Banking industry continues 2012 recovery with strong Q4 performance – uncertainties for 2013 ahead

zeb/market flash

Key topics

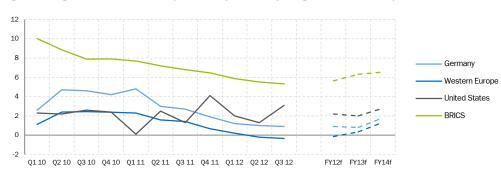
- I. Global economic climate (p. 2)
- / Aside from the US, the global economy continues to slow down,
 - as GDP growth rates and forecasts further decrease
- / Economic outlook for Germany substantially reduced
- / Italy may become main challenge for the euro in 2013 due to elections and highest refinancing needs
- II. Key banking drivers (p. 5)
- / Stock market volatilities back to pre-debt-crisis levels
 - Historically low EURIBOR not reflected in lending/deposit rates
- Investment banking activities with solid recovery corporate bond issuances outperform M&A activities and equity offerings
- III. State of the banking industry (p. 9)
- Q4 strong quarter for banking industry outperforming all other industries – upward trend continues as market capitalization reached highest level in two years
- / Outlook for 2013 mixed due to increased rating downgrades
- IV. Special topic: The impact of negative interest rates (p. 15)
- / Negative interest rates pose several challenges for banks

I. Global economic climate

Economic growth perspectives

With the exception of the US, the global economic climate continues to cool down, as GDP growth rates decline further. The outlook was particularly reduced for Germany and Western Europe.

Fig. 1: GDP growth and forecasts (real GDP, year-over-year growth rates, in %)

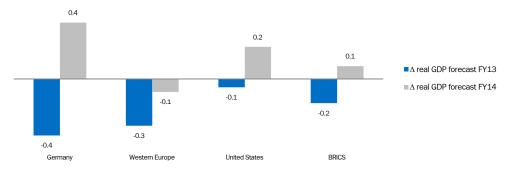


US only bright spot in global economy in Q3 2012

Western Europe includes the euro area, Denmark, Norway, Sweden, Switzerland, United Kingdom. BRICS: Brazil, Russia, India, China, South Africa. Q4 2012 data not yet available at the time of writing. Source: Bloomberg, zeb/research

- / The downward trend in the global economy continued in Q3 2012: Western Europe experienced negative GDP growth for the second quarter in a row, thus technically falling back into recession
- / Taken as a whole, even the BRICS countries were not immune to the downward trend only the US showed an improved growth rate of 3.1% after 1.3% in Q2 2012
- / Forecasts predict another difficult year for 2013, as the European debt crisis and the US fiscal cliff are not fully solved yet

Fig. 2: Change of GDP outlook (difference between GDP forecasts Q4 12 and Q3 12, in %p)

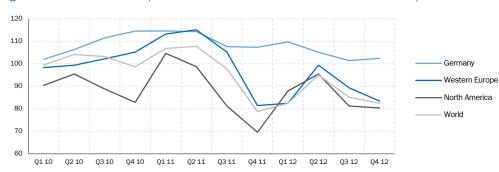


GDP outlook for 2013 adjusted downward

Source: Bloomberg, zeb/research

- / Forecasts for 2013 are generally less optimistic than a quarter ago
- / Especially for Germany, the outlook was significantly reduced over the last quarters: After a consensus GDP growth forecast for 2013 of 1.6% at the end of Q1 2012, the outlook declined to 1.4% in Q2 2012, to 1.2% in Q3 2012 and to only 0.8% at the end of Q4 2012 a downward adjustment of 0.8%p or 50% in only nine months

Fig. 3: Economic sentiments (ifo Business Climate Index – ifo Geschäftsklimaindex)



Sentiments still pessimistic in most regions

The ifo Business Climate Index is an indicator for economic activity based on a survey among companies on their current business situation and outlook for the upcoming six months (2005 = 100). The ifo Institute only provides data for selected countries and regions. North America includes Canada and the US, no separate data for BRICS countries available.

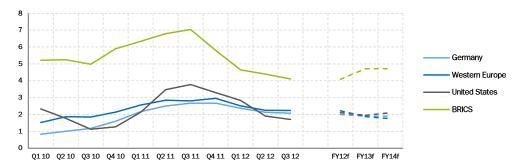
Source: ifo Institute for Economic Research, zeb/research

- / After a sharp fall in global business confidence in Q3 2012, sentiments have only decreased slightly in Q4 2012
- / In Germany, sentiments stabilized on the lowest levels in three years, but remain above the levels of the other regions

Inflation and interest rates

In Q3 2012, inflation rates stabilized for Germany and Western Europe as a whole at a level of around 2%. In the US and the BRICS countries, inflation rates continued to decline. Government bond yields in Germany and the US continued to benefit from their "safe haven" status.

Fig. 4: Inflation rates and forecasts (annual change of average consumer prices, in %)

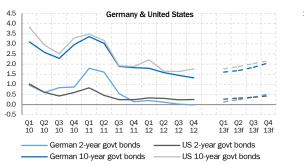


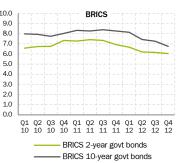
Global inflation rates stable

Q4 2012 data not yet available at the time of writing. Source: Bloomberg, zeb/research

- / Despite continued central bank action, global inflation rates continue to decline or remain stable at low levels
- / Inflation in BRICS countries is now at a long-term low of just above 4%, in Western Europe and Germany inflation rates are still under control at just above 2%
- Forecasts predict stable inflation rates for all regions, except for BRICS countries where GDP growth is expected to increase again in 2013

Fig. 5: Government bond yields (2/10-year bond yields p.a., in %)





Interest rates remain at historic lows

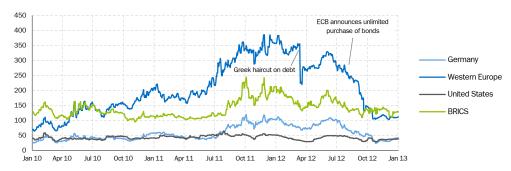
BRICS bond yields calculated as unweighted average, no forecast data available for BRICS countries. Source: Bloomberg, zeb/research

- / For the first time, German 2-year bonds exhibited negative average interest rates in Q4 2012, underlining the country's status as a safe haven in Western Europe, while US bonds of the same category continued to provide investors with an at least small return. For a detailed look at the phenomenon of negative interest rates, see Chapter IV of this zeb/market flash issue
- / The Fed's December commitment to keep interest rates near zero as long as unemployment remains high and inflation below 2.5% is not yet reflected in the predictions

Sovereign refinancing

The calming effect of the ECB's readiness to buy government bonds if necessary continued to last in Q4 2012. After a long period of high volatility, Q4 2012 saw Western European sovereign CDS spreads improve, but with more stability. This may, however, be challenged by the high refinancing needs of Italy and Spain this year.

Fig. 6: Sovereign CDS spreads (5-year CDS spreads, in bp)



Western European CDS spreads improved further

Average of Western European countries as composed by Bloomberg. BRICS 5-year sovereign CDS spreads calculated as unweighted average, no data available for India.

Source: Bloomberg, zeb/research

- So far, the decision of the ECB to purchase Western European countries' government bonds on an unlimited basis if necessary has proved to be very effective – Western European sovereign CDS spreads further declined in Q4 2012 and are now lower than BRICS CDS spreads for the first time in two years
- / German CDS spreads reached US levels again thanks to the ECB "breathing space" provided to the eurozone countries

Fig. 7: Sovereign refinancing needs (bonds and loans outstanding with maturity 2013/14, in % of nominal GDP)

Italy with highest refinancing needs in 2013

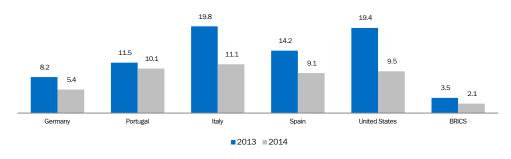


Figure only contains currently outstanding bonds and loans, without net new borrowings. Source: Bloomberg, zeb/research

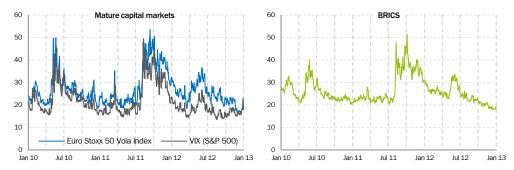
- / As of December 31, 2012, Italy has by far the highest refinancing needs with EUR 312 bn (19.8% of nominal GDP) for bonds and loans maturing in 2013
- / Italy, in particular, may become the main challenge for the euro in 2013, as the upcoming elections at the end of February may further complicate the Italian funding task

II. Key banking drivers

Selected capital market indicators

Stock market volatilities stabilized in Q4 2012 and almost returned to the levels before mid-2011. In the currency markets, the euro further gained in value against the US dollar and BRICS currencies.

Fig. 8: Stock market volatilities (in bp)



Market volatilities stabilized on pre-debtcrisis levels

The BRICS volatility index is calculated as an unweighted average of CBOE Brazil Volatility Index, Russian Volatility Index, India NSE Volatility Index, AlphaShares Chinese Volatility Index, JSE Securities South African Volatility Index.

Source: Bloomberg, zeb/research

- Volatilities of capital markets further stabilized globally in the last quarter, underlining the reduced uncertainty of investors – market volatilities in Europe and the US returned to mid-2011 levels
- / In BRICS, volatility continued to decline slightly and is currently even below the level of Q2 2011
- / The difficult US fiscal cliff negotiations are reflected in the US volatility at the end of 2012

Euro recovery continues

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Fig. 9: FX rates (EUR/USD, EUR/BRICS basket)

Jan 12

1.50

1 40

1.30 1.25

1.20 1.15

Jan 10

Jul 10



EUR/BRICS basket represents a custom index of EUR/BRL, EUR/RUB, EUR/INR, EUR/CNY and EUR/ZAR exchange rates. Individual exchange rates are indexed by 1/1/2010. The basket is then calculated as an unweighted average of individual exchange rate indices.

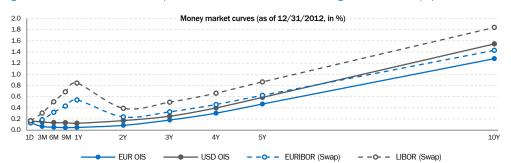
Source: Bloomberg, zeb/research

- / In Q4 2012, the euro further restored the trust of investors and continued its recovery against the US dollar and our BRICS currency basket for the second quarter in a row
- / The EUR/USD rate stabilized above the important level of USD 1.30 per EUR and the EUR/BRICS rate is even back on January 2010 levels

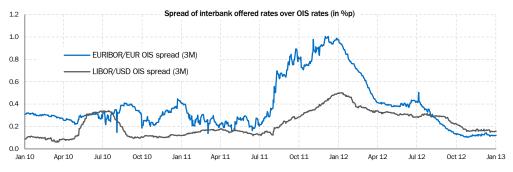
Funding costs and margins

In Q4 2012, the interbank funding situation in the euro area hardly changed compared to Q3 2012. The historically low EURIBOR rates are not yet reflected in deposit and corporate lending rates.

Fig. 10: Interbank market rates (interbank offered rates and overnight indexed swaps)



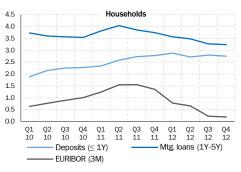
Funding spreads stabilized on reasonable levels

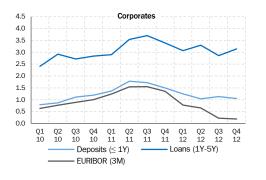


Source: Bloomberg, zeb/research

- / The previous quarter further eased the funding situation of banks: After a strong decline in Q3 2012, spreads of interbank offered rates over the corresponding OIS rate stabilized
- Current spreads are still slightly above normal levels with 0.120%p (EURIBOR/EUR OIS rate) and 0.159%p (LIBOR/USD OIS rate), but well below the spreads of the tumultuous second half of 2011. This indicates that banks currently see a lower probability of defaults in the interbank markets and possibly a further stabilization of the sector

Fig. 11: Deposit and lending interest rates in the euro area (new business rates) and EURIBOR (in %)





Low EURIBOR still not reflected in lending rates

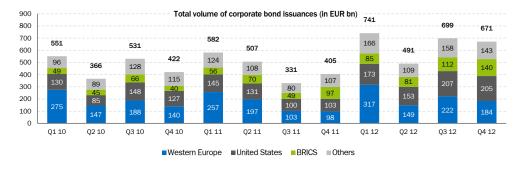
Source: European Central Bank, zeb/research

- / In the deposit-taking business, the competition for customer deposits remained strong, as interest rates decreased only slightly in the last quarter despite the historically low EURIBOR
- / In Q4 2012, lending rates for corporates are still unaffected by the low EURIBOR

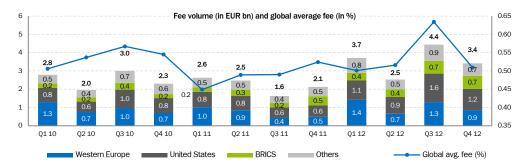
Investment banking activities

Q4 2012 marked the end of a year that showed a mixed picture of the global investment banking business. The global bond issuance business performed definitely better in 2012 than in previous years, as the total volume rose by nearly 43% and the fee volume increased by more than 59% compared to 2011. However, other business lines were not able to keep up. In the equity offering business, the total volume increased by more than 15% in 2012, however, the overall fee volume stagnated. In the M&A business, the total deal volume declined even further in 2012.

Fig. 12: Corporate bond issuance business by home region of issuing company



Bond issuance volume and fees increased in full year 2012

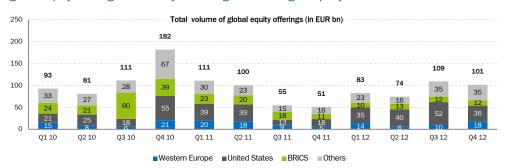


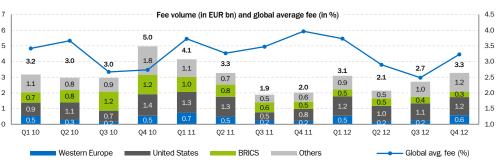
Fee volume (left-hand axis) and global average fee rate (right-hand axis) are estimated based on offering volume and volume-weighted average of all

Source: Bloomberg, zeb/research

- / The global volume of corporate bond issuances declined by 4.0% in Q4 2012, but remained on a high level of EUR 671 bn. Nevertheless, the fee volume decreased strongly by 22.7%, driven by a lower average fee rate
- Overall, 2012 was a successful year in the bond issuance business: The total volume reached EUR 2,602 bn after EUR 1,825 bn in 2011 and EUR 1,870 bn in 2010, and the total fee volume of EUR 14.0 bn is well above previous years' volumes (2011: EUR 8.8 bn, 2010: EUR 10.1 bn)

Fig. 13: Equity offering business by home region of issuing company





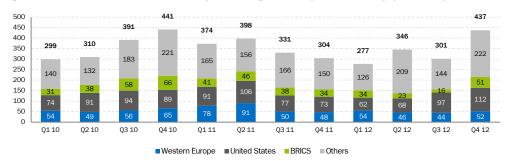
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Equity offering business includes initial public offerings and additional equity listings. Fee volume (left-hand axis) and global average fee rate (right-hand axis) are estimated based on offering volume and volume-weighted average of all available fees. Source: Bloomberg, zeb/research

- Overall, equity offerings showed a mixed picture in 2012: Compared to 2011, the total volume increased by 15.8% to EUR 367 bn, but this is well below 2010 levels (EUR 467 bn, -21.4%)
- More importantly, the positive volume effect in 2012 was completely offset by a lower average fee rate such that the fee volume only reached EUR 11.2 bn (full year 2012) after EUR 11.3 bn in 2011 and even EUR 14.2 bn in 2010

Equity offering business with mixed results

Fig. 14: Deal volume of M&A business by home region of acquired company (in EUR bn)



Strong Q4 2012 ends a difficult year for M&A business

Category "Others" includes all M&A transactions with target companies from regions different than those specified and deals with targets in multiple regions not further specified. All transactions classified by announcement date.

Source: Bloomberg, zeb/research

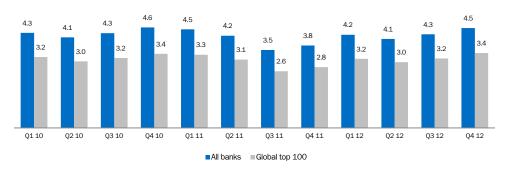
- / In Q4 2012, the M&A deal volume jumped to EUR 437 bn, 45% more than in the previous quarter, thus marking a positive end to a difficult year for the business
- / Overall, the M&A business acquired a deal volume of EUR 1,361 bn which is lower than in 2011 (EUR 1,407 bn, -3.3%) and 2010 (EUR 1,441 bn, -5.6%). Especially Western Europe and BRICS performed worse, as deal volumes declined by 27% and 22% compared to 2011

III. State of the banking industry

Market valuation

From an equity perspective, the global banking industry looks back at a strong quarter. Market capitalization of banks rose further in Q4 2012 and reached EUR 4.5 bn, the highest value in two years. Nevertheless, valuation differences across regions and business models remain.

Fig. 15: Market capitalization of the banking sector (end of quarter, in EUR tr)



Banks continued upward trend in Q4 2012

All banks include all banks worldwide according to Bloomberg classification. Global top 100 banks contain largest banks by market capitalization. Source: Bloomberg, zeb/research

- The global banking industry continued its recovery in Q4 2012, as the market capitalization of the sector increased further to the highest levels in the last two years
- / In 2012, the market capitalization of all banks grew by 21.1%, whereas the global top 100 institutions performed even better with a market capitalization increase of 23.3%

Fig. 16: Market capitalization of global top 100 banks by region (in EUR tr)

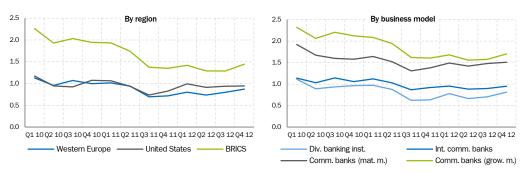


Strong growth in all regions in Q4 2012

Source: Bloomberg, zeb/research

- / Despite a deteriorating short-term economic outlook and ongoing sovereign debt issues, Western European top institutions profited from the reduced market uncertainties and therefore further improved their market capitalization by 11.7% in Q4 2012 to pre-debt-crisis levels
- / Throughout the entire year 2012, the market capitalization of the largest Western European and US banking institutions increased by more than 34.1% and 34.9%, respectively, whereas BRICS' top banks gained 12.0%
- / As a result, market caps of BRICS and US top banks are close to the highest levels of the last three years

Fig. 17: Price-to-book ratio of global top 100 banks



No fundamental valuation changes in Q4 2012

Diversified banking institutions generate more than 30% of their earnings from investment banking/trading/non-classic banking activities, international commercial banks generate more than 70% of their earnings from classic banking in culturally different types of international markets, commercial banks from mature/growing markets generate more than 70% of their earnings from classic banking activities in their respective market type.

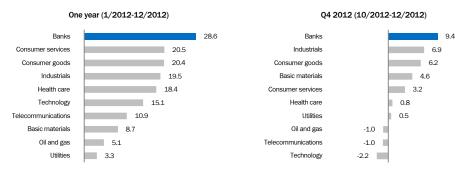
Source: Bloomberg, zeb/research

- / With regard to regional distribution, banks from BRICS still reach a significantly higher average price-to-book ratio of 1.4 an increase of 12% compared to Q3 2012 than Western European and US institutions with average price-to-book ratios of around 1.0
- / In view of business models, global top 100 institutions still show clear differences: Commercial banks (especially from growth markets) are still preferred by investors, as they reach significantly higher average valuation levels with price-to-book ratios of 1.7 and 1.5, whereas international commercial banks and diversified banking institutions achieve, on average, price-to-book ratios of only 0.9 and 0.8

Equity performance

The banking sector led all industry sectors in terms of equity performance in Q4 2012 and in total 2012, but mostly due to banks' bad performances in the recent past.

Fig. 18: Total shareholder return of industry sectors worldwide (in %)

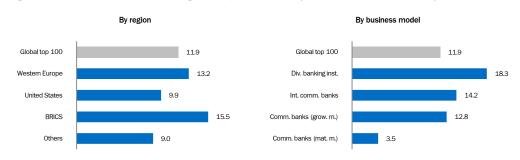


Banking sector strongly recovered in 2012

Total shareholder return of industry sectors based on global sector total return indices, aggregated and provided by Datastream. Source: Datastream, zeb/research

- / With total shareholder returns (TSR) of 9.4% in Q4 2012 and 28.6% over the entire year, banks outperformed all other industry sectors
- / However, this has to be seen in light of the very poor 2011 performance that was heavily influenced by the European debt crisis

Fig. 19: Total shareholder return of global top 100 banks (10/2012-12/2012, in %)



Central bank support in Western Europe and the US boosted TSR

Average total shareholder returns are weighted by the market capitalization of each bank. Source: Bloomberg, zeb/research

- Continued central bank support in the US and Western Europe allowed banks in these regions to sustain their good TSR in Q4 2012. Institutions especially from China recovered from heavy losses in Q3 2012, as economic news improved again
- / Similarly, international commercial banks and diversified banking institutions recovered from losses incurred in the first half of 2012
- / Nevertheless, national commercial banks with a clear focus on customer business remain very attractive, as they exhibit a more balanced performance throughout the entire year

Fig. 20: Top/low TSR performers among global top 100 banks (10/2012–12/2012, in %)

Globa

Chinese banks top TSR performers globally

Top performers	Country	TSR	Low performers	Country	TSR
China Minsheng Banking Corp Ltd	China	39.1	BB&T Corp	United States	-11.7
Industrial Bank Co Ltd	China	39.0	Al Rajhi Bank	Saudi Arabia	-9.1
Bank of Beijing Co Ltd	China	35.4	Danske Bank A/S	Denmark	-8.6
China Merchants Bank Co Ltd	China	35.3	CaixaBank	Spain	-7.9
Shanghai Pudong Development Bank	China	34.4	PNC Financial Services Group Inc	United States	-7.0

Western Europe

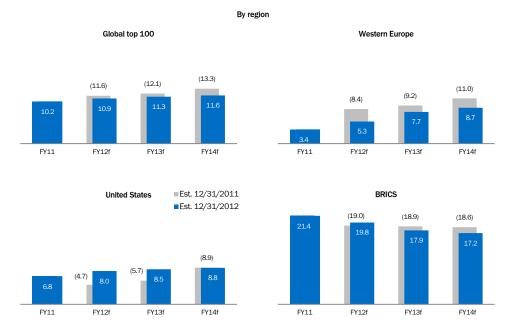
Top performers	Country	TSR	Low performers	Country	TSR
Société Générale SA	France	28.2	Danske Bank A/S	Denmark	-8.6
Royal Bank of Scotland Group PLC	Britain	26.3	CaixaBank	Spain	-7.9
UBS AG	Switzerland	24.6	Svenska Handelsbanken AB	Sweden	-5.6
Lloyds Banking Group PLC	Britain	23.4	Nordea Bank AB	Sweden	-4.4
Barclays PLC	Britain	22.7	DNB ASA	Norway	0.2

Source: Bloomberg, zeb/research

/ In the global banking sector, the differences between top performers and low performers have narrowed in Q4 2012 compared to Q3 2012: Top-performing banks from China achieved a TSR of around 35% in Q4 2012 (down from Crédit Agricole's 50% in Q3 2012), while low performers from the US, Western Europe and the Arab world lost around 10% (down from Chinese banks' losses of up to 15% in Q3 2012)

Fig. 21: RoE after taxes and yearly RoE forecast changes of global top 100 banks (in %)

RoE forecasts globally revised downwards



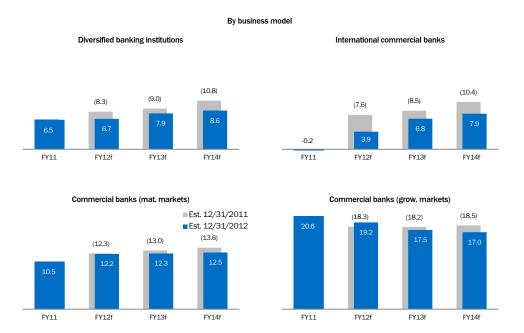


Figure compares different consensus forecasts of return on equity of global top 100 banks based on market capitalization. Forecasts are calculated as equity-weighted averages of analysts' consensus forecasts as available in Bloomberg.

Source: Bloomberg, zeb/research

- / RoE forecasts for the banking industry were adjusted downwards across the globe compared to forecasts a year ago. This is in contrast to the recent increase in valuations shown in Fig. 15–17 and confirms the findings from our zeb/value compass that all value-relevant dimensions are needed to explain value creation instead of looking at RoE alone
- / The RoE of banks from Western Europe and the US is currently expected to grow from very low levels of 3.4% and 6.8% in 2011 to 8.7% and 8.8%, respectively, in 2014
- / RoE forecasts for diversified banks and international commercial banks remain well below those of national commercial banks

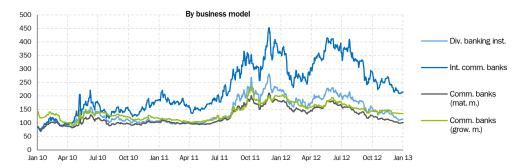
Debt perspective

From a debt perspective, the latest quarter showed a mixed picture. Banks' CDS spreads declined further on a global basis. However, the number of rating downgrades increased again due to the still risky general economic environment, especially in Western Europe.

Fig. 22: CDS spreads of global top 100 banks (avg. 5-year CDS spreads, in bp)



Banks' CDS spreads nearly back to pre-debtcrisis levels

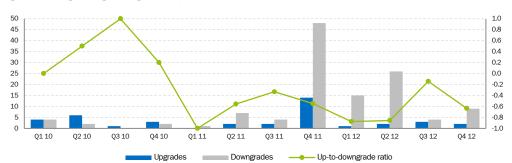


5-year CDS spreads are calculated as unweighted average of CDS spreads of each bank. For issue 4 of zeb/market flash, some pricing sources of CDS spreads of global top 100 banks were updated. This lead to minor data differences compared to previous issues.

Source: Bloomberg, zeb/research

- / In Q4 2012, CDS spreads of top 100 banks fell again, regardless of region or business model, some spreads even returned to the level before the European debt crisis heated up
- / Regionally, CDS spreads of US institutions remain the lowest with 116bp, down 32bp compared to the end of Q3 2012. However, Western European top banks' CDS spreads also developed reasonably well and are now down to 143bp, a decrease of 56bp or 28%
- / Among our business model clusters, CDS spreads of commercial banks are still at the lowest levels with 102bp, whereas international commercial banks are down to 214bp
- / Diversified banks have the second lowest CDS spreads, thus their poor P/B valuation (see Fig. 17) is not based on a higher risk perception

Fig. 23: Rating changes of global top 100 banks



Rating downgrades increase again

Rating changes consider the number of upward and downward revisions of the long-term rating of global top 100 banks as provided by Standard & Poor's, Moody's, Fitch Ratings. Outlook revisions are excluded. Up-to-downgrade ratio (right-hand axis) is a harmonized index calculated as (number of upgrades – number of downgrades)/sum of upgrades and downgrades.

Source: Bloomberg, zeb/research

- / The number of rating downgrades of global top 100 institutions increased again: After only four downgrades in Q3 2012, nine institutions were downgraded in Q4 2012, the up-to-downgrade ratio worsened from -0.1 to -0.6
- The most notable rating changes consisted in the downgrading of French BNP Paribas, Spanish Banco Santander and BBVA as well as the Canadian market leaders Bank of Nova Scotia and National Bank of Canada
- / Despite these further downgrades, the overall funding situation for banks stabilized further in Q4 2012

IV. Special topic

The impact of negative interest rates

In the following section, we investigate the issue of negative interest rates and its consequences for the banking industry. From a theoretical point of view, such an analysis sounds paradoxical, because most economic theories already deny their existence, since nobody would choose an investment with a negative nominal interest rate when it is possible to keep the money in cash for an interest rate of zero.

Negative interest rate – a theoretical paradox

In practice however, things are not that simple. Firstly, negative interest rates could be implemented by a government to defend a currency against massive foreign capital inflows, which may lead to an unfavorable appreciation of the national currency. In reality, Switzerland implemented such negative interest rates from 1964–66 and 1971–79. In the last two years, Switzerland is in a very similar situation as back then, and the reimplementation of negative interest rates is under discussion. In the interbanking market, Credit Suisse already announced to charge negative interest rates of up to -1.0% on certain Swiss franc deposits starting December 10, 2012.

Switzerland discusses negative rates on foreign investors' deposits

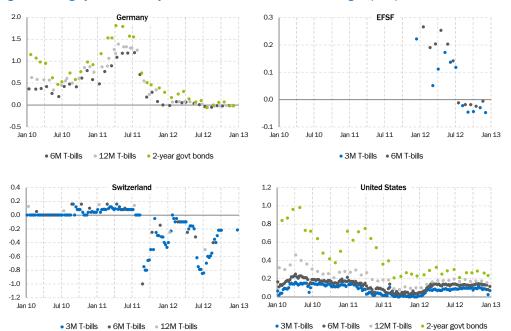
Secondly, a difficult and volatile environment can also lead to negative market interest rates. Since mid-2012, certain European countries were able to issue sovereign bonds with negative nominal yields. So overall, investors already paid money to get a chance to purchase treasury bills and sovereign bonds of certain countries as they are considered as "safe havens". Among euro area countries and institutions, auctions held by Germany and the European Financial Stability Facility (EFSF) since mid-2012 resulted in slightly negative yields of up to -0.06%. Other examples are Austria and France. Outside the euro area, the Swiss government was able to issue almost all sovereign treasury bills and bonds with a nominal interest rate of zero in 2010. Since Q2 2011, the yields are clearly negative. Among the most important non-European sovereigns, only US nominal interest rates were slightly above or exactly zero, but not below. In contrast thereto, sovereign yields in BRICS countries remain high and well above zero due to a quite different environment in these growing economies. Figure 24 shows the development of some selected sovereign bond yields between January 2010 and December 2012.

Selected sovereign bond yields currently negative

The key factor for this development is that the current crisis is not just an economic crisis, but even a more fundamental crisis of confidence. In this situation, the "return of money" is clearly more important than the "return on money". In addition, many institutional investors face certain investment restrictions which force them to invest in certain countries or rating classes. On top of that, due to the very low general interest rate level, investors prefer short-term investments, and very high default risks within the banking system make investments at banks or other financial institutions not attractive either. In this critical situation, institutional investors even accept negative nominal interest rates. Of course, initial negative yields could still turn into positive returns if bonds and treasury bills were sold at a better price on the secondary market before the end of their maturity.

Fundamental crisis as reason for negative interest rates

Fig. 24: Average yields of money market auctions of selected sovereigns (in %)

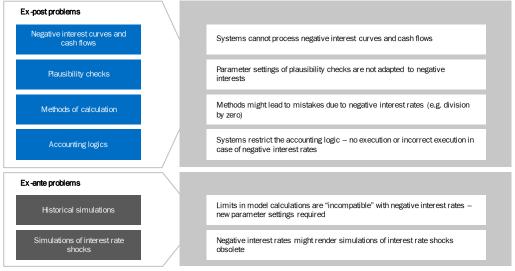


Certain European sovereigns exhibit negative interest rates

EFSF denotes the European Financial Stability Facility. Source: Bloomberg, zeb/research

The main problem for banks is that negative interest rates in most cases have a negative effect on the net interest income of banks. Of course, the individual consequences can differ from bank to bank. They are contingent on the individual business model, the positioning and treasury strategy of an institution, but taken together, they often lead to a lower net interest income of banks. The occurrence of negative interest rates also has to be implemented in systems, processes and methods of calculation, both from an ex-post and from an ex-ante perspective (see Fig. 25). As negative or low, positive interest rates are a key challenge for many banks in the future, we will investigate this issue in more detail in this year's zeb/value compass.

Fig. 25: Typical challenges in negative interest rate environments



Source: zeb/

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