

BEACON²⁰¹²

MANAGEMENT REVIEW



Research & Scholastic Development Team



SiB **PUNE**
SINCE 1978

Symbiosis Institute of Business Management Pune
Constituent of Symbiosis International University
Accredited by NAAC with 'A' Grade
+91 20 3911 6088
www.sibm.edu



SYMBIOSIS INSTITUTE OF BUSINESS MANAGEMENT PUNE



ESTABLISHED IN 1978, SIBM PUNE IS IN ITS 34TH YEAR OF SERVICE TO THE STUDENT COMMUNITY. IT REMAINS THE FLAGSHIP BRAND OF SYMBIOSIS AND IS RECOGNIZED AS ONE OF THE BEST BUSINESS SCHOOLS IN INDIA.

LIFE AT SIBM PUNE REVOLVES AROUND THE PERPETUAL PROCESS OF LEARNING AND UNLEARNING. THE BREATHTAKING LOCATION AND BRILLIANT INFRASTRUCTURE ACT AS CATALYSTS GIVING US AN UNFAIR ADVANTAGE IN THIS PROCESS. ACADEMICS AT SIBM PUNE ARE RIGOROUS TO SAY THE LEAST BECAUSE WE BELIEVE THAT A FRAMEWORK FOR QUESTIONING THE CURRENT MANAGEMENT PRACTICES CAN BE BUILT ON A FOUNDATION OF STRONG ACADEMICS. THE PEDAGOGY AT SIBM PUNE IS BUILT AROUND THE PRINCIPLES OF EXPERIENCED TEACHERS, OPEN ENDED TEACHING, AND THE NURTURING OF ARGUMENT. SIBM PUNE STRONGLY BELIEVES IN THE ALL-ROUND DEVELOPMENT OF ITS STUDENTS AND HAS ARGUABLY THE BEST SPORTS COMPLEX OF ANY B SCHOOL IN THE COUNTRY. ALL IN ALL, THE BRILLIANCE OF STUDENTS PROVOKED BY THE BEST OF FACULTY AND AIDED BY AN AWE INSPIRING CAMPUS RESULTS IN AN MBA EXPERIENCE WORTH DYING FOR.

EDITORIAL TEAM
RESEARCH AND SCHOLASTIC DEVELOPMENT TEAM



Niket
Khaitan



Jaikishore
Sharma



Ketan
Agarwal



Krupesh
Shevgaonkar



Mridula
Muraleedharan



Arun
Prateek K



Bhavik
Bhatgara



Manisha
Rana



Snehal
Narang



Vasudha
Tripathi



COVER ART BY
Piccolo Momin

Contact RSDT : 020- 39116088, 88888886987, 8308829254.

Mail : rsdt@sibmpune.edu.in

CONTRIBUTORS



Aanshul Agarawal



Anant Jindal



Ankit Deshpande



Ankit Srivastava



Bharath Harish



Dhruv Talwar



Eunice Mudialba



Manisha Rana



Nihal Satam



Prateek Batra



Rachit Baxi



Ronald Browne



Sagar Rachh



Snehal Narang



Srumita Narzary



Sudhanshu Shekhar



Supriya M S



Surabhi Singhal

We Thank All Our Contributors For Their Efforts!

DIRECTOR'S NOTE



Dear Reader,

I take great pleasure in introducing you to the second issue of 'Beacon Management Review', an initiative taken up by the students of Symbiosis Institute of Business Management, Pune. Beacon Management Review is an attempt at showcasing SIBM students' interest in understanding the business environment and that in research.

This issue is a compilation of the best management and research based articles written by SIBM Pune students in the academic year 2011-12. These articles cover a wide range of topics ranging from strategy and finance to human resource and marketing management, stressing the diversity of the business environment today.

At SIBM Pune, we believe that research and management education are complementary activities. People with insight and initiative are invariably more valuable to recruiters. This publication is another initiative of Research and Scholastic Development Team, SIBM Pune for showcasing the zeal for research among the students of our institute.

I appreciate the efforts of Research and Scholastic Development Team in getting live projects from the industry for students to work on. They have worked on live projects for Godfrey Phillips India, Mother Dairy, Mahindra Composites Ltd., Credit Analysis of Banks and BVG Cleantech this academic year.

Neil Armstrong said, "Research is creating new knowledge". But this is not necessarily true. Knowledge already exists in countless domains and forms, collecting relevant knowledge and interpreting it to reach meaningful conclusions is the real art.

In its second year, Beacon Management Review has tried to improve the degree of detail of its articles and their treatment of the subject matter. I hope you will find the experience of reading it as enjoyable and enlightening as the students found the process of creating it.

Dr. Vivek Sane

Director, SIBM Pune

CONTENTS
Table of Contents

| | |
|---|-----|
| A Gen Y Perspective: Managing Job, Career and Relationship | 1 |
| Algorithmic Trading | 7 |
| eHR: Byte More Than You Can Chew | 22 |
| Employee Value Proposition | 29 |
| Will EU Survive the Next Decade? | 37 |
| Aligning Interests of Gen Y Workforce for Organisations to Respond to Future Transformations | 45 |
| Goodbye Recession...Goodbye Ethics? | 52 |
| Inflation in India - an Overview | 64 |
| Effect of Plastic Money on Money Supply in India | 78 |
| Is there a Property Price Bubble in China? | 85 |
| Stock Market Trends and Influencers In Bad Times | 89 |
| Competent Structure of Two Wheeler in Rural and Urban Markets .. | 96 |
| Inclusion and Business Impact | 119 |
| Management Case | |
| Dousing the Fire: Kirloskar Brothers Ltd | 126 |

A Gen Y Perspective : Managing Job, Career and Relationship

- Sudhanshu Shekhar and Srumita Narzary

Abstract

The objective of this research is to look at one of the most talked about areas of professional world, work-life balance with an angle of relationship. Job and relationship affect each other. The research aims to look at the trade-off between career orientation and relationship progression. Work life balance is increasingly becoming part of employee value proposition for most of the organizations. But how well can this be addressed when the emotional angle of relationship is factored in is what we aim to analyse through this study.

Introduction

Work-life balance has always been a concern of those interested in the quality of working life and its relation to broader quality of life. Especially for today's Generation Y, relationship in terms of marriage or before marriage, impacts the work and the same gets reflected positively or negatively on organisation's performance.

The pressure of work for professionals has been intensifying in recent decades. Factors such as the advancement in information technology, the need for being more responsive to situations, the importance attached to quality of customer service, its implication for constant availability and the pace of change with its resultant upheavals and adjustments all demand time and can be sources of pressure. The evidence from the UK, which has the longest working hours in Europe, shows while the average number of hours worked has been steady for the past twenty years, the proportion of working more than 48 hours in a week has increased in the past decade.

Beacon Management Review 2012

While on one hand, the number of dual career families and demand of work is increasing day by day, on the other hand commitment to family and relationship demands quality time, out of the busy work schedule. The art of balancing both work and personal life becomes very difficult when a situation arrives wherein an individual is left to choose only one out of the two.

Much of the general analysis about the causes and consequences of work-life imbalance is speculative and based on limited convincing evidence. We need to learn more in particular about the consequences of imbalance in family and community and on changing values among younger workers. It is also notable that debates about work-life balance often occur without any clear and consistent definition of what we mean by work-life balance.

Overview of Previous Work Done

In the past there has been a lot of research and articles published on work-life balance. Preliminary findings from the EEO Trusts on-line survey on how work affects relationships and vice versa show that most respondents (81%) think work has a positive effect on their relationships. Most people (60%) also thought their workplace valued and supported their relationships with friends and partners. Also, a large number of people (86%) said that when their relationship was going well they were more productive at work because they felt better. Many (76%) also said that the emotional support from their relationships had a positive impact on their work performance. However a third of respondents had experienced a break-up with their spouse/partner where the impact of work had been a contributing factor. Work pressure, exhaustion and stress were the main reasons followed by long and unpredictable working hours (2004).

Rothbard's (2001) engagement hypothesis suggests that positive emotions experienced at work, spill over onto the emotions experienced at home. One aspect of this engagement hypothesis is that engagement at work (work attention and absorption) is positively associated with positive mood at home. As noted by Rothbard, supporting this expectation is the argument that individuals who have high levels of job satisfaction do not bring their troubles home with them and therefore come home with a more positive frame of mind and are more receptive to their family.

In a 2001 survey conducted by the Radcliff Public Policy Centre, 82% of men and 85% of women aged 20 to 39 placed family time at the top of their work/life priorities. In a 2001 study by Rutgers University and the University of Connecticut, 90% of working adults said they were concerned that they do not spend enough time with their families.

Friedman and Greenhaus, two leaders in work-life balance, in their highly acclaimed book, *Work and Family—Allies or Enemies* bring forth new evidence to help understand choices we make as employers and individuals regarding work and family. This pioneering study of more than

Beacon Management Review 2012

800 business professionals considered values, work, and family lives and found that “work and family, the dominant life roles for most employed women and men in contemporary society, can either help or hurt each other.” To handle work-life balance, Friedman and Greenhaus emphasize that working adults learn to build networks of support at home, at work, and in the community. Conflict between work and family has real consequences and significantly affects quality of family life and career attainment of both men and women. The consequences for women may include serious constraints on career choices, limited opportunity for career advancement and success in their work role, and the need to choose between two apparent opposites— an active and satisfying career or marriage and children. Many men have to trade off personal and career values while they search for ways to make dual career families work, often requiring them to embrace family roles that are far different, and more egalitarian, than those they learned as children. This research reveals a compensatory effect between two forms of psychological interference: work-to-family and family-to-work. Specifically, support from two domains (partner and employer) has a significant impact on one another. The impact of partner support is greater when business professionals feel their employers are unsupportive of their life beyond work. Conversely, for employees with relatively unsupportive partners, the employer family-friendliness reduces role conflicts more than partners. Thus, one source of support compensates for the lack of the other.

A 2003 study reveals that employees are often preoccupied with work when not working, and when in the company of family and loved ones, experience an inability to be meaningfully engaged in non-work spheres. As researcher Ezzedeen explains, “modern work has become knowledge based, fluid, and intellectual; overworked people think about work all of the time. For many people, work has become cognitively intrusive”. To understand work-life balance, Professor Swiercz and Ezzedeen of The George Washington University developed and tested a cognitive approach, the “Cognitive Intrusion of Work.” In simple terms, this means that work-life balance is not just about finding “physical time” to do all that needs to be done. Instead, and more importantly, it is about the “cognitive space” necessary to process, organize, and respond to the thinking demands of life within a complex society.

Ezzedeen and Swiercz found that the cognitive intrusion of work results in lower job satisfaction, less happiness, a greater incidence of work-life conflict, and more frequent burnout.

Similarly, there have been many studies conducted on the work-life balance since ages to understand, quantitatively as well as qualitatively the impact of work on life and vice versa.

Research Methodology

To understand the impact of relationships on work and career and vice versa, a primary survey was

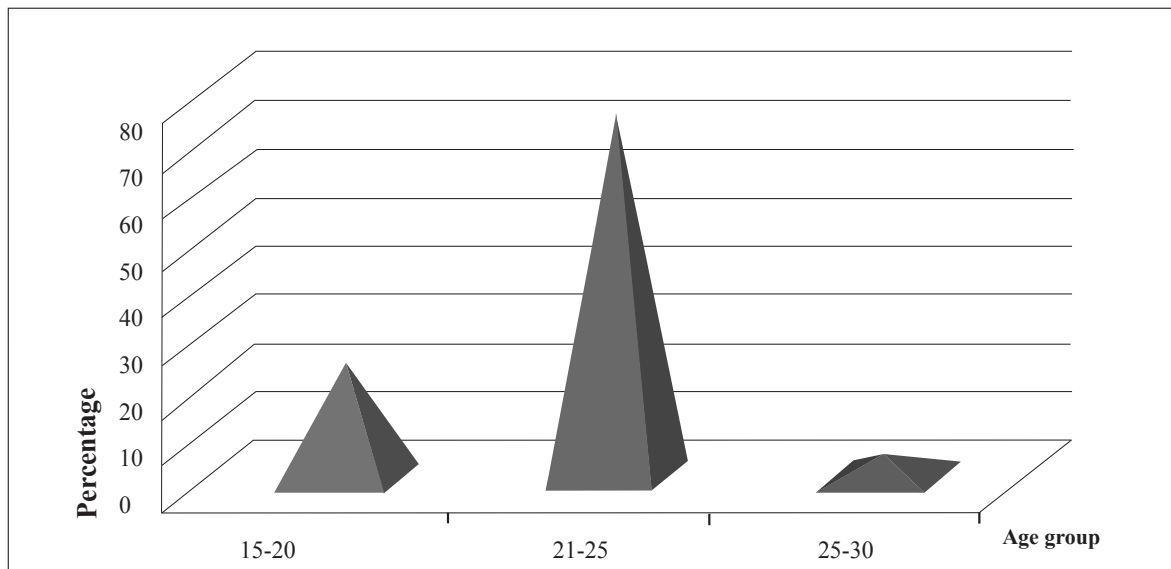
Beacon Management Review 2012

conducted on people employed in different industries. The survey results were then interpreted along with secondary information to arrive at the findings for the research/study.

Findings and Recommendations

The starting point for the survey done was to determine what percentage of professionals (Gen Y) has been in relationship. Around 65% have been in relationship once, 27% have been in relationship more than once and around 8% revealed that they have never been in relationship. Thus as much as 92% of the professionals have handled their relationship and job simultaneously at some point of time or the other.

Graph 1 shows that about 71% of those who have been in relationship before marriage were in the age group of 21-25.



Graph 1: Relationship - Age Group Connect

The age group of 21-25 is crucial in the terms that this marks the entry of large chunk of professionals in the industry, mostly in the services sector. In the growth phase of their career, it becomes crucial how emotionally intelligent an individual is and how well he/she maintains the balance between his/her job and relationship.

The average working hours for the professionals was around 8.5-9 hours per day. The amount of time that they spent on direct interaction (via calls, messages, chats etc.) and indirect interaction (thinking about the partner) with their partner was on an average 4.5 hours. The higher end of the distribution of hours spent was attributed to those in long distance relationship.

Table 1 shows the number of leaves taken by the professionals in a year for spending exclusive time with their partner.

Beacon Management Review 2012

Table 1: Leaves attributed to relationship

| No. of leaves | Percentage of employees |
|---------------|-------------------------|
| 0 | 20 |
| 01 – 10 | 25 |
| 10 – 20 | 35 |
| >20 | 20 |

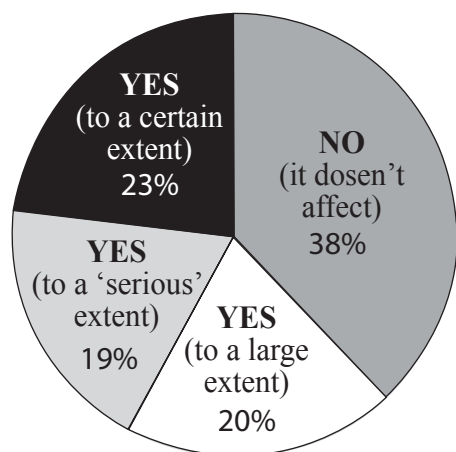
On an average the number of leaves in a year allotted to the employees range from 25 to 30. More than 50% of the professionals in a relationship spend a major part of those leaves with their partner. There is an emotional gap which comes about because of the work priority and pressure. To fill that gap becomes the inherent interest when professionals take leave.

There are instances when an individual needs to take a career or a job related decision, for example, the decision to relocate and taking up a higher post or a better job responsibility or profile. In such scenarios, whether the individual considers the relationship or career on priority impacts the progress of both.

The survey shows that about 57% of the professionals in relationship considered relationship on higher priority, whereas 23% didn't consider relationship for making career decisions. Around 20% considered relationship on second priority while making such decisions weighing their options but with higher weightage to career.

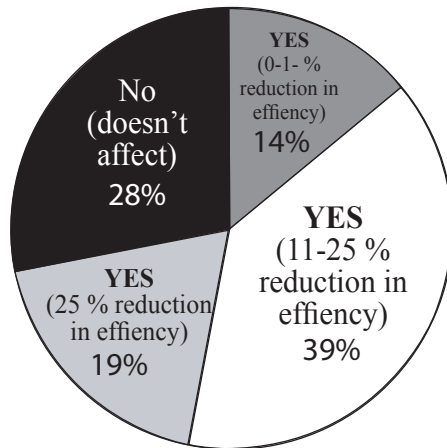
Work pressure affects relationship. About 40% of the professionals in relationship felt that work related pressure affected their relationship to a large or serious extent. Another 38% felt that it affected their relationship to a certain extent. The genesis of why so many relationships fail comes out of this trade-off with respect to work. Gen Y employees have an inherent focus on career progression and learning. When relationship becomes a part of life, it overlaps with the work and career aspirations. A lot of exasperation comes when a professional is looking for both intellectual and emotional satisfaction, but a healthy mix of both in reality is a far cry.

Graph 2: Effect of Work Pressure on Relationship



The impact of relationship on job can be measured in terms of the variation in work efficiency. About 58% of the professionals reported a reduction in efficiency of more than 10% on account of their relationship, whereas 10% reported reduction in efficiency by a small degree. Only 28% felt that relationship doesn't affect their work efficiency.

Graph 3: Effect of Relationship on Efficiency



In monetary terms, the cumulative impact of this reduction in efficiency would amount to a significant loss factor for organisations. Emotional presence at workplace is more important than physical and mental presence. This is a grey area which is not directly addressed by organizations. Efficiency translates into revenue generation and if efficiency gets affected, the top-line and eventually the bottom-line gets affected.

Conclusion

The research shows that relationship as a factor is very significant in work-life balance. This is an area which is not directly addressed but has a huge potential to improve the organizational performance if addressed rationally. In this regard, an informal culture which drives professionals to openly talk about their relationships with peers could help to improve the emotional health of the organization. Any relationship calls for a high degree of maturity and understanding. Sometimes a third party view helps an individual to understand the perspective of his/her partner. With the development of generations, the tendency has been to turn inwards. Thus, we are at a juncture where we need to revisit the very characteristic of the younger generation of being self-oriented. What we are looking at is more of an empathetic environment, at work in particular, or else the third level of Maslow's hierarchy of needs i.e. social needs will ever prevent us from moving into the realm of esteem and self-actualization!

References

- [1.] David E Guest (2001), "Perspectives on the Study of Work-Life Balance". ENOP Symposium, Paris.
- [2.] Timothy A. Judge and Remus Ilies (2004), "Affect and Job Satisfaction: A Study of Their Relationship at Work and at Home", *Journal of Applied Psychology*, 89, 4, 661-673
- [3.] Nancy R. Lockwood (2003), "Work/Life Balance Challenges and Solutions", *Society of Human Resource Management Research*

Algorithmic Trading

- Eunice Deeptha Mudialba

Abstract

Algorithms are widely recognized as one of the fastest moving bandwagons in the capital markets. As research and execution are unbundled and as clients increasingly access the market directly, brokers need to find new ways to keep their institutional clients. Algorithmic trading gives the creative brokers- those able to design flexible, customized algorithms, a new way to stay ahead of the competition

Algorithmic trading cuts down transaction costs and allows investment managers to take control of their own trading processes. More sophisticated algorithms allow buy-side firms to fine-tune the trading parameters in terms of start time, end time, and aggressiveness. In today's hyper-competitive, cost-conscious trading environment, being the first to innovate can give a broker a significant advantage over the competition both in capturing the order flow of early adopters and building a reputation as a thought leader.

This paper discusses the types of algorithms used in the trade cycle, the key effects that the rise in the use of algorithms has had on the trading environment, And the emerging Algorithmic trading trends. It also discusses the future of algorithmic trading and some of the concerns that surround it. Algorithmic innovation is here to stay and it for firms to reap the returns of a really unique execution strategy.

Introduction

Trade carried out using algorithms is known as algorithmic trading. Algorithmic trading can be defined as “placing a buy or sell order of a defined quantity into a quantitative model that automatically generates the timing of orders and the size of orders based on goals specified by the parameters and constraints of the algorithm”. The rules built into the model attempt to determine the optimal time for an order to be placed that will cause the least amount of impact on the price of the financial instrument. Algorithmic trading is a way to codify a trader’s execution strategy.

Beacon Management Review 2012

Algorithmic trading or computer-directed trading cuts down transaction costs and allows fund managers to take control of their own trading processes.

These mathematical models analyse every quote and trade in the stock market, identify liquidity opportunities, and turn the information into intelligent trading decisions. Algorithmic trading, or computer-directed trading, cuts down transaction costs, and allows investment managers to take control of their own trading processes. It is a style of trading and not a separate business.

Algorithmic trading volumes are currently driven by sell-side proprietary traders and quantitative hedge funds. In their never-ending quest to please their customers, being the first to innovate can give a broker a significant advantage over the competition, both in capturing the order flow of early adopters and building a reputation as a thought leader. It is possible to create an algorithm and enjoy a significant time window ahead of the competition if that algorithm addresses a really unique execution strategy.

Buy-side firms are gravitating toward rules-based systems. For example, instead of placing 1,00,000-share order, an algorithmic trading strategy may push 1,000 shares out every 30 seconds and incrementally feed small amounts into the market over the course of several hours or the entire day. By breaking their large orders into smaller chunks, buy-side institutions are able to disguise their orders and participate in a stock's trading volume across an entire day or for a few hours. The time frame depends on the traders' objective, how aggressive they want to be, and constraints such as size, price, and order type, liquidity and volatility of the stock and industry group. More sophisticated algorithms allow buy-side firms to fine-tune the trading parameters in terms of start time, end time, and aggressiveness. Algorithmic trading is appealing to buy-side firms because they can measure their trading results against industry-standard benchmarks such as volume weighted average price (VWAP) or the S&P 500 and Russell 3000 indices.

Popular Algorithms

In practice the most commonly used algorithms in the market place are: arrival price, time weighted average price (TWAP), volume weighted average price (VWAP), market-on-close (MOC), and implementation shortfall (the difference between the share-weighted average execution price and the mid-quote at the point of first entry for market or discretionary orders). Arrival price is the midpoint of the bid-offer spread at order-receipt time, and it also notes the speed of the execution. VWAP is calculated by adding the dollars traded for every transaction in terms of price and multiplying that by shares traded, and then dividing that by the total shares traded for the day. MOC measures the last price obtained by a trader at the end of the day against the last price reported by the exchange. Implementation shortfall is a model that weighs the urgency of executing a trade against the risk of moving the stock. Most algorithms already allow customers to change the timing of executions, the rate of order-filling attempts at the beginning or end of the trading day, and the tolerance for the slippage of a stock from certain benchmarks.

There are many more complicated strategies implemented by algorithmic trading software.

Beacon Management Review 2012

“Benchmarking” attempts to mimic indices’ returns; “sniffers” detect volatile and unstable markets; then of course there are “gamers”. “Gaming” is any type of algorithmic trading that depends on the programming of other algorithmic traders. Essentially what these gamers are trying to do is discover “icebergs” (the large trades that have been broken down to reduce transaction cost) and trade based on gaining from those large orders coming through over time.

Algorithmic Components in Trade Cycle

Algorithms are used extensively in various stages of the trade cycle. Broadly we can classify them into pre-trade analytics, execution stage, and post-trade analytics.

Pre-trade analytics involve thorough analysis of historical data and current price and volume data to help clients determine where to send orders and when; whether to use algorithms or trade an order manually. The pre-trade analysis is designed to help buy-side traders understand and minimize market impact by choosing the level of aggressiveness and a time horizon for trading various stocks. Traders can select varying levels of aggressiveness and visualize them against the time horizon for completing the trade. Most compare the spread between bid and ask prices, reference that against the volatility of a given stock, and attempt to create a range of potential outcomes. A lot of the broker-sponsored algorithmic trading systems attempt to measure or project the trade costs.

In the Execution stage, traders can create the lists of stocks, choose a particular strategy—such as implementation shortfall—and enter the start time and the end time. Traders can also monitor the performance and progress of the algorithms in real time and change the parameters if the stock is moving away. Additionally, users can filter portfolios by sector, market cap, exchange, basket, and percent of volume, profit and loss per share. Several brokers are designing algorithms that sweep crossing networks and so-called dark books liquidity pools that match buy and sell orders without publishing a quote.

Post-trade analytics track commissions and assist in uncovering the costs involved from the time a trade is initiated all the way through to execution. Post-trade analytics are meant to improve execution quality and facilitate the making of investment decisions. The most prevalent trading benchmark in use today is VWAP, which is popular because it is easy to measure. Although it provides comparative results, it is not as useful for evaluating strategies that are trying to do something other than follow the market midpoint.

It is clear that algorithms are more cost-effective for low-maintenance trades and that has meant head-count shifts and reductions on sales desks. Algorithms have become such a common feature in the trading landscape that it simply is unthinkable for any broker not to offer them because that is what clients want. No broker can be taken seriously today unless it offers at least the basic algorithms—VWAP, TWAP, implementation shortfall, and arrival price. It will cost a broker at least \$5 million to \$10 million a year to build and maintain algorithms, hire quantitative analysts or financial engineers, and build the required market-data infrastructure.

Beacon Management Review 2012

It is difficult to confirm categorically whether or not the investment for developing algorithms justified the cost savings. Another bigger question is what the opportunity cost is of not getting more business, of maintaining future and current market share in a slim-margin and fairly commoditized business. What seems clear is algorithms are firmly a part of the brokerage business. It is a perception issue—if you are a bulge bracket full-service broker, you cannot just offer VWAP and TWAP; you must have different sophisticated algorithms that are all being constantly refined.

Trends in the Algorithmic Environment

That the trading environment is being transformed by algorithmic techniques is beyond doubt. However, it is important to gain a measure of precision in what we mean by algorithmic techniques. Algorithmic trading is more than simple electronic execution, these methods can be applied to a diverse array of areas, from looking to minimise execution costs to pattern-seeking for minute arbitrage opportunities.

For tier-1 institutions there is a perception within the market that, on the equities side currently approximately thirty to forty per cent of trades are executed algorithmically. There are a number of reasons for this. Firstly, equities are concentrated volume products – the ratio of the number of equities to the number of market participants is much higher than it is for options or corporate bonds – thus there tends to be a higher turnover ratio. Equities have a relatively high bid-offer spread to volatility, something that algos can profitably exploit. In addition, equity products are typically exchange traded and there are significant volumes traded electronically.

The uptake across other asset classes has been nowhere near as advanced. Each asset class poses a distinct set of challenges to the algorithmic trader, affecting the way they can apply their techniques. On the debt side, for example, the reported figure traded is much lower than for equities, merely a single figure percentage. The fundamental issues in the bond market are a lack of transparency and an advanced electronic trading framework by which algorithms can be applied to the market.

One source qualified this, by arguing that there was a definite realisation of the need for greater adoption of algorithmic trading methods across a broader range of products. The feeling within the leading broker-dealers of a need to make a move has been growing in the last 18 months, and now, they are finally laying down detailed plans of action. There are also fundamental differences in the way aspects of the debt sphere are traded that makes some more suited than to algorithmic techniques than others. There is much less opportunity for trading corporate bonds because it lacks a critical mass of active market participants required to stealthily apply algorithmic techniques. Currently, the bund, bobl, shatz and rate futures market's huge liquidity is way past this critical mass thus participants are not exposed to the liquidity risk that can arise from high volume algorithmic trading.

Across FX, the uptake of algorithmic trading is mixed. Although superficially more suited to

algorithmic trading due to the electronic nature of the market, uptake has yet to reach the level of equities. Some houses boast over two thirds of their FX trades executed algorithmically with a larger number of price indications being generated by the same methodologies. However, research has indicated that some large scale global institutions, with significant emerging market interests, execute as little as three per cent of their trades via algorithm. As the “old money” increasingly looks towards currencies as a method of portfolio diversification and alpha generation, demand for effective algorithmic execution looks likely only to increase. Such execution is facilitated due to the deep liquidity in the FX space, meaning large scale pattern trades can be undertaken without detection, and because its an increasingly electronically traded market.

On the buy side, some hedge funds are looking to generate profit purely through the development and application of algorithms. Other players, whose sources of alpha are not derived directly from algorithmic techniques, are happy to purchase algorithms from sell side developers in order to reduce execution costs.

Any estimates of a particular banks’ volume of algorithmic trading should only be interpreted with reservations. The sensitive nature of the information means that some banks dissimulate over the exact figures for algorithmic executions, exaggerating or understating volumes in order to disguise their position and to represent superior performance.

Algorithmic Trading Trends

Algorithms have sparked a fundamental change in everything—an exciting era of opportunity for those who innovate. It is difficult to foresee precisely all the contours of algorithmic landscape. But some broad trends are referred to here. In the coming years, the evolution of the algorithmic landscape will result in firms re-evaluating and evolving their views, trading strategy, asset-class mix, the relationship between buy-side and sell-side, the very composition and skills of the people they employ and information technology.

Customized Algorithms

The buy-side until now predominantly access algorithms pre-built by sell-side brokers. Buy-side players are gradually moving away from “commoditized” algorithms in order to capture their own intellectual property in customized algorithms.

Algorithms Migrating to Currencies

The use of algorithms in multiple asset classes will continue to increase. There are strong indications to date that algorithms also have a place in the \$2 trillion-plus global foreign exchange market, at a time when investors are incorporating foreign exchange (FX) into multi-asset-class strategies. Market participants have long recognized that established equity trading techniques such as baskets and order slicing apply to FX. They are quickly finding out that in the fast-moving

FX markets, algorithmic trading is even more effective. It is a fact that algorithms in FX markets are still at an early stage relative to the equities markets.

Fixed Income Next

The introduction of algorithmic trading is being explored in the fixed-income market. It is happening slower than in foreign exchange. The reason for the slow uptake is due to a different market structure in terms of how it functions and operates and algorithmic trading takes off fastest where there is an order-driven environment and greater price transparency. Once European markets embrace the Markets in Financial Instruments Directive (MiFID) algorithmic trading across fixed-income markets gets a boost to take off. MiFID promises to be catalyst, by encouraging a move away from dealer-led markets to central order-driven pools of liquidity.

Cross-Asset Trading Adoption of Algorithmic Techniques

Traders are quick to find out cross-asset trading opportunities to generate Alpha (risk-adjusted “excess return” on an investment). Technology has enabled the traders to monitor and respond to multiple liquidity pools across various asset classes. A trader may, for example, buy equity, hedge with a derivative of the equity, and take out an FX position—all within the same strategy. We will see an uptake in innovative algorithms to capitalize on high frequency cross-asset opportunities. The sophistication of these new combinations requires detailed simulation and careful testing. Modern algorithmic trading platforms provide the tools to back-test, profile, and tune new strategies before deployment.

Algorithms for News Analysis

Markets are moved by news. Buy-side firms and traders are increasingly interested in strategies that are able to analyze news events and its impact on a firm or industry. If the algorithm can analyze and react to the news faster before a human trader; advantages can be realized. An algorithm could, for example alert a trader if a news is released on a company X and if the company stock rises or falls by say one percent in the value of that stock within five minutes. For example, Reuters NewsScope Real-time product lets clients use live news content to drive automated trading and respond to market-moving events as they occur. Each news item is ‘meta tagged’ electronically to identify sectors, individual companies, stories or specific items of data to assist automated trading.

Algorithms for Managing Trading Risk and to Meet Regulatory Requirements

Given the criticality of risk management there is an increasing demand for algorithms that monitor and respond to risk conditions on real-time basis. Using real-time analytics, algorithms can continuously re-calculate metrics like Value-at-Risk (VaR) and automatically hedge a position if VaR is exceeded.

Compliance with law is of utmost importance and it is becoming burdensome with ever increasing stringent regulations. Firms going forward will increasingly harness the latest in algorithmic trading technology to address regulatory compliance issues. In parallel, regulators will begin to automate surveillance to monitor trading operations for patterns of abuse.

Algorithmic Innovation, not Adoption, is State-of-the-art

Once the domain of only the largest institutions, algorithmic trading is now entering the mainstream, triggering an ‘algorithmic trading arms race’. In 2002, having algorithmic tools was enough to generate alpha. Buy-side firms were content to use pre-packaged ‘black-box’ algorithms. However, the game has changed. Alpha now goes to the firm with the best algorithms – and what is considered ‘best’ changes by the day. Only the firms that can introduce new algorithms quickly will stay ahead. The future promises more of the same, with the landscape dominated by those who have the most effective, innovative, evolvable algorithm and algorithmic trading strategies.

The Rise of the Buy-side as an Algorithmic Powerhouse

The explosion of the hedge fund and alternative investment market has changed the competitive landscape, challenging sell-side institutions to optimise their client services. Concurrently, the buy-side is demanding increased anonymity and control over their trading strategies. With algorithmic trading being adopted by firms of various shapes and sizes, the need for technology that supports unique trading techniques will continue to grow..

Increased use of Platforms based on ESP Technology

ESP is a new technology that monitors streaming event data, such as market data feeds, analyses those streams and identifies patterns among those events. With ESP, traders can identify market patterns and use the information to develop trading strategies. Providing an alternative to potentially commoditized black-box strategies, ESP-powered platforms enable traders to modify, tweak, test and evolve algorithms. Also called complex event processing, ESP was originally applied to algorithmic trading. Now its reach is extending to real-time risk management, smart order routing, market making and fraud detection. There will be a greater uptake of ESP technology in coming years.

Algorithmic Everything: the Convergence of the Front and the Back office

Historically, calculating risk exposure was often conducted in batch at the end of the trading day. Now, firms are beginning to incorporate traditionally back office functions, such as changes to foreign exchange (FX) risk exposure, into their front-office operations. This reinforces the need for real-time risk monitoring. If performed in real time, value-at-risk (VaR) calculations can

provide up-to-the-millisecond visibility into potential exposure, evaluating trades based on their potential risk impact. Should a trade push exposure over key levels, it can be prevented before the trade is executed. Firms will increasingly use algorithmic technology to execute real-time position evaluations, before deciding on an automated action.

Broad Asset Class Adoption of Algorithmic Techniques

Equities were the first asset class to adopt algorithmic trading. During the next few years, other asset classes will follow suit; a prediction already realised by today's innovative firms, which are algorithmically trading not only equities, but also FX, futures and options and fixed income.

The Optimal Combination of Algorithms

Pre-trade and execution analytics will be combined to create new strategies that give competitive advantage. For example, a strategy that uses VWAP techniques for historic volume-based slicing, but simultaneously hedges each slice with an FX position if the instrument is in a foreign currency, can create an innovative package of trades. In tandem, the sophistication of these new combinations requires detailed simulation and careful testing. Modern algorithmic trading platforms provide the tools to back-test, profile and tune new strategies in advance of deployment. The ability to test new algorithms against historical market conditions and simulate the impact on the market can help a firm to explore the prospective performance of strategies.

Managing the Evolution of Algorithmics

The development of new trading strategies can now be automated using the latest in algorithmic technology. Today's tools help to identify the cause and effect of trading techniques, to teach lessons from profit and loss, and to identify interesting market patterns and suggest new combinations of algorithms. Consistent use of these tools over time enables traders to 'genetically tune' algorithmic trading systems. Like Darwin's survival of the fittest theory, algorithmic traders can run thousands of permutations of an algorithm, swap out the least profitable and replace them with more effective approaches.

Use of Algorithms to meet Regulatory Requirements and Monitor Compliance

The need to ensure that trades comply with necessary regulatory compliance rules becomes more complicated in the world of algorithms. Firms must provide the best price, but how do they calculate this? How do market depth, risk and hidden liquidity factor into the calculation of best price? Over the coming years, firms will increasingly harness the latest in algorithmic trading technology to address these issues. In parallel, regulators will begin to automate surveillance to

monitor trading operations for patterns of abuse, for example, ‘1-2-3 go’ trades, in which two counterparties execute counteracting trades simultaneously to generate volume.

The Scaling of the Trader

Algorithmic techniques call into question the evolving relationship between man and machine. Algorithmic ‘auto trading’ complements human traders, and can make them more effective. For example, by automating low-value, high-volume deals, traders can concentrate on designing new algorithmic techniques.

Into the Future: The Death of the Trader

The rise of algo trading will allow banks to pare away the dead wood amongst the trading staff. However, the brightest traders will always find their way to the money. There remains a need for experts to devise new and more sophisticated algorithms to exploit market opportunities. The advantage of algorithms is that they can take traders away from the more menial, simple tasks, rendering the overall operation more efficient. This will also free up time for the “stars” of the trading floor to devote themselves to seeking out ever more esoteric routes to profit.

Going forward, banks will look increasingly to distinguish between their automatically executed algorithms and those that provide alerts to traders, alerting them to patterns and correlations within market data, and then requiring human intervention to allow the algorithms to interact with the market. Currently, the prevalent focus upon speed and latency reduction has meant that many algos are based around statistical arbitrage and executed in a timeframe measuring in the milliseconds. However, as the major houses adopt these techniques, such dislocations will be ironed out of the market. Instead of just speed, banks will also need to focus upon developing ever more complex algos based upon a high quality, in depth data set. Such algorithms are likely to have multiple stages of execution, not the one or two tick timeframes of most stat arbitrary algos, and consequently will carry substantially higher operational risk burden, not only allowing but necessitating the supervision of a skilled human trader.

The human trader is a necessity; an experienced trader will have a feeling for market sentiment, he will be able to appreciate the “colour” of the market, foreseeing its volatile and unpredictable movements in times of stress. We can also envisage the role of the human trader as managing by exception, seeing where the machines may be going wrong and guiding them back on path. The trader can be left to devise the overall strategy in place, which could subsequently be executed via algorithms.

Another role for which the human trader is uniquely suited is the structuring of complex, at times loss making, deals for particular clients. Whilst the bank may not make money from such deals, they may need to offer their clients’ solutions in order to encourage further business from the client

that will actually generate revenue. A computer will not be particularly suited to the demands of calculating such a trade. And, unlike a human, a computer cannot articulate or interpret a bank's overall business strategy. Whilst algorithms may advance, they will remain tools to be utilised rather than completely replacing the human trader.

Complex Event Processing

Complex event processing (CEP) refers to the ability for computers to handle and react to data from incidents that have a multiplicity of effects. First developed in The Academy by a mixture of computer programmers and advanced quant PhDs, the idea is finding increasing traction when applied practically to the financial markets.

Theoretically, this should allow the development of sophisticated algorithms that can exploit news feeds, detect fraud and manage risk in a nigh-on real time fashion. However, the current clamour is something of a case of "all mouth and no trousers". Whilst CEP may be oft discussed, there is little actual application on the ground. Across the industry, views over the application of CEP remain decidedly mixed. Whilst it was dismissed in some areas, a survey discovered that several tier-1 firms employed it for high volume, real time pattern matching.

One area that is being looked at, however, was the reaction to complex events such as market shocks. The unpredictable volatility that could result from such events means that the "standard" algorithms the banks had in place would be of limited, or even negative, value. A source opined that it was possible that, in this situation, CEP could prove extremely useful. Indeed, this does illustrate one flaw within the algorithmic sphere. Their development corresponds with a period of low volatility almost unmatched in the history of the financial markets. Should a market shock transform this situation, as has occurred in the wake of the subprime crisis in the US, all the algorithms developed on the basis of this data would be rendered useless. Furthermore, there is a great deal of overlap employed in the algorithmic strategies of the major players, meaning that their losses were magnified. Thus, it was thought important to look towards developing algorithms that could anticipate price movements in extraordinary market conditions, not just in terms of volatility, but also in the case of a liquidity squeeze - be it isolated to a specific market or occurring across asset class. However, there are definite difficulties in programming algorithms to cope with these challenges as historical market data can never be a fully accurate predictor of how the market will respond to new shocks. By storing a lengthy quantity of historical data, including past market shocks, and analysing this in tandem with quasi real time data feeds banks will be able to ride out, and even profit from, times of stress.

One way of coping with periods of stress is through the development of heuristic algorithms. These algorithms could be developed by making reference to historical back data, then deploying a recalibrated best-fit model to a market in a stressed situation in order to rapidly take advantage of changed market conditions.

For most players, as it stands, current algorithmic development, aimed at squeezing dollars

Beacon Management Review 2012

from market dislocations and arbitrage opportunities, is sufficient. Launching into CEP without a comprehensive algorithmic toolkit, could be seen as analogous to attempting to run before you can walk. Until there are fifteen major players deploying crawling algorithms to squeeze out the margins, resources assigned to CEP would be better deployed elsewhere. To draw a comparison directly from the investment banking world, the profit opportunities would be similar to the process of a product from exotic through complex to vanilla. Whilst a product is new, large margins can be extracted, but as it becomes increasingly accepted and competition becomes more intense and margins disappear; the sell side then moves on to the next, ever evolving, offering.

One area that could prove important in the near future is the automation of trading off news data via algorithm. With the ubiquity traditional pricing data sets, operators are striving to quantify news data in order to find another source of alpha. Although the data challenges associated with algorithmic trading are formidable, the number of market participants engaged in building systems means that traditional arbitrage opportunities may soon be exhausted. Theoretically, the rapidity with which an algorithm can process news data should allow it to respond more quickly than any human trader, gaining an edge of only a few milliseconds over the rest of the market, which would be enough to guarantee substantial gains. The opportunities for such trading are amplified in world of live global news and information feeds and where a political or economic development in one country can ripple out across a variety of markets.

Indeed, the move towards automated trading off news may come sooner than expected.

One source, speaking from a hedge fund perspective, commented that a number of his peers were already developing algorithms to take advantage of news stories. During the course of producing this report Reuters launched a system designed to quantify the sentiment within news stories in order for the data to be utilised by algorithmic trading.

The system works by assigning numerical “sentiment scores” to words or phrases which are then processed to give an overall positive, neutral or negative score to the company featuring in the news article. These scores are added together to calculate the current sentiment for a company, a sector, an index or, indeed, to quantify the sentiment of the global market. This builds on the two products launched during December 2006 aimed at directly importing economic statistics and company earnings announcements into quantitative algorithms. Reuters are not the only company making an offering in this space. As of March 2007, Dow Jones launched their “Elementized News Feed”. This product aims to deliver news stories on corporate or economic issues via XML so as to be easily interpreted by a computer. Although the vendors are keeping details of their client base close to their chests, it has been strongly implied that a number of leading banks’ proprietary trading desks and several hedge funds have been amongst the early adopters.

Building a Suite of Complementary, Cooperative Algorithms

Another area for the future is the simultaneous application of a variety of algorithms that operate cooperatively. By way of a simple example, a bank may look to employ a strategy that uses historical analysis for volume-based slicing, but simultaneously take an FX position to hedge against currency risk.

Plans for cooperative algorithms remain in their infancy. Some progress has been made on the equities side. However, for debt, the leading players are looking to combine two to three algorithms as a base, on which they will then build. One source argued that any further work in this area was very much market dependent. If more competitors began utilising algorithm suites for a specific market, then banks would be forced to throw resources into the development of an ever more complex toolset of algorithms designed to function in harmony. For those in the second strata of algorithmic trading, the development of complementary suites remains only in the realm of conjecture. It is first necessary to develop a comprehensive algorithmic toolkit to serve the bank, and clients' needs, before attempting to find synergies between tools. One can, question, however, whether the terminology of a "suite" of algorithms is, in fact, particularly meaningful.

Instead a collection of algorithms serving one trade could merely be seen as one, albeit complex, algorithm.

Algorithmic Development as a Strategic Priority

The clamour in the financial press as regards algorithmic trading can often lead to a misplaced sense of the actual situation on the ground. Whilst various hedge funds may have been shovelling in the profits via algorithmic trading it is only of late that the major sell side players have pushed algorithmic trading up their agenda, particularly outside the equities sphere. In the past six to twelve months, applying algo trading in the rates area has only been a topic of idle discussion. It was mentioned in passing meetings, but actual action was limited. However, now there is a definite awareness of the importance of developing algorithmic techniques. Work is now progressing apace, with the leading banks senior management realising they need to react to a transformed trading environment. Amongst the second strata of banks, long overdue work on algorithmic trading is now taking place as well, although a realisation of the full strategic importance of algorithmic techniques remains lacking.

There appears to be general dissatisfaction from those charged with implementing algorithmic techniques with the failure of business planners to fully appreciate the shifting paradigm for the trading world, and whilst, on the equities side, there had been considerable work, the application of algorithmic tools across the other asset classes had not advanced as much as it could.

However, awareness of the new trading paradigm is dawning amongst senior figures.

Budget allocations are expanding faster than any other area of investment banking, as leading players realise that they are faced with a transformed business environment.

Beacon Management Review 2012

Industry estimates for spending on algorithmic trading vary from some \$700mm to just shy of two billion dollars for 2007. Whilst sources within banks keep their actual spending figures close to their chests, most stated that this expenditure would have to grow by 20 to 50% year-on-year in order to remain competitive. If anyone were in any doubt of the strategic importance of algo trading, Citigroup's \$680mm acquisition of Automated

Trading Desk, a company devoted to high speed automated executions, in July 2007 should dispel them.

One definite strategic priority is the development of techniques to take advantage of the opportunities offered by cross-asset trading. However, before this can be accomplished there needs to be substantial work carried out to bring the standard of algorithms in other asset classes up to the same standard as those on the equity side. This problem is aggravated by the inability to port algorithms directly across from the equities sphere over to other instruments. Each market has its own specific demands. For example, many of the equity algorithms have been devised to crawl for liquidity, something that is not as much of an issue in either the FX or government bond markets.

Looking further into the future, banks will be seeking to utilise their e portal technology as an access point for offering algorithms to clients. One bank that was surveyed stated that they were pushing their e portal as a cross product centralised access point for all of their clients. The more ambitious players in this space have been looking to ape Amazon, devising sophisticated customer analytics that can automatically hone the offering of algorithms to clients based on their past trading habits.

ALGORITHMS: AREAS OF CONCERN

Lack of Visibility

We know what a specific algorithm is supposed to do, measure its pre-trade analytics and see how the post-trade results match up to that expectation. But if the trader didn't select the most optimal algorithm for that trade little can be done. This problem is caused by a lack of visibility and transparency into the algorithm while it is executing orders.

Algorithms Acting on Other Algorithms

If fund managers' trading pattern is spotted and regular; tracked with the use of algorithms, then these algorithms are liable to be 'reverse engineered'. This implies that their buy and sell orders are pre-empted and used to the maximum effect by their competitors. Here, algorithms are acting on other algorithms.

Which Algorithm to Use?

With brokers offering many algorithmic strategies, one concern is that buy-side institutions lack

the tools to understand which algorithm to use for a particular stock. The lack of a standard benchmark has made it almost impossible to assess the quality of algorithms. Buy-side firms are having a hard time evaluating when to use a particular algorithm. For example, if a portfolio manager tells a trader to sell a mid-cap, semi-illiquid stock within five hours—because the manager has to raise cash—the trader may be confused about which algorithm would be the best solution, given the constraints on liquidity and time. They need a certain level of sophistication and understanding to use it.

Algorithmic trading requires careful real-time performance monitoring as well as pre and post-trade analysis to ensure it is properly applied. Traders must calibrate the algorithms to suit portfolio strategy. Far from the sole or final answer to best execution, algorithmic trading represents an additional tool in a trader's expanding kit. Far more important is aligning execution choices with the level of order difficulty involved in terms of: order size, liquidity, and trade urgency. Low touch venues such as algorithmic trading lend themselves best to easier types of orders such as low-urgency and small orders for large cap stocks. But urgent orders for a large volume of small cap stocks would require a higher-touch approach to ensure best execution and cost efficiency.

Missing Ingredient—the Trader's Gut Feel

Algorithms are simply advanced trading tools and they cannot replace the human elements or make interaction redundant. Algorithms fail to capture a trader's "gut feel". It is the intraday trading characteristics of a stock that assist a trader in determining the right strategy, whether to back off or be more aggressive. In order to allow their guts to play a proper role, the traders need to see precisely what actions their algorithms are taking, what venue the orders are being sent to, and where they get filled. It is early in the development of trading software to think that the thought process of a human trader can be mimicked by an algorithm. Algorithms can not compete with the ability of the human brain to react to unanticipated changes and opportunities. Some algorithm providers are trying to address this issue by offering instant messaging (IM) services that work with the algorithm. As trades go on, a trader is alerted of issues that arise and the trader can alter the strategy depending on the nature of news.

At the end of the day, it's the clients who drive the demand and innovation necessitating next generation algorithms. The next generation of algorithms will be able to "speak" to the trader, to let the trader know what is going on dynamically, and allow the trader to interact with the algorithm. Soon we will have adaptive algorithms that adjust their execution at each moment in time in response to what they see happening in the market just as a human trader.

Conclusion

When considering the future of trading and the role that algorithms will play, perhaps a sensible question is: what will not change? In the coming years, the evolution of the algorithmic landscape will result in firms re-evaluating and evolving their views on information technology, trading

Beacon Management Review 2012

techniques, trading strategy, asset-class mix, the relationship between buy-side and sell-side, and the very composition and skills of the people they employ. Algorithms have sparked a fundamental change in everything – an exciting era of opportunity for those who innovate and peril for those who stagnate.

References

- [1.] Bob McDowall Algorithmic Trading: its growth and limitations?, IE4C, December 9, 2005.
- [2.] Daniel Safarik Algorithms a la Carte. Wall Street & Technology, January 30, 2006.
- [3.] Daniel Safarik The ‘Holy Grail’: Pre-Trade Analytics. Wall Street & Technology March 01, 2005.
- [4.] Jessica Pallay Algorithmic Arms Race. Wall Street & Technology; May 25, 2005.
- [5.] John Bates Algorithmic gymnastics – keeping at least one vault ahead of the rest. Hedge Funds Review, June 2006.
- [6.] John Bates Today’s top 10, a guide for buy sides on how to get ahead in algo. STP Magazine, April 2006.
- [7.] Katherine Heires Algorithms and Clearing Wrapped Up in One Algorithmic Trading. Wall Street & Technology; May 25, 2006.
- [8.] Kerry Massaro 7 Surfacing Algo Trends. Wall Street & Technology; September 26, 2006.
- [9.] Michelle Price Go forth and multiply. STP Magazine, March 2006

eHR: Byte More Than You Can Chew

- Nihal Satam

Abstract

This research article primarily focuses on how technology has and will change the face of HRM as we know it today. It revisits the transformation of HRM from its nascent stages and its transition from Personnel management as was known before. It describes the history of e-HR and reviews the transformation of HR from manual processes to completely automated systems. It moves on to provide a thought provoking review of the issues associated with the e-selection systems in organizations. It discusses the exciting new prospect of distance learning in organizational setting. It considers how technology supports the administration of compensation systems in organizations. In particular it highlights how technology can facilitate decision making about compensation, enable round-the-clock access to salary and benefits information, streamline processes and increase the effectiveness of strategic decision making.

Introduction

Our field is changing, rapidly and profoundly. Those of us in HR once wished that we could eliminate all the routine paperwork and concentrate on “strategy” and be a “Business Partner.” Well, be careful what you wish for. Today technology has finally begun to deliver on the promises of the previous century. HR is providing more and better service to our stakeholders. It has finally made the data accessible to those who need it. It is no longer the bottleneck in HR information flow. We today are talking about portal strategy, employee self-service and data ownership. It has the analytical tools to allow HR profession to be more strategic.

Evolution of e-HR

Payroll management can be credited with a distinction of being the reason the concept of Personnel management came into being. But ironically over the years it has been the most

detested by managers across the world. Oh those dreadful sheets which were manually audited fraught with errors, an administrative nightmare. Those who could afford could automate. GE implemented the first home-grown mainframe automated payroll system that could process tens of thousands of employee data followed by spite of legislations. As the labour unions discovered their strength in their plight through turbulent times of bandhs and emergencies, unions became more aware of their rights. Companies started to look seriously at technology to gain control over workforce information without significantly increasing costs to the business. Vendors began to promote Enterprise Resource Planning (ERP) solutions that combine personnel data and payroll applications. Some even integrated financial controlling systems with the HR systems, so that companies could not only make more efficient financial decisions, but also increase control over where corporate cash was spent.

Companies could leverage HR systems compliant with the legislations and law of the land and time, so that they could protect companies against costly fines, lawsuits and a bad name. They also started automating those processes that albeit important and critical to achieve did not contribute value. The consequence was not just compliance, efficiency and control but helped them focus resources on things that mattered. And here we are today. This begs the question, what is this today? That is exactly going to be the focus of this article. I have tried to give an end to end perspective on various aspects of HR starting with recruitment and ending with compensation.

Role of e-HR in Recruitment

Your company is only as good as your last employee. The importance of selecting the right mix of talent in right positions can't be stressed enough. Large board room interviews, flight tickets, hotel arrangements for recruiters, are fast replaced by virtual experiences. So which exactly are the common E-recruitment practices used nowadays:

- Recruitment pages are added to existing organizational websites.
- Using various job portals, online job boards.
- Developing interactive tools for processing applications.
- Online screening techniques.
- Using intranet systems to post internal job postings.

It also helps companies build brands. For example Cisco Systems prides itself in recruiting employees only through the internet. Apart from the fact that companies are using these systems to recruit, we can quiz ourselves why? Reasons can be many. Few of them can be stated as follows:

- Reaching large number of qualified applicants.

Beacon Management Review 2012

- Reducing recruitment costs.
- Decreasing cycle time.
- Streamlining burdensome administrative processes.
- Enabling the organization to evaluate the success of its recruitment strategy.

One of the elements which can't be left un-discussed here is Online Assessment Techniques.

Online Assessment Techniques

Online Assessment Techniques have evolved leaps and bounds over the years. Organizations use them for multiple purposes, including attracting candidates, communicating benefits about the organization and assessing applicant's knowledge, skills, abilities and other requirements. Some organizations use software like Resumix to scan applicant's resumes for key words and provide them with immediate feedback if they are qualified for the job. Others use online aptitude tests, simulations to assess candidates' critical thinking and decision making skills. Still others use online interviews or allow candidates submit video clips as part of their application. There are a few points for and some against it as well. Points which favour the use of online self-assessment techniques are:

- They are more objective and less biased by factors which are not job-related such as race, gender or age.
- Immediate feedback about the job fit is given to candidates as seen earlier.

Points against online self-assessment techniques are: In spite of the advantages of using online systems to screen applicants, there are number of potential dysfunctional consequences. In particular the following-

- Numbers of misclassification errors are very much possible, which means that the organization may eliminate qualified candidates in favour of those who are not.
- Online screening methods may not always yield valid or reliable results.
- As a result organizations may select candidates who use the right words rather than the more qualified ones.
- There is no way of monitoring if the candidates are not copying online tests, researching the answers online and sharing them with others.

Alignment of e-Recruiting Systems with Organization's Strategic Goals

It can be safely assumed and also easily observed and researched that online systems require the candidates to have the necessary technical skills in order to use them. As a result, if organizations are using them as a primary source of staffing then these systems influence the type the employees recruited. This hinders the diversity.

The Positives always have an antithesis. Some of the dysfunctional consequences are:

- **Digital Divide**-Online systems can only be accessed by individuals who have access to a computer. Candidates from low socio-economic strata tend to lose out.
- **Potential to Invade Privacy**- Computer systems can easily be networked with other systems and individuals can be permanently stigmatized in the process. When an individual applies for a job online, the data can be used to gather additional data about his credit, lifestyle or medical history.
- **Unauthorized Access and Disclosure of data**-They allow access to personal information like address, personality data, medical data which is often disclosed to other agencies for making a quick buck.
- **Lack of Privacy Policies**- Despite the widespread use of online recruitment systems and growing concerns about privacy, many companies have not established policies that protect the privacy of job applicants or employees.

e- Based Learning

When one leads today he's not only looking after individuals from the same city but different continents. So communicating uniform training exercises all over the spread of an organization is of utmost importance. In recent years apart from web-based training companies use satellite, video, audio, audio-graphic computer, and multimedia technology have been applied to organizational development programs, allowing organizations to provide training to employees all over the world.

The popularity of distance learning stems from its convenience and substantial cost savings. For example IBM reported savings of \$400 million, HP savings of \$5.5 million. But distance learning programs can prove detrimental to organizational development if improperly implemented. One reason might be that they are not always developed according to standardized, experimental tested procedures but instead are often simply adaptations of other training tools used by the company.

e-Compensation

Having an effective compensation plan is very essential in today's competitive scenario. An organization's compensation system primarily includes policies and practices that address how the organization establishes and maintains-

- Internal Equity
- External Equity
- Communication of the compensation plan.

Let us evaluate how web systems can help us with the above-

Internal Equity: It refers to establishing the relative worth of jobs inside the organization. Organizations achieve internal equity through performing job analysis and job evaluations. How does the automated systems help here-

- **Increasing Accessibility-** Internet technologies make available expert information to much broader audience. For example, HR managers can electronically access advanced job analysis techniques developed by well-regarded experts such as Personnel Systems and Technology Corporation's web based job analysis tools. They can access the Common Metric Questionnaire (CMQ) designed and validated by researchers to accurately describe both managerial and non-managerial occupations.www.pstc.com
- **Streamlining the Process-** With online JPS Management Consulting Questionnaires, once the manager completes the online survey, the data is automatically generated, converted to job evaluation format, and given a job evaluation point score.

Challenges to Achieving Web-Enabled Internal Equity-

- Integrating internal, external and individual equity.
- These tools are only as good as data they access.
- Proper training is required for the users.
- Quality and efficiency with which decisions are made ultimately with the manager.

External Equity: or external competitiveness, involves determining an organization's pay in relation to the external labour market. Organizations have to offer competitive rates of pay if they wish to attract and retain competent employees. They establish external equity by conducting wage and salary surveys. How does the automated systems help here-

- **Increasing Availability of Salary Data-**Spread sheets are available for download from the internet that save hours in matching jobs, summarizing and auditing data. The salary survey data published on the web, while accessible 24/7, and nevertheless does not represent real-time data.

Beacon Management Review 2012

- **Streamlining the Process**-Several specialized software vendors, such as Advanced Information Management Inc., HR Web Solutions International, and HR consulting companies such as Mercer, Aon Consulting offer web- based systems that integrate external market and internal compensation data into a centralized database that also provides customized manager self-service access.

Challenges to achieving Web-Enabled External Equity-

- Easy access to market information does not eliminate the necessity to be careful consumers of this data. This includes considering the quality of survey data, quality of the benchmark job matches, survey age, sample size and relevant competitive market.
- Integrating market data into the present HRIS.

Communicating Compensation Policies

Compensation policies however brilliant will not accomplish its objectives without a communications strategy.

- 1) Rapid Online turnaround time gets information o employees far sooner than print, minimizing out-dated information.
- 2) A website can be refreshed multiple times annually, resulting in total compensation communications that is fresh and relevant year around.
- 3) Online publications result in substantial savings on paper and publications costs.

Conclusion

Today, every HR department is in midst of a seemingly endless transformation, one that not only encompasses the function of the HR department, but also its role within the business, the relationships it maintains, and the technology it uses and is responsible for deploying. More businesses are realizing that people are the true differentiating factor in long-term competitive success. For so long HR technology was focused only on automating back-office functions and was necessarily leveraged throughout the business to give employees, managers and executives the tools they needed to make better personal decisions, let alone better people management decisions.

Now that human capital management permeates the business, companies are committed to deploying the right collaborative tools to employees so that they can not only make better decisions about such personal options as healthcare or investments but also leverage collaborative tools that enable better teamwork across and outside of the business. With this teamwork comes innovation, access to better and more relevant information. HR can now contribute to the many capabilities that impact key performance drivers and ultimate business

Beacon Management Review 2012

performance, workforce productivity, and leadership developments. HR is primed to help business change the way they leverage their people to compete and deliver unmatched customer satisfaction. HR will continue to create strategic value for the business.

References

- [1.] Making the most of on-line recruiting. Harvard Business Review. (Cappelli P. 2001)
- [2.] Protect applicant privacy to be safe. www.shrm.org, (Brotherton,P. 2004)
- [3.] The use of technologies in the recruitment, screening and selection processes of job candidates. International Journal of Selection and Assessment. (Cober,R.T. Brown, D.J 2003)
- [4.] Resume database nightmare: Job seeker privacy at risk. www.privacyrights.org(Dixon,P. 2003)
- [5.] Millenium compensation trends, The Handbook of compensation. (Berger D.R. 2000)
- [6.] Web based compensation planning, Web based human resources. (Gherson,D 2001)
- [7.] Compensation (7th edition). (Milkovich, G.T & Newman, J.M 2002)

Employee Value Proposition

- Ronald Browne

Abstract

In this study, we discuss the significant impact that Employee Value Proposition is having on the organizations on a whole. The study starts with discussing factors that comprise Employee Value Proposition and how these factors weigh against each other. An attempt has been made to ascertain how these factors change with the age of the employees. These stated factors can then be compared with the Employee Value Proposition factors of various other companies to see how the factors stated have been implemented. This study further discusses how along with keeping the strategy of the company in sight and benchmarking exercises and surveys, Employee Value Proposition for an organization can be modeled.

Keywords

Employee Value Proposition (EVP), offer, flexible arrangements, compensation, organizational behaviour, loyalty and commitment, Career Development, Confidence in senior management, Recognition, “Reward of Work” (ROW) model, Compensation, Benefits, Work content, Career, Affiliation, motivator, Affiliation, Talent, Analytics.

Introduction

For a long time now Employee Value Proposition has been a rather defied topic in the field of Human Resource Management. The HR professionals many a times looks at it, if at all, as a document which they need to create because competition around them is creating one whereas the line managers consider it an ineffective piece of paper which adds to their budget and has no consequential use in helping them increase the top line. Caught between these two assumptions lies the actual effectiveness of the concept, which has helped a lot of organisations in giving their employees what they actually expect, in increasing engagement, in bettering efficiency and in slashing turnover rates. Discussed below are the underlying factors and research which has gone

into the nativity of the concept of an Employee Value Proposition.

It's a theory, no it's a training, or wait, is it just a fancy document? These are the most frequent comments which pop up in the mind of a 'layman' when the term EVP or Employee Value Proposition is discussed. The problem gets more serious when HR professionals not deft with the concept may agree to its importance but put it on a backburner or even worse, create something not up to the mark. Truly, a half-baked EVP can be much worse than none at all as it not only damages the 'Values' which the current employees perceivably derive from the organization, but also scares away new talent. The concept is very new to the HR industry and it is only in the period over last few years that organizations have acknowledged the importance and the impact that an EVP can have on all facets of HR be it employee recruitment, selection, engagement or retention.

Defining Employee Value Proposition

For the uninitiated, it is an answer to the employee's questions: "What's in it for me?" and "What more can you offer?" Formally, Minchington (2005) defines an Employee Value Proposition (EVP) as a set of associations and offerings provided by an organisation in return for the skills, capabilities and experiences an employee brings to the organisation. It is an employee-centred approach that is aligned to existing, integrated workforce planning strategies as it has been informed by existing employees and the external target audience.

Tandehill (2006) reinforces it as a statement of why the total work experience at an organisation is superior to that at other organisations. The value proposition should identify the unique people policies, processes and programs that demonstrate the organisation's commitment to i.e., employee growth, management development, ongoing employee recognition, community service, etc. It should list out the central reasons that people will choose to commit themselves to an organisation.

EVP, of late has become closely related to the concept of employer branding, and the term EVP is being used to define the underlying 'offer' on which an organisation's employer brand marketing and management activities are based. In this context, the EVP is also often referred to as the Employer Brand Proposition.

The Pillars of Employee Value Proposition

Gone are the days when the employer defined the workplace. According to a NASSCOM-McKinsey report, only 25 per cent of fresh engineers; and a mere 10% of fresh graduates are actually employable, giving the employable talent pool (old and fresh), an uncanny leverage over employers. They want a better understanding of their employment options and a greater say in how work is assigned, assessed and rewarded; rather, employees' priorities and preferences dictate what the workplace should look like, particularly now that technology makes it easier than ever to design a variety of flexible arrangements. Companies operating with both young and aging workforces have to craft methods to engage and re-engage the talent and those that fail to

Beacon Management Review 2012

respond to this change and do not succeed in defining their employee value proposition will fail to attract, retain or develop talent effectively.

As an EVP affects both internal and external perceptions of a company, human resource professionals should act as a facilitator among the various verticals and should ensure collaboration to ensure the employee and customer experiences are integrated and aligned. [1]

According to Tandehill Human Capital Consulting [2], some questions which should be answered during the collaboration include:

- How unique are our non-traditional rewards? For example, Nucor offers \$2,000-per-year college scholarships to each child of an employee who has more than two years of service. The Levi Strauss Foundation donates \$500 to community organizations in which an employee actively participates for a year. McDonald's offers a three-month sabbatical after 10 years of service.
- How are we better at our management? For example, Boeing has a "no messenger" policy. Team members must solve problems on the spot and are discouraged from finding a manager to solve it. Whole Foods runs its grocery, baking and produce departments with self-managed teams. Self-directed work teams at Baylor Medical Centre set their own schedules and do their own interviewing and hiring.
- What makes our culture special? For example, Starbucks creates an inclusive culture by providing part-time employees with full benefits and stock options. First Federal Bank of California has an informal culture reinforced by a policy that requires employees to address each other on a first-name basis. And among the many ways Ben & Jerry's differentiate itself as it donates 1 percent of profits to programs that support peace.

After defining all of the above, then the company discusses the role compensation plays in the employment value proposition. The pay should exist to provide employees with a fair return on the investment they make of time, skills and energy, but ideally, it should not be the fundamental reason they come to work. According to Jeffrey Pfeffer, professor of organizational behaviour at Stanford Business School in the May 1998 edition of Harvard

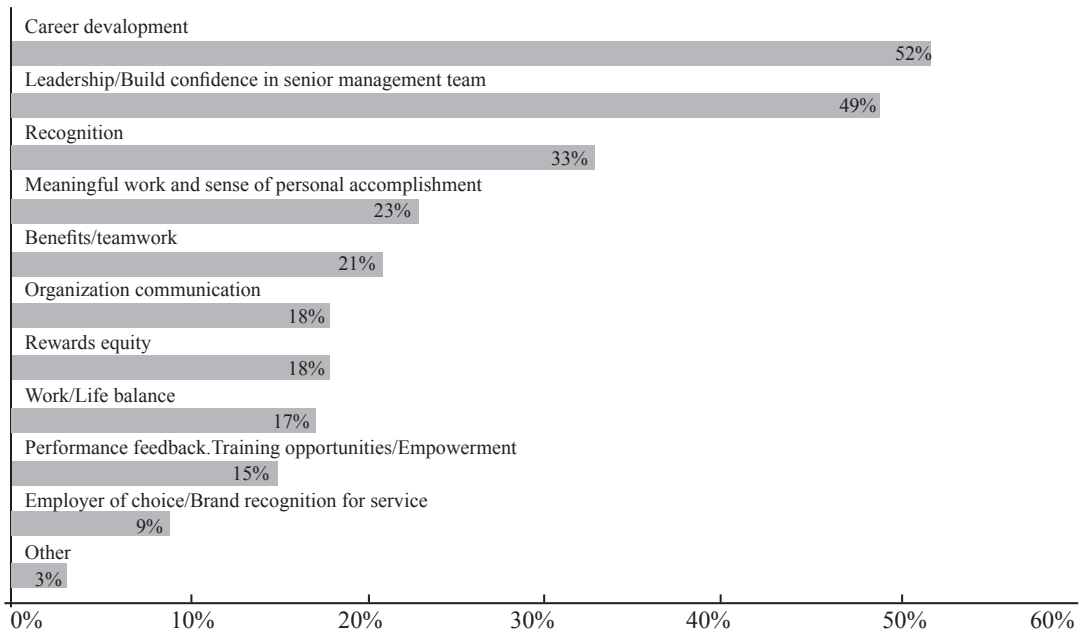
Business Review, "People work for money, but they work even more for getting meaning out of their lives. In fact, they work to have fun. Companies that ignore this fact are essentially bribing their employees and will pay the price in lack of loyalty and commitment."

According to a survey done by Mercer [3], the top drivers for employee engagement are as shown in the figure on the left. It is evident that employees consider Career Development, Confidence in senior management and Recognition as the three most important factors for being engaged with their work.



Fig 1: Attributes of EVP

Source: <http://www.sibson.com/services/organization-and-talent/employee-value-proposition/>



Graph 1: Employee Engagement Trends in Asia

Source: Employee Engagement Trends in Asia – Survey (May, 2010)

Beacon Management Review 2012

Sibson Consulting has created a “Reward of Work” (ROW) model which talks about reward elements [4] and the process of creating a ‘formalized’ clear framework for building a total rewards strategy which translates into a proposition of value for the employees. Under this approach, rewards, both financial and non-financial are prioritized according to the needs and preferences of key talent segments in an organization. This EVP framework has five elements:

- *Compensation*: The money employees receive for their work and performance
- *Benefits*: Indirect compensation including health, retirement, and time off
- *Work content*: The satisfaction employees receive from their work
- *Career*: The long-term opportunities employees have for development and advancement
- *Affiliation*: The feeling of belongingness employees have towards the organizations

Organizations need to consider this as a skeleton framework and understand and *design their own value proposition*, the preferences of their staff, and the causes of any gaps between employee and/or organization aspirations and the actual EVP.

Sibson then went on to study the importance which different age groups within an organisation attach to the five elements. [5] The data from Sibson Consulting’s “Rewards of Work” study, based on 1,059 respondents, reveal the elements that employers can use to drive employee performance over the course of their careers. The research shows that:

Benefits are of average importance for employees of all ages. Employees aged 30 and younger rated benefits fourth for driving performance. Benefits tied for fourth place among workers ages 31 to 50; tied for third for those ages 51 to 60; and ranked third among those aged 61 and older. Surprisingly, the youngest respondent group was the most likely age group (62%) to rate benefits as important or very important. This finding does not indicate that benefits are less important to older employees than to younger employees, but it does indicate that benefits tend to become less effective motivators as people age.

Work content is the top motivator for every age group. Respondents of every age chose this element as the primary driver of good performance. It was the only element to maintain the same relative importance in each age group.

Career elements, such as title, status and opportunities for growth, decline in value among older employees. Career elements were rated second most important by employees age 30 and younger. They slipped to a third place for workers ages 31 to 50 and finally dropped to last place for respondents age 51 and older. While 81% of workers age 30 and younger indicated that career elements were important or very important in motivating their performance, only 41% of those older than 60 agreed.

Compensation gains - and then loses - importance as the age brackets progress. Although

Beacon Management Review 2012

employees age 30 and younger ranked compensation as the third most important motivator, it rose to second place for those age 31 to 60. Once employees reached 61 and older, however, compensation fell to fourth place.

Affiliation is more important among older employees, compared to the other age groups. Of all the elements, affiliation was the one that grew in importance among the older respondents. It was ranked last among the five motivators by employees age 30 and younger, and tied for last until employees reached age 51 to 60. At that point, it rose to fourth place, only to leap into second place among those aged 61 and older.

Generally, most of the elements lose some of their ability to motivate performance among older employees. The opposite is true for affiliation. It is interesting to note that after age 30, less than two-thirds of respondents said they were motivated to perform by affiliation, career, compensation and benefits.

Thus, while tailoring elements to each employee is not advisable or practical, knowing how cross sections of the workforce perceive these elements can help organizations communicate its offerings for optimal impact. A company may be able to improve its ability to motivate and engage its workers by understanding what elements to focus on to yield the greatest return on investment. A program that gives an organization the flexibility to adapt and communicate reward vehicles as needed, will be a more effective motivator than one that adheres to a rigid, one-size-fits-all message. Given the differences in what motivates employees in different age groups, as the demographics of the workforce shift, organizations should consider whether their employee value proposition needs to shift as well.

An article on Talent and Analytics [6] talks about ways of using analytics to calculate what employees value most, and by using that data to create a model that will boost retention rates. This application of analytics leads to predictive action, a rung on the ladder in which companies anticipate employees' preferences and future behaviours and tailor HR practices to help them hold on to their valuable talent. This was the approach taken by Convergys, a company that manages billing, payroll, benefits and pensions for businesses in 40 countries. After the company's initial public offering in 1999, the Convergys workforce doubled to 35,000, but turnover was a major headache – the company had to recruit 50,000 new people in 1999 to maintain that level of staffing. To reduce attrition, Convergys turned to a consumer marketing technique, conjoint analysis. When used with products, such analysis helps companies determine how people value different combinations of features. When used with employees, it helps companies figure out the mix of benefits most likely to encourage people to stay with the organization.

Effectiveness of Employee Value Proposition

Graph 1 classifies the percentage of organisations with formalised EVPs according to their performance [7]. It is evident that a higher number of high performing and global organisations have an EVP in place.

Beacon Management Review 2012



Graph 2: Classifying Percentage of Organisations with Formalised EVPs

Source: "Creating a sustainable Rewards and Talent Management Model.", Global Talent Management and Rewards Study, Towers Watson (2010)

According to a research article (Attracting and Retaining Critical Talent Segments, Building a Competitive Employment Value Proposition, Corporate Leadership Council, Corporate Executive Board, 2006) [8], an effective EVP provides organizations with three quantifiable benefits:

Improved attractiveness: Organizations with effective EVPs are able to source from a much deeper pool of talent in the labour market. Top-performing organizations draw candidates from about 60% of the labour market, including "passive" candidates who would otherwise be content to stay with their current job. Lesser-performing organizations are able to source only from the most active 40% of the workforce.

Greater employee commitment: Organizations with effective EVPs enjoy significantly higher levels of commitment from their employees. Top-performing organizations have 30-40% of their workforce displaying high levels of commitment, compared to less than 10% in under-performing organizations.

Compensation savings: Organizations with effective EVPs are able to reduce the compensation premium required to attract new candidates. Top-performing organizations are able to spend 10% less on base pay compared to under-performing organizations.

Beacon Management Review 2012

References

- [1.] Kathy Kibbe, Laura Sejen, Kathryn Yates. “why an Employee Value Proposition Matters: Creating Alignment, Engagement and Stronger Business Results,” Towers Watson, October 13, 2010
- [2.] <http://www.mercer.com.hk/webcasts/OptimizingYourBenefitsInvestment>
- [3.] <http://www.sibson.com/services/organization-and-talent/employee-value-proposition/>
- [4.] Talking ‘bout my generation: Segal examines what motivates employees of different ages. By Trevor Kunkle and Aaron Sorensen (September 1, 2008)
- [5.] Talent and analytics: new approaches, higher ROI by Jeanne G. Harris, Elizabeth Craig and David A. Light; Journal of Business Strategy. VOL. 32; NO.6, 2011
- [6.] Towers Watson, “Creating a sustainable Rewards and Talent Management Model.”, Global Talent Management and Rewards Study 2010.
- [7.] <http://www.performancesolutions.nc.gov/evp/EmploymentValuePropositionB.pdf>

Will EU Survive the next decade?

- Prateek Batra

Introduction

The European Union is constituted by 27 European nations. Its existence came into being in 1993 with the Treaty of European Union also known as the Treaty of Maastricht. The motive behind the European nations coming together was not only strengthening a political bloc, but also fighting the economic hegemony of the US dollar over other currencies. The fundamentals for the adoption of a single currency were growth and trading benefits that these countries desperately looking for. By switching over to a single currency, they opened their economies to each other by easing trading conditions between each other.

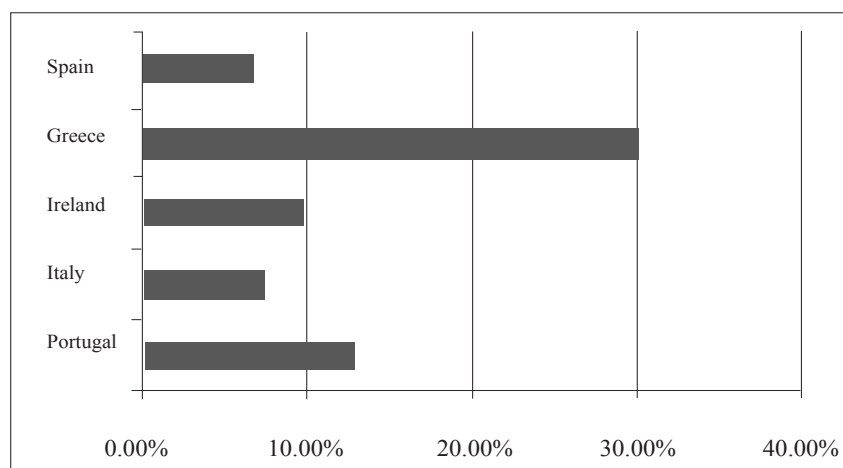
The European Union or EU, as we know it, consists of some member functions through which it performs its decision making functions.

1. The European Commission
2. The European Parliament
3. The Council of Ministers
4. The European Court of Justice (ECJ)
5. European Central Bank (ECB)

The European Central Bank is the main economic powerhouse of the Eurozone. The ECB laid down certain conditions for entry into Eurozone. A budget deficit of less than 3% of GDP and debt-GDP ratio of not more than 60% was the main constraint laid down for new entrants. Though the monetary policy i.e. setting up of interest rates and controlling inflation(keeping it under 2%) were under the purview of the ECB, the fiscal measures like issuing government bonds for raising debt, forming budgets, tax policies and banks were still under the control of these nations.

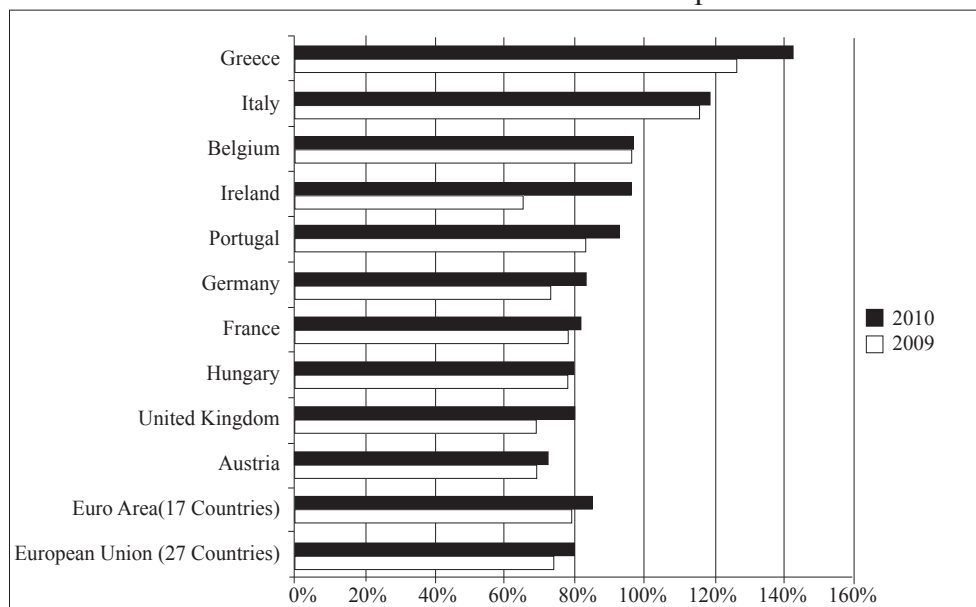
The Eurozone Crisis

After near a decade of existence, the Eurozone has come under a major threat - the threat of defaulting on the sovereign debt that had been raised, of some of its members. Countries like Portugal, whose bonds have now been officially rated by Fitch (after Moody's) as Junk, along with Greece, Ireland, Italy and Spain. The yields on 10-year govt. bonds are pretty much indicative of the on-going situation in the Eurozone.



Graph 1: Bond yields of government bonds.

The debt-GDP ratios of these countries are also very high. The following chart shows the debt to GDP ratios of Individual economies and the European Union as a whole.



Graph 2: Debt-GDP ratio

Since the Euro crisis has unfolded, some major developments have taken place. Be it the toppling governments, austerity measures, the stability fund or changing polarities, Europe seems to have seen it all. The Eurozone crisis, its implications on the European Union and the future can be understood with reference to following points.

The Power of Germany

Germany and France have been the two great powers that have dominated the European Union and its policies. The decisions, majorly, have been like a Franco-German diktat. Many EU members have started raising their voices against this partnership. However post the 2008-2009 economic crisis, the power shift has started taking place most of which is economic. Mrs Merkel has been more vociferous on the treaty changes, tougher rules and sanctions for rule breakers. France's deficit, in 2011, was approximately 6% of the GDP while that for Germany was under 3%. In addition to that, Germany's GDP growth rate was poised at 3.7% while the French were at 1.6%, slightly lesser than the average growth rate of 1.7% , of the EU. There has also been a reinforcement of the political will over the past few years that differentiate Germany's interests from those of the French. Germany is more concerned today for safeguarding its national interests rather than leaving it at the mercy of the EU.

The Political Standpoint

For a monetary policy to work, there have to be enough fiscal measures to be in place to ensure an optimal flow of money. However with the different political standpoints of the 17 European member states, this has come to exist as one of the major hurdles in the EU story which has started to cause a divide in the EU. There is a growing dissent in Germany where the ruling coalition parties as well as the Bundestag (the Parliament) are sceptical about the kind of help provided to the defaulting nations like Greece. The worries they have are twofold. Not only are they worried about the taxpayers' money, they also fear that Germany's help , through bailouts or the European Fund Stability Facility(EFSF) to such countries would more strengthen the unwillingness of such countries to solve their own problems.

However, on the other end of the horizon, austerity measures in countries like Greece and Italy are more likely to increase unemployment and drive them into more problems. Even if such austerity measures are taken up in such countries, there is a high possibility of the government getting overthrown which would again put them in a declined state.

Since the time debt crisis started unfolding, 5 governments have been toppled or replaced by new governments. Spain is the latest addition to this list after Portugal, Italy, Ireland and Greece. This is one of the major concerns from the standpoint of Euro as the delay caused in decision making, due to the change in political leadership, is adding to the turmoil and taking away the investor confidence.

This Euro crisis has put the countries to think over the political will that would be required to sustain in the EU in tough times. Not only do these countries lack the political will, but the growing angst among the people of the respective countries also tells a different story.

The Social Structures and Growing Dissent in Eurozone

Enough has already been talked about over the past couple of years on the difference in the social structures in the Eurozone nations and how the governments function differently. This difference also reflects in their fiscal policies. Germany has won the confidence of its voters over the years by maintaining good monetary policies. The corporate taxes are high in Germany as compared to the rest of the Eurozone. Greece, however, has ruling elite which over the years has tried to buy the public for electoral support through reckless public spending. A majority of European economies, as a matter of fact, measure the growth with social welfare systems. That is, they still view their growth in old-age pensions and unemployment allowances. As much as this idea of growth might sound idealistic, the governments fail to focus on generating employment opportunities. According to a report by The Economist,

“The whole package—civil servants with jobs for life, endemic corruption, generous pension schemes, weak enforcement of tax laws, special tax exemptions for hundreds of politically favoured groups, the abuse of EU funds to bankroll farmers—was a social contract, albeit not a very impressive one”

This difference in policies has also caused the people and media of the stronger countries into making chauvinist remarks about the weaker nations. People of Germany have slandered Greeks for their early retirement ages and have gone to the extent of calling the Greeks as “lazy and early retirees”

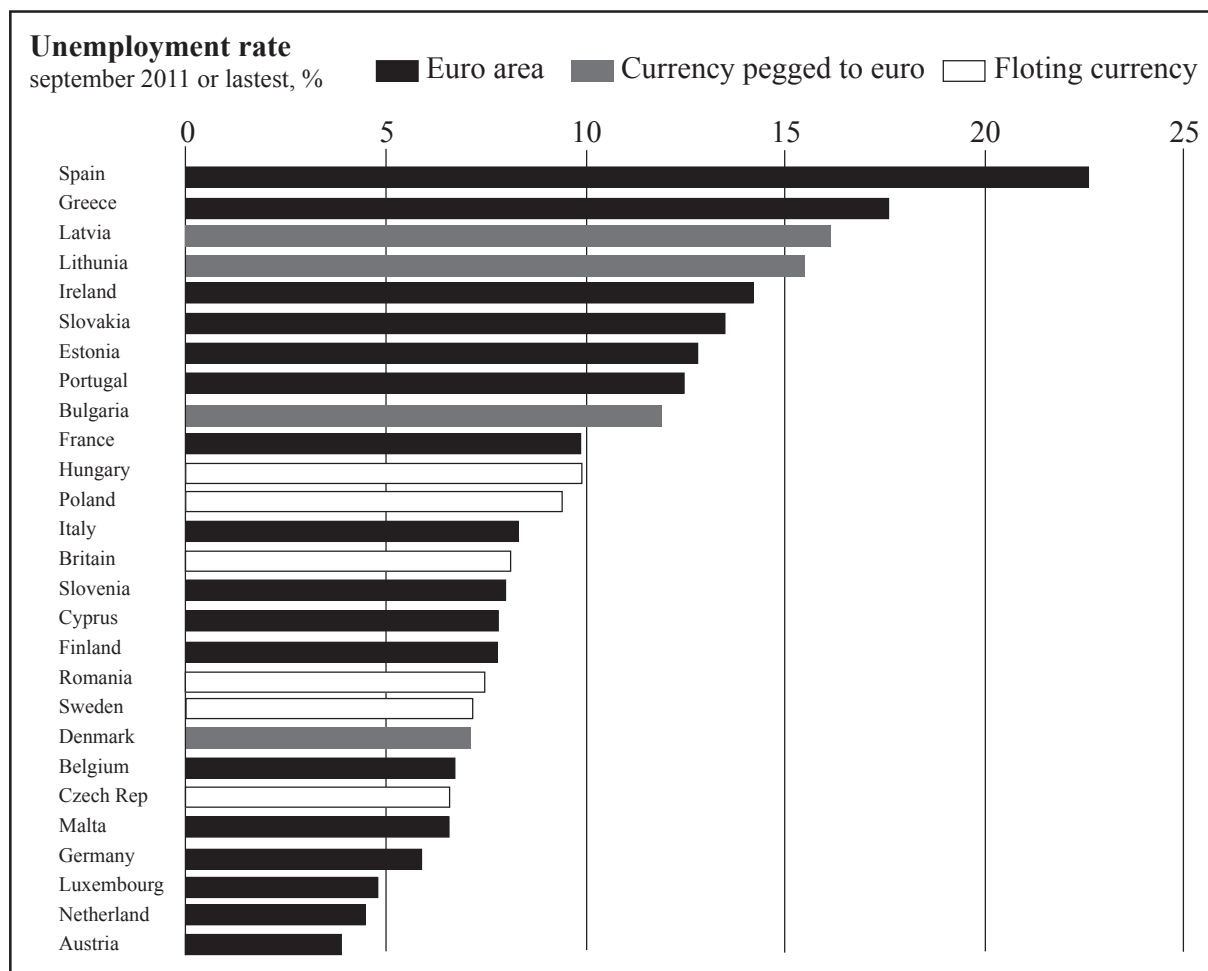
Such acerbic remarks could prove a major blow to the unity of the Eurozone. This is one development that’s feared by International and European financial elite.

This crisis is not only a crisis of national interests; it is a crisis due to class divisions. A report from The Economist states “The ruling elite in Greece is part of the European and international corporate-financial elite. It is deeply involved in international speculation and backs the Papandreou government, providing full support for its attacks on the working class.”

Another cause of worry is the high unemployment levels. Not only the PIIGS economies are suffering, but stronger countries like France have high levels of unemployment.

Union’s Internal Market Rules & Migration

European Union’s market rules are as such that they tend to attract cheap labour from the weaker economies from the eastern countries that are more mobile as compared to the labour of western European economies. This however helps the strong economies more than the weaker ones. However the only ray of hope for the EU’s survival comes from the fact of such economic and trading flexibility and dynamism.



source: Eurostat

Graph 3: Unemployment rate

The Conflict of Interests

The Eurozone at the outset of this crisis has also seen the differences in the approaches. The big guns of EU namely Germany and France are poles apart on their respective solutions.

According to Germany, the euro can be saved by stringent rules on borrowing, spending and competitiveness. This includes going to an extent of threatening the poorer countries to freeze EU funds and EU mega-projects. It also advocates the suspension of a country's voting rights in EU ministerial councils to set an example.

However France wants something different. It is in favour of issuing the Eurobonds which would be a monetary measure to redistribute the looming risk from poorer economies to the strong economies.

Germany and France have an unbalanced participation in the EU due to the current crisis which may lead to the formation of poles in the EU.

Interconnectedness of Banking Systems

The sovereign crisis has led to a banking system crisis. This is due to the interconnectedness of the banks. The banks are exposed to each other in form of debts. This can cause a major spill over effect on the banks, especially in the high spread euro area comprising of Belgium in addition to the PIIGS. This has also to an extent proven that the sovereign risks in EU are directly related to the credit risks in the banking system. The latter, though, is more an effect of the former. According to the GFSR (Global Financial Stability Report) issued by the IMF, the spillovers on European banks' exposure to Greek sovereign is close to € 60 billion. For this reason, the banks which held the Government bonds of other high spread countries like Italy and Spain have started moving towards the safer havens, the German Bunds. However, if there is a major delay in the policy implementation the Analysts predict that Bunds can make a transition to risky.

A number of other banking systems—such as those of Luxembourg, France, and Germany—have experienced spillovers from the high-spread euro area to their foreign operations or cross-border exposures, but these represent a smaller percentage of assets.³

This could be a major turning point for the EU because the spread widening contagion might as well spill over to better performers like Germany through banks. Thus the EU can see the change in dynamics in its structure which may even threaten its existence in the coming decade.

Delays in Policy Implementation

The current crisis in Eurozone requires long term and pragmatic policy making. However the seventeen nations in the zone have miserably failed to identify the long term goals that they may be looking at. The most fundamental question that the Eurozone needs to answer is how it sees itself in the next 3-5 years. Do they look at a fiscal union along with regional sovereignty? Or do they need a smaller union. The EU has, however, failed to answer all of them. There has not only been a lack of clear vision, but also delays in the policy implementation.

Austerity Measures and its Repercussions

The UNCTAD (United Nations Conference on Trade and Development) in a recent report has affirmed the fact that the austerity measures taken in some European economies could bring down the economic growth. According to the report, they pose a serious threat to the economic recovery. With countries like Greece, France and Portugal adopting the austerity measures, this solution seems to have done more bad than good for the Eurozone. Not only has it cut the public spending of governments, it has also led to a widespread resentment against the government.

An austerity measure taken by the Greece government includes the suspension of 30,000 civil servants in partial pay by the end of this year. The unemployment rate has risen to

18.4%.

In Italy, an austerity package was adopted in July this year. It included cuts in regional subsidies, family tax benefits and the pensions of high earners.⁴ For the public sector, it has frozen the recruitment.

Ireland has also slashed the salaries of all the government servants by 5% in a move that has agitated the population.

The Spain government has also given in to European pressures of cuts on public spending. In a strong move, it froze the salaries for all the public workers in 2011 and raised the retirement age to 67.

In France, VAT on goods and services is being planned to be hiked from 5.5% to 7%. The high earners have also been burdened by the government to pay an additional 1% on their incomes.

The austerity measures are not only being taken up by the PIIGS economies, but also by stronger nations like Germany. The plans include a cut in subsidies to parents, 10,000 government job cuts over four years, and higher taxes on nuclear power.

All these measures have one thing in common. Although, they do show resilience from the European governments to tackle the current crisis, they tend to disrupt the growth. To add to that is the fear of civil revolution against the government practices in the weaker economies. The widespread protests have already started against the unpopular policies and cuts.

This poses a serious threat for the survival of the Eurozone in the next decade.

Conclusion

While the Europe keeps the world on wait, the catastrophe is not too far. However, it can take many forms.

A country might be thrown out of the Euro, which the treaty forbids as of now; or a government that might try to adopt austerity measures might be thrown away. There are speculations rife that Germany could be the first one to breakaway.

Amid all this, a Greek exit from Eurozone could open a Pandora's box for the EU and multiply its miseries manifolds. This could lead to a butterfly effect spanning not only the Eurozone but also the Banks and Institutions all over the world.

The EU is just taking its last breaths. The end may not be too far.

References

[1.] Eurostat.com

[2.] Eurostat.com

[3.] Global Financial Stability Report, Sept 2011

[4.] <http://www.bbc.co.uk/news/10162176>

Aligning Interests of Gen Y Workforce for Organisations to Respond to Future Transformations

- Manisha Rana and Surabhi Singhal

Abstract

In this study we analyse the significant transformations that organisations are liable to undergo in the coming future. We further discuss how the course of future organisations will be set in a world which will be globally more integrated having better information flow channels and collaboration forces in action. The central issue raised in this study is: aligning the organisations interest with that of the new generation, the Gen Y as it will be this generation that will constitute a major part of workforce in the future organisations that we envisage. A comparative analysis is made based on the findings of SHRM 2010 report on job satisfaction to compares the top five factors needed for job satisfaction as perceived by Gen Y, Gen X and the HR Professionals in the organisations. With the help of this analysis we find the gap in perception of factors signifying satisfaction among Gen Y workforce and the organisations and we analyse how the gap can be reduced with alignment of interests of the new generation and the organisations.

Introduction

The dynamic landscape that we are working in requires for a change in the way organisations work. Before we envisage organisations in near future we need to look as to what defines an organisation. Over a period of year's development of various cultures, onset of various revolutions, coming up of various innovations and change in the demographics, have time and again helped shape and define organisations. Organisations are wrought in ways which are often reflections of the changes and events occurring in the world over a period of time. Amidst all these changes organisations have become larger and more intertwined in a global framework. Today the companies handle operations in more countries than they used few years back and we

have channels for better information flows than we had earlier.

Transformations in Organisations in Future

To envision how organisations will shape in the years to come we see that there will not be a complete paradigm shift or a revolutionary change in the way organisations work but what we will witness is an extension of the evolution already taking form in many of the firms at present. According to a research conducted by Economist Intelligence Unit companies in the next decade will be flatter with employees having a greater say in the decision-making with wider implications on how the businesses are run. The major shifts that organisations will experience are:-

- Moving towards a more contingent workforce to match constantly changing talent needs across countries with wider global collaborations.
- Inclusion of management with local know-how of the place where business is run as well as a global perspective to understand business needs necessitating global operations.
- Young people considering international assignments as a major factor while choosing their employers and businesses and moving employees across global offices for short-term consignments rather than long-term projects.
- Organisations will weigh analytical skills, exceptional communication skills and interpersonal skills more than functional or technical knowledge while recruiting employees.
- Organisations will also expand their sources of talent to widen the talent pool by directly partnering with schools and colleges to provide industrial training to students before they enter the corporate world.
- Local offices will have more decision making power entrusted with them along with having a uniform organisational framework of global standards and processes in order to keep the organisation globally integrated into a single brand and identity. Professor Beer of Harvard Business School says that in the world we're living in today, the words 'decentralisation' and 'centralisation' need to be thrown out completely. These are opposites that can no longer exist as opposites. Companies will try to push as much decision-making to local units at the same time that they create global standards, global processes to maintain competitive character and business sustainability.
- The new generation or the Gen Y which is stepping in the workforce is all set to occupy the strategic roles as well as the management roles early in their careers and will be needed to provide with more opportunities and accelerated leadership training to retain them and to enhance their productivity.

Beacon Management Review 2012

- Increase in fluctuating workforce and the organisations will feel a need to balance the allocation of resources between contractual and permanent workforce to maintain the morale and earn the loyalty of both these types of employees.
- Diversity and inclusion will be a major force impacting the recruiting decisions. The companies are bound to feel a need to diversify the workforce on basis of academic background, socio economic status, immigration status and cultures for confluence of myriad ideas and perspectives to drive innovation and thinking.

Comparative Study of Factors Leading to Job Satisfaction in Organisations

With all these changes being factored in the DNA of the organisation a need will arise to analyse whether these changes are in coherence with the aspirations and the needs of the new generation of workforce the Gen Y who will be leading these organisations in near future. Gen Y today is very vocal and very particular about choosing their employers based on the way they see themselves growing in the organisation and on the way they are treated in the organisations.

Today, more than any other time in history this has become more important for companies because of the peculiar situation the companies are in, as far as the mix of workforce is concerned. Most of the companies across the globe are dealing with three generations in their workforce – namely boomers, Gen X and Gen Y. It is essential for the organization to bring all the three work together and their efforts aligned with the business objective. No more the companies will be able to afford considering their employees just as resources instead they would need to consider them as their business partners. But to do so the companies will need to align their perception of employees need to what employees actually need and value in an organisation.

In the current scenario a wide hiatus has been noticed in what the employees want out of their organisations and what the organisations think is valued by employees. A recent survey was conducted by Society of Human Resource Management to investigate what matters most to employees in organisations. Table 1 shows a comparative analysis based on the findings of this survey report about the key aspects that Gen Y and Gen X employees find important to job satisfaction vis-a-vis the key aspects that HR professionals (i.e. organisations) consider important to employee job satisfaction. In this study we refer to Gen Y as the generation born from 1980 to 1995 and Gen X as the generation born from 1961 to 1979.

Aligning Interests of Gen Y and Organisations

In the 2006 survey conducted by Gallup and the Council for Excellence in Government it was revealed that only 35% of Gen Y respondents listed job security as very important factor in

Beacon Management Review 2012

terms of job satisfaction as compared to the present scenario where Gen Y finds job security as the quintessential factor to job satisfaction. It is after the downturn that the economy has started witnessing since 2008 job security and financial health of the organisation are considered as highly valued aspects for job satisfaction among employees. Employees are more focussed on avoiding unemployment in the already weak labour market. Organisations in want to attract Gen Y employees and retain Gen X employees are taking steps to boost employee morale, to provide a sense of job security and to adopt ways to be more transparent to keep employees entrusted in organisations working and should continue working in this direction. In the near future we might also see more millennial population being interested in choosing Government/Public Service as it is considered more secure. Table 2 shows that government workforce constitutes only 8% of Gen Y as compared to 25% of Gen Y workforce in private sector.

Table 1: Important Aspects of Job Satisfaction as per Workforce and HR Professionals

| Gen Y Employees : Top Five Very Important Aspects of Job Satisfaction | Gen X Employees : Top Five Very Important Aspects of Job Satisfaction | HR Professionals : Top Five Very Important Aspects of Employee Job Satisfaction |
|--|--|--|
| Job Security – 69% | Job Security – 66% | Relationship with immediate supervisor – 72% |
| Benefits – 60% | Benefits – 62% | Job security – 69% |
| Opportunities to use skills/abilities – 58% | Compensation/pay, Organisation’s financial stability – 59% | Communication between employees and senior management – 65% |
| The work itself – 56% | The work itself – 55% | Organization’s financial stability – 64% |
| Organisation’s financial stability – 54% | Opportunities to use skills/abilities – 53% | Opportunities to use skills/abilities – 62% |

Source: Society for Human Resource Management 2010 Employee Job Satisfaction Survey Report

Table 2: Workforce Distribution in Government and Private Sector 2010

| Age | Government Workforce Age Distribution | Private Sector Workforce Age Distribution |
|-------------|--|--|
| Under 30 | 8% | 25% |
| 30-39 | 18% | 24% |
| 40-49 | 31% | 25% |
| 50 and over | 43% | 26% |

Source: Deloitte Millennial Model: An Approach to Gen Y Readiness Report 2010

With significant workforce percentage on the verge of retirement now is the time for government organisations to capitalize on opportunities to attract millennial by bringing change in rigid and lax human capital policies and practices that lag in time.

Role of Employee Benefits in Job Satisfaction

The recent recession has hindered the entry of Gen Y in the workforce leading to depressing wages, reduction in employer-sponsored insurance, rapidly rising living expenses, mounting debt and nominal savings jeopardizing their financial security. In the face of the current scenario the Gen Y has started showing a growing understanding and appreciation towards the benefits offered to them by the organisations. But it seems that organisations do not consider benefits as an important job satisfaction factor as according to a 2010 SHRM study 18% of the organisations have reduced employee benefits as a means to cut costs. Table 3 shows the list of benefits that Gen Y workforce need but in most cases they can't get at work.

Table 3: Benefits Gen Y Needs which It Cannot Get at Work

| Benefits | Percentage of Gen Y workers who want a benefit not available to them by the employer |
|---------------------|---|
| Supplemental health | 15% |
| Major medical | 12% |
| Long-term care | 11% |
| Critical illness | 11% |
| Life | 10% |
| Disability | 10% |
| Cancer | 9% |
| Accident | 8% |

Source: Colonial Life, Harris Interactive survey, June 23-27, 2011

Businesses need to realise that the talent pool is scarce which makes it imperative for the businesses to attract and retain the younger generations by adopting a different approach than what they did with previous generations. In the time to come reward packages incorporated with voluntary benefits will play a vital role in helping the Gen Y in building a financial security and will also help them in maintaining work life balance which lies at the core of their heart.

Role of Opportunities to Use Skills and Abilities in Job Satisfaction

Opportunities to use skills and abilities gives a feel good factor to Gen Y as well as Gen X employees as they feel satisfied to be utilizing their skills and contributing to the organisations. With the need for job security rising among employees, opportunities to use skills/abilities enhances the sense of job security as the importance of their job is directly linked to the organisation's growth and success. 62% of HR Professionals feel the importance of this factor and places them as fifth most important factor in terms of employees' job satisfaction highlighting the importance of skill usage felt by organisations even.

Role of Work Itself in Job Satisfaction

For employees the work itself has become a factor of motivation or demotivation. Working on a challenging job makes an employee feel more respected and his self-esteem and sense of achievement and recognition rises which helps an organisation to excel. 56% of employees consider the nature of work itself as an important aspect determining job satisfaction as compared to 40% of HR Professionals. Hence, organisations need to strategize how to feed employee's mind with valuable tasks and not just by feeding employees wallets by forming and reforming pay strategies. As this is a highly skilled and educated generation so it tends to become demanding of a globally networked, creative and knowledge work environment. If anytime the Gen Y feels that the work that they are doing is dead end job dissatisfaction starts rising and growth opportunities to find external pastures increases. To retain this generation organisations need to put more focus on providing them a meaningful work. With blackberry in hand and internet to browse, life and work are closely enmeshed together in a close knit nexus. Work for them is not a task but a way of life.

Conclusions

Organisations in near future will get a renewed outlook in terms of framing strategies and how workers approach their jobs. Future organisations will be more have more contractual workforce and there will be a dynamic balance of power between local and global offices. To manage the complexities inherent in the evolving global organisations it will be a critical for organisations to align their interests with that of the new generation which will be leading these organisations in the future. Comparative analysis of the survey done by Society of Human Resources 2010 reveals that organisations need to put more impetus on kind of benefits that are provided to the Gen Y employees as well as the kind of work that is offered to this generation in order to attract and retain the millennial population. Focus on relationship and communication between employees and superior and senior management is considered as a topmost factor by HR Professional in driving employee satisfaction. This aspect may not be factored as high ranking by the Gen Y employees in the present scenario but according to a report of Economic Intelligence Unit 2010 it is expected that with the rise of matrix type of organisations in near future the new generation of employees, the Gen Z will expect their employers to care more for them. They would want more frequent and clear discussion with their managers on their work priorities and development goals.

References

- [1.] Global firms in 2020: The next decade of change for organisations and workers: A Report by Economist Intelligence Unit.
- [2.] SHRM 2010 Employee Job Satisfaction Report: Investigating What Matters Most to

Beacon Management Review 2012

Employees

[3.] SHRM Jobs Outlook Survey Report

[4.] Deloitte Millennial Model: An approach to Gen Y Readiness, 2010

[5.] Pump Up Productivity from the Next Generation: Build Voluntary Benefits into Workplace Strategies to Attract, Engage and Retain Generation Y, A Colonial Life White Paper, September 2011

[6.] Generation Y and the Workplace Annual Report 2010, Global Workplace Innovation Report by Johnson Controls

[7.] Justin Meier, Stephen F. Austin and Mitchell Crocker, Generation Y in the Workforce: Managerial Challenges

Goodbye Recession...Goodbye Ethics?

- Dhruv Talwar

Abstract

Recession is a word that triggers off a whirlpool of uncertainty and fear in the minds of people. Through this article, a host of issues pertaining to the after-effects of recession have been discussed. A number of these issues are very sensitive and subjective in nature leading to diversity in opinions. The discussion revolves around topics such as recession leading to inflation, outsourcing in times of crisis, ethical ways of compensating, rising number of sweatshops, organisational downsizing and global supply chain ethics amongst others.

Keywords

Recession, Inflation, Outsourcing, Compensation, Supply Chain, Stakeholders, Sweatshops, Bluffing, Downsizing

The Recession Saga

The newspaper headlines for most parts of 2009 and 2010 were dominated by issues related to the falling share markets, decreasing industrial growth and the overall negative mood of the economy. For many people, life had taken a complete turnaround in the form of a downfall that not too many had anticipated (Shaw, 2010). Suddenly, panic seemed to be getting the better of all the assurance and calmness that had set in owing to the general worldwide boom that had taken place during the first half of the decade. There were cries far out and wide for communities and nations to get together and resolve this mayhem that had accounted for collapse of some of the most reputed banks and financial service providers across the world.

What followed was an unseen phenomenon of organisations all over the world adopting various cost-cutting strategies, changing business plans and experimenting with the organisational culture (Shaw, 2010). These strategies can be considered to have been successful with regards to “coming

out of recession”; however, a lot more is desired when it comes to answering questions such as “Are we back living the way we were before recession?” While the recovery seems to be on track and visible efforts can be seen all around, there have been eyebrows raised with regards to the ethical handling of the crisis. Questions have been raised related to issues ranging from the burgeoning number of outsourcing activities to the compensation offered to the top brass of debt-ridden companies (Shaw, 2010).

In the coming sections, opinions given by experts on these issues have been presented and discussed so as to holistically analyse the situation and understand the common perceptions related to it.

Inflation: The Problem of a Common Man

Staying in line with the long-held belief that recession and inflation are mutually exclusive, the end of the global financial crisis has brought out inflation rates that were previously unheard of in the Indian economy. While inflation is a global phenomenon that cannot be stopped owing to the fact that economies all over the world are growing and purchasing power in the hands of people keeps increasing, its growth rate can certainly be controlled to ensure that there is a balance between the rise in prices and the rise in income. Besides, considering the post-recession fragile nature of the economy and uncertainty in the minds of common people, proper planning and forecasting on behalf of the responsible agencies would have ensured that India wouldn't have been facing the inflation crisis that it is facing today (Rajashekar, 2010).

Life for the common man is becoming increasingly difficult owing to the all round rise across the country. An aspect of the rise phenomenon that is particularly alarming is that people are paying upto 40% more for basic services such as health, education and transport than they were 3 years back (Rajashekar, 2010). A large majority of the working people in India are in the unorganised sector. Their incomes fluctuate and they have no protection against rising prices, besides; prices have been raised, not the incomes. One of the major reasons for the rising indebtedness among such families is the increasing cost of healthcare, which is linked to the escalating cost of drugs. India has witnessed periods of inflation even earlier, but over the last two years there has been no end to this trend, and the situation is going from bad to worse.

Acute agrarian distress and incidents of suicide among farmers in many parts of India is of common knowledge. The farmer is getting less than Rs. 30 a kg for pulses that have a sale price of Rs. 100 in the market. The pertinent question is: who corners the profit of Rs. 70?

As explained by Robert Samuelson in *The Great Inflation and its Aftermath*, the root cause for inflation is ‘commodity exchange’. The prices of produce escalate three-fold as they pass from the farmer to the consumer. Faulty procurement policies lead farmers to sell their produce to middlemen or through the ‘commodity exchange’ process. The hoarders release or sell the produce as they wish, particularly when the market is up. The farmers suffer from a lack of a viable credit facility, a poor procurement mechanism, and expensive farm inputs such as seed, fertilizer and diesel. Today, the situation facing agrarian India is so pathetic that more than 80 per cent of the

farmers want to leave farming (Rajashekar, 2010). Boosting the incomes of small and big farmers will not only enhance their means of livelihood, but also safeguard them from the anguish of suicides.

A Tale of Two Cities: Outsourcing

The great recession of 2008 re-ignited the debate on outsourcing in developed countries. A major argument put forth by senior government officials was that outsourcing would further increase the pressure to create jobs in an already-crippled US economy (Carrigan& Pelsmacker, 2009). They believe that the sole purpose of companies engaging in outsourcing was to cut down on costs and maximize profits owing to availability of cheap labour. On the other hand, corporates argued that the business case of off-shoring is evolving beyond a pure cost play.

Heads: An American Perspective

Many prominent academicians have argued that with globalization, America has no choice but to tap in on the lower costs and unique skills of labour abroad to remain competitive. Samuel Palmisano, the CEO of IBM, while visiting Bangalore in 2009 pointed out that IBM's Indian employees are part of "a new kind of organisation", one that's designed not around a single country, "but on a truly planet-wide model." Yet, a critical point has been lost in the debate: The interests of U.S. corporations are often not the same as those of the country and its citizens. Hiring staff in India may help companies like IBM and others lower their costs and boost their profits, but it hurts the workers who lose jobs and those who lose the prospect of jobs (Carrigan & Pelsmacker, 2009).

Economist Paul Samuelson, a Nobel Prize winner, wrote in a 2007 paper that the economic effect of outsourcing is similar to allowing mass immigration of workers willing to compete for service jobs at extremely low wages. They can drive down the income for huge swaths of the middle class, even if they benefit their employees. He believes that mainstream trade economists have insufficiently noticed the drastic change in mean U.S. incomes and in inequalities among different U.S. classes. Ron Hira, a public policy professor at the Rochester Institute of Technology believes that the U.S. visa programs need to be modified. He says that some of the most active users of visas for visiting workers are Indian outsourcing firms, which appear to be training workers in the U.S. and then sending them home to be more effective at taking U.S. jobs.

Tails: Free Trade is Always the Best

Timothy Taylor, managing editor of the Journal of Economic Perspectives, in an article in the Cato Journal, entitled "In Defence of Outsourcing" wrote that the debate over outsourcing is full of misnomers, miscommunications, and misleading assertions. He believes that governments should stay out of the way and let markets determine where companies hire their employees. If politicians preening for the public try to make public policy around outsourcing, they're likely to make things worse instead of better.

Beacon Management Review 2012

Increasingly, the reason companies are hiring overseas is because of the talent they find there. In a joint study last year from Duke University's Fuqua School of Business and consulting firm Booz Allen Hamilton, the number of companies that said they were hiring overseas because of "access to qualified personnel" increased 75% over the previous two years. As explained by Taylor, if one country is better at making wine and the other bread, both countries come out ahead if they specialize their skills and then trade with each other. The million dollar question, however, persists: Is outsourcing ethical in the post-recession era?

Do CEOs Get Paid Too Much?

It is no secret that America's corporate executives get paid huge sums of money. *Business Week* estimated that in 2006, CEOs of the 365 largest U.S. corporations were paid on average \$10 million, 301 times as much as factory workers (Lavelle, 2007). What, if anything is wrong with this? Although it has received a great deal of attention in management and economics journals and in the popular press, the topic of executive compensation has been virtually ignored by philosophers. As a result, its normative dimensions have been largely ignored. Organizational theorists and economists tend to be more interested in what the determinants of CEO pay are than in what they should be. Jeffrey Moriarty (2008) suggested a general framework for CEO compensation: agreement view, desert view and the utility view.

Agreement View

According to Moriarty (2008), under the agreement view just prices for goods are obtained through arm's-length negotiations between informed buyers and informed sellers. In this case, the good is the CEO's services, the seller is the CEO, and the buyers are the company's owners. Provided there are no imperfections (e.g. fraud, coercion) in the bargaining process, the agreement view says, the wage that comes out of it is just. Owners are free to do what they want with their money, and CEO's are free to do what they want with their services.

Desert View

The desert view appeals to independent standards for justice in wages. It says that people deserve certain wages for performing certain jobs, whatever they might agree to accept for performing them. According to the desert view, the CEO should be paid \$10 million per year if and only if he deserves to be paid \$10 million per year (Weiss, 2006).

Utility View

The utility view conceives of wages not as rewards for past work, but as incentives for future work. The purpose of wages on this view is to maximize firm wealth by attracting, retaining, and motivating talented workers. If the CEO's position is not compensated adequately, few talented candidates will apply or remain on the job for long, and the company as a whole will suffer. On the other hand, an expensive CEO can easily earn his keep through even small increases in the price of the company's stock. According to the utility view, then, a compensation package of \$10 million

per year is just if and only if it maximizes firm wealth by attracting, retaining, and optimally motivating a talented CEO (Weiss, 2006).

The Ethical Way of Compensating

To solve the debate about CEO pay, we must determine which view of justice in wages is correct. It is unlikely that agreement theorists, desert theorists, and utility theorists will all come to the same conclusion about how much CEO's should be paid. Also, there are some academicians who believe that no matter which view is correct, CEO's get paid too much. It supports the popular suspicion that CEO's are overpaid. James Condrow (2009) argues that in order to decide the appropriate compensation for CEOs, a company must first determine what the correct view of justice in wages is. Second, they must apply the correct theory of justice in wages to the problem of CEO pay. That is, to identify the wage that maximizes firm wealth, gives the CEO what he deserves, or would be the result of an arm's-length negotiation between the CEO and the owners.

Purpose of the Corporation During Recession

For many, the view that the purpose of the corporation is to make a profit for stockholders is beyond debate and is accepted as a matter of fact (Velasquez, 2010). However, the most recent global economic meltdown brought out another side to this story: Should the purpose of a corporation be to consider those affected by business decisions, who are referred to as corporate stakeholders?

The Friedmanite View

The classical view that a corporation's primary and perhaps sole purpose is to maximize profits for stockholders is most often associated with the Nobel Prize-winning economist Milton Friedman. Friedman has two main arguments for his position. *First*, stockholders are the owners of the corporation, and hence corporate profits belong to the stockholders. Managers are agents of the stockholders and have a moral obligation to manage the firm in the interest of the stockholders, that is, to maximize shareholder wealth. *Second*, stakeholders are entitled to their profits as a result of a contract among the corporate stakeholders. The stockholders bear the risk when they supply the capital, and profit is the contractual return they receive for risk taking. Friedman believes that these voluntary contractual agreements maximize economic freedom and that economic freedom is a necessary condition for political freedom (Roleff, 1996).

The Stakeholder Advocates

An alternative way to understand the purpose of the corporation is to consider those affected by business decisions, who are referred to as corporate stakeholders. From the stakeholders' perspective, the classical view is problematic in that all emphasis is laid on one stakeholder – the stockholder. The interests of other stakeholders are unfairly subordinated to the stockholders' interests. Traditionally six stakeholder groups have been identified: stockholders, employees, customers, managers, suppliers, and the local community (Roleff, 1996). Managers who manage from the stakeholder perspective see their task as harmonizing the legitimate interests of the primary

Beacon Management Review 2012

corporate stakeholders. In describing stakeholder management group, R. Edward Freeman argues that managers have an ethical responsibility to manage the organisation for all stakeholders.

Which View Is Better?

Boatright (2009) concedes that the purpose of a firm during tough economic times is to benefit every stakeholder group. However, he argues that management decision making is an inefficient means of protecting the interests of non-shareholder stakeholders and that a system of corporate governance marked by shareholder primacy better serves the interests of all stakeholders. Such a system of governance, he believes, maximises the welfare of all stakeholder groups.

An article by Wayne Cascio of *Business Week* compares the management of Sam's Club, a warehouse retailer that is part of Wal-Mart, and its competitor Costco. Cascio points out that Costco is an aggressive and highly successful competitor to Wal-Mart. Over a 5 year period ending in 2007, Costco's stock rose 55 percent while Wal-Mart's declined 10 percent. At the same time, Costco was taking extraordinarily good care of its employees and customers and had excellent relationships with other stakeholders, unlike Wal-Mart that had come under sustained criticism for allegedly unfair and illegal labour practices and sexual discrimination. Cascio argues that if Costco could combat the recession while ensuring that all its stakeholders are treated well, Wal-Mart should be able to do the same.

Rise in Sweatshops and Bribery

Perhaps the international business ethics issue that has received the most attention during the global financial crisis is the issue of sweatshops. Owing to recession, there has been a dramatic growth in the contracting out of production by companies in the industrialised countries to suppliers in developing countries (Jennings, 2010). This globalisation of production has led to an emerging international division of labour in footwear and apparel in which companies like Nike and Reebok concentrate on product design and marketing but rely on a network of contractors in Indonesia, China, Bangladesh etc., to build shoes or sew shirts according to exact specifications and deliver a high-quality good according to precise delivery schedules.

The contracting arrangements have drawn intense fire from critics (usually human right activists). They have charged that the companies are (by proxy) exploiting workers in the plants (international sweatshops) of their suppliers. Specifically the companies' stand accused of chasing cheap labour around the globe in the light of recession and rising costs, failing to pay their workers living wages, using child labour, turning a blind eye to abuses to human rights, being complicit with repressive regimes in denying workers the right to join unions and failing to enforce minimum labour standards in the work place, and so on (Jennings, 2010).

Validity Of The Charges

According to Jennings (2010), the critics' charges are undoubtedly accurate on a number of points:

Beacon Management Review 2012

- There is no doubt that international companies are chasing cheap labour.
- The wages paid by the international sweatshops are-by American standards-shockingly low.
- Some developing country governments have tightly controlled or repressed organized labour in order to prevent it from disturbing the flow from foreign investment.
- It is not unusual in developing countries for minimum wage levels to be lower than the official poverty level.
- Developing country governments have winked at violations of minimum wage laws and labour rules.
- Some suppliers have employed children.
- Some developing country governments deny their people basic political rights. China is an obvious example.
- A related charge is that international sweatshops are contributing to the increasing gap between rich and poor.

A Clash Of Opinions

Not everyone is so quick to condemn the practices of multinationals in this area. Several prominent economists have spoken out claiming that the wages paid to the workers of foreign suppliers in the third world are hardly immoral “slave wages” but rather represent an increase in the standard of living. These arguments are defended in an article by Maitland (2004). Maitland argues that multinationals are wrong to improve working conditions because doing so will lead to higher unemployment in developing nations. He argues that corporate executives should explain to activists and others that improving working conditions will be bad for workers and bad for developing economies, since it will slow economic growth. However, in their article “Sweatshops and Respect for Persons” Denis Arnold and Norman Bowie defend a different view. They use Kantian arguments to show that multinational enterprises have a moral obligation to ensure that their suppliers follow local labour laws, refrain from coercion, meet minimum safety standards, and provide a living wage for employees.

Talking Tough On Bribery

In their essay “Taking Responsibility for Bribery,” Thomas Dunfee and David Hess explain the connection between bribery and human right violations. After reviewing international efforts to combat corruption, they articulate and defend a corporate principles approach to bribery, one that relies on rigorous internal guidelines and controls. They point to shell as an example of a company that has had great success at implementing such a program especially during times of economic dullness when unscrupulous activities are on the rise.

Deceptive Marketing

Many critics deplore the values presented in advertising as well as the effects advertising has on customers. Owing to recession and a fall in demand for consumer goods, a few companies' started engaging in unethical marketing practices in order to give their product demand a much needed boost. Other critics are more concerned about specific practices of advertising during the recession that were directed at vulnerable groups such as children, the poor, and elderly (Piercy, 2007).

Although critics have long denounced misleading or information-deficient advertising, the moral concerns and concepts underlying these denunciations have seldom been carefully examined. What is a deceptive or misleading advertisement? Is it, for example, deceptive or misleading to advertise a heavily sweetened cereal as "nutritious" or as "building strong bodies" especially during times of recession? Are such advertisements forms of lying? Are they manipulative, especially when children are the primary targets or people are led to make purchases they do not need and would not have made had they not seen the advertising? Does such advertising represent a deprivation of free choice, or is it rather an example of how free choice determines market forces? Control over a person is exerted through various kinds of behaviour, but not all influences actually control behaviour.

On Bluffing And Disclosure

One does not need extensive experience in business to know that many deceptive practices, like bluffing and slick sales techniques, are widely practiced and widely accepted. It is common knowledge that automobile dealers do not expect people to pay the sticker price for automobiles, but it is a closely guarded secret as to how much can be knocked off that price. An advertising tactic related to disclosure is discussed in the case study "Advice for Sale." This case explains how companies such as Sony, Hewlett-Packard, and Wal-Mart pay "experts" to recommend their product during interviews on television news programs. The ethical problem lies in the fact that these "experts" fail to disclose to viewers, or to those conducting the interviews, that they have been paid to recommend specific products to viewers.

Marketing And Vulnerable Populations

In his article "Marketing and the Vulnerable," George Brenkert (2008) noted that the concept of vulnerability is slippery, but he argues that we can gain enough clarity about the concept of make use of it in assessing marketing strategies. Brenkert argues that vulnerability is best understood as susceptibility to harm by others.

Brenkert argues that marketing campaigns that target those, such as children, who are especially vulnerable, must be designed so that those that are targeted are treated fairly. Marketing campaigns that fail to do so, he argues, are unethical for it can result in serious harms such as poor self-esteem, false notions of how to achieve happiness, a distorted world view, a poor diet leading to obesity and serious health problems, and poor money management skills leading to indebtedness in the teen years and beyond.

Organizational Downsizing – An Ethical versus Managerial Viewpoint

Organisational downsizing or the intentional elimination of jobs and positions has been popular since the 1980's in western countries. Cameron (1994) argues that downsizing is probably the most pervasive yet understudied phenomenon in the business world. Downsizing as a management technique increases the variety of demands put on the managers who are responsible for the reductions in personnel.

The managerial perspective of downsizing is, however, quite rarely found in research. According to Palmer et al. (1997) there are two different tendencies within the management literature concerning downsizing. The first one involves the assumption that the negative effects of downsizing can be reduced if the process is appropriately managed. The second one focuses on the relationship between downsizing and strategy. This involves the assumption that cost cutting through the use of organisational downsizing is a solution to many organizational problems as many organisations are fat and lazy.

According to Cameron (1994) downsizing is becoming the norm rather than unusual practice. It typically aims at such goals as reducing costs, increasing productivity and restructuring work processes. However, it has been argued that most firms do not succeed in achieving the goals and often many unintended consequences (Cameron, 1994). Despite these problems, downsizing seems to continue apace, and a large number of organizations have embarked on systematic downsizing. For example, Drew (2004) that downsizing is not simply a part of recession which will disappear when good times return.

Downsizing as a Means to Economic Consequences

This viewpoint emphasizes utilitarian ethics and rational management, as the emotions of employees in downsizing situations either are not considered or explained away as “irrational disadvantages”. This suggests that the managers have a mechanical view of ideal management where only economic goals to survival receive consideration.

Also, managers view downsizing as being part of managerial obligation. The managerial obligations, a duty to be loyal to the goals of the company and the duty to treat people fairly in the situation, have a deontological and a rule-utilitarian tune. This implies that downsizing may easily be accepted by the managers as a usual and unquestionable strategy of the company. Rules, thus, have a central role to play in determining correct behaviour (Beauchamp & Bowie, 1999).

Ethical Take on Downsizing

The duty to treat people fairly is worked out through procedural justice (Lamsa, 1999) suggested that a company's attempt at fairness in procedure may be the outcome of dual intentions. The first one is that since the company has obligations towards people who have served it, it is the manager's sincere duty to take care of the people who leave. This intention is based on the deontological reasoning. The second intention may be to create a feeling of care among employees (impression

management). In such a case, procedural justice often takes the form of voice procedure. Correct delivery of traumatising information is used to lull the workers into a sense of wellbeing and general sympathy for the company.

In general, it has been suggested that that downsizing issues are primarily of two kinds – that of the firm and that which arises out of their position as professional managers. It is also often seen that managers' perspectives are maybe narrower than usual in the case of a declining situation where economic crisis is at hand. If this interpretation is correct, it implies that when immediate short-term goals instead of long-term goals are the focus, perspectives become narrow and restricted.

Talking in terms of Theories

Finally, if the managers' explanations are considered on the basis of ethical theories, the utilitarian approach seems to be prevalent when the managers adopt the viewpoint of their firms. However, as soon as they begin to explain their experiences from a "self-perspective", the tune of explanations changes towards deontology. They begin to make a division between public and private morality (Lamsa, 1999).

However, as soon as they try to combine these two forms of morality, the managers are in a position to promote the greatest good for everyone. This everyone constitutes only people inside the firm and not all people from "society" as a whole. In essence, managers in situations of crisis such as recession have a unique "ethical viewpoint".

2009 National Business Ethics Survey (NBES) : A Surprising Reverse in Trend

The 2009 NBES is the eighth in a series of reports that began in 1994, an ongoing research initiative of the Ethics Resource Centre (ERC). Overall, 78 percent of those interviewed in the survey said they or a colleague had been affected by company efforts to weather the U.S. recession. Yet surprisingly, most of ERC's key measures improved when compared to 2007:

- *Misconduct at work was down.*
- *Ethical cultures got stronger.*
- *Pressure to cut corners was lower.*

Despite the positive overall picture, there is a toll that the recession has taken on ethics in American business in particular. When asked about the effects of recession, about 25 percent respondents said that to stay in business during recession, their company had lowered its ethical standards. NBES also found that a company's tactics to combat recession can damage employee perceptions of an ethical workplace. The more such tactics an organisation employed, the less positive the ethics.

Overall, NBES reflected the importance of ethical culture in the workplace. Measures of culture

Beacon Management Review 2012

can discover red flags – hints that financial fraud or other misconduct is occurring or is about to occur – well before the damage shows up in financial reporting. It also illustrated that the executive compensation is much less an issue in a healthy ethical environment marked by transparency, accountability and a basic sense of fair play. More than 70 percent of employees believed that the compensation package for their CEO was appropriate. This perception, however, is linked to the ethical culture of the business. Taken together, the data shows that:

- *We are experiencing an ethics bubble*
- *Executives who don't elevate culture to a priority risk long-term business problems.*

Conclusion

The aim of this article was to present an all-pervading view on the various ethical issues that are associated with the effects of recession on the global economy.

Considering the post-recession fragile nature of the economy and uncertainty in the minds of common people, it is popularly believed that proper planning and forecasting on behalf of the responsible agencies would have ensured that India wouldn't have been facing the inflation crisis that it is facing today. With regards to outsourcing, one sect believes that USA has no choice but to tap in on the lower costs and unique skills of labour abroad to remain competitive. However, there is another wing that opines that hiring staff in India may help companies like IBM and others lower their costs and boost their profits, but it hurts the workers who lose jobs and those who lose the prospect of jobs.

Questions were being raised related to the compensation that was being given to CEO's of top companies (the fact that they were being paid on an average 301 times more than a regular employee), however, the result of NBES 2011 stating that over 70 percent of the sampled employees felt that the compensation was justified effectively puts these questions to rest. Likewise, issues pertaining to global supply chain ethics, the stakeholder versus stockholder debate, rising number of sweatshops, deceptive marketing and organisational downsizing have received a divided stance.

However, the common perception that binds all these arguments is the belief that this recession has been an eye-opener of sorts in terms of the difficulty that was faced by organisations in sustaining their culture. Companies around the world could take a cue from it to ensure that in the future, if the situation demands, they are in a position to take decisions that they can deem appropriate from a managerial as well as an ethical viewpoint.

References

- [1.] Shaw, W. H., (2004), "Business Ethics", Rydson Publishers & Distributors, New Jersey, USA

Beacon Management Review 2012

- [2.] Matten, A. and Crane, D., (2009), “Business Ethics: Managing Corporate Citizenship”, Pearson Education, Inc., New Jersey, USA.
- [3.] Velasquez, M., (2005), “Business Ethics: Concepts and Cases”, Pearson Prentice Hall (Dorling Kindersley Publishers), New Delhi.
- [4.] Jennings, M., (2010), “Business Ethics: Case Studies and Selected Readings”, Rydson Publishers & Distributors, New Jersey, USA
- [5.] Ahner, A., (2009), “Business Ethics: A Stakeholder and Issues Management Approach”, The Free Press, New York
- [6.] Roleff, T., “1996”, “Business Ethics”, Harvard Business Review, 68, pp. 148-156.
- [7.] Ghiller, A., (2008), “Business Ethics: A Real World Approach”, Journal of Management, 39(2), pp. 45-50.
- [8.] Carrigan, M. & Pelsmacker, P., (2009), “Will Ethical Consumers Sustain Their Values In The Global Credit Crunch”, International marketing Review, 26(6), pp. 642-653.
- [9.] Lamsa, A., (2009), “Organizational Downsizing: An Ethical Versus Managerial Viewpoint”, Red Cross Annual Publication, New York.
- [10.] Barrett, R. “Reasons For Global Recesion” (www.jsonline.com/bym/news/nov03)
- [11.] Moya, K. “When Outsourcing Pinches” (www.staffordshirestrategic.com/casestudy/outsourcing/jan08)
- [12.] Andres, L. and Liebenthal, K., “Cost Of Resolving A Financial Crisis” (www.bizstudies.com)
- [13.] Roland, E., “I Need A Job” (www.reuters.com)

Inflation in India - An Overview

- Supriya M S

Abstract

If there is one word that has persistently been in the news for the past 24 months, it is inflation.

This article attempts to give an overview about this important economic phenomenon. It starts by defining inflation and its different forms. Then it explains the methodologies used to measure inflation, followed by outlining the drivers of inflation. It goes on to elaborate the impact of inflation on the economy. Finally, it focuses on the current scenario in India and the measures that can be taken to keep inflation in check.

Keywords

Inflation, WPI, CPI, RBI, demand, supply, fiscal, monetary, policies, repo rate

Introduction

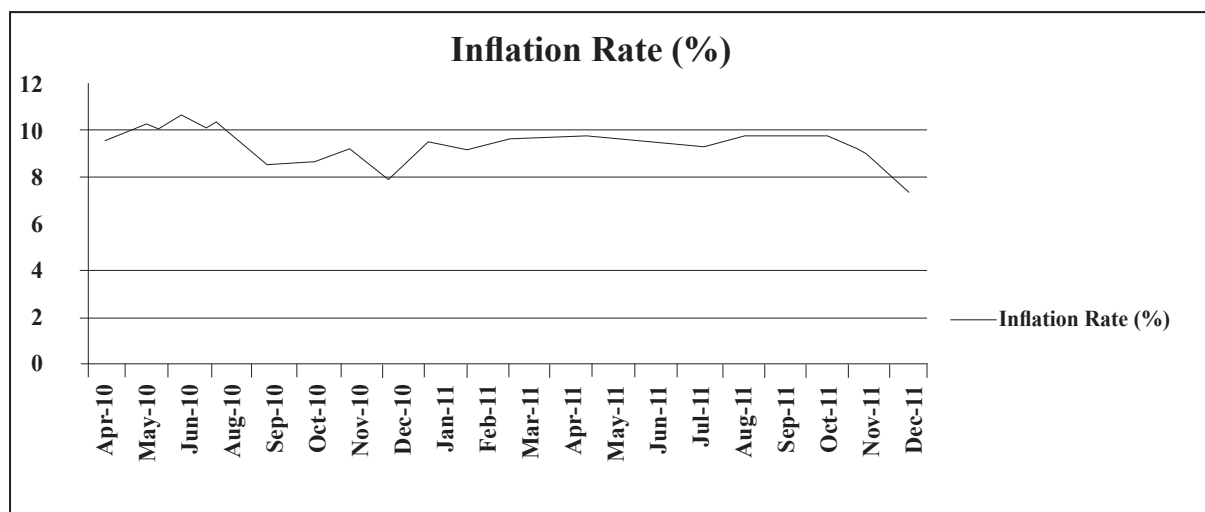
Inflation can be defined as an observed increase in the value of goods and services produced in an economy. This change in prices is called the inflation rate, which is mostly calculated annually. An economy comprises of innumerable goods and services and this makes it virtually inconceivable to find out the change in prices of all these goods and services. Hence, a predetermined group (popularly referred to as a “basket”) of goods and services, which acts as a representative of the whole, is commonly used to get an indicative figure of the change in prices.

Types of inflation

There are two primary types of inflation: cost-push and demand-pull. The two types of inflation are not mutually exclusive, so it is possible for both to occur simultaneously.

Beacon Management Review 2012

Graph 1: Inflation rate movement from Apr-10 to Dec-11



Source: Reserve Bank of India

Cost-Push Inflation:

The four factors of production comprise of land, labor, capital and entrepreneurship. When there is an increase in costs of any of these factors of production, the companies cannot maintain profit margins by producing the same amounts of goods and services. Hence, they increase the product prices to protect their profit margins. These increased costs are passed on to consumers, causing a rise in the general price level.

Demand-Pull Inflation:

Demand-pull inflation occurs when there is an increase in the purchasing power of the consumer. Such a situation mostly exists in a growing economy where there are huge expansions from the government and private sector, leading to increase in employment which in turn increases the purchasing power of the consumer. Since demand is running ahead of supply, there is an increased pressure on scarce resources. This is also referred to as “too much money chasing too few goods”. This prompts the producers to increase the price of goods and services.

It is not necessary that only one type of inflation exists in an economy at a time. They can co-exist. For instance, in India right now we have both types of inflation, oil and metal prices have gone up to record highs, giving rise to cost push inflation. At the same time, purchasing power has also increased due to increases in employment, wages, and easy availability of money, creating demand pull inflation.

Inflation measures

Inflation is calculated using price indices. Of the many indices, two are of critical importance. The first is the Wholesale Price Index (WPI) and the other is the Consumer Price Index (CPI). Both these indices are the weighted averages of prices of a specified set of goods and services.

Beacon Management Review 2012

India uses WPI to calculate the inflation rate in the economy, whereas most developed countries use CPI.

Wholesale Price Index (WPI):

Wholesale Price Index (WPI) is the main measure of the rate of inflation in India. WPI is the index that is used to measure the change in the average price level of goods traded in wholesale market. WPI is based on the price prevailing in the wholesale markets or the price at which bulk transactions are made. The WPI is compiled and published by the Office of the Economic Advisor (under the Ministry of Commerce and Industry) on a weekly basis. The index is broadly divided into three sub-categories – Primary Articles, Fuel Products and Manufactured Products. This index does not cover non-commodity producing sectors viz. services and non-tradable commodities. In India, a total of 676 commodities data on price level is tracked through WPI which is an indicator of movement in prices of commodities in all trade and transactions.

Till Oct-2009, WPI was released weekly with a lag of fortnight and is now released in two phases. Primary articles and fuel group inflation continues to be released weekly for its sensitivity with a fortnightly lag. This is known to represent the headline inflation. The non-food manufactured products inflation is considered the core inflation—an indicator of demand condition. This is released monthly with a fortnight lag. Core excludes volatile items like food and fuel. This is because food and energy prices can rapidly increase while other types of inflation can remain low. Hence headline inflation may not give an accurate picture of how an economy is behaving.

While headline inflation tends to get the most attention in the media, core inflation is often considered the more valuable metric to follow. Core inflation removes the CPI components that can exhibit large amounts of volatility month to month, which can cause unwanted distortion to the headline figure. Both headline and core results are followed closely by investors, and are also used by economists and central banking figures to set economic growth forecasts and monetary policy.

As prices of primary articles and fuel rises, companies pass on the prices to consumers via their manufactured products. If the headline inflation persists it would lead to rise in core inflation as well. There usually is a lag of 2-3 months between changes in headline to lead to changes in core inflation.

Consumer Price Index (CPI):

It is a price index that tracks the prices of a specified basket of consumer goods and services, providing a measure of inflation. It attempts to measure changes in the retail prices of fixed baskets of goods and services being consumed by the target group (namely the average

Beacon Management Review 2012

Table 1: Elaboration on the weights and number of items in each group under WPI

| Major Group/ Group | Weight | | No of Items | | | | | No of quotations | | |
|--|---------|---------|----------------|---------|--------|---------------------|----------------------------------|---------------------|---------|--------|
| | 2004-05 | 1993-94 | 2005-05 | 1993-94 | Common | Dropped/ Revised | New Items added or revised | 2004-05 | 1993-94 | Common |
| All Commodities | 100 | 100 | 676 | 435 | 259 | 176 | 417 | 5482 | 1918 | 595 |
| I Primary Articles | 20.12 | 22.03 | 102 | 98 | 91 | 7 | 11 | 579 | 455 | 320 |
| (A) Food Articles | 14.34 | 15.4 | 55 | 54 | 54 | 0 | 1 | 431 | 340 | 245 |
| (B) Non- Food Articles | 4.26 | 6.4 | 29 | 25 | 25 | 0 | 4 | 108 | 96 | 62 |
| (C) Minerals | 1.52 | 0.48 | 18 | 19 | 12 | 7 | 6 | 40 | 19 | 13 |
| II Fuel & Power | 14.91 | 14.23 | 19 | 19 | 19 | 0 | 0 | 72 | 72 | 57 |
| A. Coal | 2.09 | 1.75 | 4 | 4 | 4 | 0 | 0 | 20 | 20 | 5 |
| B. Mineral Oils | 9.36 | 6.99 | 10 | 10 | 10 | 0 | 0 | 47 | 47 | 47 |
| C. Electricity | 3.45 | 5.48 | 5 | 5 | 5 | 0 | 0 | 5 | 5 | 5 |
| Manufactured Products | 64.97 | 63.75 | 555 | 318 | 149 | 169 | 406 | 4831 | 1391 | 218 |
| (A) Food Products | 9.97 | 11.54 | 57 | 41 | 32 | 9 | 25 | 406 | 168 | 54 |
| (B) Beverages, Tobacco & Tobacco Products | 1.76 | 1.34 | 15 | 11 | 7 | 4 | 8 | 102 | 49 | 16 |
| (C) Textiles | 7.33 | 9.8 | 55 | 29 | 17 | 12 | 38 | 457 | 100 | 18 |
| (D) Wood & Wood Products | 0.59 | 0.17 | 10 | 2 | 1 | 1 | 9 | 64 | 9 | 0 |
| (E) Paper & Paper Products | 2.03 | 2.04 | 18 | 11 | 9 | 2 | 9 | 138 | 67 | 15 |
| (F) Leather & Leather products | 0.84 | 1.02 | 13 | 1 | 0 | 1 | 13 | 91 | 9 | 0 |
| (G) Rubber & Plastic Products | 2.99 | 2.39 | 45 | 15 | 10 | 5 | 35 | 5=351 | 55 | 19 |
| (H) Chemicals & Chemical Products | 12.02 | 11.93 | 107 | 69 | 24 | 45 | 83 | 11111 | 276 | 41 |
| (I) Non- Metallic Mineral Products | 2.56 | 2.52 | 26 | 9 | 3 | 6 | 23 | 225 | 42 | 2 |
| (J) Basic Metals Alloys & Metal Products | 10.75 | 8.34 | 69 | 53 | 20 | 33 | 49 | 696 | 203 | 10 |
| (K)Machinery & Machine Tools | 8.93 | 8.36 | 107 | 56 | 23 | 33 | 84 | 903 | 312 | 43 |
| (L) Transport Equipment & Parts | 5.21 | 4.29 | 33 | 21 | 3 | 18 | 30 | 287 | 101 | 0 |

Source : Office of the Economic Advisor

working class family). Since it is based on the final prices of goods at the retail level, it is considered as a cost of living index. This index is constructed on a monthly basis and is released with a one month lag.

Beacon Management Review 2012

Within the Consumer Price Indices, there are four sub-indices that are based to capture price levels across different types of consumers. They are:

1. CPI-Industrial Workers
2. CPI-Urban Non-Manual Employees
3. CPI-Agricultural Laborers
4. CPI-Rural Laborers

While the Labour Bureau (under the Ministry of Labour and Employment) prepares and publishes the CPI-IW, CPI-AL and CPI-RL, the CPI-UNME is compiled and released by the Central Statistical Organization (under the Ministry of Statistics and Programme Implementation). Among the four measures of CPI, the CPI for Industrial workers (IW) has a broader coverage than the others. The CPI-AL, CPI-RL and CPI-UNME are designed for specific groups of population with the main objective of measuring the impact of increase in prices on rural and urban poverty. CPI-UNME has been discontinued and CSO has started releasing CPI-Rural and CPI-Urban inflation since Jan-2011.

Comparison:

Most countries use the CPI as a measure of inflation, as this actually measures the increase in price that a consumer will ultimately have to pay for. It is pointed out that WPI does not properly measure the exact price rise an end-consumer will experience because, as the name suggests, it is at the wholesale level. Also, out of the 676 commodities included in the index, many have ceased to be important from the consumption point of view. However, major criticism of WPI is it does not include services which form 60% of the Indian economy.

So why is India not switching over to CPI?

Though conceptually, the CPI is a better indicator of demand side pressures than the WPI, there are quite a few advantages in using WPI:

1. WPI is computed on an all-India basis, while CPIs are constructed for specific centres and then aggregated to an all-India index. There is no single CPI that is representative of the whole country.
2. It is available at high frequency – WPI inflation at fortnightly lag vs. CPI inflation at monthly lag. Then two components of WPI are released on a weekly basis giving weekly information on inflation trends.
3. It is available for all commodities' and for major groups, sub-groups and individual commodities. WPI has a broader coverage than the CPIs in terms of the number of commodities, quotations and inclusion of non-agricultural products and tradable items.

Beacon Management Review 2012

Table 2: Features of the four CPIs in India

| | | CPI IW | CPI- UNME | CPI -AL | CPI-RL |
|---|--|--|---|-------------------------------------|-------------------------------|
| 1 | Base Year | upto Dec 2005 base year = 1982 (after Jan 2006 new series with base year =2001) | 1984-85 | 1986-87 | 1986-87 |
| 2 | Population Group | Industrial workers relating to factories, mines, plantation, railways, public motor transport undertakings, electricity generation and distribution establishments and ports and docks | Consumers having Non- manual occupations in the non-agricultural sector | Household of Agricultural labourers | Households of Rural Labourers |
| 3 | Centres | 76 Centres (base year 1982) 78 Centres (base year 2001) | 59 Centres (34 centres are common with CPI-IW) | 20States (600 villages) | 20 States (600 villages) |
| 4 | Coverage: Goods & Services with weights | | | | |
| | Food Beverages and Tobacco | 60.15(base year = 1982) 48.39(base year = 2001) | 47.13 | 72.94 | 70.47 |
| | Fuel & Light | 6.28(base year =1982) 6.42(base year =2001) | 5.48 | 8.35 | 7.9 |
| | Housing | 8.67 (base year =1982) 15.29 (base year =2001) | 16.41 | - | - |
| | Clothing & Footwear | 8.54 (base year =1982) 6.58(base year =2001) | 7.03 | 6.98 | 9.76 |
| | Miscellaneous | 16.36 (base year = 1982) 23.32 (base year =2001) | 23.95 | 11.73 | 11.87 |
| | Total | 100 | 100 | 100 | 100 |
| 5 | Basis for Weighting Diagram | 1. Working class family income and expenditure survey (1981-82) for old series (1982) 2. Consumption pattern of the working class population at all the 78 selected centres across the country during 1999-2000 for new series (2001) | Family Living Survey (1982-83 and 1999-2000)- NSSO | 38th Round (1983)- NSSO | |
| 6 | Methodology | Laspeyres Index Formula | | | |
| 7 | Source | Labour Bureau, Govt. of India | cso, Govt. of India | Labour Bureau. Govt. of India | Labour Bureau. Govt. of India |

Hence, despite the criticisms, WPI remains the focal point of inflation discussion in India. With CPI-Urban and CPI-Rural indices available may be over a period of time focus shifts to CPI inflation.

Causes of Inflation

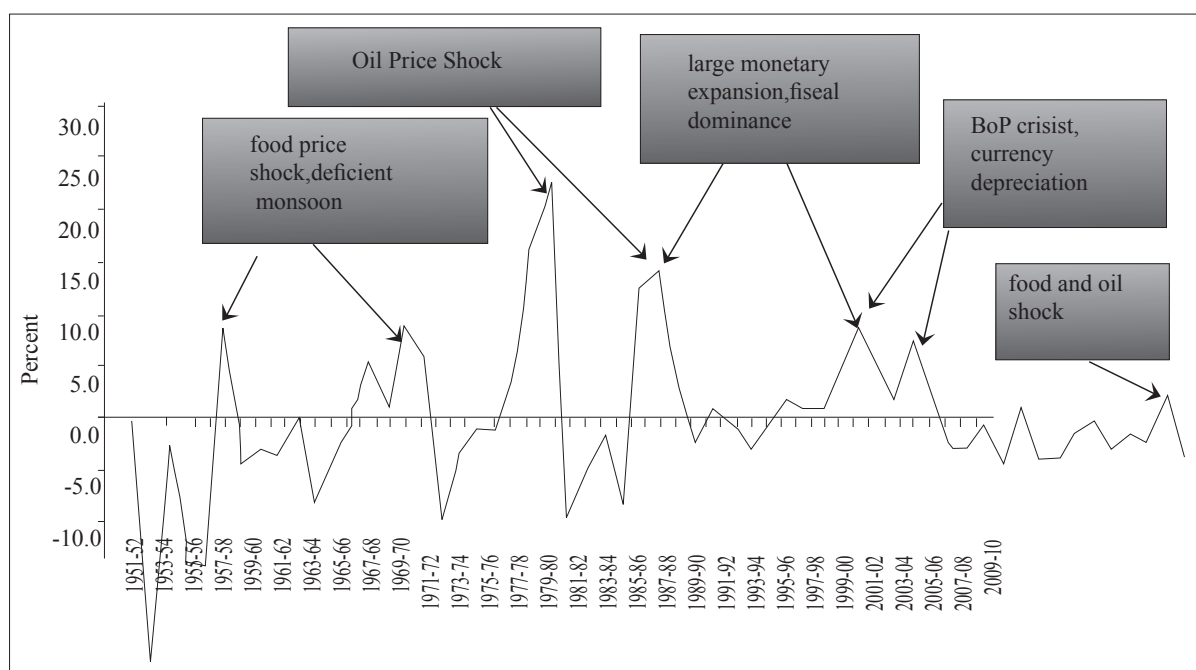
Both supply and demand side pressures have been responsible for the inflationary surge seen

today in India. Food and fuel prices, reflecting supply-side forces and the prices of manufactured goods, reflecting demand-side ones, all contributed significantly to the recent rise in inflation.

The Indian economy has always been vulnerable to inflation shocks, which have caused uncomfortable spurts in prices across the board. Fig.2 identifies some major shocks to the system, all of which required strong policy responses. As is evident from the graph, the vulnerability of the Indian economy to supply shocks on the food and energy fronts is persistent. Sharp depreciation of the rupee in the midst of an oil shock has also played a role on one occasion. While the demand driven inflation shocks can be avoided by prudent monetary and fiscal policies, the vulnerability to supply shocks in the form of a failed monsoon or a surge in oil prices will obviously remain.

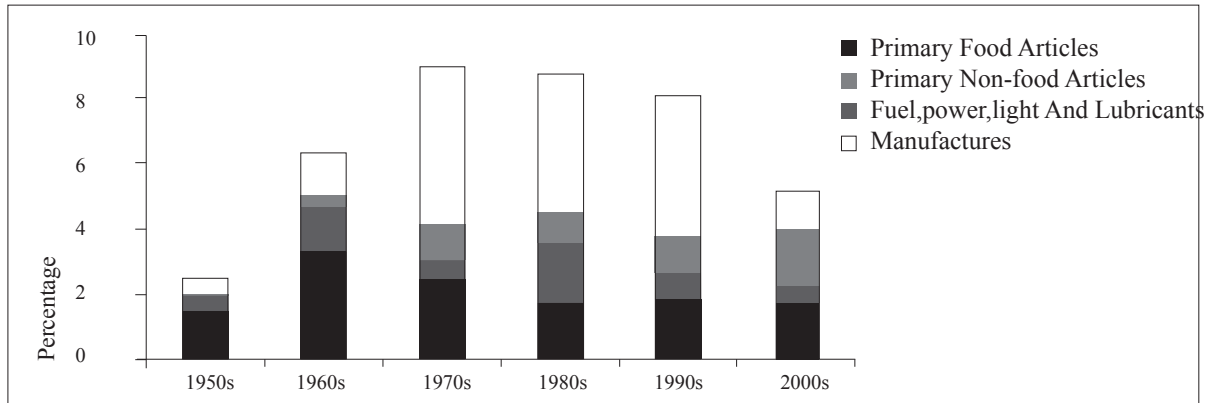
Fig.3 shows how the relative contributions to inflation have changed over the decades. Food has been a steady source of inflation over the entire period. Energy became a significant factor during the 1970s, following the first oil shock of 1973. It has persisted in its contribution since then. Adding up the two provides the overall contribution of supply-side factors, which, as the graph suggests, have persisted in one form or another through the entire period. Fig.3 also displays the positive impacts of effective supply response. The contribution of manufactured goods to inflationary pressures has declined significantly over the decades. This decline can be attributed to increasing effectiveness of policy reforms in increasing domestic capacities and competition and integrating domestic markets with the global supply chain.

Graph 2: Major sources of high inflation



Source: Reserve Bank of India

Graph 3: Sources of inflation



Source: Reserve Bank of India

1. One major reason for inflation is getting more money in the market. The Governments contributes heavily to this problem by printing money to fund the deficit, to pay extra salaries, and to provide subsidy. Unless the Government looks at its own revenue and expenditure gap and reduces to a manageable level, inflation will remain a concern.
2. The other significant problem lies in supply side. India is amongst the world's largest wasters of food and faces a potential challenge to provide food security to its growing population in light of increasing global food prices and the declining rate of response of crops to added fertilizers. It is estimated that around 20-30% of the total food grain harvest is wasted annually due to gaps in the cold chain such as poor infrastructure, insufficient cold storage capacity, unavailability of cold storages in close proximity to farms, poor transportation infrastructure, etc. India produced a record 2,410 lakh tons of food grains in the agricultural year 2010-11 according to the Fourth Advanced Estimates on crop production for the year. At present the government has a storage capacity of 625 lakh tons of food grains as against burgeoning stocks at 654 lakh tons. As a result, a huge amount of food grains is left in the open to rot and finally turn unusable for human consumption. This creates an artificial gap between the demand and supply of food grains.
3. Additionally, inefficiency in basic industries and lack of infrastructure create their own bottleneck causing price rise of commodities. Transporting goods from railways is much cheaper than by roadways. But there is a dearth of capacity in railways. The result is that major goods are transported by trucks, which run on bad roads, which further increases cost in the form of fuel.
4. Sovereign debt concerns in the euro area pose a major downside risk to overall

growth outlook. The absence of a credible solution to the euro area problem is weighing on global growth prospects even as recent data suggest that there is some improvement in the US recovery. Continuing uncertainty in the euro area will adversely affect Indian growth through trade, finance and confidence channels.

5. Capital inflows to India have slowed down on account of portfolio re-balancing by FIIs due to global uncertainty. This raises concerns, especially because the current account deficit of India has widened. The exchange rate has already come under significant pressure, which has also added to inflationary pressures. If the global situation does not improve, capital inflows could continue to be adversely affected. In this scenario, the size of the current account deficit poses a significant threat to macroeconomic stability.
6. The fiscal deficit of the government has remained elevated since 2008-09. At the current juncture when there is a need to boost private investment, the increase in fiscal deficit could potentially crowd out credit to the private sector and add to inflationary pressures.
7. As regards food, the pressures in the Indian economy are predominantly domestic. The growing demand supply imbalance, more so in protein based food items, significant increases in rural wages, particularly in the post-MGNREGS period, large increases in minimum support prices (MSPs), high global food prices, uncertain monsoon, rigidities in supply chain - all these factors have made food inflation remain high on a sustained basis.
8. Besides food, fuel has been another major source of price pressure, which is directly linked to international trends in crude petroleum prices. In India, changes in international crude prices are not fully passed through to domestic prices of petroleum products, because of the administered pricing mechanism. While petrol prices have been deregulated since June 2010, prices of diesel, LPG and PDS kerosene are still regulated to insulate consumers against high global crude oil prices, which, however, inflate the subsidy bill with every increase in oil prices. The revenue loss incurred by retailers on selling fuel below cost is split between the government and the oil firms. Fuel retailers Indian Oil Corp (IOC), Bharat Petroleum (BPCL) and Hindustan Petroleum (HPCL) currently lose a record Rs 13.53 on selling every litre of diesel, Rs 29.99 per litre on kerosene and Rs 287.00 per 14.2-kg domestic LPG cylinder. IOC, HPCL and BPCL lost Rs 97,300 crore in revenue on selling diesel, LPG and kerosene at government controlled rates during the first nine months of the current fiscal. Of this, the upstream companies have been asked to make good 37.91 percent or Rs 36,894 crore. The government has paid a total of Rs 40,912 crore, or just over half of the revenue loss, in cash subsidy to the retailers. While in the short-run the impact on inflation gets suppressed through administered pricing, inflation is actually inbuilt in the system. This is because the subsidy bill increases the fiscal deficit. To finance this deficit government will need to print money which will further lead to inflation. Moreover, subsidized pricing does not encourage the desired

level of energy conservation, which is critical given our high level of dependence on oil imports.

9. The inflation process thus started from primary food and fuel, and these two together accounts for as high as 29 per cent of total weights in WPI. The increase in these prices spills over to non-food and non-fuel (or the core) inflation through both higher input costs and higher inflation expectations getting reflected in wage revisions. In the presence of strong demand conditions, the spillover is faster, causing a generalized inflationary process.
10. Another significant development in the past few months is the depreciation of the exchange rate, and its inflationary impact working against what the tight monetary policy actions intend to achieve. Excessive volatility in exchange rate is a potential source of macroeconomic instability, and accordingly must be contained to ensure a stable macroeconomic environment. The Indian rupee has depreciated by about 20 per cent against the US dollar since July 2011, and this has been feeding into the core inflation. Thus exchange rate depreciation has emerged as a new shock and is an area of concern.

Impact of Inflation on the Economy

Though inflation is the sign of a growing economy, it has an adverse effect on the economic conditions of a nation if it goes beyond the comfort level.

1. Existing creditors will be hurt as high inflation can sometimes result in negative real interest rates. Ex: If the inflation is touching 10% and the interest rate on fixed deposit is 9% it is then giving a negative return of 1%.
2. It lowers the real value of savings. As the prices increase, the purchasing power of income reduces and the consumer has to shell out more money from his pocket to buy the same products. Therefore his savings get eaten up.
3. As savings get reduced, automatically investments will reduce, affecting the economy negatively. This impacts foreign sentiments and adversely affects the overall growth.
4. Since the consumer is averse to spending and the businesses are not making any money, the unemployment levels go up.
5. If domestic inflation remains persistently higher than those of the trading partners, it affects external competitiveness as the products and services are now costlier. Exports reduce and imports increase, making the current account deficit wider.

To control inflation, central bank takes monetary actions and the government takes fiscal measures.

Monetary policy is the process by which the monetary authority of a country controls the supply

Beacon Management Review 2012

of money, often targeting a rate of interest for the purpose of promoting economic growth and stability. The official goals usually include relatively stable prices and low unemployment.

Fiscal policy is the use of government expenditure and revenue collection (taxation) to influence the economy. Governments can influence macroeconomic productivity levels by increasing or decreasing tax levels and public spending. This influence, in turn, curbs inflation, increases employment and maintains a healthy value of money.

These two policies are used in various combinations in an effort to direct a country's economic goals.

Current Scenario

GDP growth moderated from 7.7 per cent in Q1 to 6.9 per cent in Q2 of 2011-12. This was mainly due to deceleration in industrial growth from 6.7 per cent to 2.8 per cent. GDP growth is projected to be around 7.2% for this fiscal.

Headline WPI inflation, which averaged 9.7 per cent during April-October 2011, moderated to 9.1 per cent in November and further to 7.5 per cent in December. This decline was driven largely by a decline in primary food and non-food articles inflation.

Primary articles inflation, which was in double digits for over two years from September 2009 to October 2011, moderated to 8.5 per cent in November and further to 3.1 per cent in December. This was essentially on account of seasonal decline in vegetable prices. However, inflation in protein items – eggs, fish, meat, milk and pulses – remained in double digits.

Fuel group inflation remained high at 14.9 per cent in December 2011, reflecting high global crude oil prices and rupee depreciation. In fact, there is sizeable suppressed inflation in the fuel-group as administered prices do not fully reflect the market prices.

Core inflation declined from 8.1 per cent in October to 7.9 per cent in November and further to 7.7 per cent in December. This indicator is sensitive to international commodity prices and currency movements and the recent rupee depreciation has accentuated price pressures as reflected by this indicator.

Measures to Control Inflation

RBI has mostly been responsible for trying to rein in the inflation monster by influencing the interest rates since 2010. The cash reserve ratio was increased in January 2010 and in March 2010, the first of a series of rate hikes. This was done to address the rapidly mounting demand-side inflationary pressures. Between January 2010 and October 2011, the Reserve Bank cumulatively raised the cash reserve ratio (CRR) by 100 basis points and the repo rate 13 times by 375 basis points. The focus of this monetary policy stance was to contain the persistently high inflation and to anchor inflation expectations even as it meant sacrificing some growth.

Beacon Management Review 2012

In its Mid Quarter Monetary Policy Review 2011-12, the RBI adopted a wait-and-watch strategy by keeping both the CRR and the repo rate unchanged. In its Third Quarter Monetary Policy Review 2011-12, the RBI decided to cut the CRR by 50 basis points from 6.0% to 5.5%. This reduction in the CRR is expected to inject around Rs32,000crore of liquidity into the system and eventually have a multiplier effect, resulting in the softening of interest rates. The repo rate and the reverse repo rate were kept unchanged.

(Simply put, the CRR is the amount against deposits which commercial banks have to keep as liquid assets, such as cash, with the RBI. The rate at which the RBI lends money to commercial banks is called repo rate and reverse repo rate is the rate at which the RBI borrows money from commercial banks. Right now the CRR is at 5.5%, repo rate at 8.5% and reverse repo rate at 7.5%)

Increasing policy rate is just one of the steps in curbing inflation. Unless we take care of other bottlenecks in the economy, it will not go away. The Government should focus more on building infrastructure, putting a lid on deficit, and improving the supply side economics to build a comprehensive strategy to tame it. Undoubtedly, in a globalized world, central banks and Governments do not have full control over their economy. For example, rise in oil prices and inclement weather are some of the events over which central banks and Government have no control. However, this should not stop the Government and central banks to push for the structure reform in the economy. Otherwise, changing policy rates will not do much to tame inflation. The secret to accelerating growth while still being able to keep inflation in check over long periods of time is in the speed and efficiency of the supply response. As long as the growth in supply keeps pace or even exceeds the growth in demand, inflationary pressures do not sustain. Supply can be expanded by enhancing domestic capacity or by tapping into global sources.

Public finances are deteriorating with a rising subsidy bill, lower-than-expected tax revenues, as well as mounting public borrowing. The level of the fiscal deficit and the quality of government expenditure have significant influence on inflation. The fiscal deficit, which stood at 6.7% of GDP in the first half of 2011-12, has emerged as a key concern of economists who say it could be as high as 7% for the full year - spelling higher borrowing and bigger interest payments. The government had proposed to bring down the fiscal deficit in the current fiscal to 4.6 per cent of the GDP from 4.7 per cent a year ago. However, the surge in subsidy bill and poor realization from disinvestment has made the task difficult. The most sensible way to contain the fiscal deficit is to deregulate diesel prices and allow third-party marketing of all petro-fuels.

Global commodity prices and, particularly, crude oil prices will have an impact on overall inflation. This requires policy initiatives towards energy conservation, efficiency in energy usage, recourse to alternative sources of energy, and step up in domestic exploration of oil and gas.

To address the challenge of food inflation, the overall policy framework for agriculture needs to change. The government needs to rethink price policy interventions. There is a case for revisiting the subsidy regime for a number of reasons, including the pressure it exerts on food

inflation. Subsidies on inputs (fertilizer, electricity, irrigation) to incentivize production entail a large fiscal burden. There is a moral hazard here like in any subsidy. If the amount spent on subsidies could be diverted to augment capital formation in agriculture and creation of rural infrastructure, higher productivity would raise the income of farmers while lowering the prices for the consumers.

The supply chain through which farm products move to reach the final consumers is a major source of price pressures and needs to be improved. There are also several proposals on the table for improving supply chain management. Given that protein food inflation stems especially from perishable items such as milk, eggs, meat, fish, vegetables and fruits, the case for a better supply chain management becomes stronger. The most actively discussed option is allowing FDI into multi-brand retail. A CRISIL Research study estimates allowing foreign direct investment in multi-brand retail could reduce wastage by about Rs 63,000 crore in the fruit and vegetable subsectors alone every year, or about 30 percent of total output.

An extremely disorganized distribution network and disheveled infrastructure compound the shortage problem. The issue of warehousing has to be addressed to improve storage to cut down on wastage in fruit and vegetables. The current Union budget has focused on aspects of food preservation, storage and logistics. The process to create new storage capacity of 15 lakh tons through private entrepreneurs and warehousing corporations has been fast-tracked. The decision to create 2 lakh tons of storage capacity under the Public Entrepreneurs Guarantee (PEG) Scheme through modern silos has been taken. It is necessary for the country to focus on investing in food warehouses, irrigation systems and power plants, failing to do which will push the prices up further and leave the economy sagging.

Conclusion

The long-term growth prospects of the Indian economy provide an enormously attractive investment environment for a range of businesses. The challenge, therefore, is to keep inflation in check over long periods of time, allowing the economy to grow at its potential rate with minimal disruptions and deviations. The inflation rates that the economy is now experiencing, both from the supply and the demand sides, are clearly a matter of great concern. It is incumbent on the government and the central bank to use all the means at their disposal to rein inflation in. This is the best way in which the macroeconomic environment can contribute to a positive business climate.

References

- [1.] http://www.rbi.org.in/scripts/bs_viewspeeches.aspx
- [2.] http://www.mospi.nic.in/Mospi_New/site/home.aspx
- [3.] <http://www.labourbureau.nic.in/>

Beacon Management Review 2012

[4.] <http://www.eaindustry.nic.in/>

[5.] <http://www.mostlyeconomics.wordpress.com/>

[6.] <http://www.investopedia.com/articles/#axzz1klxYx6GE>

[7.] <http://www.indiatoday.intoday.in/>

[8.] http://en.wikipedia.org/wiki/Main_Page

Effect of Plastic Money on Money Supply in India

- Rachit Baxi

Abstract

The plastic money is replacing the traditional use of cash and paper money. The Digital and Electronic payments have brought about a revolution in the transaction mechanism. This paper discusses the effect of plastic money on Indian Economy. Its effect on the money supply, money demand and the money multiplier is paramount and has been studied in this paper. Also the measures of money supply M1, M2 and M3 have been seen and their impact on the money supply has been studied.

Keywords

Credit card transactions, Plastic Money, Liquidity, Money Multiplier, Money Supply, Money Demand, Earnings, Interest rates, Inflation.

Introduction

The expansion of financial systems and globalisation has led to an increased awareness of credit cards by the consumers irrespective of their age and gender. In US alone, the past couple of years have seen a rise of 25% in the credit card usage for buying gasoline. This drastic change happened due to the easy availability of credit and liquidity crunch due to the recent downturn in the world economies.

If we look at a developing country like India, the effect has been much more prominent. The table below shows the expected rise in the transactions through various mediums.

Beacon Management Review 2012

| Transaction | Revenues (\$ U.S. billions) | | Compounded Annual Growth Rate |
|-------------------------------|-----------------------------|-------------|-------------------------------|
| | 2008 | 2015 (Est.) | |
| Cash and Paper | 7.4 | 19.5 | 14.80% |
| Credit Cards | 1.0 | 5.1 | 27.20% |
| Transaction banking | 4.9 | 14.6 | 17.10% |
| Debit Cards | 0.2 | 2.0 | 42.90% |
| Internet and e-commerce | 0.1 | 0.8 | 33.20% |
| Mobile Payments | 0.1 | 1.1 | 51.10% |
| Cross Border | 1.8 | 2.4 | 4.20% |
| Total Payments revenue | 15.5 | 45.5 | 16.80% |

Table 1: Revenues and Growth rates of various transactions

Source: McKinsey India Payments Map

Thus, we can clearly see the changing trend in the payments methodology. In 2008, about 45% of the payments were through cash. However, it is estimated that in 2015 this number would come down to nearly 40 – 42% range. This is mainly due to the use of plastic money like debit and credit cards and also the use of e-commerce and internet protocols.

The credit card holders in the country are expected to increase to about 38 million in 2015 as against 18.3 million in 2010. The number is expected to more than double in a span of 5 years. According to RBI data, customers spent an average of Rs 2,685.97 per transaction in 2009-10, up from Rs 2,518.4 in 2008-09. Thus, not only the number of card holders but also the transaction amount per swipe is on a rise. Now, the Indian economy grew at an average of 8% year on year for the last 3 years. If the trend continues for the next 5 years, the average spending per consumer would increase by about 40 – 50%. This would give a tremendous boost to the use of debit/credit cards and internet shopping. Also, the growing awareness about changing technology and rise in internet users gives a clear indication of the change in the trend from cash to credit cards.

Methodology

Measures of Money Supply

Broadly there are 3 different measures of money supply: M1, M2 and M3.

M1 consists of money that can be directly used for payments of goods and services. This can be currency, checkable deposits and traveller's cheques. This is used as a measurement for economists trying to quantify the amount of money in circulation. The M1 is a very liquid measure of the money supply, as it contains cash and assets that can quickly be converted to currency.

Beacon Management Review 2012

M2 has got 4 additional assets in the form of Savings Deposits, Small denomination time deposits, money market deposit accounts and Money Market Mutual Fund shares (Non Institutional). M2 is a broader classification of money than M1. Economists use M2 when looking to quantify the amount of money in circulation and trying to explain different economic monetary conditions.

M3 has got following assets over M2: Large denomination Time Deposits, Money Market Mutual Fund shares (Institutional), Overnight and Term Repurchase Agreements and Overnight and Term Eurodollars. This is the broadest measure of money; it is used by economists to estimate the entire supply of money within an economy.

The results from all the 3 multipliers vary in different situations. However, we will consider M3 as the reference measure of Money Supply.

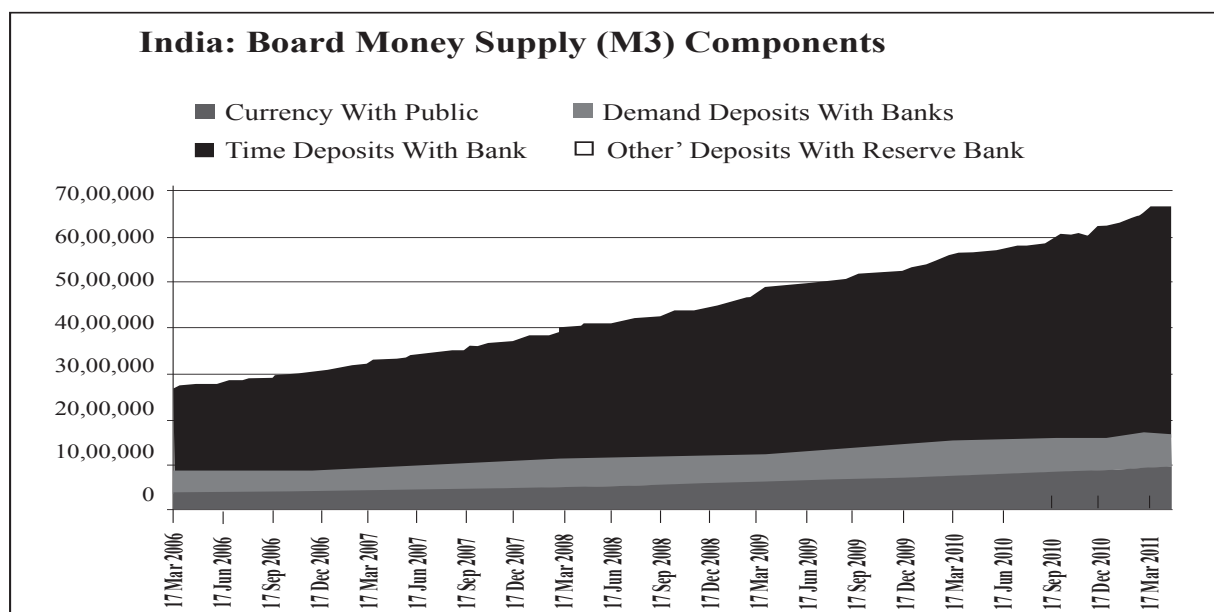
Money Supply in India: Trends

Table 2: Money Supply in India: Trends

| Year | Jan-09 | Jan-10 | Jan-11 | Jan-12 |
|-----------------------------------|-----------|-----------|-----------|-----------|
| Money Supply M3 (CroreRs.) | 45,54,150 | 53,39,406 | 64,99,488 | 71,92,572 |
| Growth year-on-year | 13.3 | 17.24 | 21.73 | 10.66 |

As seen from the table, the money supply has been on a constant rise in the country. The growth rate has reduced in the last year owing to the measures taken to curb high prevailing inflation levels. The money supply M3 depicts the true picture of the money available in the system.

Graph 1: Board Money Supply Components



Source: RBI Data

Beacon Management Review 2012

The figure above shows the total money supply in the country from 2006 to 2011. There has been a continuous rise. The maximum gain is in the Time Deposits component of the money supply M3.

Now we can see that the currency circulation in India in 2006 was around Rs. 5,00,000 crore and the total money supply was around 27,00,000 crore. Thus, there was around 17% of the total money supply in form of currency. However, this figure rose to 67,00,000 crore in 2011, although the physical currency formed about 14.7% which is much lesser than the 2006 levels. Hence, the rate of increase of physical cash in the country is constantly reducing, although the total money supply is increasing linearly.

Now, when we look at the demand side of money, there has been a similar trend.

The demand for money is mainly due to 3 reasons:

- 1) Transaction
- 2) Precaution and
- 3) Speculation

Transaction and Precaution are a function of Earnings of common people. People spend a part of their income on necessities and luxuries which becomes the consumption. This forms the transaction money. Also, some part of their income is kept as cash as a precautionary measure. The rest of it is the speculative money demand caused by the banks due to a change in their interest rates. The sum total of all these is the total demand for money existing in the country.

The trend is shown as follows:

1960's: Demand of liquid money = 20% of GDP

2009 : Demand of liquid money = 12% of GDP

2010 : Demand of liquid money = 15% of GDP

Now there are 2 reasons why the money demand increases or decreases.

The rising inflation makes the commodities expensive and it requires more amount of money to buy the same commodities. This increases the demand for money in the country as a whole.

The increase in Demand of money in 2010 was due to the lag effect of high levels of inflations existing in 2008-2009.

The excessive use of debit and credit cards reduces the currency circulation in a country. The effect of net banking and online transactions can also be seen in the demand of physical money in the country. Hence, as people become more familiar with advancing technologies and increase the use of plastic money and online transfer the demand for physical money reduces.

The 2 factors give a net effect on the money demand in the country.

Furthermore, the Liquidity in the country is a function of Consumer's income and the prevailing interest rates.

Thus $L = f(Y, i)$

Beacon Management Review 2012

Now, as the inflation level increases, the Savings Banks interest rate offered by the bank increases. Now, to curb this, the Central Bank has to bring in policy measures by increasing the CRR, SLR, Repo and Reverse Repo rates to reduce the liquidity in the system. The reduction in the money supply in the country tries to curb the inflation level.

When the CRR is increased banks have to keep a larger part of their cash as reserves. They are able to lend lesser money to the consumers. Hence, the money supply reduces, though the demand of money increases. Now, when the commercial banks have lesser amount to lend, they increase the lending rates and also the savings bank interest rate. Due to this the Investments fall down drastically reducing the growth factor. Hence, this ultimately results in the reduction of Money demand in the country.

Money Multiplier effect

Now the central bank infuses only a fraction of the money supply in the country. However, the multiplier effect increases the liquidity to match the total money requirement in the country. This

$$m = \frac{(1 + \text{CurrencyDrainRatio})}{(\text{CurrencyDrainRatio} + \text{DesiredReserveRatio})}$$

Currency Drain Ratio = Percentage of total money that people want to hold as cash

Desired Reserve Ratio = Cash Reserve Ratio (CRR) for the commercial banks

Results / Findings and Recommendations

Table 3: Multiplier Trends

| Year | Currency Drain Ratio | CRR | Multiplier, m |
|------------------|----------------------|------|---------------|
| 2007 | 6.22 | 6.00 | 8.69 |
| 2008 | 8.29 | 7.50 | 6.86 |
| 2009 | 8.37 | 5.00 | 8.11 |
| 2010 | 7.56 | 5.75 | 8.08 |
| 2011 | 8.96 | 6.00 | 7.28 |
| 2012 Predictions | 6.00 | 6.00 | 8.83 |
| | 6.50 | 6.00 | 8.52 |
| | 7.00 | 6.00 | 8.23 |
| | 7.50 | 6.00 | 7.96 |
| | 8.00 | 6.00 | 7.71 |
| | 8.50 | 6.00 | 7.48 |

Source: RBI data

The table above shows the trend of multiplier from 2007 – 2011.

Between April 08-Aug-08, multiplier had a fall from 6.8 to 6.2 levels due to the increase in

Beacon Management Review 2012

CRR by RBI from 7.5% to 9%. This increase in CRR was to control inflation by reducing liquidity. RBI had no option but to tighten the policy. RBI raised CRR multiple times. In Sep-08, the Indian economy was hit by global financial crisis and RBI started easing the policy rates drastically. In successive events, CRR was lowered to 5% by Jan 09. This increased the money multiplier to 8.1 levels by Apr-09. As economy stabilized, multiplier increased further to 8.2 levels in Oct-09. Now, RBI started increasing policy rates. It gradually raised the level of CRR to 5.75% in multiple stages. Owing to this, the multiplier started declining. It came close to 8.0 in Apr-10. However, the CRR has remained constant for the past year and hence the volatility in money multiplier is relatively constant. There is an easily observable difference that holds when we compare this with other developed economies. If we take the case of countries like UK and US, in spite of central banks easing policies the money multiplier has failed to pick up. So the use of unconventional means of raising money has caught momentum in these countries.

Now, if we keep the CRR constant at 6% for 2012 and see the various estimates of Currency-Drain Ratio, we observe that as C (currency drain ratio) increases, the multiplier m reduces. Hence, more the amount of money people want to hold in cash, lesser is the multiplier effect.

But, we know that the credit transactions have been on a rise in India. This enables people to hold fewer amounts of cash with them. Instead they prefer to use the swipe cards to make any transactions. Hence, with the increase in plastic money, the need for physical money in the system goes down. Due to this the Cash-Drain ratio goes down. And hence, the multiplier m increases. Now, with the same liquidity in the system, the consumption goes up. As a result the central bank needs to print less money to suffice the needs of people.

Thus, with an increase in plastic money, the economy could be fuelled much faster without the printing or inducing excess cash in the system.

Conclusion

There would be a definite increase in the money multiplier in the country. Hence, the control of RBI or Central bank on the liquidity floating in the system would reduce. Presently, RBI uses CRR and REPO rates to effectively control the money present in the system. This gives it a stronghold on issues like Inflation, Growth, Consumption, Demand and Supply aspects of the economy. With increasing use of digital money, the liquidity in the country would no longer be an issue, since the banks could effectively utilize their deposits to generate multiple levels of income and liquidity in the system. This would be a sense of worry for the Central Authority, as then the consumers would be more than willing to spend for luxury items. The credit period would boost the consumption of people and that too without the need of actual money. The transactions are digital and even the money transfer takes place just on paper. Hence, the multiplier would be many-folds as of present scenario.

However, the apprehensive nature of people and the fear of banks owing to the high default rate by consumers do not allow the immediate increase in the credit card transactions in the country. Also, most of the people in India are still comfortable using traditional methods like paper and cash transactions. Hence, it will take more than just a few banks to boost the level of confidence in the people to jump to new avenues of transactions which are much simpler and offer many more benefits. Whatever the case may be, but sooner or later there is going to be a definite shift in the transaction patterns of people in India. The use of plastic money is rising, and with advancing technology the rise is just going to be exponential. This would bring a definite boost to the economy by increasing the money supply in the country.

References

- [1.] Prakash Singh (2009) - Structural Break, Stability and Demand for Money in India
- [2.] Takeshi Inoue (2008) - An Empirical Analysis of the Money Demand in India
- [3.] McKinsey (2009) - A Strategic Review of India's emerging payments market
- [4.] Scott Schmitt (2008) - Credit Card Market: Economic Benefits and Industry Trends
- [5.] Journal of Finance and Accountancy – The Swipe and Spend Economy
- [6.] Reserve Bank of India (July 2011) – Press Release
- [7.] Statements of Money Supply – RBI
- [8.] N. Gregory Mankiw – Money Supply and Money Demand
- [9.] Purna Chandra Padhan- Stability of Demand for Money in India: Evidence from Monetary and Liquidity Aggregates
- [10.] <http://www.rbi.org.in/home.aspx>
- [11.] <http://www.rbi.org.in/scripts/NotificationUser.aspx?Id=6234&Mode=0>
- [12.] IMF, www.Property-Investing.org
- [13.] <http://www.creditcards.com/credit-card-news/research-statistics-stories.php>
- [14.] www.business-standard.com
- [15.] www.timesofindia.indiatimes.com
- [16.] www.economictimes.indiatimes.com
- [17.] www.economywatch.com
- [18.] <http://business.rediff.com/report/2010/may/18/number-of-credit-card-holders-slips-to-18-point-3-million-in-march.htm>

Is There a Property Price Bubble in China?

-Bharath Harish

Abstract

“Safe as houses” is the famous and an old saying. By the look of it, we even have exceptions to an old adage like this. Guessing the exception is not worth a prize either. It’s always the country which has its idiosyncrasies in every walk of a life, which is on the way of becoming a standing testimonial to the fact the houses or real estate, in a literal sense, is no more a safe form of investment.

I am talking about the “Dragon economy” of the world, China. During the recent past (5 to 10 years), there has been an observation that the property prices are sky rocketing and yet the occupancy rates are atrociously low. Recent survey by the Hong Kong based economist shows that there are huge malls built where most of the shops are empty and huge apartments built where occupancy again is too low. The research also goes one step ahead and shows that China is adding at least 10 cities every year to the country!

Now comprehending these facts are sometimes is not possible for a sane, logical and a simple mind like me so I went a little deep into understanding what is happening in the country. That is exactly the purpose of this paper. This is a record of my understanding of the property prices conundrum of China. The secondary observations which were required to form my opinions have stemmed from various resources available on the internet. I have quoted my sources where ever necessary,

The paper is roughly categorized into 3 sections. In the first part, I have tried to find out, how property or real estate really affects the engine of an economy. This gave me valuable insight into how a country can really grow if the real estate sector really booms. Off course, one must never forget what happens to an economy when the financial system is not regulated properly, especially when we have the example of the US economy plunging into a recession because of real estate price bubble. However, greedy countries have short memories.

In my second part, I have tried to figure out why the craze for property in China, how and why is the government spending money by giving credit and mortgages at, say, really cheap rates. I have

also tried to explain the GDP calculation of China, how its vastly different from other nations and how is real estate helping the Chinese achieve their obsession of GDP growth.

In the last part, I have tried to establish that the property and asset prices in China are really a bubble and a correction is imminent. However, a correction can occur if the market forces takeover the command economy philosophy of Chinese governance and the consequences if the correction really happens.

The Impact of Property or Real Estate on the economy

According to one of the key economist named David Harvey, real estate can really rev up the engine of an economy because an increasing demand for real estate can actually create a lot demand in related sectors. Property sector plays a key role because it probably is the one of the sectors which is closely and significantly connected to many other sectors which drives the economy.

Let us understand how it actually happens. A real surge in demand for property or fixed assets, in parlance to property sector can create a demand in sectors like steel, cement and other construction materials sector which form the core of the manufacturing sector. Manufacturing sector, as we all know, really drives the GDP of an industrialized economy. It also makes people save a lot of money because people who really dream of buying houses have to do a lot of savings and hence it increases the investments and savings of a country, which bears a direct impact on the nation's GDP. So, Property sector has a huge bearing on the GDP of a country.

Let us take the example of China. According to the latest Goldman Sachs Report on the BRICS, Chinese economy is now a pre-dominant investment based economy where the investments in fixed assets form more than 60% of the GDP of the country. This is one of the reasons why, according to Helen Zhu, chief equity strategist China, for Goldman Sachs Chinese 12th 5 year plan focuses on increasing consumption to GDP ratio of the country.

Property prices can really drive the GDP of a country but it would be too simplistic to conclude that it is one of the best sectors a country should focus on to improve its GDP. The major reason is the time taken for realizing the demand. Any property, during construction, really creates a lot of demand for all the construction material sector making your GDP boom, banks lend money and hence drives up consumption and economy really performs well because all these factors positively contribute to the GDP growth. However, the contribution is in terms of quantity and not really quality because actual realization of demand happens once the construction is complete and if the property is not bought, it leads to a less quality of GDP because the finished product is not consumed.

An interesting point to note, as far as China concerned, is that the state is pumping a lot of money to encourage people to buy property. This is happen through banks lending credit and mortgages at very less interest rates to promote building of houses. This can create a problem very similar to what happened in the US in 2007 (sub-prime crisis). Having said that, it will be interesting to

understand what is causing the Chinese government to promote this behavior. For that we need to understand why Chinese obsession with the GDP growth which is covered in the next section.

China's Craze for Property, GDP Calculation and Obsession with GDP Growth

As far as GDP calculation is concerned, China is a different animal when compared to the rest of the world. Once we understand Chinese GDP calculation, its use and its importance, we can relate to why Chinese have a penchant to build property. One important thing which we have to keep in mind is that China is a command economy where the state dictates the proceedings that affect the economy of the country unlike a free market economy where market forces like demand and supply gap that drives the economy of a country.

For rest of the world, GDP is a byproduct of the actual progress of the country and GDP is an indication of the country's capability to produce goods. In China, GDP is more of a planning tool and before the year starts, they have a target for GDP growth in the particular year and then they plan suitably as to what has to be done to achieve this particular GDP. GDP calculation for china is very complex. Complex to the extent that printing their own currency adds to their own GDP!

It is quite incredible as to how they come up with GDP targets and keep meeting the targets year on year. This craze for GDP is directly connected to the amount of foreign investments that happen to the country. It is not rocket science to understand that better the GDP growth, higher the foreign investments because, GDP is considered one of the most comprehensive measures of the performance of a country. Hence the craze for property building and investments into fixed assets of the country because as mentioned before, property sector is a huge contributor to the GDP of a country.

Chinese craze for property also stems from the fact that a lot of urbanization has happened in China in the recent years. China is investment in the property where most of the property is in terms of building high quality infrastructure, high speed trains, roadways, huge malls and multiplexes. To testify this, one of the key statistics from IMF website indicated that more than 50% of the steel requirement and construction material is coming from China thus keeping the global capitalistic system alive.

All this sounds great as far as we can relate this to growth of China and its role in the global economy. However, economists think that as far as Chinese property craze is considered, the contribution to the GDP in terms of quantity is significantly high but quality of GDP is not good because as far as demand for real estate is concerned, it has reached a tipping point and many economists believe this entire property and pricing is concerned, it is a bubble. Bubble of a magnitude bigger than the US crisis during 2007. In the following section, I have tried to explain as to why this is a bubble.

Property Prices, Price Correction and its Impact

Property market however is displaying totally cataclysmic indications. Some of the statistics obtained using sources 1, 2 and 3 indicate that the prices of the property are held artificially high and not subject to market forces. Using the same sources we can see that Chinese have built enough apartments without vacancy. The new south mall in south china shows that of 2350 rental stores available in the mall, over 2350 are empty! Despite of all this, there is approximately 30 Billion feet under construction which means a 5*5 cubicle space for every citizen in china. These statistics ring bells in the years of any economist that the prices are artificially controlled by the state without demand and hence the entire property market is a bubble. So a price correction is a necessity because on the long run, market forces are expected to put pressure on command economy for price realization.

However, whether a correction is imminent is to be seen. A correction in the near future may not be imminent because of the mere nature of working of the country as a command economy. However, smart move has been made by the country in focusing on increasing consumption to GDP ratio (Source – Goldman Sachs report on China) to drive the economy towards a consumption based economy from a investment based economy. Price correction may not actually occur this has some over bearing consequences on the global economy and the Chinese economy also. Most important is the exposure of Chinese banks to the mortgages and loans. A bubble burst at this moment can push Chinese banks to the rocks and the government might have to take the responsibility of bailing out the banks that may not be able to save themselves. This can put sever pressure on the currency of the country and may have to devaluate the currency which can be counterproductive. The Chinese government has taken an important measure to avoid a major hiccup in this regard and that is monitoring FDI inflows into property market on the basis of a speculation (source 4). Chinese property bubble also can cause a huge global melt down because as a country it is driving exports of key sectors of some countries like Steel for Australia. A property bubble burst can severely hit this country which can collapse the global financial system like the effect caused by fall of Lehman Brothers in 2008. By looking at all these factors, one gets a notion that even though it is quite evident that the property market in China is a bubble. A price correction may not be imminent.

References

[1.] http://www.politico.com/news/stories/1109/29330_Page2.html

[2.] <http://www.youtube.com/watch?v=0h7V3Twb-Qk>

[3.] <http://www.time.com/time/magazine/article/0,9171,1971284,00.html>

[4.] <http://www.washingtonpost.com/wp-dyn/content/article/2010/01/10/AR2010011002767.html>

Stock Market Trends and Influencers in Bad Times

- Sagar S. Rachh

Abstract

The sub-prime crisis of 2008 has made one thing absolutely crystal clear – All the countries in the world are extremely interdependent. If one fails, it pulls down the others.

The sub-prime crisis was an event which occurred due to fundamental mistakes in the financial sector of United States of America, but it caused a financial Tsunami all over the world. There was hardly any place in the world which was unaffected by the game called 'Financial Innovation and Globalization'. Investors and wealth managers all over the world, be it London, Cape Town, Dubai, Shanghai or Sydney, were beaten and left completely shattered. Losses amounting to trillions of dollars buried the entire globe into a deep grave called Recession.

Even today, as we see the political and economic developments in Europe, it becomes clearly very evident that the financial world is tightly knit. A debt market burden which was felt too heavy for Greece (GDP- \$312 billion) is now also proving heavy for the bigger economies like Italy (GDP- \$2 trillion)¹. Trading partners of such distressed European countries are also facing the heat. The banking system across the globe and particularly Europe and North America is on the brink of another disaster. Any event (positive or negative) is seen to have a very visible impact on the stock markets all across the globe.

So what is it that is driving these stock markets on a bull or a bear ? Is it the fundamental strength of the local markets, the performance of the listed companies, highly influential investors or macroeconomic 'flowers' and 'bombs'?

In this paper, I have tracked the movement of global stock markets. These movements have been confined to the last four years (2008, '09, '10, '11). These stock indices are the most developed and respected indices globally. I have tried to find out the relations between them and also the effect of

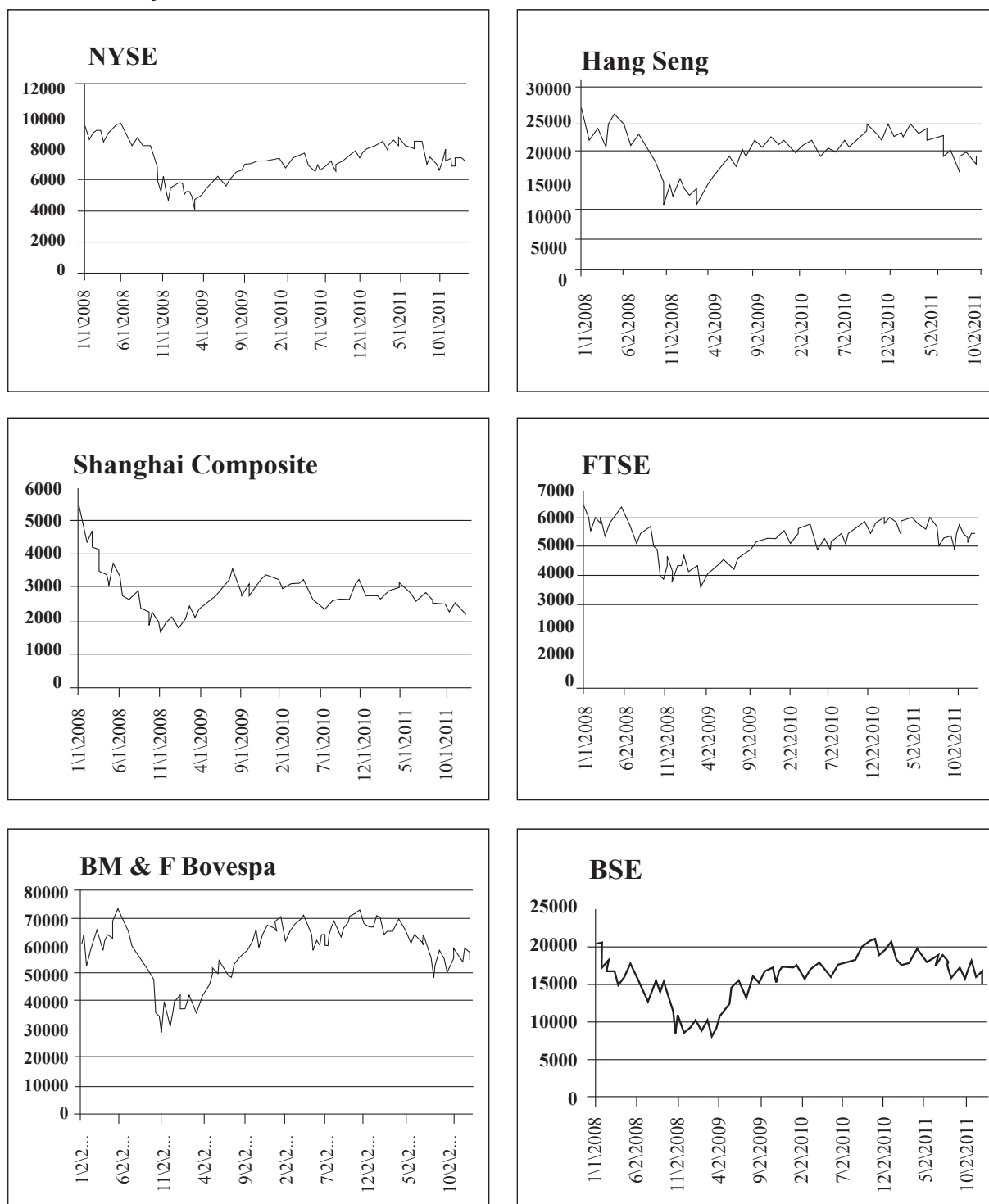
Beacon Management Review 2012

major international events on them.

On the basis of the findings of this research, I have tried to find out the actual reasons for the stock market movements globally.

Movements of major stock indices (From Jan '08 to Dec '11)

Graph 1: Major stock indices movement Jan 08-Dec 11



Beacon Management Review 2012

- The graphs on the earlier page make it evident that there was some kind of similarity in the movement of indices. Some patterns observed are:
- All the indices dropped by 50-60% in the second half of 2008. This bearish run in the global stock markets was due to the unfolding of the sub-prime crisis.
- All the indices went through a bullish run in the latter half of 2009. This was due to the monetary and fiscal easing that every economy went through.
- All the indices went through a phase of stability in the year 2010 as the major economies showed signs of recovery during the year.
- The year 2011, particularly the second half, showed signs of a milder downturn. This was due to the instability in the political and financial sector of Euro zone. A few other reasons for this downturn are the downgrading of US debt by Standard & Poor's and inflationary pressure on the Asian economies.

Statistical data

| <i>Index</i> | <i>Coefficient of Determination (R^2)</i> | <i>Regression coefficient</i> |
|-------------------------|--|-------------------------------|
| BSE | 0.36 | 1.57 |
| Hang Seng | 0.77 | 2.5 |
| Shanghai | 0.35 | 0.3 |
| FTSE | 0.86 | 0.5 |
| Bovespa (Brazil) | 0.42 | 5.56 |

Table 1: Relation between NYSE and other major indices

| <i>Index</i> | <i>Coefficient of Determination (R^2)</i> | <i>Regression coefficient</i> |
|-------------------------|--|-------------------------------|
| BSE | 0.6 | 3.59 |
| Hang Seng | 0.81 | 4.64 |
| Shanghai | 0.26 | 0.48 |
| NYSE | 0.86 | 1.68 |
| Bovespa (Brazil) | 0.61 | 12.09 |

Table 2: Relation between FTSE and other major indices

The above tables have been prepared using the data of the respective indices for the period January 2008 to December 2011.

Observations from table 1 and 2:

- Emerging markets like Hong Kong, Brazil and India move in sync with developed American and European markets. However, their regression coefficients are high which

Beacon Management Review 2012

relates to the high amount of volatility attached to their indices.³

- The high values of coefficient of determination (R^2) highlighted in both the tables show that the movement of these indices can be predicted reasonably by the movement of developed indices like FTSE and NYSE.
- The high value of R^2 between FTSE and NYSE shows that the developed markets show almost identical movements. However the NYSE is more volatile as compared to FTSE which is shown by the low value of regression coefficient for FTSE against NYSE.
- The low value of R^2 for BSE against NYSE shows and proves the fact that India was in a way resilient to the sub-prime crisis. This is because India rides on a domestically driven economy.

Table 3 shows correlation between the movement of all the six indices for the given period.

| | BSE | NYSE | Hang Seng | Shanghai | FTSE | Bovespa |
|-----------------|------------|-------------|------------------|-----------------|-------------|----------------|
| BSE | 1 | | | | | |
| NYSE | 0.603322 | 1 | | | | |
| HangSeng | 0.828438 | 0.882189 | 1 | | | |
| Shanghai | 0.511123 | 0.591388 | 0.676856 | 1 | | |
| FTSE | 0.761363 | 0.930839 | 0.908842 | 0.517422 | 1 | |
| Bovespa | 0.877421 | 0.651864 | 0.85823 | 0.53179 | 0.783738 | 1 |

Table 3: Correlation between the six indices.

- Hang Seng, BSE and Bovespa have correlation coefficients with NYSE and FTSE ranging from 0.7 to 0.9 which shows that emerging market indices are influenced to a huge extent by the sentiments in the west and FII inflows and outflows.
- Other than Shanghai Composite index, movement of all the other indices is very well correlated with NYSE and FTSE. The high correlation coefficient between FTSE and NYSE (0.93) shows that the developed markets behave absolutely in the same way.

Influential events and their repercussions during bad times

1. Bear Sterns bailout:

In March 2008, the Federal Reserve held the first emergency weekend meeting in 30 years to try and save investment bank Bear Stearns, which was in danger of going bankrupt thanks to bad mortgage-backed securities and other collateralized debt obligations. This led to the following effects on the global indices:

- Shanghai composite index lost 25% of its value in one month.

Beacon Management Review 2012

- Hang Seng lost more than 10% of its value in the first 15 days of the month.
- The Brazilian index Bovespa lost more than 8% in the first 15 days of the month.
- The Bombay Stock Exchange lost nearly 11% in the first 15 days of the month.

2. Lehman Brothers Bankruptcy Triggers Global Recession

On September 15, 2008, Lehman Brothers filed for bankruptcy which led to a series of shocks globally:

- The NYSE lost almost 30% during September-December 2008.
- The Hang Seng lost more than 33% during September-November 2008.
- The Shanghai Composite dropped by almost 18% during September-October 2008.
- The FTSE shed around 27% of its value during September-November 2008.
- The Bovespa dropped by around 28% during September-December 2008.

The news of Lehman Brothers did shiver the entire world as every single index dropped by a significant amount on the day of filing bankruptcy i.e September 15, 2008.

3. March 18, 2009: the Federal Reserve announces decision to buy \$1.2 trillion of government bonds and mortgage-related securities.

This move taken by Federal Reserve was aimed at improving the conditions in the private credit markets. This policy was termed as “Quantitative easing”.

- Shanghai Composite index gained almost 10% in 2 weeks.
- BSE gained more than 15% in 2 weeks.
- Bovespa index rallied from a level of 40142 to 44391 in 2 weeks.
- FTSE gained around 10%.
- Hang Seng gained around 10%.

This shows that the positive sentiment created by the Central Bank of USA was reflected elsewhere too.

4. A dull but stable 2010.

The year 2010 was marked by mixed news from USA. Thousands of job cuts mixed with signs of GDP growing positive, rise in the sale of automobiles are some of the factors that

Beacon Management Review 2012

contributed to the stable growth in 2010. The stock markets moved as follows:

- Hang Seng rose by 8.5%.
- FTSE rose by 9%.
- BM&F Bovespa remained almost flat.
- Bombay Stock Exchange rose by around 16%.
- NYSE grew by around 8.7%.

5. Euro and US debt problems lead to the tumbling of stocks globally (July-Aug 2011). This also involved downgrading of US credit.

- Hang Seng shed 10% over the 2 months.
- Shanghai Composite index dropped from around 2759 to 2567 losing close to 7% in 2 months.
- FTSE lost around 14% during this period.
- BSE lost around 11% during this period.
- NYSE lost around 17% during July-August 2011.

6. EURO zone bailout plan (Dec 9, 2011).

European Union leaders met at Brussels and agreed on new fiscal rules highlighting tougher budget discipline. However, there was some kind of negativity always attached with the Euro zone as political considerations were overriding the economic considerations since months. So this new plan was decided but no concrete measures of implementing it were finalised. Global indices reacted as follows:

- Hang Seng lost 3% in 5 trading sessions post December 9, 2011.
- Shanghai Composite index lost 5.8% in 5 trading sessions post December 9, 2011.
- FTSE lost 5.8% in 5 trading sessions post December 9, 2011.
- BM&F Bovespa lost 5% in 7 trading sessions post December 9, 2011.
- BSE lost 6.4% in 8 trading sessions post December 9, 2011.
- NYSE lost 4.7% in 7 trading sessions post December 9, 2011.

Conclusions

The statistical data that we have used above clearly establishes the relationship between the behaviour of stock markets all over the world. It leads to the following conclusions:

Beacon Management Review 2012

- The Emerging markets are largely influenced by the American and European markets. This is due to the fact that emerging market indices are largely dependent on FII activities. With the growth in globalization and outsourcing, the health of emerging market economies depends on the health of the richer economies.
- The high value of R^2 clearly indicates that the movement of Hang Seng, BM&F Bovespa and to an extent, BSE, is determined by the movement of western indices.
- The high value of coefficient of determination and correlation coefficient between FTSE and NYSE proves that developed market indices move in a very similar fashion.

The influential events discussed above highlight the following points:

- Any financial or economic event occurring in USA and Europe has had a severe impact on the movement of indices globally.
- Although markets such as China and India are developing at a rapid pace, they still depend quite a lot on the news from the west.
- India showed a GDP growth of close to 6.5% and China showed a GDP growth of 8.7% in 2009. However, we can see that the major stock market indices in these countries were heavily beaten due to the global meltdown.
- Hundreds of important economic events have happened in the emerging markets over the last 4 years. But these events have only affected the domestic stock market indices of these economies. No event in China, Brazil or India has had a huge impact on the stock markets of USA and Europe.

References

- [1.] Major economic events of 2008 - http://useconomy.about.com/od/criticalissues/p/2008_Economy.htm
- [2.] Major economic events of 2009 - <http://www.examiner.com/economic-policy-in-national/top-10-economic-events-of-2009>
- [3.] Data on closing values of indices - <http://finance.yahoo.com/>
- [4.] GDP growth figures for 2009-<http://edition.cnn.com/>
- [5.] GDP figures for Greece and Italy - <http://www.imf.org>
- [6.] Data compiled using inputs from <http://finance.yahoo.com/> and Microsoft Excel.
- [7.] The closing value of indices from Jan 1, 2008 to Dec 31, 2011 has been obtained from <http://finance.yahoo.com/>. The regression and correlation analysis on this data has been done using Microsoft Excel.

Competent Structure of Two Wheeler in Rural and Urban Markets

- Aanshul Agarawal

Abstract

Which stock to invest in? The trickiest questions, which many fine brains, analysts and bankers are working day and night, to answer. With the increasing debt loads of developed controlling economies of the world and most of the global businesses underperforming, it has become difficult to make the right choice of investment. This article may help you in allocating some part of portfolio funds into one of the safest growth product.

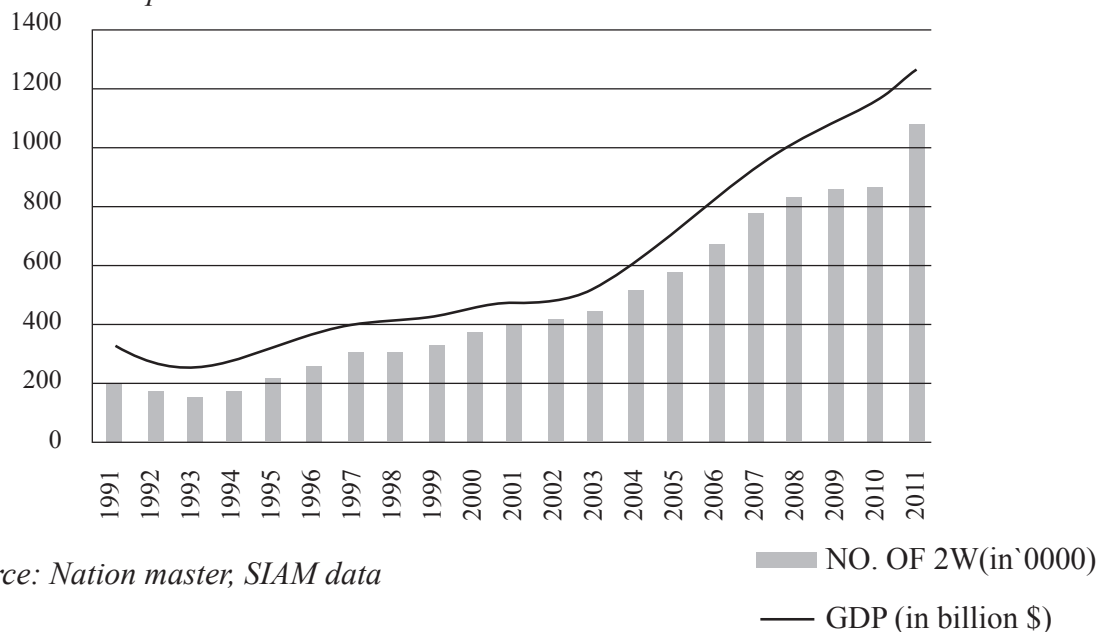
Since the crash of 2008-09 many business recovered but was unable to sustain the growth. One of the sectors which were able to do so was, “Two wheeler industries”.

Two wheeler sales had seen very strong growth in the past 20 years in India and rest of the world. 2W grew at CAGR of 11% in 2001-2011. There had been strong growth seen in exports too. Exports from India also grew many folds from 100 thousand units to 1.5 million units per annum, in the past decade.

India being the second largest populous country, with poor public transport and infrastructure, most of the people are depending on their personal mode of transport for comfort, convenience and style. With the cost of petrol increasing steadily 2W makes the daily travelling easy and affordable compared to passenger vehicles. With the growing economy India 2W market crossed the 10 million unit mark for the first time in FY 2010.

2Ws is one of the major modes of transport in many developing countries like China, India, Africa, Latin America and most of the ASEAN countries. Total global 2W demand was more than 50 million in 2010-2011. Global 2W demand had been growing at a CAGR 9% in the past 10 years.

Graph 1: GDP vs 2W Sales in India



Source: Nation master, SIAM data

DOMESTIC MARKET

India is ranked as the second largest two wheeler market in the world after China. The two-wheeler market in India is the biggest contributor to the Indian automobile industry with a size of 45 billion dollars. Two wheelers shares 76% of total automobile sales in India with the size of 11 billion dollars. There had been a phenomenal growth in two wheeler sales in the past decade. Strong economic growth and rising income levels has strengthened two wheeler sales in India.

Reasons for strong 2W growth in Urban and Rural India .

- **Increase of population:** Rural population growing at 1.7% per annum whereas urban population at 2.8% in (2000 to 2011).
- **Upward migration of household income levels:** Rise in disposable income gave increase in affordability hence strengthen automobile sales in rural areas and repeat buyers in urban area.
- **Growing working population (between 15-35 years):** Working population has increased at CAGR 2% in past 20 years and around 120 million people will be added to the working population in the next five years. Also increase in working women increased the growth of gearless scooter.
- **Middle class expanding by 30-40 million every year:** Presently there are 300 million Indian middle class consumers. Their numbers are growing at very fast rate with the rising per capita income.

Beacon Management Review 2012

- **Increased access to credit and lower interest loans:** Auto loans are easily available with flexible repayment schemes. More than 50% of 2W are sold on credit every year.
- **Fast paced urbanization to rise from 28% to 40% by 2020:-**There was around 15% rise in urban population in past 20 years and will continue growing at high rate with increased migration towards urban areas.
- **Lack of public transport** in most of the cities and villages has made 2W as only mode of motorized transport.
- **Increase in size of towns and cities** and increasing traffic congestion have made 2W a better commute option.
- **Technological advancements** in product manufacturing and emphasis on design innovation are leading it to higher product liking.
- **Higher fuel efficiency** compared to any other automobile makes it the affordable mode of transport.
- **Increasing farm yield** and better pricing of food products have increased the buying power in rural region.
- **Increase in exports** to developing African, Latin American and ASEAN countries, with the rise in favorable product demand.

Growth opportunities and potential

Penetration of Two-Wheelers

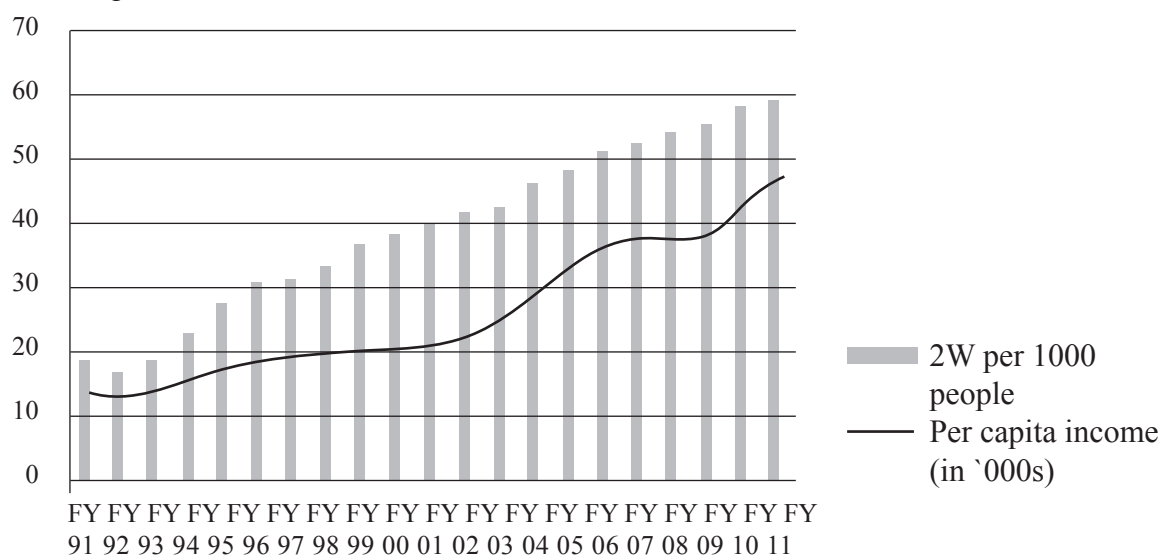
India is the second highest populous country in the world and has one of the least automobile penetrations.

Out of **221** million total households in India penetration stands around 28%. And out of **70** million urban and **151** million rural households the penetration is of the order of 45%, whereas in the rural segment, the penetration is only about 12% of the households. The overall penetration of two-wheelers in India is around **60 per 1000 people**.

This compares poorly with countries like in China which is 70 per 1000 and in Malaysia around 245 per 1000; Thailand is around 600 per 1000 households. Also with a household size of 5.5 persons and more than one wage earner in about 60% of the households, the potential for a second vehicle demand is also very good.

Beacon Management Review 2012

Graph 2: GDP vs 2W Sales in India



Indian Household income

- There are around 11 million urban households and 4.4 million rural households having annual incomes of Rupees 300 thousand to 500 thousand category.
- The next category consists of 25 million urban and 23 million rural households.
- The overall penetration of two wheelers in is of order of 30% of the households. In the urban region the penetration is of the order 45% whereas in the rural segment the penetration is only about 14% of the households.
- At least a quarter of them 11-12 million will move into the purchasing segment during the next 2 to 3 years. This is almost the same number as at present.

The NCAER in its research report on market demographics has clearly indicated that Indian households have graduated to higher income groups as can be seen in the table below.

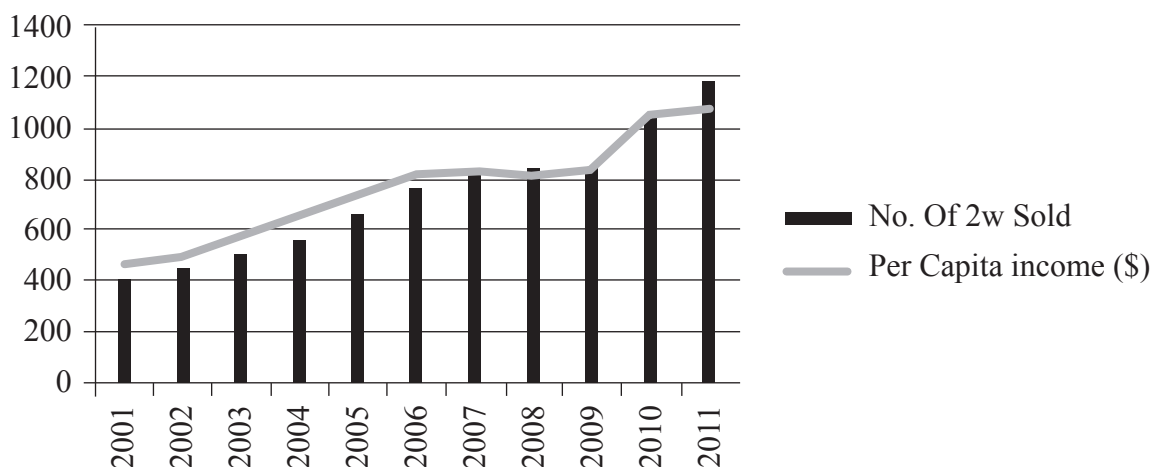
| Year | Low income (less than Rs 45000) | Middle income (Rs45000-180000) | High income (more than Rs 180000) | Total |
|---------|------------------------------------|-----------------------------------|--------------------------------------|-------|
| 1985-86 | 83.8 | 43.3 | 1.4 | 128.5 |
| 1993-94 | 90.5 | 62.9 | 3.9 | 157.3 |
| 2001-02 | 65.2 | 109.2 | 13.8 | 188.2 |
| 2007-08 | 46.3 | 135.9 | 36.9 | 219.1 |
| 2009-10 | 41 | 140.7 | 46.7 | 228.4 |

Source: Nationmaster.com, SIAM data

Table 1: Demographic Trends

Beacon Management Review 2012

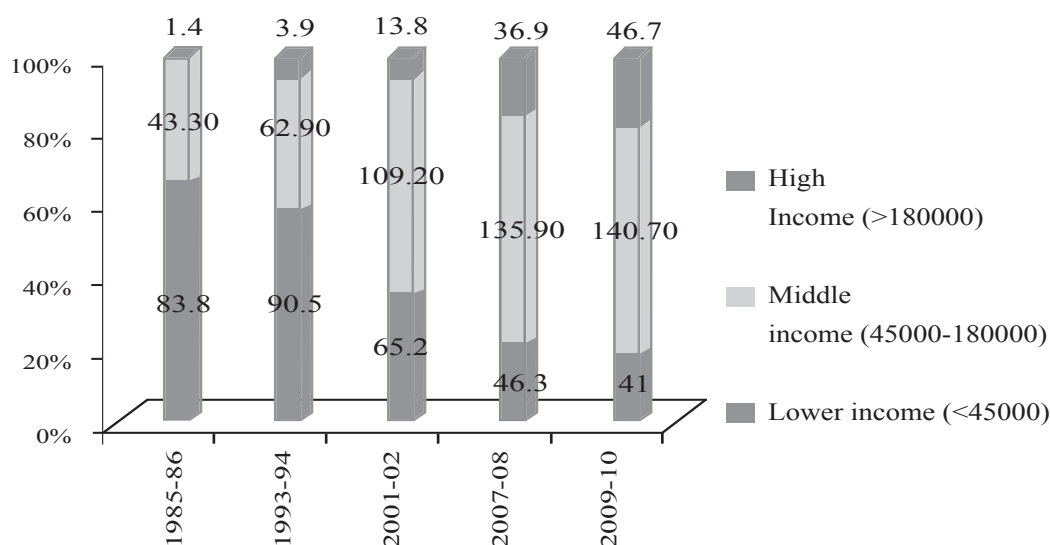
Graph 3: 2W Sales vs per Capita income in India



Share of total number of households has increased from 10.6% in FY88 to 20.5% in FY96. The rising income profile has, however, been more pronounced in the urban areas as average annual growth in industry has surpassed that of agriculture since the period FY96. The number of households in the low income group has fallen since FY85. On the other hand, the numbers in the middle, upper middle and high income groups, which form the consumer base for two wheelers, have increased. Around 30 million more potential buyers have risen in the past 5 years and their numbers will be increasing in the coming years.

In 2010, households with annual disposable incomes of US \$ 5,000-\$ 15,000 as a percentage of total households are estimated to be 14.6% in India. This will reach 41.1% by 2020. This rise of 300 million people in this group will form huge potential for the 2W market. Looking at the growing income of households and extreme low penetration assures that there is tremendous growth expected from current levels.

Graph 4: Household distribution (in millions)



Source: NSHIE2004- 05 data NCAER- CMCR analysis

Two Wheeler Penetration in Different States

In 2011 the total registered two wheeler in India stood around 110 million considering life of a new vehicle is less than 10 years, there must be only 80 million two wheeler on Indian roads.

In the past years, rich states having better farm yield had seen better growth in the 2W numbers compared to poor states. An analysis of the census data (2010) reveals a strong link between the proportion of rural population, the penetration of 2W and demand. States with a high rural population and low penetration have witnessed faster growth. This includes states such as West Bengal, Uttar Pradesh, Orissa, Bihar and Himachal Pradesh.

Penetration in the states with lower per capita income remained less, whereas high in rich states. It remained very low in poor states high in rich states. With the rising income level the next growth will be seen from poor states. Hence the company with better distribution network in those areas will have advantage. Current 2W population in both rich and poor states is very less and their numbers will further increase with the rise in non-agriculture income and rising employment. Clearly, the states with higher per capita income had better penetration level. The states with income source other than agriculture like Goa, Gujarat and Tamil Nadu had good 2W population. With the increase in income levels in lower penetrated states, would see strong growth in coming future.

Increase in youth population

| Age group (years) | 1991 | 1996 | 2001 | 2006 | 2010 | 2013(E) |
|-------------------|------|------|------|------|------|---------|
| 0 to 4 | 13.1 | 12.8 | 10.7 | 10.4 | 10.3 | 10 |
| 5 to 14 | 23.2 | 25 | 23.6 | 20.2 | 18.5 | 18.2 |
| 15 to 19 | 10.8 | 9.7 | 10.8 | 11.2 | 10.1 | 9.1 |
| 20 to 24 | 9.6 | 8.8 | 8.9 | 9.9 | 10.4 | 10 |
| 25 to 34 | 15.2 | 15.2 | 15.5 | 15.6 | 16.4 | 17.4 |
| 35 to 44 | 11.1 | 11.2 | 12 | 12.7 | 13 | 13.1 |
| 45 to 54 | 8.1 | 7.8 | 8.5 | 9.2 | 9.7 | 10.2 |
| 55 to 59 | 3.1 | 2.8 | 3.1 | 3.4 | 3.6 | 3.8 |
| 60 & above | 6 | 6.7 | 7 | 7.5 | 8 | 8.4 |

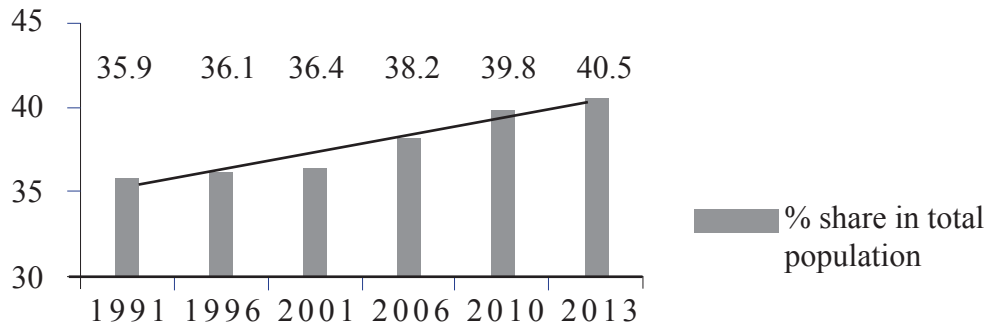
Source: Statistical outline of India

Table 2: Demographic Trends

India has more than 50% of its population below the age of 25 and more than 65% below the age of 35. With the increase in population, there will growth in youth population too. The growth in youth population was around 4% (age group of 15 to 45) in last 20 years (the potential 2W buyers). It is expected that, in 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan, by 2030. With more youth adding, will increase the workforce and the 2W demand.

Beacon Management Review 2012

Graph 5: Increase in youth population



Source: NSHIE 2004-05 data, NCAER-CMCR analysis

If 20% of this growth adds up to the buyers list, the sales will double in next 3 years. This growth will continue with new and repeat buyers and India will remain as one of the biggest market for the coming years.

| STATES | Registered 2W penetration <i>per 1000 people</i> | Per capita income (Rs) | | | |
|-------------------|---|------------------------|--------------------|-----------|---------------|
| Bihar | 9 | 16,119 | Chhattisgarh | 60 | 38,059 |
| Arunachal Pradesh | 10 | 51,644 | Rajasthan | 60 | 34,189 |
| Sikkim | 10 | 48,937 | Kerala | 66 | 59,179 |
| Meghalaya | 13 | 42,601 | Andhra Pradesh | 69 | 51,025 |
| Tripura | 19 | 35,800 | Maharashtra | 69 | 74,027 |
| Assam | 20 | 27,197 | Karnataka | 85 | 50,676 |
| West Bengal | 20 | 41,469 | Haryana | 89 | 78,781 |
| Nagaland | 22 | 21,434 | Punjab | 122 | 62,153 |
| Mizoram | 28 | 45,982 | Gujarat | 125 | 63,961 |
| Jammu & Kashmir | 29 | 30,582 | Tamil Nadu | 127 | 62,499 |
| Himachal Pradesh | 31 | 50,365 | Goa (c) | 279 | 132,719 |
| Uttar Pradesh | 31 | 23,132 | UTs | - | - |
| Manipur | 40 | 28,531 | A & N Islands | 65 | 44,800 |
| Orissa | 42 | 33,226 | Lakshadweep | 80 | 49,200 |
| Jharkhand | 43 | 30,719 | D & N Haveli | 107 | 46,194 |
| Uttaranchal | 57 | 55,877 | Delhi | 206 | 78,690 |
| Madhya Pradesh | 58 | 27,250 | Daman & Diu | 211 | 36,805 |
| | | | Pondicherry | 305 | 48,477 |
| | | | Chandigarh | 504 | 110,676 |
| | | | INDIA TOTAL | 60 | 45,000 |

Table 3: Penetration in states

Working population

India's working age population will increase a lot in the coming decade. In 2011-20 there will

be rise of 120 million working age group. Increasing population of continuously increasing working class would need a personal mode of transport. With lack of proper public mode of transport, there is no substitute seen except 2W for a large number of populations.

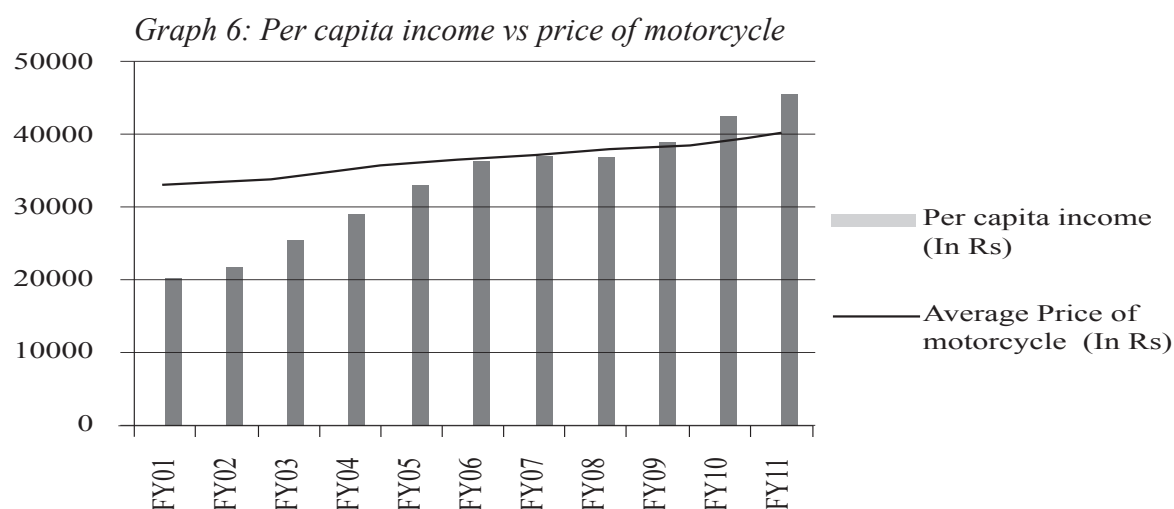
In 2020-30, India will add another 100 million people in the work force whereas. The employment in service sector increased from 28% of total population in 1999-2000 to 30% in 2004-05. The nearest competitor China, on the other hand, will add only 19 million people in the same period contributing 5% of the global working population. The growth in employment and lack of public transport will increase 2W necessity.

Lack of public transport

Due to increased migration to urban areas in search of employment and lack of public transport in most of the town and cities has made personal mode of transport as only means. With the increasing traffic congestion in most of the cities has worsened the existing infrastructure bottlenecks. Poor urban planning and transportation facilities have not been able to keep pace with the growing economy and increasing population. Looking at all the aspects people are left with 2W or other automobile as only mode of transport.

Per capita income vs Average cost of motorcycle

Sales growth of 2W is driven by increase in its affordability. From the past study it has been seen that, there was very less realization in the average price of 2W in last 10 years. Per capita income has surpassed the average motorcycle cost in FY07 and there had been consistent growth due to growing economy. Increase in raw material prices was majorly compensated by minimizing operation cost by the manufacturer or balancing the profitability. In past 10 years, average cost of a two wheeler remained nearly unchanged, whereas the per capita income has increased from Rs 21,000 to Rs 45,000 by 115%, hence increasing the buying power.



Source: Statistical outline of India

With every percent rise in GDP, there had been more percent gain in the per capita income due to controlled increase in population and increasing employment. The affordability will rise in magnified manner and the buyer will grow at much faster rate in future. In the next five year per capita incomes is further estimated to increase by 46% to Rs 66,000 and average motorcycle cost by 10%. This huge growth difference will further strengthen sales to almost twice from current levels.

Cycle population and penetration

Bicycle remained cheapest mode of transport for common man in India. It has been the only mode of transport in many villages. Lack of good roads in many villages, also restrict buyers from buying a motorcycle in rural region. More people can now afford to own a Bicycle than before. In 2005, more than 40% of Indian households owned a bicycle. 53% of urban household owned bicycles whereas, 70% of rural household owned bicycles.

In Rural India penetration of bicycle was good (around 75%) in lower income class group compared to high income class group 64%. This difference was more in rural region (around 64%) for low income states and 46% for high income states. More than 2 out of 5 Indian households own a bicycle. That's a total of more than 85 million bicycles on the road.

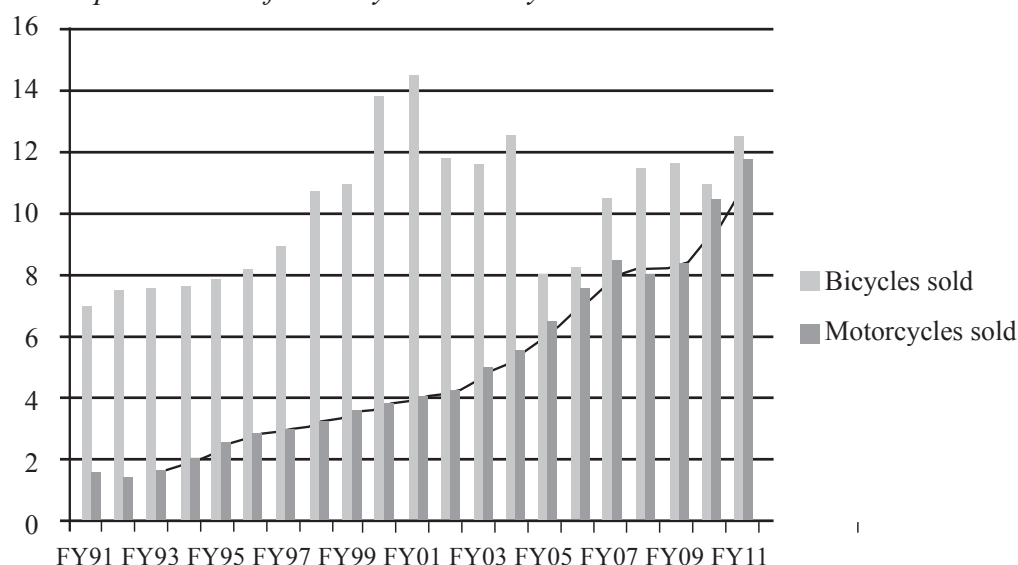
Assuming an average bicycle is made to last for seven years, this would mean that replacement demand alone would add up to around 12 million bicycles each year. The proportion of households owning a bicycle varies from a high of around 70% for the Punjab and UP to a low of around 30% for Goa, Karnataka, Maharashtra and Kerala. For Goa, this deficiency is compensated for by the high proportion of households owning motorcycles, mopeds or scooters: 45%, significantly higher than the all-India figure of 7%. The biggest players on the Indian market are Hero cycles, with a production of around 4 million units.

For the past few decades, bicycle population was more in villages in rich states compared to poor states. Same growth trend was seen for motorcycle. With the rising income levels there will be more growth in motorcycle in rural region of rich states compared to poor states. There is a huge difference between the price of a bicycle and a motorcycle. This restricts buyers from affording a motorcycle and go for bicycle. Also the cost of running a motor cycle varies from Rs 1 to 1.5 per km whereas it is nil for a bicycle. In Urban region bicycle are used mostly by labors and hawkers where affordability is an issue, else used for exercise and sports (by young children).

The current bicycle market will be replaced by motorized vehicles in coming time. 2W would be the only affordable option for huge mass in next 10 years.

Beacon Management Review 2012

Graph 7: Trend of motorcycle and bicycle sales



Source: Indian Statistics (units sold in millions)

RURAL MARKET

Around 69% of total Indian population i.e. rural India makes it the biggest 2W market. Increase in land prices, good monsoon, higher farms yield and better government subsidies have acted positively in increasing agriculture income hence increasing the 2W sales in past years. Overall two wheeler penetration is 11% in rural India. 27% of total rural households own a 2W. The rising rural income level will create a big opportunity in 2W growth. Hence biggest growth will be seen in the rural India and the products meeting their requirement.

| Rural household Group | % household owning 2W |
|-------------------------|-----------------------|
| High income household | 44 |
| Middle income household | 32 |
| Low income household | 19 |

Table 4: percentage household owning 2W

The following table shows the estimate of households, population and income by state of residence in rural India.

| | Households (millions) | Population (millions) | Household size | Average household income (Rs per annum) | Per capita income (Rs per annum) |
|-----------------------------|--------------------------|--------------------------|-------------------|---|-------------------------------------|
| Low income states | 73.7 | 398 | 5.4 | 44,999 | 8336 |
| Middle income states | 46.6 | 214 | 4.6 | 55,604 | 12094 |
| High income states | 23.9 | 120 | 5.02 | 66,121 | 13172 |
| Total | 144.2 | 732 | 5.08 | 51,922 | 10227 |

Source: NSHIE 2004-05 data, NCAER-CMCR analysis

Table 5: Estimate of income by state

Out of 142 million households in Rural India only 38 million households own 2W (According NCAER-CMCR analysis). Considering rural India as the biggest market, penetration in the high income households of rural India is still very less.

Being in low income group, villagers generally prefers basic (entry level) segment two wheeler. The motorcycle used in rural segment are mostly low powered (100 to 125cc), robust, requires less maintenance and whose parts are easily available. The buyers in the rural region are mostly first time buyers and their numbers are growing very fast. Rural areas are mostly agriculture dependent, hence not affected by global slowdown. Sales are mostly on cash purchase and very less credit which makes it a riskless market. With the strengthening economy there will be very high demand from rural India.

Increasing literacy in rural market

Rural literacy had been growing very fast. Many rural students have to travel to schools and colleges to nearby villages or town. Though there numbers are not much but, peer pressure (like urban market) and the advantages of fast commuting will push the students to buy personal mode of transports in coming years. With the rise in higher education and lower dependency on agriculture income, many young buyers will add to the future demand.

Population trend in the rural India

Due to fast urbanization for the past 20 years, there had been negative growth in the rural population. Still the rural India contributes more than 70% total population in India. Rising affordability of middle class income group in the rural households has increased potential 2W buyers. Overall penetration in rural India is 11% of total households.

With the growing economy and industrialization many rural household have shifted to non-agricultural income group. Increase in travelling of people to nearby towns for employment and lack of proper public transport system have made 2W a very essential.

Improving infrastructure in rural India

There are about 600 thousand villages spread over 3.28 million square kilometers area. Presently there is around 2.7million km of road in rural India constitute over 80% total Indian road network. In the past study, it was seen that new roads are revitalizing the rural economy, raising incomes, and improving the quality of life. Farmers find it easier to take their produce to market in time, school enrolment is on the rise, and families' access to health care has improved. Hence road in India are primary means of mobilizing resources.

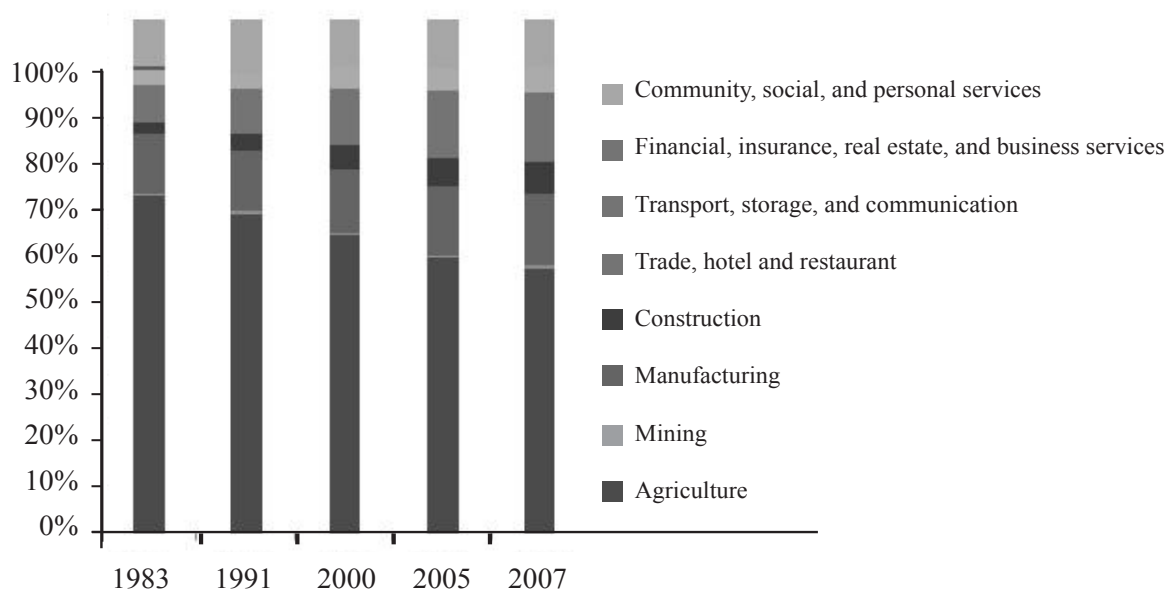
All the developments are only possible if they have affordable means of transport. Around 0.7% of GDP around \$11 billion is being spent on Indian roads every year. Increasing government expenditures in the rural region have improved the road network in the past 10 years

Still there are many villages which don't have proper all weather road connectivity. Hence people are forced to use bicycle, carts and other non-motorized means of transport. Rise in government expense towards rural India will strengthen the rural infrastructure, hence increase 2W sales.

Increasing employment

There had been big shift of rural income from agricultural to non-agricultural products in the past years. With the rise job demand in urban areas, from non-agriculture sectors like mining, construction, manufacturing etc., have increased the purchasing power of rural population. Unlike in the past where the ratio between those who involved in agriculture and in other business was 75:25, today the estimated ratio is 55:45. The graph shows the percentage share of working population in different sectors and the changing trend.

Graph 8: working population in different sectors

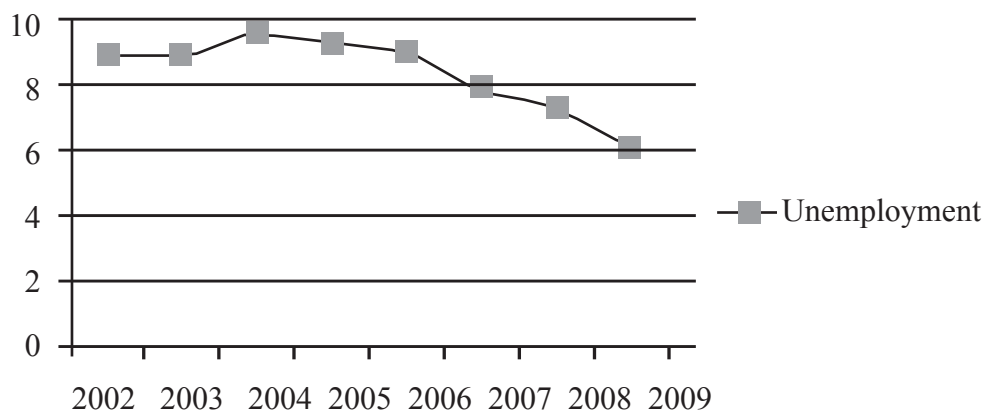


Source: India Statistics

Today, 50-60 per cent of the rural population is involved in other businesses. A lot of people belonging to the second generation are getting white-collar jobs in nearby towns. Hence there is a growing rural middle class with rising nonagricultural income unlike before.

This has resulted in a definite growth in the prosperity level in rural India. Still there are lots of poor people, especially the agricultural laborers. But there is a growing middle class with regular income and the rural rich are becoming richer. This shift has increased the necessity of personal modes of transport in many villages. Following graph shows the decrease in unemployment rate in the total work force in the past decade.

Graph 9: Unemployment rate



Source: CIA World Fact-book

URBAN MARKET

Around 53% of total urban population lives in towns, where public modes of transports are not as well developed. Hence, personal modes of transport are one of the only convenient options. India's urban population is around 286 million. Out of which 62 million households around 69% own a 2W. Motorcycle is major mode of transport in most of the urban areas. It remained the most affordable and fastest mode of transport in many towns and cities.

Present penetration of 2W in the urban areas is a lot more than in rural regions mainly due to higher affordability. Two-wheelers are more affordable than any low cost cars and even used cars. Since the average road speeds in India are low, the lower passenger safety of two-wheelers when compared to cars does not inhibit buyers. They are also cheaper to run and easier than cars to maneuver and park on narrow road. 2W remained the best modes of transport for working class in the urban areas. All the above reasons don't leave any option apart from a personal 2W in urban region.

Around 44% of total urban household has 4 members per household and 36% have 5-6 members per household. So that makes around 248 million people. Considering 25% of total 2W buyers and riders, it comes around 62-65 million in numbers at present. Average house hold income in Urban regions have reached to around Rs 96,000, which is lot more than an average cost of bike (Rs41000). This shows the huge growth prospect in coming years. The following table shows the estimate of households, population and income by state of residence in Urban India.

Increasing size of towns and cities

Growing urbanization and scattering growth of towns and cities have increased the commuters travel distance. Increasing traffic congestion, lack of proper parking infrastructure has made 2W very necessary in cities. Increase in employment and floating population of cities with lack of public transport leaves no choice of transport except 2Ws.

Beacon Management Review 2012

| | Households | Population | Household | Average household | Per capita income |
|--|------------|------------|-----------|-------------------|-------------------|
| | (millions) | (millions) | size | income | income |
| | | | | (Rs per annum) | (Rs per annum) |
| Low income states | 18 | 95.2 | 5.29 | 80948 | 15295 |
| Middle income states | 23 | 100 | 4.43 | 89223 | 20566 |
| High income states | 20.4 | 100.1 | 4.91 | 116421 | 23720 |
| Total | 61.4 | 295.3 | 4.81 | 95827 | 19935 |
| <i>Source: NSHIE 2004-05 data, NCAER-CMCR analysis</i> | | | | | |

Table 6: Estimate of income by state in Urban India

Replacement demand

With rising purchasing power, buyers are replacing their old motorcycle more frequently than before, hence decreasing the product life. Average age of a motorcycle has come down from 10 years to 8 years for many buyers. This forms a big group of potential buyers every year. Considering 70 million 2W on Indian roads i.e. less than 10 years of age and yearly sales of more than 10 million, at least 4 to 5 million repeat buyers will add to the yearly sales and their numbers will continuously rise in future. Replacement demand grew at CAGR 9% approximately in the past 11 years.

Upgrade from entry to mid/premium segment

Cost of a 2W is a lot less than any new car or second hand car. With the rising disposable income there is a huge shift in 2W segment demand. The price gap leaves no choice for buyers hence they go for higher segments bikes. Buyers are spending more on 2W models for extra comfort, features and design. Sales of executive and premium segment have increased many times during the past few years. All the three segment of 2W has shown good growth in the past decade. But the maximum growth had been seen in the *motorcycle* sales and exports. Motorcycles shares 81%, scooters 14% and mopeds share 5% of total 2W sales in India.

| Segment | Details | Share in 2001-2002 | Share in 2009-10 |
|----------|--|--------------------|------------------|
| A1,A2,A3 | Scooters with engine capacity less than 75-250cc | 20.8% | 14.20% |
| B2 | Motorcycles with engine capacity less than 75-125cc | 62% | 58.40% |
| B3 | Motorcycles with engine capacity less than 125-250cc | 6.4% | 21.3% |
| B4 | Motorcycles with engine capacity above 250cc | 0.6% | 0.7% |
| C1 | Mopeds | 10.3% | 5.40% |

Table 7: percentage shares of 2W sales in India

Beacon Management Review 2012

There had been increase in B3 and B4 segment of motorcycle and decrease in percentage of lower powered motorcycle and scooters. Entry level segment grew at CAGR 6.3% whereas mid-level segment grew at CAGR 22.3 %. This clearly signifies the demand of medium and premium segment motorcycle and risen affordability. The growth seen in these segments are estimated to be maintained. The company manufacturing these products will be seeing strong growth as market grows further.

Increase in scooters due to increasing working women

The work participation rate of women has shown a continuous rise since 1981. It increased from 19.67% in 1981 to 25.68% in 2001. In the organized sector, women workers constituted 18.4% as in 2003, of which about 5 million women were employed in the public and private sectors. Cities as well as small towns have seen growth in the working women population. The rising working class has given strong demand in the scooter and mopeds sales in the past decade.

Scooters and mopeds grew at CAGR 19% in the last 11 years with women riders contributing to more than 50%. With the new multi-purpose product launch as per comfort in the past 10 years has given a boost to scooters sales in India. Scooter sales rose by 50% in past 5 years. Looking at the current penetration, rising women literacy and work force will boost scooter and moped sales in future.

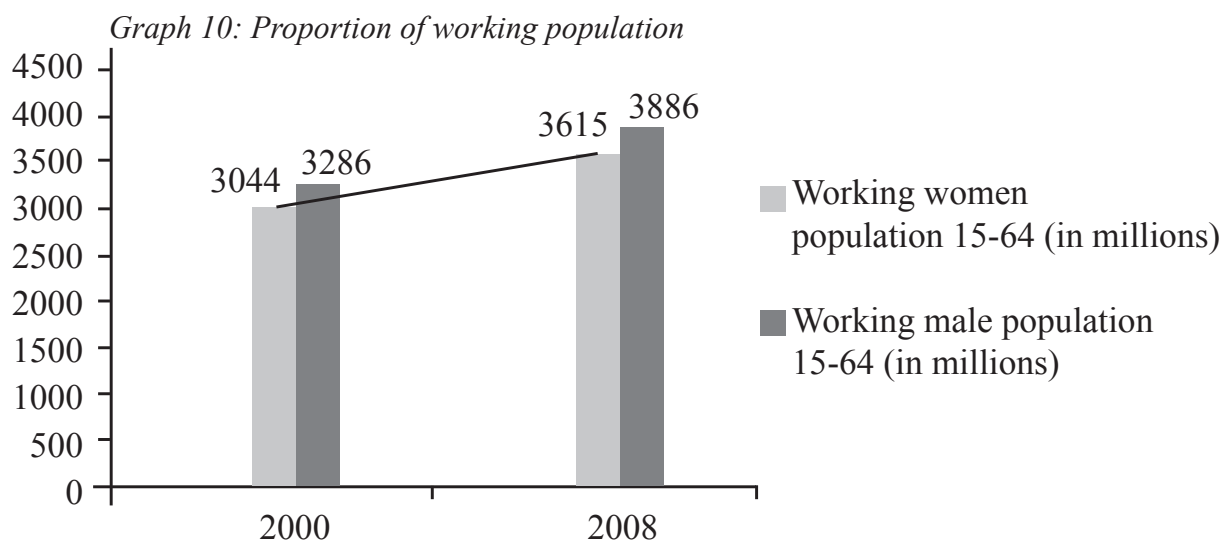
OVERSEAS MARKET

2W are used as a personal/family vehicle or a goods carrier in the developing countries of Asia, Latin America and the Africa and Mideast region, whereas it is confined to sports/racing (heavy motorcycles) or short distance travelling (mopeds) in developed countries like US, Japan and Europe.

Labor participation by gender and age group

| | | 2000 | | | 2008 | |
|--|-------|-------|-------|-------|-------|-------|
| Age group | All | Women | Men | All | women | Men |
| 15-19 | 35.9 | 23.1 | 47.6 | 33.4 | 20.6 | 45 |
| 20-34 | 196.6 | 108.9 | 277.1 | 196.9 | 109.9 | 275.3 |
| 35-49 | 215.8 | 132.7 | 291.8 | 218 | 140 | 290.5 |
| 50-64 | 171.3 | 85.3 | 256.4 | 167.8 | 82.8 | 250.9 |
| Total 15-64 | 61.1 | 35.2 | 85.2 | 61 | 35.7 | 84.6 |
| Total 15-64 economic active (in millions) | 3871 | 1071 | 2799 | 4576 | 1290 | 3286 |
| Total 15-64 working age (in millions) | 6330 | 3044 | 3286 | 7501 | 3615 | 3886 |

Table 8: Labor participation by gender and age group. Source: ILO Labor statistics



Asia is the biggest 2W market in the world with market size of more than 70%. China, India and Indonesia have become the biggest market in terms of both demand and production of motorcycles. Most of these countries have low per capita income and major part of their economy is dependent on agriculture yield. Major portion of the country's population lives in rural area. Their needs, choices and affordability are nearly same.

Competitive intensity is increasing, in China, Vietnam, Indonesia, Thailand and other Southeast Asian markets. While Asia is dominant in terms of unit volume low margin motorcycle, most key players make higher revenues per unit from sales in developed markets such as North America and Europe. Although North America accounted for only 3% of global demand in unit terms in 2006, it comprised 24% global sales revenue.

The world two-wheeler market is dominated by Japanese manufacturers account for around 65% of the total two 2W in the world. However, production within Japan has been declining due to lower domestic demand and shift in manufacturing base outside the country. Japan is also the world's largest exporter of two-wheelers in the world controlling around 75% of the world trade. Its major markets are India, China, USA and Europe. In terms of player positions, Honda Motors Corporation, Yamaha Motors and Suzuki Motors Corporation share the top three positions in the world two-wheeler market. The following table shows the 2W penetration in different countries.

Average 2W penetrations in most of the developing nations are very less. The demand is growing very fast in the countries lacking public transport, having high rural population and rising per capita income. With rising income levels more and more people are able to afford personal mode of transport. These are mostly developing countries in Asia, Africa and Latin America. China, India, Indonesia and other ASEAN countries have seen tremendous growth in the past decade.

Beacon Management Review 2012

World 2W demand has grown from 20 million p.a. to 50 million p.a. in last 10 years. HONDA, YAMAHA, SUZUKI and their subsidiaries are the major motorcycle manufacturers in the world with market share of 20%, 10.5% and 6% respectively. Hero Honda remained the biggest 2W manufacturer in the world with annual production of more than 5 million in 2011.

Countries with high population, low penetration, lacking proper public transport and rising per capita income would be seeing the fastest growth. Many Indian 2W companies are trying to utilize this growth opportunity. Exports from India have grown at CAGR 24% in 2001-11.

Global demand for motorcycles is forecast to rise 7.6 percent per year through 2012 to 114 million units, spurred by rising standards of living in poorer developing parts of the world, which are making motorcycles a more affordable alternative to walking, bicycling or using mass transit. Higher energy prices, along with a rebound in economic growth, will also contribute to motorcycle market gains in both developing and developed areas. Product sales will expand at a slower pace in value terms, climbing 7.2 percent annually to \$66.6 billion in 2013, because of an expected decline in sales-weighted prices. Some offsetting support will be provided by the

| Country | Penetration per 1000 | Per capita income(\$) |
|--------------|-------------------------|--------------------------|
| Mexico | 7 | 12447 |
| Nigeria | 15 | 1400 |
| U.K. | 20 | 35046 |
| Bangladesh | 20 | 640 |
| USA | 21 | 47131 |
| Philippines | 23 | 2011 |
| Nepal | 30 | 1013 |
| Brazil | 37 | 10470 |
| France | 41 | 31161 |
| Germany | 48 | 34065 |
| India | 59 | 1211 |
| China | 62 | 4282 |
| Sri Lanka | 88 | 2364 |
| Indonesia | 100 | 2963 |
| Japan | 104 | 42325 |
| Vietnam | 131 | 1155 |
| Argentina | 170 | 13061 |
| Italy | 200 | 30955 |
| Malaysia | 236 | 7754 |
| Thailand | 286 | 4620 |

Source: International Road Federation's World Road Statistics, 2008

Table 9: 2W penetration in different countries.

introduction of new models equipped with more features, boosting motorcycle demand.

Share of different countries in total 2W sales

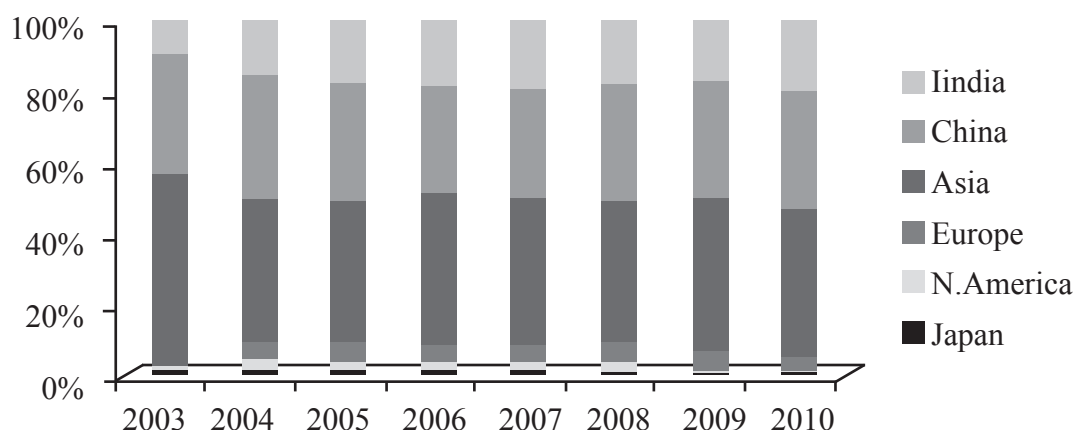
Most of the Asian countries had seen good growth in the past 10 years. India, China and Indonesia, accounts more than 70% of total global 2W sales. Global demand for motorcycles is estimated to rise 7.6 percent per year through 2013 to 100 million units, spurred by rising standards of living in poorer developing parts of the world, which are making motorcycles a more affordable alternative to walking, bicycling or using mass transit. 2W numbers are growing in the countries with increasing transportation needs and lack of other options. Most of these country households would certainly need at least personal modes of transport.

Potential opportunities addressed by Indian companies

Choices of two wheelers models and segments in different countries varies, depending on

Beacon Management Review 2012

Graph 11: Share of different countries in total 2W sales



Source: HONDA annual reports, SUZUKI annual reports, YAMAHA fact book

affordability, road conditions, comfort level, distance traveled etc. Most of the developing nations lack proper means of public transport. Hence 2W acts as essential means of transport and goods carrier for them. Motorcycle remained the first choice for most of these countries, but there had been huge market for mopeds, scooters, and step-through 2W also. Most of the product liking was from 75 to 125cc segment. Indian 2W companies are the biggest manufacturer of entry level motorcycle in the world. Major revenue of Hero Honda was coming from the domestic market which is mostly 100-125cc product. Whereas, Bajaj Auto had major share in the exports and its major profitability was from premium segment. Its entire exports product has seen very good response in overseas market. With the diversifying product range in those markets, their exports would be increasing in future.

| | Domestic | Exports |
|-------------------|---------------------|---------------------|
| | market share | market share |
| Hero Honda | 44% | 8% |
| Bajaj Auto | 20% | 64% |
| TVS motors | 15% | 14% |

Source: SIAM data

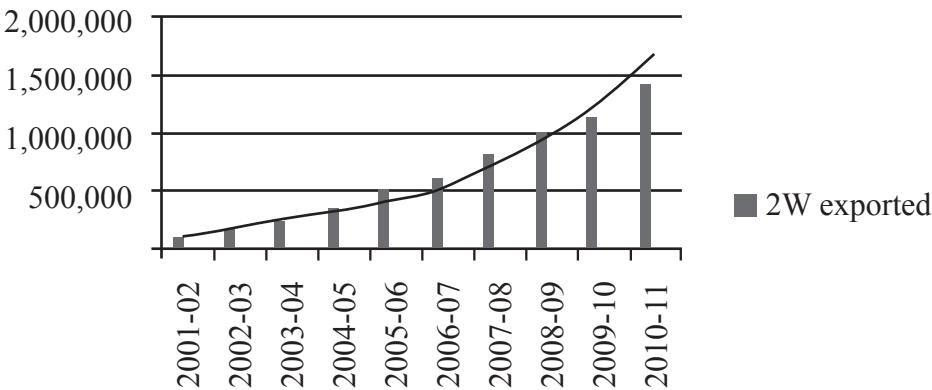
Table 10: Market share of various of companies

Indian manufacturers are good at producing high fuel efficient entry level and executive segment motorcycle at affordable cost. Their high production capacity gives advantage to compensate increase in raw material prices and maintain cost and profitability. New brands entering in these markets would find difficult to compete to Indian manufacturers and maintain margins.

Exports of 2W form India to other countries

The main target export markets for the Indian companies include Asia-Sri Lanka, Philippines, Bangladesh and Nepal, Latin America Peru and Chile, Brazil, Argentina, parts of Africa and West Asian countries such as Iran. Sales increased in the markets where penetration levels were low and income growth was high. The major products exported were between 100 to 250 cc.

Graph 12: Export data for 2 Wheelers



Source: SIAM data

Emerging trend and export structural shift

With transportation growth its need is growing very fast. Motorcycle exports grew at CAGR 42% and scooters rose by CAGR 53% in the last 10 years, whereas mopeds exports declined by 65%. Motorcycles are high fuel efficient, durable and affordable mode of transport compared to other segments. Scooter and moped sales growth will be seen in small towns mostly among working women and teens. They are mostly second household 2W.

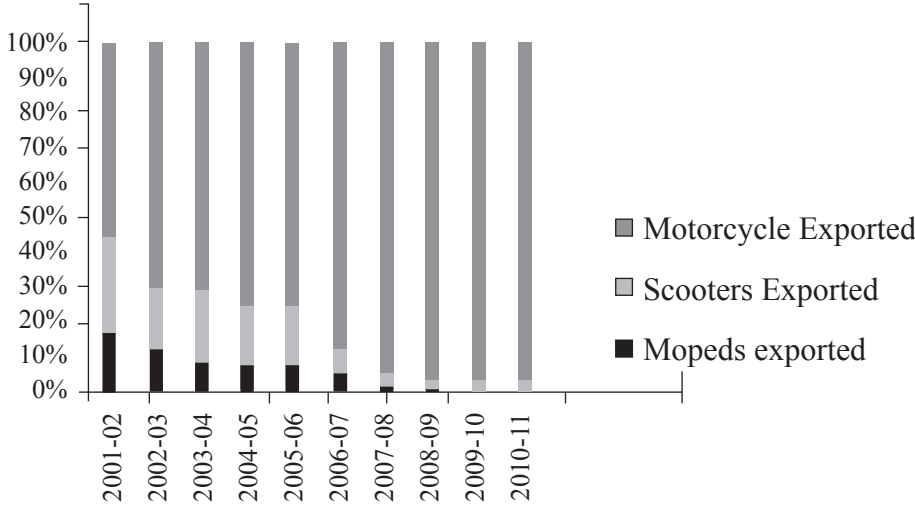
All the developing nations have common choice of entry level or less powered motorcycle (100-250cc). The sales chart of different 2W segment shows the growth in motorcycle. There had been faster increase in growth of premium segment motorcycle compared to entry level and executive segment. But the entry and executive segments had the maximum share, Indian products are being adopted very well in exports market, hence signifying good brand establishment.

Profitability in exports market

With well-established player in the exports market, it would be difficult to capture market. Manufacturers like Hero Motocorp which will be exploring the market with a new brand, would take several years to capture market share. It would be difficult to compete with Chinese and Japanese low cost brand coming in those markets with \$600 motorcycle. But with

large production capacity and good product quality with competent pricing can make Indian companies to grow fast in exports. Hero Honda can have better profitability in its low cost 100cc segment due to efficient volumes, whereas Bajaj Auto can grow with its established premium segment model having better margins.

Graph 13: Segment wise export data



Source: SIAM data

Companies placed in the available opportunity

There is no slowing down seen in the 2W growth in the coming future in India as well as most of the developing nations. Hero Motocorp, Bajaj Auto and TVS motors will remain leaders in terms of market share. With the growing demand from the rural areas, the biggest growth will be seen in 100 to 125 cc segment in the coming years. Hero Motocorp and Bajaj Auto are the only companies with the large production capacity and diversified product range to fulfill the market needs. There will be good growth in their future sales.

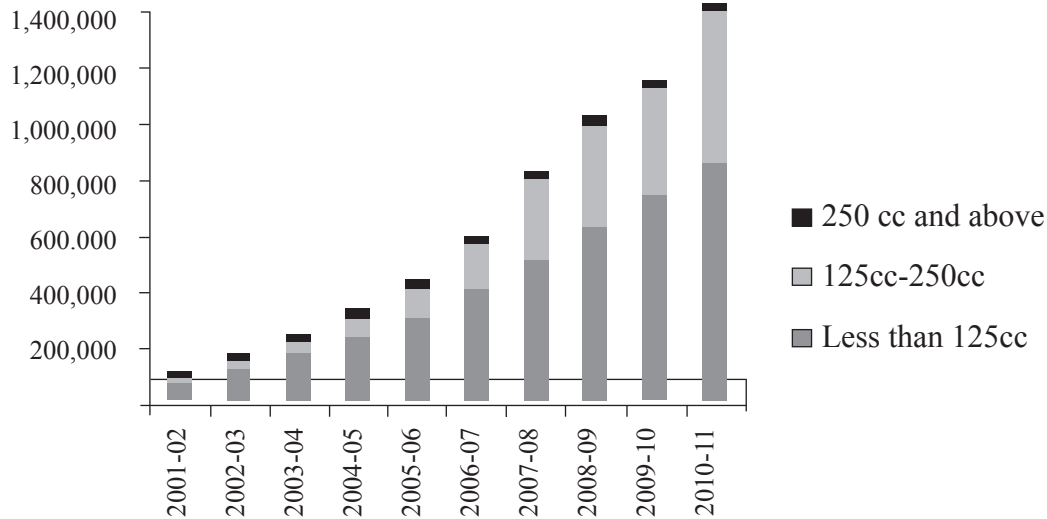
There are many countries with very low 2W population and rising income levels. Companies trying to acquire those market and are already established there would see better growth rates.

Presently Bajaj auto is well established in the exports market followed by TVS motors and Hero Motocorp. All of them together contribute annual sales of more than 1.5 million units.

The graph 14 shows the changing trend in exports of different segments of motorcycles.

Beacon Management Review 2012

Graph 14: Changing trend in 2 Wheeler exports



Source: SIAM data

Strengths for Indian companies

- Cost competitiveness in terms of labor and raw material and potential to maintain margins.
- Large unexplored markets with rising income levels like Africa, Latin America and Middle East.
- Wide range of products as per the buyer's choice.
- Continuously evolving product designs and technology with the changing market.
- Established manufacturing base. Economics of scale due to domestic market.
- Potential to harness global brand image of the parent company. Bajaj Auto, TVS and Hero have long history of brand.
- Large production capacity due to domestic demand.
- Large dealer network to reach different markets and good supply management skills in domestic market.

Key challenges for Indian companies

Changing models, improving fuel efficiency, cutting costs and enhancing user comfort without

Beacon Management Review 2012

compromising quality are the most important challenges of the auto industry. Players will have to compete on various fronts viz. pricing, technology, product design, productivity, after sale service, marketing and distribution. In the short term, market shares of individual manufacturers are going to be sensitive to capacity, product acceptance, pricing and competitive pressures from other manufacturers.

Domestic market

- Higher fuel prices may act negative in the growth.
- Maintaining profitability with the growing raw material prices and rising interest rates.
- Gaining market share and competing new low cost product from HONDA.
- Launching new models and modifying with the changing market needs.
- With more low cost cars entering domestic market and fall in second hand cars may affect the sales of premium two wheelers.
- Rising interest rates acts negatively in the 2W credit purchase.

Exports market

- Building brand in the countries in less explored markets of Africa and Latin America and competing with well established brands in developing countries.
- Maintaining cost compared to other cheaper brands.
- Establishing dealer network and maintaining sufficient inventory.
- Maintaining profitability with the growing raw material prices and rising interest rates.
- Improving product with changing market needs.
- Competing with Japanese and Chinese rivals entered Latin America and Nigeria, targeting with highly affordable products.
- Establishing strong dealer network to penetrate in both Urban and Rural areas of overseas market.

Conclusion

As affordability grows; people would choose to own a private means of transport in India and other developing nations resulting in high sales of motorcycle. New 2W demand grew at CAGR 12% whereas replacement demand grew by CAGR 10% in the past 10 years.

The domestic two wheeler market is expected to double in next five years. With players grabbing

Beacon Management Review 2012

the overseas market, their numbers may increase further. With extreme current penetration level the sales are expected to increase in coming years.

The above analysis represents the long term stability and robust growth of Indian two wheeler industries. This would certainly leave some investors mesmerized and would make them invest into the sector without the need of complex knowledge of stock market.

Inclusion and Business Impact

- Ankit Deshpande

Abstract

Inclusion in its most general sense signifies accommodation of all as a matter of equal right in spite of the various diversities that they might have. Inclusion is a realized concept in the consciousness of most governments, institutions, public discourse, forums, and societies and so on. However its realization in practical terms is something human kind will have to continuously strive for. Newer issues, power centers, trends and influences will keep emerging making the quest for a completely inclusive society a vision that binds its different hues into a single ray of its brilliance. Societies have gotten better in some aspects over time and still lag in others. Our cumulative wisdom and thought are evolving into newer perspectives, technologies, processes, laws and systems that our acting as enablers of inclusion in ways not thought of before.

*The main focus of this paper is the evolution of thought as alluded to above in the business domain. In some aspects that have been elucidated upon in the ensuing discussion, it is about including the bottom of the pyramid as a segment that businesses can profitably cater to. But it is more than C.K. Prahalad's BOP concept, and answers the question why corporations have started looking at this segment, given that the bulge at the middle income bracket is going to be huge, as it is, for any corporation to capture. The paper looks at this new strategy of corporations as essential to their foundational core competencies, given that these are dynamic and have to keep pace with the ever changing business environment. In their seminal paper, *The Core Competence of the Corporation*, C.K. Prahalad and Gary Hamel talk of a concept called 'Rethinking the corporation'. The concept talks about the elusive nature of markets, and consumer preferences and how 'A few companies have proven themselves adept at inventing new markets, quickly entering emerging markets, and dramatically shifting patterns of customer choice in established markets.' [C.K. Prahalad and Gary Hamel; *The Core Competence of the Corporation*, 1990]. They then go on to stress the importance of 'infusing products with irresistible functionality, or creating products that customers need but have not yet even imagined'. In this paper this concept is extended to creation of new markets and*

ways of reaching them, new service offerings, and newer ways of selling and newer forms of existing products to expand not the target base of corporations. However, how these endeavors catalyze the larger aim of inclusion remains the main focus of this paper; through the medium of examples from varied sectors, corporations, and domains.

The paper explores six examples- a mix of the private, the public sector undertakings, SME and an example of the positive fallouts the use of ICT technology in the area of financial inclusion.

ITC's e-Choupal

The ITC group of companies has a yearly turnover of Rs 7.5 billion (US\$162 million), and its activities span tobacco and cigarettes, paper and packaging, paperboard, hotels and tourism, information technology, and agricultural exports. For its agri-export division, ITC procures various agricultural commodities such as soybeans, coffee, and oil seeds. Typically, a farmer sells his produce to a small trader called a kacchaadat, who sells the produce to a larger trader called the pakkaadat, who in turn takes the produce to a local mandi, where a larger trader buys the produce. The mandi traders then operate through brokers to negotiate sales to companies such as ITC. This long supply chain results in high procurement costs for ITC and in lost profit opportunities for the farmers. Because this long supply chain is a very time-consuming system, it also results in deterioration in the quality of the products.

ITC introduced its famous E-Choupal model in rural areas to form a seamless partnership with the farmers in the hinterlands.

What is worth noting is the success of the model in that e-choupal system has expanded to 6500 e-choupals. E-Choupal entered into an existing mode of agricultural supply chain operations, with set ways of working. The system is not only bound by linkages relating to the various stages of procurement and distribution but also strong social relationships, hierarchies and mores that have lasted the test of times over many years, hardships and joys of the Indian farmer. To be able to convince the stakeholders involved to ITC's e-choupal as a preferred way of selling their produce is a sound achievement. Not only that the intermediaries after initial resistance joined the initiative as well due to the volumes being generated. Any innovative way of doing business necessarily will break older linkages and form new ones. Here, the middleman, had an important historical relationship with the farmer of providing ready (risky) credit, not only for his crops but also for social purposes, like family functions, marriage of children, which are of central importance to the fabric of the rural society in India. Hence, building mutual trust gains high importance in such scenarios. Another spill-off effect this untangling of the systemic knots in agricultural procurement and supply chain is the improvement in productivity, efficiency and volumes for the farmer, enabled by better seeds, information, weather forecasting and other relevant education that ITC provides as part of its initiative. However, the e-choupal model has been highly successful in the trading of the Soya crop while the wheat choupal has not been doing that well due to the market conditions, it being an almost perfectly competitive wheat

market, with a large number of buyers and sellers.

A more neglected aspect of inclusion which is often not talked about as much in the public discourse is the inclusion of all people for all products and services. It is not by design but by default that most people in rural and areas do not receive the product assortment, information through advertisements and other such efforts of marketers, and services as their counter-part urban citizens are able to avail of and at times at a fraction of the cost- both real and opportunity . This has been hitherto due to difficulties faced by corporations to carry out operations given the high cost to serve, and high cost of reach and distribution. And the situation has remained the same for the past many decades. It is true that the rural customer is different from the urban in terms of buying behavior which has hitherto been of loose products-commodities and low brand perception. This however, is self-feeding loop, because it has been found that rural disposable incomes rise, the product basket preferences become strikingly similar to the higher socio-economic classes.

ITC's initiative not only has improved lives in the agricultural rural areas by providing key information hard to come by before, established the long term sustainability of the model by building trust amongst all stake-holders involved thereby achieving volumetric growth and increased margins for all involved but it has all included the rural customer in the choice of packaged products he/ she didn't have earlier.

The company alongside, the above has achieved critical goodwill, has secured its raw material/ input resources and established a connect with the high potential rural market. Also, with the success of the model the company stands to potentially control other FMCG players in the future. Exide, Marico, Duncans, Phillips, Titan, Nokia, LG, NABARD, Shell, ACC, ICICI are amongst the FMCG, durable and service companies already using E-Choupal, besides farm input manufacturers.

Thus the concept initiated by ITC has not only created synergies amongst a variety of actors and issues but also with this innovative idea re-defined business rules, logic, market segments and ways of reaching then sustainably and profitably.

HUL'S Project Shakti

A similar attempt has been made by HUL the country's leading FMCG Company towards integrating the twin goals of expanding reach in the rural areas given the plateauing that might happen in the urban demand in the future. For that it makes business sense to make inroads in the rural segment now, with rising rural incomes and accompanying demand for FMCG goods expected.

The project aims at adding to the fleet of HULs reach and distribution in far flung areas which is difficult for it to reach on its own. Like described in case of ITC new methods of business do meet with challenges from time to time which need to be dealt with innovatively. The challenge

of the Shakti Ammas feeling stigmatized in door to door selling was overcome by conducting Shakti days-which resulted in fast selling of the products. The resulting volume has led to an increase in margins increasing long term sustainability and viability of the project.

The concept has helped create more than 48000 women entrepreneurs and has resulted in boosting the income of their households besides giving people in unconnected areas in the country choice of products, in the price range and SKU size that best suits their needs. This step will go a long way in helping HUL maintain its superiority in distribution over its competitors.

The Turnaround of the Railways

- Achieved without any burden passed on to the millions of poor travellers.

A public sector enterprise, a sleeping mammoth unaware about its profit making ability till it performed its function of providing affordable transportation to millions in the country. The cheapest fare, charged before it actually started sharing its good fortune with employees and passengers, was Rs 7 which later dropped to Rs 4. Perhaps numbers provide the stark comparison of the time when the Railways was facing bankruptcy to a time when it achieved high financial stability. For example its cash surplus before dividend in 2001 was Rs 4790 crores compared to 25006 crores in 2008. Its bank balance in 2001 was 359 crores compared to 22279 crores in 2008. In the same period the railways improved its operational efficiency from 75.9% to 98.3% better than the operating ration of the Chinese rail as well as class one American railroads. Its return on net worth was a 21% better than many blue-chip companies listed on the Sensex. All this was accompanied by a decrease in passenger fares. In fact certain phrases from that time became famous. One was the no retrenchment, privatization, fare- hike refrain, when the railways set upon the task of bringing order to its house. This was done through a concept which became the by-word of the railways that of running faster, heavier and longer trains. It found out ways of increasing profitability through increasing the number of higher yield coaches and wagons, decreased prices in the profitable freight and AC reserved classes which it had started to lose to alternate private modes. It started measuring cost per tonne and increased the length and load on a train which turned out to be more efficient as fixed cost of the engine, fuel, other related infrastructure and employee cost remained the same for that. It rejigged the earlier flaws in its pricing that as pointed to above not only took profitable business away but also the low prices it charged for transporting at `an extra service. It therefore started charging more in empty-load directions (parcel service) and door to door freight. It was therefore, able to achieve a politically/ socially desirable and commercially viable end.

Transportation as a form of mobility is part of the options people have to access desired goods, services, spaces and social activities. Evaluations which ignore the relation between public transportation and human development can lead to unfavorable implications for more sustainable forms of development, constituting a reversal from a social development perspective.[Guidelines to mainstream social inclusion in public transportation evaluations,

Diana DasteMarmolejo Development Planning Unit University College London 2010]

The Indian Railways achieved this without burdening the millions of poor travellers or its employees. It actualized the mission of inclusive reforms, meeting commercial objectives without compromising the needs and aspirations of the poor.

Financial inclusion: The role of the Information and Communications Technology Industry:

Today banks have centralized operations, more and more banks and branches are moving to CBS , network based computing, new delivery channels such as networked ATMs, internet banking, smart card based products, mobile access etc and are using IT for customer relationship management, customer transaction pattern analysis credit profiling and risk management. At the same time, large number of households continues to be excluded from the formal banking system and as per some recent surveys their share has increased.

e-Financial Inclusion

It could be described as “innovative applications of ICT for delivery of financial & payment services and adequate credit where needed, at an affordable cost to the vast section of disadvantaged and low-income groups, who currently are unbanked. The key deliverable is Financial Inclusion and therefore to accelerate the process, multiple channels of delivery of variety of financial services are required to be explored. Quite clearly, the task is gigantic and technology is general and ICT in particular is and would be the driving force for achieving this.

The example of Nokia

For the past three years, YellakandulaUrmila of Bhongir village, near Hyderabad, has been banking with SKS Microfinance (MFI), India’s largest lender. She first bought a loom to weave silk saris with a US\$150 loan from MFI in 2007, which helped triple her family’s monthly income to US\$100. Three months ago she took out another loan for US\$26 to buy a Nokia 1200 mobile phone with a prepaid Bharti Airtel connection, which she will have paid off in June. “It’s been a life-changing and time-saving experience,” says Urmila, affectionately patting her gleaming silver handset and recalling how she used to have to walk a mile to a wire-line public phone booth to call clients about orders. “Deals are now wrapped up in minutes,” she says.

Wooing rural consumers like Urmila while teaming up with local organizations have been a key part of the global strategy of the US\$55 billion Finnish handset multinational since 2006. “Partnering with local stakeholders is a cool thing,” says GireeshShrimali, professor of information systems at the Indian School of Business in Hyderabad. “It is a neat innovation, which creates buzz and brand equity for Nokia.”

(<http://ideas.repec.org/p/ess/wpaper/id1653.htm> ;<http://www.mpf.org.in/pdf/e-Financial%20inclusion.pdf> ;<http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4474>)

Financial inclusion offers a huge opportunity to the telecom companies- both service providers and handset manufacturers given the problems of reach that the banking industry is facing today. This is another dimension of an inclusive, profitable business.

Amul: A shining example in the SMEs and Co-operative sector

Amul pioneered the co-operative movement in the country by not only providing employment to millions of but also establishing an innovative and profitable venture that brought together cooperatives. India was transformed to a milk surplus as a result of the operation white flood that Amul led the country usher in.

Amul has over time been able to establish its brand value and has emerged as a strong force in the milk and milk products category. A brand stands for reliability, quality, and consistency. Amul has been able to achieve this in spite of the difficulties posed for a structure where the raw material is procured from so many different members in diverse locations. As its members were poor farmers, it innovatively designed an easy to understand milk testing and accounting system. It created a mechanism that shielded members from the fluctuations in milk production which had been resulting in sale at lower prices during the flush season. It thus succeeded in building a viable milk procurement system, laying a foundation for its future growth. [The White Revolution- How Amul Brought Milk To India More Facets: JJ BAXI]. Besides policies that led to higher productivity and integration amongst its members, Amul created the concept of pool and share to minimize investments and maximize utilization. It created a milk grid whereby the flow of milk from areas of surplus to areas of deficit was regulated. Also the various milk unions combined to form GCCMMFL- Gujarat Cooperative Milk Marketing Federation Limited.

It thus created a source of livelihood for the farmers, by shoring up their incomes, given that seasonal and under-employment is rampant in many parts amongst farmers. Amul not only created a brand that stands for trust and today competes with corporations with far deeper pockets. This given that Amul's advertising to sales ratio has been on an average less than 1%, whereas it ranges from 7-12% for other FMCG majors. Amul's story is a story of successful business and social transformation.

Amul thrived because it was owned by its farmers who had a stake in its success. [22nd Annual report of GCMMFL'S Golden Jubilee]

Conclusion

Through the varied examples above we see how it is not only possible but a new imperative to have inclusive growth accounted for in the business equation for any enterprise today. It shows that how not only can corporations in any sector and segment can take various hitherto

unthought-of segments with them but in the process also re-define how their business is conducted and expand both its scope, life and vitality.

This paper explored the possibilities that inclusiveness can lead to profits if handled with right amount of conviction and business acumen. The two are not necessarily opposing concepts.

References

- [1.] <http://ideas.repec.org/p/ess/wpaper/id1653.html>
- [2.] <http://www.mpf.org.in/pdf/e-Financial%20inclusion.pdf>
- [3.] <http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4474>
- [4.] http://siteresources.worldbank.org/INTEMPOWERMENT/Resources/14647_E-choupal-web.pdf
- [5.] <http://www.equitymaster.com/detail.asp?date=08/10/2009&story=4&title=HUL-Project-Shakti-business-model-overview>
- [6.] How the Indian Railways Transformed Itself –Sudhir Kumar, Shagun Mehrotra
- [7.] Guidelines to mainstream social inclusion in public transportation evaluations, Diana Daste Marmolejo Development Planning Unit University College London 2010
- [8.] 22nd Annual report of GCMMFL'S Golden Jubilee
- [9.] The White Revolution- How Amul Brought Milk To India More Facets: JJ BAXI

Dousing the Fire

- Anant Jindal, Ankit Deshpande, Ankit Srivastava and Snehal Narang

Acknowledgement

This case is written by students of Symbiosis Institute of Business Management, Pune in association with Kirloskar Brothers Limited to be used at marketing class in Business schools. We would like to extend a warm gratitude to the senior management team of Kirloskar Brothers Limited for their support and patience; without which this wouldn't have been possible. We would also like to take this opportunity to thank our director Dr.Vivek Sane for providing us this platform and supporting our efforts through to its completion.

It was 6:00 pm, Arun Mehra lifted his empty coffee mug for the fifteenth time and took another empty sip. "Sir!" said the guard hesitantly breaking his pensive silence, "Should I bring you another cup?" He said. Arun got startled as he realized what he was doing, thanked the guard and switched off his laptop. He had a very long drive home and he hoped he wouldn't be stuck in traffic. As Arun drove away from "Yamuna", the headquarters of KBL, his thoughts went back to today's meeting with Riya about Multi Stage Multi Outlet pumps. Ms. Riya is the general manager of centrifugal pumps. MSMO pump is a fire pump that provides a continuous supply of pressurized water at all levels of a high rise building. Riya had said "I doubt the acceptability of MSMO pumps in the price sensitive Indian market. Since these pumps are expensive than some traditional pumps in the market, the builders may not find them attractive even if they improve the long term cost effectiveness and safety of their building. We should pull out from Indian market and channelize our marketing and distribution efforts in other geographies where demand for high rise buildings is poised to grow, and consumers are more safety conscious driving the demand for pumps that comply to safety norms such as the MSMO in the builder fraternity"

Arun believes that this product requires more awareness among Indian customers, and with

Beacon Management Review 2012

proper positioning efforts supported by the spiralling growth in the number of skyscrapers and increasing awareness for safety norms, the product will have a good market in India. And he hopes to capture the first mover's advantage when that happens.

Overview of the industry

According to Hydraulic Institute, pumping systems account for nearly 20% of the world's electrical energy demand and range from 20-25% of the energy usage in certain industries. The industrial pump market will exceed \$37 billion worldwide with larger markets like residential pumps and those used in hydraulic systems will exceed \$60 billion in 2012. Asia is the largest market with 40% of the total demand. China accounts for 61% of total Asian purchase. Indian pump market is seven decades old; however, with the advent of globalization it has grown its legs in international pump markets. The industry is characterized by the presence of organized and unorganized players. The latter cater mainly to agriculture sector due to lower cost, and low requirement of efficiency due to subsidized electricity by government for that sector. The organized market comprises of international players and few domestic ones such as Kirloskar. India produces more than 2 million units of pumps every year catering to 95% of domestic demand. Indian pumps are exported to as many as 60 countries including developed nations.

Since water has become vital commodity in all the regions therefore the emphasis on water quality coupled with stringent waste water discharge regulations are creating huge opportunities for the companies. To cater to this segment which has enormous potential, KBL has come up with products such as Low Life Cycle Cost (LLC) pumps. LLC pumps are normal pumps with high degree of reliability built-in. Pumps offer a good sustained efficiency over a large period, which saves some operating costs. Maintenance cost is also saved as the maintenance intervals are longer and breakdown frequency are minimal.

Overview of Kirloskar Brothers Limited

With humble beginnings in 1888, Kirloskar Brothers Limited (KBL) has become India's largest manufacturer and exporter of pumps and also the largest infrastructure pumping project contractor in Asia. Kirloskar Brothers Limited is the flagship company of the \$2.5 billion Kirloskar group. In 1888, founder Mr. Laxmanrao Kirloskar established the company with its first product as an iron plough. He dreamt of building his own industry and a community for his employees, which he later realized in the form of Kirloskarvadi, where he started his factory in 1910.

The company is a global fluid management solutions provider and the largest provider and exporter of centrifugal pumps and valves from India. Its core products are customized pumps, standardized pumps, projects and valves. The customized pumps are designed for water and non-water fluids; critical, supercritical and regular operations according to the client's

requirements and are sourced directly through KBL. The standardized pumps mainly for industrial, household and agricultural purposes are sourced through dealers. The projects business offers turnkey solutions to the client's requirements; the biggest example of this is the Sardar Sarovar Dam, which is the world's largest pumping scheme.

Rationale of developing the product

The 10-12% growth in the Indian pump industry, has invited stiff competition from both organized and unorganized sectors causing commoditization in the pump industry. This has put significant pressure on margins. With the opening up of markets to international players in 1991, the industry has been facing stiff competition in the technology front as well. Therefore, in order to boost its topline and to retain its current market share, Kirloskars decided to introduce a new product as a differentiating factor in the hypercompetitive market which will also increase their bottom line significantly.

On the basis of prior experience in the pump industry, the company found a potential market in the high rise buildings segment. The company invested in research to develop a product in the firefighting segment, leveraging upon the additional capabilities that it gained through the acquisition of SPP in 2003.

The product thus developed was MSMO: a multistage, multi output pump which can supply water at uniform pressure to all levels of a high rise building (over 60 meters in height).

Terms

Head: Liquid in vertical pipe exerts pressure on a horizontal surface at the bottom. This pressure is expressed in metres of liquid column. This height of liquid column is known as Head.

MSMO: MSMO refers to Multi Stage Multi Outlet. Multi Stage pumps have two or more impellers mounted on the same shaft. Number of impellers are connected in series in same casing in such a way that discharge of first impeller, is suction of second impeller and so on. Multi outlet pumps have multiple (two or more) discharge nozzles which can cater to different head requirements.

Product Specifications

A traditional active fire protection system involves use of sprinklers post manual or automatic fire detection. A typical sprinkler system operates when the heat generated due to fire in an area breaks the bulb and allows flow of water from the sprinkler causing the pressure in it

Beacon Management Review 2012

to drop. The fire pump starts when the pressure in the fire sprinkler system drops below a threshold. Fire pumps are needed when the pressure of the local water supply isn't sufficient to meet the hydraulic requirements of the sprinkler system. This usually occurs when the building is very tall such as in high rise buildings or those which require a larger volume of water, such as storage warehouses. A jockey pump is installed with the fire sprinkler system and is intended to maintain high pressure in the piping system, so that a small drop of pressure created by a sprinkler is noticeable for the firefighting system to begin operation.

In high rise buildings conventional fire pumps need additional pump house for every zone (approx. every 60 metres). This system has a higher cost creating an extra floor for another pump house, buying additional pumps, valves and piping, and creating multiple water storage tanks to cater to the pressure requirements of higher floors.

Multi-Stage Multi-Output pumps are fire pumps which only require a single installation per building and can cater to a 100-storey building. These pumps are automatic as well as manually operated and a few models are LPCB certified to operate in conditions of fire. The product can have up to 5 outlets, and has a head range of up to 500 meters which is the height to which the pump can supply water at sufficient pressure. The pump can also be installed vertically that saves up to two car park space.

| Technical Specifications |
|--|
| Flow Range: 700 m ³ /hour (3082 US gpm)* |
| Head Range: Upto 500 metres (1640 Ft)* |
| No. of outlets: upto 5 nos. |
| Type of Execution: Both horizontal and vertical |
| Std MOC (Casing/Impeller/Shaft): Cl / Bronze / SS |
| Available in both Gland pack/ Mechanical Seal |
| Frequency: 50 Hz/ 60 Hz availability |

Table 1: Technical Specifications

Application and Benefits

The application of MSMO pumps can be in the following systems:

- Sprinkler systems
- Hydrant systems
- Deluge systems
- Monitor systems
- Water curtain

In the current Indian market, MSMO pumps are used mainly in sprinkler and hydrant systems for fire protection.

Its USP is in the cost effectiveness of this pump in comparison to conventional pumps. It eliminates the requirement of building a pump house and saves construction cost while

creating more business space to utilize or sell. The presence of multiple outlets reduces the necessity of having multiple pumps for different head requirements. It also saves space and cost because of reduced requirement of water tanks, pipes, valves and a possibility of vertical orientation. The saved space amounts to greater revenues for the builders especially in areas where the cost of property is higher. The position of suction and delivery pipes can be customized according to customer's requirement.

Segmentation Targeting and Positioning

The market for the MSMO pumps can be behaviorally segmented based on the different roles played by the people during the purchase decision of pumps.

The first segment comprises of 'Consultants', who act as initiator and influencer for the buying of the MSMO pumps. This segment of people gives the underlined specifications for the fire-hydrant system during the construction of the high-rise buildings. They are the major influencers in the purchase decision of MSMO pumps by the builders.

The second segment constitutes 'Builders', who purchase MSMO pumps for their construction projects of high-rise buildings. Builders, normally act on the specifications spelled out by the consultants for fire- hydrant system.

The third segment is that of 'Residents'. These are the users of MSMO pumps in case of any fire accident. The reliability of the fire-hydrant system matters the most to this category of people and have the least involvement in the purchase decision of MSMO pumps.

The market for the MSMO pumps can also be segmented based on its beneficiaries. The first segment comprises of 'Builders' who save moajorly on construction cost as well as on insurance premium. It also creates more business space to monetize at basement for two cars' parking and two additional flats, which would otherwise be used for installing extra pumps and placing a water tank.

The second segment is that of 'Residents' who gets a reliable fire hydrant system, which works automatically and almost instantaneously on all the floors of the building in case of a fire accident at intermediate floors.

Based on the prior market experience and pilot market research, there was found to be a strong correlation between segment one and two i.e. consultants and builders. Builders act in conjunction with the consultants and install equipments as per the specifications given by the consultants. However, builders are also in an advantageous position for using MSMO pumps, as they save on a considerable amount of floor space in their buildings, as compared to the conventional pumps. This can be realised in a total saving of INR 20 M to 500 M in metro cities such as Mumbai or Delhi Therefore, the target market for the MSMO pumps comprised of both Consultants and Builders.

As Arun reached closer to his house, a million thoughts rushed through his head. He is still concerned if the communication strategy needs to be revised to strongly portray the attributes of MSMO pumps to the target market. Also, Riya's comments made him rethink the positioning of the product, which has troubled him right from the beginning. As he parked his car, he assured himself that the product was good and the Indian market will accept it in the coming years.

Exhibit 1: Structure of Product

Fig 1 below shows the horizontal orientation of the Multi Stage Multi Output pumps, it has multiple impellers loaded on its shaft and multiple (upto 5) outlets installed at 90° to each other. It has pressure gauges loaded at each suction and outlet to measure the pressure of the fluid in that channel. These gauges need to be calibrated to the pressure requirements of the building at different storeys. A jockey pump is installed alongside it to ensure continuous supply of water in all the pipes of the firefighting system in the building.



Fig 1: A horizontal MSMO Pump

Exhibit 2: Advertisement of MSMO pumps

The advertisements of MSMO pumps were put up in print as well as electronic media. And its visibility was ensured in spaces visible to the target market, that is, builders and consultants. An example of an advertisement of MSMO pumps is shown in Fig 2.

**FIRE PUMPS FOR
HIGH-RISE BUILDINGS**

**CONSUMES
FIRE...
NOT
SPACE!**

Saves space up to
2 car parks

KIRLOSKAR
Enriching Lives

Pumps with 5 discharge outlets available for buildings up to 100' storeys.
Discharge Capacity up to 700 m³/hr.

KIRLOSKAR BROTHERS LIMITED

Fig 2: An advertisement of MSMO Pumps

RESEARCH & SCHOLASTIC DEVELOPMENT TEAM



THE RESEARCH & SCHOLASTIC DEVELOPMENT TEAM OF SIBM PUNE WAS FORMED WITH THE INTENTION OF FURTHERING THE RESEARCH AND SCHOLASTIC APTITUDE OF THE STUDENTS. THE TEAM PRIMARILY LOOKS AT IDENTIFYING, CONCEPTUALIZING AND EXECUTING LIVE CORPORATE PROJECTS AND RESEARCH PROJECTS THAT HAVE THE POTENTIAL TO CONTRIBUTE TO THE EVER CHANGING LANDSCAPE OF BUSINESS MANAGEMENT BY ASSOCIATING STUDENTS WITH LIVE PROJECTS FROM THE INDUSTRY. A MUTUALLY BENEFICIAL RELATIONSHIP IS NURTURED.

SIBM PUNE OFFERS SPECIALIZATIONS IN THE FIELDS OF FINANCE, MARKETING, OPERATIONS AND HUMAN RESOURCES. EVERY REAL WORLD BUSINESS SITUATION REQUIRES ANALYSIS FROM MULTIPLE PERSPECTIVES AND THEREFORE, OUR MULTIDISCIPLINARY TEAM COMES INTO PICTURE AND CREATES A WIN-WIN FOR THE INDUSTRY AS WELL AS THE STUDENTS.

SOME OF THE PROJECTS THAT RSDT HAS EXECUTED IN THE PAST ARE:

- STRATEGY FORMULATION FOR LAUNCH OF NEW PRODUCT FOR GODFREY PHILLIPS INDIA LIMITED.
- MARKET RESEARCH AND STRATEGY FORMULATION FOR MAHINDRA COMPOSITES, MAHINDRA NAVISTAR ENGINES
- SPECIAL SITUATIONS INVESTMENT PROJECT FOR TATA CAPITAL
- CREDIT ANALYSIS OF DEBT INSTRUMENTS OF INDIAN AND FOREIGN BANKS AND A STUDY OF LOAN BOOK COMPOSITION OF BANKS
- SERVICE LEVEL IMPROVEMENTS USING SIX SIGMA FOR ATLAS COPCO
- UNDERSTANDING THE ASPIRATIONS OF A SEGMENT OF THE SALES FORCE FOR MOTHER DAIRY.
- MARKET RESEARCH AND STRATEGY FORMULATION FOR A NEW SERVICE FOR BVG CLEANTECH



Research & Scholastic Development Team

Symbiosis Institute of Business Management Pune
Constituent of Symbiosis International University
Accredited by NAAC with 'A' Grade
+91 20 3911 6088
www.sibm.edu

