



A guide to preferred shares

A special report by the Portfolio Advisory Group

Written by Christopher Girdler, CFA, Fixed Income Advisor, and the Fixed Income Strategies team



Wealth Management
Dominion Securities

A guide to preferred shares

Preferred shares are an integral part of a Canadian's suite of investable assets that exist in a variety of structures, each with their own features. A commonality across all structures is that preferred shares are perpetual instruments, with interest rate sensitivity dictated by features such as dividend terms, call dates, and reset dates. This guide serves as tool for investors that are new to preferred shares and want to build base knowledge, as well as those who want a refresher on the asset class. Below is a summary of a number of highlights of this report:

Common features of preferred shares

- Dividends
- Structure and call feature
- Equity/capital treatment
- Where preferred shares sit in the capital structure
- Taxes

Key market characteristics

- Market size
- Issuing sectors
- Development of structures

Analyzing preferred shares

- Correlations between preferred shares, bonds, and equities
- Historical volatility and returns
- What trading prices tell you about the probability that a preferred share will be redeemed
- Understanding what different yield measures tell you and when to use each different measure
- Key risks to consider
 - Interest rate risk
 - Credit risk
 - Call risk
 - Extension risk
 - Liquidity risk
 - Tax risk

Structures of preferred shares

- Fixed rate perpetual preferred shares
- Rate-reset preferred shares
- Floating rate preferred shares
- Fixed-floater preferred shares
- Split shares
- Retractable preferred shares

Portfolio considerations

- Incorporating preferred shares within a portfolio

Appendix

- NVCC and what it means to Canadian investors

Preferred shares—The alternative funding vehicle

Canadian corporations can choose from a variety of options to raise capital, with common share and debt offerings being two frequently selected. A common share offering provides capital (cash) to the corporation in return for an ownership stake. Investors receive a share of profits and any income that gets paid in the form of dividends.

In a debt offering, the corporation borrows capital (cash) and promises to pay it back at a set date in the future. The corporation is required to pay a rate of interest throughout the life of the bond, typically a fixed rate set at the loan's origination.

Preferred shares represent an alternative source of capital for corporations that are typically sold to investors through a public offering in a similar manner to common shares. One of the features that draws investors to this asset class is that any cash flow is taxable as dividend income rather than interest income.

Common features of preferred shares

Dividends

Preferred shares pay a dividend, stated as a percentage of the \$25 par value. The terms of the dividend are set when the preferred shares are issued, and the dividend may be a fixed rate or can be linked to a reference rate such as the 5-year Government of Canada (GoC) bond, the 3-month GoC T-bill rate, or, in the case of legacy issues, the corporate prime rate. The dividend may stay fixed or it may move up or down with the prevailing market conditions. The type of dividend depends on the structure of the preferred share which we will explore more of later.

Perpetual instruments with call features

Preferred shares typically don't have a maturity date but are callable at set intervals and prices, at the issuers' discretion. This means preferred shares can be in existence for as few as five years or into perpetuity. Issuers typically compare the terms a new preferred share would carry to an existing issue when determining whether to redeem an existing issue. Redemptions typically occur when a company can reduce its costs by refinancing at a lower dividend rate.

Equity/capital treatment

Corporations typically issue preferred shares because they represent a non-dilutive (to common equity holders) form of equity funding. For non-financial corporates, preferred shares are classified as 50% debt and 50% equity on a corporation's balance sheet. This is an important point because the cost of preferred shares is often closer to debt than it is to equity, making them an efficient financing option. For a financial borrower, the attractiveness of preferred shares is that they count towards important measures of capital which, when divided by their assets (loans), provide an indication of their financial stability.

Preferred shares and the capital structure: Between debt and common equity

Preferred shares sit between debt and common equity in a company's capital structure, as demonstrated in the chart on the following page. This

Preferred shares can be in existence for as few as five years or into perpetuity.

Preferred shares sit between debt and common equity in a company's capital structure.

means that in a case of company liquidation, preferred shareholders rank behind (are subordinated to) bondholders in order of payment, but rank ahead of (senior to) common equity holders. Given this junior ranking, preferred shares are typically issued by more credit-worthy borrowers as there is generally weaker demand for a subordinated claim on a weak or heavily indebted corporation that has limited cash flow to draw on to service preferred share dividends.

Preferred shares rank between debt and equity in the capital structure of a Canadian corporate

Senior debt	<ul style="list-style-type: none"> • Senior debtholders have priority claim on non-collateral assets in the event of liquidation. • Failure to make a coupon payment in a timely manner means an issuer is in default. • Investors have first priority claim on the firm's cash flows.
Subordinated debt	<ul style="list-style-type: none"> • Investors are subordinated to senior debtholders meaning they have second priority on cash flows and second claim on assets in the event of liquidation.
Preferred shares	<ul style="list-style-type: none"> • Cash flows to preferred shareholders are subject to management's discretion but are paid ahead of common share dividends. Preferred share investors have the next claim on assets after debtholders in the event of liquidation.
Common equity	<ul style="list-style-type: none"> • Cash flows to common equity holders are subject to management's discretion. • Common equity shareholders have a claim on the residual [leftover] assets in the event of liquidation.

Source - RBC Dominion Securities, Inc.

A common equity dividend cannot be paid while a preferred dividend is not current.

Preferred shares and the capital structure: Priority of payment versus common equity dividends

Another feature that marks the seniority of preferred shares over common equity relates to the payment of dividends. A common equity dividend cannot be paid while a preferred dividend is not current. On top of this, for non-financial issuers (those that are not banks and insurance companies), dividends on preferred shares are cumulative. This means that if a dividend payment isn't made during one quarter, it is added to the dividend payment due in the following quarter. As a general rule, the presence of a common equity dividend that has been paid in an uninterrupted fashion for a number of years and is well covered by internally generated cash flow is a positive for preferred shares. This is because the ongoing payment of a common equity dividend ensures the regular stream of preferred share dividends will also be paid.

Preferred shares and the capital structure: A less-secure payment stream than a bond

Preferred share dividends are not legal obligations, and a company will not fall into default if it misses a dividend payment like it would if it were to miss an interest payment on outstanding debt. Although their market reputation may be brought into question, companies can suspend preferred share and common equity dividends in an effort to save cash to

service debt. A common equity dividend will typically be suspended first before a preferred share dividend is at risk although they may be suspended at the same time if the financial situation weakens materially such that the company is dangerously close to defaulting on its debt.

Taxes

When compared to debt interest, preferred share dividends represent a more tax efficient source of income for a taxable investor and a less tax efficient outlay for a corporation. This is because Canadian resident investors get tax credits for dividends received from preferred shares, thereby increasing their after-tax value. Bond investors are less fortuitous and pay income tax on each coupon payment received. For a corporation, preferred share dividends are paid out of after-tax earnings whereas interest payments on debt are paid from pre-tax earnings. This makes preferred share dividends a less tax-efficient outlay than interest payments for a corporation with positive earnings.

Key market characteristics

Preferred share market size: Less than 5% the size of the bond market

The preferred share market has a market capitalization between \$60B and \$65B (as of December 2017). Although this seems large, it is relatively small compared to the total fixed income market in Canada. The Canadian bond universe has a market capitalization that exceeds \$1.5T (as of December 2017), according to the latest index data (FTSE TMX).

Preferred share market is less than 5% the size of the bond market.

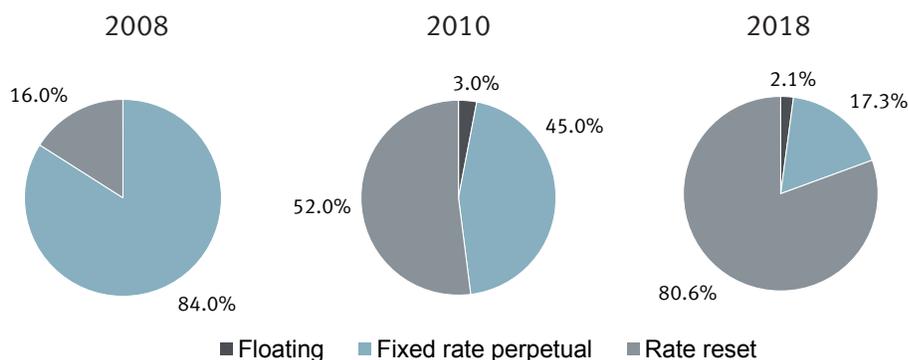
Market composition: Issuing sectors

The largest issuers of preferred shares have historically been banks and insurance companies. More recently, energy infrastructure companies have become frequent issuers. These three sectors account for over two-thirds of the outstanding preferred shares.

Market composition: Issuance structure

Rate reset, fixed-to-float and their sister floating issues make up the majority of the current preferred share market, with a smaller portion of the market currently in fixed rate perpetuals. This stands in stark contrast to the profile of the market in 2007, prior to the advent of the rate reset structure, when the market was mostly comprised of fixed rate perpetual issues. This change is demonstrated in the chart below.

The preferred share market has changed dramatically over the past 10 years



Source - S&P Dow Jones Indices

A correlation matrix using 10 years of daily returns

	Bond	Preferred	Equity
FTSE TMX Bond Universe	1		
S&P Preferred Share Index	-0.06	1	
S&P / TSX Equity Index	-0.30	0.32	1

Source - Bloomberg, RBC Dominion Securities, Inc.

Preferred shares analysis

Historical correlation between preferred shares, bonds, and equities

In terms of historical performance, preferred shares have had a positive correlation to the stock market over the long term while not having any real correlation to bond markets (see above chart).

Historical data suggests preferred shares are less volatile than equities, more volatile than bonds

As one might expect, preferred share returns have been more volatile than those of bonds, but less than those of equities as shown in the chart below. The correlation and volatility characteristics suggest preferred shares can be used to diversify traditional stock and bond portfolios, which is one reason why investors have been drawn to the preferred share market over the years.

Historical total returns and their volatility across fixed income, preferred shares, and the stock market

	3 Years			5 Years			10 Years		
	Bond	Preferred	Equity	Bond	Preferred	Equity	Bond	Preferred	Equity
Cumulative total returns	8.0%	3.6%	18.8%	16.8%	7.6%	48.4%	57.5%	36.6%	54.8%
Annualised total return	2.7%	1.2%	6.1%	3.2%	1.5%	8.4%	4.7%	3.2%	4.5%
Annualised volatility	4.1%	9.6%	11.9%	3.8%	7.6%	11.2%	4.0%	7.2%	18.8%

Source - Bloomberg, RBC Dominion Securities, Inc.

Given the preferred share market has evolved considerably over the past 10 years, having an understanding of its current size, its composition, and the different types of preferred shares that are available is important for potential investors.

Trading prices offer an indication of how likely it is that an issue will be redeemed

When a preferred share trades above par, which is typically—but not always—the same as the call/redemption price, the preferred share is more likely to be called by the issuer at the next call date. This is not a guarantee, but if the preferred share trades materially above its par price, the issuer may be better served to call/redeem the existing preferred share and reissue a new preferred share at a lower cost (dividend rate). The reverse of this would be if the preferred share was trading at a deep discount to its call price. Issues trading well below their par value may be outstanding for an extended period of time, beyond the next call date, given the issuer would

need to pay a much higher cost (dividend rate) to issue a new preferred share compared to the existing one.

Preferred shares have a number of different yield measures—Some guidance on where to focus

When a preferred share trades materially above par, it often changes the way investors view the preferred share, from a perpetual security to one with a limited life. The preferred share would, all else being equal, look and trade more like a bond, so investors would analyse its yield to call. The yield to call of a preferred share is the annualised yield the investor would attain from buying the share now and holding it until its call date. The return comes from dividend income received plus or minus the differential between the market price and the call price. When a preferred share has multiple call dates and prices, the calculation of yield to worst is used. The yield to worst of a preferred share calculates the yield to call under each possible call date and call price, as well as the cash yield (explained below) and selects the lowest figure. It is important for investors to keep the yield to worst in mind at all times, even if its relevance seemingly decreases with a preferred share that moves further away from its call price.

A separate way to value a preferred share is to calculate its cash yield. This is calculated by dividing the annualised dividend by the current share price. The cash yield measures the preferred shares yield if it were to be outstanding for an extended period of time, or more accurately into perpetuity. Therefore, preferred shares that are trading at large discounts to their par values and call prices are often valued using their cash yields. Investors will typically use both measures to help judge the value of a preferred share.

Key risks to consider

The keys risks of investing in preferred shares include interest rate risk, credit risk, call risk, extension risk, liquidity risk, and the risk that tax changes may negatively impact the status of dividend income. Below is a summary of those risks.

Interest rate risk

One of the most important risks to understand with preferred shares relates to changes in interest rates. Depending on the type of preferred share and its potential dividend variability, an increase in interest rates could negatively or positively impact the value of preferred shares. For example, a fixed rate perpetual would typically suffer when interest rates rise because the fixed dividend will compare poorly to alternative investments and an issuer would be less likely to redeem that funding source and reissue if the cost of funding has risen. Floating rate preferred shares on the other hand benefit directly from higher interest rates through increased dividends while rate reset preferred shares benefit indirectly through a higher future cash flow profile, assuming the preferred share isn't called at the next reset date.

Credit risk

Another material risk to preferred shareholders is related to an issuer's creditworthiness. Credit risk relates to how this measure evolves over time i.e., the change in the likelihood that the issuer is able to pay present

When a preferred share trades materially above par, it often changes the way investors view the preferred share, from a perpetual security to one with a limited life.

An increase in interest rates could negatively or positively impact the value of preferred shares.

Preferred shares are highly sensitive to changes in credit worthiness.

and future dividends. Preferred shares are highly sensitive to changes in credit worthiness of an issuer given they are close to the bottom of the capital structure and near last in receiving any cash back in a liquidation procedure. Please refer to the chart on [page 4](#) for more information. Rate reset structures and their floating sister issues are the most sensitive of all preferred shares to changes in creditworthiness because their dividends already adjust to the changing interest rates. A fixed rate perpetual has both changing interest rates and changing creditworthiness heavily impacting its price. The credit quality of a preferred share issuer in Canada is judged by two rating agencies—Standard & Poor’s (S&P) and the Dominion Bond Rating Service (DBRS). Both monitor the issuer and provide a credit rating (see chart below) that investors use to help form investment decisions. Ratings are on a scale from high to low, Pfd-3 is the line of demarcation between investment grade and non-investment grade at DBRS.

Bond and preferred share ratings scale from DBRS and S&P

DBRS senior bond rating		DBRS preferred share scale		S&P global preferred share scale		S&P preferred share scale	
AAA		Pfd-1	Superior	AA		P-1 (High)	
AA				AA-		P-1	
A		Pfd-2	Satisfactory	A+			
BBB		Pfd-3	Adequate	A		P-1 (Low)	
BB		Pfd-4	Speculative	A-			
B			Highly Speculative	BBB+		P-2 (High)	
CCC		Pfd-5	Very Highly Speculative	BBB		P-2 (Low)	
CC				BBB-		P-3 (High)	
C				BB+		P-3	
D		D	Default	BB		P-3 (Low)	
				BB-		P-4 (High)	
				B+		P-4	
				B		P-4 (Low)	
				B-			
				CCC+		P-5 (High)	
				CCC+		P-5	
				CCC-		P-5 (Low)	
				CC		CC	
				C		CC	
				D		D	

Source - S&P and DBRS rating agencies

Changes in credit risk have an inverse relationship with the price of preferred shares.

Changes in credit risk have an inverse relationship with the price of preferred shares i.e., a deterioration of creditworthiness would translate into lower preferred share prices, all else being equal. This is because if the same corporate were to issue a new preferred share at that point in time, the fixed dividend that investors would require them to pay would be higher than the existing dividend, making the current dividend less attractive. It is also worth noting that preferred shares that have no maturity date, or are trading at a discount and thus appear like they will be outstanding for an extended period of time, will be greatly impacted by changes in credit risk. Preferred shares that have a shorter time until redemption or are trading well above their par value and are subsequently expected to be called within the next five years, will be less impacted by changes in credit risk.

Call risk

Almost all preferred shares have a feature where the issuer can redeem all of the outstanding issue, as set out in the terms of the issue. This is a risk for the investor because it is likely an issuer would redeem a preferred share that is trading at a premium to its call price if the issuer could reissue a new one at a lower cost. The investor, if he or she wished to stay invested in the underlying issuer, would need to accept a lower return on a newly issued security.

Extension risk

The opposite of call risk for investors is extension risk. Investors can of course sell their preferred shares on an exchange but an issuer may decide, for any reason, to extend an issue rather than redeeming it. An investor that was relying on the issuer to redeem the preferred share would be forced to hold the issue for another five years, or more, unless the investor decides to sell it. This is more likely to occur when a preferred share is trading at discount to its call price, although it will entirely depend on each individual issuer. An extension would also be more likely if the dividend on a fixed rate perpetual was low and interest rates rose rapidly, or if the reset spread was low and the creditworthiness of the issuer deteriorated over the five-year period.

Liquidity risk

Preferred shares are traded on an exchange but there are significantly fewer people trading them than there are trading the common shares of the same issuers. This means that some investors may struggle to buy or sell their preferred shares at what they perceive to be fair value, and to complete an order they may have to pay a premium or sell at a discount to the last trade.

Tax risk

Given the dividend tax credit is one of the key attractions of preferred shares to higher rate tax payers, changes to provincial or federal tax rates will affect the attractiveness of preferred shares relative to other investments.

Structures of preferred shares**Fixed rate perpetuals**

Fixed rate perpetuals are the least complex structure in the preferred share market. As the name suggests, these issues pay a fixed dividend for as long as the shares are outstanding. Fixed rate perpetuals have no set maturity date but can be redeemed, by the issuer, based on a date and pricing schedule set out at the time of issue.

Dividend payment stream: Fixed rate perpetuals offer investors a stable income stream and typically pay a higher dividend upon their issuance compared to other types of preferred shares, from the same issuer, to compensate the investor for locking that dividend rate into perpetuity. An investor in fixed rate perpetuals should be aware of the price they pay for the security, especially if it is trading around or above par, in case the issuer redeems the share and the investor incurs a small capital loss.

Typical call feature: Perpetual preferred shares are callable and typically the issuer has the right to redeem a fixed rate perpetual five years after it begins trading. The most common call schedule (see chart on following page) gives an issuer the option to redeem a fixed rate perpetual at a price above

Preferred shares are traded on an exchange but there are significantly fewer people trading them than there are trading the common shares of the same issuers.

Fixed rate perpetuals offer investors a stable income stream.

its original issue price (typically \$26) on the first call date and each year the call price will decline until it reaches its issue price. This typically happens nine years after issuance. The terms of most call schedules permit the issuer to redeem the preferred share at the call price at any time, as long as they provide holders with a minimum of 30 days' notice.

Typical call schedule on a fixed rate perpetual preferred share

Date	Call price
Jan 2018 (issue date)	Not callable
↓	↓
Jan 2023	\$26.00
Jan 2024	\$25.75
Jan 2025	\$25.50
Jan 2026	\$25.25
Jan 2027	\$25.00

Source - RBC Dominion Securities, Inc.

Interest rate sensitivity: Due to the lack of maturity date and the fixed rate cash flow profile, moves in longer-term bond yields tend to impact fixed rate perpetual preferred share prices. These preferred shares typically exhibit a negative relationship between their price and longer-dated bond yields. Fixed rate perpetuals will therefore typically perform well when interest rates are falling and/or credit spreads are stable or tightening.

Differentiating between high-dividend and low-dividend issues: The size of the dividend rate will also impact the sensitivity of a fixed rate perpetual to interest rates. Given two nearly identical fixed rate perpetuals, the security with the higher dividend rate would typically be less sensitive to changes in interest rates than the lower dividend issue.

Perpetual issues that are not non-viability contingent capital (NVCC): Canadian banks have been slowly redeeming their fixed rate perpetual preferred shares which will no longer count towards their equity capital ratios, as of January 1, 2022. Fixed rate perpetuals of this nature are termed Non-NVCC and have been replaced with NVCC versions. For more information on NVCC and what it all means, please see the [Appendix](#).

Rate-reset preferreds

Rate-reset preferred shares are now the most common type of preferred share in Canada and offer a unique combination of fixed and variable features. Rate-resets are typically issued with a fixed-rate dividend for the initial five-year period, after which time the shares are redeemable by the issuer. If the issuer chooses not to redeem the shares, holders of rate-reset preferred shares can choose whether to lock in a new dividend for the next five-year period or opt for a variable-rate version instead. This choice repeats itself for as long as the preferred shares are outstanding.

Dividend payment stream: Unlike perpetual preferred shares, which have a constant dividend for the life of the security, dividends of rate-reset preferred shares are periodically adjusted (reset) via a calculation that adds a predetermined credit spread (unique to each security) to the prevailing

The size of the dividend rate will also impact the sensitivity of a fixed rate perpetual to interest rates.

Dividends of rate-reset preferred shares are periodically adjusted.

yield of the 5-year GoC bond at a specified point in time (the reset date). The original dividend on a rate reset is typically set at a fixed rate above the 5-year GoC bond with the differential (between the dividend and the 5-year GoC yield) called the reset spread. For example if the initial fixed dividend was set at 4.50% while the 5-year GoC bond yield was 1.50% this would make the reset spread equal to 3.00% (see chart below). At the five-year mark, assuming the rate-reset preferred share isn't redeemed by the issuer, a new fixed dividend will be set based on that 3.00% reset spread and the prevailing 5-year GoC bond yield. For example, if the GoC 5-year yield was now 2.00%, the fixed rate dividend for the next five years would be increased to 5.00%.

Breaking down the component parts of a rate reset

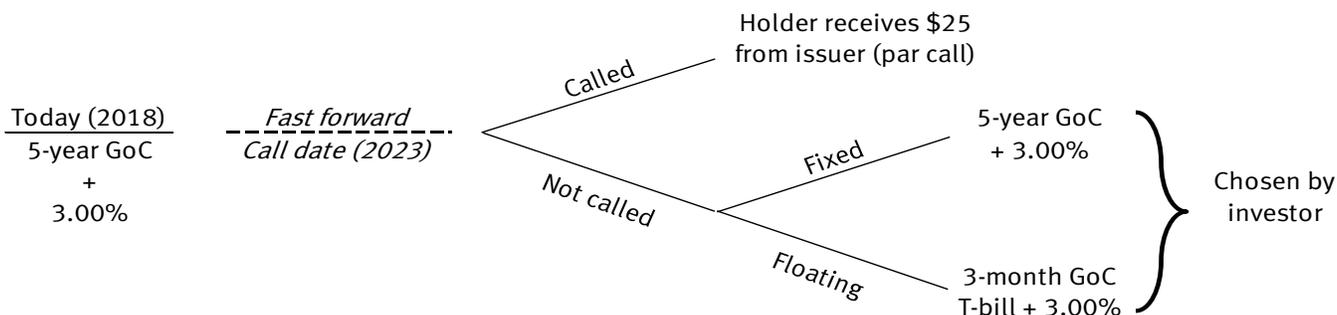
Dividend	=	Reset spread	+	5Y GoC yield
4.50%		3.00%		1.50%

Source - RBC Dominion Securities, Inc.

Once an investor has chosen to switch from fixed rate to a floating rate, they cannot switch back until the next reset date in another five years.

Typical call (reset) feature: Rate reset preferred shares are callable at the issuer's option at \$25 on each reset date, which typically occurs every five years. When an issuer does not redeem a rate reset issue and it is extended beyond the reset date, investors in the preferred share get the choice to accept a new fixed rate dividend for the next five years (5% in our example above), or switch into a variable rate structure which pays a dividend every three months. The variable rate dividend is the sum of the reset spread, in this case 3.00%, plus the 90-day GoC T-Bill rate. These choices are all demonstrated in the chart below. The T-bill rate is typically less than the 5-year Government bond yield, but an investor that expects the central bank to raise interest rates more often than the market is pricing in over the next five years may prefer the floating series as the total dividends of the variable rate structure may exceed those of the new fixed rate structure. It is worth noting that once an investor has chosen to switch from fixed rate to a floating rate, they cannot switch back until the next reset date in another five years. They can, of course, sell their floating rate issue and buy the fixed rate issue back in the open market, but the prices are likely to have deviated and the investor will create a tax event in doing so.

Rate reset preferred share decision tree for issuer and investor



Source - RBC Dominion Securities, Inc.

Differentiating between high and low reset issues: Rate-reset preferred shares that have reset spreads below the prevailing new issue level are likely to remain outstanding because these issues represent a cheaper source of funding than a new offering. Accordingly, investors purchasing securities with lower reset spreads should be mindful of what the new dividend will be if the issue is extended and calculate what the yield on this issue would be at the new dividend (divide the dollar value of the potential new dividend by the current trading price). This yield measure is more relevant than the yield to call given the issue is more likely to be extended than called. Conversely, issues that carry larger reset spreads than the prevailing new issue level are more likely to be redeemed and investors should be more mindful of the yield to call on these issues.

Rate-reset issues with lower reset spreads tend to benefit the most from higher interest rates.

Interest rate sensitivity: Rate-reset issues with lower reset spreads tend to benefit the most from higher interest rates and, therefore, exhibit the most sensitivity to interest rate expectations. This tends to also make them more volatile than higher reset spread issues. This sensitivity can be a significant advantage to investors when interest rates are rising, providing an offset to lower prices of traditional bonds. The reverse is also true. The price/interest rate relationship will have a bigger impact if a preferred share borrower's creditworthiness remains stable or improves as interest rates are rising.

The dividend floor provides value in case the 5-year GoC bond yield actually falls over the five-year period.

Dividend floor (minimum dividend) features: Many non-financial (not bank or insurance) rate-reset preferred shares have been issued with minimum dividend "floors" since 2015. This feature guarantees the security's fixed dividend reset value cannot be below a specified level, typically the initial fixed rate. The feature provides value to investors in case the 5-year GoC bond yield actually falls over the five-year period. We also note that a floor is more valuable when the starting point of the 5-year GoC yield i.e., on issue date, is higher.

Floating rate preferreds

Floating rate preferred shares offer investors a dividend that is reset quarterly based on the 3-month GoC T-bill rate. Floating rate preferreds are unique in that they originate from rate-reset preferreds when an investor chooses to convert into a variable rate dividend stream over the new fixed rate. This decision tree is laid out in the lower chart on [page 11](#).

Floating rate preferreds are unique in that they originate from rate-reset preferreds when an investor chooses to convert into a variable rate dividend stream over the new fixed rate.

It is worth noting that for a floating rate preferred share to be issued, a threshold number of shares needs to be elected to convert, otherwise the conversion will not occur and all investors will remain in the fixed series. Assuming a conversion does occur, a newly issued floating rate preferred share is redeemable by the issuer after five years. In some instances, the issuer can redeem the preferred share at any time between five-year anniversary dates but at a price that is a premium to par value (\$25). If the issuer chooses not to redeem the preferred share during, or at the end of the five years, holders of floating rate preferred shares can choose whether to convert back into a fixed rate dividend for the next five-year period or continue to receive a variable-rate dividend. This conversion choice repeats itself for as long as the preferred shares are outstanding. Once an investor has chosen to switch from fixed rate to a floating rate, he or she cannot switch back until the next reset date in another five years. The investor can of course sell his or her floating rate issue and buy the fixed rate issue

Dividends of floating rate preferred shares are periodically adjusted.

Liquidity of floating issues is usually less than their fixed sister issues.

Split shares are created using an underlying common share or basket of common shares.

back in the open market, but the prices are likely to have deviated and the investor may create a taxable event in doing so.

Dividend payment stream: Unlike perpetual preferred shares, which have a constant dividend for the life of the security, dividends of floating rate preferred shares are periodically adjusted (reset) via a calculation that adds a predetermined credit spread (unique to each security) to the prevailing yield of the 3-month GoC T-bill yield at a specified point in time (the reset date).

Fixed versus floating issues should experience a price convergence over time: One thing that is important to note is that rate-reset structures and their direct floating rate sister issues can be exchanged back into one another at each five-year reset period. This is important because during that period the two issues may deviate in price, subject to interest rate expectations and the liquidity of the individual preferred shares, but their prices will converge at each five-year anniversary date.

Liquidity of floating issues is usually less than fixed sister issues:

Historically, there have been more shares outstanding for the fixed dividend side of a rate-reset than have been for their sister floating rate issues. Fewer shareholders typically translates into less trading and, therefore, less daily liquidity in the floating rate issues.

Fixed-to-float preferreds

The rate-reset structure has evolved over time, and the original structure, although rare in today's market, has a couple of different features related to the dividends. With the original fixed-to-floating structure, a fixed dividend is set for the first five years, after which the issuer has the choice to redeem the issue or not. Assuming it is not called by the issuer, the dividend for the following five years will be determined by the issuer and must be greater than 80% of the prevailing GoC 5-year bond yield. At this point, the investor has the choice to accept the new fixed dividend rate or to switch into a floating rate structure. The floating rate will have a dividend that is set on a monthly or quarterly basis, depending on the issue, and will be calculated as a percentage of the Canadian corporate prime rate. The floating rate is typically 50%–100% of the prime rate with the exact percentage set by the issuer. Due to the evolution into the current rate-reset structure, fixed-to-float preferred shares now make up a small portion of the market.

Split share preferreds

Split share preferred shares are different because they are created using an underlying common share or basket of common shares. For the sake of simplicity, we will use a single common share. Exposure to that underlying common share is split into a preferred share and a capital share. The preferred share receives the fixed dividends from the underlying common share while the capital share participates in the upside of the underlying common share. If the common share is split 50/50 between the preferred share and the capital share, this means the preferred share can theoretically receive a dividend yield (%) which is twice the size of the dividend yield on the underlying common share and equally, the capital share is getting twice the upside of the underlying stock. The preferred share will be negatively impacted if the dividend on the underlying common share reduces

materially while it also has downside exposure to the underlying common share. If the underlying common share price falls rather than increases over time, the capital share will experience a loss. If the underlying common share falls below a specific level, which is set at issuance and depends on the capital and preferred share split, the capital share will effectively be wiped out and the preferred share is next in line to take losses. Due to the fact that the capital share takes the first losses, the preferred share has a level of downside protection before it would be negatively impacted. This type of preferred share is a unique structure that suits investors that are comfortable with the underlying equity risk, in a severe downside scenario, but like to receive a high and often stable dividend income. Split share preferreds typically have a maturity date that can be anything from 5 to 15 years and also have an issuer call schedule. Due to the evolution of the market, split shares now make up a small portion of the market.

Retractable preferreds

Retractable preferred shares pay fixed-rate dividends but are different from fixed rate perpetuals in that they offer the holder the right to sell the shares back to the issuing company at specified prices and on specified dates as set out in a schedule. Retractable preferred shares can be either hard or soft, meaning that the company must provide cash in the case of the former, and can provide cash or common shares in the case of the latter. Due to the flexibility retractables offer to investors, they also have the closest resemblance to traditional bonds. These shares can also be redeemed, subject to the call schedule, by the issuer. This takes some of the power away from investors as the issuer call schedule can be different to the retraction schedule. However, if the redemption date is long before the retraction date, the call price is typically high and declining each year until the retraction date. Due to their attractive features and the added flexibility afforded to investors, retractable preferred shares are increasingly rare and make up a very small portion of the Canadian market.

Due to the flexibility that retractables offer to investors, they also have the closest resemblance to traditional bonds.

Portfolio considerations

Preferred shares within a portfolio

As detailed earlier in this guide, there are a number of different preferred share structures each exhibiting their own risk and return profiles. Even for the same issuer and the same structure, two preferred shares may differ based on their prevailing yields and call date schedules. Two issuers within the same sector will exhibit idiosyncratic risks. An understanding of the overall risks, as well as the potential returns, will help in the determination of whether preferred shares are a suitable investment for an investor. After all, every investor is different.

Providing there is a tolerance and the willingness to accept the risks involved in preferred shares, alternatives would include: 1) stick to a maximum allocation of preferred shares within a fixed income portfolio of 25% unless there is a particular situation where more may be suitable; 2) build a diversified portfolio across preferred share structures, sectors, and issuers; and 3) take an active approach to investing in preferred shares.

Appendix

Non-viability contingent capital (NVCC): What it means to investors in Canadian bank debt and preferred shares.

Non-viability contingent capital is the term assigned to all of the recently issued subordinated bank debt and preferred shares that meet the criteria outlined by the banking regulator in its [August 2011 Advisory](#). At its core, NVCC is capital that has a bail-in feature such that a firm can be re-capitalized without an injection of taxpayer funds if it reaches the point of non-viability. A “trigger event” converts all existing NVCC capital into common equity and instantaneously recapitalizes the institution. It’s very important to note that NVCC features will only be triggered by the regulator at a time of extreme distress (i.e., looming default, no access to capital) such that a firm is no longer viable.

Under the pre-NVCC regime, in a scenario where a bank was non-viable, we would have expected dividend payments on common and preferred shares to cease. At this point, preferred share investors would own perpetual securities that paid no dividend and they would be staring at a very uncertain outlook regarding potential recovery values in a bankruptcy recovery. Under the NVCC framework, there are numerous possible outcomes when an issuer is flirting with potential default. The NVCC framework attempts to formalize and expedite the process of a wind down if the regulator deems an institution to be non-viable by preemptively laying out the implications for the securities once an issuer is considered to be non-viable.

The only way a non-viability conversion can be activated is following a “trigger event” which can be enacted by the Office of the Superintendent of Financial Institutions (OSFI) or a capital injection from the government. Issuers do not have the ability to arbitrarily convert preferred share investors into common shareholders. Additionally, there are a number of tests done by the regulator to test the financial condition of the banks. By the time they reach a point of non-viability, the regulators have likely been involved for some time.

Banks have been required to issue exclusively NVCC-compliant subordinated debt and preferred shares since the beginning of 2013. These legacy securities lose their capital treatment at a rate of 10% (of the total capital that existed on January 1, 2013) per year meaning the banks have been slowly reducing the outstanding balance of non-NVCC securities since.

Disclosures and disclaimers

The information contained in this report has been compiled by RBC Dominion Securities Inc. (“RBC DS”) from sources believed by it to be reliable, but no representations or warranty, express or implied, are made by RBC DS or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC DS’ judgment as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Past performance may not be repeated. The information provided is intended only to illustrate certain historical returns and is not intended to reflect future values or returns.

This report is not an offer to sell or a solicitation of an offer to buy any securities. Additionally, this report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. This material is prepared for general circulation to Investment Advisors, does not have regard to the particular circumstances or needs of any specific person who may read it and is not intended as advice of any kind to any specific person. A specific investment strategy should be considered relative to its suitability for the specific investor, as well as that investor’s investment objectives and risk tolerance. For that reason, readers are advised to discuss the contents of this report with an RBC DS Investment Advisor or other investment professional prior to making any investment decisions based on this report. RBC DS and its affiliates may have an investment banking or other relationship with some or all of the issuers mentioned herein and may trade in any of the securities mentioned herein either for their own account or the accounts of their customers. RBC DS and its affiliates may also issue options on securities mentioned herein and may trade in options issued by others. Accordingly, RBC DS or its affiliates may at any time have a long or short position in any such security or option thereon. Neither RBC DS nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or the information contained herein. This report may not be reproduced, distributed or published by any recipient hereof for any purpose.

In all jurisdictions where RBC Capital Markets conducts business, we do not offer investment advice on Royal Bank of Canada. Certain regulations prohibit member firms from soliciting orders and offering investment advice or opinions on their own stock. References to Royal Bank are for informational purposes only and not intended as a direct or implied recommendation for investing in Royal Bank and all related securities.

RBC Dominion Securities Inc.* and Royal Bank of Canada are separate corporate entities which are affiliated. *Member-Canadian Investor Protection Fund. RBC Dominion Securities Inc. is a member company of RBC Wealth Management, a business segment of Royal Bank of Canada. ® / TM Trademark(s) of Royal Bank of Canada. Used under licence. © RBC Dominion Securities 2018. All rights reserved.