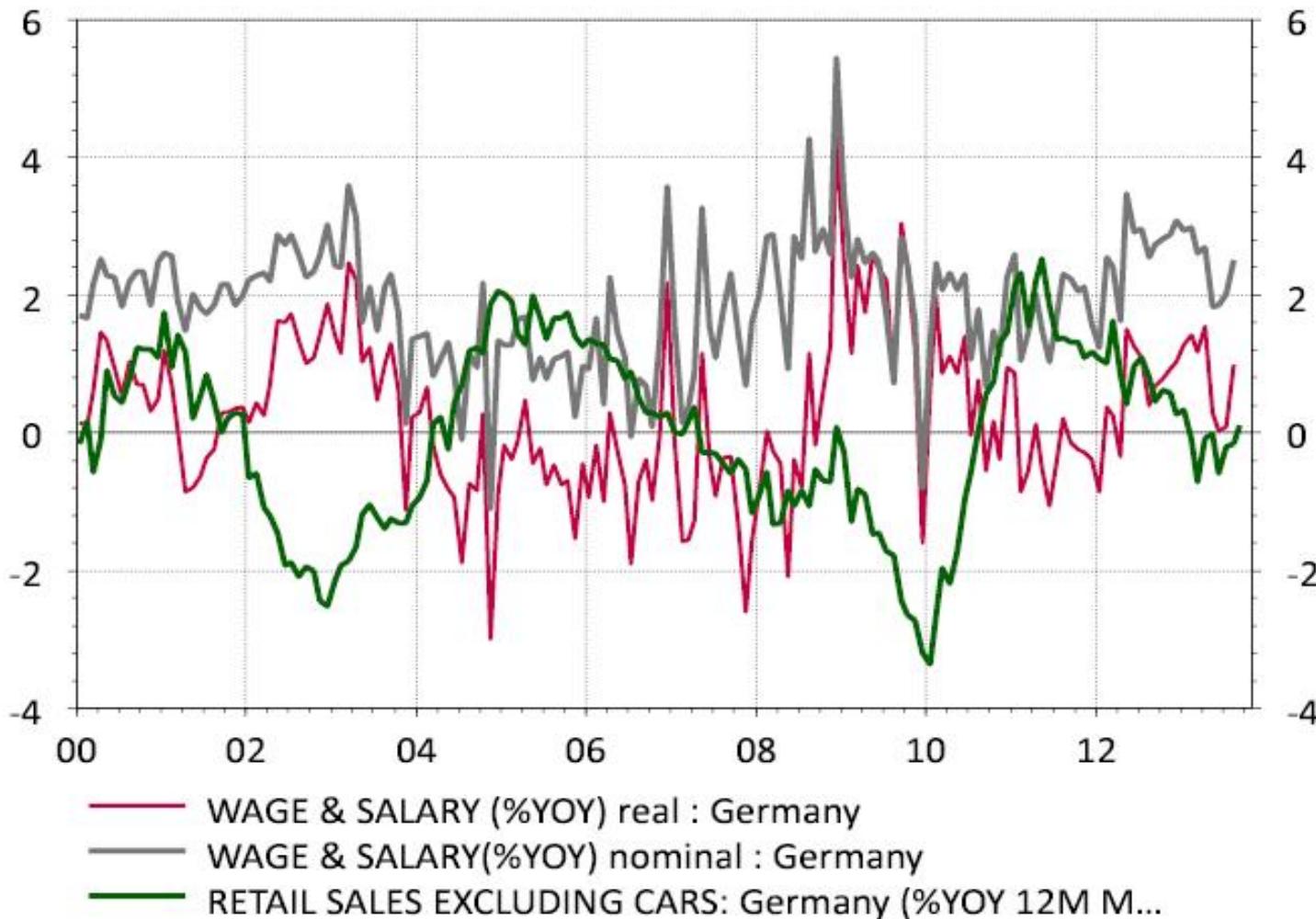
Eurozone: einde van de recessie.

Duitsland/Eurozone: de loonkloof wordt kleiner.



Eurozone: einde van de recessie.

Gemiddelde reële loongoei in Duitsland valt opnieuw terug in 2013.



Bron: Thomson Reuters Datastream

Eurozone: einde van de recessie.

Jobcreatie vooral op het vlak van part-time banen.



Bron: Thomson Reuters Datastream

Eurozone: einde van de recessie.

Wat staat er nog op de Europese agenda?

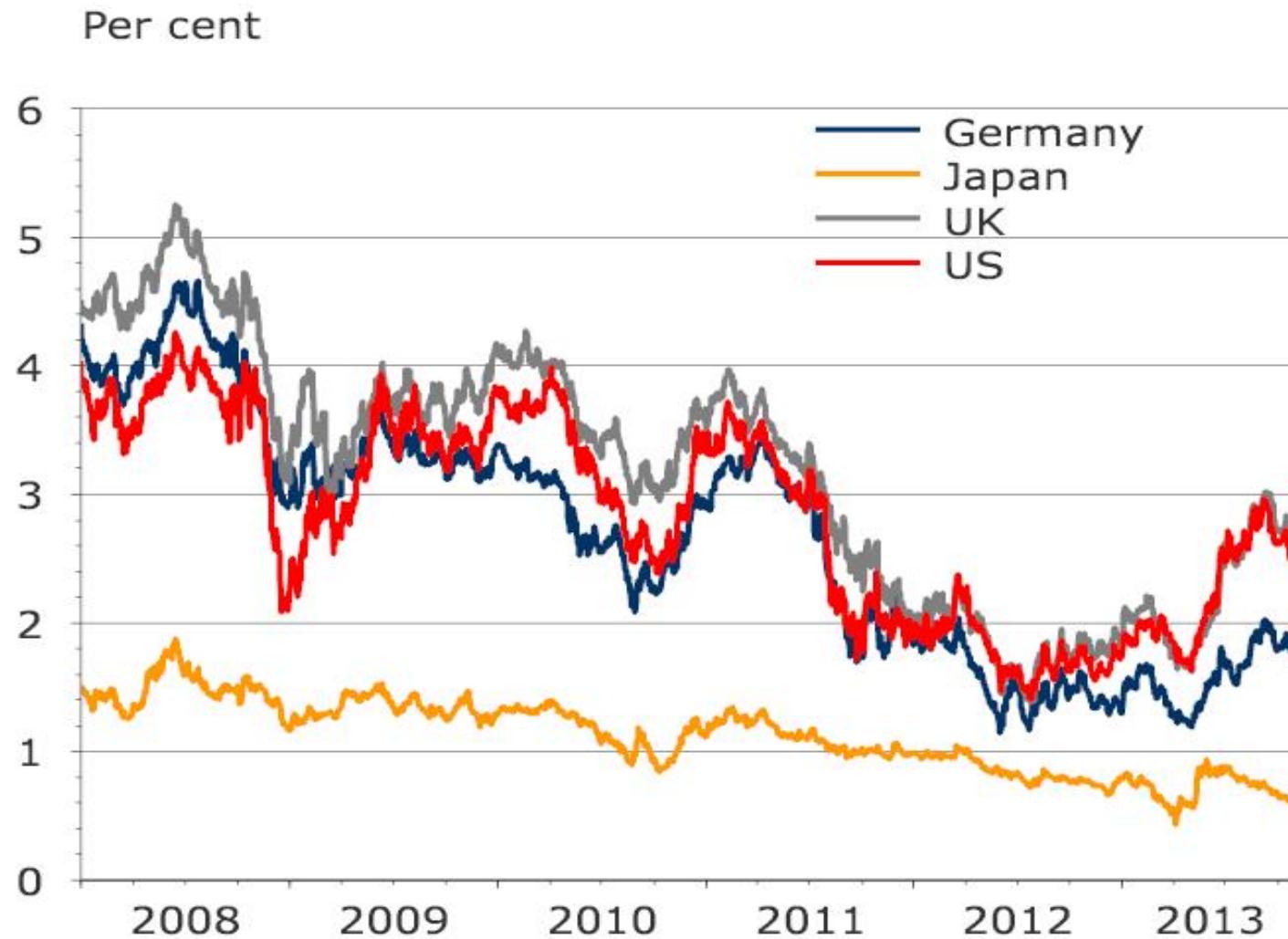
- Van existentiële crisis naar een (labiel) evenwicht?
- Tweede Griekse schuldherschikking?
- Spanje, Portugal, Italië, ...
- Werken aan de bankenunie.
- Asset Quality Review (2014): doorlichting van 128 financiële instellingen.
- Aanpakken (jeugd)werkloosheid : Europees "7-stappen plan"
- Europese verkiezingen (mei 2014).

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Rentemarkten: de bodem voorbij.

Het begin van de 'grote' renteklim?

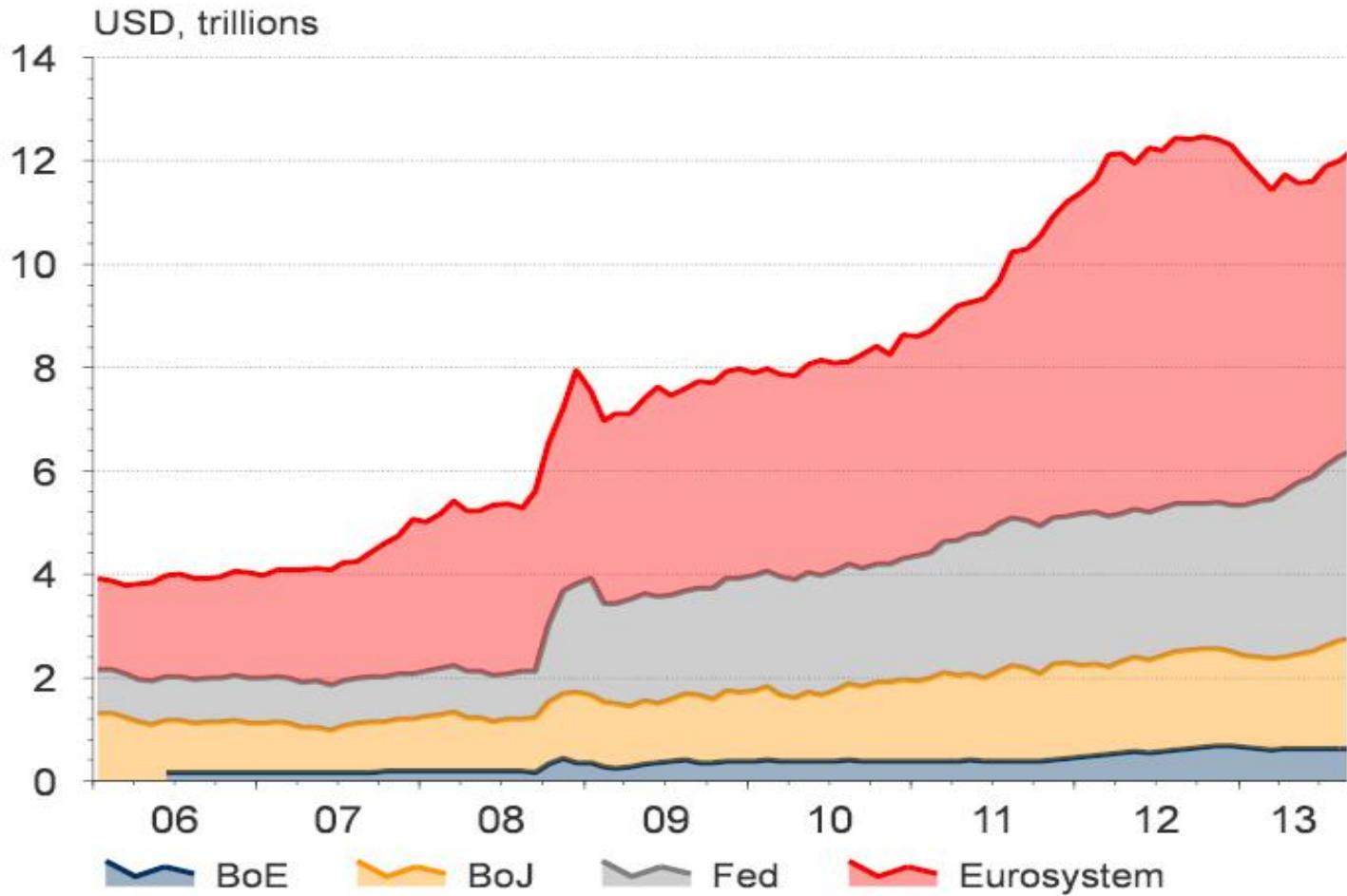


Bron: Thomson Reuters Datastream / Fathom Consulting

Rentemarkten: de bodem voorbij.

Globaal: centrale banken pompen massaal geld in de economie.

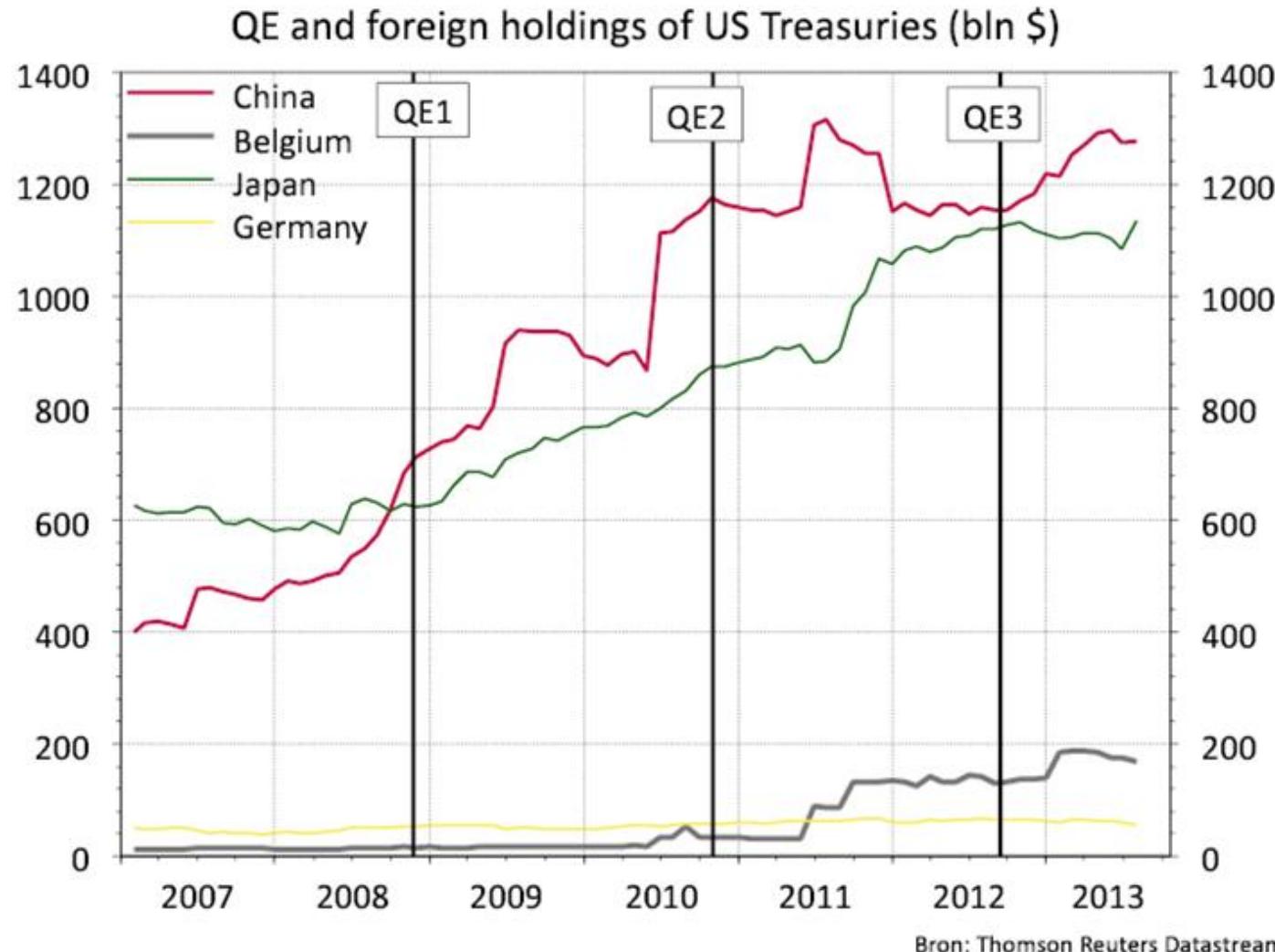
Central bank assets



Bron: Thomson Reuters Datastream / Fathom Consulting

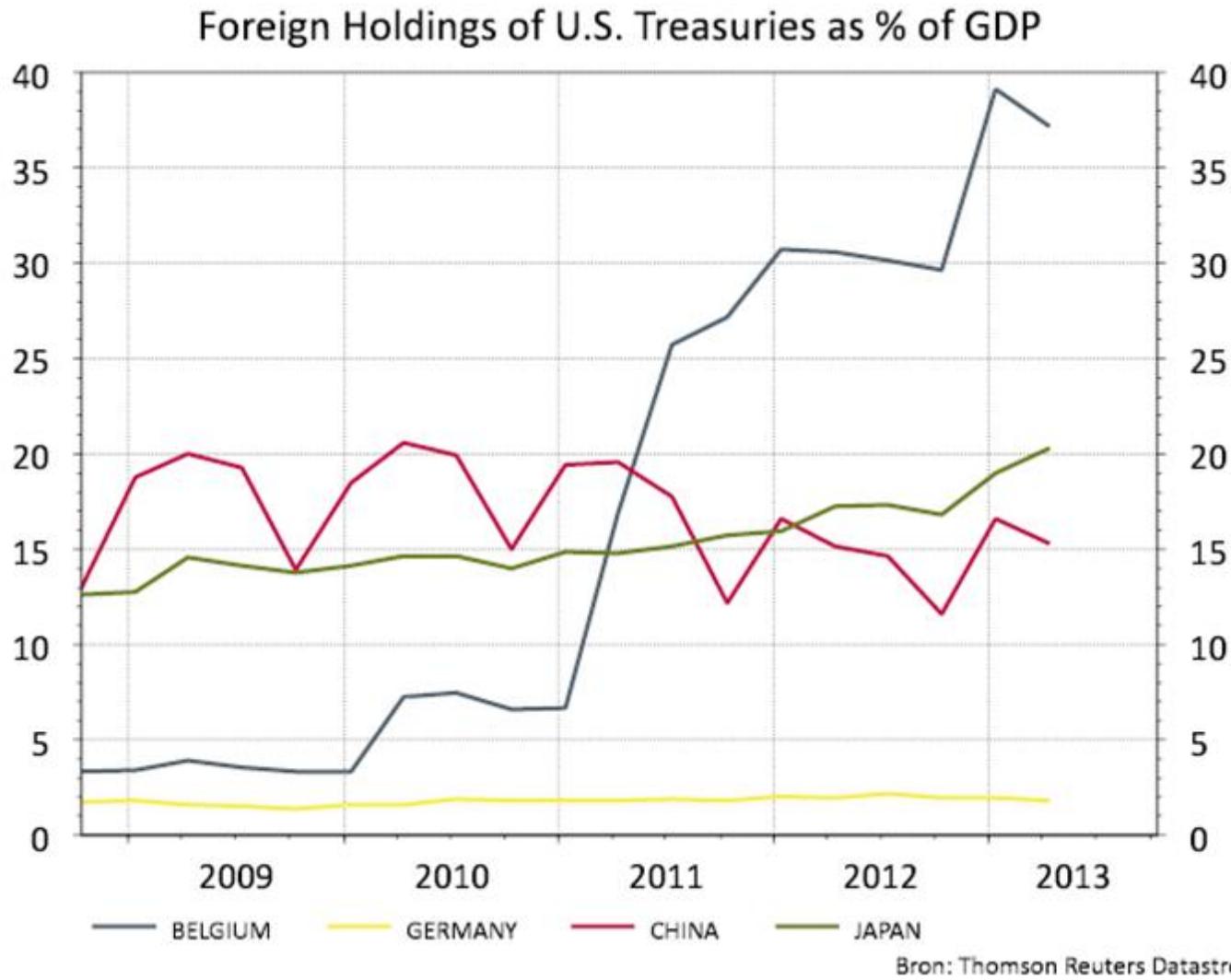
Rentemarkten: de bodem voorbij.

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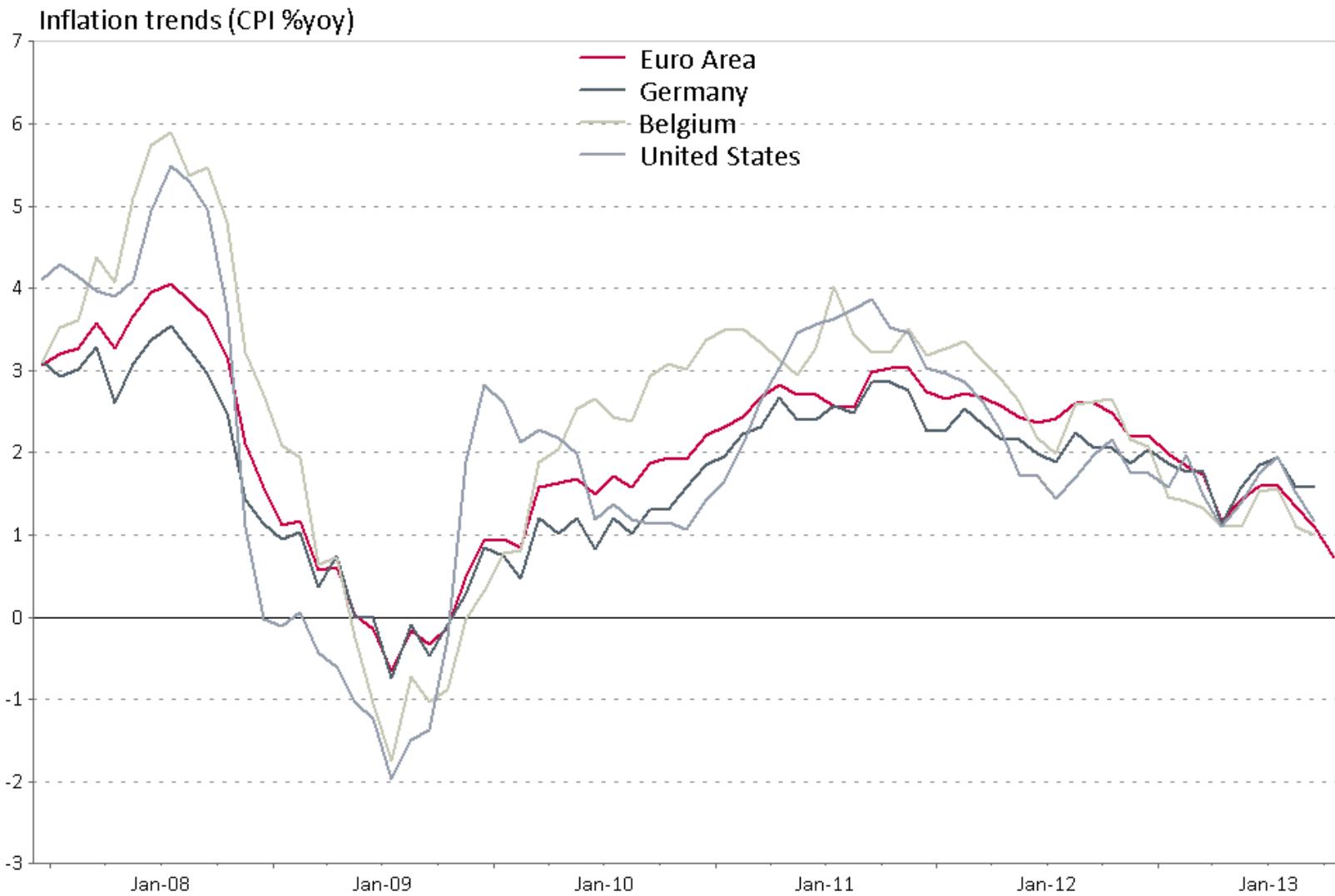
Globaal: centrale banken pompen massaal geld in de economie.



Bron: Thomson Reuters Datastream

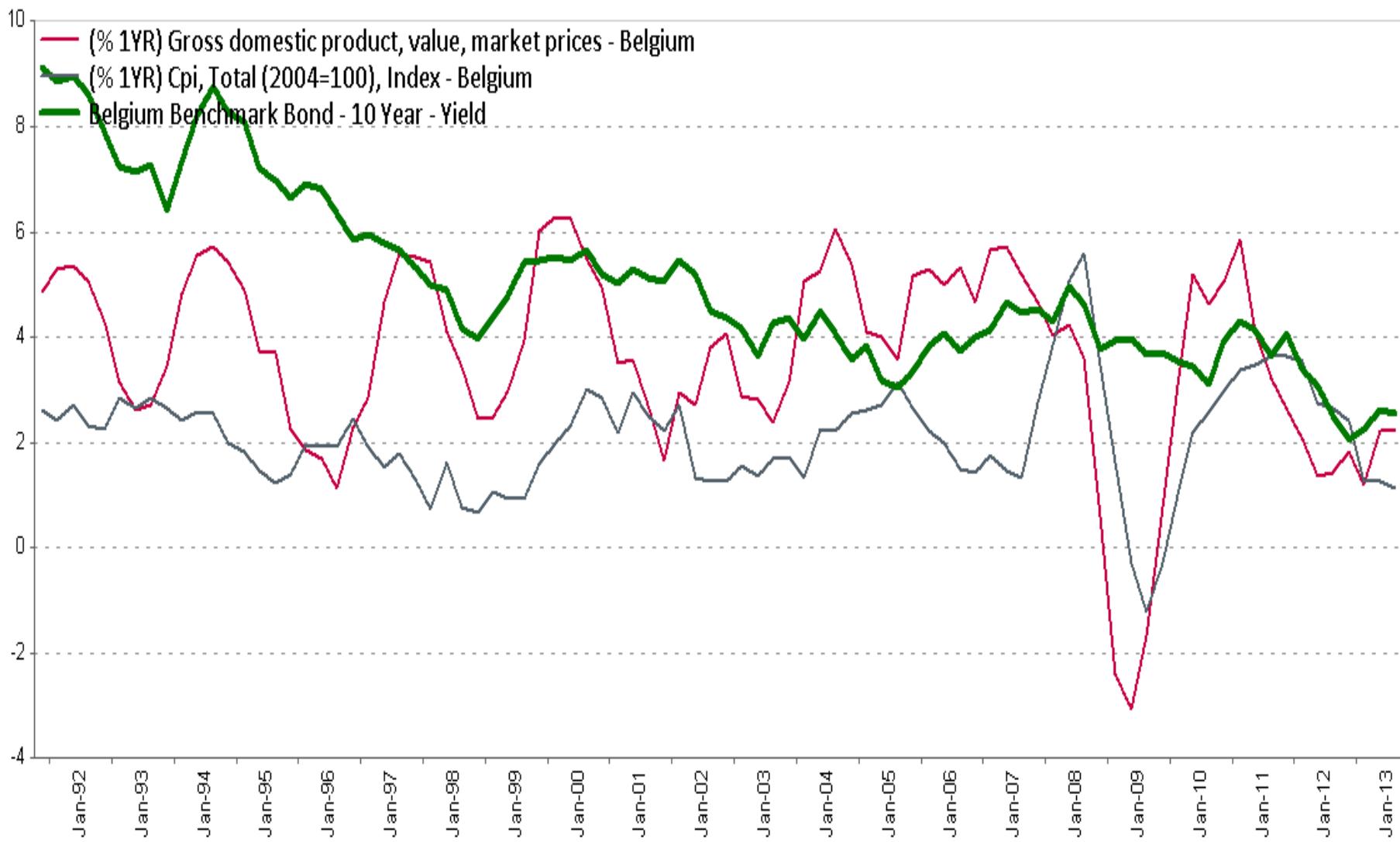
Rentemarkten: de bodem voorbij.

Afwezigheid van inflatiendruk ondanks ultrasoepel monetair beleid.



Rentemarkten: de bodem voorbij.

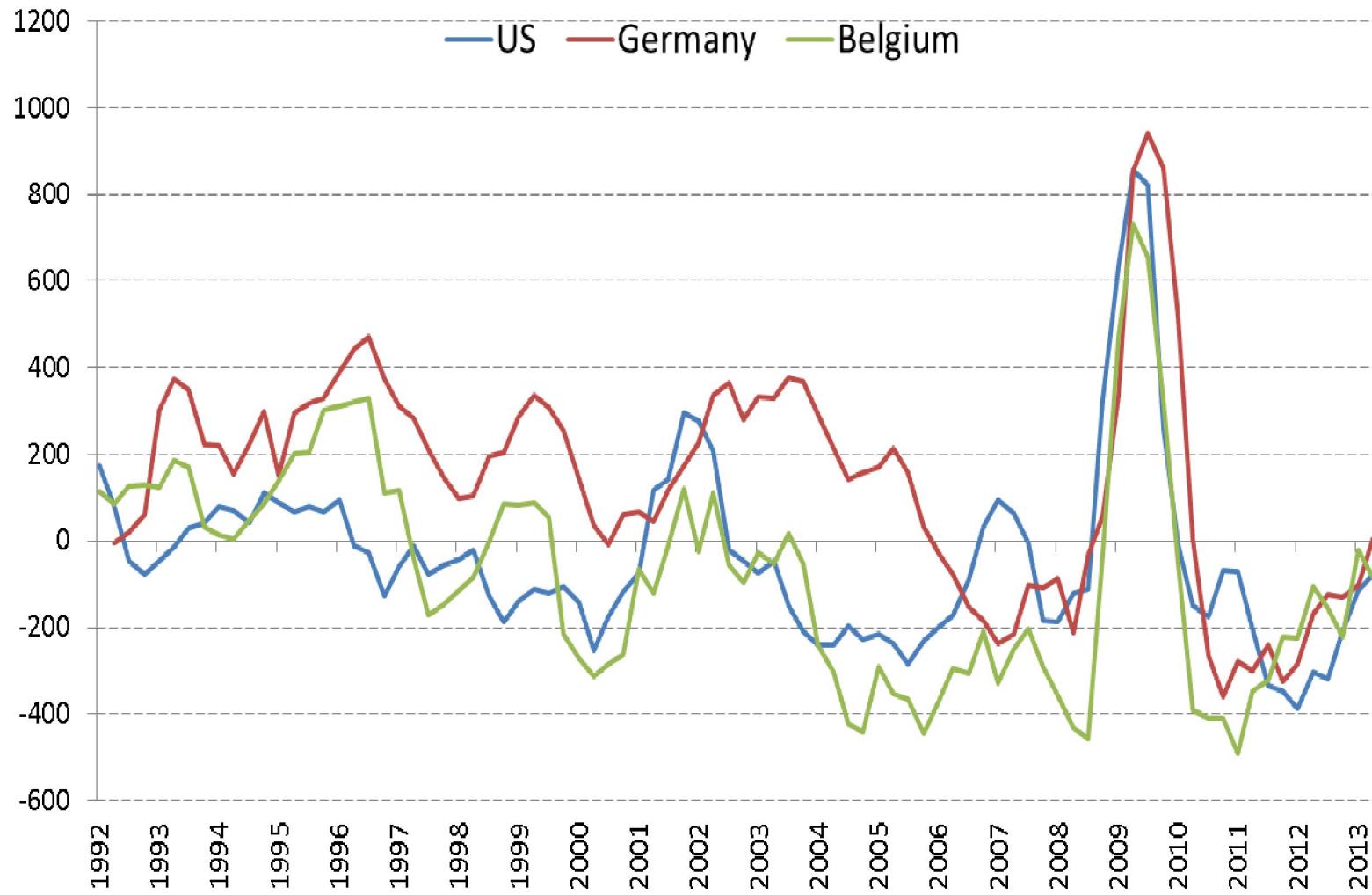
Vuistregel: LT-rente = Groei + Inflatie (+ Premie)



Bron : FACTSET

Rentemarkten: de bodem voorbij.

Evolutie van de 'premie'

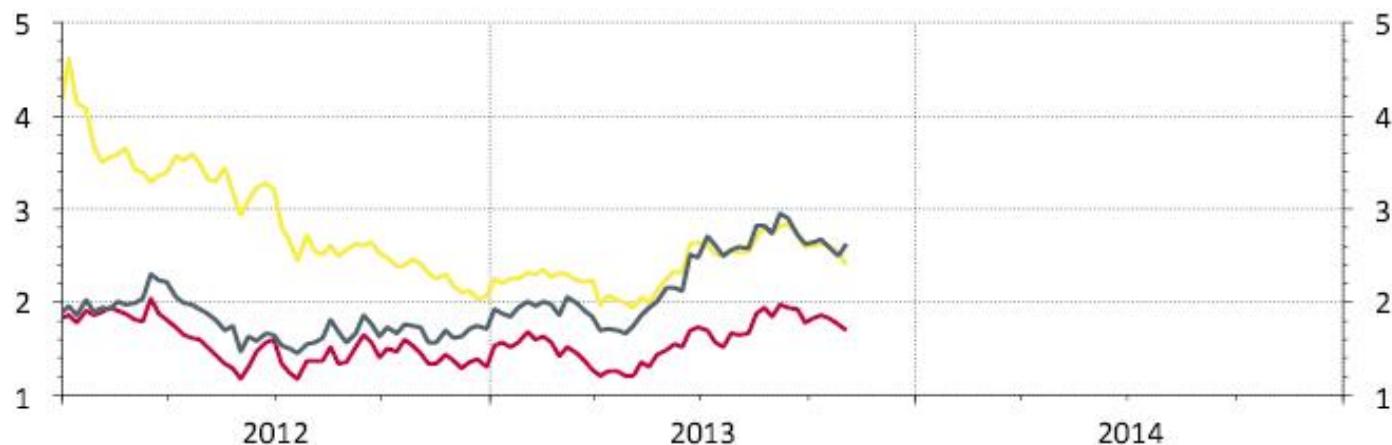
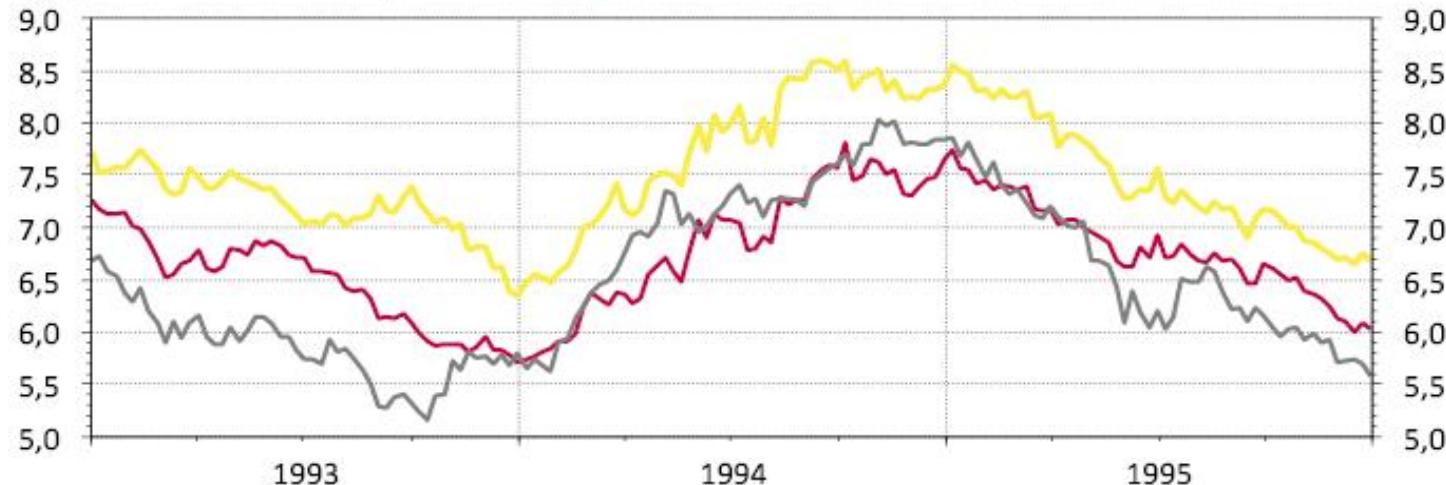


Bron : FACTSET

Rentemarkten: de bodem voorbij.

Maken we een herhaling mee van de 1994 obligatiecrash?

10y government bond yields — GERMANY — BELGIUM — US



Bron: Thomson Reuters Datastream

Rentemarkten: de bodem voorbij.

Overeenkomsten en verschillen 1993-1994 vs 2012-2013.

OVEREENKOMSTEN

OLO onder zware druk in het voorgaande jaar.



Fed = oorzaak van de verkoopgolf.
1994: renteverhogingen
2013: afbouw obligatie-aankopen

Intrasovereign spread Bund - OLO



USD verzwakt?

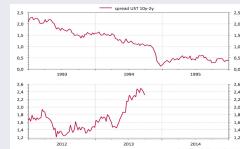


VERSCHILLEN

Groot verschil in nominale groei en renteniveaus



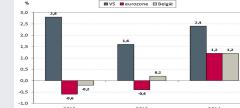
'Steepening' van de rentecurve



Hogere correlatie obligatiekoersen

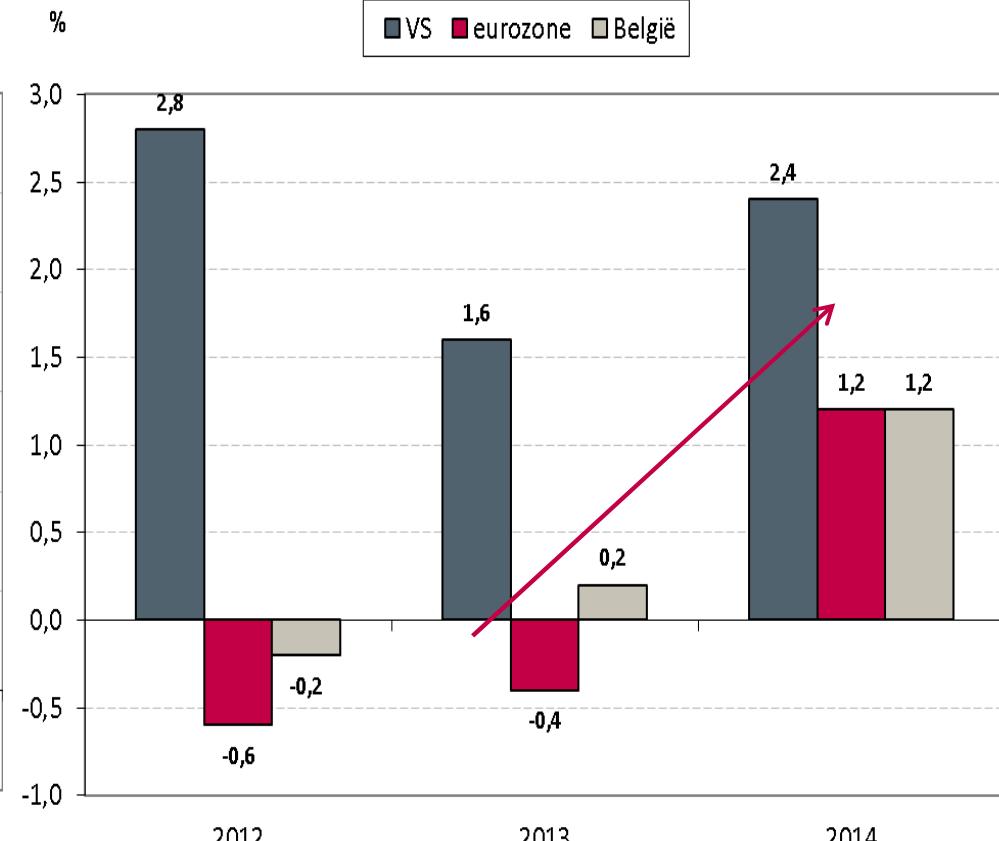
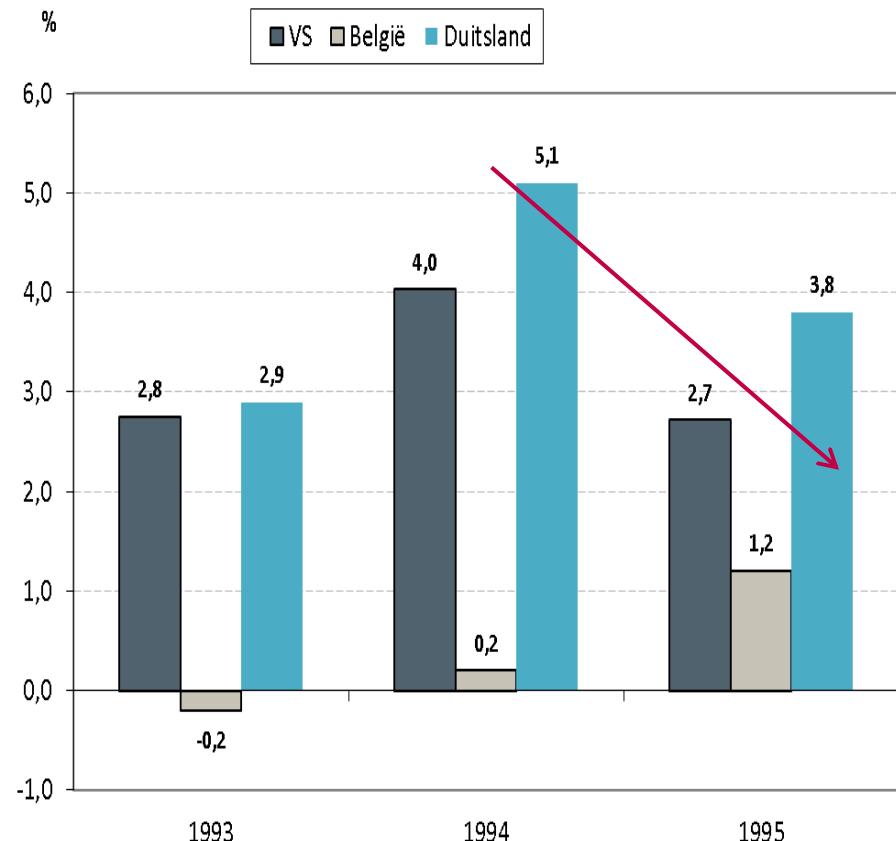


1995: groeivertraging 2014: groeiherstel



Rentemarkten: de bodem voorbij.

1995: groeivertraging vs 2014: hoop op groeiherstel.



Rentemarkten: de bodem voorbij.

Hogere correlatie van de obligatiekoersen dan in 1994.

Sovereign yield correlations



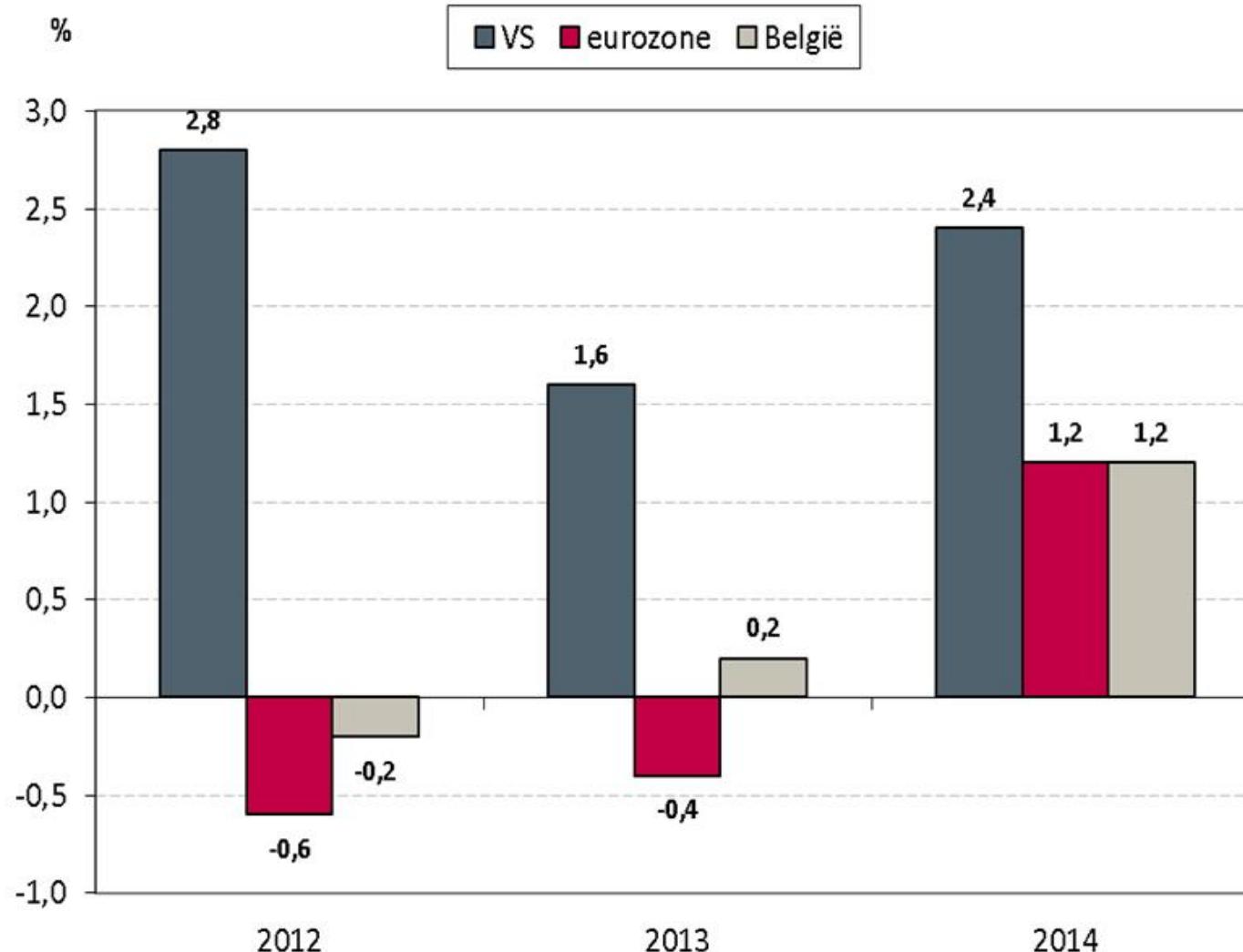
Bron: Thomson Reuters Datastream / Fathom Consulting

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Vooruitzichten.

BBP-groei (%).



Vooruitzichten.

| | BBP (in %) | | | Inflatie (in %) | | |
|---------------------|------------|-------|-------|-----------------|-------|-------|
| | 2012 | 2013 | 2014 | 2012 | 2013 | 2014 |
| China | + 7,8 | + 7,6 | + 7,3 | + 2,6 | + 2,6 | + 3,4 |
| Verenigde Staten | + 2,8 | + 1,6 | + 2,4 | + 2,1 | + 1,6 | + 2,0 |
| Japan | + 2,0 | + 1,8 | + 1,6 | 0 | + 0,5 | + 1,5 |
| Verenigd Koninkrijk | + 0,2 | + 1,0 | + 1,5 | + 2,8 | + 2,7 | + 2,2 |
| Eurozone | - 0,6 | - 0,4 | + 1,2 | + 2,5 | + 1,6 | + 1,5 |
| België | - 0,2 | + 0,2 | + 1,2 | + 2,6 | + 1,5 | + 1,6 |

Vooruitzichten.

V.S: speculatie renteverhoging koelt af.



Bron: Thomson Reuters Datastream

Vooruitzichten.

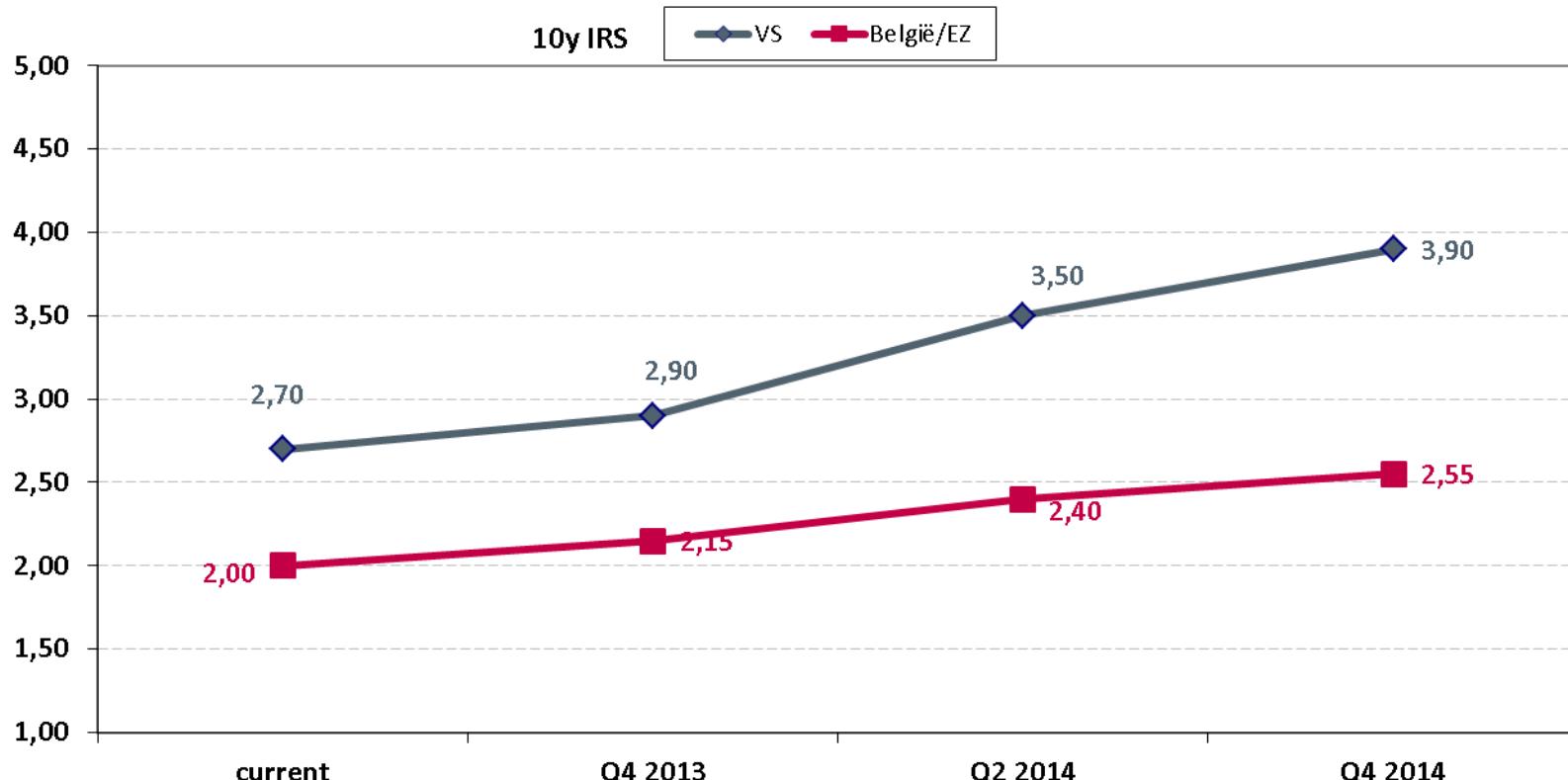
ECB: rente blijft nog geruime tijd op de bodem.



ECB President Draghi
(July 2013) :
"Looking ahead, our monetary policy stance will remain accommodative for as long as necessary. The Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time."

Rentevooruitzichten.

| % | 3m | | 10j IRS | | 10j OLO |
|---------|------|-----------|---------|-----------|---------|
| | VS | België/EZ | VS | België/EZ | België |
| current | 0,26 | 0,22 | 2,70 | 2,00 | 2,41 |
| Q4 2013 | 0,25 | 0,25 | 2,90 | 2,15 | 2,55 |
| Q2 2014 | 0,25 | 0,25 | 3,50 | 2,40 | 2,75 |
| Q4 2014 | 0,30 | 0,30 | 3,90 | 2,55 | 2,90 |



Bron : Research Belfius Bank, Economische Vooruitzichten, oktober 2013.

Rentemarkten: de bodem voorbij.

EUR-USD : goedkoper kan geen kwaad.

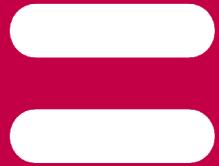


Bron: Thomson Reuters Datastream

Vooruitzichten.

Forex prognoses *

| | 4/11/2013 | Q1 2014 | Q2 2014 | Q4 2014 |
|---------|-----------|---------|---------|---------|
| EUR/USD | 1,35 | 1,34 | 1,32 | 1,3 |
| USD/JPY | 98,7 | 95 | 93 | 92 |
| EUR/CHF | 1,23 | 1,22 | 1,21 | 1,21 |
| EUR/GBP | 0,85 | 0,85 | 0,84 | 0,82 |



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Frank Maet, Senior Macro Econoom
Belfius Bank

Financieel Forum Gent
14 november 2013

Financieel Forum

How insurance players drive their investment strategy?

Sonja ROTTIERS

Gent – 14th November 2013

CONFIDENTIAL

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redefining / standards



Agenda

- AXA and our noble purpose...
- ... is achieved thanks to the particular business model of an insurance company which is mostly impacted by financial risks...
- ...via investment strategies that have to comply with our challenging and changing environment...
- ... and managed through a strong Risks Management governance which impacts our Assets and Liabilities ...

We are “born to Protect” !

AXA is present for its clients...

Prevent

Support

Accompany

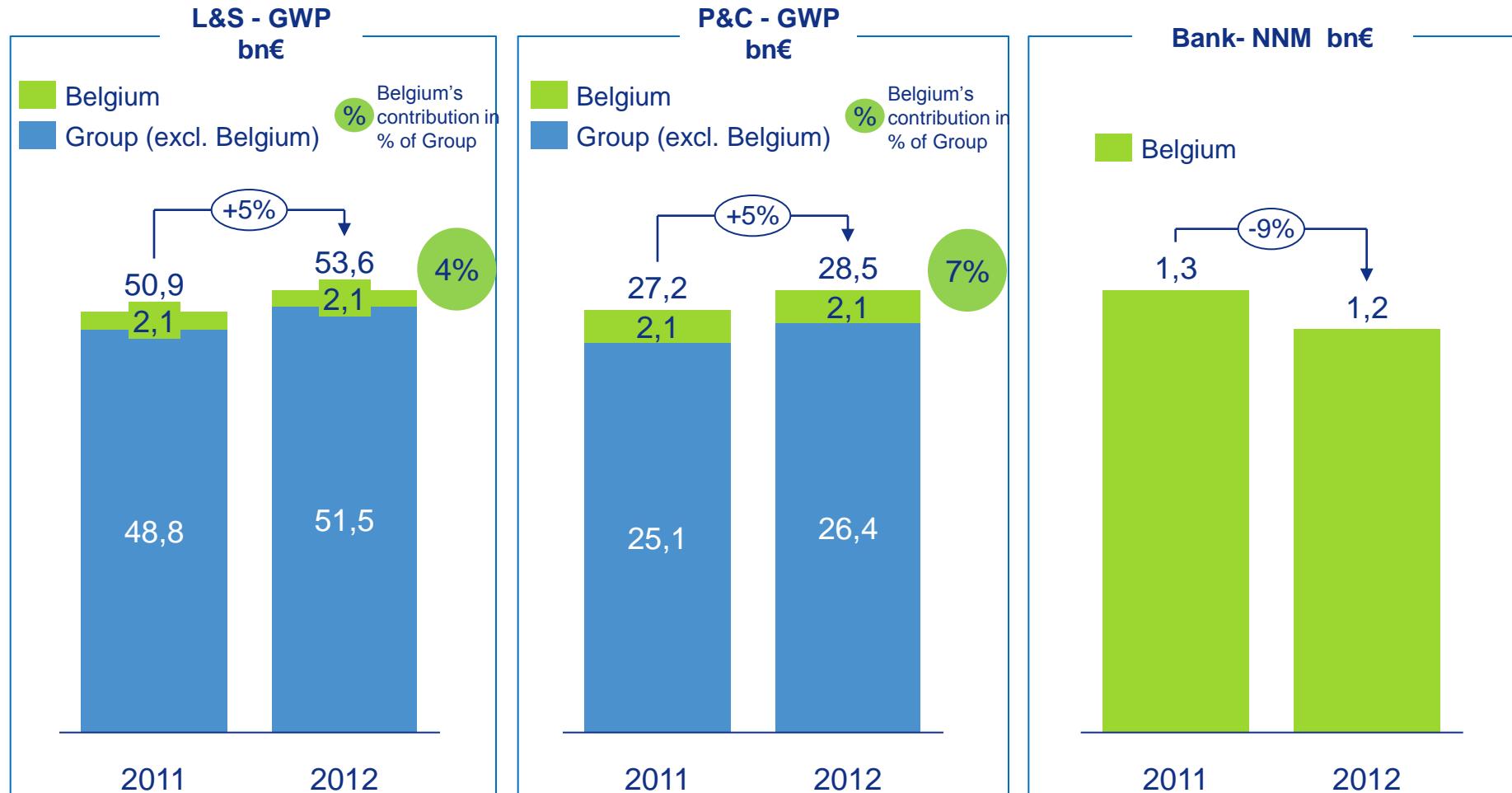
- Research & Development in Belgium (AXA research fund)
- “InsureYourSuccess” a program that educates the young on financial risks,
- Etc...

- AXA Assistance worldwide
- Etc...

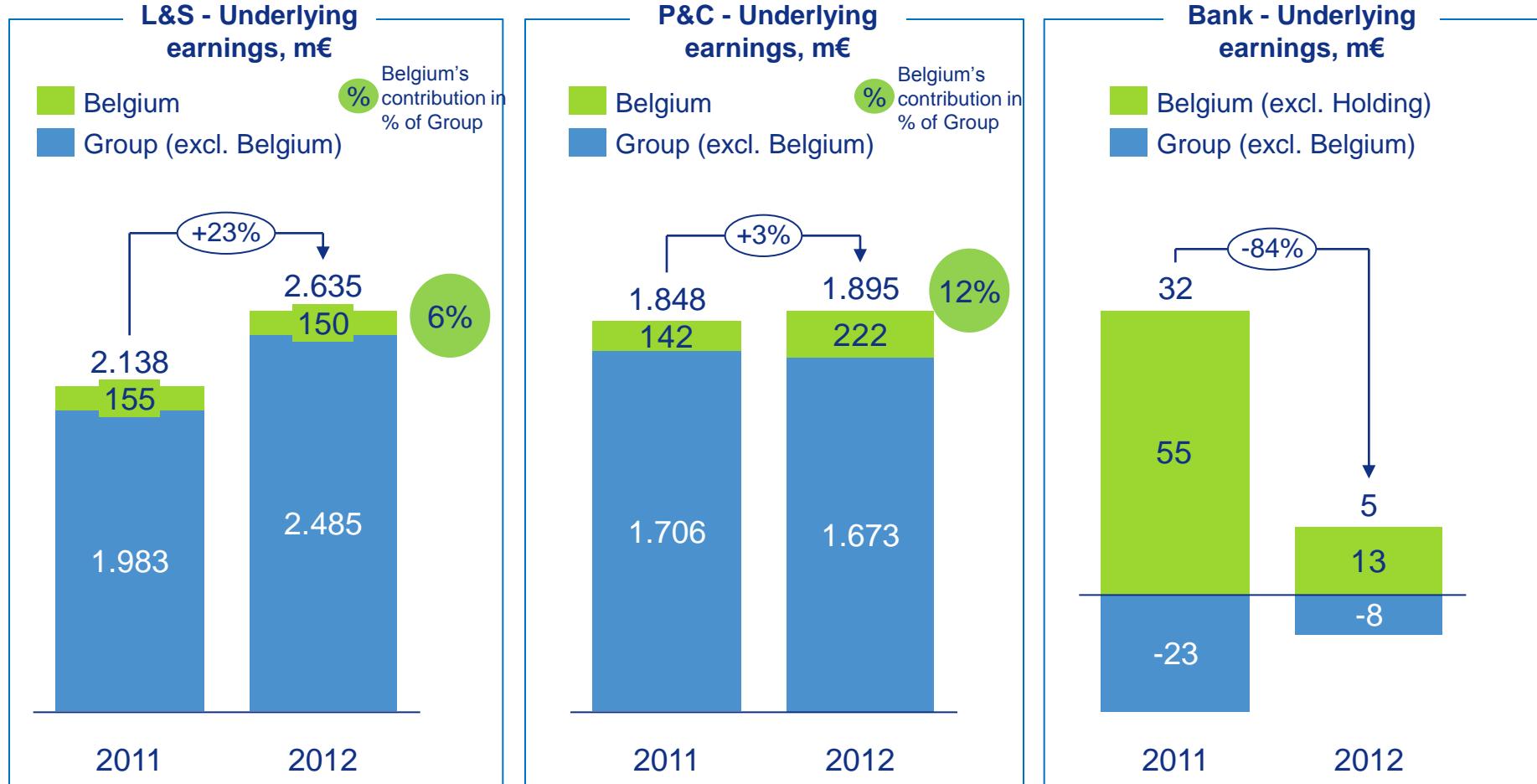
- Our network at **the service** of the clients to advise them to build a plan for life,
- Personal services adapted to every situation



... AXA Belgium contributed significantly to the success of AXA Group ...



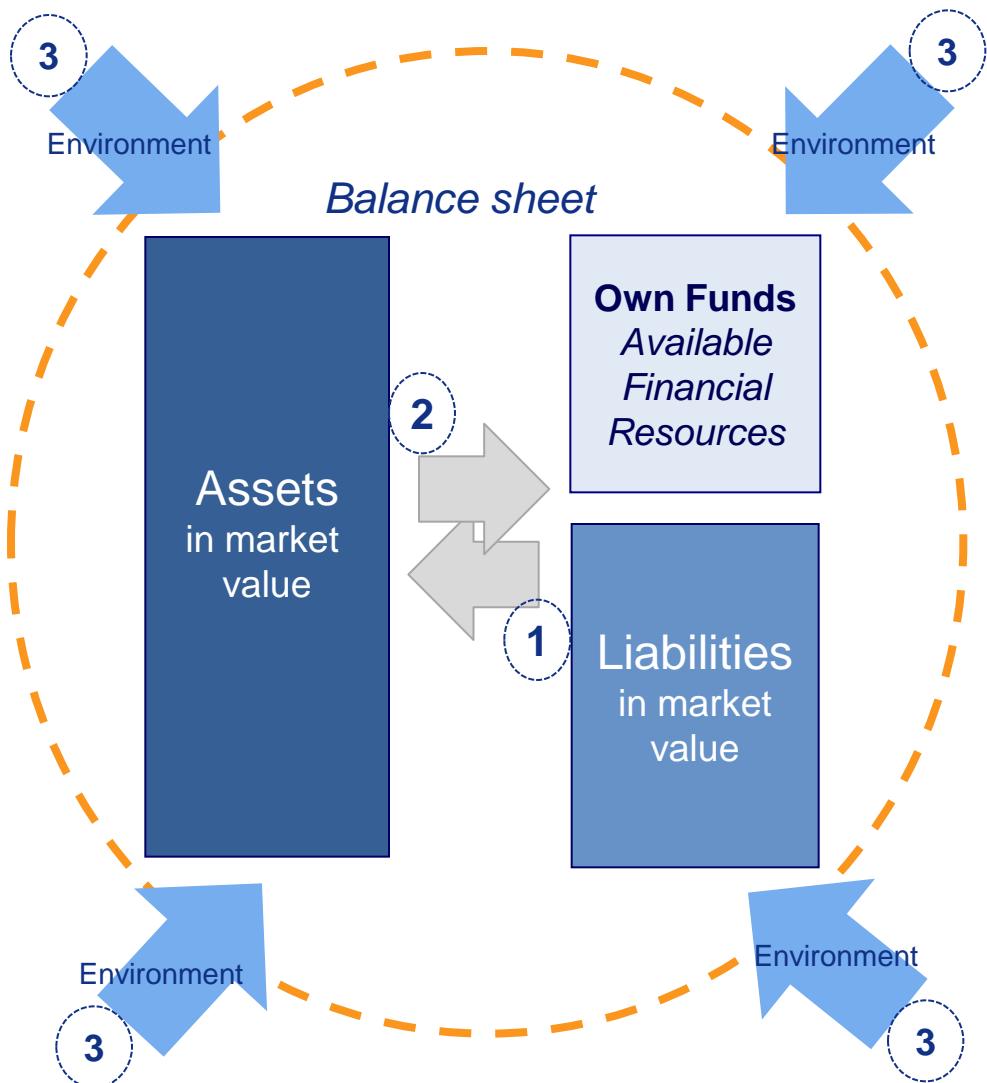
... AXA Belgium accounts for a significant part of AXA Group underlying earnings...



Agenda

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- ... is achieved thanks to the particular business model of an insurance company which is mostly impacted by financial risks...
- ...via investment strategies that have to comply with our challenging and changing environment...
- ... and managed through a strong Risks Management governance which impacts our Assets and Liabilities ...

The insurances business model is different from the one of the banks...



- 1** - Clients purchase a Life insurance product for an agreed risk and return...
- **Insurance company** manages to find a related return in relation with the risk...

- 2** The **investments return** have to cover the client contract but also insurance company's expenses and the shareholders.

- 3** In addition to the risks, insurance players have to manage the changing **external constrains** such as :
 - **Regulatory and fiscal** (Solvency 2, Mifid, etc.)
 - **Economical** (Interest rates, ...)
 - **Commercial** (competitors)
 - **Socio-demographic** (aging population, pensions, etc.)
 - **Technology** (Digital)
 - Others...

Insurance companies mostly manage Financial risks in order to protect all our stakeholders' interests...

SCHEMATIC BREAKDOWN BY RISK CATEGORY OF AN INSURANCE COMPANY



Diversification impact

Most important risks are linked to the market!

Economic Capital

Financial, Insurance & Operational Risks measured consistently using Economic Capital is the capital required to run our business



Example of Market risks

- **Equity**
- **Real Estate**
- **Interest Rates**
- **Spread**
- **Hedge Fund**
- **Private Equity**
- **Foreign Exchange**
- **Volatility**
- **Basis Risk**
- **Inflation Risk**

Agenda

- AXA and our noble purpose...
- ... is achieved thanks to the particular business model of an insurance company which is mostly impacted by financial risks...
- ...and necessitates investment strategies that have to comply with our challenging and changing environment...
- ... and managed through a strong Risks Management governance which impacts our Assets and Liabilities ...

Insurance investors have to comply with many regulations and especially to Solvency II...



Solvency II – 3 pillars

Pillar 1 : Quantitative requirements

Technical Provisions

AFR

SCR/MCR
Standard Formula

SCR Internal Model (full/part.)
- Statistical, Calibration, P&L attribution, Validation

Pillar 2 : Qualitative requirements

System of Governance

- Fit & Proper
- Risk Mgt Function
- Internal Control System
- Actuarial Function
- Compliance function
- Audit Function
- Governance, Use test
- Stress Testing
- Risk Appetite

Own Risk Solvency Assessment (ORSA)

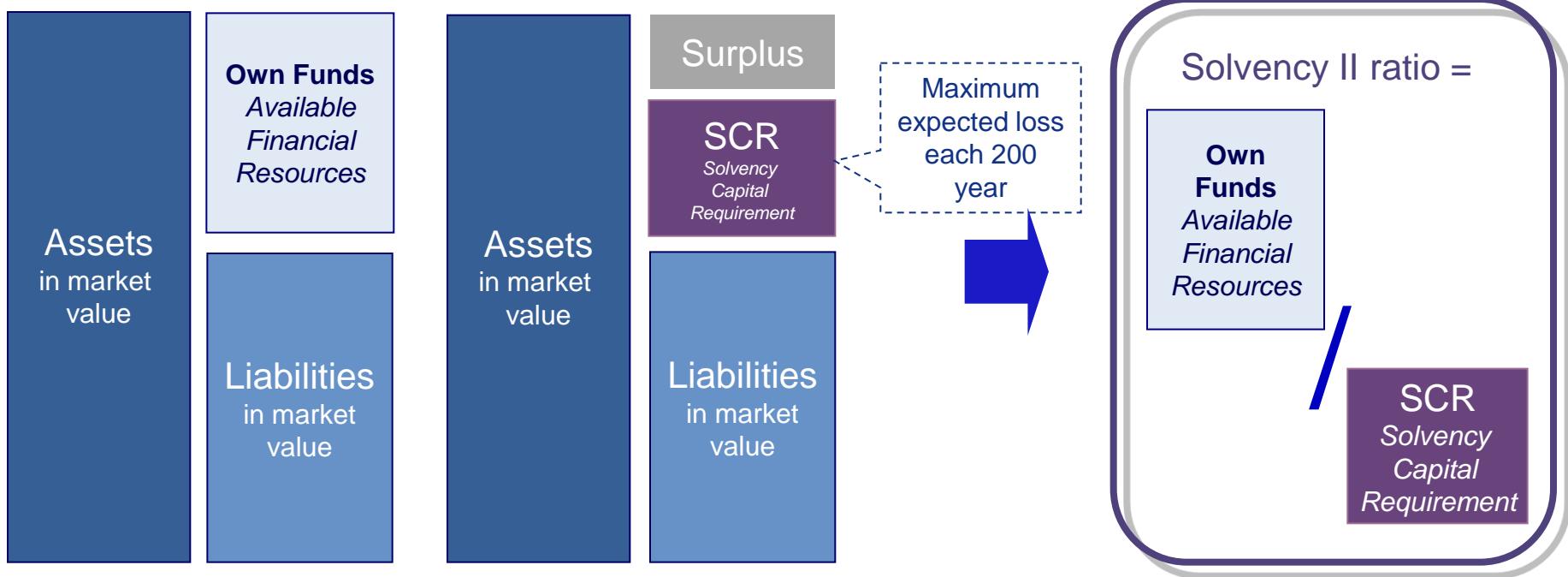
Pillar 3 : Disclosures requirements

Regulatory
(Report To Supervisor – Private)

Market
(Solvency Financial Condition Report – Public)

Quarterly Quantitative Reporting

Solvency II regulation takes into account our whole balance sheet to estimate risks...



Solvency II Ratio Main Assumptions

- The Solvency II coverage ratio is the economic forecast at a one year horizon of the capital coverage for a 1 out of 200 years worst case Marked-to-Market loss at balance sheet level
 - The future market value of both assets and liabilities is projected in real world probabilities,
 - The loss scenario is usually a one shot jump exercise to a marked-to-market reality one year from now
 - The probability of a 1 out of 200 years scenario is usually based on distributions calibrated to historical data

Solvency 2 will reflect the risks associated to each product including on the asset side...

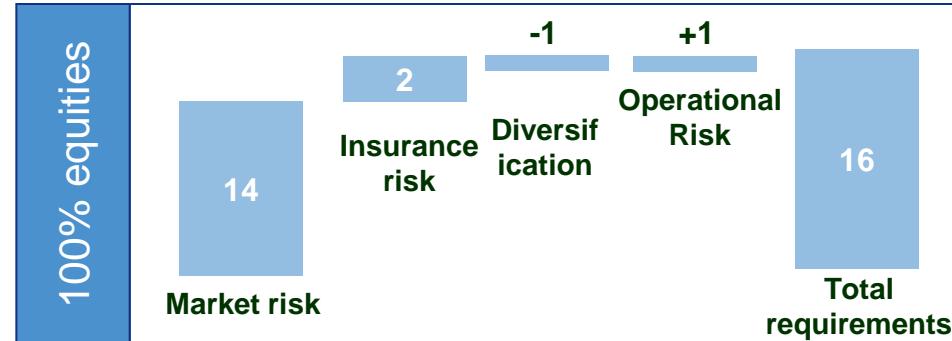
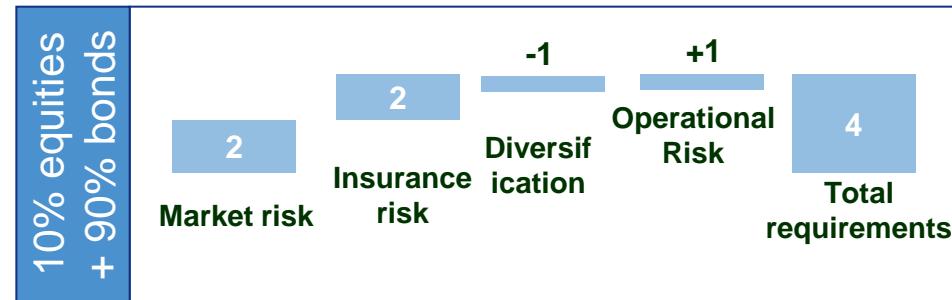
Solvency I: capital requirements are function of volume of business

Solvency II: capital requirements are function of risks taken

Illustration of the required capital in a non unit-linked life insurance product

€100m premiums*
→ €100m reserves
→ €4m capital requirement

4
Total requirements



- Solvency II will enhance the policyholder protection thanks to better capital requirement rules that are function of risks underwritten and investment strategy
- The change in capital requirements depends on the asset allocation

Solvency II and the LDI Strategy

Strategic Impacts

- **How to construct Products that are Solvency II friendly?**
 - In order to minimize the impact from the external sources of volatility on the value of products, one can implement a Liability Driven Investment (LDI) solution – key idea being to **obtain a cash flow matching between the liabilities and the assets**
- De-risking the Balance Sheet
 - Solvency II Market Valuation of the Balance Sheet introduces market volatility on the liability side and thereby increases the volatility of the whole balance sheet.
 - Implementation of a Liability Matching Strategy (LMS)
 - Adopt Performance Seeking Strategy (PSS) through a smart diversification
 - Dynamically adjust allocations between LMS and PSS in order to manage short term risk & preserve surplus through the economic cycle
 - Implementation of Dynamic Risk Budgeting



De-risking the Balance Sheet

Maintaining Adequate Funding Level

Protection of Capital Surplus

LDI Strategy : manage the risk of outflows on the liabilities and adapt the assets (hedging) consequently

De-risking the Balance Sheet

Liability Matching Strategy (LMS)

- Matching of the financial cash-flows through the use of safe financial assets (bonds with low or no credit risks)
 - Matching of the duration GAP
 - Matching of the various time buckets
 - Matching of the Negative Convexity
- This minimization of risk is done under a return constraint as this low-risk assets portfolio must deliver a minimal return allowing to pay :
 - a technical rate to the policyholders but also
 - a minimal return on the capital allocated to the business by the shareholders



Main characteristics:

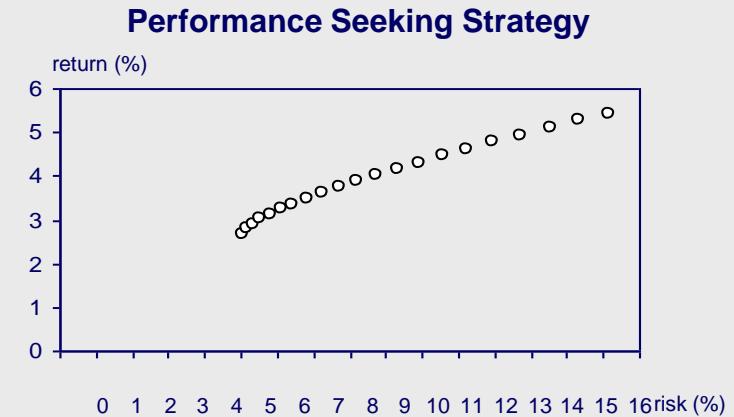
- Liability cash flows take into account all types of **certainty equivalent outflows** (lapses, longevity, claims, expenses, etc.)
- Life: **Risk Neutral calculation** to minimize duration gap, which is equivalent to optimize the option & guarantees for the EEV calculation
- P&C: Purely based on **cash flow matching**

LDI Strategy : a Performance Seeking Strategy (PSS) through a smart diversification ...

Performance Seeking Strategy

Performance Seeking Strategy (PSS)

- Definition of a global Strategic Asset Allocation allowing to reserve a part of the global allocation to more (expected) profitable assets.
 - Strategy of return optimization on the remaining part of the portfolio/balance sheet with a risk appetite constraint as the level of risk taken may not endangered the global profitability of the whole portfolio.
 - More diversification across attractive asset classes.
 - Dynamic review of expected risks and returns
- Purposes : Generate a return beyond simple liabilities matching and maintain long-term commercial capacities (Profit-sharing and commercial actions funding)



Main characteristics:

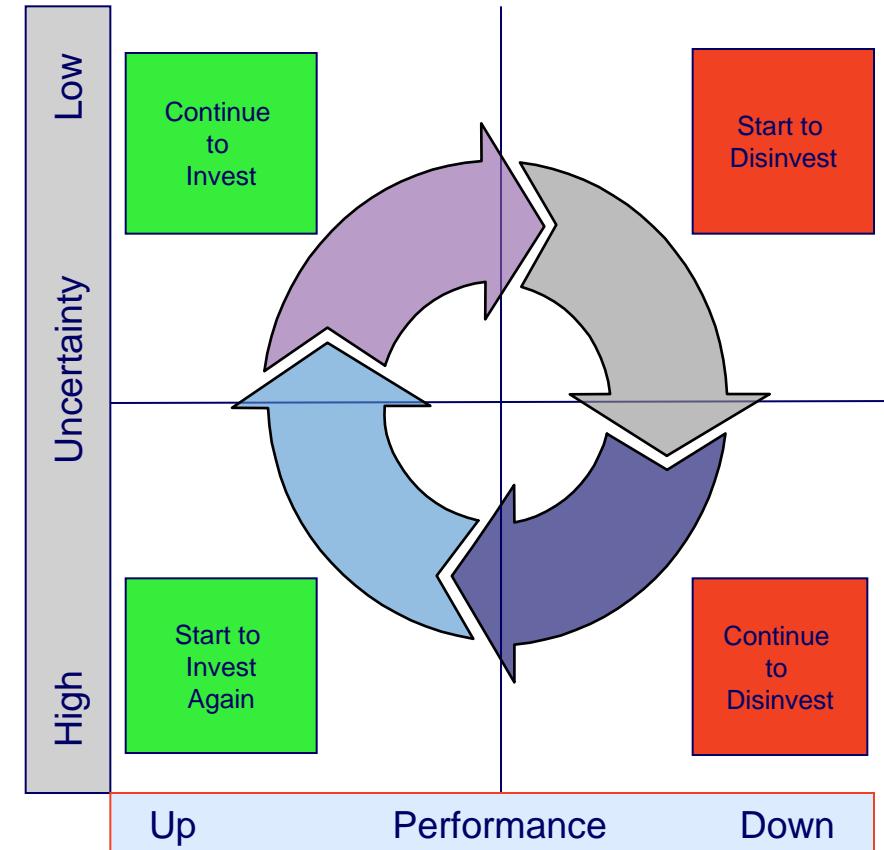
- Same principle for Life & Non life:
 - **Real World calculation** optimizing in a robust way the risk/return couple of different portfolios
 - The idea is to optimize the **cash flow to shareholder with minimizing volatility**
 - Assumed **net returns & volatilities** of asset classes:

LDI Strategy : implement a dynamic management of the financial assets...

Protection of Capital Surplus

Dynamic Risk Budgeting

- Definition of a Tactical Asset Allocation
 - Declination of the Strategic Asset Allocation in a bigger granularity by the division of each major asset classes in sub-categories (increased benefit of diversification)
 - Positioning of the PSS in each of those sub-categories: choice of an effective exposition in the range of exposure defined for each sub-asset classes
- Downside risk management of the portfolio to protect both the surplus and the Capital by taking into account the historic performance of the portfolio and the level of market uncertainty



Two vision of investment management and its consequences for ALM : Mutualization (asset pooling) vs Segregation



Mutualization (Asset Pooling)

Benefits

- **Flexibility in ALM management (size, risk diversification,...)**
- **Launch of New products in low IR environment (No destruction of the commercial franchise)**
- **NBV Calculation**

Costs

- **No Cash Flow Matching**
- **Less easy to follow profitability of individual products**

Segregation / Internal Segmentation

Benefits

- **Close monitoring of Financial Risks**
- **STEC favourable**
- **Close follow-up of profitability (analytic accounting)**
- **Creation of ST value for the shareholders (no subsidization)**

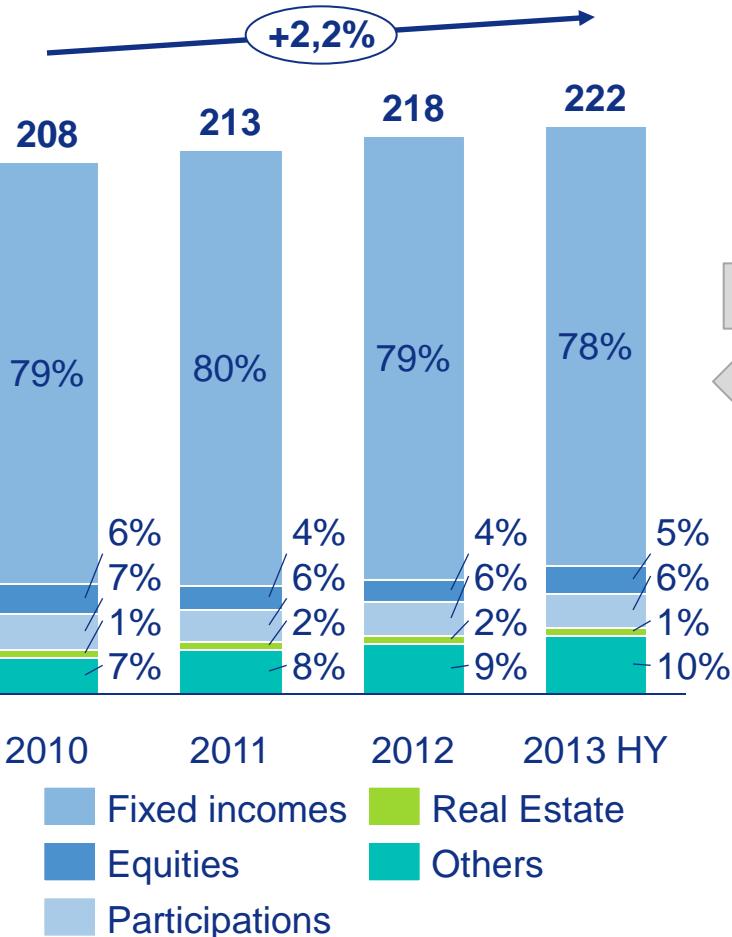
Costs

- **Commercial risks**
- **Destruction of LT value for the shareholders (unless reallocation of Capital)**

Given the current market conditions and the dynamic strategy, insurance players are investing mostly in low risk/low return products.

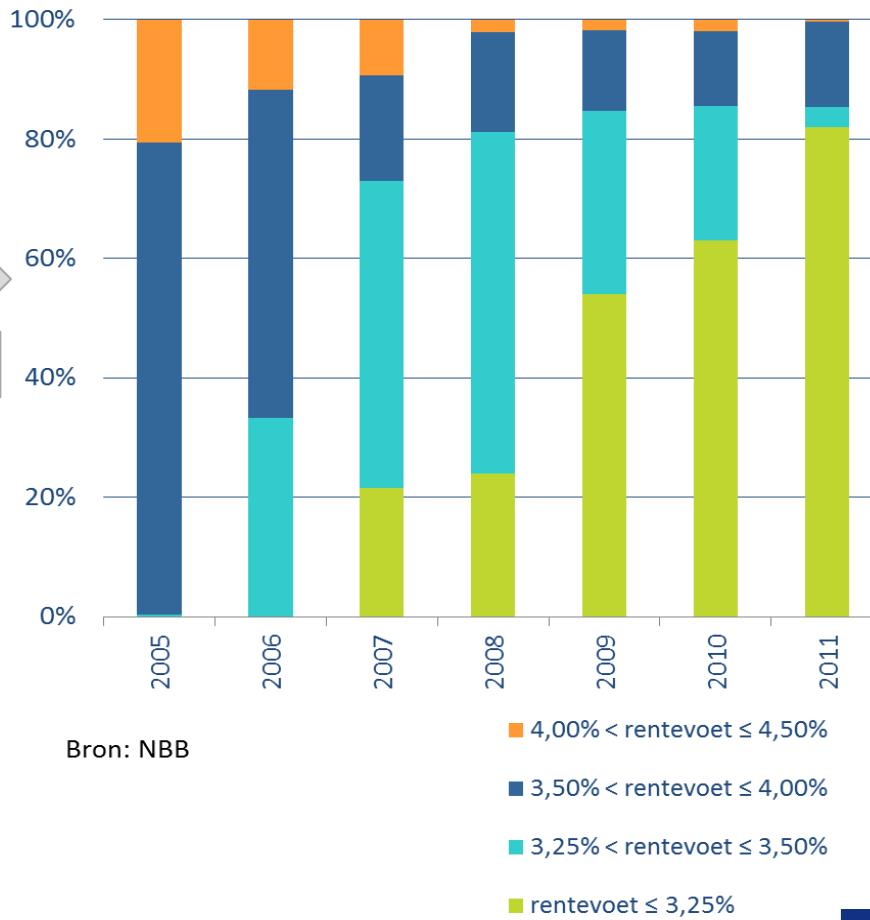
Market Financial Assets for Life activities (excl. B23)

Book value, bn €



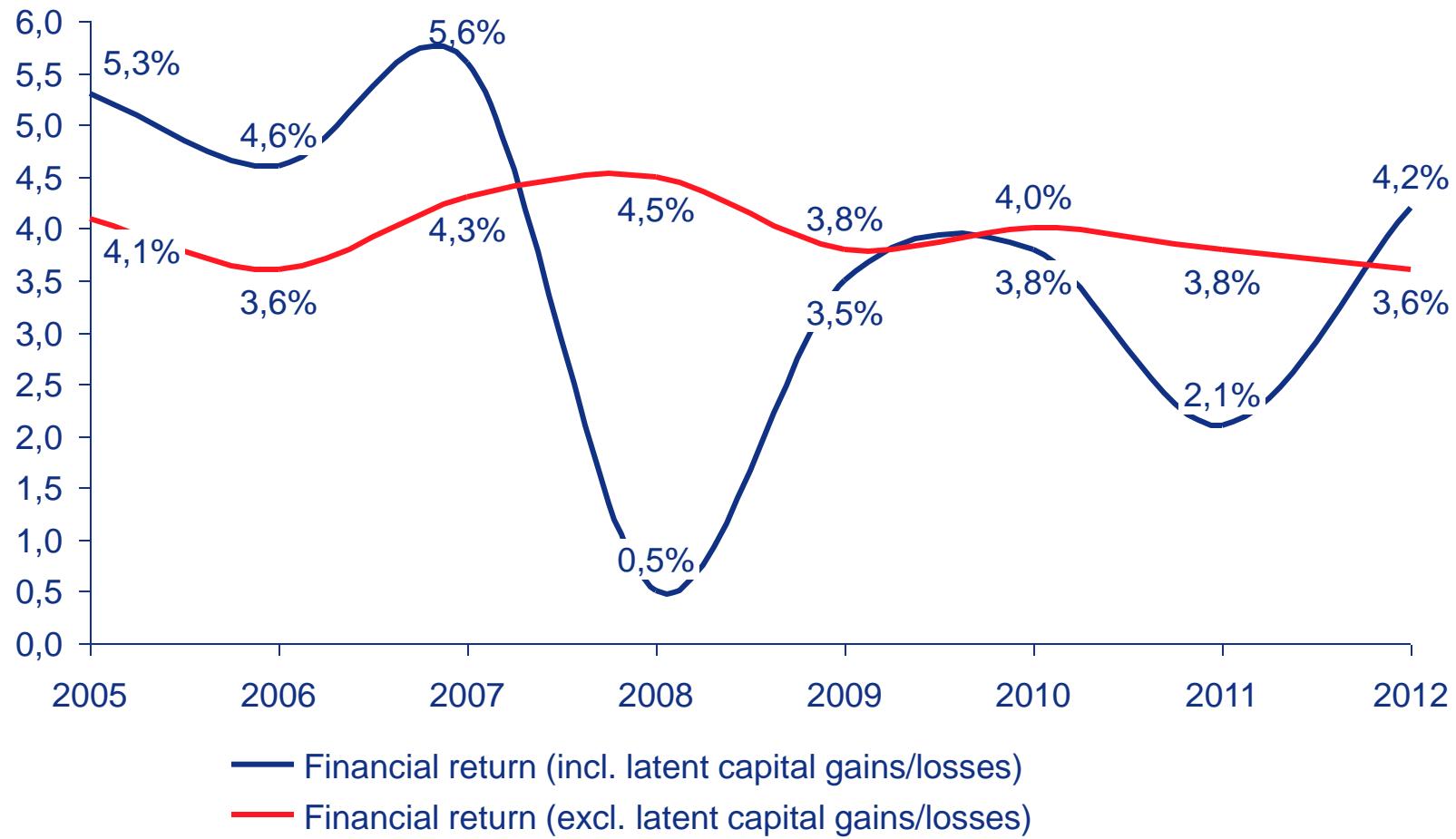
Allocation of the average guaranteed interest rates

In % of the total technical provisions B21



The crisis impacted the financial returns of the insurance sector which was mitigated by this dynamic strategy

% of the average return of financial assets (market value, excl. UL)



Source : Assuralia

Solvency II and the LDI Strategy in brief...

Consequences of LDI for ALM Strategy

■ Necessity to adapt ALM strategy to limit the gap between Assets and Liabilities

- Active management of the risk of lapses on Liabilities (Negative convexity) and adapted asset-hedge strategies (LMS)
- As the capacity to increase margins on assets is decreasing, there is a necessity to adapt the design of insurance products (liabilities) to maintain a minimal profitability on the Life Business
- For the Non-Life Business, necessity of additional financial profits to finance unexpected claims
- Diversification becomes an asset (PSS)
- Dynamic management of the Tactical Asset Allocation to be prompt to catch-up opportunities on financial markets or to hedge in the case of down-turn of the markets

■ Impact of the strategy on the asset allocation/picking processes: « flight to quality » and risk-cutting processes

- Positive for Govies, Good Quality Corporate bonds and Credit Products (Commercial Loans and Mortgages), Real Estate
- Negative for Equities and Risk Capital, Un-hedged Derivatives products, Mutual Funds (without transparency), structured and alternative investments

■ Current Asset Allocations in Belgian Insurance Companies:

- High proportions of OLO Govies
- Other bonds are mainly corporate (but underweight of credit on financial institutions)
- Search for Loans (Infrastructure, Mortgages)
- Low proportions of equities (dividend oriented)
- Real Estate strategy focused on long term recurring yield
- Very selective approach on alternative investments



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- ...via investment strategies that have to comply with our challenging and changing environment...
- ... and managed through a strong Risks Management governance which impacts our Assets and Liabilities ...

A “Risk Appetite Framework” ensures that all stakeholders are aligned on the risk tolerance...

Objectives

Risk Appetite is a risk governance tool ...

... ensuring that risks are limited and their consequences on all dimensions understood

Empower local units and manage the Group

- The **Risk Appetite Framework** is a governance tool to ensure that appropriate governance, reporting, limits and decision processes have been set up to drive risk management decisions.
- It helps to :
 - monitor accumulation of risks,
 - have a clearly stated risk appetite, and
 - manage the exposures.
- The **risk appetite** considers potential impact of **risks** on **4 dimensions** across 7 key indicators:
 - **earnings**: underlying earnings, adj. earnings, net income
 - **value**: Group EEV,
 - **solvency**: solvency I / local solvency and solvency II coverage ratios,
 - **liquidity**: liquidity coverage ratio.to set up **limits** on **functional risk indicators**.
- The **risk appetite is a structured process** between **all stakeholders** to ensure **consistency** of risk tolerance, related governance and decision processes - **empowering stakeholders** to actively manage their risk exposures through their own choice of limits.



Thank you for your attention