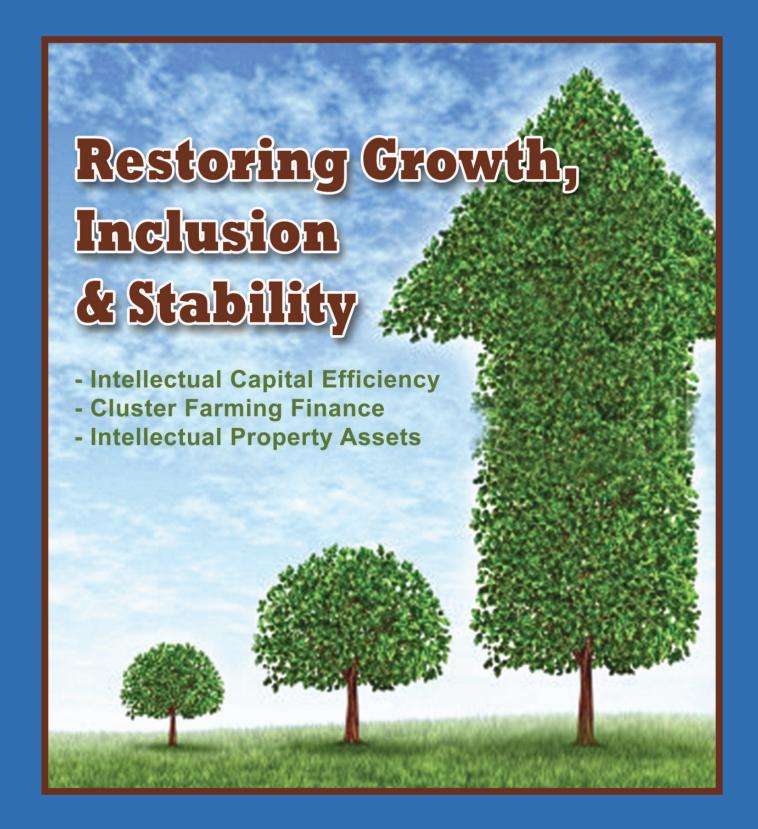


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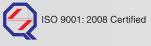
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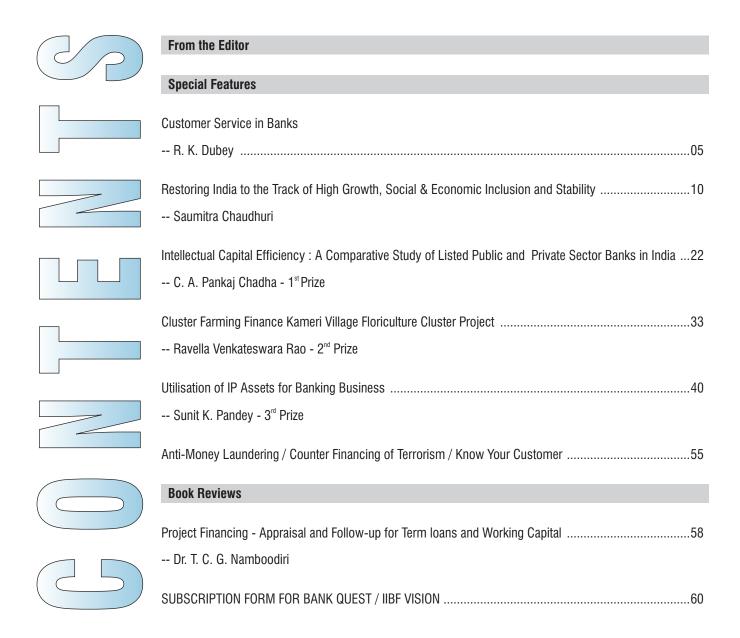
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The mission of the Institute is to develop professionally qualified and competent bankers and finance professionals primarily through a process of education, training, examination, consultancy / counselling and continuing professional development programs.

— ध्येय –

संस्थान का ध्येय मूलतः शिक्षण, प्रशिक्षण, परीक्षा, परामर्शिता और निरंतर विशेषज्ञता को बढाने वाले कार्यक्रमों के द्वारा सुयोग्य और सक्षम बैंकरों तथा वित्त विशेषज्ञों को विकसित करना है।

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editorial



Dr. R. Bhaskaran *Chief Executive Officer, IIBF, Mumbai*

he Institute organizes theme based seminars every year and current year's theme is Customer Service. The current issue begins with the inaugural speech delivered by Mr R. K. Dubey, Chairman and Managing Director, Canara Bank at the 9th Customer Service Seminar held at Bengaluru in collaboration with BCSBI.

Sir Purshotamdas Thakurdas or Sir P.T. as he was popularly known was one of the founding members of the Institute. In his memory, the Institute organizes an annual lecture on a contemporary topic related to banking and finance. Since 1981, this lecture has become an important annual event of the Institute. The 29th Sir Purshotamdas Thakurdas Memorial Lecture (Sir PTML) was delivered by Mr. Saumitra Chaudhuri, Member, Planning Commission, Government of India on the topic "Restoring India to the Track of High Growth, Social & Economic Inclusion and Stability". We carry the speech as the second article in this issue of Bank Quest.

Mr. Chaudhuri in his speech narrated the opportunities available to bring about remarkable improvement in the living conditions of the people. He stressed the need for the Indian economy to get back to 9% or at least 8% growth. To achieve the desired growth, he emphasized the need to overcome the supply side constraints in the next 4 or 5 years. He has suggested measures that are driven from reforms, to overcome delay and denial of infra projects, to reduce CAD. He threw light on the enormity of the transformation that is underway which has opened up many opportunities as well as varied challenges. In order to cope with this situation, there is a need for enhanced investment in institutional capacities, innovative thinking and discipline in conduct.

Every year, the Institute conducts an essay competition for its members (bankers) under its Micro Research initiative. All the essays received by the Institute for the Competition are evaluated by a panel of experts. Based on the panels recommendation, the winning essays are identified and approved by the Institute's Research Advisory Committee comprising of eminent bankers and academicians. During the year, the Institute has received a good number of papers for the competition. This time in addition to first, second and third

editorial

prizes, the Institute awarded 3 consolation prizes. The Institute has a practice of publishing the prize winning essays in the Bank Quest. In this issue we have featured some of the prize winning essays.

The essay which was awarded the first prize is "Intellectual Capital Efficiency: A Comparative Study of listed Public and Private Sector Banks in India" by Mr. C. A. Pankaj Chadha. The study provides a new perspective and dimension for performance measurement & efficiency of banks in India and contributes to the existing literature on intellectual capital. In the article, Mr. Chadha analyses the Intellectual Capital Efficiency of the listed Public and Private Sector Banks in India for a period of seven years from 2005 to 2011 using the VAIC (Value Added Intellectual Coefficient) model. For the purpose of the study, he has used data of a sample of 14 listed banks. The empirical results revealed that VAIC of most of the banks is increasing and intellectual capital is efficiently utilized by the Indian banks.

Next article in this series is the paper which won the second prize "Cluster Farming Finance" is by Mr. Ravella Venkateshwara Rao. The paper describes a successful floriculture cluster farming finance project implemented by one of the leading Public Sector Banks in Maharashtra. Here, the author has documented an innovative project from its conceptualization stage to the evaluation stage. The case study demonstrates as to how one can explore available opportunities in Rural Banking.

The third prize winning article is "Utilisation of IP Assets for Banking Business & Financial Instrumentation" by Mr. Sunit K. Pandey. The paper explores new areas of operation i.e., leveraging and utilizing the potential of IP assets for core banking business. The paper also gives a brief view of principles and methods for utilization of IP assets for MSME debt restructuring and designing new corporate/MSME Banking products.

We are happy to introduce a new feature / section in the Bank Quest from this issue. In this section, we will analyse / discuss / write on a topic related to current developments in Banking & Finance sector. In this issue, we carry an article on AML / KYC. We welcome your feedback.

Further, the issue also includes a book review 'Project Financing- Appraisal and Follow-up for Term loans and Working Capital' written by D. P. Sarda. We hope you will enjoy reading the articles.

We welcome your valuable suggestions and feedback for improvement.

(Dr. R. Bhaskaran)

Customer Service in Banks *

The position of banks has changed considerably from the past, wherein demand used to far exceed the supply. In today's deregulated environment, there are several players in the market, e.g., Public Sector Banks, Regional Rural Banks, Indian Private Banks, Foreign Banks, Urban Co-operative Banks, Rural Co-operative Credit Institutions, etc.

In this overarching setting, customers are highly demanding; and information asymmetry no longer exists. Today's market quickly disseminates necessary inputs about the price and service provided by the various players. Consequently, customers are becoming increasingly better-informed and more demanding. The customers quickly differentiate players, who provide prompt and efficient service and move to them. This is why customer service has now become the industry buzzword globally.

Greater 'customer centricity' requires:

- Definition of strategic customer segments and value propositions by transcending product and price to include other dimensions, e.g., service, customization, reliability and timeliness.
- Establishment of enterprise wide customer guiding principles.
- Identification of specific synergies, variations and gaps among business units to maximize customer value.
- Creation of strategic customer initiatives.

The success of any business model depends not just on margins, but more importantly on ensuring value based services to the customers. Change in technologies, business processes, organization models and customers has fundamentally altered the customer relationship landscape.

Implementation of business analytics, integration architecture and other disruptive technologies necessitate a sharper focus on Customer Relationship Management (CRM).

In case of financial institutions, effective customer relationship strategy and greater customer-centricity is reflected in Fair Practices Codes for Lenders, transparency and reasonableness of bank charges and financial education of customers.

In the present world, the customer is a customer of the bank and not of the branch. Consequently, transforming customer demands and proliferation of new technologies, such as, CBS, Business Process Re-engineering (BPR), ATMs, Real Time Gross Settlement (RTGS), make it necessary for banks to move from transaction banking to customer-centric solutions.

In the Indian scenario, where all banks offer almost similar products and services, need-based efficient customer service can differentiate a bank.

A recent analysis of complaints received by the Banking Ombudsman reveals that complaints arise because of various challenges in banking services. Such challenges relate to the changes in the way service is delivered, multiplicity of agencies, shifting loyalties of staff and customers, risks of frauds, proliferation of delivery channels, demanding customers, financial inclusion measures and technology and customer mismatch.

^{*} Inaugural Speech delivered at the 9th Seminar on Customer Service jointly organised by IIBF & BCSBI on 21th June, 2013 at Bengaluru.

^{**} Chairman & Managing Director, Canara Bank.

2. RBI'S DEFINITION OF CUSTOMER

The customer of a Bank may include:

- A person or entity that maintains an account and / or has a business relationship with the bank;
- One on whose behalf the account is maintained (i.e., the beneficial owner);
- Beneficiaries of transactions conducted by professional intermediaries, such as, Stock Brokers, Chartered Accountants, Solicitors, etc., and
- Any person or entity connected with a financial transaction, which can pose significant reputational or other risks to the bank, e.g., issue of a high value demand draft as a single transaction.

3. MAJOR AREAS OF COMPLAINTS

Complaints broadly relate to the following aspects:

- ATM Debit card
- Credit Cards
- Net Banking
- Cheques for collection
- Service charges
- Home Loans
- Pensions
- Remittances
- CIBIL reporting
- Other issues
 - Misbehaviour
 - Sanction of loans
 - Exchange of notes

IMPROVING CUSTOMER SERVICE IN BANKS

Given the criticality of customer service in banks and financial organizations, the issue of customer service has been carefully examined, particularly in the wake of the global financial crisis of 2008. Creation of new and clearly differentiated value requires product management, product delivery management, convenience management and customer delight management. Hence, customer service must be understood in terms of all aspects of the product and

the delivery process. Accordingly, customer service is fast acquiring the significance it undoubtedly deserves because of increased business complexities and the need for a holistic view of several organisational functions.

The proliferation of recent research on CRM facilitates the development of competitive advantage in a variety of organizational settings. It is important for a firm to closely monitor and conform to the needs and preferences of its customers. Customer service imperatives emanate from increasing global competition, rising consumer affluence, increased customer options, advancing technology, ethical standards and a realisation of the cost of mistakes.

A lot of work has been undertaken on what influences the attitudes and behaviour of customers. This makes it abundantly clear that the rapidly expanding field of customer service should neither be taken as an appendix to management nor as a trivial element of the development strategy of organizations.

Superior level of customer service builds durable client relationship, improves retention rates and identifies new business opportunities. Five prerequisites of staying close to customers despite their transforming requirements, aligning the strategy and organization to best support customers' needs and monitoring execution to achieve results require making CRM principles an integral part of the work ethic and to make it "the driving force for sustainable excellence".

i) Building Enduring Relationship

Providing good customer service, real-time experience tracking and a sustained relationship with the customers increases the effectiveness of the marketing strategy and increases sales. Higher responsiveness requires understanding and knowing the customer for a seamless, integrated customer experience. Relevance and interactivity helps to both maintain existing accounts and attract new ones.

Banks must examine events that influence customer perceptions and ensure proper alignment of business strategies for more focused customer services in the real time online environment. This task requires inter-alia, customer-centric policies, fair Customer's Grievance redressal System, reasonable charges, formulation and execution of transparent, objective, non-discriminatory and non-exploitative policies and procedures. These and other effective customer retention programmes, which build a series of processes to ensure meeting of brand promises in the customer care delivery system, help to sustain and enhance customer loyalty.

ii) Centralizing Customer Information

Collection, processing and incisive analysis of customer data provides a decisive edge over competitors. Further, today's technology realm and RBI's vision demands customer focus. Customer focus requires leveraging existing customer information to gain deeper insights and to formulate policies to improve related processes to derive value. But the crux of the issue lies in moving from real-time insight to real-time action, particularly for products and services delivered through multiple channels over large areas.

Both theoretical underpinnings and empirical evidence clearly reveal that those companies that created the greatest value have embraced entirely new ways of thinking about customer service and performance management.

Centralized customer information helps the banks in identifying specific customer segments and their requirements and benchmarking and best practices study. It thus enhances competitive strength and resilience by delivering value-added services to customers and increasing productivity by utilising data mining and data warehousing applications. It also facilitates optimization of business strategies by use of analytics.

iii) Thinking from the customers' point of view

The customer is undoubtedly the king. As Mahatma Gandhi stressed, "A customer is the most important visitor on our premises, he is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so".

There is thus a manifest need to maintain the highest standards in customer service; lest customers silently move away from the institutions, which do not give them a fair deal. This focus on the customer's holistic experience for increased brand identification requires a 360-degree view of customers across product lines, business units, and service divisions with a thrust on data quality and consistency to identify and satisfactorily respond to customers' needs.

iv) Innovation in Products / Services

With deregulation, banks in India are innovating products and services and the alternative technology aided delivery channels to make banking transactions faster, cheaper and easier. We need to leverage technology to quickly introduce new features, products and services, track success, and effect course correction where necessary.

To get younger and upwardly mobile customers, banks need to be more technologically savvy and also significantly popularize their technology aided product offerings.

v) Change in attitude of Staff

Better and faster technology, swanky branches and best product / service offerings are necessary but not sufficient for complete customer satisfaction. Hence, there is a need to transform the mindset of the staff through greater technological absorption, increased domain knowledge and enhanced communication skills. This transformational learning experience helps staff members acquire the skills and knowledge to nurture customers to drive breakout performance and successfully lead their organizations into the future.

Renewed focus on customer delight needs to be driven home all along the line right from the Board of Directors, General Managers, Zonal / Circle Managers and Regional Managers to the Branch Manager and supervisory staff. The pursuit of organizational success requires fostering of a culture of customer service throughout the business - customer service is too important to be left to customer service officers alone!

5. INITIATIVES OF CANARA BANK

Canara Bank, which has a history of 107 years, has been known as a customer-focused bank. The Bank has, however, taken several initiatives to improve the quality of customer service. The Bank has implemented Core Banking solution, single window services and teller services, ATM and Anywhere Banking, Internet and Mobile Banking and various other customer friendly services.

Further, the Bank has also introduced the following facilities:

- CPPC to process Pension centrally.
- Introduced CTS 2010 compliant cheques to prevent frauds and to avoid delay in collection of cheques.
- SMS alerts to registered mobile number regarding account transactions.
- Sending pass sheet to registered email address of the customers on regular intervals as requested.
- Facilitating Passbook printing by introducing kiosks for passbook printing.
- Facilitating retail loans online with tracking facility and information regarding the list of documents required.

During the year, 2011-12 and 2012-13, we received about 4000 and 5100 complaints, respectively and all complaints were redressed. We are, however, regularly monitoring the situation to bring about further improvement.

We have a separate General Manager in-charge of Customer Services and Customer Grievances Redressal Wing.

We are also in the process of appointing a Chief Customer Service Officer (CCSO), an official who will work as an Internal Ombudsman.

6. CONCLUDING REMARKS

The World Bank - IMF's Report on the Financial Sector Assessment for India (2012) justifiably maintained "India has comprehensive policies and compliance mechanisms for the protection of banking consumers, and is ahead of most countries in this area. Going

forward, including Non-banking Financial Companies (NBFCs) in the mandates of the Banking Codes and Standards Board of India and of the Banking Ombudsman System (BOS), ensuring consumer protection of the entire financial system, and devising a strategic consumer awareness program, will further strengthen the system".

However, an accent on customer service through a focus on tangibles, accuracy, reliability, responsiveness, empathy and bonding / advocacy is necessary to raise the bar.

The ability and willingness to anticipate and meet customer expectations, an uncanny ability to look at the larger picture, is what distinguishes the winners from the 'also-rans'. Indian public sector banks will be able to weather the intensifying competition as long as they are relevant to consumers in terms of their product offerings relevant in terms of technology, quality, reliability, price, performance and support.

Treating Customers Fairly (TCF) requires clearly understood products and services. The Managers should appropriately advise customers on suitability of products, risks in complex products, etc.

The Sergeant Review of Simple Financial Products in the UK has identified 4 attributes of classifying financial products as "simple". These are -

- attributes of benchmarking and comparing with other products;
- understandable and accessible to the mass market;
- not tailored to meet individual needs, but meet the basic needs of consumers and offer them a fair deal;
- and a viable commercial proposition for the provider.

TCF does not require a one size fits all approach. But we have to make TCF a credo by transparency and non-discrimination in pricing through access to adequate, comparable information; honest and ethical dealings; and effective, responsive and robust grievances redressal system.

In the case of banking and financial institutions, customer service must become a business philosophy. Hence, there has to be a move from rules based

to principles based system, TCF across life cycle and a renewed thrust on customer service and it's tracking on an ongoing real-time basis. This necessitates designing of innovative and cost-effective mechanisms of delivering banking services efficiently, developing profitable business models and leveraging technology optimally.

Banking Codes and Standards Board of India (BCSBI) is playing a pioneering role in enhancing awareness among staff and general public, promoting good and fair banking practices, increasing transparency and promoting a fair and cordial relationship. We have placed the BCSBI Codes on our Website and are making all our efforts to popularize this Code. Now

BCSBI proposes to rate banks in their level of customer service. I wish BCSBI all success in their customer-centricity efforts.

I am delighted that the Indian Institute of Banking and Finance (IIBF) has taken a lead role in promoting the significance of customer service. The catalytic role played by BCSBI and IIBF is both welcome and timely. All stakeholders in the banking community must join hands in the realisation of our collective vision of improving customer service.

Thank you!



मुद्रास्फीति पर रुपये के मूल्यह्नास का प्रभाव

विनिमय दर पास - थू (ईआरपीटी) आयातक और निर्यातक देशों के बीच विनिमय दर में एक प्रतिशत परिवर्तन के कराण स्थानीय मुद्रा आयात मूल्य में हुए बदलावों के प्रतिशत को दर्शाता है। विनियम दर के मूल्यह्नास का घरेलू उपभोक्ता मूल्य मुद्रास्फीति में पास-थू समय के साथ अनेक देशों में कम हुआ प्रतीत होता है जो आंशिक तौर पर मौद्रिक नीति के फ्रेमवर्क को मुद्रास्फीति केंद्रित बनाने तथा मुद्रास्फीति प्रत्याशाओं पर अंकुश लगाने में मौद्रिक नीति की सफलता को दर्शाता है (मिशिकन, 2008)। जब मुद्रास्फीति के प्रति मौद्रिक नीति की प्रतिबद्धता मजबूत और विश्वसनीय होती है और मुद्रास्फीति प्रत्याशाओं पर आघातों का असर-चाहे वह समग्र मांग, उर्जा मुल्यों या विनियम दर से हो-कम होता है।

ि किंतु, मुद्रास्फीति प्रत्याशाओं पर अंकुश लगाने में मौद्रिक नीति की भूमिका पास-थू के अनेक निर्धारकों में से एक है। पास-थू के अन्य निर्धारकों में निम्न बातें शामिल हैं : (क) मुद्रास्फीति की निरंतरता, (ख) बाजार के रुख के अनुसार कीमत निर्धारण, (ग) आयातक देश में मांग की कीमत लोच, (घ) अंतिम खुदरा मूल्य में स्थानीय वितरण और विपणन लागत का हिस्सा, (ङ) देश का आकार, (च) खुलेपन की सीमा, (छ) विनियम दर में उतार -चढाव और विनियम दर आधातों की निरंतरता, और सबसे महत्वपूर्ण (ज) विनियय दर में मूल्यह्नास के समय घरेलू मांग की स्थित। बाजार की दिशा के अनुसार कीमतों का निर्धारण यह संकेत करता है कि विश्व के बाकी भागों से निर्यातक आयातक देश में मुद्रा में मूल्यह्नास के प्रभाव को आंशिक तौर पर वहन कर रहे हैं। यदि आयात स्थानापन्न वस्तुओं के घरेलू निर्माता अपनी कीमतें अपरिवर्तित रखते हैं तो पास-थू कमजोर भी हो सकता है। भिन्न-भिन्न पण्यवार विश्लेषण यह संकेत देते हैं कि सोने और तेल जैसी कुछ वस्तुओं के लिए मांग की कीमत में लचीलापन कम हो सकता है, जिसके कारण ऐसे वस्तुओं के लिए पास-थू अधिक हो सकता है। हालांकि, कभी - कभी आयातित वस्तुओं के कीमत विर्धारण में राजकोषीय नीति के हस्तक्षेप को दर्शाने वाली दमित मुद्रास्फीति के कारण पास-थू कम रह सकता है। बाजार के खुलेपन में बढोंत्तरी के साथ, उच्च आयात की मात्रा भी पास-थू को बढ़ा सकती है। यदि यह महसूस किया जाता है कि मूल्यह्नास कम समय के लिए और अस्थायी होगा, पास-थू अधिक नहीं हो सकता। वास्तविक प्रभावी विनिय दर (आरईईआर) के व्यवहार के संदर्भ में विनियय दर का गलत संरेखण अक्सर प्रमुख संकेतक के तौर पर कार्य करती है कि मूल्यह्नास के बारे मं बाजार की धारणा कैसी हैं। पास-थू के महत्वपूर्ण निर्धार मांग की घरेलू परिस्थितियां होती हैं जो मूल्य

भारत में, समय के साथ मौद्रिक नीति के प्रति बहु-उद्देशीय और बहु-संकेतक होने के बावजूद मुद्रास्फीति उद्देश्यों के प्रति उच्च प्रतिबद्धता को स्थापित किया है। हालांकि, लगातार होने वाले आपूर्ति आघातों के कारण, उच्च स्तर पर भी हाल के वर्षों में मुद्रास्फीति में दृढ़ता देखी गयी। विनिमय दर में बड़ी मात्रा में गलत संरेखण सामान्य तौर पर देखा नहीं जा रहा है, और विनिमय दरों में उतार-चढ़ाव को रोकने के लिए रिज़र्व बैंक के प्रयासों से स्थिरता सुनिश्चित हुई है। हालांकि, सकल घरेलू उत्पाद में आयात के हिस्से के तौर पर भारत के खुलेपन मं वृद्धि हुई है परंतु राजकोषीय स्थिति में सुधार के लिए बाजार आधारित कीमत निर्धारण की महत्ता के बावजूद पट्रोलियम उत्पादों में दमित मुद्रास्फीति जारी है।

निर्धारण क्षमता का एक संकेतक है। मूल्य लोच वाली वस्तुओं में कमजोर घरेलू मांग फर्मो की कीमती निर्धारण क्षमता को उल्लेखनीय ढंग से सीमाबद्ध कर देती है। परिणास्वरुप शेष विश्व से

निर्यातक और मूल्यह्नास वाले देश के आयातक दोनों फर्मों को अपने लाभ मार्जिन को समायोजित करना पड़ सकता है जिसके परिणामस्वरुप पास - थ्रू कम हो सकता है ।

भारत में विनिमय दर पास-थ्रू पर अनुभवजन्य साक्ष्य में यह पाया गया है की अपूर्ण पास-थ्रू के जर्बदस्त साक्ष्य मौजूद है इसके बावजूद पास-थ्रू की मात्रा पर विविध साक्ष्य भी हैं। खुन्द्रक्यम (2007) ने पाया कि 1991 के सुधारों के बाद घरेलू कीमतों में विनिमय दर पास-थ्रू में गिरावट का कोई स्पष्ट संकेत नहीं है। इसके आगे, पास-थ्रू में मूल्यवृद्धि और मूल्यह्मास और विनिमय दर के परिवर्तनों के आकार के बीच असममिति थी। भट्टाचार्या और अन्य (2008) ने यह पाया कि विनिमय दर में एक प्रतिशत के परिवर्तन के कारण दीर्घाविध में उपभोक्ता मूल्य सूचकांक में 0.04-0.17 प्रतिशत और थोक मूल्य सूचकांक में 0.29 प्रतिशत का परिवर्तन आता है। मिल्लक और मर्कुएस (2008) ने पाया कि 1990 के दशक में पास-थ्रू अपर्याप्त रही लेकिन प्रशुल्क दर पास-थ्रू (टीआरपीटी) से अधिक रही।

हाल के वर्षों में, विनिमय दर पास-श्रू संभवतः पेट्रोलियम उत्पादों में उल्लेखनीय दिमत मुद्रास्फीति के कारण कम रहा है। यग भी संभव है कि शेष विश्व से निर्यातकों ने भारत के बाजार में अपने हिस्से को बनाये रखने के लिए संभवतः प्रभाव के कुछ हिस्से का वहन किया होगा जिसके कारण संभवतः कम पास-श्रू हुआ। मंद वैश्विक मांग की परिस्थितियों को देखते हुए शेष विश्व के निर्यातकों द्वारा बाजार के रुख के अनुसार कीमत निर्धारण के कारण मुद्रास्फीति पर अनुमानित पास-श्रू में कमी आ सकती है।

Source: RBI, Annual Report, 2011-12.

29th Sir Purshotamdas Thakurdas Memorial Lecture, 2012

Restoring India to the Track of High Growth, Social & Economic Inclusion and Stability

✓ Saumitra Chaudhuri *

INTRODUCTION

The title notes the three pillars that constitute the challenge of the present. However, the relative emphasis on each of the three has strayed in this speech from being equitable, which is largely a consequence of the limitations of length. Economic growth is imperative to create the necessary jobs and livelihood opportunities for our young people and take the Indian economy and her people to a higher level of income and standard of life. In recent times India has been feted as an economic power. This is somewhat anticipatory, in recognition of the potential that exists. It should be underscored that where India stands today¹, Sri Lanka had crossed over in 1999, China in 1997, Indonesia and the Philippines in 1988, Egypt in 1983, Thailand in 1982, Malaysia in 1971, Brazil, most of Latin America, Russia and South Africa yet earlier.

In 2012, as we identify with BRICS and G20, it is worth remembering that in these forums we are by far the poorest. In the BRICS group, our per capita income is 16 per cent of the average of the other four in the G20 it is lower. The next higher nation in both lists is China and our per capita income is 26 per cent that of our northern neighbour. The use of per capita income as an indicator for relative prosperity may be questioned. However, it remains a crude and reliable metric for relative underdevelopment.

These differences also obtain for other measures of direct material inputs or well-being – be it electricity generation, energy consumption, access to safe drinking water & sanitation, health outcomes and housing. Till a couple of decades ago our record on literacy and the enrolment of children in schools was slow to improve.

That has changed dramatically over the past three decades, even as questions on the quality of learning are rightly coming to the fore. Our broader population has just begun to get a taste of modern life and its amenities. To achieve well-distributed material modern amenities even at modest levels, we have a long distance to go. It is therefore grotesque, when the objective of economic growth is questioned in our context. The attitudes and preferences of the developed West are not so readily portable.

Economic growth is of course not an end in itself. It must lead to improved earnings and livelihood for the widest sections of the population. It must cater to the aspirations of the populace and especially that of the young. It must be balanced in terms of regional development. It must not only successfully result in the inclusion of economically weaker sections, but most particularly of those who historically have been at the social margins. Attention has to be paid where desirable outcomes are not necessarily generated by the prevalent social dynamic, such as in the case of women and children's health, gender equity and the protection of rights of marginalized sections. Social and economic outcomes must provide opportunities for advancement and cater to the willing, diligent and enterprising, which means that barriers to entry has to be whittled down and competition encouraged.

Stability has diverse dimensions but is a desirable objective from every perspective. The dire consequences of instability in external payments and on the fiscal front are in abundant evidence - in Europe, most recently. The global crisis of 2008 directly flowed from financial sector instability. The deep-rooted

Member, Planning Commission, Government of India.

^{1.} The comparison here is to per capita GDP at constant prices in US dollars.

changes that are underway across the globe and which is shifting the polarity of the world will inevitably create new stresses and volatility in economic and financial conditions. In this situation, being well grounded in a domestically stable environment is prudent. The ability to maintain balance in regional economic development and in social and economic inclusion will not only permit us to draw on the fuller potential of our economy and society, but it is of vital importance to generate social stability in all of its aspects.

Growth Acceleration Post 1991

However, one looks at the data, the fact of the acceleration of economic growth in the decades after the economic reforms of 1991 is inescapable. There was a setback in the second half of the 1990's for a variety of reasons - both domestic and international - but growth did pick up momentum in the early years of the next decade and ramped up to a level that most may not have expected. The Tenth Plan (2002-2007) period averaged 7.8 per cent growth, the highest ever and in formulating the Eleventh Plan (2007-2012), targeting of a 9 per cent rate of growth must have seemed to be par for the course with the last two years of the previous plan period having had 9.5 per cent growth.

The first year of the Eleventh Plan (2007-08) did produce 9.3 per cent growth, but the crisis of 2008, the drought of 2009 and the politics of 2010 and 2011 did slow things, notwithstanding fairly strong growth in both 2009-10 and 2010-11. That the average growth in the Eleventh Plan has turned out to be 8 per cent is testimony to the resilience of the growth dynamics of the country.

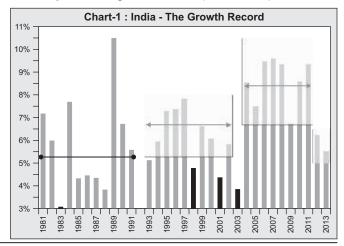
While that does not take away the hard reality of the depth of the slow down experienced in 2011-12 and in 2012-13, it is worth recounting because one too often hears the lament that India has so to say permanently shifted to a lower growth trajectory of 5 or 6 per cent growth.

Nothing is permanent - at least in life. The strong fail and the weak rise. Good performance can yield to the indifferent and vice versa. The only thing that is constant is endeavour. Not discounting the role of luck for the individual, in the case of nations as a whole, changes in outcome are the consequence of concrete factors, of decisions taken and not taken, of execution well done or gone awry.

It was never inevitable that just because we got 9 per cent growth three years running, we will therefore continue to get 9 or at least 8 per cent growth. By the same token it is not inevitable that just because the economy has slipped for the most recent two years running, that is now its inevitable course. Indeed part of the problem in recent years arose from our success in negotiating the global crisis. We came out of it well and weathered the weak monsoon of 2009 and found that we were back to 8 plus per cent growth in 2009-10 itself²

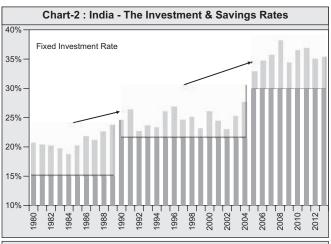
Little wonder that hubris set in. 'This was the Asian century' a voice in our head seemed to be telling us. 'It doesn't matter what we do, we will get 8, if not 9 per cent growth' it's in the stars. 'We dine at the head table ergo we must be economic hot shots'. Part of the problem is that many of our elites are fortunate to be able to have a lifestyle in India that is hard to distinguish from that of their counterparts in the developed West. That does not however change the material reality of India. Our national needs remain that of a poor developing nation.

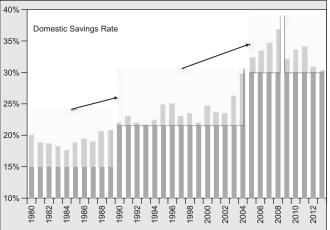
The ramping up of the rate of growth in the past decade had some distinctive elements and was driven by a sharp pick up in domestic investment and savings rates. If we look over the previous three decades it is clear that not only did the rate of growth pick up, but also the variability of annual growth reduced sharply, testimony to the deepening of the economy and of its growth drivers. (see Chart 1)



^{2.} Upon release of Quick Estimates for 2010-11 on 31 January 2013, three days after the lecture was delivered, we find that we had notched 8.6 per cent growth in 2009-10 and 9.3 per cent in 2010-11.

The investment rate picked up somewhat in the nineties and then again very sharply from 2004-05 onwards when it jumped to 33 from 28 per cent in the previous year. The fixed investment rate rose to over 30 per cent in 2005-06, peaking at close to 33 per cent in 2007-08. Though it has come off in subsequent years, it still remains over 30 per cent. The investment rate at about 35 per cent, lower than the peak of 38 per cent in 2007-08 but still high whether in comparison to our own history or in comparison with other emerging economies-except of course China. In parallel our domestic savings rates rose to well over 30 per cent, peaking at 37 per cent in 2007-08 and remains presently at over 30 per cent, notwithstanding the weakening of government and to some extent of corporate finances since 2007-08. (Chart 2).





The investment rate of 35 per cent in recent years, even if we were to knock off the 1.5 per cent incrementally

immobilized in the form of deployment to gold holdings, is still high and comparable to that in 2005-06. Such a level of investment is not consistent with the growth of 6.5 per cent in 2011-12 and the 5.7 to 5.9 per cent indicated by the Finance Ministry for 2012-13. With inflation running at close to double digits, inadequacy of domestic demand was not a factor in limiting growth. We, therefore, need to understand how we got such a poor outcome in terms of growth.

In the past two decades there have been four separate episodes of growth slumps. The first was in 1991-92 when GDP growth plummeted to 1.4 per cent and that of the non-farm sector to 2.6 per cent. The second was in 1997-98, the third in 2002-03 and the fourth in 2008-09. Of these only in 1991-92 was the decline in growth across-the-board and that can readily be put down to the deep crisis in that year. So too, albeit to a lesser extent, the slowdown in 2008-09. In 1997-98 the sharp fall in farm output exacerbated the weakening in the industrial sector and in 2002-03 farm output fell so steeply that it swamped the improvement in non-farm activity. However, the decline in growth in 2011-12 and 2012-13, keeping in mind the level of the investment rate and fixed asset creation, appear to be unduly low, except relative to 1991-92, with which it ought not to be comparable.

An important clue is provided in the reversal of the magnitude at which fixed investment at constant prices grew year-to-year. A sharp uptick in the rate of growth in fixed asset creation in 1994-95, sustained in the next year kicked-off overall economic growth northwards. The same happened a decade later. In fact the median annual rate of growth in fixed capital formation in the years 2003-04 to 2007-08 was as high as 16 per cent. This slumped in 2008-09, recovered somewhat in 2009-10 and 2010-11, but turned south once again in 2011-12 and possibly in 2012-13³. That is, the pace of new investments slowed down sharply in the recent two years.

Besides this, some commonsense things we do know. There are power projects that are running far short of capacity because of shortages of fuel, both natural gas and coal. There are manufacturing plants, especially in the south that are losing output on account of inadequate

We now know that at constant prices fixed investment in the private corporate sector declined by nearly 4 per cent and overall fixed capital formation rose by little over 4 per cent.

power availability. There are many large power and other infrastructure projects under construction that have been delayed on account of clearances being withheld. There are mines that are not functioning on account of closure orders. It should not then be a surprise that, even with the extant fairly high level of capital formation ⁴, current output is growing much below what should have been the outcome.

When it comes to new projects and new commitments by the corporate sector the explanation for a dearth of enthusiasm is not hard to find. There is first, the global economic and financial situation, which does not exactly stir the fire of ambition, i.e. risk taking, in the heart of enterprise. Second, are the long delays in project clearance and the vitiated political atmosphere which has lowered expectations about decision making. Third, is the negative impact of the deterioration in general macroeconomic fundamentals - be it higher inflation, fiscal and current account deficits. Last, but not least, is the weakening of corporate profitability which has further aggravated the difficulty of raising equity by simultaneously weakening balance sheets and reducing valuations.

A few words on the last element. Investments do not increase when profitability is falling. Profit margins after dropping from 2007-08 levels, recovered a bit in 2009-10 and 2010-11, but slipped again in 2011-12. In the first half of 2012-13 there appears to have been a small improvement, but it remains to be seen if it is sustained in the full year. Stronger profits infuse equity and reduce debt, while supporting higher operational volumes. Profit erosion does the opposite. We can see that leverage has mostly gone up. What is interesting is that the sharp increase in leverage actually starts out from 2007-08 and relative to that point, the subsequent increase in 2011-12 has been small.

That probably should tell us something about the assets to which finance was committed in 2007-08: That they have not paid out as expected, that outside equity infusions which were anticipated (and were expected to replace part of the debt) did not materialize and has not since. It suggests that a large order of equity infusion is a necessary pre-condition to improve risk appetite. That can take many forms - from the inter-connected nexus of completion of projects and resultant revenue flow, to improved margins, to better valuations and outside infusion. Public policy cannot directly address profitability, but improved macroeconomics and helping project completion, can certainly assist in the cure.

Returning to the higher growth trajectory

The two year slowdown in growth has been a harder knock for the Indian economy, compared even to the 2008 global crisis, or at least the immediate effects thereof. We have to dig our way out of the hole that we find ourselves in. It is true that the global environment is not supportive, but that is neither here nor there - it is quite beyond our control. Internally, the key displacement has been the souring of business sentiment, in conjunction with eroded profitability and higher leverage, which have impacted new investment commitments. That needs to be remedied, at least to the extent that it flows from the domestic framework.

First, economic policy-making must look to finding solutions that are driven from reform, i.e. are internally sustainable. The reform process that had got pushed to the side, in the hothouse climate that was created in the recent past, has now yielded to clearer-cut path clearing which must continue with pace. Second, a systemic solution to the culture of delayed and denied clearances that have bogged down projects in the infrastructure space must be found and implemented. The recently constituted Cabinet Committee on Investments has the potential of doing exactly that - but like in everything, the proof of the pudding is in the eating. Macromanagement must yield positive result in finding a better balance. Inflation is slowly cooling and fiscal policy is on the track of consolidation - politically hard and costly as it has been and was always bound to be.

On the external payments front we have to find sustainable solutions to reducing the current account deficit, while creating space for the flow of foreign capital- especially for long-term investors, both of the direct and portfolio varieties. Closer integration with both our economic neighbourhood in Asia and in the Indian Ocean region, as also with our other important economic partners has great potential to assist in the process of stabilizing external

^{4.} The investment rate at constant prices in 2011-12 was nearly 38 per cent and that at current prices 35 per cent of GDP.

payments, besides improving access to both technology and markets and generating the valuable externality of selfconscious mutually beneficial co-existence.

The medium and long term path to improving the state of Indian economy and society lie in a dramatic overhaul of both our physical and social infrastructure. One without the other will not do. Our resources - financial, physical and organizational - are limited. Which is why, it is all the more important, that we remain vigilant in containing the demands for diversions of these scarce resources and pool what is available in a result-oriented and focused manner.

Until the 1970s, it was hard for most to accept that it may be possible to sustain high growth extended over any significantly long period. We could say that this was an era of growth "pessimism", not "optimism". Hence, global economic hierarchies were viewed as self-perpetuating and eternal for all practical purposes.

Per capita incomes in the industrialized nations of the West grew at a rate of between 1.0 and 1.8 per cent between 1820 and 1950, whichever time-slice one chooses to zoom in to. Britain was close to 1.1 and the US to 1.6 per cent over their 130 year-long journey from 1820 to 1950. There was a pick up to 2.4 per cent in the post war period (1950-73), but it then eased down. In Japan, the post-war period saw very rapid growth in Japan, but that did not upset the contention as it was about reconstructing an already developed economy.

The rigours, political burdens and mediocre results of self-conscious "planned" economic development in the former communist world, did not also hold out promise for sustained fast growth, even for the "mixed" economy model. I say this with some 20/20 hindsight, as the rigours and the mediocrity of the results were not to be fully known till much later.

The fast pace of growth in South Korea, Taiwan, Hong Kong and Singapore (the so-called New Industrialized Countries or NIC) was seen as atypical. They were small, two of them city states, who also benefited from the particularities of geo-political support in the Cold War. That South Korea started out from a point worse-off than India, lacking in every element of developmental input,

was surprisingly not seen to be material - at least from the viewpoint of growth pessimists, that is.

The "miracle" in South East Asia did begin to finally erode the scepticism, but the achievements were unfortunately tarnished by the currency crisis of 1997. The multi-decade and continuing explosion of growth in China finally and conclusively proved that very high rates of economic growth could indeed be sustained over a long time frame and that too only in a market-oriented framework. But success at this self-conscious development of the economy needs particular attention to detail and a felicity in implementing decisions and in executing projects.

As I have said earlier, in India, the available investible resources, the institutional and organizational capacity of the economy, remain available and adequate to support the return to a higher trajectory of growth. With somewhat adverse international conditions that could mean 8 per cent. With better conditions it should mean 9 per cent. These remain achievable targets and we must strive to realize them.

SUPPLY CONSTRAINTS & INFLATION

Analytically the emphasis in understanding the process of, and limits of economic growth, has focused on demand, as therefore has models of macroeconomic management. The underlying assumption being that supply would always be created to cater to such demand. Indeed, it would tend to be in excess of incremental demand, leading thereby to the inevitability of competition, business cycles and in a later era, of the supposition that this property of competition is a public good in need of protection and regulation. The framework was appropriate for the industrialized west which took centuries to make the passage.

For developing economies, who because (a) slow transition was no longer an option in an integrated modern world and (b) they wished to make the transition quickly, the framework had to be necessarily different. This was indeed recognized early on and divergent approaches emerged in the post Second World War period which argued on the one had for the possibility and on the other, the impossibility of market-oriented

^{5.} From the work of Angus Maddison, published as Monitoring the World Economy, OECD Development Centre, Paris, 1995.

self-sustaining development. The focus was somewhat limited, zeroing on quite correctly on investible resources, the capacity to pay for imports of equipment and other ingredients of modernization, technical education and on improving farm productivity. The challenges of building institutions, especially that of enterprise, and mediating between contending interests in a world where advanced country sensibilities were understandably dominant were not anticipated.

The advantages of having an open society is that it is so much better in fostering and giving space to enterprise- tiny, small and big. There is spontaneity about the process, and in the wake of large businesses, many small and tiny ones thrive. The rigidities in supply, particularly where there are governmental and / or regulatory action involved, can and do have the power to create persistent shortages.

Our experience of a hundred years has made the word "black-market" an indelible part of our lexicon. Started by our colonial masters at the onset of the First World War, rationing of foodgrain and restrictions on stocks and movement, was built on a deep distrust of the market, of the private sector and a touching faith in the probity, competence and alertness of the bureaucracy. Perhaps there was merit in the decisions taken a hundred years ago, perhaps not. Be that as it may, this approach became an ideology, till it began to be dismantled partly in the 1980s and substantively after 1991. Do we have a "black-market" in anything these days? That the answer is "no", should be cause for considerable satisfaction.

However, that does not mean that we lack in shortages. Since we are an open economy, by definition, the shortages are limited to non-tradeables. India has had power shortages ever since the early eighties, once we had crossed the Laxman Rekha of what Prof Raj Krishna once despairingly described as the "Hindu" rate of growth. The terms "power cut" and "load shedding" is also now an integral part of our lexicon. As indeed is "jam" and the various euphemisms for jumping the multiple queues that meander in the domains where citizen meets state. Power, roads, railways, ocean ports, airports, safe drinking water, sanitation, sewage treatment, urban transport, housing - all these are where India tries to make do without enough and that too of sub-standard quality.

Then there are the shortages of onions, tomatoes, potatoes and aubergines. Prices shoot up and we can do little. Is it that there is not enough output growth? On the contrary. Horticulture production has really taken off, growing by 5 to 7 per cent each year as farmers, even in remote areas, gain access through much improved road networks to a burgeoning urban market. But the logistics are poor and the marketing system in dire need of reform as antiquated arrangements such as the Agriculture Produce Marketing Committee (APMC) Acts come in the way. Guilds are monopoly structures, which the APMC in fact is. Like guilds in the West once did, it solves the problem of scale economics (or rather the absence of it) and enforces standards and conduct. However, that time is long past and we need to be able to reform regulations so that the logistics, handling and storage system can be modernized, thereby reducing wastage, improving price realization for the farmer and lowering the delivered price to the consumer. The season for availability will also get extended, on account of the combination of better geographical network, modern storage and protected agriculture. The seasonality of "seasonal" produce can also largely become a thing of the past.

The result of these shortages has both directly and indirectly led to higher inflation. The direct consequence is obvious. The indirect path has been the result of the way Indian enterprise had of trying to negotiate the constraints imposed by shortages in infrastructure services and by the regulatory system. To compensate for inadequate grid power, diesel generating sets provide expensive captive power. Constraints in goods movement means higher transport costs and often higher inventory carrying costs. Inadequate municipal infrastructure is the plea for restricting the vertical growth of cities, which results in expensive and inadequate housing; in high real estate costs for commercial activity, including hotels and restaurants. Having the highest hotel tariffs in Asia, ex-Japan, is surely not a prescription for keeping the cost of doing business down or for encouraging tourism.

Therefore, the upshot of perennial shortages has been inflation at a level higher than that of our comparator countries. In the 1980s and 1990s, India had average annual inflation of 9.1 and 9.6 per cent respectively, when the median inflation for 32 major emerging economies was 18.5 and 20.4 per cent respectively. So even as we had high inflation, we were placed much lower than the median; indeed we were in the first quartile in both of the two decades. More pertinently, the average inflation in China in these two decades was 7.5 and 7.8 per cent, lower than ours, but not by much. Several Latin American countries, including Brazil and Argentina suffered hyper-inflation in both decades, as did the transition economies in the nineties.

In the period between 2004 and 2012 our average inflation rate was 8.4 per cent, lower than it had been in the eighties and nineties. However, the world had changed and we were now over the median value of 7.5 per cent. The first quartile was much lower at 4.3 per cent. In China inflation averaged 3.1 per cent. Most of Asia and Latin American had inflation in the range of 3 to 5 per cent. In sum, 17 of the 32 major emerging countries had inflation rates lower than us and most of those that had higher were resource exporters like Venezuela, Iran and Angola.⁷

Our inability to stick with our targets of 5 per cent - which would have been as the record shows, quite appropriate-was the result of supply side rigidities, which in the face of surging income growth created enough granularity for inflationary momentum to build up. It would not be complete if one fails to mention that the political economy of pricing regulated products, where high current inflation was often used as a reason to defer price and distribution reform, only resulted in generating other distortions, that on the one hand reinforced some supply rigidities and accommodated wasteful use, while on the other, prevented the economy to adjust to changes in relative prices of energy in an efficient manner.

Relatively higher rates of inflation and recurring episodic bouts of spikes have been a heavy burden for the conduct of both monetary and fiscal policy. It has burdened our enterprises with higher costs. The erosion of profitability and of balance sheets, mentioned

previously, derives considerably from this. Second order effects include weakening of our external payments situation by eroding export competitiveness, supporting a level of oil import higher than what would have been otherwise and encouraging a level of gold imports higher than it may been otherwise. The dynamic has been shifted in the wrong direction.

Which is why, it is vital that we ensure that the supply side rigidities, which have been such a distinctive part of the Indian landscape, must now begin to pass into history. If over the next four or five years we are able to make a sizeable dent in this, and there is no reason why we cannot, the greatest incomplete task of reform would have been finally achieved.

Trade & of Capital Flows - The Regional Element

The increasing regional concentration of international merchandise trade is vitally important to understand. In 2010, the second largest regional trade block was in Asia (excluding the Middle East), amounting to \$2.5 trillion, 62 per cent as large as that of the leading regional trade concentration in Europe (\$4.0 trillion). Two decades back in 1990, intra-Asian trade had been a quarter the size of intra-European trade. The proportion of Asian origin exports to other Asian markets increased to 53 per cent in 2010. Not only is the developing world, and Asia in particular, becoming proportionately more important in international trade, but the trade within the region and potentially that with Africa and Latin America holds the promise of further expansion and deepening.

The source and direction of capital flows are also slowly shifting. In 1990, 95 per cent of FDI outflows originated in advanced economies. In 2011 this had fallen to 73 per cent, even as the total value of flows rose from \$242 billion to \$1.7 trillion. On the destination side, the share of developing economies rose rapidly from 17 to 45 per cent between 1990 and 2011, of which the inflow into Asia increased over the two decades from 11 to 28 per cent. The proportion of FDI originating in the developing world jumped from 4.5 per cent (\$11 billion) in 1990 to 23 per cent (\$384 billion) in 2011. The share of developing Asia on the destination side was 28 per cent of global inflows

^{6.} In the eighties the comparison is for 29 nations, excluding 3 who are from the former Soviet bloc where inflation numbers for eighties are not available. The first quartile for 29 countries in the eighties and for 32 in the nineties was 9.6 and 9.8 per cent respectively.

 $^{7. \ \} Average\ inflation\ as\ measured\ in\ terms\ of\ consumer\ price\ indices.\ From\ the\ World\ Economic\ Outlook\ database\ of\ the\ IMF,\ October\ 2012.$

^{8.} International Trade Statistics (2011) and that for previous years, published by the World Trade Organization, Geneva.

(\$423 billion) and on the destination side 17 per cent of total outflows (\$280 billion). 9

There are major differences within the developing world in net national savings rate, as reflected in differences in current account balances. It is possible that there will be some mitigation in the magnitude of these differentials. However, it is likely that in the future, the magnitude of incremental savings arising in Asia and other developing economies will be proportionately larger than that which may reasonably be expected to arise in the advanced economies.

To a great extent Asia has come to become a major locus of capital flows with several centres acquiring considerable significance in financial intermediation. The shift in the polarity and geography of both capital flows and of its intermediation will be as powerful a dynamic as the shift in the geography of production and international trade.

Thus, the geography of global finance will change. The dominance of conventional centres in New York, London and Frankfurt will yield to centres in the developing world - most particularly in Asia. Hong Kong and Singapore already have acquired increasingly enhanced roles as centres of financial mobilization and fund raising activity. Asia is simultaneously a major source of savings as also of demand for investment financing. Skills have gradually become internalized and regulation and market structures seem to be supportive of these two island centres to expand very much more. We need to be able to figure out how India can fit into this changing landscape in a manner reflecting her aptitudes and needs.

FUTURE PROSPECTS

1. We are at a momentous juncture in history where the greatest change in global economic polarity in the past 300 years is underway. Where economics sail, trade, investment and political power are inseparable companions. In 2000, as much as 80 per cent of world output arose in the advanced world and 20 per cent in the emerging. Just twelve years later in 2012, only 62 per cent of global income arises in the developed world and 38 per cent is generated in the developing world. By

about 2021, the split is likely to be 50:50. The order and speed of change is indeed mind-numbing. ¹⁰

Developing Asia has taken its share from 7 to nearly 18 per cent of world income. China and Russia have more than trebled their respective shares to 11.5 and 2.7 per cent. Brazil and India have nearly doubled their shares to 3.4 and 2.7 per cent respectively. The BRICS group has seen its share of world income rise from 8 per cent in 2000 to 21 per cent in 2012. By the end of the present decade, the share of China is likely to increase to 15 per cent, while that of India may go up to 5 per cent and the BRICS group to 28 per cent.

India with a GDP of about \$2 trillion in 2012 was the tenth largest economy in the world, packed just behind Italy and Russia and poised to overtake both in 2013. By 2017, India may overtake France, the UK and Brazil to become the fifth largest economy in the world. In another five years India may pull past Germany and Japan, becoming the world's third largest economy.

China came from far behind to become the world's second largest economy in 2010. By 2017 she is likely to be two thirds the size of the USA and almost as large as the Eurozone. Sometime around 2025, China may overtake the USA to become the largest national economy and also larger than the 27 member European Union. It is a striking story and in many ways lights the way before our own course - both to the potentials and the pitfalls.

It should however be noted that even as the economic polarity of the globe is being shaken up, China and for that matter India too, will remain relatively poor countries in comparison with today's advanced economies. As a proportion of per capita incomes in the USA, in 2000, that of China was 2.7 per cent. This improved several-fold to 12.2 per cent in 2012. However, at \$6,000 per head, China's income levels in 2012 are still modest, whether in absolute or relative terms. Even when in the middle of the next decade the Chinese economy is expected to exceed that of the USA, China's per capita incomes at \$21,000 (2012 prices) will be comparable to where Slovenia, Greece, Portugal and Czech Republic are today.

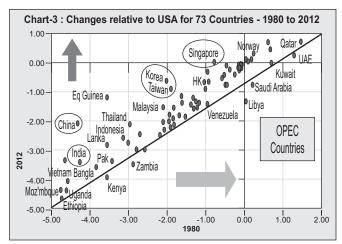
^{9.} World Investment Report (2012), UNCTAD, United Nations, New York and Geneva, 2012.

^{10.} Data used here and subsequently is from the World Economic Outlook (October 2012) database of the IMF and from the United Nations portal on National Accounts Statistics. For future periods, the IMF projections up to 2017 are used. Thereafter the estimates are that of the author.

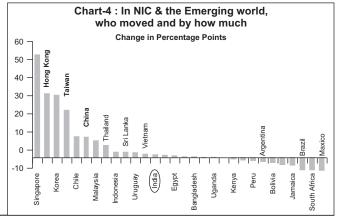
It will still be a quarter that of the USA and little more than half of that in Brazil. Another decade on and China's per capita incomes are not likely to exceed a third of that in the USA.

This is even truer in our case. From a mere 1.3 per cent of US per capita incomes in 2000, we have improved to 3.2 per cent in 2012. By the mid-2020s, our per capita incomes are likely to see a dramatic improvement from the current level of \$1,600 to being in the range of \$7,500 (at 2012 prices) - but it still will be only a tenth of what the USA level at that point in time is likely to be. Comparable to where Romania, Colombia and South Africa are today and a third lower than where Brazil, Poland and Argentina are presently. The short point is that if we get our act together, we as a nation will be able to make considerable progress. But at the end of the next 15-20 years, we will remain at best a middle income country by today's standards, in the fourth decile of the distribution and 40 per cent below the median. For comparison in 2012, we are located in the third decile and 70 per cent below the median.

In recent years, the idea of a "Middle Income Trap" waiting around the corner to trap Asian economies with hubris-filled heads in the air, has gained some currency. Fundamentally it is an older debate about the growth process and what drives it. As is known the eighties threw up a considerable literature on "convergence" with the European project primarily in mind. Expanded beyond the European context it acquired "conditional" characteristics. The short point is that if the stock of capital and labour were the only determinants of growth, it is not possible to explain differences in inter-country experience and, therefore, there must be other factors where nations and societies vary - as indeed they do. In the context of self-conscious organization of national growth, the focus on productivity enhancing elements - especially those that flow from human capital, organizational and regulatory structures, functioning of markets, scientific & technological research and innovative approaches to problem solution - are of great importance.

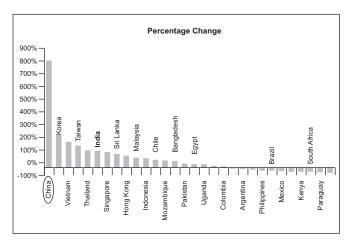


What has been the experience of countries in the past three decades? Expressing per capita income as a proportion of US per capita incomes, the distribution of individual countries presented at Chart-3 should be of some interest. We have the log values of the ratio for 1980 on the horizontal axis and that for 2012 on the vertical axis. Those lying over the diagonal have improved their relative positions and those lying below it have seen deterioration. Further those who have been able to move to the quadrant(s) above it have improved their position the most, 11 as have those who have crossed over beyond the USA from having been below it (namely Singapore). In the former set are Korea, Taiwan, China and Equatorial Guinea. To a less pronounced extent and Malaysia, Thailand, Indonesia, Sri Lanka and India.¹² On the other hand, the group that has most noticeably slipped are the traditional oil exporters, underscoring the limits of resource-based economic expansion.



^{11.} A level of 5 per cent corresponds to -3.0, 10 per cent to -2.0 and 37 per cent to -1.0. Thus, China went from 1.4 to 12.2 per cent, Indonesia from 4.4 to 7.3 per cent, Sri Lanka from 2.9 to 5.8 per cent, while Thailand went from 5.2 to 11.7 per cent. India improved from 1.4 to 3.2 per cent.

^{12.} Equatorial Guinea has benefitted from recent large oil discoveries and if experience is any guide it would follow the path of the traditional oil exporters in time. For some time the gains can be incredible: oil took Equatorial Guinea from \$263 in 1995 to \$14,855 per capita in 2012.



The use of logarithmic values does not quite bring out the magnitude of change. From Chart-4, we can appreciate its truly incredible extent. Singapore was able to improve its relative position vis-à-vis the USA by as much as 54 percentage points from 46 to over 100 per cent. The relative movements of Korea, Taiwan and China have also been huge. On the right-hand side, it is relative effort that is shown, which is dependent on the starting point. The experience of China is exceptional. India too fared reasonably well. However, all emerging countries did not gain as indeed the declines on the right side of both charts show. Most of these are Latin American, Caribbean economies and South Africa. In many ways the improvements in the past decade has restored someof the salience that they lost in the hyper inflationary and debt- wracked years of earlier decades, especially that of the eighties.

Inclusion - The Regional Balance

In the national interest economic growth must be broadbased across the States and regions of the country. Over the past three decades, the evidence suggests that this objective has been achieved to an extent and further that the process has been more pronounced in the past decade.

Using per capita incomes, and defining improvement as an unchanged or improved ratio vis-à-vis the all-India average, we would find that between 1980-81 and 2011-12, of the seventeen large States,¹³ as many as eight definitely have improved their relative position. In the more recent period 2001-02 to 2011-12, of the twenty larger States, as many as twelve have improved their

relative positions. Of the States which has seen erosion in their relative positions, most are in the northern and eastern parts of the country.

Further, in the past decade, several States with lower incomes have shown a sharp acceleration in growth, namely Bihar, Odisha, Rajasthan, Madhya Pradesh and to some extent UP as well. There is less of a widening of the divergence amongst lower income States, while in the higher income groups there is more. The median of growth rates for the larger 22 States in the Eleventh Plan period was 8.3 per cent, higher than the 7.9 per cent recorded in the Tenth Plan and much greater in previous plan periods. As many as 16 of the 22 larger states, which includes six that are traditionally considered to be low income, averaged growth in the Eleventh Plan period that was greater than the national average. Of the states that are traditionally considered weaker, only three had average growth in the Eleventh Plan lower than the national average. But, it must be pointed out that growth even in these three States ranged between 6.9 and 7.3 percent.

The standard deviation for growth in these 22 states was lower at 1.6 per cent in the Eleventh Plan compared to 1.8 per cent in the Tenth Plan and 2.6 per cent in the Eighth Plan. The coefficient of variation (CV) which adjusts for the level of median growth shows that the Eleventh Plan had the lowest CV of 19 per cent compared to 22 (Tenth Plan), 27 (Ninth Plan) and 44 (Eighth Plan) per cent. The distribution of growth rates also showed significant improvement in favour of the slower growing states. The first quartile value for the Eleventh Plan was 7.3 per cent compared to 6.0 (Tenth Plan), 3.9 (Ninth Plan) and 4.4 per cent (Eighth Plan). In the Eleventh Plan period, of the seven smaller north eastern states (excluding Assam), five experienced average rates of economic growth that were higher than the national average.

Inclusion - Consumption Distribution & Measures Of Poverty

Household consumption expenditure surveys conducted by the National Sample Survey Organisation (NSSO) forms the basis of our analysis about family consumption baskets and by extension of consumption poverty.

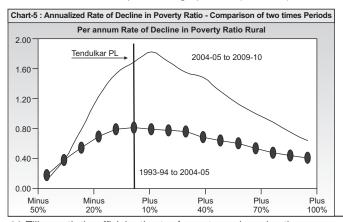
^{13.} Three new States were created in the period, namely Chhattisgarh, Jharkhand and Uttarakhand

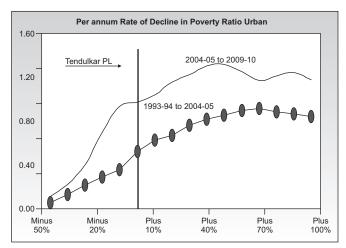
The Planning Commission has traditionally been tasked to estimate poverty which it does on the basis of methodologies established by expert committees. ¹⁴

What constitutes a "fair" poverty line has always been a contentious issue. This primarily flows from the fact that poverty, and in a broader sense deprivation, is a cultural construct specific to a point in time and space. It is not conceivable that the sense of what constitutes poverty should remain unchanged as society grows wealthier, incomes rise and modern amenities become widely available. Progress by its inherent nature does and should recalibrate the notion of what constitutes poverty and deprivation.

The methodology of the Tendulkar Committee was applied to the NSSO survey of 2009-10. It was found that the poverty ratio was just below 30 per cent for the country as a whole and had declined by 7.3 percentage points between 2004-05 and 2009-10. The annual rate of decline in this period was twice as large as that for previous period, namely 1993-94 to 2004-05.

This finding was criticized by some for having used a poverty line described as being too "low". However, the finding that poverty has declined much faster in the period 2004-05 to 2009-10 is valid irrespective of where we choose to draw the poverty line. If we use the Tendulkar poverty line (PL), the decline in the period is found to be 7.3 percentage points. If we use a poverty line 30 per cent higher, the decline would be 7.8 percentage points. Likewise at a PL that is 50 per cent higher, the decline would be 6.5 percentage points. (Chart-5)



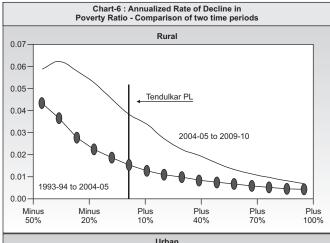


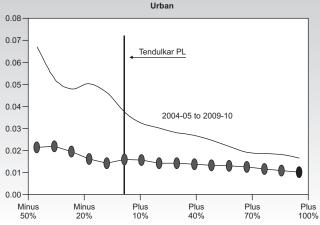
In fact, the pattern of decline in the poverty ratio for different levels higher and lower than the Tendulkar PL shows that the decline not only occurs at every level higher or lower than the Tendulkar PL, but that the decline is strongest at lower levels of PL, particularly in rural areas. This is clearly brought out in Chart-6, where the rate of decline is expressed in terms of the poverty ratio in the first period.

The NSSO has conducted large consumption surveys for 2011-12. The detailed unit level data is not available. However, the summary distribution at the all-India level for consumption expenditure which has been made available yields a most revealing picture. At Chart-7, we have presented the annualized change in per capita monthly consumption expenditures at constant prices. The rate of change between 1993-94 and 2004-05 is plotted together with that between 2004-05 and 2011-12 separately for rural and urban populations. On average for rural households, the rate of annual increase is found to have improved from 0.85 per cent between 1993-94 and 2004-05 to 3.40 per cent for the period between 2004-05 and 2011-12. For urban populations, the figures are 1.49 and 3.72 per cent for the two periods.

This is a massive order of improvement in household consumption expenditure and by extension in household incomes as well. Not only is the increase large at the average level, but the improvement is evident in every section of the population - from the poorest in the first decile, right through to the top. The magnitude of the

14. Till recently the official estimate of poverty was based on the recommendations of the expert committee chaired by the late Prof. D. T. Lakdawala (1993). Over the years the findings on poverty made in line with the methodology of the Lakdawala Committee began to be criticized as being "too low" and not in line with the general advancement of the economy. In 2005, the Planning Commission appointed a new expert committee chaired by the late Prof. Suresh Tendulkar, which made several deep-rooted changes in the methodology for adjusting poverty lines to price changes and substantially revised upward the rural poverty line vis-à-vis the Lakdawala Committee, both for 1993-94 as well as for 2004-05.



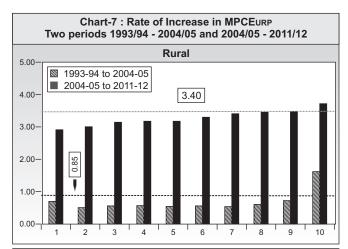


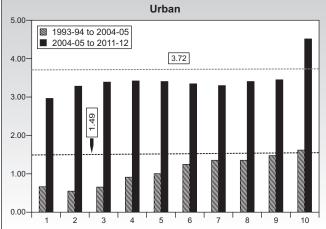
improvement is also at comparable levels as between rural and urban populations.

The evidence of improved vertical inclusion unites many different dimensions of public policy, including improvement in rural and social infrastructure, improved farm output (income) growth, expansion of livelihood and other opportunities and capacities. The broad-based expansion of incomes and consumption at the end of the day is the eventual outcome that economy building is targeted at.

Concluding Comments

The opportunities that we as a people and a nation have to bring about a dramatic improvement in the living conditions of our 1.2 billion citizens, is immense. That is particularly true in respect of the young to whom we are duty bound to bequeath a society better than the one that we were born into. But it is not going to be smooth sailing.





I have tried to throw some light on the magnitude of the transformation that is underway, which will throw up both unprecedented opportunity and also challenges. To successfully cope with them will need investment in our own institutional capacities, innovative thinking and discipline in conduct. There will be many pitfalls along the way and we need to step with care and deliberation. Not all countries can win; some will lose out - some more, some less. So far we have stayed on the positive side of the ledger, though the gains of others show that we could have done better. And better we must do in the years and decades ahead.



Micro Research Prize Winning Article, 2012

Intellectual Capital Efficiency: A Comparative Study of Listed Public and Private Sector Banks in India 1st Prize

∠ C. A. Pankaj Chadha *

Abstract

The modern economy has moved from production to a knowledge economy. The shift has been from people working with their hands to people working with their brains. Information and knowledge has become today's thermonuclear weapons and the knowledge resources such as human capital, processes, external brands and networks have become key characteristics of modern economy. Banking sector (being intellectually intensive in nature) can be a good sector for the research of intellectual capital.

The main aim of this research paper is to analyze the Intellectual Capital Efficiency of the listed Public and Private Sector Banks in India for a period of seven years from 2005 to 2011 using the VAIC model (Value Added Intellectual Coefficient, developed by Pulic Ante in 2000). Sample size for this study consists of 14 listed banks which were selected based on CNX Bank Index on NSE and BANKEX Bank Index of BSE. This index captures the capital market performance of Indian Banks. The source of data was the RBI online database on Indian economy and annual reports of the banks.

The significance of this study is that it uses a new perspective and dimension for performance measurement & efficiency of banks in India and contributes to the existing literature on intellectual capital. Empirical results indicate that VAIC of most of the banks is increasing over the sample study and intellectual capital is efficiently utilized by the Indian banks. On comparison, it was observed that Private Banks are way ahead from Public Banks in terms of Intellectual Capital Efficiency.

KEYWORDS

Intellectual capital, human capital, customer capital and VAIC Model.

The paper is divided into five different sections:

Section - I covers a brief introduction to the topic. Section - II reviews the existing related literature on the study. Section - III gives research objective of this study and methodology used. Section IV presents the results and discussion of the study. Last but not the least, Section - V concludes the paper.

SECTION-I

INTRODUCTION

Economic history has passed through the agrarian phase & the production phase. Now, it is a time for the knowledge phase which can be called as "Knowledge Economy". In the agrarian phase, land was the primary source of wealth. In a production-based economy land, labour, capital and physical assets have vital role while in a knowledge-based economy, intellectual capital has a pivotal position and become a source of success and wealth for organizations. In new era, organizations need three types of capital to carry on their business: Physical capital (factory, equipment, stocks etc.); Financial capital (cash, investments, credits etc.); and Intellectual capital (knowledge, experience, skill etc.). Intellectual Capital of an organization can be identified in its workforce (human capital), its customers' demands and preferences (customer capital), and its systems, products, processes, and capabilities (structural capital).

Over the last decade or so, Intellectual capital has been recognized as the most important source of competitive advantage of various organizations which lead

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to increase in the business performance and country's economic growth. According to Cohen and Kaimenakis (2007), intellectual capital has appeared as the most vital source to enhance the performance of organizations.

Banking industry is a backbone of the economy. The growth and success of an economy depends on the operation of the banking system therefore, the role of banking industry in economy is highly acknowledged and appreciated by many researchers. From the last decade, the banking sector has been undergoing dramatic change in both structural and technological advancement. Globalization, deregulation and advances in information technology have brought about significant changes in the operating environment for banks. (Cabrita and Bontis, 2008).

Mavridis (2004) argued that banking sector can be a good sector for the research of intellectual capital because the business nature of the banking sector is intellectually intensive. Its entire staff is moreover identical intellectually and professionally. (Kamath, 2007) stated that Components of intellectual capital i.e. human capital and customer capital are widely present in the banking sector as these are important factors for the smooth and successful working of the banks.

Despite the importance of intellectual capital in financial sector; Shih, Chang and Lin (2010) identified that there are little studies that focused on the relationship of intellectual capital with the organizational performance of banking industry. This study attempts to evaluate the business performance and efficiency of the Indian banking system over a period of seven years, using Value Added Intellectual Coefficient (VAIC) based on three components of intellectual capital namely, human capital, customer capital and structural capital.

SECTION-II

LITERATURE REVIEW

2.1 Intellectual Capital: Meaning, Classification & Measurement

(2.1.i) Meaning of Intellectual Capital

The term "Intellectual capital" was first introduced by economist John Kenneth

Galbraith in 1969 as a form of knowledge, intellect, and brainpower activity, which used knowledge to create value. Edvinsson and Malone (1997) defined Intellectual Capital (IC) as "Knowledge that can be converted into value." Stewart (1997) pointed out that intellectual capital is referred as the accumulation of all knowledge, skills and expertise of employees that can lead to take competitive advantages.

(2.1.ii) Classification of Intellectual Capital

Karl-Erik provided a classification for IC, dividing it into three broad areas of intangibles. capital, structural capital and viz.. human customer capital. Nick Bontis (Bontis, 1996) has modified the classification of IC by replacing customer capital with relational capital. Some other classification was also proposed by other researchers like Ismail (2004) proposed that intellectual capital is based on human capital, customer capital, structural capital, technological capital and social capital. In the same way, Khalique, Shaari and Isa (2011a) proposed an integrated intellectual capital which is based on human capital, customer capital, structural capital, social capital, technological capital and spiritual capital.

Despite of the various proposed component of Intellectual Capital by different researchers, generally the Intellectual Capital is considered as a combination of human capital, customer capital and structural capital which is explained below-

(2.1.ii.a) Human Capital

Human capital is the life blood of intellectual capital and source of innovation. It mainly consists of the individual abilities, knowledge, know-how, talent, education, skills and experiences of employees in organizations (Bontis, Keow and Richardson, 2000; Edvinsson and Malone 1999; Shaari et al., 2010). Many researchers believe that intellectual capital is

created by employees through intelligence, attitude and eligibility. It is the human capital which creates the skills, specialties, problem solving abilities and leadership methods. Few examples of Human Capital are:

- Know-how
- Education & Vocational qualification
- Work related knowledge & competencies

(2.1.ii.b) Structural Capital

Structural capital is a skelton of an organization. It includes institutionalized knowledge and comprehensive experiences based on routine activities and processes. Even with highly qualified employees, a weak set of rules and systems does not let organization take advantage of its employees' abilities to create values and have good trading performance. Like other components, it is also one of the most important components of intellectual capital. It comprises of the internal structure of the organization such as the processes, procedures, guidelines and rules. It includes all non-human storehouse of knowledge in organizations including organizational competitive intelligence, routine, formula, policies, procedures and databases (Salleh and Selamat, 2007; Cabrita, 2009; Khalique, et al., 2011b).

The intellectual capital of an organization would achieve to the maximum potential capability, provided there are efficient working systems and procedures. Organizations with strong structure and consequently a supportive culture allow people to try new ideas, confront with failures and then learn. Few examples of Structural Capital are -

- Patents, Copyrights, Design rights
- Trade secrets, Trademarks, Service Marks
- Management philosophy, Corporate Culture
- Management Processes, Information systems

- Networking Systems
- Financial Relations

(2.1.ii.c) Customer Capital (Relational)

Customer capital is another most important component of intellectual capital which also includes the organization's relationship with customers. The most important part of it is the relation of organization with customers and thats why it is also called customer capital. It includes the degree of customers' loyalty, the number of distribution channels, proper relationship with suppliers and the credit of brand name (Bontis 1998; Edvinsson and Malone 1999; Stewart 1997, Khalique, Shaari, Isa and Ageel (2011b). Well established customer capital can lead to good organizational performance. Few examples of Customer / Relational Capital are -

- Brands, Company Names
- Customers, Customer Loyalty, Backlog Orders
- Distribution Channels
- Business Collaborations, Licensing Agreements, Franchising Agreements

(2.1.iii) Measurement of Intellectual Capital

Several studies show that future growth is determined not by historical financial accounts but by factors such as management skills, innovation capability, brands and the collective know-how of the workforce. The traditional balance sheet does not take account of those intangible factors that largely determine a company's value and its growth prospects and thus the value of Intellectual Capital like customer relationships, experiences of employees or organizational culture cannot be determined based on the financial statement.

As per research, there are over 30 different measurement methods of Intellectual capital. Few of the commonly used financial and non

financial methods / models for measurement of the Intellectual Capital are tabled below

Intellectual capital measurement									
Financial measurement models	Non-financial measurement models								
- Discounted cash flow	- Balanced scorecard								
- Relief-from-royal	- Skandia navigator								
- Comparable transactions	- Human resource accounting								
- Avoided cost	- Intangible assets monitor								
- Adjusted Present Value	- Knowledge assets map								
- Value added methods									
- Value chain scoreboard									
- Market to net book value									
- Capital asset pricing model									

(2.2)Value Added Intellectual Coefficient (VAIC) method

For the purpose of this study, Value Added Intellectual Coefficient (VAIC) method has been used which was developed by Ante Pulic. VAIC is a management and control tool that is designed to enable the organizations to monitor and measure the IC performance and potential of the firm. It is considered appropriate for an organization that is intellectually inclined. Deceptively simple in its formula, it considers different components of value - financial capital, human capital and structural capital. Additionally, it introduces an efficiency coefficient that shows how well a company converts its intellectual capital into value added. It also provides an essential link between intellectual capital and financial performance that should help to bring together the currently distinctive disciplines of finance and performance measurement. (Pulic, 2001 and 2002).

2.2.i) Terms used in VAIC: The main terms used in VAIC are discussed below.

Value Added (VA): The value added indicator is measured in monetary units. It is the difference between the output (OUT) and input (IN) and represents the value created by the organization during a year. Thus, VA = OUT-IN, where

Output (OUT): Total income or total revenue generated by an organization during the year by selling goods or services;

Input (IN): Costs that are incurred by the organization towards purchase of inputs for

business operations. All expenditure related to human resources - such as employees' compensation and expenses on training and development etc - would be excluded from the 'input' for the simple reason that it would be treated as investment (human capital) and not a cost.

Human Capital (HC): Human capital is one of the most important components of intellectual capital. It covers all expenditure on employees' compensation and development. The value - added approach regards employees as a key resource who invests their knowledge, skills and intellect in managing the organization and creating wealth; hence the expenditure on employees is considered as an investment or human capital.

Structural Capital (SC): It refers to the organization structures, systems and processes that enable an organization to exploit the intellectual capital. In Pulic's (1998) VAIC model, Structural Capital is obtained by deducting human capital from the value added.

Capital Employed (CE): It includes the net physical and material assets of the organization employed for attaining financial goals.

(2.2.ii) Calculation of VAIC

VAIC i.e Value Added Intellectual Coefficient is the sum total of the three components i.e HCE, SCE and CEE, and indicates the intellectual capability of the organization.

VAIC = HCE + CEE+ SCE where,

Human Capital Efficiency (HCE): It is a ratio of Value Added (VA) to Human Capital (HC). This ratio gives the contribution made by every unit of money invested in HC to the VA in the organization. It is an indicator of value added efficiency of human capital and calculated by using formula, HCE=VA/HC

Capital Employed Efficiency (CEE): It is a ratio of Value Added (VA) to Capital Employed (CE); this ratio shows the contribution made by

every unit of CE to the VA in the organization. It is an indicator of value added efficiency of capital employed and calculated as per formula -

CEE=VA/CE

Structural Capital Efficiency (SCE): It is the ratio of Structural Capital (SC) to Value Added (VA). It is an indicator of value added efficiency of structural capital and calculated as per formula mentioned below - SCE = SC/VA

(2.4) Prior Research on Intellectual Capital:

Several authors have attempted to analyze the Value Added Intellectual Coefficient (VAIC) for measuring the value-based performance of various industries across different countries which are summarized below-

Pulic (2004) studied the impact of intellectual capital on the banking industry. He measured Australian banks' intellectual capital performance (1993 to 1995) and Croatian banks' capital performance (1996 to 2000) with the VAIC model. He found a significant impact of Intellectual capital on the ranking of the banks. Mavridis (2004) have made study on 141 Japanese banks between 2000 and 2001 using VAIC and found that banks with high human capital were the highest performers. He concluded that HC is important for a bank's performance; however, physical assets are less important.

Hong Pew Tan, David Plowman and Phil Hancock (2007) investigate the association between the intellectual capital (IC) of firms and their financial performance. The findings show that: IC and company performance are positively related; IC is correlated to future company performance; the rate of growth of a company's IC is positively related to the company's performance; and the contribution of IC to company performance differs by industry.

(Kamath, 2007) conducted a study measuring the intellectual capital of 98 Indian Banks with the VAIC model. Results indicate that, different types of banks performed differently. Maria do Rosário Cabrita and Nick Bontis (2008) have tried to examine the interrelationships and interactions among intellectual capital components and business performance in the

Portuguese Banking Industry and to test interaction effects among intellectual capital components and business performance.

Zeghal & Maahoul (2010) carried out study in UK on 300 firms and found a positive relationship between intellectual capital and firms' economic and financial performance. Zerenler, Hasilogu & Sezgin (2008) analyzed intellectual capital influence over innovative performance of Turkish firms and found a positive association between them. Tan, Plowman & Hancock (2007) investigated and analyzed a positive relationship between intellectual capital and future financial performance in Singapore Companies. Chen, Cheng & Hwang (2005) evaluated the relationship between intellectual capital and market valuation of Taiwanese Companies.Dr. G. Kamath Bharathi (2010) estimates the value added intellectual capital (VAIC) of the banks in Pakistan for a 2 year period between 2005 and 2006. The study concludes that the private sector banks were doing much better than all other banks in Pakistan on intellectual capital efficiency levels.

The above literature review shows that in India there is a lot of scope of research about the comparative VAIC performance of public and private sector banks. This paper attempts to fill the gap and adds new literature on the subject.-

SECTION-III

3.1 RESEARCH OBJECTIVE

The major objectives of this study are to:

- Evaluate the Intellectual Capital efficiency of the listed Public and Private Banks in India using VAIC model.
- Compare the efficiency of Human Capital, Structural capital and Capital Employed of the listed Public and Private Banks in India.

The expected output would be a VAIC Index score of performance that would rank the Banks covered in the study on intellectual efficiency.

3.2 RESEARCH METHODOLOGY

The research methodology used can be summed up as follows:

Sample size and selection :

Sample size for this study consists of listed public and private banks that are included in either CNX Bank Index on NSE or BANKEX Bank Index of BSE as on June 2012. This index captures the capital market performance of Indian Banks. The CNX Bank Index represents about 15.08% of the free float market capitalization of the stocks listed on the exchange and 87.63% of the free float market capitalization of the stocks forming part of the Banking sector universe. BANKEX represents 90 percent of the total market capitalization of all banking sector stocks listed on BSE. Accordingly, the sample size consist of total 14 banks have been selected. Details of these banks are as follows -

Public Banks (7)	Private Banks (7)
Bank of Baroda	Axis Bank
Bank of India	Federal Bank
Canara Bank	HDFC Bank Ltd
Punjab National Bank	IndusInd Bank Ltd
State Bank Of India	ICICI bank Ltd
Union Bank of India	Kotak Mahindra Bank
IDBI Bank Ltd	Yes Bank Ltd

Sources of information :

The data was mainly collected from the secondary sources. The required data was available in the balance sheets and profit / loss account of the concerned banks; this data was compiled and published by Reserve Bank of India (RBI) in a consolidated form in its annual statistics of Indian banking. Thus, the data for the present study was collected from the RBI website (www.rbi.org.in) directly.

Nature of data collected

The data collected were related to items that would help in calculation of VAIC scores, namely total interest earned on loans and other income for the year, the cost of inputs (the interest expenses on deposits and other costs but excluding taxes and expenditure on human resources), expenditure related to human resources, and capital employed.

SECTION-IV

RESULTS & DISCUSSION

The data from 14 banks across public and private sectors for seven years for a period 2005 to 2011 was analyzed using the VAIC method. The main results and findings are discussed below.

4.1. Bank-Group wise Annual Average VAIC Scores

Table -1 below presents the group-wise average VAIC scores for the Private and Public sector banks.									
Group	2005	2006	2007	2008	2009	2010	2011		
Private Banks	4.227	4.481	4.136	4.242	4.597	5.155	4.730		
Public Banks	3.293	3.238	3.532	3.889	3.950	4.083	3.917		
GAP Analysis	12.41	16.10	7.88	4.34	7.58	11.60	9.40		

Note: GAP Analysis has been calculated as a percentage of difference in the value of variables between Private Sector Banks and Public Sector Banks as a ratio of their aggregate value.

The following significant results emerge from a study of Table -1:

- On comparison basis overall average VAIC score, private sector banks are consistently higher than the public sector banks, which indicate that the efficiency of intellectual capital is higher in the private sector banks as compared to the public sector banks.
- Though Public sector banks lag behind the private banks, however GAP analysis indicate that public sector banks are catching up by improving their efficiency of intellectual capital. The percentage difference between public and private banks which was more than 12% in the year 2005 has decreased significantly to around 9% in the year 2011.
- In terms of rate of improvement in Intellectual Capital, the public sector banks are leading, which is evident from the fact that rate of improvement in private banks for the year 2011 on comparison with 2005 has increased by around 12%, whereas the rate of improvement for public banks has increased by around 19%.

As explained in the earlier section VAIC score is computed by adding HCE (Human Capital Efficiency),

CEE (Capital Employed Efficiency) and SCE (Structural Capital Efficiency). Therefore, it is essential to analyze each component of VAIC separately to understand the key determinant that impacts the overall VAIC score of the private and public sector banks. Below table shows comparison analysis of private and public sector banks based on score obtained under each component of Intellectual Capital.

Table - 2 : Bank - Group wise average Human Capital Efficiency (HCE) scores									
Group 2005 2006 2007 2008 2009 2010 2011									
Private Banks	3.610	3.741	3.423	3.514	3.850	4.357	3.955		
Public Banks	2.647	2.600	2.865	3.188	3.235	3.363	3.214		
GAP Analysis	15.39	18.00	8.88	4.87	8.69	12.87	10.34		

Table - 3 : Bank - Group wise average Structural Capital Efficiency (SCE) scores									
Group	2005	2006	2007	2008	2009	2010	2011		
Private Banks	0.588	0.708	0.683	0.695	0.712	0.760	0.739		
Public Banks	0.612	0.607	0.637	0.673	0.687	0.693	0.674		
GAP Analysis	-2.00	7.68	3.52	1.61	1.77	4.64	4.61		

i abie - 4	Table - 4 : Bank - Group wise average Capital										
Employed Efficiency (CEE) scores											
Group	2005	2006	2007	2008	2009	2010	2011				
Private Banks	0.029	0.031	0.030	0.033	0.036	0.038	0.036				
Public Banks	0.034	0.031	0.030	0.028	0.028	0.027	0.029				
GAP Analysis	-8.83	0.22	-0.18	7.63	11.55	16.67	9.71				

The following significant results emerge from a study of Table - 2, Table - 3 & Table - 4:

- Private Banks lead in terms of getting high average score for human capital efficiency consistently. Public sector banks have improved significantly in terms of increasing the efficiency of Human capital and as a result of which the GAP between the private and public which was around 15% in 2005 has decreased to around 10% in the year 2011.
- In terms of Structural Capital Efficiency score depicted in Table - 3, Private Banks is successfully able to reduce the gap with Public Banks. As evident from the SCE scores, the Private Banks has shown significant growth in the structural capital efficiency when compared with Public Banks.
- As regard to Capital Employed Efficiency depicted in Table - 4, Private Banks has completely reversed their position from year 2005 to the year 2011 and has gone ahead from Public Banks.

From the combined analysis of Table - 2, Table - 3 & Table - 4, it is clear that public banks has increased in Human Capital Efficiency score but in terms of Structural Capital and Capital employed efficiency score the Private Banks has outplayed the Public Banks.

4.2. Analysis of Bank-wise VAIC Scores

	Table - 5: VAIC Score of Individual Private and Public Sector Banks									
Banks	Category	2005	2006	2007	2008	2009	2010	2011	Average	Ranking
AXIS BANK LIMITED	Private	4.981	5.970	5.107	5.118	5.555	6.017	5.809	5.508	2
FEDERAL BANK LTD	Private	3.875	3.679	4.092	4.708	5.809	5.269	4.757	4.598	5
HDFC BANK LTD.	Private	6.722	5.906	5.111	4.680	4.057	4.589	4.498	5.080	3
ICICI BANK LIMITED	Private	5.834	5.397	5.442	5.650	6.376	6.922	5.005	5.804	1
INDUSIND BANK LTD	Private	4.340	3.914	3.436	3.241	3.652	4.160	4.599	3.906	7
KOTAK MAHINDRA BANK	Private	3.199	2.822	2.673	2.901	2.571	3.967	3.363	3.071	14
YES BANK LTD.	Private	0.636	3.679	3.092	3.399	4.163	5.164	5.079	3.602	9
BANK OF BARODA	Public	3.342	2.848	3.094	3.173	3.511	3.804	4.127	3.414	11
BANK OF INDIA	Public	2.723	2.871	3.112	3.956	4.588	3.747	3.183	3.454	10
CANARA BANK	Public	3.564	3.343	3.483	3.450	3.818	4.033	3.768	3.637	8
IDBI BANK LIMITED	Public	3.995	4.244	4.980	5.184	4.140	5.400	5.874	4.831	4
PUNJAB NATIONAL BANK	Public	2.532	2.996	3.183	3.282	3.643	4.085	3.737	3.351	12
STATE BANK OF INDIA	Public	3.249	3.017	2.854	3.344	3.517	3.058	3.422	3.209	13
UNION BANK OF INDIA	Public	3.647	3.348	4.017	4.835	4.431	4.458	3.310	4.007	6

The following significant results emerge from a study of Table - 5:

- Among Private Banks, the performance of ICICI Bank, Axis Bank and HDFC Bank is above a score of 5.00, which is considered to be an excellent VAIC score. Among Public sector, although none of the bank can cross a score of 5.00, however, the performance of IDBI is remarkable as it approaches to an average score of 4.83.
- The ranking of the banks on the basis of VAIC scores shows that first three positions are occupied by private sector banks, namely ICICI Bank, Axis Bank and HDFC Bank. IDBI BANK at rank - 4 is the top performing Public sector bank.

Table - 6, Table - 7 & Table - 8 provides banks' detailed performance matrix based on the three elements comprising the VAIC score, namely HCE, SCE and CEE. The scores of HCE, SCE and CEE presented in below tables would together add up to the VAIC scores given in Table - 5.

 HCE component (Table - 6), which has a significant weight in the overall VAIC scores has helped the

- private sector bank, namely ICICI Bank, Axis Bank and HDFC Bank to get top position in the ranking. The same banks continued to dominate in the ranking on the SCE scores as well (Table 7).
- On both these counts, the PSU banks were seen lagging behind, except IDBI BANK which relatively performed well on both HCE and SCE components. Even the largest Indian commercial bank SBI surprisingly ranked a poor 13th on HCE and 12th on the SCE scores. Other public banks like PNB, Bank of Baroda and Canara Bank also displayed a poor show with their too low ranking.
- Among the private sector banks, Kotak Mahindra Bank has the distinction of being the tail-ender both on VAIC, HCE & SCE scores but surprisingly ranked 1 in CEE parameter.
- Ranking on the basis of CEE scores (Table 8) has a different story wherein public sector banks has secured a good ranking.
- ICIC Bank, Axis and IDBI who secured good rating in HCE and SCE scores is shifted to the tail-ending position in CEE scores.

Table 6: Human Capital Efficiency (HCE) Score of Individual Private and Public Sector Banks										
Banks	Category	2005	2006	2007	2008	2009	2010	2011	Average	Ranking
AXIS BANK LIMITED	Private	4.198	5.137	4.314	4.321	4.734	5.173	4.975	4.693	2
FEDERAL BANK LTD	Private	3.155	2.980	3.354	3.928	4.968	4.455	3.971	3.830	5
HDFC BANK LTD.	Private	5.857	5.065	4.300	3.893	3.314	3.809	3.724	4.280	3
ICICI BANK LIMITED	Private	5.009	4.593	4.633	4.829	5.527	6.054	4.212	4.979	1
INDUSIND BANK LTD	Private	3.669	3.209	2.782	2.609	2.968	3.423	3.827	3.212	7
KOTAK MAHINDRA BANK	Private	2.554	2.229	2.112	2.290	2.021	3.223	2.690	2.445	14
YES BANK LTD.	Private	0.829	2.977	2.468	2.730	3.420	4.361	4.285	3.010	8
BANK OF BARODA	Public	2.675	2.258	2.469	2.538	2.833	3.099	3.394	2.752	11
BANK OF INDIA	Public	2.156	2.281	2.484	3.234	3.817	3.049	2.549	2.796	10
CANARA BANK	Public	2.873	2.683	2.810	2.781	3.112	3.307	3.067	2.948	9
IDBI BANK LIMITED	Public	3.291	3.514	4.205	4.398	3.421	4.602	5.051	4.069	4
PUNJAB NATIONAL BANK	Public	1.992	2.379	2.538	2.628	2.946	3.347	3.030	2.694	12
STATE BANK OF INDIA	Public	2.591	2.391	2.261	2.684	2.838	2.436	2.750	2.564	13
UNION BANK OF INDIA	Public	2.951	2.692	3.290	4.053	3.676	3.702	2.656	3.288	6

Table 7: Structur	Table 7: Structural Capital Efficiency (SCE) Score of Individual Private and Public Sector Banks									
Banks	Category	2005	2006	2007	2008	2009	2010	2011	Average	Ranking
AXIS BANK LIMITED	Private	0.762	0.805	0.768	0.769	0.789	0.807	0.799	0.785	2
FEDERAL BANK LTD	Private	0.683	0.664	0.702	0.745	0.799	0.776	0.748	0.731	5
HDFC BANK LTD.	Private	0.829	0.803	0.767	0.743	0.698	0.737	0.731	0.759	3
ICICI BANK LIMITED	Private	0.800	0.782	0.784	0.793	0.819	0.835	0.763	0.797	1
INDUSIND BANK LTD	Private	0.640	0.688	0.641	0.617	0.663	0.708	0.739	0.671	7
KOTAK MAHINDRA BANK	Private	0.608	0.551	0.527	0.563	0.505	0.690	0.628	0.582	13
YES BANK LTD.	Private	0.207	0.664	0.595	0.634	0.708	0.771	0.767	0.562	14
BANK OF BARODA	Public	0.626	0.557	0.595	0.606	0.647	0.677	0.705	0.631	9
BANK OF INDIA	Public	0.536	0.562	0.597	0.691	0.738	0.672	0.608	0.629	10
CANARA BANK	Public	0.652	0.627	0.644	0.640	0.679	0.698	0.674	0.659	8
IDBI BANK LIMITED	Public	0.696	0.715	0.762	0.773	0.708	0.783	0.802	0.748	4
PUNJAB NATIONAL BANK	Public	0.498	0.580	0.606	0.619	0.661	0.701	0.670	0.619	11
STATE BANK OF INDIA	Public	0.614	0.582	0.558	0.627	0.648	0.590	0.636	0.608	12
UNION BANK OF INDIA	Public	0.661	0.628	0.696	0.753	0.728	0.730	0.623	0.689	6

Table 8: Capital	Employed	Efficien	cy (CEE) Score	of Indivi	dual Pri	vate and	l Public	Sector Ba	nks
Banks	Category	2005	2006	2007	2008	2009	2010	2011	Average	Ranking
AXIS BANK LIMITED	Private	0.021	0.027	0.024	0.028	0.033	0.037	0.034	0.0293	11
FEDERAL BANK LTD	Private	0.036	0.034	0.037	0.035	0.042	0.039	0.038	0.0373	4
HDFC BANK LTD.	Private	0.035	0.039	0.043	0.043	0.045	0.043	0.043	0.0415	2
ICICI BANK LIMITED	Private	0.025	0.022	0.024	0.028	0.030	0.034	0.030	0.0277	12
INDUSIND BANK LTD	Private	0.032	0.017	0.014	0.015	0.021	0.029	0.033	0.0229	13
KOTAK MAHINDRA BANK	Private	0.037	0.042	0.035	0.047	0.045	0.054	0.044	0.0435	1
YES BANK LTD.	Private	0.014	0.038	0.029	0.035	0.035	0.032	0.028	0.0301	8
BANK OF BARODA	Public	0.042	0.032	0.030	0.029	0.031	0.027	0.028	0.0313	6
BANK OF INDIA	Public	0.031	0.029	0.030	0.032	0.034	0.026	0.026	0.0297	9
CANARA BANK	Public	0.038	0.033	0.029	0.028	0.027	0.028	0.028	0.0302	7
IDBI BANK LIMITED	Public	0.007	0.014	0.013	0.013	0.012	0.015	0.021	0.0136	14
PUNJAB NATIONAL BANK	Public	0.042	0.037	0.039	0.035	0.036	0.036	0.037	0.0376	3
STATE BANK OF INDIA	Public	0.044	0.044	0.035	0.033	0.031	0.032	0.036	0.0364	5
UNION BANK OF INDIA	Public	0.035	0.028	0.030	0.030	0.027	0.026	0.030	0.0296	10





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SECTION-V

CONCLUSION

The study reveals that private sector banks have been able to show higher level of efficiency in utilizing their intellectual resources due to greater human capital efficiency and structural capital efficiency. Though the gap between the human capital efficiency of both the public and private banks are reducing year by year but still public sector banks has lot to do to catch up the private sector banks.

While PSU banks have to make efforts to improve the efficiency of human and structural capital, private sector banks need to work at enhancing the efficiency of capital employed. The private sector banks, unlike PSU banks, don't have the Government support or legends of historical achievements, huge asset bases built over centuries or a captive customer base. Their only chance to compete, grow and succeed in today's competitive environment depends on the strategic and efficient utilization of their intellectual and tangible resources that would determine and reflect in the quality of service, customer satisfaction and brand-building. These findings can significantly help banks in preparing a roadmap in improving their future performance.

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Micro Research Prize Winning Article, 2012

Cluster Farming Finance Kameri Village Floriculture Cluster Project

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INTRODUCTION

Indian agriculture has a significant history. We have solved enormous problems in agriculture before. In the past 50 years agriculture technology has tripled crop yields. As of 2011, Indian agriculture is a large and diversified, accounting for 14 percent of GDP and 10 percent of export earnings. The country is the largest producer of fruits, pulses, buffalo milk, millets and spices. It is the second largest producer of Wheat, Rice, Vegetables, Tea and third largest producer of eggs. Even though India showed remarkable progress in recent years in attaining self sufficiency in food staples, the productivity is low compared to the farms in Brazil, China, US, France etc. At the same time viability for the Indian farmer is also declining making farming unremunerative. Indian farmer is not in a position to realise the benefit out of his hard work. Some of the important reasons for low income generation to the farmers are:

- Fragmented land holdings resulting in non adoption of modern agricultural practices
- Low investment capabilities and poor infrastructure facilities
- Poor market access and exploitation by middlemen

One of the important goals of Agricultural Policy recommended by the 'National Commission on Farmers in India' is "to introduce measures which can help to attract and retain youth in farming by making it both intellectually stimulating and economically rewarding, by conferring the power and economy of scale to small and marginal farmers both in the production and postharvest phases of farming"

Suggested initiatives are:

- Farming activities have to be intellectually stimulating
- Farm ventures to be economically rewarding
- Obtention of economy of scale to small and marginal farmers
- Taking care of production and post-harvest phases of farming
- Attract and retain youth in farming

Small and marginal farmers whose land holdings are below two hectares constitute 80% of all Indian farmers.

For this segment of farmers, marketing of their produce is the main problem apart from credit availability and output price fluctuations. There is a big gap between producer prices and consumer prices. The farmer in India receives just 10 to 23 percent of the price the Indian consumer pays for it. The difference is going to losses and middlemen. Farmers in developed economies of Europe and US, in contrast, receive 64 to 81 percent of the price the local consumer pays for exactly the same produce in their supermarkets. Hence, there is a need to look for efficient models to overcome the problems of marketing while achieving economies of scale for the small farmers. There are different models for marketing collectively by the small and marginal farmers. These are: self help group model, small producer co-operative model and contract farming. 'Apni Mandi' in Punjab, 'Rytu Bazars' in Andhra Pradesh, Dairy co-operatives in Gujarat are some of the successful cases in collective marketing. It is a challenge to organize small and marginal farmers for collective marketing and linking them to high value agriculture. Group approach can be adopted for getting benefits of consolidation and marketing.

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The support systems and credit delivery have to go hand-in-hand for raising farm productivity through improved practices for raising realisable incomes to small and marginal farmers in India. The National Commission on Enterprises for Unorganised Sector (NCEUS, 2008) suggested special programmes for small and marginal farmers. An important activity proposed was promotion of marginal and small farmer groups. This enables them to get inputs at cheaper rates and to market the output at higher prices.

In appreciation of the above concepts, it is mandatory for the policy makers, bankers and governments to encourage group approach in farming and marketing which leads to creation of win-win networks with and among farmers. Agriculture has to be taken up as agribusiness embracing the entire value chain - from farm to plate and fiber to fashion. Indian farmers, particularly those belonging to small and marginal category are at the wrong end of the supply chain for agricultural commodities. Middleman instead of the farmer, grabs the major share of the price benefits in the market. The scheme of "CLUSTER FARMING FINANCE" comprehensively finds the solutions for overcoming the bottlenecks in a better manner from production to realisation. Bankers in this model can act as catalysts, right from formation to cash management, bringing together all the parties- from government agencies to suppliers, and providing access to better markets.

This Research paper apart from reviewing the literature about the group farming models within the country and abroad, discusses a case successfully implemented by an Agricultural Development Branch of State Bank of India.

Literature Review on Farm Clusters:

1. Latin American fruit clusters

The small and medium growers of Latin American Fruit Clusters have found different ways to meet market pressures. A good example of this is the case of about 2000 smallholder raspberry producers (less than 2 ha) from the Maule and Bio-Bio regions in Chile have established long-term supply

agreements with larger firms that produce, pack / process and export raspberries. They also established direct sourcing arrangements with small supermarkets and participated in ethical production and marketing networks. In the process they have taken joint action to meet the challenges of achieving economies of scale in production and supply in desired quantities to meet the market demand, collectively.

2. Ecuador Flower Cluster

Ecuador's EXPOFLORES promotes the cluster collective action that brings together groups of flower growers, exporters and plant dissemination companies. It develops training and technical assistance programmes, enters into agreement with public and private institutions, compiles and disseminates statistics and information on markets and social and environmental issues. The first collective actions of the Ecuadorian flower cluster aimed at solving basic common issues, such as input provision (e.g. seeds, fertilizers, cardboard boxes), produce transport and currency remittances by the Bank. Institutional support: The most significant role that the public sector has played in support of the Ecuadorian flower clusters was the negotiation and maintenance of preferential market access.

3. Philippines Vegetable Cluster

With increasing population, rising household income and greater urbanization in the Philippines, opportunities are emerging for the vegetable industry to supply hotels, hospitals, supermarkets, restaurants and fast food chains. These institutional buyers need more vegetables for their menus and are looking for more reliable suppliers who can give them a constant supply at a good price while maintaining good quality. As the majority of the vegetable farmers in the Philippines cultivate less than 3 hectares, producers and producer organizations have collaborated to consolidate the production. Vegetable clusters have been encouraged through institutional support viz.

Commercial Banks and Government Departments. These clusters are a success in generation of higher income to small growers and resulted in direct supply of quality vegetables to the consumer establishments.

There are certain successful cases of cluster approach in Indian farming also, viz. grape clusters in Maharashtra, dairy clusters in Gujarat and Andhra Pradesh, which are operating successfully for many years. These clusters are predominantly led by government through cooperative structure on a large scale. 'Kameri village cluster' which is enumerated hereunder, is a Bank led model project that comprehensively takes care of all the issues in achieving a viable consolidation of small farmer groups in a compact area.

KAMERI VILLAGE FLORICULTURE CLUSTER **PROJECT**

Genesis:

The concept of 'Cluster Farming' among the farmers in Kameri village in Satara District of Maharashtra arose from the innovative thinking of a small group of farmers led by an unemployed youth who wished to improve their economic and social environment. Their intention was to do it together in a formal way, which had not been feasible as individual farmers. At the core of this report is the story of the development of that initial concept of joining farmers as a group for adoption of new agricultural techniques, creation of common post harvest facilities and combined marketing with unified brand name. All of them are small and medium category farmers and many of them do not have even formal primary education. All these initiatives are financially supported by State Bank of India which adopted this village as SBI ka Apna Gaon. This effort of extensive feasibility study reveals that it is a successful model results in all round prosperity to the farmers, viable loaning model for the Bank and finally it resulted in the drafting of a workable template for group farming named as 'CLUSTER FARMING FINANCE'.

BACKGROUND:

Kameri is an interior village on the banks of river Krishna, located 23 kilometers away from the district and block head quarters Satara. It is the last village at the end of the road starting from National Highway no. 4. The village has a population of 2226 and 352 households out of which 69 are BPL families. Major crops are sugarcane, maize, jowar and vegetables. Most of the farmers are Small and Marginal category and many farmer families are engaged in dairy farming. The village is known for social harmony among various classes and was awarded as a green village by district authorities.

Since sugar cane cultivation, the main crop in the area, was not yielding sufficient returns, some youth thought about alternate farming options. In the process, Mr. Vinod Gadge, an educated un-employed youth, took the initiative to study the feasibility of introduction of floriculture into the village. He went to Pune to get onfarm training at an established Poly house Floriculture unit for three months. He thoroughly involved himself in all the operations in Gerbera cultivation right from planting to production of cut flowers, noted the financials, got the ideas of input suppliers and marketing of flowers and interacted with suppliers of poly house and planting material. Vinod returned home with the required knowledge and information for starting of a poly house of 560 sq. mts. for gerbera cultivation, which is the minimum economic size.

BEGINNING OF CLUSTER FARMING:

Since the village is remotely located, Vinod realized that marketing of flowers from his individual unit is a risky proposition. The buyers from Pune are not keen to come periodically for such a small quantity. Nor can the flowers be taken to the wholesaler daily as it would not be economical. He approached SBI where he avails crop loan and expressed his intention to start a floriculture unit. State Bank of India, Agricultural Development Branch at Satara had adopted Kameri village as "SBI ka Apna Gaon" under Bank's innovative initiative of 'BONDING WITH THE FARMERS'. It has financed extensively for various agricultural activities and undertaken many CSR initiatives in Kameri village. As the branch foresaw many bottlenecks in Vinod's floriculture proposal on individual basis, it proposed the idea of 'group farming'. Vinod called a small group of youth and he along with bank officials, explained the details of

Floriculture and the suitability of the facilities in their village for production of quality Gerbera flowers viz. soils, mild climate throughout the year and more particularly availability of the Krishna river water. Economics of 560 sq. mts. polyhouse unit of Gerbera cultivation was explained by the Bank's technical staff who advised the gathering about the National Horticulture Board subsidy scheme as well. Enthused by the prospects, as many as 25 farmers expressed their willingness to start the venture. All of them are small farmers, many of them are unemployed youth and some are senior farmers. It was a good mix of farmers, both young and aged coming forward to start the new enterprise.

CLUSTER FARMING-IDEA TO IMPLIMENTATION:

Looking at the interest shown by many farmers and keeping the good financial discipline of the village in mind, the Bankers designed and suggested an innovative financial model which they named as 'CLUSTER FARMING'.

The modalities are:

- 1. Flower production to be undertaken at individual farmers' level.
- Development of common post-harvest infrastructure.
- Loan (for establishment of polyhouse, cost of plants etc. and farmers share in common infrastructure) will be in the individual farmer's name.
- 4. Harvested flowers to be handled collectively at packing house.
- 5. Marketing to be done by the farmers themselves through an established marketing cooperative at Satara with a 'Brand Name'.
- 6. Establish a member body to organize inputs to cash realisation.
- Distribution of sale proceeds as per the supply of individual farmers.

Requirements are:

 The units of 560 sq. mts. Poly houses are to be established at individual farmers' level and production of flowers in individual capacity.

- 2. A common 'packing house' to be established.
- 3. A transport vehicle to be purchased by the group to take the packed flowers to Satara.

Market arrangement:

Ajinkyatara Co-operative Society based in Satara, handling flower marketing since 1997 is a successful entity in the cooperative sector. It receives packed flower boxes from the growers daily and sends them to Pune, Mumbai, Delhi, Calcutta, Hyderabad and Bangalore markets. It has established its own out lets in the wholesale markets avoiding middlemen. The society markets the flowers under a common brand name 'Ajinkya Flora'. The society also provides fertilisers, pesticides, packaging material and boxes to the farmers at reasonable rates. This facilitates growers to spend maximum time in their polyhouses concentrating on production of quality flowers. The Ajinkyatara Co-operative distributes the sale proceeds to the farmers after recovering reasonable costs, thus helping the farmers to get real benefit for their investment and hard work. State Bank of India took the initiative to tag the Kameri cluster to Ajinkyatara.

Procedure of handling of sale proceeds:

Initially the farmers faced problems in realisation of sale proceeds on account of delayed collection of cheques. The Bank suggested hassel-free cash management procedure which has been implemented successfully to the delight of farmers. This is possible through the Bank's Core Banking facility.

Steps in this regard are:

- The ADB Satara branch will open Savings Bank accounts for all the 25 farmers and issue ATM cards and Multy City Cheques.
- The 'home branch' for these accounts will be changed to that of an SBI branch located close to flower markets, facilitating cash acceptance at that branch into individual accounts.
- 3. Cash would be deposited in respective farmer's accounts at various cities as per the consignments on the same day.

4. Since the branches are under Core Banking, it facilitates farmers to withdraw cash instantly by using ATM cards at Satara or wherever they want.

This is a clear example of how banking technology initiatives can be made useful for small farmers located in remote villages.

Financials:

As it was proposed that cultivation of flowers on individual basis and there after handling, packing and marketing on collective basis, the individual farmer project cost involves the cost of production and also proportionate cost of common infrastructure.

Estimated Cost of Naturally Ventilated Polyhouse (560 Sq. Mts.) at farmer's level :				
PARTICULARS	COST IN Rs.			
Structure with Plastic Film	3,50,000			
Gerbera Planting Material @ Rs 35 for 3300 Plants	1,15,000			
Micro Irrigation System	40,000			
Transportation	5,000			
Support Material	60,000			
TOTAL COST	5,70,000/			

Cost of common Infrastructure :				
Cost of Packing house	Rs. 1,50,000/-			
Cost of Transport vehicle	Rs. 4,50,000/-			
Total common infrastructure	Rs. 6,00,000/-			
Per farmer cost	Rs. 6,00,000 / 25 = Rs.24000/-			
Total Investment	Rs. 5,70,000 + 24000 = Rs. 594000/-			
NHB subsidy (20%)	Rs. 1,14,000			
Applicant's margin (20%)	Rs. 1,15,000			
Term Loan	Rs. 3,65,000 (repayment: 5 years			

A. Annual repayment obligation :					
Installment	Rs.73,000 + av. interest: 23,000 = Rs.96,000/-				
Income	(40 flowers per plant per annum and sale @ Rs. 2.50 per flower)				
Gross annual income	(3300 x 40 x 2.50): Rs. 3,30,000				
Less: maintenance cost	Rs. 50,000				

B. Net annual income :	Rs. 2,80,000
Debt Service Coverage	
Ratio (DSCR): Rs.96,000: Rs.2,80,000	= 1 : 2.9
Net Surplus to the farmer	
per year :Rs.2,80,000 (-) Rs.96,000	= Rs. 1,84,000/-

It was also agreed at the initial meeting that the project would require collective support and a continued communication process to enable the participating farmers to understand the group approach and realise its advantages, as the farmers have traditionally operated in isolation, making their own decisions and rarely having to make joint decisions that directly influence their financial future. It is here that the greatest challenge lies in ensuring that growers fully understand the group concept and its impact on them. As farmers of Kameri village already were socially tuned to cooperative coexistence, it was easy for them to understand the group dynamics and advantages of 'fully-integrated group farming'. All the farmers readily accepted the loan proposals and decided for accessing NHB for subsidy assistance. The actions were quickly followed through and the units were grounded by January, 2008. Bank had given priority for processing of the proposals and helped the farmers in filling the NHB subsidy applications and their submission. All the farmers got 20% subsidy released from NHB. Polyhouses were constructed by a Pune based firm on turnkey basis. Plant material and initial technical support was extended by a Bio-tech company. Because of group involvement the farmers did not take much time to acquaint themselves with Gerbera farming. By the time the initial batch of flowers was harvested, Savings accounts were in place.

Evaluation:

Evaluation visits were made by the author of this article twice, during 2008 and 2010 and the finding is that there is a perceptible change in the confidence level of the farmers. This is the result of financial success of these activities. The group morale is at a high. The economic status of the farmers' families has improved. Other farmers started looking for new avenues of starting new ventures. State Bank of India, Satara ADB expresses full satisfaction about the project and appreciates the group

enthusiasm of the farmers. All the accounts are being regularly serviced and the 'Cash Management' procedure suggested is working well.

Benefits derived from the model:

'Cluster Farming Finance' is proved to be successful and beneficial because of the following:

- It takes care of small farmers and helps them to achieve economies of scale through consolidation.
- 2. Common Infrastructure helps to reduce the individual cost of the project.
- 3. Middlemen can be eliminated.
- 4. Every farmer gets better remuneration for his hard work.
- Industry interaction with farmers will be easy as a large number of small units makes a substantial business combine.
- Loan processing and subsidy administration is an easy task for the Bankers because of commonalities.
- 7. Every farmer enjoys the benefit of the power of BRANDING.
- 8. Collective bargaining is possible to represent with Government departments or local bodies.
- Unlike in Joint or cooperative farms, every farmer strives for increased productivity as production is on individual basis.
- 10. It does not have the disadvantages of Contract Farming as the prices of farm produce are not pre determined and there is no possibility of prices going below the market prices.
- Peer pressure is applied for taking along the under performers for improvement of quality of produce and also for recovery of bank loans.
- 12. Since the loans are sanctioned on individual basis, liability will be limited to the individual farmers' level unlike continuance of liability in case of cooperatives / group loaning / SHGs which encourages the farmers to be prompt in repayment and get their securities released.

SOME OTHER SUGGESTED ACTIVITIES FOR 'CLUSTER FARMING FINANCE':

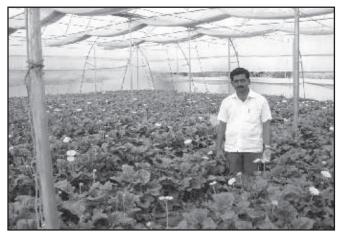
Taking a cue from Kameri village Floriculture Cluster Project, there are several activities which can be taken up as Group Farming activities with common infrastructure and joint marketing with a brand name.

- Group of Banana farmers with common packing house and 'Ripening Chamber' with its own brand name.
- 2. Group of sugarcane growers with common jaggery processing facility, godown with own brand name.
- Vegetable growers with small sized cold storage and packing house and supplying to super markets.
- 4. Clusters of grape growers with common drying house for making raisins.
- 5. Quality organic vegetable supply is in great demand in metro and urban locations. Organic vegetable growing clusters in the peri-urban locations around cities can be encouraged with common grading and packing houses. These clusters can have their own outlets in vegetable mandies avoiding middlemen.

Conclusion:

Finally to conclude, farmers are inherently independent and will naturally take some time to make such fundamental changes to their operations as proposed through syndication. Yet if syndication can be made to work successfully, the potential economic, environmental and social benefits are very substantial. Banks can take initiative in encouraging small farmers to form into clusters to reap the benefits of consolidation. This working model of Cluster Farming would surely be a stepping stone in the pathway towards such a change. In a nutshell, the present micro research paper has shown that consolidation of small farms is beneficial for higher realisation to individual farmers. Farmers would enjoy major benefit share in the value chain. Consumers can get access to quality and reasonably priced products. In the process, banks who take the

initiative in forming such clusters would enjoy quality and profitable lending in agriculture. Cluster farming has the potential to change the landscape of agriculture in India besides providing a viable financing model to the banks.



Mr. Vinod, the initiator of group farming approach, in his polyhouse



Polyhouses in Kameri village have become integral part of farmer households

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Growers and Bankers of Kameri Floriculture Cluster Project

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Micro Research Prize Winning Article, 2012

Utilisation of IP Assets for Banking Business 3rd Prize

Sunit K. Pandey *

1. Introduction

1.1 Concept of IP Assets:

Intellectual property(IP) refers to creations of the human mind like inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Patents, Copyrights, Trademarks, Trade Secrets & Knowhows, Geographical Indication, Industrial Design, Brand Name etc. are referred to as Intellectual property. IP Assets are classified at intangible assets in financial statements. Intangible assets are further classified as:

- Identifiable intangible assets: Patents, Copyrights, Industrial Design, Trade Secrets & Knowhows, Trademarks & Brand names etc.
- Unidentifiable intangible assets: Goodwill, Reputation, Management Teams, Distribution Network etc.

IP Assets (Identifiable Intangible assets) are useful in generating income for Organisation / entity. These assets are identifiable from other assets of a business; they are protected & not freely available to public, capable of producing ongoing benefits for the business and are transferable.

1.2 Importance of IP

Intellectual Property has played crucial role in the development of national & international economy. The present millennium is witnessing Information Communication & Technology (ICT) Revolution due to which the role of IP assets is bound to increase for businesses and for transformation & enhancement in quality of life. Further, efforts for establishment of international framework to recognise, protect and unleash potential of Intellectual Property through efficient

mechanisms embedded in TRIPRs (Trade Related Intellectual Property Rights), WTO (World Trade Organisation esp. Uruguay Round) and WIPO (Worldwide Organisation for Intellectual Property) has made IP the new business mantra. Legal protection extended to Intellectual property rights at National level (Such as Indian Patent Act; Copyright Act; US Sarbanes Oxley Act and the 2003 OECD European Intangibles Summit; new international accounting standards etc;) has further laid foundations to realise promising returns from IP assets. Thus, increasing need & importance of gathering & utilising IP assets is being felt by Businesses & Knowledge society across the world. Table I, II, III & IV shows the growth of IP assets of various types across the world and in India. Table V shows the details of IP assets, its types and growth and also the filing rate from different sectors.

1.3 Banking Industry & IP

Benefits of IP rights & assets are being realised by Businesses / Individual for achieving higher level of output, increased efficiency of production & product innovations. Industries who have derived the most through IP assets include Software Industry, Pharmaceutical Industry, Textile Industry, Construction Industry, Auto Industry, Electronic Industry, FMCG segment etc. Although, Banking Industry has also utilised IP assets (especially IT products & Physically security products) for improvement in business process, physical security solution and accounting systems, but leveraging & utilising the potential of IP assets in Banking Industry for core banking business is still to be explored and yet to be standardised. NBFC's (Non Banking Finance Companies) have been providing seed capital, venture capital etc, on the basis of IP assets (like Patents, Copyrights, Trademarks), but standard

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guidelines are yet to be established for conducting such business in large scale and standard approach is yet to be evolved for such lending business.

Banking Industry can utilise IP assets for developing new Corporate / MSME banking products and also utilise it for MSME debt restructuring in a way that will not only reduce NPA / default rate but will also promote scientific entrepreneurship. Banking Industry is uniquely placed as the common interaction point for all categories of Business/Individual entities and the benefits of IP assets available with various business / individual entities can be best realised by this Industry when an effective mechanism for utilisation of this category of assets is installed in core banking business.

However, only select category of IP Assets (Identifiable Intangible Assets) can be relied on while designing such a system for Banking Industry, considering the accuracy & predictability of IP valuation methodology. These select categories of assets where fairly reliable valuation system is established available are Patents, Copyrights, Industrial Design, Trade Secrets, Trademarks & Brand Names.

Further, the rate of growth of cases under Corporate Debt Restructuring is alarming and its also revealed that the requirement of debt restructuring below the limits of CDR mechanism is also increasing at an alarming rate especially MSME segment. Utilisation of IP assets specifically Patents, Copyrights and Industrial Design to be used for Debt restructuring for MSMEs foreseeing collapse and debt ridden. However, sufficient checks and balances are to be done under expert guidance to ensure the achievement of desired objectives.

Increased utilisation of IP assets by businesses has also opened ways for Bank to utilise this category of assets while designing new Corporate / MSME banking products. In an era where Banking Industry as a whole is facing stiff competition in providing financial services to various Businesses / Individuals, innovation in Banking Products will certainly provide an edge to the Bank over others. The safety & margin requirement can be ensured after proper valuation of IP asset and using them through Securitisation, Collateral, Sub Leasing, Assignment, Benefit as Claimant, Technology Transfer Agreement etc. However, personnel's with requisite expertise and sufficient experience must be used to take up such lending cases.

Furthermore, even from Bank's perspective conventional assets may not be always / really appreciative in nature when the time comes for using them as a means of recovery of loan / debt. MSME has a limited capacity to generate or keep generating collaterals, however, few IP Assets have a unique feature that can be generated and renewed regularly and hence can be of good use for fund-raising. Intellectual property such as patent for a new innovative design or formula could be highly appreciative in its value and thus could help in raising much more funds than a typical collateral could do it.

Although, utilisation of IP Assets by Banking Industry looks lucrative business, but, it has serious constraints & constants which deters realisation to a considerable extent. These constraints & constants are linked to limitation of IP valuation methods available; variable business life cycle; variable shelf life of IP assets across industry; increased rate of IP filing i.e high rate of technology development which in turn make the earlier technology obsolete and redundant etc. These bottlenecks can be overcome using suitable mathematical techniques, in depth study, imparting training / expertise & data capturing.

This paper aims to establish a concrete linkage between Banking Industry & IP Assets thereby identify a potential of symbiotic relationship between the two. This paper also attempts to give a brief view on principles & methods that can be followed for utilisation of IP assets for MSME debt restructuring & Designing new Corporate / MSME Banking Products. However, it is beyond the scope of this paper to design & finalise the exact ways & means (i.e Product Guidelines & Lending Parameters) for utilising IP assets by Banking Industry, as it requires considerable time and extensive research work. At best this paper aims at laying strong foundation for building and discovering new terrains of operation for Banking Industry.

2. Approach

Lending by Banking Industry in India is largely based on collateral & motgage system which means borrower is

required to deposit specific assets belonging to him to the Bank till the time he repays the borrowed amount & accrued interest, in an event where the borrower fails to repay the debt Bank reserves the right to confiscate those assets and make good for its looses. Various bodies and legislation are put in place to ensure establishment of such a system of recovery for the Bank. For such a system to be efficiently operational the assessement of exact value of assets is important and also its value over the period of lending is to be known in order to ensure that the assets deposited with bank is having the potential to compensate the losses of the Bank in case of default. Hence, the Valuation of any asset being taken by Bank as colleletral is indispensable & plays a crucial role when things go wrong. The Valuation of conventional class of assets being accepted by Bank (like land, building, plant & machinery, securities, deposits etc,) are easy to conduct and these assets are easy to realise as well. Innumerable number of valuation agencies are operating in market and the procedure for valuations are also standardised, which enables Banker to arrive at reasonable & correct valuation of asset. Similarly, valuation of IP assets plays a vital & pivotal role in designing any new Banking Product & System based on IP assets. Hence, it is imperative for Bank's to undertake & establish proven IP valuation methods to utilise them for generating banking business and recover the bad debts.

2.1 Conventional Methods of IP Valuation

However, Valuation of IP assets (being a creation of mind & being intangible) poses a serious challenge. This complexity further increases when grouping of IP assets is done, as ascribing appropriate economic benefit to an individual IP asset becomes difficult. The valuation of patent is initially very high, but the initial value is amortized over life of patent. On the other hand the value of Trademark is initially low, but its value increases over period of time. Moreover, an IP is unique so that valuation comparisons with other IP becomes difficult to justify. The determination of relative indexes & parameter also adds to the complexities. Here, its pertinent to mention that conventional assets being accepted by Banks have also faced & overcome such

complexity in past and are still facing few such less / unanswered guestions.

It is obvious that the prior valuation of IP is necessary but difficult to make and its clear that IP assets are being viewed differently by the Business entity & the Banker as also the seller and the buyer. Therefore, it is essential to define the parameter for IP asset valuation in order to carryout IP valuation, which includes:

- Type of IP asset to be valued i.e Patent, Copyright, Trademarks, Industrial Design etc.
- For whom the valuation is being done.
- Purpose of the valuation.
- The date of valuation considering the date of companies balance sheet.
- Method of valuation which will be appropriate.

IP valuation alone plays a crucial role, hence it must be robust, dynamic, verifiable, transparent, based on reliable data and must give reliable estimates. There are four main approaches:

- Market value of company less the net tangible assets.
- Cost based (Historic Cost & Replacement Cost).
- Comparable Market Valuation.
- Economic Benefit Method.
- Hybrid method of IP valuation for Banks.

2.1.1 Market value of company less the net tangible assets

This approach can be used to value IP assets of public companies. From the company balance sheet, the book value can be obtained from Total Assets [TA] less Total liabilities [TL]. If any book value has been ascribed to any Intangiable Asset [ITA] is again substracted. Thus,

Net tangible Assets [NTA] = TA - TL - ITA.

The Market Capatalisation [MC] of listed companies is the price per share multiplied by the number of shares issued. This information is obtained from stock market. An estimate of Unidentifiable Intangible Assets [UITA] (e.g. Goodwill) can be estimated at 8 to 10% of the total capatilisation (i.e UITA=10% X MC or 8% X MC).

Thus, the market valuation of the company is given from MC=NTA + UITA + IP assets

Therefore,

IP Assets = MC -NTA-UITA.

This valuation technique does not value IP assets individually, valuation also changes with changes in value of shares, is applicable only to public companies and is a gross approximation. However, this approach can be used to judge the value of IP assets and its ongoing impact on the stake holders of Business.

2.1.2 Cost based (Historic Cost & Replacement Cost)

- Historic Cost Method: The historic cost [H] is the acual cost incurred in creating and developing an intellectual property. This is relatively easy to calculate from funds invested [F], factored-up for the "time cost" of money [T] (based on a risk free interest rate). This method is easy to use for IP assets in the R&D phase. However, this approach ignores the fact that there is no direct co-relation between expenditure on IP assets and its potential to generate revenue over a period of time, further this also fails to assign reward to intellectual creation. At best this can be used to access the minimum return required from an IP asset.
- Replacement Cost Method: The replacement cost valuation [R] is based upon an assessment of the cost to replace the IP asset or to develop an alternative on. To carry out the valuation, an estimate is made of the time and resource needed to bring an asset to the same stage of maturity as the IP asset being valued. The method can also factor in risk and estimates of future costs and benefits.

2.1.3 Market Valuation

Market valuation of assets is the most straightforward and acceptable approach as it results from the estimation of buyer and the seller on the fair value for the transaction to happen. Market valuation approach to be valid there must be an active market that is trading comparable assets. In absence of such market condition subjectivity in valuations increases and reliability decreases. Consultancy firms like (PWC, GMS, McKinsey etc.) have gathered data for license royalty rates across the industries and globe. Such data are of much use for comparative valuation of IP assets and setting royalty rates. A royalty stream is a measure of the value that an IP asset adds to product / process over a product that is not protected by IP rights. Thus, the Present Value [PV] for the royalty income is equal to the value of the IP asset. Such transaction are governed by "25% rule" which indicated a fair royalty for the use of IP asset, which means that a royalty rate (based on sales of product) should result in a licensor receiving 25% of the profit from the product and the licensee receiving 75% to compensate for the risk and efforts in final product development, manufacturing and marketing. At present the trading market for IP assets is not sufficiently active, however data bases on IP valuations are growing and the Interbranch survey data on branch value of businesses provides information and describes methodology used.

Application Market valuation method is often chosen particularly when the transaction process of the same or similar asset is known. Unfortunately, such prices are often not available because inventions or trademarks are usually not developed for sale.

2.1.4 Economic Benefit Method

IP assets may be regarded as certain amount of capital deposited in the bank. Bank saving can produce interest, the amount of which is determined by the amount of the deposited capital. Therefore the interest amount can help to calculate the amount of the capital deposited in the bank. When IP assets produce income in the future, we may regard the income as the interest, by which the principal will be calculated. We may regard the principal as the value of the IP assets. This is the basic principle behind income method. When we deposit the capital into the bank, the interest income will be safe and stable. However, as the income of IP assets is influenced also by many other factors such as management and production processes, market and currency factor, etc., it is highly risky. For this sake, the income from investment in IP should be higher than the interest drawn from bank for the same amount of capital. Thus, we may take the present value obtained by discounting the future income of the IP assets at a discount rate higher than the bank rate as the value of the IP asset, which may be determined by the following formula, this is also called Discounted Cash Flow(DCF):

 $PV = \sum_{t=1}^{t=n} R(t) _{t=1}^{t=n}$

PV: Value of the evaluated IP asset; R(t): Income of the IP assets in year t.

t : Certain year in future.

n : Term during which income may be produced;

i : Discount rate.

Therefore, to evaluate IP assets by the income method is mainly to decide three kinds of unknown figures, namely the amount in the years followed, the discount rate and the term during which income may be produced.

The amount of income refers to the future profit that the IP assets may produce in the years to come. In other words, deciding of the amount of income has to be based on predicting. So, the principle that one should follow. It is the total asset of an enterprise, including both tangible and intangible assets, that bring return and income for investments. IP as a kind of asset is a part of the intangible asset. The income contributed by IP asset can therefore be calculated by subtracting the income contributed by other assets that IP assets from total income.

The above mentioned ways for calculating the amount of income attributed to IP assets does not take investment risk in the intangible assets and other factors, such as management, into consideration. In fact, the value of IP assets often tends to be somewhat overestimated by applying that method. In light of that problem, some people hold that a profit division rate should be used, which is generally believed to be between 10-30%. However, this rate lacks satisfying theoretical explanation and therefore needs to be further studied.

- The discount rate is generally three fold, which includes the risk free rate, risk taking rate and inflation rate. The risk free rate refers to the lowest return rate obtained from investment by investor. The risk taking rate is the rate of return for risk taking on assets. As far as the inflation rate is concerned, if the expected amount of profit does not reflect or does completely reflect the effect of inflation, the discount rate does not necessarily need to contain the inflation rate. Deciding the discount rate is very difficult task and no unified discount rate suitable for IP assets is possible. Discount rate may vary from asset to asset, industry to industry and location to location.
- To decide the term during which income may be produced is another important work in evaluating the IP assets, since the profit amount is closely related with that term. In case of the exploitation of inventions, profit may grow with market penetration until saturation is reached. Competitors will be left behind at this first time due to economy of scale effect. Then, however, competitors will catch up, and technology will become more and more obsolete, and profit will decrease. It should be noted that as IP assets are legally protected, the decrease may be delayed as compared with technology without legal protection.

In the process of valuation, the method applied to predict and decide the term usually take the following terms into consideration: (a) the term stipulated by law; (b) the term agreed in the contract; (c) the term determined by statistics and analysis; and (d) the term determined by comparison.

2.2 Hybrid method of IP valuation for Banks

Banking Industry deals with public money and due caution and care must be exercised while accepting any collateral and making lending decisions, these decisions become more difficult when unconventional assets like IP assets are under consideration. Hence, a combination of all the above methods along with other parameters are to be considered for IP valuations especially by Bank. The

unique behaviour in the valuation of IP is that the value of IP assets is highly dynamic. For example, technology in electronic industry changes fast and with changing technology, the value may diminish. Same applies to media industry where the future royalties will depend on the popularity of a performer. But the IP in the pharmaceutical industry always has high value, because of the slow change in the technology development. The frequency of valuation of IP assets considered by Bank must be high. Depending upon the type and class of IP assets the frequency must be decided, for example a highly technology wise dynamic industry (i.e mobile, software etc.) may require valuation in interval of six months and a comparatively less dynamic industry (i.e pharmaceutical, rubber, cement etc.) may require valuation in a span of one or two years depending upon the tenure of loan sanctioned. The frequent valuation of IP assets will be helpful for Banks to take preventive measures and safeguard itself and the borrower from a possible collapse.

Bank must hire professional IP valuation agency for submitting valuation report which contains all relevant parameters and logically finds the valuation. The valuation methodology must make minimum assumption that to logically arrived assumptions and pessimistic valuation wherever higher assumptions are made. Establishing exact method that could be used by Banks requires extensive research and study of all industries operating across globe, which is at present beyond the scope of this paper. However, it is certainly possible to integrate all the parameters and arrive at such a formulation; foundation of such a formulation is being laid down.

2.3 Mechanism to utilise IP assets for Indian **Banking Business**

After deriving the valuation of IP asset and getting itself satisfied about the financial productivity of IP asset, the Bank is now required to decide on the quantum of funds that may be lent against IP assets to the borrower. In order to arrive at the repayment capacity. Bank may rely on conventional tools of financial analysis over and above the one's mentioned below:

Requirement of Margin Caps: Banks must also stipulate margin requirements on the utilisation of IP assets while extending loans. These margin requirements could be variable depending upon the volatility of IP asset, tenure of lending and type of industry. However, such stipulation will be helpful in safeguarding the Bank from potential risk. Typically 45% - 50% margin does good for this category of assets. Further research in this field is required to establish industry and asset wise margin caps.

Ratio Analysis on IP assets: Ratio Analysis is a proven tool for assessment of credit appraisals for conventional loan. Applicability of ratio analysis can be equally utilised and relied upon. Apart from examining all financial statement a Bank can also examine non-financial statement containing details of identifiable intangible assets and its derived valuation.

Once the quantum of funds to be lent is decided, the Bank can adopt any of the below mentioned routes to safeguard itself in worst case scenario:

- Route of Securitisation of IP assets: Securitization refers to the pooling of various financial assets for creating and issuing new securities supported by those financial assets. These pooled assets are the claims that have reasonably predictable cash flows. Thus securitization is possible for future royalties from IP assets by licensing a patent, trademark or trade secret etc. Securitisation can be done in two ways:
- Assignment to lender: Through assignment of the IP asset to the lender as security for getting a loan.
- Assignment to securitisation company: Through assignment of the IP asset to the securitisation company and this entity issues securities to capital market investors.
- Route of mortgage of IP asset: Mortgage refers to assigning title of the IP asset to the Bank and the Bank can again assign the borrower some rights through license. After the loan is paid back by the borrower, the lender releases the mortgage. This type of mortgage provides total control over the IP assets in case of default.

A wide range of financial products & services can be innovated utilising the principles outlined above. These products & services can be especially useful for MSME banking / loan products, MSME debt restructuring, IP asset trading etc. Few possible products & services are described as under:

MSME Loan Product :

Utilisation of IP assets by MSME sector in India is gradually increasing especially in Hi-technology MEME. Bank's have an opportunity to facilitate acquisition of IP assets having ability to create value for the MSME.

Further, Banks can extend loans based on IP assets already available with MSME / Business entity to take up creation of infrastructure / manufacturing capacity for production of products & services.

• IP Factoring Service :

Bank may enter into an agreement with the Borrower wherein the proceeds of sale of IP asset based product / services can directly be collected by the Bank and appropriated according to viable / agreeable terms & conditions between the two parties.

IP assets for MSME debt restructuring :

MSME debt restructuring has become major challenge for banking industry. Effective utilisation of IP assets though auction \acquisition and capital infusion can be a robust solution to debt ridden MSME.

Many such financial products & services with detailed guidelines, appraisal templates, scoring models can be created once IP assets, its valuation and consequent utilisations are accepted.

2.4 Cautions to be taken

- IP asset must be checked for its registration and status of ownership and litigation must be thoroughly examined.
- Concerns regarding confidentiality of information poses difficulties for both parties to enter into agreement, in few such cases, the Bank can expect warranties and indemnity. This will protect the Bank from any losses arising out of the non-disclosure of confidential information in a patent.

- It must be ensured that all the rights of Bank are protected during the period of agreement vis-a-vis right to audit & examine IP asset, right to approve before licensing, right to sell in an event of default, right to collect payment etc.
- The Indian Contract Act, 1872 specifies usage of IP assets as collaterals. The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 does not specifically deal with the intellectual property. However, Section 2 (t) it lays down that "property" means intangible assets, being know-how, patent, copyright, trade mark, licence, franchise or any other business or commercial right of similar nature. Hence, both these regulations are to be considered while making lending decision.
- IP asset valuation must be conducted with extreme care and through professional agencies. The staff deployed for dealing with such cases must be experienced and have required expertise.

2.5 Way ahead

- Amendments' in existing legislation (like Patent Act 1972, Copyright Act 1957 etc.) and also making new and exclusive legislation is required to deal with IP securitisation.
- Research should be promoted to make IP asset valuation more realistic.
- Like land records database for IP assets is to be created specifying valuation, title details and brief utilities.
- Reserve Bank of India may come up with guidelines on utilisation of IP assets in conventional Banking Business and establish a framework through which efficient utilisation of this class of assets could be done by Banks, Industries and Individuals.
- Extensive research is required to be conducted for establishing exact methodology for IP asset valuation by Bank's for lending; Research for discount rate, tenure of income from asset & the anticipated profit; Arriving at figures of margin requirement and assignment of risk weights.

3. Conclusion

The onset of Information, Communication & Technology revolution is gradually transforming Indian society into a Knowledge Society, where recognition of Intellectual Property Rights (IPR) is increasing. Banking upon Intellectual Property (IP) assets is a profitable business and the same has been successfully demonstrated by other Industries. Further, IP asset based financing has ability to increase rate of scientific innovation and foster entrepreneurial spirits amongst the youth of Nation.

The challenge lies in standardising an approach towards valuation of IP assets and finding flexibility in credit instruments' that can match the various kinds of credit requirement and standardising post credit delivery methods of credit monitoring.

A promising solution is to initially begin with short term loans backed by composite collateral (both of them at par with other assets). In depth and careful research is required for standardisation of IP valuation method to be used for Banking, Margin requirement, ratio analysis tools in order to determine ideal credit appraisal system.

4. References

- WIPO IP Reports, July 2012 Published by Economic & Statistics Division of WIPO, Geneva.
- Valuation of Intellectual Property Assets by Akshat Pande.
- Corporate Banking for Bankers by Indian Institute of Banking & Finance.
- SME in India by Indian Institute of Banking & Finance.

		Annexure						
TABLE - I : INTELLECTUAL PROPERTY APPLICATIONS BY OFFICE, 2010								
Office Applications								
	Trademark class count	Patent	Industrial Design	Utility Model				
Australia	107,862	24,887	5,863	1,465				
Brazil	125,654	22,686	5,501	1,988				
Canada	123,581	35,449	5,142	n.a.				
Finland	14,615	1,833	187	n.a.				
France	294,359	16,580	4,891	484				
Germany	221,345	59,245	6,285	17,005				
India	-	34,287	6,092	n.a.				
Philippines	24,597	3,393	845	621				
Russian Federation	206,963	42,500	3,997	12,262				
South Africa	30,549	6,383	1,747	n.a.				
Spain	73,487	3,779	1,826	2,640				
Switzerland	80,365	2,155	2,515	n.a.				
Thailand	37,656	1,937	3,614	1,328				
United Kingdom	76,637	21,929	3,604	n.a.				
United States of America	377,964	490,226	29,059	n.a.				
China	1,080,769	391,177	421,273	409,836				

2009 data are in italics

n.a. not applicable

Source: WIPO Statistics Database, May 2012

⁻ not available

Direct trademark application class count data are not available; therefore only Madrid designation statistics are reported.

²Direct trademark application class count data are not available; therefore only Madrid designation statistics are reported. Similarly, industrial design data are not available, thus only Hague designation statistics are reported,

³Trademark and industrial design applications are filed with the Benelux Office for Intellectual Property (BOIP).

⁴Direct industrial design application data are not available; therefore only Hague designation statistics are reported.

⁵Trademark application class count is calculated based on the average number of classes specified in applications, which is provided by the office, combined with Madrid designation class counts.

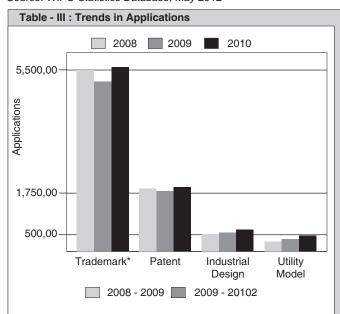
Patent applications are filed with the Swiss Federal Institute of Intellectual Property.

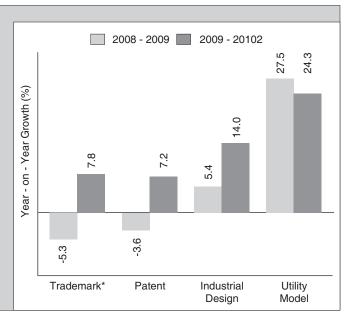
⁷Patent applications include utility model applications.

Table - II : Trend in Applic	ations		Year			
	2008	2009	2010	Growth (%) 2008-09	Growth (%) 2009-10	
Trademark*	5,473,000	5,185,000	5,588,000	-5.3	7.8	
Patent	1,915,000	1,846,000	1,979,000	-3.6	7.2	
Industrial Design	557,000	587,000	669,000	5.4	14.0	
Utility Model	313,000	399,000	496,000	27.5	24.3	

Note: Total applications worldwide are WIPO estimates rounded to the nearest thousand. *Refers to class count, i.e. the number of classes specified in applications.

Source: WIPO Statistics Database, May 2012





Source: WIPO Statistics Database, May 2012

Table - IV: PATENT APPLICATIONS FOR THE TOP 15 OFFICES, 2010								
Office	Application Year							
	2008	2009	2010	Share of total (%): 2010	Growth (%): 2009-10			
Total	1,915,000	1,846,000	1,979,000	100.0	7.2			
United States of America	456,321	456,106	490,226	24.8	7.5			
China	289,838	314,604	391,177	19.8	24.3			
Japan	391,002	348,596	344,598	17.4	-1.1			
Republic of Korea	170,632	163,523	170,101	8.6	4.0			
European Patent Office	146,150	134,580	150,961	7.6	12.2			
Germany	62,417	59,583	59,245	3.0	-0.6			
Russian Federation	41,849	38,564	42,500	2.1	10.2			
Canada	42,089	37,477	35,449	1.8	-5.4			
India*	36,812	34,287	-	1.9	-6.9			
Australia	26,346	23,681	24,887	1.3	5.1			
Brazil	22,917	21,944	22,686	1.1	3.4			
United Kingdom	23,379	22,465	21,929	1.1	-2.4			
France	16,419	15,693	16,580	0.8	5.7			
Mexico	16,581	14,281	14,576	0.7	2.1			
China, Hong Kong SAR	13,662	11,857	11,702	0.6	-1.3			
Others	158,586	148,759	182,383	9.2	22.6			

Note: Application numbers are a sum of direct filings and PCT national phase entries received by offices.

^{*}Share of total applications is based on 2009 total and growth is based on 2008-09 figures.

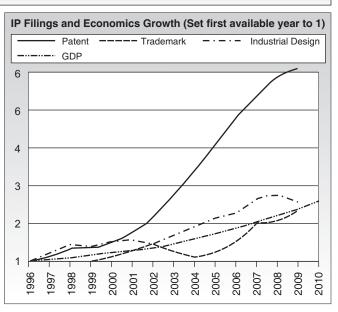
⁻ not available

Source: WIPO Statistics Database, May 2012

Table - V: IP Stastics of India Population (Million): 1224.61 (2010) (Rank = 2)**Gross Domestic Product (Billion US\$)** (Constant 2005 US\$ (PPP)) : 3794.42 (2010) (Rank = 4)

IP Filings (Resident + Abroad, Including Regional) and Econom

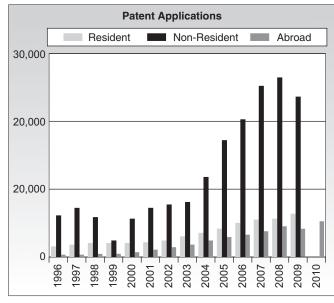
ir i liligs (nesident + Abroad, including negional) and Economy							
Year	Patent	Trademark	Industrial Design	GDP (Constant 2005 US\$			
1996	1,960		1,787	1456.02			
1997	2,249		2,203	1515.05			
1998	2,658		2,637	1608.89			
1999	2,645	61,637	2,507	1727.74			
2000	2,919	69,382	2,738	1797.38			
2001	3,473	81,495	2,841	1891.14			
2002	4,204	90,746	2,618	1962.38			
2003	5,425	79,515	3,034	2126.65			
2004	6,708	67,455	3,465	2302.70			
2005	8,022	77,907	3,867	2517.28			
2006	9,444	93,649	4,075	2750.68			
2007	10,534	124,871	4,756	3020.71			
2008	11,546	127,991	4,949	3169.71			
2009	11,939	143,418	4,608	3458.31			
2010				3794.42			



Source: WIPO statistics database; last updated 08/2/2012

Patent Applications

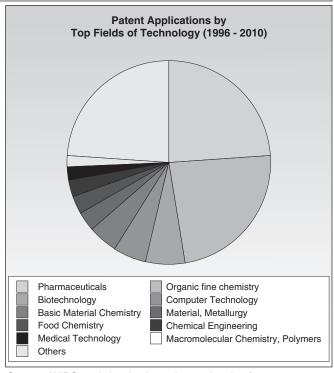
Year	Resi- dent	Rank	Non-Resi dent	Rank	Abroad	Rank
1996	1,661	23	6,901	12	299	28
1997	1,926	20	8,229	12	323	28
1998	2,247	20	6,707	14	411	28
1999	2,206	21	2,620	29	439	28
2000	2,206	21	6,332	15	713	25
2001	2,379	20	8,213	15	1,094	22
2002	2,693	18	8,772	14	1,511	22
2003	3,425	17	9,188	13	2,000	21
2004	4,014	14	13,452	9	2,694	21
2005	4,721	14	19,661	8	3,301	21
2006	5,686	13	23,242	7	3,758	21
2007	6,296	13	28,922	7	4,238	21
2008	6,425	12	30,387	7	5,121	21
2009	7,262	13	27,025	7	4,677	20
2010					5,957	20



Source: WIPO statistics database; last updated 08/2/2012

Patent Applications by Top Fields of Technology (1996 - 2010)

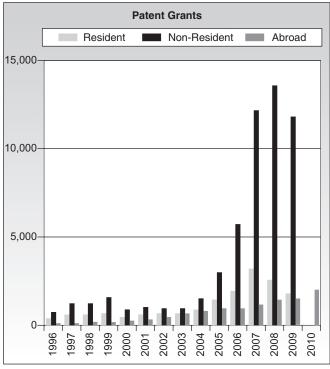
Field of Technology	Share
Pharmaceuticals	24.24
Organic fine chemistry	23.34
Biotechnology	6.17
Computer technology	5.30
Basic materials chemistry	4.65
Materials, metallurgy	3.09
Food chemistry	3.03
Chemical engineering	2.54
Medical technology	2.03
Macromolecular chemistry, polymers	1.96
Others	23.65



Source: WIPO statistics database; last updated 08/2012

Patent Grants

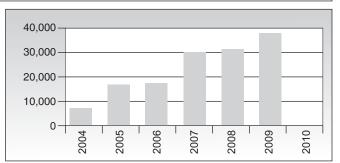
Year	Resi-	Rank	Non-Resi	Rank	Abroad	Rank
	dent		dent			
1996	359	29	661	31	83	32
1997	546	24	1,161	22	80	32
1998	550	24	1,223	23	134	31
1999	633	22	1,527	21	157	30
2000	402	27	861	26	182	30
2001	529	25	1,020	28	288	28
2002	619	23	921	28	425	25
2003	615	27	911	28	622	22
2004	851	21	1,466	17	766	22
2005	1,396	19	2,924	16	888	22
2006	1,907	18	5,632	11	919	23
2007	3,173	12	12,088	7	1,125	23
2008	2,541	13	13,520	7	1,398	22
2009	1,725	17	4,443	12	1,466	23
2010					1,919	20



Source: WIPO statistics database; last updated 08/2012

Patents in Force

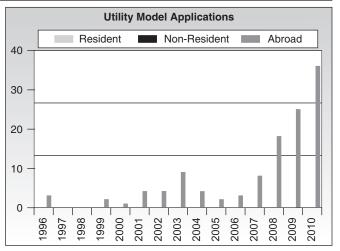
Year	Patents in Force	Rank
2004	6,857	27
2005	16,419	19
2006	17,066	19
2007	29,688	19
2008	30,822	19
2009	37,334	19
2010		



Source: WIPO statistics database; last updated 08/2012

Utility Model Applications

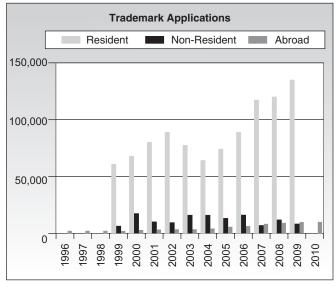
Year	Resi- dent	Rank	Non-Resi dent	Rank	Abroad	Rank
1996					3	33
1997						
1998						
1999					2	38
2000					1	39
2001					4	36
2002					4	46
2003					9	41
2004					4	42
2005					2	48
2006					3	42
2007					8	41
2008					18	35
2009					25	33
2010					36	28



Source: WIPO statistics database; last updated 08/2012

Trademark Applications

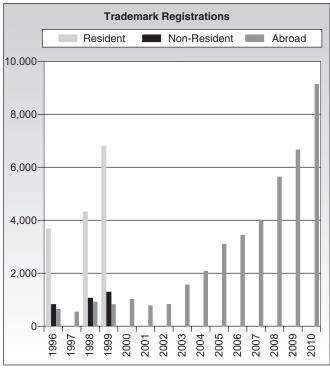
Year	Resi- dent	Rank	Non-Resi dent	Rank	Abroad	Rank
1996					1,392	34
1997					1,242	36
1998					1,135	38
1999	60,337	9	5,393	49	1,300	38
2000	67,262	9	17,013	16	2,120	36
2001	79,746	6	10,490	29	1,749	40
2002	88,190	5	5,930	45	2,556	39
2003	76,801	6	15,450	10	2,714	42
2004	63,906	8	15,090	11	3,549	39
2005	73,308	7	12,361	18	4,599	39
2006	88,210	5	15,209	15	5,439	42
2007	117,014	4	6,500	43	7,857	39
2008	119,371	3	10,801	24	8,620	40
2009	134,403	3	7,540	28	9,015	37
2010					9,255	39



Source: WIPO statistics database; last updated 08/2012

Trademark Registrations

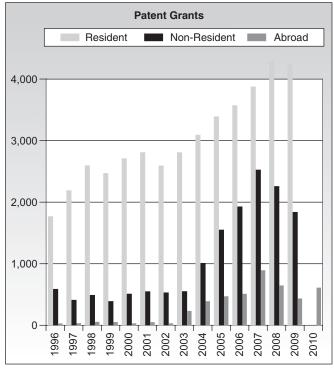
Year	Resi-	Rank	Non-Resi	Rank	Abroad	Rank
	dent		dent			
1996	3,654	28	782	94	589	37
1997					514	37
1998	4,302	29	998	88	856	37
1999	6,747	20	1,263	82	814	37
2000					976	36
2001					767	37
2002					808	44
2003					1,569	47
2004					2,051	40
2005					3,081	41
2006					3,403	43
2007					3,974	43
2008					5,588	43
2009					6,628	40
2010					9,112	37



Source: WIPO statistics database; last updated 08/2012

Industrial Design Applications

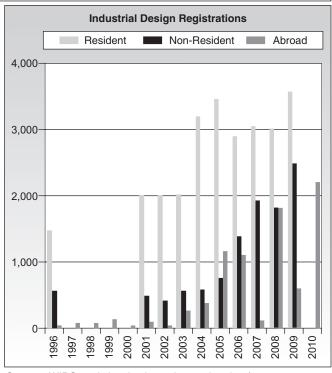
Year	Resi-	Rank	Non-Resi dent	Rank	Abroad	Rank
4000		40		40	47	0.4
1996	1,770	13	587	19	17	34
1997	2,192	11	403	26	11	37
1998	2,594	11	482	39	43	37
1999	2,470	10	381	45	37	39
2000	2,708	8	499	44	30	42
2001	2,810	9	540	40	31	50
2002	2,591	10	533	39	27	46
2003	2,816	10	541	41	218	38
2004	3,093	11	1,009	16	372	39
2005	3,407	10	1,542	13	460	39
2006	3,584	9	1,937	11	491	40
2007	3,873	9	2,529	10	883	37
2008	4,308	9	2,249	9	641	41
2009	4,267	9	1,825	8	341	46
2010					603	43



Source: WIPO statistics database; last updated 08/2012

Industrial Design Registrations

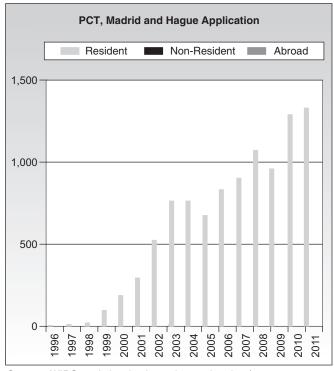
Year	Resi- dent	Rank	Non-Resi dent	Rank	Abroad	Rank
1996	1,455	12	549	19	22	34
1997					57	30
1998					49	36
1999					112	31
2000					19	43
2001	1,969	10	457	42	67	39
2002	1,974	12	390	43	21	48
2003	2,004	11	543	37	247	33
2004	3,166	8	562	30	345	35
2005	3,439	9	736	17	1,134	20
2006	2,877	10	1,373	11	1,081	20
2007	3,026	9	1,902	10	93	37
2008	2,985	14	1,787	10	1,788	39
2009	3,552	8	2,473	8	582	31
2010					2,194	40



Source: WIPO statistics database; last updated 08/2012

International Applications via WIPO Administered Treaties

Year	Resi- dent	Rank	Non-Resi dent	Rank	Abroad	Rank
	dent		dent			
1996	4	47				
1997	13	41				
1998	16	43				
1999	101	30				
2000	190	26				
2001	295	23				
2002	525	22				
2003	763	19				
2004	725	19				
2005	678	20				
2006	833	20				
2007	902	20			2	21
2008	1,072	19				
2009	961	20				
2010	1,286	17				
2011	1,330	18				



Source: WIPO statistics database; last updated 08/2012

PCT Top Applicants (Publication Year = 2011)

Applicant	Publication	Rank
RANBAXY LABORATORIES LIMITED	58	289
COUNCIL OF SCIENTIFIC AND		
INDUSTRIAL RESEARCH	53	332
DR. REDDY'S LABORATORIES LTD.	35	512
TATA CONSULTANCY SERVICES LTD.	34	530
LUPIN LIMITED	29	629
CADILA HEALTHCARE LIMITED	28	652
HETERO RESEARCH FOUNDATION	24	764
MATRIX LABORATORIES LTD	21	866
INDIAN INSTITUTE OF TECHNOLOGY	20	913
INDIAN INSTITUTE OF SCIENCE	19	950

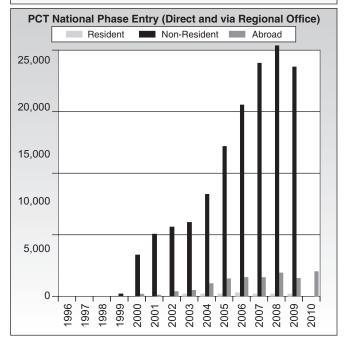
PCT National Phase Entry (Direct and via Regional Office)

Year	Resi- dent	Rank	Non-Resi dent	Rank	Abroad	Rank
1996						
1997					2	48
1998					15	39
1999			269	28	37	34
2000	27	21	4,172	13	96	31
2001	8	25	6,343	10	176	29
2002			7,049	10	419	23
2003	207	16	7,510	10	613	21
2004	384	17	10,287	10	1,346	21
2005	173	21	15,171	8	1,782	20
2006	349	18	19,411	7	1,839	22
2007	212	22	23,679	7	1,926	23
2008	237	23	25,469	7	2,341	22
2009	209	23	23,222	7	1,866	22
2010					2,524	22

Source: WIPO statistics database. Last updated: 08/2012

- The statistics are based on data collected from IP offices or extracted from the PATSTAT database (for statistics by field of technology). Data might be missing for some years and offices or may be incomplete for some origins. The data relating to population and gross domestic product (GDP) are from the UN Statistics Division and the World Bank.
- A resident filing refers to an application filed in the country by its own resident; whereas a non-resident filing refers to the one filed by a foreign applicant. An

PCT National Phase Entry (Direct and via Regional Office)



abroad filing refers to an application filed by this country's resident at a foreign office.

- Where an office provides total filings without breaking them down into resident and non-resident filings, WIPO divides the total count using the historical share of resident filings at that office.
- IP filings and Economy lists patent, trademark and industrial design filings worldwide by applicants from this country (resident + abroad).
- One filing at the Eurasian Patent Organization (EAPO), the African Intellectual Property Organization (OAPI), the Benelux Office for Intellectual Property (BOIP) or the Office for Harmonization in the Internal Market (OHIM) is treated as equavalent of multiple abroad filings at each member state; whereas one filing at the European Patent Office (EPO) or the African Regional Intellectual Property Organization (ARIPO) is counted as one abroad filing due to lack of information on designation.
- Contact information: Economics and Statistics Division, WIPO. Tel.: +41-22-338-91-11, email: Ipstats.mail@wipo.int.

new feature

Anti-Money Laundering / Counter Financing of Terrorism / Know Your Customer

In the recent past AML / KYC issue has gained media attention and focus. At present, different financial products get governed by different regulators i.e., Reserve Bank of India (RBI), SEBI, Pension Fund Regulatory and Development Authority (PFRDA) and Insurance Regulatory and Development Authority (IRDA). In order to prevent money laundering / financing of terrorism, these regulators have issued distinct KYC norms for compliance. Though a host of intermediaries are also involved in providing various financial services, the primary responsibility of complying AML / CFT / KYC rests on the respective

regulated entity (banks, insurance companies etc.). Banking function has become increasingly complex over time with the introduction of new products and services. Combating money laundering continues to be a key issue for banks as the frontline staff / the authorized intermediaries are involved in selling of various products such as loans / deposits, insurance, mutual funds and pension funds. In this issue of Bank Quest, the Institute has made an attempt to compare the provisions of AML / CFT / KYC guidelines issued by different regulators.

	Comparison of AML / CFT / KYC guidelines										
Sr. No.	Particulars	RBI	IRDA	SEBI	PFRDA						
1.	The word "Customer" includes	A person or entity that maintains an account and or has a business relationship with the bank, beneficial owner, professional intermediaries (Stock brokers, CAs, solicitors etc).	Proposer / policy holder, beneficiaries and assignee	"Client" means a person seeking to do / has done his KYC through intermediary with KRA. In the revised KYC regulations, In Person Verification (IPV) has been made mandatory for Mutual fund investors.	Subscriber to the Scheme						
2.	When should KYC be done	At the time of opening an account and periodical updation.	In case of general insurance, to be done at the settlement stage also when claim payout / premium refund crosses a threshold of ₹1 lakhs per claim / premium refund	At the account opening stage.	At the entry & exit stage.						
3.	Discretion on the nature of ID Proof documents	If ID Card or letter from public authority is obtained as proof, it should be to the satisfaction of bank.	No discretion	No discretion.	No discretion.						

Sr. No.	Particulars	RBI	IRDA	SEBI	PFRDA
4.	List of documents for ID /address proof	Indicative only	Illustrative only	Complete list. The address proof include Gas Bill, Registered lease or sale agreement of residence, flat maintenance bill, insurance copy, proof address issued by banks etc.	Complete list for both ID & Address proof. The list includes Certificate issued by MP / MLA, water bill, latest property / house tax receipt (not more than one year old), lease agreement on stamp paper (in case of rented / leased accommodation) etc.
5.	Nature of Address Proof required	Proof of permanent address. Given clear cut definition of permanent address. The documents mentioned should confirm to the satisfaction of the bank.	Proof of residence is required. No discretion. Guidelines are clear for example i) Any kind of telephone bills (landline / mobile / wireless) not older than 6 months from the date of insurance contract. ii) Pass book-updated upto previous month iii) valid lease agreement along with rent receipt which is not more than 3 months old etc.	If correspondence & permanent address are different, then proof for both to be submitted. Guidelines are clear for example Telephone bill (only landline, electricity / gas bill-not more than 3 months old 2) bank statement / Pass book not more than 3 months old.	Current address. Guidelines are clear for example. House tax receipt (not more than 1 year old), telephone bill / electricity bill / water bill (all less than 6 months old), Certificate of address (with photo) issued by MP / MLA
6.	Monitoring Transactions	Remittance of funds above ₹50,000/- by debit to account or by cheque. Banks may prescribe threshold limit / category of accounts and monitor when these limits exceed.	Premium / proposal cash beyond ₹50,000/-per transaction shall be accepted subject to the customer quoting PAN (please note that it excludes ₹50,000/-)	Investments in mutual fund schemes [including investments through Systematic Investment Plan (SIP)] of up to ₹50,000/- per investor per year per mutual fund are exempted from the requirement of PAN. However, the requirement of KYC is mandatory for all investments, irrespective of the amount of investment.	Submission of PAN Card is a mandatory requirement for opening and operation of a Tier II account for all sectors under NPS.
7.	Reporting of Cash Transactions	All integrated transactions exceeding ₹10 Lakh Integrally connected transactions below ₹10 Lakh in foreign currency within a month and aggregate value exceeds ₹10 Lakh Cash	Any cash transaction above ₹10 lakh and integrally connected cash transactions above ₹10 lakh per month should be reported to FIU-IND	NA	NA

Sr. No.	Particulars	RBI	IRDA	SEBI	PFRDA
		transactions wherein forged / counterfeit currency used as genuine Details of individual cash transactions below ₹50,000/- need not be reported.			
8.	Reporting of Suspicious Transactions	Any cash or non-cash or a series of transactions integrally connected of suspicious nature ii) All transactions involving receipts by NPO of value more than ₹10 lakh or its equivalent in foreign currency should be reported to FIU-IND	Cash based suspicious transactions for payment of premium over and above ₹5 lakhs per person per month. It should also consider multiple DDs each denominated for less than ₹50,000/- ii) All transactions involving receipts by NPO of value more than ₹10 lakh or its equivalent in foreign currency should be reported to FIU-IND	NA	NA

We hope this comparison will help all those who are involved in complying KYC norms.



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30.06.2013 R. Bhaskaran

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Name of the Book : Project Financing - Appraisal and Follow-up for Term loans and

Working Capital

Publisher: Govind Prakashan, B-350, Ten B Scheme, Gopalpura Bypass, Jaipur-302 018.

Price: 870/-

The book under review is on the appraisal and follow-up of Term Loan and working capital credit Pages: 272 Pages Reviewed by : Dr. T. C. G. Namboodiri facilities extended by commercial banks. These are two important areas for the commercial banks as good appraisal avoids adverse selection which is one of the reasons for the non performing assets. The author has earlier written two separate books viz; Hand Book on Project Appraisal & Follow-up and Handbook on Working Capital Finance which were quite popular among the bankers. The present book is by and large a combination of those two books.

This book consists of 20 chapters devoted to project loans and working capital appraisal. The book discusses management appraisal, technical appraisal and commercial appraisal. In the financial appraisal part it examines the issues related to term lending and working capital financing. Topics like financial projections, ratio analysis, break-even analysis and discounted cash flow techniques are discussed in the financial appraisal part. One chapter each is devoted for Management of inventories, management of receivables, disbursement and follow-up and Income Recognition Asset Classification and provisioning. There is separate Chapters on MSME financing and CGTMSE relevant in the current situation. All these topics are useful for

The book targets not only the bankers but also the entrepreneurs, finance managers, the practicing bankers in their day-to-day activities. and consultants. All these groups have to understand the intricacies of bank lending because it is necessary for the entrepreneurs and finance managers to understand what the real requirements of the bankers to take a credit decision and what are their expectations from the clients. Similarly, the bankers should also know the various issues involved in lending. Once this happen, the wave length between these different stake holders can be evened and the conflict of interest can be minimized. This will lead to a better understanding between the lenders and

Bankers have to understand the various issues in financing so that the credit appraisal becomes borrowers resulting in better customer service. more comprehensive addressing the requirements of the borrowers. This is, perhaps, the cornerstone in credit portfolio management reducing the regulatory concern. From this point of view also the book is of useful to all the persons related to bank credit.

Though the book is not discussing the various aspects and issues of project appraisal and project monitoring elaborately, it covers the essential parts like technical appraisal, management appraisal and financial appraisal. This shall induce the readers to go for further reading in the subject. The book as a reference material has, therefore, utility for the bankers and other related parties viz. entrepreneurs, finance managers and consultants. Authored by a former central banker with long experience, the book is a good reading material and will be an useful addition for the library.

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