

Financial Sector Bond Yield Curves



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Group One Bonds Data

For Group One, we consider a portfolio of 22 bonds, issued by Mediobanca, Intesa Sanpaolo, Unicredit, quoted on the market on 26/06/2012.

BACRED	Maturity	Coupon
1	20/12/2012	4.875%
2	04/03/2016	3.750%
3	11/10/2016	4.625%

UCGIM	Maturity	Coupon
1	12/02/2013	4.875%
2	21/08/2013	3.625%
3	14/01/2014	5.250%
4	10/02/2014	4.375%
5	07/03/2017	4.875%
6	29/01/2020	4.375%

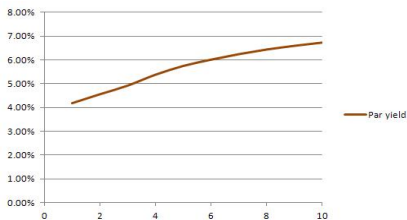
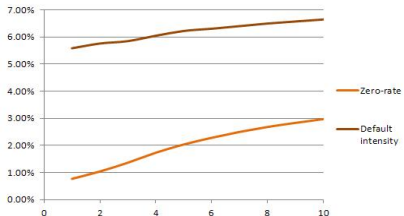
ISPIM	Maturity	Coupon
1	04/12/2012	2.625%
2	01/02/2013	3.250%
3	08/08/2013	4.000%
4	27/11/2013	3.500%
5	19/12/2013	5.375%
6	19/01/2015	3.375%
7	01/04/2015	3.875%
8	14/01/2016	4.125%
9	23/11/2016	3.750%
10	28/02/2017	5.000%
11	11/04/2017	4.750%
12	08/11/2018	4.000%
13	14/04/2020	4.125%



Bootstrapped Data - Group One

For Group One (BACRED, ISPIM, UCGIM), we show the interest rate, the default intensity, and the par yield curve.

Time	Zero-Rate	Default Intensity	Par yield
1Y	0.77%	5.58%	4.18%
2Y	1.04%	5.76%	4.56%
3Y	1.36%	5.85%	4.92%
4Y	1.73%	6.05%	5.38%
5Y	2.04%	6.22%	5.75%
6Y	2.28%	6.30%	6.01%
7Y	2.50%	6.40%	6.24%
8Y	2.68%	6.50%	6.44%
9Y	2.83%	6.57%	6.59%
10Y	2.97%	6.64%	6.73%



Bootstrapped Data - Group One

Comparison of the market and model prices on the reference date (26/06/2012).

Bond	MKT	Model	% Error
BACRED 4 7/8 12	100.965	100.436	0.52%
BACRED 3 3/4 16	95.170	95.254	0.09%
BACRED 4 5/8 16	97.430	96.846	0.60%
ISPIM 2 5/8 12	99.805	99.449	0.36%
ISPIM 31/4 13	99.665	99.558	0.11%
ISPIM 4 13	99.760	99.961	0.20%
ISPIM 3 1/2 13	98.870	98.992	0.12%
ISPIM 3/8 13	101.445	101.506	0.06%
ISPIM 3 3/8 15	97.205	97.015	0.20%
ISPIM 3 7/8 15	98.400	97.745	0.67%
ISPIM 4 1/8 16	96.715	96.768	0.05%
ISPIM 3 3/4 16	94.000	93.357	0.68%
ISPIM 5 17	98.13	97.482	0.66%
ISPIM 4 3/4 17	97.030	96.298	0.75%
ISPIM 4 18	90.310	89.659	0.72%
ISPIM 4 1/8 20	87.835	87.100	0.84%
UCGIM 4 7/8 13	100.635	100.523	0.11%
UCGIM 3 5/8 13	99.470	99.519	0.05%
UCGIM 5 1/4 14	100.880	101.296	0.41%
UCGIM 4 3/8 14	99.725	99.973	0.25%
UCGIM 4 7/8 17	94.040	96.964	3.11%
UCGIM 4 3/8 20	87.920	88.972	1.15%

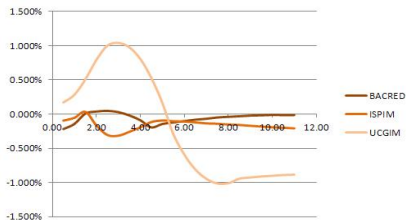


Issuer Specific Error - Group One

The table shows the difference between the common zero curve and the issuer specific zero rate curve.

The root-mean-square error (RMS) and the plot of the percentage error for each issuer are shown below.

Issuer	RMS
BACRED	0.082%
ISPIM	0.083%
UCGIM	0.72%



Time	BACRED	ISPIM	UCGIM
0.5Y	-0.321%	-0.062%	0.156%
1.0Y	-0.174%	0.014%	0.279%
1.5Y	-0.073%	-0.011%	0.526%
2.0Y	-0.003%	-0.189%	0.784%
2.5Y	0.027%	-0.234%	0.982%
3.0Y	0.026%	-0.219%	1.004%
3.5Y	-0.007%	-0.145%	0.926%
4.0Y	-0.078%	-0.209%	0.751%
4.5Y	-0.184%	-0.341%	0.478%
5.0Y	-0.112%	-0.260%	0.121%
5.5Y	-0.080%	-0.161%	-0.324%
6.0Y	-0.060%	-0.112%	-0.589%
6.5Y	-0.038%	-0.087%	-0.773%
7.0Y	-0.027%	-0.083%	-0.888%
7.5Y	-0.014%	-0.082%	-0.932%
8.0Y	-0.006%	-0.077%	-0.911%
8.5Y	-0.001%	-0.076%	-0.823%
9.0Y	-0.000%	-0.077%	-0.801%
9.5Y	0.001%	-0.085%	-0.781%
10.0Y	0.000%	-0.093%	-0.765%
10.5Y	-0.001%	-0.103%	-0.758%
11.0Y	-0.004%	-0.105%	-0.756%



Group Two Bonds Data

For Group Two, we consider a portfolio of 10 bonds, issued by Banco Popolare, MPS, quoted on the market on 26/06/2012.

BPIM	Maturity	Coupon
1	07/08/2012	3.750%
2	06/04/2013	4.000%
3	16/09/2013	3.125%
4	22/10/2014	4.125%

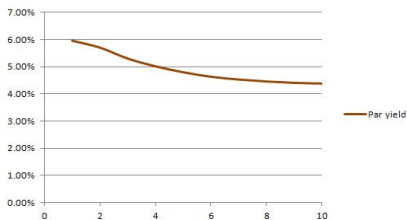
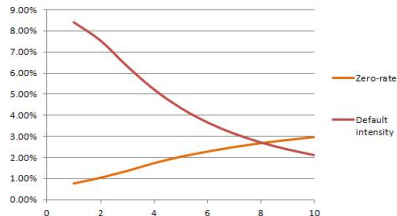
MONTE	Maturity	Coupon
1	25/10/2012	5.000%
2	30/07/2013	4.375%
3	11/11/2013	4.125%
4	07/03/2014	4.500%
5	30/04/2014	4.750%
6	02/02/2015	3.875%



Bootstrapped Data - Group Two

For Group Two (BPIM, MONTE), we show the interest rate, the default spread, and the par yield curve.

Time	Zero-Rate	Default Intensity	Par yield
1Y	0.77%	8.41%	5.96%
2Y	1.04%	7.54%	5.70%
3Y	1.36%	6.32%	5.30%
4Y	1.73%	5.22%	5.02%
5Y	2.04%	4.34%	4.80%
6Y	2.28%	3.66%	4.63%
7Y	2.50%	3.13%	4.53%
8Y	2.68%	2.71%	4.46%
9Y	2.83%	2.38%	4.41%
10Y	2.97%	2.11%	4.38%



Bootstrapped Data - Group Two

Comparison of the market and model prices on the reference date (26/06/2012).

Bond	MKT	Model	% Error
BPIM 3 3/4 12	99.875	99.796	0.08%
BPIM 4 13	98.865	98.577	0.29%
BPIM 3 1/8 13	96.465	97.054	0.61%
BPIM 4 1/8 14	96.925	97.258	0.34%
MONTE 5 12	99.900	99.715	0.18%
MONTE 43/8 13	100.115	98.675	1.44%
MONTE 4 1/8 13	97.475	97.933	0.47%
MONTE 4 1/2 14	97.265	98.031	0.79%
MONTE 4 3/4 14	98.480	98.348	0.13%
MONTE 3 7/8 15	97.070	96.591	0.49%



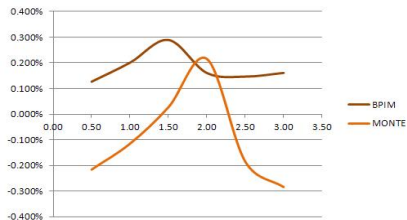
Issuer Specific Error - Group Two

The table shows the difference between the common zero curve and the issuer specific zero rate curve.

The root-mean-square error (RMS) and the plot of the percentage error for each issuer are shown below.

Issuer	RMS
BPIM	0.053%
MONTE	0.170%

Time	BPIM	MONTE
0.5Y	0.126%	-0.216%
1.0Y	0.201%	-0.115%
1.5Y	0.289%	0.027%
2.0Y	0.160%	0.215%
2.5Y	0.146%	-0.185%
3.0Y	0.161%	-0.284%



Group Three Bonds Data

For Group Three, we consider a portfolio of 8 bonds, issued by Pop. Vic., UBI Banca, BPM, VenetoBanca, quoted on the market on 26/06/2012.

VICEN	Maturity	Coupon
1	16/09/2013	4.750%
2	15/04/2014	5.750%
3	27/02/2015	6.750%

UBIIM	Maturity	Coupon
1	28/02/2013	3.875%
2	21/10/2013	4.125%
3	25/06/2014	4.939%

PMIM	Maturity	Coupon
1	15/04/2013	4.000%

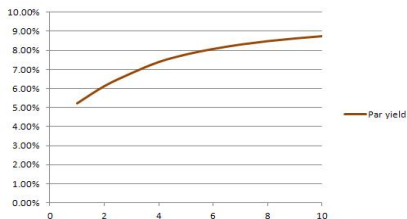
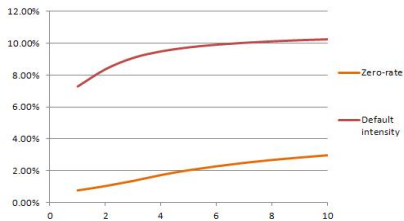
VENBAN	Maturity	Coupon
1	21/10/2013	4.875%



Bootstrapped Data - Group Three

For Group Three (VICEN, UBIIM, PMIIM, VENBAN), we show the interest rate, the default spread, and the par yield curve.

Time	Zero-Rate	Default Intensity	Par yield
1Y	0.77%	7.29%	5.22%
2Y	1.04%	8.37%	6.13%
3Y	1.36%	9.08%	6.81%
4Y	1.73%	9.49%	7.39%
5Y	2.04%	9.74%	7.79%
6Y	2.28%	9.91%	8.08%
7Y	2.50%	10.03%	8.31%
8Y	2.68%	10.12%	8.49%
9Y	2.83%	10.19%	8.63%
10Y	2.97%	10.25%	8.75%



Bootstrapped Data - Group Three

Comparison of the market and model prices on the reference date (26/06/2012).

Bond	MKT	Model	% Error
VICEN 4 3/4 13	98.845	99.436	0.60%
VICEN 5 3/4 14	99.315	99.234	0.08%
VICEN 6 3/4 15	99.495	100.297	0.81%
UBIIM 3 7/8 13	99.585	99.399	0.19%
UBIIM 4 1/8 13	99.265	98.449	0.82%
UBIIM 4.939 14	99.085	97.876	1.22%
PMIIM 4 13	98.610	99.263	0.66%
VENBAN 4 7/8 13	99.215	99.371	0.16%



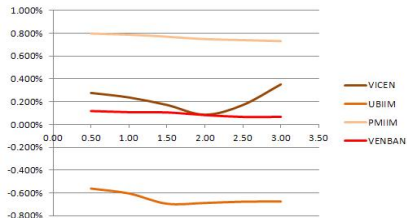
Issuer Specific Error - Group Three

The table shows the difference between the common zero curve and the issuer specific zero rate curve.

The root-mean-square error (RMS) and the plot of the percentage error for each issuer are shown below.

Issuer	RMS
VICEN	0.085%
UBIIM	0.049%
PMIM	0.024%
VENBAN	0.020%

Time	VICEN	UBIIM	PMIM	VENBAN
0.5Y	0.277%	-0.562%	0.797%	0.118%
1.0Y	0.237%	-0.605%	0.787%	0.108%
1.5Y	0.172%	-0.695%	0.770%	0.106%
2.0Y	0.086%	-0.688%	0.749%	0.083%
2.5Y	0.171%	-0.677%	0.740%	0.07%
3.0Y	0.352%	-0.675%	0.731%	0.07%



Group Four Bonds Data

For Group Four, we consider a portfolio of 3 bonds, issued by Banca Marche, Banca Carige, Credito Valtellinese, quoted on the market on 26/06/2012.

BANMAR	Maturity	Coupon
1	15/04/2013	4.375%

BANCAR	Maturity	Coupon
1	13/04/2013	4.000%

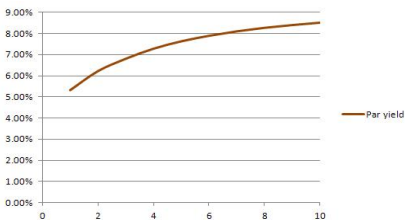
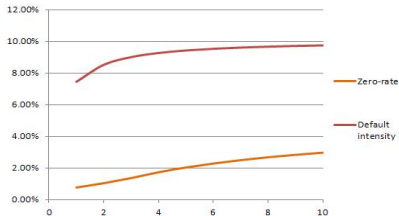
CVALIM	Maturity	Coupon
1	27/11/2013	4.500%



Bootstrapped Data - Group Four

For Group Four (BANMAR, BANCAR, CVALIM), we show the interest rate, the default spread, and the par yield curve.

Time	Zero-Rate	Default Intensity	Par yield
1Y	0.77%	7.45%	5.32%
2Y	1.04%	8.53%	6.22%
3Y	1.36%	9.01%	6.81%
4Y	1.73%	9.27%	7.28%
5Y	2.04%	9.43%	7.63%
6Y	2.28%	9.54%	7.89%
7Y	2.50%	9.61%	8.10%
8Y	2.68%	9.67%	8.27%
9Y	2.83%	9.72%	8.40%
10Y	2.97%	9.75%	8.51%



Comparison of the market and model prices on the reference date (26/06/2012).

Bond	MKT	Model	% Error
BANMAR 4 3/8 13	99.270	99.453	0.18%
BANCAR 4 13	99.595	99.178	0.42%
CVALIM 4 1/2 13	98.395	98.526	0.13%



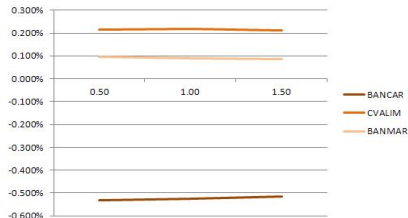
Issuer Specific Error - Group Four

The table shows the difference between the common zero curve and the issuer specific zero rate curve.

The root-mean-square error (RMS) and the plot of the percentage error for each issuer are shown below.

Issuer	RMS
BANMAR	0.0028%
BANCAR	0.0060%
CVALIM	0.0032%

Time	BANMAR	BANCAR	CVALIM
0.5Y	0.216%	-0.530%	0.095%
1.0Y	0.219%	-0.525%	0.089%
1.5Y	0.212%	-0.516%	0.087%



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