

## **Investment Management Is Risk Management – Nothing More and Nothing Less**

In this paper we argue that investors and investment managers make a mistake if they try to focus on achieving high returns or high risk-adjusted returns and are likely disappointing investors in the long run. Instead, we argue that investment management should focus almost exclusively on managing the risks of an investment portfolio; above average returns will be a natural outcome of a proper risk management process. We describe the key risk management steps and why we believe this process leads to superior investment performance. // Joachim Klement, Chief Investment Officer

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*Take calculated risks.*

*That is quite different from being rash.*

Gen. George S. Patton

What does it take to be a good investment manager? Most people will argue that a good investment manager focuses on achieving the highest possible return for a given level of risk or manages financial assets in such a way that the risk-return trade-off is optimized. This goal implies however, that two assumptions hold: First, it implies that returns can be reasonably predicted ex ante by the investment manager and thus can serve as an investment target. Second, it implies that the relationship between the risk of an investment and its future return can be predicted and thus used as an investment guideline.

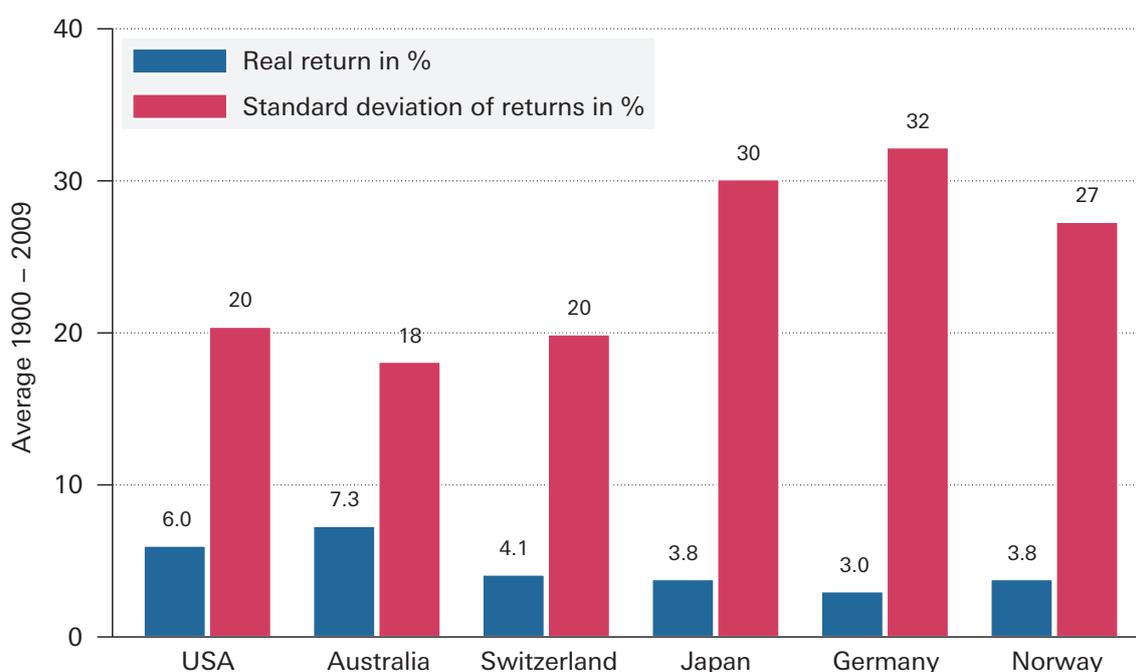
We argue that the first assumption does not hold and thus return forecasts should not be used as a basis for investment management. Different studies have tried to explore the return forecasting abilities of professional analysts for stocks, currencies and interest rates. The results unequivocally show that forecasts for

investment horizons of several months to one year are typically less accurate than a naïve forecast (Spiwoks and Hein [2007], Spiwoks, Gubaydullina and Hein [2011]). Even worse, while many investors argue that in the long run mean reversion will lead to returns that are more in-line with long-term historic experience and thus could be reliably forecast, more and more studies show that the forecasting error for long-term returns increases as the investment horizon lengthens and overwhelms any mean reversion effect (Welch and Goyal [2007], Pastor and Stambaugh [2009]).

The second assumption though might be partially true in so far as there might be (extreme) market circumstances where the relationship between risk and return or the likely distribution of future returns can be reasonably well predicted and thus used to make investment decisions. Too many investment managers, however, make the mistake of assuming a simple static relationship between risk and return as it is predicted, for example, by the Capital Asset Pricing Model (CAPM) that higher returns require higher risks. This, however, could not be farther from the truth. Over very

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**Exhibit 1: Real returns and standard deviation of returns for different stock markets**



Source: Dimson et al. [2010]

long time frames (i.e. 80 years or more), US stocks have outperformed US Treasuries and thus compensated investors for the higher volatility of stocks vs. bonds. Yet, there are prolonged sub-periods often lasting ten years or more when the higher volatility of stocks was not adequately compensated by higher returns, as the experience of the last decade has shown again. Similarly, over the last 109 years, US, Australian and Swiss stocks have outperformed the more volatile stock markets of Japan, Germany and Norway (Exhibit 1).

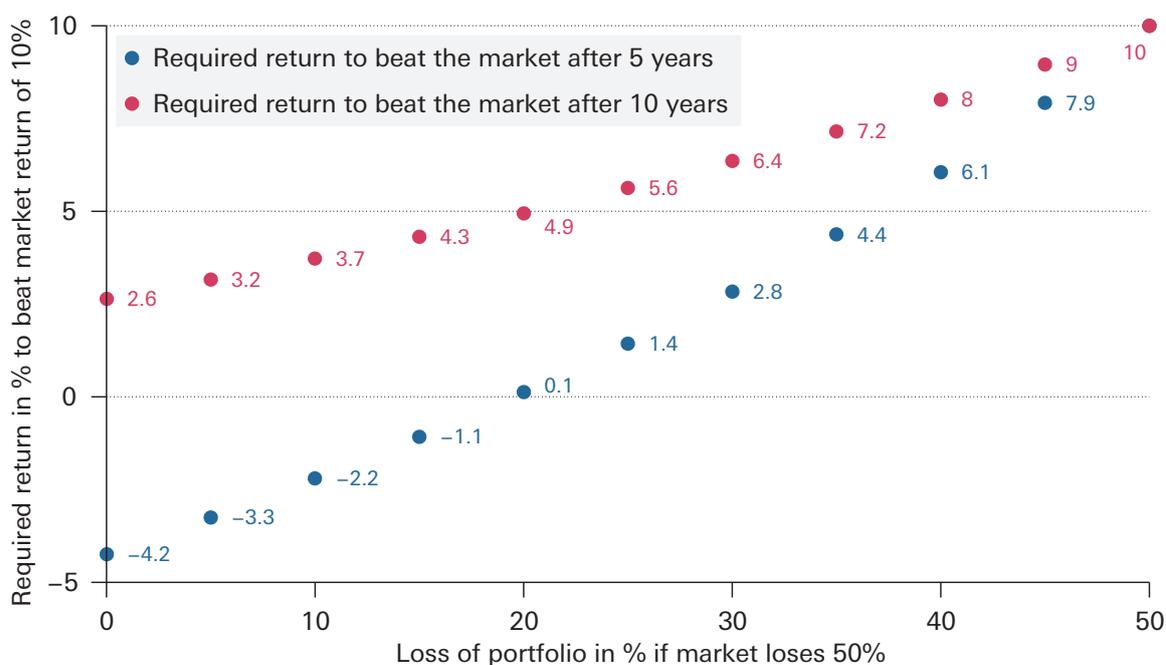
In this paper, we outline why we think a focus on returns or the relationship between risk and returns is detrimental to successful investment management. Instead, investment managers in our view should focus almost exclusively on managing the risks of different investments in a portfolio and treat returns as a derivative of proper risk management.

To see why this is so, assume that one has the option to invest in the US stock market in a traditional way through an index oriented investment or a mutual fund that tries to beat the overall market performance. Most investment managers try to beat the mar-

ket by identifying the most promising stocks in the universe depending on the prevailing market environment. Thus, they hope in the long run they will pick more winners than losers and eventually outperform the market. Instead of identifying winners with the highest expected returns we advocate an approach that focuses on avoiding the riskiest stocks and avoiding losses. Since 1926, the US stock market has averaged an annual return (including dividends) of roughly 10%. This is an extraordinary high return. However, this high average return has come at the price of periods of steep losses even over very long time frames. In the year 2008 the US stock market lost almost 50% and has yet to completely recover its losses. The Nasdaq 100 stock index has so far not recovered the losses from the burst of the tech bubble and probably will not do so over many years to come. The same is likely to be true for bank stocks bought before the crisis of 2008.

If an investor is able to limit losses in such severe downturns and loses only half as much as the overall market did in 2008 (so 25% instead of 50%) the required rate of return to reach the same overall level of wealth

**Exhibit 2: Required return to beat market return of 10% after a market downturn of 50%**



Source: Wellershoff & Partners

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after five years as an investor who stayed in the market all the time is just 1.4% per year instead of 10%. To have the same level of wealth after ten years, the same investor would require an average return of 5.6% - still significantly lower than the 10% market return (Exhibit 2). Thus, we see that if one is able to cut downside risks in an investment portfolio through appropriate risk management and prudent exit strategies, in the long run the investment will outperform the market even if it has much lower average returns. If the investment manager is able to beat these lower required returns, the result will be a market beating performance over the long run.

This is the essence of why we think risk management is by far more important than chasing returns and why the theory of return maximization leads to inferior investment returns in practice.

In order to successfully implement such a risk management approach, six principles should be obeyed in our view:

1. All investing is risk-taking
2. Take risks, only if they are adequately rewarded in the market
3. Expand risk management to uncertainty management
4. Enter risks only if you know how to exit
5. Limit your risk exposure and never bet the house
6. Diversify your risk exposure

In the following paragraphs we will explain briefly what these six principles imply in practice.

### **All investing is risk-taking**

There is no such thing as a risk-free investment. The investment world oftentimes defines risk as volatility and volatility is usually nothing more than shorthand for the standard deviation of returns. In this simplified world, a Treasury Bill appears to be almost risk free since its historical volatility is close to zero. Often, an inflation-linked government bond is sometimes considered to be the ideal risk-free asset because the investor is compensated for inflation plus a real interest rate for holding this government bond. The Republic of Greece has issued inflation-linked government bonds in the past, but it will probably be an uphill battle to convince any investor that these are risk-free. Similar-

ly, Treasury Bills may be almost risk-free at the moment, but not only do governments default on their obligations, but also surprise inflation might impair the gains on such seemingly safe assets. In times when debt is increasingly being monetized with freshly printed money in many countries around the world, holding Treasury Bills or cash may lead to permanent loss of purchasing power due to unexpected inflation or spiking prices for real assets.

In our view, risk should be defined as a permanent loss of purchasing power, be it because an investment becomes worthless or losses become so big that the investor is unwilling or unable to hold on to the investment until purchasing power is recovered. This means that in practice there is no risk-free asset. Classical safe assets like cash or government bonds are risky in the sense that governments may default on their debt and thus incur losses of capital to their borrowers. Holding cash almost certainly leads to loss of purchasing power over time as long as inflation remains positive. In fact, even in a deflationary environment cash might not be risk-free since governments may be tempted to get rid of deflationary trends (which incidentally also lead to an ever increasing amount of real government debt) through currency reform, which could lead to significant devaluations of cash.

That other assets like stocks, commodities or houses are not risk-free should be obvious to anyone who has ever held these assets. Here again, the classic definition of volatility as risk shows its limitations. Gold and other commodities have had higher volatility than stocks over the last decade, yet, most people would argue that stocks have been the riskier investment. Volatility for commodities has been high but mostly skewed to the upside, while stocks have moved sideways with bear market losses comparable to bull market gains. In the decade of the 1990s the pattern was largely reversed and investors would have argued that stocks were the less risky investment. Thus, for an investor, volatility is high for both stocks and commodities but risk is not, depending on the circumstances. This brings us to our second principle in managing investments.

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### **Take risks only if they are adequately rewarded**

Taking a risk for a reward prompted our ancestors to leave their trees and explore their environment – with some inevitably becoming a snack for neighboring lions. Survivorship bias and unrealistic models like the CAPM lead many in the investment industry to believe that taking on systematically higher risks will lead to higher returns.

But risk depends on the circumstances. If one of our ancestors was sitting on the only tree in the Savannah for many yards with some hungry lions roaming the plains between the trees, climbing out of the tree to check out the neighborhood did not make him a successful explorer – it made him an idiot. On the other hand if he was sitting on a tree which was running short of leaves and fruit to eat it might be smart to climb down and look for a new tree with more fruits and leaves. However, it might be an even better idea to wait until the lions nearby have caught another prey and are somnolently digesting their latest meal.

If all investing is risk-taking, it becomes paramount for investors to accept only risks that are adequately rewarded. This is the point where investors and investment managers alike fall into the trap of predicting future returns in order to estimate which risks will be most handsomely rewarded. In most instances, investments combine both risks and opportunities and it is virtually impossible to assess *ex ante*, which will prevail in the future. As a result, a return estimate is always forced to represent in one number all the conflicting forces that will impact a certain investment. Such a number may be convenient for an investor or investment manager because it allows comparing different investments quickly, but it oversimplifies reality and ignores the prevailing uncertainty around the expected future developments. The results are disappointments for some investments while others positively surprise.

However, in our experience this will inevitably lead to unsatisfied clients. If an investor is promised a return of 5% and then earns 0% the relationship between an investment manager and an investor will be stressed. On the other hand, few clients complain when a 5% return promise is exceeded.

A better approach to investing is to only exploit circumstances in which risks and opportunities are in a clear mismatch. Sometimes, markets do become over-

ly pessimistic about future prospects of an investment so that it can be bought at depressed prices with little risk of further loss of purchasing power but a high likelihood of higher prices in the future. This concept is at the heart of Benjamin Graham's concept of «margin of safety».

In our view the concept of margin of safety is one of the most powerful rules of investing and should be at the heart of every investment management approach. However, we think one can expand this concept to an investment approach based on extremes. We tend to analyze all kinds of investments by looking at risks and opportunities. If there is no clear dominance of either force, we tend not to take any active positions in these investments. Rather, we try to identify situations where risks are clearly outweighed by opportunities or vice versa.

For instance, interest rates in many developed countries are currently close to zero having declined for the better part of the last thirty years. While it is not impossible that interest rates will decline even further, we think there is a very high likelihood that interest rates on government bonds will be higher in ten years than they are today. This knowledge alone is sufficient to direct investment decisions for long-term investors because the prospect of rising interest rates will have a significant impact on the ideal allocation to bonds, stocks and other asset classes in a portfolio. In fact, contrary to traditional investment theory we think of government bonds in many countries not as a safe asset but as one of the riskiest assets to invest in at the moment.

Similarly for shorter investment horizons strong deviations from purchasing power parity between two currencies cannot persist indefinitely and have to be resolved over the course of a few years. On an even shorter time frame, market psychology - for example in reaction to the tragic developments on Japan in March 2011 - typically cause extremely pessimistic market sentiment for a short time that may normalize in a few days to weeks and can thus be exploited.

This approach to investing, where return forecasts or predictions are largely abolished but instead focus is put on situations where risks and opportunities are in a clear mismatch is in our experience more successful than the current approach to actively invest in the most promising investments no matter the circum-

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stances. It requires, however, a different discipline from the investment manager. Most investment managers and investors behave according to the maxim «Don't just sit there, do something.» We prefer an approach we call «Don't just do something, sit there.» Once an interesting investment opportunity has been identified, investment returns are just the result of staying invested until the mismatch between risks and opportunities is resolved again.

### **Expand risk management to uncertainty management**

To properly identify a mismatch between risks and opportunities can be quite difficult in practice. Financial markets have a long history of ignoring many substantial risks until it is too late (after which they will be dubbed a «black swan» that could not have been foreseen) while the financial industry has an almost equally long history of hiding risks in plain sight and calling the result «financial innovation». Behavioral research shows that it is only human to ignore many risks for a long time because they are not «salient» (i.e. they cannot be felt in daily life). The risk of a nuclear meltdown is typically not priced into the stock price of a utility company. When such an event materializes as during the tragic events in Japan in March 2011 this risk not only becomes more salient, it may suddenly dominate investor perception. As a result risk is overpriced in utility stocks leading to investment opportunities because opportunities and risks have gone out of balance.

In a normal market environment, complacency is prevalent and most risks are not adequately priced in markets. The period of the «great moderation» was essentially a multi-year time span during which macroeconomic risks were increasingly underestimated in financial markets. Similarly, we believe that, many investors underestimate the risks inherent in investments like hedge funds, which typically face much higher operational risks than market risks. But, since market risks are easily recognized and analyzed by most investors, these risks get priced into markets while operational risks do not as the cases of Amaranth hedge fund or Bernie Madoff have demonstrated.

The investment approach of assessing the balance of risks and opportunities does require however, that one has at least a qualitative grasp of the risks of an in-

vestment. Where such risks cannot be properly assessed, prudence tells us to stay away from such investments. This leads to some surprising outcomes. Because we think that the risks of an investment in gold or commodities can be much better understood than the risks of an investment in a hedge fund for example, we are per se much more willing to invest in gold than in hedge funds.

A classic value investor would abstain from commodity investments on the basis that they do not produce cash flows that can be valued, whereas we would say that the risk of a gold investment depends on some well-known factors like the level of real interest rates, inflation expectations, political risks or the size and directions of investment flows. Based on an analysis of these risk factors it is possible in our view to assess the relationship of risks and opportunities of a gold investment and exploit potential investment opportunities.

Of course, not every risk can be assessed all the time or even be recognized in advance. Frank Knight famously introduced the distinction between risk and uncertainty, where risks are characterized by our ability to quantify potential outcomes while uncertainties are inaccessible to the current state of statistical methods and thus more qualitative in nature. There is always the domain of the «unknown unknowns» as Donald Rumsfeld put it. But in our experience the focus on risk management allows us to devote more time on reducing our blind spots and thus uncover more unknown unknowns of an investment and transfer them into known unknowns. Thus, we focus more on uncertainty management in order to grasp not only quantitative risks such as market risks but also qualitative uncertainties like political risks and their potential impact on investments. The result is better protection against the loss of purchasing power and thus effectively less risk and uncertainty in a portfolio.

### **Enter risks only if you know how to exit**

Of course, all investing is risk-taking. This means that every investor is inevitably exposed to risks and thus it is only prudent to think about possible exit strategies. Our ancestors who thought about leaving their tree to explore the surroundings would have done well to do so only when the neighbor lions were asleep digesting their latest meal. But when exploring the surround-

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ings he (or she) might still have encountered another predator that was still looking for a juicy meal. In this case it would have been quite beneficial to always know where the nearest tree is that provides safety from the imminent danger.

If risks should be taken only if they are adequately rewarded it is still possible that these rewards may not materialize. The disposition effect is probably the most well-documented case of investors' bias to remain locked into an existing position for fear of regret if the position is dissolved. As humans we do have powerful mechanisms of justifying a bad investment decision after the fact. Thus, we advocate a mechanistic approach to profit taking or cutting losses in an investment. The advantage of such a mechanistic approach is that it circumvents our innate fear of losses and preserves capital for another day.

In fact, the ability to cut losses and reduce (downside) risks is in our view one of the most underappreciated ingredients to a successful investment approach. If one is able to only partially avoid the loss of purchasing power in a specific market event (e.g. the financial crisis of 2008) the required return of the investment to achieve the same long-term return as the overall market is reduced dramatically as we have shown above.

#### **Limit your risk exposure and never bet the house**

Lehman Brothers apparently forgot what every good gambler knows: Never bet the house. No matter what an investor does in real life, the exposure to any risk should always be limited so that in the worst case some capital can be preserved. Sometimes an opportunity seems to be so attractive that investors and investment managers are tempted to put too much money into this one opportunity. If the opportunity then does turn out not to be as attractive as one thought, the result can be dramatic losses.

In this case the losses may not even need to lead to a permanent loss of purchasing power. Oftentimes it is enough if the temporary loss is big enough to either wipe out an entire portfolio through additional margin requirements (if leverage has been used or a majority of investments have been made in illiquid investments) or big enough to prevent the portfolio from achieving its ultimate goals in time (e.g. to preserve the standard of living for an individual after retirement

in ten years). The financial crisis of 2008 provides ample examples of excessive risk taking gone wrong. Lehman Brothers and other investment banks took on too much sub-prime mortgage risks, university endowments invested too much in illiquid investments that could not be sold to cover losses in other assets, and individual investors were too exposed to equity market risks and lost large parts of their retirement nest eggs.

A friend of ours who works at a re-insurance company told us that rule number one in any re-insurance business is never to underwrite more contracts based on one specific risk than the company can bear. Investors and investment managers in this respect could learn a lot from the insurance industry. After all, it is the insurance industry that has focused for decades on managing risks.

Limiting the exposure to any single source of risk should not be confused with diversification, though. Getting exposure to many different sources of risk that are not driven by the same underlying factors is the final step in our risk management process.

#### **Diversify your risk exposure**

No matter how much you limit your exposure to any single risk, if they all materialize at the same time, you are still going to die. Sometimes the world looks full of attractive opportunities. At first glance these opportunities seem to be reasonably diverse, but if they all rely on a solidly growing economy, they may all turn sour if the economy gets into a recession. Similarly, many diverse sources of risk may all materialize at the same time if investors around the world flee risky assets indiscriminately at the same time. This is what has led to the correlation breakdowns in the last financial crisis where typically uncorrelated risky investments suddenly all moved in the same direction (which unfortunately tended to be down in this circumstance).

Similarly, during market rallies we not only regularly observe increased complacency towards risk but also increasing naïve diversification where investors try to diversify their investment portfolios by investing in different assets that on the surface seem to be rather independent but incidentally all tend to rally before they were included in the portfolio. But if investments all go up at the same time, they tend to also go down at the same time. A successful investment ap-

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proach requires the ability to cut positions in time in order to prevent excessive losses. The value of this technique has been demonstrated above.

But it also requires the ability to invest in assets with fundamentally different risk exposures. It takes a solid contrarian investor (a rather rare species it seems) who invests in undervalued, unfavored or declining assets to diversify the investment portfolio. Yet, true diversification of risks requires exactly this ability to hold on to different assets that in the eyes of many pundits may be the worst investments to hold at the moment.

This is why we invest in such diverse assets as Swiss real estate, gold or money market funds at the same time. We believe that interest rates are likely to rise in the coming years. If they rise because of higher inflationary pressures, gold and to some extent Swiss real estate investments will likely post solid returns. However, if interest rates rise because of rising real rates while inflation remains low, gold will most likely be hurt. However, this environment tends to be positive for money market investments.

But what if we are wrong and interest rates stay low or even continue their multi-year decline? Then gold and Swiss real estate investments should be among the winners if inflation remains positive while money market investments provide a safe haven in deflationary times. Overall then, we have positioned our portfolios according to our assessment of a high likelihood of rising interest rates compared to the risk of falling rates. But if interest rates stay low, we still have diversified our risk exposure sufficiently to incur fewer losses than a more traditional investment portfolio.

### Conclusions

Realizing these six principles in an investment process isn't easy. It requires an increased focus on risks while at the same time not falling prey to the temptations of greed and hope. Sometimes it feels as if one has to be clinically depressed in order to follow this approach to investment management. This, in our view, is why Warren Buffet was right when he said, «investing is simple, but not easy.»

### Bibliography

- E. Dimson, P. Marsh, M. Staunton and J. Wilmot, “Global Investment Returns Yearbook 2009”, Credit Suisse (2010).
- F. Knight, “Risk, Uncertainty, and Profit”, Boston, (1921).
- L. Pastor and R.F. Stambaugh, “Are Stocks Really Less Volatile in the Long Run?”, NBER Working Paper (2009).
- M. Spiwojs and O. Hein, “Die Währungs-, Anleihen und Aktienmarktprognosen des Zentrums für Europäische Wirtschaftsforschung”, Wirt Sozialstat Archiv, (2007).
- M. Spiwojs, Zulia Gubaydullina and O. Hein, “Trapped in the Here and Now – New Insights into Financial Market analyst Behavior”, Wolfsburg Working Papers No. 11 – 01, (2011).
- I. Welch and A. Goyal, “A Comprehensive Look at The Empirical Performance of Equity Premium Prediction”, Review of Financial Studies, 21 (4), (2008).

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