

Fourth Seminar Series

February 27th – 28th, 2014

Venue

Central University of Tamil Nadu,
Thiruvarur



MADRAS SCHOOL OF ECONOMICS

**The Fourth Seminar Series, Madras School of Economics
Schedule of Presentation**

Day One – 27th February, 2014

2.30 p.m *Welcome Address by Professor K. R. Shanmugam,
Director, Madras School of Economics.*

	Time	Name of Paper Presenter	Title	Theme
1	2.45 p.m	Dr.Saumitra Bhaduri	Determinant of Target Leverage and The Speed Of Adjustment: Evidence from the Indian Corporate Sector	Corporate Finance
2	3.15 p.m	Dr. Sreejata Banerjee	Vector Autoregressive Approach to Macro Stress Test of Banks Operating in India	Finance/Banking
3	3.45 p.m	Dr. Swarna Vepa	Variations in the Spread of Micro Credit: Bank-SHG Linkage Programme	Finance/Banking
Tea would be served during the presentation				
4	4.15 p.m	Dr. Madhuri Saripalle	R&D Spillovers across the Supply Chain: Evidence from the Indian Automobile Industry	Industrial Economics
5	4.45p.m	Dr.A. Balasubramanian	Status Report on Corporate Social Responsibilities in India: A Comparison with Rest of the World	Corporate Finance
6	5.15 p.m	Mr.Anubhab Pattanayak	Weather Sensitivity of Rice Yield in India – Some Distributional Aspects	Environmental Economics

**The Fourth Seminar Series, Madras School of Economics
Schedule of Presentation**

Day Two – 28th February, 2014 at 9.30 a.m

	Time	Name of Paper Presenter	Title	Theme
1	9.30 a.m	Dr. K.R. Shanmugam	Impact of State Vat on Wholesale and Retail Prices	Public Finance
2	10.00 a.m	Dr. Paul P. Appasamy	Has Economic Growth Worsened Inter-District Inequality in Tamil Nadu?	Growth and Development
3	10.30 a.m	Dr. K.S. Kavi Kumar	Jatropha Cultivation for Biodiesel: Implications for Food Security and Rural Livelihoods	Environmental Economics
4	11.00 a.m	Dr. Zareena Begum	Green Accounting of the Indian Metal Mining Sector	Environmental Economics
Tea would be served during the presentation				
5	11.30 a.m	Dr. Brinda Viswanathan	Farm Production Diversity, Consumption Diversity and Women's BMI: A Study across Rural Indian Farm Households	Agriculture and Nutrition
6	12.00 noon	Dr. Sukanya Das	Health Impacts in Air and Water Pollution in India: A Systematic Review	Environmental Economics
7	12.30 a.m	Dr. Madhuri Saripalle	R&D Spillovers across the Supply Chain: Evidence from the Indian Automobile Industry	Industrial Economics
8	1.00 p.m	Dr. R. Hema	Comparative Analysis of Costs and Returns for Different Methods of Rice Production	
1.30 p.m Wrap up of the Fourth Seminar Series of Madras School of Economics 2014 followed by lunch				

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WEATHER SENSITIVITY OF RICE YIELD IN INDIA – SOME DISTRIBUTIONAL ASPECTS

Anubhab Pattanayak and K. S. Kavi Kumar

Abstract

Rice is one of the most important cereal crops in India with well established linkages with food security for a large majority of population. Knowledge about the sensitivity of rice to weather fluctuations could provide important insights for potential impacts due to climate change. From the policy perspective it is further important to learn about the temporal and regional distribution of weather sensitivity of rice. The present study utilizes the yield response function of *kharif* rice estimated in a companion study based on district level data for the period 1969-2007, to analyze the changing nature of yield sensitivity over time and across regions. The simulated impacts due to changes in average weather in the past are analyzed across the states of India.

Acknowledging that rice crop phenology differs across regions and is affected by region specific climate and the prevailing weather characteristics, the study further argues in favor of assessing the weather sensitivity of *kharif* rice at the regional level in India. Using disaggregated data for the period 1969-2007, region-specific (South and East) yield response functions are estimated. The results suggest that the regional yield response functions more effectively capture regionally relevant weather variables compared to the all-India level crop response function. The study makes a case of assessing disaggregated climate change impacts using the regional yield response function to better capture the vulnerability.

Key words: *Rice, India, Regional Impacts, Vulnerability*

JEL Codes: *Q1, Q52, Q54, R1, R11*

STATUS REPORT ON CORPORATE SOCIAL RESPONSIBILITIES IN INDIA: A COMPARATIVE WITH REST OF THE WORLD

Saumitra N. Bhaduri, Ekta Selarka, A. Balasubramanian

Abstract

The concept of Corporate Social Responsibility (CSR) is widening its horizon in characterizing its vitality in the world of business, around the globe. The subject is gaining momentum not only in the corporate world but also in academic arena, government policies and regulations. In this study, we survey literature and practices related to CSR around the world to understand the current status of CSR around the world. This survey helps us to understand the state of the CSR in India as a comparative to the rest of the world. More specifically, we explore if there is a convergence in CSR activities undertaken in developed countries and those evolving in emerging markets. As far as back to 1940's, the first assessment of businessmen's responsibilities towards the society was conducted by the fortune magazine during 1946 since then, several surveys have been conducted. These surveys document the importance and development of CSR around the world. More recently, many survey based studies on CSR activities undertaken by Indian companies have also been emerging.

From the survey of literature and various reports, we observe that the global initiative is high at the level of making commitments, defining goals and setting policies. However, in terms of implementation there is a long way to go. Our study comes in time when the new Companies Act 2013 has mandated spending on CSR by large Indian Companies. Globally more companies are reporting on their social and environmental impact, internationally, more people are interested in knowing these factors. The emerging scenario creates a positive development and sets a platform to analyse the long term effect of CSR activities on firm valuation not only by shareholders as well as by its stakeholder. We conclude that the present status of CSR is of multi-stakeholder perspective and self-regulation still remains a dominant source of information in India as well as across other emerging markets.

Key Words: Corporate Social Responsibility (CSR), India, International Comparison

JEL Code: D21, M14

FARM PRODUCTION DIVERSITY, CONSUMPTION DIVERSITY AND WOMEN'S BMI: A STUDY ACROSS RURAL INDIAN FARM HOUSEHOLDS

Brinda Viswanathan, Getsie David, Swarna Vepa and R. V. Bhavani

Abstract

This study primarily captures the impact of farm production diversity and dietary diversity on women's BMI among farm households in rural India. To assess the differential impact on low and high BMI, quantile regression model using a 2SLS approach is estimated with dietary diversity as the endogenous variable. Overall the study shows an indirect impact on women's BMI of farm production diversity working via dietary diversity while there is a direct influence of dietary diversity, better access to basic amenities, lower physical stress and her status within her household.

Results from first stage shows that dietary diversity is positively influenced by the number of crops grown, number and varieties of livestock owned by the household as well as wealth status and education level of the household head. Income effect is non-linear whose influence increases but at a decreasing rate while households which have a higher share of income from wage labour both agricultural and non-agricultural have lower dietary diversity.

For the second equation logarithm of BMI is better explained by a quantile regression model than OLS model. Dietary diversity has the largest impact across all the quantiles of BMI with a higher magnitude for the bottom quantiles than for the top quantile after controlling for per capita household consumption expenditure whose magnitude increases with the BMI quantile. Women who work in the farm including animal rearing or those who work as agricultural labourer have lower BMI compared to all other women. Purified drinking water has a large positive influence and open defecation has a large negative impact with a higher magnitude for the lower quantiles. Women's status captured by whether the women eat along with men or not has a significant positive influence and so does access to health care either for short term morbidity or antenatal care during pregnancy.

Key words: Agriculture, Nutrition, BMI, Women

JEL codes: Q12, Q15, O10

CORPORATE GOVERNANCE AND EXCESS CASH HOLDINGS: EVIDENCE FROM INDIAN CORPORATE SECTOR

Ekta Selarka and Saumitra Bhaduri

Abstract

The importance of corporate governance is well recognized since Jensen and Meckling's thesis in 1976 that the separation of ownership and control in public firms causes agency problems between investors and managers. These agency problems are particularly pronounced in the use of corporate cash holdings. It is both easy for managers to misuse cash holdings and hard for investors to evaluate the use of cash holdings. Moreover, cash holdings account for a substantial proportion of corporate assets, and their importance has steadily increased over time. It is generally accepted that better internal corporate governance is associated with both a higher price that investors are willing to pay for a dollar of corporate cash holdings (Dittmar and Mahrt-Smith, 2007) as well as a better use of cash holdings (Harford, Mansi, and Maxwell, 2008). The empirical evidence is limited around the existence of type II agency problem which is more pronounced in Emerging and Transition countries due to the concentration of ownership and its impact on the levels and use of corporate cash holdings.

In this study, using non-financial firms listed on Bombay Stock Exchange, we investigate the effect of both internal as well as external corporate governance on corporate cash holdings. Specifically, we test the hypothesis that given the ownership structure and different types of investors, the monitoring of management may vary with investor horizon and type of investors. The findings presented in this paper provide direct evidence of *how* governance can improve or destroy firm value and insight into the importance of governance in determining corporate cash policy.

Keywords: Cash holdings, Corporate governance, Ownership structure, Acquisitions

JEL Codes: G32, G34, G35

COMPARATIVE ANALYSIS OF COSTS AND RETURNS FOR DIFFERENT METHODS OF RICE PRODUCTION

Hema R

Abstract

Pilot studies were undertaken in India to understand costs, returns and value additions across the value chain of rice from on-farm production to retail sales. The objective was to compare across four different techniques of rice production – high yielding varieties, rain fed organic, certified organic and system of rice intensification. Two post harvest chains were also studied – a traditional chain that caters to local markets and the more dominant chain where the paddy passes through a complex network of millers, traders, wholesalers with transactions happening through regulated markets, contract agreements or government procurements before ending up in retail stores, big and small. This paper presents the findings of the comparative analysis of on-farm costs and returns for the four different methods of farming.

PREFERENTIAL TAXATION OF LARGE INVESTORS

Kaushal Kishore

Abstract

In a scenario where a single country wants to attract heterogenous large (strategic) investors, a preferential regime generates higher tax revenues compared to a non-preferential regime. The result of Kishore and Roy (2013) does not hold when investors are large because the government gains from investor specific tax policy which is not possible when numbers of investors are large. The paper explains the emergence of large multinational firms and adoption of preferential taxation regimes by many countries.

Keywords: Tax competition; Capital mobility; Non-preferential regime

JEL Codes: F15; F21; H26; H87

JATROPHA CULTIVATION FOR BIODIESEL: IMPLICATIONS FOR FOOD SECURITY AND RURAL LIVELIHOODS

K.S. Kavi Kumar

Abstract

Biofuels are acquiring importance due to their potential to mitigate greenhouse gas emissions. The two most important biofuels – viz., bio-ethanol and bio-diesel, are largely considered supplementary to the transport fuels. India has extensive programs and aims to blend 20 percent of transport fuels with biofuels by 2017. Focusing on *jatropha* cultivation aimed at biodiesel production, this paper explores the implications for food security and rural livelihood options in India. Acknowledging that *jatropha* cultivation can in principle compete with food and commercial crops for land, the paper compares the profitability and competitiveness of *jatropha* with other crops using cost of cultivation data. The results suggest that *jatropha* cultivation can adversely affect food security provided the yield is close to theoretical predictions and high-speed diesel prices are significantly high resulting in higher support price for biodiesel. Drawing insights from field survey carried out in six districts of Tamil Nadu, the paper argues that despite aggressive approach adopted by the Government of India, inadequate attention paid to the institutional issues has resulted in unsatisfactory progress in achieving the bio-diesel blending targets and has threatened the rural livelihood options.

Key words: Biofuels, Bio-diesel, Energy Policy, Food Security, Rural Livelihoods

JEL Codes: Q42, Q56, O13

RATIONALE FOR CONSCIOUSNESS IN BUSINESS ORGANIZATIONS AND INSTITUTIONS

Madhuri Malhotra

Abstract

Consciousness is defined as individual awareness of one's unique thoughts, memories, feelings, and environment. Conscious experiences are constantly shifting and changing from one moment to the next. In recent years, consciousness has become a significant topic of research in the context of business organizations. Business organizations have become instrumental in creating economic wealth and have helped in creating a complex and highly technological social system around the world (Assadourian, 2006). Organizations ought to be treated as a new form of collective life along with family and society. Like the individual, it is a group-soul that must become more self-conscious to attain an organic self-expressive life.

There is a remarkable change in business principles and practices, such as transformations from hierarchical structures to team-based structures that empower employees, from analytic justification to creative problem solving, from competition to cooperation, and from an emphasis on physical assets to an emphasis on human resources as a company's most valuable resource. In their search for ways to explain these phenomena and to trigger them in companies where they have not yet occurred, leading consultants and writers have begun to speak of growth of consciousness as a key element underlying these transformations (Blanchard, 1993; Koestenbaum, 1991; Maynard and Mehrtens, 1993; Weiss, 1994). This shift in paradigms or mind-sets is indicated as a "new management consciousness" (Joiner, 1994). The new paradigm has many aspects, but its foundation is that consciousness is causal and that the power of the individual psyche is far vast than we could have previously imagined. A business organization is viewed from a perspective of the dynamic process of consciousness. The present study highlights the rationale for consciousness in business organizations and institutions, levels of organizational consciousness and the concept of collective consciousness.

Key Words: Organizational Consciousness, Collective consciousness, social systems.

JEL Codes: D23, L20,M54

R&D SPILLOVERS ACROSS THE SUPPLY CHAIN: EVIDENCE FROM THE INDIAN AUTOMOBILE INDUSTRY

Madhuri Saripalle

Abstract

This study analyzes the impact of intra-industry R&D spillovers on firm's own R&D effort from a supply chain perspective. Empirical studies have found inter-industry spillovers to be significant as opposed to intra-industry, as the pool of accessible knowledge is the same for a cross section of firms within an industry. However, from a supply chain perspective, though firms may be suppliers to an industry, they belong to different segments of the industry; and different tiers of the supply chain. The automobile industry is a good case in point: though auto component firms supply to the automobile sector, they come under diverse industrial classification schemes like rubber, electronics and engineering. The present study attempts to measure the horizontal spillovers within the Indian auto components Industry as well as spillovers coming vertically from the original equipment manufacturers (OEM) from a flow and a stock perspective.

The study finds spillovers from within the component group are a substitute for firm's own in-house R&D, while spillovers coming from outside the component group act as complements, thus indicating the integral nature of automobile design, requiring collaborative R&D effort. Vertical spillovers vary based on vehicle category suggesting that nature of OEM-supplier collaboration differs by vehicle types. Other factors influencing own R&D effort include age, market share and location in an industrial cluster.

Key words: Industry studies, Research & Development, Country studies, Industrial Organization, Supply Chain.

JEL Codes: L6, L22, O33

HAS ECONOMIC GROWTH WORSENERD INTER-DISTRICT INEQUALITY IN TAMIL NADU?

Paul P. Appasamy and Sunil Paul

Abstract

Tamil Nadu experienced very rapid growth of the economy during the period 2004-05 to 2012-13. Gross State Domestic Product (GSDP) grew at 9.5 per cent, higher than the All India growth rate of 8 per cent during the same period. The first half (2004-05 to 2007-08) witnessed a growth rate of 11.69 per cent which decelerated to 8.8 per cent in the later period. Per capita GDP grew by 8.7 per cent during the period 2004-05 to 2012-13. In constant prices, State per capita income nearly doubled from Rs.30,062 in 2004-05 to Rs.59,113 in 2012-13 at 2004-05 prices. The increase in State per capita income was not uniform across the state. The disparity in district per capita income widened during this period. It is well known that inequality often increases during periods of rapid economic growth.

The purpose of this paper is to investigate the factors that have contributed to the widening inter-district inequality. Districts that were more urbanized grew much more rapidly than those that were dependent on agriculture. Industry was seen to be the engine of growth in the urbanized districts. However, human development performance was more even across the State. Social development indicators such as rates of Literacy, Infant Mortality, and Life Expectancy are more or less uniform across the State. In other words, public goods such as basic education, health, food and nutrition, provided by the State have ensured equitable performance in social development. However economic growth, based on comparative advantage of regions and greater role of private sector has led to a more unequal distribution of per capita income across the districts of Tamil Nadu.

Key words: Spatial Inequality; Inter-District Disparity

JEL Codes: D63, O10, R11

DETERMINANTS OF ENERGY INTENSITY IN INDIAN MANUFACTURING INDUSTRIES: A DYNAMIC PANEL DATA ANALYSIS

Santosh Kumar Sahu

Abstract

Energy intensity in Indian Manufacturing firms is a matter of concern given the high import burden of crude petroleum. Concerns have been reinvigorated by the global and local environmental problems caused by the ever-increasing use of fossil fuels, and so it is clearly an enormous challenge to fuel economic growth in an environmentally sustainable way. This paper utilizes firm-level data from 2001-2012, from the CMIE-PROWESS to assess the determinants of energy intensity of Indian manufacturing industries using dynamic panel data approach. In general, the results indicate that differences in firm-level energy demand are systematically related to identifiable firm characteristics. Even after controlling for technology import variable; there are firm-level differences in production process and determinants of energy intensity. The results confirm that, firms that are more actively engaged in acquisition of technology either through import of technology or in-house R&D efforts appear to be more efficient in energy use.

Key words: Energy Intensity, Indian Manufacturing Industries, Panel Data Econometrics.

JEL Codes: O4, B23

DETERMINANT OF TARGET LEVERAGE AND THE SPEED OF ADJUSTMENT: EVIDENCE FROM THE INDIAN CORPORATE SECTOR

Saumitra N. Bhaduri

Abstract

In recent times, there has been a growing consensus among the researchers that firms actively pursue target capital structure. This strand of literature emphasizes that firms are not only concerned about their optimal level of capital structure but also about the strenuous adjustment process towards that optimal level. This new breed of revised trade-off theory (Frank and Goyal 2005) argues that firms optimize both the cost of deviating from the leverage target and the costs of adjusting towards the optimal level while deciding about their optimal capital structure. Further, as the capital market imperfections accentuate these costs, firms may fail to instantaneously rebalance the leverage towards the optimal level leading to an incomplete adjustment in any one period. Moreover, as the cost of rebalancing depends on various firm specific factors such as degree of financial constraint, information asymmetry, financial distress and potential tax benefits, the speed of adjustment towards the optimal decision also varies across firms. While there is a large body of work which endorses this dynamic trade-off model there is a very little understanding of the adjustment process underpinning these models.

This paper makes an attempt to examine the speed of capital structure adjustment towards the target level, particularly in the context of an emerging market where the capital market imperfections are likely to be more prohibitive. The paper uses a panel length bias corrected Least Square Dummy Variable Technique (LSDV) for unbalanced panel to estimate the optimal leverage and subsequently uses a second stage fixed effects regression to estimate the speed of adjustment towards that optimal leverage. Using a diverse sample of 742 listed manufacturing firms over a six year time period (2006-2011), the paper confirms that the Indian firms are engaged in active adjustment towards the target capital structure and the speed of adjustment towards the target are significantly influenced by the costs and benefits of rebalancing.

Key words Target Capital Structure, Trade-off Theory, LSDVC, Speed of Adjustment, India

JEL Code: G32

IMPACT OF STATE VAT ON WHOLE SALE AND RETAIL PRICES

K.R. Shanmugam

Abstract

Transition from sales tax regime to State VAT system was a major tax reform at the state level in India. As the state VAT is a multi point tax with the provision of granting set-off or credit for the tax paid on the purchases against the tax payable on sales, revenue neutral, abolishes the burden of several existing taxes such as surcharge on sales tax, turnover tax, additional surcharge, special additional tax etc, the proponents of this tax argue the overall tax burden will be rationalized and prices in general will fall. Various studies relating to the impact of VAT on prices also suggest that this tax is not inflationary.

Another view is that the replacement of the existing tax with a VAT will always change the structure of relative prices in the economy, even if the revenue yield remains the same after the tax switch. As prices indices like CPI or WPI use fixed weights to calculate the aggregate price effects, the direction in which the index change after the tax switch is a priori uncertain, depending as it must be on the pattern of the change in relative prices. A different perception is that all traders will initially bear the tax and compliance cost but would like to recoup them in due course. Some traders take the advantages of the situation and charge prices somewhat higher than that warranted by VAT. Thus the question of the impact of state VAT on prices is purely empirical.

This study attempts to test empirically whether the regime shift from sales tax to State VAT leads to higher inflation or not, using monthly point to point CPI-IW inflation series and WPI inflation series for the country as well as individually for major Indian states. For this purpose, it employs the Box and Tia intervention analysis (involves ARIMA framework) and panel data modeling. Results indicate that while the state VAT has a positive and significant impact on retails prices, it has no significant impact on whole sale prices at national level. In most states, this tax is positively related to higher CPI inflation.

Keywords: Value Added Tax, Inflation, ARIMA and Panel data methodology.

JEL Codes: H71, H73

VECTOR AUTOREGRESSIVE APPROACH TO MACRO STRESS TEST OF BANKS OPERATING IN INDIA

Sreejata Banerjee

Abstract

Vector autoregressive model to test the robustness of banks operating in India in response to unexpected shocks from macroeconomic factors reveal that shocks from external and domestic factors adversely impact banks across different ownerships. Non-performing assets the key indicator of bank soundness are regressed on a vector of variables that represent the macroeconomic, external and banking factors in two phases from 1997 to 2003 and 2004 to 2012. In the first phase external exchange rate, Net FII, output gap, interest rate, CRR have significant influence on NPA of public banks. But interest rate in two lags is significant in the second phase for all the banks. Granger causality test indicates exchange rate, net FII flow and deposits influence NPA. In the second phase NPA Granger causes Net FII and there exists a two-way causality between NPA and interest rate. In the second phase banks are vulnerable to inflation requiring 8 quarters to recover to its original position. Overall there is little scope for complacency and banks operating in India across different ownerships have to be strengthened to face shocks from external factors of exchange rate and FIIs and internal forces like inflation.

Key words: Macro Stress test, Non-performing loans, Impulse response function, Vector Auto Regression.

JEL Codes: C33, E32 E37

HEALTH IMPACTS IN AIR AND WATER POLLUTION IN INDIA: A SYSTEMATIC REVIEW

Sukanya Das and Zareena Begum

Abstract

Environmental conditions or factors have significant direct and indirect impacts on human health. Approximately 13 million deaths could be prevented every year by addressing environmental problems, such as air and water pollution, and through public health measures, such as improved access to water and sanitation and the use of cleaner fuels (WHO, 2008).

Particulate matter (PM) measures as a proxy for air pollution, has serious effects on human health. For water pollution the significant indicators include access to safe drinking water and access to better sanitation. We conduct a systematic review of the literature on the studies having impact on health due to air and water pollution. Results are synthesized through the simplest meta-analysis strategy: vote-counting. In this method, the investigator gathers all the relevant studies and then constructs one or more indicators of the relationships under investigation from each study.

PM is found to be positively significant in 60% of the studies and is negatively significant in 40% of the studies. Source of water (non-piped) affecting human health both has equal voting both positively and negatively.

Taking in to account the limitations of the method, we try to estimate the total health costs which is aggregated across all the studies that has been done in regard to India in air and water pollution. The estimated health cost on account of losses from PM10 is US\$ 124 million. Total health-related losses from water supply and sanitation account for US\$39 billion. Defining and thus measuring the cost of inaction is complex partly because of the environmental and economic uncertainties and partly due to difficulty in establishing both the baseline and the boundaries for these estimates.

Keywords: Air pollution, Water Pollution, Meta-Analysis, Vote-Counting, Impacts.

JEL Codes: I15, C10, Q52, Q53

COMMODITY FUTURES INDICES AND TRADITIONAL ASSET MARKETS IN INDIA: DCC EVIDENCE FOR PORTFOLIO DIVERSIFICATION BENEFITS

M.A. Lagesh, Mohammed Kasim C, Sunil Paul

Abstract

This paper investigates the potential for portfolio diversification benefits of commodity futures in Indian context. For this purpose, we have estimated Dynamic Conditional Correlations (DCC) between returns of four commodity futures indices and traditional asset class indices such as stock index, long term bond index and Treasury bill index, separately for pre crisis and crisis period using DCC-GARCH model and daily data ranging from June 2005 to September 2011.

Empirical results reveal that there exist very low dynamic conditional correlations between commodity futures indices returns and traditional asset indices returns, an evidence illustrating the potential for portfolio diversification benefits of commodity futures. Commodity futures become more segmented from traditional asset market, thus they can be effectively used for strategic asset allocation. Further, the conditional correlation between agriculture commodity future returns with long run and short run bond returns declined during the crisis period. Similarly, the conditional correlations of commodity futures indices returns (agriculture, energy and metal) with stock index declined in periods of high volatility in equity markets. These two findings indicate that the diversification benefits of commodity futures are most realized when the risks in traditional asset markets rise.

Keywords: Commodity Futures Indices, Traditional Assets, Correlation, DCC-GARCH Model

JEL Codes: G13

VARIATIONS IN THE SPREAD OF MICRO CREDIT: BANK- SHG LINKAGE PROGRAMME

Swarna Sadasivam Vepa and Vinodhini Umashankar

Abstract

The main objective of this study is to examine the variations in the outreach of microcredit across regions states and banking Institutions. Outreach is essentially the number of credit –linked self-help groups receiving micro credit. The paper also examines the association of some aspects that could influence the outreach of micro credit such as the percentage of population below poverty line in the state, net state domestic product per capita, share of women's groups, share of credit disbursed to women and the loan savings ratio of the self-help groups.

Various annual reports of the National Bank for Agriculture and Rural Development a subsidiary of the Reserve Bank of India provides data for three consecutive years of 2007-08, 2008-09 and 2009-10, separately for 30 states and union territories, for three different financial banking Institutions (viz., public sector and private sector commercial banks, regional rural banks and cooperative banks). The study also analyses available data for individual banks at the state level for all states for three years. The econometric estimations on fixed effects panel data model, unless otherwise mentioned.

The major conclusions are that the public sector banks have a bigger outreach compared to other banking institutions but there is a significant decline in the outreach of public sector commercial banks. Southern region has the highest outreach followed by eastern region. The branches of commercial banks did not have significant influence on the outreach of the commercial banks but the number of branches of cooperatives banks had positive impact on the outreach of the co-operatives. Higher per capita state domestic product has significant negative association with outreach of microcredit across the states. Percentage of population below poverty line in the state did not show any association with outreach. Women's share has negative association with outreach.

Key words: Bank-Self group linkage, Outreach, Women self-help groups

JEL Codes: G21, I30, J16

GREEN ACCOUNTING OF THE INDIAN METAL MINING SECTOR

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Abstract

Economic growth is widely considered as one of the means for enhancing social welfare. Economic activity could however, be unsustainable and welfare reducing for several reasons. Nature and landscapes have become increasingly exposed to a rapidly growing world population and an increasing utilization impact over the last decades. This has led to a considerable and ever increasing loss of animal and plant species worldwide as habitats are either chopped up or lost completely. Mineral extraction sites in particular are frequently regarded as destructive to the environment and therefore still present a predominantly negative image for the public and nature conservation organizations and authorities. Despite efforts of the industry to restore mineral extraction sites, the resentment remains unbroken to a large extent and poses serious problems for the provision of raw materials and future mineral extraction planning.

This paper estimates the true economic income of India's metal mining sector for the period 1970-2010, using a model of green economic income based on Hamilton (2000). The total depletion of natural capital caused by metal mining is calculated by estimating, on the one hand, the depreciation of mining resources (using Hotelling rent approach) and, on the other, the environmental degradation provoked by metal mining activities. The results show that, correcting the usual GDP measure for man-made capital depreciation plus the total loss of natural capital, the standard metal mining GDP measure of the National Accounting System overestimates by 40-50% the economic income generated by India's metal mining sector during the period 1970-2010.

Key words: Green accounting; Metal mining; Natural capital depreciation; India

JEL Codes: Q30, Q32, Q50, Q56