QUANTITATIVE MANAGEMENT RESEARCH INITIATIVE

2023

Activities and Events organized by the Research Initiative (QMI) – ANNUAL REPORT

This document describes the activities organized by the Quantitative Management Research Initiative (QMI) during its eleventh year of existence.

For internal use only.

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Quantitative Management Research Initiative

"QUANTITATIVE MANAGEMENT INITIATIVE (QMI)"

1. INTRODUCTION

Hosted within the Fondation du Risque (FdR) and with the support of the Institut Louis Bachelier (ILB), the work conducted within the framework of this Research Initiative is principally carried out by teams from the Université Paris Dauphine - PSL and the ENSAE (Ecole Nationale de la Statistique et de l'Administration Economique). It benefits from a partnership with LFIS Capital.

1.1. The objectives of the QMI

In the post-2007 financial-crisis context, Quantitative Management professionals from the French Financial sector came together in 2010 to create QuantValley to promote Quantitative Finance and its benefits in terms of research, risk management and value creation for investors. The association was joined by GFI and UBS, and thanks to their support, the Quantitative Management Initiative (QMI) was born in early 2012. Today, the Quantitative Management Initiative (QMI), who is supported by LFIS Capital, is investing even more in the promotion of research and the development of interactions between the academic world and the Professional world of Quantitative management and is structured around the following themes:

- Developing quantitative research applied to asset management;
- Facilitating knowledge transfer between academic environments and asset management agents;
- Responding to the research issues of various private partners;
- Encouraging collaboration with one or more companies that are leaders in fields relating to quantitative management;
- Promoting the image of asset management based on quantitative approaches;
- Increasing and consolidating the high level of excellence by organising reflexion, research and training activities on an international scale relating to one or more themes of general interest;
- Reflecting on the evolution of regulation pertaining to asset management.

1.2. Research axes of the QMI

Amongst the research areas of most interest to the QMI are:

1.2.1. Signal generation

Statistical Signal Processing & Machine Learning in Finance

Application of signal treatment to the estimation of factorial models, the detection of outliers, the filtering of trends and the robust estimation of Kalman models is historical research field of the IdR QMI. Our industrial partners were originally interested by using mathematical methods to take investment decisions. At that time, Statistical Signal Processing were the most promising approach to process the information encompassed in historical time series. A new publication - Chevalier, Darolles (2022), may be classified in this category. The objective is to allocate money to a portfolio of different trends following systems. The risk of this strategy is then linked to the probability of observe simultaneously breaks in trends characterizing different markets. Forthcoming working papers will feed this

strand of research, and in particular through the use of machine learning techniques to rely observed trends to economic environment variables. This will make the link between this topic and the following one.

Machine Learning (ML) is indeed a promising technique to process large set of information. Arthur Stalla-Bourdillon and several co-authors test the usefulness of Machine Learning (ML) for sovereign risk assessment and pricing in the euro area. They show that their predictive accuracy compared to traditional econometrics methods and their assessment on what are the most important economic factors behind market perception of sovereign risk (see Belly et al. working paper page 14).

Serge Darolles, Gaëlle Le Fol, and Beatrice Sagna, former PhD student (see PhD defense and placement page 17), with another co-author are working on volume prediction (univariate and multivariate) models using machine learning method. Their first results presented in a working paper show that machine learning technics outperform ARMA and SETAR specification both in and out of sample.
Finally, we have organized in February 2022 our fourth Hackathon – AI and ML in Asset management, with 66 participants/41 teams. See Annual Report 2022, page 23.

Big data, machine learning and Alternative Data in Finance

Serge Darolles and Gaëlle Le Fol, with the support of an ENSAE Master Student, have studied the use of Nowcasters to predict changes in regime. The first results presented in Darolles, Deni, Le Fol are promising, and further developments will be tested.
Marius Zoican, with Alfred Lehar and Christine Parlour, is currently working on liquidity and market fragmentation on AMM markets from crypto assets.
Arthur Stalla-Bourdillon, former PhD student (see PhD defense and placement page 17), and his co-authors published a paper in the Journal of International Money and Finance underlining how relying on a large datasets of sectoral equity prices performs better in macro-forecasting than using, as a predictor, the aggregate equity prices. Embedding these sectoral stock prices into a factor model also outperforms conventional benchmark, such as the term spread. This paper was quoted in Bloomberg on January 18, 2023, see Media coverage page 23.
The development of ESG dataset is a new and promising field for this topic. Several research are conducted on the link between ESG rating and the risk premia of listed securities. Faverjon, Hardy and Lambert (2023) publish a systematic literature review on financial stock performance of sustainable investments. Their objective in this work is to bridge the gap between empirical evidence and recent theoretical models.
An « Alternative Data in Finance » special invited session leaded by Serge Darolles, Member of the QMI has been organised at the Computational Financial Econometrics (CFE) conference in London in December 2022. A companion publication in Option Finance (November 2023) by Serge Darolles treated the same topic.
Coadou and Darolles (2023) investigates whether investors may favour securities presenting features in line with fundamental portfolio guidelines, namely better ESG quality and optimal Index tracking. Using US-listed firms of the USA MSCI Index and Refinitiv ESG score from 2013 to 2021, they propose a double sort methodology to assess this assumption. They found that Low ESG-Beta stocks are relinquished by investors in order to answer new constrains and generate higher risk adjusted returns. See Working papers page 13.

Risk premia

Serge Darolles is working with his former PhD Student Charles Chevalier on the characterization of a Multi-asset Trend Following Risk Premia that can be used to explain the cross-sectional dispersion observed in the CTA space. The corresponding risk factor can be used to improve the explanatory power of the linear factor models generally used to analyse hedge fund portfolios. A first publication in Journal of Asset Management in 2019 reports all the results obtained on momentum strategies. A second paper ("Diversifying Trends") by the same co-authors is forthcoming in Econometrics and Statistics, see Published papers page 15. The main objective of this research is to extract what is in common between trends observed on different markets.
Julien Royer, Jean-Michel Zakoian and a coauthor, are extending the theory on the estimation of dynamic conditional betas. In particular, they alleviate the short memory assumption frequently imposed on the volatility models, which can be restrictive in empirical applications. They investigate the existence of a carbon risk premium in the cross-section of US industry portfolios.
Serge Darolles, Gaëlle Le Fol and Gulten Mero are working on a regime switching approach to study the existence of risk premia. They apply their methodology to the size premia and show that the size effect is not a statistical fluck. They use a Markov Regime Switching model to filter regime-dependent risk-adjusted size spreads, in order to capture the reward for bearing the risk inherent to the size effect. The corresponding paper is published in Finance (see publications page 15) in 2022 and some developments are currently works in progress.

Finally, Paul Ehling and Costas Xiouras in their project "Asset Pricing with Endogenous beta", founded in 2018, study the cross-section of expected returns in a framework where betas are determined endogenously. Their theoretical analysis shows that the stocks' betas fluctuate significantly over time and are affected by both the state of the economy and the individual stock states, i.e. their characteristics.

1.2.2. Risk & Crowding

Crowding

Hector Chan, former PhD student (see PhD defense and placement page 17), and a co-author are developing, in paper published in Journal of Portfolio Management in 2022, a model whose aim is to study the relationship between crowding and liquidity shocks. One of the main results is that crowding is associated with a larger exposure to broader liquidity shocks on arbitrageurs. They confirm this link empirically by studying equity long-short strategies. They use short interest data both to identify liquidity shocks impacting sophisticated equity investors and to infer crowdedness for some of the well-known long–short equity factors. When liquidity shocks (such as the 2007 quant crisis or the more recent 2020 COVID-19–induced quant deleverage) occur, crowded strategies indeed tend to underperform.

Marius Zoican with two co-autors study, in a paper called "The queuing friction in limit order book markets", the impact of (new) technology on securities exchanges and asset management, as well as how to leverage technological innovations to build a better market. They uncover a novel crowding-out effect: a market maker inventory shock crowds-out liquidity provision by others later in the queue. A trade-off arises, where the queuing sequence that maximizes risk sharing minimizes quoted depth, and vice versa.

In "Social Media as a Bank Run Catalyst", Juan Imbet and his co-autors document that social media amplifies the exposure to bank-run risks, using the bank-run on SVB on March 2023 as motivation. Our paper is the first to show that the exposure to social media can affect the risk of banks and should be taken into account in internal risk management models as well as in stress-testing scenarios by regulators. This research has been intensively presented in several international conferences and seminars, see Seminars and conference participations page 18.

Risk disaggregation and portfolio allocation

A change in the structure of a fund's client base affects the potential mismatch between the liquidity of its assets and liabilities. An asset/liability approach for liquidity management is therefore critical and requires a client behaviour model. Serge Darolles, Gaëlle Le Fol and Ran Sun are working on investor's behaviour and the consequences on funding liquidity risk.

Marius Zoican is working with a co-author on a project where they look at institutional investor attention. They build a model where analysts who compete for scarce investor attention to maximize volume for brokerage houses end up clustering in a small subset of stocks. They find that it explains 21.39% of the cross-sectional variation in analyst coverage. This research has been published in Journal of Financial Markets in 2023.

Hugues Langlois in the project "Forecasting Portfolio Weights", funded in 2018, proposes a new methodology to compute dynamic mean-variance optimal portfolios. The originality of his approach is to directly forecast portfolio weights. This research was presented at the CFE conference in London in December 2021and in a webinar launched in 2021.

Contagion and funds flows

Serge Darolles, Gaëlle Le Fol and her former PhD Student Beatrice Sagna work with another co-author on some multivariate volume prediction methods applied to the circulation of liquidity within a portfolio. This paper research has been presented several times at some international conferences in the past.

Fabrice Riva and a coauthor are currently investigating the impact of Exchange-Traded Funds (ETFs) on their constituent securities. They find that, after the switch, constituent stocks experience greater commonality, both in returns and in liquidity. The effect on return commonality appears stronger for the least liquid stocks included in the ETF. Also, they present evidence that ETF arbitrage is the transmission mechanism of the comovements. Moreover, they show that the comovements do not appear excessive. This research has been accepted for presentation several times by well-established Finance conferences (FMA 2022, Eurofidai-ESSEC 2022, 14th Annual Hedge Fund Research Conference, see page 21).

Darolles and Roussellet (2023) study hedge fund liquidity management in the presence of liquidity risks on the asset and liability sides. They formulate a two-period model where a single fund has always access to a liquid asset and can invest in an illiquid asset which pays off only at the end of period two. Funding liquidity risk takes the form of a random outflow originating from clients in period one. They solve the allocation problem of the fund and find its optimal allocation between liquid and illiquid assets. Liquidation probability and portfolio composition are revealing about the market liquidity and funding liquidity, respectively. Gates, as a device that limits the outflows experienced by the fund, helps it reduce its liquidation risk and harvest liquidity premia.

Estimation risk for portfolios

In particular, in a paper forthcoming in Journal of Econometrics, Jean Michel Zakoian and a co-author are testing the existence of moments in the framework of GARCH processes, which is of particular interest as the existence of moments can be crucial for risk management, for instance when risk is measured through the expected shortfall (see Publications page 15).
Ophélie Couperier, former PhD student (see PhD defense and placement page 17), is also working on risk measures and on backtests of risk measures in two working papers, with different co-authors. This research has been presented at several international conferences (see Diffusion of Research, Annual report 2022, page 17).
Juan Imbet is currently working with three co-authors, robust option-implied measures of conditional volatility, skewness and kurtosis based upon quantiles and expectiles inferred from weekly options on the S&P 500. find that the option-implied robust indicators exhibit short-, medium- and long-term predictive ability for the U.S. equity risk premium, market volatility, skewness and kurtosis, both in- and out-of-sample, and outperform equal indicators inferred from historical returns. The paper was also presented in a practitioner's conference called QuantMinds international 2022.
If standard errors measure the uncertainty in estimates of population parameters, evidence-generating process (EGP) variation across researchers adds uncertainty: Non-standard errors (NSEs). Lambert and Zoican with many co-authors study Non-standard errors (NSEs) by letting 164 teams test the same hypotheses on the same data. They show that NSEs turn out to be sizable, but smaller for better reproducible or higher rated research. Adding peer-review stages reduces NSEs. They further find that this type of uncertainty is underestimated by participants. This research is forthcoming in Journal of Finance.

Systemic risk and stress exercises

Several research have been conducted by Christian Gourieroux to detect the systemic risks present in a portfolio, define rating for systemic risk, or construct scenario generators to measure the impact of systemic shocks. Gagliardini, Gourieroux, Rubin (2019) develop a systematic factor model for a joint analysis of the ranking of portfolio managers based on a high dimensional analysis of 900 stocks returns.
Boloorforosh, Christoffersen, Fournier, Gourieroux (2019) consider the market beta exposures of stocks and allows for stochastic market betas exposures of stocks and allows for stochastic market betas with possible comovements. Such nonlinear dynamic factor models are usually difficult to estimate by maximum likelihood due to the high dimensionality. Gagliardini, Gourieroux (2019) introduce a moment method based on Laplace transform to get consistent approximations in this big data framework. This method is particularly useful when we have to consider large panels of assets, such as in Brownlees, Darolles, Le Fol, Sagna (2022).
Several papers may be put together around the expected shortfall and systemic risk themes. Couperier and Leymarie for example developed a new methodology to backtest expected shortfall via multi-quantile regression. El Azri proposes a framework to assess tail risk connectedness across financial markets using a two-step procedure. Expected shortfall are first estimated using a quantile regression approach. And a directional left-tail risk spillover measure à la Diebold and Yilmaz is developed to quantify spillovers between markets.

Alternative Risk Premia

Given the sharp increase of the number of alternative risk premia discovered by academics and practitioners, several issues need to be addressed: the factor construction methodologies, the consequences for portfolio diversification, the persistence of the alternative risk premia.

Regarding the first two issues, Marie Lambert et al. are working on construction rules of risk factors and the design of smart beta strategies. A proper methodology to stratify stock universe into style buckets is key for the design of persistent risk factors, asset allocation and performance attribution.
The two working papers have been presented at academic and practitioner conferences and seminars (FMA – San Diego, Quant Vision Summit, AFFI, etc. see seminar and conferences). Marie Lambert et al. also works on the design of alternative risk premia capturing non-linear payoffs. The working paper on the gamma trading of hedge funds have also been presented at several conferences and seminars.
Regarding the persistence of the alternative risk premia, Serge Darolles and Marie Lambert are working on the economic cycle of alternative risk premia and the change in business model from active to passive management for those investment strategies.
On the same topic of alpha persistence, Serge Darolles, Gaëlle Le Fol and Gulten Mero are working on a regime switching approach to study the existence of risk premia. They apply their methodology to the size premia and show that the size effect is not a statistical fluck. They use a Markov Regime Switching model to filter regime-dependent risk-adjusted size spreads, in order to capture the reward for bearing the risk inherent to the size effect. The paper is published in 2022 in Finance (see publications, Annual report 2022, page 15).
Finally, Luc Dumontier is starting a PhD thesis on the "The 5 W's of Alpha Generation" under the direction of Gaelle Le Fol. He did his first presentation at the last CFE Conference in Berlin.

1.2.3. Implementation challenges

Capacity

Recent studies have documented that market impact decays slowly through time. Hector Chan, former PhD student (see PhD defense and placement page 17), published paper in 2023, Journal of Portfolio Management, studies the effect of such slow decay on trading strategies' capacity. To do so, he proposes a numerical methodology to estimate capacity. He shows that incorporating the slow decay of market impact leads to trading strategy capacity estimates are significantly lower than shown in previous capacity studies.

Listed market liquidity

Looking at serial correlations, Serge Darolles, Gaëlle Le Fol and Ran Sun are working on hedge funds liquidity and managers' skills (See 2.1.1. Working papers *page 13).*
Fabrice Riva is for his part, with two co-authors, working on ETF liquidity (See Working papers page 13).
Marius Zoican and another researcher are also working on ETF liquidity ("The value of ETF liquidity"). They find that identical ETFs can exploit different investor clienteles to charge different management fees for holding identical portfolios. Highly liquid ETFs can extract 0.47 bps in higher fees than their competitors for each 1 bp of narrower bid-ask spread. This research has been presented in numerous international conferences in 2022 (see Annual report 2022, page 20). It received the award of Best paper semifinalist (Microstructure), Financial Management Association 2021 and is now Revise and Resubmit (round 2) at Review of Financial Studies.
In their project "Stock Market Liquidity and Trading Costs of Asset Pricing Anomalies", Tamara Nefedova, with some co-authors, uses transaction-level data from Ancerno to investigate implicit cost dynamics and estimate transaction costs associated with trading asset-pricing anomalies. They find that the related costs are considerably lower than documented by previous studies.
Ain Tommar and Darolles (2023) establish new evidence from listed Private Equity (PE) funds. Listed PE is a new solution used by asset managers to provide liquidity to their investors. This paper discusses the different solution available to list a funds, and what are the impact of listing in terms of governance and performance.

Algo and/or High frequency trading

Optimisation of the VWAP (Volume Weighted Average Price) replication algorithms, link between the speed of placing orders on the market and the arrival of information, liquidity trade-offs, maximum trading capacity are areas of research in which QMI is regularly investing.
Serge Darolles, Gaëlle Le Fol, and Béatrice Sagna with another co-author are working on basket VWAP strategies. They first have papers of the volume forecasting methodology and now use this approach to filter from the realized volume the connections between stocks belonging to a same market.
The current research of Ophélie Couperier and another co-author, aims at introducing functional covariates that takes into account the influence of intraday price variations in the volatility.

1.3. The QMI's organization

1.3.1. The steering committee

The steering committee reviews, monitors and prioritizes major QMI projects.

Scientifique Director

Gaëlle Le Fol, Professor, Université Paris-Dauphine – PSL and CREST

Researchers from l'ENSAE and Université Paris-Dauphine - PSL

Serge Darolles, Professor, Université Paris-Dauphine - PSL

Jean-Michel Zakoïan, Professeur, CREST-ENSAE ParisTech

Other Members

Gouriéroux G., Professor, Université de Toronto

1.3.2. The Advisory Board

The Advisory board assists the Steering Committee in its supervising tasks over the activities of the project. The advisory Board members are:

Representing LFIS Capital : Sofiène Haj-Taieb

Representing l'ENSAE ParisTech : La Directrice Générale du GENES ou son représentant

Representing the Université Paris-Dauphine – PSL : Bruno Bouchard

Representing the Risk Fondation: Jean-Michel Beacco

Qualified Person: Marie Brière (Amundi)

International Experts: Michel Crouhy (Natixis), René Garcia (Univ. Montreal & TSE), Michael Rockinger (University of Lausanne), and Ronnie Sadka (Boston College)

1.3.3. The secretariat

Pauline de Saint Quentin, the secretary of QMI can be contacted at Pauline.desaintquentin@dauphine.psl.eu or by telephone: +33 1 41 16 76 19.

1.3.4. The QMI's researchers

S. Darolles, Université Paris - Dauphine - PSL

C. Gouriéroux, Toronto University

J. Imbet, Université Paris – Dauphine - PSL

G. Mero, Université de Cergy-Pontoise

E. Jouini, Université Paris – Dauphine - PSL

T. Nefedova, ESCP Business School

M. Lambert, HEC Liège (Liège Université)

F. Riva, Université Paris – Dauphine - PSL

G. Le Fol, Université Paris – Dauphine - PSL

J.-M. Zakoïan, CREST and University Lille 3.

M. Zoican, Toronto University

E. Benhamou, PhD Student, Université Paris-Dauphine

H. Chan, PhD Student, Université Paris - Dauphine

John Coadou, PhD Student, Université Paris-Dauphine, CIFRE Amundi

O. Couperier, PhD student, CREST-ENSAE, ATER Université Paris - Dauphine – PSL

L. Dumontier, PhD Student, Université Paris – Dauphine - PSL

A. El Azdi, PhD Student, Université Paris – Dauphine - PSL

Faverjon, PhD Student, HEC Liège et Université Paris – Dauphine – PSL

J. Royer, PhD Student, CREST-ENSAE

B. Sagna, PhD Student, Université Paris- Dauphine - PSL

Arthur Stalla-Bourdillon, PhD Student, Université Paris- Dauphine - PSL

2. RESEARCH ACTIVITIES

This research initiative aims to be a means of exchange and reflexion where research themes emerge naturally and become the starting point of research articles in the best international journals. The QMI must also be able to create a research community around themes of interest to management companies by calling for research projects nationally and internationally and by reinforcing the QMI member teams by recruiting research assistants and publishing doctoral contracts.

2.1. Research Publications

- Date: 2023
- Themes: Quantitative Management

2.1.1. Working papers

Ain Tommar S. and S. Darolles, Permanent capital, permanent struggle? New evidence from listed private equity, Working Paper.

Ain Tommar S., S. Darolles and E. Jurczenko, The Geography of Private Equity Returns, Working Paper.

Benoit S., O. Couperier, J. Leymarie, and O. Scaillet, Elicitability of Market-Based Systemic-Risk Measures, Working Paper.

Billio, M., M. Costola, S. Darolles, and L. Pelizzon, Measuring the relationship between ESG factors and firm's credit risk in Europe, Working Paper.

Boeckelmann L, and A. Stalla-Bourdillon, Structural Estimation of Time-varying Spillovers: an Application to International Credit Risk Transmission in the Euro Area, Working paper Banque de France.

Book A., J. Imbet, M. Reinke and C. Sala, The forecasting power of short-term options, Working paper.

Briere M., C.-A. Lehalle, T. Nefedova, Tamara and A. Raboun, Stock Market Liquidity and the Trading Costs of Asset Pricing Anomalies. Université Paris-Dauphine – PSL Research Paper, SSRN No. 3380239.

Brousse C., Même, N., Saillard, M. and A. Stalla-Bourdillon, The impact of energy shocks on financial stability in the context of the 2022 episode. *Bulletin de la Banque de France*, (249).

Brown D., S. Kovbasyuk and T. Nefedova, On the Origin of IPO Profits, Working Paper.

Brownlees C., Darolles S., Le Fol G., Liquidity cascades, Working paper.

Brownlees C., Darolles S., Le Fol G., and B. Sagna, Forecasting Intra-daily volume in large panels of assets for basket VWAP trading, Working paper.

Calamia A., Deville L. and F. Riva, The Provision of Liquidity in ETFs: Theory and Evidence from European Markets, Working Paper.

Cantin, L., Francq, C., and J.M. Zakoïan, Estimating Systemic Risk Measures, Working Paper 2022-11, CREST.

Chan H., A. Landier and Y. Wang, Currency and Stock Returns: An Example of Market Inattention, Working Paper.

Coadou J. and S. Darolles, Does ESG Matter More than Tracking Error ?, Working Paper.

Cookson J.A., C. Fox, J. Gil-Bazo, J. Imbey and C. Schiller, Social Media as a Bank Run Catalyst, Working Paper.

Couperier O., C. Francq and J.-M. Zakoian, Daily volatility forecasting using intraday returns and functional covariates, Working Paper.

Couperier O. and J. Leymarie, "Backtesting expected shortfall via multi-quantile regression", Working paper.

Dare W., Darolles S., Lambert M., and G. Monarcha: The Missing Link between Active and Passive Management, Working paper.

Darolles S., Deni, G, and G., Le Fol, Timing Equity Risk Premia via a NowCast Indicator, Working paper.

Darolles S., Faverjon, A., and M., Lambert, Analysts' Recommendations and ESG ratings: Evidence of reverse causality, Working paper.

Darolles S., He, Y., and G., Le Fol, Understanding the effect of ESG scores on stock returns using mediation theory, Working paper.

Darolles S., and G. Roussellet, Managing hedge fund liquidity risks, working paper.

Eisele A., T. Nefedova, Tamara and G. Parise, Are Star Funds Really Shining? Cross-Trading and Performance Shifting in Mutual Fund Families, BIS Working Paper No. *577*, Available at SSRN 2831690.

Evans R., T. Nefedova and G. Parise, Front-trading and Information Environment in Mutual Fund Families. Working paper.

Francq C., J. Royer, and J.-M. Zakoian. A multivariate ARCH(∞) model with exogenous variables and dynamic conditional betas. Working paper.

Garriott C., V. van Kervel and M. Zoican, The queuing friction in limit order book markets, Working paper.

Gil-Bazo J., and J.F. Imbet, Tweeting for Money: Social Media and Mutual Fund Flows, Working paper.

Giroux T., J. Royer, and O.D. Zerbib. Empirical asset pricing with score-driven conditional betas, Working paper.

Gourieroux C., and J., Jasiak, Generalize Covariance-Based Inference for Models Partially Identified from Independence Restrictions, Working Paper.

Gourieroux C., and J., Jasiak, Nonlinear Forecasts and Impulse Responses for Causal-Noncausal (S)VAR Models, R&R, Journal of Econometrics.

Gourieroux C., and J., Jasiak, Nonlinear Forecasts and Impulse Responses for Causal-Noncausal (S)VAR Models, R&R, Journal of Econometrics.

Gourieroux C., and J., Jasiak, Structural Modelling of Dynamic Networks and Identifying Maximum Likelihood, Working Paper.

Gourieroux C., J. Kim, and N. Meddahi, Stationary Ultra Long Run Component, R&R, Journal of Econometrics.

Gourieroux C., and Q. Lee, Nonlinear Impulse Response Functions and Local Projections, Working paper.

Gourieroux C., Y., Lu, and A. Monfort, Ultra Long Run Term Structure Models, Working Paper.

Imbet J. F., Stroke of a Pen: Investment and Stock Returns under Energy Policy Uncertainty, Working paper.

Imbet J. F. and M. Ortiz, Private Firms and Offshore Finance, Working paper.

Imbet J. F., M. Ortiz and V. Tena, How are the tax-evasion savings distributed?, Working paper.

Jourde T., and A. Stalla-Bourdillon, Environmental Preferences and Sector Valuation, Working paper, Available at SSRN 4481313.

Khomyn M., T. J. Putniņš and M. Zoican, The Value of ETF Liquidity, Working Paper, 2nd round Revise and Resubmit at Review of Financial Studies, Best paper semifinalist (Microstructure), Financial Management Association 2020.

Kolokolova O., T. Nefedova and L. Ye, Information Flows in Brokerage Business, Working Paper.

Langlois H., Forecasting Portfolio Weights, Funded Project 2019, Webinar and Working Paper.

Lehar A., D. Parlour and M. Zoican, Liquidity Fragmentation on Decentralized Exchanges, Working Paper.

Marta T. and F. Riva, Do ETFs increase the co-movements of their underlying assets? Evidence from a switch in ETF replication technique, Working paper.

Martineau C. and M. Zoican, A machine learning measure of analyst report contribution, Working paper.

Menkveld A., E. Pagnotta, and M. Zoican, Does Central Clearing Affect Price Stability? Evidence from Nordic Equity Markets, Working paper, R&R at Journal of Financial Economics.

Mero G, False discoveries in Hedge Fund performance and business cycles, Working Paper.

Mero G. and H. N. Ngankam, Sentiment and Equity Return-Liquidity Relationship: Does Noise Trading Risk Matter?, Working Paper.

Nefedova T., G. Parise and M. Zoican, ETF fee competition and security lending, Working Paper.

Nefedova T., Tippers and tippees: Brokers' pre-release of price-sensitive information to their VIP clients, Working paper.

Sagna B., Learning From Heightened Equity Premium, Job Market Paper.

Sagna B., "Intra-daily trading volumes and VWAP strategy: evidence from a horse race, Working Paper.

Stalla-Bourdillon A., Stock Return Predictability: comparing Macro- and Micro-Approaches, Working paper.

Xiouros C., and P. Ehling, Cyclical beta, Funded Project 2019, under the name of "Asset Pricing with Endogenous beta".

Zoican M., Asset management at the zero-fee bound, Working Paper.

2.1.2. Published Papers

Ain Tommar S., S. Darolles and E. Jurczenko, Private equity fund performance around the world. Forthcoming in Financial Analysts Journal.

Belly, G., Boeckelmann, L., Caicedo Graciano, C. M., Di Iorio, A., Istrefi, K., Siakoulis, V., and A. Stalla-Bourdillon (2023), "Forecasting Sovereign Risk in the Euro Area via Machine Learning". Journal of Forecasting, 42 (3), p. 657-684.

Brolley M. and M. Zoican (2023), Liquid Speed: A Micro-Burst Fee for Low-Latency Exchanges, Journal of Financial Markets, vol. 64, Issue C. Available online since 2022.

Brolley M. and M. Zoican (2023), On-demand Fast Trading on Decentralized Exchanges, Finance Research Letters, vol. 51, 103350.

Chan H. and T. Tan (2023), Crowding and Liquidity Shocks, Journal of Portfolio Management, vol. 49(3), 36-61.

Chapkovski P., M. Khapko, and M. Zoican (2023), Trading Gamification and Investor Behaviour, Forthcoming in Management Science.

Chatelais, N., Stalla-Bourdillon, A., and M. Chinn (2023), Forecasting Real Activity using Cross-Sectoral Stock Market Information. Journal of International Money and Finance, vol 131, 102800.

Chevalier C. and S. Darolles (2023), "Diversifying trends", Econometrics and Statistics, in Press.

Djogbenou, A., C. Gouriéroux, J. Jasiak and M. Bandehali, Composite Likelihood for Stochastic Migration Model with Unobserved Factor, forthcoming in Journal of Financial Econometrics.

Francq, C., Kandji, B.M. and J.M. Zakoïan (2023): Inference on multiple component GARCH without any small-order moment, Econometric Theory, forthcoming https://doi.org/10.1017/S026646662300014 2

Francq, C., and J.M. Zakoïan (2023): Optimal estimating function for weak location-scale dynamic models, Journal of Time Series Analysis 44, 533-555.

Francq, C., and J.M. Zakoïan (2023), Testing hypotheses on the innovations in semi-parametric conditional volatility models", Journal of Financial Econometrics, vol. 21, Issue 5, p. 1443-1482. available online since 2022.

Gourieroux, C., and J., Jasiak, Generalized Covariance Estimators, Journal of Business and Economic Statistics, 41, 1315-1327.

Gourieroux, C., and J., Jasiak, Dynamic Deconvolution of Independent AR(1) Sources, Journal of Time Series Analysis, 44, 151-180.

Gourieroux, C., and J., Jasiak, (2023), Time Varying Markov Process with Partially Observed Aggregate Data: An Application To Coronavirus, Journal of Econometrics, vol. 232, issue 1, p. 35-51.

Gourieroux, C., and J., Jasiak, Temporally Local Maximum Likelihood with Application to SIS Model", forthcoming in Journal of Time Series Analysis.

Gourieroux, C., and Y., Lu, Noncausal Affine Processes with Applications to Derivating Pricing", Mathematical Finance, 33, 766-796.

Lambert M., M. Zoican and 342 co-authors (2023), Non-standard errors, Forthcoming in Journal of Finance.

Martineau C., and M. Zoican (2023), Retail trading and Analyst Coverage. Journal of Financial Markets, vol. 66, 100849.

Royer, J. (2023). Conditional asymmetry in Power ARCH(∞) models. Journal of Econometrics, 234(1),178-204.

2.1.3. Books and books chapters

Lambert, M., and A. Scivoletto, (2023), Dry Powder in Private Equity. In The Palgrave Encyclopedia of Private Equity. Springer International Publishing. September.

Gillain, C., Ittoo, A., and M. Lambert (2023). Detecting Equity Style Information Within Institutional Media. In Lecture Notes in Operations Research. Springer International Publishing.

Faverjon, A., Hardy, C., and M. Lambert (2023). A systematic literature review on financial stock performance of sustainable investments: Bridging the gap between empirical evidence and recent theoretical models. In The Routledge Handbook of Green Finance (pp. 463-484). London, United Kingdom: Routledge.

2.2. Call for projects

There was no call for project in 2023.

2.3. Ongoing PhD thesis, PhD defense and placement

- Antoine Banea, Essais sur l'instabilité financière et les politiques macroéconomiques, under the supervision of Serge Darolles and Sylvain Benoit.
- Eric Benhamou, Can Deep Reinforcement Learning solve the portfolio allocation problem ?, under the supervision of Jamal Atif and Rida Laraki. October 2, 2023 at Université Paris Dauphine. Eric is Scientific advisor at AI for Alpha.
- Hector Chan, Three essays in quantitative asset management, under the supervision of Serge Darolles. June 24, 2022 at Université Paris Dauphine. Hector is Quant trader at Qube Research and Technologies, Dubaï, Emirats Arabes Unis.
- John Coadou, Topics on the ESG's uneven contribution over stock markets, ongoing thesis under the supervision of Serge Darolles. Cifre at Amundi.
- Ophélie Couperier, Three essays in Financial econometrics, under the supervision of Christian Franck, and Christophe Hurlin and Jean-Michel Zakoïan. December 2, 2022 at Institut Polytechnique de Paris. Ophélie was also teaching assistant (ATER) at Université Paris Dauphine-PSL. Ophélie is on the Job Market.
- Ahmed-Amine El Azdi, 3 Essais d'économétrie financière : Stratégies d'arbitrage, risques extrêmes transversaux et volatilité, under the supervision of Serge Darolles.
- Anouk Faverjon, Three contributions on ESG ratings and their impacts on firm performance, ongoing thesis under the supervision of Serge Darolles and Marie Lambert.
- Julien Royer, Infinite ARCH processes, dynamic betas, and financial applications, under the supervision of Christian Franck, Jean-Michel Zakoïan. December 9, 2022 at Institut Polytechnique de Paris. Julien Royer is now Quant researcher at Lombard Odier IM in Paris.
- Béatrice Sagna, Trading volumes in stock markets: Forecasts, Trading Strategies, Market Impact, Equity Premium, and Monetary Policy, under the supervision of Gaëlle Le Fol. November 29, 2022 at Université Paris Dauphine-PSL. Beatrice is now Economist at the International Monetary Fund.
- Arthur Stalla-Bourdillon, Systemic Financial Risk Analysis: from the Sectoral to the Aggregate Perspective, under the supervision of Gaëlle Le Fol. November 24, 2022 at Université Paris Dauphine-PSL. Arthur is now Economist at Banque de France

3. RESEARCH EXPOSURE AND DIFFUSION

Over and above research production, the QMI aims to distribute quantitative management academic research throughout the scientific community but also towards quantitative management professionals (knowledge diffusion). To this end, the QMI's research will be presented in international conferences, within the framework of an annual conference addressed to academics and professionals. Furthermore, training (research applications) will be developed, and the website will propose research articles and webinars than put that research into practice.

3.1. VISIBILITY & DIFFUSION OF RESEARCH

3.1.1. 17th CSDA International Conference (CFE 2023)

Organization of two sessions at the Computational and Financial Econometrics, December 2023

- Financial Times series, Organized session CO154

C. Francq, CREST France and **J. M. Zakoïan** Chairman and organizer, CREST, Members of the QMI,

- Testing the zero-process of intraday financial return for non-stationary periodicity, **G. Sucarrat**, BI Norwegian Business School, Norway
- Detection of breaks in weak location time series models with quasi-Fisher scores, **C. Francq**, CREST France
- Finite moments testing in a general class of nonlinear time series models, **J. M. Zakoïan**, CREST and QMI, France.
- Improving the robustness of Markov-switching dynamic factor models with time-varying volatility, **J. Royer**, CREST and QMI, France
- Fractional integration in mixed causal-noncausal models, **S. Telg**, Vrije Universiteit Amsterdam, Netherlands

- Quantitative finance, Organised session CO372

S. Darolles, Organizer and **G. Le Fol**, Chairman and Organizer, Université Paris Dauphine - PSL, Members of the QMI

- Learning the predictive density of mixed-causal ARMA processes for portfolio optimization, **A. Thomas**, Université Paris Dauphine – PSL
- Does ESG matter more than the TE?, **J. Coadou**, Université Paris Dauphine – PSL and QMI
- Yes, Virginia, There Is [More Than] Hope: Twenty years of sector rotation with Shiller's CAPE® Ratio, **L. Dumontier**, Université Paris Dauphine – PSL and QMI

3.1.2. Seminar and conference participations

QMI's researchers have presented their work at several conferences and seminars:

"Agency costs of dry powder in LBO funds", Lambert, M., Scivoletto, A., and T. Tykvova

- Financial Management Association Annual Meeting, Chicago, United States, October 10.
- Corporate Finance Days, Lille, France, September 21-22.
- EDHEC Research Seminar, Lille, France, November 22.

"Analyst recommendations and ESG ratings : Evidence of reverse causality", Darolles S., A. Faverjon, and M. Lambert

- Finance Seminar at Université Paris Dauphine – PSL, September 7.

"Behavioral differences regarding sustainability – A comparison of U.S. and European investors", Hardy, C. and M. Lambert

- PhD Workshop in Sustainable Finance, Liège, Belgium, March 14.
- HEC Research Day 2023, poster presentation, May 4.

"Deep learning, recommandations des analystes et ratings ESG", Darolles S., and A. Faverjon

- Club des Techniques Quantitatives de l'AFG, Paris, October 17.

"Does ESG Matter more than the Tracking Error", Coadou J., and S. Darolles

- Computational and Financial Econometrics (CFE 2023), Berlin Germany, 17-19 December.
- Doctoral seminar, Université Paris Dauphine – PSL, France, June 1st.

"Disagreement on Environmental, Social, and Governance reduces analysts forecasting ability", Prunier, L., Lambert, M., and W. Torsin

- HEC Liège Research day - Poster session, Liège, Belgium, May 4.

- PhD Workshop in Sustainable Finance, Liège, Belgium, March 14.

"Do companies with strong ESG scores “really” outperform? Evidence of selection and survivorship biases in ESG ratings", Faverjon, A. and M. Lambert

- 39th International conference of the French Finance Association (AFFI), Bordeaux, France, June 5-7
- Corporate Finance Days, Lille, France, September 21-22.

"Do ETFs Increase the Comovements of Their Underlying Assets? Evidence from a Switch in ETF Replication Technique", Marta T. and F. Riva

- 14th Annual Hedge Fund Research Conference, Paris France, January 26-27.

"Environmental Preferences and Sector Valuation", Jourde T. and A. Stalla-Bourdillon

- Conference on Climate and Energy Finance, Hannover, Germany, November 4.

"Estimating conditional systemic risk measures in semi-parametric volatility models", C. Francq, and J.-M. Zakoïan

- seminar of the Research Center for Statistics, University of Geneva, Geneva, Switzerland, March 3.

"Finite Moment Testing in a General Class of Nonlinear Time Series Models", Francq C., and J.M. Zakoian

- Conference on Robust Econometric Methods in Financial Econometrics, Copenhagen Denmark, September 7-8.
- Computational and Financial Econometrics (CFE 2023), Berlin Germany, 17-19 December.

"Fragmentation and optimal liquidity supply on decentralized exchanges", A. Lehar, C. Parlour, and M. Zoican:

- Financial Intermediation Research Society, Vancouver, Canada, June 2-4
- UNC Junior Faculty Finance Conference, Chapel Hill NC, United States, August 10-11
- Northern Finance Association Meeting, Toronto, Canada, September 8-10
- 5th Tokenomics, New York NY, United States Conference, October 27-28
- WBS Gillmore Centre Conference on DeFi & Digital Currencies, London, United Kingdom, October 27-28

"Improving the robustness of Markov-switching dynamic factor models with time-varying volatility", Aumond R., and J. Royer

- Computational and Financial Econometrics (CFE 2023), Berlin Germany, 17-19 December.

"Identifying fundamental shocks on the European natural gas market", Buquet M.-A., and A. Stalla-Bourdillon

- 24th IWH Workshop: Commodity Prices and Macroeconomic Developments, Halle, Germany, December 12.
- National Central Banks International Economy Meeting, Paris France, October 10.

"Inference on conditional systemic risk measures", Francq C., B. M. Kandji and J-M Zakoïan.

- the 10th days for Econometrics and Finance, Rabat Moroco, April 26-28.
- XIIIth workshop in Time Series Econometrics, Zaragoza Spain , Invited speaker, March 11-12.

"Inference on multiple component GARCH Models without any Small-Order Moment", Francq C., and J.M. Zakoian

- Quant. Finance and Financial Econometrics (QFFE), Marseille France, June 6-7.
- Workshop "Non-stationarity, cyclostationarity and applications", Nanterre France, June 5-7.
- 10th Italian Congress of Econometrics and Empirical Economics (ICEEE), Cagliari (Italy), May 26-28.

"Long Run Risk in Stationary Structural Vector Autoregressive Models", Gouriéroux C., and J. Jasiak

- the 10th days for Econometrics and Finance, Rabat Moroco, April 26-28.

"On the Origin of IPO Profits", Nefedova T., D. Brown and S. Kovbasyuk

- Brown Bag Seminar, University of Vienna, Austria, Invited seminar, March 29.
- Research Seminar, HEC Liège, Belgium, Invited seminar, May 30.

"Social Media as a Bank Run Catalyst", Cookson J.A., C. Fox, J. Gil-Bazo, J. Imbet and C. Schiller.

- ACPR Chaire Bank of France Internal Seminar, Paris France, December 13.
- Bank of Mexico, 5th Biennial Conference on Financial Stability, Mexico City, Mexico, November 1.
- USC, Second Annual Conference on Social and Behavioral Finance, Palos Verdes California USA, November 16.
- NBER Summer Institute, Boston USA, July 12.
- Cleveland Fed, Fed Financial Stability Conference, Cleveland Ohio USA, November 16-17.
- CEMFI, Internal Seminar, Madrid Spain, November.
- Fed Board, CEBRA Conference, Washington USA, November 13-14.
- Texas Christian University, Texas USA, October 7.
- FRB Boston, Stress Testing Conference, Boston USA, October 19.
- Wharton, Liquidity and Financial Fragility Conference, Philadelphia USA, October 6.
- FDIC, Internal Seminar, Washington USA, September 2023.
- Single Resolution Board (Brussels) , Internal Seminar, Brussels Belgium, May 2023.
- ECB, Internal Seminar, Frankfurt Germany ,September 2023.
- Bundesbank, Internal Seminar, Frankfurt Germany, October 2023.
- University of Luxembourg, Internal Seminar, Luxembourg, June 2023.

"Stock Return Predictability: comparing Macro- and Micro-Approaches", Stalla-Bourdillon A.

- 71st Congress of the French Economic Association, Paris, France, June 14.

"The Geography of Private Equity Returns", Ain Tommar S., S. Darolles and E. Jurczenko

- Lapland Investment Fund Summit, Levi, Finland, March 21-22.
- 39th International conference of the French Finance Association (AFFI), Bordeaux, France, June 5-7

"Tweeting for Money: Social Media and Mutual Fund Flows", Gil-Bazo J. and J. Imbet

- FMA Annual Meeting Chicago, Chicago USA, October 2023.
- Midwest Finance Association, Chicago USA, March 2023.
- University of Edinburgh Economics of Financial Technology Conference, Edinburgh, Scotland, July 2023.

"Who can better push firms to go "green"? A look at ESG effects on stock returns", Darolles S., Y. He and G. Le Fol

- 39th International conference of the French Finance Association (AFFI), Bordeaux, France, June 5-7

3.2. Annual events

Every year, the QMI organizes some events. Intended for quantitative management experts – academics, professionals and journalists – it will aim to combine the research undertaken by members of the QMI, projects financed by the QMI and research by internationally renowned researchers, by organizing a guest session and presentation sessions for research articles.

3.3.1. Conference

14th Annual Hedge Fund Research Conference

The Annual Hedge Fund Research Conference is a two-days academic conference with sessions that did cover the latest research on asset management, and more particularly on institutional investors' risks and performance; transparency (reporting) and due diligence; financial intermediation activity; hedge fund and broad macroeconomic issues such as systemic risk and contagion; institutional investors' incentives and activism; portfolio liquidation and liquidity; financial regulation; private equity funds; ETFs; etc.

This year, the keynote speaker was Prof. **Vikas Agarwal**, Bank of America Distinguished Chair and Professor of Finance at J. Mack Robinson College of Business, Georgia State University.

Organizers

- Serge Darolles, *Université Paris Dauphine-PSL*
- Tamara Nefedova, *ESCP Business School*

Scientific Committee

- Vikas Agarwal, Georgia State University
- Charles Cao, Penn State University
- Serge Darolles, Université Paris Dauphine-PSL
- Zoran Filipovic, Université Paris Dauphine-PSL
- René Garcia, University of Montreal and Toulouse School of Economics
- Christian Gourieroux, University of Toronto and Toulouse School of Economics
- Paul Karehnke, ESCP Business School
- Olga Kolokolova, University of Manchester
- Hugues Langlois, HEC Paris
- Marie Lambert, Université de Liège
- Christian Lundblad, UNC Chapel Hill
- Tamara Nefedova, ESCP Business School
- Andrew Patton, Duke University
- Sugata Ray, University of Alabama
- Adam Reed, UNC Chapel Hill
- Ronnie Sadka, Boston College
- Daniel Schmidt, HEC Paris
- Clemens Sialm, University of Texas at Austin
- Melvyn Teo, Singapore Management University
- Irina Zviadadze, HEC Paris

Venue :
Université Paris – Dauphine
Place du Maréchal de Lattre de Tassigny, 75016 Paris

DAY 1: Thursday, January 26, 2023

8:30–9:00: Welcome coffee and registration

9:00–10:30: Performance – Session 1, Chair: Alon Brav, Duke University

- Juha Joenväärä, **Nick Bollen** (Owen Graduate School of Management, Vanderbilt University, USA), Mikko Kauppila: "Are Hot Hands in Hedge Funds Still Warm?"

Discussant: **Daniel Schmidt** (HEC Paris, France)

- Charles Cao, Grant Farnsworth, Hong Zhang, **Yijun Zhou** (Baruch College, USA): " Hedge Fund Leverage, Delegated Portfolio Management, and Asset Prices"

Discussant: **René Garcia** (Université de Montréal, Canada)

10:30–11:00: Coffee Break

11:00–12:30: Anomalies – Session 2, Chair: Santiago Barraza, ESCP Business School

- Benjamin Holcblat, **Abraham Lioui** (EDHEC Business School, France), Michael Weber: "Anomaly or

Possible Risk Factor? Simple-To-Use Tests"

Discussant: **Irina Zviadadze** (HEC Paris, France)

- Boone Bowles (Texas A&M University, USA), Adam Reed, Matthew Ringgenberg, Jacob Thornock: "Anomaly Time"

Discussant: **Paul Karehnke** (ESCP Business School, France)

12:30–14:00: Lunch Break and Poster Session

- Heterogeneous Investor Consideration, Mutual Fund Competition, and Fund Fees
  Richard Grice, **Ahmed Guecioueur** (INSEAD, France)
- Financial Affiliations of Hedge Funds: An Analysis of Liquidation Probabilities and Flows
  Guillermo Baquero, **Vu Binh Le** (ESMT Berlin, Germany)
- The Short-Duration Premium in the Stock Market: Risk or Mispricing?
  Heiner Beckmeyer (University of Muenster, Germany), Paul Meyerhof
- Believe it or Not: The Role of Investor Beliefs for Private Equity Valuation
  Aleksandr Ermakov (University of Luxembourg, Luxembourg)

14:00–15:30: Short Selling – Session 3, Chair: Michael Troege, ESCP Business School

- Spencer Andrews, Christian Lundblad, **Adam Reed** (UNC Chapel Hill, USA), "Dancing to the Same Tune: Commonality in Securities Lending Fees"

Discussant: **Evgenia Passari** (Université Paris Dauphine – PSL, France)

- Xi Dong (Baruch College/City University of New York, USA), Hong Liu, Siyi Shen, Yajun Wang, "Do Short-sale Constraints Restrict Negative Information Revelation? The Role of Institutional Sales"

Discussant: **Junyuan Zou** (INSEAD, France)

15:30–16:00: Coffee Break

16:00–17:30: Diversity – Session 4, Chair: Marie Lambert, HEC Liège, Univ. Liège

- Jun Chen, Shenje Hshieh, **Melvyn Teo** (Singapore Management University, Singapore), Feng Zhang: " Foreign Talent in Finance"

Discussant: **Sara Ain Tommar** (NEOMA Business School, France)

- Alberta Di Giuli (ESCP, France), Alexandre Garel, Arthur Petit Romec: "The Voting Behavior of Women-Led Mutual Funds"

Discussant: **Olga Kolokolova** (University of Manchester, UK)

17:30–18:30: Keynote Talk: "Income taxes and managerial incentives: Evidence from hedge funds" by **Vikas Agarwal**, Chair and Professor of Finance at Georgia State University's J. Mack Robinson College of Business
Session Chair: **Serge Darolles**, Université Paris Dauphine – PSL and QMI

DAY 2: Friday, January 27, 2023

8:30–9:00: Welcome coffee

9:00–10:30: Exchange Traded Funds – Session 5, Chair: René Garcia, Université de Montreal

- Fabrice Riva (Université Paris-Dauphine and QMI, France), Thomas Marta: " Do ETFs Increase the

Comovements of Their Underlying Assets? Evidence from a Switch in ETF Replication Technique"

Discussant: **: Ziwei Zhao** (University of Lausanne and Swiss Finance Institute, Switzerland)

- Jonathan Brogaard, Nataliya Gerasimova, **Ying Liu** (School of Finance, Shanghai University of Finance and Economics, China): " Advising the Advisors: Evidence from ETFs"

Discussant: **Vincent Tena** (Université Paris Dauphine – PSL, France)

10:30–11:00: Coffee Break

11:00–12:30: Social Responsability – Session 6, Chair: Marie Brière, Amundi

- Yan Lu, Narayan Naik, **Melvyn Teo** (Singapore Management University, Singapore): " Race, Discrimination, and Hedge Funds"

Discussant: **: Rustam Abuzov** (University of Virginia, USA)

- John G. Matsusaka, Chong Shu (University of Utah, USA): "Does Proxy Advice Allow Funds to Cast Informed Votes? "

Discussant: **Marie Lambert** (Université de Liège and QMI, Belgium)

12:30–14:00: Lunch Break

14:00–15:30: Social Media – Session 7, Chair: Carole Gresse, Université Paris Dauphine-PSL

- **Xiaoxia Lou** (University of Delaware, USA), Gideon Ozik, Ronnie Sadka, Siyi Shen: " Innocuous Noise? Social Media and Asset Prices"

Discussant: **: Juan Imbet** (Université Paris Dauphine – PSL and QMI, France)

- AJ Chen Chen, Gerard Hoberg, **Miao Zhang** (University of Southern California, USA): " Wisdom of the Institutional Crowd: Implications for Anomaly Returns"

Discussant: **Florian Weigert** (University of Neuchatel, Switzerland)

15:30–16:00: Coffee Break

16:00–17:30: Active vs Passive – Session 4, Chair: Laurent Barras, University of Luxembourg

- Magnus Dahlquist, **Markus** Ibert (Board of Governors of the Federal Reserve System), Felix Wilke: " Are Subjective Expectations Formed as in Rational Expectations Models of Active Management?"

Discussant: **: Sylvain Benoit** (Université Paris Dauphine – PSL, France)

- Fabio Moneta (University of Ottawa, Canada), Markus Broman: " On the Anomaly Tilts of Factor Funds"

Discussant: **Gulten Mero** (CY Cergy Paris Université and QMI, France)

3.3.2. Hackathon

There was no hackathon in 2023.

3.4. Media coverage

Darolles, S., “Scores ESG : quelles questions se poser avant de les utiliser ?” Option Finance, 24 November 2023.

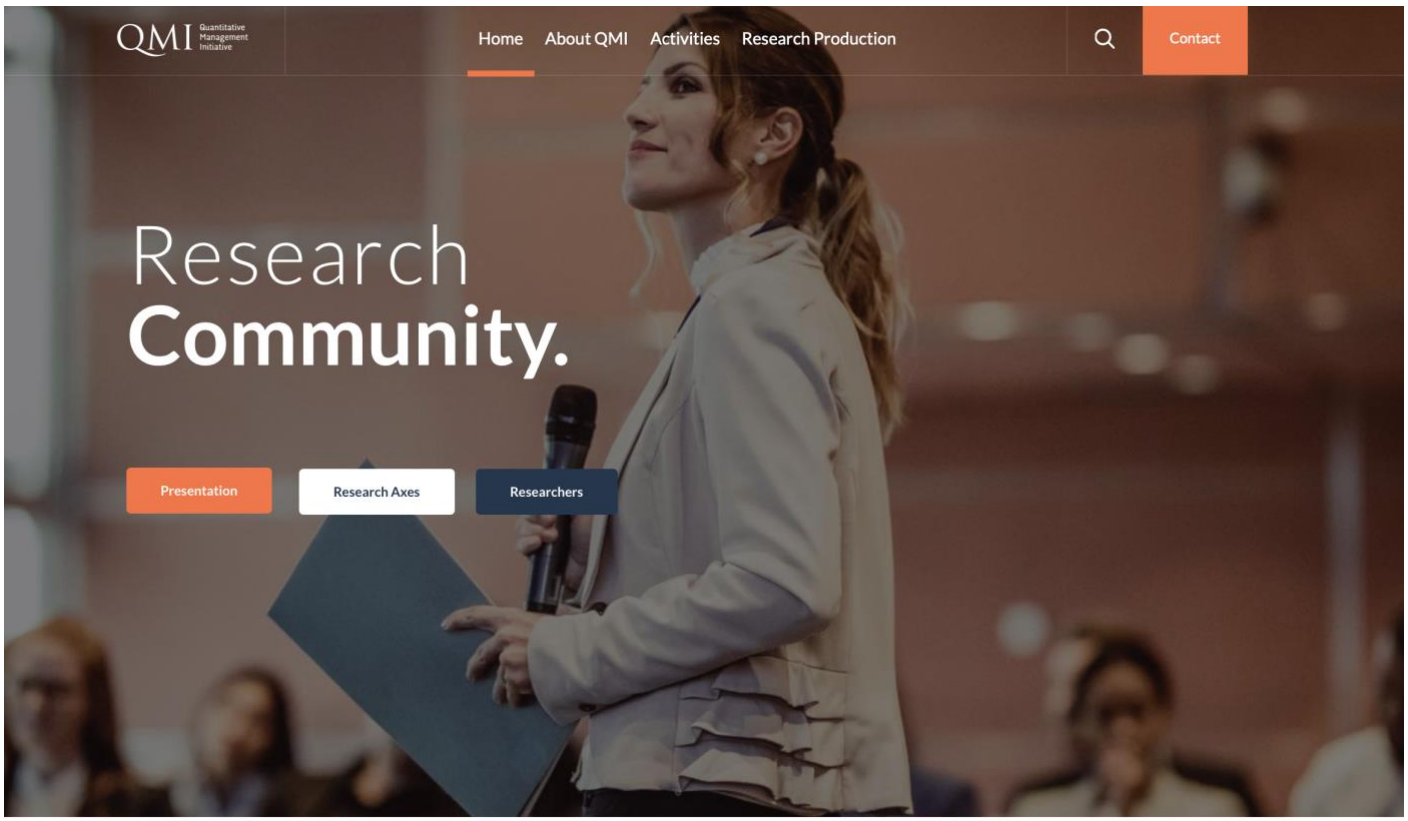
Ishii, K., Macaire, C., & Stalla-Bourdillon, A., China has reduced its energy bill thanks to Russian oil discounts. *Blog Banque de France, September 27, 2023*.

Article de Chatelais, N., Stalla-Bourdillon, A., and M. Chinn (2023), cité dans There's an Upbeat Signal Buried Beneath the Stock Market's Surface”, Bloomberg, January 18.

3.5. Website

The goal of the website is to become a showcase for the QMI and to encourage exchange between research and professionals by becoming for example a public library of research articles and computer code relating to quantitative management themes. Address: QMinitiative.org

The website is a way to manage the annual conference and workshops registrations. Moreover, it is continuously updated.



ACTIVITIES

QMI aims to distribute quantitative management academic research throughout the scientific community but also towards quantitative management professionals. Every year we organize a conference, a hackathon, we invite applications for PhD and research project proposal ...

QMI
Quantitative Management Initiative

Annual Conference

Every year, the QMI organises a conference. Intended for quantitative management experts - academics, professionals and journalists ...

Read More

Hackathon

Our hackathon explores the fields of artificial intelligence and machine learning in the asset management industry.

Read More

Calls

The research community of QMI is calling for PhD applications,

Webinars

We will propose within short