FIN STREET ...the path to Financial Excellence!

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FINNOMICS

K J Somaiya Institute Of Management Studies and Research

Inside...

COVER STORY

PROPOSED INNOVATION IN GLOBAL PHARMACEUTICAL BUSINESS MODEL

Editor's Desk

It would still be a cold February day on which you find yourself in the company of this latest issue of the Finnomics, the Vol. 3 Issue 5, dated February 12. Coincidentally (or probably through conscious endeavor of someone in Planning), the release of this issue accompanies the flagship event of Fin Street, the Investrix. We wish team Investrix an occasion of immense knowledge-sharing and learning, as is the grail of all that we do.

This edition of the **Finnomics** aims at nothing less. Our cover story looks at one of the stellar performers in terms of investor returns, the **Pharmaceutical industry** and suggests a few strategies they could look at for the future. The study is extensive and insightful. Read on to find out **why repo rate adjustments would be ineffective in controlling inflation**, at a time when policy changes are proving to be heavy-handed on growth prospects. Short and crisp is the article describing the **four nails in the coffin of microfinance**, describing the flaws in the model of business currently employed by the MFIs in India. For all those who ever wondered what **Private Equity** firms were all about and what it was that they did and never found out, we have a little primer for you as well. Read it!

Then comes the twist in the tale, a dismissal to accept things as they are. This one titled "**It's black. Oh no! It's white.**" offers a radical new view of the monetary policy-led interest rate hikes of the near past, the dramatic entry of QFIs and *black money*, and weaves them all into an intriguing case. Certainly some food for thought. Further on is a brief account of the recent **cut in CRR and its implications** in the short-run. To make the issue even more overwhelmingly beautiful, an overview about a **Actuarial Science** has been provided.

We, **Finstreet**, have always tried to keep each and every issue as much contemporary as possible. And even this issue is not an exception.

We sincerely hope that you will find this issue not only fascinating but also thought provokingly interesting. Happy reading!

Immerse yourself,

THE FINSTREET TEAM

Contents

Global Pharmaceutical and Healthcare Sector-Overview

The Pharmaceutical and Healthcare sector is one of the world's fastest growing industries running into several trillion dollars and touching around 4.6 billion human beings across the globe. On an average, it consists of over 10% of the Gross Domestic Product (GDP) of the most developed nations forming an enormous part of its economy. With the global population reaching the 7 billion mark, the global pharmaceutical industry is set for rapid growth.

This growth will be fuelled by the following factors:

- Ever increasing demand for the pharmaceutical proucts and healthcare services because of the indispensible nature of the deliverables.

* Nearly zero threat of substitution of the product and services provided.

* Constant innovation being the driving force preventing any sluggish behaviour.

Figure 1 gives a brief overview of the top 10 global market players, based on the expected revenues by the end of financial year 2011.

Figure 1

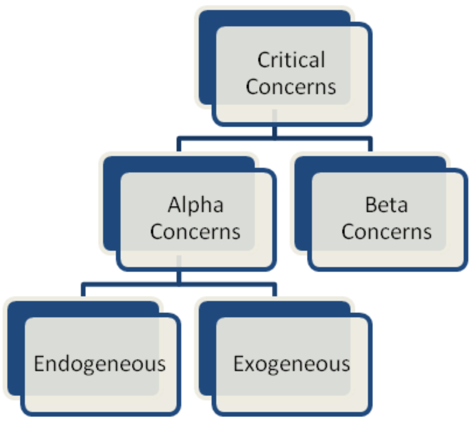
Rank	Company	Revenues (USD billions)
1	Pfizer	54.1
2	Novartis	49.5
3	Sanofi	47.9
4	Merck & Co.	42.1
5	GlaxoSmithKline	39.3
6	Roche	39.1
7	Astra Zeneca	32
8	Johnson & Johnson	24.8
9	Abbott Laboratories	22.5
10	Eli Lilly	21.5

Source: Evaluate Pharma Ltd.

1.Pharmaceutical and Healthcare-sector critical concerns

Inseparable like two sides of a coin, the pharmaceutical industry too, like any other industry, has its fair share of pros and cons. The industry, though rapidly growing has a few critical concerns. Some of them are inherent in the firms operating procedures while some others are inherent in the nature of the business and cannot be avoided. A few others are because of the external environment in which the company operates.

Figure 2



1.1 Alpha Concerns :

These are firm specific pirmary concerns which are due to the operating strategy that a firm follows. These are further divided into :-

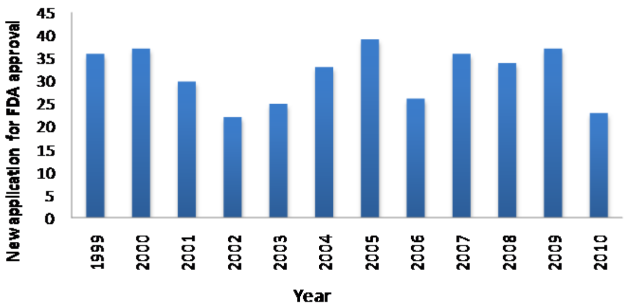
1.1.1 Endogeneous Concerns:

These are critical concerns with the internal operations of the firm. The pharmaceutical industry majorly faces the following endogeneous alpha concerns:-

1.1.1.1 Low productivity of Research and Development pipeline:

Over the past decade the number of applications for approval of new medical entities being made to FDA has averaged 30 per year. However, in 2010 only 23 applications were filed, the second lowest number in a decade.

Figure 3



1.1.1.2 Rising Research and Development Cost versus diminishing return : The main concern is not just the low productivity but the resultant increase in cost vis-à-vis the diminishing returns. The costs for R&D have consistently increased whereas the returns have been diminishing over a period of time.

1.1.2.1 Exogenous Concerns : These are concerns arising out of the firms external business model and the interaction with the firm related external procedures. These include:-

1.1.2.2 Supply Chain concerns : Supply chain has been a major concern with the healthcare industry as also with the pharmaceutical sector. Large lead times for healthcare equipment and for certain raw materials have been a cause of concern for many global and domestic companies. Considering the fact that raw materials constitute of over 45% of the revenues for the pharmaceutical industry show the importance of having a well-developed supply chain.

1.2 Beta Concerns :

These concerns arise due to the dynamic nature of the external environment and due to the interference and influence of the uncontrolled external sources.

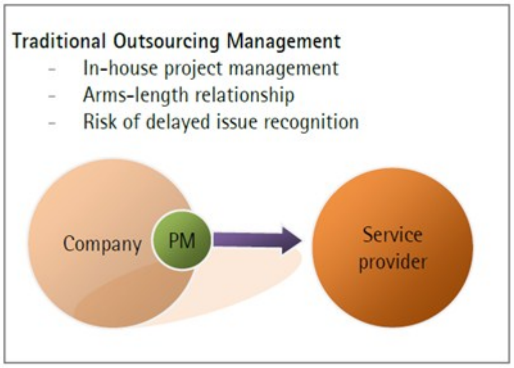
1.2.2 Patent Cliff : Patent cliff describes what happens to the sales of an original drug when its protection (patent, regulatory, etc.) ceases: A dramatic drop in sales both due to declining unit numbers, but also a price erosion of up to 70 percent within months. Patent cliff will fundamentally impact individual pharmaceutical companies in the mid-term future. During the next five year period i.e. from 2011 to 2016, the revenues of drugs having patents that will expire are about $89.5 billion USD, the majority of them small molecules.

2. Pharmaceutical and Healthcare Sector-Proposed Innovations :

2.1 Innovative Business Models: The case suggests a few innovative business models to ensure a nice balance between profitability and social responsibility. The former aspect will attract various companies to this model whereas the latter one will pull in government authorities to consider and allow the implementation of these models.

2.1.1 Change in outsourcing models: Where large, business critical projects are out-sourced, for example clinical trial, there is scope for increased project risk due to the arms-length relationship between the parties. The ideal solution would be to embed an employee in the contractor's operations to provide maximum visibility on project progress and emerging issues. Unfortunately this is rarely an option given cross-client confidentiality concerns. This means that many customers manage their relationships with service providers at arm's-length, risking delays in recognising emerging project roadblocks. We propose a third way. Engaging with an experienced consultant to act as project manager presents a neutral interface for the contractor. This has benefits for companies carrying out virtual drug development including reduced costs and uncertainty due to virtual development, greater transparency into project progress, with a fire-wall to reduce confidentiality conflicts. Understanding the nature and the scale at which outsourcing is prevalent in pharmaceutical sector, this can be n effective way to reduce costs and mitigate risks.

Figure 4



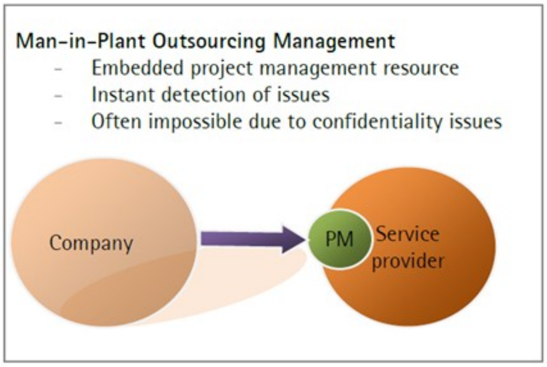
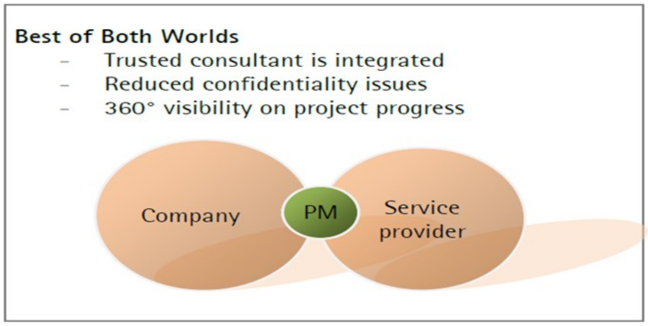


Figure 5



2.1.2 Open Innovation-Looking beyond the internal R&D:- Internal R&D remains by far the leading source of ideas for innovation for the sector as a whole (cited by 60%), and for pharmaceutical (73%) and biotech (71%) in particular. This is not inherently bad. A strong internal R&D function has been central to the success of many leading companies. However, in such a competitive environment, it's time firms understand the need for effective partnerships as well. Although companies in the sector have engaged in partnerships for a long time, there is a shift in recognising how we need to partner. In particular, leading innovators are much more likely to have embraced open innovation. Open innovation involves two elements: first, searching for new ideas wherever they can be found, even licensing in useful ones where necessary; second, willingness to share or license out IP that a company is not using.

2.1.3 Strategic Innovation: Business Strategies are dynamic and change over a period of time. The strategies that have worked for the companies in the past couple of decades need not necessarily work in the next decade. A strategic shift in the battle for competitive advantage can help a company to not only survive but also succeed in a competitive market. The following table shows the shift in strategies that could help a company navigate competition and emerge successfully and profitably.

Basis of Competitive Advantage today
Development Resources & Marketing Scale
Global High Prices Restricting Access
Multiple competitors in major therapeutic areas
Billions of money in Drug Revenue covering fixed costs
Acquisition of technology and products.

Basis of Competitive Advantage in 2020
Value of Products, Services and Distribution Strength
Price based on ability to pay driving volume uplift
Fewer Competitors in broader range of diseases
More products with lower revenue and costs
Collaboration with competitiors, academia and biotech

2.1.4 Online Chemists and Health care Bookings :

Usage of the information system for online drug procurement will not only increase the scope of wider sales but will also reduce cost over a period of time. The commissions charged by local chemist shops should be passed onto the customers will reduce their cost. It would be like having a chemist chest, similar to currency chest, at different junctures to supply the ordered medicine. Also, the penetration that such online sales will have in the urban market, because of the widespread use of technology, can be enormous. This will also legalize all the transaction, thereby reducing any illegal activity and increasing government revenue.

For the healthcare sector, online bookings for healthcare checks and various tests as well as online checking of the reports thereby will not only help in maintaining a permanent and easily accessible patient database, but will also save the time. Such online system can then be connected to a Master system which can be accessed by all the hospitals across the country and even worldwide. Thus, a patient record and a history of all the ailments faced shall flash in as soon as the hospital enters the patient ID. This will work, similar to the UID scheme, whereby one single database can access to all the past and present information speeding the entire process.

2.2 Synergies : Synergies within the industry has always come through either mergers or acquisitions. Strategic allia-nces with different firms within the industry will boost a new operational method and will ensure that firms deal with competition at a macro level vis-à-vis the micro level, as generally done today.

2.2.1 Strategic Alliances versus M&A:

Strategic Alliances reduce risks as compared to mergers and acquisition. This is especially important and beneficial When dealing with foreign firms. For an Indian company to merge or acquire a company in say Africa, to enter the African market is much riskier than just having a strategic alliance with the same. The local company shall contribute with its expertise during this alliance and the reduced investment as well as a comparatively certain outcome will benefit the Indian company.

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Abhey Bansal

"The painful side effects are one reason why the alcoholic and the inflationary nation both find it difficult to end their addictions. But another reason, at least in the earlier stages of the disease, may be even more important, is the absence of a real desire to end the addiction. The drinker enjoys his liquor; he finds it hard to admit, even to himself, that he really is an alcoholic; and he is not sure he wants to take the cure. The inflationary nation is in the same position. It is tempting to believe that inflation is a temporary and mild matter, produced by unusual or extraneous circumstances, and that it will go away of its own accord — something that never happens" — Milton Friedman.

ABSTRACT

We all have felt the pinch of escalating prices during this festive season. Life has not been very easy this year due to rising prices. The overall cost of goods and services is increasing because of inflation. It has impacted everyone from customers to banks. In response, India's central bank, the Reserve Bank of India, has consecutively raised key interest rates over a dozen times and by 375 basis points (one basis point is 0.01%) since March last year.

But inflation, in the meantime, has shown a complete disregard for all the sweat and efforts put forward by our central bank. It continues to stand tall, close to double-digits. Headline inflation for September remained elevated at 9.72%, Inflation, as measured by the Wholesale Price Index, stood at 9.78% in August.

Now the question arises has the central bank's monetary tightening harmed growth instead of taming inflation? How much growth RBI it willing to sacrifice to tame inflation? These are the questions we are going to probe here. Above a certain level, inflation starts to hurt growth and there's no trade-off between inflation and growth—the only objective, at these high level is, would then be to reduce inflation.

INFLATION v/s GROWTH

A rate of WPI (Wholesale Price Index) inflation above 6%, hurts growth in India. For WPI-inflation up to 5.5%, there is positive impact on growth. The relationship reverses when WPI-inflation is beyond 5.5% and inflation effect on growth turns negative. The breakdown of WPI and trend in WPI prices has been shown in appendix.

High inflation has started to show its side-effects on the economy in the form of slowing growth. It has an adverse impact on private investments. It had made domestic firms less competitive relative to imports and could hurt exports. Input costs, including wages had gone up and had hurt profits, thus restraining entrepreneurs from investing. Inflation could lead to lower demand, affecting growth.

Why it's so that even after so much efforts of RBI, inflations hasn't come down. Why raising rates haven't helped. Let's find out.

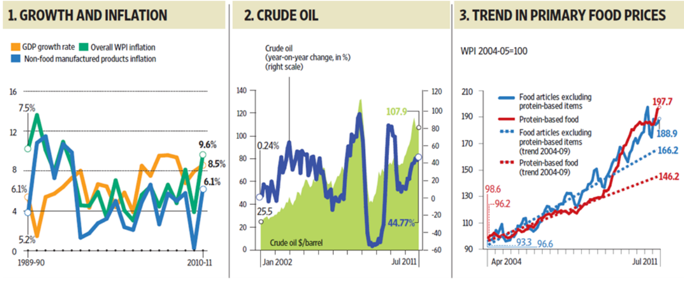
INEFFECTIVENESS OF RAISING INTEREST RATES

The ineffectiveness of raising interest rates for controlling inflation can be attributed to the supply bottlenecks coupled with the drift in policies to guide supply chains. As the supply response has not been adequate, prices have increased and remained elevated.

Food items form a whopping 14% of the Wholesale Price Index. Food items have been costly due to a supply crunch during the last few months. Surging demand and a supply mismatch have been putting price pressure on protein items, particularly fruits, onions, potatoes, meat, milk, eggs, meat and fish. On the supply front, the supply of food has not really kept pace with the demand. Reducing crop acreage due to industrialization, pulling out of agriculture labor due to urbanization, are some reasons due to which supply has remained constrained. In addition to this, there are environment issues like depleting water table, erratic monsoons, which have further brought supply under pressure.

Figure 1

Source: www.livemint.com



RBI monetary policy has little impact on food or primary articles i.e. Crude oil, because they are all governed by demand-supply mismatches. The world crude oil price is high; as India imports about two-thirds of its crude oil, the import bills are rising.

To the extent, the government has tried to cushion the impact of high international prices of oil by not passing on the increase fully to the consumers, it has increased the subsidy burden. Higher subsidy translates into higher fiscal deficit, which too has inflationary implications.

The rupee had depreciated against the U.S dollar, pushing up import prices. The rupee has depreciated all the way from 44 in early August to almost 52, till about a week back. In the last 45 days alone, the rupee has lost more than 10% in terms of value.

On the demand side, there has been a significant increase in wages—both in the formal and informal sectors. Even after accounting for high inflation, the increase in real wages has been positive both in urban and rural areas.

In addition, there has also been a significant demand stimulus from the crisis-driven fiscal and monetary policies. The current inflation process, therefore, is an amalgam of both supply constraints and demand pressures.

- 9.61% Average inflation in the last six months
- 19.20% Average increase in the price of non-food items since April
- 12.90% Average increase in the prices of fuel and power since April

FISCAL POLICY

More than the inflation, it is the government finances that may be creating bigger trouble for policy makers. India's policy mix is worsening with a much tighter than-expected monetary policy and looser-than-expected fiscal policy.

Fiscal policy is skewed towards the promotion of domestic consumption rather than investment, which adds to inflationary pressures. The government fiscal multiplier is higher for capital expenditure than for government consumption expenditure.

Fiscal deficit isn't expressed as absolute number. It is expressed as shares of GDP. The budget expected nominal GDP growth of 14.5% this fiscal, broken up into 9% real growth and 5.5% inflation.

The problem with the fiscal deficit is, the difference between government receipts and government expenditure. The Government of India has not managed the budget for the first half of the fiscal year 2011-12 too well. Up till September 2011, the government's fiscal deficit has already reached 68% of what it had projected for the entire fiscal. The reason for this is the decline in government's revenues**.** Tax revenues are not flowing in as projected. Non-tax revenues too have dried up. Moreover, the second half of the year is likely to see the expenditures rise on account of increase in subsidies. All of this means that the government's ambitious fiscal deficit target of achieving 4.6% of GDP (Gross Domestic Product) in FY12 is likely to meet with failure.

Goldman Sachs has also revised India's fiscal deficit, citing worsening of fiscal and monetary policy mix, estimate for the current fiscal to 5.8% of GDP up from 5.5% forecast earlier.

FACTORS THAT WILL SHAPE THE INFLATION TRAJECTORY

Keeping in view the costs of inflation and the fact that high inflation is inimical to sustained growth, the objective of RBI is to bring down inflation .Both global and domestic factors will shape the inflation outlook in the future.

- With India's domestic food prices being high, import is not an option for reducing the prices. Hence, increasing agricultural productivity and expanding livestock production will be important for moderation of food inflation.
- To combat global commodity prices and, we require 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.
- Government should deregulate diesel prices as soon as inflation begins to decline. Raising diesel prices will push inflation, but if it's not done, it will push subsidies to unsustainable levels.
- On the demand side, there is a need to shift aggregate demand away from consumption towards investment, to augment the potential output of the economy. The demographic dividend that we have in terms of addition of younger people to the labor force could be better harnessed when combined with increasing capital accumulation.
- There is an urgent need to complement monetary tightening through fiscal consolidation. Fiscal policy is something on which adequate attention needs to be paid as it has not been that skillful in containing demand.
- The level of the policy interest rate should be such that it is neither too simulative nor too tight. This requires active liquidity management by RBI so that the systemic liquidity mostly remains in deficit in order to strengthen monetary transmission.
- Industrial Growth had dropped to a low of 3.8% in July, pulled down manufacturing sector that expanded by just 2.3% over a year. Excise duty collections, a barometer for industrial production too declined for the first time in 16 months in September. We can raise excise duty rates to the level at which they were prior to the crisis.
- For an economy such as ours, with a large informal sector, there is also a need to foster financial deepening through financial inclusion to enhance our potential output.
- Our government can certainly help in decongesting the supply chain issues so that the food that is produced at least reaches the consumers.

FUTURE PROSPECTS

RBI has revised the baseline projection for WPI inflation for March 2012 upward to 7% from 6 %. Agriculture prospects remain encouraging with the likelihood of a record Kharif crop.

In last year we had a great monsoon; agriculture growth has bounced back, registering an 8.9% growth on the back of a strong Kharif crop. In fact India's food grain production has hit a record 236 million tones in 2010-11. The services sector also registered a 10.83% growth in the first three quarters of the year.

So there could be a bumper agriculture harvest this year and that could drive up rural consumption. Rural consumption has been one of the strong areas, which have been contributing to India's growth. So that could be a major positive for the markets.

CONCLUSION

Key to growth sustainability lies in supporting investment by rebalancing demand from government consumption to public and private investment. Our authorities - monetary, fiscal, financial authorities in our system have to be decisive and do everything that needs to be done to tackle this monster of inflation.

headed south.

It may make sense for RBI to pause this time around, but send out a strong signal that it is still very concerned about inflation so that companies, consumers and bond markets do not jump to the conclusion that interest rates will soon be headed south.

"***Whatever option you finally choose and what you feel should be done, must be done irrespective of its popularity and you have to succeed"—BimalJalan"***

The Four Nails Of The Microfinance Coffin

Sankritya Vedanabhatla

Before the reader slips into being sympathetic towards the Microfinance institutions in India by looking at the title, it is worthwhile to note that many of the MFIs (Microfinance Institutions) have built their coffins themselves by confining their "financially inclusive" lending to a particular region in the country (which many a time resulted in multiple lending) and dug their own graves by lending with little regard to the creditworthiness of the borrowers (Self help groups and Joint Liability Groups).

The farm loan waiver of 2008 hammered the hammer which hammered the first nail into the coffin of the MFIs. As an Economic Times report (dated 1st June 2008) says that loan defaults have risen since the waiver. The defaults were not only for the loans by Public sector banks which lent to the priority sector, but also were for the credits issued by the MFIs. "*Paying back the loan is a cultural concept. People borrowing money should feel the strong moral urge to pay the loans back. Loan waivers instead make them feel that if things go really, really bad, Government will step in and cancel the interest payable and even the principal. This will make even the decent guys default on their loans*" – said the report, analyzing the indirect impact the waiver had on MFIs.

Looking at the coercive methods employed by the MFIs to recover the loans and the exorbitantly high interest rates in Andhra Pradesh, the AP government in October 2010 stepped in and imposed regulations that drove the second nail in the coffin. The bill mandated MFIs to be registered with the district authority to collect installments at the panchayat office and restricts fresh lending without prior approval of the authority.

The third nail in the coffin was hammered by the RBI shortly after the AP microfinance regulation bill. The RBI panel capped the loan rate by MFIs at 26% and the margin at 12%. These norms were fine when banks were giving money to MFIs at 11%. With the increase in interest rates, banks are now charging more; and if we add to that the processing fee and the cash margin that MFIs need to keep with the banks, the effective cost of money is at least 17%.

All the banks which usually lend to the MFIs have since shunned them because of bad asset quality, nailing the coffin shut. A recent Mint article ("Can india's MFI industry be saved?" - 15th Jan 2012) cites "*The MFI industry's total exposure to Andhra Pradesh was around Rs. 7,200 crore in 2010 and they have been able to collect from the borrowers only 10% of this money. They are carrying on their books Rs. 6,500 crore worth of bad assets, and when they write off this amount in March, at the end of the current fiscal, many of India's big MFIs' net worth will turn negative*".

Many MFIs which have ABSOLUTELY no exposure to Andhra Pradesh have also not been spared. Arohan Financial Services Ltd, an MFI in West Bengal, hasn't got any money from banks ever since the Andhra crisis broke out, even though it doesn't have a single borrower in AP. Another case in point is Utkarsh Micro Finance Pvt. Ltd of Varanasi which lends to poor people in eastern Uttar Pradesh and Bihar.

In its 2010 credit analysis report, CRISIL said that the overall asset quality of MFIs would deteriorate owing to increase in Large-ticket loan disbursements, multiple lending and migration of borrowers. Fulfilling its prophecy, Spandana Sphoorty Financial Ltd was running at a loss of 50 Cr (as of Oct 2011) with an outstanding debt of 2300 Cr. The well known SKS Microfinance posted a loss of 427 Cr for the third Quarter this fiscal. In the aftermath of the crisis described above (which brought down the size of the Indian micro-lending business from around Rs. 30,000 Cr two years back to aroundRs. 15,000 Cr now), commercial banks admitted five leading MFIs with operations in Andhra Pradesh in the corporate debt restructuring (CDR) program in April. The firms are Trident Microfin Pvt. Ltd, Share Microfin Ltd, Asmitha Microfin Ltd, Spandana Sphoorty Financial Ltd and Future Financial Services Ltd.

In September 2011, CRISIL had downgraded the rating of Asmitha Microfin Ltd to D. Incidentally, SKS microfinance, Asmitha Microfin Ltd, and Spandana Sphoorty Financial Ltd were the top three MFIs in the country. If India were to save the MFIs, then some difficult decisions need to be taken in addition to some reforms in the sector.

Private equity, in finance, is an asset class consisting of equity securities in operating companies that are not publicly traded on a stock exchange. Companies in need of capital infusion can raise money through private equity funds. In a way, they're similar to investment banks. But while private equity funds raise money by raising cash from wealthy individuals and institutions like pension funds and in turn, they use this money to invest in companies. Investment banks on the other hand raise money by selling stocks or bonds on the public markets on behalf of client companies.

However, the similarity between Investment Banks and Private Equity funds ends there. Private Equity firms use the capital they raise - along with leverage gained from issuing debt - to assume control of businesses often as sole owners and sometimes as co-owners, whereas investment banks don't take a controlling ownership interest in the companies.

Private equity funds generally use a technique known as a "leveraged buy-out" (LBO) for all or part of the purchase costs. In an LBO, the acquiring group uses bonds, loans and other debt instruments to raise the capital necessary to complete the deal and buy the target. A common technique used is where they use the target company's own assets as collateral. In management buy outs or MBOs the managers of a company work with private equity groups to raise money to buy the stock of the firm they're running.

Venture capital and private equity are often used interchangeably. Strictly speaking, venture capital firms focus on funding promising new businesses, where private equity firms focus on generating value from established businesses through restructurings and better management.

In ideal situations, Private Equity funds invest in underperforming companies, try to find problem areas, revamp the structure and turn them around, and sell their stake at a profit after some years, often in the public markets. Private equity companies sometimes engage in "asset stripping," which is basically breaking up a company and selling its assets independently to make their profit.

In India the Private Equity industry is growing. The Indian market is still in its nascent stage as compared to several developed economies such as Israel, US, Singapore, etc. Firms like Texas Pacific Group, Carlyle Group, Bain Capital and Blackstone Group are a few of sector's big players.

Black or White? What will you choose? White, isn't it? Even a four year kid would choose white. But what if you got to choose black? Would you prefer to convert it to white? Does there lies a conversion cost & if yes, then can it be avoided? Michael Jackson, the pop star of 90s, underwent a plastic surgery and changed his skin colour to white but it was legal unlike in case of Money.

For last one and a half year, every morning I had spent two hours reading & analysing the news/articles/analysis published in business newspapers, & never I could deduct the good picture of our economy. All I could read & foresee was increase in interest rates by RBI, crisis gripping Europe, & Americans putting efforts to fuel their economy, though, I still doubt, if the steps taken are viable in long term.

Interest rates were low in US & Euro zone, the two economically dominating zones, so as to stimulate the demand. Now, according to Mr. Fisher's theory capital should flow into emerging economies as they had higher interest rates & first half of 2011 did see some inflow of funds but soon investors pulled their money out of India, which we could see from very poor performance of Indian equity market; believed to be dominated by FIIs; & started preferring other BRIC & African nations to India. Rupee has depreciated by almost 20 per cent as a result of capital outflow and sudden rise in demand of dollar throughout the globe & even companies which have their risk management(hedging) in place are facing trouble to make their balance sheet look good. Also, the money market is still facing liquidity crunch to the extent of 1trillion. But one thing kept running like a wild untamed horse, guess what, the Yang of growth, yeah you are right ...INFLATION.

RBI decided to tame the horse and started raising interest rates akin to reinforcement sent in the battlefield when the opponent starts dominating. Everything comes at a cost and hence, the growth vehicle of Indian economy started decelerating.

Industrial output has fallen, people are loosing jobs, recruitments & hikes are on hold, companies are trading at their 52 week low, many lost their investments in equity market, money raised through IPO is very less, and people involved in M&A are sitting at home, & a big foreign bank shutting its retail operation in India but still I read in newspapers that demand is high. It seems contradictory isn't it? Though I am just a beginner in Financial world, but one simple thing which troubles me is how can the demand be high if people don't have money to spend nor it is available at low cost.

Doesn't it ring bells in your ears that Inflation is hovering around 9 % despite of 13 continuous rate hikes by RBI? Isn't it thought provoking that why RBI didn't intervened despite of rupee depreciating so much though we have foreign exchange reserves of $300bn? Why SEBI came with two new routes for sale of shares, Institutional Placement Programme & the offer for sale through stock exchanges, circumventing the IPO route, which mandates companies to publish the prospectus containing all information about the company? Why does QFI suddenly allowed to invest in equity directly when they are already allowed to invest in Mutual funds & also the limit is set above FII limit?

Now one would argue that QFIs are allowed to open only one demat account and KYC norms are there but what put me at unease is the ability of SEBI to question the source of income of a foreign investor, especially if the investor holds an account in tax heavens or countries which values the privacy of a man, especially more if the man is rich.

I know there are certain explanations to these questions and we all read them daily and listen to them via some personality, but knowingly or unknowingly everybody is missing one aspect, Black Money. Has it undergone a plastic surgery and made his way home?

Wiki leaks has published that millions of dollars are locked in Swiss Bank & out of 2000 names of Swiss bank account holders which they got from Rudolf Elmer, a former employee of Swiss bank, majority of which belongs to Indians. They had also published a list which contains a few names, the so called big people whom we all management students look as our idle, which now, I am afraid to mention. The source of Black money is project hedge, illegal share in stock market, drug deal etc. It also claims that most of the Black money of India is routed through Pakistan, which as a true Indian & taxpayer I believe is a matter of extreme concern.

Though efforts like, being a signatory of Financial Action Task Force, Double Taxation Avoidance Agreements, Tax Information Exchange Agreement are commendable but Swiss banks are not to share the data before April.... Does this mean that a road is paved for the politicians to bring their money back at high rupee and low stock prices into their favoured and controlled companies?? If this is correct, then politically connected companies stocks will perform. Something to ponder over and start noticing.

Erica Fernandes

RBI starts to ease monetary policy

RBI signalled that monetary easing will begin in India by cutting the Cash Reserve Ratio (CRR) of banks by 0.5% to 5.5% from 6% earlier. The CRR is a statutory requirement on banks mandating them to maintain a certain proportion of their total liabilities as cash with the RBI. Banks don't earn any interest/return on the CRR. Thus raising the CRR is punitive as banks will be forced to forego interest on the CRR maintained with the RBI. Conversely, cutting the CRR is positive for the banks' P&L as they can now reinvest the freed-up cash in an interest bearing asset like government bonds/ loans to boost their income.

CRR as monetary policy tool

RBI has used the CRR as a tool to control monetary policy in the past. CRR can be used to inject/drain money into the banking system almost immediately. Currently a 1% cut in the CRR will inject INR 64,000 crores of money into banks. This will bring down the cost of funds of the banking system and enable more lending in the economy, thus boosting growth. CRR is considered a direct and blunt instrument as compared to other instruments like the repo rate as it can directly impact the banks' balance sheet while repo rate only acts as a signalling mechanism.

RBI also uses the CRR to control the money market and short -term interest rates. This is done by changing the excess cash (also referred to liquidity) available with banks. Banks may place the excess liquidity with the RBI at the overnight repo window or may lend it out in the inter-bank call money market to other banks who are short on cash. RBI can reduce the liquidity available with banks and thus can make it more difficult for banks to borrow free cash. This is turn will push the overnight borrowing rate higher and will push up the overall cost of lending.

Why has RBI cut the CRR

In an attempt to control inflation in India, the RBI has been raising interest rates since 2010. Higher interest rates reduce investment which is a component of GDP or aggregate demand in the economy. RBI has also ensured that banks have remained short of liquidity (excess cash) and they have been forced to borrow from RBI's overnight repo window at 8.5%. In a way, banks are borrowing a part of their liabilities from RBI at 8.5% and are in turn lending it out to corporate/individuals at double digit rates. But the liquidity deficit of the banking system has grown excessively and the funds available with the banking system have reduced very sharply. This has pushed up short-end interest rates very high.

There are two factors responsible for the shortage of excess cash with banks. First, the currency in circulation held by public is increasing every year and this is a drain of liquidity from the banking system. As the stock of black money grows and the size of cash transactions keeps rising, banks keep losing liquidity. In addition, RBI has been intervening in the FX market selling dollars from their foreign currency reserves and absorbing rupees from the domestic banks. This has improved the supply of dollars with the banking system but RBI has absorbed excess rupees from the banking system.

Excessive shortage of cash with the banking system can push short-end interest rates very high which in turn will adversely affect lending and investment in the country. The CRR cut is an attempt to inject liquidity back into the banking system.

Implications

A CRR cut signals that RBI has started to ease monetary policy and interest rates have peaked. From now on, RBI will try to bring down interest rates in the economy. The direct impact of CRR cut would push short-end interest rates lower. If RBI follows the CRR cut by cutting policy rates (repo and reverse repo), that would be a more powerful signal for other interest rates in the economy.

Have you ever wondered why do they have subjects like statistics, data models, etc in a Business Management Course? Why do they have quantitative departments in B-Schools? Do obtain answers for questions like the above, you need to have a through read of the article below.

Developed as a discipline from mathematical and statistical disciplines to assess risks and help managers and policy makers take decisions on the business or management front is now known as Actuarial Science. It is a discipline that assesses financial risks in the insurance and finance fields using mathematical and statistical methods. Actuarial science applies the mathematics of probability and statistics to define, analyze and solve the financial implications of uncertain future events. Traditional actuarial science largely revolves around the analysis of mortality and the production of life tables, and the application of compound interest.

Ancient Times

In the ancient world there were no "Homes" for the poor, suffering, sick, disabled, or the aged. Early methods of protection involved charity; religious organizations or neighbours, who would collect funds for the destitute and needy. However, receiving charity is uncertain. Elementary mutual aid agreements and pensions did arise in antiquity. Early, a small sum was paid into a communal fund on a weekly basis, and upon the death of a member, the fund would cover the expenses of rites and burial. However, many of these earlier forms of surety and aid would often fail due to lack of understanding and knowledge.

Then was a period of extraordinary advances in mathematics in Germany, France and England. At the same time there was a rapidly growing desire and need to place the valuation of personal risk on a more scientific basis. Independently from each other, compound interest was studied and probability theory emerged as a well understood mathematical discipline.

Life Table

Another important advance came in 1662 from a London draper named John Graunt, who showed that there were predictable patterns of longevity and death in a defined group of people, despite the uncertainty about the future longevity or mortality of any one individual person. This study became the basis for the original life table. It was now possible to set up an insurance scheme to provide life insurance or pensions for a group of people, and to calculate with some degree of accuracy, how much each person in the group should contribute to a common fund assumed to earn a fixed rate of interest. The first person to demonstrate publicly how this could be done was Edmond Halley (of Halley's comet fame).

Equitable Life

James Dodsons's pioneering work on the level premium system led to the formation of the Society for Equitable Assurances on Lives and Survivorship (now commonly known as Equitable Life) in London in 1762(the company still exists). This was the first life insurance company to use premium rates which were calculated scientifically for long-term life policies. Many other life insurance companies and pension funds were created over the following 200 years. It was the Society for Equitable Assurances which first used the term 'actuary' for its chief executive officer in 1762. Other companies that did not originally use such mathematical and scientific methods most often failed or were forced to adopt the methods pioneered by Equitable.

Recent Past

In the 18th and 19th centuries, computational complexity was limited to manual calculations. The actual calculations required to compute fair insurance premiums are rather complex. The actuaries of that time developed methods to construct easily-used tables, using sophisticated approximations called computation functions, to facilitate timely, accurate, manual calculations of premiums. However, calculations remained cumbersome, and actuarial shortcuts were commonplace. In the 1930s and 1940s, however, the rigorous mathematical foundations for stochastic processes were developed. Actuaries could now begin to forecast losses using models of random events, instead of the deterministic methods they had been constrained to in the past. The introduction and development of the computer industry further revolutionized the actuarial profession. From pencil-and-paper to punch cards to current high-speed devices, the modeling and forecasting ability of the actuary has grown exponentially, and actuaries needed to adjust to this new world.

Aid to HR

Non-life actuaries followed in the footsteps of their life compatriots in the early twentieth century. The 1920 revision to workers compensation rates took over two months of around-the-clock work by day and night teams of actuaries. In the 1930s and 1940s, however, the rigorous mathematical foundations for stochastic processes were developed. Today, when HR Departments of various organisations decide on the compensation policy for its employees or pension policies for their retired employees, then the tool

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Aid to Law

In some countries spread across the globe, actuarial models are set for criminal sentencing guidelines. These models attempt to predict the chance of re-offending according to rating factors which include the type of crime, educational background, age and ethnicity of the offender. However, these models have been opposed for discrimination against specific ethnic groups. The debate of whether this is statistically correct or a self-fulfilling correlation still continues.

Aid to Banking

Whenever, the banking system of a country has to decide on the rate of compound interest for the forthcoming quarter or a fiscal policy to be implemented in the financial year, the system has to perform some rigorous calculations based on which a quantitative value can be given to the data. The tool that is used to find this quantified data is the actuarial sciences. The discipline also helps to formulate an equation based on the previous statistical findings and probabilistic models.

However, actuarial science is also applied in the study of financial organizations to analyze their liabilities and improve financial decision-making. Actuaries employ this specialty science to evaluate the financial, economic, banking, legal, retail and other business applications of future events.

MONTH	EVENT
AUGUST	**FINUROSITY** The year began for Finstreet with Finurosity, a constituent of the club that launches a series of quizzes. Finurosity aims at putting ones brain to the task in all aspects relating to finance. It's the place where one can gauge one's own General knowledge and understanding of finance as it covers a wide variety of topics ranging from economic issues to financial happenings. The first quiz was held on 8^{th} August, 2011 and the following held on 17^{th} August,2011
SEPTEMBER	**KNOWLEDGE SHARING SESSIONS** Sound big, but is even bigger in what it conveys. What we Finstreet members like to commonly call 'a KSS', it is that part of the Committee that encourages a shared learning experience. KSS involve a Finstreet member who has a better knowledge and expertise in a particular domain relating to finance shares that knowledge and addressing issues faced by his fellow students as regards to the subject. The First KSS for the year was launch on **Sep-6^{th} which covered the subject B**asics of stock Markets and was conducted by Finstreet member Krishna Ambadasu **FINUROSITY** Another series of the of quizzes were launched this month , the first being held on 8^{th} September,2011 and the following held on 15^{th} September,2011 **FIN-EIX** The month of September saw birth of a new event altogether known as Fin-eix – A financial engineering event. FIN-eix is an intercollegiate event that invited B-schools across the country to participate and compete against each other. It was conducted in collaboration with 'Reliance Mutual Fund'. The corporate identified the task – "Financial engineering of Mutual Fund" which involved creation of a new and improved mutual fund instrument through innovative design or repackaging of existing mutual funds to meet very specific risk and return requirements of the Reliance. Participants were required to brainstorm and come up with the same. The event was held form 13^{th} September, 2011 which was the preliminary round to 16^{th} September, 2011- the on-stage round.

MONTH	EVENT
OCTOBER	**GUEST LECTURE** Finstreet besides encouraging students to learn via its host of activities also takes the this a step further with its Guest Lectures. As the name suggest, Finsteet invites prominent names from the BSFI industry to share their expertise on a subject of their choice. This month an interaction with Mr Ajay Marwah, EVP & Head, Trading, HDFC was organised by the Committee. **KNOWLEDGE SHARING SESSIONS** October saw another KSS being conducted which covered the subject 'Basics of derivatives' by over very own team that included Prateek Mistry & Dhaval
DECEMBER	**FINLY** After the holiday cheer, the spirit of Finstreet got even stronger with the lauch of our very own wekkly Newsletter called 'FINLY'. Finly is launched every Sunday with the first issue being launched on 5th December, 2011 **KNOWLEDGE SHARING SESSIONS** December also included another KSS conducted by Dhaval which gave insights on the Debt Markets.
JANUARY	**KNOWLEDGE SHARING SESSIONS** The thirst for knowledge never seizes with the students for various courses requesting the Finstreet member to conduct more KSS's. So January marked a Twin Session, the first was a KSS conducted by Dhaval on Advanced Derivatives (Part – 1) on 4th January, 2012 and the second on 5th January, 2012 (Advanced Derivatives Part – 2)

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