BBVA | RESEARCH

Country Risk Quarterly Report

BBVA Research

Cross-Country Emerging Markets Unit

June 2014

Summary

Financial Markets & Global Risk Aversion

- **Financial Markets seem to be in a generalized risk-on mood**. Financial tensions and sovereign risk premia are decreasing across the board in both developed and emerging markets (EM).
- The spillovers of the Ukraine crisis have receded and the military coup in Thailand has not had a visible impact. **Global Risk Aversion (VIX) has been steadily decreasing for the past four months and it is currently at levels not observed since the beginning of 2007**. However, risk **in the Middle East is on the rise in Iraq and neighbor countries.**
- **The sharp recovery in capital flows EM is moderating although still in positive ground.**

Sovereign Markets & Ratings Update

- **Sovereign risk premia in many developed markets, including some peripheral European countries have reached levels not observed since the onset of the 2008 financial crisis**. Similarly some CDS spreads of many EM are near historical minimum levels.
- **The positive credit rating cycle in the EU periphery has strengthened** with the upgrades of Ireland and Portugal by Moody's and Spain by S&P and Fitch.
- **The decoupling of rating cycles between different emerging regions continues:** Latam has suffered the downgrade of Argentina, Brazil and Venezuela. Within EM Europe, Russia was downgraded, but Romania was upgraded. Finally, Philippines was upgraded by S&P.

Our own country risk assessment

- **Global factors were gaining importance again during the quarter**. **Risk appetite increased sharply supported by renewed actions by Western Central Banks (ECB new measures) and a softer position by the FED officials**. The **EM central banks are joining this stimulus and some of the key Central banks are already relaxing monetary policy.** This is being supporting a rapid recovery in financial assets especially those with lower ratings. **Some of them are quoting above fundamentals and furthermore the risk of correction is increasing.**
- **Despite that the reduction in financial tensions and lower risk premia have supported the increase in risk appetite, complacency is out the question**. The extraordinary market liquidity conditions may not last forever and could reverse. Global risk aversion is also at historically low levels, but it should move to more neutral levels once the push factors from major central banks start to die out.

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Section 1

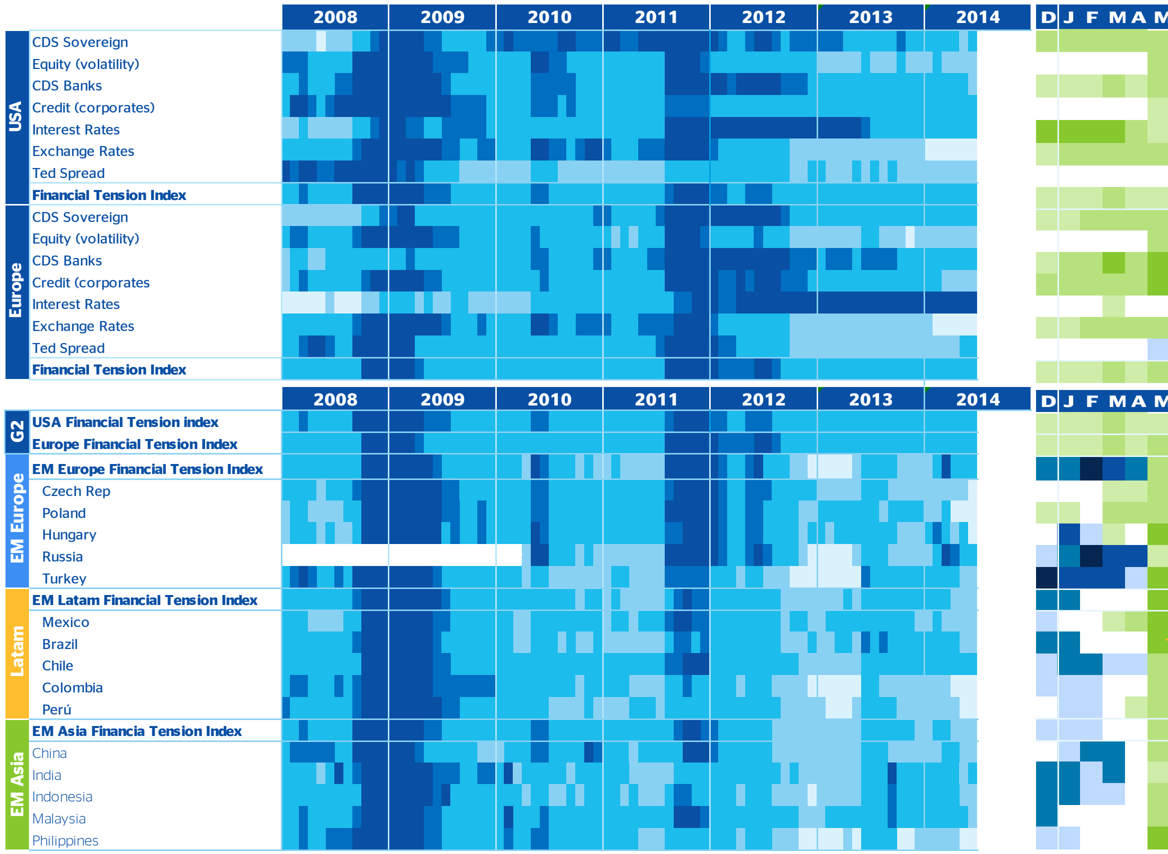
Financial Markets Stress

BBVA Research Financial Stress Map

Source: BBVA

Changes

(last 6 months m/m)



Color scale for Index in levels

- No Data
- Very Low Tension (<1 sd)
- Low Tension (-1.0 to -0.5 sd)
- Neutral Tension (-0.5 to 0.5)
- High Tension (0.5 to 1 sd)
- Very High Tension (>1 sd)

Color scale for monthly changes

- < -2
- (-2)-(-1)
- (-1) - (-0.5)
- (-0.5) - (-0.2)
- (-0.2) - 0.2
- 0.2 - 0.5
- 0.5 - 1
- 1 -2
- >2

Overall decrease in Financial Tensions in both developed and emerging economies during May.

Financial tensions are at minimum levels. Corporates and banks the most benefited.

Financial tensions in EM Europe are slowly receding. Russia starts to recover while Turkey tensions continues to relax.

Financial tensions in Latam are also declining. Mexico and Brazil the most benefited and Chile the least one.

Financial tensions decreasing all over Asia. Philippines outperforms.

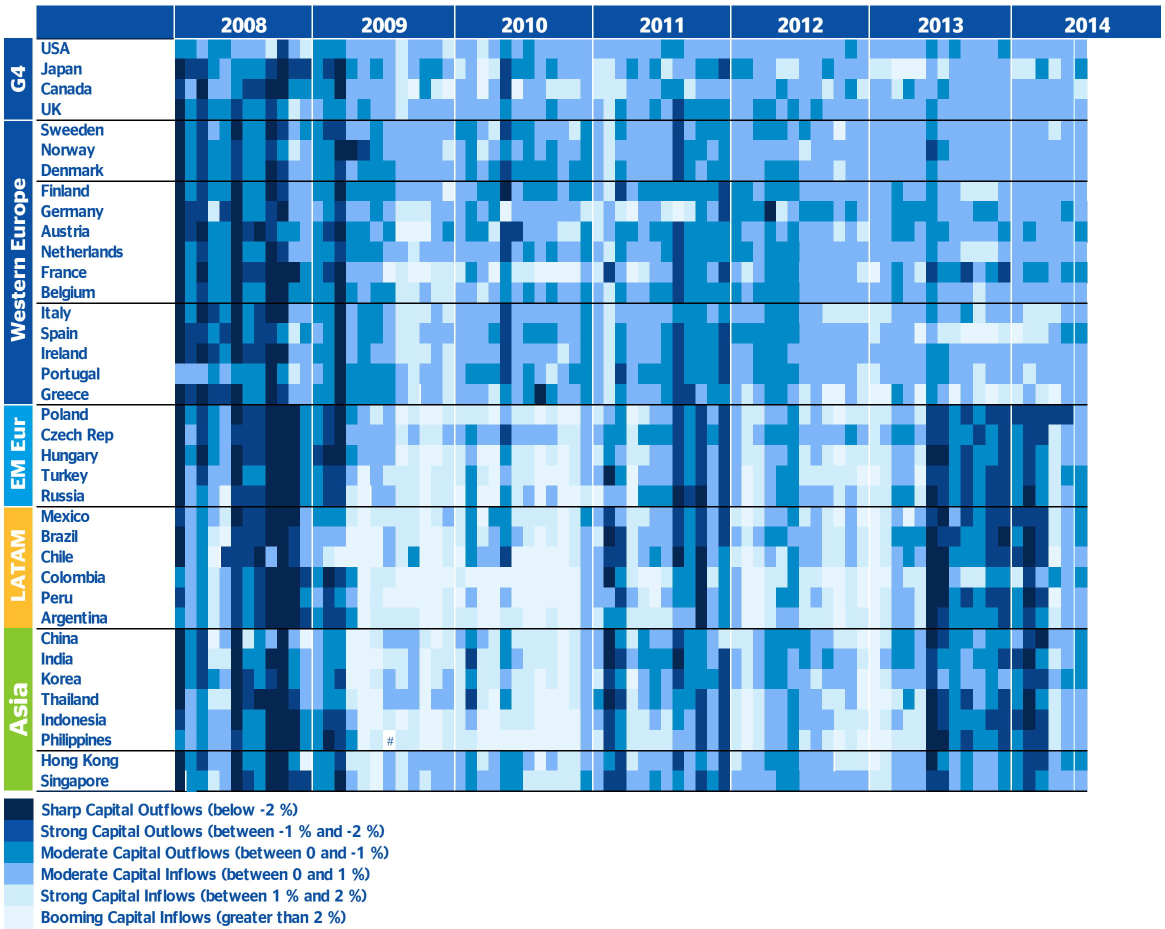
Section 1

Capital Flows Update

BBVA Country Portfolio Flows Map

(Country Flows over total Assets)

Source: BBVA Research



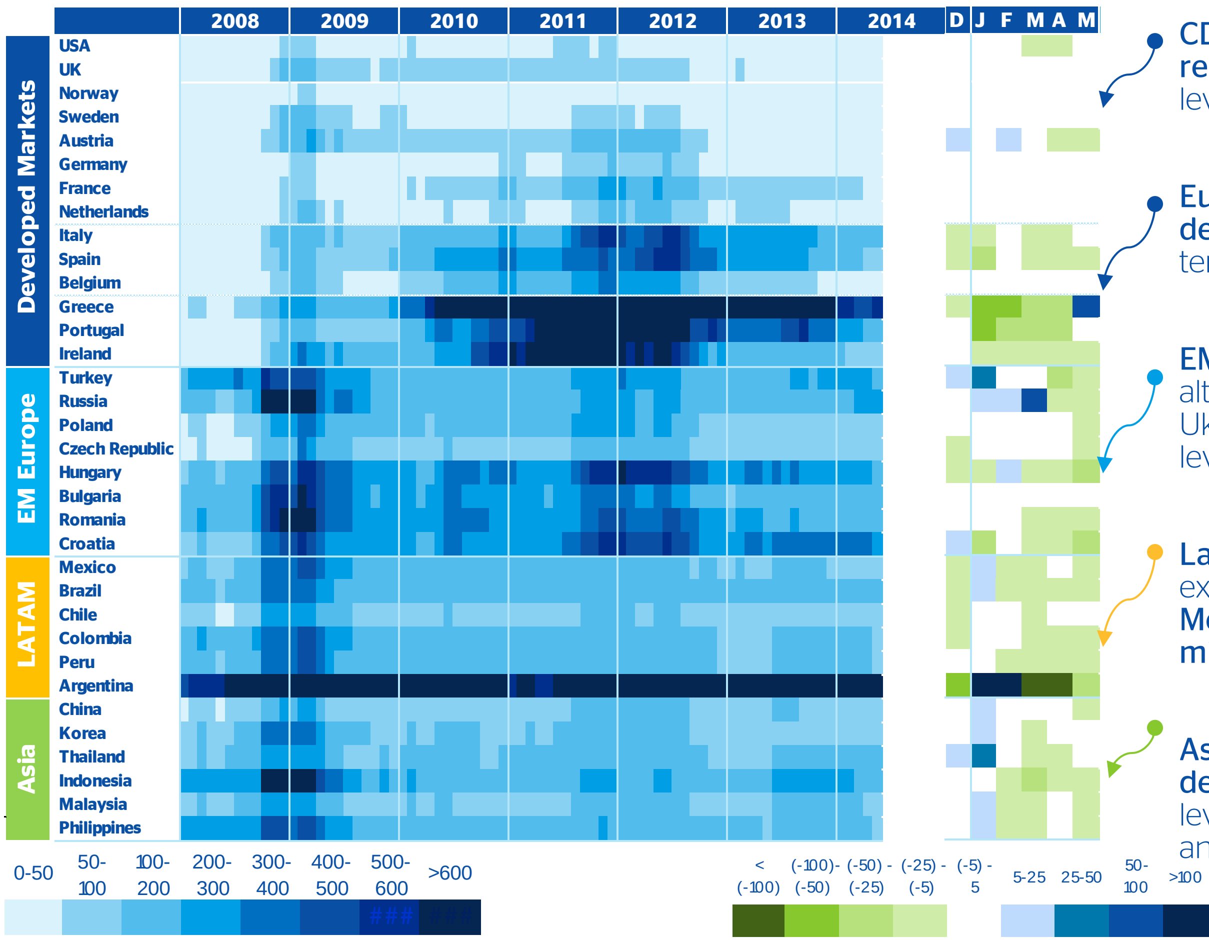
- During the 2Q 2014 **portfolio reallocation phased out allowing moderate net portfolio inflows back into EMs**, this was especially pronounced during the first half of the quarter followed by some moderation thereafter.

- The Recovery is being similar in both equity and bond markets. The latter experienced a strong rebound during May. **Institutional investors were behind this rebound, while retailers still lagged behind** maintaining the reallocation bias from the previous quarter.

- **Global factors have been responsible for roughly two thirds of the recent flow turnaround**. Monetary policy and risk appetite have been key for the surge, yet more recently their contribution has turned negative.

Section 2
Sovereign Markets Update

Sovereign CDS spreads
Source: Datastream and BBVA Research



CDS Spreads in the most advanced markets remained stable during the last quarter at minimum levels.

European periphery's CDS spreads continued decreasing in the last quarter, although an important temporary reversion was seen in Greece during May.

EM Europe's CDS improved across the region, although Russia's CDS remained tense due to the Ukrainian conflict. Turkey's CDS has returned to levels previous to the QE-tapering announcement.

Latam sovereign CDS spreads tightened in the last excepts in Chile, which remained stable. **Colombia, Mexico and Peru were quoting near their historical minimums.**

Asian sovereigns spreads remained stable or decreased. Indonesia's CDS has also returned to levels not observed since the QE-tapering announcement.

Section 2

Sovereign Credit Ratings Update

Sovereign Rating Index 2008-2014

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 positive rating cycle for European peripheral countries strengthens** as Moody's upgraded Portugal and Ireland while S&P and Fitch upgraded Spain by one notch.
- **Emerging Markets: The outlook in Emerging Markets continues to be mixed**. In Latam, Brazil was downgraded by S&P, Argentina by Moody's and Venezuela by Fitch. Russia was downgraded by S&P, meanwhile Romania and Philippines were upgraded also by S&P.

Section 2

Sovereign downgrade Pressures Map

Rating Agencies Downgrade Pressure Map

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

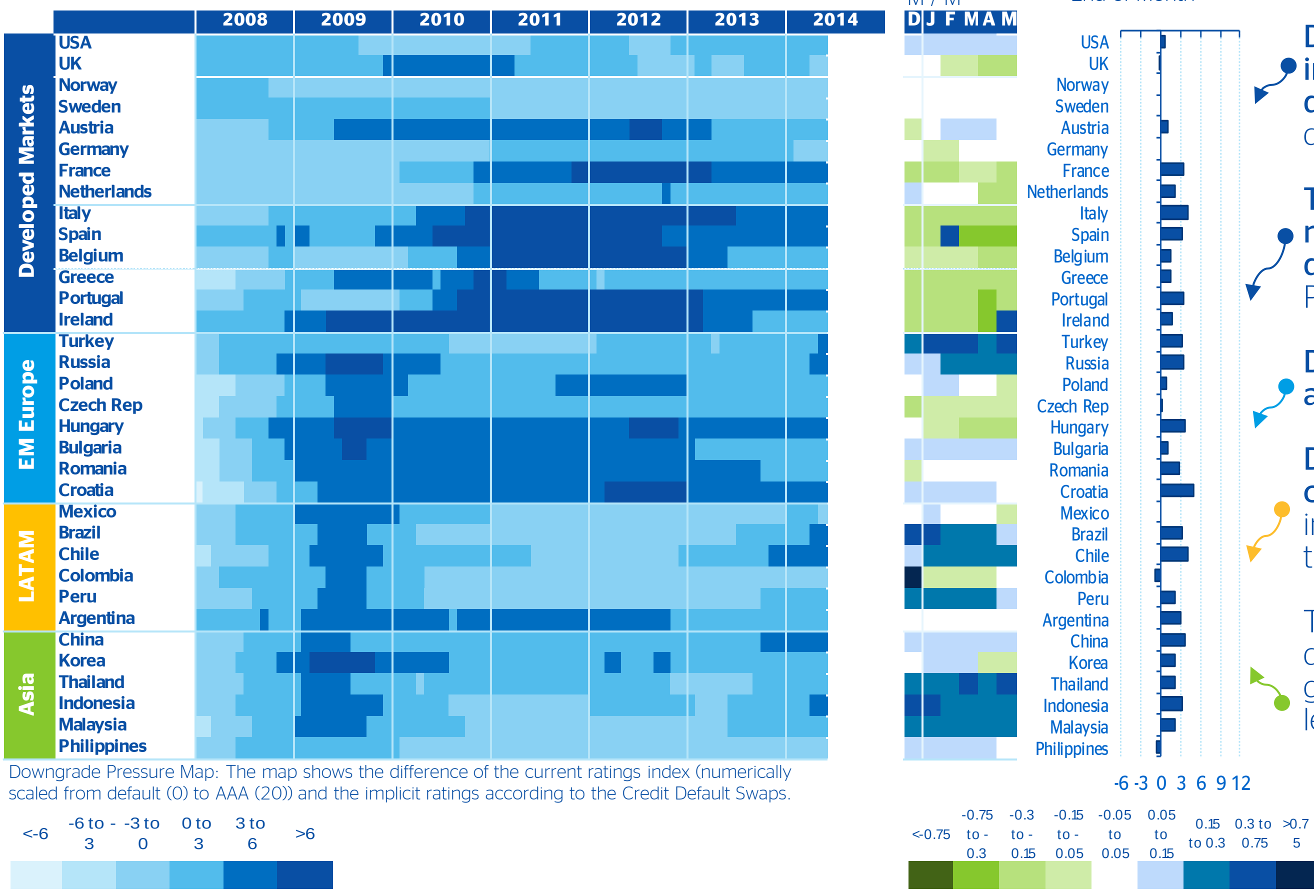
Source: BBVA Research

Changes Last 6M

M / M

May 2014

End of Month



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.

Divergences between official and market implicit ratings continue tightening in developed markets with most of the countries quoting near the official ratings.

The gaps between implicit and observed ratings in Europe's periphery continue decreasing despite the upgrades of Spain, Portugal and Ireland.

Downgrade risk is increasing in Croatia, Turkey and Russia, although the pressure is still low.

Downgrade pressure in Latin-America continues to be small. We expect it to decrease in the coming months thanks to the decrease in the CDS spreads. Colombia outperforms.

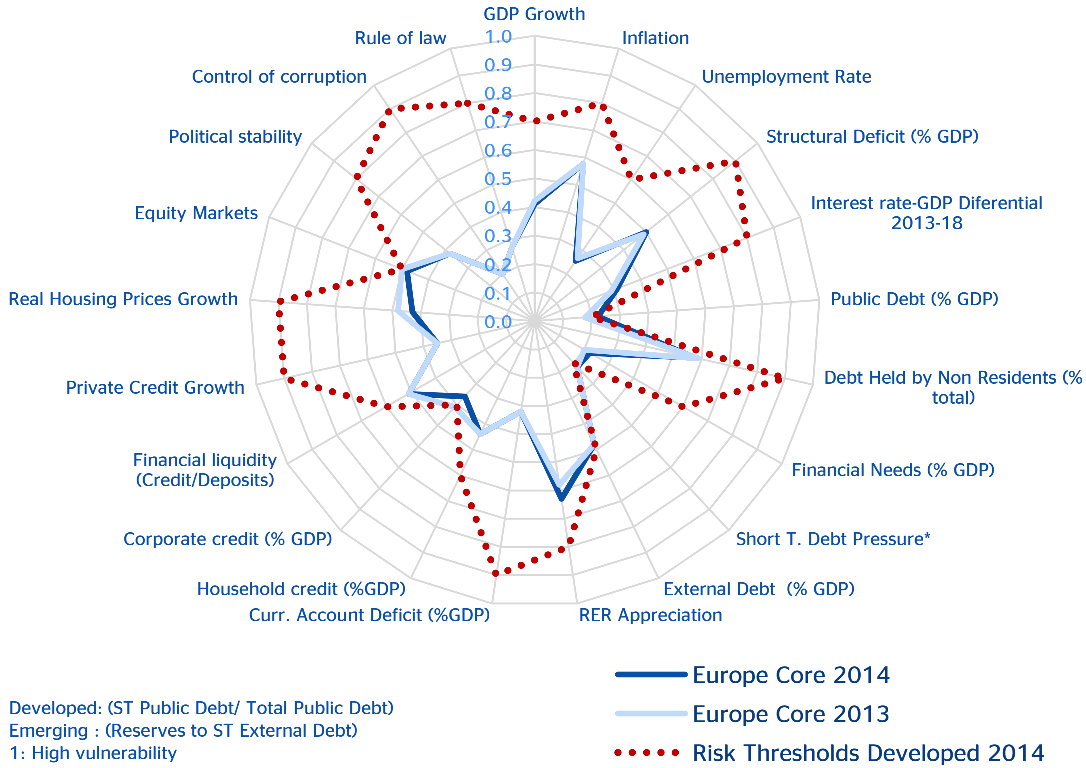
The situation is similar in **EM Asia**, where downgrade pressure is low, but there are growing downgrade pressures in **China** and to a lesser extent in **Indonesia.**

Section 3

Regional Risk Update: Core Europe

Europe Core Countries: Vulnerability Radar 2014

(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

All vulnerability indicators below the risk thresholds. Few changes with respect to 2013

Equity markets are just at the risk threshold raising some valuation concerns

External debt levels and Public debt should be monitored

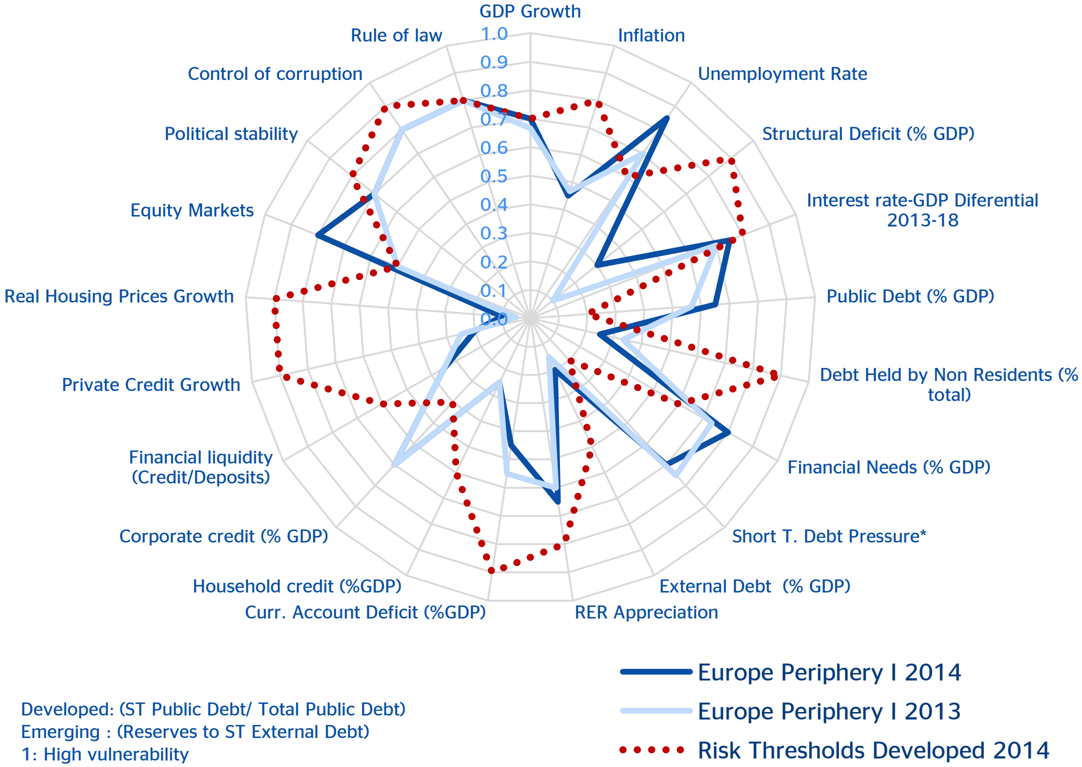
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar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

Section 3

Regional Risk Update: Europe Periphery I

Europe Periphery I: Vulnerability Radar 2014

(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

Structural public balances, housing prices growth, and private credit growth continue to improve

The growth in equity markets should call for some warning

Activity and employment indicators remain weak; Public Debt levels still on the rise

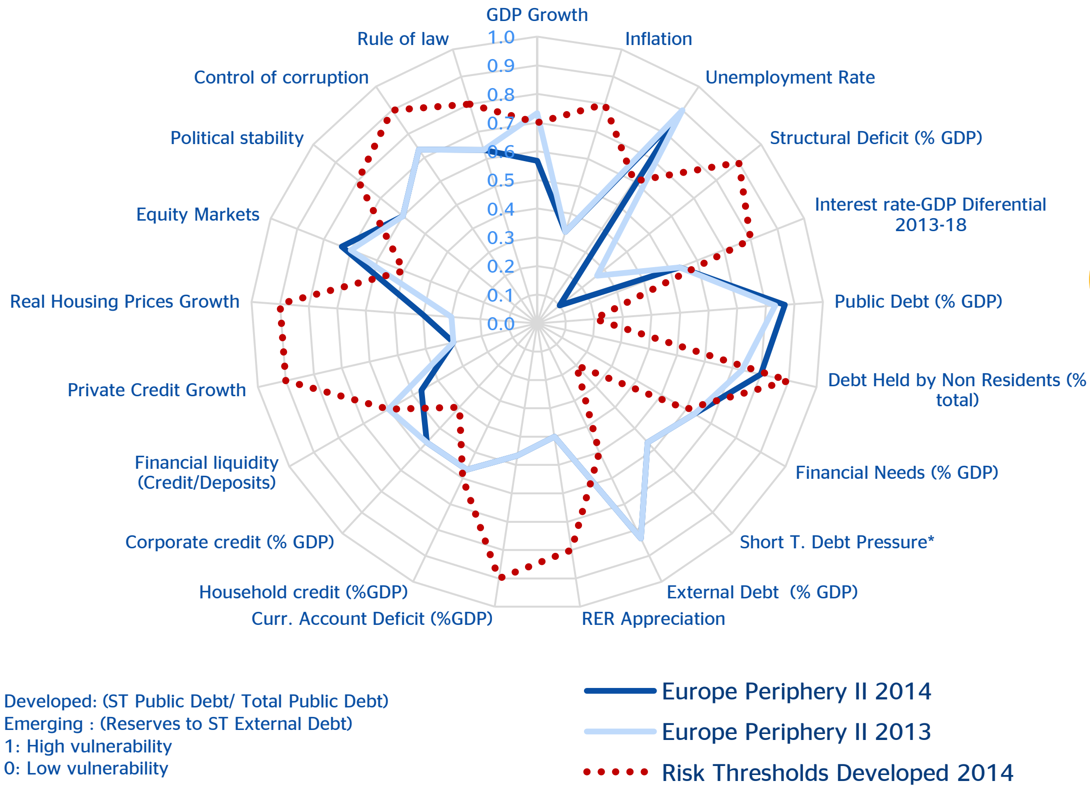
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar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

Section 3

Regional Risk Update: Europe Periphery II

Europe Periphery II: Vulnerability Radar 2014

(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

Structural public deficits and private balance sheets gradually improving

Debt Held by non-residents is rising with respect to 2013. High growth in equity markets

Public debt and External debt levels are still way above risk levels. Unemployment rate still high

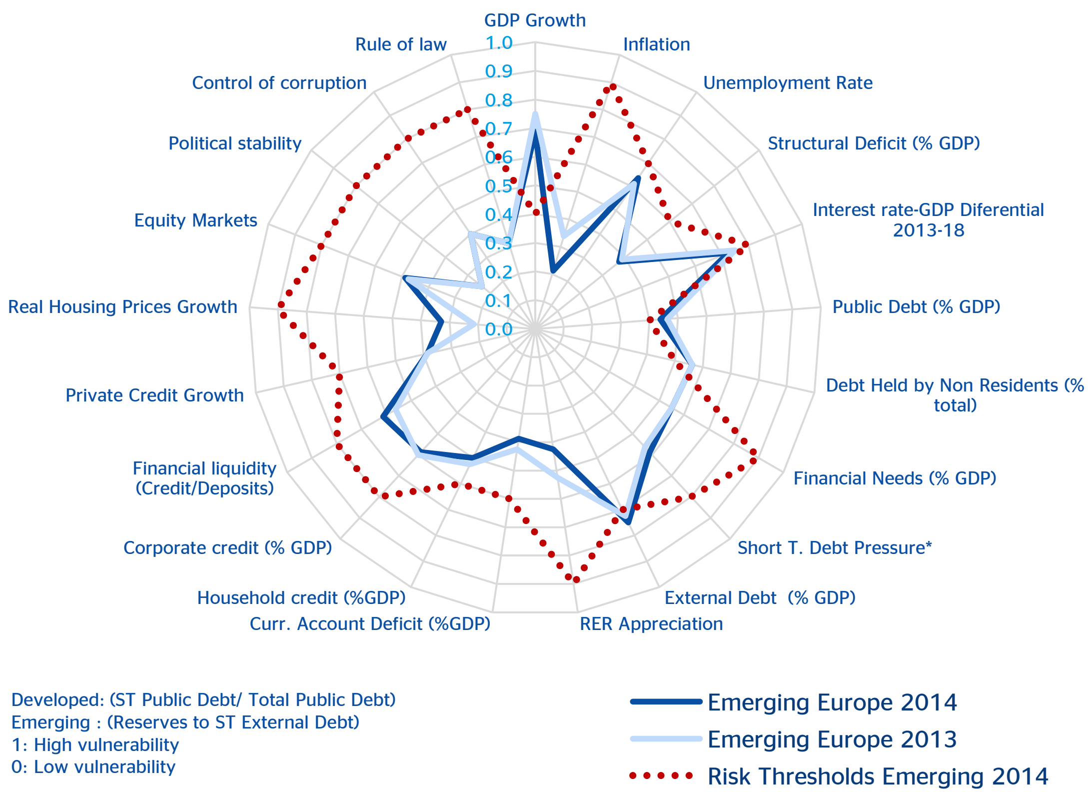
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar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

Section 3

Regional Risk Update: Emerging Europe

Emerging Europe: Vulnerability Radar 2014

(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

Structural public balances and private credit at healthy levels. Most vulnerabilities below risk thresholds

Financial liquidity vulnerable to investor sentiment changes

Public and external debt levels still higher than risk threshold. GDP growth still low

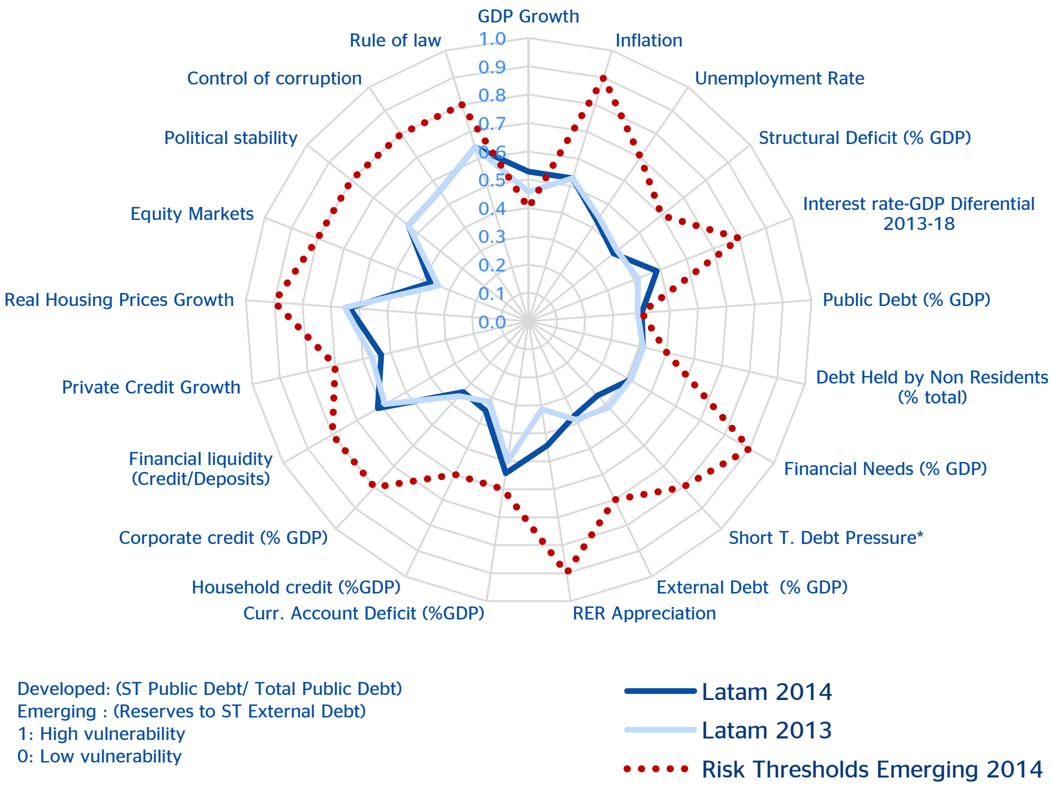
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar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

Section 3

Regional Risk Update: Latam

Latam: Vulnerability Radar 2014

(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

Most vulnerability indicators are far from risk thresholds

Slight deterioration in financial needs and interest rate-GDP differential

Weaker economic growth in some countries. Current Account vulnerability relatively high in some countries

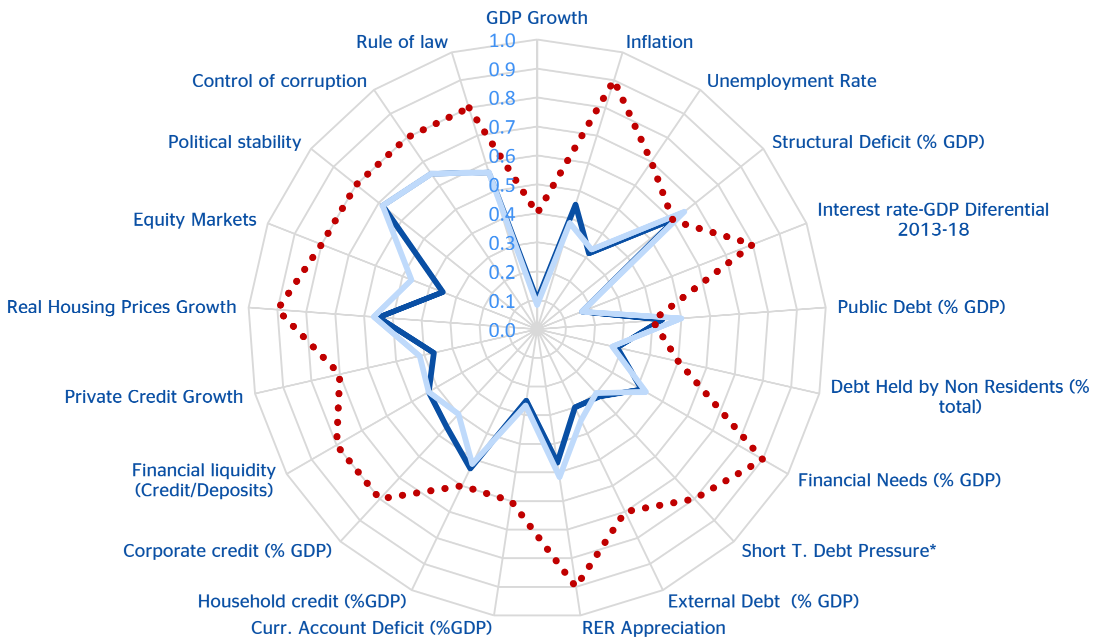
Vulnerability Radar: Shows a static and comparative vulnerability for different countries. For this we assigned several solvency , liquidity and macro variables and we reorder in percentiles from 0 (lower ratio among the countries to 1 maximum vulnerabilities.) Furthermore Inner positions in the radar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

Section 3

Regional Risk Update: Asia

Emerging Asia: Vulnerability Radar 2014

(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 still among the most solid among Emerging Markets

Private Credit and housing prices growth risks keep on rising in China

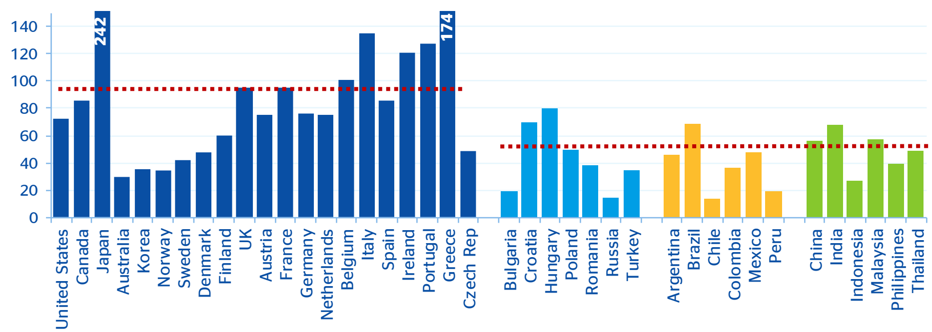
Structural fiscal deficits and public debt level above the risk thresholds in some countries

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

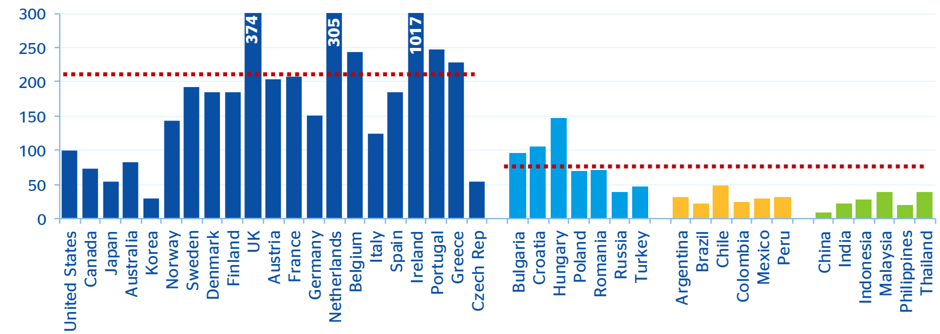
Section 3

Public and Private Debt Chart Gallery

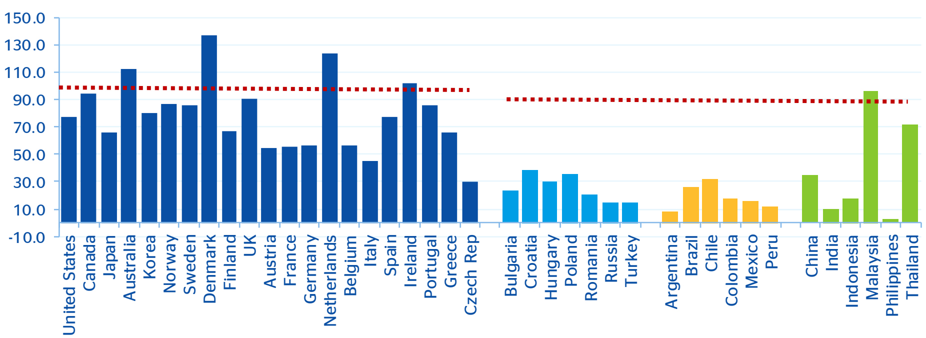
Gross Public Debt 2014
(% GDP)
Source: BBVA Research and IMF



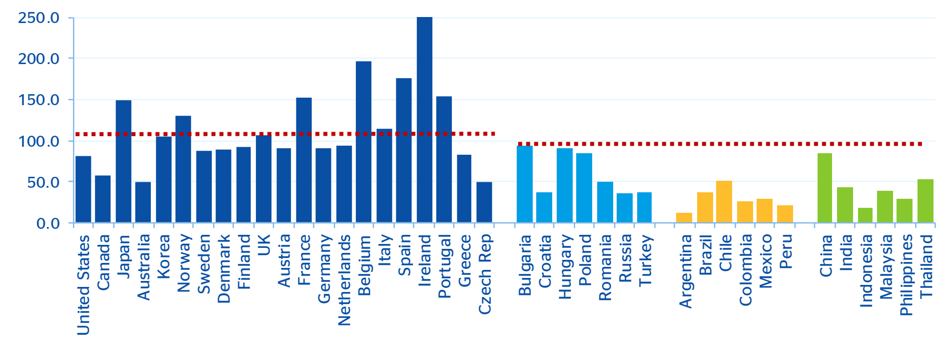
External Debt 2014
(% GDP)
Source: BBVA Research and IMF



Household Debt 2014
(% GDP)
Source: BBVA Research and BIS



Corporate Sector Debt 2014
(% GDP, excluding bond issuances)
Source: BBVA Research and BIS



Risk Thresholds

Section 3

Private Credit Pulse

Private credit colour map (1999-2014 Q1)

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

Source: BBVA Research and Haver

Q/Q Growth

Last four quarters up until Q1-2014

Credit-to-GDP ratio continues to grow rapidly in the US, although its pace is decelerating in the last quarter. **The de-leveraging process is stronger in UK, Denmark and Ireland** and in the rest of the countries is stabilizing.

In EM Europe, credit growth is losing steam in Turkey and Russia, although it is still high in the former. Meanwhile, de-leveraging continues in the rest of the countries or leverage is stagnant.

Private credit growth is basically stagnant in Latin America. In most of the countries leverage is not growing, with the exception of Brazil, where it has recovered strength in the first quarter.

In China, credit ratio growth has accelerated in the first quarter after a halt in the previous quarter. There are no signs of excess credit growth in the rest of the countries.

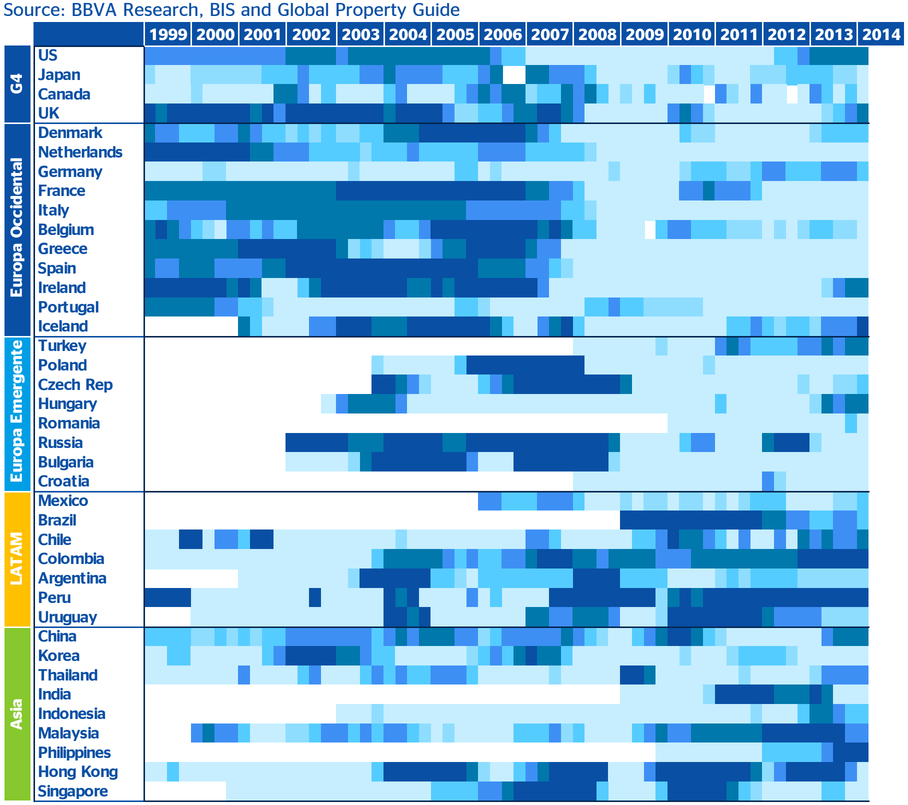
Section 3

Real Housing Prices Pulse

Real housing prices colour map (1999-2014 Q1)

(yearly change of real housing prices Y/Y)

Source: BBVA Research, BIS and Global Property Guide



Booming: Real House prices growth higher than 8%
Excess Growth: Real House Prices Growth between 5% and 8%
High Growth: Real House Prices growth between 3%-5%
Mild Growth: Real House prices growth between 1%-3%
Stagnant: Real House prices growth between 0% and 1%
De-Leveraging: House prices are declining
Non Available Data

Q/Q Growth

Last four quarters up until Q1-2014

Q/Q growth > 3.5%
Q/Q growth between 2% and 3.5%
Q/Q growth between 1% and 2%
Q/Q growth between 0.5% and 1%
Q/Q growth between -0.5% and 0.5%
Q/Q growth between -0.5% and - 1%
Q/Q growth between -1% and -2%
Q/Q growth between -2% and -3.5%
Q/Q growth < -3.5%

US real housing prices have now been growing fast for more than a year. Real growth in UK is accelerating.

Europe's correction is still alive with some positive growth in the Denmark.

Housing prices are still growing fast in Turkey and Hungary, meanwhile prices are stagnant or declining in the rest of the countries.

In Latam, **real housing prices continue to grow faster in Colombia and Peru, although moderating in the latter.**

Housing prices growth does not seem to be slowing down in China. Growth is accelerating in Philippines and it does not have a clear tendency in the rest of the region.

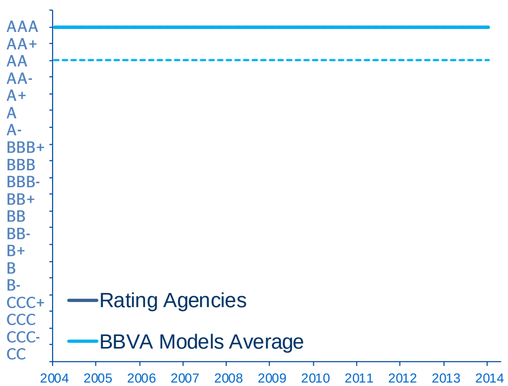
Section 3

Regional Risk Update: Western Europe

Europe Core: Sovereign Rating

(Rating agencies and BBVA scores +-1std dev)

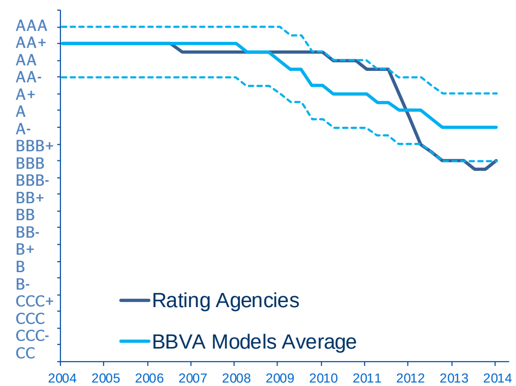
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



Europe Periphery I: Sovereign Rating

(Rating agencies and BBVA scores +-1 std dev)

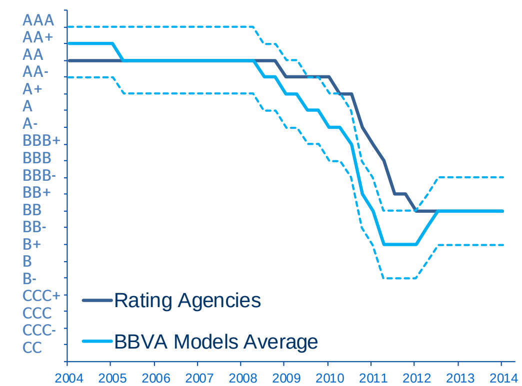
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



Europe Periphery II: Sovereign Rating

(Rating agencies and BBVA scores +.1 std dev)

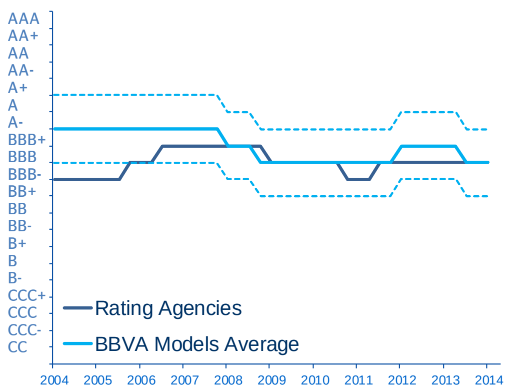
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



EM Europe: Sovereign Rating

(Rating agencies and BBVA scores)

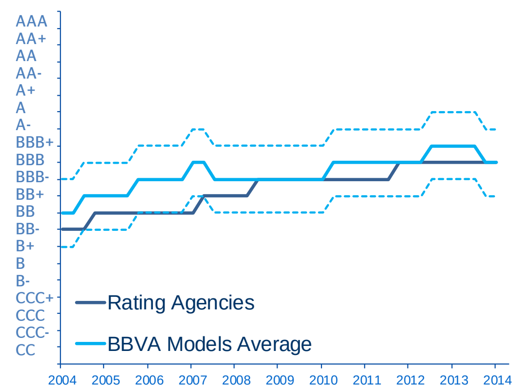
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



Latam: Sovereign Rating

(Rating agencies and BBVA scores)

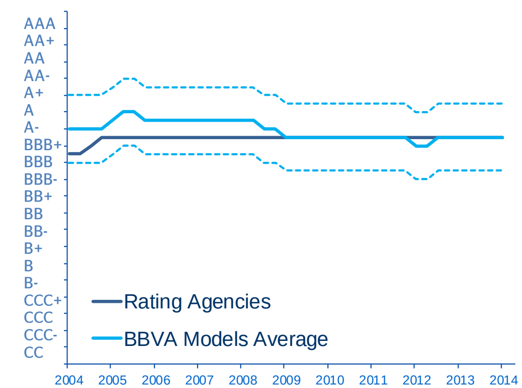
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



Emerging Asia: Sovereign Rating

(Rating agencies and BBVA scores)

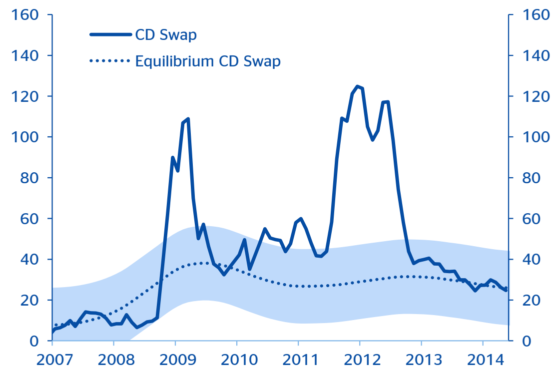
Source: Standard & Poors, Moody´s, Fitch and BBVA Research



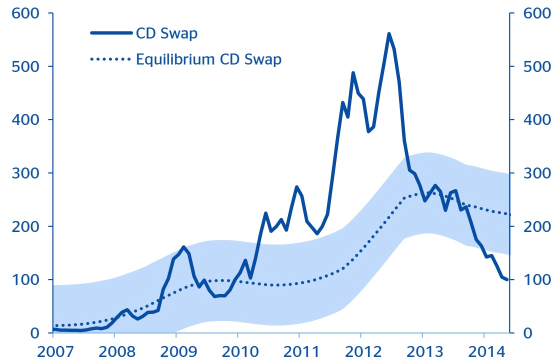
Section 3

Regional Risk: CD Swaps Update

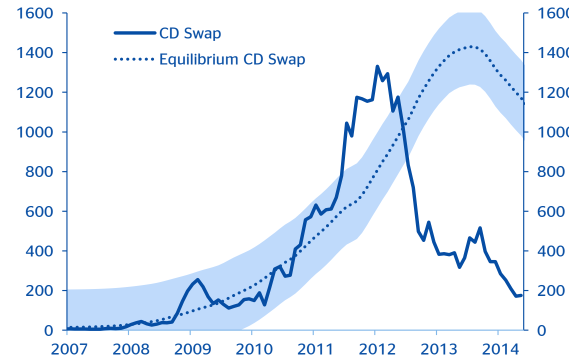
Europe Core: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



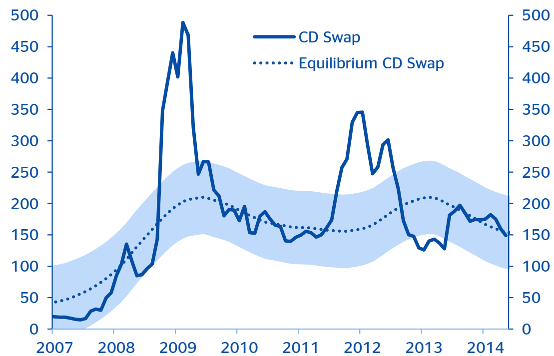
Europe Periphery I: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



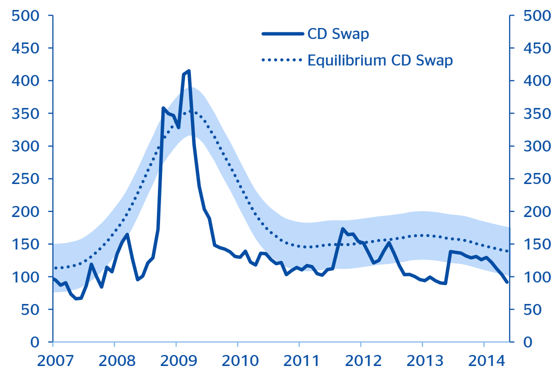
Europe Periphery II: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



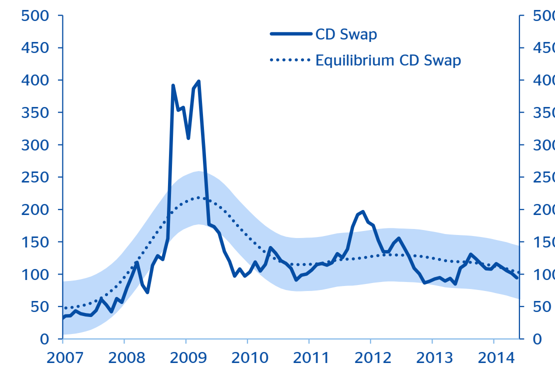
EM Europe: CD Swap 5 year
(equilibrium: average of 4 alternative models + 0.5 Standard deviation)



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* 2014: 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	-1.2	-1.1	73	-1.9	99	1.2	24	18	34	2.5	1.8	6.6	11.5	6.2	12.9	77	81	58	-0.6	-1.4	-1.6
Canada	-1.8	0.0	86	-3.5	72	-8.4	17	13	25	1.5	1.5	7.3	0.3	-0.3	12.4	95	57	108	-1.1	-1.9	-1.8
Japan	-6.0	-1.4	242	0.1	54	-20.8	58	49	8	1.1	2.8	3.6	1.5	-3.3	19.6	66	149	48	-0.9	-1.6	-1.3
Australia	-1.6	-0.6	29	-2.4	82	-3.9	6	3	55	2.6	2.3	5.9	2.1	4.7	8.5	112	49	122	-1.0	-2.0	-1.7
Korea	1.1	-1.6	35	5.6	30	8.8	1	3	14	3.7	1.8	3.2	0.7	-0.3	-1.0	80	104	130	-0.2	-0.5	-1.0
Norway	-8.4	-2.0	34	8.5	143	-3.3	-7	4	42	1.9	2.0	3.3	-0.8	2.5	18.2	87	130	110	-1.3	-2.2	-1.9
Sweden	-1.2	-1.4	42	5.9	193	-2.0	5	4	54	2.1	0.4	7.8	0.3	-2.0	13.6	85	88	298	-1.2	-2.3	-1.9
Denmark	0.1	1.1	48	6.0	185	1.2	10	7	41	1.5	1.5	5.8	-6.3	1.6	31.4	137	89	395	-0.9	-2.4	-1.9
Finland	-0.6	-1.0	60	6.0	185	3.1	8	6	92	1.5	1.5	5.8	1.7	-3.1	19.8	67	92	156	-1.4	-2.2	-1.9
UK	-1.8	-0.2	95	-2.8	374	6.1	12	6	33	2.8	1.9	3.2	-18.2	5.4	2.9	91	106	103	-0.4	-1.6	-1.7
Austria	0.1	0.0	75	3.4	204	3.0	9	6	83	1.5	1.8	4.9	-3.4	2.2	7.3	55	91	141	-1.3	-1.3	-1.8
France	-0.3	-0.5	96	-1.7	208	1.1	17	13	61	0.9	1.1	9.9	-2.6	-2.2	17.7	55	153	137	-0.6	-1.4	-1.4
Germany	2.5	0.3	76	6.7	150	2.0	7	7	60	1.8	1.3	6.6	-7.5	2.1	22.6	57	90	64	-0.8	-1.8	-1.6
Netherlands	1.2	0.4	76	9.5	305	3.5	12	9	56	0.8	0.8	8.9	-9.9	-2.6	15.8	124	93	115	-1.2	-2.1	-1.8
Belgium	1.3	1.1	101	-0.9	243	1.4	19	16	60	1.2	1.0	8.6	-2.8	-0.3	26.3	57	197	72	-0.9	-1.6	-1.4
Italy	3.9	2.2	135	1.1	124	1.7	28	26	36	0.7	0.7	12.9	-4.3	-4.3	41.4	45	115	86	-0.5	0.0	-0.4
Spain	-1.0	2.5	85	1.4	185	1.3	21	14	37	1.1	0.3	25.0	-17.1	-4.6	30.6	77	175	129	0.0	-1.0	-1.0
Ireland	0.7	0.8	121	4.3	1017	0.6	11	5	66	1.7	0.6	11.4	-23.9	7.4	26.2	102	282	113	-0.9	-1.4	-1.7
Portugal	2.3	1.3	127	0.8	247	0.1	21	17	65	1.2	0.2	15.3	-12.8	-0.9	27.7	86	153	148	-0.7	-0.9	-1.0
Greece	5.4	1.0	174	1.0	228	-1.3	25	17	80	-0.3	-0.4	27.0	1.4	-7.1	53.7	66	83	112	0.2	0.3	-0.4

*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* 2014: 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	-0.1	1.9	19	1.9	96	0.2	2	1.5	44	1.7	-0.4	12.4	0.7	-6.5	56.2	23	94	97	-0.3	0.2	0.1
Czech Rep	-0.3	0.1	49	-1.7	55	-6.7	12	8	32	2.6	1.0	7.6	0.6	2.8	4.5	30	49	82	-1.0	-0.2	-1.0
Croatia	-2.8	1.7	70	-0.8	105	-0.4	11	2.3	34	-0.4	0.5	20.8	-2.8	-14.6	-12.4	39	36	106	-0.6	0.0	-0.2
Hungary	1.8	1.6	80	1.6	148	-3.8	20	1.5	63	2.4	0.9	8.8	-4.7	7.9	-1.8	30	90	143	-0.7	-0.3	-0.6
Poland	-0.2	-0.2	50	-1.3	70	0.8	9	1.2	53	2.9	1.5	12.9	1.0	-1.3	16.0	36	84	103	-1.0	-0.6	-0.7
Romania	0.4	-0.9	38	-1.4	71	2.4	10	1.9	56	2.6	2.2	5.0	-3.6	-0.8	12.2	21	49	105	-0.1	0.3	0.0
Russia	0.5	-2.1	15	1.6	39	-5.1	2	5.0	24	0.3	5.9	6.8	6.5	-6.0	-4.8	15	35	120	0.8	1.0	0.8
Turkey	1.2	2.4	35	-5.8	46	0.6	26	1.0	31	1.5	7.9	9.3	9.4	5.3	-18.8	15	37	126	1.2	-0.2	0.0
Argentina	-0.6	-14.6	46	-0.8	31	-27.2	11	1.2	36	-0.5	36.5	8.1	0.9	1.0	88.5	9	--	76	-0.1	0.5	0.7
Brazil	2.0	3.0	69	-3.7	22	-4.3	19	10.9	5	2.0	6.2	5.4	3.8	1.9	-10.5	26	37	133	-0.1	0.1	0.1
Chile	-0.5	0.1	13	-3.7	49	-7.3	1	2.5	17	3.4	3.3	5.7	6.0	5.2	-14.9	32	52	180	-0.3	-1.6	-1.4
Colombia	0.1	-0.1	36	-3.3	24	-4.7	4	3.8	30	4.7	3.4	9.5	2.6	8.3	-2.2	17	25	180	1.4	0.4	0.4
Mexico	-1.4	-0.1	48	-1.6	30	2.4	10	2.3	37	2.5	3.7	5.1	2.6	1.3	-6.8	16	29	76	0.7	0.4	0.6
Peru	0.5	-2.2	19	-5.1	31	7.2	1	10.8	60	5.2	3.0	5.9	3.5	14.4	-28.0	12	22	89	0.9	0.4	0.6
China	-0.4	-6.3	56	2.2	7	6.1	6	6.4	...	7.2	2.6	4.0	10.1	6.7	-19.1	34	85	160	0.5	0.5	0.5
India	-3.3	-4.0	68	-2.4	21	-8.1	12	3.0	8	5.2	8.5	11.8	-0.9	-9.4	18.8	10	44	79	1.2	0.6	0.1
Indonesia	-0.9	-4.1	27	-2.7	27	-8.6	4	2.0	59	5.4	6.3	6.0	0.5	1.7	-3.5	18	18	95	0.6	0.7	0.6
Malaysia	-2.1	-2.1	57	4.1	38	-0.9	10	2.7	30	5.2	3.3	3.1	2.8	4.9	10.6	96	--	91	0.0	-0.3	-0.5
Philippines	0.5	-2.1	39	4.0	20	2.5	8	9.2	...	6.5	4.4	7.5	2.4	13.6	-6.1	2	29	57	1.2	0.6	0.5
Thailand	-2.5	-4.4	48	2.7	38	0.8	9	2.2	13	2.5	2.3	0.4	-9.8	3.0	-11.8	72	53	99	1.2	0.3	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

Annex

Methodology: Indicators and Maps

- **Financial Stress Map:** It stresses levels of according to the normalized time series movements. Higher positive standard units (1.5 or higher) stand for high levels of stress (dark blue) and lower standard deviations (-1.5 or below) stand 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) stand 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

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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 estimates 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 expectation 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 estimate 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

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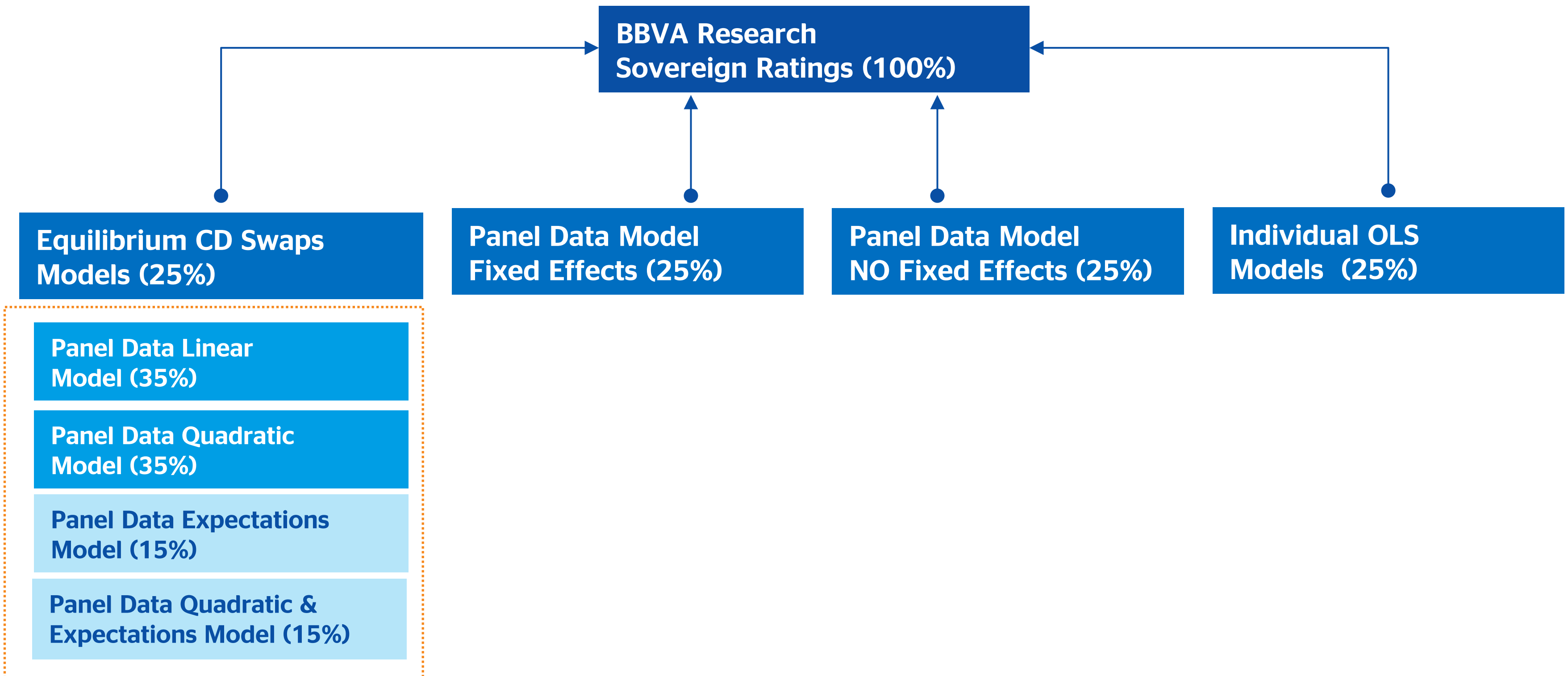
Methodology: Models and BBVA country risk

BBVA Research Sovereign Ratings Methodology Diagram

Source: BBVA Research



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