

מטריצות ריביות להיוון בישראל ליום 13.3.2020

פרטי המערך

שם: רועי פולניצר
השכלה: תואר ראשון בכלכלה (בהצטיינות) באוניברסיטת Ben-Gurion University of the Negev (2006).
תואר שני במנהל עסקים (בהצטיינות) באוניברסיטת Ben-Gurion University of the Negev (2008).
דיפלומה בניהול סיכונים פיננסיים במתכונת FRM® מאוניברסיטת Ariel University in Samaria (2012).
Professional Data Scientist of Professional Data Scientists' Israel Association (PDS).
(FILAVFA) Fellow of Israel Association of Valuators and Financial Actuaries
(FRM) Financial Risk Manager of Global Association of Risk Professionals
(CRM) Certified Risk Manager of Israeli Association of Risk Managers
.Sustaining Member of Professional Risk Managers' International Association

מבוא

חוות דעת זו מציגה 4 מטריצות ריביות להיוון בישראל (שקלית, צמודה, דולרית ויורו) לתקופות ביניים שונות בין שלושה חודשים ועד 25 שנה ולדירוגי אשראי בין ilAAA ועד ל- ilD בתקופה הרשומה לעיל.

הנחות

- 1.1. החישוב נעשה על פי כללים אקטואריים מקובלים על ידי שימוש באלגוריתמים מתמטיים (Cubic Spline) ובהליכי אופטימיזציה.
- 1.2. מטריצת מרווחי סיכון האשראי הצמודה בישראל נגזרה מנתוני השוק של איגרות החוב הקונצרניות צמודות המדד בישראל ועקום הריבית הצמוד חסר הסיכון אשר חושב על ידי לאותו מועד.
- 1.3. מטריצת הריביות השקלית בישראל נגזרה מעקום הריבית השקלי חסר הסיכון בישראל אשר חושב על ידי לאותו מועד בתוספת מטריצת מרווחי סיכון האשראי הצמודה בישראל האמורה.
- 1.4. מטריצת הריביות הצמודה בישראל נגזרה מעקום הריבית הצמוד חסר הסיכון בישראל אשר חושב על ידי לאותו מועד בתוספת מטריצת מרווחי סיכון האשראי הצמודה בישראל האמורה.
- 1.5. מטריצת הריביות הדולרית בישראל נגזרה מעקום הריבית הדולרי חסר הסיכון בישראל אשר חושב על ידי לאותו מועד בתוספת מטריצת מרווחי סיכון האשראי הצמודה בישראל האמורה.
- 1.6. מטריצת הריביות ביורו בישראל נגזרה מעקום הריבית ביורו חסר הסיכון בישראל אשר חושב על ידי לאותו מועד בתוספת מטריצת מרווחי סיכון האשראי הצמודה בישראל האמורה.

Roi Polanitzky

רועי פולניצר, FRM, F.I.L.A.V.F.A.
אקטואר

מח"מ	ilAAA	ilAA+	ilAA	ilAA-	ilA+	ilA	ilA-	ilBBB+	ilBBB	ilBBB-	ilBB+	ilBB
מטריצת ריביות שקלית בישראל												
0.25	0.58%	0.67%	0.87%	1.08%	1.98%	2.83%	4.62%	6.76%	9.17%	11.59%	13.95%	16.32%
0.50	0.69%	0.83%	1.03%	1.24%	2.05%	2.87%	4.52%	6.55%	8.05%	9.55%	11.19%	12.84%
0.75	0.76%	0.92%	1.12%	1.32%	2.05%	2.85%	4.38%	6.34%	7.63%	8.92%	10.38%	11.85%
1	0.82%	0.99%	1.20%	1.39%	2.05%	2.86%	4.32%	6.26%	7.47%	8.67%	10.05%	11.43%
2	1.08%	1.32%	1.57%	1.81%	2.34%	3.20%	4.59%	6.64%	7.61%	8.58%	9.74%	10.90%
3	1.32%	1.60%	1.87%	2.17%	2.66%	3.56%	4.95%	7.08%	7.91%	8.74%	9.75%	10.76%
5	1.54%	1.86%	2.16%	2.58%	2.98%	3.94%	5.19%	7.29%	7.97%	8.64%	9.45%	10.25%
7	1.82%	2.14%	2.48%	3.10%	3.39%	4.33%	5.33%	7.23%	7.85%	8.47%	9.10%	9.74%
10	1.84%	2.17%	2.62%	3.72%	3.84%	4.61%	5.20%	6.55%	7.07%	7.60%	8.00%	8.39%
15	2.16%	2.49%	3.14%	4.79%	4.82%	5.32%	5.57%	6.24%	6.62%	7.01%	7.22%	7.44%
20	2.21%	2.57%	3.35%	5.28%	5.25%	5.60%	5.64%	5.91%	6.23%	6.56%	6.70%	6.84%
25	2.46%	2.81%	3.62%	5.68%	5.65%	5.91%	5.88%	5.96%	6.29%	6.63%	6.75%	6.88%
מח"מ	ilBB-	ilB+	ilB	ilB-	ilCCC+	ilCCC	ilCCC-	ilCC	ilC	ilRD	ilSD	ilD
מטריצת ריביות שקלית בישראל - המשך												
0.25	18.69%	21.05%	23.42%	25.79%	31.60%	37.42%	43.23%	49.05%	54.86%	60.67%	66.49%	72.30%
0.50	14.49%	16.13%	17.78%	19.43%	23.92%	28.40%	32.89%	37.38%	41.87%	46.36%	50.85%	55.34%
0.75	13.31%	14.77%	16.24%	17.70%	21.56%	25.41%	29.26%	33.12%	36.97%	40.83%	44.68%	48.54%
1	12.81%	14.20%	15.58%	16.96%	20.43%	23.89%	27.36%	30.83%	34.29%	37.76%	41.22%	44.69%
2	12.06%	13.22%	14.38%	15.54%	18.18%	20.82%	23.46%	26.10%	28.74%	31.38%	34.02%	36.66%
3	11.77%	12.78%	13.79%	14.79%	16.95%	19.10%	21.25%	23.40%	25.55%	27.70%	29.86%	32.01%
5	11.05%	11.85%	12.66%	13.46%	14.88%	16.30%	17.72%	19.14%	20.56%	21.98%	23.40%	24.82%
7	10.37%	11.01%	11.64%	12.27%	13.15%	14.03%	14.91%	15.78%	16.66%	17.54%	18.42%	19.29%
10	8.79%	9.19%	9.59%	9.99%	10.36%	10.72%	11.08%	11.45%	11.81%	12.18%	12.54%	12.91%
15	7.65%	7.86%	8.07%	8.29%	8.42%	8.55%	8.68%	8.81%	8.95%	9.08%	9.21%	9.34%
20	6.99%	7.13%	7.27%	7.41%	7.49%	7.57%	7.65%	7.73%	7.81%	7.89%	7.97%	8.05%
25	7.01%	7.14%	7.26%	7.39%	7.46%	7.54%	7.61%	7.69%	7.76%	7.84%	7.91%	7.99%

מח"מ	ilAAA	ilAA+	ilAA	ilAA-	ilA+	ilA	ilA-	ilBBB+	ilBBB	ilBBB-	ilBB+	ilBB
מטריצת ריביות צמודה בישראל												
0.25	2.84%	2.93%	3.13%	3.34%	4.24%	5.08%	6.87%	9.02%	11.43%	13.84%	16.21%	18.57%
0.50	2.56%	2.70%	2.90%	3.11%	3.93%	4.74%	6.39%	8.42%	9.92%	11.42%	13.07%	14.71%
0.75	2.24%	2.40%	2.60%	2.79%	3.53%	4.33%	5.86%	7.82%	9.11%	10.40%	11.86%	13.32%
1	1.93%	2.10%	2.31%	2.50%	3.16%	3.97%	5.42%	7.37%	8.57%	9.78%	11.16%	12.54%
2	1.36%	1.61%	1.85%	2.09%	2.62%	3.48%	4.87%	6.92%	7.89%	8.87%	10.02%	11.18%
3	1.22%	1.50%	1.77%	2.07%	2.55%	3.46%	4.85%	6.98%	7.81%	8.64%	9.65%	10.66%
5	1.13%	1.45%	1.75%	2.17%	2.58%	3.53%	4.79%	6.88%	7.56%	8.24%	9.04%	9.84%
7	0.85%	1.17%	1.51%	2.13%	2.42%	3.36%	4.37%	6.26%	6.88%	7.50%	8.14%	8.77%
10	0.60%	0.94%	1.38%	2.48%	2.60%	3.37%	3.96%	5.31%	5.83%	6.36%	6.76%	7.16%
15	0.81%	1.14%	1.79%	3.44%	3.47%	3.98%	4.22%	4.89%	5.28%	5.66%	5.87%	6.09%
20	0.86%	1.22%	2.00%	3.94%	3.91%	4.26%	4.29%	4.56%	4.89%	5.21%	5.35%	5.49%
25	1.11%	1.46%	2.28%	4.33%	4.30%	4.57%	4.53%	4.61%	4.95%	5.28%	5.41%	5.53%

מח"מ	ilBB-	ilB+	ilB	ilB-	ilCCC+	ilCCC	ilCCC-	ilCC	ilC	ilRD	ilSD	ilD
מטריצת ריביות צמודה בישראל - המשך												
0.25	20.94%	23.31%	25.68%	28.04%	33.86%	39.67%	45.49%	51.30%	57.12%	62.93%	68.75%	74.56%
0.50	16.36%	18.00%	19.65%	21.30%	25.79%	30.28%	34.77%	39.25%	43.74%	48.23%	52.72%	57.21%
0.75	14.79%	16.25%	17.72%	19.18%	23.03%	26.89%	30.74%	34.60%	38.45%	42.31%	46.16%	50.02%
1	13.92%	15.31%	16.69%	18.07%	21.54%	25.00%	28.47%	31.93%	35.40%	38.87%	42.33%	45.80%
2	12.34%	13.50%	14.66%	15.82%	18.46%	21.10%	23.74%	26.38%	29.02%	31.66%	34.30%	36.94%
3	11.66%	12.67%	13.68%	14.69%	16.84%	19.00%	21.15%	23.30%	25.45%	27.60%	29.75%	31.91%
5	10.65%	11.45%	12.25%	13.05%	14.47%	15.89%	17.31%	18.73%	20.15%	21.57%	22.99%	24.41%
7	9.40%	10.04%	10.67%	11.31%	12.18%	13.06%	13.94%	14.82%	15.69%	16.57%	17.45%	18.33%
10	7.56%	7.95%	8.35%	8.75%	9.12%	9.48%	9.85%	10.21%	10.58%	10.94%	11.31%	11.67%
15	6.30%	6.51%	6.73%	6.94%	7.07%	7.20%	7.33%	7.47%	7.60%	7.73%	7.86%	7.99%
20	5.64%	5.78%	5.92%	6.07%	6.15%	6.23%	6.31%	6.39%	6.47%	6.55%	6.63%	6.71%
25	5.66%	5.79%	5.91%	6.04%	6.12%	6.19%	6.27%	6.34%	6.42%	6.49%	6.56%	6.64%

מח"מ												
ilAAA	ilAA+	ilAA	ilAA-	ilA+	ilA	ilA-	ilBBB+	ilBBB	ilBBB-	ilBB+	ilBB	ilBB
מטריצת ריביות דולרית בישראל												
1.49%	1.58%	1.77%	1.98%	2.89%	3.73%	5.52%	7.67%	10.08%	12.49%	14.86%	17.22%	0.25
1.57%	1.71%	1.91%	2.12%	2.94%	3.75%	5.40%	7.43%	8.93%	10.43%	12.08%	13.72%	0.50
1.63%	1.79%	1.99%	2.18%	2.92%	3.72%	5.25%	7.21%	8.50%	9.79%	11.25%	12.71%	0.75
1.68%	1.85%	2.06%	2.25%	2.91%	3.72%	5.18%	7.12%	8.33%	9.53%	10.91%	12.29%	1
1.85%	2.09%	2.34%	2.57%	3.11%	3.96%	5.35%	7.41%	8.38%	9.35%	10.51%	11.67%	2
2.02%	2.31%	2.58%	2.87%	3.36%	4.27%	5.65%	7.79%	8.61%	9.44%	10.45%	11.46%	3
2.23%	2.55%	2.85%	3.27%	3.68%	4.64%	5.89%	7.98%	8.66%	9.34%	10.14%	10.95%	5
2.29%	2.61%	2.95%	3.57%	3.86%	4.80%	5.80%	7.70%	8.32%	8.94%	9.57%	10.21%	7
2.27%	2.61%	3.06%	4.15%	4.27%	5.05%	5.64%	6.98%	7.51%	8.03%	8.43%	8.83%	10
2.18%	2.52%	3.17%	4.82%	4.84%	5.35%	5.60%	6.26%	6.65%	7.04%	7.25%	7.46%	15
2.09%	2.46%	3.23%	5.17%	5.14%	5.49%	5.52%	5.80%	6.12%	6.44%	6.59%	6.73%	20
2.05%	2.41%	3.22%	5.27%	5.24%	5.51%	5.48%	5.55%	5.89%	6.22%	6.35%	6.47%	25
מח"מ												
ilBB-	ilB+	ilB	ilB-	ilCCC+	ilCCC	ilCCC-	ilCC	ilC	ilRD	ilSD	ilD	
מטריצת ריביות דולרית בישראל - המשך												
19.59%	21.96%	24.32%	26.69%	32.50%	38.32%	44.13%	49.95%	55.76%	61.58%	67.39%	73.21%	0.25
15.37%	17.01%	18.66%	20.31%	24.80%	29.29%	33.78%	38.27%	42.75%	47.24%	51.73%	56.22%	0.50
14.18%	15.64%	17.11%	18.57%	22.42%	26.28%	30.13%	33.99%	37.84%	41.70%	45.55%	49.41%	0.75
13.68%	15.06%	16.44%	17.82%	21.29%	24.75%	28.22%	31.69%	35.15%	38.62%	42.08%	45.55%	1
12.83%	13.99%	15.15%	16.30%	18.94%	21.58%	24.22%	26.86%	29.50%	32.14%	34.78%	37.42%	2
12.47%	13.48%	14.49%	15.50%	17.65%	19.80%	21.95%	24.11%	26.26%	28.41%	30.56%	32.71%	3
11.75%	12.55%	13.35%	14.15%	15.57%	16.99%	18.41%	19.83%	21.25%	22.67%	24.09%	25.51%	5
10.84%	11.48%	12.11%	12.74%	13.62%	14.50%	15.38%	16.25%	17.13%	18.01%	18.89%	19.76%	7
9.23%	9.63%	10.03%	10.43%	10.79%	11.15%	11.52%	11.88%	12.25%	12.61%	12.98%	13.34%	10
7.68%	7.89%	8.10%	8.31%	8.45%	8.58%	8.71%	8.84%	8.97%	9.11%	9.24%	9.37%	15
6.87%	7.01%	7.16%	7.30%	7.38%	7.46%	7.54%	7.62%	7.70%	7.78%	7.86%	7.94%	20
6.60%	6.73%	6.86%	6.98%	7.06%	7.13%	7.21%	7.28%	7.36%	7.43%	7.51%	7.58%	25

מח"מ	ilAAA	ilAA+	ilAA	ilAA-	ilA+	ilA	ilA-	ilBBB+	ilBBB	ilBBB-	ilBB+	ilBB
מטריצת ריביות ביורו בישראל												
0.25	0.51%	0.60%	0.80%	1.01%	1.91%	2.75%	4.54%	6.69%	9.10%	11.51%	13.88%	16.25%
0.50	0.60%	0.74%	0.94%	1.15%	1.97%	2.78%	4.43%	6.46%	7.96%	9.46%	11.11%	12.75%
0.75	0.67%	0.83%	1.03%	1.22%	1.96%	2.76%	4.29%	6.25%	7.54%	8.83%	10.29%	11.75%
1	0.73%	0.90%	1.11%	1.30%	1.96%	2.77%	4.23%	6.17%	7.38%	8.58%	9.96%	11.34%
2	0.93%	1.17%	1.42%	1.65%	2.19%	3.04%	4.43%	6.49%	7.46%	8.43%	9.59%	10.75%
3	1.07%	1.36%	1.63%	1.92%	2.41%	3.32%	4.70%	6.84%	7.66%	8.49%	9.50%	10.51%
5	1.21%	1.53%	1.83%	2.25%	2.66%	3.62%	4.87%	6.96%	7.64%	8.32%	9.12%	9.93%
7	1.25%	1.57%	1.91%	2.53%	2.82%	3.76%	4.76%	6.66%	7.28%	7.90%	8.53%	9.17%
10	1.23%	1.57%	2.02%	3.11%	3.23%	4.01%	4.60%	5.94%	6.47%	6.99%	7.39%	7.79%
15	1.25%	1.59%	2.24%	3.89%	3.91%	4.42%	4.67%	5.33%	5.72%	6.11%	6.32%	6.53%
20	1.17%	1.54%	2.31%	4.25%	4.22%	4.57%	4.60%	4.88%	5.20%	5.52%	5.67%	5.81%
25	1.09%	1.44%	2.25%	4.31%	4.28%	4.54%	4.51%	4.59%	4.92%	5.26%	5.38%	5.51%
מח"מ	ilBB-	ilB+	ilB	ilB-	ilCCC+	ilCCC	ilCCC-	ilCC	ilC	ilRD	ilSD	ilD
מטריצת ריביות ביורו בישראל - המשך												
0.25	18.61%	20.98%	23.35%	25.71%	31.53%	37.34%	43.16%	48.97%	54.79%	60.60%	66.42%	72.23%
0.50	14.40%	16.04%	17.69%	19.34%	23.83%	28.32%	32.81%	37.29%	41.78%	46.27%	50.76%	55.25%
0.75	13.22%	14.68%	16.14%	17.61%	21.46%	25.32%	29.17%	33.03%	36.88%	40.74%	44.59%	48.45%
1	12.73%	14.11%	15.49%	16.87%	20.34%	23.80%	27.27%	30.74%	34.20%	37.67%	41.13%	44.60%
2	11.91%	13.07%	14.23%	15.38%	18.02%	20.66%	23.30%	25.94%	28.58%	31.22%	33.86%	36.50%
3	11.52%	12.53%	13.54%	14.55%	16.70%	18.85%	21.00%	23.16%	25.31%	27.46%	29.61%	31.76%
5	10.73%	11.53%	12.33%	13.13%	14.55%	15.97%	17.39%	18.81%	20.23%	21.65%	23.07%	24.49%
7	9.80%	10.44%	11.07%	11.70%	12.58%	13.46%	14.34%	15.21%	16.09%	16.97%	17.85%	18.72%
10	8.19%	8.59%	8.99%	9.39%	9.75%	10.11%	10.48%	10.84%	11.21%	11.57%	11.94%	12.30%
15	6.75%	6.96%	7.17%	7.38%	7.52%	7.65%	7.78%	7.91%	8.04%	8.18%	8.31%	8.44%
20	5.95%	6.09%	6.24%	6.38%	6.46%	6.54%	6.62%	6.70%	6.78%	6.86%	6.94%	7.02%
25	5.64%	5.77%	5.89%	6.02%	6.09%	6.17%	6.24%	6.32%	6.39%	6.47%	6.54%	6.62%