Curriculum Vitae

I. Personal Particulars

Name: MOHD TAHIR BIN ISMAIL

Current position: SENIOR LECTURER

II. A. Academic and Professional Qualifications (Please list all academic qualifications, from your first degree, in chronological order)

Year	Degree	Discipline	University
2001	Bachelor of Applied Science	Applied Statistics	Universiti Sains Malaysia (USM)
2002	Master of Science	Statistics	Universiti Sains Malaysia (USM)
2008	Doctor of Philosophy	Statistics	Universiti Kebangsaan Malaysia (UKM)

B. Titles of postgraduate theses

Master Dissertation Title:USING EXTREME VALUE THEORY TO ESTIMATE THE LIKELIHOOD OF EXTREME STOCK MARKET RETURN

PhD Thesis Title:THE APPLICATION OF REGIME SWITCHING MODEL ON MALAYSIAN FINANCIAL TIME SERIES DATA

III. Work Experience (Please list your relevant experiences in chronological order)

Year	Position	Field of Work	Place of Work
2007-2008	Lecturer	Time Series Analysis	School of Mathematical Sciences, USM
2008-now	Senior Lecturer	Categorical Data Analysis Time Series Analysis Linear Models	School of Mathematical Sciences, USM

IV. Main Current Research Areas (Please list a maximum of three)

1. Financial Time Series
2. Econometrics
3. Applied Statistics

1.0	RESEARCH AND PUBLICATION

Journal/E-Journal/Journal Proceeding (each publication)

ISI

1. Mohd Tahir Ismail, Zaidi Isa, 2006, Modeling the interactions of stock price and exchange rate in Malaysia, The Singapore Economic Review, 15.

2. Mohd Tahir Ismail, Samsul Ariffin Abdul Karim and S. Alwadi, 2011, A study of structural breaks in Malaysian stock market, African Journal of Business Management, 8

3. Alsaidi M. Altaher, Mohd Tahir Ismail, 2012, Robust estimation for boundary correction in wavelet regression, Journal of Statistical Computation and Simulation, 14.

4. . Phoong Seuk Wai, Mohd Tahir Ismail, and Samsul Ariffin Abdul Karim, 2012, International students' enrollment in IPTA by using multilevel analysis, , AIP Conference Proceedings, Volume 1482, 5.

5. Samsul Ariffin Abdul Karim, Balbir Singh Mahinder Singh, Bakri Abdul Karim, Mohammad Khatim Hasan, Jumat Sulaiman, Josefina B. Janier, and Mohd Tahir Ismail, 2012, Denoising solar radiation data using Meyer wavelets, , AIP Conference Proceedings, Volume 1482, 6.

6. Samsul Ariffin Abdul Karim, Muhammad Izzatullah Mohd Mustafa, Bakri Abdul Karim, Mohammad Khatim Hasan, Jumat Sulaiman and Mohd Tahir Ismail, 2013, Image reconstruction using singular value decomposition, , AIP Conference Proceedings,Volume 1522 , 6.

7. Mohd Tahir Ismail, Nurul Ain Abdullah, and Samsul Ariffin Abdul Karim, 2013, Impact of global financial crisis on precious metals returns: An application of ARCH and GARCH methods, , AIP Conference Proceedings, Volume 1522, 7

8. Abobaker M. Jaber,Mohd Tahir Ismail and Alssaidi M. Altaher, 2014, Empirical Mode Decomposition Combined with Local Linear Quantile Regression for Automatic Boundary Correction, Abstract and Applied Analysis, 8.

9. Abobaker M. Jaber, Mohd Tahir Ismail and Alsaidi M. Altaher, 2014, Application of Empirical Mode Decomposition with Local Linear Quantile Regression in Financial Time Series Forecasting, The Scientific World Journal, 5.

10. Abobaker M. Jaber and Mohd Tahir Ismail, 2014, Comparison between empirical mode decomposition and local linear regression in presence of boundaries, , AIP Conference Proceedings 1602, 6.

11. Phoong Seuk Wai, Mohd Tahir Ismail, and Sek Siok Kun, 2014, Gold price effect on stock market: A Markov switching vector error correction approach, , AIP Conference Proceedings 1602,4.

12. Seuk-Yen Phoong and Mohd Tahir Ismail, 2014, Maximum likelihood estimation of finite mixture model for economic data, , AIP Conference Proceedings 1602,5.

13. Mohd Tahir Ismail and Siti Nor Shadila Alias, 2014, Binary logistic regression modelling: Measuring the probability of relapse cases among drug addict, ,AIP Conference Proceedings 1605, 6.

14. Amel Abdoullah Ahmed Dghais and Mohd Tahir Ismail, 2014, A study of stationarity in time series by using wavelet transform, AIP Conference Proceedings 1605, 6.

15. Seuk-Yen Phoong and Mohd Tahir Ismail, 2014, A study of finite mixture model: Bayesian approach on financial time series data, AIP Conference Proceedings 1605, 5.

16. Seuk-Wai Phoong, Mohd Tahir Ismail, and Siok-Kun Sek, 2014, A comparison between MS-VECM and MS-VECMX on economic time series data, AIP Conference Proceedings 1605, 6.

17. Noor Wahida Md Junus and Mohd Tahir Ismail, 2014, Predicting road accidents: Structural time series approach, AIP Conference Proceedings 1605, 6.

18. Mufda Jameel Alrawashdeh, Shamsul Rijal Muhammad Sabri, and Mohd Tahir Ismail, 2014, Evaluation

the initial estimators using deterministic minimum covariance determinant algorithm, AIP Conference Proceedings 1605, 6.

19. Firdaus Mohamad Hamzah, Mohd Tahir Ismail, Rofizah Mohammad, Samsul Rijal Mohamad Sabri, and Norazman Arbin, 2014, The analysis of trends and seasonal patterns of temperature and chlorophyll in a freshwater Scottish lake, AIP Conference Proceedings 1605, 6.

20. Mohd Tahir Ismail, Siti Salwana Mamat, Firdaus Mohamad Hamzah, and Samsul Ariffin Abdul Karim, 2014, Forecasting performance of denoising signal by Wavelet and Fourier Transforms using SARIMA model, AIP Conference Proceedings 1605, 6.

21. Nor Azuana Ramli, Mohd Tahir Ismail, and Hooy Chee Wooi, 2014, Currency crisis indication by using ensembles of support vector machine classifiers, AIP Conference Proceedings 1605, 6.

22. Abobaker M. Jaber and Mohd Tahir Ismail, 2014, Comparison between empirical mode decomposition and local linear quantile regression in the presence of boundaries, AIP Conference Proceedings 1605, 6.

23. Phoong Seuk Yen, Mohd Tahir Ismail and Firdaus Mohamad Hamzah, 2014, Finite Mixture Model: A Maximum Likelihood Estimation Approach On Time Series Data, AIP Conference Proceedings 1613, 9.

24. Noor Wahida Md Junus and Mohd Tahir Ismail, 2014, Modelling road accidents: An approach using structural time series, AIP Conference Proceedings 1613, 11

25. Firdaus Mohamad Hamzah, Rofizah Mohammad, Mohd Kamal Mohd Nawawi, Mohd Tahir Ismail, and Norazman Arbin, 2014, Temporal changes in nutrients in freshwater Scottish lake, AIP Conference Proceedings 1613, 8.

26. Samsul Ariffin Abdul Karim, Mohammad Khatim Hasan, Jumat Sulaiman, Josefina B. Janier, Mohd Tahir Ismail,and Mohana Sundaram Muthuvalu, 2014, Denoising solar radiation data using coiflet wavelets, AIP Conference Proceedings 1621, 8.

27. Phoong Seuk Wai and Mohd Tahir Ismail , 2014, Measuring nonlinear behavior in time series data , , AIP Conference Proceedings 1635,6.

28. Abobaker.M.Jaber, Mohd Tahir Ismail, 2014, Trend extraction using empirical mode decomposition and statistical empirical mode decomposition: Case study: Kuala Lumpur stock market, AIP Conference Proceedings 1635, 4.

29. Firdaus Mohamad Hamzah, Othman Jaafar, Mohd Kamal Mohd Nawawi, Mohd Tahir Ismail, and Norazman Arbin , 2014, Assessing the responses of physical parameters in ocean via statistical approach, ,AIP Conference Proceedings 1635, 7.

30. Seuk-Yen Phoong, Mohd Tahir Ismail, and Firdaus Mohamad Hamzah , 2014, Two-component mixture model: Application to palm oil and exchange rate, AIP Conference Proceedings 1635, 6.

31. Noor Wahida Md Junus, Mohd Tahir Ismail, and Zainudin Arsad, 2014, Behavior of road accidents: Structural time series approach, AIP Conference Proceedings 1635, 8.

SCOPUS

1. Mohd Tahir Ismai, Zaidi Isa, 2006, Modelling Exchange Rates Using Regime Switching Models, Sains Malaysiana, 9

2. Samsul Ariffin Abdul Karim, Mohd Tahir Ismail, 2008, Compression Of Chemical Signal Using Wavelet Transform, European Journal of Scientific Research, 8

3. S. Al Wadi, Mohd Tahir Ismail, Samsul Ariffin Abdul Karim, 2010, Statistical Computational of Volatility in Financial Time Series Data, World Academy of Science, Engineering and Technology, 5

4. Alsaidi M. Altaher, Mohd Tahir Ismail, 2010, A Comparison of Some Thresholding Selection Methods for Wavelet Regression, World Academy of Science, Engineering and Technology, 7

5. S. Al Wadi , Mohd Tahir Ismail, Samsul Ariffin Abdul Karim, 2010, A Comparison Between Haar Wavelet Transform and Fast Fourier Transform in Analyzing Financial Time Series Data, Research Journal of

Applied Sciences, 9

6. S. Al Wadi, Mohd Tahir Ismail, Alsaidi M. Altaher, Samsul Ariffin Addul Karim,, 2010, Forecasting volatility data based on Wavelet transforms and ARIMA model, , Proceedings of The 2010 International Conference on Science and Social Research (CSSR 2010), 5

7. Noor Aina Abdul Razak, Rasimah Aripin, Mohd Tahir Ismail, 2010, Denoising Malaysian time series data: A comparison using discrete and stationary wavelet transforms, , Proceedings of The 2010 International Conference on Science and Social Research (CSSR 2010), 4

8. Nurul Najwa Jatarona, Mohd Tahir Ismail, 2010, Discovering structural break in precious metal time series data, , Proceedings of The 2010 International Conference on Science and Social Research (CSSR 2010), 6

9. Mohd Tahir Ismail, 2011, Modelling nonlinear relationship among vegetable oil price time series, , 2011 4th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO 2011), 5

10. S. Al Wadi, Mohd Tahir Ismail, M. H. Alkhahazaleh, Samsul Ariffin Abdul Karim, 2011, Selecting Wavelet Transforms Model in Forecasting Financial Time Series Data Based on ARIMA Model, Applied Mathematical Sciences, 12

11. Sadam Al Wadi, Mohd Tahir Ismail and Samsul Ariffin Abdul Karim, 2011, Discovering Structure Breaks in Amman Stocks Market, Journal of Applied Sciences, 6

12. Samsul Ariffin Abdul Karim, Bakri Abdul Karim, Mohd Tahir Ismail, Mohammad Khatim Hasan,Jumat Sulaiman, 2011, Application of Wavelet Method in Stock Exchange Problem , Journal of Applied Sciences, 6

13. Siok Kun Sek, Cheau Pian Ooi, Mohd Tahir Ismail, 2012, Investigating the Relationship between Exchange Rate and Inflation Targeting, Applied Mathematical Sciences, 13

14. Zetty Ain Kamaruzzaman, Zaidi Isa and Mohd Tahir Ismail, Mixtures of Normal Distributions: Application to Bursa Malaysia Stock Market Indices, 2012, World Applied Sciences Journal, 10

15. Alsaidi M. Altaher, Mohd Tahir Ismail, 2012, Local Polynomial Wavelet Regression with Missing at Random, Applied Mathematical Sciences, 15

16. Mufda Jameel Alrawashdeh, Shamsul Rijal Muhammad Sabri, Mohd Tahir Ismail, 2012, Robust Linear Discriminant Analysis with Financial Ratios in Special Interval, Applied Mathematical Sciences, 14

17. Alsaidi M. Altaher and Mohd Tahir Ismail, 2012, Robust Wavelet Estimation to Eliminate Simultaneously the Effects of Boundary Problems, Outliers, and Correlated Noise, International Journal of Mathematics and Mathematical Sciences, 18

18. Alsaidi M. Altaher, Mohd Tahir Ismail, 2013, Robust Wavelet Regression with Randomly Missing Data, International Journal of Applied Mathematics and Statistics, 12

19. Samsul Ariffin Abdul Karim, Mohd Tahir Ismail, Mohammad Khatim Hasan, Jumat Sulaiman,2013, Denoising the temperature data using wavelet transform, Applied Mathematical Sciences,10.

20. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi, 2014, Do the Choices of Indicators Affect the Predictability in Modeling an Early Warning System for Currency Crisis? An Analysis, International Business Management, 12.

21. Mufda Jameel Alrawashedh, Shamsul Rijal Muhammad Sabri and Mohd Tahir Ismail, 2014, The Significant Financial Ratios of the Islamic and Conventional Banks in Malaysia Region, Research Journal of Applied Sciences, Engineering and Technology, 8.

22. Nor Azuana Ramli,Mohd Tahir Ismail,Hooy Chee Wooi, 2014, Application of Fuzzy Optimization and Time Series for Early Warning System in Predicting Currency Crisis, Malaysian Journal of Mathematical Sciences, 15.

23. Amel Abdoullah Ahmed and Mohd Tahir Ismail, 2014, Wavelet Transform-Based Approach for Assess the Relationships between Stock Markets of Developed Countries and MENA Region, Journal of Applied Sciences,18.

	24. Seuk-Wai Phoong, Mohd Tahir Ismail and Siok-Kun Sek, 2014, Linear Vector Error Correction Model Versus Markov Switching Vector Error Correction Model to Investigate Stock Market Behaviour, Asian Academy of Management Journal of Accounting and Finance,18 25. Nor Azuana Ramli, Mohd Tahir Ismail, Hooy Chee Wooi, 2014, An Analysis on Two Different Data Sets by using Ensemble of k-Nearest Neighbor Classifiers , WSEAS TRANSACTIONS on MATHEMATICS, 9 **Non ISI/SCOPUS, other international database** 1. Mohd Tahir Ismail, Zaidi Isa, 2007, Detecting regime shifts in Malaysian exchange rates, Journal of Fundamental Sciences, 14 2. Mohd Tahir Ismail, Zaidi Isa, 2007, Regime Shifts in Malaysian Exchange Rates, Malaysian Journal of Science, (SKSM 14 Special Issue), 7 3. Mohd Tahir Ismail, Zaidi Isa,2008, Identifying Regime Shifts in Malaysian Stock Market Returns, International Research Journal of Finance and Economics, 2008,14 4. Mohd Tahir Ismail, Zaidi Bin Isa,2008, Modelling Nonlinear Relationship among Selected ASEAN Stock Markets, Journal of Data Science, 13 5. Mohd Tahir Ismail, Zaidi Isa,2008, Modeling Nonlinear Interaction among Selected Asean Exchange Rates, Journal of Probability and Statistical Science, 14 6. Mohd Tahir Ismail, Zaidi Isa,2009, A Study of Nonlinear Relationships Between World Oil Price and Malaysian Stock Price, Journal Of International Economic Review, 14 7. Mohd Tahir Ismail, Rosmanjawati Abdul Rahman, 2009, Modelling the Relationships between US and Selected Asian Stock Markets, World Applied Sciences Journal, 7. 8. S. Al Wadi, Mohd Tahir Ismail, M.H. Alkhahazaleh, Samsul Ariffin Abdul Karim, 2010, Orthogonal Wavelet Transforms in Forecasting Volatility: An Experimental Results, World Applied Sciences Journal, 10 9. S. al Wadi, Mohd Tahir Ismail,Samsul Ariffin Abdul Karim,2010, A comparison between the daubechies wavelet transformation and the fast fourier transformation in analyzing insurance time series data, Far East Journal of Applied Mathematics, 11 10. S. Al Wadi, Mohd Tahir Ismail, Samsul Ariffin Abdul Karim, Volatility Computational in Financial Time Series Data Based on Wavelet Transforms, International Journal of Mathematics & Computation, 2010, 7, 10, 12 11. Alsaidi M. Altaher, Mohd Tahir Ismail,2010, Automatic Polynomial Wavelet Regression for Signals with Non-Gaussian Noises, International Journal of Mathematics & Computation, 12 12. Zetty Ain Kamaruzzama, Mohd Tahir Ismail, 2011, Nonlinear Relationship of Crude Oil Price and Primary Commodity Prices, International Journal of Statistics & Economics, 15 13. Zetty Ain Kamaruzzaman, Zaidi Isa, Mohd Tahir Ismail, 2012, Bukti empirik ketidaknormalan bagi indeks bulanan pasaran saham bursa Malaysia, Journal of Quality Measurement and Analysis, 11 14. Chai Tew Ang, Norhashimah Morad, Mohd Tahir Ismail, Norli Ismail, 2013, Projection of Carbon Dioxide Emissions by Energy Consumption and Transportation in Malaysia: A Time Series Approach, Journal of Energy Technologies and Policy, 13 15. Faisal Ababneh, S. Al Wadi and Mohd Tahir Ismail, 2013, Haar and Daubechies Wavelet Methods in Modeling Banking Sector, International Mathematical Forum, 16 16. Phoong Seuk Yen and Mohd Tahir Ismail, 2013, Fitting Finite Mixture Model to Exchange Rate Using Maximum Likelihood Estimation, International Journal of Scientific & Engineering Research,5 17. Phoong Seuk Wai, Mohd Tahir Ismail,Sek Siok Kun,2013, Commodity Price Effect on Stock Market: A Markov Switching Vector Autoregressive Approach, International Journal of Scientific & Engineering Research, 6.

	18. Phoong Seuk Yen, Mohd Tahir Ismail, 2013, Rubber Price Effect on Exchange Rate: A Bayesian Mixture Model Approach, Information Management and Business Review, 7. 19. Phoong Seuk Wai, Mohd Tahir Ismail, Sek Siok Kun,2013, A Study of Intercept Adjusted Markov Switching Vector Autoregressive Model in Economic Time Series Data, Information Management and Business Review,7. 20. Phoong Seuk Wai, Mohd Tahir Isrnail, Sek Siok Kun,2013, A Markov Switching Vector Error Correction Model on Oil Price and Gold Price Effect on Stock Market Returns, Information Management and Business Review,6. 21. Amel Abdoullah Ahmed Dghais, Mohd Tahir Ismail, 2013, A Comparative Study between Discrete Wavelet Transform and Maximal Overlap Discrete Wavelet Transform for Testing Stationarity, International Journal of Mathematical Science and Engineering,5. 22. S. Al Wadi, Faisal Ababneh, Hazem Alwadi and Mohd Tahir Ismail, 2013, Maximum overlap discrete wavelet methods in modeling banking data, Far East Journal of Applied Mathematics, 10. 23. Abobaker M. Jaber, Mohd Tahir Ismail and Alsaidi M. Altaher, 2013, Automatic boundary correction using empirical mode decomposition and local linear regression, Far East Journal of Mathematical Sciences, 14. 24. Nor Azuana Ramli, Mohd Tahir Ismail, and Hooy Chee Wooi, 2013, Designing Early Warning System: Prediction Accuracy of Currency Crisis by Using k-Nearest Neighbour Method, World Academy of Science, Engineering and Technology, 6. 25. Amel Abdoullah Ahmed Dghais, Mohd Tahir Ismail, 2014, Analysis of the Relationship between US and MENA Stock Markets Based on Wavelet Transform, Journal of Basic and Applied Scientific Research,17 26. Lalitha Dhamotharan and Mohd Tahir Ismail.2015, The Behaviour of Exchange Rate and Interest Rate Differential in Malaysia: Evidence from Wavelet Analysis. Australian Journal of Basic and Applied Sciences, 6.
	Chapter In Research Book (non proceedings) each document 1. Mohd Tahir Ismail, S. al Wadi, Samsul Ariffin Abdul Karim, (2010). Forecasting Malaysia Stock Market Based on Wavelet Transformation Using Box-jenkins Model in M. T. Ismail and A. Mustafa (Eds.): Research in Mathematics and Economics, 7 2 Alsaidi M. Altaher, Mohd Tahir Ismail, 2011, Hybrid Local Polynomial Wavelet Shrinkage for Stationary Correlated Data, ,Communications in Computer and Information Science (Informatics Engineering and Information Science), Vol 253, 12
	Proceeding 1. Mohd Tahir Ismail, Zaidi Isa, 2008, Detecting and modelling nonlinear behaviour in commodity price time series, , Prosiding Simposium Kebangsaan Sains Matematik ke- 16, 7 2. Mohd Tahir Ismail, Samsul Ariffin Abdul Karim, 2008, Wavelet method in statistics, , Prosiding Simposium Kebangsaan Sains Matematik Ke- 16, 7 3. Husna Hasan, Mohd Tahir Ismail, Ahmad Abdul Majid, Jamaludin Md Ali, 2008, Penghayatan matematik di luar bilik darjah, Prosiding Simposium Kebangsaan Sains Matematik Ke- 16, 5 4. Mohd Tahir Ismail, Samsul Ariffin Abdul Karim, 2009, A study of structural breaks in malaysian stock market, , 5th Asian Mathematical Conference Proceedings (Volume III), 7 5. Zetty Ain Kamaruzzaman, Zaidi Isa, Mohd Tahir Ismail, 2010, Gelagat siri masa indeks pasaran saham bursa Malaysia, Proceedings of The 2nd International Conference on Mathematical Sciences (ICMS2 2010), 8

	6. Alsaidi M. Altaher, Mohd Tahir Ismail, 2010, Robust Polynomial Wavelet Regression for Boundry Correction , , Proceedings of The International Conference on Mathematical Applications in Engineering (ICMAE10), 6 7. S. Al Wadi, Mohd Tahir Ismail, Samsul Ariffin Abdul Karim, 2010, Forecasting financial time series data base on Wavelet transforms and Neural network model, , Proceedings of The International Conference on Mathematical Applications in Engineering (ICMAE10), 3 8. Mohd Tahir Ismail, 2010, Modelling the impact of US stock market on ASEAN countries stock markets, , Proceedings of the Tenth Islamic Countries Conference on Statistical Sciences(ICCS-X), 9 9. Alsaidi M. Altaher, Mohd Tahir Ismail, 2011, A new Method on Treating Missing Values in Polynomial Wavelet Regression, , Proceedings of The Annual International Conference on Operation research and Statistics (ORS 2011), 6 10. Noor Wahida Md Junus Mohd Tahir Ismail and Zainudin Arsad, 2014, Road Accidents Model: Time Series Regression versus Structural Time Series, , The 3rd International Conference on Computer Science and Computational Mathematics (ICCSCM 2014), 8. 11. Nor Azuana Ramli, Mohd Tahir Ismail, Hooy Chee Wooi, 2014, A Novel Nearest Neighbour Tree for Currency Crisis Forecasting, , 16th International Conference on Mathematical and Computational Methods in Science and Engineering (MACMESE '14),6. 12. Amel Abdoullah Ahmed Dghais and Mohd Tahir Ismail, 2014, Dynamic Relationship between the US Stock Market and the Stock Markets of MENA Economics, 2014 Fifth International Conference on Intelligent Systems, Modelling and Simulation, 6.
	Conference Presentation (oral and poster) 1. Regime switching models in ASEAN exchange rates, Gurney Hotel, Penang, 2005 2. The relationship among commodity price indices: a cointegration and markov switching vector autoregresssion approach, Pnb Darby Park, Kuala Lumpur, 2006 3. Modelling Nonlinear Relationship Among Selected ASEAN Stock Market, Legend Hotel, Kuala Lumpur,2007 4. Detecting regime shifts in Malaysian exchange rates, Hotel Concorde, Shah Alam, 2007 5. Penggunaan model pertukaran rejim dalam kajian siri masa pulangan pasaran saham di malaysia, Hotel Concorde, Shah Alam, 2007 6. Denoising Time Series Data Using Daubechies Wavelet Packet Transformation, Bogor, Indonesia, 2008, 7. Application of Wavelet Transform in Chemistry, Labuan, Sabah, 2008 8. Denoising Chemical Signals Using Wavelet Transform, Batu Pahat, Johor, 2008 9. Interaction Between Crude Oil Price and Other Commodities price, Maltepe University, Istanbul, Turkey, 2009, 10. Applications of Wavelet Method in Stock Exchange Problem, Kuala Lumpur Convention Centre, Kuala Lumpur, 2010 11. Detecting regime shift via wavelet transform, Bali, Indonesia, 2010 12. Impact of global financial crisis on precious metals returns: an application of arch and GARCH methods, Hotel Palm Garden, Putrajaya, 2012. 13. Multivariate Markov switching models: MS-VAR vs MS-VEC models, Seminar kebangsaan ism ke-8 (skism viii), Jabatan Matematik, Fakulti Sains Universiti Putra Malaysia & Institut Statistik Malaysia (ISM), 2014.

	14. Wavelet transform- based approach for assess the relationships between stock markets of developed countries and MENA region, International Statistical Institute Regional Statistical Connference 2014, International Statistical Institute (ISI), 2014.

1.3	**Research Grant**
	National **(ii) Project Head** 1. On The Choice Of Wavelet Basis Function For Analyzing Economic and Financial Time Series Data , KEMENTERIAN PENGAJIAN TINGGI , RM60,000.00, 1/11/2008-31/10/2011 **(iii) Co-researcher** will be awarded 1 mark each. 1. Extreme Value Theory (EVT): Modelling Of Meteorological Data, KEMENTERIAN PENGAJIAN TINGGI , RM105,000.00, Husna Binti Hasan , 1/8/2011-31/7/2013. 2. Building And Developing Agent Based Modelling For Higher Order Logic In Neuro Symbolic Integration , KEMENTERIAN PENGAJIAN TINGGI , RM66,099.00, Saratha A/p Sathasivam , 1/12/2013-30/11/2015 3. The formation of optimal monetary policy rule for ASEAN5 using DSGE model , KEMENTERIAN PENGAJIAN TINGGI , RM89,000.00, Sek Siok Kun , 1/7/2014-30/6/2017
	University **(i) Project Manager** 1. A Study of Structural Breaks in Malaysian Stock Market , USM (INSENTIF) , RM5,000.00, 19/6/2008-20/6/2008 2. The Application of Maximal Overlap Discrete Wavelets Transform in Financial Time Series Data , USM (JANGKA PENDEK) , RM30,400.00, 1/11/2010-30/4/2013 3. Modeling Economic Relationship using Markov Switching VAR and Markov Switching VECM , USM (JANGKA PENDEK) , RM40,000.00, 15/11/2013-14/11/2015 **(ii) Co-researcher** will be awarded 1 mark each. 1. Development And Simulation Of A Modified Pedestrian Crowd Dynamics Model , USM (RU) , RM196,030.28, Zarita Binti Zainuddin , 1/8/2010-31/7/2013 2. A Novel Hybrid Model for Supplier Selection , USM (JANGKA PENDEK) , RM40,000.00, Adli Bin Mustafa , 1/10/2010-30/9/2012 3. Exchange Rate Intervention and Its Impact on the Performance of Inflation Targeting in Emerging Economies , USM (RU) , RM118,100.00, Sek Siok Kun , 1/1/2011-30/6/2013 4. A Study of Some Domination Parameters In Graphs , USM (JANGKA PENDEK) , RM29,000.00, Roslan Bin Hasni @ Abdullah , 1/2/2011-31/1/2013 5. A Research On Sustainable Growth: Exploring The Aspects of Income Inequality, Environmental Quality and Effective Policy Regime , USM (RU) , RM67,011.40, Sek Siok Kun , 1/12/2011-30/11/2013 6. Higher Order Logic Programming in Radial Basis Network , USM (JANGKA PENDEK) , RM38,736.84, Saratha A/p Sathasivam , 15/6/2012-14/6/2014 7. Investigating the Impact of World Financial Crisis on the Dynamics of Market Integration Level and Macroeconomic Relationships for Malaysia , USM (JANGKA PENDEK) , RM33,950.00, Zainudin Bin Arsad

	, 15/6/2012-14/6/2014 8. Modelling Financial Time Series Data Using the Finite Mixture Model , USM (JANGKA PENDEK) , RM41,160.00, Rosmanjawati Binti Abdul Rahman , 15/8/2014-14/8/2016

1.4	**Other Publications**
	Editing of Books/Videos and Others 1. Ahmad Izani Md. Ismail,Yahya Abu Hasan, Adli Mustafa, Zarita Zainuddin Hailiza Kamarul Hail, Norhashidah Awang, Mohd Tahir Ismail (eds.), 2007, Proceedings of the 3rd IMT-GT 2007 Regional Conference on Mathematics, Statistics and Applications Penang, School of Mathematical Sciences,USM, 1085. 2. Mohd Tahir Ismail and Adli Mustafa (eds), 2009, Proceedings of the 5th Asian mathematical conference Vol. III: School of Mathematical Sciences, USM, 780 (Index in Zentralblatt MATH) 3. Mohd Tahir Ismail and Adli Mustafa (eds), 2010, Research in Mathematics and Economics, School of Mathematical Sciences,USM,152 4. Abd Rahni Mt Piah, Ahmad Abd Majid, Mohd Tahir Ismail (eds), 2011, Research in Applied Mathematics, School of Mathematical Sciences,USM, 168 5. Hailiza Kamarulhaili, Hajar Sulaiman, Mohd. Tahir Ismail, Suraiya Kassim (eds), 2011, Proceedings of the 4th National Conference on Graphing Calculators, School of Mathematical Sciences, USM, 170 6. Ahmad Abd. Majid, Mohd Tahir Ismail And Hajar Sulaiman, 2014, Research in Mathematical Sciences Volume 1, School of Mathematical Sciences,USM, 245 7. Ahmad Abd. Majid, Mohd Tahir Ismail And Hajar Sulaiman, 2014, Research in Statistical Sciences Volume 1, School of Mathematical Sciences,USM, 173 8. Mohd Tahir Ismail,syakila Ahmad,rosmanjawati Abdul Rahman, 2014, Proceedings of the 21st National Symposium on Mathematical Sciences (SKSM21: Germination of Mathematical Sciences Education and Research towards Global Sustainability, AIP Publishing LLC, 1213

2.0	**TEACHING AND SUPERVISION**
	Undergraduate Teaching/Post-Graduate Teaching 1. MAA161, Sem 2, 2006/07, Tahun 1,2, 199 2. MAA161, Sem 1, 2007/08, Tahun 1,2, 199 3. MAA 161, Sem 2, 2007/08, Tahun 1,1 , 165 4. MST 567, Sem 1, 2008/09, Sarjana,1, 1, 20 5. MSG 367, Sem 2, 2008/09, Tahun 3, 1, 46 6. MST 567, Sem 1, 2009/10, Sarjana, 1, 27 7. MAA 161, Sem 2, 2009/10, Tahun 1,1 , 85 8. MST 567, Sem 1, 2010/11, Sarjana,1, 1, 24 9. MAA 161, Sem 2, 2010/11, Tahun 1,1 , 70 10. MST 567, Sem 1, 2011/12, Sarjana,1, 1, 27 11. MST 565, Sem 2, 2011/12, Sarjana,1, 1, 34 12. MST 567, Sem 1, 2012/13, Sarjana,1, 1, 25 13. MST 565, Sem 2, 2012/13, Sarjana,1, 1, 24 14.MST 567, Sem 1, 2013/14, Sarjana,1, 1, 24 14. MST 565, Sem 2, 2013/14, Sarjana,1, 1, 15 15. MST 567, Sem 1, 2014/15, Sarjana,1, 1, 27

Graduate Supervision

Ph.D

1. Sadam Mahmoud Issa Alwadi ,2012, Wavelet Methods For Modelling Amman Stock Market Index, Main Supervisor.

2. Alsaidi Almahdi Mohamed Altaher, 2013, Robust Wavelet Regression with Automatic Boundary Correction, Main Supervisor.

3. Mufda Jameel Abdalhadi Alrawashdeh, 2014, Robust Linear Discriminant Analysis:- Comparison of Performance and Its Applications, Co-Supervisor.

4. Phoong Seuk Yen, 2015, Modeling The Relationship Between Rubber Price, Exchange Rate And Stock Price: A Finite Mixture Model, Main Supervisor

5. Nor Azuana Binti Ramli, 2015, Modeling Early Warning System Using Combination Of Logit Model And Nearest Neighbour Tree For Predicting Currency Crisis, Main Supervisor

Master's Dissertation (Mixed Mode)

1. Zahida Mohd Zainun, 2009, Penilaian jawapan pelajar berdasarkan set kabur, Main Supervisor

2. Teng Kui Guik, 2009 , A study of computational algorithms for Gaussian elimination, Lu decomposition and Cholesky decomposition, Main Supervisor

3. Zetty Ain Kamaruzzaman, 2009, Nonlinear relationship of crude oil price and primary commodity prices, Main Supervisor

4. Amel Abdoullah Ahmed, 2010 , The study of dynamic relationship between us stock market and selected middle east stock market, Main Supervisor

5. Mariana Mohamad Ali, 2010, Penggunaan model regresi logistik bagi mengukur kebarangkalian mendapat penyakit buah pinggang di kalangan pesakit diabetes mellitus, Main Supervisor

6. Nor Azriani Mohamad Nor, 2010, Modeling volatility of commodity prices: gold, silver and platinum, Main Supervisor

7. Rohaini Ismail, Master, 2010, The study on long memory: exchange rate data for Malaysia-Australia and Malaysia-Singapore, Main Supervisor

8. Nurul Najwa Jatarona, Master, 2010, Detecting structural break in commodity time series data, Main Supervisor

9. Phoong Seuk Wai, 2011, A study of international students enrolment in IPTA by using multilevel analysis, Main Supervisor

10. Siti Fatimah Ismail, 2011, Macroeconomic indicators and the demand for bank lending in Malaysia: A SVAR approach, Main Supervisor

11. Nur Amalina Shafie, 2012, Analisis Memori Jangka Panjang Dengan Menggunakan Jelmaan Wavelet Diskrit Pertindihan Maksima, Main Supervisor

12. Nurul Ain Abdullah, 2012, Impact of Global Financial Crisis on Precious Metals Returns: An Application of ARCH and GARCH Methods, Main Supervisor

13. Siti Salwana Mamat, 2013, Analyzing Meteorological Data Using Fast Fourier Transform and Wavelet Transform, Main Supervisor.

14. Khor Tong Hui, 2013, Modelling Signalized Intersection Using Queueing Theory, Main Supervisor

15. Mohd Halmi Mokhtar, 2013, Analyzing the Physical Activity Participation in Selangor and Pahang using

Logistic Regression Model, Main Supervisor.

16. Mohammed Jebur Mhawesh, 2013, The Logit Binomial Regression to Detect Risk Factors for Low Birth Weight, Main Supervisor

17. Bita Moradi Khaniabadi, 2013, Modeling Stock Market Relationship Using Logistic Smooth Transition Regression, Main Supervisor.

18. Chien Yah Kiing, 2014, The Relationship Between Exchange Rate Volatility on Export of Malaysian To Its Trading Partners, Main Supervisor.

19. Nuraini Ismail, 2014, Modelling and Forecasting The Volatility of Islamic Unit Trusts Returns in Malaysia using GARCH Models, Main Supervisor.

20. Wong Sui Loong, 2014, Investigation on House Price Index in Malaysia: Panel Data Approach, Main Supervisor.

21. Mohd Hafiz Mohd Alham, 2014, Relationship Between Gross Domestic product, Energy Consumption and Carbon Dioxide Emissions in South East Asia: A Panel Data Approach, Main Supervisor.

22. Siti Nurulizzati Ahmad Zaki, 2014, How the School Quality and Family Background Effect on Early Childhood Education for Children Developement Achievement: A Quantile Regression Approach, Main Supervisor.

23. Siti Nor Shadila Alias, 2012, Binary logistic regression modelling: measuring the probability of relapse cases among drug addict, Main Supervisor

Undergraduate Supervision

Final Year

1. Siew Wai Kuan, Jonathan Seet Meng Hock, 2009, Assessing The Impact Of Local Monetary Policy And International Markets On Malaysia Equity Market

2. Ong Qiao Ru Tham Wai Loon, 2009, ARIMA Model For Modeling And Forecasting Gold Price

3. Norhidayu Sulaiman, 2009, Time Series Modelling of World Rice Price

4. Mohd Saiful Husain Nik Mohd Akram Nik Adib, 2010, Time series analysis on tin price

5. Faylanie Freddie Luji, Tong Xiao Ting, 2010, Time series modeling for cocoa price

6. Intan Farhana Shazwani Zainul Aberdin, Nurul Hasanah Ismail, 2011, The relationship between gold price with selected macroeconomics variables in the US and UK

7. Khor Tong Hui, 2011, Risk analysis of the US, Japan and Malaysia stock markets: value at risk approach

8. Nurhanie Osman, Nor Adibah Mohammad Shaffie 2011, Application of linear programming in minimizing usm students daily spending budget on food

9. Mohd Hazwan Ahmad Damanhuri, Nur Jashidatul Huda Jamaludin, 2012, Financial ratio in construction

10. Intan Baizura Zulkafly, Hijjrahtul Nur Hamizah Husaini, 2012, Efficiency of foreign exchange markets: an asean countries perspective.

11. Norazlin binti Mat Wazir, Nor Idayu binti Mohd Subri, 2013, Permodelan dan Peramalan Pembolehubah Makroekonomi di Malaysia menggunakan model ARIMA.

12. Suhartati binti Anwar, Nurul Syahirah binti Abu Bakar, 2013, Time series analysis and forecasting of Malaysian crude oil price and production.

13. Nur Hazrina binti Mohammad, Ummi Syahada binti Mudzaffar Shah, 2013, Kajian hubungan antara kadar pengangguran, perbelanjaan kerajaan dan pertumbuhan ekonomi menggunakan pendekatan data

panel.

14. Mohd Sukry bin Mustapa, Farid Zamani bin Che Rose, 2013, Modelling and forecasting of precious metal prices.

15. Norasyikin binti Mahir, 2014, Modelling trending and relationship between various precious metals price.

16. Nurul Afina Abd Ghani, Nurul Mutiah Mohamad Rodi, 2014, Kajian kesan bermusim terhadap pasaran negara-negara ASEAN.

17. Abdul Hafizh Mohd Azam, Zulfahmi Zainul Abidin, 2014, Modelling the impact of crude oil price on its refinery products using VAR model.

18. Nordiyana Abu, Irni Syuhada Ibrahim, 2014, Analysis the effect of macroeconomic variables on stock market index among ASEAN countries.

19. Lee Wen Jye, 2014, Modelling stock market using GARCH models.

3.0 ACADEMIC RECOGNITION AND LEADERSHIP

Assessor / Examiner

1. K. Ravikumar, 2011, Doctor of Philosophy (thesis entitled Contributions to the Study of Application of Wavelets and Allied Techniques in Time Series) Annamalai Universiti, India.

2. Yuyun Hidayat, 2014, Doctor of Philosophy (thesis entitled Development Methodology of Forecasting The Time for Rice Crisis in Bandung), Universiti Malaysia Terengganu, Malaysia

Internal Examiner for Thesis:

1. Mohammad Hani Mufleh Almomani, 2012, Doctor of Philosophy (thesis entitled Statistical Selection Procedure for Large Scale Problems), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia.

2. Nor Aishah Ahad, 2012, Doctor of Philosophy (thesis entitled Performance of the Modified Wilcoxon Procedure with Pseudo-Medians), Pusat Pengajian Pendidikan Jarak Jauh, Universiti Sains Malaysia.

3. Luthful Alahi Kawsar, 2015, Doctor of Philosophy (thesis entitled Optimization Based Controlled Evacuation System Using Generalised Padestrian Speed-Density Relationship) Pusat Pengajian Pendidikan Jarak Jauh, Universiti Sains Malaysia.

4. Yeoh Bit Kun, 2011, Master of Science (thesis entitled Investigating Dynamics of Market Integration Level and its Determinants for ASEAN-5), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia.

5. Anisah Abd. Rahman, 2008, Master of Science (Mathematics), (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia

6. Norul Baine Mat Johor, 2009, Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia.

7. Nabeela Saeed Alsinidi, 2009 Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia

8. Yeong Wai Chung, 2010, Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia

9. Siti Faizatun Shafii, 2010, Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia

10. Song Poh Choo, 2011 Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia

	11. Anisah Mardhiah Mazpar, 2011, Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 12. Mohd. Saiful Husain,2011, Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 13. Noor Fadhilah Ahmad Radi, 2011, Master of Science (Statistics) (mixed mode). Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 14. Lim Ching Mun,2012, Master of Science (Statistics) (mixed mode), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 15. Norfatin Salam, 2012,Master of Science (Statistics) (mixed mode), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 16. Sayed Kushairi Sayed Nordin, 2012, Master of Science (Statistics) (mixed mode), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 17. Tan Bee Huen, 2013, Master of Science (Statistics) (mixed mode), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 18. Lim Shu Yi, 2013, Master of Science (Statistics) (mixed mode), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia. 19. Khoo Yi Theng,2014, Master of Science (Statistics) (mixed mode), Pusat Pengajian Sains Matematik, Universiti Sains Malaysia.
	Reviewing Articles in Academic Journals / Assessor of Working Papers / Reviewing Books 1. H. Stanley, 2007, Heavy-tailed Value-at-risk analysis for Malaysian Stock Exchange, Physica A 2. Prof Dr. Roslan Abd. Shukor, 2008, Comparing the Accuracy of Density of Forecasts from Competing GARCH Models, Sains Malaysiana 3. Prof. Dr. Abd Ghani Md. Rafek, 2008, Model Kualiti Pendidikan Menggunakan Pendekatan Kerangka Input-Proses-Output(IPO), Sains Malaysiana 4. Robert G Aykroyd, 2009, Optimal Choice of Sample Fraction in Univariate Financial Tail Index Estimation, Journal of Applied Statistics 5. Mustafar Kamal Hamzah, 2010, Evaluating Spatial and Temporal Effects of Accidents Likelihood Using Random Effects Panel Count Model, Proceedings of The 2010 International Conference on Science and Social Research. 6. Dr. Y Rama Krishna, 2011, Efficiency of Foreign Exchange Markets: A South Asian Countries Perspective, International Research Journal of Applied Finance 7. Mustafar Kamal Hamzah, 2011, The impact of subprime mortgage crisis on the short-run and long-run volatility components of the Malaysian stock market, Proceedings of 2011 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA2011) 8. Mustafar Kamal Hamzah, 2011, Asymmetric and Long Memory Volatility Modelling for Asian Equity Markets, Proceedings of 2011 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA2011) 9. Zulhabri Ismail, 2011, Forecasting on the Crude Palm Oil and Kernel Palm Production: Seasonal ARIMA Approach, Proceedings of 2011 IEEE Colloquium on Humanities, Science & Engineering Research 10. Mustafar Kamal Hamzah, 2011, Stochastic Model Considering Individual Satellite Signal Quality on GPS Positioning, Proceedings of 2011 IEEE Conference on Computer Applications and Industrial Electronics 11. Prof. Ruhani Ali, 2011, Impact of financial crisis on Islamic and conventional stocks in emerging market:

	an application of ARCH and GARCH method, Asian Academy of Management Journal of Accounting & Finance 12. Mohammad Siddique, 2012, Description of Models of Complex, Hard Forming Objects, Applied Mathematics 13. Zulhabri Ismail, 2012, International Trade Competitiveness of Emerging ASEAN5+4 Countrie, Proceedings of the 2012 IEEE Symposium on Business, Engineering & Industrial Applications 14. Zulhabri Ismail, 2012, Forecasting Gold Bullion Coin Selling Prices using ARIMA Model, Proceedings of the 2012 IEEE Symposium on Business, Engineering & Industrial Applications. 15. Prof. Ruhani Ali, 2012, Comovement between Islamic stock returns and conventional stock returns and LIBOR:Evidence from Wavelet and Spectral approach, Proceedings of the 14th Malaysian Finance Association Conference 2012. 16. Prof. Ruhani Ali, 2012,Islamic versus Conventional Stock Indices: A comparative study of risk-return profile using wavelet analysis, Proceedings of the 14th Malaysian Finance Association Conference 2012. 17. Prof. Dr Obiyathulla Ismath Bacha, 2013, Banking, Competition and Market Structures: Panel Evidence from Jordan and Gulf Cooperation Council Countrie, Proceedings of the 15th Malaysian Finance Association Conference 2013. 18. Prof. Zaidi Isa, 2013, The Application of the Threshold Model to Modelling and Forecasting of Exchange Rates in Selected ASEAN Countries, Sains Malaysiana. 19. David Thomas, 2013, Role of Rank Set Sampling in Improving the Estimates of Population Mean under Stratification, American Journal of Mathematics and Statistics. 20. Prof. Dr. Abu Hassan Shaari Mohd Nor, 2014, Dynamic relationship Between Stock Market Volatility and Macroeconomic Volatility: Evidence of Malaysia, Jurnal Ekonomi Malaysia. 21. Mohamed Seddeek, 2014, Forecast performance of multiplicative seasonal ARIMA model: an application to naira/us dollar exchange rate, American Journal of Applied Mathematics and Statistics. 22. Qazi Muhammad Adnan Hye, 2014, Financial Analysis of Waqf Real Estate Revenues in the West Bank: 1994-2014, Asian Economic and Financial Review. 23. Mohamed Seddeek, 2014, Modeling Volatility under Normal and Student-t Distributional Assumptions, American Journal of Applied Mathematics and Statistics.
	Editorial Board (per appoinment) 1.Member of Editorial Board, International Research Journal of Applied Finance, 1/12/2010- now
	Member in Professional / Academic Associations **Member (per society)** 1. Persatuan Sains Matematik Malaysia (PERSAMA), Members , National 2. International Association of Engineers (IAENG), Members ,International 3. International Association of Computer Science and Information Technology(IACSIT), International 4. Institut Statistik Malaysia (ISM), Members, National **Committee Member (Conference / Seminar /Workshop)** 1. Committee Member of the 3rd IMT-GT Regional Conference on Mathematics, Statistics and Applications (IMT-GT RCSMA 2007), 5-6 Disember 2007

	2. Committee Member of the 3rd National Conference on Graphics Calculator (NCGC 2008),16-18 April 2008 3. Committee Member, the 5th Asian Mathematical Conference (AMC) 2009, 22-26 June 2009. 4. Treasurer, South China Sea Tsunami Workshop 3 (SCSTW 3) 2009, 3-5 November 2009 5. Committee Member of the 4th National Conference on Graphics Calculator (NCGC 2011), 21 – 26 June 2011 6. Chairman of the 21st National Symposium of Mathematical Sciences (SKSM21), 6-8 Nov 2013.