MARKET Commentary

clearwater ADVISORS

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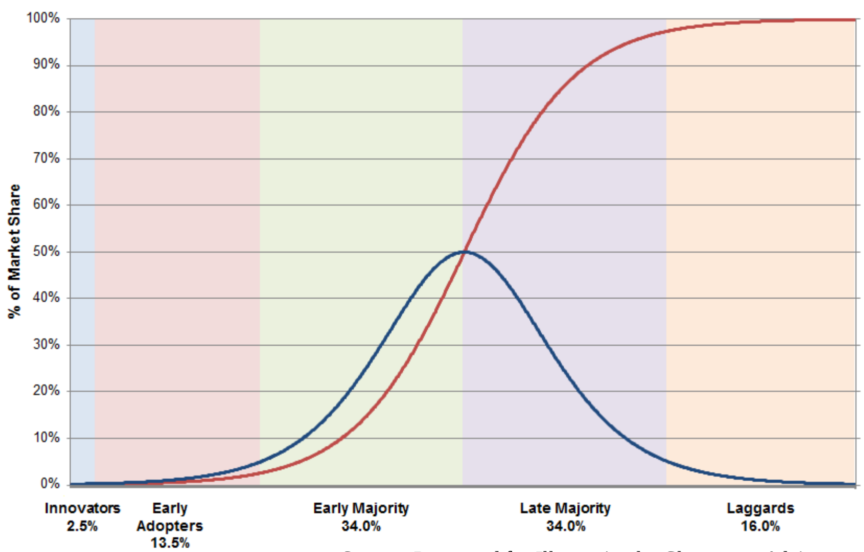
The Diffusion of Innovation

The *Diffusion of Innovation* is the seminal theory developed by Everett Rogers that illustrates how an innovation (e.g. an idea or technology) is spread and adopted within a particular social system. Roger's theory has been influential in explaining phenomena in various fields—from the medieval adoption of the Hindu-Arabic numeric system to the recent meteoric rise of Facebook. Further evaluation of the *Diffusion of Innovation* theory is relevant today in demonstrating how short-duration investors have adapted and, in many cases, failed to adapt to the challenging environment marked by exceptionally low interest rates, lowered expectations for global growth and external shocks to the financial system.

Figure 1: Example of the Rate of Adoption of an Innovation



Source: Recreated for Illustration by Clearwater Advisors

We have long been advising short-duration investors to extend portfolio durations by focusing on high-grade opportunities. While not alone in encouraging this investment strategy (i.e. the innovation in question), we definitely were early adopters[1]. Through periods of interest rate and credit spread volatility in 2009, 2010 and 2011, our story remained decidedly consistent, and the strategy proved profitable for investors willing to include incremental risk in their investment portfolios.

With a lack of viable alternatives, short duration investors should work to take advantage of relatively attractive opportunities now before they become even more unappealing in the future. For those in the late majority (i.e. those who have not yet increased flexibility in investment guidelines and policies to reflect the new reality), decisive action may be required to maximize effectively risk-adjusted returns in a low rate environment.

US Treasuries

As of 31-Jan

Benchmark	Yield
3 Month	0.05%
6 Month	0.08%
1 Year	0.11%
2 Year	0.22%
5 Year	0.70%
10 Year	1.80%
30 Year	2.94%

Bank of America/Merrill Lynch Indexes

31-Dec to 31-Jan

Index	Return
1-3 Yr Gov/Corp ≥ A	0.23%
1-3 Yr Municipals	0.24%
1-3 Yr Agencies	0.21%
0-3 Month UST	0.00%
S&P 500	4.48%

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Source: British Bankers' Association, Federal Reserve, FDIC, US Treasury, Bloomberg, Barclays, Financial Times, JP Morgan, The Economist, S&P and Center on Budget and Policy Priorities, Wall Street Journal

[1] *For a list of prior recommendations, please refer to past commentaries at www.clearwateradvisors.com*

The Easy Money Is Gone

The Fed Funds target rate has remained at historically low levels for more than three years. In its most recent statement released January 2012, the FOMC provided further transparency into future committee actions to promote economic growth and maintain price stability. The FOMC now expects that policy actions to raise short-term interest rates will not occur "at least through late 2014", an extension of 18 months from prior guidance of mid-2013.

Short-end interest rates have reached such low absolute levels that investors will find it increasingly difficult to generate meaningful returns by extending portfolio duration in rate products (i.e. Treasuries and Agencies), exclusively. We have highlighted in past commentaries that attractive substitutes for traditional rate products, such as FDIC-guaranteed bonds issued under the Temporary Liquidity Guarantee Program, are also maturing en masse, exacerbating the challenge rate product investors will face.

The easy money is gone in "risk-free" assets. The two-year note is yielding a paltry 22 basis points, and the three-year note does not look much more attractive at 29 basis points. The spread between two- and three-year Treasuries (as seen in Figure 2) has reached a relative low of 8 basis points as of January 31st – the lowest level since the reintroduction of the three-year in November 2008. One year ago, these notes were yielding 56 and 96 basis points, respectively.

Figure 2: Yield Spread Between 2-3 Year Treasuries Reaches

Source: Bloomberg

At these absolute low levels, the two-year and three-year notes have hit a performance ceiling. Can we imagine an environment in which the two-year note yields sub-ten basis points for a sustained period of time? Yes. But even in this most optimistic case for holders of two-year notes, there is simply not much money to be made. Additionally, if the two-year rate ever reaches a sustained period of sub-ten basis points, investors will have much more to worry about than the return on their investment portfolios as the market will likely be subjected to a period of low to negative growth and strong deflationary pressures.

Carry and Roll Down

Opportunities to capture relatively attractive returns in the coming years will require identifying and investing in high-quality credits. As we explained in past commentaries, the return on an individual fixed-income security is determined by two main factors: carry and roll-down. Carry is return attributed to the accrual of a bond's coupon netted with the accretion of a bond's discount (a positive) or amortization of a bond's premium (a negative) as it approaches maturity. If a bond is held to maturity, the return attributed to carry will approximate its purchase yield.

The credit curve benefits from two advantages over Treasury securities: higher carry and greater roll-down. Several signs, however, point to the risk premium on high-grade credit dissipating as policymakers show increased signs of policy accommodation. While this is a net positive for bond prices, it is a net negative for investors who are not adequately exposed to the sector. Overly cautious investors may miss out on the benefits of further spread compression and curve roll-down and be forced to invest funds in the future at the most inopportune time.

The recent rally in risk assets has been very impressive. The initiation of the European Central Bank's Longer-Term Refinancing Operation lending program, the prospects of another round of quantitative easing and exceptionally low rates through 2014 have convinced investors that central banks and policy makers will provide portfolio insurance to backstop "risk on" trades. Despite the recent rally, we continue to advocate a defensive overweight to credit and monitor several risk factors that could push credit spreads wider in 2012.

Figure 3: Events that Could Push Credit Spreads Wider in 2012

Event	Description	Probability	Impact
Greek Default	Greece defaults. Departs the EU. Losses and impact are widespread.	High	Market participants have had ample time to prepare for this outcome. However, add-on effects could proliferate due to global capital market interconnectivity.
Sovereign Risk	The European situation remains unresolved. Liquidity has improved, but there is still too much debt, too little economic activity, and divergent leadership initiatives.	High	Investor tolerance for continued dithering is low. Markets will quickly boycott countries at risk.
Political Risk	U.S. election-year rhetoric. Inept budget decision making amid weak fiscal outlook.	High	Short-sighted policy responses impair market participants' ability to commit longer term.
Central Bank Risk	Global central banks (Fed, ECB, BOE, etc.) err in policy actions to promote economic growth while keeping inflation in check.	Low	ZIRP. LTRO and other accommodative actions greatly increase the impact of a policy mistake causing economic growth to falter or worse.
Financial Risk	Additional bank downgrades (Moody's). Litigation and regulatory risk. Continued earnings pressure.	High	Higher funding costs along with difficult revenue environment will continue to pressure margins and could lead investors to exit of the bank trade. Financial spread widening tends to be a harbinger of greater risk-off to come.
Economic Risk	Austerity – lower gov't spending/higher taxes. Continued deleveraging. Weak housing market. High unemployment.	Moderate	A contracting economic picture could pose significant risk to credit spreads. However, such a scenario would likely benefit rate products.
Geo-Political Risk	Middle East conflict (Syria, Egypt, Libya, etc). Straits of Hormuz blockade. Israeli action on Iran. Russian discord.	Moderate	Geo-Political risk is likely to contribute to increased volatility with potential negative economic impact due to higher oil prices.

Source: Clearwater

Is the Tail Wagging the Dog?

Superior risk-adjusted returns require managing portfolio volatility effectively. The Clearwater investment philosophy seeks to avoid tail risk – both positive and negative tail risk. All else equal, investors should prefer returns on investments that are generated with lower volatility. A look at the Merrill Lynch 1-3 Year AAA-A Corporate Index provides a stark reminder of this principle.

During the volatility of 2011, a basket of high-beta financials (C, GS, MS, BAC), lower-beta financials (JPM, BK, USB, GE) and blue-chip industrials (DE, WMT, IBM, RDSALN) performed radically different as indicated by the table below:

Figure 4: Returns by Ticker in the Merrill Lynch 1-3 Year AAA-A Index

	2011 Returns			2011 Returns + Jan 2012 Returns		
Basket[2]	**Cumulative Returns**	**Standard Deviation of Returns**	**Return per Unit of Risk**	**Cumulative Returns**	**Standard Deviation of Returns**	**Return per Unit of Risk**
High-beta Financials	-0.49%	1.33%	(0.37)	2.92%	1.59%	1.84
Low-beta Financials	2.31%	0.32%	7.12	3.21%	0.36%	8.80
Blue-chip Industrials	2.33%	0.22%	10.76	2.57%	0.21%	12.40

Source: Merrill Lynch/Clearwater

[2] *Baskets are determined by names we have explicitly discussed in prior commentaries. Returns are calculated by evaluating the performance of index bonds under each ticker. For a list of past commentaries, please visit www.clearwateradvisors.com*

Recalculating the returns to account for a stellar month for risk assets in January 2012, the underperformance of the basket of high-beta names does not look as discouraging from a return perspective. Important to note, however, is that the return-per-unit of risk (how much volatility an investor had to endure to capture those returns) of both the low-beta and industrial basket greatly exceeds that of the high-beta basket. While the cumulative returns of all three of the baskets are within 64 basis points of each other through January 2012, the returns of the high-beta basket experienced 4.42 times the volatility of the low-beta basket and 7.57 times the volatility of the industrial basket.

Examples like these highlight why we continue to stress the importance of high-quality credit, utilizing a low-beta financial/blue-chip industrial core in our investment portfolios.

The Early and Late Majority

The market has clearly reached a tipping point where adoption of the innovation in question has become self-sustaining. The innovators, early adopters and early majority have captured much of the benefits associated with falling interest rates and the additional return from attractive carry by including high-quality credit exposure in their portfolios. For those who have not yet adopted this strategy, it is not too late.

Revisiting the *Diffusion of Innovation* theory, Rogers outlines the process in which each individual in the social system accepts or rejects an innovation. The decision to accept or reject an innovation can be broken down into five steps:

Figure 5: The Steps in Accepting or Rejecting an Innovation

Steps	Actionable Items
Knowledge	Read Market Commentaries; Observe Market Conditions; Consult with Investment Managers and Consultants; Revise Investment Guidelines and Policies; Solidify Cash Needs; Develop Investment Strategies
Persuasion	Finalize Investment Options, Guidelines and Policy; Discuss Proposal with Treasurer and CFO; Present to the Board
Decision	Make Final Decision on Investment Strategy
Implementation	Send Directives to Investment Manager; Monitor the Implementation of New Strategy; Maintain Active Dialogue with Investment Manager
Confirmation	Reap the Reward or Incur the Cost of New Investment Strategy

Source: Clearwater

We have found that the bottleneck for those working towards added flexibility in investment guidelines and policies occurs primarily in the early steps of Knowledge and Persuasion. Investors seeking to increase flexibility in investment guidelines and policies should leverage their investment managers to gain the necessary resources to make an informed decision. As the entire process may take longer than expected – depending on where you are in the process—investors would be wise to start now.

Looking Forward

In a period of exceptionally low interest rates and potential volatility surrounding external shocks to the financial system, the innovation of extending portfolio duration in high-grade credits still remains the best available option. Investors should take advantage of current opportunities to broaden exposure in high-grade credits in order to increase portfolio yield and gain exposure to a more attractive yield curve profile.

For more information this or any past recommendations, please feel free to call the desk.

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