Current Issues

International topics

Deutsche Bank Research

September 7, 2011

Emerging markets banks: Strong growth potential

The global weight of emerging markets (EMs) is growing in the real economy as well as in the banking sector. The steady rise of the economic power of emerging market economies throughout the last decade is a widely recognised trend. The strong economic catch-up is mirrored in the banking sector, with roughly 22% of global bank assets of listed banks located in emerging markets. The fact that nine of the world's 30 largest banks by market capitalisation are located in EMs also highlights the shifting balance in global banking markets.

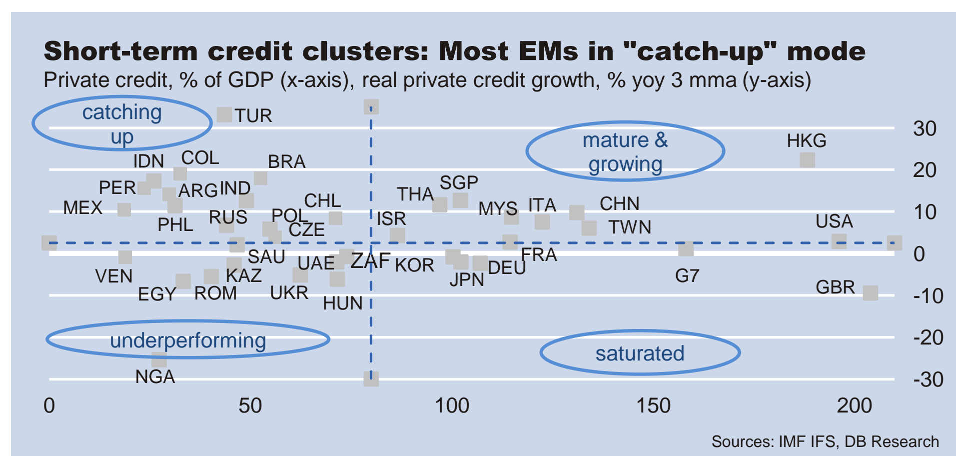
Most EM banking sectors are relatively well-capitalised and profitable. EM banks' capitalisation levels are sound overall, ranging from a 17% average capital adequacy ratio in Latin America to a 13.5% capital adequacy ratio in Asia. Asset quality is high in all regions, except for Eastern Europe. Profitability remains highest in Latin America, followed by Asia with slightly tighter margins.

Weak asset quality, a high share of FX loans and dependence on foreign funding are weighing on Eastern European banks. NPLs in the region are still high at roughly 10% on average and are expected to decline only gradually. Due to a high degree of foreign ownership the Eastern European EU member states' banks have the highest dependence on foreign funding. Although a process of gradual deleveraging has started, loan-to-deposit ratios remain above 100%.

Strong medium-term growth potential for EM banks. Our simple model based on per-capita GDP growth shows that over the next five years nominal private sector credit is expected to expand by 12% p.a. on average in the emerging markets. In terms of credit stocks, Russia, India and Taiwan will join the group of China, Brazil and South Korea, with private credit outstanding exceeding USD 1 tr by 2015. However, these numbers are purely indicative as they do not account for possible structural breaks such as changes to the regulatory environment, potential credit crises or funding constraints.

Short-term credit clusters: Most EMs in "catch-up" mode

Private credit, % of GDP (x-axis), real private credit growth, % yoy 3 mma (y-axis)



Sources: IMF IFS, DB Research

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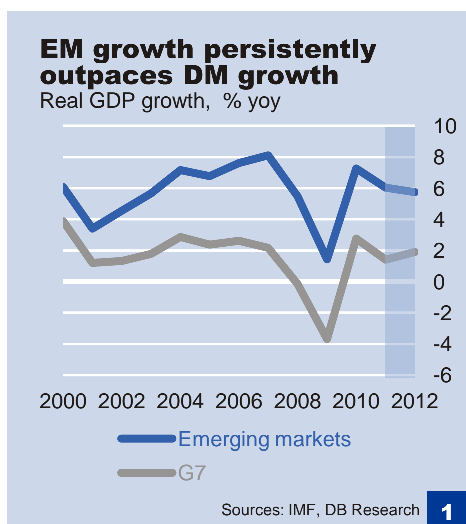
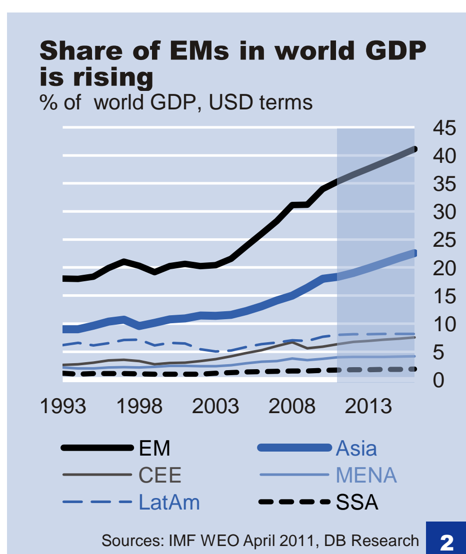
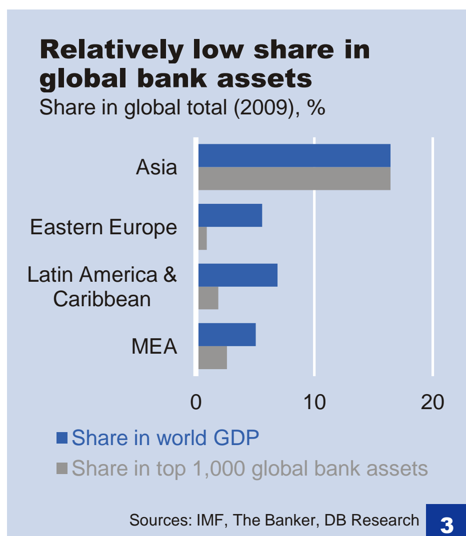






Emerging markets' share in world GDP is rising

The steady rise of the economic power of EM economies[1] throughout the last decade is a widely recognised trend. Deeper integration into the global economy, gradual transition to more liberalised markets, high commodity prices and strong capital inflows have accelerated economic catch-up. Limited exposure to toxic assets, powerful fiscal anti-crisis packages and strong domestic demand lent the EMs notable resilience to the global financial crisis in 2008-09. Although a soft patch of the global economy has become visible over recent weeks, we still see EM real GDP growth at 4-6% over the next few years (see chart 1). Thus, the EM share in world output in USD terms is set to exceed 40% of world GDP by 2016 (see chart 2), driven predominantly by strong Asian growth.

New EM banking heavyweights

But emerging market economies are not only gaining in importance in the real economy; the strong economic catch-up is also mirrored in the banking sector. In 2009, roughly 22% of global assets of listed banks were located in emerging markets. While this number is steadily growing, apart from Asia, EM banks still represent a low share in global bank assets relative to their economic size (see chart 3). This can be explained by two factors. First, many emerging markets still have relatively low levels of financial intermediation and second, many EM banks are foreign-owned (especially in Eastern Europe) and thus do not show up as EM banks in our chart. Over the last few years, internationalisation of financial markets has worked in both ways. While Western banks have increased their engagement in emerging markets[2], some large EM players have emerged as well. The shifting balance in global financial markets is evident when looking at the league table of the world's top 30 banks before and after the financial crisis. While all of the world's 30 largest banks by market capitalisation were located in the developed world in 2006, nine EM banks made it into the top-30 last year (see chart 4). Two Chinese banks, ICBC and CCB, even top the list.

The shifting balance in global banking markets in favour of the emerging markets is driven by two factors. First, record-size IPOs, such as that of China's ICBC in 2006 and China Agricultural Bank in 2010, have introduced new EM heavyweights into global banking. As a result, Asian banks' share in global assets has grown from 10% in 2000 to over 15% in 2009. Second, the financial crisis in 2008-09 originated in industrial countries and therefore hit these countries' banking sectors harder than emerging market banks (see chart 5).

[1] Emerging markets in this study refer to 31 economies in Asia (China, Hong Kong, Indonesia, India, Korea, Malaysia, Philippines, Singapore, Thailand and Taiwan), Central and Eastern Europe (Czech Republic, Hungary, Kazakhstan, Poland, Romania, Russia and Ukraine), Middle East & Africa (Egypt, Israel, Nigeria, Saudi Arabia, South Africa, Turkey and United Arab Emirates) and Latin America (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela).

[2] Schildbach, J. Home, sweet home? International banking after the crisis. DB Research. June 2011.

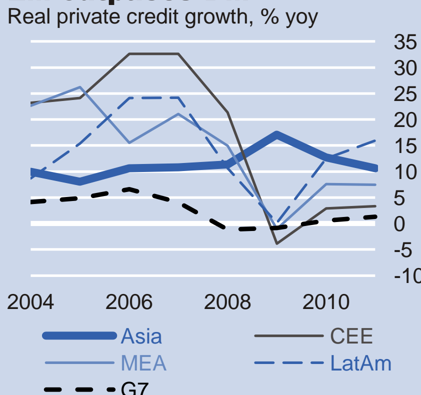
Top 30 banks worldwide

	# of banks 2006	# of banks 2010	% market cap. 2006	% market cap. 2010
USA	10	6	39.8	25.0
United Kingdom	4	4	12.5	13.1
France	3	1	7.8	2.7
Japan	3	1	11.9	2.6
Netherlands and Belgium	3	0	6.9	0
Spain	2	1	6.5	3.1
Switzerland	2	1	7.5	2.1
Canada	1	3	1.8	6.6
Italy	1	0	2.9	0
Germany	1	0	2.4	0
Australia	0	4	0	8.8
Brazil	**0**	**3**	**0**	**7.1**
China	**0**	**5**	**0**	**26.4**
Russia	**0**	**1**	**0**	**2.6**

Sources: IMF, BanksDaily.com, DB Research 4

Credit growth: EM outpaces DM

Real private credit growth, % yoy



Sources: IMF, DB Research 6

EMs: Room for financial deepening

Private sector credit, % of GDP

Sources: IMF, DB Research 8

EM resilience throughout the 2007-2009 crisis

Systemic cases* DMs	Systemic cases* EMs	Borderline cases* DMs	Borderline cases* EMs
Austria	Latvia	France	Hungary
Belgium	Mongolia	Greece	Kazakhstan
Denmark	Nigeria	Portugal	Russia
Germany	Ukraine	Spain	Slovenia
Iceland		Sweden	
Ireland		Switzerland	
Luxembourg			
Netherlands			
United Kingdom			
USA			

*2007-2009

Sources: IMF (Laeven & Valencia, June 2010), DB Research 5

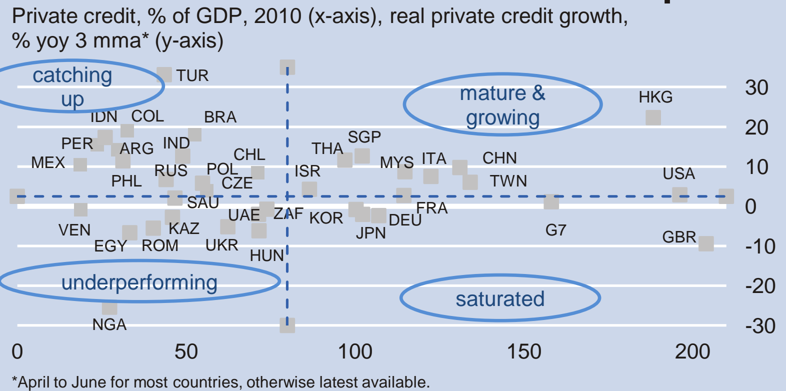
Current credit dynamics in EMs

Looking at regional credit growth over the last decade shows that EM credit growth strongly outpaced credit growth in the developed markets in the pre-crisis years and recovered more quickly after the global financial crisis in 2008/2009. Apart from Eastern Europe, which experienced a boom-bust cycle, credit growth picked up to above 7% in real terms in all other regions (see chart 6). But despite strong credit growth, the level of financial intermediation, measured by private sector credit outstanding in % of GDP, is still below 60% in Latin America, Eastern Europe and the Middle East and Africa (see chart 8).

As regional aggregates mask country-specific developments, we plot the level of financial intermediation against average real credit growth[3] for all 31 EMs as well as selected DMs. We can broadly identify four groups of countries (see chart 7):

Short-term credit cluster: Most EMs "catch up"

Private credit, % of GDP, 2010 (x-axis), real private credit growth, % yoy 3 mma* (y-axis)



*April to June for most countries, otherwise latest available.

Sources: IMF IFS, DB Research 7

Most EMs fall into the “catch-up” category, meaning that they have relatively low levels of financial intermediation and relatively high real credit growth. The second largest group (mainly Asian countries) is labelled “mature & growing”, which means that those countries display a high level of financial intermediation and high

[3] We used credit growth over the last 3 months, but using 6 months yields similar results.

credit growth at the same time. The third largest group are the so-called “underperforming” countries in terms of credit developments (mainly in Eastern Europe), who are still recovering from banking crises and recession and therefore have low or even negative real credit growth despite low levels of financial intermediation. Finally, the fourth group comprises the “saturated” markets, which have a high level of financial intermediation and sluggish credit growth. Korea and most of the developed markets fall into this category.

How credit forecasts were derived

Our forecasts of credit levels are based on a fixed-effects panel regression for 36 countries over the time period 2001-2010. In that regression, the logarithm of GDP per capita is shown to explain 52% of within-state variation in logarithmic private credit-to-GDP ratio. Starting from the actual level of financial intermediation in 2010, we predict its development over the next five years using the elasticity obtained from the panel regression. We do not include a conversion towards the theoretical equilibrium levels (i.e. move towards the regression line), but rather assume structural differences between nations to remain stable over the period covered (i.e. move from the actual level parallel to the line). In a separate estimate IMF forecasts for consumer price inflation and general government debt levels as share of GDP were used in addition to per capita GDP, yielding very similar results, with a maximum deviation from the simple model of 3 percent.

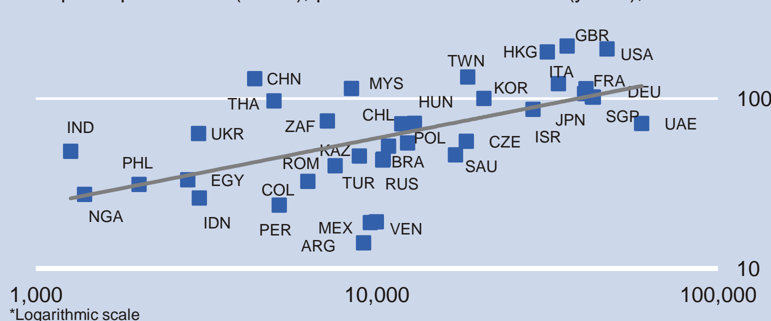
Strong medium-term growth potential for EM banks

We now turn to a more long-term perspective and aim to gauge the growth potential of the 31 EM credit markets beyond cyclical considerations. Economic theory suggests that the degree of financial intermediation should over time adjust to equilibrium levels determined by economic fundamentals like GDP per capita, nominal lending rates, inflation, interest rate margins, house prices and public debt levels (to account for crowding-out effects).[4] Additional possible determinants are the legal and regulatory environment of an economy, the quality of infrastructure and the degree of liberalisation of the financial sector.

When plotting current levels of GDP per capita against private credit-to-GDP ratios, we find that the relationship between economic development and financial intermediation holds for our country sample (see chart 9). Using IMF GDP per-capita forecasts we then generate estimates of private credit stocks in 2015 (see details in box on the left).

Financial depth rises with increasing GDP per capita

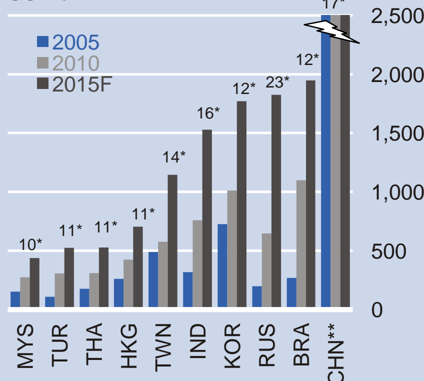
GDP per capita in USD (x-axis), private credit in % of GDP (y-axis), 2010*



Sources: IMF, DB Research **9**

Top-10 EM credit markets in 2015

Total private sector credit outstanding, USD bn



*Compound average annual growth rate, 2010-2015
**Values 2005: 2,526; 2010: 7,705; 2015F: 16,945

Sources: IMF, DB Research **10**

Our forecasts show that credit in EMs will expand by 12% per year on average, with above-average growth in Russia, Korea, Argentina, China, Indonesia, Nigeria, India, the Czech Republic, Romania, Taiwan and Saudi Arabia (see charts 10 & 11). In 2010 China, Brazil and South Korea were the only EMs with private credit outstanding over one trillion USD; if our projections are correct, Russia, India and Taiwan will join this group by 2015 (see chart 10). The top ten

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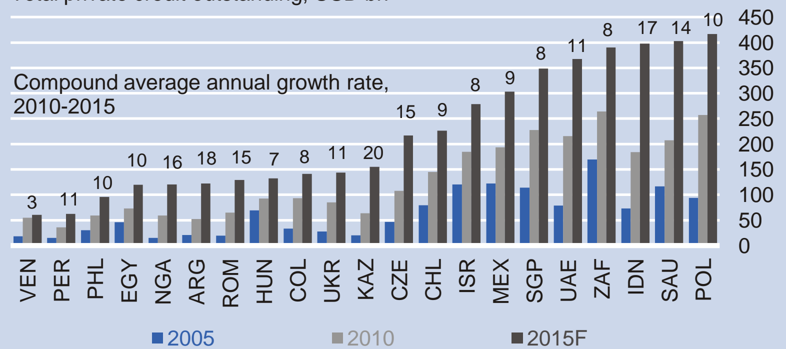
[4] For estimates of equilibrium levels see: Cottarelli et al. (2003). Early Birds, Late Risers, and Sleeping Beauties: Bank Credit Growth to the Private Sector in Central and Eastern Europe and the Balkans. IMF Working Paper. Kiss et al. (2006). Credit Growth in Central and Eastern Europe: Trend, Cycle or Boom? Paper presented at the conference Finance and Consumption Workshop: Consumption and Credit in Countries with Developing Credit Markets, Florence. Boissay et al. (2006). Is Lending in Central and Eastern Europe Developing too fast? Paper presented at the conference Finance and Consumption Workshop: Consumption and Credit in Countries with Developing Credit Markets, Florence.

EM banking markets by size are expected to remain the same in 2015.

There are several caveats attached to our forecasts. First, they do not account for possible structural breaks such as changes to the regulatory environment or potential credit crises. Second, there are limitations concerning causality since here we are deriving credit growth from GDP growth. Research focusing on the relationship between financial development and economic growth also find the opposite causal relationship. Finally, due to constraints to credit growth, such as the weak funding base in many Eastern European countries (observable in high loan-to-deposit ratios, see chart 15), our forecasts might prove optimistic in some cases like Russia, Kazakhstan and Romania.

EM private sector credit in 2015*

Total private credit outstanding, USD bn

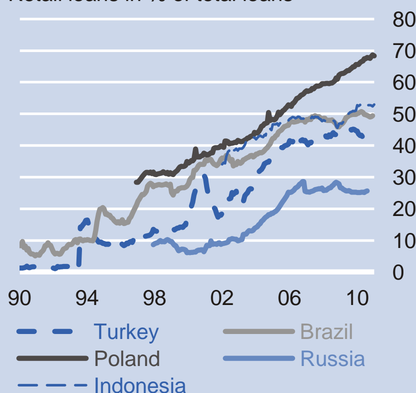


*Excluding top-10 countries.

Sources: IMF, DB Research **11**

Increasing share of retail loans

Retail loans in % of total loans



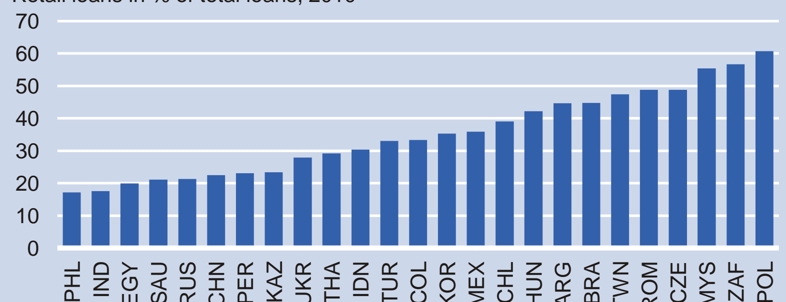
Sources: National central banks, DB Research **12**

Retail sector an engine of growth

In many EMs credit to households only accounted for a small portion of total credit outstanding one or two decades ago. Over the last decade this has changed dramatically in several countries (see chart 12). Driven by rising per-capita income, the emergence of a middle class, institutional improvements (i.e. the setting up of credit bureaus) and a deliberate strategy to target the retail market, consumer lending expanded rapidly, both in absolute terms and relative to corporate lending. Currently, most EM banking sectors have reached a stage where consumer credits, mortgage loans and credit cards are the dominating business areas in retail lending. Increasingly, however, mutual fund investments and old-age provisioning are gaining in importance as well.

Loan structure: Differing share of retail loans

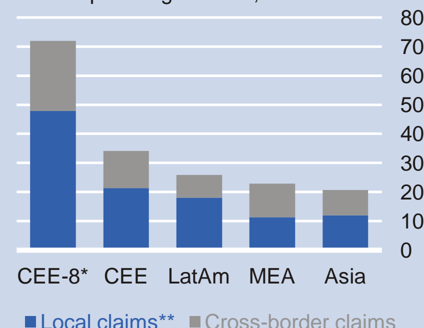
Retail loans in % of total loans, 2010



Sources: Fitch, DB Research **13**

CEE-8 most dependent on foreign lending

% of recipient region GDP, June 2011

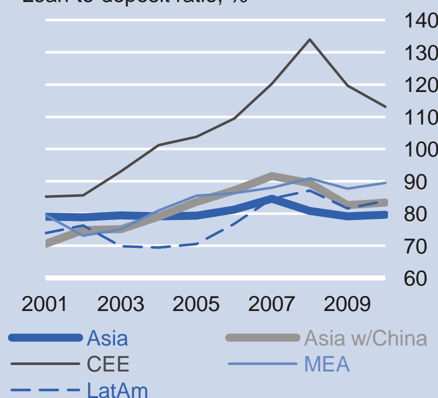


*Bulgaria, Czech Rep., Estonia, Hungary, Latvia, Lithuania, Poland, Romania.
**Local claims are claims booked by BIS-reporting banks' foreign offices on residents of the countries in which the foreign office is located.

Sources: BIS, DB Research **14**

Deleveraging in the East

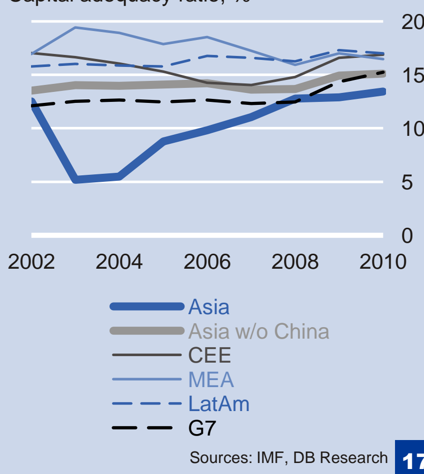
Loan-to-deposit ratio, %



Sources: IMF, DB Research **15**

Mostly sound capitalisation

Capital adequacy ratio, %



Sources: IMF, DB Research **17**

Foreign funding: Most important for new EU member states

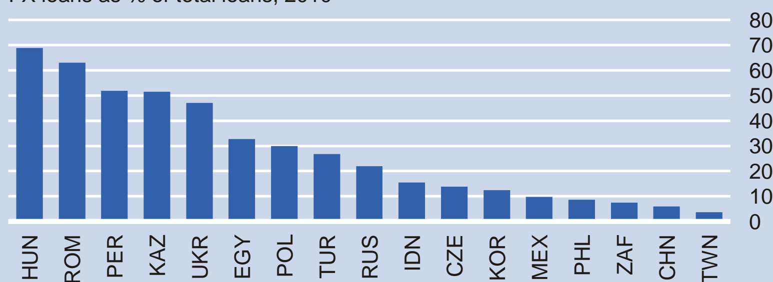
Due to a high degree of foreign ownership in the banking system the CEE EU member countries (CEE-8) have the highest dependence on foreign funding. Foreign claims by international banks account for 70% of CEE-8 GDP, which is more than twice as much as in any other region (see chart 14). Contrary to expectations, however, the CEE-8 did not register larger bank outflows than other EM regions in the context of the crisis. This performance can be explained by the deep financial integration with the Western European financial sector as well as crisis management actions by the EBRD, the ECB and other Western European central banks such as the Vienna Initiative. A process of gradual deleveraging has, however, started in Eastern Europe, as banks have intensified their efforts to bring down their loan-to-deposit ratios and adjust their funding structures. Although loan-to-deposit ratios remain above 100%, there is a certain convergence to the other EM regions (see chart 15).

FX loans mostly an Eastern European phenomenon

In Hungary, Romania, Peru, Kazakhstan and Ukraine over 40% of total loans are denominated in foreign currency (see chart 16), indicating potential FX mismatches and/or credit risks in the banking sector. While corporates may be hedged against FX depreciation via export earnings, a marked depreciation of the local currency may threaten the loan-servicing capacity of households, since these do not have income streams in foreign currency (although they may well possess FX assets). In several Eastern European countries regulators have thus banned (e.g. Hungary) or restricted (e.g. Croatia) new mortgage lending in FX. However, the large stock of FX loans is raising concerns. For instance, the debt servicing capability of Hungarian and Polish mortgage borrowers in Swiss Franc is threatened by recent sharp Franc appreciation.[5]

Share of FX loans highest in Eastern Europe & Peru

FX loans as % of total loans, 2010

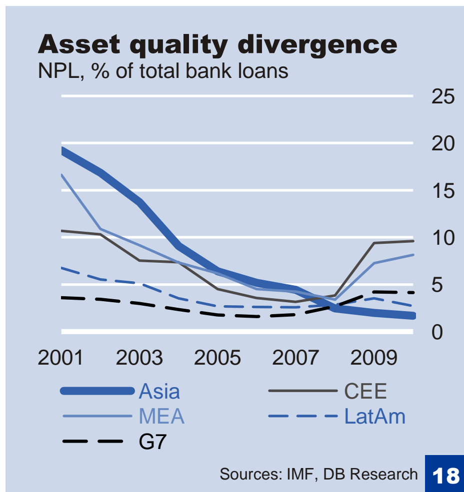


Sources: Fitch, DB Research **16**

Most EMs relatively well capitalised

Emerging market banks' capitalisation levels are mostly sound, ranging from 17% average capital adequacy ratio in LatAm to 13.5% capital adequacy ratio in Asia (see chart 17). Although capitalisation levels have improved strongly in China since the bailout of China's NPL-laden banks in 2003, large Asian markets (China, India, Korea) are still operating with relatively tight capital ratios. At 7%, Nigeria's capitalisation rate remains the lowest in our country sample, but the

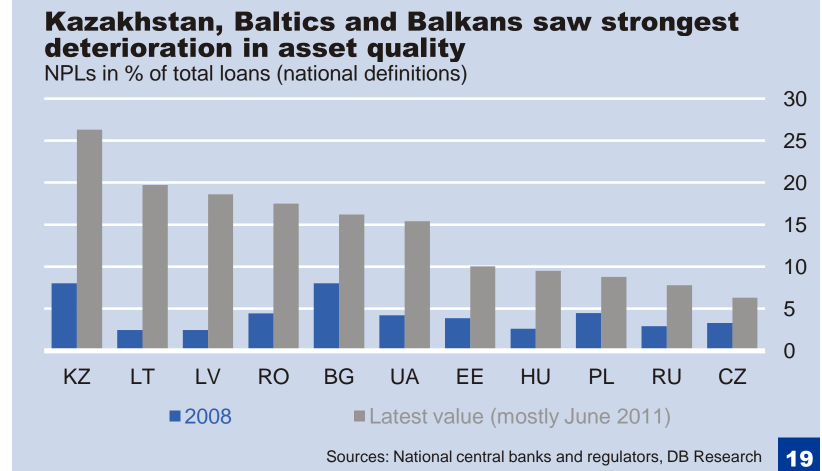
[5] Please see Grady, Caroline. CEE: The impact of CHF (and EUR) appreciation, DB Global Markets Research. July 2011.

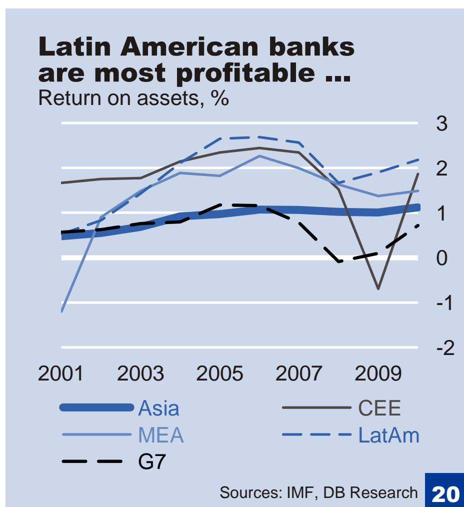


establishment of a "bad loan" bank (AMCON) in 2010 and its ongoing absorption of bad loans should help to improve capitalisation levels by the end of this year. Low provisioning in some CIS countries (e.g. Ukraine) might affect capitalisation negatively over the next few months.

Weakest asset quality in Eastern Europe and MEA

A pre-crisis credit boom followed by a sharp recession in 2009/10 has negatively impacted asset quality in Eastern Europe (see chart 18). Kazakhstan, as well as the Baltic and Balkan countries have experienced the strongest deterioration, with NPLs climbing above 15% of total loans (see chart 19). Russian and Ukrainian figures have to be interpreted with caution as national NPL definitions might differ from international reporting standards. Although a stabilisation of NPL dynamics has been visible in all countries in recent months, a decline in NPL ratios will only happen gradually as credit growth remains low and as loans have to perform continuously and fully for some time before they can be reclassified.

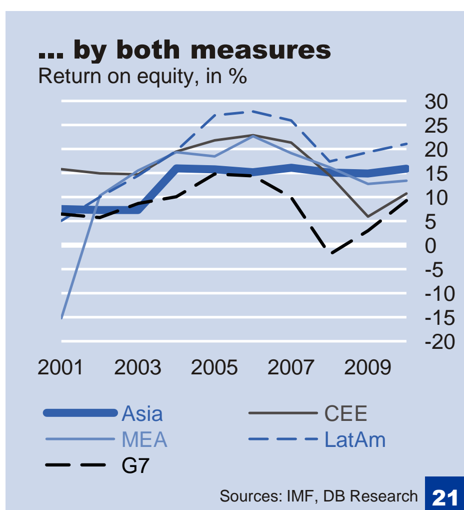




The increase in the Middle East/Africa NPL ratio is mainly driven by the sharp increase in NPLs due to the Nigerian banking crisis in 2009/2010. In the aftermath of the Arab spring, we expect increasing NPLs in Egypt given that economic growth slumped in H1 2011. In all other regions, NPL ratios are at benign levels driven by strong economic and credit growth. If our downside scenario of a global double-dip materialises within the next few months, we might see a slight increase in NPL ratios in all regions from 2012 onwards.

Profitability remains highest in Latin America

With an average return on equity of 20% and return on assets above 2% in 2010, Latin American banks were the most profitable in the world (see chart 20 & 21) and this will remain so in 2011[6]. Asian banks' profitability is slightly lower due to tighter margins given stronger competition. Eastern European bank profitability has picked up since 2009, but still remains below that of other regions as banks are still suffering from weak asset quality, lower margins and deleveraging.[7]



[6] Pierry, Mario. Latin American Banks. DB Global Markets Research. May 2011.
[7] Fitch. EM Banking System Datawatch. June 2011.

Conclusion

Emerging market economies are not only gaining in importance in the real economy, but the strong economic catch-up is mirrored in the banking sector. The fact that nine of the world's 30 largest banks by market capitalisation are located in EMs highlights the shifting balance in global banking markets. Our simple forecast model shows that over the next five years private sector credit is expected to expand by 12% per year on average (in nominal terms), with Russia, Korea, Argentina, China, Indonesia, Nigeria, India, the Czech Republic, Romania, Taiwan and Saudi Arabia expanding at an above-average speed. Driven by rising per-capita income, the emergence of a middle class and institutional improvements (i.e. the setting up of credit bureaus), consumer lending is expected to continue to expand rapidly. In terms of banking sector stability, EM banks' capitalisation levels are mostly sound, ranging from 17% average capital adequacy ratio in LatAm to 13.5% capital adequacy ratio in Asia. Asset quality is high in all regions, except for Eastern Europe, where NPL ratios are expected to decline gradually. Profitability (measured by ROE) remains highest in Latin America, followed by Asian banks with slightly tighter margins. While a global growth slowdown would definitely dampen credit growth, EM banks are likely to weather the "soft patch" well.

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Printed by: HST Offsetdruck Schadt & Tetzlaff GbR, Dieburg

ISSN Print: 1612-314X / ISSN Internet and e-mail: 1612-3158