Durasi

Durasi **mengukur seberapa besar harga Obligasi naik/turun ketika *yield* naik/turun,** di mana:

1. Durasi (volatilitas) akan semakin rendah jika kupon besar atau tenor pendek:

a. Kupon besar akan mengompensasi risiko dari ketidakpastian pergerakan suku bunga

b. Tenor pendek akan memperkecil eksposur terhadap pergerakan suku bunga

2. Durasi akan semakin tinggi jika kupon kecil atau tenor panjang:

a. Kupon kecil akan membuat investor lebih “dirugikan” akibat ketidakpastian suku bunga

b. Tenor panjang akan membuat investor lebih terekspos dengan pergerakan suku bunga

Contoh penggunaan durasi:

Di bulan Juli 2025, Mr. X membeli FR104 dengan *yield to maturity* (YTM) 6,10%. Mr. X memperkirakan YTM akan turun ke 5,60% dalam satu tahun ke depan. Berapakah *total return* (kupon + pergerakan harga) yang akan didapatkan oleh Mr. X?

Berikut merupakan informasi mengenai FR104:

- Tanggal jatuh tempo: 15 Juli 2030
- Waktu hingga jatuh tempo: 5 tahun
- Kupon: 6,50% (*gross*); 5,85% (*net of tax* 10%)
- Harga beli: 101,70
- Imbal hasil: 6,10%
- Durasi: 4 tahun

Perhitungan *total return*:

- Kupon (A): 6,50% x 12/12 = 6,50%
- Pergerakan harga (B): (5,60% - 6,10%) x -4 tahun = 2,00%
- *Total return* sebelum pajak (A + B): 6,50% + 2,00% = 8,50%
- *Total return* setelah pajak 10%: 8,50% x 0,90 = 7,65%

Note

1. Durasi tidak sama dengan tenor (waktu hingga jatuh tempo sebuah obligasi)
2. Semakin besar durasi, maka semakin besar volatilitas harga sebuah obligasi, begitu pula sebaliknya
3. Durasi diperoleh dari portal data seperti Bloomberg

Obligasi

Tabel Kinerja[2]

Mata Uang	Jenis	Obligasi	Tenor (Tahun)	Kupon	*Yield to Maturity* (Mid)	*Modified Duration* (Tahun)
IDR	FR	FR0084	0.53	7.25%	5.62%	0.50
		FR0086	0.69	5.50%	5.63%	0.66
		FR0056	1.11	8.38%	5.66%	1.02
		FR0090	1.69	5.13%	5.70%	1.57
		FR0059	1.77	7.00%	5.74%	1.63
		FR0064	2.78	6.13%	5.85%	2.49
		FR0095	3.03	6.38%	5.86%	2.64
		FR0101	3.69	6.88%	6.03%	3.17
		FR0078	3.78	8.25%	6.01%	3.19
		FR0104	4.94	6.50%	6.15%	4.17
		FR0082	5.11	7.00%	6.18%	4.16
		FR0087	5.53	6.50%	6.26%	4.46
		FR0085	5.69	7.75%	6.38%	4.50
		FR0073	5.77	8.75%	6.32%	4.50
		FR0091	6.69	6.38%	6.36%	5.28
		FR0058	6.86	8.25%	6.46%	5.23
		FR0074	7.03	7.50%	6.46%	5.28
		FR0096	7.53	7.00%	6.48%	5.63
		FR0065	7.78	6.63%	6.51%	5.93
		FR0100	8.53	6.63%	6.52%	6.25
		FR0068	8.61	8.38%	6.53%	6.07
		FR0080	9.86	7.50%	6.58%	6.94
		FR0103	9.94	6.75%	6.55%	7.16
		FR0072	10.78	8.25%	6.65%	7.19
		FR0088	10.86	6.25%	6.57%	7.68
		FR0093	11.94	6.38%	6.65%	8.18
		FR0075	12.77	7.50%	6.77%	8.16
		FR0098	12.86	7.13%	6.76%	8.34
		FR0079	13.69	8.38%	6.83%	8.27
		FR0083	14.69	7.50%	6.88%	8.80
		FR0106	15.03	7.13%	6.85%	8.92
		FR0092	16.86	7.13%	6.91%	9.71
		FR0097	17.86	7.13%	6.91%	10.01
		FR0107	20.03	7.13%	6.89%	10.36
		FR0076	22.78	7.38%	6.96%	11.04
		FR0089	26.03	6.88%	6.96%	11.60
		FR0102	28.94	6.88%	6.94%	12.39
	ORI	ORI022	0.19	5.95%	5.15%	0.19
		ORI023 T3	0.94	5.90%	6.41%	0.91
		ORI024 T3	1.19	6.10%	6.00%	1.14
		ORI025 T3	1.53	6.25%	5.81%	1.45
		ORI026 T3	2.19	6.30%	5.72%	2.04
		ORI027 T3	2.53	6.65%	5.79%	2.32
		ORI023 T6	3.94	6.10%	6.21%	3.48
		ORI024 T6	4.19	6.35%	6.16%	3.66
		ORI025 T6	4.53	6.40%	6.28%	3.91
		ORI026 T6	5.19	6.40%	6.11%	4.40
		ORI027 T6	5.53	6.75%	6.15%	4.60
	SR	SR017	0.10	5.90%	5.42%	0.10
		SR018 T3	0.59	6.25%	6.69%	0.58
		SR019 T3	1.10	5.95%	5.62%	1.06
		SR020 T3	1.59	6.30%	6.03%	1.51
		SR021 T3	2.10	6.35%	6.05%	1.95
		SR018 T5	2.60	6.40%	6.33%	2.38
		SR022 T3	2.85	6.45%	6.15%	2.58
		SR019 T5	3.10	6.10%	6.11%	2.80
		SR020 T5	3.59	6.40%	6.23%	3.19
		SR021 T5	4.10	6.45%	6.29%	3.58
		SR022 T5	4.85	6.55%	6.40%	4.12

[2] Sumber: Bloomberg per penutupan pasar tanggal 31 Juli 2025, Perhitungan kinerja merupakan *price return*,

Obligasi

Tabel Kinerja[2]

Mata Uang	Jenis	Obligasi	Tenor (Tahun)	Kupon	*Yield to Maturity* (Mid)	*Modified Duration* (Tahun)
USD	INDON	INDON26	0.43	4.75%	3.79%	0.42
		INDON27	1.43	4.35%	4.12%	1.37
		INDON27NEW	1.95	3.85%	4.11%	1.86
		INDON27NEWNEW	2.13	4.15%	4.08%	1.76
		INDON28	2.44	3.50%	4.12%	2.30
		INDON28NEWNEW	2.44	4.55%	4.20%	2.21
		INDON28NEW	2.72	4.10%	4.13%	2.52
		INDON29	3.52	4.75%	4.22%	3.15
		INDON29NEWNEW	3.60	4.40%	4.22%	3.17
		INDON29NEW	4.12	3.40%	4.24%	3.75
		INDON30NEWNEW	4.45	5.25%	4.36%	3.87
		INDON30	4.53	2.85%	4.37%	4.12
		INDON30NEW	5.20	3.85%	4.35%	4.60
		INDON31	5.60	1.85%	4.55%	5.16
		INDON31NEW	5.98	2.15%	4.64%	5.49
		INDON32	6.66	3.55%	4.74%	5.74
		INDON32NEW	7.13	4.65%	4.77%	5.90
		INDON33	7.44	4.85%	4.82%	6.16
		INDON34	8.52	4.70%	4.96%	6.77
		INDON34NEW	9.10	4.75%	4.98%	7.16
		INDON35NEW	9.45	5.60%	5.01%	7.16
		INDON35	10.19	8.50%	5.14%	7.07
		INDON37	11.54	6.63%	5.28%	8.00
		INDON38	12.45	7.75%	5.30%	8.39
		INDON42	16.45	5.25%	5.33%	10.87
		INDON43	17.69	4.63%	5.42%	11.48
		INDON44	18.45	6.75%	5.59%	10.95
		INDON45	19.45	5.13%	5.40%	12.04
		INDON46	20.43	5.95%	5.56%	11.89
		INDON47	21.43	5.25%	5.46%	12.59
		INDON47NEW	21.95	4.75%	5.45%	13.05
		INDON48	22.44	4.35%	5.53%	13.37
		INDON49	23.52	5.35%	5.53%	12.81
		INDON49NEW	24.24	3.70%	5.57%	14.24
		INDON50	24.53	3.50%	5.58%	14.35
		INDON50NEW	25.20	4.20%	5.58%	14.05
		INDON51	25.60	3.05%	5.51%	15.23
		INDON52NEW	27.13	5.45%	5.64%	13.61
		INDON53	27.44	5.65%	5.67%	13.79
		INDON54	28.52	5.10%	5.56%	14.08
		INDON54NEW	29.10	5.15%	5.55%	14.25
		INDON61	36.14	3.20%	5.56%	16.99
		INDON70	44.70	4.45%	5.67%	16.47
		INDON71	45.60	3.35%	5.51%	17.66
	INDOIS	INDOIS26	0.65	4.55%	3.42%	0.63
		INDOIS26NEW	0.85	1.50%	3.78%	0.83
		INDOIS27	1.65	4.15%	4.11%	1.56
		INDOIS27NEW	1.84	4.40%	4.06%	1.74
		INDOIS28	2.57	4.40%	4.12%	2.37
		INDOIS28NEW	3.28	5.40%	4.17%	2.96
		INDOIS29	3.55	4.45%	4.25%	3.19
		INDOIS29NEW	3.91	5.10%	4.41%	3.51
		INDOIS30NEWNEW	4.45	5.25%	4.36%	3.87
		INDOIS30NEW	4.80	5.00%	4.43%	4.21
		INDOIS30	4.88	2.80%	4.46%	4.47
		INDOIS31	5.85	2.55%	4.64%	5.30
		INDOIS32	6.84	4.70%	4.70%	5.75
		INDOIS33	8.28	5.60%	4.90%	6.54
		INDOIS34	8.91	5.20%	5.00%	7.05
		INDOIS34NEW	9.31	5.25%	5.02%	7.24
		INDOIS35	10.19	8.50%	5.14%	7.07
		INDOIS50	24.88	3.80%	5.70%	14.32
		INDOIS51	25.85	3.55%	5.64%	14.81
		INDOIS54	28.91	5.50%	5.62%	14.19
		INDOIS54NEW	29.31	5.65%	5.69%	14.03

[2] Sumber: Bloomberg per penutupan pasar tanggal 31 Juli 2025, Perhitungan kinerja merupakan *price return,*