

# MONTHLY

VOLUME 8, ISSUE 3 MARCH 2011

## FOREIGN BONDS IN PORTFOLIOS

### Introduction

Since our inception in 2004, Stairway Partners has constructed globally diversified balanced portfolios. In the vast majority of these portfolios, non-US assets in policy benchmarks have been confined almost exclusively to equities. The reason for excluding foreign bonds from most benchmarks is that we believe they do not improve the risk and return characteristics of a balanced portfolio over time.

In this *Monthly* we will examine the composition of non-US bond markets, analyze the risk and return characteristics of foreign bonds, and show how including them in a portfolio impacts long-term returns and overall risk.

### Market Composition

For the purposes of this discussion, we are focusing on bonds denominated in foreign currencies, which are classified as investment grade and included in the Barclays Global Aggregate bond index.

Like the US portion of the Global Aggregate bond in-

dex, the non-US Aggregate bond index is comprised of bonds from different market sectors. Figure 1 compares the market sector breakdown of the US to the non-US Aggregate bond index. The figure illustrates that outside of the US, a much larger portion of the market is concentrated in sovereign debt, which is equivalent to US Treasury bonds. Because of the higher Treasury weight, the broad non-US bond market does not benefit as much as its US counterpart from the higher yields associated with corporate and securitized debt. We believe that over time

this lowers returns for non-US bonds.

Non-US Aggregate and Treasury indices differ from one another not only by which sectors they include, but also by their exposure to specific currencies. For example, the nature of Japan's outstanding debt gives it a higher weight in the non-US Treasury bond index than it has in the non-US Aggregate bond index. The weights of selected countries for both bond indices are shown in Figure 2.

Although performance data for non-US bond markets is

*(Continued on page 2)*

### CURRENT TOPIC

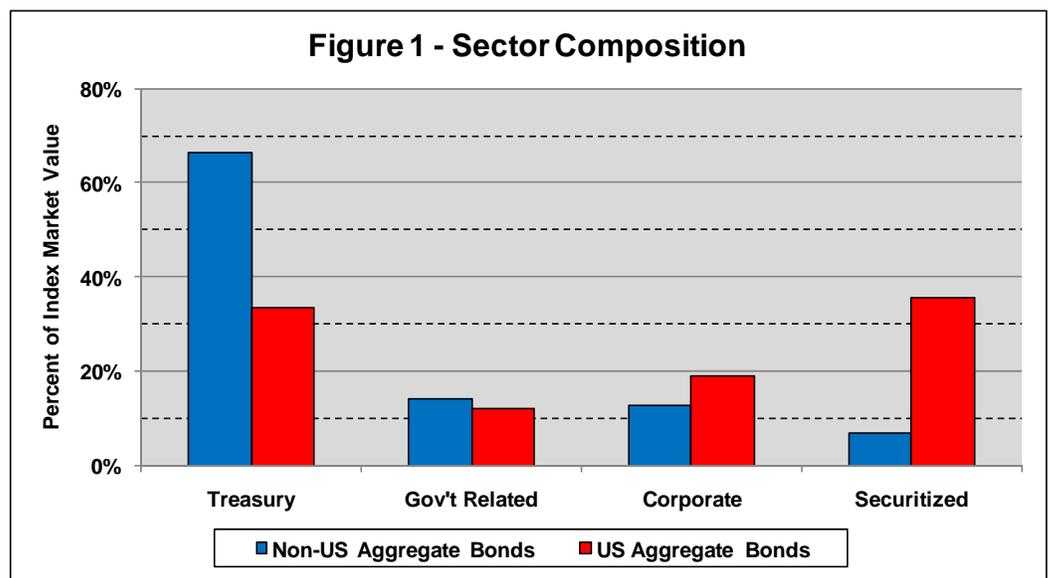
#### Foreign Bonds in Portfolios

- Introduction
- Market Composition
- Risk and Return
- Portfolio Implications
- Conclusion

#### Strategy Change

- *We eliminated our overweight to High Yield Bonds as a result of the recent strong performance*

Figure 1 - Sector Composition



Source: Barclays

# FOREIGN BONDS IN PORTFOLIOS - CONT'D

readily available, the investment options available to US investors seeking foreign bond exposure are much more limited. Companies like Vanguard offer a wide array of passive, low cost mutual funds focusing on the broad US bond market. Unfortunately, outside of the US, most diversified broad market bond funds are actively managed and carry significantly higher fees.

### Risk and Return

In the long-term, non-US bond market returns are most heavily influenced by the sector and currency composition of the underlying mar-

kets.

For bond portfolios, currency exposure affects returns in two ways. First, bond interest rates are heavily influenced by expected local cash rates and general demand for debt in the bond's native currency. A good example of a country where this has materially affected performance is again Japan, where accommodative monetary policy and a high domestic savings rate have kept Japanese yields significantly below those of most other countries for the last two decades.

The second way in which currency affects returns is

through the movement of exchange rates. We believe over long time periods that foreign exchange rate movements and relative cash rates produce zero returns for currencies. However, since exchange rates are significantly more volatile than bond returns, currency exposure does materially increase the risks of holding unhedged foreign bonds in a portfolio. Figure 3 shows the risks that a US investor incurred by holding non-US bonds on both a hedged and an unhedged basis over the past twenty years. For both Aggregate and Treasury non-US bond portfolios with hedged

currency exposure, the volatility of returns was a relatively modest 2.8%. However, if currency exposure was left unhedged, the volatility of both portfolios tripled to roughly 8.5%.

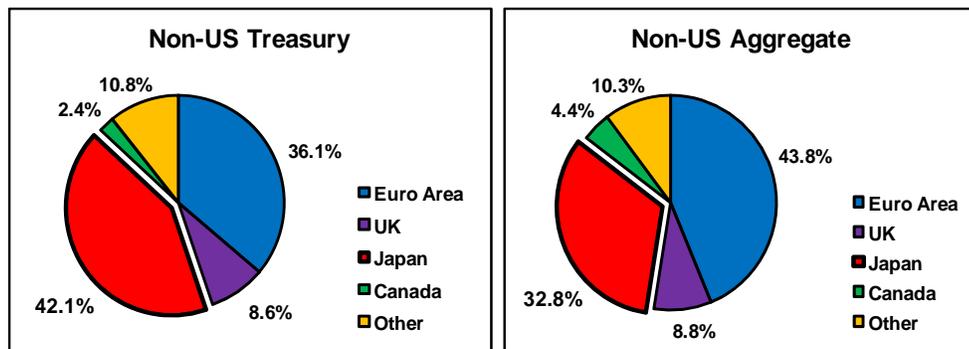
### Portfolio Implications

To understand how an asset affects the overall risk and return characteristics of a balanced portfolio, in addition to the stand-alone risk and return of the asset, it is important to account for the correlation of returns between all of the assets.

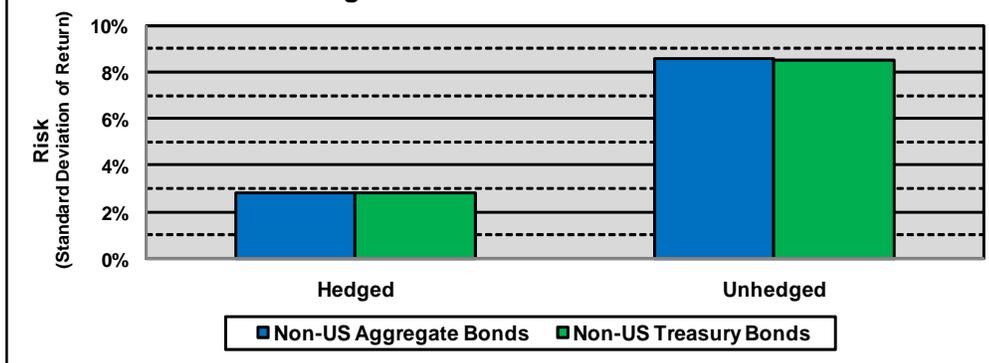
To illustrate how including non-US bonds impacts the risk and return characteristics of a balanced portfolio, we calculated returns for three hypothetical portfolios over the same twenty-year time period used in the prior illustrations. The results of our analysis are shown in Figure 4. All three of our hypothetical portfolios share the same 50% equity weight, split equally between US and un-

*(Continued on page 3)*

**Figure 2 - Country Composition**



**Figure 3 - Non-US Bond Risk**



“IF CURRENCY EXPOSURE WAS LEFT UNHEDGED, THE VOLATILITY OF BOTH PORTFOLIOS TRIPLED TO ROUGHLY 8.5%”

## About Stairway Partners, LLC

Stairway Partners was formed to provide our clients (starting with ourselves) with an effective and comprehensive solution for managing their wealth. Our disciplined and rigorous approach comes from our collective knowledge in serving large institutional clients over many years.

Our core investment belief is that asset allocation is the single most important determinant of success in any investment plan. The dominant amount of risk and return comes not from your choice of individual investments but from your asset class mix. Stairway Partners focuses our resources on risk management and asset allocation. This includes building your custom blue-print (investment policy and benchmark) and aligning your portfolio with our investment strategy utilizing the global capital markets.

*(Continued from page 2)*

hedged non-US equities. The domestic portfolio has the 50% bond allocation in US Aggregate bonds. The other two portfolios have global bond exposure with the bonds split equally between US aggregate and non-US aggregate bonds. The figure illustrates that adding non-US bonds did not materially impact the returns that were realized over the past 20 years, with or without currency exposure.

The figure also shows that the portfolio with global bond exposure, where the currency was hedged, experienced roughly the same risk as the portfolio with all do-

mestic bond exposure over the twenty-year time period. As a result, the Sharpe Ratio, which is a common measure of risk adjusted returns, is virtually identical for the first two portfolios. However, the portfolio with unhedged foreign bond exposure experienced higher risk, and as a result produced a lower Sharpe Ratio.

These results are consistent with our view of the long-term implications of including foreign bonds in policy benchmarks. Unhedged foreign bonds increase overall portfolio risk without increasing long-term expected returns. Although hedged foreign bonds do not adversely affect long-term port-

folio results, we do not believe that they provide any meaningful benefit. Furthermore, as mentioned earlier, non-US aggregate bond mutual funds and ETFs are not as plentiful as US alternatives, and generally charge higher fees.

This does not mean that foreign bond markets do not provide opportunities for enhanced returns for investors due to short-term market dislocations. We continually monitor non-US bonds with and without currency exposure, so that they can be opportunistically included in portfolios, should

their expected returns become attractive.

### Conclusion

Although we are proponents of globally diversified balanced portfolios, we believe that high quality bond exposure is better left in US assets. Since the long-term returns of US and non-US bonds are so similar, adding hedged non-US bonds in place of US bonds does not materially affect the overall risk and return characteristics of a diversified portfolio. Left unhedged, we believe that foreign bonds increase risk without improving long-term returns.

**Figure 4 - Balanced Portfolio Comparison**

	Annualized Return	Annualized Risk	Sharpe Ratio *
Global Equities & Domestic Bonds	7.77%	8.0%	0.49
Global Equities & Global Bonds (Hedged)	7.74%	7.9%	0.49
Global Equities & Global Bonds (Unhedged)	7.78%	8.7%	0.45

\* The Sharpe ratio is the amount of return in excess of the 'riskless' cash return, divided by the amount of risk taken.

“THE PORTFOLIO WITH UNHEDGED FOREIGN BOND EXPOSURE EXPERIENCED HIGHER RISK AND AS A RESULT PRODUCED A LOWER SHARPE RATIO”

Asset Class	Return	Return	Exposure	Comment																				
<b>Equities</b>																								
US	10.1%	5.2%	over	Exposure above benchmark weight due to attractive pricing																				
Non-US Developed			over	Exposure above benchmark weight due to attractive pricing																				
Eurozone	23.7%	5.8%																						
Japan	-2.5%	3.8%																						
UK	24.7%	5.9%																						
Emerging	4.7%	11.1%	neutral	Asset class is modestly above fair value																				
<b>Fixed Income</b>																								
US Treasury Bonds			under	Most Treasuries expensive, other sectors offer better value																				
2-Year	0.3%	2.0%																						
5-Year	-0.3%	2.8%																						
10-Year	-0.1%	3.7%																						
30-Year	0.5%	4.3%																						
US Municipal Bonds			under	In most maturities, municipal bonds are close to fair value																				
2-Year	0.5%	1.6%																						
5-Year	0.0%	2.2%																						
10-Year	1.7%	3.0%																						
US High Yield	1.8%	3.7%	over	Sector is close to fair value																				
Non-US Government Bonds			under	Yields remain below fair levels																				
Euro 10-Year	-0.7%	3.8%																						
Japan 10-Year	0.1%	1.3%																						
UK 10-Year	0.5%	4.3%																						
Emerging Markets Debt	3.0%	3.9%	under	Sector is close to fair value																				
Cash	0.5%	---	minimal																					
<table border="0"> <tr> <td></td> <td></td> <td>Equity</td> <td>10-Year</td> <td></td> </tr> <tr> <td></td> <td>Expected</td> <td>Return with</td> <td>Bond Return</td> <td></td> </tr> <tr> <td></td> <td>FX Change</td> <td>Currency</td> <td>with</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Currency</td> <td></td> </tr> </table>							Equity	10-Year			Expected	Return with	Bond Return			FX Change	Currency	with					Currency	
		Equity	10-Year																					
	Expected	Return with	Bond Return																					
	FX Change	Currency	with																					
			Currency																					
<b>Currencies</b>																								
Euro	-5.5%	18.3%	-6.2%	Euro is near fair value																				
Japanese yen	-2.5%	-5.0%	-2.4%	Yen is near fair value																				
UK pound	-2.7%	21.9%	-2.2%	Pound is near fair value																				

**As of: February 28, 2011**

**Notes:**

The expected return is our estimate of the annualized return likely to be generated over a 3-year horizon.

The expected returns are expressed in local currencies (e.g., Japanese equity return is stated in yen terms).

The hurdle rate represents the annualized return that an asset needs to generate in order to cover its risk.

Equity Return with Currency (in Currencies section) is the annual return we would expect a US dollar investor to earn from holding foreign equity markets.

Stairway Partners, LLC © 2011

This material is based upon information that we believe to be reliable, but no representation is being made that it is accurate or complete, and it should not be relied upon as such. This material is based upon our assumptions, opinions and estimates as of the date the material was prepared. Changes to assumptions, opinions and estimates are subject to change without notice. Past performance is not indicative of future results, and no representation is being made that any returns indicated will be achieved.

This material has been prepared for information purposes and does not constitute investment advice. This material does not take into account particular investment objectives or financial situations. Strategies and financial instruments described in this material may not be suitable for all investors. Readers should not act upon the information without seeking professional advice. This material is not a recommendation or an offer or solicitation for the purchase or sale of any security or other financial instrument.