

# The Exposure of Austrian Banks to Hedge Funds: Survey Results and Regulatory Aspects

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*Due to the expansive growth of the hedge fund industry and the accompanying political discussions about creating a legal framework for this practically nonregulated asset class, the Banking Supervision Committee of the European System of Central Banks decided to conduct an EU-wide survey on banks' hedge fund exposure. This paper presents the survey results for Austria and takes a critical look at possible measures for regulating the hedge fund industry.*

## Introduction

As a result of strong growth in recent years, hedge funds<sup>1</sup> have established themselves as significant players on the international financial market.<sup>2</sup> At present, an estimated 8,000 hedge funds with total assets under management exceeding USD 1,000 billion<sup>3</sup> exist worldwide, with assets in the EU accounting for approximately one quarter of this figure. This means that total assets under management in hedge funds have doubled since 2001. However, as these funds are generally subject to few or no regulatory requirements and the public information available from databases and from the funds' own disclosures is incomplete, it is possible to trace their development only to a limited extent.

One of the reasons why the hedge fund industry has grown so rapidly is the expansion of its investor base to include new groups of institutional as well as retail customers. This environment has sparked increasing discussion at both the national and international levels about whether hedge funds pose a threat to financial stability in addition to their positive effects on international financial markets, and whether

regulation is necessary for this alternative form of investment.

This paper is divided into two parts: The first part investigates the quantitative relationships between hedge funds and banks in Austria on the basis of a survey conducted among selected Austrian credit institutions in the spring of 2005. Qualitative aspects of the risk management systems operated by these banks are described in relation to their business activities with hedge funds. In a bank-dominated financial system, the systemic risk arising from hedge funds is primarily transmitted via the banking system, which means that our investigation makes a direct contribution to the debate on the possible regulation of hedge funds. The second part of the paper discusses possible regulatory measures which may help ensure systemic stability on the one hand and improve investor protection on the other.

## Data Basis

As a result of strong growth in the hedge fund industry as well as increasing public interest, the Banking Supervision Committee (BSC) of the European System of Central Banks (ESCB)

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<sup>1</sup> There is currently no uniform definition of the term "hedge fund." Hedge funds are best described as loosely regulated or nonregulated investment alternatives which rely on a wide variety of strategies, use incentive fee structures, and are not subject to any investment restrictions (e.g. leverage limits).

<sup>2</sup> See for example ECB (2004).

<sup>3</sup> See Counterparty Risk Management Policy Group (2005).

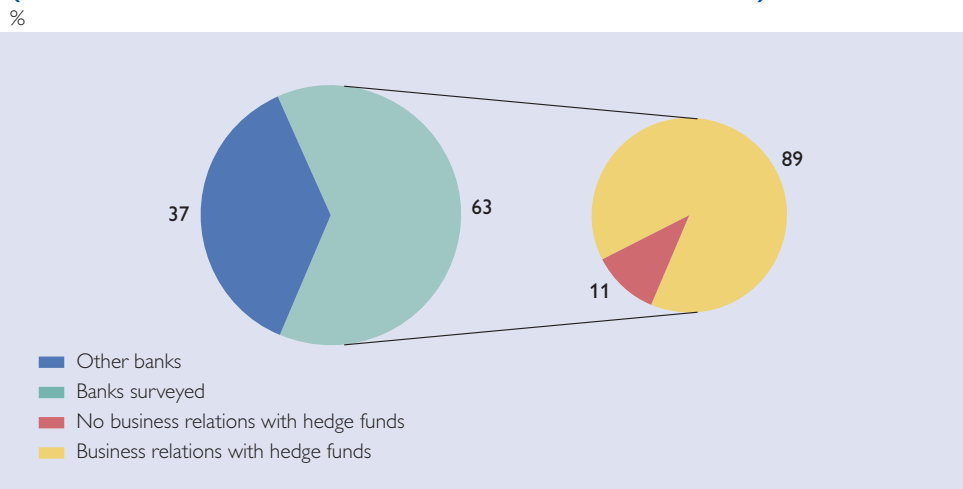
launched an EU-wide survey in the spring of 2005 which examined qualitative and quantitative aspects of the relationships between banks and hedge funds.<sup>4</sup> This survey, among other things, made it possible to assess more effectively the potential impact of these relationships on financial stability, as the research generated information on the banks' risk management practices as well as their exposures to hedge funds. The results of the EU-wide survey were published separately by the ECB.<sup>5</sup>

In Austria, the Oesterreichische Nationalbank (OeNB) carried out the voluntary survey in May 2005 and selected Austria's 22 largest banks (in terms of unconsolidated total assets) as participants. These banks accounted for more than 63% of the total assets in the overall banking system in Austria at the end of 2004 (see chart 1). Seven banks indicated that they did not have any business relationships with hedge funds at the time. Measured in terms of total assets, this means that 11% of the selected group had no business relations with hedge funds (see also chart 1).

Chart 1

**Overview of Data**

**(Shares as Measured in Terms of Unconsolidated Total Assets)**



Source: OeNB.

<sup>4</sup> The survey was based on two questionnaires: The qualitative questionnaire contained open-ended questions covering motives for investment in hedge funds; the respondents' definitions of hedge funds; the focus of hedge fund activities: financing, equity investment, trading, performance management; and general risk management practices (due diligence, limit management, collateralization, monitoring, etc.). The quantitative questionnaire addressed issues such as the extent of the surveyed banks' business activities with hedge funds, the extent and type of collateralization, the investment strategies pursued, and the frequency of certain risk management reviews, among other things.

<sup>5</sup> See ECB (2005).

### Results of the Bank Survey Definitions of Hedge Funds and Motives for Business Relationships

The banks in the survey defined and classified hedge funds differently but assessed their essential characteristics in a similar manner. Hedge funds are categorized as unregulated or only loosely regulated investment alternatives which are generally domiciled offshore, offer a broad range of investment styles, use incentive fee structures, and are not subject to investment restrictions. Derivatives, short selling and leverage are used in order to optimize the above-average absolute returns.

A majority of the banks surveyed were relatively late in establishing business relationships with hedge funds. Only two of the banks conducted business with hedge funds prior to 1999. As their main motives for investing in these instruments, the banks cited

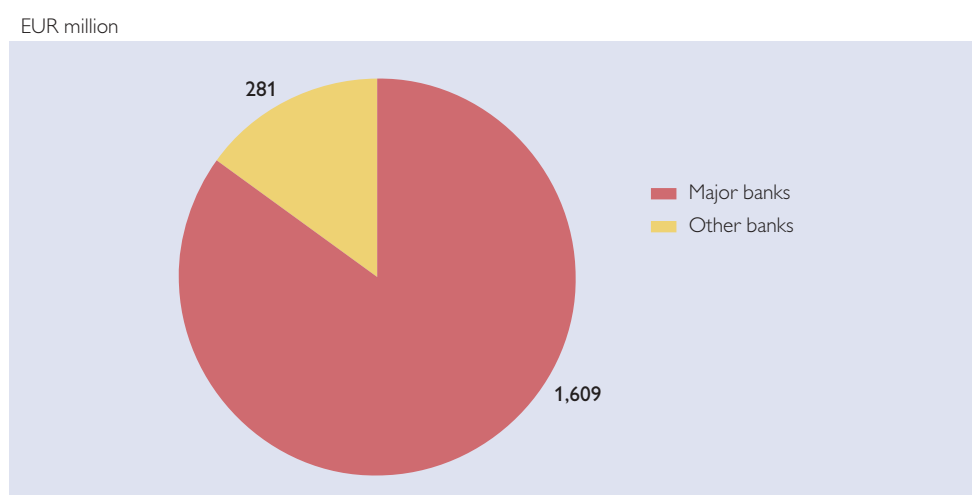
opportunities to diversify their portfolios and to outsource proprietary trading by using hedge funds, as well as the increased demand for these products by various bank customers.

### Volumes of Hedge Fund Exposures

At the end of 2004, the banks surveyed had a total hedge fund exposure (loans and investments)<sup>6</sup> of EUR 1.89 billion, thus showing an increase of 19% compared to the previous year. A vast majority (85%) of this exposure can be attributed to Austria's five major banks<sup>7</sup> (see chart 2). The volumes accounted for 0.37% of the surveyed banks' consolidated total assets in 2004, with this share ranging from 0.03% to 0.95% among the banks selected for the survey. Measured in terms of consolidated eligible own funds, the banks' average hedge fund exposure amounted to 6.78% in 2004, with figures ranging from 0.33% to 16.92%.

Chart 2

#### Share of Austria's Five Major Banks in Overall Hedge Fund Exposure



Source: OeNB.

<sup>6</sup> This includes shares and other investments in hedge funds.

<sup>7</sup> Bank Austria Creditanstalt AG (BA-CA), BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG (BAWAG P.S.K.), Erste Bank der oesterreichischen Sparkassen AG (Erste Bank), Raiffeisen Zentralbank Österreich AG (RZB), and Österreichische Volksbanken AG (OeVAG).

Along with the fact that seven of the banks in the survey did not have any business relations with hedge funds at all, the wide range of results certainly indicates very different business strategies in this area. Based on these voluntarily reported data, hedge fund investments do not seem to pose a threat to the overall banking system in Austria, even though the potential losses arising from these investments could easily have a considerable effect on the annual results of individual banks and thus also on their capital ratio.

For the most part, Austrian banks' hedge fund exposure consists of their direct investments in hedge funds. Loans to hedge funds account for approximately 4% (EUR 76.5 million in 2004) of the overall exposure and therefore play only a secondary role compared to investment volumes. However, the increase in loan exposure by 18% compared to the previous year points to a development similar to that of the banks' overall exposure.

If we compare the exposure of Austrian banks with the results of the BSC's EU-wide survey, it shows that the value of loans granted in Austria is negligible by comparison, while the investment exposure of Austrian banks, in some cases, is markedly higher than the EU average.<sup>8</sup>

The significance of Austrian banks' hedge fund activities for their overall performance is, however, currently low, as the share of annual profits derived from hedge funds is below one percentage point (2004).

A majority of the banks surveyed intend to increase their investment exposure to hedge funds in the future; at the same time, however, most of the banks do not plan to increase their activities in lending to hedge funds or in the prime brokerage<sup>9</sup> segment. Moreover, the banks also expect to see themselves and other credit institutions increasingly setting up their own hedge funds or using strategies similar to those of hedge funds in their own trading activities in the future.

### Risks and Risk Management

The surveyed banks in particular cited operational risks related to hedge fund management and technical systems as specific direct risks in their (investment) exposures to hedge funds. Moreover, they stated that they regarded liquidity, legal, market and model risks as relevant, and noted the low level of transparency in the hedge fund industry. Another risk for investors arises from the ability of some hedge funds to refuse redemption under certain circumstances.<sup>10</sup>

The banks assessed the indirect risks of hedge funds in different ways. For example, only few banks saw a problem in the potential counterparty risk arising from credit institutions which maintain high exposures to hedge funds (e.g. a number of prime brokers). The effects of similar trading strategies ("crowded trades") among various hedge funds as well as the potential shock to the financial market if a larger hedge fund collapses were also identified as indirect risks by several institutions.

<sup>8</sup> The BSC's results are based on reports from 16 major banks from 6 EU Member States; the data are, however, not directly comparable to the Austrian results due to considerable size differences and in some cases different business models (prime brokerage) of the surveyed banks.

<sup>9</sup> Prime brokerage refers to various financing, trading and settlement services for hedge funds.

<sup>10</sup> However, this should keep the funds from having to maintain very high liquidity reserves and thus increase returns (see Chordia, 1996, and Schwaiger, 2003, pp. 62ff.).

Suitable risk management is considered especially important, not least due to the above-mentioned reasons and the fact that many institutions plan to increase their hedge fund investments further. This will, above all, require a minimum level of diversification as well as careful selection (due diligence) and monitoring of exposures to hedge funds. Overall, the survey shows that the scope of banks' risk management activities increases along with their exposure to hedge funds, but also that risk management practices show room for improvement in several cases. However, the survey results alone allow only an incomplete assessment of the actual quality of risk management.<sup>11</sup>

In addition to quantitative and qualitative analysis of the funds, the due diligence process also involves management interviews and in some cases on-site visits. In this context, the banks surveyed attach great importance to the quality of hedge fund managers as well as the frequency and completeness of information provided by the funds. Due diligence reports from external organizations are also used for the purpose of evaluating hedge funds.

For the purpose of monitoring hedge fund positions, the banks generally receive monthly reports on performance and other positions (e.g. leverage) from the funds. Many of the banks also receive risk reports, which are usually provided by a third party (the administrator)<sup>12</sup>. In some cases, the hedge funds themselves also send weekly reports and ad-hoc reports in the case of extraordinary events. In this context, however, it is necessary to

question whether administrators' independence from the respective hedge funds is actually ensured, as the hedge funds themselves generally provide the underlying figures and as the remuneration structure for hedge fund managers can create incentives in information provision which are unfavorable to the investor.

In some cases, the banks' monitoring of hedge fund positions is aggregated according to the various fund strategies. In this process, the banks track statistics such as the concentration of exposures in certain markets, asset classes and currencies, as well as certain risk indicators, the utilization of limits and the performance of funds. Furthermore, a number of banks subject their investment exposures to stress tests which are also differentiated according to the funds' investment strategies. However, based on the overall findings of the survey, there seems to be room for improvement in the monitoring of hedge fund exposures in the case of several banks.

On the whole, however, both hedge funds and banks (especially prime brokers) have improved their risk management practices substantially in recent years.<sup>13</sup> The institutions surveyed also emphasized the fact that leverage in hedge funds is probably lower compared to the situation surrounding the Long-Term Capital Management (LTCM) crisis in 1998, although no uniform measure is used to determine leverage due to the methodological complexity of such calculations. Moreover, several banks noted that lock-up periods (during which investors cannot sell their fund shares

<sup>11</sup> The actual quality can be more accurately determined by means of on-site inspections.

<sup>12</sup> The administrator handles administration activities for the hedge fund.

<sup>13</sup> This was *inter alia* demanded by the Financial Stability Forum as a crucial measure to prevent systemic crises triggered by hedge funds. See Financial Stability Forum (2000).

without high penalties) have been extended to as long as three years.

## Regulatory Aspects

### Status Quo and Objectives

The current debate on the need for regulation of the fast-growing hedge fund industry is based on the potential threat to financial stability on the one hand and investor protection considerations on the other, as hedge funds are increasingly targeting new – and in some cases less professional – classes of investors.<sup>14</sup> In this context, the regulatory approaches chosen in individual countries to date differ specifically in the possibility of establishing domestic hedge funds, in the requirements regarding hedge fund management and administration, and in the regulations governing the sale of hedge fund shares.<sup>15</sup> On the whole, analyses of hedge fund databases such as the TASS or CISDM database<sup>16</sup> show that more than half of the hedge funds worldwide are domiciled in offshore financial centers due to their less stringent regulatory regimes, while more than three-quarters of the managers reside in the EU or the U.S. Far fewer funds and managers are domiciled in the EU compared to the U.S.

Identifying the extent to which hedge funds enhance or endanger financial stability calls for a differentiated perspective. On the one hand, hedge funds increase liquidity in several market segments and can therefore contribute to more efficient risk-sharing among financial market

participants. Moreover, hedge funds broaden the available investment opportunities and thus offer diversification advantages compared to traditional stock or bond portfolios. On the other hand, the use of leverage may also create liquidity risk for the funds themselves and, in turn, this risk can place considerable strain on market segments in which hedge funds have an especially strong presence. Due to spillover effects, these problems can also afflict other financial intermediaries.<sup>17</sup>

The regulation of hedge funds therefore has to be discussed in light of the potential threats to financial stability and the protection of less professional investors. In this context, the self-regulation of the hedge fund industry, which relies on standards for e.g. information provision or risk management practices, is especially important. Supervisory authorities, however, also need to discuss both direct and indirect regulatory measures.

### Regulatory Options for Investor Protection

Regulatory measures for the purpose of investor protection might include restrictions regarding qualified investors and minimum investment amounts for hedge funds. However, regardless of any limitations imposed on sales, better information on hedge funds will be required in order to enable investors to make well-founded decisions. In addition to voluntary information

<sup>14</sup> See OeNB (2005) and European Commission (2005a, 2005b).

<sup>15</sup> In Austria, for example, the law does not permit the establishment of domestic single hedge funds, whereas in Germany this is possible. Under Article 20a of the latest amendment to the Austrian Mutual Fund Act, however, Austrian investment companies can set up funds of hedge funds (FOHFs).

<sup>16</sup> TASS (Trading Advisors Selection System) Tremont and CISDM (Center for International Securities and Derivatives Markets) are two of the three large providers of hedge fund data.

<sup>17</sup> Detailed discussions of financial stability considerations in connection with hedge funds can be found in ECB (2004), SEC (2003), Baghai-Wadji et al. (2005) or Brealey and Kaplanis (2001).

provision by the funds themselves, (securities) investment advisors also play a central role in this context. Their role is related in particular to information and disclosure requirements regarding the potential risks associated with investing in hedge funds. In addition, it would also seem appropriate to improve general investor education with regard to fundamental market processes.<sup>18</sup>

### **Regulatory Options for Ensuring Financial Stability**

Among the available possibilities for supervisory regulation, a general distinction can be drawn between direct measures (i.e. those which apply to the hedge funds themselves) and indirect measures (i.e. those which apply to other parties involved).

Direct regulatory measures for the purpose of ensuring financial stability could comprise a general obligation to register hedge funds,<sup>19</sup> reporting requirements and/or supervisory audits of hedge funds. An internationally coordinated procedure is necessary in order to ensure the efficacy of such measures and to avoid further concentration in offshore financial centers. It would also be possible to restrict hedge funds' activities with regard to certain trading strategies, but this would reduce the flexibility of these funds substantially. Such a restriction would eradicate a substantial part of the positive contribution which hedge funds can make toward financial stability.

Indirect regulatory measures might include national registration obligations for hedge fund managers,<sup>20</sup> stricter disclosure requirements, improved risk management practices among the hedge funds' counterparties and investors (e.g. banks, prime brokers) as well as *ex ante* defined crisis management measures.

Compulsory registration for hedge fund managers appears to be easier to implement than registering the funds themselves, because far more managers than funds are currently based "on shore." If the obligation to register were coupled with more comprehensive reports to supervisory authorities, supervisors would no longer have to rely on information from external sources and could gain deeper insight into the managers' activities. In general, however, reports to the supervisory authority may not necessarily be conclusive due to the time lag between the underlying activities and the reports themselves, the difficulty of aggregating inhomogeneous data and the complexity of aggregating risk.<sup>21</sup> In any case, requiring hedge fund managers to register could help to reduce the number of hedge fund managers who appear unfit for the position, thus decreasing the incidence of fraud.

Improved and targeted risk management practices among the hedge funds' counterparties and investors, especially prime brokers, banks, insurance companies and pension funds,

<sup>18</sup> See also Donaldson (2003).

<sup>19</sup> Germany, for example, requires registration for hedge funds.

<sup>20</sup> For example, the U.S.A. and the United Kingdom currently require registration for hedge fund managers.

<sup>21</sup> While it can be considered useful if supervisory authorities collect parameters such as fund performance, capital, fee structures, strategies pursued, etc., the collection of aggregate risk measures such as value at risk (VaR) has to be seen as more problematic because this measure is of only limited usefulness given the complex, inhomogeneous and rapidly changing portfolios of hedge funds. Furthermore, unexpected events which are highly unlikely and can trigger a systemic crisis ("long-tail events") cannot be reliably depicted (see also Danielsson et al., 2004).

should also contribute to ensuring systemic stability. Related regulatory measures could come in the form of specific risk management requirements or an increase in direct supervisory activities. More intensive monitoring and harmonized EU-wide reporting requirements for these market participants with regard to their hedge fund exposures would not only raise the supervisors' level of information on hedge funds but also enhance market discipline. As numerous counterparties and investors are already subject to regulation, this approach would probably also be relatively easy to implement.

Danielsson et al. (2004) additionally suggest the *ex ante* definition of processes for crisis management (e.g. the involvement of the supervisory authority as a “moderator,” as was the case in the near-collapse of LTCM) in order to alleviate systemic crises triggered by hedge funds.<sup>22</sup> However, this approach leaves many questions unanswered, for example which parties can activate the crisis management plan if necessary or how potential losses are to be distributed among the parties involved.

Finally, due to the positive effects that hedge funds can have on international financial markets, evaluations of possible regulatory measures should always carefully weigh the costs of regulation to the hedge fund industry against the benefits in terms of securing financial stability and investor protection. Furthermore, the creation of “pseudo-regulation” should be avoided, as this could give investors a

(false) sense of relative security based on the involvement of the supervisory authorities.

### Conclusions

Against the backdrop of continuing rapid growth in the hedge fund industry, a discussion is underway at the international level about whether hedge funds pose a threat to financial stability in addition to their positive effects on international financial markets, and whether stricter regulation is necessary for this alternative investment form.

The results of a survey of Austrian credit institutions show that these have relatively low hedge fund exposures compared to their total assets at end-2004, although substantial differences can be observed among the banks surveyed. Furthermore, several banks have particularly high exposures in relation to their own funds. Based on the survey's results, the accompanying risk management measures currently appear to be sufficient in most cases; there is, however, room for improvement in the case of some banks.

As for the question of stricter regulations for the hedge fund industry, the costs and benefits of potential regulatory measures should always be weighed carefully. Regulatory measures should also be coordinated internationally in order to prevent hedge funds from simply changing their domicile to less regulated financial centers, thus ensuring that these measures are actually effective. From today's perspective, as a minimum, greater transparency in the entire hedge fund

<sup>22</sup> In such a scenario, it would be necessary to ensure that public funds are not made available for the purpose of resolving the crisis. However, this demand is limited by the fact that public funds can indeed be used in the case of banking crises.



industry – along with enhanced financial education for investors and careful management of counterparties’ and investors’ exposures to hedge funds on the basis of sound information – is necessary.

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