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Mergers and Acquisitions Terence Kawaja

# Sovereign Issuer's Quarterly: Fourth Quarter 1995

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### INTRODUCTION AND SUMMARY

### Economic, Policy and Market Trends

Growth prospects have improved in Japan, but growth has slowed in core European economies and is slowing in the United States. As a result, Fed easing resumed as indications that German fiscal policy will become only modestly stimulative imply another Bundesbank discount rate cut. On the other hand, the Bank of Japan's cut in the official discount rate to 0.5% most likely marks the limit of Bank of Japan's easing.

### **Equity Market Trends**

As the supply of funds to the equity market has dwarfed new issuance volumes, the broad market indices have roared to all-time highs. Equity issuance volumes have been very large, after getting off to a slow start in 1995. Issuance trends can be identified as follows: (1) Internet-related initial public offerings performed in stellar fashion; (2) equity carve-outs continued to be very popular; (3) privatizations returned with a vengeance, as the Indonesians, the Italians, the Spanish, the Canadians and the French made many successful offerings; (4) equity-linked security issuance witnessed more non-U.S. issuers than in the past; and (5) several U.S. issuers capitalized on the lack of supply of equity-linked securities by offering nontraditional or innovative security structures to the market.

### Corporate Equity Derivative Trends

With the growth in stock-for-stock acquisitions and the significant number of initial public offerings over the past few years, many corporations, investment firms and individuals own common stock and/or warrant positions that are subject to legal restrictions (Rules 144 and 145), which limit their ability to sell or hedge their holdings. Nevertheless, such restricted stock — known as Legend or Control Stock — can still be hedged or sold, provided that certain conditions are met.

### Merger and Acquisition Trends

Mergers and acquisition (M&A) activity reached a seven-year peak in the third quarter — exceeding a volume of \$400 billion over the last 12 months. Mega-transactions played a key role in this activity, as two-thirds of the quarterly volume was generated by 24 billion-dollar deals. Media, financial services and health care continued to dominate M&A activity. Also, international activity continued to set records — exceeding \$260 billion in announced deals in the first nine months. However, this activity is not exclusively U.S. market-based, given that only 20% of the international volume was generated by cross-border deals in which a U.S. company was involved. Overall, stock-for-stock transactions represented approximately one half of the volume. Notably, financial buyers largely were absent from the M&A market, and hostile deals represented less than 5% of total activity.

### Fixed-Income Market Trends

Relatively low long-term Treasury rates and corporate spread levels suggest that the long end of the yield curve provides value for issuers. Although the long-term Treasury rate may yet improve somewhat, when compared with a ten-year issuance that is coupled with a 20-year refinancing thereafter, a 30-year issuance still provides relative value. This is because 20-year borrowing rates ten years from now are likely to be relatively high, based on data from the last 25 years.

The historically low interest rate environment and strong demand for long-duration and high-convexity bonds prompted several corporations to issue 100-year bonds in the third quarter. However, this trend currently is on hold, as the Treasury announced a proposal that included the elimination of tax deductibility of interest for bonds with maturities greater than 40 years.

1

The make-whole call provision that allows issuers to redeem debt at a price that depends on Treasuries is being included in many new corporate debt offerings in order to enhance strategic flexibility at no cost.

### Liability Management Trends

The flat shape of the Treasury yield curve has created attractive opportunities for issuers to extend the maturity of their debt portfolios in a cost-effective fashion through a variety of strategies, including Treasury forward hedges, prefund and defeasance, prefund and tender, and exchange offer transactions.

### Fixed-Income Derivative Trends

Given the current flat yield curve and the relatively high implied volatility levels in the swap market, issuers can monetize the call feature of their outstanding debt through the following strategies: (1) calling the bond and refunding it at the current yield level; or (2) selling a swaption.

### Analysis of the Quarter

Issuers can judge the relative value of where in the maturity spectrum they should be funding themselves by using various techniques, including: (1) breakeven analysis; (2) simulation analysis; and (3) theoretical modeling of the yield curve. During the recent 100-year bond issuance spell, issuers were able to issue at better yields than theoretical model yields. This was due to increased investor demand for century bonds, which offered investors a relatively cheap way to buy convexity as a possible hedge for their mortgage holdings, which have negative convexity.

### ECONOMIC, POLICY AND MARKET TRENDS

### Question 1

What is the economic growth outlook for major industrialized countries?

### Answer 1

- Growth prospects have improved in Japan, but growth has slowed in core European economies and is slowing in the United States. The second-half U.S. expansion was not powerful enough to boost inflationary pressures, and U.S. growth is slowing toward a below-trend pace for early 1996.
- European growth has slowed in core countries. As a result, additional policy stimulus probably in the form of lower Bundesbank interest rates will be needed to permit a mild pickup of growth back to trend next year in Germany. In France, fiscal restraint and high real interest rates likely will keep growth below par in 1996.
- In Japan, the impact of the yen's weakening, combined with new monetary and fiscal stimulus, will help to rekindle growth in 1996; however, in the absence of structural reform, the longer-term outlook is less favorable.

### Question 2

What are the economic policy prospects for major industrialized countries?

### Answer 2

- After five months on hold, Fed easing has resumed, and significant new rate cuts are expected during the next six to nine months, reflecting subpar growth and continued abatement of inflation pressures.
- With German economic growth stagnating and increased concerns about downside risks for the German and European economies, the Bundesbank has cut its discount rate to 3%, paving the way for continued monetary relaxation. Favorable inflation, a strong Deutschemark and a mild recovery suggest that interest rates will be kept low in 1996. In France, new Government resolve to tighten fiscal policy has buoyed the franc and should permit lower short-term interest rates near term. However, further fiscal consolidation will be needed to sustain recently improved market sentiment during 1996. In the United Kingdom, slowing economic growth and improving inflation prospects suggest that base rates have peaked. Provided that the November budget is not too expansionary, U.K. interest rates likely will decline in the first half of 1996.

The Bank of Japan's cut in the official discount rate to 0.50% most likely marks the limit of its easing. Japan's recently announced fiscal stimulus package was larger than expected. Despite initial market skepticism, the new spending initiatives should boost 1996 growth. However, recent political shifts likely have ruled out any serious deregulatory efforts that could dent Japan's structural balance of payments surplus, and no solution is likely anytime soon.

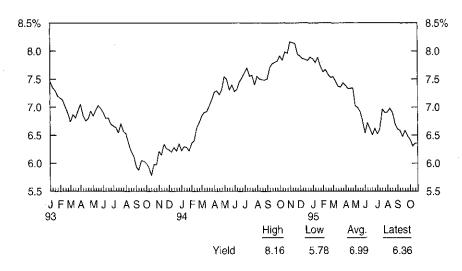
### Question 3

### Answer 3

How have the major markets performed in the third quarter of 1995?

• In sympathy with declining Treasury yields, all major asset classes exhibited modest to strong total rates of return in the third quarter of 1995. In particular, the S&P 500 stole the show (see Figures 1 and 2).

Figure 1. 30-Year U.S. Treasury Yields, 3 Jan 93 - 27 Oct 95



Source: Salomon Brothers Inc.

| Asset Class      | 30 95 | 2Q 95 | 10 95  | 40 94  | 30 94 |
|------------------|-------|-------|--------|--------|-------|
| Treasury         | 1.68% | 6.21% | 4.68%  | 0.34%  | 0.35% |
| Corporate        | 2.23  | 7.28  | 5.73   | 0.43   | 0.68  |
| Mortgage         | 2.02  | 5.18  | 5.27   | 0.44   | 0.79  |
| High Yield       | 3.01  | 6.14  | 5.90   | 0.03   | 1.29  |
| Emerging Markets | 6.58  | 22.31 | -11.10 | -8.15  | 14.25 |
| S&P 500          | 7.28% | 8.80% | 9.02%  | -0.74% | 4.15% |

Source: Salomon Brothers Inc.

### Question 4

### What is the near-term market outlook?

### Answer 4

- With U.S. growth slowing, following a stronger third-quarter expansion, U.S. inflation expectations again may improve somewhat. Long-term Treasury yields have fallen below 6.25%, but some additional declines are likely in the coming months as inflation pressures ease, and the budget deal is supportive. However, sustained long-term yield declines significantly below 6% await more conclusive signs that inflation is receding a sign that may not be evident anytime soon.
- Sluggish German growth, low inflation and declining U.S. yields will permit a small decline in Bund yields in the coming months, but some risk premium for the EMU likely will persist in long-maturity German Government bonds. The evolution of EMU prospects will play an increasing role in European relative values during 1996 and could provide for substantial volatility.

- In Japan, only a modest reversal of the recent bond market rally is likely in the next few months, until clear signs emerge that the recent stimulus measures have worked. However, in 1996, with economic acceleration and an end to deflation, yields are likely to rise toward 4.5%.
- The U.S. currency remains underpinned by fundamentals, capital flow trends and prospective policy moves. Nonetheless, significant new dollar strength is not expected soon. In the long term, an expected narrowing of inflation differentials between the key economies should help to boost the U.S. currency, as U.S. price pressures recede, European inflation prospects stabilize and Japanese deflation comes to an end.

| -   |           |                 |                      |  |  |  |  |
|---|-----------|-----------------|----------------------|--|--|--|--|
| Figure 3. Summary of Economic Forecast, 4Q 95 |           |                 |                      |  |  |  |  |
|   | Growth    | Monetary Policy | Fiscal Policy        |  |  |  |  |
| United States                                 | Slowing   | Expansionary    | Expansionary         |  |  |  |  |
| Core Europe <sup>a</sup>                      | Sluggisȟ  | Expansionary    | Modestly Stimulative |  |  |  |  |
| Japan   | Improving | Neutral         | Éxpansionary         |  |  |  |  |

a Includes France, Germany and the Benelux countries.

### EQUITY MARKET TRENDS

The second half of 1995 has been very interesting for the stock market. Against the odds, Alan Greenspan successfully steered the U.S. economy to a "soft landing." With an inverted yield curve pointing to future lower interest rates and corporate America continuing to surprise on the upside with quarterly earnings, the broad market indices have roared to all-time highs. Where now?

**Observation #1.** In December, Salomon Brothers's chief equity strategist David Shulman did an "about face": Despite some misgivings, Dr. Doom turned "more constructive" on the market. Mr. Shulman cited a paradigm shift for the failing of his previous models. The last bear on Wall Street has thrown in the towel.

Observation #2. The supply of funds to the equity market has dwarfed new issuance volumes. Several factors can be attributed to the unprecedented supply of funds to the equity market: (1) cash M&A deals completed since 1990 has totaled approximately \$500 billion and reached an estimated \$190 billion in 1995 alone; (2) dividend payments for the Russell 2000 Index since 1990 have totaled in excess of \$550 billion; and (3) many 401(k) retirement plans have shifted to various mutual fund investments. On the other hand, net supply to the equity market in the form of initial public offerings and other primary share issuance less stock repurchases has totaled a "mere" \$253 billion since 1990.

**Observation #3.** In December, Treasury Secretary Rubin announced plans for tax reform to deny U.S. corporations tax deductions for certain debt instruments. In addition, the proposals call for a reduction in the level of the dividends-received deduction.

In summary, no one knows where the stock market will go from here with the S&P 500 at approximately 600. Despite his new posture, Mr. Shulman predicts slightly more downside than upside, with a target range for the S&P 500 of 540-640; inflation does not die, it simply lies low. The influx of funds to the market is likely to remain high, but it is difficult to imagine the level of cash M&A deals continuing at the same rate. Finally, Treasury Secretary Rubin's proposed tax reforms will significantly increase the cost of capital for U.S. corporations. Non-U.S. corporations will continue to have access to U.S. equity capital under Rule 144A without the level of disclosure required of U.S. corporations and with the benefit of a much more liberal tax code.

**Equity issuance volumes** have been very large, after getting off to a slow start in the beginning of 1995. New issuance for the year-to-date totals some \$84.0 billion, well in excess of 1994's level of \$60.4 billion. Interestingly, offerings of 100% secondary shares totaled some \$18.6 billion, or 22% of total equity issuance, up from \$8.8 billion (15%) in 1994. Equity offerings by non-U.S. issuers distributed in the United States totaled \$9.1 billion, or 11% of total issuance in 1995, versus \$10.0 billion (9%) in 1994.

<sup>&</sup>lt;sup>1</sup> Sec 1996: Stock Market Bubble or Paradigm Shift?, David Shulman, et al., Salomon Brothers Inc. December 1995.

Figure 4. Total Equity Issuance, a 2Q 94-3Q 95 (Dollars in Billions) 10 95 40 94 20 94 3Q 95 20 95 30 94 \$8.5 \$6.8 \$8.1 Common Stock and Convertibles \$18.3 \$15.0 \$8.7 6.5 4.2 IPOs, Excluding REITs 6.4 6.9 3.8 6.6 IPOs of REITs 0.5 0.2 0.0 0.1 8.0 2.5 Total \$25.2 \$21.8 \$12.5 \$15.1 \$11.8 \$17.2

Sources: Securities Data Co. and Salomon Brothers Inc.

One of the most noticeable issuance trends has been the stellar performance of the Internet-related initial public offerings (see Figure 5). Many of these companies currently trade in excess of 15 times annualized revenues, and many have at least tripled in price since their initial public offerings.

Figure 5. Selected "Small" Internet-Related 1995 IPOs

| Company         | Ticker | Focus | IPO<br>Price | Price<br>18 Dec 95 | Pct.<br>Change | Market<br>Cap<br>(in Millions) | Annualized<br>Last Qtr.<br>Sales<br>(In Milfions) | Price/<br>Sales |
|-----------------|--------|-------|--------------|--------------------|----------------|--------------------------------|---|-----------------|
| Premisys(a)     | PRMS   | Н     | \$16.00      | \$50.75            | 473            | \$1,075                        | \$56.4  | 19.1            |
| UUNET           | UUNT   | Α     | 14.00        | 53.00              | 445            | 2,162                          | 65.6  | 33.0            |
| Spyglass Inc.   | SPYG   | A,S   | 17.00        | 86.00              | 471            | 513                            | 13.2  | 38.9            |
| Netscape Comm   | NSCP   | S     | 28.00        | 130.25             | 368            | 4,802                          | 83.2  | 57.7            |
| Verity Inc.     | VRTY   | S     | 12.00        | 43.50              | 229            | 375                            | 22.0  | 14.8            |
| Performance Sys | PSIX   | Α     | 12.00        | 23.13              | 69             | 656                            | 44.4  | 14.8            |
| Teltrend Inc.   | TLTN   | Н     | 16.00        | 36.38              | 123            | 207                            | 62.1  | 3.3             |

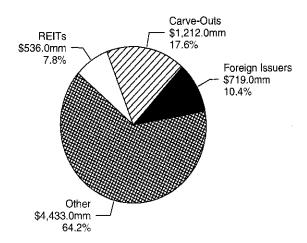
a Stock price reflects two-for-one stock split.

Source: Salomon Brothers Inc.

Several other issuance trends can be identified: (1) equity carve-outs continue to be very popular, with initial public offerings for Intimate Brands, DLJ, Union Pacific Resources, DST Systems, Enserch Exploration and Midwest Express, which were respectively carved out by the following companies: The Limited, Equitable, Union Pacific, Kansas City Southern, Enserch and Kimberly-Clark, and (2) privatizations returned with a vengeance. The privatization calendar was shared by the Indonesians, the Italians, the Spanish, the Canadians and the French. Among the most successful offerings were those of Petro-Canada and Canadian National Railway by the Government of Canada, raising \$257 million and \$528 million in the United States, respectively. The global offering of shares of ENI S.p.A., the Italian state oil and gas concern, represented the largest international initial public offering ever, raising more than \$4 billion for the Italian Government's coffers (see Figure 6).

 $<sup>^{</sup>m a}$  Equity issuance excludes Rule 144A transactions and closed-end investment funds. IPO Initial public offering REIT Real estate investment trust.

IPO Initial Public Offering, A Access, H Hardware, S Software,



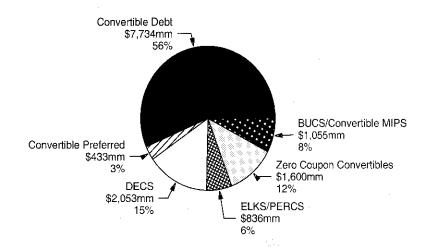
Source: Salomon Brothers Inc.

**Equity-linked security issuance** also witnessed more non-U.S. issuers than the past and more innovations in security structures. However, the convertible market has been starved of product, as issuers have redeemed outstanding securities at a rate greater than the supply of new issues.

Non-U.S. issuers raised more than \$5.3 billion in proceeds during 1995 and represented more than 32% of total equity-linked security distribution in the United States. The largest offerings by non-U.S. issuers came from Mitsubishi Bank (\$2 billion), Roche Holdings (\$766 million), Sandoz (\$609 million) and Grand Metropolitan (\$600 million). Placement of securities under Rule 144A by all issuers fell slightly in the year, from \$2.8 billion in 1994 to \$2.4 billion in 1995. Most U.S. issuers using the Rule 144A format do so for the sake of expediency. On the other hand, many non-U.S. issuers use the 144A format to avoid perceived onerous disclosure requirements required by the Securities and Exchange Commission. As competition for U.S. equity capital increases, there likely will be greater pressure to level the playing field for U.S. and non-U.S. issuers alike by creating a common accounting framework.

Several U.S. issuers have capitalized on the lacking supply of equity-linked securities by offering nontraditional or innovative security structures to the market (see Figure 7). In September, Salomon Brothers lead managed a convertible debenture offering for VLSI Technology that carried an unprecedented 60% conversion premium and an 8.25% coupon. Later that same month, National Semiconductor priced a similar debenture, with a 45% conversion premium and a 6.50% coupon.

Figure 7. Equity-Linked New Issuance by Product Type, Jan 95 - Sep 95 (Dollars in Millions)



Source: Salomon Brothers Inc.

### CORPORATE EQUITY DERIVATIVE TRENDS

With the growth in stock-for-stock acquisitions and the significant number of initial public offerings over the past few years, many corporations, investment firms and individuals own common stock and/or warrant positions that are subject to legal restrictions, which limit their ability to sell or hedge their holdings. The following is excerpted from an upcoming Salomon publication on selling and hedging restricted stock positions.

### What is *Restricted* Stock?

Restricted stock is a general term used to describe shares whose unregistered resale is limited in terms of size, timing and manner of sale by one or more provisions of the Securities Act of 1933 (the "1933 Act").<sup>2</sup> The key factors which restrict resale of shares are the relationship of the stockholder to the issuer (affiliates/control persons), and the means by which the shares were acquired (private placement or stock-for-stock acquisition). The two rules under the 1933 Act that allow the unregistered sale of restricted shares are Rule 144 and Rule 145.

Rule 144 allows unregistered resale of shares acquired in a private placement, as well as shares owned by *affiliates*, persons who are in a control relationship with the issuer, such as the most senior officers, directors and certain shareholders. Because shares acquired in a private placement typically have a legend placed on them regarding their restricted status, they often are referred to as *Legended* stock. Shares owned by affiliates typically are called *Control* stock.

Rule 145 allows the unregistered resale of shares issued to affiliates of the target corporation in certain mergers, consolidations, reclassifications and transfers of assets. The limitations placed on *Rule 145* stock are similar to the Rule 144 restrictions.

### How does Rule 144 limit the sale of common stock?

**Legended Stock**. In general, Legended stock may be sold to the public without an SEC registration statement only if all of the following requirements of Rule 144 are satisfied (we refer to these requirements as the *dribble-out provisions*):

- Adequate current public information is available on the issuer;
- The securities have been held for two years prior to resale;
- The amount of securities sold in any three-month period is limited to the greater of: (1) 1% of the shares outstanding; or (2) the average weekly volume during the four weeks prior to the filing of a notice of sale;
- The securities are sold in unsolicited "brokers' transactions" or directly to a market maker:
- Notice of sale is filed on Form 144 with the SEC as well as the principal exchange on which the issuer's stock is listed; and
- The person filing the notice of sale has a bonafide intention to sell the securities within a reasonable time after filing.

Exceptions to the dribble-out provisions are:

• Legended stock can be sold without satisfying these requirements if the seller is a nonaffiliate (or ceased to be an affiliate at least three months prior to sale) and the securities have been held for at least three years; and

<sup>&</sup>lt;sup>2</sup> "Restricted Stock" is also the term used in Rule 144 for securities we refer to here as "Legended Stock."

• Estates, and beneficiaries thereof, not affiliated with the issuer are not subject to the holding period requirement.

While the dribble-out provisions apply to the public resale of Legended stock, it still is possible to privately place Legended stock (including before the two-year holding period has elapsed). The buyer in a private placement generally will be able to tack the seller's holding period to its own holding period for the Legended stock. For example, a private buyer of Legended stock which has been held for 18 months by the seller will generally only need to hold the stock for another six months before it can be sold to the public under the dribble-out provisions.

Control Stock. Stock purchased by affiliates in the open market or through registered transactions is referred to as Control stock. A seller of Control stock must satisfy all requirements of Rule 144, except for the two-year holding period. However, if the Control stock also is Legended stock because it was acquired through a private placement, the two-year holding period requirement also must be satisfied. Similar to Legended stock, Control stock may be sold in a private placement; however, the buyer may not tack the affiliate's holding period to its own. This means that a new two-year holding period begins on the date of the buyer's purchase.

### How does Rule 145 limit the sale of common stock?

Rule 145 states that stock acquired by affiliates of the target corporation through certain transactions (such as reclassifications, mergers/consolidations, and transfers of assets in which a new or different security is exchanged for the existing security) is subject to certain resale limitations.

The rule allows for the immediate resale of Rule 145 stock, subject to Rule 144 dribble-out provisions (other than the two-year holding period and Notice of Sale requirements). After two years from the acquisition date, if the holder is not an affiliate of the acquirer, Rule 145 stock may be sold without dribble-out restrictions other than the public information requirement. After three years, Rule 145 stock held by a non-affiliate is freely saleable. If the holder of Rule 145 stock is an affiliate of the new company, then the Rule 145 stock is treated as Control stock.

### How do Rules 144 and 145 impact the ability to hedge with equity derivatives?

While Rules 144 and 145 limit the public sale of Legended, Control and Rule 145 stock, they do not necessarily eliminate the possibility of hedging the stock with equity derivatives, such as a collar or swap.<sup>3</sup> The nature and allowable size of any hedging transaction will be case-specific, taking into account the nature of the restrictions limiting an outright sale and the hedging activity contemplated by the derivatives market maker. Affiliates will have additional limitations to consider, including Section 16 disclosure under the Securities Exchange Act of 1934.<sup>4</sup>

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<sup>&</sup>lt;sup>3</sup> A collar locks in the value of an equity investment through the purchase of a put option and sale of a call option. An equity swap allows an investor to pay the total return on their equity investment and receive in exchange the total return of an index (such as the S&P 500 or LIBOR). Both of these strategies are tax-advantaged in the sense that they should not trigger a "sale" of the underlying equity (and thus no capital gains tax event). Stockholders should consult with their own tax counsel regarding their specific situation.

<sup>&</sup>lt;sup>4</sup> Section 16 of the 1934 Act requires the filing of ownership reports by "insiders", defined as holders of more than ten percent of a class of publicly held equity securities and by officers and directors of such issuers. Additionally, Section 16 subjects profits attained via offsetting purchases and sales of the equity securities within a six month period ("short-swing profits") to recapture by the issuer. Finally, Section 16 prohibits insiders from having net short positions in the stock.

| Figure 8. Limitations on Resale of Common Stock |  |   |  |  |  |
|---|--|---|--|--|--|
| Who is the Seller?                              | How was the Stock Acquired?  | Saleability of Stock to Public  |  |  |  |
| Affiliate of the Issuer                         | In a registered stock-for-stock acquisition or merger                      | Control Stock, Subject to Rule<br>144 (except no two year holding<br>requirement).  |  |  |  |
|   | In the open market or in a registered offering without a resale prospectus | Control Stock. Subject to Rule<br>144 (except no two year holding<br>requirement).  |  |  |  |
|   | In a private placement   | Legended and Control Stock.<br>Subject to Rule 144. Must be<br>held for two years before shares<br>can be dribbled out to public.                                     |  |  |  |
|   | In a registered offering with a resale prospectus                          | Freely saleable with delivery of resale prospectus by affiliate and selling broker.   |  |  |  |
| Non-Affiliate                                   | In a registered stock-for-stock acquisition or merger                      | If the holder is an affiliate of the target, subject to Rule 145. Immediately saleable subject to Rule 144 Dribble-Out Provisions. Freely saleable after three years. |  |  |  |
|   | In a private placement   | Legended Stock. Subject to<br>Rule 144. Must be held for two<br>years before shares can be<br>dribbled out to public. Freely<br>saleable after three years.           |  |  |  |
|   | In the open market or in a registered offering                             | Freely saleable.  |  |  |  |

Source: Salomon Brothers Inc.

### MERGER AND ACQUISITION TRENDS

- M&A activity reached a seven-year peak in the third quarter. Domestically, almost 2,000 transactions totaling \$149 billion were announced, representing a 34% increase over the volume in third-quarter 1994 and 75% more than second-quarter 1995. This level brings the volume over the last 12 months to \$409 billion. Two-thirds of the quarterly volume was generated by only 24 billion-dollar deals.
- Media, financial services and health care continued to dominate the activity. Media/telecom deals accounted for \$52 billion of volume, lead by the three network deals: Disney/Capital Cities-ABC, at \$19 billion; Time-Warner/Turner, at \$7 billion; and Westinghouse/CBS, at \$5 billion. The Financial Services sector saw more than \$36 billion of deals driven by continued consolidation in the banking sector. Notable transactions in the quarter included the Chase/Chemical merger (\$10 billion) and the First Chicago/NBD Bancorp deal (\$5 billion). In addition, more than \$12 billion of health care transactions were announced.

| Date<br>Announced | Acquirer/Target                                   | Industry           | Value    |
|-------------------|---|--------------------|----------|
| 31 Jul 95         | Walt Disney Co./Capital Cities/ABC Inc.           | Media              | \$18,837 |
| 28 Aug 95         | Chemical Banking Corp./Chase Manhattan Corp.      | Financial Services | 9,866    |
| 29 Aug 95         | Time Warner Inc./Turner Broadcasting Systems Inc. | Media              | 6,876    |
| 17 Jul 95         | Kimberly-Clark Corp./Scott Paper Co.              | Forest Products    | 6,792    |
| 21 Aug 95         | Pharmacia AB/Upjohn Co.                           | Health Care        | 6,316    |
| 12 Jul 95         | First Chicago Corp./ NBD Bancorp                  | Financial Services | 5,296    |
| 01 Aug 95         | Westinghouse Electric Corp./CBS Inc.              | Media              | 4,971    |
| 14 Aug 95         | PECO Energy Co./PP&L Resources Inc.               | Utility            | 4,327    |
| 02 Aug 95         | Union Pacific Corp./Southern Pacific Rail Corp.   | Transportation     | 4,037    |
| 25 Sep 95         | Baltimore G&E Co./Potomac Electric Power Co.      | Utility .          | 3,074    |

- Source: Investment Dealers' Digest.
- Stock-for-stock transactions represented approximately one half the volume. Another 25% of the deals involved both cash and equity and 25% were all cash. Equity was the predominant choice of currency for the larger deals, since the pure equity transactions which represented one half of the total volume accounted for less than 10% of the total number of deals.
- Financial buyers largely were absent from the M&A market. Only 20 transactions valued at less than \$1 billion were announced by financial buyers, continuing the trend toward heavy strategic-dominated activity.
- Hostile deals represented less than 5% of the total activity. Only 20 unsolicited transactions were announced in the third quarter, which is down from the trend in the first half of 1995.
- International activity continued to set records with over \$85 billion in volume. This pace represents approximately double the level of activity seen in the past four years. More than \$260 billion in deals already have been announced in the first nine months, compared with an annual average of \$170 million from 1991-94. However, this activity is not exclusively U.S. annual market-based, as only 20% of the international volume was generated by cross-border deals in which a U.S. company was involved.

### FIXED-INCOME MARKET TRENDS

The rally in 1995 contrasts sharply with that of 1993 and may have more staying power in 1996.

### Tale of Two Rallies: 1995 vs. 1993

The environment that inspired the interest rate rallies in 1995 and 1993 have many characteristics in common: benign inflation pressures, a moderate pace of economic growth and deficit reduction initiatives in Washington. However, in contrast, late 1993 marked the end of the Fed's easing of monetary policy, not the beginning of aggressive accommodation, as we are expecting in 1996.

As a consequence, a key structural feature distinguishes the yield curve in late 1995 from the one that prevailed in late 1993. The yield curve in October 1993 was historically steep and the shape of the curve today is relatively flat (see Figure 10). The spread between three-month LIBOR and 30-year Treasury yields was more than 200 basis points then and remains below 50 basis points today.

Despite the popular press' focus on the "new" (on-the-run) Treasury bond, the benchmark Treasury bond for pricing long corporate securities (currently the 7<sup>5</sup>/8% due 2/15/2025) dipped below 6% for only one day in 1993 (October 15). In contrast, two-year Treasury yields remain unable to rally to 1993 levels without the sustained encouragement of further Fed easing in 1996.

150bp 150bp 100 100 50 50 0 0 -50 -50 -100 80 81 82 83 84 85 86 87 88 89 90 Latest Source: Salomon Brothers Inc.

Figure 10. Comparison of Yield Curves, 15 Oct 93 Versus 1 Dec 95

Whither the Fed? Does the Treasury bond euphoria persist?

The inversion of the curve in the short end (one-month LIBOR exceeds three-month LIBOR) suggests that market participants still believe that further ease in Fed policy is likely in 1996. Will Fed-engineered reductions in short-term rates inspire additional improvements in long-term Treasury rates? The market could take a cynical perspective and view Fed accommodation as indicative of official softness on inflation-fighting. We think not though. History shows that the long end typically follows the short end, and on balance, we believe that the market would view an easier Fed policy as a signal of moderating price pressures. Nonetheless, 30-year benchmark yields below  $5^3/4\%$  should be viewed with skepticism, barring a dramatic, but unlikely, revision in inflation expectations.

Where is the value for issuers on the yield curve? We believe it is in the long end. Further substantial improvement in long-term Treasury rates likely would require another systematic dip in the level of inflation or inflation expectations. Consensus estimates have recently dipped 50 basis points to 3% and a long bond rally to the mid-5% level likely would require a 50-basis-point downward revision to this outlook.

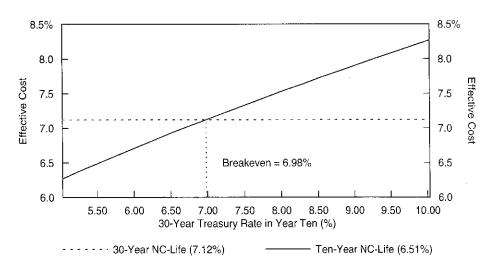
Financing spreads at the long end experienced more volatility than the short end — particularly, callable structures — but remain near historic lows. How can an industrial company that traditionally issues ten-year noncallable bonds get comfortable with 30-year bullet bonds? We believe that an evaluation of the breakeven 20-year rollover rate in year ten provides some insight (see Figures 11 and 12).

Figure 11. Assumptions for New Issue Financing Levels

| Maturity | Treasury | Reoffer | Yield to | Gross  | All-In | Ali-in |
|----------|----------|---------|----------|--------|--------|--------|
|          | Yield    | Spread  | Investor | Spread | Cost   | Spread |
| 10       | 5.71%    | +70bp   | 6.41%    | 0.650% | 6.51%  | +80bp  |
| 30       | 6.15     | 90      | 7.05     |        | 7.12   | 97     |

Source: Salomon Brothers Inc.

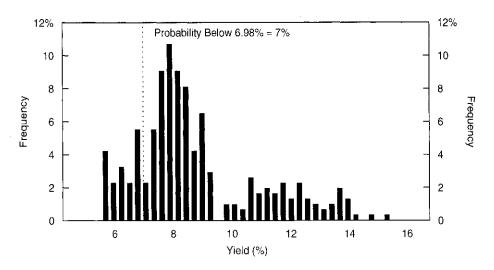
Figure 12. Effective Cost of 30- and Ten-Year Bullet Bonds Over a 30-Year Horizon



Source: Salomon Brothers Inc.

On a pretax basis, the 30-year Treasury — which acts as a benchmark for a 20-year debt offering — will need to be below 6.98% in order for the effective cost of the ten-year bond over the 30-year horizon to be lower than the original all-in cost of the 30-year bullet. (We are assuming that spreads remain constant.) How likely is this, based on the last 25 years of historical data? We calculate an *empirical* probability of 7% that 30-year Treasury rates will fall below this threshold (see Figure 13).

Figure 13. Historical 30-Year Treasury Yields, Monthly Data, 1970-95



Source: Salomon Brothers Inc.

We believe that this approach provides a simple analytical framework by which issuers can assess relative value along their financing yield curve.

### Century Bonds Have Come and Gone Again

As long-term yields rallied significantly and corporate spreads narrowed to historically tight levels, issuers seized an excellent opportunity to lock in low financing rates for a very long horizon (see Figure 14). By successfully issuing 100-year bonds, a company sends a powerful signal to all providers of capital, affirming the longevity of the issuer<sup>5</sup>.

This popularity of century bonds, however, may have been cut short. On December 7, 1995, the Treasury announced a proposal that includes the elimination of the tax deductibility of interest for bonds with maturities greater than forty years.

Figure 14. 100-Year Bond Issuance in the U.S. Corporate Public Bond Market, 1993-95 (Dollars in Millions)

| Issue Date | Principal<br>Amount | issuer                            | Ratings  | Coupon | Structure | New Issue<br>Spread (bp) |
|------------|---------------------|-----------------------------------|----------|--------|-----------|--------------------------|
| 05 Dec 95  | \$100               | Wisconsin Electric Power          | Aa3/AA   | 6.875% | 100 NC-L  | +92                      |
| 01 Dec 95  | 500                 | BellSouth Telecommunications Inc. | Aaa/AAA  | 7.000  | 100 NC-L  | 70                       |
| 01 Dec 95  | 150                 | News America Holdings Inc.        | Baa3/BBB | 7.900  | 100 NC-L  | 165                      |
| 15 Nov 95  | 200                 | Columbia/HCA Healthcare Corp.     | A3/BBB+  | 7.500  | 100 NC-L  | 116                      |
| 15 Oct 93  | 150                 | ABN Amro Bank N.V.                | AAA/AA-  | 7.125  | 100 NC-L  | 110                      |
| 22 Jul 93  | 150                 | The Coca Cola Company             | Aa3/AA+  | 7.375  | 100 NC-L  | 80                       |
| 15 Jul 93  | 300                 | The Walt Disney Company           | Aa3/AA-  | 7.550  | 100 NC-30 | 95                       |

NC-L Noncall-Life.

Source: Salomon Brothers Inc.

<sup>&</sup>lt;sup>5</sup> See Century Bonds - Send a Signal to the Market, Niso Abuaf, et al., Salomon Brothers Inc, November 30, 1995.

Financial engineering provides an alternative structure for reducing the cost of 100-year and 40-year bonds.

The make-whole call provision — that allows issuers to redeem debt at a price that depends on Treasuries — is being included in many new corporate debt offerings in order to enhance strategic flexibility for no cost.

On December 6, BellSouth raised another \$500 million of gross proceeds by using an innovative two-tranche structure which replicated the traditional 100-year bond cash flows. This alternative structure generated a pretax spread savings of ten to 15 basis points by appealing to two distinct investor groups — insurance companies seeking current income and portfolio managers who want to hedge their overall portfolio exposure with high-duration high-convexity securities.

### **Make-Whole Call Provisions**

Beginning with a \$100-million Quaker State ten-year bond issue in October, companies have begun to include a make-whole call provision in public market debt deals.

What is a make-whole call? A make-whole call is a call provision that gives the issuer the right to call the bond at a price that depends on interest rates, rather than at a fixed price, either immediately or after a brief protection period. The make-whole call price typically is determined by a fixed spread over Treasuries, but always is greater than par. Typical make-whole spreads are zero to 25 basis points. The make-whole call contrasts with the traditional bond call provision in that the call price depends on the rate environment and the call protection period is minimal. Make-whole calls have been typical in private placements, where make-whole spreads have been 25-75 basis points.

Figure 15. Recent Debt Offerings With Make-Whole Call Provisions (Dollars in Millions)

| Issue Date | Principal<br>Amount | Issuer                       | Coupon | Maturity | Make-Whole<br>Spread (bp) |
|------------|---------------------|------------------------------|--------|----------|---------------------------|
| 06 Dec 95  | \$300               | Burlington Northern Santa Fe | 6.375% | 12/15/05 | +10.0                     |
| 06 Dec 95  | 300                 | Alco Standard                | 6.750  | 12/01/25 | 15.0                      |
| 27 Nov 95  | 100                 | Century Telephone            | 7.200  | 12/01/25 | 12.5                      |
| 15 Nov 95  | 200                 | Cox Communications           | 6.500  | 11/15/02 | 15.0                      |
| 15 Nov 95  | 100                 | Cox Communications           | 7.250  | 11/15/15 | 20.0                      |
| 10 Nov 95  | 250                 | ITT Industries               | 7.400  | 11/15/25 | 20.0                      |
| 07 Nov 95  | 200                 | Noranda Forest               | 6.875  | 11/15/05 | 15.0                      |
| 07 Nov 95  | 200                 | Champion International       | 7.350  | 11/01/25 | 25.0                      |
| 03 Nov 95  | 300                 | ITT Hartford                 | 7.300  | 11/01/15 | 0.0                       |
| 03 Nov 95  | 300                 | ITT Hartford                 | 7.300  | 11/01/15 | 0.0                       |
| 25 Oct 95  | 600                 | IBM                          | 7.000  | 10/30/25 | 12.5                      |
| 25 Oct 95  | 150                 | IBM                          | 7.000  | 10/30/45 | 12.5                      |
| 18 Oct 95  | 100                 | Quaker State                 | 6.625  | 10/15/05 | 15.0                      |

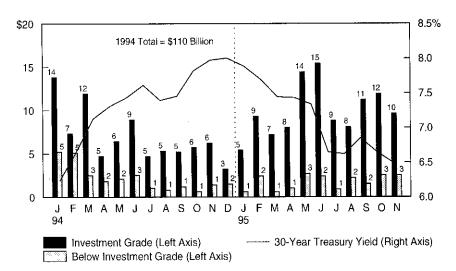
Source: Salomon Brothers Inc.

### What objective does the make-whole call achieve for the issuer?

Typically, a make-whole call does not provide the issuer with the ability to economically refinance outstanding indebtedness (unless the issuer's all-in spread tightens through the make-whole spread). Hence, the real goal of the make-whole call is to retire rather than refinance debt. This situation may occur if the issuer disposes of a significant amount of assets, either through a direct sale or a restructuring transaction.

Why the surge of interest in make-whole calls recently? It is likely that the background of several billion dollars of tender offers for Eastman Kodak, Scott Paper and ITT Corporation have focused corporate attention on the need for financial flexibility in response to strategic events, rather than only on interest rate changes.

Figure 16. Monthly Corporate Debt Issuance, Jan 94-Nov 95 (Dollars in Billions)



Notes: Includes industrial, financial and utility companies only. Excludes medium-term notes and Yankees. Sources: Securities Data Co. and Salomon Brothers Inc.

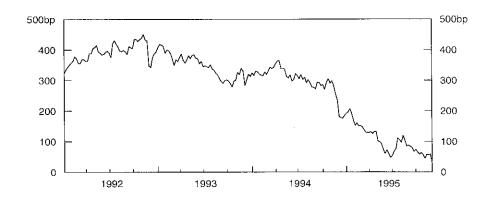
### LIABILITY MANAGEMENT TRENDS

The flat shape of the Treasury yield curve has created attractive opportunities for issuers to extend the maturity of their debt portfolios in a cost-effective fashion through hedge, defeasance or tender transactions.

Proactive liability managers can exploit both the level and shape of their financing yield curve to fine-tune key characteristics of their debt portfolio.

Although long-term benchmark Treasury yields are rapidly approaching the 20-year lows reached in October 1993, short-term rates have not fully participated in the rally. In fact, the spread between the benchmark 30-year Treasury and one-month LIBOR has narrowed to below 25 basis points from a peak of 451 basis points reached in late-1992 (see Figure 17).

Figure 17. Spread Between the 30-Year Benchmark Treasury Yield and One-Month LIBOR, 3 Jan 92 - 1 Dec 95



LIBOR London Interbank Offer Rate. Source: Salomon Brothers Inc.

High short-term rates significantly reduce the negative carry traditionally associated with "prefunding" future financing requirements. For example, suppose an issuer has a scheduled debt maturity in one month. If the company issues a long bond today at 7.25% and invests the proceeds in one-month LIBOR at 5.88%, the annual negative carry is 1.37% (or 0.11% per month). Amortizing this cost over 30 years — i.e., translating the carry into the basis-point-cost of a new issue — yields about 0.9 basis points. Similarly, if the financing requirement is in 12 months, the cost of negative carry is approximately 14 basis points. This cost contrasts to a steeper "forward premium" of approximately 25 basis points in October 1993. Clearly, the risk that long-term financing rates (either Treasury yield or financing spread) could be 14 basis points higher than today is very real.

Consider prefunding 1996 financing requirements before the Fed eases again. For this reason, liability managers should carefully review their debt portfolios to identify refinancing requirements and call opportunities in 1996. These funding needs should be viewed as being effectively current because the cost of "negative carry" over the remaining time period is minimal. The flatness of today's yield curve is a direct consequence of a stable Fed policy. Any future easing by the Federal Reserve in the first quarter of 1996 — which is widely anticipated by Wall Street economists — may sharply increase the cost of "prefunding."

Figure 18. Effective Amortized Cost of Carry for Different Prefunding Periods and Financing Maturities

|          |          | Hedge Horizon |           |
|----------|----------|---------------|-----------|
| Maturity | 3 Months | 6 Months      | 12 Months |
| 5        | +2bp     | +4bp          | +13bp     |
| 10       | 2 `      | 5             | 12        |
| 30       | 1        | 6             | 14        |

bp Basis points

Source: Salomon Brothers Inc.

The prefunding strategy mentioned above, although simple enough, temporarily will balloon the company's balance sheet. A simple refinement of the strategy is to use the proceeds of a new debt offering to *defease* the bonds to maturity (or the first call date). The "in-substance" defeasance of outstanding debt requires purchasing an appropriate portfolio of Treasuries and placing it in a defeasance trust. The cashflows of the Treasury portfolio are required to pay both the principal and interest (and possibly call premium and accrued interest) of the outstanding debt issue. The bonds are considered to be retired from an accounting point of view; so that both the bonds and the defeasance trust (assets) are removed from the balance sheet. Hence, the temporary ballooning of the balance sheet is avoided.

For debt issues due within one to six months, a *Treasury hedge* also provides a vehicle for reducing future refinancing risk. By selling Treasuries forward, an issuer can lock in the Treasury component of a future financing while remaining exposed to changes in corporate spreads.

Finally, for debt issues that mature or become callable in two years or more, we recommend a *tender offer* as a vehicle to: (1) reduce the cost of defeasance, from both a pretax and after-tax perspective; and (2) eliminate the need to maintain an open Treasury position for an extended period of time.

Corporate borrowers that face a substantial refinancing requirement in two to five years may consider an *exchange offer* strategy as a tool for significantly diluting that exposure. By using a technique pioneered in the Columbia/HCA exchange offer, issuers may be able to achieve a comprehensive restructuring of a debt portfolio with minimal costs and a high likelihood of success.

Figure 19. Summary of Techniques for Hedging Future Financing Requirements

| Hedge Period | Technique              |
|--------------|------------------------|
| 1-6 months   | Treasury forward hedge |
| 6-12 months  | Prefund and defease    |
| 1-2 years    | Prefund and tender     |
| 2-5 years    | Exchange offer         |

Source: Salomon Brothers Inc.

### FIXED-INCOME DERIVATIVE TRENDS

### Question 5

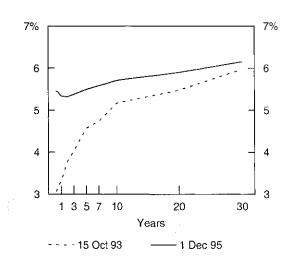
What are the major characteristics of the current U.S. dollar fixed-income environment?

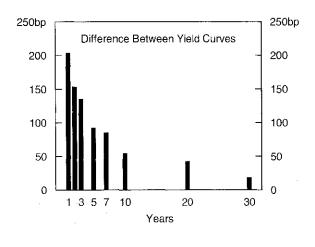
### Answer 5

The current market environment can be characterized by:

- · A relatively flat yield curve (see Figures 20 and 21), and
- modest interest rate implied volatility levels (see Figure 22).

Figure 20. U.S. Treasury Yield Curves





bp Basis points. Source: Salomon Brothers Inc.

Figure 21. 30-Year Minus Ten-Year Treasury Yields, Jan 79-Oct 95

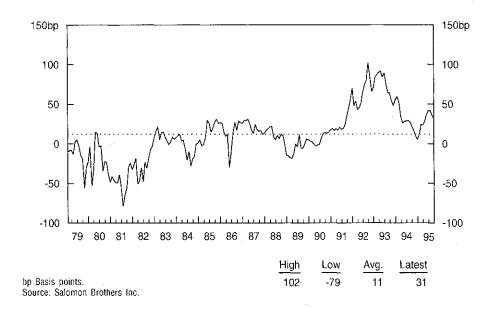
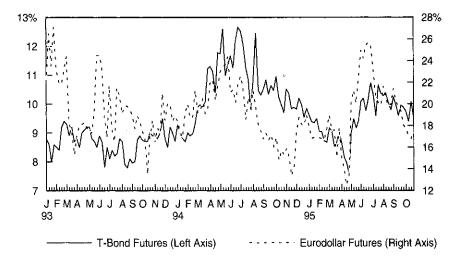


Figure 22. Interest Rate-Implied Volatility, Jan 93-Oct 95



Source: Salomon Brothers Inc.

### Question 6

Given the current yield curve environment, how can issuers with outstanding callable debt monetize the embedded call option?

Answer 6

Issuers can monetize the call feature of their outstanding debt with the following strategies:

- Calling the bond and refunding it at current yield level; or
- Selling a swaption.

Figure 23 shows the economic and accounting impact of the refunding strategy for a hypothetical 20-year bond with a coupon of 8.00% and a specified call schedule. The issuer's cost is assumed to be a matched-maturity Treasury plus 80 basis points.

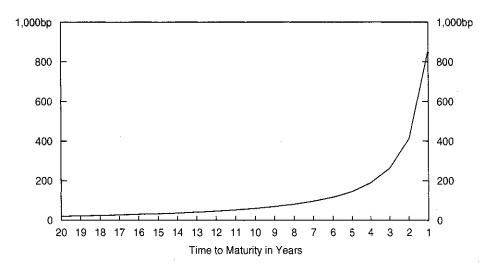
| Figure 23. Economic and Accounting Impact of Debt Refunding Strategy |            |            |             |           |                     |                             |  |  |  |
|--|------------|------------|-------------|-----------|---------------------|-----------------------------|--|--|--|
| Соироп   | Maturity   | Call Price | All-In Cost | Book Loss | Interest<br>Savings | Present<br>Value<br>Savings |  |  |  |
| 8.00%  | 12/15/2015 | 104.01%    | 7.00%       | 4.59%     | 0.72%               | 6.66%                       |  |  |  |

Source: Salomon Brothers Inc.

Given the high level of implied volatility levels in the swap market, an issuer can monetize the call feature by selling a receiver swaption, which gives the holder the right to receive a fixed-rate in a predetermined swap versus a floating-rate index, such as three-month LIBOR. The terms of the swaption can be set to meet the terms of the outstanding callable bond, specifically the embedded call schedule and expected new issue levels. According to our example, an issuer can currently receive an upfront premium of 8.78% for such a swaption.

The swaption strategy is virtually — although not perfectly — identical to the refunding strategy because the issuer credit spread might widen relative to swap spreads. Figure 24 shows the relative spread widening necessary to offset the higher premium received for the swaption strategy.

Figure 24. Breakeven Relative Spread Widening for Swaption Strategy



bp Basis points. Source: Salomon Brothers Inc.

### ANALYSIS OF THE QUARTER

### Question 7

Given the recent activity in century bonds, how can issuers judge the relative value of where in the maturity spectrum they should be funding themselves? (Because the U.S. Treasury recently announced a proposal that included the elimination of tax deductibility of interest for bonds with maturities greater than forty years, issuing beyond this maturity is currently on hold for U.S. borrowers. Nevertheless high-grade foreign corporations that can easily access the global capital markets might still be able to issue very long-dated debt and take the interest deduction in their own jurisdictions.)

### Answer 7

Issuers have attempted to answer this question by using various techniques including:

- (1) Breakeven analysis;
- (2) Simulation analysis; and
- (3) Theoretical modeling of the yield curve.

For example, in a breakeven analysis for an issuer with a 30-year horizon, the issuer considers the all-in cost of a 30-year funding relative to the cost of a ten-year funding rolled into a 20 year funding upon maturity. The breakeven 20-year interest rate in ten years is the rate at which both strategies would have the same cost to the issuer within the 30-year horizon. Based upon a heuristic assessment of possible interest-rate scenarios, the issuer then makes a judgment call as to which strategy to use.

In simulation analysis, the issuer uses a conceptually similar framework to breakeven analysis, while imposing a more formal statistical methodology to model various interest rate scenarios and the associated funding costs, and the implied corporate risks and rewards possibly relative to a benchmark portfolio.

Still another method would be to model the corporate yield curve using both mathematical and statistical techniques and compare observed market yields to theoretical model yields. A typical model might look like:

$$i = a + B_1D - B_2C$$

where i is the yield of a given maturity bond, D and C are its associated duration and convexity measures, and a,  $B_1$  and  $B_2$  are positive constants. If an attainable market yield is lower than the theoretical yield, then the bond would have relative value for an issuer, while the opposite would be true if the attainable yield is higher than the theoretical yield.

During the recent century bond issuance spell, attainable yields seemed to be better than theoretical model yields. This was due to increased investor demand for century bonds, which offered investors a relatively cheap way to buy convexity, possibly as a hedge for their mortgage holdings which have negative convexity.

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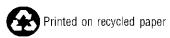
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