Vol : 8, No : 2
Journal of Economic Policy and Research
April – Sept, 2013

Listed in Cabell, Ulrich & EBSCO

Journal of Economic Policy and Research

(ISSN 0975 - 8577)

Vol : 8 April – Sept, 2013 No : 2

Journal of Economic Policy and Research

Vol : 8 | April – Sept, 2013 | No : 2

Contents

Research Papers

Research Note

Journal of Economic Policy and Research, Vol. 8, No. 2

Performance Evaluation of Neural Networks and Garch Models for Forecasting Volatility and Option Strike Prices in a Bull Call Spread Strategy

Ajitha Vejendla* & David Enke**

Investing in options has many advantages : they provide increased cost efficiency; they have the potential to deliver higher percentage returns due to increased leverage; and they offer a number of hedging and strategic alternatives. It is, therefore, worthwhile to investigate the option trading strategies that offer high payoffs. This paper provides a performance evaluation of models used in the pricing of options for a bull spread options strategy. The strategy is highly profitable when the price of the underlying primitive reaches the second out-of-the-money strike price before the expiration date of the options, but no further. The challenge lies in choosing the optimal out-of-the-money option strike price. The option exercise price, past primitive price jumps, and primitive volatility shifts are the important factors that are to be analyzed. Since the understanding of the primitive volatility is important, this thesis investigates the forecasting ability of Feed Forward Neural Networks (FNN) using back propagation learning and Recurrent Neural Networks (RNN) models, using implied volatility forecasts obtained from a Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model. The performance of the three models is studied and compared using the data from the S&P 500, DJIA, NYSE, and NASDAQ indexes. The resultsshown by the volatility forecasts indicate that RNN is a better forecasting tool. These results are further used to evaluate the performance of RNN and GARCH models in forecasting the sell option strike price in a bull call spread strategy. The trading profitability of these models is tested using SPY, DIA and SIRI options over a 1 month, 3month and 6 month trading horizon.

Keywords : Options, Bull Call Spread, GARCH, Artificial Neural Networks, Volatility.

Introduction

The tremendous increase in the awareness and activities of derivative securities in recent years has led to the popularity of option markets as one of the

* *Ajitha Vejendla, Independent Researcher, Indian Institute of Technology (IIT), Madras.*

** *Dr.David Enke, Professor & Chair, Department of Engineering Management and Systems Engineering, The Missouri University of Science and Technology, USA.*

Journal of Economic Policy and Research, Vol. 8, No. 2

Assessing the Effects of Cross Border Mergers and Acquisitions on Stock Market performance of Indian Acquiring Firms

Geeta Duppati*, Stuart Locke** & Stewart Lawrence***

In this paper we examine the reactions of the shareholders in the stock markets to the strategic decisions made by the Indian corporates in going global. The paper assesses the success of 30 cross-border mergers and acquisitions by Indian corporates. The period of the study is 2003-2011. The study addresses the questions : (1) How does the market react to the news of cross-border mergers and acquisitions by Indian corporates announcements? and (2) How successful are the Indian companies in creating value to the shareholder in the long run? The study uses event method to analyse short-term share price performance of Indian acquiring companies and restricts analysis to a three day short event window (closely surrounding the announcement day). The paper measures the long-run performance of the 30 cross-border mergers and acquisitions by Indian corporates and considers a maximum 36 months following the acquisition event month. The study uses two different approaches to assess the long term performance of the cross-border mergers and acquisitions. They are Buy-and-Hold Abnormal Return (BHAR) and Cumulative Abnormal Return (CAR) methods. The empirical results showed positive stock markets reactions in the short run following the announcements of the overseas acquisitions by Indian corporates. The empirical findings also showed positive results in the post-acquisition period. This study will add value to the existing literature, as the experiences in international acquisitions by Indian companies may be different from those in developed countries.

Keywords : Cross Border Mergers and Acquisitions; Abnormal Returns; Emerging Markets.

Introduction

With globalization, many nations have liberalized their trade policies and removed trade barriers. The transaction costs decreased and the integration of economies has contributed to increases in foreign direct investment (FDI)

* *Geeta, Duppati, Lecturer, Department of Finance, Waikato Management School, University of Waikato, New Zealand.*

** *Stuart Locke, Chairman, Department of Finance, Waikato Management School, University of Waikato, New Zealand.*

*** *Prof.Stewart Lawrence, Department of Accounting, Waikato Management School, University of Waikato, New Zealand.*

Journal of Economic Policy and Research, Vol. 8, No. 2

Exports of Agricultural Products from South-Asia and Impact of SPS Measures : A Case Study of European Rapid Alert System for Food and Feed (RASFF)

Murali Kallummal*, Aditi Gupta** & Poornima Varma***

International trade has been disciplined under the World Trade Organization (WTO) Agreements and one of the Doha Ministerial Mandate was to bring a balance between the reduction/eliminating tariffs and Non-Tariff Measures (NTMs); thereby enhancing market access. However, ever since the launch of WTO, there has been a spurt in the standards/regulations (SPS notifications) indicating the greater use of these NTMs as a trade policy instrument. This has led to an overall imbalance in market access (tariff vis-a-vis NTMs) in the global arena. This imbalance is perceived to be predisposed in favour of developed countries; given their advance technological capabilities in domestic production activities and other geo-political factors like location of multilateral institutions of significance. This study analyses the impact of the European SPS measure on the South Asian agricultural exports. We have used two data sources like Rapid Alert System for Food and Feed (RASFF) online database and World Integrated Trade Solutions. The RASFF database has been used to extract data on the EU's actions on the exports from South Asia using the flexibilities provided under the garb of SPS Agreement. The application of GRAVITY model suggests that the European standards did have a trade distorting impact when the coverage ratio was incorporated.

Keywords : Non-tariff Measures, Sanitary and Phytosanitary Measures, EU, RASFF Database, Trade Policy, Market Access Barrier.

---

* *Dr.Murali Kallummal, Associate Professor, Centre for WTO Studies (CWS), Indian Institute of Foreign Trade (IIFT), Deemed University, under the Department of Commerce, Ministry of Commerce and Industry, New Delhi.*

** *Ms.Aditi Gupta, M.Sc. Economics, TERI University, Vasant Kunj Institutional Area, New Delhi.*

*** *Dr.Poornima Varma, Assistant Professor, TERI University, Vasant Kunj Institutional Area, New Delhi.*

The authors express their profound gratitude to the Head & Professor Mr.Abhijit Das of the Centre for WTO Studies, IIFT for his support and valuable comments and to TERI University faculty members for their valuable suggestions for the completion of this study.

Journal of Economic Policy and Research, Vol. 8, No. 2

Financial Inclusion and Agricultural Productivity : Evidence from Rural West Bengal, India

Arindam Laha* & Pravat Kumar Kuri**

Agricultural productivity is influenced by the nature of cropping pattern, the level of cropping intensity, intensity of irrigation and the tenurial contract with or without Operation Barga. All factors are again influenced by the level of financial inclusion in terms of the availability of rural credit. In other words, financial inclusion enhances agricultural productivity through multiple impacts on cropping pattern, cropping intensity, irrigation intensity, choice of tenurial contract and Operation Barga. The paper thus examines how the process of financial inclusion influences these factors affecting agricultural productivity.

Keywords : Financial Inclusion (FI), Formal Credit, Cropping Pattern, Financial Access, Tenurial Contracts, Agricultural Credit, Operation Barga.

Introduction

Formal and informal credit institutions along with the tenancy practices greatly influence the agrarian relations and thus on agricultural productivity. In fact, the lack of access to formal credit (i.e., Financial Inclusion (FI)[1] acts as a capital constraint in flourishing agricultural mechanisms and that certainly influences the agricultural productivity. Credit market imperfection in rural areas encourages the farmers to tie up with the landlords under interlinked transactions involving land, labour, credit and product markets, which again affect the agricultural productivity. Moreover, the forms of interlinked tenancy contract and the level of FI have direct bearing on agricultural productivity. The terms and conditions of the tenancy are often influenced by the transactions in other non-tradeable factor markets (notably labour, draft animal and credit). The most obvious of these is the imperfectly developed credit market in the sense that asset poor tenants can overcome a credit constraint by developing their own "access institutions"

* *Dr.Arindam Laha, Assistant Professor in Economics, Department of Commerce, The University of Burdwan, Burdwan, West Bengal.*

** *Dr.Pravat Kumar Kuri, Associate Professor in Economics, Department of Economics, The University of Burdwan, Burdwan, West Bengal.*

This research is a part of the ICSSR major research project entitled "Changing Characteristics of Rural Credit and the Problem of Financial Inclusion – A Case Study of Rural West Bengal", undertaken at the Department of Economics, the University of Burdwan, West Bengal.

Journal of Economic Policy and Research, Vol. 8, No. 2

Trends in Factor Productivity and Productivity Gains in the Aggregate Manufacturing Sector of India in the Pre- and Post-Liberalization Period

M.Manonmani*

Measures of productivity describe how well the resources of an organization are being used to produce input. They are very useful in achieving and maintaining high level of performance in any organization, particularly in improving the efficiency of various operations within the organization as well as for the total organization. In the absence of proper and equitable distribution of productivity gains, the very purpose of productivity increment efforts get defeated. The reference period chosen for the study covers both pre and post liberalization period. The pre-liberalization period covers between 1972-73 and 1990-91 and post-liberalization period between 1991-92 and 2009-10. Much differences were not observed in average growth of the labour productivity in the pre and post reform period. There were no improvements in the growth of capital productivity and the linear growth rate was negative in both the periods. Much variation was observed in the mean growth of total factor productivity in both the periods. Capital enjoyed substantial share in productivity gains. The share of labour in net distributable output has been less than the share of capital in both the periods.

Keywords : Productivity, Post-Liberalization Period, Total Productivity Gains.

Productivity of an organization is defined as the ratio of outputs produced by the organization and the resources consumed in the process. Productivity is used to assess the extent to which certain outputs can be extracted from a given input. There can be many different types of productivity measurements depending on the type of resources considered. Some of the most common types of productivity measurements include labour productivity, machine or capital productivity. The partial productivity ratios are the simplest measure of productivity and are derived by dividing the output by relevant factor input. Naturally, there can be as many partial productivity ratios as there are inputs. The most commonly used and widely reported partial productivity ratios are labour productivity ratio and capital productivity ratio. The partial

* *Dr.M.Manonmani, Associate Professor, (Economics), Avinashilingam Institute for Home science and Higher Education for Women University, Coimbatore.*

Journal of Economic Policy and Research, Vol. 8, No. 2

Impact of Institutional Agricultural Credit on Cost of Production

Rabindra Kumar Mishra*

The objective of the paper is to examine the impact of institutional agricultural credit on the cost of production. In post loan period farmers use purchased inputs like high yielding variety seeds, fertilizer, pesticides and insecticides, machine labour, hired labour etc. Due to the use of these purchased inputs, the cost of production is growing and ensures a positive impact on the agricultural production and productivity and consequently the agricultural sector is able to form a substantiated situation to nourish the meagre teeming millions and take the edge off the age old predicament relating to hunger and poverty in under developed nations. So in this paper in order to examine the impact institutional credit on cost of production and agricultural production, a field study (2009-10) of three villages of different degree of Bargarh district (Orissa) India has been done. In order to test the hypotheses to know the significant difference in the growth of cost of production across the villages and farm sizes in post loan period, Two Way Anova Test has been done.

Keywords : Institutional Credit, Pre-Loan, Post-Loan, Cost of Production, Agricultural Development.

Introduction

In the current competitive and spirited economy, Indian agriculture is struggling due to the mounting costs of agricultural inputs and consequently the poor farmers are unable to meet the cost of production. In view of this, it is indispensable that the accessibility and availability of institutional agricultural credits should be guaranteed for applying modern technology, practices and provision of technical guidance in order to increase the agricultural production. Because the growth of production in agricultural sector exemplifies thoughtful way out to the problem of food crisis felt globally, provided it is bequeathed with financial support along with technological assistance. Thus there is a basic need to take immediate and mandatory measures to get better the agricultural sector by supporting the farmers financially for the increase in agricultural production and productivity.

The prime challenge today before the policy-makers to countenance the food crisis is to augment the productivity and total food grain production. In India the gross food grain production

* *Dr.Rabindra Kumar Mishra, Lecturer in Economics & Principal-in-charge, Sohela Degree College, Sohela, Bargarh, Orissa, India.*

Journal of Economic Policy and Research, Vol. 8, No. 2

Fiscal Scenario of Southern States of India

Ratna Vadra*

Sustainability of government finances is conceptually associated with the idea of solvency and assesses whether governments can continue with their existing fiscal policies indefinitely and remain solvent. In this paper we will be concentrating on the fiscal scenario of the southern states of Karnataka, Kerala, Andhra Pradesh and Tamil Nadu and make a comparison of their finances. This paper studies the structure and trends in public finances of these states from1999 to 2008-10. The study examines the key indicators in four categories-deficit management, financing fiscal deficit, revenue and expenditure management and debt management and dependence of funds on center. The paper discusses the key policy initiatives and fiscal reforms made by these states during the study period of 2000-2009. Mounting fiscal deficits and high growth in non development expenditure are the two major problems confronting state's fiscal position.

Keywords : Fiscal Sustainability, Southern States, Fiscal Reforms.

Introduction

Enhanced fiscal transparency leads to sound economic management and effective policy formulation, strengthens accountability of the budgetary policies and enhances credibility. The recent turmoil in the financial markets has brought to the fore the importance of enhanced transparency and disclosure of information. In this regard, fiscal transparency at the state government level is very crucial.

The fiscal situation has further deteriorated with poor cost-recovery measures. The ever-increasing commitment of states' expenditure on interest payments, which have resulted from rising interest rates as well as increasing indebtedness caused by accumulated losses and consequent budgetary support to public enterprises, particularly in the power sector and the spurt in pension expenditure have also contributed to fiscal problems. This turn of events is reflected in the appearance of large fiscal and revenue deficits in most states during mid-nineties. Moreover, the number of fiscal transfers, especially shared tax revenue has declined considerably in several states consequent upon the economic reforms initiated by the union government, since 1991. All these factors have led to a substantial decline in

* *Dr.Ratna Vadra, Assistant Professor, IMT, Ghaziabad, Uttar Pradesh, India.*

Journal of Economic Policy and Research, Vol. 8, No. 2

Role of Single Currency in Harmonization of International Accounting Standards

R.Anuradha*

International accounting is about accounting standards and various accounting practices followed throughout the world. It basically deals with maintaining, recording and presentation of various financial statements. The practice of following different accounting systems by different countries has resulted in several confusions among users of such financial statements. Harmonization studies have tried to ease this confusion by introducing International Accounting Standards (IASs). Though still not made compulsory, the IASs is slowly replacing the conventional methods in many global corporate annual reports. This study focuses on the role of single currency towards harmonization of accounting standards. The concept of single currency, its origin and need, functioning of existing single currency and its role towards introduction and simplification of IAS are focused in this study.

Keywords : International Accounting, Single Currency, Harmonization, Accounting Standards.

Introduction

Single currency is a currency used by all the members of an economic federation. It can also be defined as *denomination in the same currency*. It is also used to describe an international transaction denominated entirely in one currency. Robert A. Mundell (1960) describes the geographic area in which a single currency would create the greatest economic benefit as Optimum Currency Area (OCA).

Economists define an OCA, as an Optimal Currency Region (OCR), in which it would maximize economic efficiency to have the entire region share a single currency and describes the optimal characteristics for the merger of currencies or the creation of a new currency and a new monetary union. An OCA is often larger than a country, for example, Euro's OCA is almost the entire Europe.

The theory of the OCA was pioneered by economist Robert A. Mundell, though earlier work was done by Abba Lerner. Mundell gives the following criterias for a successful currency union :

- *Labour mobility across the region.* This includes physical ability to travel (visas, workers' rights, etc.), lack of cultural barriers to free movement (such as different languages)

* *R.Anuradha, Assistant Professor, The Oxford College of Business Management, Bangalore.*

Journal of Economic Policy and Research, Vol. 8, No. 2

Financing of Panchayati Raj Institutions in India : An Assessment

Tosib Alam* & Mohd Azam Khan**

The need for decentralization was realized long back but the recent effort to give constitutional back-up to rural local government is significant. The passage of 73rd Amendment Act, in 1992, people's participation in the process of planning, decision-making, implementation and delivery system in rural India has been recognized. As per the 29 items of the Eleventh Schedule of the Constitution, three functions i.e functions, functionaries and funds have to be devolved on the Panchayati Raj Institutions for planning and implementation of schemes pertaining to a particular sector. Although the 73rd Constitutional Amendment Act (CAA) mandating decentralization was passed more than a decade ago, limited devolution and inadequate capacity of local governments seem to have undermined the autonomy of Panchayati Raj Institutions. While decentralization has become a development strategy of many developing countries, its linkage to poverty reduction in particular has been the subject of recent time.

Keywords : Fiscal Decentralization, Participatory Planning, Rural Governments and Central and State Finance Commissions.

The last two decades of the twentieth century witnessed a significant rise in the scope of local democracy throughout the developing and developed countries, with increasing devolution of political, economic and administrative authority to local governments. Along with privatization and deregulation, this shift represents a substantial reduction in the authority of national government over economic policy (Khan & Alam, 2011). Failure of the centra-lized system of governance, planning to resolve local problems, promote local level development and deepening democratic principles have led to an upsurge of interest in decentralization. In the western world, decentralization is an effective tool for reorganization of the government in order to provide public services cost effectively in the "post-welfare state" era. Developing countries are turning to decentralization to escape from the traps of ineffective and inefficient governance, macro economic instability and inadequate economic

* *Dr.Tosib Alam, Ph.D in Economics, Research Assistant, Indian Council of Social Science Research, Aruna Asif Ali Marg, New Delhi-110067.*

** *Dr.Mohd Azam Khan, Assistant Professor, Department of Economics, Aligarh Muslim University.*