Preference shares — a class of their own?

Hybrid instruments, which combine the features of both ordinary debt and ordinary equity to varying degrees, have gained popularity offshore, both as an alternative means of raising capital and as alternative assets to add a further layer of diversification to investment portfolios. Local issuers have also begun to explore preference shares as an efficient means of funding, particularly if tax efficiencies are facilitated in the process.

Issuance

- Issuance in preference shares has accelerated since 2002;
- The majority of preference shares issued from 2002 have dividends that are linked to the prime lending rate;
- The financial sector has overtaken the industrial sector as the greatest issuer of preference shares; and
- The degree of diversification across sectors in preference share issuance is small but appears to be improving.

Performance

- The after-tax nature of preference share dividends has fuelled demand which, in turn, has supported preference share prices, despite the downward trend in the prime rate over the last couple of years;
- However, on a running or dividend-yield basis, liquid preference shares tend to trade below ordinary shares and bond levels;
- On a rolling one-year basis, liquid preference shares have generally tended to follow returns of bonds with limited exposure to equity capital gains; and
- One-year preference share returns as a whole are less risky than equity returns, but more risky than bond returns.

Liquidity

- Preference shares can be clustered into two main groups, depending on whether they were issued before or after 2002;
- The two main preference share clusters display common liquidity characteristics, in that more recent issues are both bigger in size and trade in larger volumes on average; and
- Liquidity in the preference share market appears to be on the increase.

Bottom line: As hybrid instruments, preference shares can be used by both issuers and investors to add a layer of diversification to either their funding or investment portfolios, particularly if tax efficiencies are facilitated in the process. Strong local demand for preference shares has increased the liquidity of the market and allowed for comparative and quantitative analysis of preference shares as a separate asset class.

30 Total average market cap 25 20 (Rbn) 15 10 5 0 2000 2001 2002 2003 2004 2005 to date

FIGURE 1: ANNUAL AVERAGE MARKET CAPS

Source: I-Net Bridge





Source: Standard Bank Group

FIGURE 3: PREF SHARE, BOND AND EQUITY BENCHMARKS



Sources: Standard Bank Group, BESA, JSE

Nicolette Roussos☎(+27 11) 378-7217⊠ nicolette.roussos@standardbank.co.zaNhlanhla Ntuli☎(+27 11) 378-7229⊠ nhlanhla.ntuli@standardbank.co.za

Global Markets Research Global Markets Research

1. Overview of preference shares as hybrid instruments

1.1 What are pref shares?

Preference shares, also referred to as preferred securities, preferred stock or pref shares are classified as hybrid instruments because they combine both **equity-like and debt-like characteristics**. There are a number of instruments that can be considered hybrid. Due to this spectrum and in particular for credit considerations, Moody's¹ coined the phrase 'debt-equity' continuum to better quantify the degree of equity or debt-like behaviour of a given hybrid instrument.

The general characteristics that are used to classify hybrid instruments are:

- Type of interest paid (dividend or coupon / fixed or floating / participating or non-participating / deferrable or non-deferrable);
- The maturity of the instrument (fixed or perpetual);
- Features of redemption (e.g. callable, puttable, extendable); and
- Other forms of optionality (e.g. convertibility to ordinary equity).

Preference shares are hybrid instruments that:

- Pay fixed or prime-linked dividends rather than ordinary dividends or coupons;
- Typically have deferrable dividends;
- Have dividends that must be paid before ordinary dividends;
- Can be **perpetual** (i.e. non-redeemable or of very long maturity);
- May be cumulative or non-cumulative (i.e. for cumulative pref shares, deferred dividends must be paid in arrears);
- May be participating or non-participating (i.e. for non-participating pref shares, holders have no or limited rights to a company's profits, and capital above the stated dividend and initial capital invested, even in the event of a wind-up);
- Generally confer limited voting rights (e.g. only in the event that a dividend is in arrears); and
- May have convertible, callable/puttable or other **optionality features**.

The exact features of a preference share issue are detailed in the terms of issue.

1.2 Why issue pref shares?

Capital raised via the issuance of pref shares is generally more costly than capital raised via ordinary debt, because preference dividends are not deductible as an expense and Secondary Tax on Companies (STC) is levied (although STC credits, where they exist, could reduce the total cost.

In addition, to diversifying their capital base, pref-share issuers also achieve flexibility since:

- Pref-share issuance is a tax efficient means of raising capital to purchase ordinary shares in an acquisition;
- Dividend payments may be deferred or 'skipped' altogether, if the shares are non-cumulative, as is the case for SA banks. However, Fitch² argues that for banks in general, the issuance of non-cumulative pref shares does not allow real flexibility in deferring or skipping dividends in practice, due to the adverse effects such an event would have on investor/client confidence);
- Dividends are prime-linked or fixed and investors therefore have limited exposure (if any) in equity-upside from a dividend perspective;
- Pref-share investors add a layer of loss absorption after ordinary equity-holders; and

Hybrid instruments combine both equitylike and debt-like features

Prefs are highly flexible instruments and can be structured to suit both issuers and investors

Pref issuers can fix their funding costs or link them to prime

 [&]quot;Moody's Tool Kit - A Framework for Assessing Hybrid Securities", by Moody's Investors Service (Global Credit Research), December 1999

^{2. &}quot;Bank Hybrid and Preferred Securities: Evaluating their Role in Capital Analysis", by FitchRatings (Banks), July 2005

If structured correctly, issuing pref shares does not increase the leverage of the issuer.

1.3 Why buy pref shares?

On the flip side of the coin, investors looking to diversify their asset base may wish to invest in debtlike equity, that is, to receive dividends that are fixed or linked to interest rates. In doing so, investors:

- Receive dividends that are non-taxable (and, where applicable, receive STC credits);
- Have some, albeit limited, capital-upside through capital gains of the pref share; and
- Hold an asset that is generally less subordinated than ordinary equity, does not dilute the earnings of ordinary equity and receives a dividend before ordinary equity.

1.4 Listed pref shares

Locally issued pref shares are generally listed on the JSE. Hence, volumes traded, market caps and issue sizes are generally available on I-Net Bridge, Reuters and Bloomberg. However, large volumes of pref shares are also traded OTC (from private placements or employee benefit schemes, as in the case of Altron, for instance), so that publicly available trading data should be treated as indicative.

TABLE 1: HISTORICAL ISSUANCE SCHEDULE

Prior to 2002	2002	2003	2004	2005 to date
AECI; African and Overseas Enterprises; Altron Anglo Rand Holdings; Barloworld Brian Porter Holdings; Caxton Publishers Cullinan Holdings; Dorbyl; ELB Group; Edcon Group Foschini; Liberty Holdings; Nampak; Reunert Rex Trueform; Shoprite Holdings Standard Bank (fixed dividend); Wooltru	Nedbank	Investec	AngloPlatinum FirstRand PSG Finance Sasfin Bank Standard Bank	African Bank FirstRand Investec Steinhoff Grindrod; PSG*; Massmart*; Capitec*

Sources: I-Net Bridge, JSE

Pref-share issuance in SA prior to Nedbank's issue in November 2002 was generally characterised by fixed rate (of the face value) dividends (Tables 1 and 2). However, recent issuance, which has been dominated by the banking sector, is characterised by dividends that are linked to prime (i.e. a fixed percentage of prime). The liquidities of more recent pref share issues are better (refer to *Liquidity Rankings* on page 9) and thus much of the price analytics discussed later will refer to these liquid, 'straight' (non-callable, non-convertible, perpetual) pref shares.

1.5 Credit considerations

The offshore pref-share market is bigger (by market capitalisation) and more liquid than the local prefshare market. To date, none of the pref shares issued locally have been explicitly rated by rating agencies. Nevertheless, should companies begin issuing in greater numbers, credit ratings may be sought to secure better funding. Moody's and Fitch³ provide in-depth analyses on hybrid credit by ranking hybrids along a debt-equity continuum. They emphasise, however, that in order to arrive at an actual instrument rating, the impact of a particular hybrid on the company's capital and hence cash flow structure needs to be determined. Pref investors benefit by receiving a nontaxable dividend

Pref issuance has been dominated by the banking sector since 2002

* Pendina

Hybrid ratings are contingent on the relative position of hybrids along a debt-equity continuum

^{3.} See, for example:

[&]quot;Moody's Tool Kit - A Framework for Assessing Hybrid Securities", by Moody's Investors Service (Global Credit Research), December 1999

[&]quot;Hybrid Securities: Evaluating the Credit Impact", by Fitch (Corporates/Financial Services), October 2001 "Hybrid Securities Analysis - New Criteria for Adjustment of Financial Ratios to reflect the Issuance of Hybrid Securities", by

Moody's Investors Service (Global Credit Research), November 2003

[&]quot;Refinements to Moody's Tool Kit: Evolutionary, not Revolutionary!", by Moody's Investors Service (Global Credit Research), February 2005

[&]quot;Hybrid Securities: Evaluating the Credit Impact - Revisited", by FitchRatings (Corporate Finance), April 2005; "Bank Hybrid and Preferred Securities: Evaluating their Role in Capital Analysis", by FitchRatings (Banks), July 2005 "Support Ratings and the Rating of Bank Hybrid Capital and Preferred Stock", by FitchRatings (Banks), July 2005

2. A broad look at the South African pref share market

2.1 Listed issuance

Local listed issuance is depicted in Figure 4, which shows the listed average monthly pref shares in circulation on a yearly basis. Issuance has clearly been on the rise, especially since 2002.



FIGURE 4: AVERAGE MONTHLY LISTED ISSUANCE

Sources: I-Net Bridge, JSE

2.2 Sector contribution to issuance

Figures 5 to 8 provide a sectoral break-down of pref-share issuance since 2000.



FIGURE 5: AVERAGE MONTHLY LISTED ISSUANCE - BY SECTOR (1)

The financial sector has been dominant in issuing prefs, followed by the industrial and mining sectors

Issuance has been on the increase since

2002

Sources: I-Net Bridge, JSE

The financial, mining and industrial sectors account for about 98% on average of the listed issuance from 2000 to date (Figure 5). The remaining listed sectors account for the rest of the total issuance. Steinhoff's R650 million issue in June this year and Grindrod's R500 million issue in August, represent the entire issuance in the household goods/textiles and transport (shipping) sectors (Figure 6).

FIGURE 6: AVERAGE MONTHLY LISTED ISSUANCE - BY SECTOR (2)



Steinhoff's and Grindrod's 2005 issues mark the entries of two new sectors in the prefshare market

Source: I-Net Bridge

The changes in sectoral contributions to issuance between 2000 and 2005 are shown in Figures 7 and 8.

FIGURE 7: CONTRIBUTION TO ISSUANCE BY SECTOR: 2000

FIGURE 8: CONTRIBUTION TO ISSUANCE BY SECTOR: 2005 TO DATE



Source: I-Net Bridge

The financial sector has overtaken the industrial sector as the major issuer of pref shares. However, there is also evidence of a growing, albeit small, diversification in issuers across sectors. In order for investors to avoid concentration risk, the pref-share market will need to develop further across sectors. If not, investors may inadvertently incorporate a high degree of potential default correlation in their portfolios by including pref shares as an aggregate 'asset class'.

2.3 Details of listed pref shares

Table 2 details the current listed pref shares, together with their sectors, current market caps and JSE codes. Unless otherwise stated, the pref shares are perpetual, non-participating and confer no voting rights to holders unless dividend payments are deferred.

Sector concentration could skew the dynamics of prefs as an asset class



TABLE 2: LISTED SA PREF SHARES

Issuer	JSE code	Sector	Description	Issue size (no of shares)	Market cap (%)
African Bank Investments	ABLP	Financial	Prime-linked, non-cumulative	5,000,000	1.74%
AECI	AFEP	Industrial	5.5%, cumulative, sterling denominated	3,000,000	0.11%
Anglo Platinum	AMSP	Mining	Part fixed/part variable, cumulative, convertible	39,999,680	22.11%
African and Overseas Enterprises	AOVP	Retail	6%, cumulative, participating	275,000	0.01%
Anglorand	ARHP	Financial	5.5%, cumulative	100,000	0.01%
Allied Electronics Corporation	ATNP	Industrial	Discretionary, cumulative, participating	210,077,270	15.06%
Barloworld	BAWP	Industrial	6%, cumulative	375,000	< 0.01%
Caxton & CTP Publishers	CATP	Media	6%, cumulative, participating	50,000	0.01%
Cullinan	CULP	Leisure and hotels	5.5%, cumulative	500,000	< 0.01%
Dorbyl	DLP1	Construction	5%, cumulative, redeemable	1,250,000	< 0.01%
Dondyn	DLVP	Construction	5.5%, cumulative, redeemable	740,030	< 0.01%
Edgars	ECOP	Retail	6%, cumulative, callable	150,000	< 0.01%
ELB Group	ELRP	Construction	6%, cumulative, redeemable, participating	3,800	< 0.01%
Foschini	FOSP	Retail	6.5%, cumulative	200,000	< 0.01%
FirstRand	FSRP	Financial	Prime-linked, non-cumulative	30,000,000	11.40%
	FSPP	Tinanciai	Prime-linked, non-cumulative	15,000,000	5.62%
Grindrod	GNDP	Transport	Prime-linked, cumulative	5,000,000	1.87%
Investoc	INLP	Financial	Prime-linked, non-cumulative	15,000,000	6.29%
Investee	INPR	T manoiai	Prime-linked, cumulative	22,182,000	8.50%
Liberty Holdings	LBHP	Financial	11%, cumulative, participating	15,000,000	0.06%
Nedcor Group	NBKP	Financial	Prime-linked, non-cumulative	277,298,900	11.57%
	NPKP	Support	6%, cumulative, participating	400,000	< 0.01%
	NPP1	Support	6.5%, cumulative, participating	100,000	< 0.01%
PSG Financial Services	PGFP	Financial	Prime-linked, cumulative	200,000,000	0.69%
Brian Porter Holdings	POTP	Motor	5.5%, cumulative	162,500	< 0.01%
Reunert	RLZP	Industrial	5.5%, cumulative	350,000	< 0.01%
Rex Trueform	RTOP	Retail	6%, cumulative	140,000	< 0.01%
Standard Bank	SBKP	Financial	6.5%, cumulative	8,000,000	0.03%
	SBPP	T manoiai	Prime-linked, non-cumulative	30,000,000	12.15%
Sasfin	SFNP	Financial	Prime-linked, non-cumulative	1,000,000	0.36%
Steinhoff	SHFF	Household goods and textiles	Prime-linked, cumulative	6,500,000	2.39%
	SHP1		6%, cumulative	175,000	< 0.01%
Chanaita	SHP2	Detail	5%, cumulative	325,000	< 0.01%
Shoprite	SHP3	Retail	5%, cumulative	225,000	< 0.01%
	SHP4		5%, cumulative	500,000	< 0.01%
14/2 - 14	WLOP	Detail	6%, cumulative	230,000	< 0.01%
vvooitru	WLP1	Retall	6.75%, cumulative	500,000	< 0.01%

Sources: JSE, I-Net Bridge

2.4 Market capitalisations

The average annual market caps for 2000 and 2005 reaffirm the financial sector's current dominance in the pref-share market, from the industrial sector's dominance in 2000. Nevertheless, a degree of diversification is also apparent now, which is expected to increase as more diverse issuers enter the market.

Financial Industrial Mining Household goods/ Retail Transport Other

Sources: I-Net Bridge, JSE

FIGURE 10: AVERAGE SECTOR MARKET CAPITALISATIONS - 2005

FIGURE 9: AVERAGE SECTOR MARKET CAPITALISATIONS - 2000



Sources: I-Net Bridge, JSE

FIGURE 11: AVERAGE MARKET CAPITALISATIONS - INDIVIDUAL ISSUERS



Sources: I-Net Bridge, JSE

More recent pref-share issuance (Figure 11) is generally bigger in terms of the issue size and therefore of greater relative market capitalisation. It therefore appears that more recent pref share issues are more liquid. However, large issue sizes and large market capitalisations may not necessarily reflect high trading volumes. Hence, in order to verify that large-cap pref issues are also traded, we investigated the average volumes traded of individual issues.

It should be noted, however, that when pref shares are included in the employee benefit schemes (as with Altron), or initial private placements work their way into the secondary market, the recorded shares in circulation may vary from year to year. In addition, existing pref issues could be tapped to finance various initiatives (as was the case with Nedbank).

2.5 Individual company volumes traded

The average monthly share volumes traded across pref-share issuers are depicted in Figures 12 to 14. Although more recently issued pref shares generally trade in larger volumes, indicating that **the liquidity of the pref share market as a whole has increased**, absolute volumes traded for most pref shares have tended to decline after issuance, probably due to initial public offering (IPO) and placement activity.



FIGURE 12: AVERAGE MONTHLY VOLUMES TRADED (1)

Source: I-Net Bridge

FIGURE 13: AVERAGE MONTHLY VOLUMES TRADED (2)



Source: I-Net Bridge

FIGURE 14: AVERAGE MONTHLY VOLUMES TRADED (3)



Earlier pref issues traded in smaller volumes

issuance sizes, traded volumes tend to decline after issue dates

Despite higher

Pref liquidity is on the

increase

3. Narrowing the market by liquidity

3.1 Liquidity rankings

The discussions in the previous sections affirm the presence of varying liquidities for pref shares. In the sections that follow, more quantitative approaches are taken in valuing pref shares with the intention of investigating the dynamics of the pref-share market, both independently and in relation to the bond and ordinary stock markets.

To eliminate the effect of illiquidity on the analysis, only a liquid subset of pref shares is used. To that end, we rank pref shares by decreasing liquidity (average market caps) (Table3).

Rank	2001	2002	2003	2004	2005 to date
1	ATNP	ATNP	NBKP	AMSP	AMSP
2	AFEP	NBKP	ATNP	SBPP	SBPP
3	LBHP	AFEP	INLP	NBKP	ATNP
4	SBKP	LBHP	AFEP	FSRP	NBKP
5	ARHP	SBKP	LBHP	ATNP	FSRP
6	DLP1	ARHP	SBKP	INLP	INPR
7	AOVP	AOVP	AOVP	PGFP	INLP
8	DLVP	DLP1	DLP1	SFNP	SHFF
9	CATP	WLP1	ARHP	AFEP	GNDP
10	WLP1	CATP	WLP1	LBHP	ABLP
No 1 market cap (Rm)	1,516	1,549	2,364	4,339	5,143
No 10 market cap (Rm)	0.7	0.7	0.8	19	438

TABLE 3: PREF SHARE LIQUIDITY RANKINGS - BY AVERAGE ANNUAL MARKET CAPS

Sources: Standard Bank Group, I-Net Bridge

The liquidities of both the first and tenth-ranked pref shares show an increasing trend in time, indicating a generally increasing base, off which liquidity is measured.

For pricing consistency, only liquid, variable-rate (prime-linked), non-convertible, non-callable, perpetual pref shares are investigated further. Hence, the liquid Anglo Platinum (AMSP) and Altron (ATNP) pref shares, which have fixed-rate dividends and/or convertibility features, are excluded from most of the subsequent analysis (refer to pref share details in Table 2).

4. Price dynamics of perpetual, prime-linked, pref shares

4.1 Basic pricing

In pricing non-callable, non-convertible, perpetual pref shares with prime-linked (at a fixed percentage) dividends, the following assumptions are made:

- Prime remains fixed at issue levels (or a fixed-level, long-term view on prime can be used);
- Dividends are paid semi-annually;
- The next dividend date is exactly six months after the last dividend date; and
- There are no ex-dividend periods (although the pricing formula can be adapted for these).

Discounting the expected cash flows to the current price using annuity formulas⁴ and taking the limit as the number of cash flows tend to infinity (for a perpetual pref share), gives the **yield of the pref share** as a function of its price as follows:

Yield = $r \times Prime \times issue price/current price$

where *r* is the pref's 'dividend rate' (i.e. the percentage of prime paid). The yield on the pref share therefore represents both a **discounting rate** (used to present-value future expected cash flows) and **the dividend yield** (or running yield in fixed income parlance) of the pref share at any given time.

By dividing the yield at any point by prime, the yield or return due to income (over roughly a year) of the pref can be interpreted as the **percentage of prime expected to be received**. We will use both *yield* and *percentage of prime expected* interchangeably, as a measure of pref-share value.

Strictly speaking, the above formula applies at dividend dates only; however, it is easy to generalise for all valuation dates (by present-valuing from the next dividend date to the valuation date).

Given the above formula, the price dynamics of perpetual prime-linked pref shares can be investigated. In doing so, it is assumed that only one driver of the yield (and, hence, price) at a time is varied, with all other price/yield drivers kept fixed.

4.2 Supply-demand dynamics

Table 4 summarises the effect on market supply and demand, as well as the direct effect on the yield of a pref share, of various market price-drivers.

TABLE 4: PRICE/YIELD I	DYNAMICS OF	PREF	SHARES
------------------------	-------------	------	--------

	% of prime in dividend increases (decreases) ¹	Increase in prime	Decrease in prime	Expectation for prime to increase	Expectation for prime to decrease
Direct effect on yield ²	Increase (decrease)	Increase	Decrease	-	-
Effect on demand ³	Increase	Increase	Decrease	Increase	Decrease
Effect on supply ⁴	-	Decrease	Increase	Decrease	Increase

Source: Standard Bank Group

Notes:

 Since dividend rate (as a percentage of prime) is fixed at the date of issue, this is a relative effect arising only in the context of a new issue coming to the market at a higher (or lower) percentage of prime. Of course, all things being equal, such an event is unlikely as it would increase the cost of capital of the issuer above accepted market levels. This point merely illustrates the relationship of the yield on the dividend paid.

2. Direct effect implies that price remains constant.

3. Assumes investors seek to maximise returns.

4. Assumes issuers seek to minimise costs.

4. "The Bond and Money Markets - Strategy, Trading, Analysis" by Moorad Choudhry (Butterworth-Heinemann, 2002)

Projected future cash flows are discounted in order to price prefs

The yield on a pref represents both a discounting rate and its dividend yield

> Market dynamics hinge around the prime lending rate

As an illustration, if the market expects **prime to increase** in the near future, demand for pref shares could be assumed to increase as investors sought **higher pref share yields** that are prime-linked, as opposed to equity, all things being equal. However, issuers would probably prefer **not to issue pref shares** at such times (unless they could issue at sufficiently low percentages of prime — see *Competitive Pricing*), as the high levels of prime tend to **increase their cost of capital**.

Market supply-demand dynamics generally imply there is a 'natural' market-related price at which supply and demand forces are in equilibrium, or the asset risk and return dynamics for both the issuer and investor are balanced.

4.3 Competitive pricing

Market supply-demand and pricing dynamics aside, there is also the added dimension of competitive pricing, which we illustrate by means of an example:

Assuming there are no credit reasons for a new issuer to issue at a 'spread', the dividend rate, r (as a percentage of prime), that a new pref share must have for its yield to be in sync with a comparable existing pref share yield is:

r = dividend rate of existing issue x issue price of existing issue / current price of existing issue

This is because if the new pref share were issued with a higher dividend rate, the prices of other comparable pref shares would decline as investors sold them in order to buy the relatively 'better' new issue. This would occur until equilibrium is re-established.

4.4 Liquidity

Market-equilibrium-driven arguments for price dynamics are contingent on there being sufficient liquidity to allow for continuous trading and to contain bid-ask spreads. As was discussed earlier, pref liquidity is on the increase but is still low relative to the bond and (ordinary) equity markets. Therefore, some anomalies in pricing dynamics could persist until liquidity reaches higher levels.

4.5 Debt or equity?

As hybrids, pref shares have certain debt-like and certain equity-like features. Furthermore, these features may become more or less apparent depending on prevailing macroeconomic conditions. Table 5 summarises some of these equity vs debt-like characteristics.

TABLE 5: EQUITY- AND DEBT-LIKE CHARACTERISTICS OF PREFS

Capital	Dividend	Maturity	Sensitivity of dividend to interest rates	Risk of default
No capital redemption	Increases with prime	Perpetual	Prefs take precedence over ordinary equity	Variable
Equity-like	Debt-like (e.g. FRN)	Equity-like	Debt-like	Equity-like

Source: Standard Bank Group

In a high interest rate environment, pref-share dividends are more secure than ordinary dividends. This characteristic is more debt-like (interest payments are fixed in time) than equity-like (dividends can be skipped or delayed) in nature. Further, during a low interest rate environment, which would generally be supportive of equity, pref-share dividends may be smaller (given their link to the prime lending rate) than ordinary dividends, again rendering them more debt-like than equity-like.

Nevertheless, the exposure of a pref holder to an outright default, particularly in a high interest rate environment, would be more in-line with equity exposure than with debt exposure, therefore rendering pref-share behaviour more equity-like with respect to default risk exposure.

The market-

contingent on

benefits

dividend vs price

determined price equilibrium is

High pref prices could dampen the percentages of prime at which new prefs are issued

Prefs can be taken to exhibit debt or equity-like behaviour

5. The dynamics of the liquid SA perpetual pref share market

In this section, we investigate the historical behaviour of the liquid, non-callable, non-convertible prefshare market identified in the section on liquidity.

As discussed previously, we follow a 'discounting future cash flows' approach in valuing pref shares with prime-linked dividends and assume that, at each valuation date:

- The forecast for prime is flat; and
- Dividends are semi-annual and occur at semi- annual intervals from the next dividend date.

5.1 The evolution of pref yields

Given (all-in or dirty) market prices, we can derive implied percentages of prime expected (yields) for liquid pref shares, which allow us to:

- Compare potential (in the sense that actual outcomes are contingent on actual developments in prime) yields of different pref shares; and
- Track the changes in the potential yields of the same pref share over time.

These derived yields therefore represent the **market expectation of dividends as a percentage of prime (or, dividend yields)** at each point in time, as they are captured by the price. The inherent assumptions contained in the price are that each pref share will pay dividend, which will accrue interest over six months at the prevailing prime rate. Insofar as the actual accrual periods and prime differ, the derived yields and actual dividend yields will also differ.

FIGURE 15: YIELD TIME SERIES FOR LIQUID PREFS vs PRIME RATE AND INFLATION



Sources: Standard Bank Group, JSE, I-Net Bridge

The time series of pref yields illustrated in Figure 15 show that:

- As prime decreased in response to declining year-on-year (y/y) inflation (CPIX), the implied percentages of prime expected by holding pref shares also trended downwards; and
- Newer pref share issues (Standard Bank, FirstRand, PSG, Investec and Steinhoff) have exhibited more stable yields.

Certainly, greater stability in yields is indicative of higher liquidity and the associated ease of price discovery. Although there is still limited credit-diversification across liquid pref shares at the present time, Figure 15 shows that the market appears to have settled into natural price levels.

Bank credit has benefited most from demand for prefs

Pref yields can be used to compare performance

Pref yields have trended lower with prime

5.2 Reality check?

Although the declining historical yields illustrated in Figure 15 are consistent with declining interest rates (prime), pref and bond yields have come under further downward pressure as a result of increased demand. The corresponding increases in the prices of pref shares occurred **despite the prime lending rate having trended lower over the period.** Since pref share dividends are prime-linked, lower prime implies lower dividends and it might therefore, be expected that pref share prices would fall with decreasing prime on the back of diminishing demand. Hence, Figure 15 illustrates that:

- Pref share yields have tracked trends in bond yields indicating evidence of saturation in the bond market and substitution effects between the two markets;
- The market believes prime has bottomed; and
- Investors are using pref shares to achieve an after-tax return.

Increasing demand for pref shares is certainly validated by higher observed liquidities (Table 3). Historically, such demand may have been motivated by the search for capital gains in a low interest rate environment (although whether this is indeed the case will be investigated further in the next section) and saturation in the bond market. Nevertheless, pref prices appear to have stabilised.

5.3 Break-even dividends

In deriving pref-share yields, the assumption that prime remains fixed at the valuation level suggests that the anticipated yield from holding a pref share may turn out to be very different from the yield obtained. We illustrate this in Figure 16 by constructing **break-even time series** for liquid pref shares, which indicate the percentage prime rate required in the dividend, in order for the yields of the prefs at each point in time to equal their initial yields (i.e. the yields at issue).

FIGURE 16: BREAK-EVEN DIVIDEND RATES FOR LIQUID PREF SHARES



Demand for prefs may be due to their being used to achieve an after-tax return

Prefs issued before 2004 would require higher dividend rates (as a percentage of prime) to break-even with initial expectations

Sources: Standard Bank Group, JSE, I-Net Bridge

In order for the pref shares that were issued when prime was high to break-even with holders' initial expectations, their dividend rates would currently have to be about 130% (of current prime)! This further illustrates that recent (since at least 2002) high demand for pref shares irrespective of declining interest rates may be overdone. Tax considerations aside, **should issuance in pref shares continue** and interest rates remain low (or even decline further), pref share **prices may be in for a downward correction.**

In the following section, we look at some liquid pref shares on a case-by-case basis. We compare pref-share yields with the yields to maturity of conventional bonds and pref-share prices with the prices of ordinary shares.

In the final section, we compare aggregate pref share vs bond vs equity performance by considering the returns on indices comprising each asset class separately (assuming that tax considerations are equivalent across all assets).

Prefs may be due a downward correction if tax-motivated demand saturates

6. Case studies

6.1 Nedbank

Except for the yield weakening that occurred around the time of the BoE acquisition, Nedbank's bond yields and pref share yields have tracked prime downwards in tandem (Figure 17).

FIGURE 17: BOND YTMS vs PREF SHARE YIELDS



Demand has supported both bond and pref yields

Sources: Standard Bank Group, JSE

TABLE 6: BOND vs PREF SHARE BENEFITS TO INVESTORS

	Issue date	Coupon/divi	Running yield	Dividend yield	
NED1	Sep-01	11.30%	10.93%	-	
NED2	Jul-02	13.15%	12.25%	-	
NBKP	Nov-02	75% of prime	-	6.70%	

Sources: BESA, Standard Bank Group

The lower pref dividend yield relative to bond running yields is partly due to low prime and strong demand for prefs. However, the discrepancy may also be slightly misleading as running yields are pretax, whereas dividend yields are post-tax.

The trends in pref and ordinary share prices are similar (Figure 18), but with pref shares showing a slight loss year-to-date (ytd) ex-dividend, as opposed to the 16% return on ordinary shares exdividend, over the same period.

FIGURE 18: ZAR SHARE PRICES



Prefs have followed the trend but not the upside in Nedbank's ordinary share price

Sources: Reuters, Bloomberg, I-Net Bridge

6.2 Investec

Again, pref share yields tracked prime and conventional bond yields, which moved downward with interest rates (and strong bond market demand) from early 2004.



High market prices allowed the INPR to be issued at a lower percentages of prime

Sources: Standard Bank Group, JSE

TABLE 7: BOND vs PREF SHARE BENEFITS TO INVESTORS

	Issue date	Coupon/divi	Running yield	Dividend yield
IV01	Jun-00	16.00%	12.06%	-
IV02	Mar-03	12.55%	11.52%	-
INLP	Aug-03	75% of prime	-	6.81%
INPR	Feb-05	67% of prime	-	6.89%

Sources: BESA, Standard Bank Group

Despite the decrease in prime between the issuance of the INLP and INPR, the establishment of the market and strong demand allowed a smaller dividend rate (67% of prime) in the INPR's issue, which would have decreased the cost of capital of the INPR.

Nevertheless, market forces appear to have pushed the price of the INPR down in order to normalise its yield (Figures 19 and 20). Although the price trends for pref and ordinary shares are similar, the return on ordinary shares is much higher (about 32% ytd).

FIGURE 20: ZAR SHARE PRICES



Ordinary share capital gains outstripped pref-share capital gains over the same period

Ordinary share price

Sources: Reuters, Bloomberg, I-Net Bridge

6.3 Standard Bank

Standard Bank has issued several bonds and one prime-linked pref share.



FIGURE 21: BOND YTMS vs PREF SHARE YIELDS

Sources: Standard Bank Group, JSE

TABLE 8: BOND vs PREF SHARE BENEFITS TO INVESTORS

	Issue date	Coupon/divi	Running yield	Dividend yield
SBK1	May-00	15.50%	matured	-
SBK2	Nov-00	13.75%	13.59%	-
SBK3	Oct-01	11.25%	10.45%	-
SBPP	Jul-04	70% of prime	-	6.68%
SBK5	Nov-04	9.50%	9.19%	-
SBS1	Nov-04	9.00%	8.80%	-
SBK6	Feb-05	7.70%	7.72%	-
SBS2	Apr-05	8.33%	8.26%	-
SBK7	May-05	9.63%	9.27%	-

Sources: BESA, Standard Bank Group

The dividend yield on Standard Bank's pref share is smaller than the running yields of the bonds, as is the return on the pref share (ytd), as opposed to ordinary equity (over the same period).



FIGURE 22: ZAR SHARE PRICES

Standard Bank's ordinary shares returned about 68% from July 2004,as opposed to about 10% returned by the pref share over the same period (both exdividend)

Sources: Reuters, Bloomberg, I-Net Bridge

The SBPP yield has followed the trend of other prefs and is below both the ytms and running yields of Standard Bank's bond issues

6.4 FirstRand

FirstRand's more recent 68% of prime pref share has traded at a relatively flat yield below FirstRand's FRB01 yield. However, this is in-line with the trend in pref share yields in general over the same period.



FirstRand issued its pref share at a time when pref yields had stabilised

Sources: Standard Bank Group, JSE

TABLE 9: BOND vs PREF SHARE BENEFITS TO INVESTORS

	Issue date	Coupon/divi	Running yield	Dividend yield
FRB01	Mar-04	13.00%	11.13%	-
FSRP	Nov-04	68% of prime	-	6.82%

Sources: BESA, Standard Bank Group

FirstRand issued the FRB01 at a premium of R111.34378 per R100 face value, thus containing the cost of capital at issue, despite the high coupon of 13%.

Despite a higher pref share base-price and narrow trading range, ordinary equity provided a (positive) capital gain (ex-dividend) as opposed to the pref's capital loss ytd.

FIGURE 24: ZAR SHARE PRICES



High demand for pref shares coupled with low dividend and prime rates would have helped contain the cost of capital of FirstRand's pref share issue

Sources: Reuters, Bloomberg, I-Net Bridge

6.5 African Bank

African Bank raised capital using a pref share issue (in March 2005). Trading data is limited and longer-term inference is difficult to justify. We include it, nevertheless, if only for the sake of completeness.



FIGURE 25: BOND YTMS vs PREF SHARE YIELDS

Sources: Standard Bank Group, JSE

TABLE 10: BOND vs PREF SHARE BENEFITS TO INVESTORS

	Issue date	Coupon/divi	Running yield	Dividend yield
ABL2	Sep-03	11.50%	11.11%	-
ABL3	Jul-04	11.75%	11.16%	-
ABLP	Mar-05	69% of prime	-	7.50%

Sources: Reuters, Standard Bank Group

Losses on the pref share return for the horizon spanning the issue date to end September may be attributed to price compression in the pref share, as investors may have shifted to higher yielding ordinary shares (the ABL share has not suffered the same fate as its pref recently) or the African Bank bonds.

FIGURE 26: ZAR SHARE PRICES



The negative return on the pref share from its issue date may be due to investors switching into ordinary ABL shares and/or bonds

African Banks' prefshare price yield

history is very short

Sources: Reuters, Bloomberg, I-Net Bridge

6.6 Steinhoff

Steinhoff was the first non-financial company (before Grindrod and Massmart's pending issue) to have issued relatively liquid preference shares in the recent past (Table 3). We therefore include the SHFF to obtain a non-banking perspective on pref-share characteristics, despite its short price history (since June 2005). Although no dividend has been paid, we calculate the pref share's yield, assuming the first dividend will be paid six months after issue (i.e. on 15 December) and semi-annually thereafter.



Steinhoff's pref share yield was set at 75% of prime

FIGURE 27: BOND YTMS vs PREF SHARE YIELDS

Sources: Standard Bank Group, JSE

TABLE 11: BOND vs PREF COSTS TO ISSUER AND BENEFITS TO INVESTORS

	Issue date	Coupon/divi	Running yield	Dividend yield
SHF01	Dec-03	10.00%	9.67%	-
SHFF	Jun-05	75% of prime	-	7.80%

Sources: Reuters, Standard Bank Group

Steinhoff's pref share is currently yielding a small positive return, as opposed to the 33% capital gain in the ordinary share price over the same period. However, price history is too short to infer any long term trend at this point.

FIGURE 28: ZAR SHARE PRICES



The small return in Steinhoff's pref share is too soon after issue to infer a trend

Sources: Reuters, Bloomberg, I-Net Bridge

7. Preference shares as an asset class

The previous sections have highlighted certain points regarding the behaviour of perpetual, primelinked preference shares. From the subset of liquid issues investigated, it can be inferred that:

- Pref-share yields have trended downward and currently have smaller (dividend) yields than both the running yields and yields to maturity of the corresponding (same issuer) bonds;
- Pref shares returned less on an ex-dividend basis than ordinary equity on a year-to-date basis (Nedbank) or, if the pref shares were issued in 2005, from the date of issue; and
- Unless credit considerations dictated otherwise, more recent pref shares were issued at smaller dividend rates (as a percentage of prime).

In a low and/or declining interest rate environment, issuers raising capital via pref shares can achieve potentially cheaper **funding that tracks the prime lending rate.** In addition, STC credits can be used to reduce issuers' cost of capital. Investors, on the other hand, can enjoy a **tax benefit** and receive a **prime-linked dividend** by investing in pref shares, as opposed to taxable interest (bond coupons). Furthermore, STC credits can also be used by investors, where applicable.

7.1 Price indices

Figure 29 represents the benchmark market bond and equity indices (ALBI and ALSI, respectively), together with a constructed pref share price index (referred to here as the PREFI⁵).

However, the post-tax nature of pref and ordinary dividends as opposed to the pre-tax nature of bond coupon payments makes comparing the three asset classes difficult. Varying tax rates and the compounding effect of reinvesting interest received in additional interest-bearing instruments over a period of time further complicates the problem of appropriately comparing bond, pref and stock total returns.

Nevertheless, since capital gains are taxed equivalently across assets, and coupon (or dividend) reinvestments) account for a smaller proportion of aggregate investment value, we assume that the tax implications in determining horizon total returns can be ignored.



FIGURE 29: CONSTRUCTED PREF SHARE INDEX vs ALBI AND ALSI

Sources: Standard Bank Group, JSE, BESA

Tax considerations aside, it is evident there is quite a high degree of correlation between the price trends of the three asset classes, which reinforce the assertion that, generally speaking:

 Pref shares can be used as a substitute for equity when a prime-linked dividend is sought; and Demand for prefs has contributed to keeping pref yields relatively low

Issuers have tax and regulatory capital benefits from issuing prefs

Investors also have potential tax and prime-linked benefits by investing in prefs

^{5.} Price index constructed using daily closing prices as reported by I-Net Bridge. Constituents are listed prefs with non-zero average trading volumes (over a year) for at least three years or part of the liquid pref share subset. Dividends paid are not reinvested or accounted for. The PREFI thus serves as a rough guide for the performance of pref shares as an asset class.

• Pref shares can be used as a **substitute for debt** when tax efficiency is sought.

Figure 30 depicts rolling one-year returns for the ALSI, ALBI and PREFI using price data from January 2000. When prime peaked in mid-2002, equity returns were hardest hit and bonds the least. The perception that pref shares offer a **debt-like layer of protection at times when interest rates are high** (in that dividends are prime-linked and prefs are less subordinated than equity) implied that when prime was at 17%, the losses on pref shares were not as acute as on equity.

However, on the flip side of the coin, the participation in capital gains for (current) low interest rates is not as great for pref shares as for equity.

One year pure equity returns have generally exhibited higher peaks and lower troughs

One-year pure equity

are widest indicating

return distributions

equity is the most relatively risky asset

FIGURE 30: ROLLING ONE YEAR RETURNS ON INDICES vs PRIME



Source: Standard Bank Group

7.2 Return distributions

Figure 31 shows the distribution of the one-year returns depicted in Figure 30.



FIGURE 31: DISTRIBUTIONS OF ONE-YEAR RETURNS

Source: Standard Bank Group

Unsurprisingly, the widest distribution of returns is for the ALSI, indicating that equity has a higher standard deviation of returns and is therefore riskier. By the same token, pref shares, as represented by the PREFI, exhibit **intermediate risk** (between bonds and equity).

The development of the pref share market in SA and the expected subsequent increase in liquidity, should lead to greater pricing transparency and the emergence of well-oiled trading and investment strategies for pref shares, as an independent asset class.

Page 21

$\overline{\mathcal{G}}$

Research — Global

Robert J Van Eyden – (Director – Corporate and Investment Banking) (+27-11-378-7242) robert.vaneyden@standardbank.co.za

Mauricio Paredes

+1-212-407-5033

Corporate and Credit Research

Americas

Denis Parisien +1-305-349-0520 denis.parisien@standardmiami.com

CEEMEA

Francis Beddington +44-20-7815-2706 francis.beddington@standardbank.com Dmitry Shishkin +44-20-7815-3709 dmitry.shishkin@standardbank.com

mauricio.paredes@standardny.com

Jose Bernal +1-305-400-6811 jose.bernal@standardmiami.com

CIS

Omega Hatfield +7-095-783-3833 omega.hatfield@standardbank.com

South Africa

Jason Costa +27-11-378-7220 jason.costa@standardbank.co.za Leigh Cosser +27-11-378-7239 leigh.cosser@standardbank.co.za

Raven Moodley +27-11-378-7222 raven.moodley@standardbank.co.za

Nicolette Roussos +27-11-378-7217 nicolette.roussous@standardbank.co.za Nhlanhla Ntuli +27-11-378-7229 nhlanhla.ntuli@standardbank.co.za

Email amanda.brennan@standardbank.co.za should you wish to be included on our research distribution list.

Analyst certification

The authors certify that: 1) all recommendations and views detailed in this document reflect his/her personal opinion of the financial instrument or market class discussed; and 2) no part of his/her compensation was, is, nor will be, directly (nor indirectly) related to opinion(s) or recommendation(s) expressed in this document.

Disclaimer

This document does not constitute an offer, or the solicitation of an offer for the sale or purchase of any investment, security or to enter into any agreement, or any advice or recommendation to conclude any transaction. This is a commercial communication and has been prepared solely for information purposes. If you are in any doubt about the contents of this document or the information to which this document relates you should obtain independent advice in respect of any information or product detailed in this document, as Standard Bank Group Limited provides no investment, tax or legal advice and makes no representation or warranty about the contents hereof. Whilst every care has been taken in preparing this document, no representation, warranty or undertaking (express or implied) is given and no responsibility or liability is accepted by the Standard Bank Group Limited, its subsidiaries, holding companies or affiliates as to the accuracy or completeness of the information contained herein. All opinions and estimates contained in this document may be changed after publication at any time without notice. Members of the Standard Bank Group Limited, their directors, officers and employees may have a long or short position in currencies or securities mentioned in this document or related investments, and may add to, dispose of or effect transactions in such currencies, securities or investments for their own account and may perform or seek to perform advisory or banking services in relation thereto. No liability is accepted whatsoever for any direct, indirect, or consequential loss arising from the use of this document. This document is not intended for the use of private individuals. This document must not be acted on or relied on by persons who are private individuals. Any information to which this document relates is only available to persons other than private individuals and will be engaged in only with such persons. In European Union countries this document has been issued to persons who are investment professionals (or equivalent) in their home jurisdictions. Neither this document nor any copy of it nor any statement herein may be taken or transmitted into the United States or distributed, directly or indirectly, in the United States or to any U.S. person except where those U.S. persons are, or are believed to be, qualified institutions acting in their capacity as holders of fiduciary accounts for the benefit or account of non U.S. persons. The distribution of this document in certain jurisdictions may be restricted by law. Persons into whose possession this document comes are required by the Standard Bank Group Limited to inform themselves about and to observe any restrictions that will be of effect. You are to rely on your own independent appraisal of and investigations into (a) the condition, creditworthiness, affairs, status and nature of any issuer or obligor referred to and (b) all other matters and things contemplated by this document. This document has been sent to you for your information and may not be reproduced or redistributed to any other person. By accepting this document, you agree to be bound by the foregoing limitations. Unauthorised use or disclosure of this document is strictly prohibited. Copyright 2005 Standard Bank Group. All rights reserved.

The Standard Bank of South Africa Limited (Reg.No.1962/000738/06). Authorised Financial Services Provider.