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Country Risk Quarterly Report

BBVA Research

Cross-Country Emerging Markets Unit

September 2013

Summary

Financial Markets & Global Risk Aversion	• The higher volatility that started after the QE tapering speculation in May and June has moderated but not vanished after a couple of months. More recently, events in Syria and political risks coming from some important countries as Italy have triggered new sources of concern and higher risk aversion • The appetite for EM assets continues to be weak despite the large sell-off seen in June. However, some better than expected Chinese macroeconomic data have helped stabilizing the mood in EMs
Sovereign Markets & Ratings Update	• Risk premia in most developed markets have benefited from the sell-off in EMs bonds and the associated flight to quality. Even the risk spreads of the European periphery countries have tumbled or remained stable, with the exception of Portugal, affected by its own political instability • The European credit rating cycle resumed with the downgrade of Italy and France. However, thanks to the decrease in CDS premia and the numerous downgrades, implicit ratings are closer to actual ratings than in any of our previous reports • There has been very little activity from the rating agencies regarding EMs, with the balance turning out more neutral, due to the upgrade of Peru and the downgrade of Venezuela, both by S&P
Our own country risk assessment	• Contrary to the Developed Markets, EMs sovereign risk premia have suffered from the large sell-off of EMs assets triggered by the FED's announcement of the QE tapering, a weakening in some EM activity data and technical portfolio reasons and the return to geopolitical risk . Such a combination has generated a large portfolio re-composition away from EMs' bonds into developed markets' assets. In general terms: • EM risk premia are now closer to the equilibrium values. With the current adjustment, increasing signs of overvaluation (as we warned in our previous reports) are now over. However, asset prices correction rarely stop at equilibrium so there is still margin for some overshooting which can affect risk profiles • Our analysis does not change about the underlying, fundamental risk of EMs, which continues to be relatively low. • A warning signal should be addressed to Developed Countries. Complacency is out of the question as most vulnerabilities still lie in this group of countries

Summary

Behind the Emerging Markets Sell Off

- Emerging Markets (EMs)' asset prices and portfolio flows experienced a sharp correction since last May. While we observed some differentiation in equity movements, the increase in risk premia and foreign exchange rate depreciation have reached most of the big EM. Besides, we estimate that near 115 US$ bn have left emerging markets in the form of portfolio outflows
- The uncertainty about the US Federal Reserve Exit, the slowdown and additional worsening of growth expectations on some EMs, technical factors which have favored the portfolio re-balancing in some big EMs, and the return of geopolitical risk are behind this significant EM Sell-Off
- We remain positive on EMs as their vulnerability remains at very low levels (historically and relative to Developed Economies), an important share of the necessary adjustments to correct extra flows generated by the QE has been already completed, and EMs are still structurally under-represented in international portfolios.

Index

1. **International Financial Markets , Global Risk Aversion and Capital Flows**
2. **Sovereign Markets & Ratings Update**
3. **Macroeconomic Vulnerability and In-house assessment of country risk on a Regional basis**
4. **Special Topic:**
    - Behind The Emerging Markets Sell Off

Annex

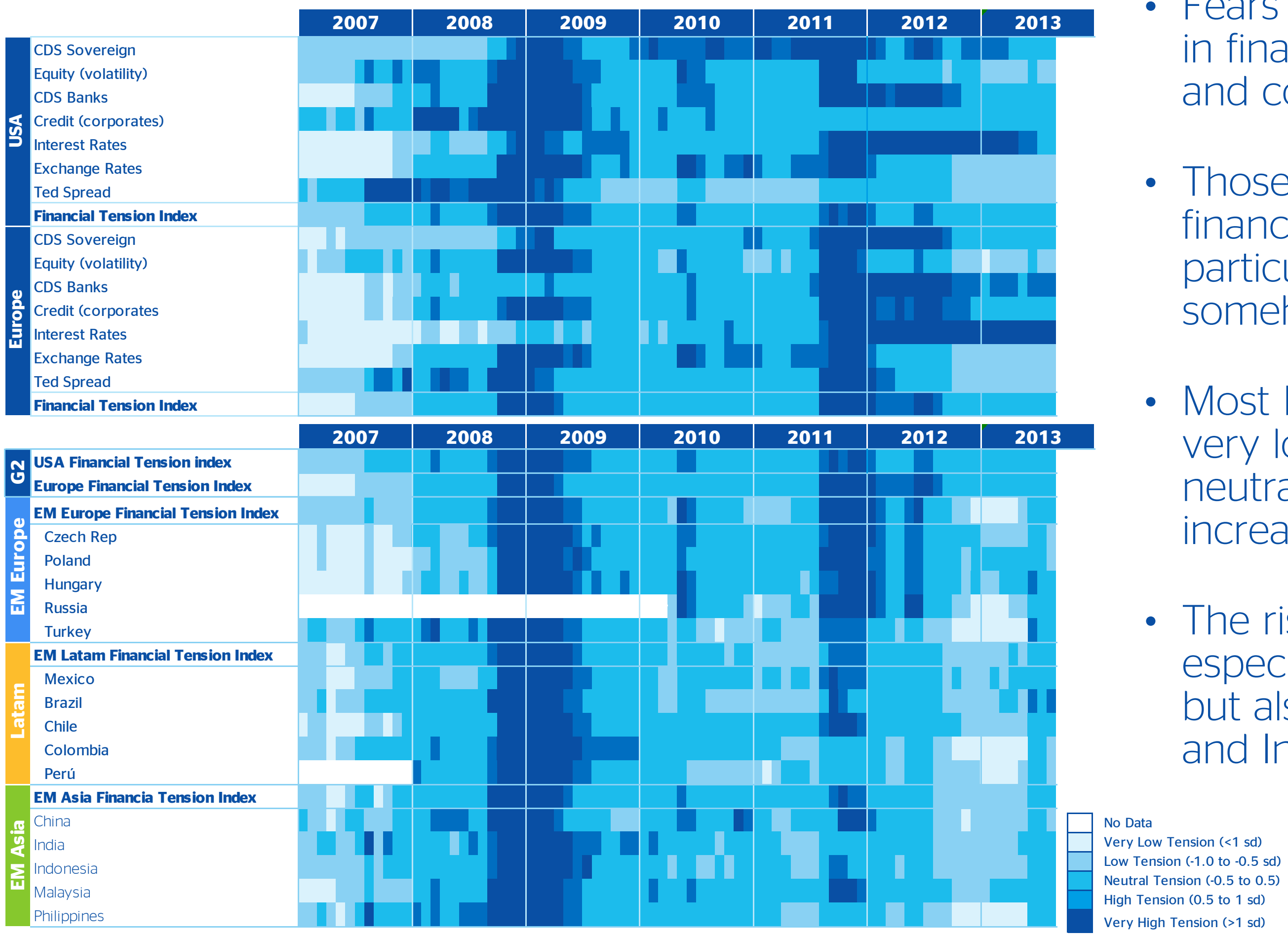
- Methodological appendix

Section 1

Financial Markets Stress

BBVA Research Financial Stress Map

Source: BBVA



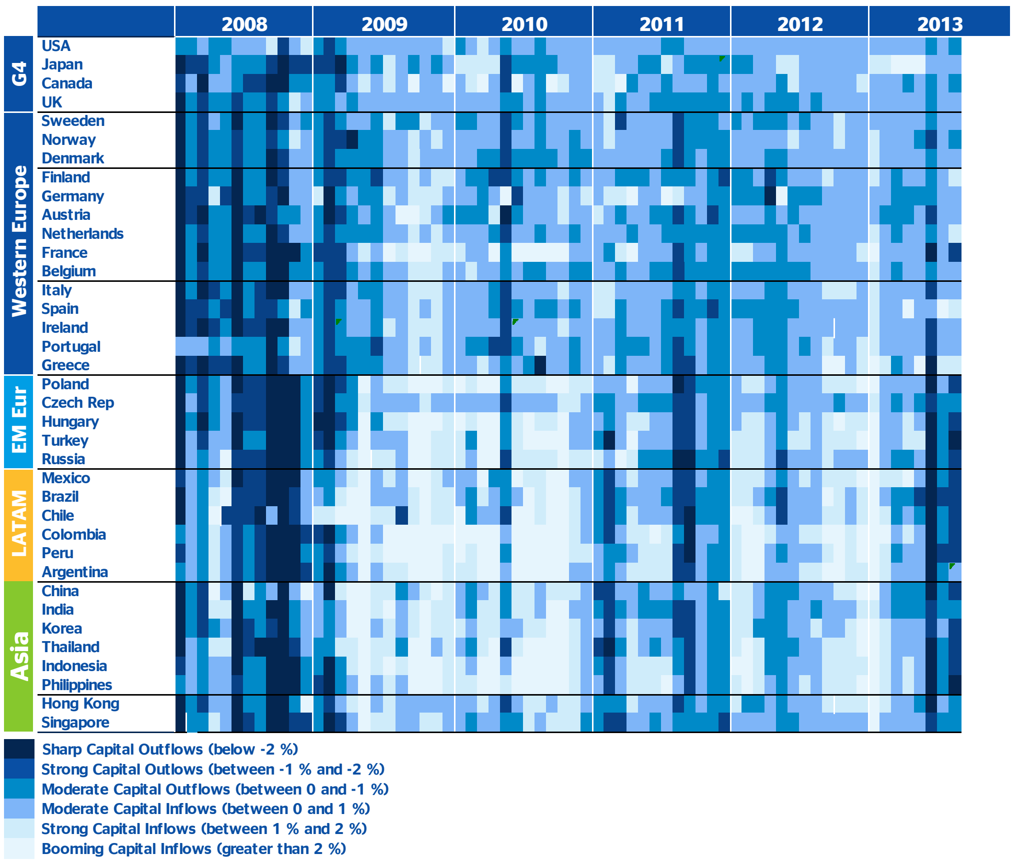
- Fears of FED's QE exit triggered a hike in financial tensions on interest rates and corporate bond spreads in Europe.
- Those same fears activated some financial tensions in EMs. These were particularly severe in June, receding somehow during the summer
- Most EM countries have gone from very low or low tension levels to neutral or high tension levels with an increasing volatility.
- The rise in financial tensions was especially acute in Turkey and Brazil, but also in Asian countries like India and Indonesia.

Section 1

Capital Flows Update

BBVA Country Portfolio Flows Map

(Country Flows over total Assets)
Source: BBVA Research through EPFR data



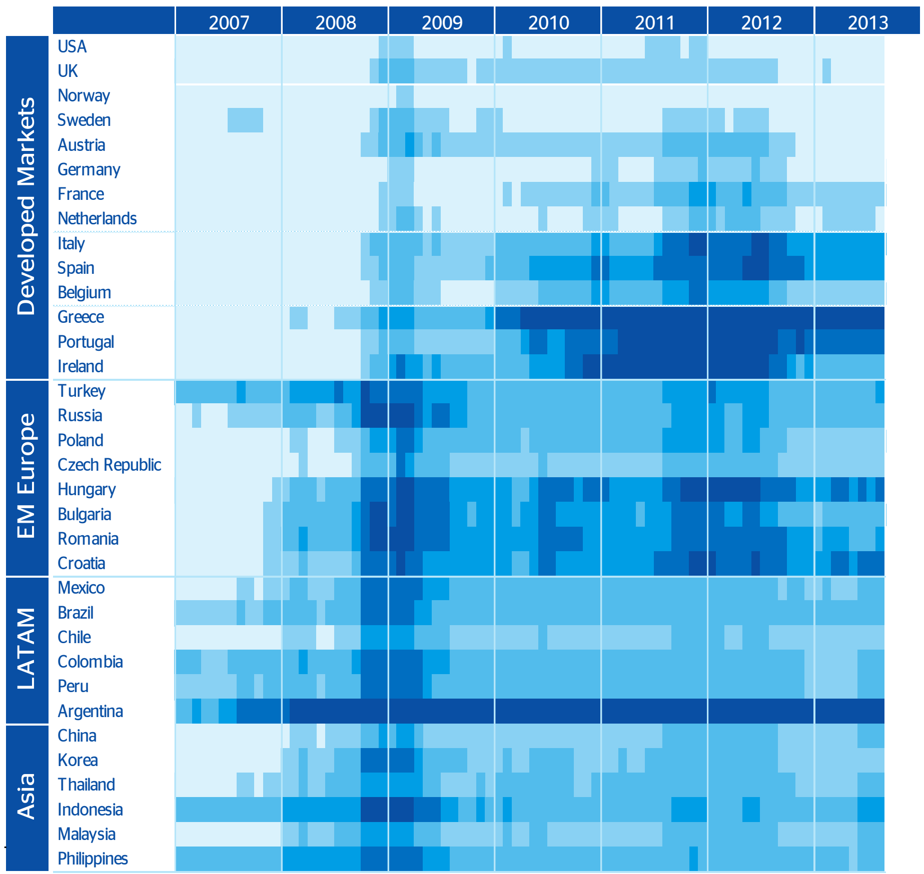
- Uncertainty about the Tapering of the FED, doubts of economic performance on some big EM economies and geopolitical tensions triggered a sharp decline in portfolio flows, specially in June. The re-allocation continued during the summer but softened
- Emerging markets suffered the most. EMU and some EU Periphery countries (Spain) benefited
- “Rotation” between fix income and equity was visible since the beginning. Retail investors reacted more strongly than institutional ones
- This trend remained in July and August albeit at a milder pace

Section 2

Sovereign Markets Update

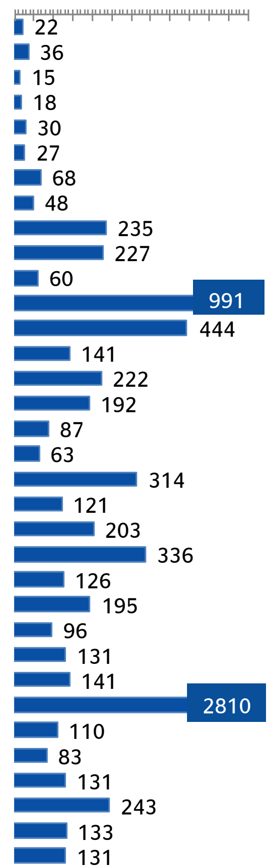
Sovereign CDS spreads

Source: Datastream and BBVA Research



Aug 2013

End of Month



Sovereign CD Swaps Map: It shows a color map with 6 different ranges of CD Swaps quotes (darker >500, 300 to 500, 200 to 300, 100 to 200, 50 to 100 and the lighter below 50 bp)

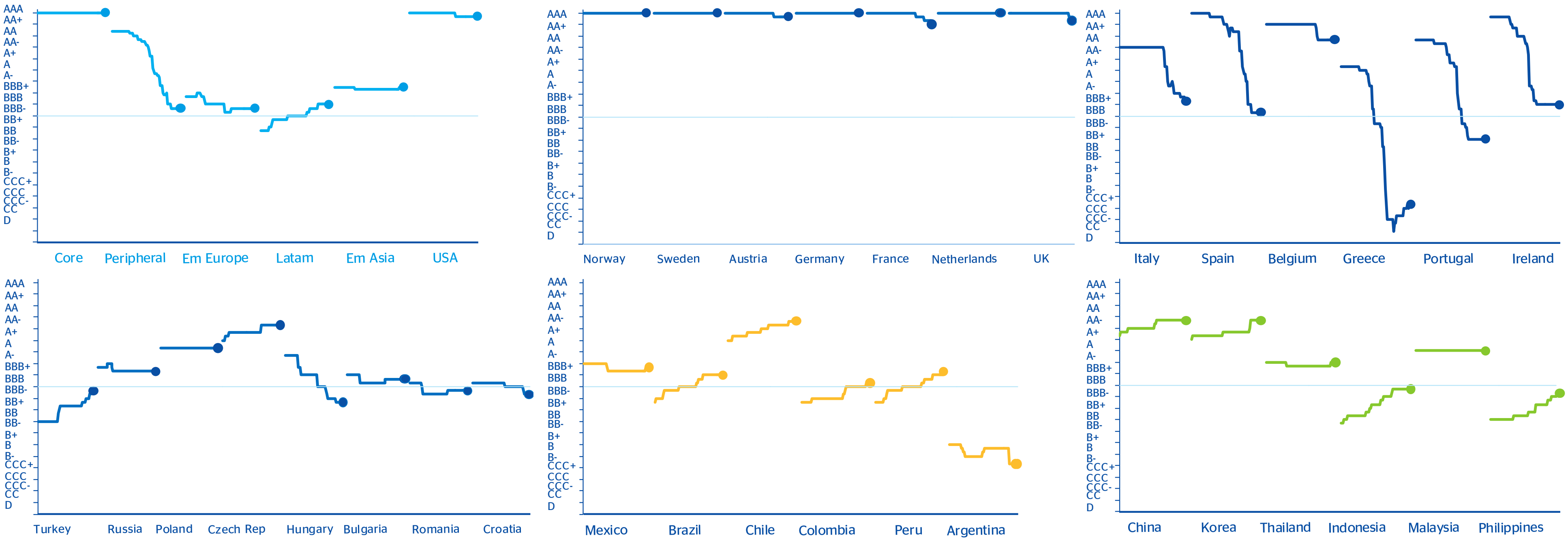
- **European periphery's CDS spreads remained almost unchanged**, with the exception of Portugal 's spread, which rose more than 100bps. Europe's core spreads tightened slightly
- Most **EM Europe** spreads rose alongside the general mood in EM markets. **Turkey, Russia and Hungary suffered the strongest rise**
- **Latin America sovereign CDS also suffered** an important rise in their spreads, **with Brazil as the most affected** among the region
- Similarly, **most of Asian sovereigns spreads experienced a strong increase** during the last quarter, with Indonesia as the worst performer and Korea as the best one

Section 2

Sovereign Credit Ratings Update

Sovereign Rating Index 2007-2013

Source: BBVA Research by using S&P, Moodys and Fitch Data



Sovereign Rating Index: An index that translates the three important rating agencies ratings letters codes (Moody´s, Standard & Poor´s and Fitch) to numerical positions from 20 (AAA) to default (0) . The index shows the average of the three rescaled numerical ratings.

- **Developed Economies:** the downgrades of Italy and France were the only changes in the ratings of the most developed economies and none is currently under revision
- **Emerging Markets:** there were also very few changes. Peru was upgraded and Argentina was downgraded, both by S&P

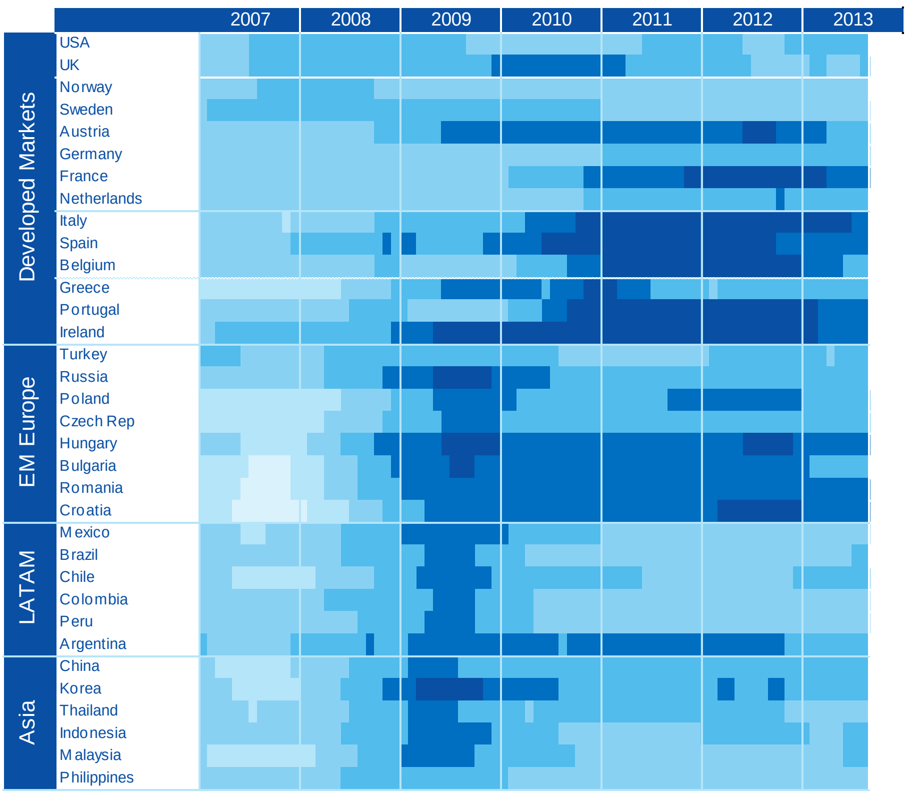
Section 2

Sovereign downgrade Pressures Map

Rating Agencies Downgrade Pressure Map

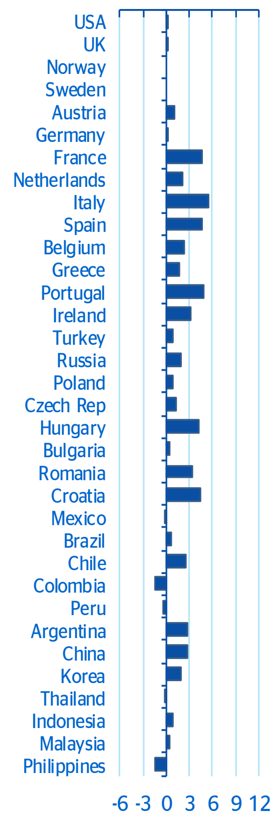
(actual minus CDS-implied sovereign rating, in notches)

Source: BBVA Research



Aug 2013

End of Month



- The gap between Implicit and observed ratings in **Europe's periphery** continued shrinking over the last quarter due to the stabilization of CDS spreads and the downgrades of France and Italy
- In **Eastern Europe**, downgrade risk remained stable, despite the spike in the spreads of **Hungary, Croatia and Romania**
- The gaps in **Latin-America** continue to be small. Chile and Argentina are quoting above rating while Colombia is still signalling upgrade potential
- The positive gaps for **China** and **Korea** increase slightly, meanwhile the **Philippines**' negative gap has almost disappeared

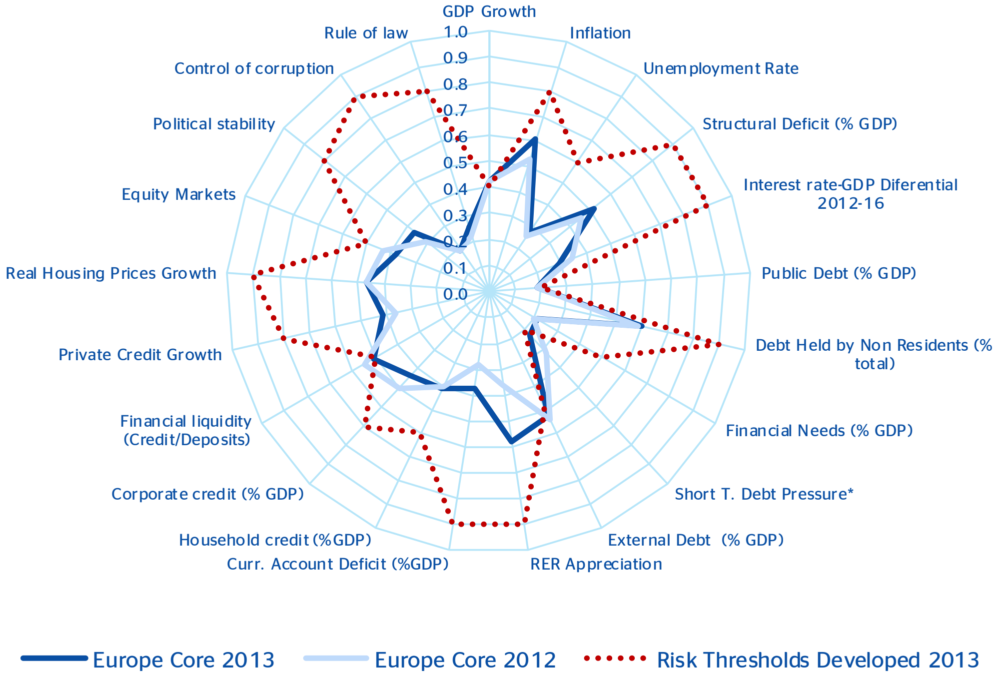
Downgrade Pressure Map: The map shows the difference of the current ratings index (numerically scaled from default (0) to AAA (20)) and the implicit ratings according to the Credit Default Swaps. We calculate implicit probabilities of default (PDs) from the observed CDS and the estimated equilibrium spread. For the computation of these PDs we follow a standard methodology as the described in Chan-Lau (2006) and we assume a constant Loss Given Default of 0.6 (Recovery Rate equal to 0.4) for all the countries in the sample. We use the resulting PDs in a cluster analysis to classify each country at every point in time in one of 20 different categories (ratings) to emulate the same 20 categories used by the Rating Agencies.

Section 3

Regional Risk Update: Core Europe

Europe Core Countries: Vulnerability Radar 2013

(Relative position for the Emerging Developed countries. Max Risk=1, Min Risk=0)
*Include Austria, Belgium, France, Germany, Denmark, Norway and Sweden
Source: BBVA Research



Developed: (ST Public Debt/ Total Public Debt)
Emerging : (Reserves to ST External Debt)
1: High vulnerability
0: Low vulnerability

Private credit risk and banking liquidity have further improve in the second quarter

Household debt worsening and still high in some countries

Still low GDP Growth, just crossing the risk threshold. Increasing structural deficits

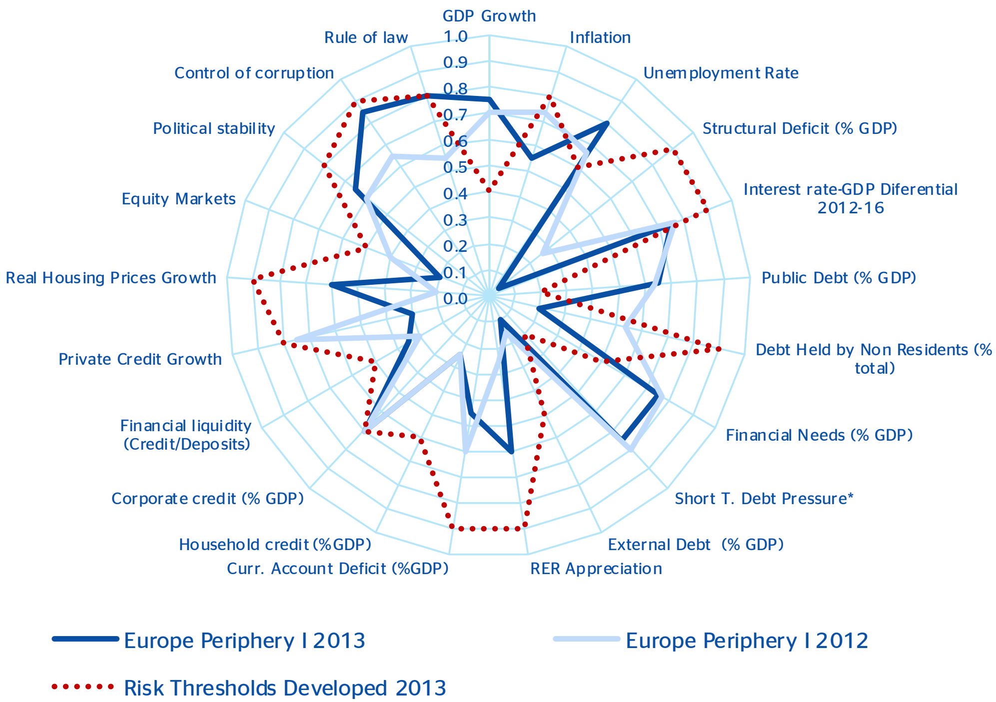
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar shows lower vulnerability meanwhile outer positions stands for higher vulnerability.

Section 3

Regional Risk Update: Europe Periphery I

Europe Periphery I: Vulnerability Radar 2013

(Relative position for the Developed Market countries. Max Risk=1, Min Risk=0)
*Include Spain and Italy
Source: BBVA Research



Developed: (ST Public Debt/ Total Public Debt)
Emerging : (Reserves to ST External Debt)
1: High vulnerability
0: Low vulnerability

Significant improvement in Structural Public Deficit. Housing prices and Private credit adjustment accelerates. Current Account also improves. Debt held by non residents decreases

Activity and employment indicators still in the risky area, but improving with respect to previous quarter

Public debt levels still on the rise. Financial needs and short-term debt pressure keep the region at high vulnerability levels

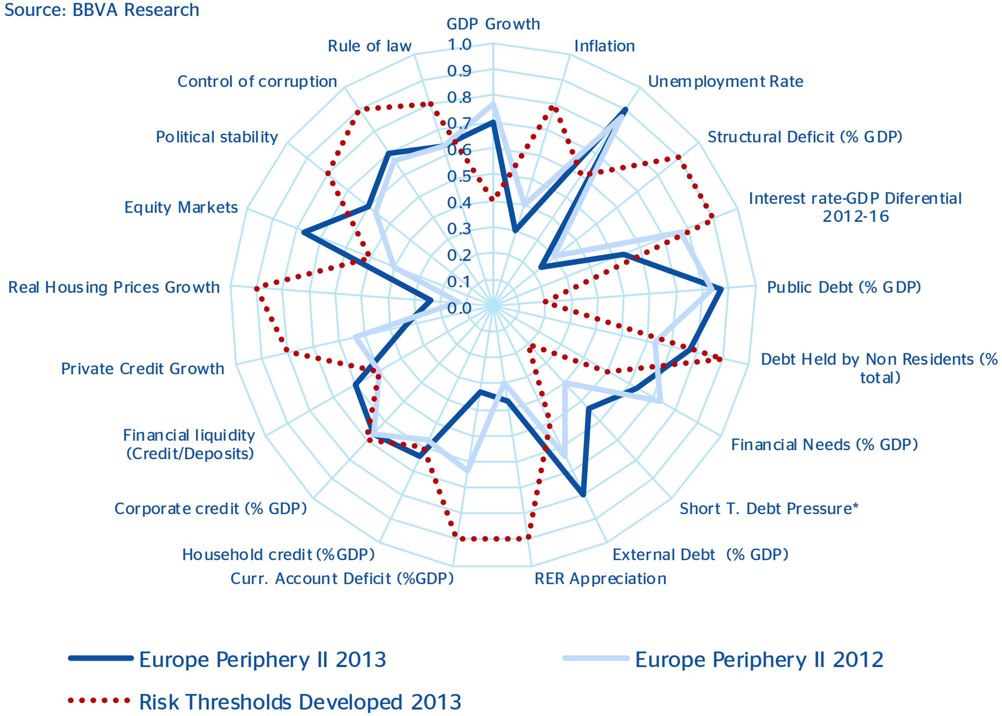
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar shows lower vulnerability meanwhile outer positions stands for higher vulnerability.

Section 3

Regional Risk Update: Europe Periphery II

Europe Periphery II: Vulnerability Radar 2013

(Relative position for the Developed Market countries. Max Risk=1, Min Risk=0)
*Include Greece, Ireland and Portugal
Source: BBVA Research



Developed: (ST Public Debt/ Total Public Debt)
Emerging : (Reserves to ST External Debt)
1: High vulnerability
0: Low vulnerability

Some improvement in structural public deficit. Private credit, household credit and real housing prices continue to adjust

Equity Markets growth had surpassed risk thresholds (valuation concerns)

Public and External debt vulnerability still growing. Banking liquidity is worsening with respect to previous quarter

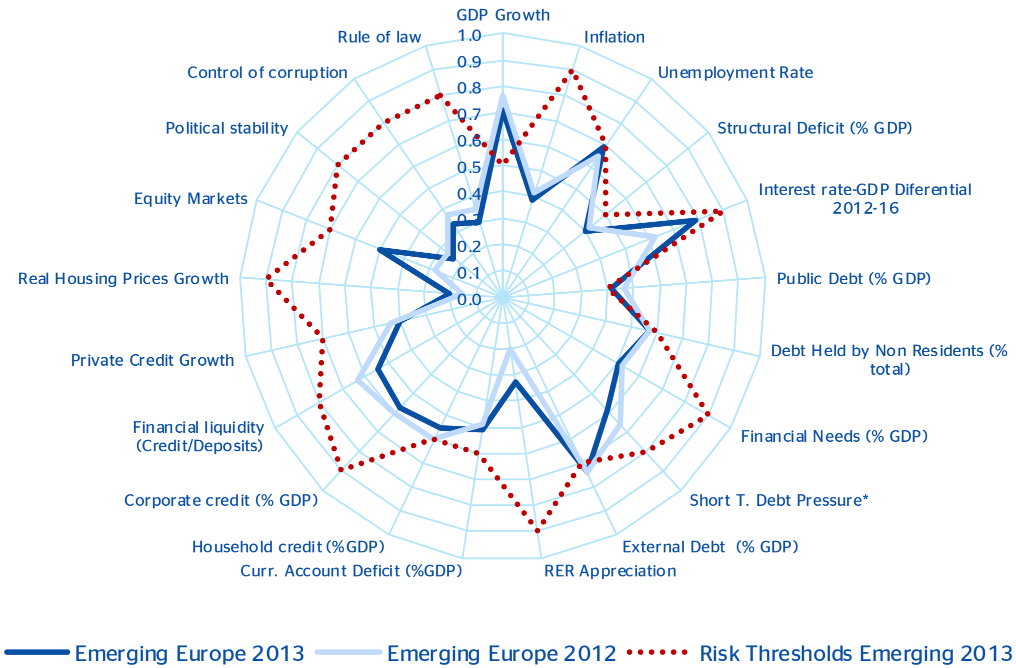
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar shows lower vulnerability meanwhile outer positions stands for higher vulnerability.

Section 3

Regional Risk Update: Emerging Europe

Emerging Europe: Vulnerability Radar 2013

(Relative position for the Emerging Market countries. Max Risk=1, Min Risk=0)
Source: BBVA Research



Developed: (ST Public Debt/ Total Public Debt)
Emerging : (Reserves to ST External Debt)
1: High vulnerability
0: Low vulnerability

Private Credit (total, households and corporate) vulnerability lower than previous quarter. Most of the variables below their corresponding risk thresholds.

Equity Markets and Housing Prices growth still low but on the rise. Credit growth accelerating in Turkey

Public and external debt levels still high with the added risk of a growing interest rate-GDP differential

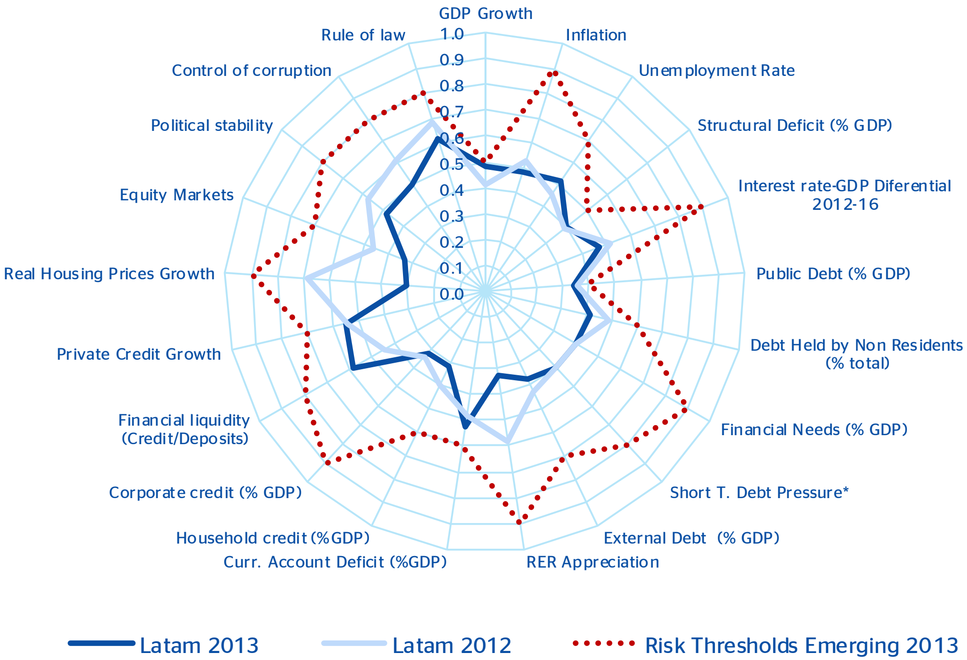
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar shows lower vulnerability meanwhile outer positions stands for higher vulnerability.

Section 3

Regional Risk Update: Latam

Latam: Vulnerability Radar 2013

(Relative position for the Emerging Market countries. Max Risk=1, Min Risk=0)
Source: BBVA Research



Developed: (ST Public Debt/ Total Public Debt)
Emerging : (Reserves to ST External Debt)
1: High vulnerability
0: Low vulnerability

All variables below their risk thresholds and most of them improving with respect to previous year

Housing prices and credit growth moderating with respect to previous report

Current Account vulnerability rising but still manageable

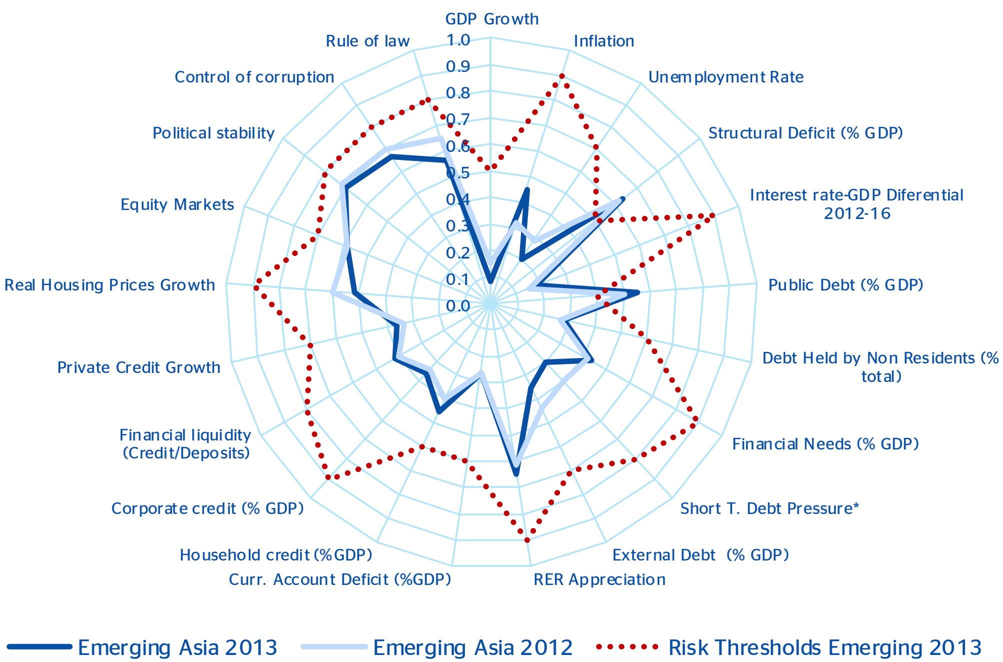
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar shows lower vulnerability meanwhile outer positions stands for higher vulnerability.

Section 3

Regional Risk Update: Asia

Emerging Asia: Vulnerability Radar 2013

(all data for 2012, Relative position for the Emerging Market countries. Max Risk=1, Min Risk=0)
Source: BBVA Research



Developed: (ST Public Debt/ Total Public Debt)
Emerging : (Reserves to ST External Debt)
1: High vulnerability
0: Low vulnerability

Activity indicators are the most solid among all regions. Credit growth risk moderated

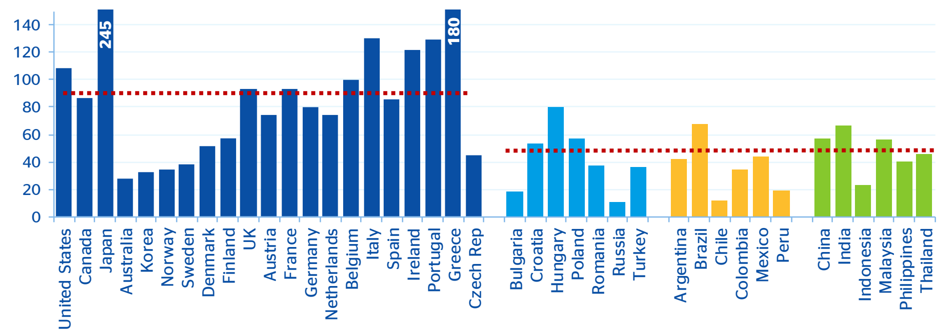
Housing prices growth risk is on the rise. Slow-down in Chinese economic data

Structural deficits above the risk thresholds and deteriorating

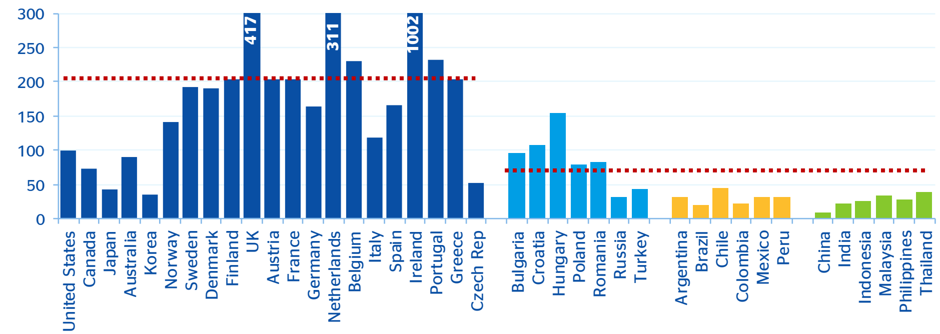
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar shows lower vulnerability meanwhile outer positions stands for higher vulnerability.

Section 3
Public and Private Debt Chart Gallery

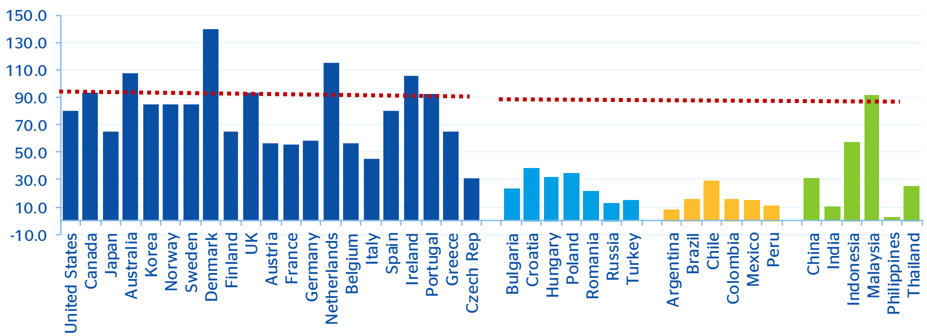
Gross Public Debt 2013
(% GDP)
Source: BBVA Research and IMF



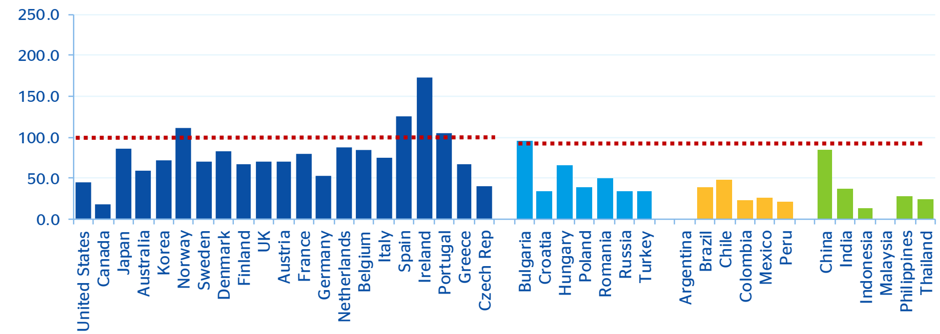
External Debt 2013
(% GDP)
Source: BBVA Research and IMF



Household Debt 2013
(% GDP)
Source: BBVA Research and BIS



Corporate Sector Debt 2013
(% GDP, Excluding Bond Issuances)
Source: BBVA Research and BIS



Risk Thresholds

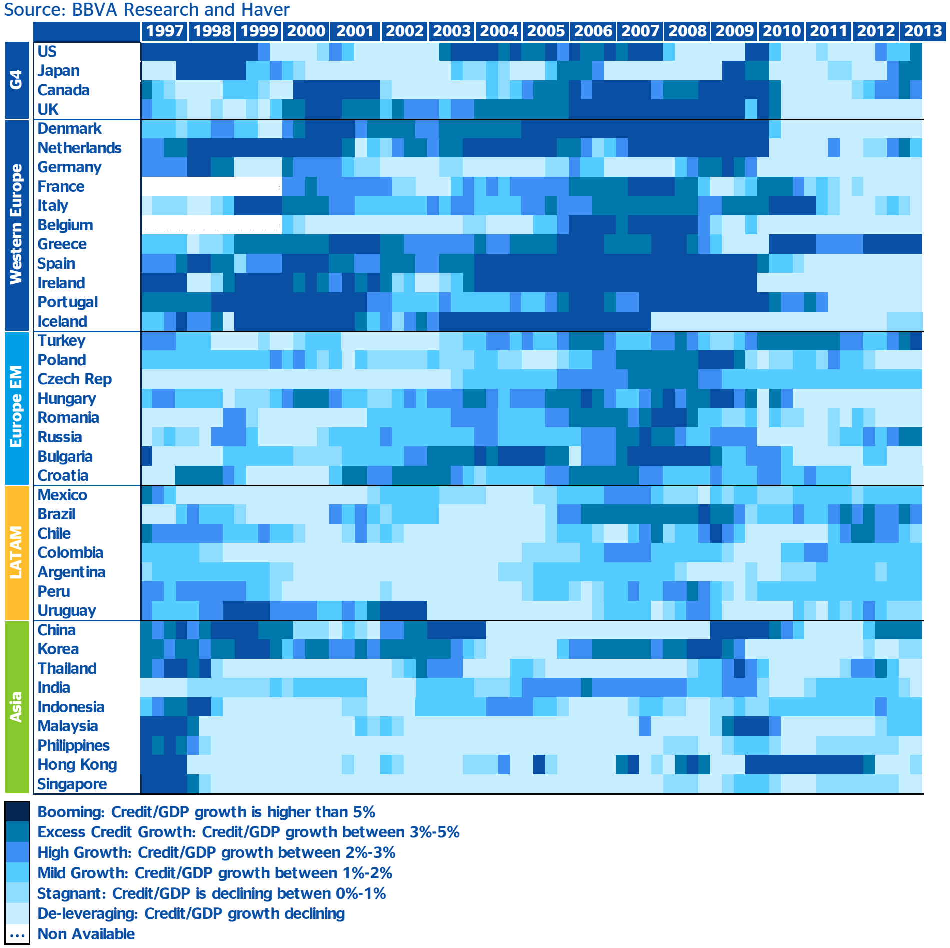
Section 3

Private Credit Pulse

Private credit colour map (1997-2013 Q2)

(yearly change of private credit-to-GDP ratio)

Source: BBVA Research and Haver



- Incipient signs of rapid credit growth of credit in US after many years of deleveraging. Credit is also growing fast in Japan and Canada, Netherlands credit Credit-to-GDP ratio moderates
- Similar to previous quarter, **Turkey** and **Russia** are showing signs of a high growth in private credit, with Turkey entering into the booming levels
- Private Credit Growth in **Latin America** keeps growing, but at a very moderate pace in most economies. Credit growth in Chile has gone from booming to stagnant in about a year
- In Asia, credit is still growing fast in China. There is no sign of excess credit growth in the rest of the countries

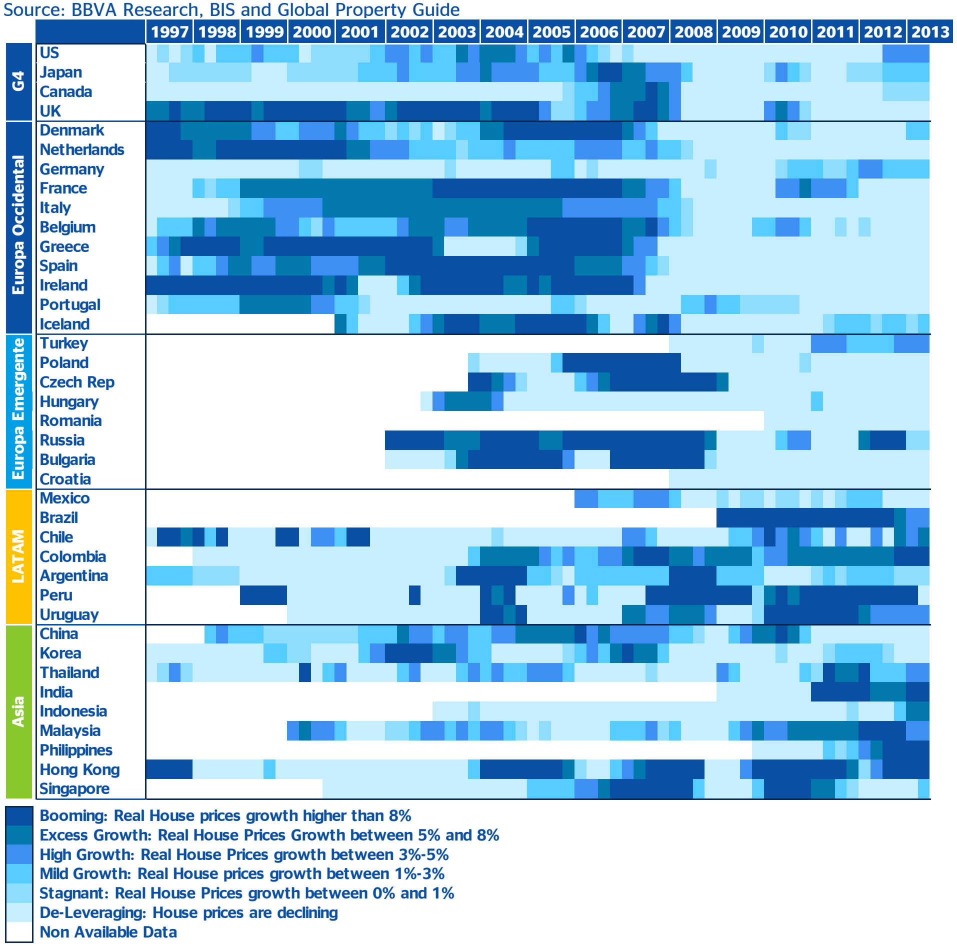
Section 3

Real Housing Prices Pulse

Real housing prices colour map (1997-2013 Q2)

(yearly change of real housing prices)

Source: BBVA Research, BIS and Global Property Guide



- Real housing prices continue recovering in the **US** while the European real housing markets are still stagnant or declining in real terms (excepts Germany and Denmark)
- In Eastern Europe, **Russia`s** real housing prices growth is finally receding. Prices in **Turkey** keep on rising, but at a moderate pace
- In Latam, housing prices growth keeps on booming in **Colombia**, and start showing signs of exhaustion in Peru**. Brazilian** housing prices keep the moderate pace of the last quarter
- Housing prices are booming in **India, Hong Kong** and **Philippines** and are growing at a more moderate pace in **Thailand** and **Malaysia**. Prices growth has accelerated strongly in **Indonesia**

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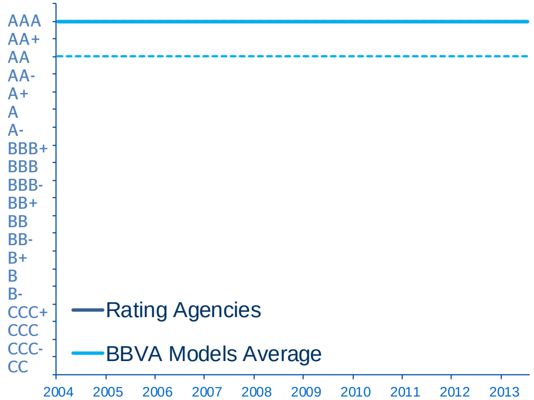
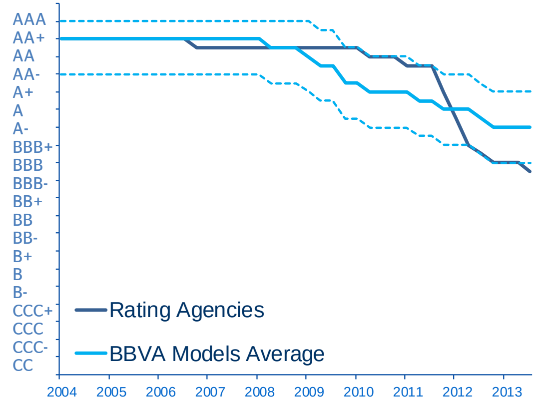
Section 3

Regional Risk Update: Western Europe

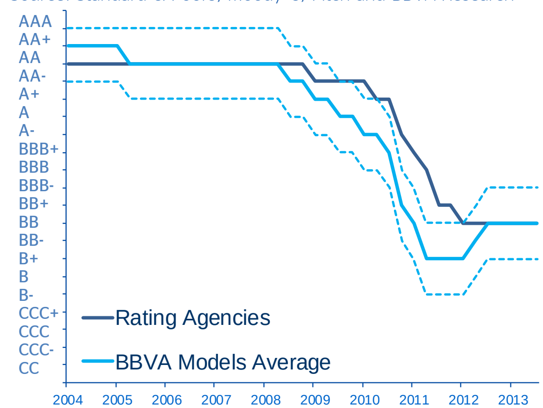
Europe Core: Sovereign Rating
(Rating agencies and BBVA scores +-1std dev)
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



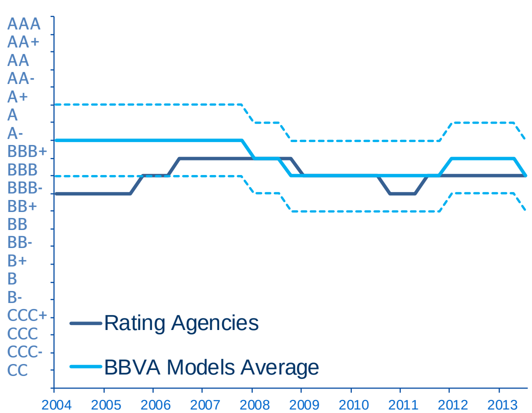
Europe Periphery I: Sovereign Rating
(Rating agencies and BBVA scores +-1 std dev)
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



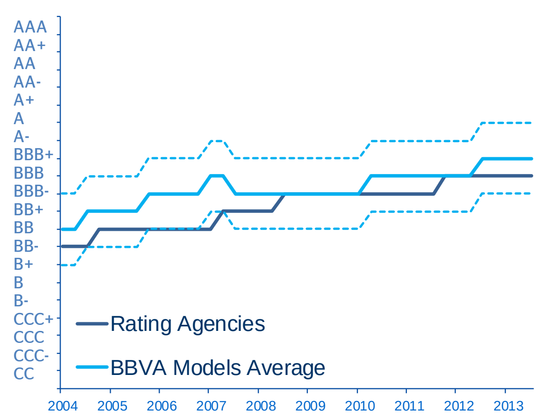
Europe Periphery II: Sovereign Rating
(Rating agencies and BBVA scores +.1 std dev)
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



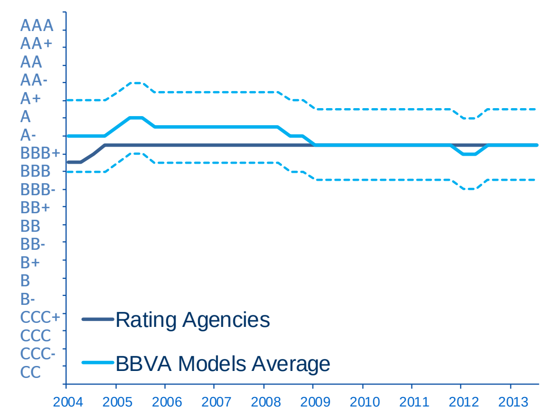
EM Europe: Sovereign Rating
(Rating agencies and BBVA scores)
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



Latam: Sovereign Rating
(Rating agencies and BBVA scores)
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



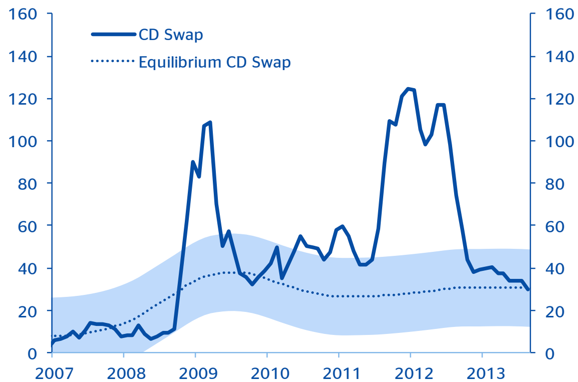
Emerging Asia: Sovereign Rating
(Rating agencies and BBVA scores)
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



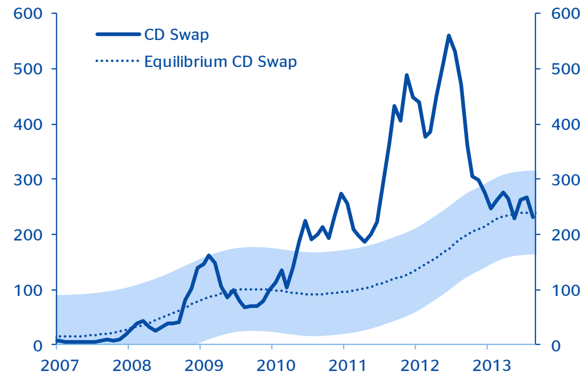
Section 3

Regional Risk: CD Swaps Update

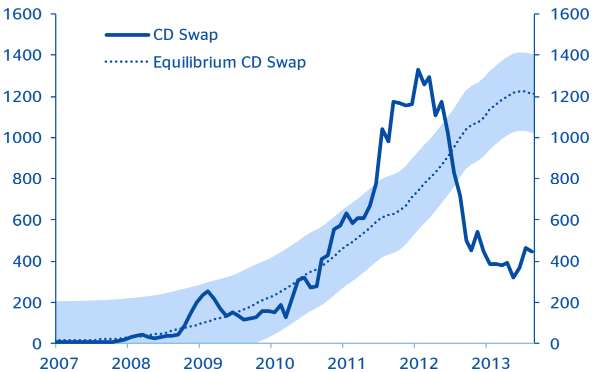
Europe Core: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



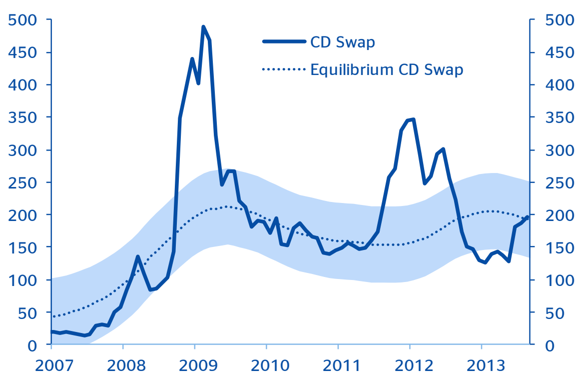
Europe Periphery I: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



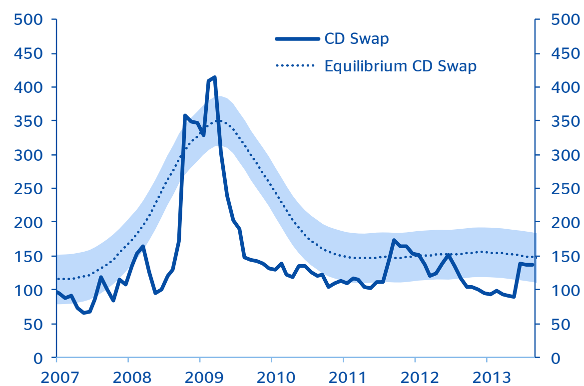
Europe Periphery II: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



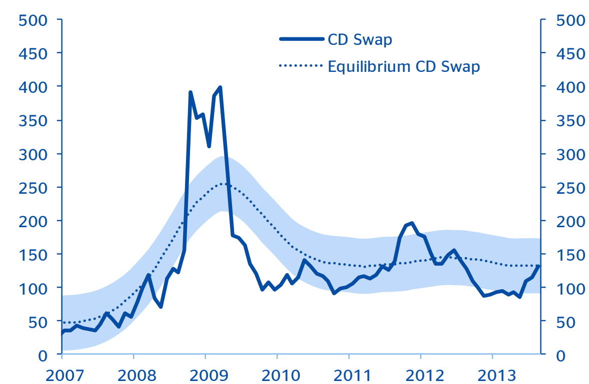
EM Europe: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



LATAM: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



EM Asia: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



Section 3

Vulnerability Indicators: Developed Economies

Vulnerability Indicators* 2013: Developed Countries

Source: BBVA Research, Haver, BIS, IMF and World Bank

	Fiscal Sustainability			External Sustainability			Liquidity Management			Macroeconomic Performance			Credit and housing			Private debt			Institutional		
	Structural Primary Balance **(1)**	Interest rate GDP growth differential 2013-17	Gross Public Debt **(1)**	Current Account Balance **(1)**	External Debt **(1)**	RER Appreciation **(2)**	Gross Financial Needs **(1)**	Short Term Public Debt **(3)**	Debt Held by non Residents **(3)**	GDP Growth **(4)**	Consumer prices **(4)**	Unemployment Rate **(5)**	Private Credit to GDP Growth **(4)**	Real Housing Prices Growth **(4)**	Equity Markets Growth **(4)**	Household Debt **(1)**	NF Corporate Debt **(1)**	Financial liquidity **(6)**	WB Political Stability **(7)**	WB Control Corruption **(7)**	WB Rule of Law **(7)**
United States	-2.7	-1.8	108.1	-2.9	100	0.6	25.2	18.6	32.1	1.9	1.8	7.7	5.2	0.0	15.8	80	44	59	-0.5	-1.2	-1.6
Canada	-1.7	0.2	87.0	-3.5	72	-2.5	16.1	13.3	23.5	1.5	1.5	7.3	4.0	1.6	4.6	93	18	108	-1.0	-2.0	-1.8
Japan	-8.7	-1.2	245.4	1.2	43	-20.2	59.0	49.2	8.9	1.7	-0.1	4.1	6.5	0.1	51.9	65	86	47	-1.0	-1.5	-1.3
Australia	-0.6	-1.2	27.6	-3.8	90	-2.3	4.2	3.1	72.2	2.9	2.2	5.3	2.0	2.2	15.5	108	59	122	-0.9	-2.2	-1.8
Korea	1.7	-2.1	32.5	1.4	35	1.1	0.7	3.1	14.3	2.3	2.3	3.3	0.4	0.0	0.5	85	72	130	-0.2	-0.5	-1.0
Norway	-8.6	-1.7	34.1	11.7	141	-1.2	-8.0	4.3	39.4	2.5	1.5	3.1	-0.1	6.6	14.8	85	111	114	-1.3	-2.2	-1.9
Sweden	-1.9	-1.5	37.7	6.0	193	2.5	4.3	3.4	46.8	1.0	0.3	8.1	2.7	0.0	12.9	85	70	307	-1.3	-2.2	-1.9
Denmark	-1.6	0.5	51.8	4.7	190	-1.7	10.1	7.3	45.7	0.8	2.0	7.6	-3.3	1.1	14.8	140	83	390	-1.1	-2.4	-1.9
Finland	-0.7	-1.2	56.9	-1.7	204	-0.4	7.9	5.8	91.1	0.5	2.9	8.1	2.2	-11.8	16.2	65	66	154	-1.4	-2.2	-2.0
UK	-2.3	-0.3	93.6	-3.1	417	0.7	12.6	6.1	31.9	1.0	2.7	7.8	-5.1	-0.6	11.6	94	70	107	-0.4	-1.5	-1.7
Austria	0.3	0.1	74.2	2.2	204	0.5	8.4	6.3	83.3	0.8	2.2	4.6	-5.1	0.0	12.6	57	70	155	-1.2	-1.4	-1.8
France	0.2	-0.1	93.2	-2.2	204	-1.5	17.3	13.4	63.5	-0.1	1.1	11.2	-1.9	-2.6	17.0	56	80	142	-0.6	-1.5	-1.5
Germany	2.8	0.0	80.3	7.0	164	-1.3	7.9	7.9	61.3	0.5	1.7	5.7	-1.3	0.0	24.0	58	53	68	-0.9	-1.7	-1.6
Netherlands	-0.1	0.0	74.5	8.7	311	0.1	12.0	8.6	53.5	-0.5	2.8	6.3	2.5	-11.6	12.1	127	87	117	-1.1	-2.2	-1.8
Belgium	1.0	1.0	100.3	-0.1	231	0.2	18.4	15.8	57.1	0.2	1.7	8.0	-0.9	-1.0	11.5	57	84	74	-0.9	-1.6	-1.4
Italy	3.6	2.4	130.4	0.8	117	-0.3	28.4	25.3	35.1	-1.8	1.6	12.0	-0.8	0.0	6.8	45	75	91	-0.6	0.0	-0.4
Spain	1.4	2.2	92.3	1.0	166	0.0	17.6	14.1	29.1	-1.4	1.7	26.2	-19.2	0.0	9.3	78	126	139	-0.1	-1.1	-1.2
Ireland	-1.3	0.4	122.0	3.4	1002	-2.1	13.2	5.7	63.9	1.1	1.3	14.2	-19.9	0.0	25.9	106	173	139	-1.0	-1.5	-1.8
Portugal	1.6	1.2	129.7	4.5	232	-0.2	23.0	17.5	60.4	-2.3	0.6	18.3	-9.7	-4.4	24.7	92	105	157	-0.7	-1.1	-1.0
Greece	4.3	1.0	179.5	-0.3	204	-1.8	19.5	14.9	68.2	-4.2	-0.8	27.0	8.3	-12.7	38.7	65	67	118	0.1	0.1	-0.6

*Vulnerability Indicators: (1) % GDP (2) Deviation from 4 years average (3) % of total debt (4) % year on year (5) % of Total Labor Force (6) Financial System Credit to Deposit (7) Index by World Bank Governance Indicators

Section 3

Vulnerability Indicators: Emerging Economies

Vulnerability Indicators* 2013: Emerging Countries

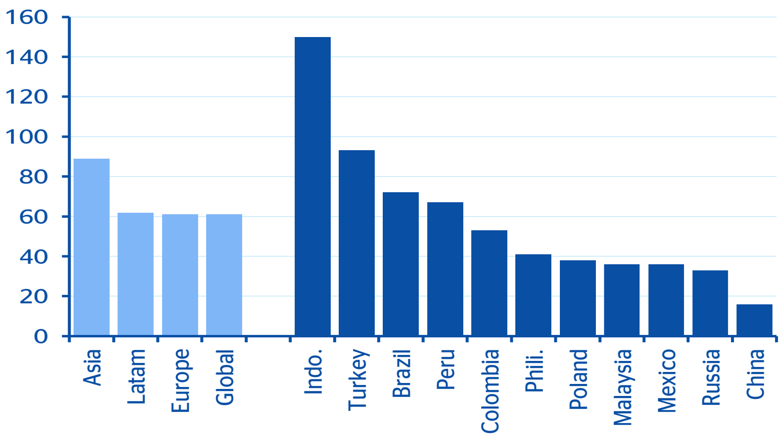
Source: BBVA Research, Haver, BIS, IMF and World Bank

	Fiscal Sustainability			External Sustainability			Liquidity Management			Macroeconomic Performance			Credit and housing			Private debt			Institutional		
	Structural Primary Balance **(1)**	Interest rate GDP growth differential 2013-17	Gross Public Debt **(1)**	Current Account Balance **(1)**	External Debt **(1)**	RER Appreciation **(2)**	Gross Financial Needs **(1)**	Reserves to Short Term External Debt **(3)**	Debt Held by non Residents **(3)**	GDP Growth **(4)**	Consumer prices **(4)**	Unemployment Rate **(5)**	Private Credit to GDP Growth **(4)**	Real Housing Prices Growth **(4)**	Equity Markets Growth **(4)**	Household Debt **(1)**	NF Corporate Debt **(1)**	Financial liquidity **(6)**	WB Political Stability **(7)**	WB Control Corruption **(7)**	WB Rule of Law **(7)**
Bulgaria	0.2	-0.1	17.8	-1.9	95	-0.3	3.9	1.3	47.2	1.2	2.1	12.4	-1.6	0.0	51.5	23	95	104	-0.3	0.2	0.1
Czech Rep	-0.7	-0.2	44.8	-2.1	52	-2.5	11.3	8.4	33.2	0.3	2.3	8.1	1.1	0.0	-2.5	31	40	84	-1.1	-0.3	-1.0
Croatia	-2.8	1.7	53.1	0.0	108	-0.9	11.2	2.3	34.0	-0.2	3.2	15.2	-2.8	n.a.	6.5	39	34	88	-0.5	0.0	-0.2
Hungary	1.9	1.3	79.9	2.1	154	-2.5	21.0	1.7	67.7	0.0	3.2	10.5	-0.4	0.0	9.7	32	66	148	-0.7	-0.3	-0.8
Poland	-0.3	-0.1	56.8	-3.6	79	-3.6	11.6	1.5	52.8	1.3	1.9	11.0	-0.4	-9.7	9.6	35	39	104	-1.1	-0.5	-0.7
Romania	0.7	-0.8	36.9	-4.2	82	0.1	11.6	1.5	47.9	1.6	4.6	7.0	-2.7	0.0	16.2	22	49	114	-0.1	0.2	0.0
Russia	0.2	-1.2	10.4	2.5	31	3.3	1.6	4.7	19.4	3.4	6.9	5.5	5.0	0.7	-4.1	13	33	117	0.9	1.1	0.8
Turkey	1.3	0.5	36.5	-6.8	42	0.6	9.4	1.0	35.0	3.7	7.1	9.0	8.6	0.0	22.0	15	33	116	0.9	-0.1	-0.1
Argentina	-1.5	-5.5	42.4	-0.1	32	-4.4	8.7	1.4	31.8	2.8	9.8	7.1	2.1	0.9	26.8	8	--	75	-0.2	0.4	0.6
Brazil	3.3	2.4	67.2	-3.3	20	-9.1	17.1	11.6	17.6	2.3	6.2	6.0	3.1	0.0	-12.7	16	38	117	0.0	-0.2	0.0
Chile	-1.0	0.1	11.1	-4.0	45	0.0	0.9	2.4	15.9	4.2	2.5	6.5	0.9	-1.3	-8.4	29	48	180	-0.6	-1.6	-1.4
Colombia	0.1	-1.1	34.4	-3.1	21	-0.7	3.8	3.4	27.7	4.1	2.2	10.3	3.5	9.2	-4.4	16	22	189	1.3	0.3	0.3
Mexico	-0.5	-0.2	43.5	-1.3	30	1.8	10.8	3.0	33.2	1.4	3.4	5.0	1.2	-0.7	6.0	15	26	76	0.7	0.4	0.5
Peru	0.9	-2.8	19.0	-5.6	31	-8.7	2.0	8.3	65.2	5.8	2.8	6.1	1.8	-4.8	-23.0	11	21	90	0.7	0.2	0.6
China	-0.3	-7.7	57.0	2.8	8	11.0	6.2	6.2	...	7.6	2.8	4.1	7.8	-2.6	-19.0	31	85	155	0.7	0.7	0.5
India	-4.3	-4.5	66.4	-4.3	21	-8.3	12.7	3.0	6.7	5.7	7.7	0.0	-1.5	8.3	11.3	9	37	79	1.2	0.6	0.1
Indonesia	-1.4	-5.2	23.4	-2.0	26	0.4	3.7	2.0	54.6	5.9	7.0	5.9	1.2	0.0	21.8	16	12	88	0.8	0.7	0.7
Malaysia	-2.1	-2.4	56.0	4.6	33	1.2	10.2	4.4	28.8	4.8	2.5	3.0	1.5	3.2	10.9	92	--	89	-0.2	0.0	-0.5
Philippines	0.5	-1.9	39.7	3.3	27	6.2	7.5	10.9	38.9	6.1	3.5	7.0	-0.3	14.7	23.2	2	27	65	1.4	0.8	0.5
Thailand	-2.5	-4.8	45.9	1.0	39	5.6	8.2	3.7	10.3	4.7	3.2	0.7	-4.1	0.0	23.9	25	24	104	1.0	0.4	0.2

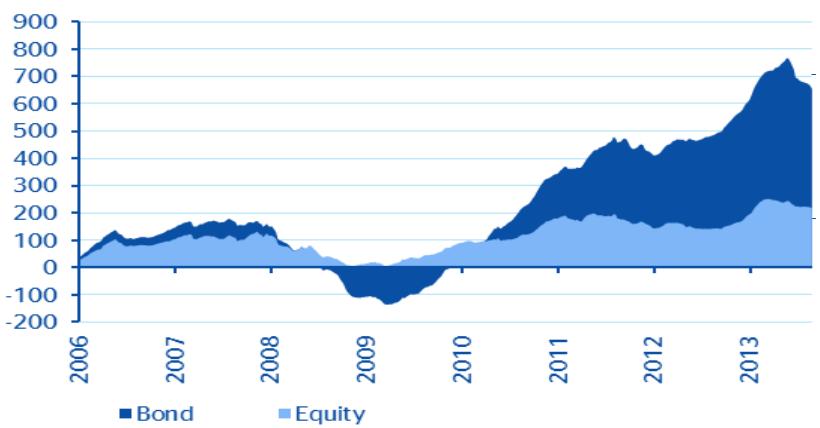
*Vulnerability Indicators: (1) % GDP (2) Deviation from 4 years average (3) % of total debt (4) % year on year (5) % of Total Labor Force (6) Financial System Credit to Deposit (7) Index by World Bank Governance Indicators

Special Topic: Behind The Emerging Markets Sell Off

Markets performance amid the Sell Off
(Risk premium increase since mid May in bps)
Source: Haver



Emerging Markets' Cumulated Net Inflows
(US bn, cumulative since 2005)
Source: BBVA Research, IMF and EPFR



Emerging Markets´ asset price and portfolio flows experienced a sharp correction since last May. In general terms, the correction in prices and quantities has been sizeable:

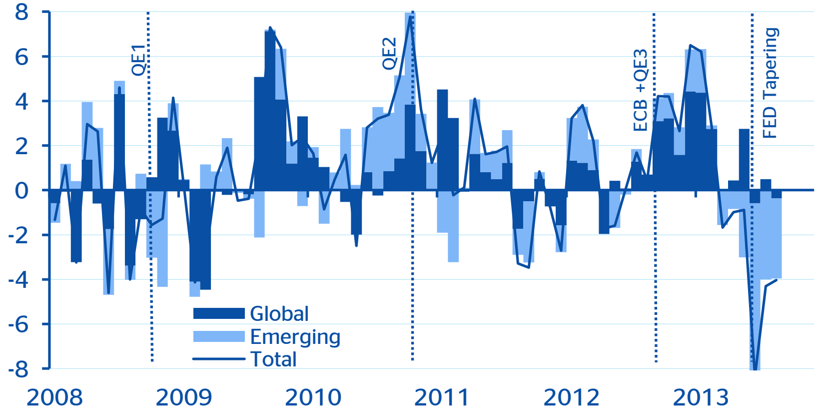
- **Asset prices reacted negatively specially across EM bonds**: While the cumulative drop in Equity markets was more uneven (with Turkey leading the way with a near 25% drop since May in contrast to +4% increase in Poland), EM risk premiums have surged an average of 70 bps bringing about an 8% median depreciation of exchange rates. The movement was somehow generalized as most of the big EM (Turkey, Brazil, Mexico, India and Indonesia) were under pressure .
- **Portfolio inflows to EM experienced a significant drop**. According to our estimates, since mid-May until the end of August nearly 113 billion USD have left emerging markets in the form of portfolio outflows (with a tilt to fix income). The adjustment reached its sharpest pace this June and continued in July and August albeit at a milder pace.

There are four relevant factors behind Emerging Markets (EM) assets rebalancing:

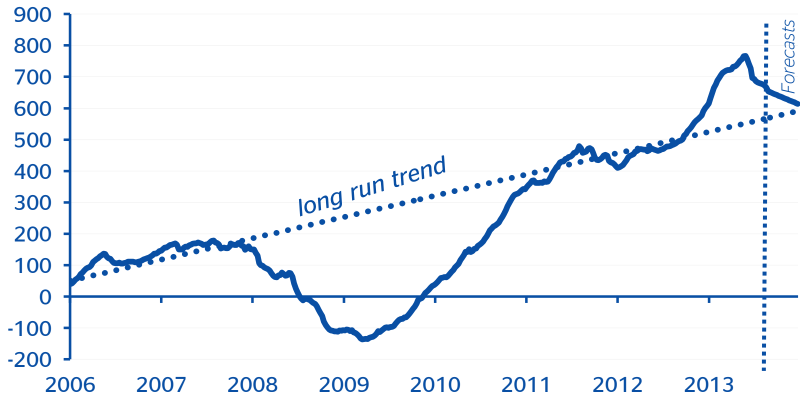
- **Uncertainty about the US Federal Reserve Exit Strategy increased** since last May when Bernanke opened the door to the tapering. This has driven the:
  - **Signaling the end of ultra-loose Monetary policy**: Since May the interest rate curve has moved significantly with an increase on near 100 bp in the expectations for FED funds in 2016.
  - **The beginning of the removal of the QE artificial boost:** We estimate the excess portfolio flows into EM due to QE3 to have reached $215 Bn USD at its peak in mid-May 2013. Today nearly 60% of such excess inflows have already been corrected thanks to the sell-off and -although there is still margin for correction- the adjustment will slowly turn more gradual.
- **The slowdown and additional worsening of growth expectations on important EMs.** China´s slowdown and liquidity crunch in the interbank market together with unfulfilled growth expectations in major EM economies like Brazil and India contributed to rapid portfolio adjustments across EM assets, leading to massive cross border outflows. Growth expectations were also affected by social unrest in Turkey and Brazil.
- **Technical factors have favored the portfolio re-balancing in some big EM.** In general terms we are assisting to a big rotation from bonds to equity and from EM to Developed Markets. Independently of fundamentals, the countries with higher exposure to EM indexes are experiencing big adjustments. This is the reason why "Frontier Markets", although riskier, have outperformed more traditional EMs during the sell-off

Special Topic: Behind The Emerging Markets Sell Off

Emerging Markets: Net Portfolio Flows Components
(Flows over Total Assets in contributions by factors)
Source: BBVA Research and EPFR



Emerging Market: Cumulative Portfolio Flows
(US$ bn, Cumulative portfolio flows since 2005 and long run trend)
Source: BBVA Research, IMF and EPFR



- **The spread of the social unrest in some important EM markets** (Turkey & Brazil), **and increasing tensions in the Middle East** (Egypt & potential attack to Syria) have also **added volatility** to security markets**.**

However, we remain positive on Emerging Markets as :

- **The EM vulnerability remains at very low levels.** This is true in both historically and relative to developed markets. Public, external and private debt ratios remain at very low levels, most of the EMs are functioning under flexible exchange regimes. Besides, contrary to previous EM crises, countries with FX denominated liabilities are now the exception and not the rule.
- **The recent EM sell off constitutes an important lesson for western central bankers and they should improve their communication policies.**
- **There are structural and cyclical international portfolio reasons to support Emerging Markets**. On the structural side, the EM are still severely underrepresented in international portfolios and this representation is bound to increase gradually. On the cyclical side: the recent sell off has been driven by a particular EM factor (see graph). In fact, most of the adjustment of the EMs artificial boosted by QEs has already taken place (near 60% of the correction in off) and EM asset prices are now closer to fair values.

Appendix: The BBVA Capital Flows Tracker

By using high frequency data of portfolio flows, we have developed a model to analyse portfolio flows dynamics by looking at investor and asset types and by regions. This tool allows to identify global, regional and idiosyncratic factors governing flow dynamics and asses the relative contribution of different shocks (Lehman, QE, Sell Off etc.) as well as produce short term forecasts. The model has a "state space" set-up form:

$$(1)\ PF_t = CX_t + V_t$$
$$(2)\ X_t = AX_{t-1} + F\,W_t$$

In the system, (1) stands for the Measurement Equation where PF(t) is a matrix of capital flows, X(t) one of un-observable factors (global, regional and idiosyncratic) and C identifies the relation between both. V(t) is a matrix of measurement errors also called noise. The Equation (2) is the Transition Equation where A is the matrix of parameters that defines the factor dynamics, F a control matrix for the noise to signal ratio of the state space model. W(t) is a matrix of shocks to the transition equation. The state equation block (2) allows for time dynamics of the mentioned latent factors so that the estimated states may evolve through time and may allow predictions of the measurement equation thus recursively retrieving portfolio flows forecasts.

Annex

Methodology: Indicators and Maps

- **Financial Stress Map:** It stress levels of according to the normalized time series movements. Higher positive standard units (1.5 or higher) stands for high levels of stress (dark blue) and lower standard deviations (-1.5 or below) stands for lower level of market stress (lighter colors)
- **Sovereign Rating Index:** An index that translates the three important rating agencies ratings letters codes (Moody´s, Standard & Poor´s and Fitch) to numerical positions from 20 (AAA) to default (0) . The index shows the average of the three rescaled numerical ratings
- **Sovereign CD Swaps Map:** It shows a colour map with 6 different ranges of CD Swaps quotes (darker >500, 300 to 500, 200 to 300, 100 to 200, 50 to 100 and the lighter below 50 bps)
- **Downgrade Pressure Map:** The map shows the difference of the current ratings index (numerically scaled from default (0) to AAA (20)) and the implicit ratings according to the Credit Default Swaps. We calculate implicit probabilities of default (PDs) from the observed CDS and the estimated equilibrium spread. For the computation of these PDs we follow a standard methodology as the described in Chan-Lau (2006) and we assume a constant Loss Given Default of 0.6 (Recovery Rate equal to 0.4) for all the countries in the sample. We use the resulting PDs in a cluster analysis to classify each country at every point in time in one of 20 different categories (ratings) to emulate the same 20 categories used by the Rating Agencies. The map and the graph plot the difference between the actual sovereign rating index and the CDS-implied sovereign rating, in notches. Higher positives differences account for Downgrade potential pressures and negative differences account for Upgrade potential. We consider the +-3 notches area as the Neutral one
- **Vulnerability Radars & Risk Thresholds Map:**
  - A **Vulnerability Radar** shows a static and comparative vulnerability for different countries. For this we assigned several dimensions of vulnerabilities each of them represented by three vulnerability indicators. The dimensions included are: Macroeconomics, Fiscal, Liquidity, External, Excess Credit and Assets, Private Balance Sheets and Institutional. Once the indicators are compiled we reorder the countries in percentiles from 0 (lower ratio among the countries) to 1 (maximum vulnerabilities) relative to its group (Developed Economies or Emerging Markets). Furthermore Inner positions (near 0) in the radar shows lower vulnerability meanwhile outer positions (near 1) stands for higher vulnerability. Besides we compare the positions of the country with risk thresholds in red whose values have been computed according to our own analysis or empirical literature
  - **The Distance to Risk Map**: Shows in different colours a summary table of vulnerability radars. Darker colours stand for indicators above risk thresholds (developed or emerging depending the country). Lighter colours reflect safe values in the sense of a high distance to the risk thresholds. Dimensions are computed as the geometric average of the three indicators included in each of the dimensions

Annex

Methodology: Indicators and Maps

Risk Thresholds Table

Vulnerability Dimensions	Risk Thresholds Developed Economies	Risk Thresholds Emerging Economies	Risk Direction	Research
Macroeconomics				
GDP	1.5	3.0	Lower	BBVA Research
Inflation	4.0	10.0	Higher	BBVA Research
Unemployment	10.0	10.0	Higher	BBVA Research
Fiscal Vulnerability				
Ciclically Adjusted Deficit ("Strutural Deficit")	-4.2	-0.5	Lower	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/100
Expected Interest rate GDP growth diferential 5 years ahead	3.6	1.1	Higher	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/100
Gross Public Debt	73.0	43.0	Higher	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/100
Liquidity Problems				
Gross Financial Needs	17.0	21.0	Higher	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/100
Debt Held by Non Residents	84.0	40.0	Higher	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/101
Short Term Debt Pressure				
Publi Short Term Debt as % of Total Publi Debt (Developed)	9.1		Higher	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/100
Reserves to Short term debt (Emerging)		0.6	Lower	Baldacci et Al (2011). Assesing Fiscal Stress. IMF WP 11/100
External Vulnerability				
Current Account Balance (% GDP)	4.0	6.0	Lower	BBVA Research
External Debt (% GDP)	200.0	60.0	Higher	BBVA Research
Real Exchange Rate (Deviation from 4 yr average)	5.0	10.0	Higher	EU Commission (2012) and BBVA Research
Private Balance Sheets				
Household Debt (% GDP)	84.0	84.0	Higher	Chechetti et al (2011). "The real effects of debt". BIS Working Paper 352 & EU Comission (2012)
Non Financial Corporate Debt (% GDP)	90.0	90.0	Higher	Chechetti et al (2011). "The real effects of debt". BIS Working Paper 352 & EU Comission (2013)
Financial liquidity (Credit/Deposits)	130.0	130.0	Higher	EU Commission (2012) and BBVA Research
Excess Credit and Assets				
Private Credit to GDP (annual Change)	8.0	8.0	Higher	IMF Global Financial Stability Report
Real Housing Prices growth (% yoy)	8.0	8.0	Higher	IMF Global Financial Stability Report
Equity growth (% yoy)	20.0	20.0	Higher	IMF Global Financial Stability Report
Institutions				
Political Stability	0.2 (9th percentil)	-1.0 (8th percentil)	Lower	World Bank Governance Indicators
Control of Corruption	0.6 (9th percentil)	-0.7 (8th percentil)	Lower	World Bank Governance Indicators
Rule of Law	0.6 (8th percentil)	-0.6 (8 th percentil)	Lower	World Bank Governance Indicators

Annex

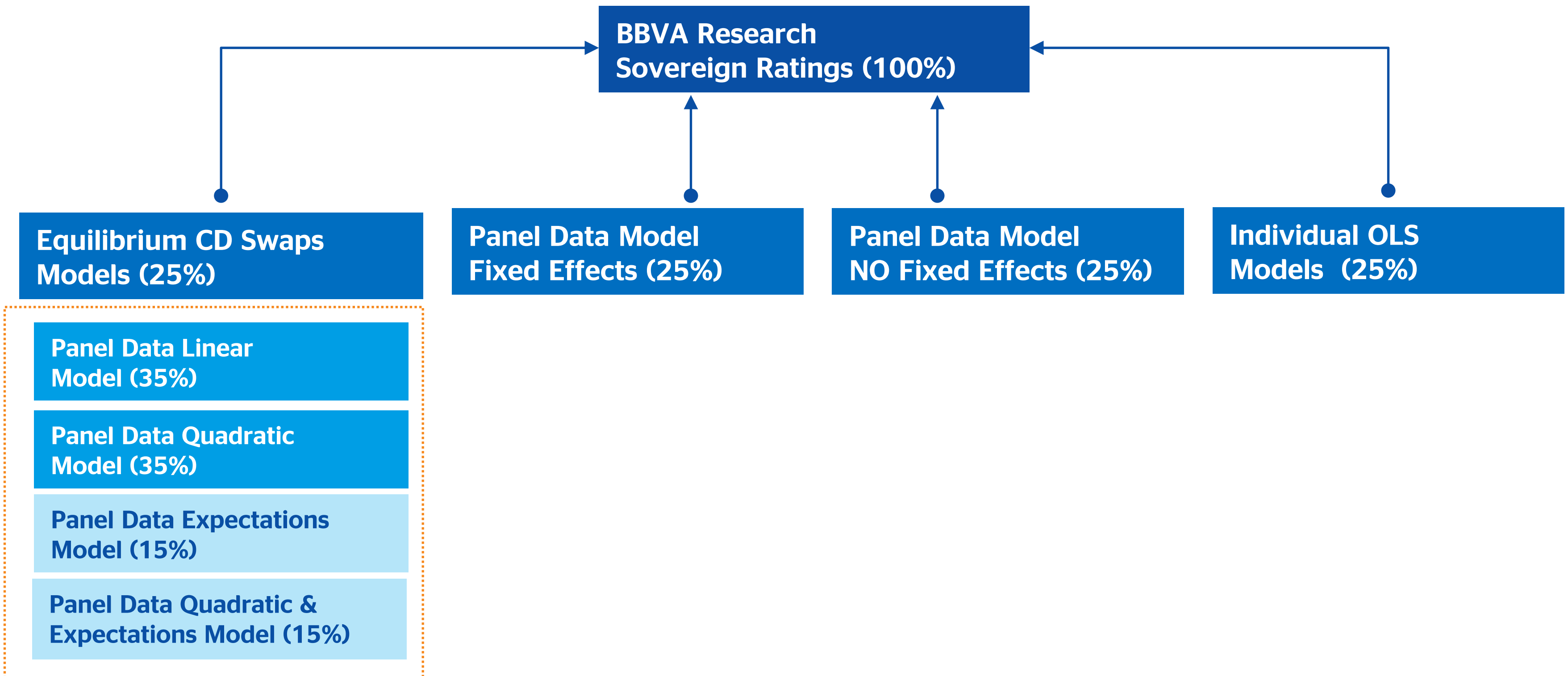
Methodology: Models and BBVA country risk

- **BBVA Research Sovereign Ratings Methodology:** We compute our sovereigns ratings by averaging four alternatives sovereign rating models developed at BBVA research:
  - **Credit Default Swaps Equilibrium Panel Data Models:** This model estimate actual and forecasts equilibrium levels of CD Swaps for 40 developed and emerging markets. The long run equilibrium CD Swaps are the result of four alternative panel data models. The average of these equilibrium values are finally are finally converted to a 20 scale sovereign rating scale. The CD Swaps equilibrium are calculated by a weighting average of the four CD Swaps equilibrium model estimations (30% for the linear and quadratic models and 15% for each expectations model to correct for expectations uncertainty). The weighted average is rounded by 0.5 standard deviation confidence bands. The models are the following
    - Linear Model (35% weight): Panel Data Model with fixed effects including Global Risk Aversion, GDP growth, Inflation, Public Debt and institutional index for developed economies and adding External debt and Reserves to Imports for Emerging Markets
    - Quadratic Model (35% weight): It is similar to the Linear Panel Data Model but including a quadratic term for public (Developed and emerging) and external debt (Emerging)
    - Expectations Model (15% weight): It is similar to the linear model but public and external debt account for one year expected values
    - Quadratic Expectations Model (15% weight): Similar to the expectations model but including quadratic terms of public debt and external debt expectations
  - **Sovereign Rating Panel Data Ordered Probit with Fixed Effects Model:** The model estimates a sovereign rating index (a 20 numerical scale index of the three sovereign rating agencies) through ordered probit panel data techniques. This model takes into account idiosyncratic fundamental stock and flows sustainability ratios allowing for fixed effects , thus including idiosyncratic country specific effects
  - **Sovereign Rating Panel Data Ordered Probit without Fixed Effects Model:** The model estimates a sovereign rating index (a 20 numerical scale index of the three sovereign rating agencies) through ordered probit panel data techniques. This model takes into account idiosyncratic fundamental stock and flows sustainability but fixed effects are not included, thus all countries are treated symmetrically without including the country specific long run fixed effects
  - **Sovereign Rating Individual OLS models:** These models estimates the sovereign rating index (a 20 numerical scale index of the three sovereign rating agencies) individually. Furthermore , parameters for the different vulnerability indicators are estimated taken into account the own history of the country independent of the rest of the countries

Annex
Methodology: Models and BBVA country risk

BBVA Research Sovereign Ratings Methodology Diagram

Source: BBVA Research



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