

POLICY		
Quaestio Capital SGR		Codice interno: PP QSF – QAF - LEO
AREA PROPONENTE:	Nome policy Pricing policy for <i>Quaestio Solution Funds</i> <i>Quaestio Alternative Funds</i>	Data: 29.11.2022
RISK MANAGEMENT		Approvata dal CDA del 29.11.2022
AREE E FUNZIONI INTERESSATE: Area controlli – unità di financial risk management		Sostituisce: 28.9.2020

Modifiche alla versione precedente

- Estensione della policy al Fondo RAIF LEO - SICAV

Quaestio Capital SGR S.p.A.

Corso Como, 15 | 20154 Milano | tel. +39 02 3676 5220 | fax. +39 02 7201 6207

www.quaestiocapital.com | certificata@pec.quaestiosgr.it

Società per azioni unipersonale | Codice Fiscale e Partita Iva 06803880969 | C.C.I.A.A. Milano-Monza-Brianza-Lodi n. 1916336
Capitale Sociale 4.200.200 euro interamente versato | Iscritta all'albo gestori OICVM al numero 43
Iscritta all'albo gestori FIA al numero 149 | Aderente al Fondo Nazionale di Garanzia

A. Scope

The Policy has been designed to clarify the methodology used in valuing all of the assets that constitute the portfolio of the Funds. The value of those assets are an integral part of the Net Asset Value ("NAV") and NAV per share calculation, on the basis of which, investors subscribe into or redeem out of the Funds on each Valuation Day.

B. Responsibility

The Board of Directors of each AIF/RAIF has overall responsibility and oversight on how the assets of the Funds are priced and valued; however, the Board has appointed the Central Administrative Agents, who is responsible for ensuring that all of the asset are priced and valued for each NAV calculation, in accordance with this Policy.

The Policy explains the generic methodology used for valuing different types of assets, whilst, in the Appendices, valuation methodologies for each Security that is or may, in the future, become part of the portfolio of the Funds are explained and specific procedures that will apply to the policy of the Funds identified.

The responsible for interpreting, implementing and regularly updating this policy is the Chief Risk Officer (or "CRO"), with the support of the financial risk management unit of the Quaestio Capital management (or "FRM"), who has appropriate knowledge and independence from the portfolio management functions to perform his duty while the Responsible for periodic control and review of the valuation process are the Board of Directors and the CRO itself.

C. Methodology

The valuation of the assets of the Fund are based on the fair value or in some cases at cost. The Net Asset Value of the Shares of each Sub-Fund is determined in its reference currency. It shall be determined as of each Valuation Day.

The value of the shares of each sub-fund and class is obtained by dividing the net assets attributable to each Sub-Fund as of the respective Valuation Day by the number of Shares of such Sub-Fund then outstanding and is calculated on the first Luxembourg Business Day following that Valuation Day. The net assets of each Sub-Fund are made up of the value of the assets attributable to such Sub-Fund less the total liabilities attributable to such Sub-Fund calculated at such time as the General Partner shall have set for such purpose.

For the purpose of determining the value of the assets of the Fund, the Central Administrative Agent, having due regards to the standard of care and due diligence in this respect, may, when calculating the Net Asset Value, completely and exclusively rely, unless there is manifest error or gross negligence on its part, upon the valuations provided (i) by various pricing sources available on the market such as pricing agencies (i.e. Bloomberg, Reuters etc.) or fund administrators, (ii) by brokers, or (iii) by (a) specialist duly authorized to that effect by the AIFM. Finally, (iv) in the cases no prices are found or when the valuation may not correctly be assessed, the Central Administrative Agent escalates to the AIFM/RAIF.

D. Alternative methodologies

The Boards of the AIFM/RAIF are authorised to apply other adequate valuation principles for the assets of the Fund if the aforesaid valuation methodologies appear impossible or inappropriate due to extraordinary circumstances or events.

E. Pricing procedure

Appendixes describe the methodologies for valuing each and every type of the following securities:

- Equities
- Derivatives Instruments
- Target Funds
- Exchange Rates
- Bond & Fixed Income instruments
- Loans
- PE funds or PE related Instruments

In addition:

- the value of any cash on hand or on deposit, bills and demand notes and accounts receivable, prepaid expenses, cash dividends and interest declared or accrued, and not yet received shall be deemed to be the full amount, unless, however, the same is unlikely to be paid or received in full, in which case the value thereof shall be determined after making such discount as the Fund may consider appropriate in such case to reflect the fair value;
- money market instruments are valued at: a) market value plus any accrued interest for instruments having, at the moment of their acquisition by the Fund, an initial or remaining maturity of more than 12 (twelve) months, until the instruments have a remaining maturity of less than 12 (twelve) months at which time they will move to an amortised cost basis plus accrued interest, and b) on an amortised cost basis plus accrued interest for instruments having, at the moment of their acquisition by the Fund, an initial or remaining maturity of less than 12 (Twelve) months.
- for non-quoted securities or securities not traded or dealt in on any stock exchange or other regulated market, as well as quoted or non-quoted securities on such other market for which no valuation price is available, or securities for which the quoted prices are not representative of the fair market value, the value thereof shall be determined prudently and in good faith on the basis of foreseeable sales prices (see part G, "Illiquid assets")
- Units/Shares of Investment Fund will be valued based on the last known Net Asset Value of the Target UCIs provided by external pricing sources or by the Administrators / Registrars of the Target UCI if no automatic pricing is available. The Net Asset Value of some of the target UCIs may not be known at the time of the valuation of the Fund of Funds. In this case, the Central Administration could use for such shares of target UCI an estimated value received from the FRM of the Management Company. The estimated values of the FRM will be based on values received from the Managers of the target

UCIs, adjusted and updated by the FRM itself with the support – when deemed appropriate - of an independent advisor.

In the months following the calculation of the Net Asset Value of the Fund of Funds the Central Administration will collect from the Administrators / Registrars of the target Funds the confirmation of the final prices of such target Funds in order to compare them to the estimated prices used in the calculation of the NAV of the Fund. This control will outline the difference in percentage and value at the level of each investment line where an estimate has been used, the difference in percentage at the level of the Fund and the proportion of estimated prices versus final prices used in the NAV of the Fund.

In case the difference in percentage is higher than the materiality threshold defined in the CSSF circular 02/77, the CRO and the Investment Manager would be informed by the Administrative Agent.

F. Stale Prices

A price is considered as stale when it has not changed over 5 consecutive business days, irrespective of whether the asset concerned is part of a portfolio held by a daily, weekly, monthly fund, etc. The Pricing Department of the Central Administrative Agent analyses stale prices on a daily basis and attempts to find an alternative quotation source from amongst the different providers as detailed in the Pricing agreement between the AIFM and the Central Administrative Agent and will when necessary also contact issuers of, and brokers active in, the issues in question. In the case the Pricing Department cannot find any reliable source, the AIFM will be contacted to obtain the valid pricing source and/or specific price.

As mentioned above, if the methodologies described in Appendix I are not sufficient to determine the price of a security (in case of illiquid, hard-to-price securities or securities not traded on a regular open market), the price is provided to the Central Administrative Agent by the CRO and the FRM.

Whenever a stale price is detected by the Pricing Team, the Accounting Department notifies the CRO of the AIFM who will investigate. Investigation might include requesting to the relevant Investment manager to provide alternative price contributor and transmits the information to the Accounting Department. The CRO will review the stale price report to ensure that the stale prices are accurate and fair value for the securities in question. Should the CRO wish to recommend a change of the primary source it will provide a formal instruction (i.e. Circular Resolution) to the Central Administrator including any relevant justification.

G. Illiquid assets

This part of the policy has been designed to clarify the methodology used by the AIFM for valuing the illiquid assets of the Luxembourgian AIFs managed. It aims at valuing the individual investments of the Funds using a consistent approach across all the Luxembourg funds managed by the AIFM, pursuant to articles 67 to 71 of the Delegated Regulation and 17 of the AIFM Law.

This specific policy ensures that the AIFs' portfolio valuation complies with all relevant International Valuation Standards (IVS) and the International Venture Capital and Private Equity Valuation Guidelines (IPEV) commonly applied for this asset class.

The different types of illiquid investments covered by this policy are presented in Appendix 2. The investments unquoted or quoted with a limited volume of trading should be considered as illiquid investments. For quoted investments, the classification as illiquid asset will be treated on a case by case basis by the CRO as described further in the policy taking into consideration, among others, the following elements :

1. Volume of trading
2. Bid/ Ask spread
3. Percentage of floating shares

As a general guidance, if the average volume traded on an investment over the last month does not amount to, at least, half of the position held by the AIF, the asset will be considered as illiquid.

In case a quoted investment is classified as illiquid, the PPC should document its decision to classify it as illiquid. The PPC shall insure the consistency of the classification during the period.

Whereas this policy applies to each investment made by the Funds, some specificities may arise due to the nature of each investment. Specific policies per investment are described in Appendix 2.

H.1 Valuation process

The valuation process includes the following phases:

1. The Board appoints the CRO and the FRM independent from portfolio management activities to handle the valuation function. The FRM is responsible for managing the day to day tasks of the valuation process. A strict segregation of duties between the valuation function and investment management function will be observed in the course of the valuation process
2. The FRM is responsible of collecting information required by the valuation process. It should verify the fairness, accuracy and completeness of information. Then it performs the valuation in accordance with the valuation policy of the Funds and submits the valuation in a written communication to the Administrative Agent.

Roles and responsibilities

The detail of the roles and responsibilities of the parties involved in the valuation process is given in the tab below:

Task	Responsibilities
<i>Performing of valuation</i>	<i>CRO/FRM</i>
<i>Periodic approval of evaluation and oversight of FRM</i>	<i>CRO</i>
<i>Reporting to the Board of Directors</i>	<i>CRO</i>
<i>Analysis of the findings and approval of recommendations</i>	<i>Board of the AIFM</i>
<i>Compliance of valuation process with valuation policy</i>	<i>Compliance officer</i>
<i>Periodic review of valuation policy</i>	<i>CRO/Board of the AIFM</i>

H.2 Valuation requirements

Valuation requirements are stated in the Offering memorandum of the Funds managed by the AIFM. In case the prospectus of a fund requires the use of specific valuation methodologies not detailed in this policy, a mention to the fund particularities should be made in appendices of this policy

H.3 Valuation methodology

- The FRM should exercise its judgement to select the valuation technique or techniques most appropriate for a particular Investment in compliance with all International Valuation Standards and IPEV valuation guidelines. The key criterion in selecting a valuation technique is that it should be appropriate in light of the nature, facts and circumstances of the Investment and in the expected view of Market Participants
- When selecting the appropriate valuation technique each Investment should be considered individually. An appropriate valuation technique will incorporate available information about all factors that are likely to materially affect the Fair Value of the Investment
- The FRM should maximise the use of techniques that draw heavily on observable market-based measures of risk and return
- When possible, the FRM should consider the use of multiple techniques to check the Fair Value derived is appropriate

Techniques should be applied consistently from period to period, except where a change would result in better estimates of Fair Value. The basis for any changes in valuation techniques should be clearly understood. It is expected that there would not be frequent changes in valuation techniques over the course of the life of an Investment

H.4 Valuation techniques

The valuation techniques for the different types of assets are covered in Appendix 2 of this policy.

H.5 Valuation procedures

A detailed valuation procedure has been issued in parallel to this valuation policy. It will provide more information on how the AIFM conducts the valuation function including the control to be performed over the valuation work, the relationship with valuation advisors and other stakeholders of the valuation process.

H.6 Frequency of valuation

Due to the nature of assets illiquid, the valuation shall be performed at least once a year and at each subscription or redemption.

H.7 Documentation of valuation results and record keeping

All the documents which form the basis of valuation (the approval notes and supporting documents) should be maintained in electronic form or physical papers. Above records will be preserved in accordance with the norms prescribed by the laws and regulations.

H.8 Abnormal situations and unexpected events

No prescriptive guidelines are proposed to value assets/portfolios during such events since the events will impact the valuations in different ways. The AIFM, through its PPC, will deal with each situation on a case-by-case basis in order to derive true and Fair Value of such assets and document the mechanism/process of identifying the occurrence and the methodology used in handling valuation in such situations. A deviation from the Valuation policy, if any, in aforementioned circumstances will be reported to respective board and communicated to the investors by a suitable disclosure.

H. Distribution of this policy

This policy is available to all the employees of the AIFM, members of the Board, and external auditors. Subject to the decision of the Board, the policy is also made available to investors, depositary banks and other third parties as the case may be.

L. Periodical review

The AIFM will review the AIFs' valuation policy periodically (at least once a year) and before the relevant AIFs engages with a new investment strategy or a new type of asset that is not covered by the actual policy to ensure that it remains in line with best practice and that it allows the pricing of the AIFs in adherence with market standards.

In case of the relevant AIFs' valuation procedure is not anymore in line with the investment strategy and/or the type of asset of the AIFs, the valuation procedure has to be adapted.

The CRO with the support of the FRM will review and, if needed, provide appropriate support concerning the relevant AIFs' valuation procedure. Any recommendation of change will be documented and submitted to the Board which will review and approve any changes.

APPENDIX I

See the attached spreadsheet for sources of prices for liquid assets.

APPENDIX II

1. Valuation methodology for illiquid Equity investments

Valuation techniques available:

<i>Valuation technique</i>	<i>Approach</i>
Price of recent investment	Market Approach
Multiples of: - Recent comparable transactions - Comparable listed companies	Market Approach
Net assets	Cost Approach
Discounted cash flows or earnings (of Underlying Business)	Income Approach
Discounted cash flows (from an Investment)	Income Approach
Industry valuation benchmarks	Market Approach

Selection of valuation methodology

The FRM, when selecting the appropriate valuation technique, should consider the following elements.

<i>Methodology</i>	<i>Typical situations¹</i>	<i>Conditions for application</i>
Price of recent investment	Appropriate: • In case of investment recently on-boarded by the fund • In case of recent transaction on the capital of the portfolio company and / or recent financing round	• Respect of arm's length conditions • Evaluation of "recent" character • No material changes in market conditions since transaction • No material change in nature and financial conditions of investment since transaction

¹ Typical situations listed in this table aim at providing general guidance in the selection of valuation methodologies and are not exhaustive. Furthermore other particular circumstances not foreseen in this table might trigger the need to use a different method than the one recommended in the above table (subject to proper documentation).

Multiples of: - Recent comparable transactions - Comparable listed companies	- Recommended methodology (when there is no possibility to apply the price of recent investment method) - Appropriate for investments with normalized level of metrics used for valuation purposes	- Existence of comparable transactions and / or comparable listed companies - Availability and quality of market data - Use of portfolio company's metrics normalized for exceptional items - Positive metrics of investment being valued
Net assets	- Recommended when company is distressed which limit the use of other techniques (e.g. negative EBITDA) - Can be seen as a liquidation approach	Sufficient details on assets and liabilities to derive a fair value
Discounted cash flows	Appropriate: - In general, used as corroborative method in conjunction with market based approach - In case of early stage investment or in turnaround position with positive outlook in terms of cash flows but with negative current and short term metrics which renders impossible the use of market based approach - In case of highly specific investment for which there is reasonably no comparable companies / transactions or market data available - In case of investment with growth expected in near future with strong rationale over cash flows expectations - FCFF should be favoured over FCFE when capital structure evolves	- Expected positive cash flows - Sufficient visibility, reasonableness and rationale supporting future cash flows - Availability and quality of investment's financial information and forecasts data - Independence of the valuation function of BMI in the review and determination of assumptions retained to derive the portfolio company forecasted cash flows
Industry valuation benchmark	Appropriate: - In general only used to corroborate the result from other valuation techniques - In case of highly specific investment for which there is reasonably no comparable companies / transactions - In case there is no business plan prepared for investment	- Availability and quality of market benchmark - Positive metrics of investment being valued

Assessment of the Fair value:

a) Price of recent investment

Description

In applying the price of recent Investment valuation technique, the valuer uses the initial cost of the Investment itself, excluding transaction costs, or, where there has been subsequent investment, the price at which a significant amount of new Investment into the company was made, to estimate the Fair value, but only if deemed to represent Fair value and only for a limited period following the date of the relevant transaction. During the limited period following the date of the relevant transaction, the valuer should in any case assess at each measurement date whether changes or events subsequent to the relevant transaction would imply a change in the investment's fair value

Application

In applying this valuation methodology, the following conditions should be taken into account:

- The transaction must be recent. The IPEV guidelines do not specify any reference period to be considered for the application of the price of recent investment. Accordingly the CRO and FRM use their professional judgment, due skill and care to determine if the price of recent investment method might be applied. In particular it considers the following points:
 - Time elapsed since the acquisition of the investment
 - Change in the market conditions since the acquisition of the investment
 - Change in the nature, financial conditions and other circumstances of the investment
- The transaction must have been done at arm's length
- In case of recent transaction by third parties on the capital of the investment, the CRO and FRM review the background of the transaction to assess if it is representative of the fair value. As such, it considers the following aspects:
 - The stake acquired by third parties
 - The rights attached to the securities subscribed
 - The potential dilution of existing investors arising from the transaction
 - Potential specific considerations of the third parties (e.g. strategic transaction)
 - Context of the transaction (e.g. forced sale)

b) Multiples of recent comparable transactions / comparable listed companies

Description

Apply a multiple that is an appropriate and reasonable indicator of value given i.e. the size, risk profile, earnings growth prospects of the underlying company etc. to the maintainable metrics of the company.

Application

The valuation methodology is based on the following formula:

***Enterprise value or Equity value = company metric ×
multiple of selected metric from comparable listed companies/transactions***

The method consists in assessing the value of a company based on a selected metric of the company whose value is multiplied by the comparable companies' valuation multiple of this metric.

The method results in equity or enterprise value depending on the metric which is selected (e.g. EBITDA multiples result in enterprise value while net earnings multiples result in equity value).

The CRO and FRM determines the peer group of comparable companies based on several criteria which include but not limited to: nature of activities, markets served, size and geography.

Several specific considerations applies when the multiples approach is used:

- The FRM selects a multiple which is an appropriate and reasonable indicator of value of the company based on commonly observed valuation standards applied in the industry (e.g. sales, EBITDA, EBIT, net income multiples)
- The metrics of the company being valued are normalized for any exceptional events so that they represent sustainable levels
- In case of selected metrics resulting in an enterprise value, the equity value is derived by subtracting the book value of the net financial debt position of the company as of the valuation date

Regarding comparable companies or transactions selection:

- The data should always be obtained from the sources described in the section "Valuation sources"
- The criteria used to define the companies to be considered as comparable should be defined during first valuation exercise and maintained during the following valuation exercises
- The range of multiples of comparable companies are adjusted to exclude potential outliers based on the exercise of due care and professional judgment
- Selected multiple is eventually adjusted for differences between peers and portfolio company to be valued (e.g. risk, growth profile, etc.)

On top of the equity value derived from the application of the above methodology, the FRM considers the application of potential discounts and premiums, aligned with best market practices:

- In case of a valuation based on multiples from comparable listed companies, an illiquidity discount might be applied on the equity value of the company being valued to account for the lack of liquidity of private companies vs. listed ones. In addition, if the AIF has a controlling stake in the company being valued, a control premium might be added on top of the equity value of the company derived from the application of multiples as this notion is not factored in trading multiples
- In case of valuations based on multiples from recent transactions on comparable companies, a control premium or discount might be applied, as the case may be, to align the controlling stake of the comparable company acquired with the controlling stake of the Fund's company being valued (e.g. if the AIF has as a minority stake in a company which is valued via a comparable transaction implying a control acquisition, a minority discount should be applied). In case recent transactions relate to listed companies, an illiquidity discount should be applied as described above

c) Net Assets

Derive a Fair value for the company using the perspective of a market participant that would value each of the company's assets and liabilities separately and propose a value for this company based on the aggregate of these values

- d) Discounted cash flows or Earnings (of Underlying Business) ("Free cash flow to the firm" or "FCFF") / Discounted cash flows (from an investment) ("Free cash flow to equity" or "FCFE")

Description

Derive the Fair value of the company, using reasonable assumptions and estimations of expected future cash flows (or expected future earnings) and the terminal value, and discounting to the present by applying the appropriate risk-adjusted rate that captures the risk inherent in the projections

Application

This valuation methodology consists in summing the forecasted free cash flows to the firm or equity respectively that are discounted at the appropriate i) weighted average cost of capital (i.e. discount rate or "WACC") or ii) cost of equity ("COE"). These discounted cash flows result in i) the enterprise value of the company as they are attributable to the debt and equity holders or ii) in the equity value respectively. The book value of the net financial debt position of the company, as of the valuation date, is subtracted from this enterprise value to derive the equity value which is the value attributable to the equity holders.

This valuation methodology is applied as follows:

FCFF:

$$Enterprise\ value = \sum_{i=1}^N \frac{FCFF_i}{(1 + WACC)^i} + \frac{Terminal\ value}{(1 + WACC)^i}$$

$$Equity\ value = Enterprise\ value - net\ financial\ debt$$

FCFE:

$$Equity\ value = \sum_{i=1}^N \frac{FCFE_i}{(1 + COE)^i} + \frac{Terminal\ value}{(1 + COE)^i}$$

Guidelines for the determination of the different parameters outlined above is provided in the table below:

Parameter	Definition
-----------	------------

1) Free cash flows to the firm or equity	These are the free cash flows available for equity and financial debt holders of the investment. They are defined as follows: Earnings before interests and taxes ("EBIT") - Taxes on EBIT (assessed through statutory tax rate) = Net operating profit after taxes ("NOPAT") + Depreciation & amortization ("D&A") - Δ working capital - Capital expenditures ("CAPEX") = Free cash flows to the firm ("FCFF") - Debt interests and repayments ("Debt") = Free cash flows to equity ("FCFE") FCFF and FCFE are determined on a discrete period (N years) which is aligned with the period retained in the business plan produced by the management of the investment.
2) Discount rate: Weighted average cost of capital	The discount rate represents the rate of return required by the equity and financial debt holders to invest in the company valued. According to common valuation practice, it is determined as follows: $WACC = \overset{2.1}{\frac{E}{E+D}} \times \overset{2.2}{K_e} + \overset{2.3}{\frac{D}{E+D}} \times K_d \times (1 - T)$ 2.1 WACC represents the target proportion of equity and debt out of the total capital of the company (equity and debt) (financial gearing). As the fair value is based on the perspective of the market participants and market conditions, the financial gearing is supposed to reflect the capital structure of the industry observed on the market. Therefore this gearing is generally based on the median / average gearing of comparable listed companies 2.2 K_e represents the cost of equity required by equity holders. According to usual market practice, it is based on the Capital Asset Pricing Model ("CAPM") and is defined as follows: $COE = K_e = R_f + \beta \times ERP + SFP + CRP + CSR$ Where, R_f is the risk free rate, β measures the sensitivity of the investments returns to the market returns (i.e. the systematic risk of the investments),

	$ERP = (E(R_m) - R_f)$ is the market risk premium, CRP is the country risk premium applied on top of the risk free rate, SFP is the small firm premium applied on top of the risk free rate, CSRP is a specific risk premium that might be added in the light of the facts and circumstances of the investment. The calibration process described later in this policy will allow for instance to determine such specific risk premium 2.3 $(1-T) \times Kd$ is the after tax cost of debt. This represents the marginal cost of debt should new financial debt be levied by the company at the valuation date. The fair value is based on the perspective of the market participants and market conditions. Therefore, the "market based" cost of debt is derived from the median / average cost of debt of comparable listed companies. This cost of debt is taken net of taxes based on the statutory tax rate for the company being valued.
3) Terminal value	Terminal value represents the residual cash flows at the end of the discrete period. Terminal value is determined on a case by case basis by means of the following methods: - The terminal value is determined based on a marked to market multiple of the metric relevant to the investment (e.g. exit EV/EBITDA multiple $\times$ EBITDA_N). Terminal value should correspond to the enterprise value for FCFF and to equity value for FCFE - The terminal value is defined as a perpetuity derived from a normative cash flow at the end of the discrete period which grows infinitely at a stable and constant growth rate. This terminal value is defined as follows: $FCFF: \text{Terminal value} = \frac{FCFF_N \times (1 + g)}{(WACC - g)}$ $FCFE: \text{Terminal value} = \frac{FCFE_N \times (1 + g)}{(COE - g)}$ Where, g is the long term growth rate,
4) Net financial debt	This is the financial debt position as of the valuation date net of the excess cash position. It is assessed as the sum of the different items it covers book value.

Application of illiquidity discount and control discount	Once the equity value is derived based on the above process, it might be considered to apply potential discounts on this value to account for the lack of liquidity of private companies and potential lack of controls in case of minority investments. A liquidity discount is applied on the equity value to account for the lower liquidity of private smaller companies vs. listed companies. This discount is applied as the illiquidity is not taken into account in the forecasted cash flows nor the discount rate. A minority discount might be applied on the equity value in case of minority stake in the company being valued. This arises from the fact that valuation based on discounted cash flows assumes that one has the control over the company (i.e. over the business plan and cash flows). Therefore in case of minority stake, the equity value derived from cash flows is discounted to account for the lack of control.
--	---

2. Valuation methodology for bonds

Valuation models and method

The discounted cash flows method

The discounted cash flows (DCF) method is a way of valuing a derivative using the concepts of the time value of money. All future cash flows are estimated and discounted to the valuation date to give their present values. The sum of all future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value or price of the cash flows in question. The key concept in the DCF method is the discount factor, i.e. the present value of 1 currency unit at a future point in time. The present value of a future cash flow will be equal to the estimated cash flow multiplied by the discount factor. Discount factors can be inferred from the market prices of listed instruments such as interest rates futures, FRAs, swaps or bonds.

One can distinguish different types of discount factors applicable in different contexts:

- *Risk-free discount factors* applicable when no credit risk exists (typically for collateralized derivatives) and inferred from the overnight-indexed swaps (OIS) market;
- *Libor discount factors* applicable to instruments of the swap family when no collateral agreements are in place (the credit risk of a bank in the Libor panel is assumed); they are inferred from the standard Libor swaps market; and
- *Risky discount factors* applicable to cash flows due by an entity subject to a certain credit risk and inferred from liquid instruments linked to this entity. The risky discount factor is obtained as the present value of 1 currency unit when interest rate equals the entity's credit spread. Depending on the availability of market information, the following methods are used in decreasing order of priority to estimate this credit spread:
 1. The CDS spread/Asset Swap spread of the bond's issuer for the corresponding seniority level;

2. The z-spread of the bond's issuer, as implied from a quoted bond of the same issuer with the same seniority;
3. The CDS spread/Asset Swap spread of a comparable issuer (e.g. similar geographical/sectorial area) for the corresponding seniority level;
4. The z-spread of a comparable issuer (e.g. similar geographical/sectorial area), as implied from a quoted bond of this comparable issuer with the same seniority;
5. The credit spread computed using a structural model of credit (e.g. the Briys-de Varenne model) on the basis of the balance sheet of the issuer; or
6. A credit spread obtained from an external provider with due expertise and documentation in credit risk estimation.

In addition, whenever a bond is distressed following a credit event, and if none of the above methods is applicable (e.g. in absence of usable market information), a liquidation approach based on the assets of the entity may be applied in order to estimate the potential recovery of the investor on the instrument.

The Hull-White model

The Hull-White model describes the evolution of interest rates. In its simple form, it is a type of one-factor short rate model as it describes interest rate movements as driven by only one source of market risk. The Hull-White model assumes a mean-reverting diffusion of interest rates and a time-dependent volatility of interest rates. It enables negative interest rates, as often observed nowadays in the markets, and allows to calibrate the whole term structure of interest rates as reflected in the market.

The 2-factors Hull-White model contains an additional disturbance factor that mean-reverts to 0. It enables to capture further dynamic features of the forward rates.

The Monte Carlo method

Monte Carlo methods (or Monte Carlo simulations) are a class of computational algorithms that rely on repeated random sampling to compute their results.

When used in the context of derivatives valuation, a large number of paths of the underlying price are simulated (according to the chosen diffusion model), in order to accurately simulate the statistical distribution of this price at future points in time. The derivative's value is obtained by computing the derivative's payoff on each path and taking the average across all paths.

Application to bonds valuation

Valuation of fixed or floating rate bonds

Bonds are valued using the DCF method, as the sum of the present values of each of their (fixed or floating) coupons and of the final notional repayment.

Two types of yield curves may be used in the valuation: a discounting curve and a forward curve (used only for floating-rate bonds). Each of these curves is built upon deposit and par swap rates as provided by our market data providers.

For floating-rate bonds, the forward curve used to estimate future levels of the interest rate index is built upon Libor swaps in the relevant currency with the frequency of the floating leg corresponding to the tenor of the forward rates to compute.

A risky discounting curve is considered to compute discount factors at future maturities and account for the credit risk of the bond's issuer. It is built upon Overnight Interest Swaps in the relevant currency and shifted by the credit spread of this issuer.

Valuation of structured interest rate notes

According to the characteristics of the note (e.g. CMS or CMS spread floater), different methodological choices can be made. In particular, a choice is made on (i) the diffusion model (Hull-White 1-factor or 2-factors, Libor market model) and on (ii) the numerical method used to compute the price of the note according to the chosen diffusion model (e.g. the Monte Carlo method).

All market data used in this valuation process (essentially interest rates discount curves and swaptions volatilities) are retrieved from market data providers.

Finally, the credit risk of the structured note is incorporated into the valuation by discounting every future cash flow using the issuer credit spread.

3. Valuation methodology for fund interests

Fair value of the fund interests is obtained by computing the proportion of NAV of underlying fund attributable to the AIF, except in the following situations:

- i. If the AIF interest is actively traded, fair value would be the actively traded price;
- ii. If secondary market transactions are observable on underlying fund equity and deemed reasonable, fair value would be the observed secondary market transaction prices;
- iii. If management has made the decision to sell an AIF interest or portion thereof and the interest will be sold for an amount other than NAV, fair value would be the expected sale price;
- iv. If fair value for the underlying investments is calculated at a different date than the valuation date of the AIF, the NAV should be adjusted to reflect any material change in value resulting from capital call, distributions, etc.
- v. If underlying fund NAV is prepared on a non-fair value basis (e.g. cost) and none of the above situations occurred, fair value would be the share of the NAV as reported.

4. Valuation methodology for Insurance policies

Insurance policies covered by the methodology are guaranteed rate life insurance contract with profit sharing held by a legal person. Fair value of the insurance is calculated by following these steps:

- i. Calculate the future value of the versed premiums until maturity of the contract taking as interest rate: the minimum guaranteed interest rate fixed at contract inception.
- ii. Discount the forecasted value with a risk free interest rate plus a credit spread that accounts for the counterparty default risk of the insurer; i.e. it depends on the risk rating of the insurer.

$$\forall s < t, FV_t = \frac{MP_s \cdot (1 + r)^{n-s}}{(1 + i_{n-t})^{n-t}}$$

t = time at valuation date

FV_t = Fair value at time t

MP_s = Mathematical provision at time s (value from the latest benefit statement)

n = maturity of the contract at inception

r = the minimum annual guaranteed interest rate fixed at contract inception

i_k = the annual discount rate for a corporate bond with a maturity of k.

i_k is taken from a term structure of a corporate bond benchmark depending on the maturity (k) and the credit rating of the insurance undertaking that issued the policy.

NB: This methodology is only valid for legal persons and it may vary depending on the contract specifications. (We are assuming no surrenders and no mortality takes place due to the nature of the contracts.)

5. Calibration of models

When the model are first set up, a calibration exercise should be performed. The outcome should be considered for the following valuation exercises.

The calibration process consists in comparing the acquisition price of the investment with the valuation resulting from the application of valuation methodologies based on market data as of the date of acquisition. This process enables to identify potential adjustments in order to i) reflect the company specificities (e.g. specific risk, control premium) and to ii) align valuation model output to market reality (i.e. transaction price).

6. Valuation input and sources of information

This section details the sources to be use in the valuation exercise. Two main types of sources should be considered as input:

1. Investment specific data:

To be provided by the management of the underlying investments and may include among others:

- Business plan
- Book of assumptions with reference to sources of information
- Contractual information
- Audited historical financials
- Draft financials as at the valuation date
- Management accounts
- Transaction documents or any other document related to recent acquisition, investment or divesture
- Loans analytics (i.e. covenants, leverage, yield, average life, OAS, ...)

2. Market data (publicly available):

The following sources (non-exhaustive) could be used for the valuation exercise:

- Capital IQ
- Thomson/Reuters
- Bloomberg
- Factiva
- Mergermarket
- Financial literature (e.g. Damodaran, Ibbotson, etc.)

Appendix III:

Quaestio Alternative Fund - Diversified Yield - Leverage loans (excluded direct loans)

The sub-fund Diversified Yield Fund of the Quaestio Alternative Funds SICAV SIF Fund mainly invests in “leveraged loans” (also called “bank loans” or simply “loans”). The pricing of these instruments is not completely straightforward and can present some additional complications compared to the securities typically present in the portfolios managed by Quaestio Capital SGR (the AIFM) . These complications mainly include identifying with precision the exact tranche of the loan facility that the sub-Investment Manager has bought and pricing it accordingly.

General approach for valuation

The Fund is priced on a weekly basis every Friday (unofficial NAV) and on a monthly basis on the last Friday of the month (official NAV), or the next business day if the last Friday of the month is a Luxembourg holiday.

The controls on the pricing of the loans are done both on a weekly and on a monthly basis, but with slightly different objectives and a different level of accuracy. For the unofficial NAVs, the controls are meant to identify in advance of the official NAV possible problems and inconsistencies in the pricing of the loans. For the official NAVs, the controls mean to ensure that the prices used are the best possible approximation of the real market prices of the loans in the portfolio.

The controls typically take place on T+1, when the Central Administrator calculates the NAV (T being the NAV date).

Control procedure

For the official NAVs, the controls follow these steps:

1. On T+1, the Central Administrator prepares an Excel sheet with the prices for all the loans in which the Fund is invested, highlighting if some prices present particular issues or if different pricing sources have been used (the standard pricing source for the Central Administrator is Markit). Taking into account the cut-off for trades done on T 10:00 am CET, this file should be sent to the General Partner by 02.00 PM CET at the latest.
2. In parallel, each sub-Investment Manager prepare a similar Excel sheet for the loans in its portfolio, including the trades done on T. The sub-Investment Manager should clearly specify, for each loan:
 - a. the name of the tranche of the loan
 - b. the identifiers of the tranche (Markit LoanX ID and, if available, a secondary ID: ISIN, CUSIP, Bloomberg code, or LIN)
 - c. the nominal amount
 - d. the price
 - e. the type of price used (bid or mid): typically, this should be mid
 - f. the currency
 - g. the date to which the price refer (typically this would be T)

- h. the source for the price, specifying whether it is an independent pricing provider, a broker price or a fair valuation/model price (indicating the details of the model used, if relevant)
- i. seniority, maturity, and credit ratings (from S&P, Moody's and Fitch, if available)
- j. country and sector of the issuer
- k. any additional comment that would help in the pricing (for example whether the price represent a firm bid or if it represent an average of broker prices, the quality of the price as defined by an external pricing provider,...)
- l. additional information that the AIFM may request

Each sub-Investment Manager should send this file to the AIFM as soon as feasible on T+1 and in any case before the deadline specified in the sub-Investment Management Agreement.

3. The FRM of the AIFM will compare the prices provided by the Central Administrator with the ones coming from the sub-Investment Manager and highlight the relevant differences. To identify relevant differences, the thresholds used are:
 - 1.0% at the single loan level in the case of mid price is received (AXA sends a mid price)
 - 2.5% at the single loan level in the case of bid price is received (Marathon sends a bid price)
 - 0.5% at the portfolio level (for each sub-Investment Manager's portfolio)

It is intended that the Manco can intervene even if the price differences are lower than the thresholds specified above.

4. For the relevant differences identified, the FRM of the AIFM investigates with the Central Administrator and if needed the FRM of the AIFM will contact the sub-Investment Managers involved and will try to reconcile the two prices using the available information. If needed, the FRM of the AIFM can request the sub-Investment Manager to provide additional information. The decision will be taken by the the FRM of the AIFM based on the following heuristics:
 - a. Prices coming from independent pricing providers (Markit ,Reuters LPC ,...) will typically have priority over other prices
 - b. Higher quality prices (multiple contributors) will have priority over lower quality prices
 - c. Firm bids coming from brokers or prices from recent sales will have priority over indicative prices coming from brokers
 - d. In case multiple sources with the same priority are available, an average of the prices will typically be used
5. Once a decision is taken, the Risk Management function of the AIFM will communicate the final prices to the Central Administrator. The RMF of the AIFM will strive to provide the final prices to the different parties by 4.00 PM CET at the latest. The prices will be communicated to the Central Administrator by email via a CSV file.
6. The Central Administrator will then calculate the NAV. For this Fund (and for other sub-funds that invest in the Fund), the usual deadline for NAV production will be delayed for the official NAV of month end. However, the Central Administrator will ensure that the NAV is still produced by 10.00 PM CET at the latest and that all the relevant reports

(standard custodian and Central Administrator reports as well as FactSet files) are produced as well in a timely fashion.

For the unofficial NAVs, the controls loosely follow the same steps described above, but with the main objective of identifying discrepancies in advance of the official NAV calculation and solve eventual issues before the official NAV calculation date.

Appendix IV:

QSF – Quaestio Solutions Funds

The Quaestio Solutions Fund (QCF) can invests in loan participations and/or loan assignments within the limits defined in the Prospectus. The pricing of these instruments is not completely straightforward and can present some additional complications compared to the securities typically present in the portfolios managed by Quaestio Capital SGR (the Manco). These complications mainly include identifying with precision the exact tranche of the loan facility that the sub-Investment Manager has bought and pricing it accordingly.

General approach

Most of the Sub-Funds of the QCF are priced on a daily basis (unofficial NAV) and on a weekly basis (official NAV generally on Friday or the next business day if Friday is a Luxembourg holiday), except for 3 Sub-Funds where the official NAV is daily.

The controls on the pricing of the loans are done on a weekly basis. The controls mean to ensure that the prices used are the best possible approximation of the real market prices of the loans in the portfolio.

The controls typically take place on T+1, when the Central Administrator calculates the NAV (T being the NAV date).

For the official NAVs, the controls follow these steps:

1. On T+1, the Central Administrator prepares an Excel sheet with the prices for all the loans in which the Fund is invested, highlighting if some prices present particular issues or if different pricing sources have been used (the standard pricing source for the Central Administrator is Markit). Taking into account the cut-off for trades done on T 10:00 am CET, this file should be send to the Manco by 02.00 PM CET at the latest.
2. In parallel, each sub-Investment Manager prepare a similar Excel sheet for the loans in its portfolio, including the trades done on T. The sub-Investment Manager should clearly specify, for each loan:
 - a. the name of the tranche of the loan
 - b. the identifiers of the tranche (Markit LoanX ID and, if available, a secondary ID: ISIN, CUSIP, Bloomberg code, or LIN)
 - c. the nominal amount
 - d. the price
 - e. the type of price used (bid or mid): typically, this should be mid
 - f. the currency
 - g. the date to which the price refers (typically this would be T)
 - h. the source for the price, specifying whether it is an independent pricing provider, a broker price or a fair valuation/model price (indicating the details of the model used, if relevant)
 - i. seniority, maturity, and credit ratings (from S&P, Moody's and Fitch, if available)
 - j. country and sector of the issuer

- k. any additional comment that would help in the pricing (for example whether the price represent a firm bid or if it represent an average of broker prices, the quality of the price as defined by an external pricing provider,...)
- l. additional information that the Manco may request

Each sub-Investment Manager should send this file to the Manco as soon as feasible on T+1 and in any case before the deadline specified in the sub-Investment Management Agreement.

3. The FRM of the Manco will compare the prices provided by the Central Administrator with the ones coming from the sub-Investment Manager and highlight the relevant differences. To identify relevant differences, the thresholds used are:
 - 1.0% at the single loan level
 - 0.5% at the portfolio level (for each sub-Investment Manager's portfolio)

It is intended that the Manco can intervene even if the price differences are lower than the thresholds specified above.

4. For the relevant differences identified, the FRM of the Manco investigates with the Central Administrator and if needed the RMF of the AIFM will contact the sub-Investment Managers involved and will try to reconcile the two prices using the available information. If needed, the Risk function of the Manco can request the sub-Investment Manager to provide additional information. The decision will be taken by the Risk Management function of the Manco based on the following heuristics:
 - a. Prices coming from independent pricing providers (Markit ,Reuters LPC ,...) will typically have priority over other prices
 - b. Higher quality prices (multiple contributors) will have priority over lower quality prices
 - c. Firm bids coming from brokers or prices from recent sales will have priority over indicative prices coming from brokers
 - d. In case multiple sources with the same priority are available, an average of the prices will typically be used
5. Once a decision is taken, the Risk Management function of the Manco will communicate the final prices to the Central Administrator. The FRM of the Manco will strive to provide the final prices to the different parties by 4.00 PM CET at the latest.
6. The Central Administrator will then calculate the NAV. For this Fund (and for other sub-funds that invest in the Fund), the usual deadline for NAV production will be delayed for the official NAV of month end. However, the Central Administrator will ensure that the NAV is still produced by 10.00 PM CET at the latest and that all the relevant reports (standard custodian and Central Administrator reports as well as FactSet files) are produced as well in a timely fashion.

For the unofficial NAVs, the controls loosely follow the same steps described above, but with the main objective of identifying discrepancies in advance of the official NAV calculation and solve eventual issues before the official NAV calculation date.