International Association of Credit Portfolio Managers

IACPM overview of

Risk mitigation techniques in credit portfolio management

Risk sharing with credit investors is an integral part of portfolios' sustainable growth strategies

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IACPM

Introduction

Today credit market conditions, as well as prudential and sustainability regulations, are reshaping the financial services industry. In all industry sectors, the discipline of **credit portfolio management** is expanding coverage across all asset classes, and evolving to assist:

- The "**front-end**" function of credit origination into the portfolio, in policies related to risk appetite and concentration limits framework, in risk and risk/return assessment and pricing, in loan documentation, and in promotion of sustainable finance,
- The "**back-end**" function of loan portfolio management, aiming at facilitating lending growth by creating more lending capacity, mitigating concentrations and reducing capital requirements, using risk transfer solutions like loan sales, private credit insurance, credit default swaps, funded and unfunded securitisations.

The IACPM recognizes the unique and evolving role of credit portfolio managers in today's financial environment and in the transition towards a more sustainable and resilient economy. With its members active in banking, investment and insurance, the Association seeks to foster sound practices in the active management of credit exposures originated by banks and is recognized as a trusted advisor by global regulators.

The purpose of this paper is to provide an overview of the various risk mitigation and risk sharing techniques used in the "back-end" function of loan portfolio management through the whole credit cycle, describe their purpose and impact, as well as inform about IACPM initiatives to support and advance the effective and prudent usage of these tools by loan portfolio managers.

Overview of the risk mitigation techniques

Rationale

When executing risk mitigating transactions, credit portfolio managers aim to:

- **Mitigate portfolio risk**, by reducing exposure to large jump-to-defaults events or to systemic concentrations per asset class, per sector or per geography, and/or
- **Support lending growth**, by releasing capital to increase capital velocity, or reducing exposure to release limits at individual customer level.

To effect these goals, portfolio managers engage in a number of considerations related to 'front-end' risk mitigation (ie, compliance with risk appetite and concentration limits, assessment of risk adjusted return, etc) and can also consider the use of risk mitigation tools ('back-end').

Key risk mitigation tools include:

- **Loan sales**
- **Financial guarantees** and **loan-by-loan private credit risk insurance (PCRI)**, to release limits and capital on mostly illiquid borrowers
- **Single name credit derivatives (CDS)** to release limits and capital on liquid borrowers
- **Synthetic securitisations with first and/or mezzanine risk mitigation (SRT)**, to release capital on portfolios of loans

Risk mitigation tools are essential to prudent risk management and to increase lending capacity. Along the whole credit cycle, Credit Portfolio Managers will select the appropriate solution depending on their objective of risk mitigation, but also on financial, accounting, regulatory and market considerations (*).

IACPM, and its membership, have a crucial role in assuring that these tools are effective in risk mitigation so that capital flows appropriately between the full range of participants in credit markets, as these tools support real economy lending.

(*) See IACPM Principles and Practices at: http://iacpm.org/research/principles-and-practices-in-cpm/

Overview of risk mitigation techniques

Level of risk transfer

To achieve these goals, risk can be transferred at different levels:

- At **single position** level, i.e. per loan, or per legal borrower
  - By reducing exposure at borrower level, a firm releases credit limits and the capital absorbed by the transferred exposure.
- At **portfolio level**, the portfolio being sliced either vertically or horizontally (via securitisations)
  - Vertical slicing releases genuine credit default risk at position level, similar to single loan or single name credit protection,
  - Horizontal slicing ("securitisation") releases the portfolio risk and the capital attached to tranches of the distribution of losses.

Instruments used for risk transfer

Whatever the level of risk transfer as described above, the instruments used for risk transfer are:

- either **funded** ("true sale"), via loan sales or syndication, or loan sales to a true sale/cash securitisation vehicle,
- or **unfunded**, via financial guarantees, credit derivatives or private credit risk insurance (PCRI), transferring risk to sellers of credit protection. Such a risk transfer can be structured with prior horizontal slicing by synthetic securitisation, and this synthetic securitisation can be funded by credit linked notes, using eventually a separate securitisation vehicle.

The combination of level of risk transfers and instruments used is summarized in the table below.

<table>
<tr><th rowspan="3">Instruments</th><th colspan="5">Level of risk transfer</th></tr>
<tr><th rowspan="2">Single loan</th><th rowspan="2">Single Borrower</th><th colspan="3">Portfolio of loans, sliced</th></tr>
<tr><th>Vertically</th><th colspan="2">Horizontally ("securitisations")</th></tr>
<tr><td>True sale</td><td>Loan sales, syndication</td><td></td><td>Loan sales</td><td>Loan sales</td><td>Cash securitisation</td></tr>
<tr><td rowspan="3">Unfunded credit protection</td><td>Private credit risk insurance</td><td rowspan="3">Credit derivative</td><td>Private credit risk insurance</td><td>Private credit risk insurance</td><td rowspan="3">Synthetic securitisation (funded or not)</td></tr>
<tr><td rowspan="2">Financial guarantee</td><td>Financial guarantee</td><td>Financial guarantee</td></tr>
<tr><td>Credit derivative</td><td>Credit derivative</td></tr>
</table>

Impact of the risk transfer: risk mitigation and risk transformation

Depending on transaction structure, risk mitigation can reduce

- either exposure at single name level, or
- cumulative expected losses ("first loss"), which are increasing with the intensity of default and severity risks in the underlying loans (PD, LGD), or
- uncertainty of losses, i.e. capital absorbed ("mezzanine"), which is increasing with
  - the exposure to jump-to-default events, in non-granular assets pools, and/or
  - the stress correlation between the loans of the pool, which can be inflated when correlation exist also between the credit standing of the borrowers and the value of collateral assets (e.g., residential and commercial mortgages).

Below is a summary of the credit risk mitigation objectives that can be achieved or cannot be achieved by transferring different levels of risk:

<table>
<tr><th colspan="3">Increasing lending capacity by reducing...</th><th>Exposure to a borrower</th><th>Provisions for loan losses</th><th>Stressed losses/capital</th></tr>
<tr><td colspan="3">Single loan level</td><td>Can be achieved</td><td>Can be achieved</td><td>Can be achieved</td></tr>
<tr><td colspan="3">Single borrower level</td><td>Can be achieved</td><td>Can be achieved</td><td>Can be achieved</td></tr>
<tr><td rowspan="4">Portfolio level</td><td colspan="2">Vertical slicing</td><td>Can be achieved</td><td>Can be achieved</td><td>Can be achieved</td></tr>
<tr><td rowspan="3">Horizontal slicing</td><td>First loss</td><td>Cannot be achieved</td><td>Can be achieved</td><td>Cannot be achieved</td></tr>
<tr><td>Mezzanine</td><td>Cannot be achieved</td><td>Cannot be achieved</td><td>Can be achieved</td></tr>
<tr><td>Senior</td><td>Cannot be achieved</td><td>Cannot be achieved</td><td>Cannot be achieved</td></tr>
</table>

Can be achieved Cannot be achieved

However, depending on the instrument used for credit risk mitigation, the risk transformation introduces new financial and non-financial risks, which can be complex to estimate and mitigate, like

- counterparty risk for unfunded risk protection
- flow-back risk in the retained senior tranche, generally called model risk
- mismatches in default and recovery in credit derivatives that do not reference the exact same borrower and loan
- mismatches in accounting between the underlying assets and the risk mitigating instruments

<table>
<tr><th colspan="3">New risks</th><th>True sale</th><th>PCRI</th><th>Financial guarantee</th><th>Credit derivative</th></tr>
<tr><td colspan="3">Single loan level</td><td></td><td colspan="2" rowspan="2">Counterparty (CP) risk</td><td rowspan="2">Counterparty risk; Mismatches or basis risk (PD, LGD, accounting)</td></tr>
<tr><td colspan="3">Single borrower level</td><td></td></tr>
<tr><td rowspan="4">Portfolio level</td><td colspan="2">Vertical slicing</td><td></td><td colspan="3"></td></tr>
<tr><td rowspan="3">Horizontal slicing</td><td>First loss</td><td rowspan="3">Model risk</td><td colspan="3" rowspan="3">Model risk
Counterparty risk</td></tr>
<tr><td>Mezzanine</td></tr>
<tr><td>Senior</td></tr>
</table>

This transformation of risk must be understood and managed by credit portfolio managers, and is one of the main shared concerns not only of financial institutions but also of regulators, who are adding layers of conservatism by buffers in capital, transparency requirements, processes of significant risk transfer assessment, etc.

IACPM initiatives to support and advance effective usage of risk mitigation techniques

For the most widely used and for emerging techniques of risk mitigation, the IACPM is providing support to its members in the form of ongoing and ad-hoc working groups, data collection / targeted research and advocacy vis-à-vis the main regulatory bodies across the world.

In particular, in this specific domain of Credit Portfolio Management, the Association prioritizes its research and advocacy efforts on the documentation, risk assessment, regulatory treatment and transparency of critical tools which are the foundations of the above transformation in banks' credit portfolio management, i.e,

- Private credit risk insurance (PCRI),
- Credit default swaps (CDS),
- Synthetic securitisations with first and/or mezzanine risk mitigation (SRT).

Data collection / Research

Annual Synthetic Securitisation Volume & Performance survey (banks only)
Collecting transaction-level data on volumes, structuring features, pricing, investor profiles and underlying portfolio performance on public and private synthetic securitisations executed by member firms

Biennial IACPM/ITFA survey on Private Credit Insurance (banks only)
Collecting data on volumes, protected assets, pricing and claims on non-payment insurance transactions executed by banks and eligible as financial guarantees

Annual SRT survey (credit insurers only)
Collecting data on volumes, underlying assets and protected tranches of synthetic securitisations executed by credit insurers

Biennial Principles and Practices survey (all members)
Updating on developments in the credit portfolio management function, including usage of risk mitigation tools

Ad-hoc surveys
Performed to better understand practices in specific domains (e.g. Reporting and transparency practices)

Working groups

Monthly Regulatory Update Call
Covers global regulatory developments

Securitisation Working Group
Focuses on synthetic on balance-sheet securitizations, including significant risk transfer assessment, frameworks for Simple, Transparent and Standard and for green/sustainable securitizations, treatment in the various prudential capital regulations, disclosure requirements, etc

Credit Insurance Working Group
Engages with regulators for a fair treatment of non-payment insurance as credit risk mitigant

Accounting and Market Working Groups
Meet as needed on issues related to IFRS 9/ CECL (accounting) and market developments such as NoR CDS (Market) and machine learning for loan sale documentation

Climate Risk Focus Group
Meets quarterly to discuss evolving risk assessments, metrics and portfolio approaches

Effectiveness of regulatory capital release – IACPM advocacy priorities

The current credit and market environment continues to evolve rapidly amid the stresses of the credit crisis and the requirements to support growth while balancing risk and return. Credit portfolio managers are being called upon to assess and mitigate the new risks emerging from the pandemic, as well as contribute to design the transition path of their credit portfolio to deliver the sustainability objectives of their firms.

Accordingly, there are a number of transformative considerations for the financial industry looking forward that will require public – private partnership to assess and mitigate risks and establish or adjust the appropriate risk management and regulatory frameworks. Among these challenges, which have an effect on capital allocation priorities, are:

- Improvement of profitability, requiring allocation of capital not only to balance-sheet growth, but also to digital investments
- Increase of market-based funding of the economy, notably by long-term institutional investors like pension funds
- Growing role of insurers in supporting economic growth, both on the assets (investments) side and the liability (credit insurance) side of their balance-sheet
- Transition to sustainable finance, and growing investors demand for investments that promote climate transition

Therefore, the IACPM wants to promote the best practices that assure the effective and prudent use of risk transfer techniques in lending books, and their alignment with the related treatment in prudential regulations.

Appendix

For 2022, IACPM advocacy priorities can be summarized as follows for each of the instruments:

	Research	Advocacy
PCRI	• Biennial PCRI Survey with ITFA	• Recognition of the super senior level of insurance protections • Standardisation of PCRI insurance policies • Impact of Basel III finalisation
CDS		• IFRS accounting of CDS hedges (completed) • Eligibility of CDS without restructuring clause • Impact of Basel III finalisation
SRT	• Yearly survey with banks on synthetic securitisation • Yearly survey with credit insurers on SRT transactions • Ad-hoc survey on ESMA reporting adequacy	• Participating to or incentivising for comprehensive review of securitisation regulations • Simplification of the significant risk assessment process • Reduction of the non-neutrality effect for on synthetic B/S transactions • Impact of Basel III finalisation • Simplification of the disclosure templates for private securitisations • (EU) Eligibility of credit insurers as providers of credit protection in STS transactions • Framework for sustainable securitisation supporting the ESG transition

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About the IACPM

The Association represents its members before regulators around the world, holds bi-annual conferences and regional meetings, conducts research on the credit portfolio management field, and works with other organizations on issues of mutual interest relating to the measurement and management of portfolio risk.

There are more than 125 financial institutions worldwide that are members of the IACPM. These institutions are based in 26 countries and include many of the world's largest commercial wholesale banks, investment banks and insurance companies, as well as a number of asset managers.

Today credit market conditions, and new regulations, are shaping the financial services industry. The discipline of credit portfolio management is evolving within firms to include the measurement and management of credit risk at the enterprise level, in addition to execution of risk mitigation strategies in credit markets.

CPM has increasing linkages with: front-end credit originators; the setting of risk appetite and limit structures; funding and liquidity for the firm; and management of counterparty risk. CPM is also expanding coverage of credit assets beyond investment grade and leveraged to include middle market and retail, as well as in some cases bonds and other credit-sensitive instruments.

The IACPM recognizes the unique and evolving role of credit portfolio managers in today's financial environment, and offers an excellent forum through which these issues can be identified, understood and addressed.