MARIO MILONE ***October 2018***

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Professional Experience

Visiting Researcher, Imperial College Business School, *2018–2019*
Temporary Lecturer (ATER), Université Paris Dauphine, *2016–2018*
Research Intern, Laboratoire de Recherche en Informatique (LRI), *2011, 5 months*
Software Designer Summer Intern, Tokyo *2010*

Education

Ph.D. candidate in Finance, Université Paris Dauphine, *2012–2018*
Dissertation submitted. Thesis Committee: Gilles Chemla (Advisor), Denis Gromb, Jérôme Dugast, Christopher Hennessy, Kathy Yuan.
Expected Defense: December 3, 2018
Visiting Student, Harvard University, *2013–2014*, Sponsor: Oliver Hart

M.Res. in Finance, Université Paris Dauphine, Ranked 1^{st}, *2012*
M.Res. in Artificial Intelligence, Université Paul Sabatier, Toulouse, Ranked 2^{nd}, *2011*
M.Eng. in Computer Science, Institut National des Sciences Appliquées (INSA), Toulouse *2011*
Exchange Student, Hong Kong University, *2009–2010*

Research Interests (Theory and Emprirical)

Financial intermediation ; Corporate Finance
Technology ; Fintech ; Big Data
Financial Analysts ; International Trade

Working Papers

Smart Lending

This paper investigates the impact of data-based lending on financial intermediation. I show that a data-based screening technology can increase financial frictions. The use of data in the screening process reduces the acquisition of soft information by the lender which negatively impacts already constrained borrowers. Additionally, since borrowers that belong to groups that were less financed historically are under-represented in the data, the technological lender's screening efficiency differs in the cross-section of borrowers and is higher for borrowers with greater historical lending data. When traditional and technological lenders coexist, the borrowers about whom data can provide precise information raise funds from technological lenders while those with less informative historical data choose traditional lenders who can make up for the lack of hard data-based information by acquiring soft information. The intermediation cost to traditional borrowers is increased by the existence of technological lenders. I identify conditions under which traditional lenders benefit from restricting their own access to data processing technology when competing against the technological lender.

Assessing Transit Rents (with Katrin Tinn)

Trading frictions due to inevitable transportation costs are fundamentally different from those due to rent extraction by transit countries. We propose a theoretical and empirical methodology to disentangle these two types of costs and assess the presence and global magnitude of a hold-up problem. We construct a new measure of distance based on a global network of the most likely trade routes. While transportation costs make all countries worse off, rent extraction benefits transit countries. Further, we show that in general equilibrium, countries that are neither landlocked nor transit countries bear a large share of the cost of distortions due to rent extraction. While free trade agreements with transit countries do not appear to mitigate the problem, customs unions do.

Bank asset structure and the risk-taking implications of capital and liquidity requirements

In addition to risky loans, banks hold risky securities that provide uncertain future liquidity. This leads them to choose an asset structure with their desired correlation between liquidity and long term asset returns. We show that liquidity management and risk management concerns lead to a trade-off that creates an inverse relationship between security holdings and aggregate asset risk. Capital requirements mitigate liquidity risk in all future states of the world, thereby reducing the cost of liquidity risk and leading banks to increase aggregate asset risk. Liquidity requirements such as the Liquidity Coverage Ratio (LCR) affect high liquidity shock states and mitigate aggregate asset risk-taking. These results highlight the tension between capital and liquidity regulations in addressing the risk taking incentives of financial intermediaries.

Publications

Oliver Hart, La finance vue à travers la théorie des contrats incomplets (with Gilles Chemla)
publié dans Michel ALBOUY, Les Grands Auteurs en Finance, Editions EMS, 2017, p. 529 à 554

Continuous Rapid Action Value Estimates (with M.Sebag, O.Teytaud, A.Couetoux, H.Doghmen and M.Brendel) *3rd Asian Conference in Machine Learning (ACML), 2011*

Consistent Belief State Estimation, with Application to Mines (with O.Teytaud and A.Couetoux)
International Conference on Technologies and Applications of Artificial Intelligence, 2011

Q-Learning with Double Progressive Widening : Application to Robotics (with O.Teytaud and N.Sokolovska)
18th International Conference, ICONIP 2011

Seminars and Conferences

Finance Theory Group (FTG) summer conference, *June 2018*
London Business School, London

CEPR Third Annual Spring Symposium in Financial Economics, *April 2018*
Imperial College Business School, London

Second Workshop on Corporate Governance, *June 2017*
ESCP Europe, Paris

Adam Smith Conference in Finance, *March 2017*
HEC Paris

EFA Annual Meeting (43rd), *August 2016*
BI Norwegian Business School, Oslo

1st Microstructure Conference, *June 2016*
Université Paris Dauphine, Paris

9th Financial Risks International Forum, *March 2016*
Institut Louis Bachelier, Institut Europlace de Finance, Paris

8th Annual Hedge Fund Research Conference, *January 2016*
Université Paris Dauphine, Paris

Seminar Presentation - DSF/TI PhD seminar serie, *June 2014*
Timbergen Institute - Amsterdam

Teaching Experience

Teaching Assistant for Professor Gilles Chemla, *2015–2018*
Imperial College Business School
Advanced Corporate Finance (GMBA, FTMBA, WEMBA)
Mergers & Acquisitions (FTMBA, WEMBA)

Lecturer in Corporate Finance (Master level), *2013, 2016–2018*
Université Paris-Dauphine

Lecturer in Programming for Finance (Master level), *2013*
Université Paris-Dauphine
Topics: VBA

Lecturer in Computer Science (Undergraduate), *2012*
Université Paris-Dauphine
Topics: Programming

Teaching Interests
Corporate Finance ; Financial Intermediation ; Investment
FinTech ; Big Data ; Machine Learning for Finance

Languages

Fluent in French, *(mother tongue)*
High proficiency in English, *(TOEIC (925/990), TOEFL IBT (114/120), GMAT (710/800))*
Spanish to be refreshed

Extra-curriculum activities

Graduated in Recorder and Music Theory, Conservatoire de Musique et de Danse du Tarn.
Advanced level in Ballet, Contemporary and Jazz Dance.

References

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Reference letters can be obtained from **Katherine Campbell** (placement coordinator).