# EMRAH AHİ, PhD

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<b>Emplo</b>	ovment	History

Assistant Professor of Finance Multi-Asset Fund Manager	2019- 2016-2019	Özyeğin Üniversity, Faculty of Business, International Finance HSBC Global Asset Management
Researcher, Director of Fixed Income	2010-2016	Özyeğin University, Center for Computational Finance
Quantitative Analyst and Software Developer	2007-2010	Riskturk Software Tech.
Graduate Research Assistant	2004-2006	Koç University
Education		
PhD in Finance	2010-2016	Özyeğin University Dissertation: "Robust Estimation of Term Structure and Volatility Smile in Emerging Markets"
MS in Computational Science and Engineering	2004-2007	Koç University
BS in Mathematics	2000-2004	Middle East Technical University
High School	1992-1999	Ankara Atatürk Anatolian High School
Teaching Experience		
Özyeğin University	2023-2024	Investments (FIN), Applied Financial Economics (FERM), Derivatives Best Practice (FERM), Fixed Income in Emerging Markets (FERM)
	2022-2023	Investments (FIN), Applied Financial Economics (FERM), Derivatives Best Practice (FERM), Fixed Income in Emerging Markets (FERM)
	2021-2022	Applied Financial Economics (FERM), Derivatives Best Practice (FERM), Fixed Income in Emerging Markets (FERM), Fixed Income Securities (FIN)
	2020-2021	Applied Financial Economics (FERM), Derivatives Best Practice (FERM), Fixed Income in Emerging Markets (FERM), Fixed Income Securities (FIN)
	2019	Selected Topics in Finance (FIN)
	2018	Quantitative Trading (FERM)
	2017	Applied Financial Economics (FERM)

## **Research Interests**

Fixed Income Securities, Derivatives, Computational Finance, Risk Management, Credit Risk, Asset Pricing, Machine Learning, Data Science

## Awards, Grants, & Honors

2024	Outstanding Achievement Award for Information Transfer, Özyeğin University
2021	OECD Sovereign Bond Database Project Grant,
	Industrial R&D Grant with Fibabanka on "Option Pricing"
2020	Turkish National Science Foundation Grant "Stock Market Order Execution Algorithms"
2010	PhD Scholarship, Özyeğin University
2006	TÜBİTAK-CAREER Grant "Message Buffering in Epidemic Data Dissemination"
2004	MS Scholarship, Koç University

#### **Refereed Publications**

Ahi, E., & Güntay, L. (2021). Pay Getirilerinin Basıklık ve Çarpıklığının İflas ve Temerrüt Olasılıkları Üzerine Etkisi. İşletme Araştırmaları Dergisi, 13(4), 3310-3325.

Ahi, E., Akgiray, V., & Sener, E. (2018). Robust term structure estimation in developed and emerging markets. *Annals of Operations Research*, 260, 23-49.

Ozkasap, O., Caglar, M., Cem, E., Ahi, E., & Iskender, E. (2009). Stepwise fair-share buffering for gossip-based peer-to-peer data dissemination. *Computer Networks*, 53(13), 2259-2274.

### **Non-Refereed Publications and Technical Reports**

Organisation for Economic Co-operation and Development. (2021). OECD Sovereign Borrowing Outlook 2021. <a href="https://www.oecd.org/en/publications/oecd-sovereign-borrowing-outlook-2021\_48828791-en.html">https://www.oecd.org/en/publications/oecd-sovereign-borrowing-outlook-2021\_48828791-en.html</a>

### **Book Chapters**

Ahi, E. (2021). Out-of-sample comparison of portfolio optimization models: Application to global multi-asset portfolios. *Research and Reviews in Social, Human, and Administrative Sciences-I* (pp. 249-267). Ankara, Turkey: Gece Publishing.

Ahi, E. Guntay, L. (2021). Multi-asset portfolio optimization for the Turkish financial market. *Research and Reviews in Social, Human, and Administrative Sciences-II.* (pp. 149-162). Ankara, Turkey: Gece Publishing.

### **Working Papers**

"How to Get a Better Smile? A Comparison of the Implied Volatility Models for the Currency Options Market" with Levent Güntay, under review at the *Financial Analyst Journal* 

"Skipping Across the Bosphorus: Post-Jump Returns at Ultra-High Frequency" with Levent Güntay and Halil Bilgin Payze, under review at the *Journal of Financial Markets*.

"The effect of stocks returns on bankruptcy and default probabilities: A study on Borsa İstanbul companies"

### **Work in Progress**

"The Determinants of the Local Currency Credit Spread" with Levent Güntay, Yaşar Kemal Peştreli and Mehmet Özsoy, drafted and targeted for *Journal of International Money and Finance*.

"Model-based Trading in Sovereign Bond Markets" with Levent Güntay targeted for Emerging Markets Review.

"Estimating the Empirical Pricing Kernel using Machine Learning" with Levent Güntay and Han Özsöylev

"Using Randomized Controlled Experiments to Reduce Investor Behavioral Biases" with Levent Güntay, Deniz Anginer and Çelim Yıldızhan

"A Novel Approach for Implied Recovery Estimation" with Levent Güntay

### **Presentations at Conferences and Seminars:**

- 2023 9. Finans Çalıştayı, Middle East Technical University, Ankara, Turkey
- 2022 3rd Business Analytics Workshop, Sabancı University, Istanbul, Turkey
- 2022 Prometeia Banking and Insurance Conference, Istanbul
- 2022 8. Finans Çalıştayı, Özyeğin University, Istanbul, Turkey
- 2021 YAEM Conference, Istanbul, Turkey

Kadir Has Finance Seminar Series, Istanbul, Turkey

- 2020 World Finance Conference, Malta 32<sup>nd</sup> EBES Conference, Istanbul, Turkey
- 2014 Conference of the Financial Engineering & Banking Society, University of Surrey, UK
- 2014 12<sup>th</sup> EBES Conference, Singapore
- 2013 20th Annual Conference of the Multinational Finance Society, İzmir, Turkey
- 2012 25<sup>th</sup> EURO Informs Conference, Vilnius, Lithuania FMA European Conference, Istanbul, Turkey

2007 6<sup>th</sup> International Symposium on Parallel and Distributed Computing, Hagenberg, Austria

2006 1st international conference on Bio inspired models of network, information and computing systems, Cavalese, Italy International Symposium on Computer Networks, Istanbul, Turkey

#### **Journal Refereeing:**

Annals of Operations Research, Global Finance Journal, International Journal of Emerging Markets, Central Bank Review, IEEE Access

#### **Conference Discussions:**

- 2020 World Finance Conference, Malta
- 2013 20th Annual Conference of the Multinational Finance Society, İzmir, Turkey

## Consulting and R&D Projects:

- 2024 İş Asset Management, Fibabanka, Matriks Bilgi Dağıtım Hiz. A.Ş.
- 2023 Merkezi Kayıt Kuruluşu (MKK), İş Asset Management, Fibabanka
- 2022 Merkezi Kayıt Kuruluşu (MKK), İş Asset Management, Fibabanka
- 2021 OECD, Geneks Yazılım, İş Asset Management, Fibabanka
- 2020 İş Asset Management, Fibabanka, Geneks Yazılım

#### **Executive and Corporate Education:**

- 2022 Fibabanka, Lectures on Data Science in Banking
- 2021 Fibabanka, Data Analytics and Machine Learning with Python
- 2020 İş Asset Management, Portfolio Analytics with Python Geneks Yazılım, High Frequency Trading and Machine Learning Models in Python
- 2019 Alternatifbank, Education on Fintech and Machine Learning

### **Doctoral Dissertation:**

2022 Co-advisor and committee member, Yaşar Kemal Peştreli

#### **Professional Affiliations:**

American Economic Association, European Finance Association

#### Media Appearance:

## BloombergHt:

More than 100 live TV broadcasts on international, local financial markets and risk management.

## CNBC-e:

Several live TV broadcasts on international, local financial markets and risk management.

#### Odeabank

Several podcasts and videos on investment and risk management

# Fibabanka: Podcast about the role of AI and machine learning in finance:

https://link.chtbl.com/Fibabanka-Alisilmisin-Disinda-14

## TKYD Portföy Yönetim Zirvesi:

https://portfoyyonetimizirvesi.com/sayfa/program

Panel speaker and guest speaker on TEB, KHYD, OzU Business Blub, OzU Fintech and Istanbul Fintech Week events