

CIS UNIT PRICING



OICU-IOSCO

**Report from the Emerging Markets Committee
of the
International Organization of Securities Commissions**

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INTRODUCTION:

In addition to the scenario of today's world's market increased globalization, a specific phenomenon can be observed in Emerging Markets: the development of Collective Investment Schemes (CIS). The IOSCO Emerging Markets Committee Working Group on Investment Management (EMC WG-5) studied this specific development in a Survey on CIS Cross-Border Activities. The main conclusion of that survey was that in emerging markets CIS development is mainly domestic: cross-border being severely restricted in some countries and mainly import-oriented.

Even though, the domestic development of CIS is a reality, several emerging market countries issued new regulation or substantially changed their regulation during the past few years. A need therefore arose to look again at the CIS issue and to compare how a number of key subjects regarding CIS regulation were addressed in those markets. A subject of foremost importance is asset valuation and unit pricing, which has also been considered by the IOSCO Technical Committee Working Group on Investment Management (TC WG-5).

EMC WG-5 sought from the Emerging Markets Committee of IOSCO a mandate to consider the specific issue of CIS asset valuation and pricing in accordance with the following work schedule:

<i>November 1997 (Taipei)</i>	<ul style="list-style-type: none"> • EMC Approval of the New Mandate
<i>Nov/97 → May/98</i>	<ul style="list-style-type: none"> • Development of a Questionnaire on Unit Pricing
<i>May 1998 (Kuala Lumpur, Malaysia)</i>	<ul style="list-style-type: none"> • Approval of the Questionnaire
<i>May/98 → Sep/98</i>	<ul style="list-style-type: none"> • Circulation of the Questionnaire to Members and Compilation of their Responses
<i>September 1998 (Nairobi, Kenya)</i>	<ul style="list-style-type: none"> • Discussion of a Draft Report
<i>May 1999 (Lisbon, Portugal)</i>	<ul style="list-style-type: none"> • Approval of the Final Report

The EMC approved this mandate and work schedule during its November 1997 Taipei meeting.

A draft Questionnaire on CIS Unit Pricing was developed by the Chairman of EMC WG-5 (*Comissão de Valores Mobiliários of Brazil (CVM)*) and submitted it for approval during the EMC meeting in Kuala Lumpur on 20 May, 1998.

The CVM circulated the questionnaire among all EMC members, in accordance with the methodology described below, compiled the responses received in a Draft Report, which was analyzed by EMC WG-5, during its Nairobi on 13 September, 1998 meeting. It was then decided to widen the database gathered by adding information obtained from some jurisdictions after the original deadline.

The original data gathered covered 53% of the EMC membership. The additional information gathered brings that percentage up to 60%.

The present Report therefore covers the following jurisdictions: Argentina, Barbados, Bermuda, Bolivia, Brazil, Bulgaria, Chile, China, Costa Rica, Ecuador, Egypt, El Salvador, India, Indonesia, Jordan, Kazakhstan, Korea, Lithuania, Macedonia, Malaysia, Mauritius, Morocco, Nigeria, Pakistan, Panama, Paraguay, Peru, Poland, Romania, Russia, Singapore, Slovenia, South Africa, Sri Lanka, Thailand, Tunisia, Turkey, Ukraine, Venezuela and Zambia.

METHODOLOGY:

The questionnaire distributed among EMC members contained seven questions, some of them divided into a number of sub-questions. This report consists in the individual analysis of the answers provided to those questions by each jurisdiction.

The responses were synthesized and standardized in order to enable an easy comparison on a country by country basis. These condensed responses are presented in Appendix A.

In order to standardize the results, we had to include similar responses into a category, although there may be actually differences between the concept described and the actual methodology used by each country. For example, the term “yield curve”, used in question 1.B refers to several different answers, including some jurisdictions that detailed the methodology used, which we interpreted could be gathered in that category.

Please note that in order to make this exercise, the following criteria were used:

- (1) countries with different regulation on different types of CIS had their responses divided in accordance with the CIS they referred to;
- (2) to present final results in graphic form, answers of countries provided in accordance with paragraph (1), or of countries which use more than one criteria for a single type of CIS, were considered as a relative proportion that, when added, will be equal to one for each country. E.g.: if, in a country that has two types of funds, one of them has to disclose the price of shares daily and the other monthly, a weight of 0.5 will be assigned to each of them, in order for this particular country to have a total weight equal to one. Therefore, as 41 countries answered the questionnaire, the base weight for each table that origins each graph is 41; and
- (3) the term “jurisdictions” used in the tables of the next section refers basically to the number of countries that answered a determined response, but may also refer to an addition of relative proportion of each response, as described in item (2).

After calculating each weight for each country, similar responses were grouped and the result of each group was divided by 41, in order to calculate the percentage weight.

Please note that in order to minimize misleading information that could be produced as a result of this methodology, we sent to all respondents a copy of

the condensed responses, so that they could confirm or not our analysis. Some countries provided us with feedback, which resulted in minor changes. Another consequence of this feedback was the replacement of the term “SEC” by “Securities Regulator” in question 2, because some members stipulated that they cannot be formally considered as securities commissions, but have broader regulatory authority, which can encompass insurance, pension funds, and bank supervision.

The next methodological step consisted in individual analysis for each question of the survey, described in the following section of this report. This consisted in:

- Copying each question;
- Presenting the data gathered (including graphs and tables);
- Analyzing this data, while referring to IOSCO principles;
- Formulating recommendations, which are summarized in the Conclusion.

This analysis does not refer to any jurisdiction and its objective is to present an overview of the data provided. Detailed responses can be found in Appendix A.

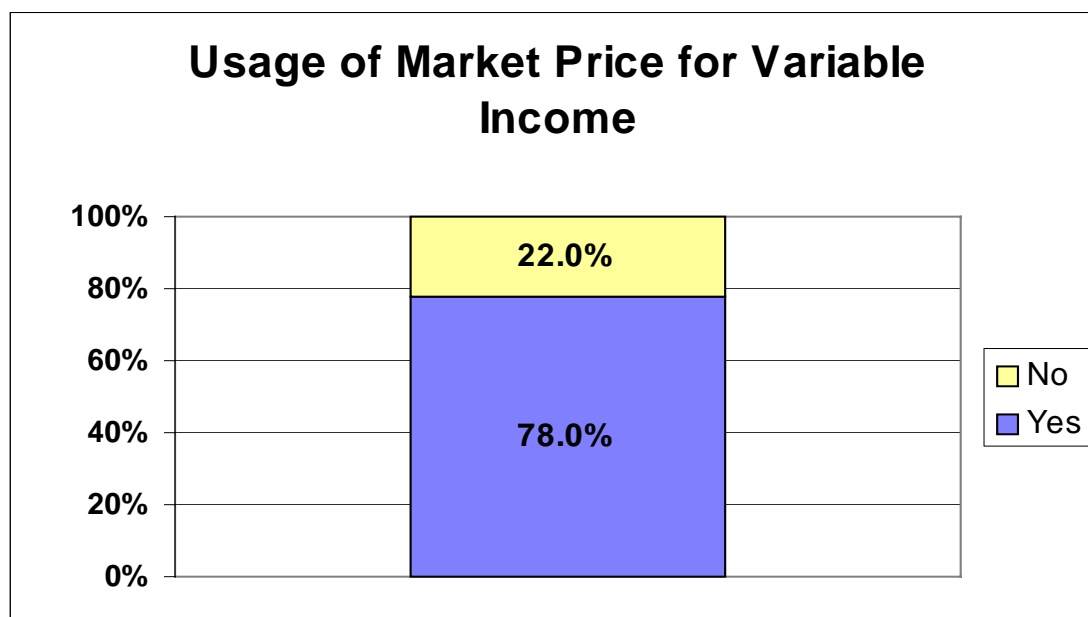
Appendix B is an extract from the 1995 IOSCO Technical Committee report entitled *Principles for the Regulation of Collective Investment Schemes*. It refers specifically to asset valuation and pricing and was included for comparison purposes between the results compiled in this report and the above mentioned CIS Principles.

Appendix C is also an extract from the *Report on the Oversight of Collective Investment Schemes*, released in 1998 by the *Council of Securities Regulators of the Americas* (COSRA), which also acts as IOSCO’s Interamerican Regional Committee.

ANALYSIS OF THE RESPONSES TO THE QUESTIONNAIRE ON CIS UNIT PRICING:

1. ***(A) Does your regulation establish that, as a general rule, variable-income securities that compose CIS portfolios be valued by their market price?***

The graph below shows that there are 32 jurisdictions (78.0%) in which the regulation establishes that variable-income securities that compose CIS portfolios shall be valued by their market price. Of the remaining 9 jurisdictions (22.0%), who stated that the use of market pricing is not mandatory, 5 do not have regulation on this topic, 2 explicitly stated that market pricing is not mandatory, 1 stated that market pricing is not formally required but expected, and 1 stated that pertinent regulation is being developed.



Considering that the TC WG-5 Report on Investment Management Principles reproduced in Appendix B states that:

“Assets of the CIS must be valued according to their market price unless otherwise permitted by Law in particular circumstances (...)”

We highly recommend that EMC countries, which are considering the development or enhancement of CIS regulation, use market price as a basic reference for asset valuation.

The issue of how to address the problem of “particular circumstances” mentioned in the IOSCO Principles, which may include lack of liquidity,

derivatives, absence of standard methodology, or fixed-income securities, will now be discussed.

(B) In the event market price is not available, please explain the valuation criteria used for the assets that compose a CIS, for instance:

- (i) stocks;**
- (ii) debentures;**
- (iii) derivatives (futures, forwards, and options);**
- (iv) other (e.g. warrants)**

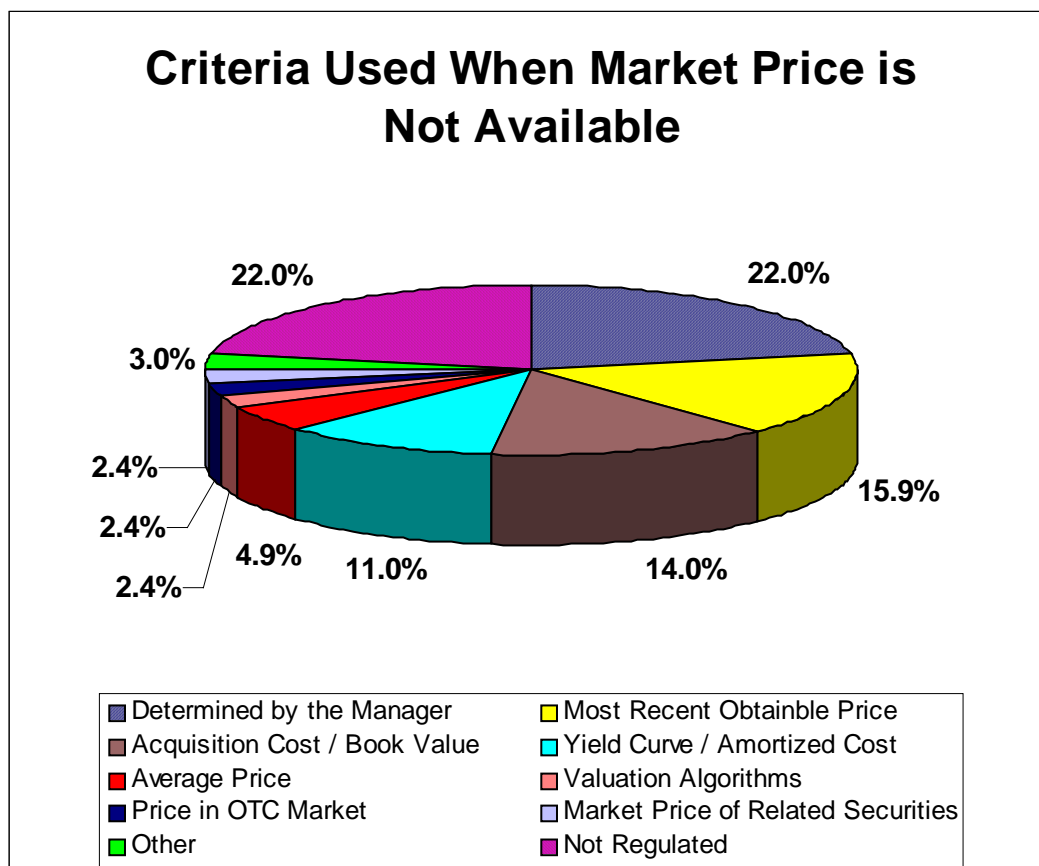
As shown in the table and graph hereafter presented, if market price is not available, the valuation criteria are determined by the CIS managers in 9 jurisdictions (22.0%). 22.0% of the jurisdictions which responded to the survey do not have related regulation and in their cases it is the CIS managers who determine the valuation criteria. Overall, in nearly half of the jurisdictions surveyed managers determining the valuation criteria is therefore actually the regular procedure. It is important to stress that for the majority of the countries, which stated that the managers might define criteria, they have to do so following acceptable principles.

Criteria if Market Price is Not Available	#Jurisdictions	%
Determined by the Manager	9	22.0
Most Recent Price	6.5	15.9
Acquisition Cost / Book Value	5.75	14.0
Yield Curve / Amortized Cost	4.5	11.0
Average Price	2	4.9
Valuation Algorithms	1	2.4
Price in OTC Market	1	2.4
Market Price of Related Securities	1	2.4
Other	1.25	3.0
Not Regulated	9	22.0
Total	41	100

Acquisition cost (which we obtained from book value) is used by 14% of the jurisdictions as a criterion. However, some of these do not adopt this criterion for all their funds. Therefore, the number 5.75 (please refer to the above table), expresses a relative proportion of the funds in which this criteria is used. This calculation methodology is applicable for the other criteria, as explained in the "Methodology" section of this report.

Two jurisdictions (4.9%) use average price as a valuation criterion. One refers to a 5-day average for the last trading prices and the other extends this concept to a weighted average bid price. Valuation algorithms, price in OTC market, and market price of related securities are used in only 1 jurisdiction each (2.4%).

The column “other” represents jurisdictions that use very specific valuation criteria for specific types of funds or too many different criteria when market price is not available.



The most important conclusion to this aspect is that some countries have very detailed regulation on how to value assets when market price is not available, whereas others leave the issue exclusively to the managers. It is very important that accounting principles leading to a fair value are used in order to avoid, as much as possible, prices that do not correctly reflect net worth, especially for open-ended funds (closed-ended funds are more correctly valued by the secondary market). The TC WG-5 *Report on Investment Management* principles states:

“Should the market price not be available for any reason, the asset price should be calculated in good faith according to a permanent and reliable valuation procedure approved by the regulatory authority.”

This is a very important point to be addressed by emerging markets, as liquidity problems are more common in such markets than in developed ones.

In addition, COSRA’s principles also state:

“If a CIS's portfolio securities are traded actively in a domestic market, market quotations generally provide the best indication of value. Questions may arise regarding the value of illiquid or thinly traded securities (...). Under those circumstances, a CIS may need to value the security at the amount at which it might reasonably expect to receive upon a current sale.”

Therefore, we also recommend that IOSCO EMC members seeking to enhance their CIS regulation identify the potential circumstances (ex. lack of liquidity) that may lead to pricing problems, in order to offer uniform and general pricing standards. This will prevent the use of a variety of different pricing criteria among the CIS and will ensure that the used criteria reflect “fair value”. This is particularly important for open-ended CIS because their units are not traded and, therefore, do not have a market value.

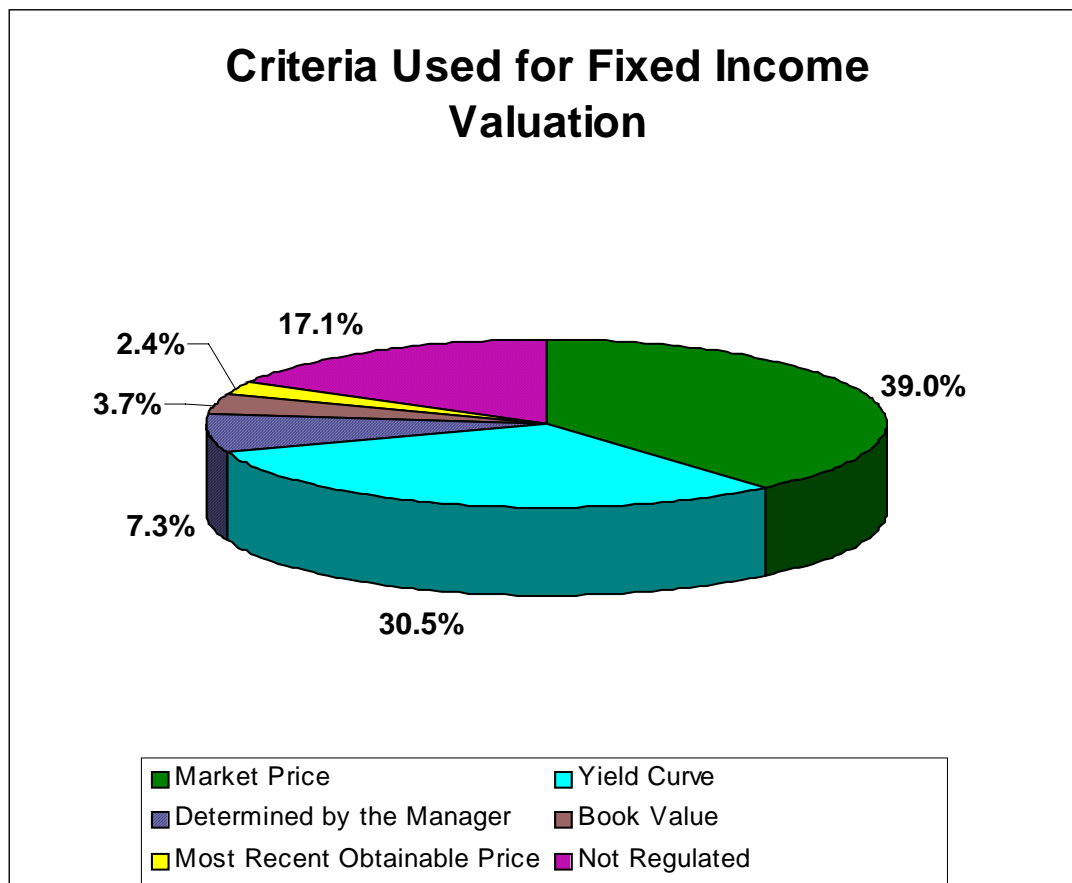
(C) How are fixed-income assets valued?

The graph below shows that fixed-income assets are valued by their market price in 16 jurisdictions (39.0%). Yield curve (or similar) criteria is used by 11.5 jurisdictions (30.5%), and 7 jurisdictions (17.1%) do not have regulation on the subject.

Fixed-Income Valuation Criteria	#Jurisdictions	%
Market Price	16	39.0
Yield Curve	11.5	30.5
Determined by the Manager	3	7.3
Book Value	1.5	3.7
Most Recent Obtainable Price	1	2.4
Not Regulated	7	17.1
Total	41	100

In 7.3% of jurisdictions fixed-income valuation criteria are determined by the manager (for specific types of funds or as a general criterion, depending on the country).

2.4% of jurisdictions use amortized cost as a valuation criteria, 3.7% use book value, and 2.4% use the most recent obtainable price criteria.



The valuation criteria of fixed income securities are a special case. The use of market value could be encouraged only in daily liquid markets (whose value generally converges to the yield curve, plus a positive or negative premium). If there be no liquidity, or if redemption can only be achieved when agreed directly between parties, the use of the yield curve may be more appropriate, as the value obtained may be more appropriate than the use of criteria related to past market values. Please note that the use of market price or of the yield curve is a mandatory requirement in 70% of the EMC jurisdictions who provided answers to this question.

2. Who may choose or change those valuation criteria? The securities regulator, a SRO, or the CIS?

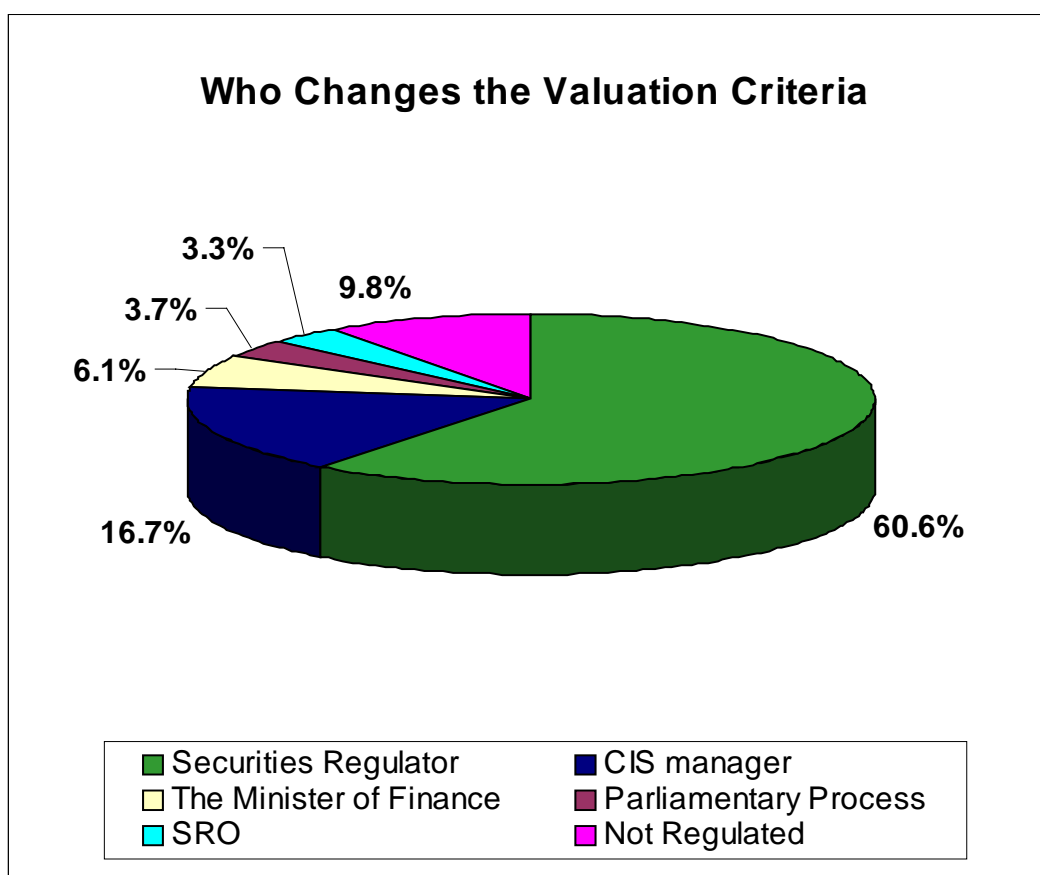
This question seeks to determine who is responsible for setting and changing CIS valuation rules. The related graph and table indicate that, in most jurisdictions, the valuation criteria are mostly determined by securities regulators (60.6%). The CIS are directly responsible for setting or modifying valuation criteria in 16.7% of the jurisdictions. 9.8% of the jurisdictions do not have related regulation. For 6.1%, effecting modifications to the CIS valuation criteria is under

the responsibility of the Minister of Finance. For 3,7%, it is the responsibility of parliamentary authorities and for the remaining jurisdictions (3.3%) the responsibility falls into the hands of Self-regulatory organizations (SROs).

Who Changes the Valuation Criteria	#Jurisdictions	%
Securities Regulator	24.83	60.6
CIS	6.83	16.7
The Minister of Finance	2.5	6.1
Parliamentary Process	1.5	3.7
SRO	1.34	3.3
Not Regulated	4	9.8
Total	41	100

The Technical Committee Report on Investment Management Principles states that:

“The regulatory regime must provide a system for valuation of CIS assets, pricing of interests and procedures for entry to and exit from a collective investment which are fair to existing investors as well as to investors seeking to purchase or redeem interests.”



EMC jurisdictions, that have not established CIS valuation criteria through government agencies or SROs, should be encouraged to rapidly do so because criteria established directly by the CIS may lead to discrepancies within the industry, in particular, if the CIS can change the valuation criteria without any obligation to follow some general standards. In these cases, the primary consideration for effecting changes to CIS valuation criteria may be the direct interests of CIS managers and not that of unit holders.

3. How often does a CIS have to calculate / publish the price of its units and net worth?

As shown in the graph hereafter presented in 44% jurisdictions CIS unit price must be disclosed on a daily basis. In 25.6% CIS pricing disclosure periodicity is not regulated (this figure includes jurisdictions in which disclosure is determined by the CIS managers).

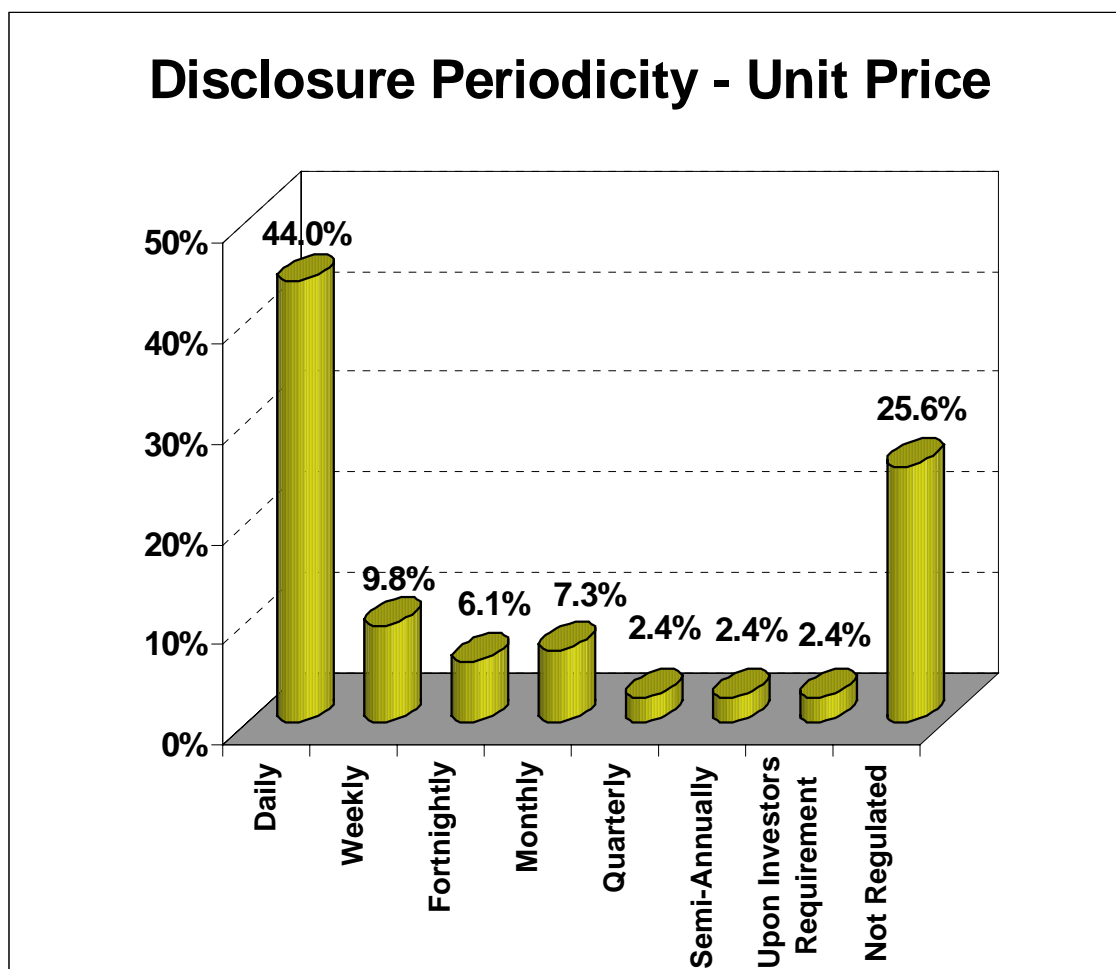
9.8% of jurisdictions require disclosure on a weekly basis, 6.1% require fortnightly pricing disclosure and 7.3% state that price must be disclosed on a monthly basis. For 2.4% of jurisdictions price disclosure periodicity is on quarterly basis. This is also the case (2.4% of jurisdictions) for semi-annual periodicity. The remaining 2.4% of jurisdictions indicated that price disclosure is provided only when investors specifically require it.

Disclosure Periodicity – Price	#Jurisdictions	%
Daily	18	44.0
Weekly	4	9.8
Fortnightly	2.5	6.1
Monthly	3	7.3
Quarterly	1	2.4
Semi-Annually	1	2.4
Upon Investors Requirement	1	2.4
Not Regulated	10.5	25.6
Total	41	100

It is also interesting to note that in some jurisdictions disclosure periodicity may differ from the calculation period (for detailed information, please refer to Appendix A). In addition, requirements for open-ended CIS may be different from requirement for closed-ended CIS, which is can be justified by the fact that the unit price for close-ended funds is better determined by secondary market pricing, rather than book value.

Concerning disclosure, the Technical Committee *Report on Investment Management Principles* states that:

“The net asset value per unit should be published at the operator’s or at the custodian’s offices or through the appropriate media.”



With respect to net worth, disclosure periodicity is often established to be less than that for net of unit price.

The graph and table shown below demonstrate that, although 26.8% of jurisdictions require net worth disclosure on a daily basis, this is a small number compared to the 43.9% that require daily disclosure for unit price. 30.5% of jurisdictions do not have regulations on CIS net worth disclosure.

Of the rest, 13.4% of jurisdictions required weekly disclosure, 2.4% of jurisdiction state that this must be performed every fortnight, 11% indicate that it must be monthly, 6.1% quarterly, 4.9% on a semi-annual basis, and 2.4% annually. Finally, 2.4% of jurisdictions state that disclosure is to be provided only when investors request it.

Disclosure Periodicity – Net Worth	#Jurisdictions	%
Daily	11	26.8
Weekly	5.5	13.4
Fortnightly	1	2.4
Monthly	4.5	11.0
Quarterly	2.5	6.1
Semi-Annually	2	4.9
Annually	1	2.4
Upon Investors Requirement	1	2.4
Not Regulated	12.5	30.5
Total	41	100

The discrepancy found between the periodicity of the disclosure of price and net worth may be the result of a greater interest of investors for unit price. In addition, disclosing both figures may cost more than the disclosure of only one of them. However, it can be argued that calculating the net worth is necessary for the calculation of the unit price, which is also called “net asset value per unit”.

The Technical Committee *Report on Investment Management Principles* states that:

“It is a fundamental principle that the price of interests in a CIS be calculated according to the net asset value of the CIS, which must be determined on a regular basis (...)”

and

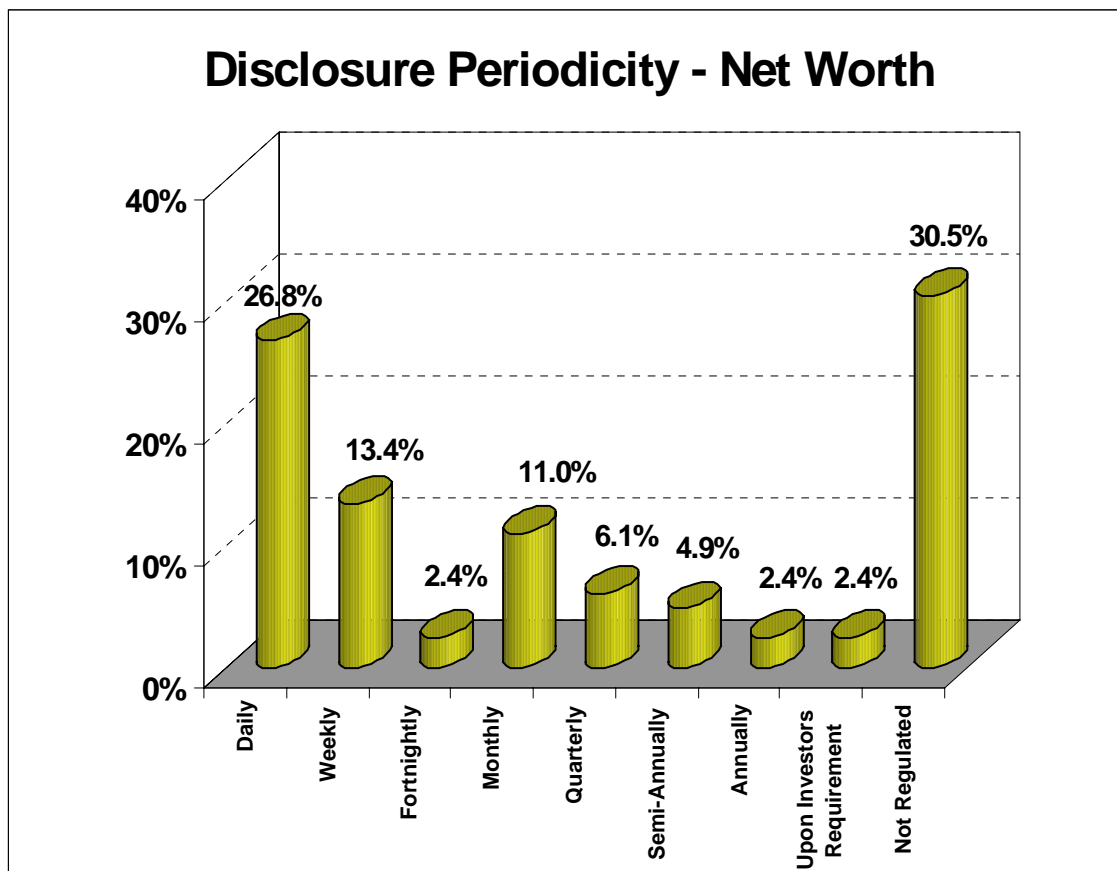
“The net asset value per unit must be calculated in accordance with applicable accounting standards by dividing a CIS's assets less its liabilities by the number of units.”

This shows that, as a general rule, unit price calculation should be performed taking as a base the net worth (total assets minus liabilities), which is then divided by the number of existing shares.

Given that the net worth has to be calculated before the share value can be established, the periodicity of calculation requirements for both figures could be the same if the cost of disclosing additional information is not relevant (e.g. disclosure through the Internet).

COSRA Principles also state that:

“Daily calculation of a CIS's net asset value ensures that a CIS that issues redeemable securities is prepared to redeem those securities at a current price.”



Especially for open-ended CIS, daily calculation of unit price and net worth ensures that the mispricing risk is minimized. Mispricing may lead to problems, notably when someone has material information. For example, an open-ended CIS invested in local stocks has its price calculated weekly and the last calculation took place on a Monday. If someone wants to invest in the fund on Thursday, and by then the market has risen by 10%, he will have an advantage over the other shareholders (this is called backward pricing, and it will be further discussed in relation to the next Survey question). On the other hand, if he has to wait until the next calculation to invest into the fund, he will lose investment opportunity.

Another key factor for encouraging daily calculation: if a market opens daily, nothing is fairer for CIS investors. The only exception is if markets are illiquid.

4. Does your regulation prescribe, at the purchase (“P”) of CIS units, which unit price is to be used, that at the closing of P+0 (same date of purchase), the closing of P+1 (the day after the purchase), or later? Please specify.

As shown in the following tableau, 9.5% of jurisdictions reported that the unit price used at purchase is established at P-1, *i.e.*, the day before the purchase.

The most widely used unit price (40%) is that established at P+0 (day of purchase). Price at P+1 (day after the purchase) is used in 9.8% of jurisdictions. There are a significant number of jurisdictions (36.6%) that do not have regulation concerning the unit price used for the purchase of CIS units.

3.7% of jurisdictions report that a valuation date not exceeding one week must be used by each CIS to calculate the price of purchase. For example, if the normal valuation date is on a Monday and an investment is made on Tuesday, the unit price used for the purchase will be determined only on the following Monday.

Purchase	#Jurisdiction s	%
P-1	3.91	9.5
P+0	16.56	40.4
P+1	4.02	9.8
1 week maximum	1.5	3.7
Not Regulated / Determined by the CIS	15	36.6
Total	41	100

Forward and Backward pricing are defined as follows in COSRA’s Report:

“Forward pricing occurs when a CIS sells, redeems or repurchases its securities at a price that is computed after receiving a purchase, sale or redemption request. With backward pricing, the price used is the price that was computed before receiving the request.”

Backward pricing (*i.e.* pricing at P-1) is not recommended. An investor purchasing CIS shares using backward pricing knows the price of those shares before purchasing them. This enables a speculator to take advantage of fluctuations in the price of the securities of the CIS portfolio, which took place after the CIS unit net asset value has been calculated.

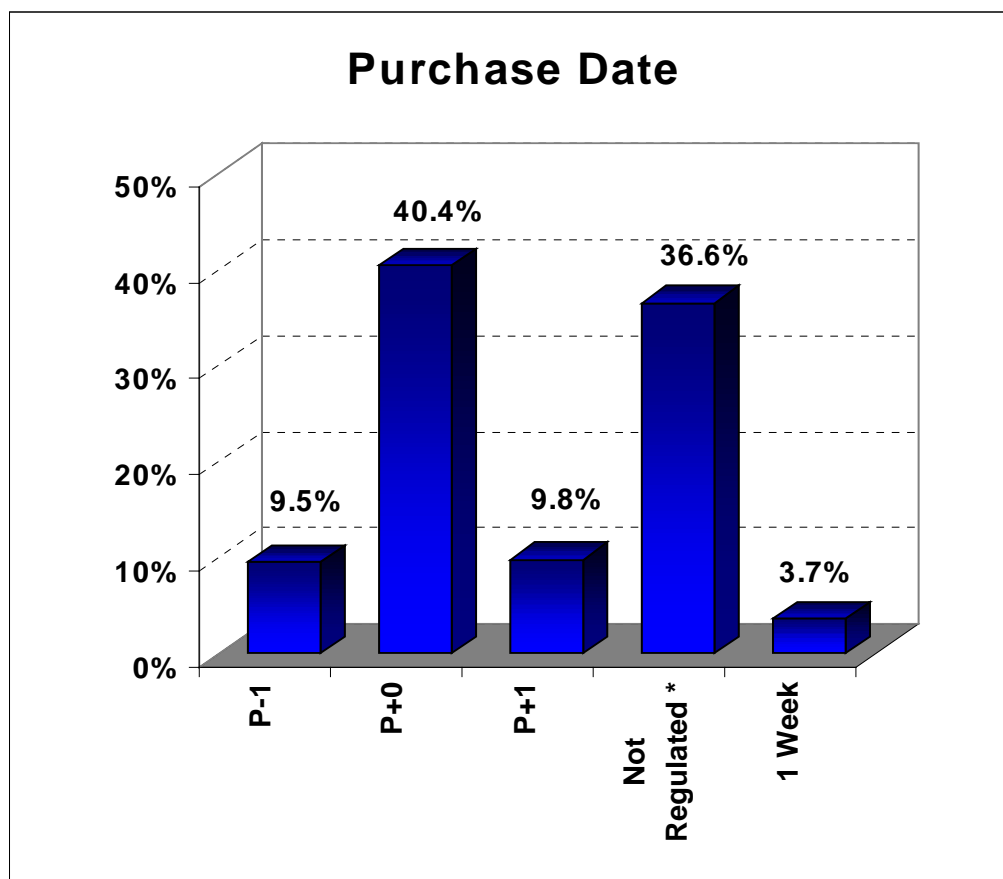
Some jurisdictions using backward pricing minimize this problem by using regulation prescribing that when a significant market movement (*e.g.*: 3% or 5%)

occurs, a new calculation must be done. The following example is mentioned in the COSRA Report:

“For example, when securities prices generally are rising, a speculator could buy a large number of CIS shares at a previously determined price, and then redeem them at a profit after the CIS's net asset value is calculated. Backward pricing can lead to significant dilution in the investments of existing CIS shareholders and can contribute to market volatility.”

A more complex situation results when a CIS may invest in securities traded in markets trading at different hours. The COSRA Report in that regard states that:

“Questions also may arise regarding the value of securities traded on foreign exchanges, when an event occurs after the closing of a foreign exchange that would result in a material change in the market value of a particular security.”



If the regulation prescribes the use of P+0 to determine the purchase price of CIS units and the main asset of a particular CIS is a stock traded in a market that closed hours ago, an investor knowing how this particular security has behaved would introduce a similar backward pricing problem into the buying equation. This is particularly true for equity funds.

Please note that the G-30 recommendation of accomplishing the settlement in T+3¹ could not be lower exactly due to the time frame between markets.

5. Does your regulation establish which unit price must be used for the redemption (“R”) of units? R+0? R+1? Later (please specify)?

Redemption price dating data shows that the timeframe used is generally longer than for determining purchase price. 34.6% of jurisdictions require redemption calculation at R+0 (compared to 40.4% for investment calculation at R+0).

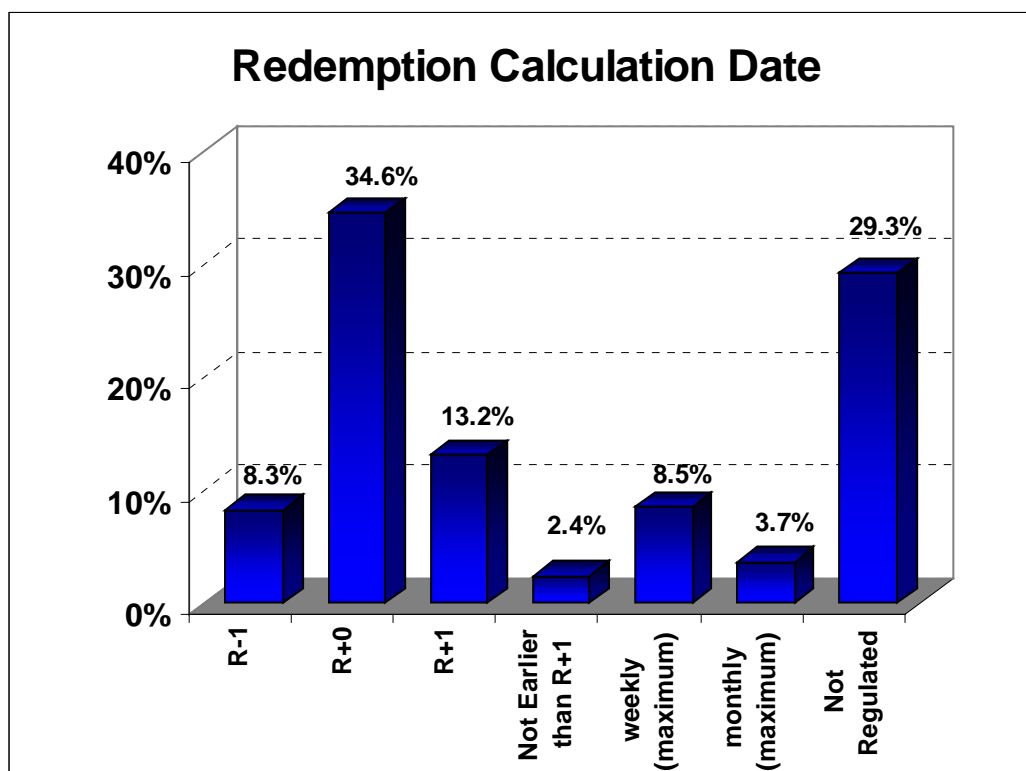
R+1 is used in 13.2% of jurisdictions (compared to 9.8% for purchase pricing), while 8.3% use R-1 (compared to 9.5% for purchase pricing). The one-week maximum timeframe is used in 8.5% of jurisdictions. A one-month maximum timeframe is used in 3.7% of jurisdictions.

Redemption – Calculation Date	#Jurisdiction s	%
R-1	3.41	8.3
R+0	14.2	34.6
R+1	5.41	13.2
Not earlier than R+1	1	2.4
No later than 1 week	3.5	8.5
No later than 1 month	1.5	3.7
Not Regulated / Determined by the CIS	12	29.3
Total	41	100

Regulators are generally flexible on this point, some of them even permitting that the CIS managers use a redemption dating period between R-1 and R+1. One regulator specifically reported taking into consideration backward pricing problems in imposing that the redemption price should not be calculated before R+1. A longer timeframe for redemption pricing may however generate liquidity problems for investors because redemption can only be effected after the redemption price has been calculated.

Redemption price dating was reported not regulated in 29.3 % of jurisdictions (slightly lower than the 36.6% reported for purchase price dating).

¹ Please refer to recommendation number 7.



Is the actual payment of the redemption made at the same date of its calculation? If not, please specify when.

The payment date issue brought surprising results as most jurisdictions reported not have any related regulation (31.7%).

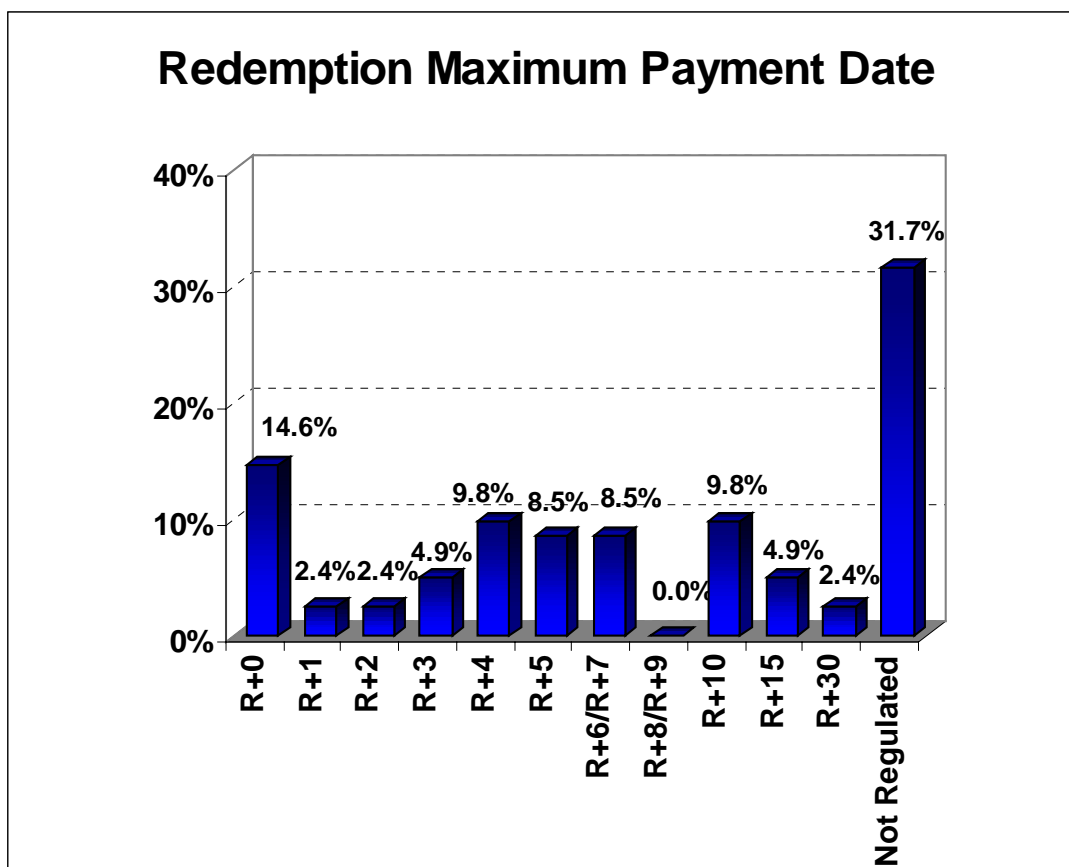
Among the jurisdictions where payment date is regulated, R+0 is used by 14.7%, R+10 and R+4 by 9.8% each and, R+5 and R+6 / R+7 by 8.5% each. R+15 and R+3 is respectively used in 4.9% of jurisdictions.

2.4% of jurisdictions respectively set the payment date at R+30, R+1, and R+2. Please note that R+8 or R+9 is not used in any jurisdiction, but is shown in the following graph for reference purpose only.

It is important to emphasize that the diversity of responses gathered on this issue is far higher than those compiled for purchase or redemption dating because, in many cases, the clearing and settlement cycles have to be taken into consideration. It is interesting to note that the R+5 and R+10 jurisdictions (36.8%) are four times more numerous than those using R+1 and R+3 (9.7%).

Redemption - Payment Date	#Jurisdictions	%
R+0	6	14.7
R+1	1	2.4
R+2	1	2.4
R+3	2	4.9
R+4	4	9.8
R+5	3.5	8.5
R+6 / R+7	3.5	8.5
R+10	4	9.8
R+15	2	4.9
R+30	1	2.4
Not Regulated / Determined by the CIS	13	31.7
Total	41	100

Nearly 15% of jurisdictions reported using R+0. This payment date is used when redemption pricing is done at R-1. This may be acceptable for fixed income oriented funds, which do not have backward pricing problems (as they are usually valued by the yield), but for the same reason should be avoided for equity oriented funds.



Some jurisdictions allow the settlement period to be different in case of liquidity problems, which is acceptable according to the Technical Committee Report on Investment Management Principles:

“Redemption of units may only be suspended on a temporary basis. Any such suspension must be in accordance with the procedures provided for by the law or the CIS rules and must be in the interests of investors. A CIS must inform the regulatory authority of a suspension. In accordance with the laws of its jurisdiction, a regulatory authority may permit a CIS to suspend the right of redemption for the protection of investors.”

Regulators should generally keep in mind the following Technical Committee investment management principle, especially applicable for open-ended CIS.

“A CIS must redeem its units at the request of any investor, in a manner and frequency laid down in the law or the CIS rules.”

“Purchase and redemption orders are to be settled as soon as possible, in accordance with the law, the CIS rules and the prospectus.”

6. Are the asset / unit pricing criteria regularly audited by independent auditors? Must the auditors be registered with the securities regulator?

As reported in the table and graph hereafter presented, in most of the jurisdictions (almost 80%) the regulation requires CIS auditing. However most jurisdictions (45.2%) having auditing requirements do not have specific pricing provisions. The regulation requires auditing of the unit pricing criteria in only 34.1% of jurisdictions. A significant number of jurisdictions (20.7%) do not require auditing or have a regulation on the subject.

Auditing Requirements	#Jurisdictions	%
Yes (no specific provision on pricing)	18.5	45.2
Yes	14	34.1
No	8.5	20.7
Total	41	100

Considering that only 34.1% of the jurisdictions reported having pricing regulation, this is a relevant issue to be addressed by EMC regulators.

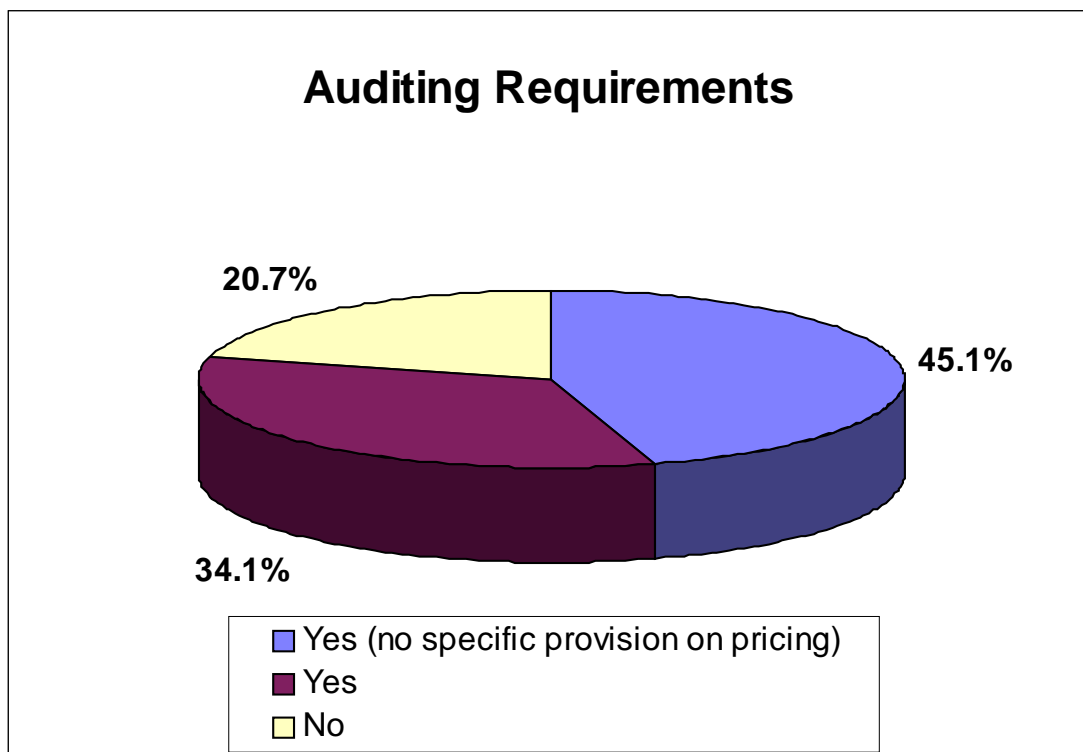
In general, two auditing provisions should be introduced in the regulation:

1. Asset valuation and pricing criteria are the legal or fair ones.

2. CIS use of these legal and fair criteria in all cases.

Please note that the COSRA's Report states that:

"It may be beneficial for the CIS's pricing procedures to be clearly disclosed to investors and subject to the review of another party, such as the CIS's board, or an auditor."



7. Do the valuation criteria of those assets forming part of a CIS portfolio have to be disclosed in the prospectus or other materials?

As shown in the following graph, 61% of EMC jurisdictions reported that valuation criteria must be disclosed. 39.0% reported that this was not the case.

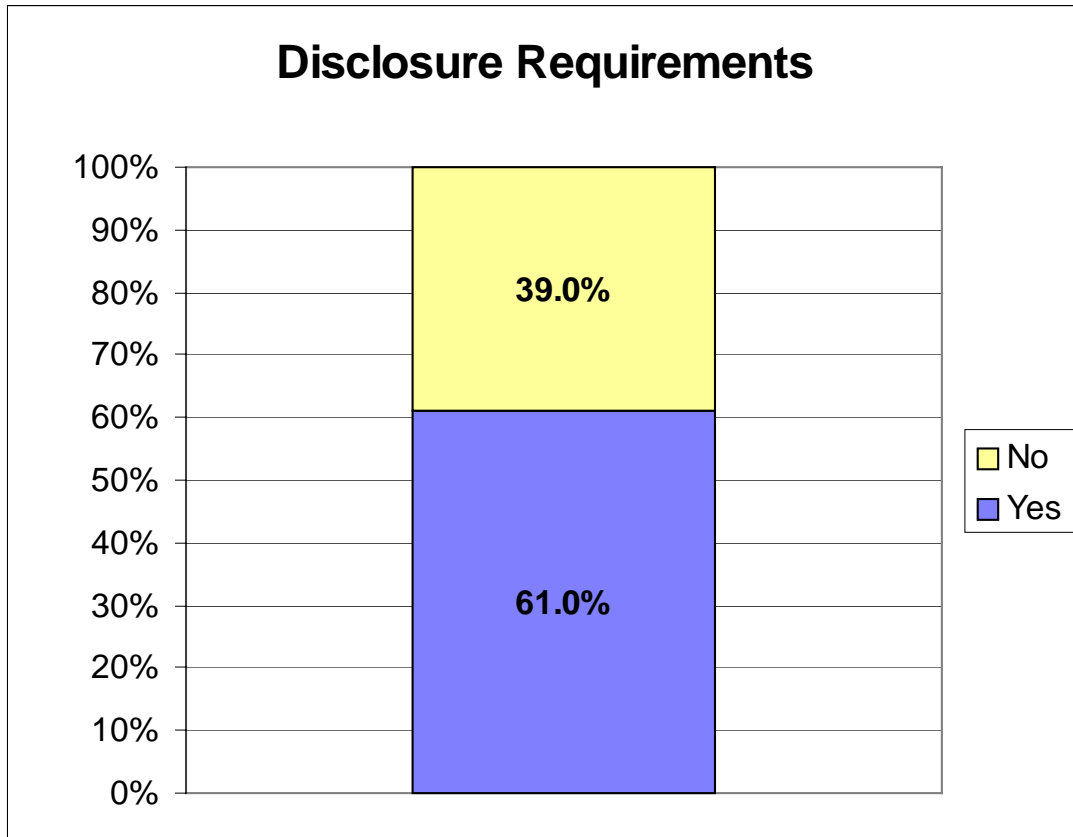
The Technical Committee Report on Investment Management states that:

"The rules for asset valuation and for calculating the price of units must be laid down in the law or a CIS's rules or its public disclosure documents."

and

"Information on the system for pricing, valuation and associated procedures must be made available to investors on requests."

This problem must be addressed by EMC regulators, which should ensure that all investors have the right to access this important information, either through public disclosure documents or upon investor request.



CONCLUSION:

The EMC thanks all the members, which have participated in the CIS unit pricing survey.

This Report is not intended to evaluate in any way the regulatory approach of individual jurisdictions. Its objective is only to provide a general assessment of the regulatory framework in place in a number of EMC jurisdictions and to formulate corresponding recommendations, which should individually be considered by EMC members in the context of the specific characteristics of their respective markets.

The main conclusion reached in this Report is that, in EMC jurisdictions, there are presently a wide variety of criteria used for CIS asset valuation and pricing. Some jurisdictions use very complex regulatory approaches, whereas others have only very general rules, leaving several issues to be determined by individual CIS. Some jurisdictions are still in the process of preparing related regulation, or have in place very limited regulation.

Based on the data gathered in this Report, it is therefore recommended that EMC members implement in their respective jurisdictions the following set of key regulatory principles for CIS unit pricing. These principles complement the ones already adopted by the IOSCO Technical Committee. The principles recommended by the EMC are:

1. Market price should be used as a basic reference;
2. Define and address specific cases where market price cannot be used;
3. Specify who may change CIS accounting criteria and under which specific circumstances;
4. Encourage daily pricing calculation and disclosure for open-ended CIS and full disclosure for closed-ended CIS transactions;
5. Avoid the use of backward pricing for the purchase or redemption of equity funds units, or create mechanisms intended to minimize its effects;
6. Encourage the use of independent auditors for reviewing CIS financial statements, including for the correct use of pricing principles.
7. Encourage the disclosure of pricing principles, at least on demand.

APPENDIX A

CONDENSED RESPONSES

CONDENSED RESPONSES TO THE EMC WG-5 QUESTIONNAIRE ON UNIT PRICING

Country	Market Price for Variable Income	Criteria if Market Price is not available	Fixed Income Valuation Criteria	Who Changes Valuation Criteria ¹	Disclosure Periodicity		Purchase	Redemption		Auditing Required	Disclosure Requirements
					Price	Net worth		Calculation	Payment		
Argentina	Yes	Most recent obtainable prices ²	Market price	Securities Agency	Daily	Daily	P+0/P+1 ³	R+0/R+1 ³	R+3 (general rule)	Yes ⁴	Yes
Barbados ⁵	-	-	-	-	-	-	-	-	-	-	-
Bermuda ⁶											
<i>Recognized Schemes</i>	Yes	Most recent obtainable prices	Most recent obtainable prices	The Minister of Finance	At least fortnightly	Semi-annually	Next valuation point ⁷	Next valuation point ⁷	R+4 (general rule) ⁸	Yes (no specific provision on pricing) ⁹	Yes ¹⁰
<i>Standard or Institutional Schemes</i>	Yes ¹¹	Generally accepted accounting principles	Generally accepted accounting principles	The Minister of Finance	No frequency requirement ¹²	Annually ¹³	Not regulated ¹⁴	Not regulated ¹⁴	R+4 (general rule) ⁸	Yes (no specific provision on pricing) ⁹	Yes ¹⁰
Bolivia ¹⁵	Yes	Yield curve	Yield curve	Securities Agency	Daily	Daily	P+0	R+0	R+0 ¹⁶	No ¹⁷	No
Brazil ¹⁸											
<i>Equity Funds (FMIA and FMIA-CL)</i>	Yes	Determined by the CIS manager ¹⁹	Yield curve ²⁰	Securities Agency	Daily (open-ended) Monthly (closed-end)	Daily (open-ended) Monthly (closed-end)	P+1 (FMIA: open-ended) P+0/P+1, according to their by-laws (FMIA-CL: open-ended)	R+1	No later than R+4 ²¹	Yes (no specific provision on pricing) ²²	No ²³
<i>FIFs</i>	Yes	Determined by the CIS manager ¹⁹	Market Price	Securities Agency	Daily (open-ended) Monthly (closed-end)	Daily (open-ended) Monthly (closed-end)	P+0/P+1, according to their by-laws (open-ended)	No later than R+30 (in accordance with their by-laws) ²⁴	No later than R+5 ²⁵	Yes ²⁶	No

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Country	Market Price for Variable Income	Criteria if Market Price is not available	Fixed Income Valuation Criteria	Who Changes Valuation Criteria	Disclosure Periodicity		Purchase	Redemption		Auditing Required	Disclosure Requirements
					Price	Net worth		Calculation	Payment		
Bulgaria ²⁷	No ²⁸	Not regulated ²⁹	Market price	CIS (prior approval of the Securities Agency is required)	At least fortnightly	Not regulated	Not regulated ³⁰	Not regulated ³¹	Not regulated ³¹	Yes	Yes
Chile	Yes	Proportional equity value, acquisition price ³²	Yield curve or market price ³³	Securities Agency	Daily	Monthly (open-ended - daily calculation required) Quarterly (closed-end) ³⁴	P-1/P+0 (variable income or short term fixed income funds) P+0/P+1 (long term fixed income funds) ³⁵	R-1/R+0 (variable income funds) R+0/R+1 (fixed income funds) ³⁶	No later than R+10	Yes (no specific provision on pricing) ³⁷	No
China	Yes	Acquisition price (never traded securities) ³⁸	Market price (assets that have an active market) ³⁹	Securities Agency	Monthly (closed-end)	Monthly (closed-end)	Not Regulated ⁴⁰	Not Regulated ⁴⁰	Not Regulated ⁴⁰	Yes ⁴¹	Yes
Costa Rica	Yes	Five day average price ⁴²	Yield curve	Securities Agency	Upon investors requirement (daily calculation required)	Upon investors requirement (daily calculation required)	P+0	R+0	R+0	No ⁴³	No
Ecuador	Yes	Determined by the CIS (prior approval of the SEC is required)	Not regulated	Securities Agency	Weekly (daily calculation required)	Weekly	P+0	R+0	N/A	Yes (no specific provision on pricing) ⁴⁴	No
Egypt	Yes	N/A	Market price	Securities Agency	Daily	Daily	P+0	R-P (1 week maximum) ⁴⁵	R-P (1 week maximum) ⁴⁶	Yes ⁴⁷	Yes

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Country	Market Price for Variable Income	Criteria if Market Price is not available	Fixed Income Valuation Criteria	Who Changes Valuation Criteria	Disclosure Periodicity		Purchase	Redemption		Auditing Required	Disclosure Requirements
					Price	Net worth		Calculation	Payment		
Morocco	Yes	Price in OTC market (if no trade has been recorded in the previous month) ⁷⁷	Market price available on the evaluation date ⁷⁸	Ministry of Finance ⁷⁹	Weekly	Weekly	P+X (1 week maximum) ⁸⁰	R+X (1 week maximum) ⁸⁰	R+X (1 week maximum) ⁸⁰	Yes ⁸¹	Yes ⁸²
Nigeria ⁸³	Yes	Net Asset Value or adjusted annual profit ⁸⁴	Market Price (based on the prevailing real interest and coupon rate) ⁸⁵	Securities Agency	N/A	N/A	N/A	R+0 (general rule)	No later than R+5 (general rule)	Yes (no specific provision on pricing)	No ⁸⁶
Pakistan ⁸⁷											
<i>NIT</i>	Yes	Determined by the CIS	Market Price ⁸⁸	CIS	Daily (general rule) ⁸⁹	Annually (general rule)	P-1 ⁹⁰	R-1 ⁹¹	R+0 ⁹²	Yes	Yes ⁹³
<i>Unit Trust schemes established under CLA rules</i>	Yes	Acquisition cost or its breakup value as per audited accounts (whichever is lower) ⁹⁴	Market Price ⁸⁸	Securities Agency	Not regulated ⁹⁵	Semi-annually	P+0/P+1 ⁹⁶	R+0/R+1 ⁹⁶	No later than R+6 ⁹⁷	No ⁹⁸	Yes ⁹⁹
Panama	Yes	Determined by the CIS	Market price	CIS (general rule)	Not regulated (daily calculation required) ¹⁰⁰	Not regulated (daily calculation required)	Not regulated (usually P+1 or later)	Not regulated	No later than R+30	Yes (no specific provision on pricing) ¹⁰¹	No
Paraguay	No (regulation being developed)	Not regulated	Effective interest rate (yield curve) ¹⁰²	Securities Agency	Determined by the manager ¹⁰³	Determined by the manager ¹⁰³	Not regulated	Not regulated	Not regulated	Yes (no specific provision on pricing) ¹⁰⁴	No

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Country	Market Price for Variable Income	Criteria if Market Price is not available	Fixed Income Valuation Criteria	Who Changes Valuation Criteria	Disclosure Periodicity		Purchase	Redemption		Auditing Required	Disclosure Requirements
					Price	Net worth		Calculation	Payment		
Peru ¹⁰⁵	Yes	Acquisition price (general rule) ¹⁰⁶	Yield Curve ¹⁰⁷	Securities Agency	Daily (open-ended) Monthly (closed-end) ¹⁰⁸	Daily (open-ended) Monthly (closed-end) ¹⁰⁸	P-1/ P+0/ P+1	R-1/ R+0/ R+1 ¹⁰⁹	No later than R+3	Yes (no specific provision on pricing) ¹¹⁰	Yes ¹¹¹
Poland	Yes	Valuation algorithms ¹¹²	Nominal value ¹¹³	Securities Agency	Daily	Monthly	Next valuation point ¹¹⁴	Next valuation point ¹¹⁵	Determined by the CIS	Yes ¹¹⁶	Yes ¹¹⁷
Romania	Yes	Acquisition price plus interests ¹¹⁸	Yield curve ¹¹⁹	Securities Agency	At least weekly (daily calculation required - open-ended)?	At least weekly (daily calculation required - open-ended)	P+0	R+0 (closed-end) R-1 (open-ended)	No later than R+10	Yes (no specific provision on pricing) ¹²⁰	Yes
Russia	Yes ¹²¹	Weighted average price ¹²²	Market price	Securities Agency	Daily (daily calculation required for open-ended and monthly for closed-end)	Daily (daily calculation required for open-ended and monthly for closed-end)	P+0	R+0	R+15	Yes	Yes
Singapore ¹²³	No specific requirement ¹²⁴	Determined by the CIS manager	Determined by the manager	The manager ¹²⁵	Determined by the manager (usually daily)	Not regulated (usually annually)	Not regulated (usually P+0)	Not regulated (usually R+0)	Not regulated (usually R+7)	Yes (no specific provision on pricing) ¹²⁶	Yes ¹²⁷

CONDENSED RESPONSES TO THE EMC WG-5 QUESTIONNAIRE ON UNIT PRICING

Country	Market Price for Variable Income	Criteria if Market Price is not available	Fixed Income Valuation Criteria	Who Changes Valuation Criteria	Disclosure Periodicity		Purchase	Redemption		Auditing Required	Disclosure Requirements
					Price	Net worth		Calculation	Payment		
Slovenia	Yes	Acquisition price or book value (whichever is lower)	Yield Curve ¹²⁸	Securities Agency	Daily (general rule) ¹²⁹	Not required (calculated daily)	P-1	No later than R+5	No later than R+5	Yes (no specific provision on pricing) ¹³⁰	No
South Africa	Yes	Amortized cost (yield curve) ¹³¹	Amortized cost (yield curve) ¹³²	Through the Parliamentary process	Daily	Daily	P+0	Not earlier than R+1 ¹³³	Not Regulated	Yes ¹³⁴	No
Sri Lanka	Yes	Acquisition price or most recent obtainable price	Market Price or yield curve	Securities Agency /SRO	Daily	Daily	P+0	R+0	R+4	Yes (no specific provision on pricing)	Yes
Thailand	Yes ¹³⁵	Fair value ¹³⁶	Fair value ¹³⁷	Securities Agency /SRO ¹³⁸	Daily (open-ended) Weekly (closed-end) ¹³⁹	Weekly ¹⁴⁰	P+0	R+0	No later than R+4	Yes (no specific provision on pricing) ¹⁴¹	Yes
Trinidad and Tobago ¹⁴²											
<i>UTC Schemes</i> ¹⁴³	Yes	Determined by the CIS ¹⁴⁴	Market price	Through the Parliamentary process	Daily	Daily	P+0	R+0 ¹⁴⁶	R+0/R+1	No	No
<i>Other Schemes</i>	Not required but generally used	Most recent obtainable price ¹⁴⁵	Market price	CIS	Determined by the manager (usually daily)	Determined by the manager (usually daily)	P+0 (general rule)	R+0 (general rule) ¹⁴⁶	R+0/R+1 (general rule) ¹⁴⁶	No	No

CONDENSED RESPONSES TO THE EMC WG-5 QUESTIONNAIRE ON UNIT PRICING

Country	Market Price for Variable Income	Criteria if Market Price is not available	Fixed Income Valuation Criteria	Who Changes Valuation Criteria	Disclosure Periodicity		Purchase	Redemption		Auditing Required	Disclosure Requirements
					Price	Net worth		Calculation	Payment		
Tunisia	Yes	Weighted average price	N/A	Securities Agency /CIS/SRO need to be consulted	Daily	Quarterly	P+0	R+0/ R+1 (if requested after 4p.m.)	No later than R+5	Yes ¹⁴⁷	Yes
Turkey ¹⁴⁸	Yes	Acquisition price or most recent obtainable price (general rule) ¹⁴⁹	Acquisition price plus daily compound interest rate (general rule)	Securities Agency	Daily (general rule)	Daily (general rule) ¹⁵⁰	P-1	R-1	R+0	Yes ¹⁵¹	Yes
Ukraine	Yes	Determined by the CIS ¹⁵²	Balance sheet value and market price	Securities Agency	Semi-annually	Semi-annually	Please refer to note ¹⁵³	Monthly	On the day of calculation	Yes (no specific provision on pricing) ¹⁵⁴	Yes
Venezuela	Yes	Most recent obtainable price (as long as this is greater than the minimum price estimated by the SEC) ¹⁵⁵	Yield curve	Securities Agency	Daily	Not regulated	P+1	R+1	No later than R+15	Yes (no specific provision on pricing)	Yes
Zambia	Yes (general rule)	Determined by the CIS ¹⁵⁶	Yield curve ¹⁵⁷	CIS ¹⁵⁸	Monthly	Monthly	Not regulated	R+0/R+1 (practice)	No later than 24 hours after calculation ¹⁵⁹	Yes (no specific provision on pricing) ¹⁶⁰	Yes

N/A: Not Available

¹ The term Securities Agency is a general simplification for the particular commissions / regulators / agencies of the countries.

² When the market in which the assets are transacted is closed, the price used will be the one of the next market closing. When the portfolio includes assets that do not have a market price the day their valuation is requested, the price taken will be the closing price of the previous day. In the case of futures and options the price taken exceptionally will be the last closing price of the market that operates the biggest volume of trade.

CONDENSED RESPONSES TO THE EMC WG-5 QUESTIONNAIRE ON UNIT PRICING

³ P+0 is used for the purchase requested before or up to the market closing time and P+1 will be used in case that the purchase is requested after the closing time of the markets or during a holiday or weekend.

⁴ Auditors are registered by the “Consejo Profesional de Ciencias Económicas”, which is a professional regulator body.

⁵ Barbados legislation on CIS is being drafted. The SEC hopes it will be enacted by December, 1998.

⁶ The Bermuda Monetary Authority provides for three classifications of collective investment schemes. Bermuda Recognized Schemes are essentially comparable to a scheme now recognized under the Companies Act 1981 as a United Kingdom Class Scheme. Bermuda Institutional Schemes are a special category of CIS which are offered only to institutional or sophisticated investors. Bermuda Standard Schemes essentially meet the requirements contained in the Code of Conduct for CIS issued by the Bermuda Monetary Authority.

⁷ Recognized Schemes may issue units at forward or historic prices, but are under a general duty to adopt forward pricing (fixed at the next valuation point)

⁸ Payment may also be made four business days after the time when the manager has all duly executed instruments and authorizations as effect (or enable the manager to effect) transfer of title to the units, should this day be after the valuation point.

⁹ Auditors must be approved by Bermuda Monetary Authority.

¹⁰ Disclosed in the schemes Prospectus and Notes to Financial Statements (notes to the Accounts for Recognized Schemes).

¹¹ Although this is not specifically stated, the Regulations do state that financial statements and other financial information used in the determination of net asset values must be prepared in accordance with generally accepted accounting principles.

¹² Price must be available upon request.

¹³ Considering that the regulations provide for the preparation and distribution of an annual report. Interim financial statements are prepared and distributed in accordance with the scheme’s constitution.

¹⁴ However, the terms upon which securities are issued must be disclosed in the constitution and prospectus.

¹⁵ Please note that this regulation will be on force after October 10, 1998.

¹⁶ Even if the payment is provided after the investor’s request, the value of share of the date of the effective payment is used.

¹⁷ Auditors must be registered with the SEC.

¹⁸ Mutual fund regulation in Brazil is divided between Comissão de Valores Mobiliários (CVM) and the Central Bank. Basically, equity funds are under the jurisdiction of the CVM and fixed-income oriented funds (mainly Financial Investment Funds - FIFs) are regulated by the Central Bank. The two main equity funds in Brazil are “FMIA” - Stock Mutual Fund and “FMIA-CL” - Free Portfolio Stock Mutual Fund. The main difference between these two types of funds is that the FMIA has to be more concentrated on shares of publicly held companies (51% of their assets), whereas FMIA-CL is a more risk-oriented fund.

¹⁹ This procedure must be stated on the explanatory notes of the CIS financial statements. Assets that were acquired or sold in the forward market have to be priced by their market quotations (spot) and adjusted to present value using each contract’s rate. Regarding futures market operations, markings to market are registered daily, as revenues and expenses, thus influencing CIS unit prices. The value of the contracts themselves are registered in special control accounts, not influencing the unit price. With respect to operations in the options market, the premiums are valued at market price. When exercising an option, the premiums will become a part of either the acquisition cost or the sales cost, according to whether it is a call or a put, respectively. If the option is not exercised, paid premiums will become an expense and received premiums a revenue. Debentures are valued by their yield curve (as fixed-income assets). If convertible and if the market price is higher than that of the conversion, the valuation may be done based on the stock’s market price. Real estate investment fund assets are valued by their acquisition cost. The funds may, however, make revaluation (upward appraisals) of their assets whenever they wish.

²⁰ Yields will be adjusted by (a) any tax deductions and (b) the amortization of the amounts by which the assets were acquired over (premiums) or under (negative premiums) their face value.

CONDENSED RESPONSES TO THE EMC WG-5 QUESTIONNAIRE ON UNIT PRICING

- ²¹ Unless the FMIA or FMIA-CL is destined exclusively to qualified investors, in which case their by-laws may establish a different date. Another exception is if part of their assets is invested in certificates of publicly held companies headquartered in other MERCOSUL countries (Argentina, Paraguay and Uruguay), should the clearing and settlement cycle be longer than T+3. Under special circumstances, which may include market/liquidity crisis, redemption payment may be made at a different date, provided authorization has been granted by the CVM.
- ²² FMIAs and FMIA-CLs are audited every six months by an independent auditor, who must be registered with the CVM.
- ²³ Only if market value is not available, occasion in which the FMIA or FMIA-CL manager may define the valuation criterion, the latter must be disclosed in the explanatory notes of the financial statement.
- ²⁴ In practice, calculation is performed daily.
- ²⁵ In practice, all major FIFs make the payment either on R+0 or R+1.
- ²⁶ FIFs are audited every year by an independent auditor, who must be registered with the CVM.
- ²⁷ The investment company's set up included in the Securities, Stock Exchanges and Investment Companies Act (SSEICA) and the rules on its application do not cover detailed texts on the pricing of the shares of the investment company or the securities from the investment companies (IC) portfolio. On principle the Securities and Stock Exchanges Commission (SSEC) does not exercise control on such companies except in the cases when eventually they decide to raise resources from the public through public offering of securities. A new draft act is envisaged in Bulgaria. It presents more broad and detailed regulation of the issues on pricing of the IC's shares including the redemption price as well.
- ²⁸ The new draft act defines the criteria as the market value.
- ²⁹ The new draft act defines that such assets will be valued through methods and principles approved by the securities regulator.
- ³⁰ For open-end investment companies (still non-existent in Bulgaria), the by-laws define the criteria.
- ³¹ The draft act defines redemption price as R+1 and payment up to R+10.
- ³² For closed-end funds, non-listed shares shall be valued in keeping with the proportional equity value and non-traded debit at discount rate implicit in their purchase price (if there is no special provisions by the SVS). For mutual funds, non-traded securities, valued in keeping with the price of their acquisition and the conditions of their emission.
- ³³ Discount rate is applicable for short term securities (Maturity < 120 days). For longer maturity, market value is applicable.
- ³⁴ Investment Funds (Closed-end funds) must publish their Statements quarterly including, among other things, number of shares, net worth and investment portfolio.
- ³⁵ The usage of P-1 or P+0 for variable income and short term fixed income funds depends if the investment order takes place before or after the close of the market. For long term fixed income funds the usage of P+0 or P+1 depends if the order takes place before or after the closing time of the bank system.
- ³⁶ The usage of R-1 or R+0 for variable income funds depends if the investment order takes place before or after the close of the market. For fixed income funds the usage of R+0 or R+1 depends if the order takes place before or after the closing time of the bank system.
- ³⁷ The external auditor must be accredited in the Registry of External Auditors of the Superintendencia de Valores y Seguros (SVS).
- ³⁸ At present, a CIS can only invest in stock and debentures (government bonds). Pricing rule has yet to be established for securities previously traded but temporarily without market prices.
- ³⁹ Otherwise, fixed-income assets are valued by their face value plus appropriate interests accrued, if any.
- ⁴⁰ Currently, there is no open-ended CIS available in China, and the relevant rules governing the valuation and the choices of purchasing and redemption prices are yet to be specified.
- ⁴¹ The auditor must be approved by the SEC to be qualified in auditing securities-related businesses.
- ⁴² In the event market price is not available, stocks have to be valued by the last five day average price or if average price is not available, an alternative valuation proceeding, according to international standards, could be applied if it is previously approved by the Superintendencia General de Valores.

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⁴³ In the near future independent auditors will have to fulfill some requirements that will be established by the Superintendencia General de Valores in order to audit any regulated entity.

⁴⁴ Auditors must be registered with the SEC.

⁴⁵ P = period of time between the last working day of the week preceding redemption and the redemption date.

⁴⁶ In the case of closed-end funds where redemption through the fund is possible, the payment is made on R+1.

⁴⁷ Auditors must be registered with the SEC.

⁴⁸ Please note that CIS have not been developed in El Salvador and therefore the questionnaire could not be answered.

⁴⁹ In India, securities are listed and traded in multiple stock exchanges. The Asset Management Company (AMC) has to select the appropriate stock exchange whose quotes will be used for valuations purpose.

⁵⁰ When a security is not traded on any stock exchange for a period of 60 days prior to the valuation date, they are classified as “non-traded securities”. Such securities shall be valued “in good-faith” by the AMC on the basis of appropriate valuation methods based on the following principles, approved by the Board of Directors of the AMC: (1) equity instruments shall generally be valued on the basis of capitalization of earnings solely in or in combination with the net asset value, using for the purpose of capitalization, the price or earnings ratios of comparable traded securities and with an appropriate discount for lower liquidity; (2) debt instruments shall generally be valued on a yield to maturity basis, the capitalization factor being determined for comparable traded securities and with an appropriate discount for lower liquidity; (3) Investments in money market instruments like call money, bills purchased under rediscounting and short term deposits with banks shall be valued at cost plus accrual; other money market instruments shall be valued at the yield at which they are currently traded; and (4) Warrants to subscribe for shares attached to instruments, the warrants can be valued at the value of the share which would be obtained on exercise of the warrant as reduced by the amount which would be payable on exercise of the warrant. A discount must be deducted to account for the period which must elapse before the warrant can be exercised.

⁵¹ Non-traded fixed income securities are valued as stated in the previous note, item (2). Money market instruments not traded for a period of 7 days are valued at cost plus interest accrued till the beginning of the day plus the difference between the redemption value and the cost spread uniformly over the remaining maturity period of the instruments. Government securities are valued at yield to maturity based on the prevailing market rate.

⁵² However as regards non-traded securities the “good-faith” valuation is to be done by the AMC. The methods used to arrive at values in “good-faith” are required to be reviewed by the Trustees of the CIS and reported upon the auditors as “fair and reasonable” in their report on the annual accounts of the CIS.

⁵³ Auditors are required to be registered with the Institute of Chartered Accountants of India which has been set up by the Government under an Act of Parliament.

⁵⁴ Commercial papers are valued at book value plus accruals.

⁵⁵ If resources of the purchasing of units are not received on R+0, the day of the actual receipt of the resources will be used.

⁵⁶ Auditors are registered with the SEC.

⁵⁷ The legal framework for mutual funds is prescribed in the new securities law (May 1997). Complementary regulations will be issued by the Commission.

⁵⁸ Please note that Kazakhstan has only a law on investment funds and its Securities Commission is in the process of developing regulations detailing the law (after discussion with the Accounting Standards Department of the Ministry of Finance).

⁵⁹ Daily calculation and CIS have to assure free access to this information.

⁶⁰ Auditors are regulated by Auditors Chamber.

⁶¹ In the prospectus and CIS reports to the National Securities Commission. Also on the investors demand.

⁶² Defined as the latest daily closing price for stocks and debentures, daily settlement price announced by the Korea Stock Exchange (KSE) for stock index futures and daily market premium announced by the KSE for stock index options.

⁶³ Non-publicly traded debentures are valued at acquisition price plus accrued interest.

⁶⁴ FSC took most of the SEC`s function pertaining securities industry, due to its abolishment

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⁶⁵ The price P+0 is calculated by dividing prior day's net asset value (total assets minus total liabilities) by prior day's total number of outstanding beneficiary certificates.

⁶⁶ In trust agreements.

⁶⁷ If these securities are on the trading lists of the Stock Exchange and if the following conditions are fulfilled: (1) the transaction of the price which is used for evaluation of securities was executed no later than a month ago; (2) a security had a level of turnover of trading on that exchange session at least equal to that which would result in the exchange's restricting the amount by which the price of the security may change from one trading session to a following trading session to the smallest percentage change permitted by the change; and (3) the price was fixed while balancing supply and demand of the securities and not on the agreement of the parties of the direct transaction.

⁶⁸ If the previous conditions are not fulfilled, the value of an investment company's securities are established on the basis of the following information: (1) the price at which the security has been traded on the last trading session at the exchange or the prices at which the security has been traded on the past; (2) the issuer's own (net) capital per share; (3) the historical and anticipated price-earnings ratio of a security; (4) the historical and anticipated price-dividend ratio of a security; (5) the prices at which securities of comparable companies have traded; (6) the present value of the anticipated dividend or interest of the security over the period the investment company intends to retain the security and the amount the investment company anticipates receiving for the security upon divesting itself of the security; (7) the historic and prospective possible variation in the anticipated total return of the security; (8) the existence of any unique factor that may affect the market value of the security; and (9) the volume, turnover, number of participants in any trading in a security. In the absence of any other relevant information, the price at which the investment company acquired securities or other assets is presumed to be the value the investment fund's assets.

⁶⁹ The same conditions of notes 64 and 65 apply.

⁷⁰ An investment fund must publicly announce the selling and redemption prices of its shares each time they are issued or redeemed, but no less frequently than twice a month. The SEC may reduce the frequency of announcements up to one time per month provided that such reduction causes no harm to the investment fund shareholders and other investors.

⁷¹ Auditors must have a license issued by the order of the Finance Minister.

⁷² Since the Law on Investment Funds has not been passed in the Parliament of the Republic of Macedonia yet, the questionnaire could not be answered.

⁷³ For unquoted schemes, fair value, should be determined on methods or basis which have been verified by the auditor of the scheme, approved by the trustee and adequately disclosed in the prospectus of the scheme.

⁷⁴ The selling prices for units should be based on the net asset value per unit in the scheme as at the next valuation point after the request for units is received by the management company ("forward pricing"). As management companies may carry out valuations more than once a day, depending on the time the purchase is made, the valuation point may fall on P+0 or P+1. The selling price may be also based on the prior valuation point (P-1 is therefore possible) provided that there are acceptable reasons and revaluation is provided if there is a movement by more than 5%.

⁷⁵ Same provisions of the note above are applicable.

⁷⁶ The Stock Exchange Commission of Mauritius does not have regulations on CIS, however, legislation is being finalized to regulate CIS in Mauritius. Please note that the Unit Trust Act, 1989 which regulates Units Trusts, is administered by the SEC. Moreover, Mutual Funds are established under the Companies' Act 1989 and fall under the responsibility of the Registrar of Companies while "Approved Investment Institutions" are regulated by the SEC.

⁷⁷ In case there has been no trade in the OTC market the stock will be valued by its last price, wherever the last trade has been recorded.

⁷⁸ In the case there has been no trade on the evaluation date, these assets are valued at the actual value of all their futures in-flows. The discount rate is based on the rate of the Treasury securities of the same maturity.

⁷⁹ Only further to the proposal of the securities regulator (CDVM).

⁸⁰ X = number of days from the date of purchase to the date of the calculation of the net asset value which has to be calculated at least once a week.

⁸¹ The asset unit pricing criteria are audited every six month by an independent auditor who must be registered by CDVM.

⁸² In the prospectus as per a circular set by the CDVM.

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- ⁸³ In Nigeria, managed funds are structured as open-end or closed-end unit trust depending on the pre-set objectives of the Fund. Recently, hybrid unit trusts have been established and targeted as sophisticated investors. Altogether, pooled investment totaled approximately US\$ 35,09 million.
- ⁸⁴ Generally, the valuation will lean more towards net assets if the company being valued is a bank where the bulk of the assets are cash; or substantial shares are involved. Ordinarily, debentures are issued either with “floating rate” or “fixed rate”. In either case, the price is influenced by the prevailing market interest rate or by Minimum Rediscount Rate. For convertible debentures, the exchange ratio will be determined by the market price of the company as at the date of the conversion. The value of rights depends on the share market price and the qualification ratio for the rights share as determined by the company directors.
- ⁸⁵ With respect to funds invested solely in the Nigeria Par Bonds, their assets are valued based on the daily Reuters listing in the UK, as communicated to the Fund Manager.
- ⁸⁶ However, such information is normally provided in the annual report published by the Fund Managers.
- ⁸⁷ In 1962, National Investment Trust Limited (NIT) was established to promote an unit trust scheme and in 1965, Investment Corporation of Pakistan (ICP) was established to promote a series of closed-end mutual funds. NIT and ICP and CIS under their management are governed by the regulations, under which these were established. In 1971 rules were framed to regulate closed-end mutual funds and in 1995 rules were made to regulate unit trust schemes, with Corporate Law Authority (CLA), as the regulatory authority. NIT’s unit trust schemes and ICP’s closed-end mutual funds (even those offered to the public after 1971) have not been brought under the ambit of CLA rules. Thirteen closed-end mutual funds and one unit trust scheme have been established under CLA rules.
- ⁸⁸ If market price is not available, fixed income assets are valued at lower of cost or breakup value, adding the net yield calculated on daily pro-rata basis, if such accrued interest is not included in the valuation of the assets.
- ⁸⁹ Closed-end mutual funds are listed on stock exchanges in Pakistan. The prices at which their shares are traded is determined by the market. ICP and investment advisers registered with CLA are publishing the Net Assets Value (NAV) of funds under their management on fortnightly/monthly basis.
- ⁹⁰ However, if between the announcement of one price and another, there is a variation of 3% or more in the NAV, NIT shall apply new prices (P+0) to all purchase and redemption application received during such periods.
- ⁹¹ However, if between the announcement of one price and another, there is a variation of 3% or more in the NAV, NIT shall apply new prices (R+0) to all purchase and redemption application received during such periods.
- ⁹² In the event of any abnormal redemption requests, payment can be withheld at the discretion of Trustee. During market/liquidity crisis, affecting disposal of deposited property, purchase or redemption may be suspended with the authorization of Trustee.
- ⁹³ Disclosed in the financial statements.
- ⁹⁴ It may be added that in valuing debentures or any securities, carrying fixed return, net yield calculated on daily pro-rata basis is added, if such accrued interest is not otherwise included in the valuation of the security. The regulation is silent on valuation on securities and warrants, as these are not available in Pakistan for investment by CIS.
- ⁹⁵ The rules only provide that where a scheme deals at a known price and the price exceeds or falls short of the current value of the underlying assets by more than 5%, the management company shall defer dealing and calculate a new price.
- ⁹⁶ Where CIS deals at a known price and there is a variation of 5% or more in the NAV, the management company shall defer dealing and calculate a new price as soon as possible.
- ⁹⁷ Where redemption requests on any one dealing day exceed 10% of the total number of units in issue, redemption requests in excess of 10% may be deferred to the next dealing day. During market/liquidity crisis, CIS can suspend dealing in units by notifying the CLA and publishing in newspapers.
- ⁹⁸ The auditors are not registered with the regulator, but they belong to recognized accounting body.
- ⁹⁹ Disclosed in the constitutive document and financial statements.
- ¹⁰⁰ CIS must send at least semi-annually the financial statements to shareholders.
- ¹⁰¹ Auditors are not required to be registered with the SEC.

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¹⁰² Considering the initial and final value of the bond. There is no adjustment on the acquisition cost between the moment of the acquisition until the maturity of the fixed income assets.

¹⁰³ The only existent mutual fund in Paraguay calculates and publishes the net worth and the price daily.

¹⁰⁴ Auditors must be registered with *Comisión Nacional de Valores* (CNV).

¹⁰⁵ In Peru there are two types of funds: *Fondo Mutuo de Inversión en Valores* (open end) and *Fondo de Inversión* (closed-end).

¹⁰⁶ For non-traded closed-end funds, valuation is determined by book value. This criteria is also applicable for the valuation of non-listed corporation shares acquired by the closed-end fund. Structured notes may be valued by the closing bid offering or if not available, by the nominal value discounted by the internal rate of return. Forwards may only be used for currency hedge purposes by the open-end funds. All kinds of forwards can be used by closed-end funds.

¹⁰⁷ If market price is not available futures cash flows are discounted by the yield curve. Real estate is valued by adjusting the acquisition cost by current transactions paid in cash.

¹⁰⁸ During the subscription period the net worth and the unit price of closed-end funds are calculated daily. Open-end funds must publish these information monthly in nation wide newspaper.

¹⁰⁹ The redemption day must obey the same criteria used for the purchase date, that means, if the purchase date is P+1 the redemption must be R+1. Pre-determined redemption are also allowed, that means, an investor may ask for a redemption in advance.

¹¹⁰ Auditors must be registered with *Controladoría General de la República*. In addition, the custodian must value, at least monthly, the fund net assets under the criteria established by CONASEV.

¹¹¹ The criteria must be specified in the by-laws, which must be disposable to the public directly or through the SEC or the exchange (the latter for closed-end funds).

¹¹² In case the market price is not stated, the trust fund society has a right to create valuation algorithms (previously disclosed), which should be based on the pricing method which stays in accordance with market value. Trust funds are forbidden to compose portfolios of derivatives or liabilities.

¹¹³ Cumulated interests, corresponding to a given valuation day, are considered separately as dues. As far as the discount or premiums is concerned for pricing securities acquired with a discount or a premium, the method of linear amortization is implemented here, respectively, for a discount or a premium.

¹¹⁴ Please refer to price periodicity calculation.

¹¹⁵ Please note this is a general rule and refer to price periodicity calculation.

¹¹⁶ Auditors examine the correctness of rules used for valuation of the trust fund portfolios in a course of auditing annual financial statements of a given trust fund.

¹¹⁷ Rules for evaluating components of a CIS portfolio are described in regulation and financial report.

¹¹⁸ For stocks not traded on the market, shall be used “the methodology of rapid valuation for companies based on a simple assessment report”. Currently, there are no derivatives and other type of securities (e.g. warrant) on the Romanian capital market.

¹¹⁹ Cash yield is defined as the acquisition value plus the difference among the value to be cashed at maturity and the acquisition value, divided with the number of days between acquisition and maturity.

¹²⁰ The external independent auditors must be authorized by the SEC.

¹²¹ The management company can only appraise securities based on recognized quotations, which is either weighted average price, or weighted average bid price.

¹²² In case of termination of announcement of recognized quotation for a security after the day preceding the transaction date the appraising price of this securities is discounted at a rate of 2% per day during 25 calendar days since last announcement of quotation, after that term the discounted price of such security remains unchanged. Derivatives may not be part of the CIS assets.

¹²³ The regulatory framework in Singapore is principally based on disclosure to investors rather than on detailed regulations governing the operations of fund managers. Hence, for many to the answers to the questionnaire, industry practices based on international best practices are cited, rather than regulations imposed by the law or Monetary Authority of Singapore (MAS) on the fund manager.

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¹²⁴ There is no specific regulation, but MAS expects variable income securities to be valued by their market price unless the Manager considers that the market price does not reflect the true value.

¹²⁵ Subject to the prior approval of the Trustee (this is an administrative guideline prescribed by MAS).

¹²⁶ The auditor must be approved by the Ministry of Finance.

¹²⁷ Disclosed in both the trust deed and the prospectus.

¹²⁸ Nominal value multiplied by their market rate, adding net yields (market rate = the percentage of their balance outstanding).

¹²⁹ The prices and the book values of shares of the closed-end funds that are listed on the stock exchange have to be published daily, while the book values of the non-listed funds have to be published monthly.

¹³⁰ Auditors are registered by the Slovenian Institute of Auditing and approved by the Securities Market Agency (SMA).

¹³¹ Over the remaining life to the redemption. Concerning derivatives, the absolute value of the exposure to option contracts shall be calculated by multiplying the number of contracts by the market values of the underlying assets of the contracts; and the absolute value of the exposure to futures contracts shall be calculated by multiplying the number of contracts by the relevant multiple and the market prices as determined by the South African Futures Exchange. Please also refer to the following note.

¹³² Please refer to the previous note. As a general rule, only investments listed in securities are permitted, and therefore, this is only applicable in limited situations such as money market funds and fund of funds.

¹³³ In practice, some management companies use R-1 and other use R+0. The trust deed further determines that in the case of certain repurchases, *i.e.* in excess of 20,000 units or above R30,000, the management company may, in its discretion, require a period of four hours during which any exchange is open for business in order to establish a price: Provided that if any underlying security is listed outside the Republic of South Africa, this period can be 24 hours.

¹³⁴ Auditors are not required to be registered with the Financial Services Board (FSB), however, the appointment of these auditors (which are made at least once a year) must be approved by the FSB.

¹³⁵ Market price of securities listed on any recognized market is defined as the last closing price.

¹³⁶ Determined by the mutual fund (CIS) management company and approved by the mutual fund supervisor (trustee). No single standard for determining fair value can be imposed because fair value depends on the circumstances of each individual case.

¹³⁷ In general practice, fair value can be determined in several ways, for example, comparable price, carrying value (acquisition cost plus interests, adjusted for amortization of premium or for accretion of discount) and etc.

¹³⁸ The principle of valuation criteria is set by SEC and its detail is set by the SRO.

¹³⁹ For open-ended funds, the disclosure must be provided within the next business day after the calculation. For closed-end funds, the publication must be done within 3 business days from every Friday.

¹⁴⁰ For open-ended funds, calculated on Friday, and published in the next business day. For closed-ended funds, publication must be done within 3 business days from every Friday.

¹⁴¹ However, every calculation day, asset and unit price criteria are approved by the mutual fund supervisor (trustee), who is a third and independent party.

¹⁴² The Securities Industry Act, 1995, is the principal legislation which regulates the local securities market. As some areas in the mutual fund industry remain unregulated at this time, the Trinidad and Tobago government is currently in the process of drafting the appropriate legislation to deal with the shortcoming with the existing legislation. At the present, there are three mutual fund providers incorporated in the country: the Trinidad and Tobago Unit Trust Corporation (UTC), Republic Bank Ltd. and Royal Bank of Trinidad and Tobago Ltd. Both Republic Bank and Royal Bank utilize the services of their finance houses to administer their mutual funds. The UTC is the dominant player accounting for 90 percent of the market. The market offers both money market funds and income and growth funds.

¹⁴³ UTC schemes answer were segregated, as their valuation criteria is determined by Law.

CONDENSED RESPONSES TO THE EMC WG-5 QUESTIONNAIRE ON UNIT PRICING

¹⁴⁴ Quoted investments of the Unit Trust valued on the basis of the lowest market dealing offer price or the highest bid price (as applicable) as at the close of the trading on that day. Another cases, the manager may determine a “fair value”.

¹⁴⁵ The CIS are empowered to determine a “fair value” for their investments when a market price is not available. There are not investments on derivatives and therefore, there is no provision for the valuation of such assets.

¹⁴⁶ If the redemption order is provided after a determined time (10 AM for UTC and 3 PM for other), R+1 is used.

¹⁴⁷ The auditors must be registered with the chartered accountants and auditors.

¹⁴⁸ Collective investment institutions are regulated and supervised by the Capital Markets Board of Turkey (CMB). There are two types of funds both regulated by the CMB: A-type funds which invest more than 25% of their portfolios in equity, and the others: B-type. In addition, there are other collective investment institutions operating: closed-end funds such as investment companies and real estate investment trusts.

¹⁴⁹ The assets that compose the mutual funds are valued as follows: (1) assets included in the portfolio are recorded by their acquisition cost. Purchasing price of the assets denominated in foreign currencies are calculated by multiplying their values at the purchase date with the exchange rate declared by the Central Bank; (2) as for the securities traded on the stock exchange but not purchased or sold in the valuation day: Shares are valued by their last trading price. Debentures, repos and reverse repos are valued by their internal rate of return at the last trading date; (3) debentures, repos and reverse repos which could not valued by the way mentioned above are valued by taking the last portfolio value, and adding the interest calculated on a daily compound interest basis depending on the internal rate of return of the asset, to the principal; (4) income sharing certificates are valued by adding their expected return associated with their realized return in previous term, to the principal; (5) foreign exchange indexed income sharing certificates are valued by adding the amount calculated by multiplying the principal with the Central Bank exchange rate; (6) as for the foreign exchange indexed bonds, their value calculated on a daily compound interest rate basis depending on the internal rate of return is multiplied with the Central Bank rate; and (6) other assets are valued by their acquisition value or the last trading prices realized on the exchange. Real Estate Investment Trust assets are valued by their current market values. These values should depend on the reports prepared by expert firms recognized by the CMB. In case of real estate renting, an expert report relating to current rental rates has to be available and the report should be renewed every year.

¹⁵⁰ Investment companies have to notify the CMB their portfolio values along with the portfolio composition weekly, and make them available to the head offices or branches as to allow the shareholders to review. Similarly real estate investment companies have to inform the CMB about their assets composition and portfolio values monthly, and to allow the shareholders to review them. They should also disclose the portfolio values including the acquisition costs and current values of the assets. Share prices of investment companies are published daily as those of other corporations traded on the stock exchange.

¹⁵¹ Auditors must be registered with the CMB.

¹⁵² In accordance with the Regulations on the procedure of valuation net assets value of investments funds and mutual funds of investment companies.

¹⁵³ “Placing and redemption of investment certificates is executed by investment fund (mutual fund of investment companies) at the price which is:

- for investment fund: equal to the value of fund net assets considering one share of founder and one investment certificate of participants (that are in circulation).
- for mutual fund of investment company: equal to the value of fund net assets considering one investment certificate of participants (that are in circulation).”

¹⁵⁴ The SEC does not register the auditors.

¹⁵⁵ In case the last transaction has taken place more than 30 days prior to the valuation date, then the valuation shall be performed by calculating the mean over the last bids placed. Further more the dividends paid shall be recognized as well as the new subscription of shares. The securities that are not regularly traded at the exchanges nor are listed at them, shall be priced at their commercial value as deem bona fide by either the administrative society or the administrator of the investment open or close ended mutual entities.

¹⁵⁶ The securities markets is currently not trading in debentures, derivatives and warrants. The method of calculating fees and charges must be clearly disclosed in the offering document.

¹⁵⁷ Discounted cash flow.

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¹⁵⁸ Criteria for valuation obey the Zambia's Institute of Certified Accountants recommendations.

¹⁵⁹ Regulation prescribes that this interval may not exceed 30 days.

¹⁶⁰ Auditors must be a member of the Zambia Institute of Certified Accountants.

APPENDIX B:

CHAPTER 7 OF PART I OF THE IOSCO PRINCIPLES FOR THE REGULATION ON COLLECTIVE INVESTMENT SCHEMES

*(Extract from the IOSCO Technical Committee Report
on Investment Management, July 1995)*

7. ASSET VALUATIONS AND PRICING

The regulatory regime must provide a system for valuation of CIS assets, pricing of interests and procedures for entry to and exit from a collective investment which are fair to existing investors as well as to investors seeking to purchase or redeem interests. It is a fundamental principle that the price of interests in a CIS be calculated according to the net asset value of the CIS which must be determined on a regular basis in accordance with accepted accounting practices used on a consistent basis.

7.1 Valuations

7.1.1 Assets of the CIS must be valued according to their market price unless otherwise permitted by Law in particular circumstances. "Market price" means the price at which significant transactions have recently been concluded and disclosed to the market, or the best price available from a market maker. Should the market price not be available for any reason, the asset price should be calculated in good faith according to a permanent and reliable valuation procedure approved by the regulatory authority.

7.1.2 The net asset value per unit must be calculated in accordance with applicable accounting standards by dividing a CIS's assets less its liabilities by the number of units.

7.1.3 The net asset value per unit should be published at the operator's or at the custodian's offices or through the appropriate media.

7.1.4 The rules for asset valuation and for calculating the price of units must be laid down in the law or a CIS's rules or its public disclosure documents.

7.1.5 Information on the system for pricing, valuation and associated procedures must be made available to investors on requests.

7.2 Purchasing and Redemption of Units

7.2.1 A CIS must redeem its units at the request of any investor, in a manner and frequency laid down in the law or the CIS rules.

7.2.2 Redemption of units may only be suspended on a temporary basis. Any such suspension must be in accordance with the procedures provided for by the law or the CIS rules and must be in the interests of investors. A CIS must inform the regulatory authority of a suspension. In accordance with the laws of its jurisdiction, a regulatory authority may permit a CIS to suspend the right of redemption for the protection of investors.

7.2.3 Purchase of units may be done in cash, or in certain circumstances an investor may be allowed to use securities to purchase units. Redemption of units may be paid in cash, except when the CIS is liquidated and this possibility has been disclosed in the prospectus, or in certain circumstances when redemption may be by way of securities.

7.2.4 Purchase and redemption orders are to be settled as soon as possible, in accordance with the law, the CIS rules and the prospectus.

7.3 Unit Pricing

7.3.1 A CIS must calculate the purchase and redemption price of its units on a regular basis in accordance with the law and the CIS rules.

7.3.2 Purchase and redemption orders must be executed at the net asset value calculation price as defined in Principle 7.1.2, excluding any subscription or redemption fees disclosed in the prospectus. The amount received by the CIS on the issue of its securities must equal the net asset value calculation price as defined in Principle 7.1.2. Any redemption fees disclosed in the prospectus may be deducted from the net asset value calculation price otherwise payable to the investor.

7.3.3 Any purchase or redemption fee applicable to units in a CIS (as well as any management fee) must be clearly indicated in the CIS rules or the prospectus, and actual rates disclosed in the prospectus.

7.3.4 The distribution or reinvestment of the income of a CIS must be effected in accordance with the law and the CIS rules.

APPENDIX C:

CHAPTER IV OF THE COSRA REPORT ON THE OVERSIGHT OF COLLECTIVE INVESTMENT SCHEMES

ASSET VALUATION

*(Extract from the COSRA Report on the Oversight on
Collective Investment Schemes, July 1998)*

III. ASSET VALUATION AND PRICING

Regulators should provide a system for the valuation of CIS assets and the pricing of interests in CIS. Regulators also should ensure that procedures for purchasing and redeeming interests in a CIS are fair to existing and future investors. The price of interests in a CIS should be calculated according to the CIS's net asset value. Net asset value should be determined on a regular basis in accordance with accepted accounting practices.

Issues Discussed

COSRA members discussed whether a CIS's assets should be valued at market price or based on another standard, who determines a CIS's valuation process, the frequency with which a CIS's assets are valued, and the mechanisms that regulators use to evaluate the fairness of CIS valuations.

Methods of Valuation

If a CIS's portfolio securities are traded actively in a domestic market, market quotations generally provide the best indication of value. Questions may arise regarding the value of illiquid or thinly traded securities. Questions also may arise regarding the value of securities traded on foreign exchanges, when an event occurs after the closing of a foreign exchange that would result in a material change in the market value of a particular security. Under either of those circumstances, a CIS may need to value the security at the amount at which it might reasonably expect to receive upon a current sale.

Most COSRA members require CIS to value their portfolio securities based on the securities' market value, with exceptions for particular types securities or under certain circumstances, as noted below. Some members have specific regulations that apply to different types of assets, and others require that a CIS's valuation method receive regulatory approval. Certain COSRA members are developing regulations regarding valuation.

As stated above, some COSRA members permit valuation based on a price other than market price under specific circumstances and/or if approved by the regulator.

Specific circumstances in which COSRA members allow valuation based on a price other than market price:

- if an alternative valuation method is disclosed to investors
- for fixed-income securities
- for securities that do not have an active market
- for restricted securities
- for derivatives
- lack of a deep market
- under extreme circumstances (in which the standard methodology is not available)

Frequency of Calculation of Net Asset Value & Pricing Methods

Daily calculation of a CIS's net asset value ensures that a CIS that issues redeemable securities is prepared to redeem those securities at a current price. It may be beneficial for the CIS's pricing procedures to be clearly disclosed to investors and subject to the review of another party, such as the CIS's board, or an auditor.

A large majority of COSRA members require open-end CIS to calculate their net asset values daily, and CIS in other jurisdictions may choose to calculate their net asset values daily. Certain COSRA members require closed-end CIS to calculate their net asset values on another basis, such as weekly, monthly or quarterly. Other COSRA members permit the frequency of calculations of net asset value to be determined by the operator, if disclosed to or approved by investors.

Forward pricing occurs when a CIS sells, redeems or repurchases its securities at a price that is computed after receiving a purchase, sale or redemption request.

With backward pricing, the price used is the price that was computed before receiving the request.

An example of forward versus backward pricing is as follows:

An investor places an order to purchase CIS shares on Tuesday morning. If the CIS uses backward pricing, the investor receives the price of the CIS shares that was computed at the end of the day Monday. If the CIS uses forward pricing, the investor receives the price that is computed at the end of the day Tuesday.

Forward pricing addresses certain problems that may characterize backward pricing systems. As shown above, a person who purchases shares of a CIS that uses backward pricing knows the price of the shares before he or she purchases them, which permits a speculator to take advantage of fluctuations in the prices of the CIS's portfolio securities that occurred after the CIS had last calculated its net

asset value. For example, when securities prices generally are rising, a speculator could buy a large number of CIS shares at a previously determined price, and then redeem them at a profit after the CIS's net asset value is calculated. Backward pricing can lead to significant dilution in the investments of existing CIS shareholders and can contribute to market volatility. Most members did not address whether they require forward pricing, but a small number of members reported that forward pricing is used by certain types of CIS, or is required for open-end CIS.

Review of Valuations

Regulators may review a CIS's valuation procedures to evaluate the fairness of those procedures. This review may occur in an inspection of the CIS, and / or in a review of the CIS's disclosure documents.

Of those COSRA members that discussed the review of a CIS's valuation procedures, most stated that they evaluate those procedures in inspections of the CIS.

Other COSRA members evaluate the CIS's valuation and pricing methods in their review of the CIS's offering memoranda and other disclosure documents, and rely on CIS compliance with those documents as well as the CIS's internal regulations. Certain members require auditors to audit CIS accounts or verify valuation criteria periodically. Although, some COSRA members only use one compliance method, most of them combine two or more methods.