

| Agenda | |
|--|---|
| 1. History of LPI | |
| 2. Supply and Demand | |
| 3. Modelling LPI | |
| 4. LPI Alternatives | |
| 5. Other flavours of LPI | |
| 6. The rise of CPI | |
| | |
| | |
| | |
| © 2010 The Actuarial Profession • www.actuaries.org.uk | 1 |









| Modelling of LPI |
|--|
| RPI options trade on price |
| RPI Index Options Natural to use Black Scholes model |
| RPI YoY Options Market convention is to assume the underlying yoy rate has a normal distribution |
| © 2010 The Actuarial Profession - www.actuaries.org.uk |

| 10 | | | | Cur | ncy | |
|-----------------|------------------------|-------------------------|--------------------------------------|--|------------------------------------|-----------|
| 1:49 UK | ZC LPI | COLLARE | SWAP S | PREAD P | AGE 1 / 1 | |
| | LPI Spreads qu | oted in bps run | ning, with resp | ect to the RF | PI ZCS rate | |
| 7C I PT | LPT[0.5] | | dicative mid for | <u>r a delta neu</u> [[0_3] | RPT | |
| Term | MID TIME | MID T | IME MI |) TIME | Refs | |
| 5 Year 1) | -1.5 8:54 | 9 28.2 | 8:54 7) -65.2 | 2 8:54 5) | 3.07 | |
| 10 Year 2) | 2.7 8:54 | 0 45.6 | 8:54 8 -70.0 | 5 8:54 Ø | 3.15 | |
| 15 Year 3 | 7.2 8:54 | 1) 54.1 | 8:54 9 -75. | | 3.25 | |
| 20 feat 1 | 15.0 8.54 | 3 63 5 | 8.54 1) -77 5 | 2 8·54 0 | 3 36 | |
| 30 Year 10 | 19.1 8:54 | 4 66.9 | 8:54 2) -79.0 | 8:54 0 | 3.41 | |
| 40 Year 7) | 23.6 8:54 | 5) 70.4 | 8:54 3) -76.0 | 5 8:54 1) | 3.41 | |
| 50 Year 🛛 🛿 | 24.8 8:54 | 6 71.9 | 8:54 4 -77.4 | 4 8:54 2) | 3.42 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | Source: |
| DI baco in | lov follows sta | ndard PDT baco | | | | Bloomberg |
| rading: | lex torrows sta | nuaru KPI Dase | | | | Nov 2011 |
| lease see f | RPDS <go> for ex</go> | ample ZC LPI te | rmsheet | | | 1101 2011 |
| ustralia 61 2 9 | 777 8600 Brazil 5511 3 | 048 4500 Europe 44 20 7 | 7330 7500 Germany 49 69 | 9204 1210 Hong Kon right 2011 Bloombe | g 852 2977 6000 | |
| 81 3 3201 | 8900 Singapore 65 | 6212 1000 U.S. 1 | 212 318 2000 Copu SN 865425 GMT+0 | right 2011 Bloombe 00 H466-1-0 15-No | rg Finance L.P. ∨-2011 11:49:32 | |





































