

## Res. Asst. PhD AYŞE ARIK

### Personal Information

**Office Phone:** [+90 312 297 6160](tel:+903122976160) Extension: 116

**Email:** aysearik@hacettepe.edu.tr

**Web:** <https://avesis.hacettepe.edu.tr/aysearik>

**Address:** aysearik@gmail.com

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Aktüerya Bilimleri Bölümü, Turkey 2011 - 2016

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Aktüerya Bilimleri Bölümü, Turkey 2009 - 2011

Undergraduate, Hacettepe University, Fen Fakültesi, Aktüerya Bilimleri Bölümü, Turkey 2005 - 2009

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Pricing Pension Buy-outs, Hacettepe Üniversitesi, Fen Fakültesi, Aktüerya Bilimleri Bölümü, 2016

### Research Areas

Mathematics, Probability Theory, Stochastic Processes, Statistics, Natural Sciences

### Academic Titles / Tasks

Research Assistant, Hacettepe University, Fen Fakültesi, Aktüerya Bilimleri Bölümü, 2009 - Continues

Research Assistant, The University of Nebraska-Lincoln, College Of Business And Administration, Finance , 2013 - 2013

### Published journal articles indexed by SCI, SSCI, and AHCI

#### I. Pricing pension buy-outs under stochastic interest and mortality rates

ARIK A., YOLCU-OKUR Y., ŞAHİN Ş., UĞUR Ö.

SCANDINAVIAN ACTUARIAL JOURNAL, no.3, pp.173-190, 2018 (SCI-Expanded)

#### II. Pricing Buy-Ins and Buy-Outs

LIN Y., SHI T., ARIK A.

JOURNAL OF RISK AND INSURANCE, vol.84, pp.367-392, 2017 (SSCI)

### Articles Published in Other Journals

- I. **Pricing Turkish longevity risk**  
KARABEY U., ŞAHİN Ş., ARIK A.  
International Journal of Ecological Economics and Statistics, vol.37, no.2, pp.46-55, 2016 (ESCI)
- II. **Gelişmekte olan bazı piyasalarda finansal risklerin uç değer kuramı ile ölçülmesi**  
ARIK A., NEVRUZ E., KARABEY U.  
İstatistikçiler Dergisi: İstatistikAktüerya, vol.6, pp.86-95, 2013 (Peer-Reviewed Journal)
- III. **Finansal Risklerin Uç Değer Kuramı ile Ölçülmesi**  
ARIK A., BULUT KARAGEYİK B., SUCU M.  
Anadolu Üniversitesi Bilim ve Teknoloji Dergisi A-Uygulamalı Bilimler ve Mühendislik, vol.14, no.2, pp.119-134, 2013 (Peer-Reviewed Journal)
- IV. **Uzun Ömürlülük Bonolarını Fiyatlandırma Uç Değer Kuramı ve Kübik Risk Fiyatlandırma Modeli**  
ARIK A., SUCU M.  
İstatistikçiler Dergisi:İstatistik&Aktüerya, vol.4, no.2, pp.69-85, 2011 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Valuation of Defined Benefit Pension Schemes Based on Solvency II**  
ARIK A., YOLCU OKUR Y.  
21st International Congress on Insurance: Mathematics and Economics - IME 2017, Viyana, Austria, 3 - 05 July 2017
- II. **Investigation of Dependency between Short Rate and Transition Rate on Pension Buy-outs**  
ARIK A., YOLCU OKUR Y.  
The Pensions, Benefits and Social Security Section and the International Association of Consulting Actuaries of the International Actuarial Association, Cancun, Mexico, 4 - 07 June 2017
- III. **On the Pension Buy out Pricing in Presence of Stochastic Interest and Mortality Rates**  
ARIK A., ŞAHİN Ş., YOLCU OKUR Y.  
The Joint Colloquium of the IACA, PBSS and IAAHS Section of the International Actuarial Association, 27 - 29 June 2016
- IV. **Pension Buy out Ürünlerinin Bağımlılık Varsayımlı Altında Fiyatlandırılması**  
ARIK A., YOLCU OKUR Y., ŞAHİN Ş.  
2. Ulusal Sigorta ve Aktüerya Kongresi, Ankara, Turkey, 17 - 18 September 2015
- V. **Pricing Pension Buy outs under Dependence Assumption**  
ARIK A., YOLCU OKUR Y., ŞAHİN Ş.  
Longevity 11 – The eleventh international longevity risk and capital markets solutions, Lyon, France, 7 - 09 September 2015
- VI. **Pricing Buy ins and Buy outs**  
Lin Y., Shi T., ARIK A.  
The 18th International Congress on Insurance: Mathematics and Finance, Shanghai, China, 10 - 12 July 2014
- VII. **Impact of Different Investment Strategies on Pricing of Pension Bulk Annuities**  
ARIK A., ŞAHİN Ş.  
The 18th International Congress on Insurance: Mathematics&Economics, Shanghai, China, 10 - 12 July 2014
- VIII. **Analyzing Collateralized Debt Obligations as a Hedging Tool for a Pension Plan**  
ŞİMŞEK G., ARIK A., YOLCU OKUR Y.  
The 18th International Congress on Insurance: Mathematics and Finance, Shanghai, China, 10 - 12 July 2014
- IX. **Selecting the Best Pricing Model to Conform to a Country's Available Data**  
KARABEY U., ŞAHİN Ş., ARIK A.  
30th International Congress of Actuaries, 30 March - 04 April 2014
- X. **A Bayesian Approach to Modelling Turkish Mortality Rates and Pricing a Longevity Bond**  
ARIK A., BULUT KARAGEYİK B., Özkök Dodd E., SUCU M.  
26th European Conference on Operational Research, Roma, Italy, 1 - 04 July 2013

- XI. **Extreme Value Theory and Risk Analysis An Application for Emerging Financial Markets**  
Arik A., Karabey U., Nevruz E.  
The 17th International Congress on Insurance: Mathematics and Economics, Kobenhavn, Denmark, 1 - 03 July 2013, pp.137
- XII. **UÇ DEĞER KURAMI VE RİSK ANALİZİ GELİŞMEKTE OLAN FİNANSAL PİYASALAR İÇİN BİR UYGULAMA**  
ARIK A., NEVRUZ E., KARABEY U.  
1. Ulusal Sigorta ve Aktüerya Kongresi, Ankara, Turkey, 6 - 07 June 2013, pp.446
- XIII. **Selecting the Best Pricing Model to Conform to a Country's Available Data**  
KARABEY U., ŞAHİN Ş., ARIK A.  
30th International Congress of Actuaries, Washington, Kiribati, 30 March - 04 April 2014
- XIV. **The Lee Carter Method and Poisson Log Bilinear Model An Application to Turkish Census Data**  
ARIK A., BULUT KARAGEYİK B., Özkök Dodd E., SUCU M.  
25th European Conference on Operational Research, Vilnius, Lithuania, 8 - 11 July 2012

## Supported Projects

ARIK A., YOLCU OKUR Y., ŞAHİN Ş., Project Supported by Higher Education Institutions, Stokastik Faiz ve Ölümülük Modelleri Yardımıyla Pension Buy-out Ürünlerinin Fiyatlandırılması, 2016 - 2016

ARIK A., ŞAHİN Ş., YOLCU OKUR Y., Project Supported by Higher Education Institutions, Pension Buy-out ürünlerinin Bağımlılık Varsayımlı Altında Fiyatlandırılması, 2015 - 2016

YILDIRAK Ş. K., KARATAŞ R., ERDEMİR Ö. G., KIRKAĞAÇ M., ŞENTÜRK ACAR A., NEVRUZ E., BULUT KARAGEYİK B., ARIK A., KARAGÜL B. Z., ŞİMŞEK G., et al., Project Supported by Higher Education Institutions, II. Ulusal Sigorta ve Aktüerya Kongresi, 2015 - 2016

## Metrics

Publication: 20

Citation (WoS): 8

Citation (Scopus): 5

H-Index (WoS): 1

H-Index (Scopus): 1