Iryna VERYZHENKO LEBOEUF

Maître de conférences en Finance, HDR

Je suis titulaire d'un doctorat en finance computationnelle de l'Université Paris-Sorbonne et d'une habilitation à diriger des recherches (HDR) de l'Université Paris-Dauphine. Je suis maître de conférences au Conservatoire National des Arts et Métiers (Cnam) à Paris, où je dirige le master *Marchés financiers et gestion d'actifs* et co-dirige le master *Gestion de Patrimoine*.

J'enseigne la finance durable, la gestion d'actifs et la microstructure des marchés financiers. Mes travaux de recherche portent principalement sur la microstructure des marchés, le trading à haute fréquence et la régulation financière. J'ai publié plusieurs articles académiques et coécris également des ouvrages consacrés à la finance. J'encadre plusieurs thèses de doctorat dans les domaines de l'économie durable et de la finance numérique.

Coordonnées

Conservatoire National des Arts et Métiers de Paris
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Formation

14/12/2020 – Habilitation à diriger des recherches (HDR) en finance de marché
Université Paris-Dauphine, PSL
Effect of technology on financial market quality, organisation and regulation

18/09/2012 – Doctorat en finance de marché
IAE – Sorbonne Graduate Business School, Université Paris 1 Panthéon-Sorbonne
A reexamination of modern finance issues using Artificial Market Frameworks

2008 – Master 2, mathématiques appliquées
Université nationale de Kiev, Ukraine
Stock return forecasting using Multifactor Dynamic Model

Fonctions académiques

Depuis 2013	Maître de conférences en Finance HDR, Conservatoire National des Arts et Métiers de Paris
Depuis 2025	Experte Crédit d'Impôt Recherche, Ministère de l'Enseignement supérieur et de la Recherche
Depuis 2017	Chercheuse associée, PRISM, Université Paris 1 Panthéon-Sorbonne
2012–2013	Assistant Professor, ESSCA School of Management
2011–2012	ATER, École Nationale Supérieure d'Arts et Métiers
2008–2011	Allocataire de recherche, Moniteur, Université Lille 1 – Sciences et Technologies

Responsabilités académiques

Directrice de quatre thèses doctorales :

- Nohade Nasralah (mi-temps) – *Détection et prévention des manipulations algorithmiques : le cas Euronext-Paris*

— Abdeslam Ariri (mi-temps) – *L'impact de l'évolution technologique sur la structure des marchés financiers*
— Daniel Finan (contrat doctoral) – *Changer de paradigme avec la finance décentralisée (DeFi)*
— Yoan Hyvernaud (contrat CIFRE avec CPR AM) – *Analyse globale des risques climatiques : perspectives sur l'économie, les marchés et les politiques monétaires*

Depuis 2023 – Membre titulaire de la section 6 du Conseil National des Universités (CNU)

Depuis 2014 – Responsable du Master 2 MR10702 Finance de marché au CNAM

Depuis 2022 – Co-responsable du Master 2 Gestion de Patrimoine MR10704 au CNAM

Depuis 2024 – Responsable de la certification « Autorité des Marchés Financiers – Finance Durable » au CNAM

Depuis 2017 – Responsable de la formation « Préparation à la certification de l'Autorité des Marchés Financiers » au CNAM

2015–2018 – Membre du bureau du laboratoire LIRSA au CNAM

2013–2021 – Membre du comité exécutif du Laboratoire d'Excellence sur la Régulation Financière

2014–2021 – Directrice déléguée Policy Papers, Labex ReFi

Enseignement

F inance durable (M2), Préparation à la certification AMF, Finance de marché : gestion de portefeuille et gestion obligataire (M1), Organisation et acteurs des marchés financiers (L3), Gestion de portefeuille (M2), Accounting & Financial Management (L3), Stratégie financière (2^{e} année d'ingénieurs), Méthodes quantitatives avec R (M2 recherche), Analyse de données financières avec R/Rmetrics (Doctorat), Machine learning en assurance et finance.

Expérience en entreprise

2006–2008 – SimCorp, Kiev (Ukraine) / Copenhague (Danemark)

- Fonction : System Development Consultant
- Équipe : Financial Adjustments Accounting Development
- Responsabilités :
  - Développement computationnel de logiciels de gestion d'actifs
  - Élaboration des états financiers (IFRS/GAAP)
  - Analyse de ratios financiers
  - Support produit

2005–2006 – Leasing Solution Company, Kiev, Ukraine

- Fonction : Software Developer
- Responsabilités :
  - Développement d'un système d'anticipation des retours d'information
  - Conception d'un programme d'évaluation Profit/Loss
  - Programmation de bases de données

2004–2005 – Registers Company, Kiev, Ukraine

- Fonction : Software Developer
- Responsabilités :
  - Développement de logiciels de comptabilité financière
  - Support technique et maintenance

Liste de Travaux et Articles

— **Articles dans des revues internationales à comité de lecture**

1. M. Chen, W. Knottenbelt, N. Oriol, **I. Veryzhenko** (2025), *Challenges, Opportunities, and Drivers in Digital Finance*, French Journal of Management Information Systems, 8(30), pp 13-21 [FNEGE 2, CNRS 2, HCERES A]

2. **I. Veryzhenko**, A. Jonath, E. Harb (2022), *Non-Value-Added Tax to Improve Market Fairness and Quality*, Financial Innovation, 8 (18), pp 2-30 [Scopus Q1]

3. S. Ligot, R. Gillet, **I. Veryzhenko** (2021), *Intraday Volatility Smile : Effects of Fragmentation and High Frequency Trading on Price Efficiency*, Journal of International Financial Markets, Institutions & Money, 75, pp. 1-19. 2021 Eurofidai Best Paper Award [FNEGE 3, CNRS 3, HCERES B]

4. **I. Veryzhenko** (2021), *"Who gains and who loses on stock markets ? Risk preferences and timing matter"*, Intelligent Systems in Accounting, Finance and Management, 22 (2), pp. 143-155

5. N. Oriol and **I. Veryzhenko** (2019), *"Market structure or traders' behavior ? An assessment of flash crash phenomena and their regulation based on a multi-agent simulation"*, Quantitative Finance, 19 (7), 1075-1092 [FNEGE 3, CNRS 3, HCERES B]

6. L. Arena, N. Oriol, **I. Veryzhenko** (2018), *"Too Fast, Too Furious ? Trading algorithmique et instabilité des marchés financiers"*, Systèmes d'Information et Management, vol.23, n2. [FNEGE 2, CNRS 2, HCERES A]

7. **I. Veryzhenko**, L. Arena, E. Harb, and N. Oriol (2017), *"Time to slow down for high-frequency trading ? Lessons from artificial markets"*, Intelligent Systems in Accounting, Finance and Management, vol. 24, pp. 73-79

8. **I. Veryzhenko**, E. Harb, W. Louhichi, N. Oriol (2017), *"The impact of the French financial transaction tax on HFT activities and market quality"*, Economic Modelling, vol. 67, pp. 307-315 [CNRS 2, HCERES A]

9. O. Brandouy, P. Mathieu, **I. Veryzhenko** (2013), *"On the Design of Agent-Based Artificial Stock Markets"*, Communications in Computer and Information Science, vol. 271, pp.350-364

10. O. Brandouy, P. Mathieu, **I. Veryzhenko** (2013), *"Algorithmic determination of the maximum possible earnings for investment strategies"*. Decision Support Systems, vol. 54, pp. 816-825 [FNEGE 1, CNRS 2, HCERES A]

11. O. Brandouy, A. Corelli, **I. Veryzhenko**, R. Waldeck (2012),*"Why Zero Intelligence Traders are not smart enough for Quantitative Finance"*, Journal of Economic Interaction and Coordination, 7(2), pp. 223-248 [CNRS 4, HCERES C]

— **Prix et distinctions**

1. 2025 Mediterranean Conference on Information Systems, second best paper award

2. 2021 EUROFIDAI, le prix de meilleur article de recherche

3. 2019 6th Young Finance Scholars Conference (on behalf of Carol Alexander), le prix de meilleur article de recherche

4. 2018 La Revue Systèmes d'Information et Management, finaliste du prix du meilleur article

5. 2011 International Conference on Agents and Artificial Intelligence, le prix de meilleure article doctoral

— **Livres**

1. E. Harb, **I. Veryzhenko**, X. Durand, P. Murat (2024), *Finance, 2nde edition*, ed. DUNOD, ISBN 978-2-10-085208-6, 2024

2. R. Estran, E. Harb, **I. Veryzhenko** (2021), *Gestion de portefeuille, 2nde edition*, ed. DUNOD, ISBN : 978-2-10-075946-0,

3. G. Benzaken, P. Dupuy, E. Normand, **I. Veryzhenko** (2021), *Réussir l'examen AMF 6e édition*, PEARSON, ISBN : 978-2-3260-0268-5

4. R. Estran, E. Harb, **I. Veryzhenko**, *Gestion de portefeuille*, ed. DUNOD, ISBN : 978-2-10-075946-0, 2017

5. E. Harb, **I. Veryzhenko**, A. Masset, P. Murat, *Finance*, ed. DUNOD, ISBN : 2100710036, 2014

— **Policy papers**

1. D. Ladley, N. Oriol and **I. Veryzhenko** (2024), "How to Tackle Spoofing Through Market Design", CLS Blue Sky Blog, Columbia University School of Law

2. N. Oriol and **I. Veryzhenko** (2018), "Finance digitale et régulation des abus de marchés : Focus sur le cas du spoofing", Policy Papers, 12/2018, Labex Refi

3. **I. Veryzhenko** and S. Thomas (2016), *Liquidity measures of bond market*, rapport pour l'Observatoire de la Liquidité, l'AFG et l'AMF.

— **Articles en cours**

1. D. Ladley, N. Oriol, **I. Veryzhenko**, *"High-frequency spoofing, market fairness and regulation"*

2. S. Ligot, R. Gillet and **I. Veryzhenko**, *"Cross-Border Trading and Price Discovery : Evidence from French Stocks"*, soumis Review of Quantitative Finance and Accounting

3. **I. Veryzhenko** and S. Ligot, *"Breaking News, Breaking Markets : A Tale of Hoaxes, Halts, and High-Frequency Trading"*, soumis International Journal of Finance & Economics

4. G. Kemler, N. Nasrallah, and **I. Veryzhenko**, *"Beyond Circuit Breakers : Leveraging Machine Learning for Market Stability"*

5. L. Pataillot and **I.Veryzhenko**, *"The Humble Crumble : Speed Bumps, Alternative Order Types and Information Diffusion in Financial Markets"*

6. N. Nasralah, **I. Veryzhenko**, E. Harb, *"Exploring Market Fairness, Extreme Price Movements, and High-Frequency Trading in Euronext Paris"*

7. **I. Veryzhenko**, N. Nasralah and H. Garcia, *"Detecting spoofing in high frequency trading using machine learning techniques"*

8. A. Ariri and **I. Veryzhenko**, *"Navigating the Technological Ecosystem of Financial Markets : Lessons from the Vinci Hoax Crash for Shaping Robust Regulatory Framework"*

9. D. Finnan, E. Darriet, **I. Veryzhenko**, *"Cross-Exchange Liquidity Dynamics : Decentralized and Centralized Crypto Platforms During the US Banking Crisis"*

— **Chapitres**

1. Laurent Pataillot and Iryna Veryzhenko (2025), *"The Humble Crumble : Speed Bumps, Alternative Order Types and Information Diffusion in Financial Markets"*, Association for Information Systems (AIS), MCIS 2025 Proceedings

2. Abdeslam Ariri and Iryna Veryzhenko (2025), *"Regulating Financial Market Technologies : Lessons from the Vinci Hoax"*, Association for Information Systems (AIS), MCIS 2025 Proceedings

3. L. Arena, N. Orio, and I. Veryzhenko (2020), *"From the Pit to millions of bits : Exploring Stock market Crashes as Socio-technical Failures through a History-Friendly Agent Based Model"*, ECIS Proceedings, Association for Information Systems, 2020.

4. I. Veryzhenko, L. Arena, E. Harb, N. Oriol (2016), *"A reexamination of high frequency trading regulation effectiveness in an artificial market framework"*, Advances in Intelligent Systems and Computing, Springer, AISC, v.473 pp.15-25

5. O.Bradouy, P.Mathieu, I.Veryzhenko (2012), *"Risk Aversion Impact on Investment Strategy Performance : A Multi Agent-Based Analysis"*, Managing Market Complexity. The approach of Artificial Economics, Springer (ISBN : 978-3-642-31300-4), vol.662, pp. 91-103.

6. O.Bradouy, P.Mathieu, I.Veryzhenko (2012), *"Optimal Portfolio Diversification ? A multi-agent Ecological Competition Analysis"*, in Highlights on Practical Applications of Agents and Multi-Agent Systems, Springer (ISBN 978-3-642-28761-9), vol.156, pp. 323-332.

7. I. Veryzhenko, P. Mathieu, O. Brandouy (2011), *"Key points for realistic agent-based financial market simulations"*, 3rd International Conference on Agents and Artificial Intelligence, Roma, Italy. Proceedings (ISBN : 978-989-8425-41-6), vol.2, pp.74-84. *"Student Best paper Award"*.

8. I. Veryzhenko, P. Mathieu, O. Brandouy (2010), *"Agent's minimal intelligence calibration for realistic market dynamics"*, in Progress in Artificial Economics, Lecture Notes in Economic and Mathematical Systems, Springer (ISBN : 978-3-642-13947-5), vol. 645, pp. 3-14.

9. O.Brandouy, P. Mathieu, I. Veryzhenko (2009), *"Computation of the Ex-Post Optimal Strategy for the Trading of a Single Financial Asset"*, in Artificial Economic, Part of the Lecture Notes in Economics and Mathematical Systems, Springer, v.631, pp. 171-184.

— **Communications dans des conférences academiques et profesionnelles**

1. Laurent Pataillot and Iryna Veryzhenko (2025), *"The Humble Crumble : Speed Bumps, Alternative Order Types and Information Diffusion in Financial Markets"*, the 17th Mediterranean Conference on Information Systems (MCIS'2025), Nantes, France

2. Abdeslam Ariri and Iryna Veryzhenko (2025), *"Regulating Financial Market Technologies : Lessons from the Vinci Hoax"*, the 17th Mediterranean Conference on Information Systems (MCIS'2025), Nantes, France

3. Laurent Pataillot and Iryna Veryzhenko (2025), *"The Humble Crumble : Speed Bumps, Alternative Order Types and Information Diffusion in Financial Markets"*, Association Information et Management (AIM'2025), Lyon, France

4. Daniel Finnan, Elisa Darriet, Iryna Veryzhenko (2025), *"Cross-Exchange Liquidity Dynamics : Decentralized and Centralized Crypto Platforms During the US Banking Crisis"*, International Workshop on "Financial Markets and Nonlinear Dynamics" (FMND), Paris, France

5. Grégoire Kemler, Nohade Nasrallah and Iryna Veryzhenko (2025), *"Beyond Circuit Breakers : Leveraging Machine Learning for Market Stability"*, Istitut Louis Bachelier 18th Financial Risks International Forum on "Big Data and Algorithmic Finance", Paris

6. Rolland Gillet, Stephanie Ligot, Iryna Veryzhenko (2024), *"Circuit Breakers and Market Quality in High Frequency Markets"*, International Workshop on "Financial Markets and Nonlinear Dynamics" (FMND), Paris, France

7. Iryna Veryzhenko, Nohade Nasralah and Henri Garcia (2024), *"Detecting spoofing in high frequency trading using machine learning techniques"*, Istitut Louis Bachelier 17th Financial Risks International Forum on "Big Data and Algorithmic Finance", Paris

8. Abdeslam Ariri and Iryna Veryzhenko (2024), *"Navigating the Technological Ecosystem of Financial Markets : Lessons from the Vinci Hoax Crash for Shaping Robust Regulatory Framework"*, Association Information et Management (AIM'2024)

9. Rolland Gillet, Stephanie Ligot, Iryna Veryzhenko (2024), *"Circuit Breakers and Market Quality in High Frequency Markets"*, 3nd IEAP Meeting : Investor Emotions & Asset Pricing, Lille.

10. Etienne Harb, Nohade Nasrallah, Iryna Veryzhenko (2023), *"End-of-Day Market Manipulations : Winners and Losers"*, L'Association Française de Finance AFFI'2023, Bordeaux.

11. Iryna Veryzhenko, Etienne Harb, Arthur Jonath (2022), *"Algorithmic Trading and Market Fairness : Is the Golden Era Over ?"*, The Society for Economic Measurement (SEM) 2022, University of Calgary, Canada

12. Stephanie Ligot and Iryna Veryzhenko (2021), *"The High Frequency Trading and Circuit Breakers in an Electronic Market"*, L'Association Française de Finance AFFI'2021, en ligne

13. S. Ligot and I. Veryzhenko (2020), *"The High Frequency Trading and Circuit Breakers in an Electronic Market"*, International Symposium in Computational Economics and Finance (ISCEF), October, 29-30, 2020, Paris

14. S. Ligot and I. Veryzhenko (2020), *"The High Frequency Trading and Circuit Breakers in an Electronic Market"*, 11th Annual Financial Market Liquidity Conference, 26-27th November 2020, Budapest

15. S. Ligot and I. Veryzhenko (2020), *"The High Frequency Trading and Circuit Breakers in an Electronic Market"*, International Symposium in Computational Economics and Finance (ISCEF), October, 29-30, 2020, Paris

16. Y. Biondi and I. Veryzhenko (2020), *Sources of Properties of Security Market Pricing : Institutional Design and Agent Rationality*, Zero/Minimal Intelligence Conference, Yale School of Management

17. Y. Biondi and I. Veryzhenko (2019), *"Where does security market pricing quality come from ? Combined analysis of institutional design and individual rationality."* Computing in Economics and Finance, 25th Conference, Ottawa, Canada, June 2019

18. I. Veryzhenko and A. Jonath (2019), *"Can we design an NVA-Tax to prevent bubble-building-bursting events and to improve market fairness ?"* The Society for Economic Measurement, Goethe University in Frankfurt, Germany, August 16-18, 2019

19. I. Veryzhenko and A. Jonath (2019), *"Can we design an NVA-Tax to prevent bubble-building-bursting events and to improve market fairness ?"* 5th International Workshop on "Financial Markets and Nonlinear Dynamics" (FMND), Paris, France, June, 2019

20. S. Ligot and I. Veryzhenko (2019), *"The Vinci HoaxCrash : The High Frequency Trading and Circuit Breakers in an Electronic Market"*, 6th YFS Conference (on behalf of Carol Alexander), Brihgton, Sussex, UK, June 2019

21. N. Oriol, I. Veryzhenko,*"Trading disruptif et systèmes de traitement transactionnels : une illustration des techniques de spoofing au sein d'un carnet d'ordre électronique"* Association Information et Management (AIM'2018), Montreal 2018

22. N. Oriol, I. Veryzhenko,*"Spotting manipulation in the Tape : the good igniter, the bad painter and the wily spoofer"*, 35th Annual Conference of the French Finance Association (AFFI), Paris, May 2018

23. N. Oriol, I. Veryzhenko,*"Spotting manipulation in the Tape : the good igniter, the bad painter and the wily spoofer"*, 5th International Symposium in Computational Economics and Finance in Paris, April 2018

24. I. Veryzhenko and N. Oriol, *"Market structure or traders' behavior ? An assessment of flash crash phenomena and their regulation based on a multi-agent simulation"*, Vietnam Symposium of Banking and Finance, Ho-Chi-Minh-Ville, October 2017

25. L. Arena, N. Oriol, I. Veryzhenko, *"Exploring Stock Markets Crashes as Socio-Technical Failures"*, 22ème conférence de l'AIM-SKEMA Business School, Paris, May 2017

26. I. Veryzhenko and N. Oriol, *High Frequency Trading and Extreme Market Events*, 3rd International Workshop on "Financial Markets and Nonlinear Dynamics" (FMND), June 1-2, 2017, Paris, France
22nd Annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA), June 12-14 2017, Milan, Italy

27. I. Veryzhenko, E. Harb, W. Louichi, N. Oriol, *"The impact of the French financial transaction tax on high frequency tradig activities and market quality"*, Fourth International Symposium in Computational Economics and Finance in Paris, April 2016

28. I. Veryzhenko, N. Oriol, *"Post flash crash recovery : an agent-based analysis"*, 9th International Conference on Agents and Artificial Intelligence, Rome, Italy, February 2016

29. I. Veryzhenko, L. Arena, E. Harb, N. Oriol, *"A reexamination of high frequency trading regulation effectiveness in an artificial market framework"*, Quant. Methods for Financial Regulation (QMFR), New York, September 2016

30. I. Veryzhenko, E. Harb, W. Louichi, N. Oriol, *"The impact of the French financial transaction tax on high frequency tradig activities and market quality"*, 3rd Workshop in International Economics and Finance, Bordeaux, December 2015

31. I. Veryzhenko, N. Oriol, *"Market structure or traders' behavior ? An assessment of flash crash phenomena and their regulation based on a multi-agent simulation"* 5th International Conference of the Financial Engineering and Banking Society (FEBS), Nantes, Audencia Nantes School of Management Campus, June 2015

32. L. Arena, N. Oriol and I. Veryzhenko, *"Flash crash et trading haute fréquence ou les usages détournés des SI sur le marché boursier"* La 19ème édition du Colloque de l'Association Information et Management (AIM 2014), Mai 2014.

33. L. Arena, N. Oriol and I. Veryzhenko, *"Algorithmic Trading and Flash Crashes : Emergence and Regulation of Coordination Failures on Financial Markets"*, 11th International Conference on the Design of Cooperative Systems (COOP 2014), Nice (France), 27-30 May 2014

34. I. Veryzhenkom *The efficiency of portfolio optimization*, International Conference on Computational and Financial Econometrics, London, 14-16 December 2013

35. O. Brandouy, P. Mathieu, I. Veryzhenko, *"A multi-agent ecological competition analysis of strategy performance : Does risk aversion matter ?"*, 17th Annual Workshop on Economic Heterogeneous Interacting Agents (WEHIA), Paris, June 21-23, 2012.

36. O. Brandouy, P. Mathieu, I. Veryzhenko, *Optimal Portfolio Diversification ? A multi-agent ecological competition analysis*, first PhD Camp, ESSEC, Paris, February 2012.

37. O. Brandouy, A. Corelli, I. Veryzhenko, R. Waldeck, *"Why Zero Intelligence Traders are not smart enough for Quantitative Finance"*, The 7th European Social Simulation Association Conference (ESSA), Montpellier, Septembre 19-23, 2011.