MARKET THOUGHTS

THIRD QUARTER 2011 VOLUME 23

Quarterly EQUITY INDICATOR	Quarterly BOND INDICATOR	Quarterly HEDGE FUND INDICATOR	Quarterly PENSION LIABILITY INDICATOR
Down 13.9%	Up 3.8%	Down 4.8%	Up 19.6%

NEPC is an independent, full service investment consulting firm, providing asset allocation, traditional and alternative asset manager search, performance evaluation and investment policy services to institutional investment programs. We offer our market letters to provide insight into recent market conditions, and to assist your interpretation of investment results. We encourage your comments and feedback, as well as any inquiries you may have about our firm or our consulting services.

Dynamic Risks, Dynamic Investing

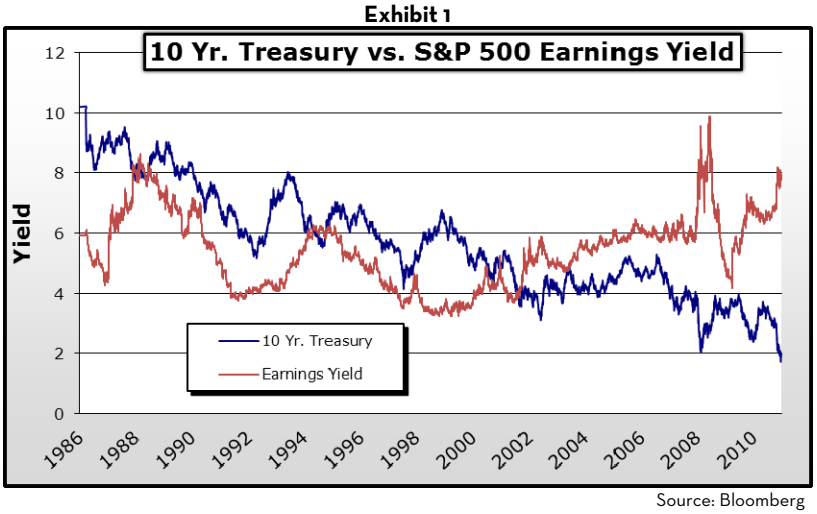
We are at a point in the market where a focus on risk predominates. Stock markets have tumbled, while high-yield bonds and other credit sectors have sold off, and Treasury yields are near rock bottom. The Eurozone is in crisis, and the recently downgraded US is politically deadlocked as deficits gape and long-term growth prospects remain muted. Global risk aversion has led to a large sell-off in emerging markets across stocks, bonds, and currencies. Investors need only to look at their September asset statements to experience the realization of these risks.

It is easy to see the myriad challenges surrounding us and to fear the possibility of many more. Collectively, these risks provide a stark reminder of the challenges of investing. Allocating capital is never as simple as the classic "set it and forget it" approach, especially if the starting point is 60% stocks and 40% bonds. Instead, we believe that the dynamic risk environment requires a dynamic approach to investing, responding to changes in markets with changes to strategic asset allocation. At NEPC, we attempt to be dynamic in our annual asset allocation process, incorporating flexible investment strategies in client programs and occasional opportunistic investments. We are currently in the midst of developing our annual asset allocation assumptions, building our forecasts of returns, risks, and correlations for the coming five-to-seven year period. As part of this process, we have to consider the key relationships that drive asset class behavior. Some of these relationships have changed meaningfully so far in 2011.

At the outset of the year, we reported that stock market return expectations were as modest as we had ever forecast in an environment where bond yields had fallen to their lowest levels in over 50 years. Credit spreads were tight and realized risk in the marketplace was muted. This led us to recommend that it was not a good time for assuming extra market risk—that clients should not reach for higher returns by taking on more "beta".

How things can change in nine months. Volatility has increased sharply, Treasury yields have dropped even more, and equity market valuations have improved (somewhat due to improved earnings, but mostly thanks to declining prices). We portray these changing relationships in Exhibit 1, which compares the yield on 10-year Treasuries with the S&P 500 earnings yield. Furthermore, the dividend yield of the S&P 500 is now significantly higher than the yield on the 10-year Treasury, a relationship not seen consistently since the 1950s. The market has re-valued the premium applied to owning equities versus Treasuries, such that investors should be able to expect significantly higher compensation for taking risk. While total return expectations for stocks are unlikely to increase dramatically, the equity risk premium, or spread over government bonds, is likely to increase as extremely low bond yields incent investors to seek risk elsewhere in the marketplace.

Exhibit 1



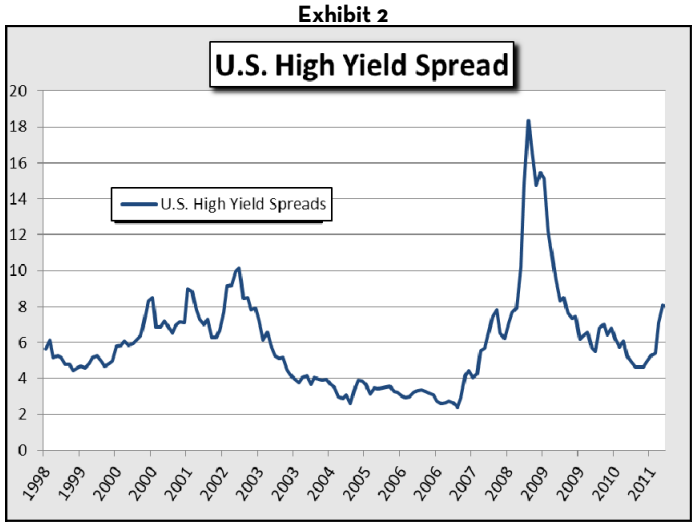
Source: Bloomberg

Credit spreads illustrate another way risk and return relationships have changed. Exhibit 2 shows the trend of spreads on high yield bonds. At the start of 2011, investors earned about 5.25% more

than Treasuries for assuming this type of credit risk, somewhat less than the historic average. Now, the market is paying investors more than 8% for taking the same risk. Such a spread level appears to assume a recessionary environment with elevated corporate defaults.

These observations do not mean that we are "ringing the bell" to increase risk in client portfolios at this moment. We acknowledge that there are many pitfalls in the short-term that the markets must get past—the US budget "super committee" results, the resolution of the European crisis, and, at best, a slow growth environment in the developed world. However a critical part of a dynamic asset allocation process is to look past current concerns and peer into the future to identify both looming risks and the potential for improved return.

Exhibit 2



Source: Barclays Capital

Global Equities

The third quarter saw panic-driven declines in the equity markets, with all major equity indices decreasing by double-digit percentages, pushing year-to-date results into negative territory. Fear overshadowed fundamentals as investors focused on macro concerns related to several issues that made headlines: the Eurozone debt crisis, a potential slowdown in China, and, closer to home, the S&P downgrade of the US credit rating and lower-than-expected GDP growth rates. Amid renewed worries about a double-dip recession, there was nowhere to hide in the equity markets.

While all capitalizations and almost all sectors were negative, defensive positioning generally fared better. From a market-cap comparison, large-cap stocks handily beat small-cap stocks. Defensive groups (utilities, consumer staples, and healthcare) significantly outperformed those tied to global growth (energy, materials, and industrials). The subplot to the sector story focused on dividends boosting relative returns. This led to growth outperforming value in the large-cap segment of the market (driven by technology names) and value outperforming growth in the small-cap segment (driven by REITs).

Similar macro shocks drove international equities into negative territory in the third quarter. In particular, the deteriorating European debt crisis and lack of definitive action by European politicians drove volatility in equity markets higher.

Emerging markets equities were hit hard as commodity prices and many emerging market currencies dropped significantly in value versus the US dollar. Latin America delivered the worst performance while Asia outperformed. Broader emerging markets fell precipitously; however, sectors that leveraged the rise of the middle class and the emerging market consumer outperformed the broader benchmark significantly.

Equity Index Returns (9/30/11)

Global Equity	Quarter	YTD	1 Year	3 Years	5 Years
MSCI World	-16.6%	-12.2%	-4.3%	-0.1%	-2.2%
US Equity					
S&P 500	-13.9%	-8.7%	1.1%	1.2%	-0.9%
Dow Jones Industrial Average	-11.5%	-3.9%	3.8%	3.2%	1.4%
NASDAQ Composite	-12.9%	-8.9%	2.0%	4.9%	1.3%
Russell 1000 Growth	-13.1%	-7.2%	3.8%	4.7%	2.0%
Russell 1000 Value	-16.2%	-11.2%	-1.9%	-1.5%	-3.3%
Russell 2000	-21.9%	-17.0%	-3.5%	-0.4%	-0.8%
Russell 2000 Growth	-22.2%	-15.6%	-1.1%	2.1%	1.2%
Russell 2000 Value	-21.5%	-18.5%	-6.0%	-2.8%	-2.9%
International Equity					
MSCI EAFE	-19.0%	-15.0%	-9.4%	-1.1%	-3.2%
MSCI Emerging Markets Free	-22.6%	-21.9%	-16.1%	6.3%	5.2%
MSCI Europe	-22.6%	-15.6%	-11.8%	-2.8%	-4.0%
MSCI UK	-13.6%	-12.8%	-7.4%	1.5%	-3.1%
MSCI Japan	-6.4%	-10.9%	-0.1%	-0.2%	-2.8%
MSCI Far East	-9.6%	-14.3%	-5.1%	-1.2%	-5.6%

Source: Bloomberg

Global Fixed Income

US high-grade fixed income markets posted strong returns in the third quarter as investors sought safety in US Treasuries, investment grade corporate bonds, and US MBS. Treasury yields fell to remarkably low levels across the yield curve, particularly at the long end, as the Fed's "Operation Twist" drove down long-term interest rates to historic levels. The yield on the 2-year Treasury note fell 20 basis points to 0.25%, while the 10-year Treasury dropped below 2%, falling a staggering 126 basis points to 1.92%. Riskier segments of fixed income markets sold off, including high yield corporate bonds and emerging markets debt. While many economic signals are negative—among them a stubbornly high unemployment level, declining growth rates, and a waffling housing market—there are some brighter spots. Corporate balance sheets are generally in good condition and historically low interest rates make financing cheap for borrowers who are able to take advantage.

During the quarter, the BC Aggregate Index ended up 3.8%, reflecting mostly falling interest rates. The BC Government Bond Index was up 5.8%, while the BC US Credit Index was up 3.0%. Longer-duration portfolios performed extremely well in this environment as the exposure to declining rates was magnified.

High yield bonds, as measured by the BC High Yield Index, were down 6.1% during the quarter, with lowest quality seg-

ments selling off the most. CCC-rated bonds, in aggregate, were down almost 12%. In investment grade credit sectors, much like equities, cyclical sectors like financials took a beating while defensive areas such as utilities outperformed.

Interest rates fell globally and diversified developed global bonds performed well (+2.4%), although unhedged global bonds were hurt as most foreign currencies lost value versus the US dollar. Volatility increased markedly in emerging market local bonds as emerging currencies sold off against a very strong dollar. In particular, the Mexican peso, Brazilian real and South African rand declined rapidly at the end of the quarter, but recovered some ground very late in September and into October. The GBI-EM GD, an index that tracks emerging local bonds, was down 8.6% unhedged.

Fixed Income Index Returns (9/30/11)					
Global Fixed Income	**Quarter**	**YTD**	**1 Year**	**3 Yrs**	**5 Yrs**
Citi World Gov. Bond	2.4%	6.5%	4.6%	7.7%	7.3%
JPM EMBI Plus	-1.8%	3.2%	1.3%	11.7%	7.9%
Domestic Fixed Income					
BC Aggregate	3.8%	6.6%	5.3%	8.0%	6.5%
BC Government	5.8%	8.1%	5.6%	6.4%	6.6%
BC US Credit	3.0%	6.5%	4.6%	11.7%	6.7%
BC Mortgage Backed	2.4%	5.3%	5.6%	7.0%	6.7%
BC Govt/Credit	4.7%	7.5%	5.1%	8.4%	6.5%
BC TIPS	1.6%	7.1%	7.2%	6.2%	6.4%
BC High Yield	-6.1%	-1.4%	1.8%	13.8%	7.2%
S&P LSTA Lev. Loan	-3.9%	-1.3%	1.8%	8.3%	4.0%
91 Day Treasury Bills	0.0%	0.1%	0.1%	0.2%	1.5%
10-Year Bond Yields	**Sep-11**	**Jun-11**	**Mar-11**	**Jun-10**	**Dec-10**
US	1.9%	3.2%	3.5%	2.9%	3.0%
Germany	1.9%	3.0%	3.4%	2.6%	3.0%
UK	2.4%	3.4%	3.7%	3.4%	3.4%
Japan	0.9%	1.1%	1.3%	1.1%	1.1%

Source: Bloomberg

Currency Markets

While assets such as gold, the Swiss franc, and even emerging markets currencies benefited from a flight to quality in July and August, the US dollar regained its lofty perch as the preferred safe haven in September. Rallying against both developed and emerging currencies, the dollar took advantage of continued turmoil across Europe, gaining against the British sterling (2.8%), the euro (7.5%), and even the Swiss franc (8.5%). During the quarter Swiss officials intervened to prevent further franc strength, pegging the currency at 1.20 to the euro. Cyclical, commodity-based currencies were dragged down with extended global market volatility as the US dollar strengthened 7.5% against the Canadian dollar and 10% versus the Australian dollar. The other safe haven was the Japanese yen, which stood out as the one developed currency that strengthened against the US dollar—gaining 4.7% in the third quarter.

Emerging currencies appeared poised to break through as new shelters for investors during spikes in uncertainty, remaining relatively stable through early onslaughts of volatility in the quarter. Negative sentiment and heightened risk aversion, however, led to an unwinding of these high-carry positions in September. The US dollar experienced double-digit strengthening against most emerging currencies including the South Korean won (10.1%), the South African rand (18.3%), and the Brazilian real (19.9%). Structurally, these currencies remain attractive due to the stronger growth prospects of their underlying economies and healthier balance sheets. Recent risk aversion represents a buying opportunity for investors.

Commodity Markets

After crude oil prices pierced $110/barrel during the second quarter, oil traded down significantly as the economic slowdown and higher inventories put downward pressure on prices. Crude oil ended September at $79/barrel, a 17% drop for the quarter and off 30% from its 2011 peak. Broad commodity indices traded down along with oil (the Dow Jones-UBS Commodities Index lost 11.3% in the third quarter) as risky assets in general fell victim to investors seeking safe havens.

Continued lack of confidence in paper currencies pushed gold higher throughout most of the quarter, however, the supposed safe haven asset was hit hard in the last two weeks of September, falling to $1,620/oz, a retracing of 15% from its high of $1,895/oz in August. Gold was still positive for the quarter and for 2011 in total, returning roughly 8% for the quarter and 14% year-to-date. Conversely, copper prices where hit the hardest by the global slowdown, returning roughly -25% for the quarter and -27% for the year. Natural resource equities were also driven lower by economic growth concerns and lower commodity prices.

Pension Liability

Treasury yields plummeted across the yield curve, with the Fed's "Operation Twist" program placing additional downward pressure on the long end. As a result, pension liabilities, as proxied by the Citigroup Pension Liability Index, skyrocketed 19.6% in the third quarter alone. The Citigroup index published an all-time low quarter-ending discount rate of 4.69%, compared to 5.67% at the end of the second quarter. Similarly, 30-year Treasury yields declined 148 basis points during the quarter, closing September at 2.90%. At the same time, corporate spreads over long Treasuries widened to 224 basis points based on the Barclays Capital Long Credit Index, which slightly eased the drop in pension discount rates from rallying Treasuries.
NEPC has been advising corporate clients for many years on the benefits of LDI strategies to protect against declining interest rates and to help maintain funded status. For those clients with an LDI program in place, their plans' funded status will have weathered this massive drop in interest rates relatively better.

Implementation of LDI strategies has become more tactical in recent years. Clients who are still considering implementing an initial LDI strategy may benefit from dollar-cost averaging into a long duration allocation over a period of months or years, as rates and/or funded status increases. Clients who have already implemented an interest rate hedge may consider reaping some recent gains from their LDI program, revisiting their target hedge ratio, or developing a program to hold asset

duration steady for the time being and then extend duration after future increases in yields occur. Given the recent widening in credit spreads, it may be appropriate to consider adding to long corporate exposure in LDI programs. Your NEPC consultant can review such LDI implementation strategies with you.

Hedge Funds

The Dow Jones Credit Suisse Hedge Fund Composite declined during the quarter (-4.8%), bringing year-to-date performance to -3.2%. Dedicated Short Bias strategies were the top performer (19.0%), while the Event Driven category fared the worst (-10.9%). The quarter presented challenges for hedge funds, with gains from July erased by losses in August and September. The macroeconomic issues driving volatility across traditional asset classes were headwinds to many hedge fund strategies as well.

Long-biased strategies suffered during the period. A widening of deal spreads and the market's rejection of securities bearing "event" risk led to losses along the event-driven continuum (distressed/restructurings, merger arbitrage, special situations equities), despite the notion that most of these situations are idiosyncratic in nature. Directional equity (represented by the DJCS Long/Short Equity Index, which returned -9.8%) and higher beta segments such as Emerging Markets (-8.9%) were similarly hard hit, as global equity markets fell. One bright spot during the quarter was managed futures (3.5%), an area that tends to do well in periods with elevated market volatility. Both short-term traders and trend-following funds generally fared well.

Against this backdrop, hedge funds have reduced net and gross exposures and generally have been cautious in their risk taking. Managers see significant opportunities in the market from a "micro" perspective. However, with technical factors dominating, company and security fundamentals continue to be overlooked. Realized equity correlations, for example, remain near all-time highs. While we are disappointed with recent performance from hedge funds, returns are generally not out of line with our expectations given the market environment we have witnessed. The question on our minds is whether hedge funds will be able to monetize the current market volatility going forward, as they have succeeded in doing historically. Periods such as the one that prevailed in August and September generate dislocations in the market, and empirical evidence shows that hedge funds perform well following these episodes.

Hedge Fund Industry Performance Overview (9/30/11)						
Composite	**Quarter**	**YTD**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
DJCS Hedge Fund Composite	-4.80%	-3.20%	1.30%	4.60%	4.20%	6.60%
Relative Value						
DJCS Convertible Arbitrage	-3.60%	-0.10%	3.10%	11.50%	4.00%	4.80%
DJCS Fixed Income Arbitrage	0.10%	3.60%	6.20%	6.10%	2.40%	4.10%
DJCS Equity Market Neutral	-3.30%	2.10%	2.20%	-14.80%	-6.80%	0.10%
DJCS Multi-Strategy	-3.70%	0.60%	4.60%	6.20%	4.00%	6.50%
Event Driven						
DJCS Event Driven	-10.90%	-9.70%	-4.30%	3.60%	3.90%	7.40%
DJCS Event Driven - Distressed	-7.80%	-4.90%	-0.70%	3.50%	3.00%	7.80%
DJCS Event Driven - Risk Arbitrage	-3.30%	-0.40%	-1.40%	4.30%	4.60%	4.30%
DJCS Event Driven - Multi-Strategy	-12.70%	-12.50%	-6.30%	3.60%	4.50%	7.40%
Equity Hedge						
DJCS Long-Short Equity	-9.80%	-9.10%	-3.70%	3.20%	3.00%	5.90%
DJCS Emerging Markets	-8.90%	-6.90%	-3.80%	4.60%	4.30%	10.70%
DJCS Dedicated Short Bias	19.00%	13.20%	0.30%	-9.90%	-6.10%	-5.60%
Tactical						
DJCS Global Macro	4.40%	5.80%	9.80%	9.30%	9.30%	10.90%
DJCS Managed Futures	3.50%	-0.10%	5.40%	5.10%	7.30%	7.00%
Traditional Markets						
S&P 500 TR	-13.90%	-8.70%	1.10%	1.20%	-1.20%	2.80%
Barclays Aggregate Bond Index	3.80%	6.70%	5.30%	8.00%	6.50%	5.70%

Source: Dow Jones Credit Suisse Hedge Fund Index

Thus, the recent sell-off has provided hedge funds, particularly those that are nimble and flexible in their approach, with a potentially compelling opportunity set. Bottom-up value exists in pockets of the global capital markets (e.g., RMBS, convertible bonds), but investors are worried about catching the proverbial "falling knife". We continue to watch Europe carefully—not just from a macro perspective—as we think the unfolding situation will lead to "micro-based" fundamental, relative value, and active trading opportunities.

Private Markets

Global economic uncertainty in the third quarter of 2011 caused private equity investors to pause and slow the pace of new private equity commitments, reversing the fund raising recovery trend that the industry had been experiencing since the last quarter of 2010. With investors being more cautious and deliberate in their investment decisions, General Partners are trending toward making more concessions or offering first closing incentives in the negotiation of partnership terms to entice investors to commit. These most commonly include management fee reductions, increased LP management fee offsets for deal, monitoring and other transaction fees, and total fund (European style) distribution waterfalls.

Global merger and acquisition activity for 2011 through the end of August was up 18% over the same period in 2010, with enterprise valuation multiples topping 11x EBITDA in both the US and Europe, a return to the heady transaction valuations of 2006-2007 (William Blair & Company). On the exit side, IPO volume slowed significantly during the quarter. While the back log of IPOs has been high, so too has the number of companies who have withdrawn their IPO plans, indicative of the volatility in equity markets and the mixed quality of IPO candidates. Despite the unsettling economic events of the quarter, we believe that there are private equity strategies and disciplined managers that are well positioned to capitalize on

these cloudy conditions. Secondary funds are reporting record levels of transaction activity ($14 billion in the first half of 2011, Cogent Partners), as financial institutions shed private equity assets to provide regulatory capital reserve relief. Credit opportunity, distressed debt and turnaround strategies seem well poised to acquire assets in need of financial and/or operational restructuring.

In the US, the commercial real estate sector has continued to show signs of stabilization. Real estate fundamentals (occupancy and rental growth rates) have improved but new construction remains very limited. Real estate indices have rebounded since 2009, core transaction volume is back up to pre-bubble levels, capitalization rates have declined since 2009, and real estate yields remain attractive relative to treasuries (440 bps above 5-year US Treasuries in Q2 2011). Despite these positive signs, distress still exists in the sector. Unlike core properties, distressed property prices remain at crisis-level lows and financing for non-core properties is scarce. With $1.2 trillion of debt maturities scheduled through 2014 and a weak CMBS market, the volume of distressed assets remains quite large with an estimated $500 million of new equity capital needed to de-lever/rebalance assets back to normal levels.

While core real estate has experienced significant capital inflows (resulting in entrance cues), we also believe that there are attractive investment opportunities within value-add/opportunistic real estate strategies, particularly in distressed opportunities where capital is required for many assets that are suffering from overleverage and/or underperformance. In debt-focused real estate strategies, low leverage senior debt is generally available at attractive terms for borrowers with core properties in attractive locations. For non-core property types (i.e. non-core locations and value-add/opportunistic strategies), lenders are still skittish about issuing large amounts of new debt capital. We believe that with this supply imbalance, debt investors targeting these property types have the potential to realize attractive risk-adjusted returns.

Final Thoughts

With the end of the third quarter, investors face an environment of elevated risk and potential opportunity. The risks are manifold—potential sovereign default in Europe leading to another bank crisis; possible double-dip recession in the US and decelerating growth across the world; debt-strapped monetary and fiscal authorities with fewer tools available to address the current situation—and exist in the midst of a highly charged political environment. In the US, we expect economic growth to remain slow, but not to dip into recession. Such a path, however, will not help reduce unemployment or boost still-depressed home prices. Political missteps could easily dampen growth further. In Europe, we remain concerned that we have not seen the end of the debt crisis and that policymakers on that continent (with their electorates) have not truly grasped the magnitude of the problems besetting the heavily indebted peripheral countries. Austerity programs have already thrown Greece and other peripheral European countries into recession, a condition that threatens to spread to Germany, France, and the UK. Economic malaise in the largest developed countries could translate into slowing growth in export-driven and resource-oriented developing economies such as China and Brazil. As a result, we expect volatility to remain high in the coming months, with the probability of troubling headlines driving market prices and emotions.

Yet investors need to be alert for opportunities as well. The fundamental relationship between risky assets and their less-risky comparisons has been changing—that is, markets have essentially been re-pricing risk. While we continue to advocate that clients maintain a risk-balanced approach to asset allocation, we also remind them to be on the watch for opportunities to take advantage of the current environment through rebalancing toward risky assets and selectively pursuing strategies with outsized return potential. Emerging markets stocks and bonds, having sold off so far this year, appear attractive given their still strong fundamentals. We also recommend allocations to strategies that can take advantage of market-level dislocations such as global asset allocation and global macro. Investors that can deploy patient capital into distressed and event-driven strategies should be well positioned to take advantage of the restructurings that must accompany the ongoing financial challenges, particularly in Europe.

As we move toward the end of 2011, we look forward to working with our clients to balance the risks in their programs with the ability to pursue opportunities in today's extremely dynamic markets.