POLICY ISSUES RAISED
BY STRUCTURED PRODUCTS

Jennifer Bethel & Allen Ferrell

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Jennifer Bethel* and Allen Ferrell**


Abstract

The structured products market has experienced explosive growth in the United States over the last five years. The growth of this market is expected to continue in the 20%-25% range given the still comparatively small size of this market in the U.S. and the expected increase in demand for fixed-income type investments by retiring baby-boomers. While often performing an invaluable role in facilitating the transfer of risk and improving the ability of investors to more fully diversify their portfolios, these products also raise important investor protection concerns. Investment banks are increasingly offering structured products to retail investors through their broker networks. Whether retail investors adequately understand the complicated payoff structure of these products, which often include embedded options, and the implicit fees being charged for these products is the source of these investor protection concerns. The illiquidity of most structured products, including even listed ones, heightens these concerns. The current regulation of structured products and possible reforms are examined with these investor protection concerns in mind.

* Associate Professor, Babson College
** Greenfield Professor of Securities Law, Harvard Law School.

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Policy Issues Raised by Structured Products

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Introduction

One of the most important changes in modern finance over the last three decades is the increased understanding and use of financial derivatives. These contracts, including options, futures, and swaps, are created by financial firms for corporate issuers who seek to tailor their liability claims and lower their costs of capital. Derivatives can trade on organized exchanges, but most often are created in unregistered form and trade in the over-the-counter markets.

These claims have become commonplace elements of many financial transactions. Within the domain of corporate finance, derivatives have allowed issuers’ financing needs to be divorced from the requirements of the suppliers of capital. Today, issuers search for low-cost funds in whatever form financings take, and then rely on the derivatives market to transform those claims to a risk profile that suits the financing needs of the firm. Sophisticated institutional investors have long used derivatives to obtain the risk exposures they desire, and to dynamically manage their existing exposures in a cost-effective manner.

As derivatives have become more accepted and commonplace in the financial markets, they have also became more competitively priced and the margins earned by securities firms dealing in these claims have declined. To help protect their margins, dealers have begun to financially engineer more complex securities, one class of which is known as structured products. A structured product has no precise definition, either in a business or a regulatory context. We follow the broad definition used by regulators such as the SEC, NASD, and NYSE that define a “structured product” as a security derived from or based on another security
(including a bond), basket of securities, index, commodity, or foreign currency. This definition encompasses a wide range of products, including equity-linked or commodity-linked debt, collateralized debt obligations, reverse convertibles, and credit-default swaps. A typical structured product consists of a zero-coupon or interest-bearing note combined with a derivative whose value is typically realized at the maturity of the note. An example is a gold-linked note that makes a period interest payment of a fixed amount and that pays at maturity the face value of the bond times the return of gold over the life of the note.

Dealers have further protected their margins by selling structured products to new classes of investors. They realized, for example, that high net worth investors who are classified as “accredited investors” under the securities laws present an attractive market opportunity beyond their traditional institutional investor client base. Accredited investors, a category that includes individuals with at least $1 million in net worth (including the equity in their real estate holdings), $200,000 in individual income or $300,000 in joint income, can purchase unregistered structured products. Alternatively, products can be registered and sold to the mass retail market. Structured products are appealing to high net worth investors for a number of reasons. First, these investors often demand complex financial portfolios. Combinations of long positions in stocks and bonds may not provide the overall risk exposure they desire. Second, many of these investors use financial advisors who may be useful in navigating the significant intricacies of structured products. The payout patterns of these securities can be very complex, requiring sophisticated financial models for valuation and to estimate embedded fees. A sense of the substantial complexity of structured products can be seen from Exhibit 1 below which

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1 NASD Notice to Members 05-59; SEC Rule 434; Securities Act Release No. 42746 (May 2, 2000). It is important to note that this definition may be different from other usages. For instance, some commentators do not consider “synthetic assets,” defined as instruments that are created exclusively out of one or more derivatives, to be structured products.
summarizes the terms of PROPELS, a structured product marketed by Morgan Stanley. Finally, structured products can be tailored to offer highly non-linear payout patterns that permit very specialized or state-contingent bets to be made on assets such as currencies, commodities or various baskets of securities.

Exhibit 1: Morgan Stanley
Protected Performance Equity Linked SecuritiesSM (PROPELS™)

- The principal amount and issue price of each PROPELS is $10.
- 0.4% interest per year
- At maturity you will receive the principal amount of $10, plus a supplemental redemption amount, if any, based on the performance of the DJIA over the term of the PROPELS. The supplemental redemption amount equal to the product of (i) $10 times (ii) the percentage increase, if any, in the average protected index value over the initial index value:
  - The initial index value will equal 10,619.03, the closing value of the DJIA on 2/20/04, the day we offered the PROPELS for initial sale to the public.
  - The average protected index value will equal the arithmetic average of the protected index closing values on eight specified determination dates during the life of the PROPELS.
  - On each determination date, the protected index closing value will equal the greater of (i) the DJIA closing value on such determination date and (ii) the highest DJIA closing value on any previous determination date; provided that the protected index closing value on the first determination date will be the DJIA closing value on such determination date regardless of whether that DJIA closing value is higher or lower than the initial index value.
  - The determination dates will be the 30th of each December, beginning 12/30/04 to and including 12/30/2010, and 12/27/2011.
- If the average protected index value of the DJIA is less than or equal to the initial index value, you will receive only the principal amount of the PROPELS at maturity and will not receive any supplemental redemption amount.


Recent evidence suggests that traditional retail investors in the United States are increasingly buying registered structured products. The American Stock Exchange reported an 18 percent increase in the number of structured products issues listed in 2005 on the Exchange over 2004 (136 in 2005 vs. 115 in 2004), bringing the notional amount of structured products on the AMEX to over $13 billion. The New York Stock Exchange reported $14 billion in new listings in corporate-issued structured products in 2005. If experience with other financial

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products serves as a guide, structured products will increasingly be sold to the mass market of retail investors. This outcome is by no means necessarily bad. In fact, relative to the United Kingdom and Continental Europe, the United States is far behind in the penetration of the retail market by structured products. As shown in Exhibit 2, the size of the U.S. market is roughly half that of Europe’s.

**Exhibit 2: Gross Sales ($ Billion) of Structured Products in 2005**

![Bar chart showing gross sales of structured products in 2005 by region. Europe leads by a large margin, followed by the United States, Canada, and Asia.](http://www.structuredretailproducts.com)

This trend, however, does raise the interesting question about how well the U.S. disclosure-based system of securities regulation can cope with increasingly complex structured products being targeted to retail investors. Can the current securities disclosure regime that governs the offer and sale of structured products generate the type of information that can protect less sophisticated investors? If not, how can these investors be protected? These questions are far from academic. The United Kingdom and Continental Europe have experienced several financial
mishaps related to the purchase of structured products by retail investors, a few of which are discussed below.

To answer these questions, we first look at changes in the market for structured products and evaluate the efficacy of the current regime for investor protection. Highlighting a few of its weaknesses, we then provide possible ways to enhance investor protection.

1. **Structured Products**

Structured products, as discussed here, are financial instruments designed to meet specific investor and issuer needs by incorporating special, non-standard features whose values are linked to, or “derived” from, such underlying assets as stocks, bonds, currencies, and commodities. The performance of a structured product is therefore based on the performance of this underlying asset and not on the discretion of the product provider. Often, but not always, the product relies on the use of derivatives to generate the return. Structured products typically come in two forms: growth products, which may provide an element of capital protection, and income products, which provide fixed high income, but with a risk to the capital return.

If we were discussing structured products eight or ten years ago, the instruments would have been securities such as Reverse Convertible Basket Linked Notes, Adjustable Conversion-Rate Equity Security Units, Market Value Put Securities, and Reset Performance Equity-linked Redemption Quarterly-pay Securities. More recently designed structured products differ from and are more complex than structured products in the past. In addition to linking payments to new classes of assets, recent structured products are characterized by innovative combinations of underlying asset mixes. For example, issuers are combining credit derivative exposures with equity index underlyings,\(^3\) and as shown in Exhibit 3, combining interest rate and crude oil underlyings. There has also been a shift in the protection of principal. Between 2000 and 2002,

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most U.S. products offered full principal protection, but since then there has been a swing to non-protected products.4

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**Exhibit 3: MACRO Securities Depositor, LLC**

On the closing date, Down-MACRO tradeable trust will issue Down-MACRO tradeable shares in the form of certificates representing undivided beneficial interests in the Down-MACRO tradeable trust. On the closing date, the proceeds from the sale of the Down-MACRO tradeable shares will be delivered to the trustee for the Down-MACRO tradeable trust, who in turn will deliver these proceeds to the trustee for the Down-MACRO holding trust. These proceeds, together with any proceeds from the sale of any Down-MACRO holding shares to holders other than the Down-MACRO tradeable trust, will be deposited into the Down-MACRO holding trust. The trustee for the Down-MACRO holding trust will then deliver the Down-MACRO holding shares to the Down-MACRO tradeable trust and the other investors in the Down-MACRO holding trust and the trustee for the Down-MACRO tradeable trust will deliver the Down-MACRO tradeable shares to investors in the Down-MACRO tradeable trust. The trustee for the Down-MACRO holding trust will use the net proceeds of the sale of its Down-MACRO holding shares to acquire bills, bonds and notes issued and guaranteed by the United States Treasury and repurchase agreements collateralized by the United States Treasury securities, that are, in each case, scheduled to mature prior to the first quarterly distribution date.

Concurrently with the formation of the Down-MACRO holding trust, we have also formed the Up-MACRO holding trust to create "paired holding trusts." The paired holding trusts will enter into an income distribution agreement and multiple settlement contracts with each other. The Up-MACRO holding trust will issue the Up-MACRO holding shares that will be acquired by the Up-MACRO tradeable trust on the closing date. A portion of the Up-MACRO holding shares (representing less than 50% of the Up-MACRO holding shares) issued on the closing date may also be acquired by other investors who are not affiliated with the Up-MACRO tradeable trust. The Up-MACRO holding shares will be issued in the form of certificates, each representing an undivided beneficial interest in the Up-MACRO holding trust. The Down-MACRO holding shares and the Up-MACRO holding shares are "paired holding shares."

On each quarterly distribution date, the paired holding trusts will use income generated by their treasuries that remains available after each trust has paid its fees and expenses and the fees and expenses of the related tradeable trust to make payments under the income distribution agreement. On the final scheduled termination date or an early termination date, the paired holding trusts will make a final payment under each settlement contract using the maturity proceeds of the treasuries held by each trust. On any redemption date, one of the paired holding trusts will make a final payment under each settlement contract that is being settled by delivering to the other holding trust all or a portion of its cash and/or treasuries. Quarterly Distributions and the Final Distributions on the holding shares or your tradeable shares will depend upon the Underlying Value of the Up-MACRO or Down-MACRO holding trusts. The Underlying Value of the holding trusts at any time will depend on the level of the Light Sweet Crude Oil Price and the yield on the treasuries. If, for example, the level of the Applicable Reference Price of Crude Oil on the relevant Price Determination Day is above its Starting Level, the Down-MACRO holding trust will be required to make a final payment to the Up-MACRO holding trust in an amount proportional to the increase in the level of that price.

Source: S-1/A 08/16/2006

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4 See StructuredRetailProducts.com.
Banks are continually innovating structured products to meet investor and issuer needs. Structured products allow market participants who prefer a particular pattern of payments over time to access such a pattern, as well as hedge certain risks. Structured products facilitate the transfer of risk, for a fee, from those who do not want to bear risk to those who are willing to bear it. This broader dispersion of risk across investors typically improves the effectiveness of risk transfer in the market, lowering the cost of capital. Structured products also allow investors to more fully diversify their investment portfolios, because investors can access asset classes that would not otherwise be available through traditional investment vehicles. For example, structured offerings can take commodities, hedge funds, and foreign exchange markets as their underlying assets. The underlyings can include a mix of different asset classes, indices or baskets of individual equities. Such diversity within an overall investment strategy may reduce portfolio return volatility.

One result of this investor demand is a large and growing market for structured products in the United States. The Structured Products Association (SPA) estimates $45 to $50 billion worth of products were placed in the United States in 2005, and that there will be a 20% to 25% growth in 2006. Both the registered and unregistered segments of the structured products market are experiencing growth. In 2004 issuers sold $12 billion in notional registered structured products in the United States, up more than 20 percent from 2003 when just under $10 billion was placed. The market has grown 53 percent annually over the last 4 years. In terms of listed registered products, similar growth is reported. The NYSE, for example, reports that by June

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5 Investment banks focus in part on innovation to avoid commoditization of their products.
6 “Despite Record $50 Billion in 2005, Structured Products Remain ‘Wall Street’s Best Kept Secret’,” SPA Chairman’s Letter, February 2006, p. 1. These numbers do not include several smaller categories tracked by the StructuredRetailProducts.com, which estimates sales in 2005 of approximately $75 billion.
2006, it had listed more than double the number of new products than it had listed over the same period in 2005.  

This growth in both the unregistered and registered markets is arising in part from new distribution channels, including distributions to retail investors. Investment banks are increasingly offering structured products in small denominations to retail investors through their broker networks. By 2004 and 2005, large retail institutions such as Raymond James, DB Alex Brown, CSFB Private Client Services, and Wells Fargo had expanded their staffs to include structured products experts to educate brokers about the risks and rewards of these products. In 2004, Citigroup’s Private Bank, J.P. Morgan Private Bank, Mellon Financial, and UBS AG reported increased structured product sales to private investors. Sales to retail investors were also higher in 2005. According to Keith Strycula, Chairman and Founder of the SPA, the growth of the structured products business in the United States resembles the growth of hedge funds in the 1990s. “Six, seven years ago, many mainstream investors were just beginning to understand what a ‘hedge fund’ was. The same could be said for structured products at this point in time.”

According to a Managing Director at J.P. Morgan Private Bank, twice as many private investors were holding options or similar investments in their portfolios in 2004 compared to 2000.

2. The Current State of Investor Protection

The sale of structured products to a wide range of investors, including retail investors, raises investor protection concerns along several dimensions. At the most basic level, do investors have even a rudimentary understand of the products they are purchasing? The

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complexity of many structured products, which often include embedded option features, raises concerns. On a related note, do investors understand the various fees, both embedded and explicit, they are being charged for the product? The answers to these questions turn on the quality of disclosures concerning structured products, the ability of investors to understand and analyze the disclosures that are made, and the responsibility of those facilitating the sale of structured products to ensure the suitability of a purchase for a given investor.

The extent of investor protection in the structured product area has been primarily set by four legal regimes: Regulation AB, the new offering regulations, suitability requirements and the general antifraud provisions of the Securities Act of 1933 and Exchange Act of 1934.

A. Regulation AB

Asset-backed securities (ABS) constitute a very important segment of the structured products market. ABS are securities that are backed by, to use the words of the SEC, a “discrete pool of receivables or other financial assets”,\(^\text{14}\) such as securities backed by mortgage loans or credit card receivables placed in a special purpose entity. Although most investors in these securities tend to be institutional, there is nevertheless meaningful retail participation in some segments of the ABS market, such as securities backed by publicly-traded debt.

Regulation AB, promulgated on December 15, 2004, is a comprehensive set of regulations governing the registration requirements for ABS. In particular, there are four important components of Regulation AB that affect investor protection: the disclosure requirements, permissible communications during the offering process, potential liability, and the definition of asset-backed securities. Of course, one need worry about Regulation AB only if there is a public offering of an asset-backed security, and hence must be registered, as Regulation AB deals with the registration process.

\(^{14}\) Item 1101(c)(1) of Regulation AB.
1. **Improved Disclosure**

Before the adoption of Regulation AB, there were no disclosures required in the registration process that were specifically crafted with asset-backed securities in mind. This resulted in a mismatch between the disclosures required and the disclosures that would be relevant for purchasers of asset-backed securities. For instance, requirements to disclose information about an issuer’s business are irrelevant given that the assets that back the securities are placed in a legally distinct entity. Beyond these assets, there simply is no business to report about. Moreover, requiring the release of an issuer’s audited financials makes little sense as these statements focus on valuing the assets and liabilities of an ongoing business. Purchasers of ABS products, on the other hand, are typically focused on the cash flows generated by the assets backing the securities. This mismatch between the traditional disclosure regime and the needs of ABS investors is not surprising given the recent vintage and growth of the ABS market.

To ameliorate this mismatch, which had been dealt with by the SEC on *ad hoc* basis through the use of no-action letters, Regulation AB requires the disclosure of information that is of particular relevance to ABS investors. Perhaps most importantly, sponsors of registered asset-backed securities must provide, to the extent material, “static pool” data consisting of the delinquency and loss experience of other pools of assets of the type to be securitized also established by the sponsor. The disclosure of delinquency and loss data is required for as far back as the prior three years. It is an open question how useful static pool information really is for ABS purchasers given that purchasers of ABS prior to Regulation AB did not typically informally request this information from issuers.

In addition, Regulation AB requires increased disclosure concerning the composition and characteristics of the asset pool, including information such as capitalized accrued interest,
whether the pool asset is secured or not, credit scores of obligors, and the interest rate being charged. Unlike static pool data, issuers prior to Regulation AB typically provided this information. Finally, prospectuses for registered ABS offerings will have to disclose far more detailed information on the fees that are being charged investors. Specifically, a separate table itemizing all the estimated fees and expenses to be paid out of the cash flows is now required.

While disclosure can be quite useful, investor protection is only enhanced if it can be intelligently used either by investors themselves or broker-dealers acting on investors’ behalf. For instance, it is important that investors (or their broker-dealers) realize that credit scores of obligors that are now being disclosed speak only to the risk of default. Credit scores do not measure the riskiness of investing in the structured product. It is not uncommon for a structured product to be extremely risky, but have little or no default risk.

2. Communications during the Offering Process

Regulation AB largely limits the content of communications to investors during the registration process to factual information, referred to as “informational and computational material,” (ICM) such as information about the structure of the various classes of the pool of assets. A communication generally cannot relay information that is not considered to be “informational and computational material.” Moreover, such communications are usually subject not only to section 12(a)(2) liability, but section 11 liability as well. This liability exposure arguably helps ensure the accuracy and completeness of disclosures made in ICM communications.

3. Definition of “Issuer”

For purposes of the liability provisions of the Securities Act and the Exchange Act, the “issuer” of an ABS is defined as the party which deposits the assets into the special purpose
entity that holds the discrete pool of assets against which the securities are issued. The definition of “issuer” as the depositor in the context of ABS raises a potential way of avoiding liability by first depositing the assets into an intermediate depositor entity, which then deposits the assets into the issuing special purpose entity. The “issuer” of the ABS in that situation would appear to be the intermediate depositor entity. Structuring the transaction in this way would reduce the potential liability exposure of an entity wishing to place assets in a special purpose entity thereby making them both more willing to offer registered structured products in the first place but with fewer consequences for misleading communications made during the registration process.

4. Definition of ABS and Synthetic Structured Products

The definition of ABS in Regulation AB, and hence the scope of Regulation AB’s provisions on disclosures and permissible communications, excludes synthetic securities. Synthetic structured products are securities whose payoffs do not depend primarily on the cash-flows generated by a discrete pool of assets, but rather depend on assets, indices or securities that are not held in any specific pool. Synthetic structured products include a number of important products, such as credit default swaps, credit-linked notes, and most collateralized debt obligation securities. Out of the $250 billion in collateralized debt obligation issuances in 2002 in the United States, approximately $187 billion were synthetic issuances.15

Many market commentators feared that the effect of not having the benefits and certainty of Regulation AB available to registered synthetic structured products would be to force these products into the private, non-registered market. And, indeed, it appears as though credit swaps and collateralized debt obligations are now overwhelmingly privately placed. On the other hand, most of these products would have undoubtedly been privately placed into the institutional market even if Regulation AB included synthetic structured products in the definition of an ABS.

15 This is based on the International Swaps and Derivatives Association estimates.
In a private placement, or other exempt offering, there is simply no need to worry about the requirements (with regards to which Regulation AB provides some relief and certainty) that attach as a result of having a public offering. In any event, the SEC’s comprehensive reform of the offering rules, in a set of regulations adopted on June 29, 2005, have gone a long way to alleviating the concern over the potentially negative effects of the differential treatment of ABS and synthetic structured products.

Private placements of structured products, whether they be synthetic products or not, with institutional investors would not seem to raise investor protection concerns if one were to put aside the costs to the public (of reducing choice and diversification) of not having these products available through registered offerings. Purchasers of non-registered securities may well have the resources and wherewithal to evaluate such investments, although even here concerns arise as a result of the modest requirements necessary to be deemed an “accredited investor.” This line of reasoning, however, ignores the fact that privately-placed structured products can be sold to the public, typically after a two-year holding period (and even one year if accompanied by certain disclosures), if the seller is not a control person, pursuant to Rule 144, with little in the way of information.

Not only are the disclosure requirements of the registration process not applicable with a Rule 144 sale to the public, but there will in all likelihood be no section 12(a)(2) liability for misleading or false statements made in connection with Rule 144 sales to the public. Most courts have interpreted the Supreme Court’s opinion in *Gustafson v. Alloyd Co.*, 513 U.S. 561 (1995) as limiting section 12(a)(2) liability to the original purchasers in a public offering. The purchasers of a structured product in a Rule 144 sale are not purchasing securities in a public offering by the

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issuer, but rather in a secondary market transaction. They thus forego the protections afforded by such liability provisions.

B. SEC’s Securities Offering Reform

From the perspective of investor protection, there are two important changes resulting from the adoption of the new securities offering regulations: the deregulation of content restrictions for communications made during the offering process and changes in section 11 and section 12(a)(2) liability. These changes affect the process by which structured products are registered and offered to the public. Unlike Regulation AB, the new securities offering regulations apply to all registered securities, including structured products whether synthetic or not.

1. Content Restriction Deregulation

The new securities offering regulations dramatically deregulate the content of permissible communications during the offering process of a registered structured product. Structured products can now be promoted after the filing of a registration statement using a so-called “free writing prospectus” so long as the issuer is a “seasoned issuer.” With some limited exceptions, an ABS issuer that is eligible to use Form S-3 (the form that is typically used to register ABS) is deemed to be a “seasoned issuer.” A “free writing prospectus” can be sent to a potential investor even if the issuer has not sent the most recent statutory prospectus on file with the SEC to the investor.

While a free-writing prospectus cannot be misleading or false on pain of facing section 12(a)(2) liability and the general antifraud provisions of the Securities Act and Exchange Act, there is no requirement in the offering rules that it provide a “balanced” picture to investors. Nor is there a limit on the type of information that can be contained in the “free writing prospectus,”
so long as it is not inconsistent with the registration statement. In other words, investor interest in a structured product offering can be solicited using a wide range of promotional materials, including information released to the media by the issuer.

For issuers of ABS, the bottom-line is that a “seasoned issuer” can either send communications to potential investors pursuant to the “free writing prospectus” rules or the Regulation AB ICM regulations. In sharp contrast to the ABS ICM offering rules, there are no restrictions in the new offering rules on the content that may be included in the “free writing prospectus.” Information that is not allowed to be included as part of an ICM communication, such as allotment and subscription information, can be included in a “free-writing prospectus” given its lack of content restrictions.

To some extent, the range of permissible communications is limited by the National Association of Securities Dealers (NASD) regulations. NASD Rule 2210 requires that all sales materials and oral presentations by registered broker-dealers present a fair and balanced picture. This rule also prohibits an omission of material fact that renders the communication misleading. The NASD, in a September, 2005 notice to members, emphasized that prior or subsequent communications containing clarifying information will not cure an otherwise misleading or unbalanced communication.\(^{17}\) This is consistent with several recent enforcement actions where the claim that a prior or subsequent communication rendered a communication accurate and balanced was rejected.

2. Liability for Communications

There are several substantial changes in liability faced by issuers and underwriters of structured products resulting from the new offering rules that both reduce and expand potential liability in different ways.

\(^{17}\) Notice to Members, 05-59 (September, 2005).
The new offering regulations remove section 11 liability for omissions or misleading statements in the “free-writing prospectus.” A “free writing prospectus” is deemed not to be part of the registration statement. The lack of section 11 liability represents a significant reduction in liability exposure as there is no due diligence defense for issuers under section 11, nor is there a sciente requirement as a prerequisite to section 11 liability. In contrast to “free writing prospectuses,” ABS ICM communications that are filed with the SEC are deemed to be part of the registration statement and, hence, create potential section 11 issuer and underwriter liability. Thus, using a “free-writing prospectus,” rather than an ABS ICM communication, removes an important source of issuer and underwriter liability.

In terms of section 12(a)(2) liability, an issuer will only be liable for misleading or false statements in the “free-writing prospectus” if the communication was prepared by or on behalf of the issuer; the communication was referred to by the issuer; or material information in the communication about the issuer or the securities offered was provided by or on behalf of the issuer. As a result, an issuer is unlikely to face section 12(a)(2) where the communication was prepared and disseminated by other parties, such as an underwriter.

There is one change in the new securities offering regulations, however, that expands potential liability, at least relative to what much of the structured products community had believed was the law prior to the new securities offering regulations. Rule 159 explains that section 12(a)(2) liability will be based on information provided to an investor at the time of sale without regard to information provided afterwards. Much of the structured products community had believed that misleading communications would not give rise to section 12(a)(2) liability if an accurate term sheet or final prospectus was subsequently given to the investor. “Rule 159 risk
management” is now an important consideration for issuers who are publicly offering structured products.

C. Suitability Requirements

Suitability requirements have historically constituted an important source of investor protection in the markets. In its September, 2005 notice to members, the NASD again emphasized the importance of broker-dealers fulfilling their suitability obligations when facilitating transactions in structured products, whether those products have been registered or not, involving retail investors. There are three different sets of suitability requirements that attach to broker-dealers in this context.

First, under NASD IM-2310-2(e), broker-dealers must “make every effort to familiarize themselves with each customer’s financial situation, trading experience, and ability to meet risks involved with such products and to make every effort to make customers aware of the pertinent information regarding [new financial] products.” Importantly, this obligation attaches to broker-dealers not only when making recommendations but also when accepting orders for new financial products. Second, there is a broker-dealer obligation, prior to making a recommendation, to ensure that a structured product is suitable for at least some investors. This obligation includes an obligation for a broker-dealer itself to understand the product. And, third, broker-dealers must, pursuant to Rule 2310, ensure that a recommendation is suitable for a given investor by examining the investor’s specific situation.

With the exception of the first requirement dealing with new structured products, these obligations only attach if a broker-dealer makes a recommendation. If an investor places an unsolicited order for an established structured product, these suitability requirements do not provide any investor protection. Tellingly, the NASD has suggested that it might be appropriate
for broker-dealers to either limit purchasers of some structured products to those already approved for options trading or develop “comparable procedures” designed to ensure that investors purchasing structured products are taking appropriate risk. Such a requirement would represent a significant extension beyond that provided by traditional suitability obligations which turns on there being a recommendation. In particular, there is concern that “reverse convertibles,” a structured product in which an investor purchases a bond and writes a put option to the issuer with the exercise price being payable in shares, is the type of structured product that the NASD believes requires pre-approved options trading as a prerequisite to purchase. This requirement could have the effect of confining “reverse convertible” products, and perhaps other structured products with embedded options, essentially to the institutional market.

D. General Antifraud Provisions of the Securities Act and the Exchange Act

In assessing the current state of investor protection, it is important to realize that the general antifraud provisions of the Securities Act and the Exchange Act apply to sales of structured products just as they do with the sale of any security. These antifraud provisions include section 17(a) of the Securities Act and Rule 10b-5, Rule 13b2-1, Rule 13b2-2, Section 13(b)(5) and Section 20(e) of the Exchange Act.

3. Is Current Investor Protection Sufficient?

To date, there are few documented instances of retail investors in the United States suffering financial losses because they were not able to understand the disclosures made concerning the returns and risks of structured products. In Europe, however, where the structured products market is more extensively developed than in the United States and where retail investors actively buy structured products, concern has emerged as retail investors have experienced losses.
Several recent events have garnered international attention. In 2002-2003, for example, investor losses from equity-linked reverse convertibles, a structured investment that came to be known as “precipice bonds,” made the news. The payments from these bonds were linked to the performance of a basket of stocks, offering relatively high coupon payments, but no capital protection. They thus promised big returns in rising markets, but at a cost of a downside penalty if the market fell. The market eventually dropped, and many bondholders found themselves losing two percent of their investment for every one percent the market fell. Following these losses, the UK Financial Services Authority (FSA) reviewed 150 financial services firms, resulting in payments to customers of £125 million. The FSA banned or fined several companies, including Lloyds TSB, for mis-selling. In its investigation, the FSA found that relatively few structured products were being sold as a result of consumers receiving advice. The FSA stated, “If consumers are not getting personally tailored financial advice, then an adequate explanation of risk is particularly important, as they will be relying solely on the literature they received.”

Another high-profile case involved a very wealthy investor, who had prior experience in the currency swap markets, who purchased a structured product, called PERLS, from Morgan Stanley International and suffered substantial losses. The payment due to the holder of PERLS on maturity was linked to the spot exchange rate of several foreign currencies. Given the complexity of the product, the product’s illiquidity, and the sizable investment made by the investor, a court concluded that the structured product was not a suitable investment.

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The concern about the current regulatory regime includes, but is not limited to the mis-selling/suitability issues described above. Concern has also arisen as to the transparency of the fees charged, which is considered in other areas of securities regulation to be very important. For example, the regulatory regime for investment products such as mutual funds emphasizes the cost of investments, which are often taken to include expenses, selling charges, and commissions. In the case of mutual funds, most of these costs are relatively easy to calculate and disclose, as they are taken as charges against the net assets of a fund. Thus a fund may have an annual expense ratio of 0.8% and may be sold with a one-time front-end load charge of 3%, all of which must be clearly disclosed at the point of sale. So important is fee disclosure in this regime that there is pressure in some quarters to go still farther with fee regulation and required periodic disclosure of dollar fees paid per quarter.

Now consider the case of structured products. If a security is offered at a price of $10, there may be a $0.40 underwriting discount, meaning that only $9.60 of the initial $10 is invested in the product. Note however, that this cost may be the only cost that is clearly disclosed and there may be other far more significant costs that investors bear. So, for example, suppose the product is a five-year equity-linked bond with an annual coupon of 1%, it has a guarantee that the investor loses none of the face amount of principal invested, and the terminal payment equal to the greater of the face amount of the bond or the percentage increase in the level of the S&P 500, with a maximum of 10% per year over the life of the bond. Suppose the volatility of the market is 20%, the interest rate is 5% annually, and the bond is sold at par. The product appears attractive in that you cannot lose your principal, can make up to 10% per year in appreciation, and get a guaranteed 1% return. But is this an expensive or a cheap product? To

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22 Soft dollars, or the payment of commission in excess of the minimum possible, and related practices, are notable exceptions.
know the answer to this question, one needs to price the embedded options in the structured note. In this case, from the investor’s perspective the note includes a long put struck at par, and a short call struck at \((1.10)^5\) or 161% above the current index level. The call is priced at $9.69 and the put at $7.02, implying an additional cost to the investor or $9.69 - $7.02 = $2.67 or 267 basis point at issue, far outstripping the underwriting charge. One might point out that this calculation neglects the 1% annual coupon paid to the investor, which it does. However, it also does not include dividends paid on the S&P 500 that the investor forgoes in making the investment, instead of investing in the underlying and buying the securities themselves. Because the forgone dividend yield of the index is above the 1% coupon on the bond, this represents an additional cost to the investor.

The point of the above example is three-fold. First, it illustrates that even a simple structured product such as a plain-vanilla equity-linked bond can require considerable effort and knowledge to decompose it to its elements. Second, and more importantly, it shows that only through such decomposition can the true cost of a structured product be understood. If the goal is to compute a cost that is on a comparable basis to the expense ratio and selling costs of a mutual fund share, then such an exercise is required. It must be clear that very few investors would be capable of such an analysis. More interesting is the question of how many selling brokers are capable of providing the salient results of such an analysis at the point of sale. With certainty the underwriting broker would be capable of this analysis, but there is no requirement such information be presented. Whether a typical introducing broker can or would present such information is, we believe, highly doubtful. There is probably room for the introduction of an examination that would be a prerequisite to being allowed to sell structured products, just like the Series 3 examination is a prerequisite for anyone applying for registration as a futures
commission merchant or commodity trading advisor. Finally, the example demonstrates that a structured product’s design can dramatically affect the magnitude of the embedded fees charged to investors and that even simple changes to a note’s design can lower such fees to a more attractive and appropriate range.

One final concern about structured products is the difficulty of reselling products before maturity. The secondary market for most structured products is highly illiquid, which means that investors who want to resell their securities face high transactions costs. Although some dealers may be willing to buy securities back from investors, few guarantee that they will repurchase them or support a secondary market.

Such a concern is all the more important given the future demographics of the United States. The baby-boomers of the 1950s and 1960s are now reaching retirement age. The U.S. Census Bureau estimates that the number of people who are 65 or older will go from 36.6 million in 2005 to over 63 million in 2025. These people are likely to be disinvesting from homes and equity securities, exiting out of corporate retirement plans, and putting their funds to work in fixed-income type investments. The investment and brokerage communities see this demographic shift as a bonanza and are trying to either retain or increase their share of these dollars. Structured finance products represent a likely place for these monies to be invested, and perhaps appropriately so given their flexibility. However, the regulatory concerns should be clear: Elderly investors who need current income, who have a potentially diminished ability to understand new products, and whose risk-behavior is likely to arise from a fear of running out of money before death may make easy prey for unscrupulous brokers.

At the same time, all of these concerns must be balanced against the clear benefits that can be conveyed by structured products. In the case of the equity-linked bond above, nowhere
can a typical investor generate such a pattern of cash flows (no loss of principal, guaranteed income, and substantial price appreciation potential) other than a structured product. Even if investors know how to synthesize such a bond, it would be prohibitively expensive to do so in terms of transactions costs, given the size of a typical retail investment. As former CFTC Commissioner Sharon Brown-Hruska made clear in her address to the SPA,23 one has to be careful in restricting the ability of retail investors to take on and manage risk. Even seemingly innocent reporting, registration or disclosure solutions can substantially increase the cost of trading derivatives, whose chief benefit is low transactions costs. This increase in cost may in turn affect the supply or terms of the products offered in the market. Thus it is up to regulators to balance the costs and the benefits to the retail investor of the chosen investor protection regime.

4. Possible Solutions

Before one begins to suggest remedies, it is important to specify appropriate policy goals. In this case, we take the policy goal to be the design of a regulatory regime that prevents investors from unknowingly holding inappropriate structured products in their investment portfolios. This overall goal encompasses two subsidiary goals: first, ensuring that retail investors purchase products at reasonable fees, including those fees that are embedded, and, second, that retail investors hold products with a risk profile that is appropriate given their investment needs. For the reasons discussed above, the particular regulatory pressure points for structured products differ from those of traditional retail investment vehicles, such as mutual funds. For one, these products are much more complicated to understand, often relying on complex mathematical formulas and models to determine cash payouts and fees. Second, these products can be linked to one or a few state-variables, such as a commodity price, an index price,

a currency price, or some combination of the above, that provide important hedging or investment opportunities to investors, or that let them develop such exposures at much lower cost than they could if they packaged such products on their own. Hence the products can confer important benefits, but at the concomitant cost of complexity and potential opaqueness.

On the one hand, there may be little cause for concern about the protection of retail investors. Although structured products are likely to be too complex for the average investor to understand, as one commentator points out, “How many people understand the intricacies of insurance accounting?” Yet they still are able to purchase insurance.\textsuperscript{24} On the other hand, the past two decades has witnessed a dramatic disintermediation of the financial markets, with retail investors increasingly holding financial assets directly or through mutual funds. In particular, structured products are typically not fungible, which makes it very difficult to comparison shop. To the extent this trend continues, the ability of investors to either a) rely on the advice of brokers or financial advisors or b) to discern the risks and rewards of investments directly is increasingly important. Here we discuss several possible avenues that might help mitigate the problem.

If one wants to reduce the risk of holding inappropriate structured products for those retail investors who do not rely on the advice of a broker or financial advisor, rethinking what it means to be an “accredited investor” might be one obvious way to go. Under the current regulatory regime, one can easily think of any number of occupations that might allow someone to meet the definition of an “accredited investor,” but that might not prepare them to appreciate the intricacies of the payments, fees, and risks of structured products. Different criteria could be crafted that would vary depending on the type of investment vehicle that an investor wants to purchase or whether the investor has a financial advisor providing advice. Indeed, as will be

\textsuperscript{24} Tony Tassell, “On London: Retail Investors Join the City Revolution,” FT.com, 8/11/06.
discussed in more detail later, the FSA’s proposed regulatory regime works off of the type of product, more specifically its riskiness, that an individual is purchasing. To the extent that structured products are privately placed, tightening the definition of “accredited investor” would preclude certain retail investors who currently qualify as accredited investors from purchasing structured products (ignoring for the moment the possibility of Rule 144 resales). On the one hand, sales to these investors may be inappropriate. On the other hand, these investors would no longer have access to what are potentially important and desirable products. This outcome is a real cost that should not be underestimated. The FSA in crafting its regulatory regime has appropriately emphasized the legitimate and important role structured products can play in investors’ portfolios.

On a related note, the SEC in the past has required firms to issue securities in minimum denominations to be granted regulatory relief from the Securities Act so as to increase the likelihood that securities remain in the hands of financially sophisticated investors. For example, firms selling securities pursuant to 144A (Exxon Capital) were required to denominate securities in increments of $100,000. Similarly, the SEC permitted MIPS to be eligible for Exxon Capital treatment if they were tailored for financially sophisticated investors. Specifically, the securities were to be issued in denominations of $1,000 (rather than $25 or $50, which was standard for retail products), they paid interest semi-annually (rather than quarterly, which again was standard for retail MIPS), and were not listed on an exchange.25 Prior to the Ralston Purina decision, one of the major facts, emphasized in a well-known opinion by the General Counsel of the SEC, in deciding whether an issuance was a “public offering,” and hence had to be registered, was the denomination amount. Similar types of criteria might be appropriate for structured products.

25 SEC No-Action Letter 2/97
For investors who are accredited and for brokers and financial advisors who offer assessments of whether particular structured products are appropriate for clients, enhanced access to information about private placements might enhance investor protection. To this end, the SEC or an industry association might consider creating a web-based repository for offering memoranda of structured product deals to facilitate the transfer of information about offerings. Because this repository would contain documents relating to private placements, access to documents of restricted securities would need to be limited to accredited investors and qualified institutional buyers. Once securities were no longer restricted, access to those specific documents could be opened more broadly. The benefits of the system would hopefully mirror those provided by Edgar (Electronic Data Gathering, Analysis and Retrieval), the SEC’s Web-based system that automates the collection and dissemination of the financial data that public companies and their affiliated executives and officers are required to file with the SEC. By making information “available to investors via the Internet within 78 seconds of receipt, Edgar gives investors a foundation for making more informed decisions.”26 It would allow parties in both the primary and secondary markets to access detailed information on current and prior deals; information that is now largely in the domain of large investment companies and pension fund managers. Once securities were no longer restricted, all investors would have access to such information. Creating a repository of such documents would allow investors to compare products features and fees.

Improving the disclosure in both offering memoranda and prospectuses of structured product deals might also enhance investor protection. In particular, two types of disclosures seem particularly important in this regard. First, investors are likely to benefit from a clear presentation of the embedded as well as explicit fees being charged for products, much as is now required in

Regulation AB offerings with respect to fees that come out of the cash-flow generated by the underlying assets. Second, investors need to understand that a security’s credit rating does not reflect the riskiness of its cash flows. Improved understanding of the true cost of a structured product and avoiding the common confusion that a credit rating speaks to a product’s risk would represent substantial progress. More generally, the SEC might consider establishing a fast-track review process for registered structured products for issuers committed to improving disclosure. The staff might then issue “best practice” guidelines to help other issuers improve their disclosure. In 1996, the SEC established a pilot program for public companies willing to file plain English documents under either the Securities Act of 1933 or the Securities Exchange Act. To compensate these issuers for being early adopters of plain English, the staff accelerated the review process. From those experiences, the industry was able to learn from the early adopters, effectively creating templates that lowered the cost for followers. To understand how the disclosure for structured products might be improved, one can look to the disclosure being developed for MACRO SECURITIES DEPOSITOR (MACROS), a security designed for retail investors. The payments to investors from these bonds are linked to two underlying assets, and the SEC’s staff has worked to have the issuer incorporate scenario analyses into its disclosure. An example of some of the MACROS disclosures is provided in Exhibit 4 below. As the exhibit also demonstrates, however, enhanced disclosure is unlikely to be a substitute for honest financial advice for most retail investors, given the complexity of many structured products. As a result, there is much to be said for suitability requirements.

27 See http://macromarkets.com/macro_securities/.
The prospectus includes 15 tables that illustrate the performance of one Up-MACRO holding or tradeable share under various scenarios based on different assumptions about the level of the Light Sweet Crude Oil Price and the yield on the treasuries in the paired holding trusts.

Scenarios:
1. Price Increases and Interest Rates Rise
2. Price Increases and Interest Rates Fall
3. Price Increases and Interest Rates Remain Constant
4. Price Decreases and Interest Rates Rise
5. Price Decreases and Interest Rates Fall
6. Price Decreases and Interest Rates Remain Constant
7. Price is Volatile with No Net Approximate Change and Interest Rates Rise
8. Price is Volatile with No Net Approximate Change and Interest Rates Fall
9. Price is Volatile with No Net Approximate Change and Interest Rates Remain Constant
10. Price is Volatile with a Net Decrease and Interest Rates Increase
11. Price is Volatile with a Net Decrease and Interest Rates Decrease
12. Price is Volatile with a Net Decrease and Interest Rates Remain Constant
13. Price is Volatile with a Net Increase and Interest Rates Increase
14. Price is Volatile with a Net Increase and Interest Rates Decrease
15. Price is Volatile with a Net Increase and Interest Rates Remain Constant

Source: S-1/A 08/16/2006

The above solutions are based on the notion of restricted access to structured products based on their registered/unregistered status and the classification of investors (private vs. public market) and on enhancing the quality of and access to information in the market. The hope is that if these mechanisms are implemented, the securities that might dribble into the public market after their restricted period lapses, per Rule 144, would have a better chance of ending up in the hands of investors who understand and are suited to a particular product. An alternate regime, and one that is being considered by the FSA in London, is a retail investor protection regime based instead on the characteristics of the product.\(^{28}\) The core idea for the framework is the level of regulatory protection for investors should be based on the product’s risk more than the

regulatory classification of the security or its manner of sale. The FSA has created a designation called “wider-range” products, a name that captures the notion that such a security is structured so that its range of possible payouts and terminal values is large relative to more conventional bonds. For example, a principal protected bond whose maturity is not too long is a good candidate for a structured product that may be broadly held. However, if the principal is not protected, and the range of outcomes is very broad, the product is likely to be much more risky and a higher level of investor protection is likely required. Examples of such protection might include enhanced disclosure, special point-of-sale information or the required participation of a registered financial advisor. Of course, such a determination of whether a product is wider range, by definition, is a subjective judgment. This structure is also reflected in the new Markets in Financial Instruments Directive (MIFID) due to come into effect in Europe in April 2007.

Notable in the FSA’s regulatory framework is the recognition up front of two risks: mis-selling by sellers and mis-buying by investors on the one hand, and the opportunity cost suffered by investors who don’t get access to such products due to regulatory restrictions on the other. These two risks are weighted nearly equally in the FSA’s discussion paper. This approach contrasts sharply with the SEC’s approach which usually weights investor protection far more heavily that it does opportunity costs.

It is appropriate to make two final closing comments. First we should address the role of efficient markets with respect to complex financial products. Efficient markets will guarantee that structured product securities are appropriately priced given all available public information. To the extent that the characteristics of a security in question are public information and are accurately and completely described and markets are liquid, then the price at which the securities trade will be “fair”. One problem with the secondary markets for structured products is that
liquidity is often limited even for listed products. In addition, this mechanism solves only a portion of the problem we discuss above. The concern is not just fair pricing, though that is important, but it is also the appropriateness of the fees and the riskiness of investments for retail investors. An unwitting investor may buy and hold a fairly priced risky security, and suffer harm in the process. Efficient pricing does not ameliorate the problems of high fees or unsuitability of the riskiness of the investment for particular investors.

Second, a number of commentators have argued that one need not be too concerned about investor protection, because financial services firms have incentives to adequately advise investors so as to protect their own reputations. Although we believe a number of firms do take the protection of their reputations seriously, anecdotal evidence strongly suggests that it is not a panacea. Herding behavior on the part of banks to supply structured products and demand by retail investors can lead to situations that may endanger the regulatory goal we stated in the beginning. We continue to believe that investors are unlikely to fully understand the cost of structured products and their cash flow risk. The challenge remains in finding an investor protection regime in which investors can accrue the benefits afforded by structured products without their protection being compromised.

5. Conclusions

Several possible regulatory approaches are possible to ensure investor protection: (1) rethinking requirements as to who is eligible to purchase structured products, such as tightening the definition of which individuals will be deemed to be “accredited investors”; (2) structuring the distribution of these products, such as large denominations or enhanced suitability requirements, to reduce the probability that investors hold inappropriate structured products; and (3) improving disclosure and access to information by requiring the disclosure of embedded and
explicit fees, developing a web-based repository of offering memoranda, and encouraging the adoption of “best practices” in the disclosure arena. As discussed earlier, any regulatory approach must consider the costs of restricting investor access, perhaps even inadvertently, to structured products because they can be valuable. Caution also needs to be exercised if disclosure standards are raised: increasing mandated disclosure may drive securities into the private markets. Although only financially sophisticated buyers will then be able to purchase the securities in initial placements, these securities will become available for purchase by less financially sophisticated buyers once they are no longer restricted. At that point in time, there will be little or no disclosure available.

Promisingly, the SPA has created an informal working group to focus on developing best practices for the industry. The group is considering two projects: 1) developing a program to further investor education on structured products, and 2) simplifying product categories for individual purchasers of structured products. As part of this effort, the group might also consider creating guidelines for the marketing and distribution of structured products. Industry self-regulation can serve as a valuable complement to other initiatives.

In short, these issues are likely to become only more important as the structured products industry grows, innovation continues, and retail investors become increasingly interested in this asset class. The key is to try to find solutions to the challenges presented by structured products before investors learn the hard way.