# Personal profile

1. Personal Basic Information:

Yuantao Xie is currently Professor and PhD supervisor of Statistics and Actuarial Science, Vice-Dean of School of Insurance and Economics, University of International Business and Economics. Dr. Xie received his PhD degree from Renmin University of China. He was a post doctor of School of Public Health, Boston University.

He is now the vice president of Beijing Institute of insurance，director of China Actuary Association, the member of the American Risk and Insurance Association (ARIA), the member of the Mathematical Finance and Financial Engineering Specialized Committee , an expert advisor of Academic Board of the Institute of Certified Financial Risk Managers(ICFRM), as well as the expert and consultant on Statistical Analysis System of Beijing Health Insurance Information Platform. He was a research scholar for United States Department of Veterans Affairs (VA) in US, as well as an research in Shriners Hospitals for Children in Boston.

He was responsible for some projects sponsored by the National Nature Science Fund of China, the National Social Science Fund of China, the Special funding for the education and teaching reform of the Ministry of Education, as well as the Insurance Society of China. He is Vice Editor of Frontiers in Public Health, Frontiers in Environmental Science, PLOS ONE.

2. Academic Background:

Dr. Xie current research is focused on:

1) Actuarial science and Risk Management: casualty, loss models, qualitative risk management, ALM,

2) Statistical analysis: generalized linear (mixed) models (like Poisson and Gamma regressions, Tweedie models, random effect, repeated measures, variant coefficient models and trend analysis for longitudinal data or panel data), survival analysis, data mining (ANN, decision trees, automatic cluster detection and association rules ), etc.

3) Advanced SAS coding and R: wrote macro code for data management data mining and statistical analysis, including computing for China External Trade Indices, generalized mixed model, reliability and validity analysis, Meta analysis, MCMC, Bootstrap and Jackknife.

3. Scientific Research Achievements:

Dr. Xie is the author/co-author of numerous journal articles and several research grants. He has published articles in professional journals in the area of Insurance, Actuarial Science, and statistical analysis. His articles appeared in SCI/SSCI journals such as IME,JCP(IF=5.715), RCR(IF=5.12), NAJEF, JNCA , AEL, etc. More than 40 articles appeared in famous CSSCI journals in China such as Statistics Research, Journal of Financial Research, Journal of Peking University(Humanities and Social Sciences), Journal of Beijing Normal University (Social Sciences),Journal of Finance and Economics, Economic Science, Systems Engineering ---Theory

& Practice, Insurance Studies, etc.


[1] Ahmed, D., Xie, Y., & Saeed Bhutta, U. (2022). Insurers' risk management as a business process: a prospective competitive advantage or not? *European Journal of Management and Business Economics*, 31(3), 345-366. (ESCI, ISSN : 2444-8451) https://doi.org/10.1108/ejmbe-08-2021-0221

[2] Khelfaoui, I., Xie, Y., Hafeez, M., Ahmed, D., Degha, H. E.,... Meskher, H. (2022a). Effects of Health Shocks, Insurance, and Education on Income: Fresh Analysis Using CHNS Panel Data. *International Journal of Environmental Research and Public Health*, 19(14), 8298. (SSCI,SCI,JCR Q1, IF=4.614, ISSN: 1660-4601) https://doi.org/10.3390/ijerph19148298

[3] Khelfaoui, I., Xie, Y., Hafeez, M., Ahmed, D., Degha, H. E.,... Meskher, H. (2022b). Information Communication Technology and Infant Mortality in Low-Income Countries: Empirical Study Using Panel Data Models. *International Journal of Environmental Research and Public Health*, 19(12), 7338. (SSCI,SCI,JCR Q1, IF=4.614, ISSN: 1660-4601) https://doi.org/10.3390/ijerph19127338.

[4] Li, H., Wang, X., Xie, Y., Chen, T., Han, H.,... Yang, Y. (2022). The Impact of Transmission and Distribution Price Reform on Economic Growth in Liberalized Electricity Markets: An Inter-Provincial Panel Data Analysis. *Frontiers in Environmental Science*, 9(SCI,JCR Q2, IF=5.411, ISSN: 2296-665X). https://www.frontiersin.org/articles/10.3389/fenvs.2021.755319

[5] Liu, D., Xie, Y., Hafeez, M., & Usman, A. (2022). The trade-off between economic performance and environmental quality: does financial inclusion matter for emerging Asian economies? *Environmental Science and Pollution Research*, 29(20), 29746-29755. (SCI,JCR Q2, IF=, ISSN: 0944-1344). https://doi.org/10.1007/s11356-021-17755-1.

[6] Lei, W., Xie, Y., Hafeez, M. et al.(2022). Assessing the dynamic linkage between energy efficiency, renewable energy consumption, and CO2 emissions in China. *Environ Sci Pollut Res*, 29, 19540-19552. (SCI,JCR Q2, IF=, ISSN: 0944-1344). (WOS:000713111200012) https://doi.org/10.1007/s11356-021-17145-7 .

[7] Xie, Y., Huang, H., He,X., & Chen,Y.(2021). Using Hyperparameter Bayes Optimized LightGBM for Frequency Prediction of Auto Insurance. *Journal of Nonlinear and Convex Analysis*, vol. 22, 10,2139-2153.(SSCI,SCI,JCR Q3, IF=1.075, ISSN: 1345-4773)

[8] Ahmed, D., Xie, Y., & Issam.K.(2021). Investor confidence and life insurance demand: can economic condition limit life insurance business? *International Journal of Emerging Markets*, Vol. ahead-of-print No. ahead-of-print. (SSCI, IF=2.488, JCR Q2, ISSN: 1746-8809, DOI: 10.1108/IJOEM-06-2020-0650) (WOS:000669604100001) https://doi.org/10.1108/IJOEM-06-2020-0650

[9] Ahmed, D., Xie, Y.(2021).Insurers risk management as a business process: A prospective competitive advantage or not? *European Journal of Management and Business Economics*.(ESCI,)

[10] Xie, Y.,Atinc, G., & Lei, X. (2021). The Impact of Trust on Public Participation in Sharing Economies. *China: An International Journal*, vol. 19, 01:158-176. (SSCI, ISSN : 0219-7472) (WOS:000626267000009) https://muse.jhu.edu/article/785034

[11] Oli，S.& Xie, Y. (2021). Domestic Savings, Investment, and Economic Growth: an Empirical Evidence from Nepal using VEC Model. *Journal of Economic Science Research*, vol. 04, 03:44-59. (ISSN: 2630-5240, DOI:10.30564/jesr.v4i3.3359). https://ojs.bilpublishing.com/index.php/jesr/article/view/3359

[12] Xie, Y., Sun, X., & Yang, S. (2020). The Effect of Delayed Retirement on Social Welfare in China from the Perspective of the Pension Replacement Rate. *The Singapore Economic Review*, 1-26. ( SSCI, IF=1.315, JCR Q3, ISSN: 0217-5908, DOI: 10.1142/S0217590821400038) ( WOS:000617056900001) https://www.worldscientific.com/doi/abs/10.1142/S0217590821400038

[13] Hao, F., Xie, Y., & Liu.X.(2020). The Impact of Green Credit Guidelines on the Technological Innovation of Heavily Polluting Enterprises: A Quasi-Natural Experiment from China. *Mathematical Problems in Engineering*, Volume 2020, Article ID 8670368, p.1-13.(SSCI, JCR Q2,Q3, IF=1.179, ISSN: 1024-123X, DOI: 10.1155/2020/8670368) (WOS: 000591650200008). https://doi.org/10.1155/2020/8670368

[14] Chen,Y., Hu,M., Xie, Y., & Qiu.R.(2020). Claim Frequency Predicting based on LightGBM. *Journal of Nonlinear and Convex Analysis*, vol. 21, 8,1759-1770.( SCI,JCR Q3, IF=1.075, ISSN: 1345-4773) (WOS: 000579682400010).

[15] Xie, Y., Yu, H., Lei, X., & Lin, A. J. (2020). The impact of fertility policy on the actuarial balance of China's urban employee basic medical insurance fund–The selective two-child policy vs. the universal two-child policy. *The North American Journal of Economics and Finance*, vol. 53, 101212,p1-14. (SSCI, IF=2.772, JCR Q2,ISSN: 1062-9408, DOI: 10.1016/j.najef.2020.101212) (WOS: 000541539200021). https://doi.org/10.1016/j.najef.2020.101212

[16] Xie, Y., Zhang,X., Lv, H., & Guo, X.(2020). The New Fertility Policy and the Actuarial Balance of China Urban Employee Basic Endowment Insurance Fund Based on Stochastic Mortality Model. *Mathematical Problems in Engineering*, Volume 2020, Article ID 3596384, p.1-10.(SSCI, JCR Q2,Q3, IF=1.179, ISSN: 1024-123X, DOI:10.1155/2020/3596384) (WOS: 000537275900007). https://doi.org/10.1155/2020/3596384

[17] Khelfaoui, I., Xie, Y., Hafeez, M., & Ahmed, D. (2020). Education Impact on Health Shocks: Evidence from C.H.N.S. Data. *Advances in Intelligent Systems and Computing*,Vol. 1190 AISC, pp. 66–80. Springer. (EI)
https://doi.org/10.1007/978-3-030-49829-0_5

[18] Chen,Y., Liu,K., Xie, Y., & Hu,M.(2020). Financial Trading Strategy System Based on Machine Learning. *Mathematical Problems in Engineering*, vol. 2020, Article ID 3589198, p.1-13(SSCI, JCR Q2,Q3, IF=1.179, ISSN: 1024-123X, DOI: 10.1155/2020/3589198) (WOS: 000561240600002).
https://doi.org/10.1155/2020/3589198

[19] Asimit, A. V., Hu, J., & Xie, Y. (2019). Optimal robust insurance with a finite uncertainty set. *Insurance: Mathematics and Economics*, 87, 67-81. (SSCI, SCI,JCR Q2, IF=1.933, ISSN: 0167-6687, DOI: 10.1016/j.insmatheco.2019.03.009) (WOS:000473379900005).
https://doi.org/10.1016/j.insmatheco.2019.03.009

[20] Xie, Y., Cui, J., & Hao, F. (2019). Rating for vehicle extended warranty contracts based on the first failure time and the first failure mileage. *Journal of Nonlinear and Convex Analysis*, 20(5, SI), 923-935. (SCI,JCR Q3, IF=1.075, ISSN: 1345-4773) (WOS:000483450800013).
http://www.ybook.co.jp/online2/jncav20-5.html

[21] Xie, Y., Yang, J., & Munir, F. (2019). Overflow effect of credit rating announcements on stock exchange based on event study. *Applied Economics Letters*, 26(17), 1452-1462. (SSCI,IF=1.157, JCR Q3, ISSN: 1350-4851, DOI: 10.1080/13504851.2019.1581900) (WOS:000472119200011).
https://doi.org/10.1080/13504851.2019.1581900

[22] Xie, Y., Lv, H., Sun, X., Mao, Y., & Yang, J. (2019). Study on the transform method of estimating discrete frequency from continuous variable: ratemaking for car repair insurance based on SAS system coding. *Cluster Computing*, 22(6), 15493-15503. (SSCI, EI, JCR Q2,IF=3.458,DOI: 10.1007/s10586-018-2656-3, ISSN:1386-7857) (WOS:000501745700239).
https://link.springer.com/article/10.1007/s10586-018-2656-3

[23] Xie, Y., Wang, W., Guo, Y., & Yang, J. (2019). Study on the country risk rating with distributed crawling system. *The Journal of Supercomputing*, 75(10), 6159-6177. (SCI,EI, JCR Q2, IF=2.469, ISSN: 1532-0626, DOI: 10.1007/s11227-018-2539-7) . (WOS:000492960000001).
https://link.springer.com/article/10.1007/s11227-018-2539-7

[24] Yang, J., Xie, Y., & Guo, Y. (2019). Panel data clustering analysis based on composite PCC: a parametric approach. *Cluster Computing*, 22(4), 8823-8833. (SCI, EI, JCR Q2,IF=3.458, ISSN:1386-7857; DOI:10.1007/s10586-018-1973-x).
https://link.springer.com/article/10.1007/s10586-018-1973-x

4. Professional teaching for international students:

《Casualty Actuarial Science》

The aim of the Casualty Actuarial Science subject is to provide a further grounding in statistical modelling of particular relevance to financial work, especially in non-life insurance company. It explores some further topics on advanced statistical models.

Syllabus topics

1 Random variables and distributions for risk modelling (20%)

2 Time series (15%)

3 Bayes Statistics, Credibility Theory, Empirical Bayes Credibility Theory (30%)

4 Generalized Linear Models, Run-Off Triangles (25%)

5 Machine learning (10%)

The weightings are indicative of the approximate balance of the assessment of this subject between the main syllabus topics, averaged over a number of examination sessions.