



THE SECONDARY MARKET FOR
AUCTION RATE
SECURITIES



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“...the market price equals fair value...”

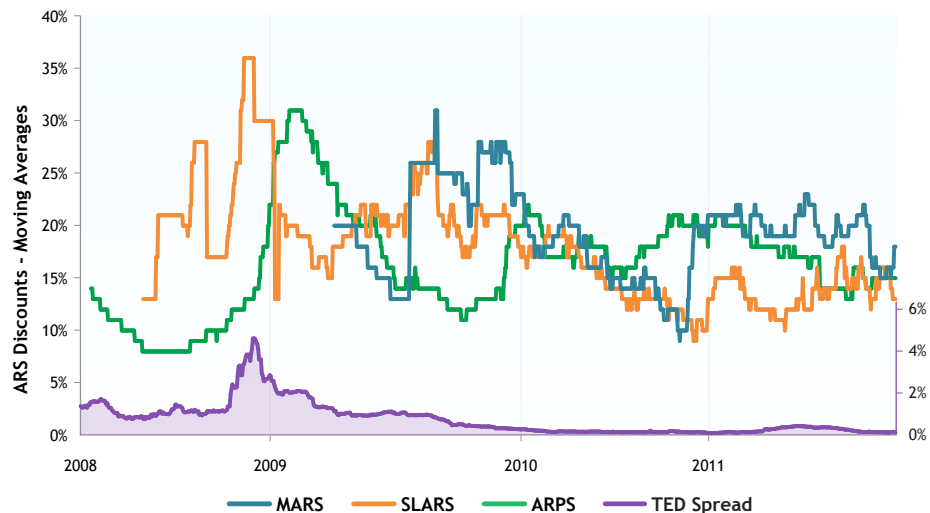
ACTIVE, CONSISTENT, AND REPRESENTATIVE OF FAIR VALUE?

Since the February 2008 “freeze” in the Auction Rate Securities (ARS) market, public and private companies, their auditors, and their valuation advisors have struggled to determine the fair value of these now-illiquid assets. This white paper will discuss the latest trends in the secondary ARS market and show how this growing market indicates prices that are more consistent among similar securities, respond to broader market forces, and are therefore more reflective of fair value than in the immediate aftermath of the market freeze. Finally, as shown herein, ARS prices improved steadily in 2010 and through the first half of 2011.

BACKGROUND

ASC 820 (FAS 157) defines fair value as the “exit price” as of the measurement date, regardless of the level of market activity. For assets that have little market activity, fair value is the price that would be realized in a hypothetical sale. All data on trading activity reasonably obtainable by the reporting entity must be considered in the analysis. It is current practice to assume that observable prices represent fair value, unless there is evidence indicating otherwise (for example, in distressed sales). An active market is evidenced by the number of active buyers and sellers, the volume of transactions, recent occurrences of trades, and the extent to which traded securities are similar to the ones being valued. If an active market exists, in principle, the market price equals fair value.

CHART 1 - ARS DISCOUNTS AND THE TED SPREAD



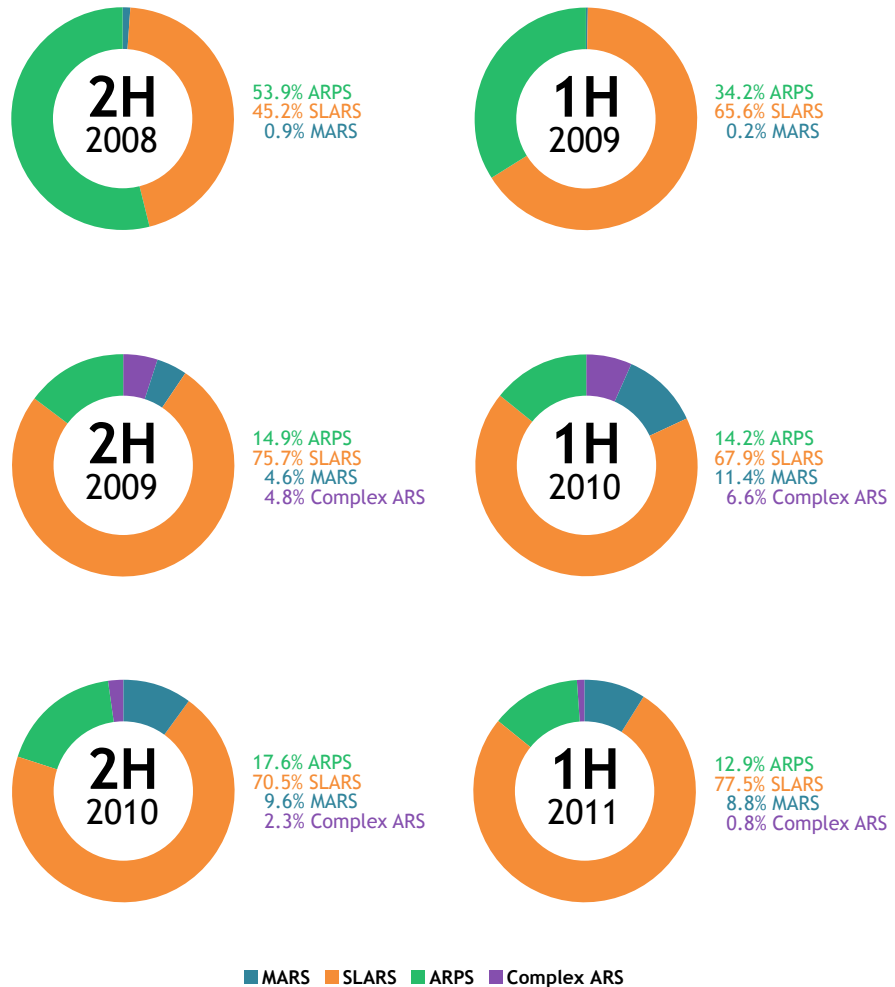
Around February 15, 2008, this large, liquid asset class (\$330B in ARS were outstanding at that time, according to most estimates) suddenly became illiquid as the broker-dealers who had supported the auctions withdrew their support. Holders of securities that had always been worth par, and had been considered the equivalent of cash by many, were facing not only significant losses, but also a confusing valuation problem. There were multiple theories of how to value ARS being circulated. Some analysts took the position that the auction markets were surely coming back soon (not so, it turned out). Others argued that securities with unimpaired collateral (e.g., student-loan backed ARS) should not be discounted. A “head in the sand” mentality prevailed for a surprisingly long time with respect to price

“...ignoring market evidence means less accurate valuations...”

levels in the secondary market: it was a widely held view that discounts for securities with unimpaired collateral could not represent fair value. However, evidence to the contrary has accumulated over time.

Consider a security that has almost perfect liquidity and can be turned into cash, at par, within days. It pays a certain coupon rate, which is reflective of interest rates for very short-term paper. Now, consider what happens when it becomes illiquid – now the holder has a 30-year bond, still yielding the same low coupon rate. Clearly, the market yield for the longer-term, illiquid security should be higher than for the short-term liquid one. When market yields exceed stated coupon rates, basic “bond math” produces a significant discount to par. The market data analyzed by Pluris since February 2008 has indicated yields that incorporate reasonable illiquidity increments given the circumstances. Additionally, the consistency of transaction prices for comparable securities has improved over time as the secondary market has evolved. We can say with confidence that reporting entities who ignore the market evidence will be presenting less accurate valuations to their investors.

CHART 2 - ARS MARKET COMPOSITION



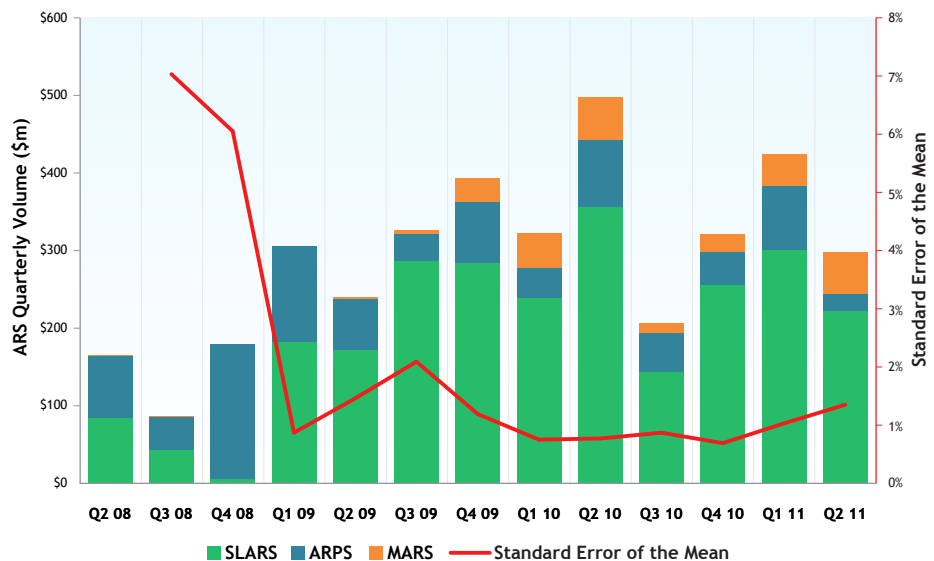
“...broadening investor base seen in the secondary market...”

THE SECONDARY ARS MARKET

As shown in the charts in these pages, the market for most types of ARS has grown significantly over time, as evidenced by volumes traded. However, this is only part of the story. While a relatively small number of buyers were active early on, the secondary market platform operated by SecondMarket currently has hundreds of participants active in the ARS market. Chart 1 has two main sets of data: Moving average trading price over time for the main classes of ARS (investment grade paper only), and the TED Spread, which is an indicator of general market illiquidity and stress, particularly in the financial sector. Despite the short-term trends having shifted at certain points, the longer-term direction has remained consistent. There has been a significant, palpable change in the market environment: pricing has improved and discounts are down. This is as expected in an environment where the market is generally less volatile and consequently less concerned about liquidity risk. As you can see in Chart 1, the TED Spread has declined (along with the VIX and other market stress indicators). At the same time, trading volumes have increased (as shown in Chart 3 below). The two data-sets thus reinforce the same market “message” of declining yield increments for illiquidity and improving prices.

Chart 2 shows market activity expanding to fully cover all the three core ARS subcategories of student-loan backed auction rate securities (SLARS), municipal auction rate securities (MARS), and closed-end fund issued auction rate preferred securities (ARPS), and also to include complex ARS (these have typically seen the greatest declines in value). This demand for a wider range of securities with differing investment characteristics is a reflection of the broadening investor base seen in the secondary market.

CHART 3 - ARS QUARTERLY VOLUME (\$M) AND STANDARD ERROR OF THE MEAN



The total volume of ARS trading shown in Chart 3 indicates the generally stable demand for ARS since 2009. But what about the dispersion of prices? In “normal” active markets, prices and yields for comparable securities will tend to cluster around the same levels, reflecting similarities in investment quality. This too, is evident in the secondary ARS market data.

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Chart 3 also shows the standard error around the mean for investment-grade ARS, by calendar quarter. The data indicates that as the volume has grown and the secondary market has become more established, the standard error has declined, reflecting more consistency in terms of how similar tranches are valued from deal to deal. This is a clear indicator of a more mature market.

VALUATION APPROACH

Ignoring the ARS market data is no longer an option. Since a functioning auction market is unlikely ever to return, the secondary market represents the only viable option for sellers. Thus, the prevailing market discount represents the only “exit price” available, now and in the foreseeable future. For this reason, at Pluris, our valuation approach is constantly calibrated to the market data. The main two approaches applied involve:

1. A direct comparables approach, wherein the discount for par for a particular security is derived from discounts in recent trades in the same or extremely similar (by issuer, maturity, collateral, coupon, and other measurements) securities.
2. A discounted cash flow approach, with the yield derived from the most-current yield curve and a yield increment drawn from the latest trading data on the most comparable ARS securities.

In our view, a critical element of the discounted cash flow approach is that the expected maturity assumption must mirror the expected maturity assumption used in deriving the implicit yield increments in secondary market deals. If there is a significant mismatch between these assumptions, the resulting value estimate should not be considered fair value.

One thing seems quite clear: the traditional auction market for ARS that would guarantee par pricing forever is not returning. These securities, in other words, have in essence converted to normal long-term bonds or preferred stock. The term “secondary market” for the trading activity seen since February 2008, therefore, is actually a misnomer: this is the *only* market currently existing and likely to exist in the foreseeable future.

1 The definition of an inactive market was recently clarified in FSP 157-4, *Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly*. Also see Paragraphs 21 and C86

2 Surveys of public company accounting for ARS indicated that early on the crisis, a large portion of reporting entities marked their ARS holdings at, or very close to, par. However, this portion has declined significantly over time.

3 SecondMarket, Inc., operates an open market platform for illiquid securities (more info at www.SecondMarket.com). Their market has been described as the largest market for secondary ARS trading anywhere. The data discussed herein is drawn from trades between buyers and sellers on this platform.

4 The TED spread measures the difference between Libor and T-bill rates.

5 Note that the trends in pricing have not been uniform among the different classes of ARS. For example, the significant improvements seen in ARPS discounts during most of 2009 began partially reversing themselves after redemption activity for more remaining issues began slowing around the beginning of 2010.

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PLURIS VALUATION ADVISORS

Pluris has 15 employees across offices in New York and California and provides valuation advisory services to clients world-wide, as well as daily marks services for high-volume clients and large institutions and portfolios.

Pluris specializes in business valuations and illiquid, complex, and distressed securities. Securities covered include Auction Rate Securities, ABS, MBS and other structured products; a wide range of derivative instruments; limited or general partner interests in investment funds; PIPEs and other restricted securities; distressed debt and bankruptcy claims; intellectual properties and intangible assets; plus operating businesses and asset-holding entities.

Pluris is known for its empirical research and proprietary databases on valuation discounts. Our research and analyses have been covered by the *Wall Street Journal*, *Financial Times*, *The New York Times*, *Forbes*, *American Banker*, *CFO Magazine*, *CPA Journal*, *Compliance Week*, *Absolute Return*, *Opalesque*, *Hedge Fund Law Report*, *Journal of Alternative Investments*, and *Hedge Fund Manager Week*, among others.

Pluris clients include: large institutions and investment funds including most large investment banks internationally, as well as smaller broker-dealers; private companies and over 100 public companies and their shareholders and executives; as well as high-net-worth individuals and families that require estate tax, gift tax, or income tax valuations, including some of the largest estates and some of the wealthiest families world-wide. Additionally, Pluris provides valuation testimony and has provided valuation services in a number of cases.

ESPEN ROBAK, CFA, PRESIDENT

Espen Robak is President and founder of Pluris Valuation Advisors LLC and a nationally recognized expert on intellectual property and business valuation, restricted and illiquid securities, securities design, levels of value, and discounts for lack of liquidity. Pluris' practice includes portfolio valuations for investment funds and financial institutions, as well as a broad range of financial reporting and tax opinions for public and private companies. Mr. Robak is a frequent contributor to books and professional journals on valuation, accounting and taxation topics. He is a columnist for *Wealth Strategies Journal*. Mr. Robak has earned the Chartered Financial Analyst designation and has a Masters in Business Administration and a Bachelor of Sciences degree from the University of Oregon.

RICK MARTIN, CPA, VICE PRESIDENT

Rick Martin, Vice President of Technical Accounting, is in charge of resolution of technical accounting issues as they pertain to our valuation clients, and manages our relationships with the accounting and audit professions. Prior to joining Pluris, Mr. Martin served as Head of Technical Accounting at Cowen and Company in New York and Senior Technical Accounting Advisor at Credit Suisse in Zurich, as well as technical accounting roles at all the big 4 accounting firms. Mr. Martin's advisory experience includes resolution of technical accounting issues in complex areas of accounting involving derivatives and other complex financial instruments, implementation of new accounting pronouncements, and assessments of IFRS and conversions. Mr. Martin earned his MBA from the University of Maryland at College Park and his undergraduate degree in accounting from Liberty University. Mr. Martin is a Certified Public Accountant.

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Tito Hill is a Senior Associate in our portfolio valuation group and is in charge of analysis, project management, and sales within the group, especially as pertaining to Auction Rate Securities, Structured Products, and distressed securities. Prior to joining Pluris, Mr. Hill worked as a Senior Associate at Accuserve, a valuations firm specializing in business valuations for the purpose of IRC 409A and FAS 123R compliance. Prior to Accuserve, Mr. Hill worked as an Associate at Calyon Securities in the Debt Capital Markets Origination Group, where he assisted Senior Originators in client management and business development capacities. Mr. Hill earned his bachelor's degree in Economics from Columbia University.

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