Collateral and counterparty risk management policy

8 April 2016
I. General background

The ESMA’s 18 December 2012 guidelines (document ESMA/2012/832 available at the website www.esma.europa.eu) include new restrictions on pledged securities: Requirements for liquidity, quality, lack of strong correlations, and concentration.

These guidelines apply to all funds in accordance with European standards (UCITS) besides the ones grandfathered in.

This document details the Collateral Management Risk Policy, revised to account for the regulatory changes.

This document specifies the choices made on a general level for over-the-counter (OTC) transactions in order to meet the new requirements.

II. Counterparties

1. Counterparty risk:

Counterparty risk is the risk of failure of a counterparty with whom the portfolio has entered into over-the-counter transactions (repo agreements, lending/borrowing, derivatives).

This risk is measured by the cost of replacing a counterparty, i.e. the amount that the portfolio could lose when the counterparty defaults and when the positions with that counterparty cannot be replaced at the same market prices as contracted with the initial counterparty.

If this cost is negative (the transaction can be replaced under conditions more favourable to the fund), no loss is recorded and the counterparty risk is considered to be zero.

The counterparty risk depends on the market price of the over-the-counter positions with a given counterparty (taken either individually or in the aggregate depending on whether or not they are negotiated under a clearing agreement), incremented by the risk that the position will worsen in the time needed to set up a new transaction in the event that the initial counterparty defaults (the "add-on") and reduced by the pledges received (collateral).

According to articles R214-21 and R214-32-29 of the French Monetary and Financial Code, counterparty risk, not counting the add-on, is limited to 10% of the net assets of UCITS and retail investment funds. This limit is lowered to 5% if the counterparty is not a credit institution from an OECD country or a member state of the EEA.

2. Counterparty analysis

In order to minimise the risks of default on over-the-counter transactions, Amundi has opted to deal only with a limited number of leading financial institutions.

The counterparties are tracked continuously by a team dedicated to monitoring credit and counterparty risk. This team is part of the Risk Department, and is therefore fully independent from the Front Office.

Counterparty analysis, much like issuer analysis, particularly relies upon operational profiles (country, activity, strategy and business model, risk management and experience of the managerial team) and financial profiles (revenue, profitability, balance sheet, liquidity, capital).

This team has access to the counterparties during financial presentations or one-to-one meetings with top management. In writing their reports, the analysts can use the ratings of the three major agencies,
3. Choosing and approving counterparties

Analysing the new counterparty begins at the request of the Front Office (managers or traders) with a green light from the head of the Trading desk.

If the opinion is favourable, Risks submit the request for the approval of Amundi’s Credit Risk Committee. The authorisation may allow one or more types of contracts: Foreign exchange contracts, lending/borrowing or repo agreements, over-the-counter derivatives (options, swaps, credit derivatives).

If the Committee approves the counterparty, a limit of credit equivalents is given, which will apply globally across portfolios. That limit can be revised at any time.

The Committee can request that special requirements be added in terms of collateralisation, etc.

Subsequent to the Committee’s authorisation, the Legal department negotiates the necessary master agreements (ISDAs, EMAs, GMSLAs, GMRAs, etc.) and the corresponding annexes (Credit Support Annex, Pledge Annex, etc.) with the counterparty.

The rules applying to collateral and approved by the Committee, which specify some of the clauses (minimum trigger threshold, eligible assets, haircuts, cross-default clauses, etc.) are defined by Risks.

III. Collateral management risk policy

1. Over-the-counter transactions and eligible collateral

The table below indicates the types of sureties pledged for each type of OTC transaction:

<table>
<thead>
<tr>
<th>OTC transaction</th>
<th>Types of collateral received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities lending</td>
<td>Equity/Bonds/ETFs/Cash</td>
</tr>
<tr>
<td>Short-term reverse repo</td>
<td>Bonds</td>
</tr>
<tr>
<td>Long-term reverse repo</td>
<td>Equity/Bonds/ETFs</td>
</tr>
<tr>
<td>Short-term repo</td>
<td>Cash</td>
</tr>
<tr>
<td>OPC derivatives</td>
<td>Equity/Bonds/Cash</td>
</tr>
</tbody>
</table>

The ESMA’s 18 December 2012 guidelines added new restrictions to collateral management, whether in the form of securities or cash.

These new restrictions on sureties in the form of securities relate to their liquidity and valuation, the issuer’s quality, and the diversification of the assets pledged.

The restrictions on cash sureties relate to the nature of allowed reinvestments.

Finally, the ESMA’s guidelines prohibit the sale, reinvestment, or re-pledging of securities pledged as collateral in UCITS.
2. Securities as collateral

2.1 Liquidity and valuation

Article 43-a of the ESMA guidelines indicates that "any collateral received other than cash should be highly liquid and traded on a regulated market or multilateral trading facility with transparent pricing in order that it can be sold quickly at a price that is close to pre-sale valuation."

Article 43-b says that "collateral received should be valued on at least a daily basis and assets that exhibit high price volatility should not be accepted as collateral unless suitably conservative haircuts are in place."

In order to apply these principles, Amundi has adopted the following requirements:

<table>
<thead>
<tr>
<th>Size/Market cap</th>
<th>A minimum size or market cap is required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of securities</td>
<td>No illiquid securities allowed</td>
</tr>
<tr>
<td>Geographical regions</td>
<td>Regions are defined by asset class and type of management</td>
</tr>
<tr>
<td>Allowed currencies (cash)</td>
<td>Only major currencies</td>
</tr>
</tbody>
</table>

2.2 Issuer credit quality

Article 43-c of the ESMA guidelines indicates that "collateral received should be of high quality."

The notion of high quality has not been defined by the ESMA guidelines.

Amundi has opted for requirements based on the rating and maximum maturity of the securities. These limits are defined for each type of over-the-counter transaction.

If there is a discrepancy in ratings between the three major agencies, the lowest rating will be selected.

In addition to the issuer quality requirements, Amundi disallows from eligible collateral any securities whose issuers are subject to a legal ban.

These particularly include issuers domiciled in countries under embargo or involved in the production or trade of anti-personnel mines and cluster munitions (in accordance with the Ottawa and Oslo Conventions).

2.3 Correlation

Article 43-d prohibits excessive correlation: "The collateral received by the UCITS should be issued by an entity that is independent from the counterparty and is expected not to display a high correlation with the performance of the counterparty."

If the counterparty defaults, the holder of the securities issued by that counterparty might not recover its capital.

For this reason, out of caution, securities issued by the counterparty or any other entity in its corporate group are not eligible as collateral.

2.4 Asset concentration

Article 43-e says that "collateral should be sufficiently diversified in terms of countries, markets and issuers."
The article introduces a new concentration ratio for each issuer. No issuer of securities may account for over 20% of the net assets of the UCITS. This percentage is larger for issuers of securities issued or guaranteed by sovereign or supranational entities, under certain conditions.

On the other hand, no threshold has been defined in the regulations for concentration by country. The notion of markets is not defined in that text either.

In this environment, Amundi applies the following restrictions:

<table>
<thead>
<tr>
<th>Market concentration</th>
<th>Amundi does not apply any restrictions in terms of market concentration, pending regulatory clarification on the matter.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country concentration</td>
<td>A maximum limit by country as a percentage of the net asset</td>
</tr>
<tr>
<td>Issuer concentration</td>
<td>The new ESMA rule is applied to each issuer.</td>
</tr>
</tbody>
</table>

2.5 **Haircut policy**

Article 46 of the ESMA guidelines now requires UCITS to have in place a clear haircut policy for the assets received by the UCITS as collateral.

The haircut is a percentage that is deducted from the market value of the pledged securities. Its purpose is to reduce the risk of loss in the event of counterparty default.

Despite the margin calls made, the cash lender, receiving pledged securities, still incurs a risk that will depend on the counterparty and on the changes in the market price of the collateral.

The haircut is therefore an additional safeguard in order to lower the risk of loss in the event that the security-lending counterparty does default.

The haircut levels by asset class are determined using risk indicators that take into account asset volatility under normal or stressed market conditions.

The parameters that influence the haircut policy are as follows:
- Nature of the pledged security
- Maturity of the pledged security
- Credit quality of the pledged security's issuer

3. **Cash collateral**

Article 43-j of the ESMA guidelines indicates that cash collateral received should be:
- placed on deposit
- invested in high-quality government bonds
- invested in reverse repo transactions that can be unwound at any time at par value
- invested in short-term money market funds

Article 44 says that "Re-invested cash collateral should be diversified in accordance with the diversification requirements applicable to non-cash collateral."

In particular, the restriction on concentration by issuer will be applied to investments of received cash collateral.
IV. Additional items on security lending

1. General reminder on security lending

Security lending is a transaction in which a fund lends out securities from its own assets to a counterparty for a defined duration in return for compensation.

The lender has the option of recalling the lent securities at any time it desires (though there are sometimes exceptions, when transactions can be processed for a defined duration).

The fund receives cash or securities as collateral in return for securities lent for the duration of the loan.

The amount of collateral is greater than or equal to the total amount of the loan; the positive difference between the amount of collateral received and the amount lent is called the "haircut".

The amount of the haircut depends on the nature and quality of the securities received as collateral.

2. Risks related to lending securities

The main risk of lending securities lies in the fact that a counterparty might not re-deliver the borrowed securities (counterparty risk) while the collateral's value is lower than the value of the loan (collateral risk).

Two things therefore need to be watched on all lending transactions: The nature of the counterparty and the nature, amount, and handling of the received collateral.

Amundi provides an appropriate response to counterparty and collateral risks:

- By rigorously choosing its counterparties and by applying strict rules to the collateral received.
- By performing a daily check of the security-lending transactions and the received collateral.
- By monitoring overall counterparty risk.

Amundi's Risk department monitors collateral management in all its aspects, using dedicated control tools.