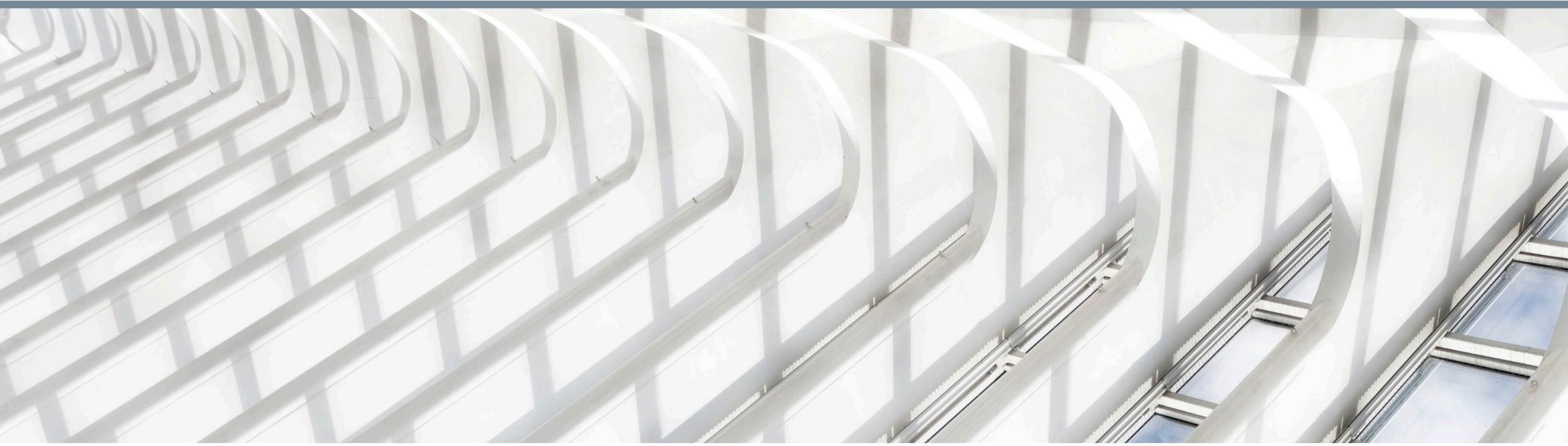
Global Asset Management



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Floating Rate Notes: A Primer

Introduction

Floating rate notes can be beneficial in a rising rate environment due to their ability to protect principal and generate attractive income. This paper outlines key features of floaters and how they can support high quality bond portfolios given their stable market values and performance.

Floater Facts

Floating rate notes, commonly referred to as FRNs or "floaters," have a variable rate of interest that resets periodically. Floating rate notes are different from fixed rate bonds in that the coupon payment is made up of two components (1) an underlying reference benchmark and (2) an additional margin.

1. **Reference Benchmark**
   - The reference benchmarks fluctuate and reset with the market, therefore driving the variability in the floater's coupon, while generally limiting the note's market value changes.
   - Common reference benchmarks are Treasury Bills (T-Bills) and 1-month or 3-month LIBOR (London Interbank Offered Rate).
2. **Margin**
   - The additional margin, or spread, is added to the reference benchmark to determine the periodic payment the issuer is obligated to pay over the underlying benchmark.

Exhibit 1: Breaking Down a Floater's Coupon

Reference Benchmark	+	Spread	=	Coupon
3-Month LIBOR (2.25%)[1]		+ 40 basis points		2.65%

[1]Source: Bloomberg as of March 2018.
Hypothetical numbers shown for illustrative purposes.

- The spread is determined at issue and based on a number of factors including credit quality and maturity.
- Larger spreads are to compensate investors for higher credit or other risks associated with the issuer of the floater – and provide higher expected income for taking on these additional risks.

For example, if the reference benchmark were 3-month LIBOR and the margin were 40 basis points, then the floating rate coupon would be based on a combination of where LIBOR is currently yielding plus the additional spread.

Pros and Cons of Fixed vs. Floating

Recall that fixed rate bond prices move in the opposite direction of interest rates. Therefore, during a rising rate environment, fixed rate bonds are susceptible to price erosion, whereas floaters are better protected because the coupon rate adjusts with the now higher market rate, returning the price to par at reset.

In addition to floaters' ability to protect principal in a rising rate environment, they can produce additional income as interest rates reset higher. As of March 2018, the 3-month LIBOR is trading around 2.25%[1], whereas a year ago at this time it was trading near 1.15%[2]. The increase in the reference benchmark experienced over the last year is advantageous to floaters as coupon income has also increased.

Despite the advantages, there are important trade-offs when investing in floaters. At inception, floaters will typically provide less yield when compared to similar maturity fixed rate bonds. In addition, floaters will earn lower income if rates fall – because their coupons will adjust downward with the benchmark rate. Finally, floaters lack certainty in the future income stream of coupon payments, unlike the payments for fixed rate notes which are known through the bond's maturity date. In short, the better-performing bond will depend on the pace and direction of rate moves and the rate path.

Exhibit 2 highlights the characteristics and differences between fixed and floating rate securities with similar maturities.

Exhibit 2: Characteristics of Fixed and Floating Rates

3-Year Corporate (Aa1/AA+)	Yield	Coupon	Duration	Maturity
Fixed	3.10%	3.10%	2.86 years	2.23.21
Floating	2.69%	3-month LIBOR +40 bps	0.26 years	2.23.21

Source: RBC GAM. Hypothetical numbers shown for illustrative purposes. Data as of 3.22.18.

What would happen to these two securities if interest rates moved in either direction over the next year? Exhibit 3 shows what would happen in a number of different interest rate scenarios. The floater is far more protected in a rising rate environment as the total return outperforms the fixed rate bond. However, in a situation where interest rates were to fall, the floater would be worse off than the fixed rate bond as shown by the total returns in Exhibit 3.

Exhibit 3: Total Returns

3-Year Corporate (AA+)	Scenarios	1-Year Total Return
Fixed	Rates +100bps	1.24%
	Rates +50bps	2.17%
	Rates = no change	3.10%
	Rates -50bps	4.03%
Floating	Rates +100bps	3.68%
	Rates +50bps	3.19%
	Rates = no change	2.69%
	Rates -50bps	2.18%

Source: RBC GAM. Hypothetical numbers shown for illustrative purposes. The example assumes an immediate interest rate shock. Data as of 3.22.18.

Floaters in a Rising Rate Environment

As highlighted earlier, floaters perform especially well in a time where rates are rising more rapidly and the Fed is becoming less accommodative. In 2017, the Fed increased rates a total of three times, and rates along the yield curve rose, with the very short end experiencing the most material gain. This has a positive effect on floaters, as their coupons are also resetting at higher rates. Exhibit 4 shows how the yields of floaters have improved from one year ago.

Exhibit 4: Floating Rate Index Yields

Source: Bloomberg as of 2.28.18.

[1]Source: Bloomberg as of March 2018.
[2]Source: Bloomberg as of March 2018.

Conclusion

Floating rate notes can fluctuate from being highly attractive to relatively expensive based on supply, demand and changes in interest rates. In a rising rate environment, floaters can be appealing due to their income, low price volatility, minimal interest rate risk and modest spread risk. At a time when short term interest rates are trending higher, floaters can play a significant strategic role in high quality short duration portfolios.

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