J.P.Morgan

European Rates Strategy

31 July 2017

Spanish regions

A simple fair value model

- We believe that most Spanish regions are trading in line with relative macro developments
- Catalonia is the exception as its bond pricing is dominated by political risk
- · Based on our model Murcia and the Balearic Islands are cheap, whereas Andalusia is looking dear

Spanish regions: central government support matters but fundamentals still matter

The 2016 ECB's decision to extend QE purchases to local debt prompted renewed interest in regional bonds. We covered the German states last year¹, and we now turn our attention to the pricing of Spanish regional bonds.

The Spanish regions enjoy a high degree of autonomy but have been supported by the central government in many ways since the beginning of the Euro area sovereign crisis². The recent legislation aims to prevent regions from accumulating excessive debt in the first place but also defining the criteria for ex post correction of budgetary imbalances if they ultimately arise. However there is no explicit guarantee from the central government and no unconditional bail-out responsibility, thus making regional fundamentals important.

We believe that standard macro and fiscal variables explain the relative pricing of the regions that have debt in the form of marketable securities (Exhibits 1-3). The framework is similar to the sovereign risk index that we use to assess fair value for intra-EMU spreads.⁴

Exhibit 1 shows that, apart from Catalonia, which seems to have a political risk premium of around 200bp, the pricing of the other regions tracks fairly closely our fair value assessment. Based on this framework bonds from Murcia and the Balearic Islands are cheap, whereas Andalusia is looking dear.

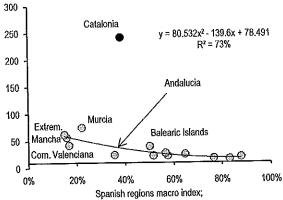
See Spotlight on German regional debt, G. Salford et. al., 2 August 2016

² See Economic Policy & Funding Programme for 2017, slides 29-30, Tesoro Publico.

³ See Regional government access to market funding: international experience and recent developments, Bank of Spain

⁴ See Global Fixed Income Markets 2017 Outlook for details on sovereign risk index.

Exhibit 1: Apart from Catalonia, the pricing of the other Spanish regions tracks well our macro index 2020 bond* spread to Bono interpolated curve regressed against our Spanish regions macro index**; bp



^{*} Closest bond if 2020 bond not available; 2020 maturity is chosen because most regions have bonds in this maturity bucket

Source: J.P. Morgan

Exhibit 2 shows the economic variables that we use in constructing the index and the last available values. We then apply a weighted average to the percentile values to calculate the index; the higher the value the better the region in our framework.

^{**} See Exhibit 2 for details on the index

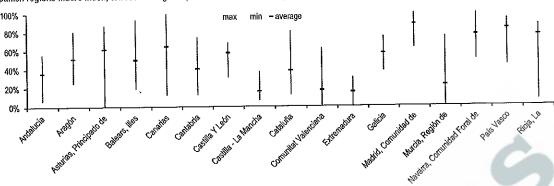
Exhibit 2: We look at macro and fiscal variables to explain the relative pricing of Spanish regions Constituents of Spanish regions macro index; latest available value;

	GDP per capila (€)	2016/10 average annual GDP growth	Unemployment rate (%)	DebVGDP	Budget balance/GDP
Andalucia	17,651	0.1%	26,9	22%	-0.6%
Aragón	26,328	0.0%	13.3	22%	-1.1%
Asturias, Principado de	20,910	-0.9%	14.2	20%	-0.5%
Balears, Illes	24,870	0.8%	16.8	31%	-0.4%
Canarias	19,867	0.2%	25.7	16%	
Cantabria	21,553	-0.5%	14.1	23%	-1.5%
Castilla Y León	22,649	-0.2%	15,1	20%	-0.6%
Castilla - La Mancha	18,591	-0.5%	22.5	37%	-0.7%
Cataluña	28,590	0,4%	15,3	36%	-0.9%
Comunitat Valenciana	21,296	0.3%	19.8	42%	-1.5%
Extremadura	16,369	-0.4%	29.2	24%	-1.6%
Galicia	21,358	0.1%	17.4	20%	-0.5%
Madrid, Comunidad de	32,723	1.0%	14.2	15%	-0.6%
Murcia, Región de	19,411	0.5%	19.3	29%	-1.7%
Navarra, Comunidad Foral de	29,807	0,6%	10,3	19%	-0.7%
Pais Vasco	31,805	0.6%	11.9	15%	-0.7%
Rioja, La	25.692	-0.7%	12.9	19%	-0.5%

² ercentile	GDP per capita (€)	2016/10 average annual GDP growth	Unemployment rate (%)	Debl/GDP	Budget balance/GDP	Index (wtd average)	Min	Max
Andalucia	6%	44%	6%	50%	56%	36%	6%	56%
Aragón	75%	38%	81%	44%	25%	52%	25%	81%
Aragon Asturias, Principado de	31%	0%	69%	69%	88%	62%	0%	88%
Asionas, Finicipado de Balears, Illes	63%	94%	44%	19%	94%	50%	19%	94%
Canarias	25%	56%	13%	88%	100%	65%	13%	100%
Cantabria	50%	13%	75%	38%	19%	41%	13%	75%
Castilla Y León	56%	31%	56%	56%	69%	58%	31%	69%
Castilla - La Mancha	13%	13%	19%	6%	38%	16%	6%	38%
Cataluña Cataluña	81%	69%	50%	13%	31%	38%	13%	81%
Comunitat Valenciana	38%	63%	25%	0%	13%	17%	0%	63%
Extremadura	0%	25%	0%	31%	6%	15%	0%	31%
Galicia	44%	44%	38%	63%	75%	57%	38%	75%
Madrid, Comunidad de	100%	100%	69%	100%	63%	88%	63%	1009
Murcia, Región de	19%	75%	31%	25%	0%	22%	0%	75%
Navarra, Comunidad Foral de	88%	81%	100%	75%	50%	77%	50%	1009
País Vasco	94%	81%	94%	94%	44%	83%	44%	94%
Rioja, La	69%	6%	88%	81%	81%	76%	6%	889
Weight	20%	5%	15%	40%	20%	<u> </u>	-	-

Source: Spanish Treasury; Bank of Spain; INE; J.P. Morgan

Exhibit 3: Typically the regional performance across the sub-categories is relatively consistent with the average Spanish regions macro index; lowest and highest percentile in the subcategories; %



Source: J.P. Morgan

Appendix: statistics on Spanish regional bond debt

The total outstanding of regional bond debt has been on a declining trend since the central government started to take over the borrowing needs of some regions (Exhibits 4-5), but some regions with the strongest fiscal positions are still coming to the market. For instance, Castilla Y Leon, Madrid, the Basque Countries and La Rioja came to the market in 2016 and 2017.⁵

Exhibit 4: Despite the ongoing increase in total regional debt, the absolute and relative level of debt securities has been on a declining trend Spanish regions: total debt and debt securities;

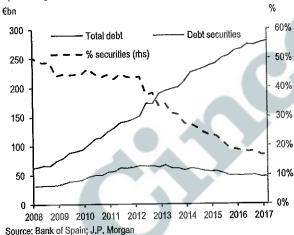


Exhibit 5: The central government has taken over a big chunk of the regions' funding needs over the past few years Support to Spanish regions' funding embedded into the central government funding plans;

Year	€bn
2012	16.6
2013	23.0
2014	ZJ,U
2015	39.9
2016	26.0
2017	17.5

Source: Spanish Treasury

Exhibit 6 shows some statistics on the regional debt securities.

⁵ The lack of issuance from the weaker names might have the impact of flattening the spread/credit curve shown in Exhibit 1.

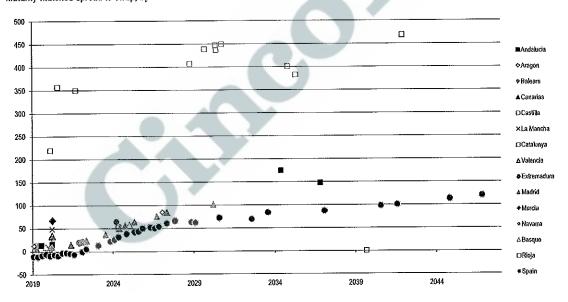
Exhibit 6: Selected statistics on Spanish regional debt securities

	All				In €, >=€300mn			
	Size (€t	on) #	Avg size (€bn	Avg maturity	Size (€bn)) #	Avg size (€bn)	Avg maturity
Andalucia	3.2	13	0.2	3.6	2.6	3	0.9	1.7
Aragón	2.5	19	0.1	4.7	1.4	3	0.5	3,5
Asturias, Principado de	n/a	n/a	n/a	n/a	n/a	n/a	n/a	∴ m/a
Balears, Illes	0.7	4	0.2	7.0	0.3	1	0.3	2.6
Canarias	1,0	7	0.1	5.5	0.6	1: 1:	0.6	2.6
Cantabria	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Castilla Y León	3,5	21	0,2	5.7	1.1	2	0.5	5,6
Castilla - La Mancha	1.2		0.1	7.4	0.4	1	0.4	2.6
Cataluña	5.4	26	0.2	7.9	4.2	5	8,0	7.9
Comunitat Valenciana	0.7	. 7	0.1	4.6	0.4	1	0.4	2.6
Extremadura	0.6	14	0.0	6.7	0.3	11	0,3	6.6
Galicia	3.0	13	0.2	3.3	1.9	4	0.5	2.4
Madrid, Comunidad de	18.1	39	0.5	7.2	16.7	19	0.9	6.5
Murcia, Región de	0.4	5	0.1	4.3	n/a	n/a	n/a	n/a
Navarra, Comunidad Foral de	1.6	15	0,1	5.3	n/a	n/a	n/a	n/a
Pais Vasco	4.0	12	0.3	4.6	3,3	. 7	0.5	4,4
Rioia, La	0.5	8	0.1	1.5	n/a	n/a	n/a	n/a

Source: Bloomberg; J.P. Morgan

Exhibit 7 shows the Spanish regions' ASW curves together with the Bono one.

Exhibit 7: Spanish regions' ASW curves Maturity-matched spread to swap; bp



Source: J.P. Morgan

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