

## **Profit Potential During Economic Calamity**

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## Profit Potential During Economic Calamity

The scope of recent credit problems for a number of sovereign European nations within the Eurozone presents an opportunity for Arrowstreet to not only discuss its current outlook for the affected markets, but also to engage in a broader discussion about the recent change in mispricing associated with macroeconomic signals for markets around the world. Analogous to the way in which money making opportunities relate to the spreads in valuation multiples in the markets, the same is true of macroeconomic signals. Macro profit opportunities are often greatest when countries exhibit wide variations in characteristics such as changes in interest rate or GDP expectations.

### Recent Credit Crisis:

Credit problems among many sovereign European nations within the Eurozone have continued to worsen in 2010. On April 9<sup>th</sup> of this year, Fitch Investor's Service cut their rating on Euro denominated long-term Greek government bonds to BBB-, the lowest investment grade rating. A few weeks later, on April 27<sup>th</sup>, S&P cut their Greek credit rating to BB+, junk status. The agency followed with cuts to the rating of Portuguese government debt (to A-) and Spanish debt (from AA+ to AA). These events have raised concerns that the fiscal crisis facing Greece may be more serious than originally thought, and that the problems of government indebtedness extend to a broader group of nations, having potential implications for the equity markets in these countries.

As shown in Figure 1, Greece and Spain are among a number of Eurozone countries which have high levels of government debt to GDP or large deficits relative to GDP. These debt burdens have all increased relative to 2008 levels, rising above 100% of GDP in the case of Greece, and the Government Deficit to GDP ratios are above 10% for three of the four countries listed.

Figure 1

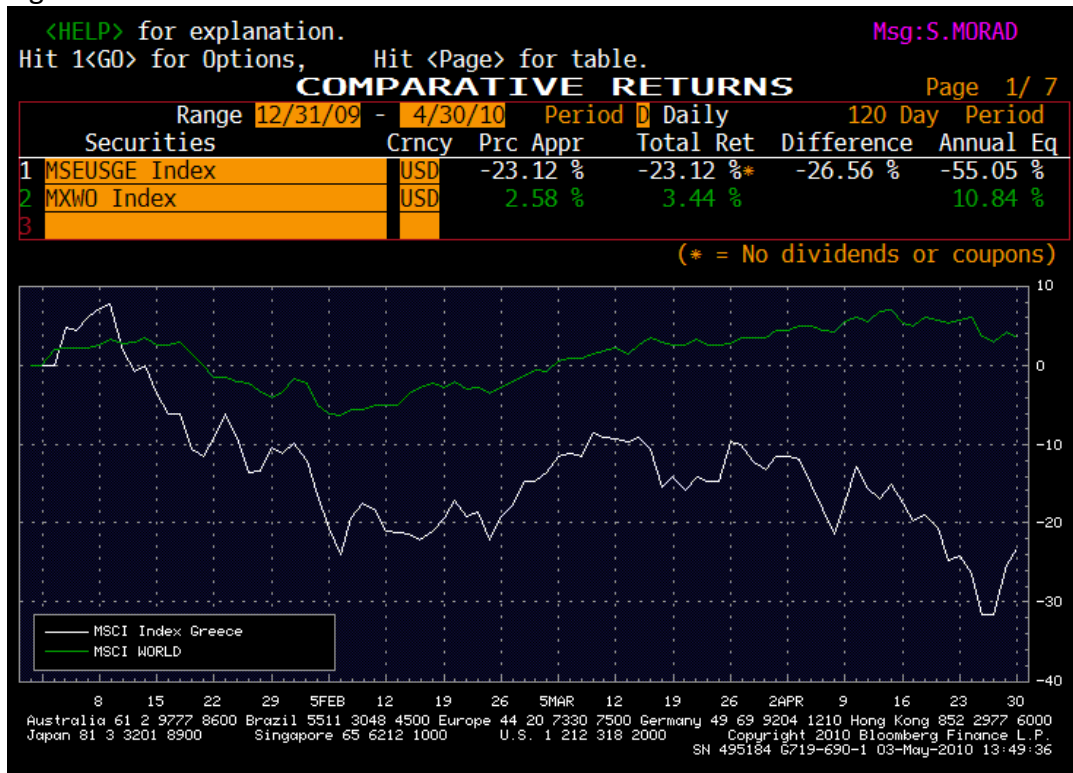
Long Term Government Bond Ratings April 30, 2010				Debt Burden (source: Eurostat)		Excess Equity Returns: % Change in MSCI Country Index - World Index (USD)	
Country	Moody's	Standard & Poors	Fitch	Govt Debt as % of GDP: 2009	2009 Govt Deficit as % of GDP	Dec 31, 2009- Apr 30, 2010	Apr 9, 2010- Apr 30, 2010
Greece	A3-	BB+	BBB-	115.10	13.60	-26.56	-5.19
Ireland	Aa1	AA	AA-	64.00	14.30	2.67	6.87
Portugal	Aa2	A-	AA-	76.80	9.40	-22.16	-8.37
Spain	Aaa	AA	AAA	53.20	11.20	-23.24	-7.03

As equity investors we face two forms of risks in such circumstances: inflation induced currency depreciation and a decline in local currency equity market prices. While the former is certainly possible, the countries most directly affected are member states of the broader Eurozone. As such they have limited influence over Euro-wide inflation as a mechanism for reducing the real value of their debt. Setting aside the possibility for individual countries opting out of the Eurozone, that then leaves a decline in the local equity market as the most significant remaining risk.

There are several channels through which such declines may occur. One channel occurs when the companies themselves hold significant amounts government debt in the affected countries. In this sense, there is a very direct link between the risks of government debt downgrades and the value of stocks in these countries. European banks, for example, hold large amounts of government debt on their balance sheets, and through this channel the downgrades on government debt have directly impacted their bottom line. The risk of a government debt downgrade can also affect the value of equities indirectly, by altering the perceived fiscal regime and regulatory regime under which companies operate. For example, the downgrades may be associated with an increased risk of higher tax levies on future corporate profits.

Because market prices move with *expectations* of rating downgrades rather than with the actual downgrades themselves, these recent events entail both downside as well as upside risk. From the data in Figure 1, we see that the Greek market has fallen 27% (benchmark relative) since the beginning of the year. As one can see from Figure 2, much of this decline in the Greek index (white line) occurred *prior* to the Fitch downgrade of April 9<sup>th</sup>. The relative underperformance of the market is even greater when one includes the 4<sup>th</sup> quarter of 2009. As a result, the rescue package arranged by other Eurozone governments has not only provided the Greek market a certain amount of cushion (leading to a sharp rebound in the last week of April), but it also represents a significant source of upside risk.

Figure 2



Arrowstreet maintains that ratings downgrades in the capital markets are a common enough occurrence that any well designed investment process should incorporate their risk and return implications to the portfolio. We maintain that the investment concepts reflected in our own process continue to work effectively during such environments, highlighting the favorable performance of our strategies during financial crisis of 2008/09 as anecdotal evidence supporting this claim. Based on this, we believe it is instructive to look at how our forecasting modes currently view these fiscally troubled European markets.

Figure 3 shows our 12 month expected return forecasts for Greece, Ireland, Portugal, and Spain (built up as cap weighted aggregates of our forecasts of all stocks in our universe located in the indicated markets). The numbers represent our expectation of USD hedged returns for each equity market relative to the cap weighted average of all developed markets.

Figure 3

Excess Return Forecast Versus Developed Market World April 30, 2010					
Country	Total Forecast	Earnings Signals	Price Momentum Signals	Value Signals	Macroeconomic Signals
Greece	2.72	-1.96	-15.43	18.32	1.79
Ireland	0.67	-1.71	2.14	-0.49	0.73
Portugal	-3.99	-0.59	-9.95	5.70	0.85
Spain	-2.47	-1.69	-7.35	5.54	1.03

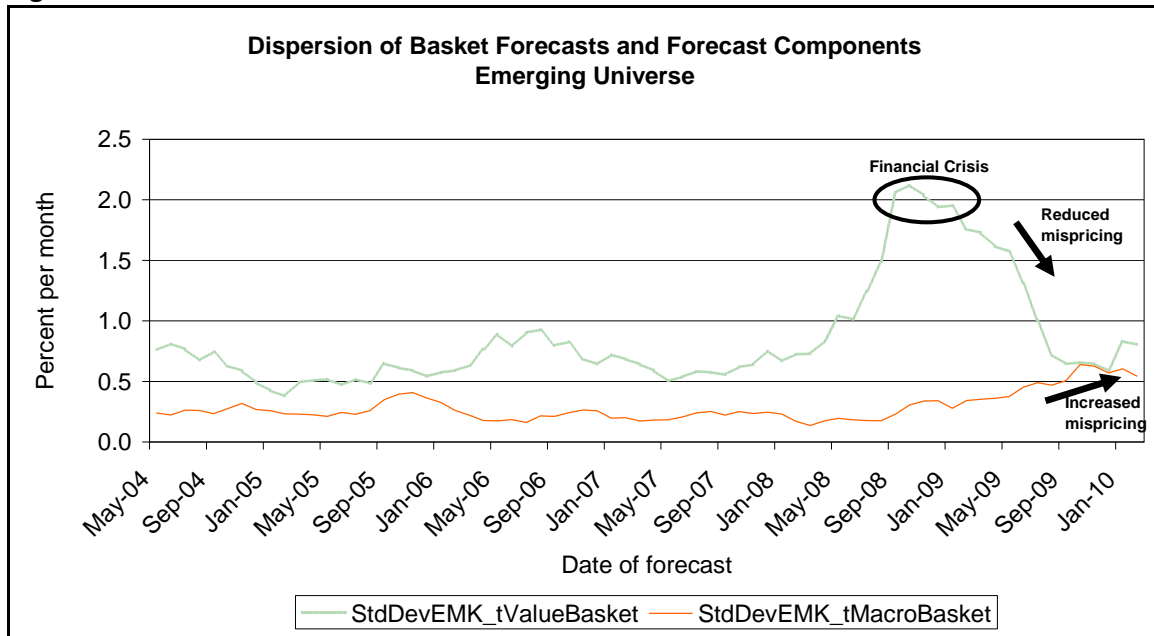
As a change to our bearish outlook for each of these four markets back in December 2009, we have recently begun to view the Greek market more favorably. While Momentum signals have degraded sharply, they are at least now more than offset by improving Valuation characteristics for the market. This upgrade is largely in response to the sell off discussed earlier in the document. Nonetheless, when all of the relevant forecasting inputs are taken into consideration, our outlook for the Greek market is still only modestly positive. As such, when compared to more attractive opportunities around the world, we continue to maintain a broadly underweight position towards the market in our portfolios. Of course, as circumstances surrounding these markets continue to evolve, our forecasting models will continue to assess the risk and return implications for our portfolios.

In summary, we believe that the possibility of further sovereign debt downgrades in the Eurozone represents a real risk to equity investors; however, it is not a risk that represents a special problem for our investment process. We have witnessed any number of similar events in the past, both directly as portfolio managers over the last 20 years as well as indirectly through the evaluation of historical market data.

**Profit Potential:**

As with most periods of change, profit opportunities exist for those that are capable of successfully navigating them. Even though the recent credit events in the Eurozone have generated unusually attractive value opportunities, these represent more of an exception to the generalized trend of assets reverting back to more normal valuation levels following the financial crisis of late 2008/early 2009. This change is most apparent within the emerging market universe shown in Figure 4 below. It illustrates how the dispersion of forecast contribution from Value signals has diminished in recent months off of their earlier highs. With this, there now only appears to be normal profit opportunities associated with Value plays compared to the recent past where more plentiful ones existed.

Figure 4



Interestingly, not all signals have followed such a “reduced profit opportunity” path. Of particular note in Figure 4 is the increased dispersion observed among Macro signals within the emerging market universe. This group of signals in our forecasting model attempts to exploit the under reaction of investors to changes in interest rate and GDP expectations, among other information. While normally it represents a relatively small contribution to our overall forecasting model, and typically one that is secondary to more powerful signals such as Value (shown in the same chart), in recent months we have seen Macro signals growing in relative importance.

In light of the varying influence that the global financial crisis has had on individual markets, it is not entirely surprising that Macro characteristics look increasingly divergent across markets. Such an environment should result in increased dispersion of the predictable component of each market’s return relative to one another (all other things being equal). In other words, increased profit opportunity for those in a position to identify and exploit them.

For example, both South Africa and Russia rank favorably on the Macro characteristics described above and do so on a even *more pronounced* basis than has typically been the case in recent years for other attractive Macro markets. Conversely, Mexico and South Korea rank poorly on the same basis and also do so in a *more pronounced* manner. As a result, our portfolios are currently positioned to take advantage of these temporarily greater profit opportunities. Of course, only time will tell if these active positions will ultimately translate into alpha for our clients. We believe, however, that by dynamically responding to such changing market conditions and opportunities we improve our ability to add value in a differentiated way.