INVESTIGATIONS OF MIS-PRACTISES IN THE
EUROPEAN INVESTMENT FUND INDUSTRY

Report of the investigations by CESR’s members

November 2004
1. Background

Following the findings in autumn 2003 of the US authorities of abusive business practices to exploit the mutual funds for the benefit of some privileged investors in the US mutual fund market, CESR’s members have conducted extensive investigations to find out the state of play in the investment fund industry of their jurisdiction.

CESR has therefore published a summary report on the actions taken by its members regarding their investigations to ascertain whether abusive mispractices such as late trading or market timing are taking place in the European collective investment management industry. It was decided that CESR’s report should concentrate on the methodologies used to investigate possible mispractices, and to cover the scope of the investigations undertaken (such as the number of companies approached, the market share of activities investigated etc.), the results and findings of these investigations and also actions taken and end policy implications of the investigations (e.g. changes in regulation or self-regulation, industry actions).

It has to be noted, that there is no common legal definition for either market timing or late trading in Europe. These terms are used to describe certain generic types of unfair behaviour and business practises in the investment fund industry.

In general terms late trading can be described to be an activity, where the fund manager accepts to receive and carry out subscription or redemption orders from certain investors after the deadline set for these transactions in the regulations of the jurisdiction in question or in the fund rules. Where this is allowed some customers are able to enter or exit the fund after the valuation point and hence on a known price. This gives them the opportunity to utilize the information received after the fund is closed and that has an influence on the market. Late trading requires cooperation between a fund manager and its customer. As such, this means the fund manager is favouring some investors to the detriment of the other unit holders of the fund, which is contrary to the essential basic principle of the collective investment management activity – the equal treatment of unit holders. Late trading, as a type of activity, is therefore considered illegal in most jurisdictions.

Market timing refers to practices where investors place trades (subscription or redemption orders) for unit prices determined with stale prices of the funds assets which do not fully reflect recent market movements. Inefficiencies in investment fund pricing are exploited by the practise of short term buying and selling of investment fund units. Market timers can use the information about market movements which are not reflected in the previous unit price to predict the movement of the following day’s price to advantageously buy or sell units.

As such, market timers are able through subscription and redemption of fund units to utilize the time zones between the different markets where the fund is invested. Information that influences the market received after one ore more, but not all, of the markets are closed, but before the fund is closed for trading, cause an incorrect value of the fund when the price is fixed when all markets are closed.

As known, the phenomenon of market timing violates the principle of investors’ fair treatment and erodes the funds value, favouring thereby short-term investors and putting long-term investors at a disadvantage. A high rate of subscriptions and redemptions due to market timing operations on units implies:

a. a necessity to keep high liquidity in the fund portfolio, with the consequence that it reduces investments in other asset classes;

b. a significant “dilution” of the per-unit performance as a result of the value extracted by market timers.

Allowing systematic market timing and thereby favouring some investors to the disadvantage of other investors by the management company without restricting opportunities to conduct it would
be regarded as a breach of rules of conduct in European jurisdictions or otherwise reprehensible behaviour by the company.

**2. Summary of conclusions**

A significant amount of regulatory and supervisory work has been conducted in Europe during the latter part of 2003 and 2004 in order to detect the existence of these types of abusive mispractices (i.e. late trading or market timing) in the collective investment management industry.

The following summary aims to give a general view of the investigations conducted by the European supervisory authorities on these issues.

**2.1 The methodologies used for investigations**

Most of the CESR members have started the investigation process with a broad questionnaire addressing the major part of their national investment fund industry to detect the possibility of malpractices. The specific questions used vary from one jurisdiction to another, but relate in general to the following issues:

- examining how the subscription and redemption orders of investment funds are processed and how the calculation of the net asset value and the subscription and redemption prices is organized;
- identifying whether some investment funds under management are subject to a risk of market timing or late trading and what the risk issues are;
- assessing the awareness of these risks by management companies and the steps they have taken to keep these risks under control, both at an individual and industry level;
- requesting management companies to report any suspicious events regarding these kinds of mispractices to the supervisory authority, e.g. large investments that were held for a relatively short period of time;
- establishing if some management companies have allowed late trading or market timing practices to take place in the investment funds they managed or have implemented procedures to avoid market timing and late trading practices.

After gathering information through the use of questionnaires, many countries made further enquiries through on-site inspections or special audits to examine the answers received to the questionnaires in suspicious cases, in order to establish a more accurate picture of the situation in the investment fund industry of the jurisdiction in question.

Some CESR members have not conducted investigations on late trading and market timing types of mis-practises specifically but have carried out wide-ranging inspection programmes covering broad areas of the collective investment management activity, e.g. calculation of the net asset value of the investment funds and the overall quality of the administrative organisation of the management companies. Following the information received on investigations carried out in the US mutual fund market concerning mispractices in autumn 2003 on late trading and market timing, these broader inspection programmes were extended to focus also on these aspects.

**2.2 The results**

When analysing the results of the investigations of CESR members regarding mis-practises, it must be noted, that several members are still waiting for the final results of their investigations or inquiries. Nevertheless, it can be concluded that CESR members have not generally found evidence of major mis-practices such as late trading or market timing in their jurisdiction. Indeed given the size of the samples and the extent of the investigations undertaken, the number of cases of mis-practises that have come to light are very small.

Nevertheless, the investigations conducted have revealed some issues for regulatory concern. The members' findings did suggest that whilst there was little evidence of major mis-practices, the investigations undertaken indicated inadequacies in internal processes of some management
companies. As a result of their investigations, CESR members have therefore identified a list of shortcomings in the field of transparency and prudent working methods, which should be tackled by some fund managers. These findings are reflected in the annex.

For example, due to inadequate record keeping, the compliance with the time limits (cut-off times) stated in the fund rules for subscriptions and redemptions can not be verified in all cases. Either the existence of market timing cannot be excluded in all cases. In a number of cases, the number of parties involved along with lack of clarity in responsibilities and procedures meant that investment funds are at risk of being subject to late trading practices. Internal procedures for issuance and redemption of units in some instances might not be sufficient to eliminate the risk of market timing and late trading arising in the future.

There is evidence of efforts by some investors also in Europe to get involved in the same kind of activities as discovered by the US authorities in the US mutual fund market. Some fund managers indicated that they had been approached by entities managing hedge funds requesting a facility to engage in the practice of market timing and late trading. In general these efforts have been denied by the fund managers.

In some cases investors had started to adopt atypical investment behaviour by subscribing and redeeming in a relatively short period of time, without however being able to prove that they were actually market timers. The fund managers had generally promptly terminated their relationships with these type of investors or had imposed restrictions on them. However, in a small number of cases more might have been done more quickly to curtail this type of activity occurring in funds.

The level of awareness regarding these types of mispractises seemed to vary quite a lot among the fund managers. Some management companies were clearly aware of the risks involved with late trading and market timing and had taken this into account in their operations, while some other companies had not.

Fair valuation of funds may be hindered by the rules used to valuate some assets (such as using close of business valuations for Asian or Pacific assets when the fund is valued at the end of the day European time) and by inconsistencies between the time of a given trade and the moment it is actually taken into account in the net asset value (NAV) of the fund.

2.3 Actions taken and policy implications

Even if the specific findings in the investigations related to late trading or market timing types of abusive practises have been fairly limited, the European regulators have taken a proactive role to try to hinder these types of mispractises from occurring in the future. Many CESR members have in first instance developed supervisory programmes and tools defining the criteria to help identify suspicious cases among the vast masses of daily transactions of subscriptions and redemptions of investment funds.

Secondly, the regulators have been initiating regulatory changes to reform the functioning of the collective investment management activity to avoid the possibilities of mispractises. Many CESR members have done this in co-operation with their national fund industry associations in order to encourage them to reflect these new practices through self regulation (where appropriate).

The regulatory tools and approaches of different European jurisdictions to prevent mispractises differ to some extent from each other, but the central core of the approaches is mostly shared by the regulators. One of the common features is the requirements concerning the internal control mechanisms of fund management companies and other fund operators. In particular these requirements indicate that companies must have robust enough controls to indicate possible abusive practises and to react on them early enough in the common interest of the unit holders.

To prevent market timing, regulators are examining very carefully the process of fund asset valuation and its relation to the process of subscriptions and redemptions of the fund units to avoid that investors can deal with the units of the fund in a known price, which would enable abusive practises. Many jurisdictions have already used or have recently moved to use the so called forward
pricing approach. This concept refers to the pricing method whereby the subscription and redemption of units of an investment fund are effected at the current net asset value (NAV) next computed after receipt of the subscription or redemption request, i.e. the price of the unit would be unknown to the investor at the time of placing the request.

In contrast, historical pricing is the pricing method whereby investors subscribe or redeem units based on the last calculated NAV of the investment fund. This means, for example, that in a rising market, investors could subscribe fund units based upon the previous day’s lower price, redeem their shares in a few days, and be assured of riskless profits, while diluting at the same time the remaining unit holders’ holdings.¹

To avoid discrepancies between the net asset value of the fund units and the movements in the securities markets, many jurisdictions are considering to allow and facilitate the use of Fair Value Pricing (use of best estimates where underlying prices are likely to have moved materially) in valuation instead of requiring the use of the closing prices of stock exchanges, to prevent the inclusion of stale prices in funds’ NAVs. When in use, the fair value principles must be systematically applied which may lead to retain a value different from the rate of the last listed and quoted value.

The detailed list of regulatory tools and market practices used in the various European jurisdictions to prevent from late trading and market timing types of mispractices includes also the following measures:

- the harmonisation of order execution and NAV calculation procedures;
- clarifying the roles and responsibilities of the various distributors involved in the subscription/ redemption operations in order to ensure that the process is secure;
- strengthening internal control activities on procedures concerning subscription/ redemption orders and the internal use of NAV information before it becomes public, orders transmitted by the management company’s staff or by institutional investors (pension funds, insurance companies, individual portfolio management firms, other management companies);
- demanding management companies document their control routines better and to have systems that prevent late trading;
- imposition of hard cut-off times for all management companies;
- defining robust sign off procedures for handling orders received after the dealing or valuation point;
- demanding management companies to register late orders in a file to be provided to the internal controller of the company (on a monthly basis);
- creating special internal procedures for handling big subscriptions/ redemptions;
- creating suitable measures against time zone arbitrage, in particular suitable time limits for placing orders and suitable valuation of the funds assets;
- allowing management companies the opportunity to revaluate the net asset value of the fund during the day, deviating from the principles provided in the fund rules. This is to prevent stale prices in the situations where there have been sudden changes at the market and the unit price does not reflect the fair value of the fund’s net asset value;
- ensuring that the prospectuses of all investment funds set out policy in relation to dealing with market timers:
  - the existence of subscription and redemption fees;
  - the possibility to charge an early redemption fee in favour of the fund (a redemption fee which is higher if the investor keeps the units for a short period of time, e.g. 3 days).

3. Summary table of CESR members’ investigations

¹ See also ‘Regulatory approaches to the valuation and pricing of collective investment schemes’, Report by the Technical Committee of the IOSCO, May 1999.
A summary table is presented below which sets out in summary, information on the key aspects of the investigations carried out by each of CESR’s members and describing: the methodologies used in the investigations, the scope of the investigations, the key findings as well as the actions taken and policy implications drawn from the findings.
## Summary of investigations of mispractices in the collective investment management

<table>
<thead>
<tr>
<th>Country</th>
<th>Methodologies used</th>
<th>Extent of the investigations</th>
<th>Findings</th>
<th>Actions taken/ policy implications</th>
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<tbody>
<tr>
<td>Austria</td>
<td>A written request to report any suspicious events</td>
<td>All management companies</td>
<td>No mispractices found so far</td>
<td>On-site inspections will now routinely cover this subject. The Financial Market Authority will issue Guidelines on Conduct of Business Rules later this year to cover these mispractices; depending on CESR’s work in this area secondary legislation will follow next year.</td>
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| Belgium  | A questionnaire to promoters of investment funds registered under Belgian law. This survey, drawn up for preventive purposes, aimed to highlight: (i) how the system for centralising and processing subscription and redemption orders operates, (ii) the procedures for accepting orders and how these procedures are audited, (iii) fund managers’ internal rules of conduct and how these rules are monitored. | All the institutions questioned answered the questionnaire. On December 31, 2003, these promoters represented 155 investment funds registered under Belgian law in a market of 423 investment funds registered with the BFIC. In terms of net assets, these 155 investment funds represent 62.5% of the market in investment funds marketed in Belgium. Responses are satisfactory, but nonetheless remain frequently on a general level without necessarily presenting an advanced degree of detail. Each fund management company has its own procedures, which creates a lack of homogeneity and transparency for the investor at the level of the overall sector. Responses to the questionnaire do not a priori contain any particularly worrying elements relating to late trading and market timing practices. However, it seems useful to emphasise that only on-site investigations could confirm this initial analysis. | An action plan including regulatory provisions and recommendations to the sector was implemented to bolster the existing framework appropriately. The regulatory provisions to be incorporated into the new Belgian regulation:  
- The possibility to charge an early redemption fee  
- The extension of the custodian’s mission  
- The harmonization of order execution and NAV calculation procedures  
The recommendations:  
- Insert a description to the prospectus of both the procedures in place to monitor transactions as well as the sanctions that the investment fund’s Board of Directors can enforce if procedures are not followed.  
- Insert a statement to the periodic reports by the
<table>
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<tr>
<th>Country</th>
<th>Current UCITS Legislation</th>
<th>Proposed Measure</th>
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<tr>
<td>Cyprus</td>
<td>No existing UCITS</td>
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<tr>
<td>Czech Republic</td>
<td>Questionnaire on unit certificate valuation and on measures eliminating market timing and late trading; Direct investigation of selected transactions in order to detect the use of these practices, identify other potential risks and propose ways of eliminating them.</td>
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The BFIC is considering the inclusion in the upcoming regulation of a provision specifically dealing with the practice of retroceding the management commission to distributors of investment fund shares. This provision will list the conditions that such a retrocession must meet and will stipulate the transparency requirements of such fees in the prospectus.

When the management company uses backward pricing generally the setting of conditions for market timing has been detected (the fund’s economic disadvantage/investor’s profit can be eliminated only with appropriate fee level). Draft measure on elimination of market timing especially in a case where the management company uses backward pricing:

Management company introduces appropriate fees in the statutes of the fund according to the previous points.
<table>
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<tr>
<th>Country</th>
<th>Action</th>
<th>Findings</th>
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<tr>
<td>Denmark</td>
<td>Discussions held with the industry. Investigations considered not necessary because of the pricing mechanism used – subscription/ redemption prices continuously adjusted to reflect the market developments.</td>
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<tr>
<td>Estonia</td>
<td>A questionnaire to examine how the All management companies (7)</td>
<td>The EFSA has not detected any (or their combination) including distribution part of the fee into the assets of the fund. After the analysis of the questionnaire</td>
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When the management company uses forward pricing the market timing is realistic, although generally such setting of conditions has not been detected (even though there is daily valuation, the price is not disclosed until day D+2 and the current portfolio structure is not available).

Regarding late trading we find a possibility in the case of unit certificate redemption where clearly auditable mechanisms for verifying the true date of receipt of the order are not in place (the determining date is the order delivery date).

After the sample of transactions was examined, following an analysis of information from management companies, we can conclude that we did not clearly detect market timing; the nature of the transactions executed suggests speculative conduct, but with not taking advantage – or scope for taking advantage – of loop holes in the system.

Draft measure on elimination of market timing in case the management company uses forward pricing:

The following amendment will be incorporated into the statutes (prospectus): The day within the meaning of Article 11 (1) of the Collective Investment Act is terminated at the close of the market on which the largest part of the relevant assets are traded.

Draft measure on elimination of late trading:

The following amendment will be incorporated into the internal regulations: The making of the order shall mean the instant the (redemption/ exchange) order concerned is delivered to the company’s registered office. Immediately on receipt of the redemption order the company shall time-stamp it with the exact time of receipt and prevent any subsequent manipulation of this information.
subscription and redemption procedures are processed, how the calculation of the net asset value and the subscription and redemption prices is organized and what methods are used by the management companies to prevent mispractices.

Instances of abusive late trading or market timing practices. The management companies were aware of the risks involved with late trading and market timing and confirmed that no events of late trading or market timing had occurred within their funds. There were some findings that need to be looked into but these relate to the inadequate internal procedures in some companies rather than to the existence of major mispractices in the market.

Finland

On-site inspections regarding the NAV calculation process and the execution of subscription/redemption orders

12 management companies representing over 88% of the volumes of the whole market

No findings of mispractices, however due to inadequate documentation the compliance with the time limits (cut-off times) stated in the fund rules can not be verified in all cases. Either the existence of market timing can not be excluded in all cases.

A letter to all management companies requiring more emphasis on documentation.

Appropriate time limits to prevent abusive practices will be required to the fund rules.

France

A questionnaire focused on equity funds was sent in November 2003 aiming at:

- identifying whether some investment funds under management were subject to a risk of market

The 39 biggest asset management companies (as far as equity funds under management are concerned) to whom the questionnaire was addressed cover 80% of the

The management companies' responses to the AMF's questionnaire revealed no major shortcomings.

The AMF has decided to conduct further, targeted on-site and off-site audits to confirm the initial assessment. It has issued its recommendations in July 2004
<table>
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<tr>
<th><strong>Timing or late trading and what the risk issues were:</strong></th>
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<tr>
<td>• assessing the awareness of these risks by management companies and the steps they had taken to keep these risks under control, both at an individual and industry level;</td>
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<tr>
<td>• establishing if some management companies had allowed late trading or market timing practices to take place in the investment funds they managed or could be suspected of having tolerated or encouraged such practices.</td>
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<td><strong>Answers were analyzed and further discussed with the compliance officers or the CEOs of the management companies.</strong></td>
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<th><strong>Volumes of the French fund market and 2/3 of equity funds.</strong></th>
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<td>As only 39 companies out of a total of 231 French asset management companies owning at least one equity fund under French law were consulted, the AMF will continue to study the remaining. At the same time, the AMF considers that the other asset management companies do not face any major risk due to the low level of assets managed. It is nevertheless foreseen to control this risk on a systematic basis at the time of on-site visits.</td>
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<tr>
<th><strong>Some unclear answers provided to the AMF suggest that few asset management companies had identified the issues of market timing and late trading as being an important risk implying particular diligence.</strong></th>
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<tr>
<td>Despite the fact that the cut-off time is clearly defined in the prospectus of all investment funds, its enforcement is variable depending on the different parties involved in the processing of these subscriptions/redemptions.</td>
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<th><strong>Requiring e.g. that:</strong></th>
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<td>• Management companies must possess procedures and relations with investors to identify and prevent illicit practices;</td>
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<td>• To prevent the risks of late trading, it must be specified that the cut-off time for the registration of subscription and redemption orders that is required to be indicated in the fund prospectus refers to the time by which orders must be received by at the establishment(s) designated by the management company to centralize orders;</td>
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<td>• To prevent abuses related to market timing, equity and bond investment funds must be designed and managed to ensure that the purchase and sale of fund shares are always undertaken on the basis of an unknown price both in respect to the net asset value of the investment fund itself and the value of the financial instruments constituting the fund's assets;</td>
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<td>• In compliance with applicable accounting principles, the management company must undertake to record the investments made as soon as the orders are negotiated;</td>
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• The management company must not communicate to certain investors or intermediaries items concerning fund assets which could facilitate market timing or late trading activities. In particular, the management company may not communicate in real-time the composition of the portfolio. The only exception is dedicated investment funds provided that the information is communicated at the same time to all shareholders;

• The management company must request account keepers to exercise special care in respect to transactions initiated by their customers purchasing or selling investment funds shares when the frequency or amount of such transactions render them suspicious in respect to the practice of market timing;

• Within the framework of his responsibilities, the compliance officer or internal auditor of the management company must notably ensure that personnel who may have access to sensitive information do not engage in the illicit market timing or
late trading activity.

In 2005, the AMF will assess the measures adopted by the different investment service providers to comply with these recommendations.

Based on the results of this assessment and the work conducted at the European (CESR) and international level (IOSCO), the AMF will formally adopt those provisions it considers should be included in its General Regulations.

The potential future changes in regulation being considered will have to

- clarify the roles of the various agents involved in the subscription/redemption operations in order to ensure that the process is secured; the objective is to minimize the risk of late trading practices;
- limit the factors of risk of market timing practices; accordingly, the funds must be encouraged to implement fair value process.

| Germany | Questionnaires to all management companies, to important depository banks and to auditors who audit the annual accounts of the management companies and the annual reports of their funds | Questionnaires were sent to all management companies domiciled in Germany (= 82). These 82 management companies manage a fund volume of 956 Billion Euro. This volume includes both retail and institutional funds; real estate funds are also included. | Only one management company gave suspicious answers and another management company not clear answers relating late trading. For these two management companies special audits were directed by the BaFin. | When BaFin started the investigation, the German trade association (BVI) amended their Code of Conduct at the same time. With close communication to BaFin they added a provision to this self-regulation which should avoid late trading and restrict market timing |
Special audits to scrutinize the answers to the questionnaires in suspicious cases

Questionnaires were also addressed to important depository banks (16) which conduct this function for more than 90% of the market. Last but not least five auditor firms were addressed by the questionnaires.

After having evaluated the answers to the questionnaires and having conducted two special audits a first interim statement can be given: The German investment industry does not seem to have significant problems with late trading or systematic market timing. But the whole investigation procedure is not yet finished. The auditors of the annual accounts of the management companies and the annual reports of their funds were asked to include a positive or negative statement to the next audit report for the funds. BaFin will be provided with these reports during the year 2004 and in the first half of 2005. Should these statements result in additional suspicions which have not been identified by the questionnaires more special audits would follow.

opportunities. According to this provision the management company

• guarantees to create an organisation which avoids late trading and to advise the depository bank and the distribution partners appropriately,
• creates suitable measures against time zone arbitrage, in particular suitable time limits for placing orders and suitable valuation of the funds assets,
• creates suitable measures to protect investors against short term trading of fund units conducted by other investors of the fund (“market trading”), and
• provides information about the measures in suitable manner and monitoring over suitable functioning of these measures.

BaFin will currently check by another questionnaire how the management companies have implemented the self-regulation. At the end of the whole investigation when BaFin has an overview of the implementation of the BVI Code of Conduct and when the audit reports of the annual reports of the funds are evaluated, BaFin will decide whether it is necessary to issue BaFin-Guidelines in addition to the self-regulation provided by the BVI
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<th>Country</th>
<th>Method</th>
<th>Scope</th>
<th>Text</th>
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<tbody>
<tr>
<td>Greece</td>
<td>Questionnaire</td>
<td>All 29 management companies</td>
<td>Code of Conduct. A positive indication is that BaFin has already approved some amendments of fund rules which have implemented the new provision of the BVI Code of Conduct concerning late trading and market timing. The analysis did not show signs of late trading practices in the Greek market. One company reported 41 cases of orders executed after the deadline. The information provided indicated that these cases concerned nine different investors. The reasons for these cases were on managerial problems within the management company and, in particular, delays in NAV calculations, high workload in the company and delays in transmission of orders between different departments of the management company. However, the management company verified that the investors did not benefit from these kinds of orders and also the order did not have a negative impact in the fund assets. The survey has made the management companies more sensitive to these particular mispractices. Some of the management companies have already taken additional internal control measures in order to face possible late trading and market timing mispractices.</td>
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<td>Hungary</td>
<td>An on- and off-site audit of mispractises</td>
<td>All management companies</td>
<td>Management companies changed the rules of subscription and redemption in prospectuses by the end of 2003. Since that time investors buying and selling units within a short time shall pay an extra fee to the investment fund. By the end of 2003 management companies also changed the calculation method of the funds from historical to forward pricing. Since the beginning of 2004 there has been a noticeable decrease in mispractices. The audit showed no signs of late trading of investment units. Market timing used to be a problem for management companies until the beginning of 2004. During that time investors were trying to arbitrage from the volatility of bond market buying and selling in large amount the investment units of bond funds within a short time.</td>
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<td>Country</td>
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<td>Iceland</td>
<td>The FME has amended the methodology for on-site inspections to ensure a rigid approach to evaluating and analyzing the NAV calculation, market timing and late trading. All the five authorized management companies will be inspected during this year (two of them have been inspected so far). The FME has not identified any mispractices in regard to NAV calculation, market timing or late trading. However, the FME has identified that internal procedures for issuance and redemption of units in some instances might not be sufficient to eliminate the risk of market timing and late trading. The FME has in some instances requested a change in internal procedures and has as well requested changes to prospectuses and fund rules to eliminate any doubt in interpretation of issuance and redemption of fund units as well as in regard to NAV calculation. No legal definitions of late trading or market timing are to be found in the Icelandic legislation. The FME is looking into whether the issue should be taken up with the Ministry of Commerce, or whether the FME should issue guidelines regarding the matter.</td>
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<td>Ireland</td>
<td>The CIS, and their managers were required to provide confirmation in relation to the following: (i) that CIS documentation clearly provided that applications for subscriptions and redemptions are only accepted prior to the valuation point of the CIS, and that they were satisfied that there was no late trading being carried out; (ii) that they were satisfied that there are no issues with regard to market timing impacting on the CIS; (iii) information on instances, if any, where trades had been accepted post the dealing deadline as prescribed in the prospectus but prior to the valuation point. In that event, details of such transactions and the specific control procedures in place were to be provided. The investigation focused on all Irish authorized managers, fund administration companies and trustee firms providing services to CIS. This encompassed 975 firms targeted for information. The review period encompassed the calendar year 2003 and included all CIS, with the exception of closed-ended funds. The investigation focused on all Irish authorized managers, fund administration companies and trustee firms providing services to CIS. This encompassed 975 firms targeted for information. The review period encompassed the calendar year 2003 and included all CIS, with the exception of closed-ended funds. The investigation focused on all Irish authorized managers, fund administration companies and trustee firms providing services to CIS. This encompassed 975 firms targeted for information. The review period encompassed the calendar year 2003 and included all CIS, with the exception of closed-ended funds. To date, IFSRA has not detected any instances of abusive late trading practices and it has identified only one case of limited discretionary frequent trading arrangements. There have been a limited number of findings of mispractices. However, these findings relate to failures in internal processes in some companies, rather than the existence of major mispractices. In one case which involved limited discretionary frequent trading arrangements, compensation has been paid to investors. Two further investigations are on-going, one which involves instances of market timing and the other which involves late trading. As such, it is possible that further compensation will be necessary. IFSRA has identified several areas for future policy development: • The imposition of hard cut-off times for trades received via distributors; • Defining robust sign off procedures for handling trades received after the dealing or valuation point;</td>
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To date, IFSRA has conducted one on-site inspection and has held a number of meetings/conference calls with all parties with whom issues arose.

- Ensuring that the prospectuses of all CIS set out policy in relation to dealing with market timers;
- The use of fair value pricing to prevent the inclusion of stale prices in funds' NAVs. FVP is a permitted technique in principle but policy in this area needs to be developed;
- Methods to dissuade/prevent market timing;
- Defining policy and procedures with respect to disclosure of portfolio holdings;
- The use of a single swing price.

IFSRA will determine the extent to which an on-site inspection programme is necessitated upon conclusion of the current investigation, which will involve determining the basis under which certain fund groups or service providers might be selected.

| Italy | In order to define current market practices, fund rules of some management companies were examined in order to better understand their procedures concerning unit fund subscriptions and redemptions, focusing on the following processes:
|       | - timing of orders transmission;
|       | - receipt and assessment of subscriptions;
|       | - reimbursement and switches;
|       | The Italian authorities are carrying out an investigation into the trading of open-end funds’ units. In this context seven Italian management companies representing about 27,5% of the market share, are under examination to detect the existence of market timers activity and to assess the efficiency of SGRs’ internal procedures.
|       | The preliminary main results concerning only procedures analysis are the following:
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The preliminary main results concerning only procedures analysis are the following:

- Ensuring that the prospectuses of all CIS set out policy in relation to dealing with market timers;
- The use of fair value pricing to prevent the inclusion of stale prices in funds' NAVs. FVP is a permitted technique in principle but policy in this area needs to be developed;
- Methods to dissuade/prevent market timing;
- Defining policy and procedures with respect to disclosure of portfolio holdings;
- The use of a single swing price.

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With regard to the step of the inquiry, some enforcement measures will be taken in place to limit unfair behavioural risks for the future.

By the end of the year a new regulation strengthening the fund's units subscription and redemption procedures will be enacted. As a general principle, the regulation requires SGR to define in the fund
Since current practices vary between companies, a selection was carried out to assess how effectively each practice is devoted to prevent opportunistic behaviours. The selection was based on two fund balance ratios calculated with regard to all Italian open-end funds (1339 funds managed by 92 fund management companies, SGR):

1) the weight of the amount of subscriptions and reimbursements on fund portfolio total assets;
2) the weight of net liquidity on fund portfolio total assets.

With reference to ratio 1), a high frequency of unit trading determines an increase in the amount of subscriptions/redemptions referred to fund portfolio value. With reference to the ratio 2), where market timing occurs, funds show in the portfolios a significant weight of liquidity to manage the high turnover of the fund units.

In order to avoid biased results, newly established funds (less than one year) and small size funds (with value less than 50 million Euro) were excluded from the fund population. Also, due to different structure of investments, we set different liquidity level for equity, balanced and bond funds (respectively, 20%, 20% and 30%). Furthermore, we set a threshold for subscriptions and reimbursements flows ratio (10%).

Following the criteria described above, we identified 15 SGR and 37 funds. To capture precise signals of the market timing companies; in some cases there is a specific internal rule for institutional clients;

iii. no one of the selected management companies set out specific checks in case of funds invested in securities negotiated in markets with time zone different more than six hours;

iv. all SGRs perform an electronic check on the integrity and consistency of subscriptions and redemptions Book-Order data.

Moreover:

- in the case of subscription of units, the day of NAV valuation, taken into consideration for determining the number of units to be given to the unit holder, must be specified by the fund rules ("the reference day"). The reference day must be the day in which the SGR receives the subscription request, no later than a certain hour fixed in the fund rules. The subscription must be settled the day after the reference day;
- similar rules are provided for unit redemption. Regarding the cases where the redemption is close to the subscription date, the fund rules must provide for specific criteria to calculate the redemption value to be applied when it is necessary to protect the interests of the other unit holders.

Specifically, with regard to the general procedures, Italian management companies will be
phenomenon, we decided to consider only SGR with at least two funds involved in the selection. Thus, at the end of the selection process, 7 SGR were chosen representing about 27.5% of the Italian open-end fund market share. The selected SGR were asked to provide additional information.

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<th>Luxembourg</th>
<th>Investigation based on a questionnaire and further enquiries</th>
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The investigation encompassed 425 entities, mainly Luxembourg transfer agents, central administrations, distributors of units of investment funds, depository banks and asset management companies, requesting them to respond to some detailed questions relating to late trading and market timing. Later on, the CSSF has launched a second investigation by selecting about a hundred compartments of funds investing their assets mainly in securities from the Asian or American markets.

| The investigations have revealed two cases where the orders were placed after the cut-off time set in the prospectus of the investment fund concerned. It turned out in fact that these two cases did not involve any late trading mispractices, but were due to technical or organisational insufficiencies. In these cases corrective measures have been taken by the entities concerned, who confirm moreover that these transactions had no impact on the investment funds. |
| Several entities questioned have required to:
  - strengthen internal control activities on procedures concerning subscription/redemption orders, internal use of NAV information before becoming public, orders transmitted by management company’s staff or by institutional investors (pension funds, insurance companies, individual portfolio management firms, other management companies);
  - ensure consistency and integrity of Book-Order register, even by regulating the access to subscriptions and redemptions data and by detailing procedures for recording any data changes.

The CSSF will continue to see to that the protection and the equal treatment of investors is not hindered by late trading or market timing practices and it will carry out controls in this regard. A circular concerning late trading and market timing has been issued 17 June 2004 (Circular no. 04/146).
In this regard, the CSSF has also asked those Luxembourg entities belonging to a financial group mentioned in the international press for having perpetuated or letting perpetuate late trading or market timing operations, to take a position on the alleged facts and to make a statement on the possible impact of these operations on the Luxembourg collective investment schemes.

The CSSF’s investigation also covered those Luxembourg collective investment schemes which had delegated tasks to one of the managers accused of having favoured or practised late trading or market timing activities. It has asked these investment funds to comment on these accusations and to make a statement on the possible impact of the controversial practices on the Luxembourg collective investment schemes.

Informed about their suspicions on possible market timing practices within some investment funds. Our attention was drawn to about twenty investors who had started to adopt atypical investment behaviour by subscribing and redeeming in a relatively short period of time, without however being able to prove that there were actually market timers. Based on the documents provided, it has turned out that these investors have been unable to develop their activities in Luxembourg, while the investment fund has promptly terminated its relationship or imposed restrictions on them.

In all the cases cited, the impact of these short term transactions on the investment fund has been considered insignificant. In addition, the CSSF has not detected any elements which could prove that the Luxembourg financial centre lends itself to suspicious dealings by people who, with the help of a professional of the financial centre, are in pursuit of a fast profit at the expense of others.

The CSSF concludes that the investigations not only alerted potential market timers, but also showed that those responsible in the investment fund field are conscious of their professional duties and have done the necessary research. Where problems have
<table>
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<th>Country</th>
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| Netherlands| A wide-ranging inspection program was carried out from mid-2003 to April 2004. The inspections covered broad areas of CIS activity, including:  
  - the processing of surcharges and discounts in relation to the information contained in the prospectus;  
  - the comparison of costs charged to investors with the costs stated in the prospectus;  
  - price-making and trade with affiliated parties and third parties;  
  - the calculation of the net asset value;  
  - and the quality of the administrative organisation.  
The inspections included numerous on-site investigations in the management companies, studies of their accounts and procedures, and control of their correspondence with affiliated parties and third parties. | The review has revealed a long list of shortcomings in the field of transparency and prudent working methods of CIS. However, the AFM has found no evidence to suggest that there is a wide-scale advantage to the detriment of investors, as has been the case in the US in instances of improper business practices such as late trading and market timing. | In order to solve the broadly found shortcomings, the AFM has advised the Ministry of Finance to include the results of the review in the current process of revising the Act on the Supervision of Collective Investment Schemes (Wtb) and the Decree on the Supervision of Collective Investment Schemes (Btb).  
The AFM has established the Committee for Modernising Collective Investment Schemes. This committee consists of industry experts and is charged with the task of coming forward with recommendations for restructuring the CIS-industry in the Netherlands.  
The main topics the committee addresses are:  
  - the trading systems which are used to purchase and redeem CIS;  
  - the disclosure of fees and commissions to the investors;  
  - the quality of the administrative organisation;  
  - the role of the internal and external auditor;  
  - the corporate governance of CIS.  
The AFM is acting as secretary of the Committee. By the end of 2004 the Committee will publish its points of view in a final report. | Ten providers, each with several CIS’s, has been investigated, which are considered to be a representative part of the (retail) market. |
| Norway     | The management companies were asked to From a total of 25 fund | There have been a limited number | Kredittilsynet has required some of | 
send information to Kredittilsynet in a spreadsheet that gave information on every subscription and redemption in the fund in the period from 1st January 2003 until 31st October 2003. The companies were also asked to give information on every subscription and redemption in the largest Asian fund and the largest sub-fund if any.

The spreadsheet was required at least contain the following information: date, hour, customer, subscription amount, subscription fee, net subscription, number of units, value, redemption amount and redemption fee. The companies were asked to send a copy to the auditor and the trustee.

Further investigations and on-site inspections are continuing.

management companies, 12 companies were subject to the investigation. Five of the largest fund management companies did participate in the investigation, the other companies were small or middle sized. The 12 companies manage more than 70 % of the capital in the Norwegian mutual funds. Kredittilsynet has investigated the redemptions and subscriptions in mutual funds representing 17 % of all the Norwegian mutual funds per third quarter 2003.

of problems occurring as a result of failures in internal processes in some companies rather than the existence of major malpractices.

The management companies to change their routines. In cases were the company was responsible for an error Kredittilsynet required that the customers were given compensation if they had suffered a loss due to the mistake.

Kredittilsynet has planned to follow up this investigation during ordinary on-site inspections. The management companies will be asked to submit subscriptions and redemptions in selected funds for a defined period to be analysed before on-site visits.

Kredittilsynet will ask the companies to document that the subscription/redemption deadline in the fund rules prevents market timing. Kredittilsynet will also ask the companies to further document their control routines and to have systems that prevent late trading.

### Poland

| Questionnaire and investigation of “on-going audits” reports | All management companies (19) | Even if the review of “on-going audits” showed no proven cases qualified as market timing or late trading, there were at least three cases reported of non-adequate assessment of subscription (retail) that could be qualified as late trading and one internal group transaction that could be considered as a mispractise (market timing + conflict of interests practice). | The new Decree on investment funds’ accounting describes the new rule of valuation of the fund’s unit that require to calculate the unit price basing on the value of fund’s transactions of day of valuation (transaction day (T) = valuation day).

Additional requirements are being considered including recording of the hour of subscription placement, assessment of subscription executed always by unit price set in D (purchase day)+1 (after the new Decree is in force; and as for now: D+2)). |
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<th>Country</th>
<th>Description</th>
<th>2003 Inspection Details</th>
<th>Compliance Details</th>
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<tr>
<td>Portugal</td>
<td>On-site inspections to the CIS management companies, CMVM analyzes the existence of eventual late trading activity through the examination of all subscriptions and redemptions occurred, in accordance with the following procedures: a) require and examine the subscription and redemption requests that are sent to the CIS management company from the CIS marketer and the equivalent registration in the CIS portfolio. b) Related to this, CMVM verifies: a. the date and hour of the request; and b. the NAV per share considered in those subscriptions and redemptions, c) and compares it with the rules defined in the respective informative documents (management regulation and simplified and complete prospectus) to conclude about the respective compliance.</td>
<td>In 2003 five CIS management companies were inspected. The deficiencies observed have been related, basically, to organisation and functioning, registration of investment decisions, valuation of assets, registration, accounting of operations and the commissions imputed to the CIS portfolios.</td>
<td>CMVM has planned to start on-site supervisions to the CIS marketers in the latest quarter of 2004 and carry it out through 2005. CMVM will verify the compliance with the rules taken by CIS marketers on subscription and redemption operations.</td>
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<td>Slovak Republic</td>
<td>On-site inspections (still on-going)</td>
<td>Regarding late trading one management company out of ten and 53 funds (all the closed ended funds) out of 93 have been inspected, regarding market timing, five of ten management companies have been inspected.</td>
<td>No late trading or market timing type of mispractises have been detected in the collective investment activity.</td>
</tr>
<tr>
<td>Slovenia</td>
<td>No specific investigations regarding market timing or late trading conducted, inspected as part of the normal inspection programme.</td>
<td>-</td>
<td>In avoidance of market timing and late trading, the SMA prescribed the obligatory use of the forward pricing system. Every management company</td>
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<td>Country</td>
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| Spain | A new supervisory programme has been developed to indicate possible late trading cases for further investigations based on calculations on:  
- fund volatility;  
- subscription and redemption fees;  
- correlation between current-day subscriptions and next-day market evolution for each investor;  
- number of subscriptions and redemptions per investor, the total return that each investor gets in all her/his operations, the number of operations in which the investor gets positive results and the average period of time for which the investor keeps her/his money in the fund. |
|  | On-site inspections to eight management companies and distance supervision for three management companies covered over 60% of the volumes of the whole market. |
|  | No mispractices have been detected so far. |
|  | A new supervisory programme described under “Methodologies used” |
| Sweden | Questionnaire regarding detected and possible cases of late trading/ market timing and measures taken to prevent these activities. Results verified by on-site inspections. |
|  | Nine largest management companies covering 85% of the volumes of the whole market. |
|  | No signs of late trading. The possibility of market timing can not be excluded in all cases. |
|  | Finansinspektionen has made the following recommendations:  
- Management companies must not accept orders received after the cut-off time, except in special situations. |
cases such as in the event of technical problems. All unitholders must be able to buy and sell fund units on equal terms, preferential treatment of any customer category can never be tolerated.

- The affected management companies review and take action with regard to the structure of cut-off and valuation times for those funds that the management companies deem to be susceptible to market timing activities.
- In view of how cut-off and valuation times are determined, that management companies also introduce other measures that aim to restrict or prevent market timing.
- Management companies introduce procedures enabling control and supervision of mutual fund flows to identify market timing.
- Management companies adopt procedures for circumstances that prevent a market valuation from being performed using existing methods. For example, this might entail an alternative market valuation method in cases where the underlying market has been closed and where price-sensitive information has been revealed. If a market valuation of the fund cannot be obtained, the fund must remain closed for
| United Kingdom | Questionnaire on e.g. the turnover in the funds (at a high level as well as an individual deal level), and on the practical actions being used by fund managers to deter mispractices. Information on cases of large investments that were held for relatively short periods of time were reviewed for suspicious activity. A series of on-site visits conducted to probe in more depth the findings. Both detailed testing and interviews were employed to establish whether further work was merited. | The sample of firms included in FSA's review had funds under management of £160bn (73% of the total volume). FSA collated data from 31 firms (predominantly authorized fund managers but including some Third Party Advisors who provide services to them) and undertook on-site visits to 25 firms. 9,620 transactions were examined in the course of FSA's investigation but only 118 eventually required follow-up work during on-site visits. | No evidence was found of late trading in the UK authorized CIS. It appears this is due in large part to the industry framework: where deals are placed directly with the fund manager before valuation points, and the important control function provided by the trustee. While there was some activity that looked to be attempts at market timing, it was generally short lived with fund managers taking swift action to terminate these relationships. In a small number of cases perhaps more could have been done, more promptly, to curtail this type of activity in funds. In these instances the firms have been asked to calculate the effect of market timing. This has formed the basis for compensating payments, which in total have not exceeded £5 million. It should be noted that the payments were all made on a voluntary basis and the firms involved have not been publicly identified. | The industry body for trustee and depositaries, DATA, circulated best practice guidelines during December 2003, on controls to preclude late trading. The FSA will be undertaking further work to confirm its view of trustee oversight. The FSA was already in the process of implementing reforms to the regulation of funds (CP 185 published March 2003) including amendments to clarify the measures available to deter market timing. These measures include the use of fair value pricing (use of a best estimate where underlying prices are likely to have moved materially) and clarification of the scope for declining to deal. The willingness of the industry to embrace fair value pricing has been encouraging and FSA looked to them to develop concrete proposals for this. The firms asked that FSA implement the proposals on fair value pricing made in CP185 for existing funds and this has been done. The Investment Management Association, the industry body of fund managers, has circulated draft guidelines to its members on their implementation. |