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Thinking About and Through the Current Market Crisis
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No circumstance places more pressure on trustees, investment staff, and consultants than a sudden downward price movement in one or more of the investment landscape's important asset classes, taking total fund value down with them. With the trailing twelve month declines shown in Table I, this is clearly one of those times. For most plans, these declines have placed trailing total fund returns far below actuarial requirements for pension plans, spending policy targets for endowments, surplus maximization targets for insurance companies, and retirement savings objectives for defined contribution participants.

Table I

Trailing 12-Month Returns
As of September 25, 2008

Asset Class	Representative Index	Return
All Cap US Equity	Russell 3000	-17.92%
Large Cap US Equity	Russell 1000	-18.49%
Small Cap US Equity	Russell 2000	-10.92%
Int'l Developed & Emerging Equity	MSCI ACWI ex-US (GD)	-21.87%
Emerging Markets Equity	MSCI Emerging Mkts (GD)	-26.51%
US Core Fixed Income	Lehman Aggregate	4.56%
US Treasury Notes	Lehman 5-10 Year Treasury	10.42%

History has shown us many distressed markets. Most of them were fairly quickly followed by a significant recovery. Others, more rare, included a decline of unusual magnitude, followed by an extended period of market stagnation, such as occurred in the Great Depression, the 1970s U.S., or Japan in the 1990s and this decade. The most obvious question is: which model will the current market decline follow?

Fiduciaries facing market declines, however, also find themselves confronting a more practical set of questions: those involving potential actions they could take in response to these market declines. The most fundamental of them is:

> Does the fund's asset allocation policy, presumably agreed upon in a time when "normal," or unstressed, markets prevailed, still best serve the fund in the current abnormal, stressed market environment?

Recent dramatic market volatility has likely mis-aligned most plans' asset allocations, relative to their long-term target allocations. The practical and most immediate question, then, becomes one of adherence to rebalancing policies:

> Should the established rebalancing policies put in place after careful deliberation be allowed to operate as intended? In the current circumstances, that would mean incrementally moving assets to equities — domestic and international — and reducing bond exposure.
>
> -or-
>
> Should established rebalancing policies be set aside in favor of some new asset allocation response created "on the spot"? During periods of stress, market declines, and uncertainty, new asset allocation or rebalancing policies often materialize as proposals to sell fallen equities and buy bonds (sometimes with a heavy emphasis on Treasurys).

What Should Fiduciaries Do?

No one specific course fits all investment decision-makers. The circumstances facing a board of trustees for a perpetual pension fund differ from those of a defined contribution participant nearing retirement age. We believe that the following comments apply generically to a surprising degree, but they are targeted more directly at institutional fiduciaries running multi-asset class funds.

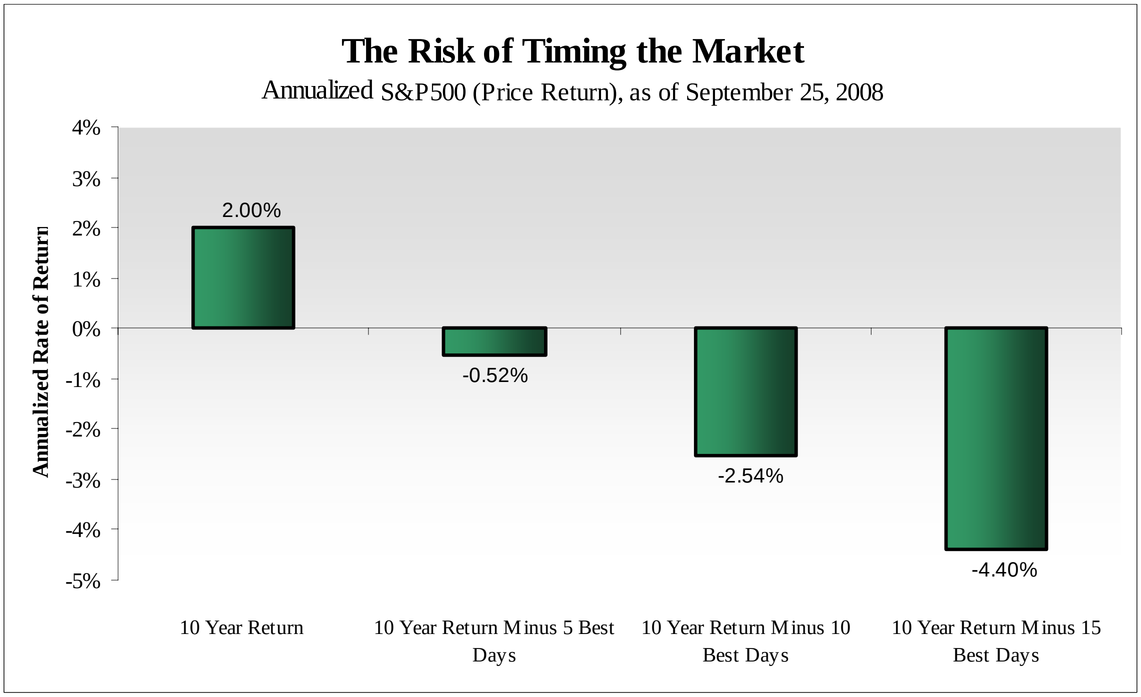
Our best advice is to rebalance as needed to maintain the fund's policy asset allocation. We don't rest this advice on platitudes about "staying the course." Instead, we would rather look at this difficult problem from the straightforward view of risk and reward, based on those lessons that market history and behavioral finance offer us.

We recognize the discomfort that strict adherence to a rebalancing policy introduces, particularly amidst volatile markets. During volatile markets, to maintain policy allocation targets, both the magnitude of required asset transfers and their frequency increase. Rebalancing necessarily involves buying into a market that has declined, and the conceptual shift required to define a market as one that "has declined," rather than "is declining," is a counter-intuitive and uncomfortable one.

Still, to do anything else but rebalance to an agreed target allocation would, we feel, sacrifice several advantages offered institutional investors and be the sub-optimal decision.

Maximizing the long-term (ten- to twenty-year) returns of an institutional fund depends to a large extent on maintaining as close to an optimal asset allocation as possible for as much of this period of time as possible. Asset allocation is the largest driver of total fund returns over time, and changing it significantly creates a clear cost and notable risks — specifically the costs of transitioning substantial assets among classes (and, presumably, back) and the risk of being out of the market when price appreciation occurs. This latter risk is exacerbated by the fact that asset class rebounds are often sudden, while changing asset allocation is more akin to turning a supertanker.

Chart I



We draw two implications from the data presented in Chart I. First, missing out on even the market's ten best days over a ten-year period results in an *annualized* performance shortfall of more than 4.5%, and indeed turns a positive equity-market return into a negative one. Second, we note that even after including the domestic equity market's best days, the market has only delivered a 2.0 % annualized return over the last ten years. Portfolios that have diversified away from equities in this period have benefited from lower exposure to this asset class.

The risk of failing to rebalance is also illustrated in Table II on the following page. We examined every one-year period (evaluated monthly) since 1970 in which the S&P 500 Index declined by more than 15%, and then calculated the subsequent six-month, one-year, and five-year performance of the index. There are some examples of months following significant equity market declines where the market continued to fall by notable amounts (see the table's blue highlights). In the majority of cases, however, positive returns in the periods following those declines were substantial. In fact, evaluating all periods in the table, the correlation coefficient between historical (negative) market return and prospective return has been negative, indicating that significant declines have fairly reliably been followed by positive returns in the opposite direction.[1]

[1] The correlation coefficients are -0.58, -0.24, and -0.26, calculating the historical one-year return versus prospective six-month, one-year, and five-year returns, respectively.

Table II

S&P 500's Worst 12-Month Returns Since 1970, and Subsequent Market Performance							
		Six Months Later		One Year Later		Five Years Later	
1-Yr Ended	1-Yr Return	S&P 500	LB Agg	S&P 500	LB Agg	S&P 500	LB Agg
4/30/1970	-18.6%	4.2%	N/A	32.2%	N/A	28.1%	N/A
5/31/1970	-23.4%	16.2%	N/A	34.8%	N/A	42.4%	N/A
6/30/1970	-22.9%	29.1%	N/A	41.9%	N/A	56.5%	N/A
11/30/1973	-15.2%	-7.4%	N/A	-23.8%	N/A	24.0%	N/A
7/31/1974	-24.0%	-0.2%	N/A	17.5%	N/A	66.2%	N/A
8/31/1974	-28.1%	16.2%	N/A	26.4%	N/A	92.5%	N/A
9/30/1974	-39.0%	34.7%	N/A	38.4%	N/A	118.5%	N/A
10/31/1974	-28.8%	21.2%	N/A	26.2%	N/A	75.0%	N/A
11/30/1974	-23.8%	33.5%	N/A	36.4%	N/A	92.7%	N/A
12/31/1974	-26.4%	42.0%	N/A	37.4%	N/A	99.8%	N/A
1/31/1975	-16.4%	17.8%	N/A	36.7%	N/A	88.2%	N/A
8/31/1988	-17.8%	12.5%	3.8%	39.2%	13.2%	108.8%	75.2%
3/31/2001	-21.7%	-9.7%	5.2%	0.2%	5.4%	21.5%	28.3%
8/31/2001	-24.4%	-1.7%	3.0%	-18.0%	8.1%	25.5%	26.8%
9/30/2001	-26.6%	11.0%	0.1%	-20.5%	8.6%	40.1%	26.5%
10/31/2001	-24.9%	2.3%	0.0%	-15.1%	5.9%	41.9%	24.7%
1/31/2002	-16.1%	-18.7%	4.2%	-23.0%	9.5%	39.1%	26.9%
6/30/2002	-18.0%	-10.3%	6.2%	0.3%	10.4%	66.3%	24.5%
7/31/2002	-23.6%	-5.3%	5.1%	10.6%	5.4%	74.8%	24.1%
8/31/2002	-18.0%	-7.3%	4.7%	12.1%	4.4%	76.2%	23.5%
9/30/2002	-20.5%	5.0%	3.0%	24.4%	5.4%	105.1%	22.4%
10/31/2002	-15.1%	4.5%	4.3%	20.8%	4.9%	91.5%	24.1%
11/30/2002	-16.5%	3.9%	6.3%	15.1%	5.2%	73.3%	26.4%
12/31/2002	-22.1%	11.8%	3.9%	28.7%	4.1%	82.9%	24.2%
1/31/2003	-23.0%	16.8%	0.4%	34.6%	4.9%	76.5%	26.1%
2/28/2003	-22.7%	20.9%	-0.4%	38.5%	4.5%	73.4%	24.6%
3/31/2003	-24.8%	18.5%	2.4%	35.1%	5.4%	71.0%	25.1%

Average Prospective Returns After Decline

	Six Months	One Year	Five Years
S&P 500	9.7%	18.0%	68.6%
LB Aggregate	3.3%	6.6%	28.3%

NOTE: Lehman Brothers (LB) Aggregate Bond Index performance history began in January 1976.

Top 5 worst one-year rolling returns since January 1, 1970

Instances when S&P500 produced returns lower than -5% in the ***six months*** *following the negative year.*

Instances when S&P500 produced returns lower than -5% in the ***one year*** *following the negative year.*

While of course the investment markets never offer guarantees, market history suggests the risk of failing to rebalance (missing out on the recovery in equity values while expanding exposure to lower return bonds) exceeds the potential gain of avoiding a significant further decline in equities. If there is a case worse than having suffered through the declines noted in Table I above, it is having done so and then taken action that results in missing any subsequent recovery.

As fiduciaries contemplate their options, and the risks and rewards associated with each, we would offer a thought particularly applicable to perpetual funds — open pension plans, endowments, foundations, permanent funds, etc. Major market declines, during their worst periods when prices are falling most rapidly, almost universally share one characteristic: they are driven in large part by investors who *must sell* because they are leveraged, because they lack liquidity, because their institutional survival is at stake, or because their investment decisions are driven by raw emotion. Large perpetual institutional funds have many advantages over most investors, namely: access to a greater range of alternative investments, the ability to make less liquid investments, professional staff and consultant resources, and the lower fees associated with larger mandate sizes. But perhaps chief among their advantages over many categories of investors in the capital markets is their ability to make long-term investments and benefit from three-, five-, seven-, and ten-year opportunities. Some perpetual institutional funds may *choose* to sell into sharp declines; but most *do not have to* join the categories of investors who must do so. Why give up such a substantial advantage over other investors without a compelling investment thesis?

Other Actions to Consider

Are there other steps that fiduciaries should consider taking in the current crisis? There are, but they are as much directed to structurally enhancing the fund's ability to withstand the next crisis as attempting to tactically maneuver the total fund "supertanker" through the rapid, even daily, gyrations of the current one. And, as is clear below, the theme they share in common is not creating and exercising short-term tactical agility, but rather re-emphasizing once again the virtue of diversification in the total portfolio, within asset classes, and within the investment vehicles used to implement long-term asset class strategies.

Every crisis teaches us a new lesson about better management of portfolios. A major lesson of the Stagflation 1970s was the vulnerability of financial assets to inflation. Fiduciaries overseeing institutional portfolios without some diversifying exposure to the real return asset class should reconsider adding this element to the portfolio. A major lesson of the dot-com bubble and subsequent equity collapse is the risk of over-concentration in specific industries (technology/media/telecom) or style segments (e.g., growth equities) and the risk in not rebalancing among them. *This is a good time to reassess whether any industry or style concentrations have inadvertently crept into the portfolio.*

Opinions about the key lesson (or lessons) regarding the current crisis are many and more are still being formed. Prominent among them is the risk associated with financial leverage at all levels of the total fund, and its implementing investment program, from equities (investments in financial institutions relying heavily on leverage), to fixed income (SIV's, structured fixed income instruments, to cash management and securities lending collateral pools), to Absolute Return portfolios. A key lesson we draw from the current crisis is that when large amounts of financial leverage are applied to relatively undiversified underlying investments, risk is greatly exacerbated.

We recommend that fiduciaries take efforts to ensure that investment managers communicate appropriate information regarding embedded leverage levels, both to the plan and to RVK, to ensure our ability to adequately monitor those leverage levels.

We would extend this regular monitoring process beyond the fund proper and into cash management vehicles, collateral pools for securities lending, and other operationally driven investment efforts.

At the manager level, we also suggest that insisting on more frequent communication from managers will not only empower fiduciaries and their staff with a better understanding of the elements of the current crisis, but it can also give significant clues as to how given managers' philosophies, tactics, and resources performed under duress. This suggests that the most valuable data will be attribution analysis of the portfolio's performance in a stressed environment. We suspect that a wealth of information about managers — good and bad — will emerge from this period.

A final thought for fiduciaries to consider. We have thus far during this crisis seen generally better performance from diversified hedge fund or "Absolute Return Strategy" investment managers than their traditional-asset counterparts. It is too early to firmly conclude that most of the institutional quality managers throughout this asset class managed investment and financial risk sufficiently well to notably outperform equities (and perhaps even bonds). *If over the course of the next several months that proves to be so, then fiduciaries who have avoided deploying Absolute Return Strategies or done so minimally, may find the case for reconsidering that asset class has become much stronger.*

As your consultant, we look forward to working with you to evaluate and address all of these issues. You can be assured that we are actively monitoring the situation. Over the course of our next several meetings, there will be opportunities to discuss lessons learned from the current market crisis, potential portfolio improvements to better insulate the portfolio from difficult environments of the future, and opportunities to better position portfolios for what will eventually be a recovery from the current state of affairs.

Conclusions

The current market crisis has been a painful one, and no one can guarantee a quick recovery. Plan fiduciaries will understandably be tempted to react to it by making structural changes to the investment portfolio. We encourage fiduciaries to adhere to rebalancing discipline through these tumultuous markets, and resist temptation to make wholesale changes to the long-term structure of investment portfolios in response to current events. We suggest that as fiduciaries re-evaluate long-term portfolio structure, they do so not in a reactive way, but with the same care and thought that have presumably undergirded current policy allocation targets. Finally, we observe that two lessons that can be drawn from current market developments are the dangers of embedded, and especially unknown embedded, leverage in investment portfolios, and the general need for further diversification of investment portfolios into investments that do not rely on upward equity market direction as their primary source of return.