
Credit Day

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FRIC • CENTER FOR FINANCIAL FRICTIONS

CBS DEPARTMENT OF FINANCE
COPENHAGEN BUSINESS SCHOOL

 Danmarks
Grundforskningsfond
Danish National
Research Foundation

**CAPITAL
FOUR**

Opening Speaker

Sandro Näf, Capital Four

Speakers

Bo Becker, Stockholm School of Economics

Pete Drewienkiewicz, Redington

Shohini Kundu, UCLA Anderson School of Management

Michael Marsh, Goldman Sachs

Nicolai Nørregaard, Kadeau

Olivier Sibony, HEC Paris

Michael Schwert, Wharton School of the University of Pennsylvania

Panelists

Sabrina Fox, European Leveraged Finance Association

Alejandro Gonzalez, JP Morgan Private Bank, London

Laust Johnsen, Capital Four

René Kallestrup, Capital Four

Ivan Rasmussen, Polaris

Mikkel Sckerl, Capital Four

Timothy Smith, Capital Four

Dr. Robert Wania, Allianz Investment Management SE

Jim Wiant, Capital Four US

Organizers and Moderators

David Lando, CBS and FRIC

Sandro Näf and Torben Skødeberg, Capital Four

Introduction

Together with Copenhagen Business School (CBS) and Professor and Director of Center For Financial Frictions (FRIC) David Lando, Capital Four had the pleasure of welcoming an audience of 175 for the inaugural Credit Day. The program aimed at providing a day full of insights across credit. The speakers and audience spanned world-class academics, sophisticated investors and leading practitioners.

Sandro Näf, CEO and co-founder of Capital Four, welcomed all, emphasizing the power of the research, of dialogue, and of collaboration. Sandro also flagged the importance of credit and, by way of example, shared the material growth differential between the US and Europe post GFC which is partly due to different credit systems. Sandro encouraged all participants to gather food-for-thought.



Part I - Academic

The academics shared their research findings across Credit Risk Modelling, CLO Equity, Senior Loans in relation to CLO fire selling, and – more broadly – how innovative disruptions are central to understanding defaults.

David Lando

Professor, PhD, Director of Center For Financial Frictions (FRIC)

In setting the scene for the morning sessions, David focused on issues around securitization and shared that there has even been talk of a “formula that killed Wall Street”.

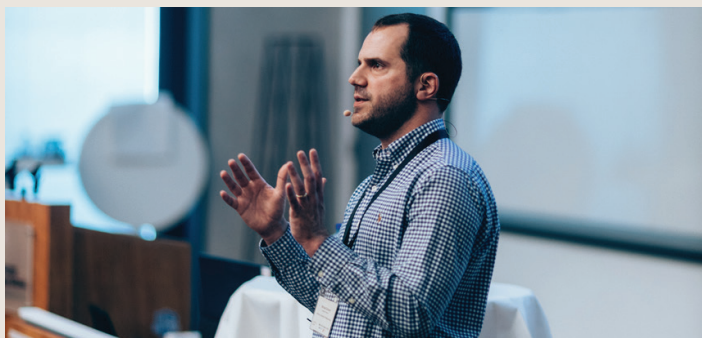
Combining the insights from Robert Merton’s seminal paper “On the pricing of corporate debt: the risk structure of interest rates” from 1974 with a market factor model of multiple firms with idiosyncratic noise and taking a large homogenous portfolio, a formula for the fraction of loans defaulting can be expressed.

David then went on to outline how subordination within securitized products can be created by understanding cross asset correlation and propensity to default. In addition, David flagged that the sensitivity within the model for subordination is really not that sensitive at the single layer.

As a next step, David then looked at combining multiple pools (i.e. another layer of the structure) and a lower tranche such as a BBBs by using the same model. Then the subordination requirements are extremely sensitive and potentially a AAA cannot actually be created. This is the real “smoking gun”.

This was also evidenced out by showing measurements of how some AAAs in the US sub-prime non-agency mortgage market themselves had maybe exceeded the losses expected but not by a wide margin. Applying the formula to one layer of securitization had effectively worked.

The true “formula that killed Wall Street” was in essence when rating agencies and investors had not (sufficiently) considered the very high correlation of assets within Collateralized Debt Obligations which itself had double-layers of subordination. These structures consequently saw enormous losses (greater than \$410 billion). The distinction between what works and what does not methodology-wise when it comes to securitized products and layers makes a world of difference.



Michael Schwert

Assistant Professor of Finance Wharton School of the University of Pennsylvania

Michael immediately utilized David’s presentation to highlight how CLOs are different from CDOs. Having outlined the basic of a CLO, Michael posed the questions of how have they performed and what factors can we link this to.

Key findings in the paper co-authored with Larry Cordell, Federal Reserve Bank of Philadelphia and Michael Roberts, like Michael at the Wharton School, are:

- CLO equity show abnormal returns. This is especially true of the pre-08 “1.0 vintage”
- More recent CLOs (“2.0 vintage”) do not demonstrate as strong a return profile. However, it is proposed that this is due to a biased in that only terminated CLOs are included in the study and that the vast majority of CLOs created since 2011 are still live, thereby skewing the profile of the data set
- CLO performance is strongest (and this is perhaps somewhat counter-intuitive) when you have volatility in markets as managers can utilize options embedded in the structure to improve returns via active management
- Across all vintages there are signs of manager performance persistence
- Investors in the top part of the CLO structure support strong returns for CLO equity.

Shohini Kundu

Assistant Professor of Finance UCLA Anderson School of Management

Rather than the performance of the structure per se, Shohini's presentation focused on the action taken by CLO managers when faced with a poorly performing sector which pushes the CLO itself toward the limits of its covenants.

When CLOs are subject to idiosyncratic shocks (in this study from Oil&Gas exposure) that push them closer to their covenant thresholds, they fire-sell unrelated loans in the secondary loan market to alleviate their constraints.

These fire sales exert price pressure across security markets. The market dislocations erode the liquidity positions of exposed firms, spilling into real economic activity. Contrary to traditional fire sale settings, CLOs fire-sell loans issued by riskier firms.

These findings are helpful in understanding both individual manager actions as well as how the system of CLOs at large respond to situations of default.



Bo Becker

Professor of Finance Stockholm School of Economics

Connecting with the theme of defaults, Bo shared the findings of a paper written together with Victoria Ivashina of Harvard University.

The paper outlines how credit risk has increased during the past 30 years and how this increase can be largely attributed to an increase in the rate at which new and fast-growing firms displace incumbents (aka 'disruptive innovation').

The finding is evidenced via research within industries related to IPO and venture capital activity.



Interview with an Investor

The audience then had the pleasure of listening to Pete Drewienkiewicz (CIO, Redington with £600bn+ AUA) outline how they support clients in making better decisions, how they review investments on a practical level, how newer asset classes are incorporated and how managers are ultimately selected.

Regarding investments, Pete shared a core framework of contractual return vs capital gain strategies. Within the contractual return side, credit has for a considerable time been important to institutional investors to support regular cash flow and to be time diversifying. Over time, this investment area has expanded to include, among other areas, CLOs. However, it has predominantly been invested in via multi asset credit / multi class credit products which blend various sub strategies rather than on a standalone basis.

This has several advantages including underlying investors not having to embrace large portfolio composition step-changes. Credit lends itself well to managing client expectations which has enabled investor exposure.

On the subject of manager selection, Pete emphasized the value of a repeatable investment process and Redington's emphasis of being "bottom-up" and fundamental. This is combined with a search for strong alignment of interest and being entrepreneurial, and of the manager having sufficient resources and market breadth combined with dynamism. Typically, this results in the selection of mid-sized AUM managers with whom a partnership can successfully be formed.



Part II - Practitioners

The afternoon kicked off with a riveting 'tour of the credit landscape' during the past 12 months courtesy of **Michael Marsh** (Global Co-head of Credit Finance and Global Co-head of the Alternative Capital Solutions Group, Goldman Sachs).

This particular 12 month period (May 2021 – May 2022) was of course characterized by the emergence from Covid19 lock-ups at the beginning to the outbreak of war near the end, with the fundamental picture of interest rates changing drastically during the period and investors now favoring floating rate. Related to rates, Michael noted how central bank policy action was with unity during the Covid19 period unlike now where there is less unity.

Michael contrasted the 1980s situation "The Modern Cycle" (lower inflation, central bank independence, real globalization, low volatility, longer cycles, higher % of margin on GDP, material conflict reduction, deeper capital markets, unlimited supply of cheap energy) with the new future of "The post-modern era" (people and energy not in abundant supply, underinvested capex for energy, ESG and decarbonization, government spending in infrastructure, regionalization). While volatility can be expected to be higher in this era, it is not a given that the default ratio will spike. That said, the breakpoint of terminal rates above 3.5% was raised as a key factor.

Looking ahead, the number one topic of discussion is growth at the individual corporate level given the new dynamics. Clearly, markets are concerned with higher default scenarios but the underlying evidence for this is not yet being demonstrated and is not expected by all market participants. In addition, the strong consumer alongside government policy does support a less negative picture.

To share insights on investor options and behaviours, a series of panel discussions followed.



Private Debt: An institutionalizing asset class

Combining perspectives from a seasoned private equity house, one of Europe's largest and most advanced private debt investors, and Capital Four, the panel tackled numerous topics including:

- Manager selection by investors: Key features include market access, track record and work-out capabilities
- Private debt provider selection by private equity sponsors: Be relevant and reliable to the sponsor via dialogue, speed, and solutions to complement the individual business model case and strategy
- Value of covenants: Good relative value in private direct lending vs the liquid debt markets and as we are yet to experience a real test of European direct lending, one should recognize the value-add of covenants
- Recent trends: There are multiple dynamic sub-markets that importantly are all institutionalizing. Across these, ESG KPIs is the latest feature to be embraced broadly

Multi Asset Credit (MAC): How to Implement & How to Evaluate

Combining perspectives from a leading investment consultant, a world class market maker and participant, and Capital Four, the panel tackled:

- MAC is increasingly being utilized by investors. This enables broader underlying investment universes from which to select and, consequently, a great potential for value-add both via tactical allocation and fundamental selection
- The various sub-markets (for example, high yield, senior loans, CLOs, financials) each have individual characteristics and drivers which can be exploited by managers. While historically such differences could also have been picked up by investors themselves, the 'reaction time' in markets have decreased which in turn gives day-to-day expert practitioners a distinct advantage
- MAC may come to also include less liquid assets. Trend-wise, investors appear to favor experts who can demonstrate how agility and sub-market access can add value rather than narrowly defined "box"-like mandates
- Finally, it was confirmed that MAC per se does not mean that ESG is less of a product feature.



Taking a step back, **Professor of Strategy Olivier Sibony of HEC** was introduced to share the highlights from the book *Noise: A Flaw in Human Judgment* which he co-authored with Daniel Kahneman and Cass Sunstein. Key points included:

- Core concept of "noise": unwanted variability in judgment (we expect "bounded disagreement"). This is not about the judgment being consistently skewed (i.e. biased (which are 'causal') but rather the judgment is inconsistent
- This phenomenon is continuous and prevalent across all areas where human judgment is involved (medicine, insurance, government etc. etc.). In addition, the point was demonstrated live via the audience voting on a few examples
- The components of Noise are: i) level noise – i.e. differences in evaluation; ii) occasion noise – the evaluation by the same person will differ as to when the evaluation is made (Olivier strongly recommends visiting doctors in the morning); and iii) pattern noise – i.e. individual preferences by the evaluator
- The impact is substantial and much greater than we ourselves imagine and wish to tolerate (not just 10-15% but rather 50%)
- The solution to this is through "decision hygiene" where frameworks can support better decision-making via:
 - Aggregate independent inputs as averaging *independent* inputs reduces noise
 - Use relative measures rather than absolute ones
 - Structure judgments for example via a score card
 - Keep intuition for the end

After this, the audience enjoyed the final two panel discussions of the day, namely:

ESG & Credit: The Need for a Thoughtful Approach

Combining perspectives from the CEO of the European Leveraged Finance Association, the fixed income team of a leading global Private Bank, and Capital Four, the panel tackled:

- The ESG standards of today: A critical topic for end-investors but “the standard” is still evolving and the space is very dynamic. The younger generation is highly engaged in how investments align with values. This has fueled an appetite for impact and thematic funds. So far, the process of evaluation is predominantly a qualitative one
- ESG & differences of opinion: Clear agreement on how current ESG scores are suffering from substantial dispersion across score providers. Differences both across the investment landscape (for example, based on where the investment manager is based) and client types are clearly evident. In general, the differences are anticipated to become smaller over the medium-term, also as the large regulators are moving toward similar frameworks
- Where to focus and how to get data support: Once ESG data is richer, new opportunities for quantitative analysis will arise. By way of example, ELFA has created 14 different sector fact sheet to support the journey for both borrowers and investors, helping establish clear guidelines. Own reporting by managers is also seen as a strong positive, demonstrating engagement on the ESG topic
- The future: Torben shared how the path to net zero 2050 actually looks quite promising. He also flagged that the investments to be made will also have a growth factor of 0.4% GDP p.a. Data will become more standardized and more widely available. This can enable investors to better evidence and pursue the individual ESG approach they wish to pursue.



“Noise” from Theory to Practice Re Investment Decisions

Combining perspectives from Olivier Sibony, Capital Four’s Head of Strategy Timothy Smith, and René Kallestrup (PM & Partner), the panel tackled:

- Capital Four faced a need to optimize the scoring process on individual corporates to act as ‘guard rails’ to reduce Noise
- Olivier worked with the team to define where decision hygiene would have the largest impact
- Capital Four implemented a fundamental score which has seven components and where each component (e.g. “management & ownership”) has reference cases to enable a relative discussion rather than an absolute one
- This has supported Capital Four’s internal language, process consistency and broader framework for decision-making.



To round off the content of the day, **Nicolai Nørregaard** (award winning chef of two-Michelin starred Kadeau) was interviewed to share his perspective on especially

- **Continuous creativity:** As a self-taught chef, Nicolai is much more unconstrained in his idea generation. Even so, it is very much a matter of continuous testing and trying to get to a final result. Inspirations can be very varied including – as an example – from seeing a painting
- **Sustainability:** While Nicolai and Kadeau are highly focused on local sourcing of raw materials, limiting waste and using organic produce, Nicolai shared his vision. This includes a friendly work environment, reduced hours in the restaurant, and team bonding at their Bornholm location. It also has nice, smaller touches such as a glass of wine with staff meals
- **Expectations:** Once a Michelin-star is won, it's a new game. The restaurant has to deliver to this standard and more. This is a challenge across all aspects. Nicolai shared that with two stars achieved in Copenhagen, it may be on the cards to try for three in the future.

Final Remarks

Torben concluded proceedings by thanking all for the high quality inputs and discussions throughout the day, inviting all to continue benefitting from the ideas and perspectives shared as well as new relations made. Naturally he also warmly extended an invitation to all for next year's Credit Day.

Credit Day 2023

Details to follow