CHANDLER ASSET MANAGEMENT

Credit Quality in The Public Investment Portfolio

Public Funds Investing: Yesterday and Today

February 28, 2013

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Establishing Investment Objectives

- Safety
  - Maintain appropriate level of exposure to risk
- Liquidity
  - Sufficient short-term investments
  - Marketable securities
  - Targeted maturities
  - Extra layer
- Yield (Return, Growth)
  - Income
  - Long-term growth

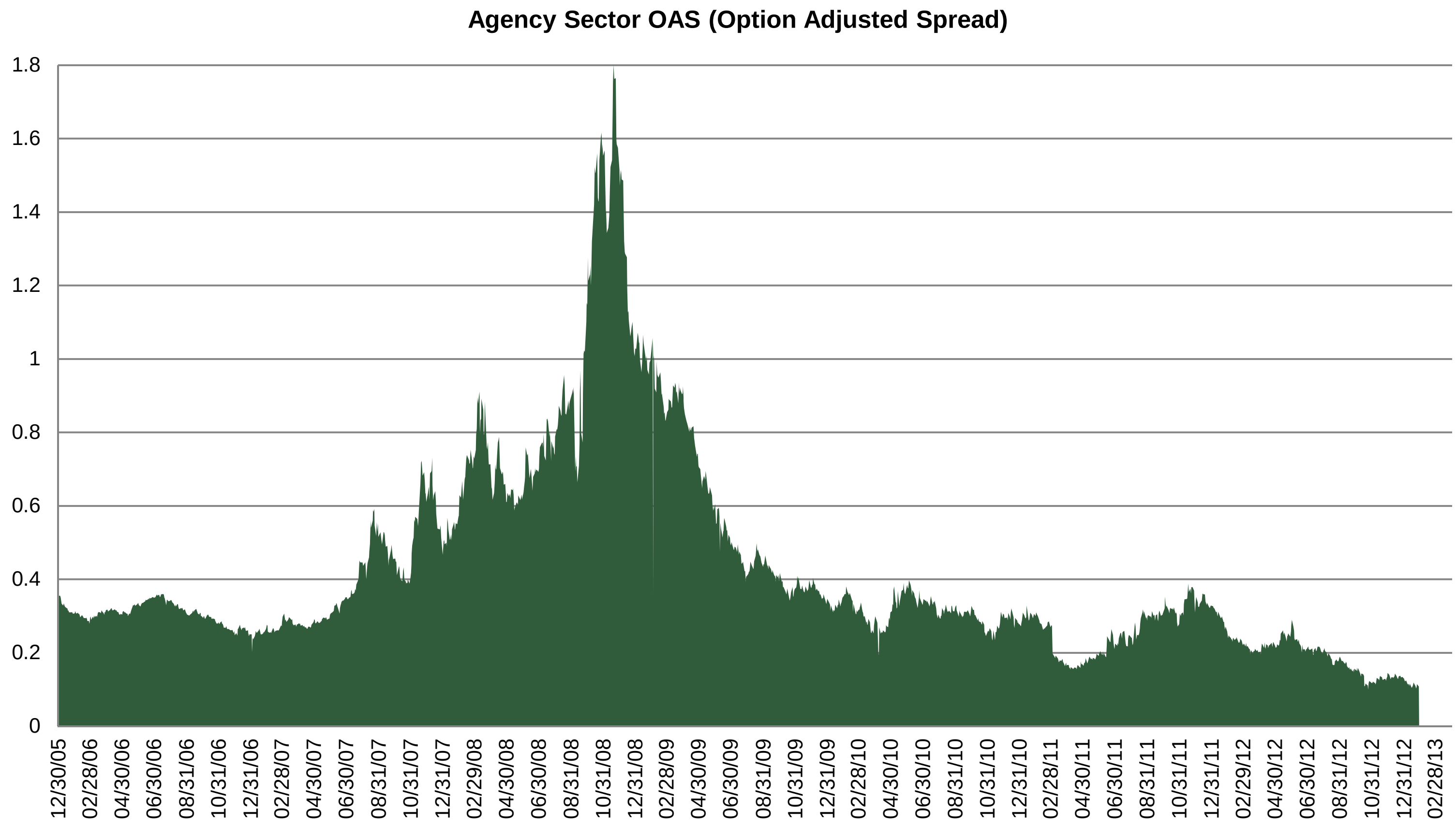
GSE Reform

Government Sponsored Enterprises

- Fannie Mae and Freddie Mac remain under conservatorship
  - US Treasury recently mandated the retained portfolio accelerate the pace of contraction to 15% per year (previously 10%)
  - No longer required to pay 10% dividend on preferred shares bolstering the capital of each of the entities
  - But…. All profits now flow directly to the US Treasury
- Agency asset class is likely to provide less yield to investors versus US Treasury securities

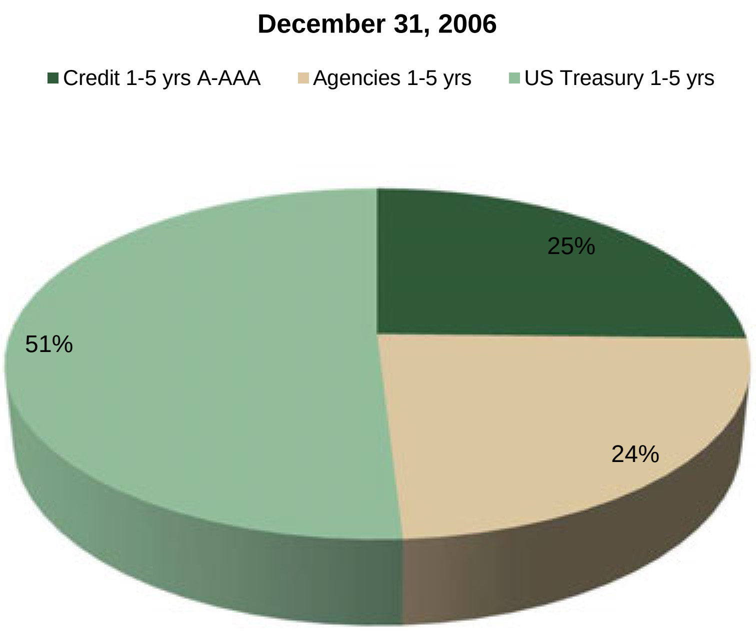
Agency Spreads: Past 3 Years

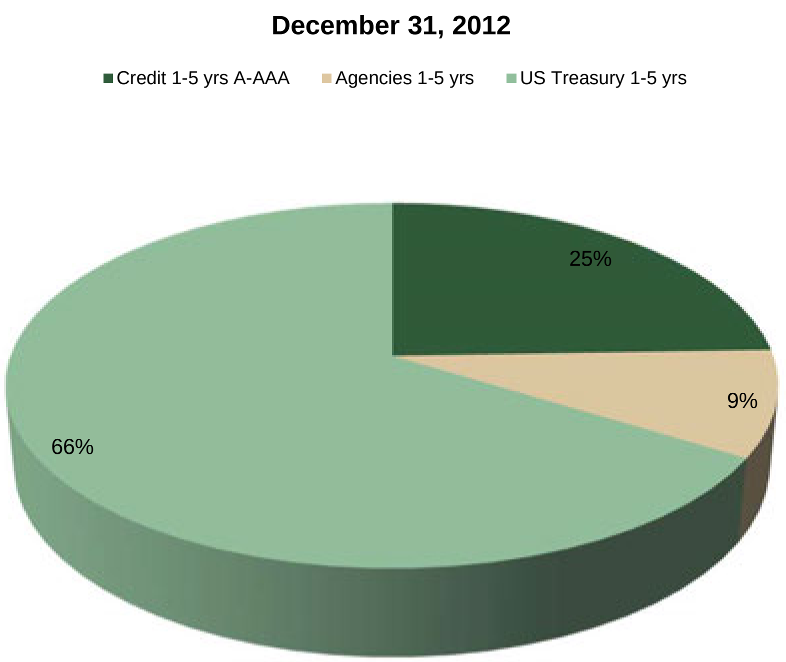
Agency Universe – Shrinking Supply and Conservatorship



Source: Barclays Live

Agency Sector Has Already Shrunk





Source: Bloomberg / ML Global Bond Indices

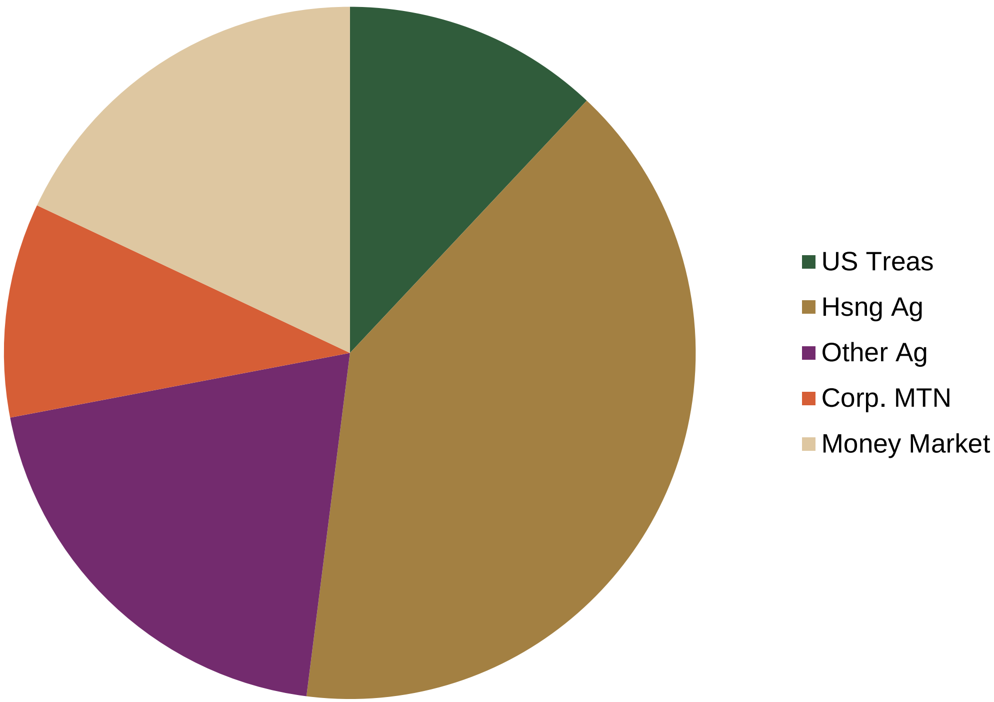
Note: Corporate includes Yankee bonds, Agency excludes subordinated bonds

Portfolio Management *is* Risk Management

- The greater an investor's exposure to properly *diversified* risk, the higher the expected return over time
- The greater an investor's exposure to risk, the higher the volatility of return from period to period
- The objective of "safety" requires establishing risk constraints
- Risk is something to be managed not avoided

Sector Allocation

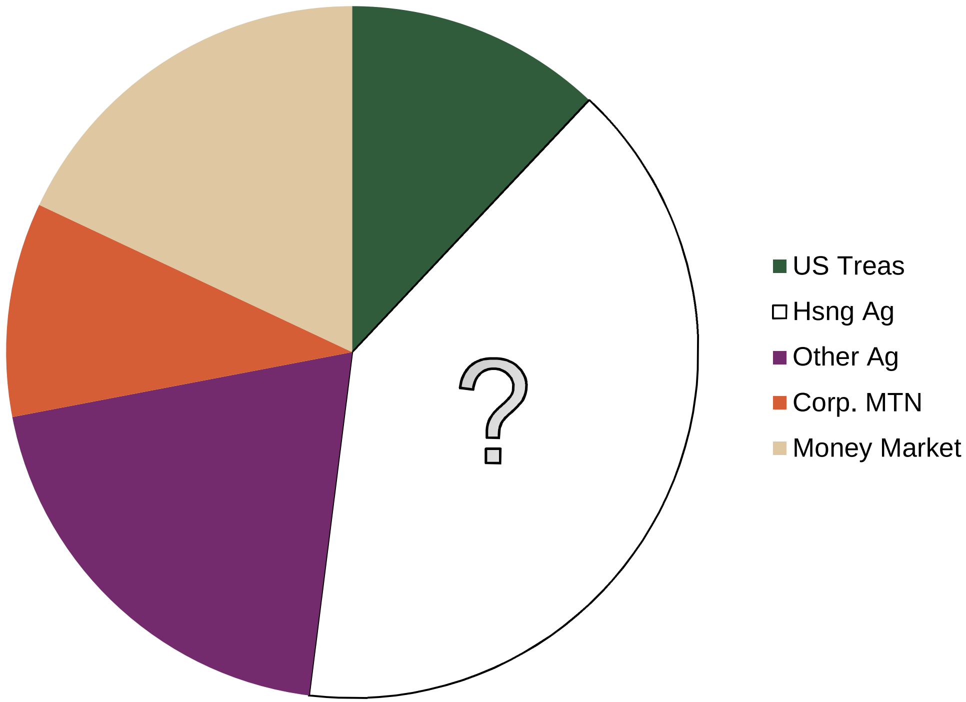
Goals of Sector Allocation



- Safety
- Diversification
- Liquidity
- Value

Preparing for Investment Without Agencies

Housing Agency Issuance is Shrinking



- Safety
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Alternative Asset Classes

- Investors are seeking alternatives to traditional public funds asset classes – Treasury and Agency debt

- Investing in Corporate Notes, Negotiable CDs, Yankee CDs, MBS and ABS can improve income from investments

BUT… as with all investments, the potential for increased return goes hand-in-hand with the assumption of more risk

Different Types of Risks

- Market Risk
- Credit Risk
- Liquidity Risk
- Reinvestment Risk
- Event Risk

Market Risk

- Also called interest rate risk
- The risk that the value of a security or a portfolio will change as interest rates change
  - Value can go up or down, *inversely to interest rate changes*
  - All securities are subject to market risk, even US government guaranteed
  - The longer the duration of the portfolio, the greater the change in value
- We can’t predict interest rates, but, using duration, we can calculate approximately how much the portfolio market value will change with a given, instantaneous change in interest rates

Credit Risk

- Credit risk is the risk that the issuer of a bond may not be able to make timely payments of principal and/or interest
- Investors receive higher yields when they purchase riskier securities
  - Agencies vs. Treasuries
  - Corporates vs. Agencies
  - “A” vs. “AAA” Corporates
- Credit ratings change over time
- Yield spreads vary over time

Liquidity Risk

- Liquidity risk
  - The risk that the portfolio won't provide adequate cash flow for the agency
  - The risk that a security can't be sold, if necessary, at a good price
    - Measured by such factors as the difference between bid and ask
    - Number of market makers for the issue
    - Usually, the larger the issue size, the greater the liquidity
- Liquidity risk can be minimized by maintaining appropriate balances of short-term securities in the portfolio

Reinvestment Risk

- Reinvestment risk: cash flows from a bond must be reinvested at the market rate at the time the cash flow occurs
  - Interest payments
  - Principal paid at maturity
  - Paydowns from mortgage securities
  - Principal from called bonds

Event Risk

- An unexpected event causes a sudden deterioration in an issuer's credit quality, and a concomitant instant decline in price
- NRSRO ratings do not (cannot) reflect event risk

SECTION 1

Analyzing Securities

Macroeconomic Analysis

- Analysis of economic trends
  - Employment
  - Housing
  - Inflation
- Federal Open Market Committee announcements and actions

Industry Analysis

- Industry trends
  - Earnings
  - Sales
- Regulatory issues and changes
- Demographic and social changes
- Industry business cycle analysis

Issuer Specific Analysis

- Financial health
  - Profitability
  - Balance Sheet
  - Cash Flow
- Management and corporate governance
- Bond covenants
- Capital structure

Tools and Resources

- Bloomberg
- Independent Third Party Research
  - Stone McCarthy
  - Macroeconomic Advisers
  - Credit Sights
- Regulatory Filings
- Information from Nationally Recognized Statistical Rating Organizations (NRSROs)
- Ongoing and continuous monitoring of portfolio holdings and issuers
- Hard work

Wrap Up

- Keep it safe - Don’t overstretch for yield
- Provide for liquidity
- Having non-governmental issuers in the portfolio offers greater expected earnings
  - AND involves greater risk
- Effective implementation of a program of non-governmental investing requires
  - Expertise and the time to perform research and analysis
  - Sufficient resources, including external subscription services
  - Continuous monitoring of issues in the portfolio and under consideration
  - A high level of diversification by sector and by issuer

Conclusion

- Do your own credit research, don’t rely strictly on ratings agencies
- Be aware of the risks in your portfolio
- Make sure you can pass the “sleep test”

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Biography

Martin Cassell, CFA
CEO, Chief Investment Officer

Martin Cassell is the chief executive and investment officer at Chandler Asset Management and is a principal of the firm. Mr. Cassell is responsible for defining, planning, and directing company programs. He heads implementation of the firm's investment strategies and portfolio risk management. He designed the proprietary quantitative models that drive our investment process, establishing duration, structure, and asset allocation throughout client portfolios.

Mr. Cassell joined Chandler Asset Management in 1991 from the City of San Diego where he managed a $1 billion fixed income portfolio. He began his investment career in 1987 managing portfolios at World Savings and Loan.

Mr. Cassell received his B.S. in finance from California State University, Hayward. He is a member of the CFA Society of San Diego and holds the designation of Chartered Financial Analyst. He is also a member of the California Association of Joint Power Authorities (CAJPA) finance committee.