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Book

Transparency and fairness in the European capital market

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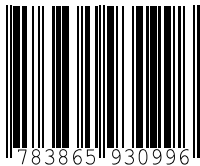
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Will the finance markets experience a crash when some of the big hedge funds go bust? And will we soon be seeing large numbers of German businesses taken over by private investors who then dismiss droves of employees and relocate production abroad so that expectations of enormously high yields can be fulfilled? It is these questions that the report investigates. It describes the background and incentives that have led to a vast inflow of money into private equity and hedge funds, explains just how good their performance as an investment vehicle really is, and analyses the opportunities and risks for the stability of the finance system and the growth implications for the German economy. The focus is on regulatory proposals and in this context the report advocates a departure from 'soapbox speeches'. There are an enormous number of practical hurdles standing in the way of tighter regulation and they may not be naively ignored. A direct regulation of funds with domiciles on offshore islands is not enforceable. But even without support from the Anglo Saxon partners, European policy makers can do much to implement more meaningful regulations. An important starting point is the regulation of the banks: the granting of loans must be handled more wisely and with more restraint. The report makes a number of practical proposals, suggesting ways how the many increasingly threatening dangers can be eliminated.



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Joachim Voth

Transparency and Fairness in The European Capital Market

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in The European Capital Market**

edition 217

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The European Capital Market**



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Hans-Joachim Voth was born 1968 in Lübeck and studied in Bonn, Freiburg, Florence and Oxford. He was awarded a doctorate from Nuffield College, Oxford, and went on to McKinsey and Co. Following his return to science he lectured at Stanford, MIT, Cambridge, NYU-Stern and UPF, Barcelona and worked as an advisor for the Deutsche Börse AG (German Stock Market plc). Results of his research have been published in four books and over forty papers. His latest book *Invasion of the Locusts* (*Invasion der Heuschrecken*), with Werner G. Seifert, deals with the power struggles on the German stock market in the spring of 2005.

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Preface

What should investors be allowed to do on European capital markets? How can transparency and fairness be assured? And what control rights should minority share holders be able? This report analyses what options exist at the national and European level to improve the quality of regulation on capital markets. In addition to practical considerations, the discussion focuses on (i) the most appropriate level for action and (ii) the likelihood for political support of the proposed measures of reform.

The first part of the report examines the role of hedge funds in detail, focusing on the dangers for market stability in particular. The second part of the report is dedicated to the question of investor activism (also, in part, by hedge funds), as well as the opportunities and risks that are associated with private equity investment.

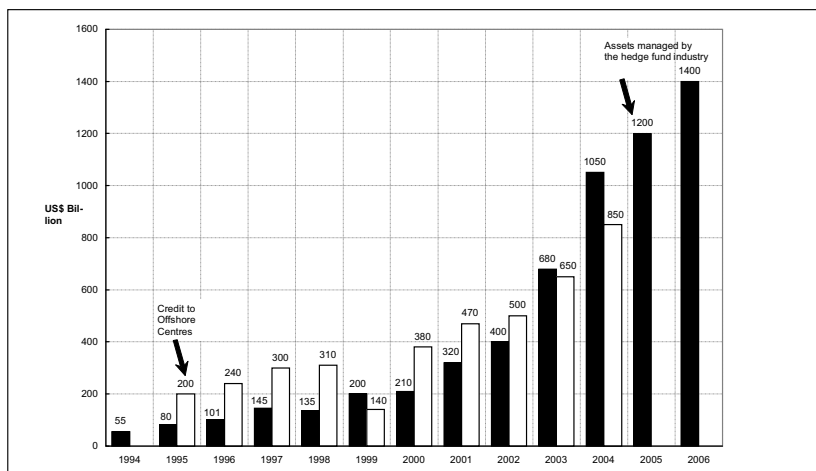
Hans-Joachim Voth
June 2007

1 Hedge Funds

Hedge funds operate in international capital markets without many of the restrictions which typically apply to other investors. They can engage in selling short – that is, speculate on falling share prices – trade in derivatives, leverage their gains and losses through credit, and accumulate large stakes in particular firms (often going beyond the limits that apply to investment funds in many countries).

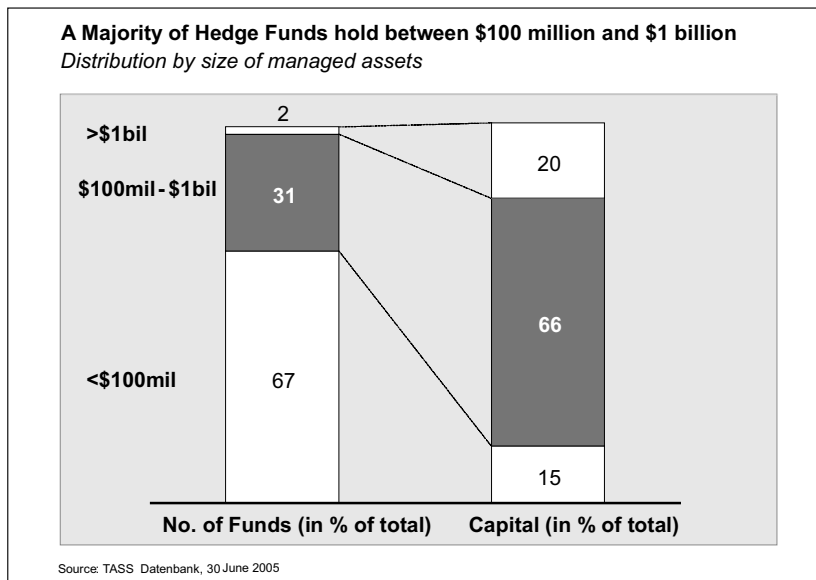
The potential for risk reduction through diversification has led ever more institutional investors, such as pension funds, or wealthy individuals to put their money in hedge funds. Today, the hedge fund industry is large, but not overwhelming in size – the industry controls around \$ 1.400 billion worldwide, compared to, say, \$ 20.200 billion in mutual funds. Many observers predict a strong increase in funds under management in coming years (PSE 2007). The consequences of this can be positive or negative. On one hand, some evidence exists to suggest that the distribution of risk within advanced economies has markedly improved. On the other hand, it is quite possible that the probability of catastrophic discontinuities in the market is notably higher today than five years ago. To add to this, the correlation of asset returns in different markets during financial crises has increased (“contagion”).

Figure 1: Assets of Funds Managed by the Hedge Fund Industry and Credit to Offshore Financial Centres, 1994 to 2006



Source: ECB, TASS Research, Barclays

Figure 2: Financial Assets Managed by Hedge Funds



1.1 Benefits – Arbitrage und lower cost of risk

Hedge funds may have beneficial effects because they increase the depth and liquidity of capital markets. Consequently, the allocation of risk should improve. In addition, a larger number of arbitrage deals have a potentially stabilizing effect. In the last few years, one can observe a wider distribution of risks among investors, and a positive knock-on effect on the cost of capital.

While the causes of this cannot be ascertained with complete certainty, it is quite likely that hedge funds and their risk taking strategies have played an important role. The price gains displayed by hedge fund indices, such as CSFB-Tremont, have only a small correlation (less than 0.5) with price increases in stock or bond markets¹. As a result, many observers believe that the enormous decline in risk premia worldwide must be due to the improvement in risk allocation through the activities of hedge funds. Crucial is the interaction effect with the rise of asset backed securities. For example, through the extensive sale

¹ These are the conclusions of the ECB as presented in a discussion paper by Garbaravicius und Dierick 2005.

of credit derivatives and asset-backed securities, today only a small portion of credit risks are still in the hands of the banks that granted the mortgagees and loans. In contrast to the dramatic **credit crunch** in the USA during the early 1990s, which resulted in a recession, the financial crisis following the year 2000 had only a limited effect on economic growth. While the cost of credit and the risk premium (measured by the difference in returns between debt with strong or poor ratings) increased, credits were rarely called in, and banking crises were conspicuous by their absence.

It also seems to be the case that some hedge funds have a moderating impact on the volatility of investment markets. Because they can engage in selling short and invest in relatively illiquid asset, hedge funds can contribute to more stable prices. During the speculative bubble on NASDAQ, some large hedge funds bet on falling share prices during the period of 1999-2000, when share prices increased rapidly without any apparent reason. Of course, not all of the “stabilizing” speculators survived this episode – for example, the Tiger Fund had speculated on sinking share prices and collapsed in early 2000, as an increasing number of investors withdrew their funds. Other funds, such as Soros, speculated on rising share prices and thereby contributed to the well-known exaggeration and overvaluation of shares². Nonetheless, on the whole, hedge funds probably had a stabilizing effect on markets. What helped them were, in part, lock-up provisions which limit the ability of investors to ask for their “money back” immediately. This allows funds to see through their trades even if mispricings temporarily widen.

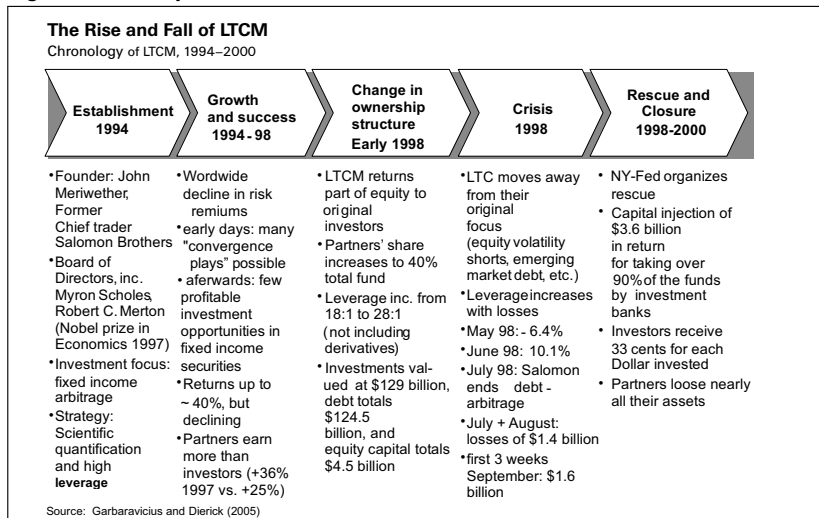
1.2 Systemic Risks

The largest danger that stems from hedge funds is a sudden systemic collapse of multiple credit institutions, possibly in combination with a radical price correction in asset markets. Memories of the collapse of **Long Term Capital Management (LTCM)** in the summer of 1998 continue to haunt investors and regulators. LTCM was founded by Nobel Prize winners Robert Merton and Myron Scholes, as well as a former trader and vice-chairman from Salomon Brothers, John Meriwether. It invested in fixed income arbitrage, often in government bonds. The partnership was registered in Delaware, and the investment vehicle was registered on the

2 Brunnermeier und Nagel 2004.

Cayman Islands. During the period when the fund's strategy of betting on a decline in mispricing succeeded, the firm earned returns of up to 40 percent per year. In early 1998, the partners returned much of the invested capital to their investors. The main intention was to increase the proportion of profits going to the partners themselves. Because of the payout, the leverage ratio rose dramatically – very little equity capital underpinned a mountain of debt-financed assets. At one point, the firm had investments totalling \$ 129 billion. At the same time, it had debts totalling \$ 124.5 billion and equity capital totalling just \$ 4.5 billion – a ratio of equity to debt of just 3.6 percent³.

Figure 3: Development of the LTCM Crisis



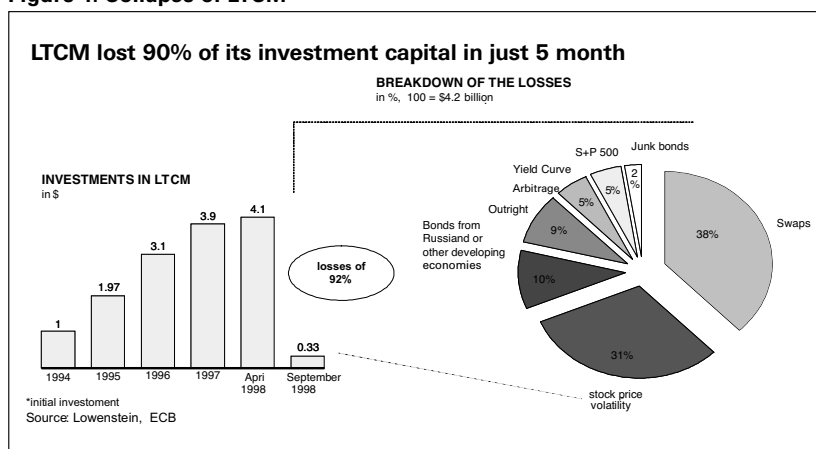
In the summer of 1998, when the Russian government stopped interest payments on some of its bonds, the risk premium for fixed interest securities suddenly increased dramatically. In August, LTCM lost \$1.9 billion, and in the first three weeks of September, it lost another \$1.6 billion. The ratio of equity to debt fell to just 0.5 percent, or \$200 debt for each dollar of equity capital. Attempts to close losing positions were often unsuccessful. The banks acting as prime brokers for LTCM insisted on debt reductions and the posting of additional margin. While LTCM was trying to close positions, liquidity in many markets dwindled. LTCM found it ever more difficult to find counterparties with whom it could

3 Lowenstein 2001.

trade. When one could be found and a sale agreed, the fund often had to sell at a steep loss. As market prices came under pressure, other funds and investment banks found themselves with “marked-to-market” positions showing steep losses. This in turn triggered further selling since these institutions reached their loss thresholds. As a result of attempts to restore margin, assets unrelated to the original holdings of LTCM experienced price falls. As the distress of LTCM became clear, a growing number of trading departments in large banks started to engage in “predatory trading”, selling positions that were similar to the ones held by LTCM – only to repurchase them later at a lower price⁴.

The biggest danger was the threat of insolvency caused by LTCM. Banks had lent a total of \$124 billion (comparable to the total debt of countries like India, Brasil, or Turkey) to the fund. Had it gone bankrupt, this could have caused a collapse of lending institutions, hitting the payment system and the process of financial intermediation more generally. Faced with the risk of a meltdown of the financial system, the Federal Reserve Bank of New York organized a takeover of the fund by the largest banks involved. Fifteen of them took over the fund for a total of \$3.6 billion. In the medium term, acquiring the trading positions of LTCM paid off for the banks – after the fund was dissolved, the banks were able to recoup their investment and make an additional profit.

Figure 4: Collapse of LTCM



4 For example, according to Lowenstein (2001), Goldman Sachs sold in parallel to LTCM during the summer of 1998, after the problems of the fund became apparent, and earned substantial profits through this ‘attack’.

The LTCM episode highlights the dangers of intransparent trading positions, of near-absolute faith in computer modelling of asset returns, and of high levels of leverage. Each individual bank trading with LTCM was under the impression that the situation was under control – the value of the loans seemed to be backed by collateral in the form of securities; interest rates and criteria could be changed quickly. Yet none of the trading partners of LTCM had insight into the fund's total risk profile. The value of collateral depended on LTCM's portfolio positions not having to be sold simultaneously, which is exactly what happened in the summer of 1998.

Since 1998, in the eyes of the Federal Reserve Bank of New York and the FSA, risk management has improved at **Prime Brokers** (who execute trades for hedge funds and often lend them the money to buy positions). At the same time, the volume of credit going to offshore centres has increased over the last years, in parallel with the explosive growth of the hedge fund industry (Figure 1). By 2004, over \$500 billion has probably been lent to funds registered in the Cayman Islands, another \$100 billion in Jersey und Guernsey, and \$50 billion each in Bermuda und the West Indies⁵. Nowadays, few funds operate with the same aggressive use of debt as LTCM. According to ECB estimates, over 60 percent of hedge funds have no debts, 6 percent have less than 100 percent of their equity, and only 13 percent hold than double their equity in various forms of debt⁶. The UK's Financial Services Authority estimates (including the positions related to derivatives) that the average hedge fund has debt levels around 2.5 times that of their equity capital and that the maximum level is around 15 times their equity capital. The rules governing the use of securities as collateral have become much less generous. Banks insist increasingly on timely and regular reporting of a hedge funds' profit and loss position.

Neither the debt crisis in Argentina nor the collapse of the hedge fund Amaranth in the summer of 2006 led to significant panic selling. The fund had speculated on rising gas prices, taking on debt equivalent to 8 times equity, and ended up loosing over \$6 billion (the total losses in the LTCM case were \$4.6 billion – after accounting for inflation, both losses are of a similar magnitude). In the view of the FSA and NY-Fed, this stability is due to the fact that the risk management by banks has improved considerably⁷. The FSA estimates that the level

5 Bank of International Settlement, External Debt Statistics 2005.

6 Garbaravicius und Dierick 2005.

7 Geithner 2006.

of **excess collateral** may be as high as 100 percent, which implies that a debt of \$100 can require as much as \$200 in collateral⁸. In other words, unless asset prices fall by more than 50%, banks loans would not have to sustain losses. At the same time, some evidence suggests that, in the last 2 to 3 years, low interest rates and intense competition among banks for the business of hedge funds led to looser lending criteria. For example, illiquid assets such as some **OTC (over the counter) derivatives** are being accepted as collateral; in other cases, **netting** of positions with different, illiquid forms of collateral may be used.

The absence of large-scale collapses or crises in the last nine years should not lead to undue optimism. The new measures through which banks have protected themselves from certain risks could actually increase the likelihood and severity of a large crisis. In a speech in Hong Kong during September 2006, the President of the New York Federal Reserve, Timothy Geithner, pointed out that the new risk-management practices can lead to new dangers. In order to reduce their risks, banks insist on higher margin after a fund's position has been adversely affected. The fund in question will hence have to put up more cash, which in practice often entails the selling of assets. A single financial institution can limit credit risks in this way. However, if a large number of banks sector uses this same practice, price falls induced by one fund selling can produce a cascade throughout the financial system. The probability of a catastrophic domino effect, leading to a widespread fall in prices increases, cannot be ruled out. This could cause the simultaneous insolvency of a number of different market participants.

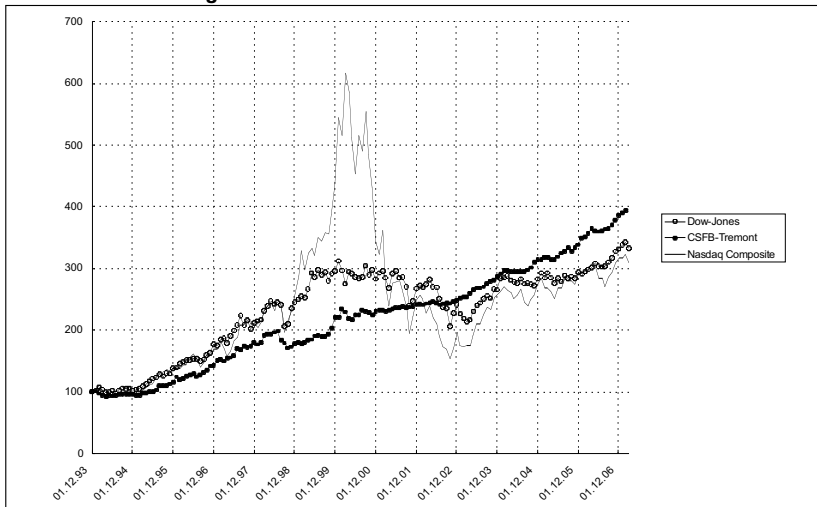
The possible consequences of a market-wide collapse are not taken into account by the calculations of individual banks. Basel-II sharpens the incentives for banks to utilize precisely these forms of volatility-increasing measures due to the emphasis on **Value-At-Risk (VAR)** models. VAR models are based on historical data and correlations. However, these parameters are not constant, but may change dramatically over time – particularly during financial crises. The models are often also estimated with very short runs of data, especially in the case of new financial products. Parameter instability is of particular concern when risk has seemingly been reduced by diversification across different asset classes. If the VAR models send out signals to sell, a whole series of unrelated markets may be overwhelmed by a wave of selling. In such a case, junk bonds may suddenly start to move in lockstep with blue chip equities or foreign currencies – diversification

8 Waters 2006.

only “works” while markets remained orderly. Once liquidity dwindles and most institutions try to trade on the same side of the book, prices can spiral downwards very quickly. Many funds and their Prime Broker would then go bankrupt. A new post-LTCM crisis could possibly take this form⁹.

In the last few years, regulatory authorities have done much to better understand the practices of hedge funds. Nonetheless, it is striking that even the regulators who are most effective and close to the market, such as the FSA, do not possess enough information to assess the magnitude of dangers. Turmoil in credit markets this summer took regulators by surprise. The limited understanding is partly due to the lack of transparency on the part of hedge funds, which is part of their business model. Thus, even a bank that acts as a Prime Broker for a hedge fund, only has information on some of its positions. Because other parts may generate substantial losses and thereby deplete the equity of the fund, risks may be underestimated. Neither regulators nor prime brokers are today in a position to conduct comprehensive “stress tests” of hedge fund portfolios, and cannot predict how far away a market-wide meltdown is at any one point in time.

Figure 5: Price Indices of the Dow-Jones, Nasdaq-Composite, and CSFB-Tremont Hedge Fund Index



Source: Dow-Jones, CSFB-Tremont

9 This section was written in the original German version before the events of the summer and fall of 2007. More than one observer has concluded that the speed and ease with which troubles in US sub-prime mortgage spread to equities.

1.3 Fraud and Valuation Problems

Investors dream of high, steady, uncorrelated profits. It is this dream that is behind the large flow of money into hedge funds. It appears to have come true. As Figure 5 shows, hedge fund indices appear to outperform other assets over the long term, with less volatility. However, in addition to the dangers for market stability already discussed, fraud and dubious valuation practices in the hedge fund industry represent a major problem. These also put a question mark behind many of the industry's claims regarding its performance.

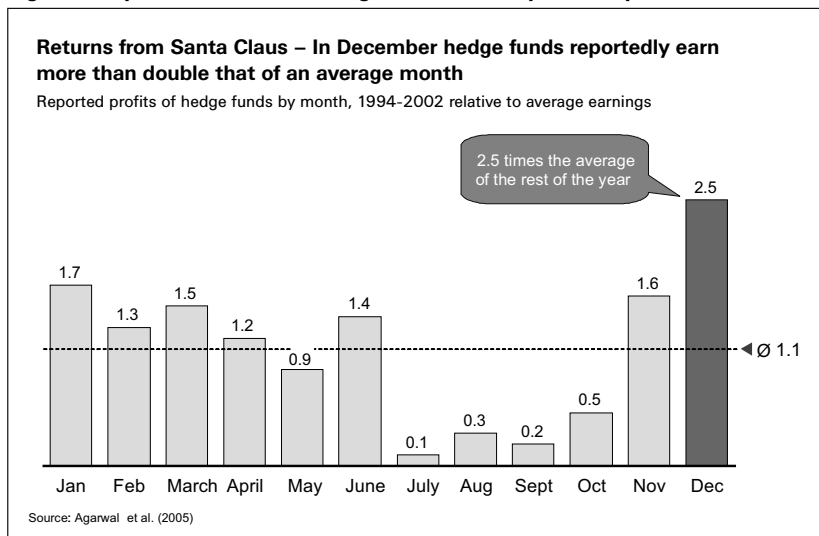
The CSFB Index, designed to track the investment performance of hedge funds, shows a nine percent rate of return over the last few years – combined with comparably low volatility. Less well-known is the frequency with which hedge funds misrepresent the value of their investments. The spectrum extends from simple errors all the way to systematic fraud. For example, the SEC estimates that in 2005 alone incorrect valuation inflicted losses on the order of \$ 1.6 billion. Included within this estimate are also cases of fraud, such as in the collapse of the hedge fund Bayou. Bayou was registered in the Cayman Islands and controlled some \$ 450 million of investors' money, but collapsed in 2004 after the Chief Financial Officer (CFO) turned himself in. Since 1997, the fund had suffered losses on a regular basis, but reported substantial profits to its clients. Of the \$ 450 million in invested funds, the SEC only succeeded in tracking down some \$ 100 million. The fraud was made possible by the fact that the CFO employed his own auditing firm to “verify” the accuracy of his accounting.

Bayou was not an isolated case. Lipper Investments suffered losses of around \$ 1.9 billion but managed to hide them through fraudulent reporting. At Beacon Hill Advisors, mortgages were over-valued to the tune of \$ 300 million. Tradewinds International allegedly held some \$ 18-23 million in investors' money, of which only \$ 1.1 million could subsequently be found as the swindle was exposed.

Scandals such as Bayou are often only a part of the behaviour that undermines trust of investors. Since hedge funds often invest in highly illiquid goods (debts of bankrupt firms, capital goods in less developed countries, arbitrage positions in fixed income securities without much trading), a “market price” often doesn't exist. Instead, funds utilize their own models of valuation to calculate the likely price that can be realized in the event of a sale. This practice opens the gates to abuse and various distortions.

Apparently, manipulations is quite common. In a recent research paper entitled “Why is Santa Claus so kind to hedge funds?”, three US financial economists show that the returns of hedge funds are three times higher in December than in an average month. Since the fees paid to the funds usually depend on the annual return by the end of December, the suspicion of manipulation (such as through the early booking of expected trading profits) seems well founded. Despite considering other alternative explanations, the authors of the study deem them unlikely. Of course, investors respond to manipulation – the volume of investment is much lower in funds that experience obvious earnings manipulation¹⁰.

Figure 6 Reported Returns of Hedge Funds: Reality or Manipulation?

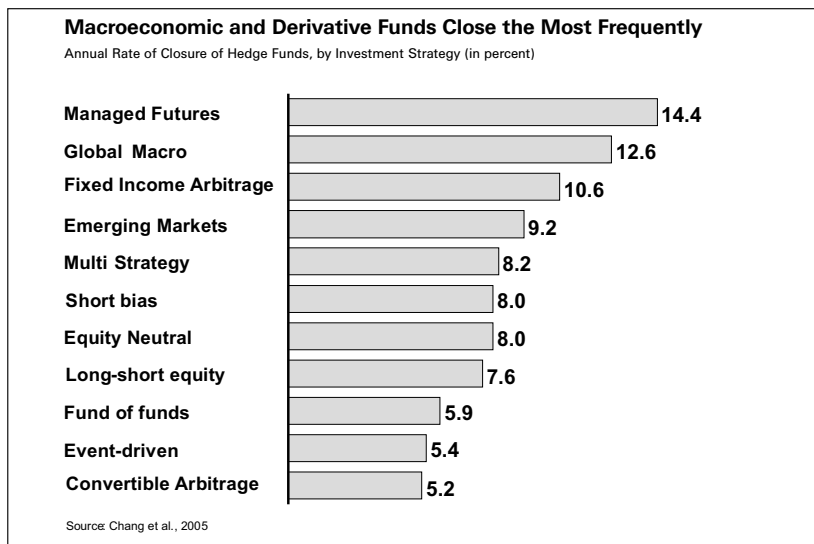


A further issue is that the seemingly attractive earnings of hedge funds on average (such as those of the CSFB-Tremont Index) come with substantial risks that are not obvious in the movements of the aggregate index. Roughly 2-4 percent of all hedge funds close after just one year in operation – usually with large losses. After the first year, the number of closures grows rapidly. On average, 5-8 percent of all hedge funds close down annually. On a cumulative basis, just 58 percent

10 This section was written in the original German version before the events of the summer and fall of 2007. More than one observer has concluded that the speed and ease with which troubles in US sub-prime mortgage spread to equities and foreign exchange was precisely due to contagion on the asset side of the balance sheet.

of all hedge funds remain active after five years, whereas 42 percent are wound up. This problem is particularly acute for small funds (under \$ 150 million in assets). In certain asset classes (managed futures, global macro), more than ten percent of all funds are shut down every year (Figure 7).

Figure 7: Annual Rate of Closure for Different Hedge Fund Types



1.4 Solutions

1.4.1 Regulation with the OECD

Ideally hedge funds should be forced to register legally in an OECD-country and be subjected to comprehensive and prudent regulation in those locations. This measure could help to reduce risks. However, without co-ordination between rich countries, such a measure would surely go awry. Its absence has more to do with a lack of will than an absence of means. The OECD has been quite successful in exercising pressure on tax havens about money laundering and tax evasion. The same could surely be done when it comes to the regulation of hedge funds.

Table 1: Assets Managed by Hedge Funds According to Location of the Registration and Fund Management

European managers very often administer funds that are registered outside the EU

Registration of the Fund										
Location of Management	by number (in % of total)					by capital (in % of total)				
	EU	US	Offshore Centre	Other	Total	EU	US	Offshore Centre	Other	Total
EU	7	1	16		23	8		18		26
US	1	33	21		54	1	23	29		53
Offshore Centre	1		13		14	1		12		13
Other	1		5	2	8	1		6	1	8
Total	10	34	55	2	100	11	24	64	1	100

Source: TASS Datenbank, 30. Juni 2005

Realistically, one should not count on an OECD initiative. Without support for a major crackdown by the US and the UK, funds will continue to be allowed to ‘play’ on the capital markets of the developed world while remaining based in offshore locations, often in the Caribbean. There is a widespread belief that attempts at direct regulation by individual countries would have limited chances of success. The EU as a whole is probably large enough to exert substantial pressure, since many hedge fund investments originate there. However, given the pro-hedge fund position of EU-Commission, and especially of the commissioner McCreevy – who has consistently spoken out against further regulation– it remains unclear whether any substantial changes can be implemented¹¹.

Currently, the regulation of hedge funds is in the hands of the EU member states (Table 2). Rules differ widely from member state to member state. It would certainly be possible to attempt a step-wise erosion of the extra-territorial nature of the hedge funds, either at the level of the EU or through the efforts of individual states (“coalition of the willing”). A combination of incentives and regulations could be helpful

11 Agarwal et al. 2005.

Table 2: EU Regulation of the Minimum Capital and Operation of Hedge Funds

Country	Minimum Capital	Retail	Regulation of sales to domestic consumers
Austria	Not specified	No regulation, usually through banks and investment firms	No
U K	50,000 Euro + expenses for 3 months	Independent Financial Advisors	No
Italy	1,000,000 Euro	Private placement	Yes
Finland	169,000 Euro	Direct marketing	Yes
Netherlands	226,890 Euro	Direct marketing, structured notes, brokers	Yes
Spain	300,000 Euro	Structured notes	No
Belgium	Not specified	Banks, Private placements	No
Germany	Not specified	Banks	Yes

Some countries have taken comprehensive steps to bring the sale of hedge funds to private retail customers (“**retailization**”) under control and establish effective regulation (Germany, France, Italy, Netherlands). Even in the United Kingdom, there is growing support for the idea of pushing for more **onshoring**, and to regulate the activities of funds more directly. The FSA plans to regulate the sale of funds-of-funds to British end customers¹². The Social and Economic Committee of the EU Parliament also made an interesting suggestion in the Purvis-Report about how to utilize a combination of relatively soft regulation and EU-wide operating privileges in order to create incentives to bring more funds “onshore.” In this way, so-called “**sophisticated alternative investment vehicles**” (SAIVS) could be created, which would be regulated on a Europe-wide basis.

The EU Commission has not embraced the suggestions of the Parliament, such as those in the Purvis Report. Another option for regulatory action would be through the portfolio rules for domestic pension funds, insurance firms and asset management companies. Currently, portfolio rules allow German insurers to invest five percent of their assets in funds that are registered in Europe¹³. Retail customers are only allowed to buy **fund-of-funds (FOF)**. In these areas, a more generous set of regulations could be used to reward funds that operate with greater transparency, abstain from investor activism, register in the EU, etc.

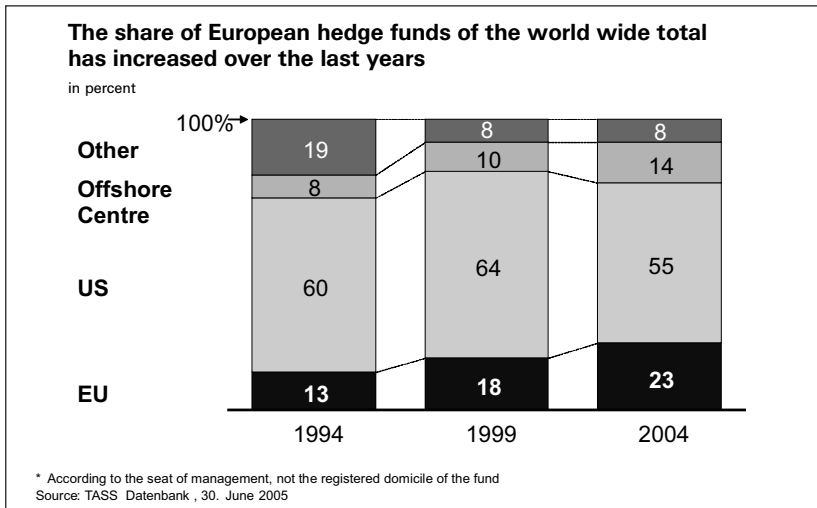
Further incentives could, for example, include the following: a blanket exemption on sales restrictions for funds selling to customers with minimum assets

12 Waters 2007.

13 PriceWaterhouseCoopers 2004.

of two million Euro, or beneficial tax treatment for the earnings of asset management activities and capital gains of domiciled funds¹⁴. Parts of the industry already expect a step-wise migration of the hedge fund industry to onshore locations¹⁵. Even though a stronger domestic anchoring and regulation of funds seem attractive in the long term, risks for market stability will not be reduced by these efforts in the short term. Even if all funds originating in Europe can be brought onshore, markets will not automatically be in better shape – the EU market constitutes just 23 percent of the global hedge fund market (by volume of invested capital).

Figure 8: European Hedge Funds within the International Fund Market



1.4.2 Incentives for Alternative Forms of Investment

Investors would benefit and market stability could be enhanced if the investment strategies of hedge funds were not characterized by a lack of transparency and by registration in locations where regulatory standards are low. Also, the fees charged by hedge funds are usually quite high – the standard formula applied is 20+2, meaning a 20 percent charge on profits, and a two percent annual fee for the investments being managed. In order to create competition among the

14 This rule existed already in part under the old (pre 2004) white-grey-black rules.

15 PriceWaterhouseCoopers 2004.

funds and give investors more attractive options, a number of measures could be considered. Regular mutual funds could be given greater freedom in their investment strategies. They could be permitted to take on debt and to engage in short selling. In addition, comprehensive and reliable information about the actual performance of hedge funds would be extremely helpful in order to correct the often exaggerated positive picture of potential returns (a point to which I shall return below). A new EU Directive (UCITS-III) will make it easier to engage in short selling and to operate investment funds on a European-wide scale. Nonetheless, many market participants suggest that the implementation of the Directive in national law in many countries will leave important gaps. Due to the split in asset management structures, it remains difficult to sell across the multiple countries – even with the endorsement through a unified European permit. So-called **Absolute-Return Funds** try to achieve the same investment goals as classic hedge funds by generating returns independently from the overall direction of the market. These funds are now becoming increasingly common (61 operate in Germany). However, even these funds do not replicate hedge fund strategies comprehensively. Few of them rely on short selling strategies; they are largely run as general diversified funds.

1.4.3 Risk Diversification through Capital Requirements for the Prime Broker (“Basel III”)

From a pragmatic point of view, regulating the banks that act as prime brokers is the most promising way to reduce the systemic risks associated with hedge funds. A clear and cautious set of rules could enhance the stability of the financial system and reduce volatility. This option is also attractive for the following reasons:

- (i) Banking regulation still falls under national jurisdiction – all the rules within Basel II are considered minimum standards and may be supplemented through additional domestic rules;
- (ii) the statements of key regulators in the USA and United Kingdom indicate that a consensus may be possible;
- (iii) no politically complex measures need to be taken directly against funds with extraterritorial registration. This option also seems attractive because only three firms (Morgan Stanley, Goldman Sachs, and Bear Stearns) handle more than half of all trades by hedge funds. World-wide, there are probably no more

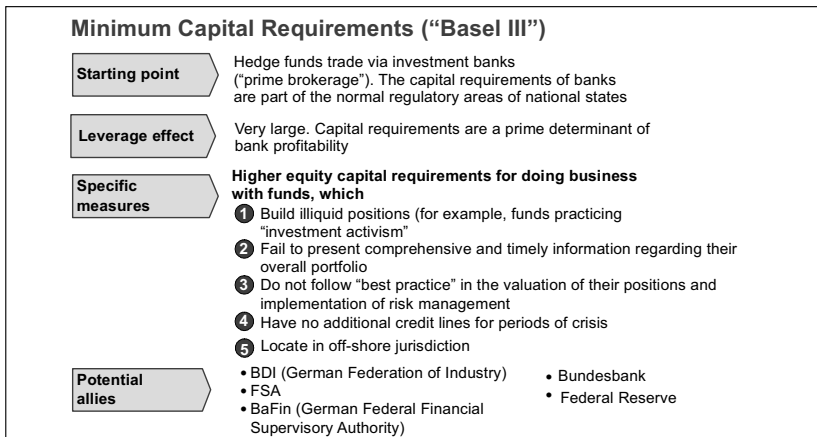
than 15-20 credit institutions that would be substantially affected by the new rules¹⁶.

Measures to consider should include: lending to hedge funds in general leads to higher capital requirements (Basel II provides for a factor of three in the case of equity investments; for example, a factor of five or higher could be envisaged). By raising the cost of credit, the incentives to increase leverage could be reduced. To strengthen incentives for responsible investing, this could be combined with:

- a reduction of minimum capital requirements for lending to funds that follow more liquid investment strategies (for example, funds that don't act as activist funds, which requires a longer-term investment horizon)
- for lending to hedge funds that is explicitly long-term, and not tied to high-frequency valuations of the funds asset position
- for lending to funds that disclose their overall position to the Prime Broker in a timely fashion
- those that register in an EU country,
- supply meaningful and accurate valuations of their asset position,
- implement best practices in their risk management systems, and those that have
- a waiting period for investors of at least six months before they can redeem their stake in a fund.

Figure 9 summarizes these various proposals.

Figure 9: An Approach Based on the Regulation of Minimum Capital Requirements



16 EuroHedge 2004 and International Financial Services 2005.

At present, each bank tends to demand more collateral when one of the hedge funds it trades for takes losses. Although each bank reduces its own risks, this can lead to a cascade of falling prices in the market as a whole. In the worst case, a random **margin call** may lead to a chain reaction within the stock market. As the head of the New Yorker Federal Reserve Bank recently said in Hong Kong¹⁷:

„In market conditions where initial margin may be low relative to potential future exposure, the self-preserving behavior of leveraged funds and their counterparties may be more likely to exacerbate rather than mitigate an unexpected deterioration in asset prices and market liquidity. As financial firms demand more collateral, funds are forced to liquidate positions, adding to volatility and pushing down asset prices, leading to more margin calls and efforts by the major firms to reduce their exposure to future losses. In the context of the previous discussion of externalities, firms' incentives to minimize their own exposure can amplify the initial shock and impose on others the negative externality of a broader disruption to market liquidity”.

In recent years, the correlation between different stock markets and different asset classes has increased strongly. For example, the German and US stock markets had a correlation of 0.88 between 2002 and 2005. Between 1982 and 1985, this correlation was just 0.26¹⁸. In crisis periods, the correlations tend to be even higher. The practices of banks and hedge funds described above by Geithner could play a major role in this, even if we have, as yet, no clear evidence to support this hypothesis.

In retrospect, it often becomes apparent that trading positions would have been profitable if only they had been held for a longer period. For example, a large hedge fund, Tiger, gambled against the speculative NASDAQ bubble. Eventually, as investors redeemed their stakes in the face of mounting losses, it had to close shop. Had it carried on for a few months longer, its investment strategy would have been hugely profitable.

In order to increase stability, it seems useful that (i) banks give more generous lines of credit when it comes to trading losses and (ii) owners are forced to commit for longer periods. At first it may seem like a paradox to propose giving more generous credit for hedge funds in times of crisis. Why should a bank react to trading losses of a fund, for which it acts as a Prime Broker and to whom it

17 Geithner 2006.

18 A series of other factors may play a role here— for example, stronger links to the real economy and flows of trade. The data are described in Quinn und Voth 2007.

extends credit, by offering an additional line of credit? This sort of rule could, for example, be linked to minimum losses on a general market index, an increase in volatility of a certain magnitude X, or something similar. This practice would make it easier for funds to see their positions through, rather than selling them just at the moment when their losses are greatest, but expected returns are highest. Banks that anticipate these additional commitments during a crisis will also become more cautious in giving credit during normal times. In this way, the stability of the overall market could be increased.

1.4.4 Rehypothecation

A similar effect could be achieved by restricting re-lending (“**Re-hypothecation**”). Currently, Prime Brokers re-lend assets provided by hedge funds as collateral to other parties. In some countries, regulations restrict the re-hypothecation of collateral to around 2/3 of the total debt of the hedge fund held by the Prime Broker.

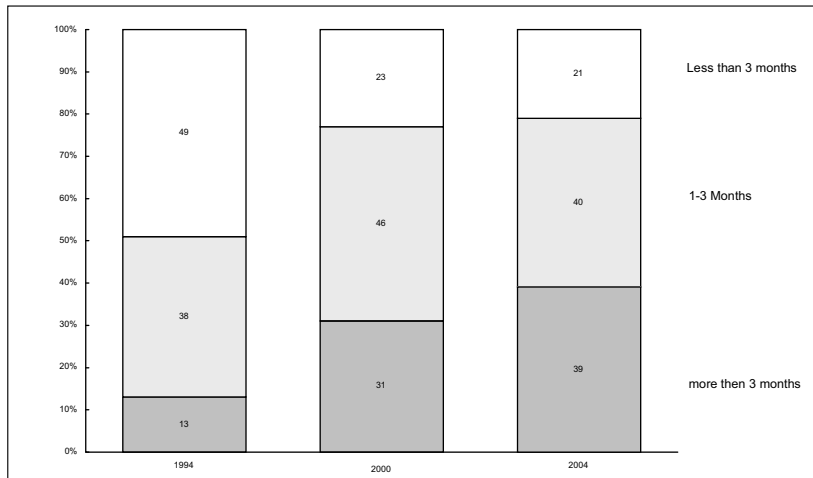
The **Alternative Investment Expert Group** (dominated by experts from the industry itself, and appointed by the EU-Commission) pushed for the abolition of these restrictions in their report published during the summer of 2006. In the case of a general restriction on re-lending, the costs of credit for hedge funds would increase substantially. This effect is desirable, and can enhance market stability. Since neither hedge funds nor the Prime Broker must shoulder the macroeconomic costs of a market collapse, it is likely that there are negative externalities here. General restrictions on re-hypothecation could slow the volume of lending to hedge funds precisely because they raise the cost of credit.

1.4.5 Further Incentives for Stability and Transparency

So-called **lock up-provisions** have become increasingly common. The ECB estimates that the waiting period for the payout of invested funds has greatly increased in recent years: already, 80 percent of all funds have a time limit of three months or more (SB 11)¹⁹. The legendary American investor Warren Buffett once recommended that investors should only buy shares when they are genuinely ready to “marry” them (i.e. never sell them). The same advice could be beneficial for hedge funds. This would reduce the risks from a pro-cyclical wave of sales once trading losses appear on the books.

19 Garbaravicius and Dierick 2005.

Figure 10: Lock-up Provisions of Hedge Funds



Source: Garbaravicius and Dierick (2005)

In addition, periodic “stress tests” based on historical data should be considered. Today, funds rarely share information about their positions to regulators. An important (and legitimate) fear is that others will copy their trading strategy (or trade against it) in the market. Given the inadequate information provided to regulators, an urgent task would be to require that funds disclose their positions on a particular (possibly a randomly chosen) date. The trading positions of all market participants could then be tested against historical and other scenarios in order to determine what risks might be caused by large movements in the market.

Recently, IOSCO (International Organisation of Securities Commissions) started work outlining “best practice” in valuation of assets held by hedge funds. The FSA’s Chief of Asset Management, Dan Water, is chairing the group. The result will be a voluntary “code of conduct” that will emphasize a number of recommendations (which will not be binding).

In order to solve the problems of hedge fund valuation, it would appear useful to use the example of rating agencies. Creating independent institutions that provide a regular and objective source of information about the value of a hedge fund would be beneficial in a number of ways. In most OECD countries, the standards for auditing are inadequate to deliver a timely valuation of hedge fund portfolios. Given that many investments are highly illiquid (especially when more than a few hedge funds try to close out their positions), the value of these investments

can only be decided on the basis of models. This makes it all the more important to reduce the scope for manipulation.

A rating similar to the existing services of Moody's or Standard & Poor's (S & P) could be helpful, at relatively low costs. S & P already gives ratings for mutual funds; adding assessments of hedge funds would be much more complicated, but doesn't seem impossible if the market opportunity is sufficiently attractive. Hedge funds with good ratings for their risk management, with long-term lock-up of funds, and access to additional lines of credit in a crisis could, for example, be classified as better counterparts. Their Prime Brokers should then be rewarded by lower minimum capital requirements, which they could pass on to the funds themselves, improving the competitiveness (and returns) of funds who provide fair and objective valuations of their assets.

Regular, comprehensive, and timely valuation could benefit the hedge fund industry itself. Given the various scandals over fraud or questionable claims of high returns, its reputation has recently suffered. If the actual returns of the funds were determined objectively, the volume of investment could be lower than it is today. In the long run, it must nonetheless be in the interest of the industry to let the true top performers shine, and to make life harder for those funds that claim success based on questionable valuation practices.

1.5 Summary

The rapid growth of investment managed by hedge funds offers both opportunities and dangers at the same time. Opportunities exist because less regulated investors can play a role in reducing misvaluations in the market earlier and thus nipping "irrational exuberance" in the bud. A broad distribution (and parcelling out) of risks can lower the overall costs of risk capital. High, stable investment returns could make an important contribution to the problem of funding pension obligations.

Regulation has not caught up with the growth of the hedge fund industry. Largely unregulated funds from tax heavens are active on the capital markets of OECD countries, often without any meaningful direct restriction. During crisis periods, their behaviour can contribute to volatility. Cases of fraud and large losses for investors are common.

In the case of LTCM, international capital markets were close to the precipice. Debt was a major contributor to the problem. During 2006 and 2007, a growing number of representatives from market regulators and central banks, even in Anglo-Saxon countries, have expressed concern about the possibility that another LTCM-style meltdown might be around the corner.

This report makes a number of concrete proposals how this risk can be reduced. What measures are more promising? Figure 11 summarizes the pros and cons of different methods of intervention.

Figure 11: Proposals for the Regulation of Hedge Funds

Regulation through capital requirements seems particularly promising		
	Advantages	Disadvantages
"onshoring" <ul style="list-style-type: none"> • Incentives for relocating within the EU • Competition through investment funds 	<ul style="list-style-type: none"> • Funds would be directly subject to national rules • Transparency and risks can be determined direct • EU-Hedge fund industry can be created • First successes in setting funds 	<ul style="list-style-type: none"> • Only relatively weak regulation enforceable • EU - lacks jurisdiction. Support of the EU Commission is questionable • UCITS-III Funds are only weakly involved in business beyond Europe
Capital and Cost Regulations <ul style="list-style-type: none"> • "Basel III" • Rehypothecation • Incentives for emergency credit 	<ul style="list-style-type: none"> • Leverage Effect: access to cheap credit is (I) central for the activities of funds (II) easily to regulate through to access to credit • National responsibility for banking regulation • Evidence of support of the Federal Reserve (and possibly the FSA) and other allies • incentives for disclosure built in 	<ul style="list-style-type: none"> • Markets with expensive access for hedge funds could go be compensated by higher risk premiums • Time delay in implementing • Dependence of current Basel on models - Framework leads to either incongruence or insufficient minimizing of risks
Valuation and Disclosure <ul style="list-style-type: none"> • transparency - requirements • quality rating 	<ul style="list-style-type: none"> • Market conforming incentives to reduce fraud • Real returns of funds are less impressive than generally assumed • Less additional burden for Regulators 	<ul style="list-style-type: none"> • Transparency often insufficient to motivate investors to making better decisions (effects on investment funds are likely to be small)
Improving Market Infrastructure	<ul style="list-style-type: none"> • Introduction of central counterparty would limit the risks in trading in OTC-Derivatives • Improve transparency • Profit opportunity for • Lower the costs to market participants Clearing+Settlement Companies 	<ul style="list-style-type: none"> • Expensive • Market potential is unclear • Standardization only in selected products (credit derivatives, swaps, et),

Regulating the capital requirements of prime brokers seems particularly attractive. This option would take the views of the hedge fund industry itself seriously – namely, that it is already indirectly controlled through the regulation of banks acting as prime brokers. In doing this, the EU should above all seek close contact to the SEC und the Federal Reserve. This could lead to a comprehensive, measured regulation of the capital requirements of those investment banks acting as a Prime Broker on behalf of hedge funds. By using higher reserve requirements, restrictions on re-hypothecation, limits on risk concentration, etc. to raise the cost of credit to hedge funds, the incentives to offer debt will be reduced. Additional measures to lock in investors could further raise the stability of markets because

they make it possible to “wait out” losing positions by creating binding time limits of investments.

A final bundle of measures should aim to relocate funds (**“onshoring”**). A key impulse for this could be given by a prudently-regulated, European-wide set of registration and operating rules for hedge funds. Beyond this, the new UCITS-III Directive can be used to increase competition for hedge funds, by allowing mutual funds to satisfy investors looking for absolute return products.

2 Private Equity and Investor Activism

The next section of this report analyses the opportunities and dangers related to private equity investors and investor activism. This report argues that while private equity investors can be better owners of companies, they often chose the easy way out – financial engineering – rather than the hard and difficult task of restructuring. Because of some of the financial techniques (such as recapitalizations and special dividends) used, the interests of these investors can deviate strongly from those of the economy as a whole.

The rationale for private equity transactions and investor activism is, in fact, similar – numerous structural weaknesses of listed corporations which could also be minimized by improved corporate governance. In the long run, improving corporate governance will reduce the threat from private equity as effectively as measures to curtail the industry directly. Also, it is striking that there is no “level playing field” when it comes to takeovers world-wide. US corporations protect themselves very effectively against hostile take-over threats in a way that EU firms often cannot. In effect, Europe practices the theory, and not the reality, of Anglo-Saxon free capital markets. This report discusses a series of possible responses, considers their relative merits, and makes recommendations about how to prevent existing abuse.

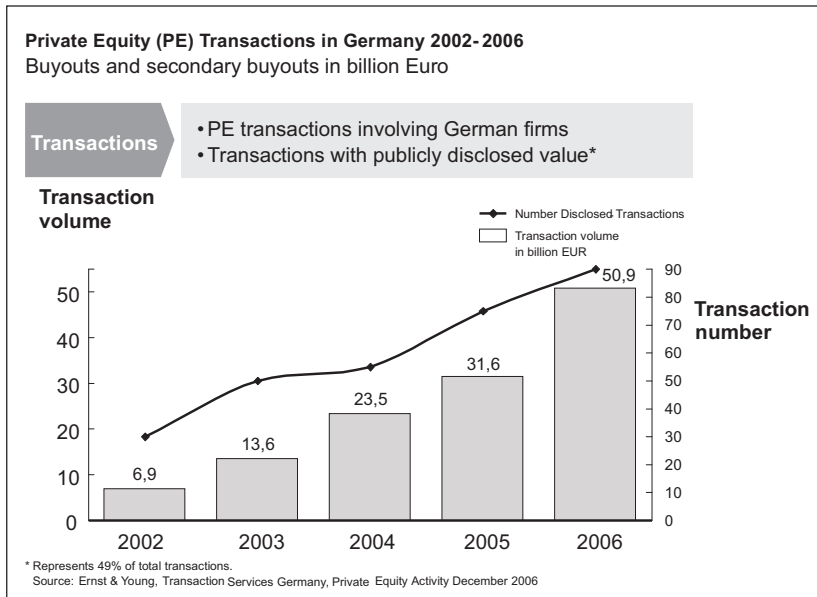
2.1 The Concept of Private Equity

2.1.1 Overview: Private Equity in Germany

Private Equity consists of two distinct activities: the acquisition of mature firms by financial investors (**Buy-out**) and the support of new start-up firms that are often in high-tech industries (**Venture Capital**). In this section of the report, the focus is exclusively on buy-out activities; venture capital is only discussed to the extent that it may be affected by broader forms of regulation.

Just like hedge funds, private equity belongs to the category of so-called **alternative investments**. In recent years, it has grown hugely in terms of assets under management. As with hedge funds, this class of investments is characterized by (i) low levels of liquidity, (ii) relatively high average returns, (iii) low levels of transparency and (iv.) high fees charged by fund managers.

Figure 12: The Activities of Private Equity Funds in Germany



Investments in private equity have increased quickly over the last several years. In the USA, they were 18-times higher in 2001 than in 1980 (in nominal terms). Worldwide, roughly € 100 billion has been invested. The invested capital of these funds is usually combined with debt financing when making acquisitions.

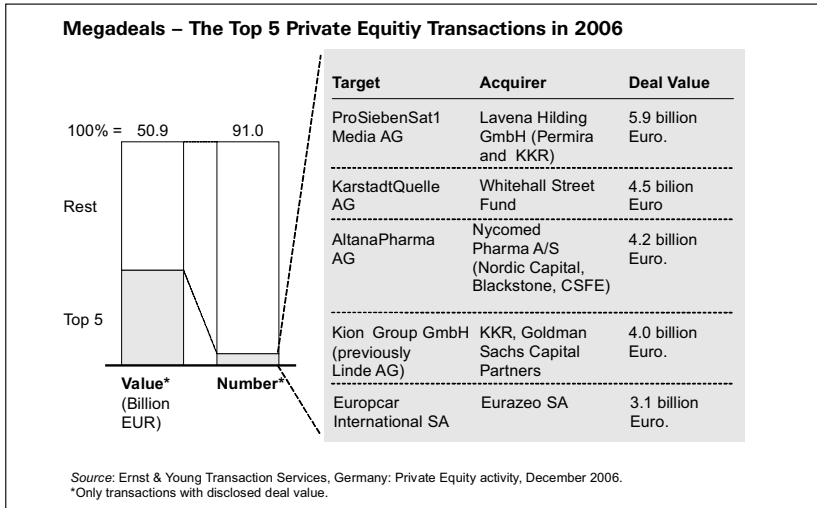
In Germany, the volume of private equity transactions has increased massively in the last five years: from roughly € 7 billion in 2002 to € 51 billion in 2006. More than 90 transactions were registered in that year²⁰. Germany thus accounts for nearly one-third of all European transactions²¹. At the end of 2006, 963,000 employees work in companies controlled by private equity, with an annual turnover of around € 189 billion. The value of reported deals grew some 61 percent just between 2005 and 2006. This growth in total volume can be largely explained by the so-called **mega-deals** – transactions with a deal value of more

20 Only the transactions with reported values are measured here. This bias in measurement can be disregarded. Only deals are counted where a German firm was involved (either as a buyer or as an acquired firm).

21 Candover 2007.

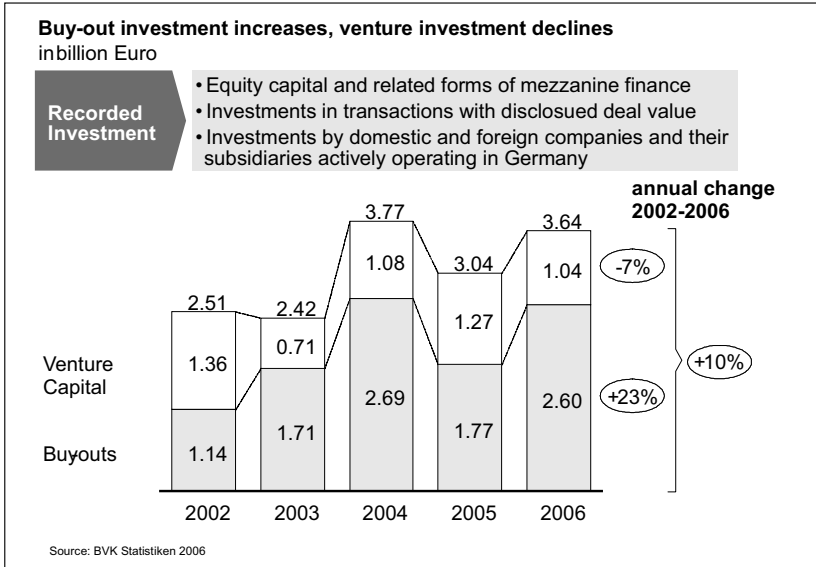
than € 3 billion. Five of these deals in 2006 were responsible for 41 percent of total deal value; KKR alone completed deals worth € 10 billion.

Figure 13: Large-scale Acquisitions by private equity in Germany



Debt accounts for the largest share of financing. Equity capital investment in 2006 was just € 3.6 billion. This implies a leverage ratio of 14 (that is, an equity share of just seven percent and debt share of 93 percent). This high level of debt is caused by the momentarily advantageous conditions for debt finance, and the growing proportion of **Leveraged Buy-outs (LBOs)**. As recently as 2002, more capital had been invested in venture capital than in buy-outs.

Figure 14: Buy-out and Venture Capital Transactions in Comparison



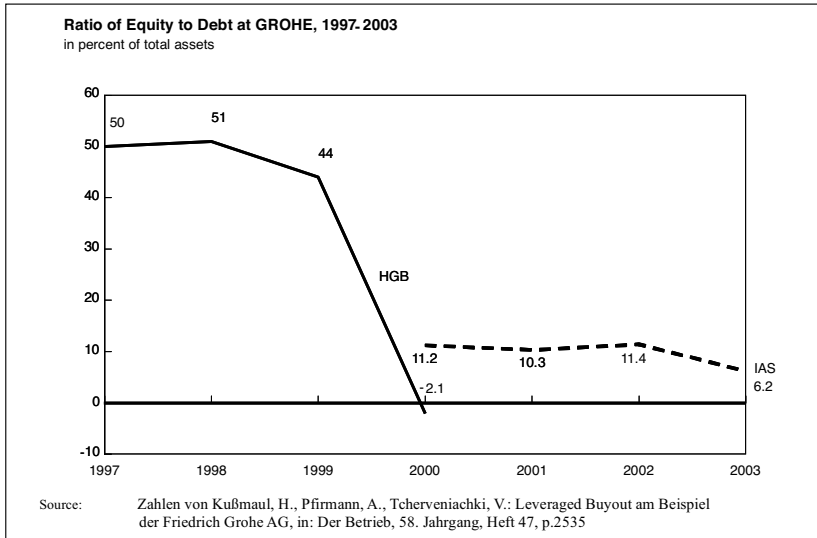
In 2006, the proportion was just around one-quarter. Although the absolute value of investments in buy-outs more than doubled, the absolute value of investments in venture capital declined. The overall growth of the industry between 2002 and 2006 can be accounted for by the growth in buy-outs.

The role of private equity in Europe is likely to increase further in the future. The entire capital invested in Germany by PE firms was equivalent to just 0.2 percent of GDP. In France, the corresponding figure is 0.3 percent. In the USA and Great Britain, by contrast, levels reach 1.1 to 1.2 percent. On this basis, investment volume may easily double in the medium term.

Taking on debt belongs to the business model of buy-outs – but not usually to that of venture capital funds. The case of Grohe is typical in its use of debt financing. The company was family owned until 1998. Equity accounted for 50 percent of liabilities. In 1999, the company was acquired by BC Partners and the equity capital was quickly exchanged for debt financing. Figure 15 shows the changes in the equity share of liabilities in the years 1997 to 2003. Regardless of the accounting method, the equity ratio sank to just one-fifth of its former value, as the new owners (following the sale of Grohe to Credit Swiss First Boston (CSFB) and Texas Pacific Group (TPG) in 2004) seemed to follow the same policies as

BC Partners. In 2007, the firm was burdened with variable loans to the tune of € 700 billion. In 2014, repayments of up to € 1.13 billion will fall due²².

Figure 15: Levels of Debt at Grohe AG Following Acquisition by Private Equity Investors

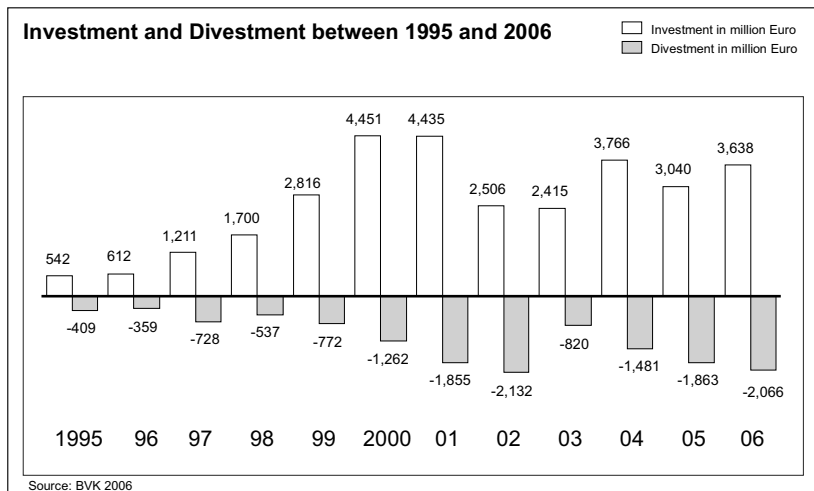


In the meantime, the situation at Grohe has improved. Turnover and profits are rising, and the equity cushion has grown. Nonetheless, a lucky escape ex post does not imply that the strategy was low risk. If the slowdown in demand during the crisis years of 2001 and 2002 had, for example, been stronger, the firm that once had a bright future could have easily faced bankruptcy.

Private equity firms normally intend to own firms only for a limited period of time. Subsequently, they are sold to other investors, to other industrial firms (**trade sale**) or offered in an IPO on the stock market. As the industry matures, a growing portion of firms are resold. Figure 15 shows the purchases and sales in Germany since 1995. Although the net level of investment remains positive, the difference between in- and outflows is shrinking. As a result, net investment in 2006 was just € 1.6 billion.

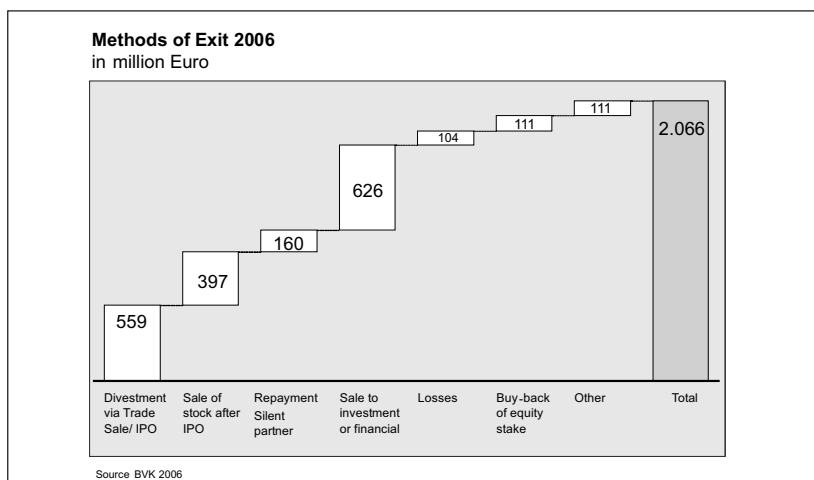
22 It must be noted in this context that the guarantees of private equity firms reduces the validity of their measured equity ratio, since in moments of crises, additional funds can be called upon.

Figure 16: Investment and Divestment in Private Equity Transactions



Passing the firm along to other investment firms has recently become one of the most common forms of exit – they now account for 29 percent of deal value (Figure 17). Sales to other industrial firms occurred in 25 percent of cases, and selling stock accounts for 19 percent of holdings. Bankruptcies account for the rest, to the order of € 104 million (five percent of invested capital, 23 percent of all acquired firms).

Figure 17: Methods of Exit by Private Equity Funds from Acquired Firms



2.2 Advantages and Disadvantages of Private Equity Investment

2.2.1 Rate of Return

How much do private equity funds really earn? And if the rates are really high, how do we explain them? Kaplan and Schoar (2003) calculate the rate of return for private equity funds as over 14 percent for the period 1980-2001. Cochrane (2003) reports an **Alpha level** (a measure of outperformance after accounting for risk) of 23 percent. Just as with hedge funds, there are good reasons to question the rates of return reported by private equity firms. An accurate picture can only be obtained once a fund is wound up, i.e. when all investments have been sold or shut down. Naturally, this is only possible in the case of a relatively small number of “older” funds. For the rest, we have to trust the valuation provided by the private equity firms themselves. In doing so, more than a grain of salt should be used. Worldwide, roughly 30 percent of all completed transactions led to losses (20 percent were total losses). By contrast, the estimates of the fund managers themselves are that only nine percent of unfinished deals are in the red. It is conceivable that the rates of return on acquired firms are slowly improving; but this scenario is not too likely²³. This means that fund managers may be systematically over-optimistic in their assessment of the firms that they retain in their portfolio, not least because of earnings- and career considerations.

Another reason for suspicion comes from the cross-section of reported losses. Younger private equity firms systematically report fewer loss-making investments. Since industry experience generally has a positive impact, the opposite should be true. More flexible accounting rules in some countries are also associated with higher estimated rates of return on unfinished transactions in the private equity industry (Cumming und Walz 2004). Despite these peculiarities, the median rate of return for unfinished transactions at a typical fund is exactly zero percent, compared to 17 percent at firms that have been re-sold (the arithmetic mean is between 63 and 68 percent; averages are often distorted by a handful of cases with extremely good returns). This seems to imply that PE funds sell their winners early to “look good”, and hang on to an increasingly toxic cocktail of underperforming companies.

23 Cumming und Waltz 2004.

Figure 18: Rates of Return for the Entire Investment Period for Private Equity Firms, Calculated per Acquired Firm over the Period of the Investment (in Years)

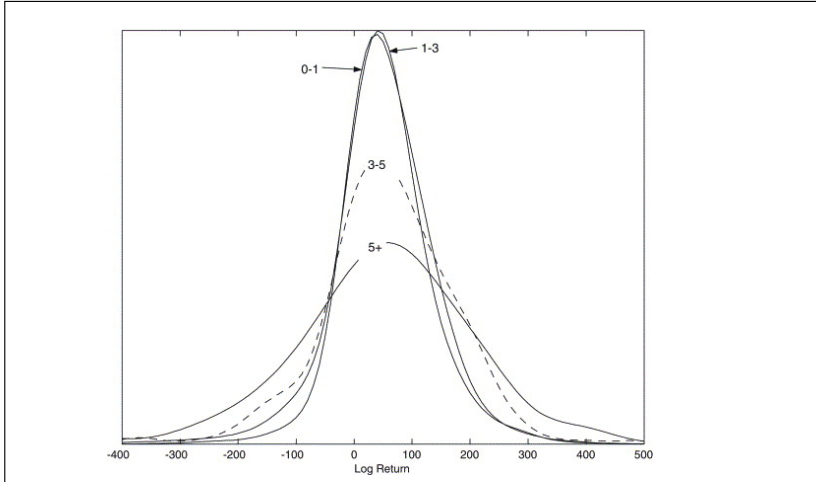


Figure 18 shows the rate of return on investment (per firm) by private equity funds (according to Cochrane 2003). The variance is very large. A handful of very strong results contrast with a great number of loss-making cases. The range of outcomes can be explained by heavy debt financing. High debt ratios create exponential changes in the rate of return, depending on the underlying rate of profit that firms generate. Poor business results lead to bankruptcy whenever debt levels are high; conversely, a couple of good years can produce fantastic rates of return. The lower the equity contribution of PE funds, the quicker a relatively modest return on assets (ROA) will translate into fantastically high rates of return on equity (ROE).

From a regulatory point of view, the crucial point is the divergence between the financial returns for private equity investors, on the one hand, and the profitability and business success of the purchased firms, on the other hand. Even when a large number of firms in the portfolio of a private equity fund are insolvent, a fund can generate high financial returns on investors' money. A few cases of good luck can compensate for numerous complete write-offs. In the final analysis, many firms' survival is dispensable: if a private equity firm invested in 100 target firms, where the rates of return took the shape shown in Figure 18, the probability of a loss on the overall portfolio would fall to almost zero. Even

with only eight investment projects, a negative rate of return would occur in just nine percent of all cases. If 15 target firms are held in the portfolio, losses would on average only appear in just one percent of private equity firms – even if 20 percent of all investments are written off entirely.

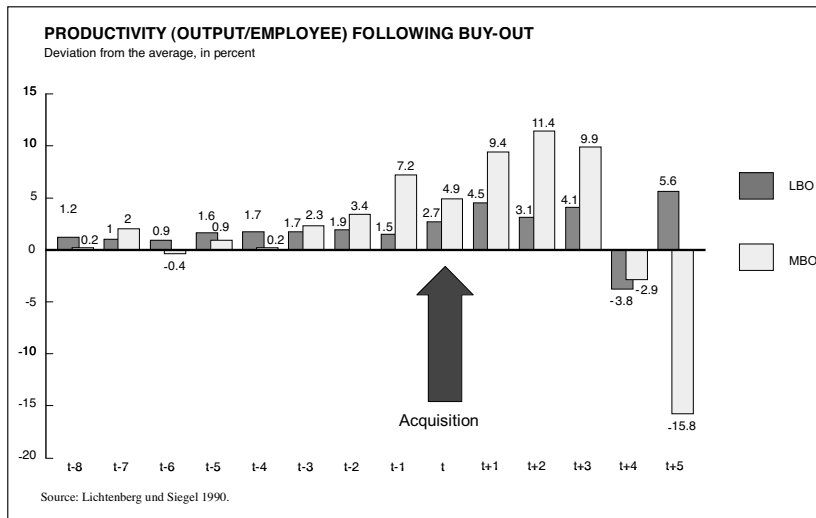
The combination of both factors – the very high rates of return when highly leveraged investments do well, and the dispensable nature of many firms in the investment portfolio – leads to a divergence of interests between the private equity investors and the firms in which they invest. Even if a fund would prefer not to face any bankruptcies in its portfolio, consciously taking a risk of multiple bankruptcies due to high debt levels may be a worthwhile strategy. In this way, the interests of private equity investors and those of employees, suppliers, and creditors of the target firm, as well as the economy as a whole, may diverge substantially.

Similar to the model of Lorenzoni (2007), it can be beneficial at the macro-economic level to restrict the level of credit given to entrepreneurs and target firms. Under realistic assumptions, this may even be the case when new debt capital is used for investment in new equipment and machinery (because on average, the increase in volatility has a stronger negative effect on welfare than the positive benefits brought by an increase in output).

2.2.2 Operational Improvements

Many studies have demonstrated that improvements to operational efficiency often occur after LBOs and MBOs. The productivity of employees and of capital increases, and financial performance improves. What remains unclear is for how long these improvements last. It also remains unclear what price is paid for such improvements. Figure 19 shows data from a study by Lindenberg and Siegel (1990), who analyzed the takeover wave in the USA during the 1980s. Prior to the takeover, the acquired firms already displayed above-average performance; following the acquisition, their performance again improves notably. In the case of management buy-outs, productivity increases already one year before the change of ownership. This increase is significantly higher than in the case of “normal” leveraged buy-outs. However, the same research shows that after several years, the increase in financial performance is paid for with higher risks, among other things. The “early wins” of both MBOs and LBOs collapse and are followed by below average performance later; in the case of MBOs, a dramatic decline in performance is visible in the fifth year.

Figure 19: Productivity of Target Firms Following a Buy-out



Among other things, it appears that private equity investors are able to make enormous profits in a short period of time. In 2005, Blackstone sold the German chemicals firm Celanese after owning the firm for less than twelve months. The investment made by Blackstone increased four-fold; all fresh funds were paid out to the private equity firm in the form of an extraordinary dividend. KKR also made a four-fold return on their investment in under a year when selling PanAm-Sat, a satellite company. Even the Wall Street Journal expressed some concern about this selling practice, known as “flipping” (Cowan 2006):

“While some debt is fine, when it is taken on to finance things that only benefit some shareholders – such as special dividends – new investors are buying hobbled companies”.

Early studies showed that performance was merely average after acquired firms return to the stock market (Holthausen und Larcker 1996). The economic efficiency of these firms seemed to be high at the time of listing on the stock exchange, but declined thereafter. Newer studies, by contrast, suggest that the operative outperformance remains over a longer time horizon and results in high financial returns for the new investors (Cao und Lerner 2006).

A number of questions remains. Listing on the stock exchange already presumes that the firm is performing quite well under its private equity owners. This induces sample selection bias – the return for listed firms are not indicative

of how PE-owned firms do in general. All of the firms that have collapsed under their high burden of debt, for example, are not included in these studies. And the good performance following the stock exchange listing is not true for all firms acquired through LBOs. If companies are sold again quickly (“Quick Flips” with less than twelve months of holding time), share prices fall subsequently by around 18 percent. In contrast, when private equity firms hold firms over longer horizons, the subsequent rate of return is around 8.5 percent. A clear signal also comes from the differences in how newly invested funds are used. If debt is reduced, the firm does better in the long term – the rate of return is 17 percent. If newly invested capital is used differently, such as paying extraordinary dividends to private equity firms, the subsequent rate of return is quite low (just two percent)²⁴.

Table 3: Three-Year Rate of Return by Reverse LBOs

	Rate of Return
<i>By Duration of Ownership by Private Equity Investor:</i>	
More than 12 months	8.64
Less than 12 months	-17.9
<i>By Use of Newly Invested Funds</i>	
Reduction of Debt	17.3
Other	1.9

Source: Cao und Lerner 2006.

These results are particularly interesting because the success of the investment following a listing on the stock exchange is very likely to mirror the profitability and efficiency of the newly listed firm. The implication is that firms undergoing a restructuring by a private equity firm can operate more efficiently later on – but that this scenario is not necessarily the most frequent outcome. Where PE funds buy a firm only for a short time, and new finance obtained from an IPO is used to reward them, the subsequent performance is generally poor. Presumably, investors will learn this sooner or later, and adjust by offering lower prices during the IPO. The most important factor from a regulatory perspective is that private equity can in some circumstances improve the underlying operating performance

24 Here the rate of return is corrected for the performance of the S&P-500 Index (Cao und Lerner 2006).

of firms, but that high returns (where they exist) are mainly a result of financial engineering.

2.2.3 Payout of Cash Reserves

In many private equity acquisitions, and in the plans of activist investors, paying out cash reserves is high on the agenda. For example, between May 2005 and December 2006, Deutsche Börse AG used € 1.4 billion for repurchasing shares and paying extraordinary dividends – cash that was freed up after activists from the hedge fund TCI thwarted a takeover attempt by Deutsche Börse of the London Stock Exchange. A central tenant of the agency cost approach relates to free cash flow. Firms with high cash reserves often invest in projects with lower rates of return. The high performance of many buy-outs can be explained in this way (Baker and Smith 1998). Studies that focus on sudden inflows of cash (Blanchard, Lopez-de-Silanes and Shleifer 1994) also seem to suggest that firms with weaker management controls often use their accumulated cash to investment in projects that ultimately prove unprofitable.

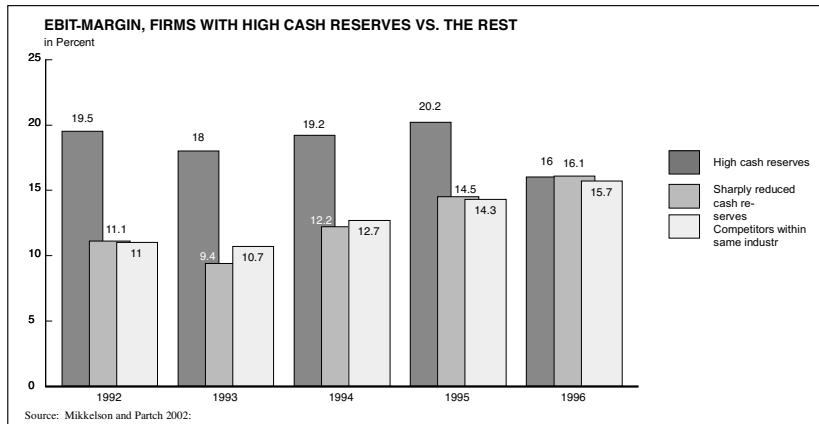
The analytical problem in these studies is that cash windfalls are by their very nature different from the cash piles that some firms accumulate. Blanchard, Lopez-de-Silanes and Shleifer (1994) use compensation from legal battles as a source of exogenous variation. Consequently, the question remains unanswered as to what happens in more normal cases, when firms generating high levels of cash through their normal operations are forced to pay these out to investors, contrary to their normal procedures.

Some preliminary evidence comes from Mikkelson and Partch (2002). The authors show that firms with high cash reserves do better in their operative business than competitors in the same industry and size category, as well as firms who have strongly reduced the levels of reserves. The firms with greater reserves invest more, grow faster and are valued at higher prices by the market. In addition, these firms invest a notably higher amount in research and development.

A typical firm with high cash reserves dedicates the equivalent of 17 percent of its assets for R&D spending; other firms use just between seven and nine percent. This suggests that firms that rely strongly on non-tangible assets make

a decision to build upon stronger cash reserves. The reason for this is that it may be harder for them to access external financing²⁵.

Figure 20: Performance of Firms with High Cash Reserves Relative to their Competitors



Does this suggest that paying out cash reserves as the result of takeovers or the appearance of activist investors leads to a reduction in research expenditures? Some exceptions exist, such as in the case where Duracell was taken over by KKR (Baker and Smith 1998). In that particularly case, R&D expenditures were hugely increased, and the company transformed itself into the global market leader. In normal cases, unfortunately, the opposite is true – R&D budgets are cut.

A study by the US Census Office shows that (i) firms acquired in LBOs have R&D investment levels that are significantly below average even before the transaction, (ii.) following the acquisition, R&D expenditure is reduced by around 40 percent and that (iii.) these effects are particularly strong in smaller firms. While firms in this study with R&D departments typically spend 3-4 percent of their turnover on R&D, acquired firms spend just between 1.2 and 1.8 percent (Lichtenberg und Siegel 1989). Taken together, the results of these studies provide support for the conclusion that the paying out of cash reserves to shareholders robs firms of some of their future prospects and thus comes at a cost for the ma-

25 It needs to be considered that firms with low cash reserves may not have lost them due to a crises. The comparison with firms from the same sector and with similar size indicates that it is not due to a distortion based on the composition of the sample.

croeconomy as a whole. Thus, empirical research over the last 15 years has lent much support to the claims of Nobel Prize winner Robert Solow in 1989:

“We find irresistible the inference that the wave of hostile takeovers and leveraged buy-outs encourages or enforces an excessive and dangerous over-valuation of short-term profitability” (p. 144).

The negative consequences stressed by Solow and his co-authors include the loss of competitiveness of many US firms. After the decline of industrial manufacturing in the USA and Great Britain in recent years –at least in part due to a gigantic buyout wave in the 1980s – the same fate may now loom for European industrial firms.

2.3 Measures for Reducing Negative Externalities

A good case can be made that it is in the interest of economic growth and stability to curb some of the excesses of financial engineering in private equity transactions. Thanks to limited liability, the maximum risk for the investing firm is the complete write off of its equity stake. If the level of debt increases, this becomes more likely. At the same time, very high rates of return also become more likely *ex ante*.

Private equity firms can diversify these risks, limit their losses and thus realize high rates of return. Employees, suppliers and affected communities do not hold such a portfolio of jobs or business contracts. For them, bankruptcy entails massive losses. Even employees who find a new job often face salary cuts. Particularly in smaller cities in depressed areas, a bankruptcy may result in severe losses for many local retailers, landlords and self-employed professionals. All of these factors are ignored in the calculation of the funds. While the funds cannot be expected to play the good Samaritan, policy can intervene and reduce externalities. It is also important that many other economically useful activities of private equity firms are not allowed to suffer. This is particularly true for the financing of venture capital.

Attempts at voluntary self-regulation by the industry have largely proved unsatisfactory. Recommendations such as those by Sir David Walker (Walker 2007) focus on promoting more transparency, but do not resolve the central problems. Better reporting in the case of large acquired firms is desirable (PSE 2007), but

it does not resolve problems related to debt and the creation of value for investors at the cost of employees and creditors.

In order to realign the interests of fund managers and acquired firms, a number of measures seems feasible. These will be presented over the next few pages, and their relative merits evaluated. One promising avenue seems to be to limit the tax deductibility of interest payments, both in general terms (**“Zins-schranke” – interest cap, as provided for in the latest reform of German corporate tax**) as well as for special forms of finance used in private equity transactions.

Interest cap: The planned reform to German business taxation in 2008 limits the deductibility of interest payments, which represents a first important step in the right direction. Originally considered to counter the transfer of profits overseas, an interest cap limits the deductibility of tax to payments for less than € 1 million. This measure will effectively raise the cost of credit for many firms acquired by private equity funds. Even for relatively small firms, the upper bound should prove effective in reducing incentives to pile on debt.

Mezzanine, Senior Equity, and High Yield Financing: Many private equity transactions involve massive amounts of debt. Loans made to finance takeover transactions often have particular contractual characteristics and normally carry high rates of interest. If the “normal” creditworthiness of a firm is exhausted, firms usually need to resort to equity financing. Mezzanine- and high yield debt, or senior equity, come after “normal” credit in terms of debt seniority; only equity capital comes after the obligations of the firm to mezzanine, senior equity, and high yield creditors in the case of insolvency.

Instead of paying out a share of varying profits, as in the case of equity capital, fixed rates of interest must be paid (meanwhile, these may be combined with convertible options that give the right to be exchanged for corporate bonds). In addition to the normal obligations to the creditor, additional provisions are often included for the firm (so-called **covenants**), such as using the sale of a subsidiary firm to pay down debts. From a corporate finance perspective, mezzanine credits and high yield credits combine the characteristics of equity (high risk, high return) with those of credit (seniority relative to equity holders, tax benefits through the deduction of interest payments).

Tax discrimination in favor of debt is the main reason for the use of mezzanine and high yield debt financing. These forms are almost exclusively limited to **LBO (Leveraged buy-out)** and **MBO (Management Buy-out)** transactions.

From a regulatory perspective, the use of tax deductions for interest that has equity characteristics is questionable. If the loans go into default, the participating banks can immediately write them off. The banks, as well as the buy-out firms, profit from strong tax incentives by using financial structures with Byzantine complexity and burdening acquired firms with high interest payments. For this reason, there should be a blanket prohibition on the tax deductibility of interest for these forms of financing.

Capital Requirements: How should banks make provisions for the large credits associated with private equity transactions?

In the first section of this report devoted to hedge funds, we argued that higher capital requirements could limit systemic risks to the financial system as a whole. This option seems less attractive in the case of private equity. Of course, indirectly making debt more expensive would be an effective lever to put the most dangerous transactions on more solid ground. At the same time, systemic risks are probably negligible in most cases given the size of financing made available. Bank regulation would degenerate into a policy instrument for unrelated macroeconomic ends. From a regulatory point of view, this seems quite undesirable. These regulations can be defended in the case of hedge funds, since they contribute to the stability of the banking system. For this reason, other regulatory instruments and incentive mechanisms should be used.

Minimum Capital Requirements for Firms: The key problem is the divergence of investor and firm interests. If transactions are financed by enough equity capital, this divergence is reduced. Limits on the tax deductibility of interest payments works in this direction. Should there also be minimum capital requirements for firms in industries other than banking? In that case, an overarching interest in stability makes a minimal capital requirement necessary. Different capital requirements for different sectors could be implemented, but would quickly lead to distorted incentives: if the minima are too high, firms may migrate overseas; if they are too low, they remain ineffective. Innovations that may, for example, change the cash flow structure would be less beneficial since a constant minimum set of capital requirements must be maintained. A big incentive would exist to be reclassified from one industry sector to another. Although a minimum capital requirement is easy and elegant as a solution for the economy as a whole, it is difficult to implement. Nonetheless, in the case of acquisitions, a transition period such as five years could be considered for applying a relatively modest minimum requirement of 20-30 percent.

Limiting the Deductability of Losses: Currently, the losses created by the insolvency of firms reduce the tax burden of investors, which may have made high profits on other investments. By reducing this type of offset, incentives for responsible behaviour toward acquired firms would be strengthened.

Again, practical problems abound. Such regulation would require that it be implemented throughout the entire EU (or even better, across the OECD). If Germany introduced these limitations on its own, private equity funds would simply move. German investors could then, for example, report earnings from a London based fund to the German tax office on the basis of English accounting and tax rules, which would still allow netting of gains and losses.

Transparency: Just as with hedge funds, the rates of return claimed by private equity firms are generally too high to be true. Even if they were, it is unlikely that future returns will resemble past ones. Low purchase prices enjoyed by many private equity firms seem to be a thing of the past. In the last two years, prices have increased considerably. Even deals with a value equivalent to six-times EBITDA are no longer uncommon.²⁶

At the same time, life insurance companies and pensions funds are putting more money into alternative investments such as private equity. A few simple measures could assure much greater transparency. Insurance firms often face maximum investment percentages in different asset classes, including alternative investments. These could be relaxed for investing in private equity firms that have a proven track record and can convincingly demonstrate high returns. In addition, limits could be related to investment ratings. These could be compiled analogously to, say, the Morningstar ratings for mutual funds.

Poison Pills: Following the large takeover wave in the USA during the 1980s, corporations increasingly found ways to defend themselves against hostile takeovers. So-called **poison pills** have proven particularly popular. For example, these schemes ensure that in the case of a hostile takeover, pre-existing shareholders receive newly issued shares for free – which then must be purchased by the bidder at considerable extra cost. A majority of US corporations are registered in states where poison pill measures are permitted. It is partly for this reason that the large-scale wave of takeovers in the 1980s has not repeated itself. A company such as RJR Nabisco, which was purchased by KKR after a bitter bidding war in 1988, could defend itself much better today.

26 Steadfast Capital 2006.

Similar defence measures still exist in a few European countries. Above all, so-called “**golden shares**” with extraordinary voting rights (often held by the state) alongside other measures such as the VW-law are meant to make takeovers more difficult. Europe has worked hard in this area to remove these distortions in recent years. This is a case of following the textbook theory of free and competitive capital markets to the letter, at a time when it has fallen out of favor in the US. In the interest of a level playing field on both sides of the Atlantic, it seems desirable to give European firms access to similar instruments as long as they are common in the US. Otherwise, the threat of a wave of sell-offs to US firms and parents would grow. In an ideal world, it may be better if all takeovers (without the burden of excessive debt) were made easier, in order to discipline managers. Yet it remains doubtful if this effect is sufficiently important in order to compensate for the current distortion that comes from differential access to poison pills.

Strong Position of Corporate Pension Funds: UK pension funds have quietly become important players in many takeover transactions, safeguarding the interests of employees and reducing negative externalities. Since pensions are funded, and a good part of the assets are held in the form of shares of the employer company, their position can be powerful indeed. Continental Europe lacks similar forms of protection.

In order to safeguard the future pension claims of employees, the trustees of a corporate pension fund have to vote in favour of the takeover. In some cases, such as in the case of Sainsbury, the pension fund can win a number of key concessions. For example, £ 2 billion was to be paid into the pension fund, even though the fund deficit was just around £ 500 million. The takeover attempt failed as a result. KKR had to face a demand from the pension fund for over £ 1 billion in its bid to acquire Boots²⁷.

These and similar measures were officially endorsed by the British pensions regulator in May 2007. In some companies, the Trustees are responsible to set the level of the pension contributions to be made by the employer. If the financing of a deal is too complex or involves too much debt, pension trustees have often refused their support in the past or made demands that were so high as to lead private equity investors to give up or call the transaction into question (as in the case of Sainsbury).

27 Pagnamenta und Butler, 2007.

This unusual position of UK pension funds helps to ensure that the interests of all stakeholders – and not just those of shareholders – are taken into account during a takeover. A similarly strong position of private pension funds does not exist in continental Europe. Creating a large stock of pension assets would take decades. Still, in the context of a comprehensive reform of the pension system, a compulsory creation of organizationally independent company pension schemes could be considered. These would need to be monitored by a codetermined supervisory board and have the power to set binding levels of the pension contributions made by the company. This solution seems elegant and practical. However, German lawmakers have decided to build pension reserves through individual pension plans in order to maximize the mobility of labour and avoid a concentration of risks. Given the general superiority of the outsourced pensions solution, it is unlikely that the UK model can be implemented. To compensate for it, alternative measures (such as “golden shares” for the employees or pensions representatives) could be considered.

Structural Reforms to Corporate Governance: The success of private equity firms can be attributed to three main factors:

- financial engineering
- operational improvements
- low purchase prices.

It is undisputed that many firms are better-managed in the hands of a single owner. In numerous cases, firms acquired by private equity funds do display noticeable improvements in their business operations. Even despite the downsides (loss of employment, cuts in R&D spending have already been mentioned), at least some potential for improved results certainly exists. Why can the same firms (and often the same managers) perform significantly better in the hands of an investment fund than, for example, in the form of a listed corporation?

The modern corporation with highly dispersed share ownership suffers particularly from incentive problems for managers. Since the writings of Berle and Means (1932), it is well known that management is rarely monitored well through the normal forms of “shareholder democracy.” Despite all attempts to improve the alignment of interests, such as through stock option programs, the so-called **principal-agent problem** remains one of the major challenges for publicly listed firms.

A good proportion of the improved performance by firms following a buy-out must be caused by the incentive effects of ownership concentration – particularly

where this is combined with the incentive effect of high interest payments on debt. Jensen (1986) argues that free cash flow consistently leads managers to invest in projects with poor prospects for success. Consistent with this argument is the observation that LBO firms, which are re-sold through an IPO, subsequently have higher rates of return than firms that were previously listed. The return on investment averages around 25 percent compared to 8 percent at firms that were initially managed privately.

The success of private equity can be further explained by the growing difficulties faced by listed firms. For example, the necessity to present successful business results each quarter can mean that important investment projects with long-term time horizons are not undertaken. Rather, available funds are used to finance measures such as the repurchase of shares, extraordinary dividends, or other forms of transferring wealth to shareholders.

It is difficult to separate short-termism and the principal-agent problem in general. But perhaps, it is no mere coincidence that the most successful automobile producer of the last 20 years – Porsche – still rejects quarterly reporting. At the same time, clear evidence exists to suggest that the stock market strongly undervalues future cash flows – depending on the study, up to 40% for earnings that are only realized in five years time (Miles 1993). It seems prudent to reduce the negative effect of quarterly reporting in the context of new “Finanzmarktförderungsgesetze” (a set of German laws designed to promote the efficiency of capital markets), by explicitly allowing firms to reduce the frequency of financial reporting.

Part of the operational success of many firms managed by private equity comes from giving the right incentives to managers. Stock options, which are often used in publicly listed firms, are a poor way to solve the conflict of interests between investors and managers. Private equity firms often give a proportion of the firm’s capital to managers; in the case of MBOs this element is the core of the transaction. This simply suggests that the participation in the equity capital of the firm in the form of stock or phantom stocks is a particularly attractive way to structure incentives correctly. Stock options only have a low value at the moment of issue before share prices have changed, but can increase in value very quickly thereafter. By contrast, direct participation translates gains and losses in the stock price into financial benefits and losses in a 1:1 fashion. Tax laws could be rewritten to make one form of incentive more attractive than the other.

2.4 Investor Activism

2.4.1 Origins of the Takeover Wave of the 1980s

Investor activism is the attempt of minority shareholders to directly influence management. This influence often occurs outside of the regular institutional channels, such as the Annual General Meeting (AGM). In particular, media campaigns or coalitions with other shareholders are used to create pressure. Often, these activists demand the payment of extraordinary dividends or share buy-backs, the reduction of cash reserves, the sale of certain business units, or a change of the team management team.

Investor activism is a relatively new phenomenon. Until the late 1980s, dissatisfied shareholders normally sold their shares, rather than push for changes in the firm. The resulting fall in share prices created a basis for takeovers through **corporate raiders** such as Carl Icahn, KKR, or Forstmann, Little. Only very large shareholders would have problems selling all their shares due to a lack of liquidity— and these shareholders were usually represented directly on the supervisory board.

The takeover firm Icahn Partners describes their own method as follows²⁸:

„It is our contention that sizeable profits can be earned by taking large positions in “undervalued” stocks and then attempting to control the destinies of the companies in question by: a) trying to convince management to liquidate or sell the company to a “white knight”; b) waging a proxy contest; c) making a tender offer and/or; d) selling back our position to the company”.

Poison pill defences have made option C largely impossible and made option A much more difficult. Instead of acquiring firms completely, compensating shareholders, changing management, and adopting a new strategy as in the past, investment activists now apply pressure in a variety of ways to get their views heard.

Many of the old corporate raiders, such as Carl Icahn, can be found among today’s investor activists. A prominent example of this metamorphosis is the hedge fund Icahn Partners and its activities during 2005/2006. Together with three other funds, Icahn purchased three percent of the stock of the media conglomerate Time Warner. Icahn proposed two sets of measures – dividing Time Warner into its various component businesses, starting with the sale of Time

28 Auletta 2006.

Warner Cable, and the repurchase of shares worth around \$20 billion. The proposed structure of the latter transaction would have meant that only a handful of shareholders could benefit (a **reverse Dutch auction**, whereby the existing shareholders sell their shares to the company at a price higher than the current stock price). Time Warner had lost – after the end of the internet bubble and an unhappy merger with AOL – nearly \$ 125 billion in market capitalization. Google earned just half the profits of Time Warner, but its market value was more than twice as high.

The CEO of Time Warner, Richard Parsons, planned to fight the crisis with conventional methods – selling off some businesses combined with cost cutting and changes at AOL. Carl Icahn threatened an open revolt by shareholders and soon began a media campaign to increase pressure on Time Warner management. Fourteen new directors were to be elected to the board, and the CEO should be replaced. Bruce Wasserstein of the investment bank, Lazard Freres, compiled a report for Icahn arguing that breaking up Time Warner would dramatically increase shareholder value.

Icahn operated under the assumption that hedge funds would now begin to buy shares. The share price would increase – good for his profits – and the changes in the shareholder structure would lead Time Warner managers to give up their fight (which is similar to what happened in the case of Deutsche Börse). Thanks to a new board, an extraordinary dividend payment to shareholders would be agreed. It didn't matter that the \$ 20 billion, which Time Warner was to use for this purpose would be missing as investment in new films at Warner, new magazines, in its publishing business, or in new programming for HBO. Thanks to the Dutch Auction, Carl Icahn would have long since been able to sell his own stake.

In this case, the final outcome was rather different. CEO Parsons acted cleverly and kept the institutional investors on his side. Wall Street analysts were not very convinced by the Wasserstein report. The hedge funds did not jump on board because, among other things, “old media” was considered to lack promise in 2006 (even though this situation changed radically in 2007).

Still, at Deutsche Börse, ABN Amro, GM and many other cases, investor activism has succeeded in achieving its aims. In the case of GM, high payments through share buybacks and extraordinary dividends went together with reduced R&D expenditure and truncated plans for expansion. Alongside these, management was changed and many jobs were cut. After a revolt of the shareholders – led

by the famous activist pension fund of California state employees, CalPERS – the CEO was thrown out, the firm subjected to a radical downsizing program, and billions were paid out to shareholders in the form of share buybacks. Despite the growth in profits during the 1990s due to the popularity of GM's, research and development investments remained small. By 2007, the product lines has become so obsolete that GM can scarcely continue to pay for the health insurance and pension costs of its employees; its bond ratings reached junk status in 2006.

For shareholders, the financial hollowing-out of a firm can be profitable. High levels of debt can play a critical role. In the USA, the equivalent of every second dollar of new debt issued between 2000 und 2005 was spent on share buybacks. Buy-backs lead to a reduction in the number of outstanding shares, so that a firm's equity basis dwindles and leverage ratios increase. If turnover and profits subsequently rise, earnings per share increase much more rapidly than before. However, if a crisis emerges, bankruptcy is just around the corner – only a thin “layer” of equity capital keeps the firm away from insolvency. A sobering notion is that even after radical interventions of this nature, the benefits to shareholders are often relatively small—US investors rarely pursue activist measures, and the results are often disappointing (Black 1998, Karpoff 2001). The most thorough overview study on this topic to date comes to the following conclusion (Karpoff 2001):

“To be sure, some empirical results are mixed. But much of the disagreement among researchers reflects differences in the metrics emphasized. Researchers emphasizing changes in target firms' governance structures tend to characterize shareholder activism as a “successful« tool to improve firm performance. Most of those emphasizing changes in share values, earnings, or operations, in contrast, characterize shareholder activism as having negligible effects on target companies”.

The problem is quite similar to the case of private equity investments: in both instances, the interests of investors and other stakeholders, such as employees, suppliers, etc. begin to diverge as the debt of the company increases. Investors can live with the risk of bankruptcy by diversifying their portfolio—unlike employees.

2.4.2 Hedge Fund Activism

The traditional forms of investor activism—as practiced by pension funds and other institutional investors—have led to relatively few cases of success. Still, some pieces of evidence suggest that hedge funds are substantially more successful as activist investors.

Marco Becht et al. (2006) studied the investments made by Hermes, a fund that manages the investment portfolio for the BT pension. Of some 71 investments, activist strategies were used in 30 cases. A main factor was to force the hand of management. At the same time, the fund was not shy to use legal disputes, hostile actions in the shareholders' meeting, or press campaigns. In 28 cases, firms were forced to divest subsidiary firms and to concentrate on their "core business"; in ten cases, mergers and acquisitions were stopped, and in seven additional cases, investment plans were scrapped. In 14 cases, the chair of the board was replaced. Becht et al. find an additional rate of return of around 3-4 percent and a somewhat bigger effect in cases where restructuring measures were carried out.

It remains unclear how representative the results of this study are. Hermes is a comparatively small fund, and information about the explanatory variables of the study (the actions of the fund, which measures of activism it used, etc.) were produced and shared by Hermes itself. It cannot be ruled out that the fund managers (knowingly or coincidentally) put largely successful disputes on the list of their own activities.

A study by Alon Brav et al. (2006) is more comprehensive. The authors investigate 888 actions undertaken by 131 activist hedge funds. They find a sizeable excess return. Within 20 days after the start of substantial involvement by the hedge fund (as documented through a 13D Filing), share prices increase by 7.2 percent more than predicted in a market model. The return on assets increased slightly (from 2.35 to 2.68 percent), whereas the return on equity increased rather dramatically (from 6.1 to 10.1 percent). The stronger improvement on the return to equity must reflect higher leverage. New investment, as in the case of Hermes, is substantially curtailed. The probability of a change in the top management team is considerably higher than at comparable firms. Improvements in the underlying business performance are insufficient to explain the large increase in share prices. The period of observation in the Brav et al. study is also relatively short. As shown in the discussion of MBOs, changes in the capital structure often lead to hollowing-out of the capital structure and a decline in a firm's

competitive position. What both the studies by Franks and Brav et al agree upon is that activism can benefit fund managers more than the pension funds or other institutional investors.

Other evidence suggests that activist shareholders simply undertake a redistribution of cash flows. Klein and Zur (2006) find no measurable improvements to business performance. Neither the return on investment nor the return on equity improves, nor improvements in cash flow lag behind those of comparable firms without activist shareholders. What changes clearly are payouts. Klein and Zur also find evidence that activist funds concentrate their investments on firms that already perform better in the year of the acquisition than comparable firms. The high payouts are financed largely through higher levels of debt. The results, which are in part diametrically opposed to those of the Brav et al. study, can partly be explained by sample composition. Brav et al. have identified a higher number of transactions by activist investors. At the same time, their study is limited to a much shorter time span (2001-05 instead of 1995-2005 in the study by Klein and Zur). Since MBOs display the negative consequences of higher debt and lower investment only after a period of several years, the results of Klein and Zur are more likely to reflect the long-term macroeconomic impact.

The events at Deutschen Börse show clearly that harmful decisions can follow from the involvement of hedge funds. In January 2005, The Children's Investment Fund (TCI) demanded that the takeover bid for the London Stock Exchange be withdrawn—supposedly because the deal would destroy shareholder value. Deutsche Börse initially offered 540 pence per share. The maximum price that the firm was ready to pay was around 620 pence. By May 29, 2007, the shares of the LSE closed at a price of 1,429 pence. In the subsequent two and a half years, the market value of the LSE increased by around £ 1.55 billion. Instead of using £ 1.3 billion to acquire the LSE, the Deutsche Börse used roughly the same amount for share buy backs and dividends. For the investors, this was anything but a good deal. If the investors reinvested these funds in the DAX, the investments would have been valued at £ 2.32 billion. The LSE, by contrast, was worth £ 2.85 million. This implies value destruction of more than £ 500 million. If investors had reinvested in the FTSE Index, the loss of value would have been even bigger,

since the index performed more poorly than the DAX – value destruction would amount to £ 1.18 billion²⁹.

2.4.3 Measures

What can or should be done regarding investor activism? Activists argue that their activities simply reflect a form of shareholder democracy. Carl Icahn said during his dispute with Time Warner:

„What’s important to all this is that if we don’t do something about managements and the way we manage – if we don’t have a corporate democracy like you have a political democracy – the corporations have no accountability”.

Indeed, mismanagement is not rare. Some CEOs waste money on prestige buildings, private jets, or absurd takeovers. The supervisory board (or the board in the USA) is designed to control these forms of abuses. It should serve as the representatives of shareholders. In real life, few of them do so all the time – the principal-agent problem is alive and well.

A firm’s shareholder base today changes much more rapidly than the composition of supervisory boards. The shares of most firms are sold one time per year on average – although a handful of long-term shareholders do not sell their shares and another group of shareholders will “churn” their shares several times per year.

The rules of the capital market envision that new shareholders will wait for the next general shareholders’ meeting, when new members are elected to the supervisory board. But the typical investor activist (like Icahn) doesn’t want to do this and tries to build up pressure externally, so that members of the board are changed outside the normal.

This practice has little in common with the repeated endeavours of Icahn (and Chris Hohn) to present themselves as champions of shareholder democracy. More accurately, a coalition of activists and institutional investors emerges that tries to bully the management – even without a majority in the shareholders’ meeting. Due to shareholders’ risk aversion and the lack of interest, they are often in a relatively strong position to cause some commotion. Furthermore, their negotiations with management also allow them to win new information about the future

29 Share buybacks certainly livened up the share price of Deutschen Börse, but at the price that some shareholders could no longer participate in this growth. Despite the massive buybacks, the share price of DB has not done better than that of the LSE. The actual destruction of value must have been somewhat lower for shareholders, who did not sell their shares during the buyback program.

strategy of the company, which they can then exploit to their own advantage. This opens the door to abuse – particularly in Europe, where insider trading is less strictly regulated and less stridently persecuted than in the USA.

Modifying Voting Rights: The ability to trade large numbers of shares in just minutes is valuable. It lowers the cost of capital. Short-term ownership of shares should always remain possible in the future. What remains questionable is whether it is useful to endow shares acquired for the short-term with full voting rights. For example, if a minimum period of holding the share of one year was required before voting rights could be exercised at the shareholders meeting, then the prospect of profits by very short-term activists would be considerably reduced. After shares are held for a period of three years, their voting rights could be doubled.

Restrict share buybacks: If share buybacks of more than five percent of outstanding shares per year by, for example, were prohibited by law, firms would still retain sufficient freedom to optimize the equity component of their balance sheet over the long term. Yet this measure would put a lid on the hope of fast share price increases. Existing cash reserves could not be used fully for buybacks. Incentives to accumulate debt would decline. It is doubtful that any negative effects would occur. At the same time, this would strengthen resistance against raiders such as Carl Icahn. By increasing the equity cushion, the volatility of earnings – and perhaps, of the economy as a whole – would be reduced.

However, such a rule may lead to unintended consequences: if firms know that buybacks are more difficult, they may issue fewer shares. Since the restriction only impacts the speed of change, it seems likely that this effect would be negligible.

Lowering the attractiveness of new debt: Even if the rules regarding share buybacks were changed, activists would still be able to use the route of an extraordinary dividend. If no large cash reserves exist, increasing debt may be used instead. This path should also be made more difficult in the interests of economic stability.

In this regard, the recently passed limit on interest deductions in Germany could play an important role. Even more important would be strengthening the rights for existing creditors. Many banks and bondholders have made credit available on the assumption that highly rated firms keep their policies steady. Piling debts high and handing over special dividends to shareholders amounts to redistribution at the expense of bondholders and banks. Older creditors are

disadvantaged to the benefit of shareholders. Even if the original credit contract does not contain clauses about downgrades in the credit rating, it would be good if it were legally possible for creditors to sue. These claims would come due if, for example, corporate bonds are downgraded as a result of special dividends and other payouts to shareholders.

Granting of Credit and Equity Requirements: Alternatively (or perhaps in addition), it may be worth considering whether the granting of credit by banks should be made more restrictive in the context of a “Basel III” framework. However, this approach would be a tool designed to reduce systemic risks for another purpose. This is not desirable from a regulatory point of view.

Transparency: In the USA, all shareholders owning more than five percent of the shares in a company must submit a so-called **13D-Form** (Appendix 1). With it, the structure of ownership (number of shares and class of shares, etc.) is made transparent. Financial investors in a hedge fund must also be named and details of the personal background of new large shareholders must be given (including nationality, tax number, pending litigation and previous convictions, etc.).

Comparable rules do not exist in most European countries. Their introduction could be useful to avoid insider trading and other conflicts of interest. Firms would get to know their shareholders. Today, in most EU countries, firms cannot request information about who their shareholders are if the stock is held by foreign share custodians. Unilateral measures by individual nation states are possible and could alleviate this problem. Anyone who supports shareholder democracy should have no objections to this type of measure.

3 Outlook

A few years ago, the former chief economist of the IMF, Raghuram Rajan, published a book (together with Luigi Zingales at the University of Chicago) entitled *Saving Capitalism from the Capitalists*. In it, he describes why capitalists themselves are often the worst enemy of competition. According to Rajan and Zingales, the financial sector has particular importance: it ensures new entry. Thus, old firms must live with new competitors and the threat of takeovers. Creative destruction is only possible if the financial sector gives new competitors a chance.

Financial markets sometimes seem equally self-destructive as the firms that Rajan and Zingales describe. Intransparent and insufficiently regulated hedge funds are a potential danger for the stability of the global financial system, even in the eyes of some central bankers and regulators. In many cases, private equity firms and activist hedge funds force successful firms to reduce investment spending. Much of the cash flow must be used to service large mountains of debt instead. Employees and the future prospects of the firm often suffer. In many parts of continental Europe, a fresh wave of deindustrialization looms, driven by the extreme rates of return demanded by activist owners and the adoption of risky capital structures. If damage becomes widespread, popular support for the free enterprise system and vibrant capital markets could dwindle.

The results would be anything but desirable. A return to the highly regulated financial markets of the Bretton Woods era is unattractive by any measure – not least because of the anticompetitive consequences that Rajan and Zingales emphasize. Furthermore, private equity firms, as well as hedge funds, often do create beneficial effects. Some firms are much better managed under a single owner than they ever were as public firms. The existence of hedge funds has also probably contributed to lowering the costs of risk over the last years. They also represent one of the better hopes to curtail “irrational exuberance” in asset markets. To keep these positive effects alive and save the financial industry from itself and its “fundamentalist”, activist fringe, better regulation is needed.

Despite the fact that risk premia have soared since the second quarter of 2007, making many takeovers more costly, new regulations are necessary. This report has made a number of suggestions as to how abuses related to two new forms of

investment – hedge funds and private equity – can be reduced in Europe. Additional proposals relate to the behaviour of activist investors in general.

The shifting of risks through excessive debt is the key problem in both private equity investments and hedge funds. Although changes in European tax treatment go in the right direction, the way forward for hedge funds should be to regulate the risks faced by prime brokers (“Basle III”). In this way, systemic risks can be reduced and the dangers for economic stability be minimized. Prudent, far-sighted regulation should not wait for the next big financial crisis to take the right measures. In the final analysis, the proposals outlined in this report are intended to safeguard the many advantages of hedge funds and private equity firms – better risk allocation and improved corporate governance.

Appendix 1: Schedule 13D

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934
(Amendment No. _____)*

(Name of Issuer)

(Title of Class of Securities)

(CUSIP Number)

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. []

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for

any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be »filed« for the purpose of Section 18 of the Securities Exchange Act of 1934 (»Act«) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No.	
1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).	
2. Check the Appropriate Box if a Member of a Group (See Instructions) (a) (b)	
3. SEC Use Only	
4. Source of Funds (See Instructions)	
5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)	
6. Citizenship or Place of Organization	
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power
	8. Shared Voting Power

<p>Number of Shares Beneficially Owned by Each Reporting Person With</p>	<p>9. Sole Dispositive Power</p> <p>.....</p>
<p>10. Shared Dispositive Power</p> <p>.....</p>	<p>11. Aggregate Amount Beneficially Owned by Each Reporting Person</p> <p>.....</p>
<p>12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)</p> <p>.....</p>	<p>13. Percent of Class Represented by Amount in Row (11)</p> <p>.....</p>
<p>14. Type of Reporting Person (See Instructions)</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	

Instructions for Cover Page

- (1) *Names and I.R.S. Identification Numbers of Reporting Persons* – Furnish the full legal name of each person for whom the report is filed – i.e., each person required to sign the schedule itself – including each member of a group. Do not include the name of a person required to be identified in the report but who is not a reporting person. Reporting persons that are entities are also requested to furnish their I.R.S. identification numbers, although disclosure of such numbers is voluntary, not mandatory (see »SPECIAL INSTRUCTIONS FOR COMPLYING WITH SCHEDULE 13D« below).
- (2) If any of the shares beneficially owned by a reporting person are held as a member of a group and the membership is expressly affirmed, please check row 2(a). If the reporting person disclaims membership in a group or describes a relationship with other persons but does not affirm the existence of a group, please check row 2(b) [unless it is a joint filing pursuant to Rule 13d-1(k)(1) in which case it may not be necessary to check row 2(b)].
- (3) The 3rd row is for SEC internal use; please leave blank.
- (4) Classify the source of funds or other consideration used or to be used in making purchases as required to be disclosed pursuant to Item 3 of Schedule 13D and insert the appropriate symbol (or symbols if more than one is necessary) in row (4):

Category of Source	Symbol
Subject Company (Company whose securities are being acquired)	SC
Bank	BK
Affiliate (of reporting person)	AF
Working Capital (of reporting person)	WC
Personal Funds (of reporting person)	PF
Other	OO

- (5) If disclosure of legal proceedings or actions is required pursuant to either Items 2(d) or 2(e) of Schedule 13D, row 5 should be checked.
- (6) *Citizenship or Place of Organization* – Furnish citizenship if the named reporting person is a natural person. Otherwise, furnish place of organization. (See Item 2 of Schedule 13D.)
- (7)–(11), *Aggregate Amount Beneficially Owned by Each Reporting Person, etc.* – Rows (7) through (11) inclusive, and (13) are to be

completed in accordance with the provisions of Item 5 of Schedule 13D. All percentages are to be rounded off to nearest tenth (one place after decimal point).

- (12) Check if the aggregate amount reported as beneficially owned in row (11) does not include shares which the reporting person discloses in the report but as to which beneficial ownership is disclaimed pursuant to Rule 13d4 [17 CFR 240.13d-4] under the Securities Exchange Act of 1934.
- (14) *Type of Reporting Person* – Please classify each »reporting person« according to the following breakdown and place the appropriate symbol (or symbols, i.e., if more than one is applicable, insert all applicable symbols) on the form:

Category	Symbol
Broker-Dealer	BD
Bank	BK
Insurance Company	IC
Investment Company	IV
Investment Adviser	IA
Employee Benefit Plan or Endowment Fund	EP
Parent Holding Company/Control Person	HC
Savings Association	SA
Church Plan	CP
Corporation	CO
Partnership	PN
Individual	IN
Other	OO

Notes: Attach as many copies of the second part of the cover page as are needed, one reporting person per page.

Filing persons may, in order to avoid unnecessary duplication, answer items on the schedules (Schedule 13D, 13G or 14D-1) by appropriate cross references to an item or items on the cover page(s). This approach may only be used where the cover page item or items provide all the disclosure required by the schedule item. Moreover, such a use of a cover page item will result

in the item becoming a part of the schedule and accordingly being considered as »filed« for purposes of Section 18 of the Securities Exchange Act or otherwise subject to the liabilities of that section of the Act.

Reporting persons may comply with their cover page filing requirements by filing either completed copies of the blank forms available from the Commission, printed or typed facsimiles, or computer printed facsimiles, provided the documents filed have identical formats to the forms prescribed in the Commission's regulations and meet existing Securities Exchange Act rules as to such matters as clarity and size (Securities Exchange Act Rule 12b12).

Special instructions for complying with schedule 13d

Under Sections 13(d) and 23 of the Securities Exchange Act of 1934 and the rules and regulations thereunder, the Commission is authorized to solicit the information required to be supplied by this schedule by certain security holders of certain issuers.

Disclosure of the information specified in this schedule is mandatory, except for I.R.S. identification numbers, disclosure of which is voluntary. The information will be used for the primary purpose of determining and disclosing the holdings of certain beneficial owners of certain equity securities. This statement will be made a matter of public record. Therefore, any information given will be available for inspection by any member of the public.

Because of the public nature of the information, the Commission can utilize it for a variety of purposes, including referral to other governmental authorities or securities self-regulatory organizations for investigatory purposes or in connection with litigation involving the Federal securities laws or other civil, criminal or regulatory statutes or provisions. I.R.S. identification numbers, if furnished, will assist the Commission in identifying security holders and, therefore, in promptly processing statements of beneficial ownership of securities.

Failure to disclose the information requested by this schedule, except for I.R.S. identification numbers, may result in civil or criminal action against the persons involved for violation of the Federal securities laws and rules promulgated thereunder.

3.1 General Instructions

- A. The item numbers and captions of the items shall be included but the text of the items is to be omitted. The answers to the items shall be so prepared as to indicate clearly the coverage of the items without referring to the text of the items. Answer every item. If an item is inapplicable or the answer is in the negative, so state.
- B. Information contained in exhibits to the statements may be incorporated by reference in answer or partial answer to any item or sub-item of the statement unless it would render such answer misleading, incomplete, unclear or confusing. Material incorporated by reference shall be clearly identified in the reference by page, paragraph, caption or otherwise. An express statement that the specified matter is incorporated by reference shall be made at the particular place in the statement where the information is required. A copy of any information or a copy of the pertinent pages of a document containing such information which is incorporated by reference shall be submitted with this statement as an exhibit and shall be deemed to be filed with the Commission for all purposes of the Act.
- C. If the statement is filed by a general or limited partnership, syndicate, or other group, the information called for by Items 2-6, inclusive, shall be given with respect to (i) each partner of such general partnership; (ii) each partner who is denominated as a general partner or who functions as a general partner of such limited partnership; (iii) each member of such syndicate or group; and (iv) each person controlling such partner or member. If the statement is filed by a corporation or if a person referred to in (i), (ii), (iii) or (iv) of this Instruction is a corporation, the information called for by the above mentioned items shall be given with respect to (a) each executive officer and director of such corporation; (b) each person controlling such corporation; and (c) each executive officer and director of any corporation or other person ultimately in control of such corporation.

Item 1: Security and Issuer

State the title of the class of equity securities to which this statement relates and the name and address of the principal executive offices of the issuer of such securities.

Item 2: Identity and Background

If the person filing this statement or any person enumerated in Instruction C of this statement is a corporation, general partnership, limited partnership, syndicate or other group of persons, state its name, the state or other place of its organization, its principal business, the address of its principal office and the information required by (d) and (e) of this Item. If the person filing this statement or any person enumerated in Instruction C is a natural person, provide the information specified in (a) through (f) of this Item with respect to such person(s).

- (a) Name;
- (b) Residence or business address;
- (c) Present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted;
- (d) Whether or not, during the last five years, such person has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) and, if so, give the dates, nature of conviction, name and location of court, and penalty imposed, or other disposition of the case;
- (e) Whether or not, during the last five years, such person was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws; and, if so, identify and describe such proceedings and summarize the terms of such judgment, decree or final order; and
- (f) Citizenship.

Item 3: Source and Amount of Funds or Other Consideration

State the source and the amount of funds or other consideration used or to be used in making the purchases, and if any part of the purchase price is or will be represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the securities, a description of the transaction and the names of the parties thereto. Where material, such information should also be provided with respect to prior acquisitions not previously reported pursuant to this regulation. If the source of all or any part of the funds is a loan made in the ordinary course of business by a bank, as defined in Section 3(a)(6) of the Act, the name of the bank shall not be made available to

the public if the person at the time of filing the statement so requests in writing and files such request, naming such bank, with the Secretary of the Commission. If the securities were acquired other than by purchase, describe the method of acquisition.

Item 4: Purpose of Transaction

State the purpose or purposes of the acquisition of securities of the issuer. Describe any plans or proposals which the reporting persons may have which relate to or would result in:

- (a) The acquisition by any person of additional securities of the issuer, or the disposition of securities of the issuer;
- (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the issuer or any of its subsidiaries;
- (c) A sale or transfer of a material amount of assets of the issuer or any of its subsidiaries;
- (d) Any change in the present board of directors or management of the issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) Any material change in the present capitalization or dividend policy of the issuer;
- (f) Any other material change in the issuer's business or corporate structure including but not limited to, if the issuer is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by section 13 of the Investment Company Act of 1940;
- (g) Changes in the issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the issuer by any person;
- (h) Causing a class of securities of the issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) A class of equity securities of the issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or
- (j) Any action similar to any of those enumerated above.

Item 5: Interest in Securities of the Issuer

- (a) State the aggregate number and percentage of the class of securities identified pursuant to Item 1 (which may be based on the number of securities outstanding as contained in the most recently available filing with the Commission by the issuer unless the filing person has reason to believe such information is not current) beneficially owned (identifying those shares which there is a right to acquire) by each person named in Item 2. The above mentioned information should also be furnished with respect to persons who, together with any of the persons named in Item 2, comprise a group within the meaning of Section 13(d)(3) of the Act;
- (b) For each person named in response to paragraph (a), indicate the number of shares as to which there is sole power to vote or to direct the vote, shared power to vote or to direct the vote, sole power to dispose or to direct the disposition, or shared power to dispose or to direct the disposition. Provide the applicable information required by Item 2 with respect to each person with whom the power to vote or to direct the vote or to dispose or direct the disposition is shared;
- (c) Describe any transactions in the class of securities reported on that were effected during the past sixty days or since the most recent filing of Schedule 13D (§240.13d-191), whichever is less, by the persons named in response to paragraph (a).
- Instruction:* The description of a transaction required by Item 5(c) shall include, but not necessarily be limited to: (1) the identity of the person covered by Item 5(c) who effected the transaction; (2) the date of the transaction; (3) the amount of securities involved; (4) the price per share or unit; and (5) where and how the transaction was effected.
- (d) If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of an employee benefit plan, pension fund or endowment fund is not required.
- (e) If applicable, state the date on which the reporting person ceased to be the beneficial owner of more than five percent of the class of securities.

Instruction: For computations regarding securities which represent a right to acquire an underlying security, see Rule 13d-3(d)(1) and the note thereto.

Item 6: Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Describe any contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, naming the persons with whom such contracts, arrangements, understandings or relationships have been entered into. Include such information for any of the securities that are pledged or otherwise subject to a contingency the occurrence of which would give another person voting power or investment power over such securities except that disclosure of standard default and similar provisions contained in loan agreements need not be included.

Item 7: Material to Be Filed as Exhibits

The following shall be filed as exhibits: copies of written agreements relating to the filing of joint acquisition statements as required by §240.13d-1(k) and copies of all written agreements, contracts, arrangements, understandings, plans or proposals relating to: (1) the borrowing of funds to finance the acquisition as disclosed in Item 3; (2) the acquisition of issuer control, liquidation, sale of assets, merger, or change in business or corporate structure or any other matter as disclosed in Item 4; and (3) the transfer or voting of the securities, finder's fees, joint ventures, options, puts, calls, guarantees of loans, guarantees against loss or of profit, or the giving or withholding of any proxy as disclosed in Item 6.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

.....
Date

.....
Signature

.....
Name/Title

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative (other than an executive officer or general partner of the filing person), evidence of the representative's authority to sign on behalf of such person shall be filed with the statement: provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)

<http://www.sec.gov/divisions/corpfin/forms/13d.htm>

Last update: 12/05/2002

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