



# AERC VOICE

Newsletter, December 2015, Issue No. 8



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**Applied Economics Research Centre**  
University of Karachi

**Editorial Committee:**

Uzma Iram  
Mohsin Hasnain Ahmad  
Nigar Zehra  
Humera Sultana  
Sadaf Majeed  
Narjis Khatoon

**Graphic and Design:**

Sharafatullah Faheem

## From the Desk of Editor

Dear AERC Colleagues and Readers,

We welcome you to review the 8th Issue of AERC Voice, being the result of your overwhelming appreciation and likeness of previous issues. It made us work harder and to sincerely concentrate in improving the quality of this Newsletter. The Editorial committee is very much encouraged with the successful on-line presentation, as well as release of hard copy of all previous issues of AERC Voice Newsletter. During the last two years, AERC Voice feels proud in presenting news and stories from every corner of the Centre. For further interest of the readers we have, of course, continued the traditions in communicating significant events and up-to-date activities of our Institution. I would now like to thank my Editorial Committee for their hard work to bring this issue in your hands. I am sure joint efforts of all contributors made our task easier to achieve the heights of success. It may not have been possible without their help for AERC Voice's timely publication and on regular basis. Last but not the least, I would like to extend special thanks to Mr. Joseph Cyprian for his editing support. That is all for now, and expect you to enjoy a happy reading!

The AERC Voice wishes its readers a very happy and prosperous New Year 2016.

*Uzma Iram*



## Message from the Acting Director Prof. Dr. Moonis Ahmar

It gives me great pleasure to write these few lines for AERC VOICE. In the last three months, AERC has kept itself engaged in academic activities by holding its lecture series, publishing its bi-annual research journal and maintaining its MS, M. Phil and Ph.D. programs. Furthermore, one major achievement of AERC was the signing of Memorandum of Understanding (MoU) with Institute of Cost And Management Accountants, Pakistan in November 2015. It is expected that AERC will not only sustain its academic profile in coming months but will also enhance the pace of its work particularly by seeking research collaboration with different organizations for mutually beneficial relationship.



## Impacts of climate change and adaptation on the availability of water: A case of agriculture in Pakistan

*Samina Khalil*

The paper explains that the climate of a region is a key factor that ascertains the availability of water resource. The global phenomenon of climate change has increasingly instigated rise in average global air and temperature of oceans. Mounting global sea levels and pervasive melting of glaciers are evident consequences of climatic changes in the last few decades. Changes in atmospheric temperature and radiation balance are closely linked to the hydrological balance. The hydrological cycle gets intensified due to higher temperature of climate which in turn results into increasing rate of evaporation and liquid precipitation. It is quite evident that these processes along with the changing pattern of precipitation have profound impact on the spatial and temporal distribution of soil moisture, groundwater reserves and runoff etc. This could trigger the intensity and reg-

ular occurrence of floods and droughts. Agricultural demand, particularly for irrigation water is considered more sensitive to climate change. A change in field-level climate may alter the need and timings of irrigation. The demand for water for irrigation purpose may increase with the increase in dryness and on other hand it may reduced if soil moisture content rises at critical times of the year. It is projected that most irrigated areas in Pakistan would require more water around 2030 and global net irrigation requirements would increase relative to the situation without climate change by 3.5–5% by 2030, and 6–8% by 2075. The effect of climate change on water resources may be mitigated through better water harvesting and by micro-storage facilities in watersheds. These would not only provide supplemental irrigation but also recharge the groundwater aquifers.

*Continued on Page 2*

## The impact of age structure on the household saving: The empirical investigation for SAARC Countries

*Mohsin Hasnain Ahmed and Noman Saeed*

The effect of demography on economic performance has been the subject of intense debate in relevant literature for nearly two centuries among researchers and policy makers. The demographic variables are considered important for domestic saving in developing economies. The population structure has been identified as a factor affecting saving behavior in Less Developed Countries (LDCs). Changes in the dependency ratio affects saving behavior, not only in the form of changed demand for health expenditures, human capital formation, and retirement consumption levels, but this ratio can affect government expenditures.

In 1950 the world population was 2.52 billion, which reached to 60.06 billion in 2000 and expected to approach 8.3 billion in 2030. During the period of 2000 to 2030, the population size will be almost remain the same in developed world, while the population of less developing countries will be increased from 4.87 to 7.1 billion during the same period.

(UN 2001). South Asia is included among those regions, which are highly populated. Currently its population is around 1.45 billion, almost 22.1% of world population; it contains more than 40 percent of the world's poor. High population and low real per capita income during the past four decades seems to be eroding the economic and social progress of the region. Historically South Asia's saving performance is not very impressive relative to other developing countries in the world except India that had experienced sustained high growth. Gross domestic saving (% GDP) have increased from 11 % to 21 % from 1960 to 2010 in South Asia. Pakistan and Bangladesh domestic saving performance is very low related to other countries in world during the period of 1960 to 1980, however after 1990s slightly increased in the performance of domestic saving but remain very below other developing countries.

*Continue on Page 2*

**Impact of climate change and adaptation on the availability of water: - Continued from Page 1**

Global weather changes and water- resources are deeply inter-related. The largest source of freshwater is rain. Global climatic changes will have major effects on precipitation and runoff. In the relatively arid and semi-arid regions, modest changes in precipitation can have proportionally large impacts on water supplies. In mountainous watersheds, higher temperatures will increase the ratio of rain to snow, accelerate the rate of spring snowmelt, and shorten the overall snowfall season, leading to more rapid, earlier, and greater spring runoff. Because the temperature projections of climate models are less speculative than the projections of precipitation, temperature-induced shifts in the relative amounts of rain and snow and in the timing of snowmelt in mountainous areas are considered highly likely. Climate-induced changes in hydrology will affect the magnitude, frequency, and costs of extreme events, which produce the greatest economic and social costs to humans. Flooding could become more common and extreme. Recent reports of the Intergovernmental Panel on Climate Change (IPCC) suggest that a greenhouse warming is likely to increase the number of intense- precipitation days as well as flood-frequencies in northern latitudes and snowmelt-driven basins. These reports also suggest

that the frequency and severity of droughts could increase in some areas, as a result of a decrease in total rainfall and more frequent dry spells.

The developing countries of Asia, like Pakistan, where impacts of climate change are likely to be felt most severely because of resource and infrastructure constraints, need to develop and implement incremental adaptation strategies and policies to exploit no regret measures and stressing the importance of considering climate change in planning, designing and implementing development activities.

The first is a macro strategy and involves rapid sustainable and equitable development that will increase income levels; education and technical skills; improve public food distribution, disaster preparedness and management and health care systems and reduce vulnerability. The second strategy is a micro strategy and involves the management of sectors most sensitive to the climate change. This means developing new institutions or modifying existing ones to promote adaptation to climate change. It would also involve modifying climate-sensitive infrastructures already planned or implemented or other long-term decisions that are sensitive to climate.

**The Impact of age Structure on the household saving: - Continued from Page 1**

This study presents the justification of the change in the aggregate household saving rate in selected SAARC countries through the estimation of a saving function. The household saving function captures the impact of young dependency and old dependency, growth rate, per capita income, inflation rate, real interest rate and public saving.

The findings of research study has some important policy implications regarding performance of savings in these economies: young dependency, income and growth are consistent main variables contributing in household saving in these countries .Findings suggest that dependent population and income and growth are crucial for household saving in these economies. Therefore, policy implication, which could be drawn from this study, is the need to lower the fertility level through family planning that is the highest among the developing countries and efforts to en-

hance income and economic growth potential could be rated as one of the important policy measure to promote household saving behavior in these countries.

Furthermore, Inflation is source of macroeconomic instability that which inversely effects the household saving .Findings suggest that planned growth trajectory maintain a healthy balance between restrain inflation and facilitating investment growth in a non-inflationary environment.

Government of these economies through prudent policies could raise public savings rates, through reforms of public enterprises, local government finances and the central government budget which may contributing to raising the total savings rates. Household savings could be improved due to better access and spread of banking system, especially in remote areas may be helpful in improving the household savings rate.

**AERC NEWS****Faculty Development**

Dr. Samina Khalil presented a paper titled ‘Impacts of climate change and adaptation on the availability of water: A case of agriculture in Pakistan’ in accordance with the conference thematic area: Environmental Protection and Natural Resource Management. International Scientific Agriculture Symposium “Agrosym 2015” was held on Jahorina mountain (near Sarajevo- Bosnia Herzegovina) from October 15-18, 2015, under the auspices of University of East Sarajevo, Faculty of Agriculture, Bosnia and Herzegovina, University of Belgrade, Faculty of Agriculture Serbia and Mediterranean Agronomic Institute of Bari (CIHEAM-IAMB).



The thematic areas which were discussed during Agrosym 2015 are: (i) Plant production, (ii) Plant protection and food safety, (iii) Organic agriculture, (iv) Environment protection and natural resources management, (v) Animal husbandry, (iv) Rural development and agro-economy, (vii) Forestry and agro-forestry.

On June 05, 2015 (Friday) being the occasion of global Earth Day, Dr. Samina Khalil participated in the National Conference was held on Defence Creek Club, Karachi, on ‘Promoting Sustainable Consumption and Production Practices’ organized by the Foundation for Progress, in collaboration with the Department of Environment, Government of Sindh under the auspices of United Nations Environment Program (UNEP). She presented an informative research paper on “Climate Change: Disasters and Conflicts -- A case of Pakistan”, which was very well appreciated and applauded by the audience.



## Faculty Development

Dr. Anjum Aqeel was invited to attend a very prestigious international conference “EcoMod 2015” held in Boston, USA in July, 2015. Academicians, international researchers, policy makers and modeling experts from all around the world attended the conference. Dr. Aqeel presented a paper entitled: ‘Determinants of Migration in Pakistan’. Her paper was one of the 102 carefully selected papers from the 223 excellent papers submitted from 51 countries, by the Program Committee of the Conference.



## Award of Doctorate Scholarship

One of the Staff Economist at the AERC, Mr. Tehseen Iqbal is awarded a scholarship from the AERC recently to proceed abroad for a Ph.D. Degree from the University of Kent, UK. He will pursue his doctorate research in the area of international economics. Congratulations for scaling new heights and setting new standards. AERC Voice joins the AERC staff in wishing him the best in achieving his goals and success in his future endeavours, as well.



## Inception of PhD Program

After completion the First year of PhD program successfully, AERC Voice is proud to announce the commencement of Second batch from January 2016. This batch provided admission to 13 students after a careful scrutiny, appearing test and interview. The final list of successful candidates, displayed on 18th November 2015, await our warm WELCOME. Congratulations to in-coming future PhDs.

## Honor for AERC’s New Faculty Staff

AERC’s faculty members are invited for Annual Lunch, managed by Karachi University Teacher’s Society (KUTS) every



year. In November 2015, AERC faculty was invited to join KUTS annual lunch. It is our pleasure to announce that Ms. Sadaf Majeed, Ms. Narjis Khatoon, Ms. Lubna and Ms. Uzma Tabassum [All new staff members] received Welcome Shields from KUTS on joining the AERC. Being a great honour for new entrants, we congratulate and wish them all praises in their bright career ahead.

## Ceremony for Signing Memorandum of Understanding

A Ceremony of MoU Signing was held between Applied Economics Research Centre (AERC), University of Karachi and Institute of Cost and Management Accountant of Pakistan (ICMA), Karachi. The event took place at the AERC premises on November 24, 2015. Prof. Dr. Moonis Ahmar, Dean Social Sciences & Director AERC and Dr. Samina Khalil, Incharge AERC



signed on the MoU documents on behalf of the AERC to collaborate for research, development, innovative and publication activities including: (i) collaboration in the areas of mutual interest; (ii) exchange of information, scholastic material, development material, sharing and advancing innovations and ideas and undertake publications; and (iii) other such related works and for this purpose share intellectual and physical resources, hold meetings and initiate projects. The mutually decided objectives, assignments, tasks, study, survey, feedback, opinion seeking and other works related to research, development, innovation and publications within the country and abroad on non-financial terms shall be called Research Collaboration and will be covered under the RDI Agreement. Whereas mutually decided objectives, assignments, tasks, study, survey, feedback, opinion seeking and other works related to research, development, innovation and publications within the country and abroad on financial terms shall be called Joint Project.

## GOOD BYE

### Ms. Shehla Zahid

Wishing good-bye to Ms. Shehla Zahid [Deputy Librarian at AERC] this time, we are blended with mixed emotions. We are glad that Ms. Zahid retired on September 9th 2015 on attaining the age of superannuation after serving for 35 years and on successful completion of service. She started her career at the AERC in January 1981 and immediately involved herself in the development of Library. During her assignments, she conducted various events and programs, like “World Bank Day”, library weeks, conferences, and so on. She was engaged with her team to manage Books, Journal, Reports, and Surveys in a simple catalogical style. She was awarded scholarship for post graduate diploma in Library Management in 1993 from Haagse School of Netherland, and funded by PLA (Pakistan Library Association) and NLDP (Netherlands Library Development Projects). Her Ph.D. is in progress from the European Studies Centre, University of Karachi. In honour of her outstanding service to library profession, Ms. Zahid received life-time achievement award from PLA Sindh Branch in 2011. Ms. Zahid’s Congratulations! Her retirement actually means that she is promoted to one of her best roles in life. We wish her all the best and appreciate her 35 years of dedication, enthusiasm, friendliness and team spirit.



### Farewell to Retired Staff

Keeping in view its past trend, the AERC staff organized its 4th mega farewell party on 12th August 2015. A memorable celebration was held in the AERC's own auditorium, to applaud the services of Ms.Nighat Bilgarmi-Jaffery, Dr. Syed Ashraf Wasti, Mr. Riaz Hussain, Ms. Shahnaz Rashid, Ms. Shehla Zahid, Mr. Ashfaq Hussain, Mr. Lal Mohammad, Nazeer Hussain and Ghulam Abbas, who retired during 2013 to 2015. It was once again, a memorable moment of excitement to invite our retired staff as a token of AERC's remembrance.



Commencing the program in the name of Almighty ALLAH, recitation from The Holy Quran was taken. Dr. Moonis Ahmar, Dean Social Science/Director AERC and Dr. Samina Khalil, In-charge AERC along with the faculty of AERC welcomed the guests. Mr. Zia Abbas hosted the program with his attractive style by inviting all guests on the stage. During his welcome address, he praised their performance undertaken with fullest responsibilities and an air of dignity in every respect. All retired participants shared their memories and views on all thrilling moments during their service at the Centre. The speeches from all retired persons were impressive and emotional. The audience enjoyed their experience and communicated mutually in a friendly atmosphere. Ms. Amtul Wadood praised the achievement and success of retired persons in her own poetry, which was highly appreciated. She also shared her good memories with Ms. Shehla Zahid in a sentimental mood. Moreover, Dr. Moonis Ahmar and Dr. Samina Khalil addressed in the honour of retired guests and appreciated the organizers efforts to make the event more exciting and inspiring, as usual. The distribution of TITLES during the ceremony flashed as the most unforgettable moment in the heart of retired staff. All titles



matched significantly with their impressive personalities. At the end of this event, Shields, Bouquets and Gifts were given to all retired persons. AERC Voice thanks to the organizers in their best efforts to make the event excitingly cheerful, successfully colourful and productively unique.

### Seminar Series

Applied Economics Research Centre (AERC) organized a lecture under its regular feature pertaining to Dr. Ehsan Rashid Memorial Lectures Series on the topic entitled: "Development Vision & Strategy for Regional Development: Case of Balochistan" on 28th October 2015.



The guest speaker, Dr. Kaiser Bengali is the Adviser to the Chief Minister's Policy Reform Unit, Government of Balochistan, stated that despite the passage of nearly seven decades of Independence, Balochistan's physical and social infrastructure development remained frozen in time. Vast areas of the province are without roads, electricity, and water supply and/or even lack educational, employment opportunities and health facilities. Given that minor crops and livestock sectors account for a quarter of the provincial economy, Balochistan is still in the horticultural and pastoral age, as manufacturing and finance account for a mere 9% only. Balochistan has an infrastructure deficit and from the primary sector economy, it is imperative that attention is focused on development of basic infrastructure and primary sectors to create a sound basis of further growth of secondary and tertiary sectors. And given the resource constraint, it is also imperative that development is concentrated in selected sectors and in selected areas, i.e., growth nodes, that can be expected to create a pull effect for the rest of the sectors and areas. Dr. Bengali concluded the seminar on few suggestions, stating that Balochistan should be pulled out of the relatively low-value added primary and pastoral sectors in order to develop it as a natural resource economy. Balochistan is a resource rich province with a manageable population of only 1.5 million families. We need to create 1.5 jobs to reduce unemployment and poverty, as well, to zero. This is doable!

### Eid Milan Party

AERC simultaneously celebrated a Happy Eid through its Eid Milan Party, along with its retired staff on the same day. This event was full of enjoyment, fun and games with the participation of the audience. The atmosphere became delightful and glowing with their support and would be remembered as the best moment



in times to come. A grand lunch was served in the end which refreshed the participants of this pleasurable and friendly environment. The AERC Voice surely assumes that everyone enjoyed this event whole-heartedly and wishes that the next party would be more magnificent and enjoyable.



## Condolence

AERC Voice is deeply saddened by sharing the news about Mr. Rashid who passed away on 8th December 2015. Mr. Rashid joined the centre in 2005 and by all accounts, he was a hard-working Driver, caring co-worker, and dedicated family man.



His colleagues report feelings of shock and grief at his death, and describe the empty space he will leave behind--not just on his show--but in the morale of his workplace.

AERC Voice and staff will never forget his gentle and egocentric image. May God give his eternal rest and the family the strength to bear the great loss. We extend our most heartfelt sorrow and condolences to his family and prays that God will grant strength needed to get through this moment in their life.

## Alumni NEWS

### Where are they Now!

#### Dr. Abdul Waheed

AERC Voice is pleased to introduce Dr. Abdul Waheed as an Alumni of AERC. Dr. Waheed is an economist with expertise in International Development and specializes in economic issues of South Asia. Dr. Waheed achieved his Ph.D. degree in International Development from Nagoya University, Japan, under Japanese government Monbusho fellowship in March 2005, and successfully completed this Post Doctorate research under Japan Society for the Promotion of Science (JSPS) fellowship in September 2006. Dr. Waheed was invited as guest speaker by the Government of South Korea in October 2007 to make a presentation on “Financial Social Accounting Matrix of Pakistan” constructed by him during his post doc research. The Institute of Developing Economies also invited him to Tokyo, Japan in 2009 as Visiting Research Fellow, to conduct research on “Financial Sector Reforms in Pakistan”. During the last twenty years he has had the opportunity to teach various courses at graduate and post graduate levels in different educational institutions at national and international levels. He has been participating in a wide variety of research projects. As an outcome of his research activities, he has twenty-two scholarly contributions in peer reviewed international academic journals (some of them are listed in Thomson Reuters. Impact Factor journals), a chapter in a book and a monograph. Dr. Waheed participated in many international conferences and workshop held in different countries. He has been the Chairman of the Department of Economics, member Senate, Academic Council, and Board of Governors AERC, at University of Karachi. He is also member of advisory board of different research journals. Currently he is Associate Professor at the Department of Economics & Finance, College of Business Administration, University of Bahrain, Kingdom of Bahrain. We heartily congratulate him on all her enormous endeavors during his bright journey of success and keep best wishes for more success and happiness.



#### Dr. Sabir Afridi

Dr. Sabir Afridi is an Alumni of AERC. After completion of MAS, Dr. Afridi completed his PhD in Economics from VU University Amsterdam, The Netherland. Dr Afridi is currently working as an Assistant Professor at the department of Management Science and Humanities, Giki Topi, Swabi in Pakistan. He is an author of many research articles in professional academic journals, and has many research articles on transport infrastructure and economic growth. Indeed Dr. Afridi proved his excellent personality not only in the field of teaching and research but performed many administrative tasks successfully. Presently he is a member of ERSA (European Region science Association). Moreover, he has been engaged as a member of NECTAR (Network of European communication and Transport Activities Research), European Association of Environment and Resource Economics (EAERE) and World Conference on Transport Research Society (WCTRS). We congratulate him for his past success and have all praise and wishes for his future endeavor.



#### Quote

*Successful people maintain a positive focus in life no matter what is going on around them. They stay focused on their past successes rather than their past failures, and on the next action steps they need to take to get them closer to the fulfillment of their goals rather than all the other distractions that life presents to them.*

**Jack Canfield**

## Pakistan Independence Day Celebration

Independence Day is celebrated each year whole-heartedly with patriotic enthusiasm in order to revitalize the nation's harmony. The nations are recognized by the zeal and zest of their youth. They must be hard working, well educated, highly skilled, and dedicated to face unforeseen catastrophes within the country. The youth in Pakistan is an asset of distinction and their distinguished glimpses shine among the students of AERC. The students proved it during 14th August celebrations this year. The students proudly organized this event



with discipline and keenness to show their best efforts to be remembered till the celebrations in coming years. LONG LIVE PAKISTAN. Ms. Farah Naz and Ms. Javeria hosted the program jointly and welcomed Dr. Monis Ahmer, Dean of Social Science/Director AERC and Dr. Samina Khalil, In-charge AERC, along with other AERC faculty and staff. Mr. Hafiz Habib (MAS student) recited the Holy Quran and a Naat Sharif was delivered as a prayer by Mr. Tahir (A student). The whole event continued by the deliverance of different segments. The best patriotic songs were sung by MAS students (Sheeba, Neelam, Amna, Hira, Fatima, Hina & others), while the segment of quiz was hosted by Ms. Nida. She asked many relevant questions regarding the event from the audience and handed over the gift for correct answers. The great event eventually reached to its peak when poetries by Ms. Neelam, Ms. Sheeba and Ms. Amna were delivered. The verses captured the attraction of the listeners, who expressed and showered all praises by the high noises of clapping. The participation of the staff was noticed when they involved themselves in expressing their feelings regarding the occasion. Eventually, ever green national songs boosted the expression of all participants, particularly the National anthem. This event became more pleasant when Dr. Mohsin Husnain Ahmad and Dr. Uzma Iram created more excitement among the audience by singing the national songs and relevant poems. The presence of Dr. Moonis Ahmar and Dr. Samina Khalil was well recognized and both appreciated the whole event, making it more valuable for the audience.

## CONGRATULATIONS: Honor of AERC's Students:

The high quality of learning through transparent assessment from admissions to the completion of MAS, places our graduates ahead in competition at leading institutions across the country. We proudly integrate our brilliant students who are undertaking their responsibilities and activities with dignity and self-confidence at renowned positions in ADB, IFPRI, WB, SBP (to name a few) and many other national and international organizations. AERC Voice takes the opportunity to highlight the top positions of MAS students in the 2014-15 session: Mr. Usama Ehsan secured First position with CGP at 3.84%, whereas Ms. Muniza with CGP at 3.803%, stood Second. The Third position was attained by Ms. Shazmen Maroof with CGP score of 3.600%. AERC Voice deeply congratulates them for their success and extends its best wishes for their bright future ahead.



## Award of Doctorate Scholarship

AERC Voice congratulates Ms. Shazmeen Maroof (MAS student of 2014-15) on receiving research grant from University of Strathclyde, UK. Ms. Maroof has recently been awarded Ph.D. scholarship for higher studies at the University of Strathclyde in Scotland [Glasgow] in United Kingdom for her doctorate research in economics. Congrats! Since Ms. Maroof has made us proud, we pray for her success and higher achievements in future, as well.





## M.Phil. Thesis Series

### Determination of Capital Structure, Dividend Decision and Insider Ownership in Pakistan: A Simultaneous Equation Approach

*Abmad Ghazali*

Abmad Ghazali completed his M.Phil thesis, under the supervision of Dr. Muhammad Nishat and Dr. Mahpara Sadaqat. His study empirically examined the corporate governance from an agency cost perspective and tries to evaluate the governance; ownership and control relate variables which are hypothesized to mitigate the agency problems. This study also tried to evaluate the effectiveness of corporate governance mechanism for the controlling of level of agency related costs and the examination of the incidence of agency costs among companies listed on the Karachi Stock Exchange (KSE) over the period from 2005 to 2008. To measure the agency cost levels his research used four measures of agency costs: asset utilization ratio, free cash flow and growth, discretionary expenditure ratio and Tobin's Q ratio. It is found that Pakistani firms have increasing agency problems as compare to US and Australian companies. Factors that have more impact on the agency problems are related to independence of the board, CEO and chairman is the same person and ownership by the institutions. Some non linear relation is found between external ownership and agency problems. It is found that from corporate governance attributes, CEO-chair duality reduce discretionary expenditure ratio, enhance the free cash flow; board remuneration enhance, firm's asset utilization ratio, reduce the discretionary expenditure; audit committee and remuneration committee reduces the discretionary expenditure ratio. Form control variables, leverage reduces the asset utilization ratio; dividend ratio increases the asset utilization ratio, reduces the free cash flow and enhances the performance of the managers (Tobin's Q ratio); risk increases the free cash flow and Tobin's Q ratio; larger firms faces lower level of asset utilization ratio, reduction of free cash flow, higher level of discretionary expenditure ratio and lower level of Tobin's Q ratio. In term of ownership attributes, director ownership is found effective in controlling the free cash flow and reducing the discretionary expenditure ratio; Institutional ownership and external ownership are effective to enhance the asset utilization ratio, reduce the free cash flow and to control discretionary expenditure ratio. Also evidence form this study is obtained that simultaneity of financial variables from an agency perspective is present in the selected Pakistani firms which lead to the simultaneity of financial decision making. The results shows that use of debt, insider share holdings, large institutional share holdings, profitability, fixed assets and growth opportunities are important monitoring devices and to determine the dividend, leverage and insider shareholding policies.



### The Impact of Trade and Economics Growth on the Environment: A Cross Country Study

*Naveed Wahid Awan*

Naveed Wahid Awan has been rewarded his M.phil degree in 2015 and he completed his thesis under the supervision of Dr. Samina Khalil and Dr. Mohsin Hasnain Ahmed. This study emphasized that trade liberalization is a common tool which is being practiced in modern world in current scenario. Asian countries including Pakistan are successfully taking part in partnership of trade openness with rest of world. The trade openness is a moral fiber of economic structures every country, so the countries have a significant impact of trade openness in different dimensions, but we are concerned here with the impact of trade openness on environment. The current study is to determine the impacts of trade liberalization on the environment of different Asian Countries. For empirical analysis, this study exploited cross-country panel data set of 18 Asian countries, spanning the period 1981 to 2010 and, split the accessible set of countries into three categories according to their geographical areas; Eastern Asian Countries, Southern Asian Countries, and South-Eastern Asian Countries. In order to investigate data empirically, this study used Ordinary Least Square (OLS) and to find the individual specific effect of the model, the Fixed Effect (FE) or Random Effect (RE) approach is used on the basis of Hausman specification test. Generalized Method of Movement (GMM) also used to check the dynamics of the model. The outcome from said techniques designate that environment degradation exists due to trade openness but its degree varies from region to region. Kuznets curve proved as inverted U shaped for all set of Asian countries indicates that income inequalities subsist as economic growth boost and after having a threshold level, it decreases. Contrary to Southern Asian Countries, and South-Eastern Asian Countries environmental degradation is negatively allied with the growth of gross domestic product (GDP) Eastern Asian Countries. The countries which were incorporated in East Asian pool are more developing countries than rest of the countries showed negative relation but insignificant due to least impact over dependent variable. Net Foreign Direct Investment showing positive and noteworthy results in both OLS & FE approaches in case of pooled sample, South Asian Countries and South-East Countries and East Asian Countries explain significant and negative relationship with dependent variables. Trade directness for all sets of countries behaves in same way as net foreign direct investment indicates. This explores that new investment and trade openness is related with environmental welcoming manufacture techniques. The outcome are modified with OLS and FE approaches, describe that GDP is highly significant and accountable of rising Carbon Dioxide and primary energy consumption for all related countries. This optimistic relationship between GDP and CO<sub>2</sub> per capita leads to environmental degradation in the economy but scale of environmental degradation depends upon the character of product that is being shaped, it might be worst in production of dirty goods as compared to clean one.





## **Applied Economics Research Centre**

University of Karachi

Website: [aerc.edu.pk](http://aerc.edu.pk)

Phones: 99261541-43

Fax: 92-21-99261545

*for feedback: [voice@aerc.edu.pk](mailto:voice@aerc.edu.pk)*