

Assessing the Relevance of Austrian Investment Companies and Mutual Funds for Financial Stability

This paper looks at the role Austrian investment companies and the mutual funds managed by them play in the context of financial stability. At the end of the third quarter 2009, the 30 Austrian investment companies (of which 5 manage real estate funds) had invested around EUR 114 billion in the market. Given the repercussions arising from interlocks between investment companies and other financial intermediaries (such as credit institutions, insurance companies, pension funds and severance funds) in the event of a financial crisis, this study explores the underlying risks and makes an attempt at quantifying the mutual dependencies, focusing above all on market and reputational risks.

Areas that are relevant for financial stability include the contribution of investment companies to the profitability of banks and the potential risks related to the role of custodian banks. Furthermore, the distribution and administration of mutual funds issued by investment companies affiliated with banks is a source of commission income for the banking sector. Finally, the use of mutual funds (in unit-linked life insurance plans) as repayment vehicles for foreign-currency bullet loans may cause funding gaps in the event of poor fund performance, which could increase the credit risk exposure of the banks involved.²

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1 Introduction

Under the Austrian Investment Funds Act, a mutual fund is a portfolio of assets invested collectively with a view to risk diversification. Investors become co-owners of the given portfolio of securities and/or money market instruments and/or other liquid financial assets by buying mutual fund shares, which they may resell at the applicable repurchase price. A mutual fund may issue either “unit certificates evidencing a claim to annual distributions of annual income to the unit holders (income-distribu-

ting unit certificates)” or “unit certificates not evidencing a claim to distributions of annual income to the unit holders (income-retaining unit certificates).”³ Domestic companies managing mutual funds must be licensed as banks, which means that their operations are subject to the Austrian Banking Act and to banking supervision.⁴ Among other things, the Austrian Investment Funds Act distinguishes between retail and institutional funds, with investment in the latter being limited to no more than ten investors and subject to a minimum invest-

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² See “Extension of the FMA Minimum Standards for Granting and Managing Foreign Currency Loans and Loans with Repayment Vehicles of 16 October 2003; Extension of 22 March 2010” (www.fma.gv.at/cms/site/attachments/5/2/6/CH0217/CMS1272028701173/fma-fxtt-ems_final_en.pdf).

³ Article 22 paragraph 2 no. 7 Austrian Investment Funds Act.

⁴ The activity of managing mutual funds (under the Austrian Investment Funds Act) and real estate funds (under the Austrian Real Estate Investment Funds Act) qualifies as a banking activity under Article 1 paragraph 1 nos. 13 and 13a of the Austrian Banking Act and must be licensed by the Financial Market Authority.

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Robert Hellwagner,
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Market Authority

ment of EUR 250,000 for natural persons.⁵

When the framework for financial market supervision was reformed in Austria in 2008, the OeNB's financial stability mandate was spelled out explicitly in Article 44b of the Federal Act on the Oesterreichische Nationalbank: *"In the public interest, the Oesterreichische Nationalbank shall monitor all circumstances that may have an impact on safeguarding financial stability in Austria."* To fulfil this responsibility, the OeNB gathers individual data from mutual funds⁶ and investment companies, which enable it to undertake comprehensive stability analyses.⁷

At the end of September 2009, 25 domestic investment companies and 5 domestic real estate investment companies were managing a total of 2,224 securities mutual funds and 6 real estate mutual funds. The 5 real estate investment companies had total (balance sheet) assets of EUR 35 million at the end of Q3/09, and between them they had EUR 1.8 billion under management, which is a share of 1.3% of the entire assets under management by all 30 companies. In other words, their impact on aggregate results is very limited. In the following and for the sake of simplicity, we generally refer to funds and investment companies irrespective of the different underlying legal provisions.

Taken together, the total (balance sheet) assets of all investment companies added up to almost EUR 600 mil-

lion at the end of Q3/09, which corresponded to just 0.06% of the aggregated unconsolidated total assets of the Austrian banking system. Yet this small ratio is put into perspective by the net asset value (NAV) those companies have invested in the market on behalf of mutual fund buyers, namely EUR 114 billion, which is sufficiently high to be of potential relevance for the stability of the Austrian financial system. Typical buyers of mutual funds include households, insurance companies, pension funds, severance funds as well as credit institutions. Given the high degree of integration between investment companies and other financial intermediaries, the purpose of this paper is to identify the key risks for the stability of the Austrian financial market and to analyze potential channels of contagion. Unless indicated otherwise, the data for this study relate to the end of the third quarter of 2009. In section 2, we provide a summary overview of the latest developments in the Austrian mutual fund market. Section 3 highlights the interlinkages with, and potential channels of contagion to, banks and other financial intermediaries. Section 4 concludes with a summary of key results.

2 Latest Developments in the Austrian Mutual Fund Market

Having invested a consolidated NAV of approximately EUR 114 billion in the market on behalf of investors at the end of Q3/09, Austrian investment compa-

⁵ In this study we refer only to products that are covered by either the Investment Funds Act or the Real Estate Funds Act, i.e. we disregard closed real estate funds, private equity funds, dividend-right certificates of collective investment schemes other than investment funds, etc. Similarly, we do not refer to foreign mutual funds with sales licenses in Austria under Articles 30 and 36 of the Investment Funds Act.

⁶ In line with the Regulation of the ECB concerning statistics on the assets and liabilities of investment funds (ECB/2007/8).

⁷ Statistical information is collected on a security-by-security basis for securities held by funds and on an aggregate basis for all other assets (such as deposits, financial derivatives and property). Since investment companies must be licensed as banks, they are also subject to the reporting requirements imposed on banks, which provides the OeNB with quarterly data on the structure and profitability of such companies.

nies play a prominent role in the Austrian financial market. In total, i.e. including the assets invested in Austrian mutual funds, Austrian investment companies were managing EUR 137 billion.⁸ Austrian mutual funds thus accounted for 2% of the European mutual fund market, which is the second-biggest in the world (with 38% of global assets) after the United States (44%).

At the end of Q3/09, 25 investment companies plus 5 real estate investment companies managing a total of 2,230 mutual funds were subject to supervision in Austria.⁹ Following a steady rise in the number of mutual funds from 1,893 in Q4/03 to 2,337 in Q1/08, those numbers have since gone down by 4.6% (107 mutual funds) until the end of Q3/09. While this decline reflects a combination of factors, the merger of commercially unviable smaller funds and the unwinding of funds with unsatisfactory returns appear to have been the driving factors.¹⁰ The lion's share – 85% of the consolidated NAV of mutual funds – is held by domestic investors, with households and nonprofit institutions serving households (EUR 35 billion) as well as insurance companies and pension funds (EUR 33 billion) being the biggest domestic investor groups.

Annual growth of assets under management averaged 4% from end-

2003 until Q3/09.¹¹ However, this period was highly heterogeneous, including both boom years (2005: +25%) as well as the latest financial crisis (2008: –23%), which clearly took its toll on the mutual fund industry and visibly affected investor confidence.¹² In a quarterly comparison, aggregated funds under management dropped seven consecutive quarters from Q3/07 to Q1/09, whereas annual growth rates have been negative since Q4/07. Interestingly, institutional fund assets (+10.4% growth per annum since 2004) have recorded higher growth rates than retail fund assets (+0.7%) every single year since 2004. This pattern was particularly pronounced in 2008, when retail fund volumes contracted by 30% whereas institutional fund assets declined by just 7%. As a result, the share of institutional funds in total funds under management increased further during the crisis, jumping from 28% in mid-2007 to 38% in Q3/09. Besides possible performance differentials, this increase most likely reflects the fact that investors in institutional funds shifted assets between their funds, while retail investors liquidated some of their mutual fund holdings and invested the proceeds in government-guaranteed savings deposits.

For reasons of data availability over the entire review period, an assessment

⁸ The difference between the assets actually invested in the market (consolidated net asset value) and assets under management results from domestic mutual fund shares/units that are held by Austrian mutual funds themselves. For instance, the assets of a pure fund-of-funds are disclosed under assets under management, but have not been invested directly in the market. Thus, the change in assets under management reflects not only the performance of mutual funds and net capital inflows but also changes in fund structures.

⁹ At the same time, 5,234 foreign funds were licensed for sale in Austria (source: VÖIG (Association of Austrian Investment Companies)), and Austrian investors had placed EUR 26.36 billion with them (source: OeNB).

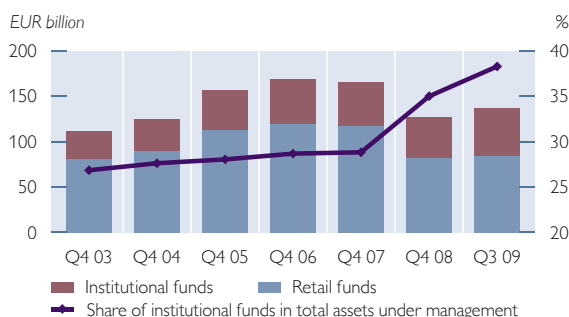
¹⁰ The profitability of investment companies is discussed in section 3.2.

¹¹ This figure is a compound annual growth rate, which corresponds to an aggregate rise of assets under management by 23.7%. In the European market, assets under management increased by 43.9% to EUR 6,840 billion over the same period of time.

¹² See also Probst and Sedlacek (2009).

Chart 1

Development of Mutual Funds' Assets under Management



Source: OeNB.

by category of funds has to be limited to retail funds: It is noteworthy that from Q4/03 to Q3/09, both equity and bond funds suffered a decline in assets under management (-2.3% and -0.8% per annum, respectively), whereas money market funds¹³ and mixed funds grew during that period ($+4.8\%$ and $+3.3\%$ per annum, respectively). Real estate and hedge funds, which had still played a negligible role among Austrian retail funds at end-2003, became increasingly popular with investors over the years, accounting for respectively EUR 1.7 billion and EUR 527 million, at the end of Q3/09.¹⁴

As of the third quarter of 2009, institutional funds and retail funds reflected rather a mixed investor behavior: While the majority of institutional funds were classified as mixed funds (51%), the bulk of retail funds were classified as bond funds (54%). Fur-

thermore, as much as 39% of institutional funds were classified as bond funds and only 8% as equity funds, whereas 24% of retail funds were classified as mixed funds and as much as 15% as equity funds.¹⁵ In terms of geographical allocation, more than three-quarters of the consolidated NAV of Austrian mutual funds were invested abroad (53% in other euro area countries, 24% in the rest of the world) and less than one-quarter in Austria itself.

An analysis of the factors that explain the change in value of assets invested in the market shows that both investors' appetite¹⁶ as well as the funds' performance and income started to decline as early as 2006, even before the financial crisis erupted. This trend continued through 2008, with net sales of fund shares by investors in 2007, 2008 and Q1/09 as well as price losses being recorded in 2008 and in Q1/09. In Q2/09 and Q3/09, the consolidated NAV of mutual funds was rising again. On balance, it increased by a total of 8% in the first three quarters of 2009 to EUR 114 billion, which was nonetheless considerably below the peak recorded in Q2/07 (EUR 145 billion). The recent recovery reflected above all the rally on stock exchanges that started in March 2009, while the inflow of new funds from investors remained subdued. Price gains and in-

¹³ Reported in line with regulation ECB/2001/13.

¹⁴ In this study, the term "hedge fund" covers only funds of hedge funds which are governed by the Austrian Investment Funds Act and which are in line with the definition given in the Regulation of the ECB concerning investment funds (ECB/2007/8), for which reporting began with data for December 2008. Therefore, those funds represent only part of the Austrian hedge fund market. In general, reclassifications of funds over recent years have distorted time series, which had an impact on some of the growth rates indicated. In particular, some bond funds were reclassified as money market funds and some hedge funds were reclassified as other funds following the implementation of the ECB's regulation concerning investment funds at the end of 2008.

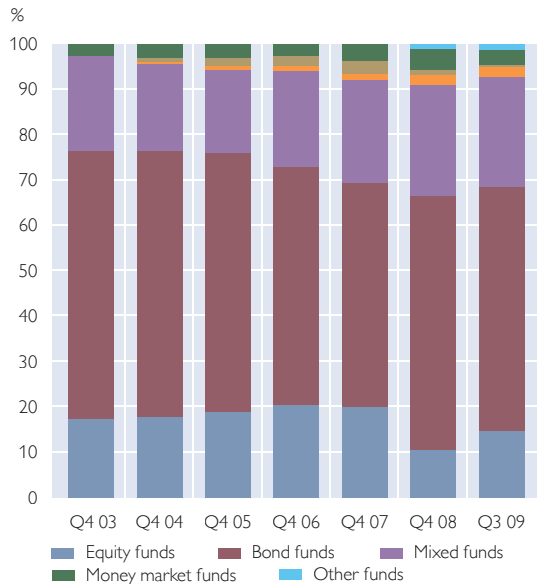
¹⁵ Given that institutional funds tend to be able to change their asset allocation more flexibly than retail funds, changes in asset allocation strategies need not necessarily lead to a change in the fund categories.

¹⁶ Measured in terms of the net balance of newly issued and repurchased mutual fund shares.

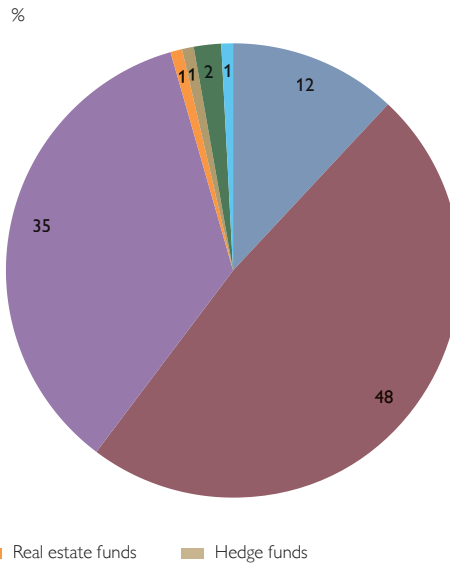
Chart 2

Allocation of Assets among Individual Fund Categories

Categories of Retail Funds



Assets under Management by Retail and Institutional Funds in Q3 09



Source: OeNB.

come increased the consolidated NAV of mutual funds by EUR 9.0 billion in the first nine months of 2009, while net capital inflows added just EUR 950 million. Thus, investor confidence in domestic mutual funds is returning only gradually and slowly after the crisis.

3 Interlocks with Other Financial Intermediaries and Possible Repercussions on Financial Stability

The strong ownership and asset interlocks of investment companies with other financial corporations, such as credit institutions, insurance companies, pension funds and severance funds, may give rise to spillovers among financial market agents that are of relevance for the stability of the Austrian financial market. This aspect

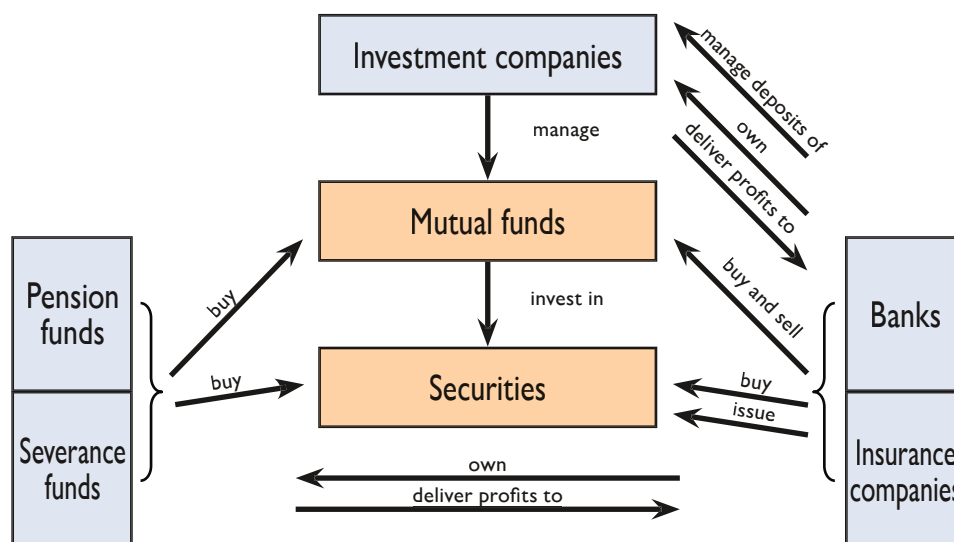
will be dealt with in the following section.

3.1 Mutual Contagion Risks of Banks, Investment Companies and Mutual Funds

At the end of September 2009, domestic banks held mutual fund shares worth some EUR 9.9 billion, which is close to 1% of total unconsolidated assets of the Austrian banking system. In turn, close to 7% (EUR 7.5 billion) of the consolidated NAV of Austrian mutual funds was invested in (debt and equity) securities issued by Austrian credit institutions.¹⁷ These EUR 7.5 billion represent roughly 40% of the mutual fund assets invested in domestic securities. This does not imply, however, that investment companies have invested a disproportionately high share with banks, as banks accounted for almost

¹⁷ National accounts sector 122 in line with ESA 95.

Interlocks between Investment Companies and Other Financial Intermediaries



50%¹⁸ of (debt and equity) securities issued by Austrian entities that were outstanding at the end of Q3/09.

At the same time, a comparison of individual investment companies shows that companies which are not closely affiliated with any of the domestic banks have smaller investment interlocks with the banking sector. In this context, price losses of domestic bank instruments may have a material impact on the performance of Austrian mutual funds and reinforce liquidity constraints when there is an excess of bank instruments on offer (danger of fire sales). In the event of a banking crisis, investment companies affiliated with banks thus face not only a reputational risk resulting from ownership interlocks and brand association, but also the risk that price and liquidity losses suffered by bank instruments may feed through to their mutual funds. Hence a combination of factors may trigger capital outflows from investment compa-

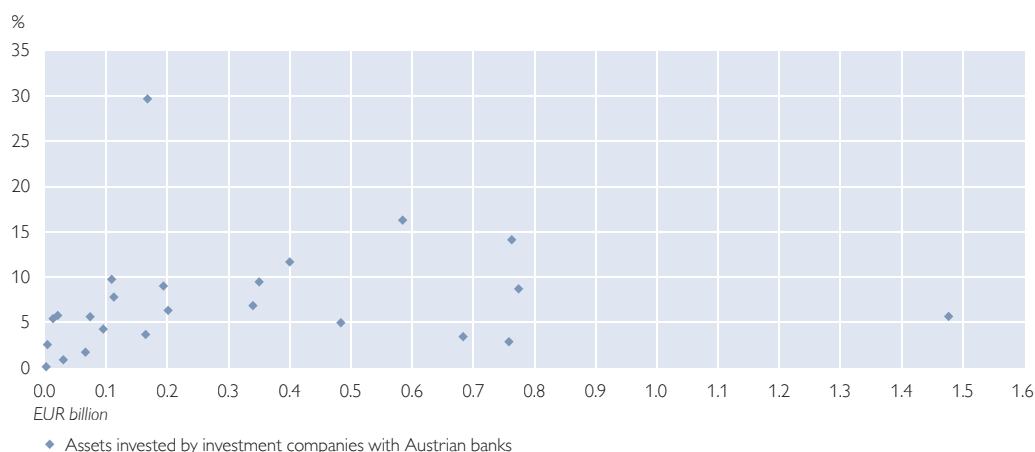
nies, which would add to the predicament of the investment company and its parent bank.

Investment companies subject to supervision in Austria (see the corresponding data points in chart 4) have different exposures to bank instruments. As is evident from chart 4, there is one investment company which has invested as much as 30% approximately of its assets with domestic banks. In this respect, investments made with parent banks might give rise to a conflict of interest if fund managers were to sell bonds or shares of their parent bank, or to remove deposits from their parent bank, in the interest of their clients upon evidence of problems at the parent bank. In order to limit this exposure, the Austrian Investment Funds Act stipulates that “an investment fund may not combine investments in securities or money market instruments issued by, deposits made with, and/or exposures arising from OTC derivative transactions to a

¹⁸ Source: OeNB issuance statistics for September 2009.

Chart 4

Assets under Management by Investment Companies Invested with Austrian Bank Instruments¹



Source: OeNB.

¹ In absolute figures (EUR billion) and as a percentage share of volume invested by each investment company; excluding investment companies that have not invested in bank instruments.

single credit institution in excess of 20 per cent of its assets.”¹⁹

Another way in which banks may be exposed to mutual funds is through capital guarantees they may have assumed for such funds. In Austria, approximately EUR 4.8 billion have been invested in capital-guaranteed mutual funds, with banks having offered guarantees for as much as EUR 3.7 billion thereof.²⁰ At the same time, the corresponding exposure of banks is limited, as most mutual funds come with quantitative models that will cause assets to be shifted into fixed-income securities before the guaranteed amount of capital becomes underfunded.²¹ All that remains in this case is the overnight risk, which is defined as the price loss for invested securities within the period in which the investment may not be changed; but the overnight risk is typically small.

To sum it up, we can say that adverse market developments may cause additional negative effects and feedback effects as a result of strong interlocks between banks and investment companies.

3.2 The Importance of Investment Company Performance for the Banking Sector

Most Austrian investment companies (80% measured in terms of balance sheet assets) are subsidiaries of Austrian banks, which benefit from their stakes in those companies one way or other. On the one hand, parent banks stand to receive profit transfers from affiliated investment companies; the contribution of such transfers to the aggregate annual surplus of the Austrian banking sector came to 2.6% in Q3/07, close to 2% in Q3/08, and close to 5% in

¹⁹ Article 20 paragraph 3 no. 8d Austrian Investment Funds Act.

²⁰ The remainder of guarantees have been provided by foreign banks (EUR 0.8 billion) and insurance companies (EUR 0.4 billion).

²¹ For example, a value protection strategy such as a constant proportion portfolio insurance.

Q3/09.²² This implies that the banking industry suffered a sharper decline in profitability in recent years than investment companies. When we take the annual surplus of investment companies that are affiliated with domestic banks as an upper limit for approximating profit transfers, investment companies may have transferred up to EUR 44 million to the Austrian banking system in 2009 – which means that they had a rather limited impact on the stability of Austrian banks in this respect. On the other hand, banks earn commissions when they sell shares in mutual funds (typically those issued by their affiliated investment companies), and the fees for trading securities and holding securities in safe custody boost the income of the respective parent

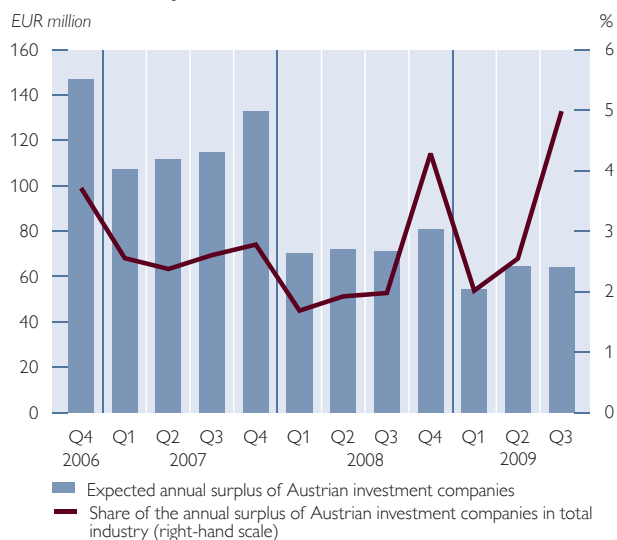
banks, which tend to do most of the trading. Thus, the profitability of domestic investment companies contributes to the stability of the Austrian banking sector.

The UCITS IV directive,²³ which was adopted in 2009 and is to be transposed into national law by 2011, commits EU Member States to introducing best execution principles which will ensure that investment companies conduct their business activities in the best interests of the funds they manage. The best execution policies are going to fuel competition for the services of custodian banks and brokers (which have often been provided by one and the same credit institution so far) and may thus possibly limit the profitability of custodian banks and brokers.

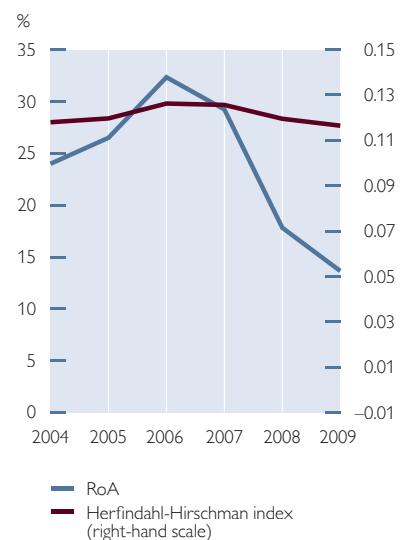
Chart 5

Austrian Investment Companies: Profitability and Competition

Annual Surplus of Investment Companies and Shares in Total Industry



Return on Assets and Herfindahl-Hirschman Index



Source: OeNB.

²² Annual surplus of all domestic investment companies in Q3/09: EUR 64 million, aggregate annual surplus of the Austrian banking sector as a whole: EUR 1.3 billion.

²³ Directive of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS). This directive does not cover real estate funds.

The profitability of investment companies has been limited already in the past through the relatively high degree of competition in the mutual fund market. In particular, measured in terms of the Herfindahl-Hirschman index²⁴ the concentration of the mutual fund market (excluding companies managing real estate funds) was rather low in the third quarter of 2009 with around 0.12, and has been going down since 1998. Given the relatively high number of investment companies with market shares of between 1% and 4%, the fund market is indeed competitive. At the same time, more than 50% of assets under management are concentrated at three investment companies.

The return on assets (RoA) of investment companies dropped sharply from more than 30% in 2006 to below 15% in 2009, and the Herfindahl-Hirschman index declined slightly over the same period.

At the same time, the fact that most Austrian investment companies are affiliated with domestic banks gives rise to mutual reputational risks. If, say, the parent bank were to run into financial difficulties, investors might withdraw funds deposited with affiliated investment companies, which might in turn trigger distress sales of securities and lower the income of the parent bank. Other systemically relevant aspects of such interlocks with regard to the role of custodian banks will be discussed in greater detail below.

3.3 The Relevance of Custodian Banks for Investment Companies

The 24 Austrian custodian banks fulfil an important task for domestic mutual

funds, as they are appointed to “*issue and repurchase the unit certificates as well as to keep the securities belonging to an investment fund in safe custody and to keep the accounts belonging to the fund.*”²⁵ This stringent definition of the role of custodian banks would not leave any room for a systemically relevant channel of contagion, as the securities held by mutual funds are kept in segregated accounts and are therefore unaffected by creditor claims against the custodian bank.

This is not the case, however, for deposits that mutual funds have made with banks in order to optimize their asset allocation and ensure the liquidity of their mutual fund shares. Such deposits are not covered by the Austrian deposit insurance scheme under Article 93 paragraph 5 no. 5 of the Austrian Banking Act. Moreover, in order to keep administrative overheads low and for reasons of logistical efficiency, these deposits are often held with the custodian bank of the mutual fund. In the event of bankruptcy of the credit institution entrusted with these deposits, two problems would arise for the affected mutual funds: First, their deposits would be part of the bankruptcy estate and would thus be exposed to a risk of loss like any other ordinary investment. Second, the mutual funds would not have immediate access to their deposits, which might give rise to liquidity constraints. Potentially, they might be forced to sell securities in order to restore their liquidity and regain investment flexibility. In this respect, there is a potential channel of contagion running from banks to mutual funds and, under a worst case scenario, even

²⁴ The Herfindahl-Hirschman index is a measure of market concentration and can range between 1 and $1/N$ (N being the number of firms operating in a given market). An index of 1 would indicate a monopoly; the lower the index, the lower the degree of market concentration is.

²⁵ Article 23 Austrian Investment Funds Act.

to the financial market, if securities sales under distress were to depress prices. At the same time, the volatility of deposits made by mutual funds makes liquidity management more difficult for custodian banks, as, unlike other clients, fund managers tend to adjust the size of their deposits rapidly, depending on the prevailing market conditions.

While in Q3/09 Austrian mutual funds had invested more than 90% of their assets in securities, they also held short-term liquid deposits with domestic and foreign monetary financial institutions (MFIs) totaling EUR 11.5 billion, of which 98% were with domestic MFIs. This corresponds to approximately 10% of mutual funds' consolidated NAV and to around 2% of the aggregate deposits made by banks and nonbanks with domestic MFIs. At the same time, mutual funds had credit liabilities of approximately EUR 4.5 billion. In general, the share of mutual

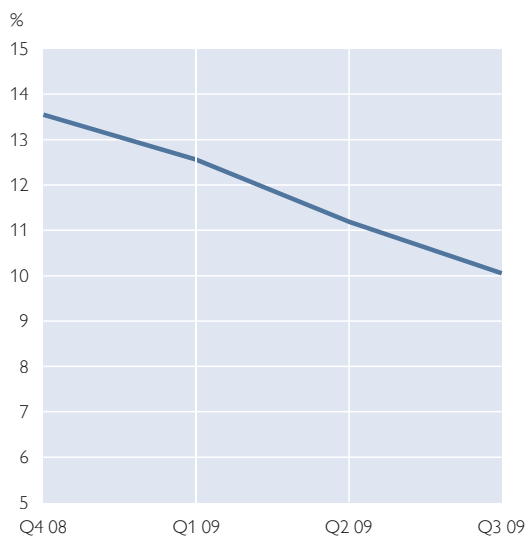
funds' deposits with domestic and foreign MFIs relative to their consolidated NAV has been constantly declining since Q4/08, from 13.6% to 10.1%, which points to a lower liquidity preference and reduced defensive deposits in 2009 – a development that helped to support the financial market recovery.

Since Austrian mutual funds do not report deposits on an individual bank basis, it is not possible to provide an exact quantitative analysis of the interlocks between mutual funds and individual MFIs. The heavy concentration of assets under management with just three custodian banks (59% in Q2/08, 57% in Q3/09) reflects the large market share of the three investment companies affiliated with these parent banks, and also suggests a high degree of concentration of deposits with those custodian banks. This would be problematic insofar as the risk for the liquidity of the Austrian mutual fund indus-

Chart 6

Mutual Fund Deposits with MFIs and Allocation of Assets among Custodian Banks

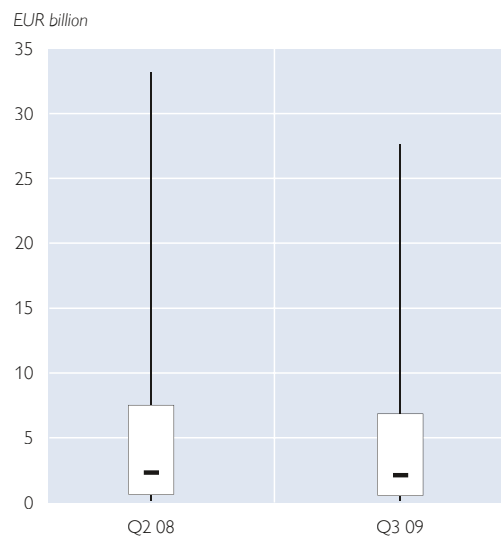
Share of Deposits with MFIs in Consolidated NAV



Source: OeNB.

Note: NAV stands for net asset value.

Assets under Management with Austrian Custodian Banks (Quartile Ranges)



This chart shows the lowest and the highest level, the first and second quartiles, and the median (horizontal line).

try and its investors would be concentrated with those three financial institutions.²⁶ The uneven distribution of mutual fund assets among Austrian custodian banks is also evident from chart 6.

Should a bank with which a mutual fund has placed deposits run into trouble, the fund manager might decide to withdraw his deposits, which would reduce the bank's deposit base and cause its refinancing situation to deteriorate. Given that most Austrian investment companies are owned by Austrian banks, which often provide custodian services for their funds, the aforementioned situation would create a conflict of interest for fund managers of affiliated investment companies. While withdrawing the deposits from a distressed parent bank might be in the interest of investors, it would at the same time exacerbate the situation of the parent bank. In order to counteract such corporate governance issues, Article 2 paragraph 9 of the Austrian Investment Funds Act provides for the separation of organizational and personal responsibilities at investment companies and custodian banks.²⁷

The effects of strong interlocks have also been evidenced in 2008 by the case of Constantia Privatbank AG,²⁸ which served as a custodian bank for many external investment funds but did not have the backing of a major bank. As a result, it was more dependent on fund-

ing through mutual funds' deposits and the interbank market. In this particular case, the combination of a bank with a small balance sheet, a large custodian business and a dependence on liquidity lines with larger banks, who had no ownership relations and interests, proved to be problematic.

3.4 Insurance Companies and Investment Companies

With insurance companies owning less than 2% of total (balance sheet) assets of investment companies, ownership interlocks between the two industries are negligible. Yet with the business model of insurance companies calling for long-term investment strategies, domestic mutual fund shares accounted for almost EUR 20 billion of insurance companies' assets in Q3/09²⁹ – which is more than 20% of the balance sheet assets of the insurance sector and close to 18% of the NAV invested in mutual funds. In this respect, insurance companies are exposed to operational and market risks. The investment risk of insurance companies may materialize when negative investment income causes claims of insurance holders to become underfunded, or when traditional life insurance plans fail to generate the guaranteed investment income. Of the EUR 20 billion that insurance companies held in mutual funds in Q3/09, unit-linked life insurance plans accounted for some EUR 7.5 billion,

²⁶ Article 20 paragraph 3 no. 8d Austrian Investment Funds Act.

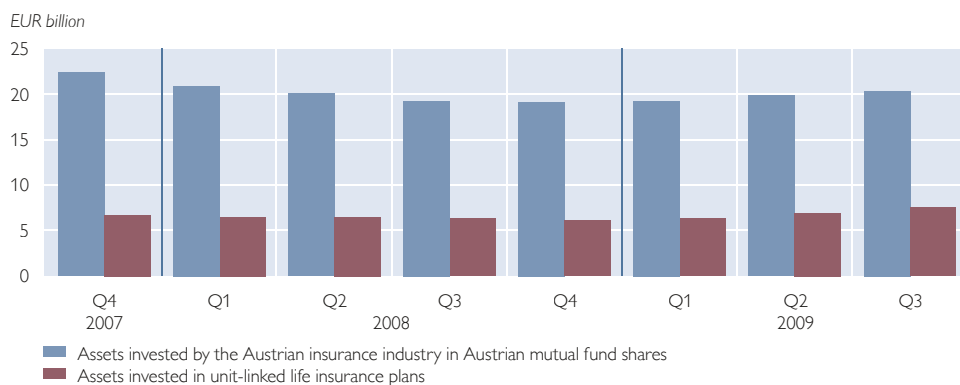
²⁷ The relevant clause reads as follows: "No manager of the custodian bank and no member of the custodian bank's supervisory board shall be a member of the supervisory board of the investment company. No manager or authorised signatory of the custodian bank and no member of the custodian bank's supervisory board shall be a manager or authorised signatory of the investment company." In addition, the relevant agents in Austria are subject to self-regulation commitments, which have been approved by the FMA (quality standards of the Austrian mutual fund industry 2008).

²⁸ www.oenb.at/de/presse_pub/aussendungen/2008/2008q4/20081017_constantia_privatbank.jsp#tcm:14-91868 (press release, available in German only).

²⁹ Unit-linked life insurance plans could not be broken down into domestic and foreign mutual fund shares because there is a lack of corresponding data.

Chart 7

Assets Invested by Austrian Insurance Companies in Austrian Mutual Fund Shares



Source: OeNB.

the underlying investment risk of which is borne by policy holders alone.

Unit-linked and index-linked life insurance plans have been very popular also as repayment vehicles for foreign-currency bullet loans, with Austrian households currently relying on such plans to generate as much as half of the amounts they will need to repay (some EUR 15 billion). Thus, such plans constitute yet another link between credit institutions, insurance companies and mutual funds. Through unit-linked life insurance plans, the malperformance of mutual funds may cause foreign currency-denominated bullet loans to become underfunded³⁰ and may thus add

to the risk that the borrower may default. A survey among domestic banks (which considers data up until Q4/08) shows that, at the lowest point of the crisis, accumulated savings fell approximately 16% short of planned values, with varying consequences depending on the maturity of the loan and the underlying investment strategy of the mutual fund. The ensuing additional credit risks for banks are mitigated by collateral, such as property holdings.

Reverse interlocks arising from the investment of mutual fund assets in securities issued by Austrian insurance companies were rather limited with a size of EUR 156 million (Q3/09).

Box 1

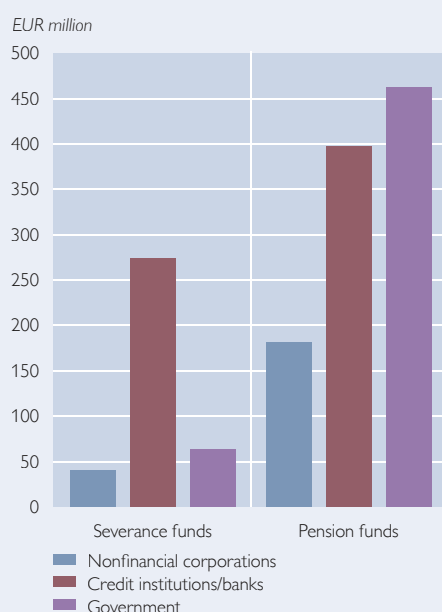
Role of Pension Funds and Severance Funds with Regard to Interlocks between Banks and Investment Companies

In Austria, pension funds and severance funds are majority-owned by the financial sector: On an asset-weighted basis, 65% of all such funds are controlled by domestic banks. Between them, pension and severance funds had accumulated approximately EUR 16 billion by the end of Q3/09, with pension funds accounting for EUR 13.3 billion and severance funds for EUR 2.7 billion (with the latter posting an annual growth rate of 33.5% in 2009). Of those EUR 16 bil-

³⁰ See "Extension of the FMA Minimum Standards for Granting and Managing Foreign Currency Loans and Loans with Repayment Vehicles of 16 October 2003; Extension of 22 March 2010" (www.fma.gv.at/cms/site/attachments/5/2/6/CH0217/CMS1272028701173/fma-fxtt-ems_final_en.pdf).

lion, 91% had been invested in securities, the remainder being cash balances or balances with credit institutions. In turn, 91% of the assets invested in securities were invested domestically, either directly in Austrian securities (only around EUR 340 million) or indirectly through Austrian mutual funds (EUR 12.8 billion). In other words, pension and severance funds had invested 80% of their total assets in domestic mutual funds at the end of September 2009. In particular, they had invested EUR 671 million in bank instruments, either directly or indirectly through mutual funds, which is rather a limited share, given the total outstanding amount of almost EUR 280 billion invested in bank instruments.

Investment Volume of Domestic Pension and Severance Funds by Debtor Sectors (EUR 1.5 billion)



In addition to their deposits with banks, pension and severance funds had invested as much as 14% of their cash balances with domestic banks or into instruments issued by the latter. In the event of bank defaults, these interlocks would have a – mixed – negative impact on the performance of pension funds and severance funds. With respect to pension funds, the direct exposure to investment risks is limited, as most of these risks are borne either by the employers (to the extent that they are obliged to make supplementary contributions) or by the beneficiaries of the pension plans. Only 27%¹ of the pension assets are subject to a minimum return guarantee. Even so, the underlying stability risk for pension funds is relatively small at present, as – following a legislative change in 2003 – this minimum return must be provided only when the pensions actually become due.²

The exposure of severance funds is somewhat higher: Severance funds, which invest 69% of their capital into mutual fund shares, are subject to a nominal capital guarantee under Article 24 of the Severance Fund Act, which means that beneficiaries are entitled to receive

the amounts they originally paid in irrespective of associated administrative costs. Thus, a prolonged negative performance of mutual funds (scenario: three consecutive years at 2008 performance levels) would deplete the reserves of individual severance funds, as a result of which their owners would have to inject more capital.³ As the capital guarantee is of a nominal nature, severance funds should, however, be able to defuse the situation by shifting funds in a timely manner, for instance such that they track the secondary market yield (which is approximately 3% at the time of writing). Adjusted for inflows and outflows and for costs, severance funds were able to realize an average increase in capital of 1.4% in the period from 2004 to 2009.⁴

From a liquidity perspective, the situation would appear to be less critical, as in the early stages of the new severance pay system – under which all staff taken on from January 2003

¹ As of December 2008.

² On the one hand, only 11% of pension plan members were already entitled to pension payments at the end of 2008; on the other hand, pension funds had accumulated EUR 56 million in terms of minimum return reserves, which they started to build from premiums in 2003.

³ The scenario figures are based on a survey that the OeNB conducted in 2009.

⁴ In line with capital-weighted OeNB calculations based on data reported by severance funds. Note that these calculations are based on the assumption that capital guarantees would have to be redeemed for every single beneficiary account. These figures are not tantamount to a performance report. Performance reports can be accessed under www.oekb.at.

(and all new self-employed persons from January 2008) accrue entitlements to severance payments – inflows exceed outflows up to four or five times. Here, too, the sector and/or the system is getting increasingly vulnerable to (another) market crisis the closer the system gets to its equilibrium state. Irrespective of the performance of pension and severance funds for beneficiaries, they are going to be a source of stability for companies managing mutual funds. After all, premiums paid into pension funds and severance funds add up to almost EUR 2 billion each year, and the bulk of this amount is invested indirectly, i.e. into mutual funds, thus providing the financial system with stable returns and a steady supply of liquidity.

4 Summary of Key Results

Given the relatively small balance sheets of investment companies, they do not pose a systemic danger for credit institutions. Yet the net asset value they have invested in the market adds up to EUR 114 billion and thus does have an impact on financial stability.

In particular, the overlapping roles of custodian banks, parent banks and banks with which the liquid assets of mutual funds are invested, warrant further observation. This study provides a thorough overview of the interlocks between mutual funds and all other financial intermediaries. In addition, we were able to quantify the ownership in-

terlocks of credit institutions, investment companies, severance funds and pension funds. On balance, the underlying risks to financial stability would appear to be limited.

What the paper did not look into are operational risks (which should not be underestimated as the Madoff scandal in the U.S.A. has shown) and the effects of the UCITS IV directive.³¹ Likewise, we did not include any indirect feedback effects on financial stability (and, thus, on the real economy) resulting from price loss risks which are borne by nonfinancial corporations and households; these issues would warrant further research.

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³¹ Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities.

Appendix

Austrian Investment Companies, Funds under Management, Custodian Banks

Name of the investment company	Assets under management (EUR million) ¹	Custodian bank for most (>50%) assets under management
Raiffeisen Kapitalanlage-Gesellschaft mit beschränkter Haftung	26,654	Raiffeisen Zentralbank Österreich Aktiengesellschaft
ERSTE-SPARINVEST Kapitalanlagegesellschaft m.b.H.	26,073	Erste Group Bank AG
Pioneer Investments Austria GmbH	20,034	UniCredit Bank Austria AG
Allianz Invest Kapitalanlagegesellschaft mbH	9,803	Allianz Investmentbank Aktiengesellschaft
KEPLER-FONDS Kapitalanlagegesellschaft m.b.H.	8,907	Raiffeisenlandesbank Oberösterreich Aktiengesellschaft
DWS (Austria) Investmentgesellschaft mbH	5,883	State Street Bank GmbH Filiale Wien
3 Banken-Generali Investment-Gesellschaft m.b.H.	4,476	Oberbank AG, BKS Bank AG ²
CPB Kapitalanlage GmbH	4,249	Aviso Zeta Bank AG (formerly CONSTANTIA PRIVATBANK)
Carl Spängler Kapitalanlagegesellschaft m.b.H.	3,693	State Street Bank GmbH Filiale Wien
RINGTURM Kapitalanlagegesellschaft m.b.H.	3,583	UniCredit Bank Austria AG
Gutmann Kapitalanlageaktiengesellschaft	3,437	Bank Gutmann Aktiengesellschaft
BAWAG P.S.K. INVEST GmbH	3,422	BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse Aktiengesellschaft
Volksbank Invest Kapitalanlagegesellschaft m.b.H.	3,186	Österreichische Volksbanken-Aktiengesellschaft
HYPO-Kapitalanlage-Gesellschaft m.b.H.	2,573	Vorarlberger Landes- und Hypothekenbank Aktiengesellschaft
Schoellerbank Invest AG	2,230	Schoellerbank Aktiengesellschaft
Sparkasse Oberösterreich Kapitalanlagegesellschaft m.b.H.	2,139	Allgemeine Sparkasse Oberösterreich Bankaktiengesellschaft
Security Kapitalanlage Aktiengesellschaft	1,431	Aviso Zeta Bank AG (formerly CONSTANTIA PRIVATBANK)
Raiffeisen Salzburg Invest Kapitalanlage GmbH	1,296	Raiffeisen Zentralbank Österreich Aktiengesellschaft
C-QUADRAT Kapitalanlage AG	1,071	Aviso Zeta Bank AG (formerly CONSTANTIA PRIVATBANK)
Tirolinvest Kapitalanlagegesellschaft m.b.H.	562	Tiroler Sparkasse Bankaktiengesellschaft Innsbruck
Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.	349	Bankhaus Schelhammer & Schattera Aktiengesellschaft
JULIUS MEINL INVESTMENT Gesellschaft m.b.H.	228	MEINL BANK Aktiengesellschaft
INNOVEST Kapitalanlage AG	155	Allianz Investmentbank Aktiengesellschaft
Valartis Asset Management (Austria) Kapitalanlagegesellschaft m.b.H.	115	Valartis Bank (Austria) AG
Erste Asset Management GmbH	2	Erste Group Bank AG
Bank Austria Real Invest Immobilien-Kapitalanlage GmbH ³	1,108	UniCredit Bank Austria AG
Raiffeisen Immobilien Kapitalanlage-Gesellschaft m.b.H. ³	335	Raiffeisen Zentralbank Österreich Aktiengesellschaft
Immo Kapitalanlage AG ³	221	Österreichische Volksbanken-Aktiengesellschaft
CPB Immobilien Kapitalanlage GmbH ³	116	Aviso Zeta Bank AG (formerly CONSTANTIA PRIVATBANK)
ERSTE Immobilien Kapitalanlagegesellschaft m.b.H. ³	22	Erste Group Bank AG
Total	137,352	

Source: OeNB.

¹ Data refer to Q3/09.

² Mutual funds issued by 3 Banken-Generali Investment-Gesellschaft m.b.H. are handled by either Oberbank AG or BKS Bank AG.

³ Real estate investment companies.