



CREB Research News

March 2013

Centre for Research in
Economics and Business
Lahore School of Economics



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EDITORS NOTE

The Centre for Research in Economics and Business (CREB) was established in 2007, as an independent research centre at the Lahore School of Economics, Pakistan. Its primary objective is to conduct policy-oriented research with a rigorous academic perspective on key development issues facing Pakistan and promote public debate on policy issues through conferences, seminars, and publications. CREB organizes the Lahore School's Annual Conference on the Management of the Pakistan Economy, and publishes Working Paper and Policy Paper Series to disseminate the research being done at the Centre.

At CREB, we place great emphasis on building research networks and linkages with researchers, within and outside the country, to bring together people with the right set of skills to help achieve these goals. CREB hosts visiting international scholars undertaking research on Pakistan, facilitates and coordinates research by the faculty at the Lahore School, and administers the postgraduate program leading to the MPhil and MS degrees at the Lahore School.

This is the third in a series of research newsletters from CREB, and we hope that it will provide a useful perspective regarding the scope and depth of research being carried out at the Centre. We invite you to visit our website www.creb.org.pk, and browse through our ongoing and completed research.

Introduction

In the short period since its inception, the **Centre for Research in Economics and Business (CREB)**, has built an excellent reputation for the quality of its research. Our faculty and researchers have received funding support from regional partners and international agencies such as British Academy UK, Department for International Development (DIFD), International Growth Centre (IGC), National Science Foundation, USA, Open Society Foundation (OSF) and South Asia Network of Economic Institutes (SANEI).

Our staff are highly skilled in applied research and have been actively involved in projects that help build strong policies. The research interests of our staff include Growth, Political Economy, Economic Policy, Education and Labor Economics – with a special country focus on Pakistan.

From time to time CREB puts together its CREB Research Newsletter. This is the third one in the series and covers the period between April, 2012 and March, 2013. It has information on current research projects at CREB, as well as of events such as the upcoming 9th Annual Conference of the Lahore School of Economics and International Conferences where CREB staff presented papers. This newsletter also includes a list of recent CREB publications and research carried out by the CREB staff individually. Last but not the least it provides abstracts of recently completed PhD, MPhil and MS theses.

Research

Ongoing Projects

Understanding and Addressing Rural Poverty in Pakistan: Oxford University-Lahore School Collaboration

With funding from the *British Academy UK* and the *Lahore School of Economics* the Oxford University-Lahore School collaboration will develop a 3-year collaborative program on the research theme of the Economics of Rural Poverty in Punjab. The team of collaborators will be led by *Naved Hamid, Kate Vyborny, Hamna Ahmad* and *Marcel Fafchamps* (Oxford University).

The study will involve joint research on a number of questions, including:

Patron-Client Relationships and Rural Development in Pakistan

How do social networks and local “patrons” affect household wellbeing and access to public services? Patron-client relationships, or vertical social relationships in which individual powerful “patrons” have multifaceted relationships with “clients”, are said to be key features of both markets and politics in many developing country settings, including rural Pakistan. But how do these relationships work in practice and how do they affect the delivery of government goods and services?

These questions are also being explored further by *Azam Chaudhry*, *Haseeb Ashraf* (Lahore School) and *Kate Vyborny* (Lahore School/Oxford University) with data collected from the Lahore School's PERI survey, using which Azam Chaudhry and Kate Vyborny have written a working paper showing different effects of patronage in different public programs. This paper has been presented in several departments at Oxford. These questions are also being explored further with data collected in a survey jointly funded by Lahore School and the British Academy joint grant with Oxford; this survey was completed in March 2013. The survey will help test whether different types of program design make programs for the poor more robust to the influence of patronage.

Evaluating the Impact of Punjab's Girls Stipend Program

The government of Punjab, starting in 2004, offered a conditional cash transfer (CCT) of Rs 200 per month, to girls in class 6 to 8 with minimum 80 percent attendance, in order to increase the educational attainment of girls in districts with less than 40 percent literacy. The program was later extended up to grade 10.

Using data collected in 2009 from the Punjab Consanguinity survey in conjunction with data currently being collected from the new Punjab Rural Household Survey (supported by the British Academy and Lahore School of Economics), *Theresa*

Chaudhry (Lahore School) aims to evaluate the impacts of this CCT by means of a difference-in-differences approach, comparing eligible girls to their non-eligible elder sisters in both stipend and non-stipend districts.

Rural Household Finance and Child Outcomes

Theresa Chaudhry (Lahore School) and *Gwendolyn Tedeschi* (Manhattan College) will be looking at child outcomes (education and child labor) as they relate to microfinance borrowing, using data currently being collected through the Punjab Rural Household Survey (supported by the British Academy and Lahore School of Economics). They will also get a detailed picture of rural households' finances, including borrowing and savings behaviors, taking place through both formal and informal sources, including microfinance institutions, moneylenders, friends and family, and committees.

Learning about Flood Risk: Evidence from a Field Experiment in Pakistan

Farah Said, *Uzma Afzal* (Lahore School) and *Ginger Turner* (The Wharton School) will be investigating how individuals learn about flood risk through the experience and observation of flood events. The study tests the theory that individual risk perceptions and preferences could change with disaster experience, even when controlling for

variation in initial asset constraints and losses. The aim is to improve on previous studies by matching game choices with survey data that includes questions on expectations, asset, information sets, and timing by complementing surveys with experimental design.

A main contribution of this study is to improve the identification of individual loss measures, to test whether variation in flood damages at an individual level can explain differences in observed risk aversion changes. This research is particularly innovative in the Pakistan context, where there has been little work to date on behavioral economics.

Analysis of Technology in the Sialkot Soccer Ball industry

The project has been developed under the firm capabilities programme of the *International Growth Centre (IGC)* and is led by a team of researchers including *Azam Chaudhry* and *Shamyla Chaudry* (Lahore School), *David Atkin* (Yale University), *Amit K. Khandelwal* (Columbia University) and *Eric Verhoogen* (Columbia University).

The Sialkot soccer ball cluster is made up of a large number of manufactures who export approximately 60 million hand-stitched soccer balls each year, accounting for about 70 percent of global production. But over the last few years, the amount of soccer balls produced in Sialkot has fallen. This project aims to better understand the

technologies within the industry and determine the characteristics of the firms that are able to identify and implement new technologies.

As of date the project has collected data on the Sialkot soccer ball sector with a baseline survey conducted in May 2012, a face to face follow-up survey conducted July 2012, one telephonic follow-up survey conducted December 2012 and currently a face to face follow-up survey conducted March 2013. The endline survey will be conducted in mid May-June, 2013. The preliminary data analysis was presented at the IGC Growth Week September 2012, in London, where the

Secretary Industries, Punjab Government, used the project's findings to propose and initiate an Innovation Development Fund (IDF).

Currently, the Punjab Government has initiated this fund and the Lahore School is represented on its executive board.

Incentives and productivity: Work groups vs. production lines

The project has been developed under the firm capabilities programme of the *International Growth Centre (IGC)* and is led by a team of researchers including *Theresa Chaudhry* and *Haseeb Ashraf* (Lahore School) and *Christopher Woodruff* (University of Warwick). They have attempted to test whether short-term financial incentives can be used to

decrease worker absenteeism in one of Gujrat's leading fan factories. The factory intends to move production from batches performed by teams to assembly lines in order to remain competitive.

In early 2012, workers from eight work groups (teams) were surveyed on demographic characteristics, work habits, and team interactions. From February to June 2012, two incentive schemes, one based on individual attendance and one based on meeting a team attendance target, were rotated among the eight teams on a monthly basis.

Early results indicated that the team attendance target appeared to have some effect on coordinating workers' absences. In order to build stronger evidence, we are currently testing the team attendance incentive against a control group on a larger sample of 22 teams.

Social Structures, Social Exclusion and Education in Rural Punjab: World Bank and CREB joint Research Initiative

Tayyaba Tamim (Lahore School) and *Rehan Jamil* (World Bank) accompanied by six students from Lahore School will be conducting field research in three villages in spread across North, Central and Southern Punjab. The research will seek to uncover the diverse processes of social exclusion experienced by certain communities at the village level. The findings of the research will be published in the World Bank's Working Paper Series on

education in Pakistan. The research will consist of qualitative household level interviews, village level focus groups and school teacher interviews.

Completed Projects

Public Vs Private Schooling Choice at the Household Level

With a grant from *Open Society Institute (OSI) Privatization in Education Initiative (PERI)*, researchers led by *Masooma Habib, Hamna Ahmad* and *Sahar Amjad* (Lahore School) undertook a study titled *Determinants of School Choice – Evidence from Punjab, Pakistan*. The study addressed the following overarching question: Why do parents choose low cost private schools when free public schools are available? The main emphasis of the study in answering this question was on the role of parents' perceptions in school choice while controlling for a range of child, household and school specific characteristics. The study was based on a

sample of 1024 rural households in 64 clusters spanning over 8 *tehsils* and 7 districts of the Punjab.

For more information please visit:
<http://www.creb.org.pk/researchproject>

CREB Publications

CREB published papers aim to bring to a wider audience the research being done at the Centre. The studies under the **working paper series** comprise of rigorous analytical and empirical research while the **policy paper series** was started in 2010 with the aim to publish papers more directly targeted towards a policy audience. The papers published since the last Annual Conference are listed below:

- **CREB Working Paper No. 02-13**
Agglomeration and Firm Turnover
Marjan Nasir, Azam Chaudhry
- **CREB Working Paper No. 01-13**
Determinants of School Choice:
Evidence from Rural Punjab, Pakistan
**Hamna Ahmed, Sahar Amjad,
Masooma Habib, Syed Ahsan Shah**
- **CREB Working Paper No. 03-12**
The Effects of External Migration on
Enrolments, Accumulated Schooling,
and Dropouts in Punjab.
Rabia Arif, Azam Chaudhry

To view the complete list of papers in both series please visit:
<http://www.creb.org.pk/Publications>

Staff Research

CREB staff have produced research which has been published in national and international journals. A list of latest publications is given below:

The Impact of Financial Liberalization on the Credit System of Pakistan: Historical Perspective, *Research Journal of Recent Sciences*, Vol 2(3), 2013

Ayesha Afzal, Nawazish Mirza

Interest Rate Spreads in an Emerging Economy: The Case of Pakistan's Commercial Banking Sector, *Economic Research*, 2012, Vol 25(4)

Ayesha Afzal, Nawazish Mirza

Size, Diversification and Risk: Preliminary Evidence from Commercial Banks in Pakistan, *Pakistan Journal of Commerce and Social Sciences*, 2012, Vol 6(2)

Ayesha Afzal, Nawazish Mirza

The Impact of Public School Enrollment on Child Labor in Punjab, Pakistan. *Lahore Journal of Economics* 17: 2, 2012

Hamna Ahmed

The Opportunities and Pitfalls of Pakistan's Trade with China and Other Neighbors. *Lahore Journal of Economics*, 17: SE, September 2012

Naved Hamid, Sarah Hayat

Can Current Earnings Predict Future Cash Flows? A Literature Survey, *Research Journal of Recent Sciences*, 2013, Vol 2(2)

Nawazish Mirza, Ayesha Afzal, Syed Kumail Abbas Rizvi, Bushra Naqvi

Time Varying Stock Market Volatility: The Case of an Emerging Market, *Research Journal of Recent Sciences*, 2012, Vol 1(11)

Nawazish Mirza, Mawal Sara Saeed

Some Preliminary Evidence on Stock Price Bubbles in an Emerging Market, *The Romanian Economic Journal*, 2012, XV(44)

Nawazish Mirza, Ayesha Afzal

Asset Prices, Financial Stability and Monetary Policy, *Journal of Basic and Applied Scientific Research*, 2013, Vol 3(1)

Syed Kumail Abbas Rizvi, Bushra Naqvi, Nawazish Mirza

Inflation Targeting as a Plausible Monetary Framework for India, *Research Journal of Recent Sciences*, 2012, Vol 1(12)

Syed Kumail Abbas Rizvi, Bushra Naqvi, Nawazish Mirza

Calendar Anomalies and Stock Returns: A Literature Survey, *Journal of Basic and Applied Scientific Research*, 2012, Vol 2(12)

Sahar Nawaz, Nawazish Mirza

Evaluating the Impact of Recent Advances in Biomedical Sciences and the Possible Mortality Decreases on the Future of Healthcare and Social Security in the United States, *Pensions: An International Journal*, 2012, Vol 17(4)

Alexander Zhavoronkov, Nawazish Mirza, Edouard Debonneuil, Igor Artyuhov

The Politics of Languages in Education: Issues of Access, Social Participation and Inequality in the Multilingual Context of Pakistan, *British Educational Research Journal*, 2013

Tayyaba Tamim

Higher education, languages, and the persistence of inequitable structures for working-class women in Pakistan. *Gender and Education*, December, 2012

Tayyaba Tamim

Human Capital Convergence: Evidence from Punjab. *Lahore Journal of Economics* 17: 1, 2012

Uzma Afzal

To view the complete list of CREB staff research please visit:

<http://www.creb.org.pk/Staffresearch>

More from the Centre

Annual Conference on the Management of the Pakistan Economy

The Centre organizes the Lahore School's Annual Conference on the Management of Pakistan's Economy. The proceedings of the Conference are published in a special issue of the Lahore Journal of Economics. This year's conference is titled "**Human Capital Development for Sustained Economic Growth**". Previous conferences have focused on a range of themes covering topics in growth, trade, and development.

For more information on current and past conferences please visit:
www.creb.org.pk/conferences

CREB at the 28th AGM and Conference of the Pakistan Society of Development Economics (PSDE)

Papers authored by CREB research fellows were selected for presentation at the 28th annual meeting of the Pakistan Society of

Development Economics (PSDE) held from 13th – 15th November 2012 at Islamabad. Topics covered included:

Determinants of Export Performance in the wake of the Global Financial Crisis – Evidence from South Asia Paper, by Farah Said and Hamna Ahmad

This study has been undertaken with a two-fold objective: Firstly, to analyze the impact of the global financial crises on manufacturing and service exports in four South Asian countries. Secondly, to understand the business environment determinants of export performance in a sample of exporting firms from Pakistan, India, Bangladesh and Sri Lanka. Using data provided by the Interim Enterprise Survey conducted in 2009-10, results reveal that crisis continues to have a significant negative impact on expected export growth in Pakistan even after two years since the onset of the crises for the pooled sample. On the other hand, for other countries in the sample the impact of the crises on

export growth in becomes insignificant by 2011. In addition, size is consistently found to be an important determinant of export growth for Pakistani firms.

Remittances from Saudi Arabia: A Community Phenomenon, by Asha Gul and Mahreen Mahmud

This study uses a sample of 542 Saudi migrant households from nine high migration districts in 2009 and analyses individual, household and community determinants of remittances in a combined framework. The findings of the study strongly establish the education of the migrant as the most important factor affecting the level of remittances to Pakistan from Saudi Arabia. In addition, the study provides a novel and interesting insight into the role of *community level variables* in explaining differential remittance flows to the districts analysed.

CREB at the Eurasia Business and Economics Society (EBES) 2012 Conference in Istanbul, Turkey

Uzma Afzal, Senior Research and Teaching Fellow at CREB presented her working paper on '**Human Capital Convergence: Evidence from Punjab**' as it was selected for presentation at the EBES 2012 Istanbul Conference held from 24th – 26th May 2012, in Istanbul, Turkey.

While the literature on economic growth provides mixed evidence on convergence

across different countries and regions, a large number of studies point toward the widening income gap between rich and poor. In the development literature, a broader range of national welfare indicators beyond income per capita—health and education in particular—are considered important instruments for measuring progress in human development. This article examines education and other selective welfare indicators to determine if there has been unconditional and conditional convergence across the districts of Pakistani Punjab over the period 1961–2008. Few studies have examined human capital in the context of convergence, and Pakistan has not been studied in any depth up to now. The results of our empirical analysis show that over the last five decades, both unconditional and conditional convergence has taken place in literacy rates across Punjab, and that this has been accompanied by increased gender parity in educational enrolment levels and improved housing conditions.

CREB at the Privatization in Education Research Initiative's (PERI) regional Conference in Kathmandu, Nepal

Hamna Ahmed, Senior Research and Teaching Fellow at CREB presented a study on '***Determinants of School Choice – Evidence from Punjab, Pakistan***' at the *Open Society Foundations (OSF)* and the Privatization in Education Research Initiative's (PERI) regional conference titled

Globalization, Regionalization and Privatization in and of Education in Asia. The conference was held from 28th to 29th September, 2012 in Kathmandu, Nepal. The objective of the conference was to debate the merits and demerits of privatization on quality, equity, effectiveness and efficiency of the education sector.

The study was prepared by the research team at CREB, headed by *Masooma Habib* and *Naved Hamid*. The objective of the study was to understand why parents in rural areas choose low cost private schools when free public schools are available? The study was based on primary data collection undertaken by the Lahore School of Economics in collaboration with the Punjab Bureau of Statistics. The main findings of the study show that wealth, access, perceptions about employment opportunities and school quality emerge as important determinants of private schooling in rural Punjab.

Recently Completed Student Research

Ph.D Thesis

Interest Rate Spreads, Loan Diversification and Market Discipline in Pakistan's Commercial Banking Sector

Ayesha Afzal (Co-Supervised by Dr. Azam Chaudhry and Dr. Nawazish Mirza)

The dissertation comprised of three articles addressing various issues in Financial

Intermediation in Pakistan. In the first article we explore the determinants of interest rate spreads in Pakistan's commercial banking sector in post transition period (2004 – 2009). The results suggested that intermediary efficiency is affected by bank size, operational efficiency, asset quality, liquidity, risk absorption capacity and GDP growth rate. We could not find support for impact of interest rate volatility and financial development indicator on banking spreads.

The aim of the second article was to provide some preliminary evidence on relation between size, diversification and risk in commercial banks of Pakistan. The results suggested that larger banks were more diversified than their smaller counterparts mainly on account of their outreach and size of credit portfolio. On the risk side, based on accounting and market based risk measures, we explored if there is any impact of diversification on risk. We could not deduce significant result in favor of accounting risk measure of impaired lending signaling that banks find no incentive in diversification of credit books.

The third article provided some preliminary results on market discipline in commercial banking sector of Pakistan after partial implementation of Basel Accord. The study revealed a significant relationship between cost of deposits and bank specific factors of capital adequacy, asset quality and liquidity. However, we could not report a significant evidence for impact of market discipline on deposit switching. For the

market based variables, we found significant relationship between our risk factors and cost of deposits. These findings, albeit preliminary, have important implications for an emerging economy. The presence of market discipline not only lowers the cost of supervision by the central bank but also results in an effective control by other stakeholders thus lowering the risk of fragility.

MPhil Theses

Resource Misallocation and Aggregate Productivity in Punjab

Muhammad Haseeb (Supervisor Theresa Thompson Chaudhry)

Paper follows Hsieh and Klenow (2009) to study the role of misallocation in aggregate productivity for manufacturing plants in Punjab. Data for manufacturing plants in Punjab is taken from the Census of Manufacturing Industries 2000-01 and 2005-06. The paper essentially looks at the extent to which marginal products differ across firms within each industry. Paper imitates the liberalization settings by allowing marginal products to equalize across the plants in each industry. Findings reveal relatively more productivity dispersion in Punjab as compared to Hsieh and Klenow (2009) in India and China. Furthermore, liberalization experiment reveals that moving to the US efficiency level would boost manufacturing TFP in Punjab by 22.33% and 55.83% in years

2000-01 and 2005-06 respectively. Paper also explores the potential sources of productivity dispersion for manufacturing plants in Punjab.

Effects of Agglomeration & Trade Liberation on Firm Entry and Exit

Marjan Nasir (Supervisor Azam Chaudhry)

The turnover of firms in an industry is affected by both domestic and international factors as has been highlighted by research in industrial organization. Their thesis conducts a firm level analysis to see the impact of agglomeration on firm entry and exit in domestic industries, and the impact of trade liberalization on firm entry and exit in export industries in Punjab. The study also illustrates using maps how some industries are present in clusters while others are highly dispersed. The results suggest that higher firm entry and exit takes place in highly agglomerated industries and a real exchange rate depreciation increases firm entry and exit while tariff reduction has no significant impact on firm turnover.

Effects of Agglomeration on the Formation and Scale of Operations of New Firms

Maryiam Haroon (Supervisor Azam Chaudhry)

New firm formation is an important determinant of economic and regional development. Agglomeration has been

highlighted as one of the main factors enhancing formation and scale of operations of new firms in the industrial organization literature. This study has estimated a model which determines the effect of local conditions on new firm formation and scale of operations for the manufacturing sector in Punjab, Pakistan using data from the Directory of Industries (DOI). The findings of the study reveal that agglomeration through localization and urbanization has a strong impact on the formation of new firms and their scale of operations.

Labour Pooling as a Determinant of Industrial Agglomeration

Najam uz Zehra Gardezi (Supervisor Azam Chaudhry)

This paper analyses agglomeration behavior exhibited by the manufacturing firms in Punjab, Pakistan. It employs a unique data set to construct a distance based measure of agglomeration to test the existence of localization economies. The M function which is the industry level measure of concentration is regressed on a number of industry characteristics that measure the presence of positive externalities. In particular, a measure of each industry's potential for labour pooling is used to examine whether firms that experience greater fluctuations in employment are likely to be more concentrated. The results provide evidence as to the importance of labour

pooling working through the stated mechanism in explaining the high level of concentration within industries.

MS Thesis

**The impact of education on fertility in
Pakistan: a cross sectional analysis**

Aisha Farah

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