



# Fixed Income Primer for Insurance Companies & Risk Pools

**By design, insurance company and risk pooling portfolios are never fully diversified.**

**Most allocate their portfolios heavily towards investment-grade fixed income to account for policy holder obligations, reserves and sufficient risk capital.**

Fixed income allocations by insurers and risk pools typically range from 70% to 100% of their portfolios depending on regulatory and other constraints (*i.e. net position, business dynamics, etc.*).

As such, investing these fixed income assets effectively is a primary objective.

To do so, it will be important to understand the various fixed income asset types.

### **Investment-Grade:**

Investment grade is a rating that identifies a fixed income security (aka bond) having a low risk of default.

The primary bond rating agencies in the U.S. are:

*Standard & Poors*  
*Moody's Investors Services*  
*National Assoc. of Insurance Cos.*

## **What is Fixed Income?**

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Fixed income is a type of investment debt security (aka bond) that pays investors fixed interest payments until its maturity date, which is when the principal investment amount is repaid.

Fixed Income bonds are evaluated by rating agencies on the probability that the issuer will repay its debt. Any issuer or bond with an investment-grade rating are considered highly likely to repay debt by the maturity date.

Government and corporate bonds are the most common types of fixed income allocations by insurance companies and government risk pools.

Insurers and risk pools also commonly utilize fixed-income ETFs and/or mutual funds.

### **Investment-Grade Ratings:**

S&P: "BBB-" and Above  
Moody's: "Baa3" and Above  
NAIC: Bonds Rated 1 to 2

## **What Fixed Income Assets are Insurers and Risk Pools Utilizing?**

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### **Asset-Backed Securities (ABS):**

An asset-backed security is a bond made up of illiquid assets (excluding mortgages) that have been packaged and sold to investors.

This includes assets such as car loans, student loans, leases, credit card debt, royalties, etc.

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## Fixed Income Primer for Insurance Companies & Risk Pools

### **Asset-Backed Securities (ABS):**

Should the bond default, the pooled assets can be seized and sold in order to ensure repayment to investors.

For insurers and risk pools, asset-backed securities potentially offer higher yield (relative to government bonds) and greater portfolio diversification.

### **Securitization:**

Converting an asset(s) into securities.

### **Cash & Cash Equivalents (CCE):**

Cash & Cash Equivalents refer to any assets that are cash or can be immediately exchanged for cash. Cash equivalents are liquid assets and typically have a maturity date of 3-months (or less). They are also not subject to material fluctuations in value.

### **Cash Equivalents:**

Money Market Funds (MMF)  
Short-Term Investment Funds (STIF)  
U.S. Treasury Bills (T-Bills)

For insurers and risk pools, cash equivalents can be considered as a 'low-risk' investments due to its short maturity and liquidity. As they typically maintain their dollar value, there is much flexibility when it comes to transactional decision-making.

### **Certificate of Deposit (CD):**

A certificate of deposit is a financial product sold by banks and credit unions offering an interest rate premium on a lump-sum deposit that remains untouched for a defined period of time.

An insurer or risk pool may consider a CD as they typically offer fixed, predictable returns.

### **Collateralized Debt Obligation (CDO):**

A collateralized debt obligation, which are made up of bonds, is a type of asset-backed security with a complex structure intended for institutional investors, such as insurance companies and risk pools.

### **Derivative:**

A derivative is a security with a value based on an underlying asset(s).

A CDO 'derives' its value from other underlying assets. The assets in a CDO are pooled together and then split into pieces known as 'tranches', which are bonds of varying investment-grades.

These securities derive their price from fluctuations in the underlying asset(s).

As CDOs are split into tranches, investors can purchase bonds that match their organization's risk tolerance.





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### **Collateralized Bond Obligation (CBO):**

A collateralized bond obligation, which is a subset of CDOs (*and a type of asset-backed security*), is an investment-grade bond that derives its value from a variety of junk bonds.

Since the pool of bonds within a CBO include several types of credit quality bonds, they offer enough diversification to be considered “investment grade.”

Like CDOs, CBOs are separated into tiers (aka tranches), with each tier offering different levels of risk and compensation.

### **Collateralized Loan Obligation (CLO):**

A collateralized loan obligation, which is a subset of CDOs (*and a type of asset-backed security*), is a security that derives its value from a pool of debt.

Typically, the loans pooled together are corporate loans that have a low credit rating or leveraged buyouts made by a private equity firm.

Insurers and risk pools investing in CLOs receive scheduled debt payments from the underlying loans, as they are assuming most of the default risk. A CLO manager handles the packaged loans within their various tranches; actively buying and selling loans in order to purchase new debt.

Like CDOs, CBOs are separated into tranches offering different levels of risk and compensation.

### **Commercial Mortgage Backed Securities (CMBS):**

Commercial mortgage-backed securities are bonds that derive its value from mortgages on commercial properties. Loans packaged within CBMS are typically for office buildings, hotels, malls, factories, etc.

Like CDOs, CMBS are separated into tranches offering different levels of risk and compensation. As terms on commercial mortgages are generally fixed, CBMS can potentially offer less risk that other asset-backed securities.

CMBS can provide insurers and risk pools with an alternate method of investing in the real estate market, while offering a (typically) consistent return rate. Typically, Real Estate Investment Trusts (REIT) do not offer a guaranteed return rate and are considered ‘risk assets.’ But, not all CMBS tranches are investment grade.

Furthermore, CMBS can potentially offer higher returns than corporate or government bonds.

### **Junk Bonds:**

Below investment-grade fixed income securities that typically offer higher yield, but greater risk.

### **CMBS Note:**

CMBS often get confused with subprime residential collateralized mortgage obligations that contributed to the 2008 Financial Crisis, however they are not the same.

Any principal and interest payments made by borrowers on the underlying mortgages are first collected by the issuer. After deducting associated fees, the issuer then passes payment onto investors of the CMBS.





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### Convertible Bond:

A convertible bond is a corporate bond that can be converted into a set number of common stock (equity shares). A convertible bond can only be converted to common stock at certain times and is typically at the discretion of the bondholder.

Since convertible bonds are 'hybrids,' their price is very sensitive to changes in interest rates, stock price and the issuer's credit rating.

The conversion price, the price per share to convert the bond into common stock,) is set when the conversion ratio is decided for a convertible security.

Convertible bonds can be a flexible option for insurance companies and risk pools as they feature the structure (and potential returns) of fixed income securities, while providing the opportunity of owning stock.

### Convertible Preferred:

Convertible preferred stocks are preferred shares that can be converted into a set number of common stocks after a specified date.

Typically, convertible preferred stocks are exchanged at the shareholder's request, but the company or issuer can force conversion in certain instances. The value of a convertible preferred stock is ultimately based on the performance of the underlying common stock.

Due to their structure differences, preferred stocks are not as volatile as common stock and resemble a fixed income security as they provide shareholders with a fixed dividend (and a claim on assets if the company liquidates).

However, preferred shareholders do not have voting rights like common shareholder. Although preferred stocks provide a fixed dividend, they may not grow at the same rate as common stocks.

If the underlying common stocks rise, converting preferred stocks would then realize immediate profits.

Similar to convertible bonds, convertible preferred stocks can be a flexible option for insurance companies and risk pools due to their resemblance to fixed income bonds and potential opportunity to own common stock of the company/issuer.

### Conversion Ratio:

The bond's conversion ratio determines how many shares of stock you can get from converting one bond.

For example, a 5:1 ratio means that one bond would convert to five shares of common stock.

### Conversion Price:

The price at which converting becomes profitable for the investor.

### Conversion Ratio:

The stock's conversion ratio determines how many shares of common stock you can get from converting one preferred stock.

For example, a 5:1 ratio means that one preferred stock would convert to five shares of common stock.





## Fixed Income Primer for Insurance Companies & Risk Pools

### Corporate Bond:

A corporate bond is a debt security issued by a U.S. corporation that pays investors fixed interest payments until its maturity date.

U.S. corporations sell these debt securities to gain necessary capital, while investors receive interest payments at a fixed or variable rate.

Corporate bonds are evaluated by rating agencies on the probability that the corporation will repay its debt. Any issuer or bond with a rating below investment-grade means there is a greater risk of the bond defaulting.

Generally, insurance companies and risk pools focus heavily on corporate bonds (as well as U.S. government bonds) to maintain the consistent performance needed to account for policy holder obligations, reserves, etc.

Typically, corporate bonds offer higher interest rates as they are considered to have a higher risk than U.S. government bonds.

### Foreign Bond:

Foreign bonds are issued by foreign corporations or governments denominated in foreign currency.

Insurers and risk pools may consider foreign bonds has to increase portfolios diversification and (potentially) reduce exposure to economic instability.

### Non-Agency Collateralized Mortgage Obligation (CMO):

Non-Agency CMOs are a type of mortgage-backed security issued by private institution, such as an investment bank. Typically, these mortgages are for residential properties.

Like CMBS, Collateralized Mortgage Obligations are separated into tranches offering different levels of risk and compensation and can provide insurers and risk pools with an alternate method of investing in the real estate market, while offering a (typically) consistent return rate.

Any principal and interest payments made by borrowers of the underlying mortgages are directly distributed to the various tranches of the CMO.

Due to their structure, non-agency CMOs can sometimes offer less pre-payment risks compared with CMBS (*although any security with underlying residential mortgage exposure is subject to prepayment risk*). CMOs also provide exposure to both the benefits and downsides associated with housing markets and the mortgage industry.

### Notable Corporate Bonds:

144a: A bond issued by a U.S. corporation pursuant to rule 144a of the SEC Act of 1935.

High-Yield: A bond issued by a U.S. corporation that is below investment-grade.

Private: Bond/Debenture issued by a U.S. corporation privately issued to qualified investors - Limited market-ability.





## Fixed Income Primer for Insurance Companies & Risk Pools

### **Municipal Bond (aka 'Muni Bonds' or 'Muni'):**

Municipal Bonds are taxable or tax-exempt securities issued by a U.S. state, county, locality, or municipality.

Local governments issue these securities to help finance capital expenditures, such as schools, hospitals, transportation, construction, etc. Most muni bonds are exempt from federal taxes and many are exempt from state or local taxes.

Insurers and risk pools may utilize mini bonds for their tax advantages, lower default rates (compared to corporate bonds), and relative liquidity.

### **U.S. Agency Bonds:**

U.S. Agency Bonds are securities issued by any federal agency or government sponsored entity other than the U.S. Treasury.

Given these securities are issued by government entities, these investments are considered low risk.

For insurers and risk pools, agency bonds generally offer higher (potential) yields when compared to U.S. Treasuries. Agency bonds also have relatively high liquidity and credit quality.

### **U.S. Agency Collateralized Mortgage Obligations:**

U.S. Agency CMOs are a type of mortgage-backed security issued by a Federal Agency, such as the Government National Mortgage Association (*aka Ginnie Mae*), Federal National Mortgage Association (*aka Fannie Mae*), or Federal Home Loan Mortgage Corporation (*aka Freddie Mack*).

Like their non-agency counterparts, U.S. Agency CMOs are separated into tranches offering different levels of risk and compensation. Furthermore, any principal and interest payments made by borrowers of the underlying mortgages are directly distributed to the various tranches of the CMO.

As these CMOs are issued by U.S. Agencies, there is essentially no default risk. However, the potential benefits and risks associated with the housing market persist (*and anything with underlying residential mortgage exposure is subject to prepayment risk*).

### **U.S. Agency Mortgage-Backed Securities:**

U.S. Agency MBS are issued by a federal agency, such as the Government National Mortgage Association (*aka Ginnie Mae*), Federal National Mortgage Association (*aka Fannie Mae*), or Federal Home Loan Mortgage Corporation (*aka Freddie Mack*).





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### **U.S. Treasury Bonds (T-Bonds):**

Treasury bonds are fixed income securities issued by the U.S. Department of Treasury that have maturities of 10 years or more.

As Treasury Bonds are backed by the U.S. Government, they are essentially risk-free investments as taxes and revenue can always be raised to ensure payment on the interest and principal.

Thus, insurers and risk pools can find a guaranteed rate of return with T-Bonds.

Treasury bonds are only taxed at the federal level and interest payments are made semiannually. Furthermore, T-Bonds are issued at monthly online auctions held by the U.S. Treasury.

A T-Bond's initial price and yield are determined during the auction. However, T-bonds can be actively traded on the secondary market.

### **U.S. Treasury Inflation-Protected Securities (TIPS):**

Treasury Inflation-Protected Securities are inflation-protected bonds issued by the U.S. Treasury. In order to protect investors from any potential value decline in the U.S. dollar, U.S. TIPS are indexed (or priced) to match inflation. Thus, should inflation rise, these bonds will adjust their price to maintain its value.

Like Treasury Bonds, TIPS are only taxed at the federal level with interest paid every six months. Their initial price and yield are also determined during monthly auctions.

As US TIPS are tied to inflation, insurers and risk pools utilize this asset type to maintain the nominal value of their investments. For example, investors receive higher interest coupon payments as inflation rises.

### **Yankee Bonds:**

Yankee Bonds are securities issued in the U.S. by foreign corporations or governments that have been denominated in U.S. dollars. All Yankee Bonds are registered and monitored by the Securities & Exchange Commission (SEC).

Yankee Bonds can be a means of diversification, as well as a method of gaining exposure to markets outside of the U.S. They also often have lower costs (which accompanies lower interest rates) and longer maturity dates.

### **Types of Treasuries:**

- Treasury Bonds
- Treasury Bills
- Treasury Notes
- Treasury Inflation-Protected Securities

The securities vary by maturity and coupon payments.

### **Inflation:**

The rate at which the general level of prices for goods and services is rising.

Thus, purchasing power of currency is falling.



## Key Considerations and Next Steps

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### Understanding Regulatory Constraints on Allowable Asset Classes:

Regulations can impose constraints on potential allocations to certain asset classes. Thus, a review of the applicable regulatory framework is an integral part of any asset allocation modeling.

### Determining Risk Appetite:

Risk tolerance is vital to the strategic asset allocation process. The amount of risk an insurer or risk pool is comfortable taking on within the portfolio will shape the overall investment program.

A short questionnaire to staff, Board members and trustees can help put some constraints around any asset allocation models being reviewed.

Most importantly, scenario-based impact analyses can be helpful in identifying and adopting an appropriate asset allocation framework.

### Review Current Asset Allocation and Potential Alternatives:

Insurers and risk pools can compare their current asset allocation to other potential models in various ways. Potential asset allocation models can be focused on the asset side of the balance sheet or can also include the impact of reserves.

Many also model asset allocations by considering reserves, surplus, and other financial considerations.

It may also be beneficial to test how your portfolio may perform by simply changing the allocated amount to certain asset classes.

**Understanding Risk Tolerance:**  
[Learn More >>](#)

**Model Different Allocations:**  
Easily model various allocation scenarios to determine your company's expected portfolio return

[Test Asset Allocation >>](#)

## About Strategic Asset Alliance

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**SAA is an independent investment consulting firm that works exclusively with insurance companies and pooling organizations.** Founded in 1994 by our President Alton Cogert, our experience and focus enables us to help our clients improve their investment process and enhance the value added by their portfolios which are critical components of their business.

**We provide insurers and pools with independent investment consulting services** to aid their board members and senior executives in meeting fiduciary responsibilities, along with strengthening their investment program.

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