CENTRE FOR FINANCIAL MANAGEMENT

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CONTENTS

A. ARTICLES /CASES

1. CASE STUDY ON AN INVESTMENT BY A PRIVATE EQUITY FIRM

PRASHANT GOEL

It was a long day and finally a deal seemed to be taking shape. The PE firm had been chasing this opportunity for a very long time and it seemed that the hard work was finally paying off.

The company had come looking for funds and then gone into hibernation as it had some issues with the existing investors. After some chasing by the fund the company finally started considering an investment from a PE fund. The company is a market leader in the manufacture of a certain electronic component that is very critical to the safety of an automobile. There are only a few (may be one or two) more good manufacturers in India. The company is a market leader in India and is a key supplier to all tier one suppliers to the major passenger car manufacturers in the country.

The company exports a little over 50% of its produce primarily to North America and Europe. This has enabled the company to ride over various industry cycles smoothly. It has very strong customer linkages and very good delivery and quality systems that has resulted in happy and satisfied customers.

The past financials of the company are summarised in the table below.

INR Million	**FY -2**	**FY -1**	**FY 0**
P&L A/c			
Net Sales	628.0	655.0	920.0
Total Income	**628.0**	**655.0**	**920.0**
Raw Material Consumption	353.0	340.0	450.0
Power & Fuel Expenses	16.0	16.0	25.0
Direct Labour Cost	30.0	34.0	61.0
Other Manufacturing Expenses	28.0	26.0	50.0
Selling & Distribution Expenses	110.0	127.0	150.0
Total Expenses	**537.0**	**543.0**	**736.0**
EBITDA	**91.0**	**112.0**	**184.0**
EBITDA Margin (%)	*14.5%*	*17.1%*	*20.0%*
Depreciation	18.0	17.0	22.4
PBIT	**73.0**	**95.0**	**161.6**
Interest	35.0	28.0	27.0
Profit Before Tax	**38.0**	**66.2**	**134.6**
Tax	15.0	32.0	50.0
Tax Rate (%)	*39.5%*	*48.4%*	*37.2%*
Net Profit	**23.0**	**34.2**	**84.6**

INR Million	FY -2	FY -1	FY 0
Balance Sheet			
Share Capital	50.0	50.0	50.0
Reserve & Surplus	65.0	108.0	192.6
Shareholders Funds	**115.0**	**158.0**	**242.6**
Term Loans	100.0	86.0	146.0
Working Capital Loans	117.0	137.0	227.0
Loan Funds	**217.0**	**223.0**	**373.0**
Deferred Tax Liabilities	20.0	20.0	24.0
Total Liabilities	**352.0**	**401.0**	**639.6**
Gross Fixed Assets	261.0	277.0	417.0
Less : Accumulated Depreciation	88.0	105.0	127.4
Net Fixed Assets	173.0	172.0	289.6
Capital Work in Progress		15.0	
Current Assets, Loans & Advances			
Accounts Receivables	166.0	207.0	273.0
Inventories	88.0	100.0	172.0
Cash & Bank Balance	4.0	20.0	2.5
Loans & Advances & Other Assets	33.0	36.0	66.0
Sub-total	291.0	363.0	513.5
Current Liabilities & Provisions	112.0	149.0	163.5
Net Working Capital	**179.0**	**214.0**	**350.0**
Total Assets	**352.0**	**401.0**	**639.6**

As can be seen from the numbers the company is a good sized company that has grown well. It has been highly profitable and has posted EBITDA margins that are not very common for auto ancillaries.

The company has existing financial investors who want an exit at this stage. Hence this deal is a mix of primary investment(money required by the company for its growth) and secondary investment(money to be paid to the existing investors whose stake has to be bought out).Both the components are Rs. 18 crores each.

Some key features:

- Single source for many of the OEMs.
- Auto industry relationships matter and not easy to dislodge.
- Capital intensive and technology as barriers to entry.
- 50% of business as exports and hence protects against local cycles.

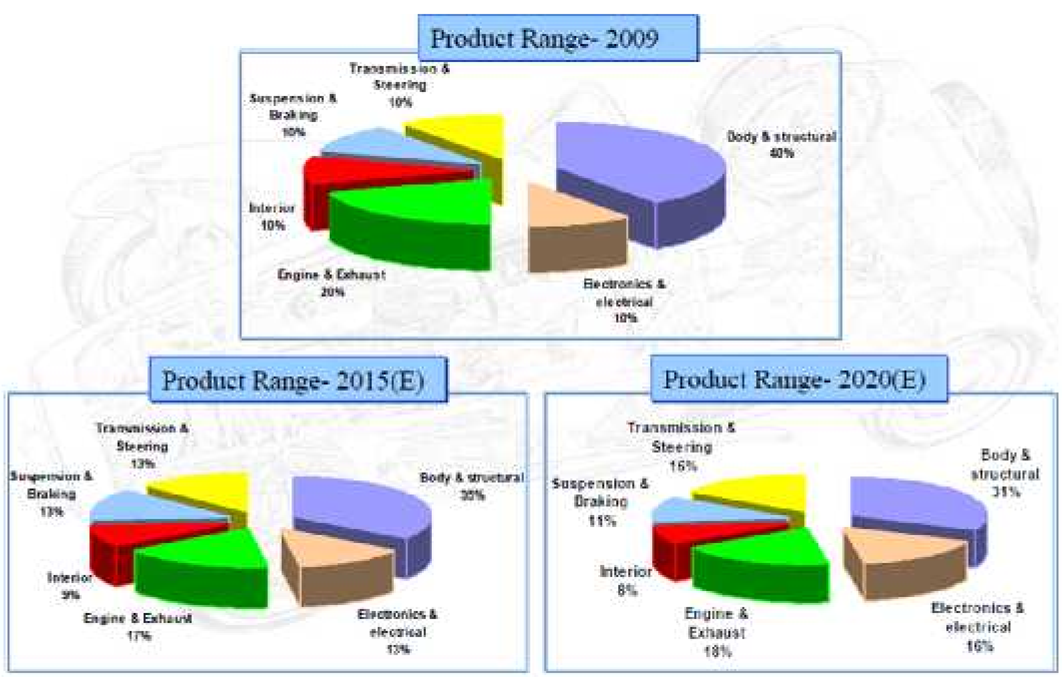
- A strong and experienced team for new product design & development backed by in-house product testing capabilities.
- Complete traceability of the product from bought outs, processes and upto finished products.
- Single window contact point to the customer which is available 24/7.
- Has the ability to deliver product in any part of the world with a 5 to 9 day delivery window.

Some sector information.

✓ Auto components markets in India growing at 21% CAGR

As per the ACMA forecast the automotive industry in India is expected to pan out as follows.

Source ACMA: Automotive Component Manufacturers Association



Source: ACMA - EY Vision 2020

- ✓ Existing customers are primarily OEMs and Tier I suppliers both in domestic market as well as North America and Europe.
- ✓ Domestic end customer: Leading OEMs.
- ✓ International end customer: Leading OEMs.
- ✓ Details on employees –Excellent profiles.
- ✓ Organisation chart – adequately staffed. Most of them have been associated for significant periods with the company.
- ✓ Quality levels – as low rejection as low as 6 ppm.
- ✓ Delivery performance – 100%. (Generally there is window that is offered for supply. One cannot supply before or after that window.)
- ✓ Customer profile – Excellent domestic and international.
- ✓ Numerous customer awards and recommendations.
- ✓ Best practices TQM, FMEA, Kaizen, 5S etc.
- ✓ Infrastructure- 250,000 sq. ft spread over two facilities
- ✓ Good set of equipment for the required manufacturing process.
- ✓ Non-unionised labour force.
- ✓ Strong focus on R&D.
- ✓ Able to develop and offer solutions to the customer.
- ✓ Product and process engineering that offers cost out to the customer at both capital level and operational level.

The company is looking for funds to set up new facilities in the country to augment their growing capacity needs.
They currently have two units, one Chennai and the other in Pune and are keen to set up another one in Pune.
The projections for the next five years are presented in the table below.

INR Million	FY 1	FY 2	FY 3	FY 4	FY 5
P&L A/c					
Net Sales	1,276.2	1,512.8	1,923.6	2,674.2	3,916.3
Total Income	**1,276.2**	**1,512.8**	**1,923.6**	**2,674.2**	**3,916.3**
Raw Material Consumption	666.0	711.0	913.7	1,270.2	1,860.2
Power & Fuel Expenses	32.0	36.3	48.1	66.9	97.9
Direct Labour Cost	79.0	90.8	111.6	180.5	264.3
Other Manufacturing Expenses	64.0	68.1	80.8	115.0	168.4
Selling & Distribution Expenses	200.0	226.9	288.5	401.1	587.4
Total Expenses	**1,041.0**	**1,133.1**	**1,442.7**	**2,033.7**	**2,978.3**
EBITDA	**235.2**	**379.7**	**480.9**	**640.5**	**937.9**
EBITDA Margin (%)	*18.4%*	*25.1%*	*25.0%*	*24.0%*	*24.0%*
Depreciation	31.7	35.5	37.5	35.1	38.7
PBIT	**203.5**	**344.2**	**443.4**	**605.4**	**899.3**
Interest	54.8	73.8	73.5	74.0	67.9
Profit Before Tax	**148.8**	**270.4**	**369.9**	**531.4**	**831.4**
Tax	64.0	91.9	125.7	180.6	282.6
Tax Rate (%)	*43.0%*	*34.0%*	*34.0%*	*34.0%*	*34.0%*
Net Profit	**84.8**	**178.5**	**244.2**	**350.8**	**548.8**

INR Million	FY 1	FY 2	FY 3	FY 4	FY 5
Balance Sheet					
Share Capital	50.0	50.0	50.0	50.0	50.0
Reserve & Surplus	277.3	455.8	700.0	1,050.8	1,599.6
	180.0	180.0	180.0	180.0	180.0
Shareholders Funds	**507.3**	**685.8**	**930.0**	**1,280.8**	**1,829.6**
Term Loans	386.0	311.0	344.2	318.7	228.7
Working Capital Loans	237.0	411.9	411.9	411.9	411.9
Loan Funds	**623.0**	**722.9**	**756.1**	**730.6**	**640.6**
Deferred Tax Liabilities	24.0	24.0	24.0	24.0	24.0
Total Liabilities	**1,154.3**	**1,432.7**	**1,710.1**	**2,035.4**	**2,494.2**
Gross Fixed Assets	597.0	797.0	797.0	797.0	797.0
Less : Accumulated Depreciation	159.1	194.6	232.1	267.2	305.8
Net Fixed Assets	437.9	602.4	564.9	529.8	491.2
Capital Work in Progress					
Current Assets, Loans & Advances					
Accounts Receivables	411.0	497.9	646.0	888.0	1,279.7
Inventories	210.0	281.9	381.9	572.9	808.1
Cash & Bank Balance	217.4	198.8	312.9	326.5	341.3
Loans & Advances & Other Assets	97.0	97.0	97.0	97.0	97.0
Sub-total	935.4	1,075.6	1,437.9	1,884.4	2,526.0
Current Liabilities & Provisions	219.0	245.3	292.7	378.8	523.0
Net Working Capital	**716.4**	**830.3**	**1,145.2**	**1,505.6**	**2,003.1**
Total Assets	**1,154.3**	**1,432.7**	**1,710.1**	**2,035.4**	**2,494.2**

The funds required are primarily for expansion. There are some working capital requirements as well but the bank loans will be adequate to meet those requirements.

For the case study given please answer the following:

1. Would you invest?
2. If yes/no, what are your reasons?
3. What do you see as strengths / risks?
4. How should the company be valued and what is the fair valuation and why?
5. Do you see tranching as an option?
6. Would you want to put any other condition to this investment?
7. What is the exit case?
8. What IRR can the deal generate?
9. Any other thoughts?

2. CORPORATE PORTFOLIO MANAGEMENT
DR. PRASANNA CHANDRA

Corporate portfolio management is mainly concerned with deciding which businesses to own and which businesses to divest. A central issue in capital allocation, corporate portfolio management perhaps has the greatest impact on value creation.

Barriers to Effective Portfolio Management

Despite its significance, many companies do not manage their business portfolios optimally. It appears that there are three major barriers to effective portfolio management: measurement and information problems, behavioural factors, and corporate governance and incentive problems.

Measurement and Information Problems In theory, a firm should exit a business when the expected rate of return from continuing the business is less than the cost of capital. However, implementing this rule is difficult in practice because of measurement and information problems. The returns that are expected from a business change dynamically over time. Assuming that the growth pattern of a business is an “S” curve, the growth is slow in the first stage, explosive in the second stage, slow in the third stage, and possible slightly negative in the fourth stage. The slope at any point of the S curve may be regarded as a proxy for the expected return from that point on. The practical problem, of course, is that it is very difficult to establish that you are at an inflection point.

Behavioural Factors Implementation of effective portfolio management practices is hindered by behavioural factors such as “sunk cost” thinking, “loss aversion,” “endowment effect,” and “status quo bias.” Sunk costs are not relevant for decision making. Yet people often do not overlook sunk costs. Cognitive psychologists Daniel Kahneman and AmosTversky have documented the phenomenon called “loss aversion.” According to them the utility of gaining a rupee is much less than the utility of avoiding the loss of a rupee. Hence, people are reluctant to divest assets at prices less than what they deem to be worth. There is empirical evidence in support of “endowment effect,” which is a tendency on the part of people to place greater value on what belongs to them relative to the value they would place on the same thing if it belonged to someone else. Finally, there is a “status quo bias” which means that people are comfortable with the familiar and would like to keep things the way they have been.

Corporate Governance and Incentives Most corporate boards and senior managements understand the logic of shareholder value maximisation. Yet they may commit to objectives that come in the way of maximising shareholder value.

Enhancing the Effectiveness of Portfolio Management

Firms interested in enhancing the effectiveness of portfolio management, will find the following suggestions helpful.

1. **Create a team of independent people for portfolio review** Most companies foster cultures and build incentive systems to reward successful growth, but often have an institutional bias against selling businesses at the right time. To counter this bias, it may be necessary to set up a team of people who are independent of the existing corporate units and are inclined to shake things up, if required.
2. **Improve the quality of information** While companies keep track of revenues and margins of their business segments (such as operating divisions, product lines, or brand names), they often have sketchy information about cash flows, capital employed, and return on capital of various business segments. By improving the quality of information on business segments, companies can enhance effectiveness of their portfolio management.
3. **Develop processes for thinking about alternatives** Generally companies that are good at portfolio management have a well-developed process for evaluating alternative ways of deploying capital. Steve Munger describes this process vividly: "I like to describe this process by comparing it to what happens during an eye examination. It's tough to describe to you the level of clarity of a given letter on a screen in isolation; but when you see one letter alongside another, it's much easier to identify comparative levels. And the same is true when looking at different strategies and capital projects, particularly when comparing levels of risk and uncertainty."
4. **Look outside the company** Effective corporate portfolio managers look outside their own company to see what their competitors, current and potential, are doing and anticipate the likely changes in the regulatory landscape. As Steve Munger put it: "People who spend less time at corporate headquarters and more time on the road tend to be more alert to the kind of changes that might suggest an inflection point changes that may not be visible inside the business."

Corporate Portfolio Management: A Global Survey[1]

A global survey of corporate portfolio management (CPM) practice suggests that managing and developing the corporate portfolio remains a top strategic priority for most major firms worldwide. The majority of companies, however, are not satisfied with their current CPM approaches and processes.

Inter alia, the right approach for a company depends on the complexity of its portfolio, its current strategic challenges, and the desired role of the corporate centre. Some of the best practices that can improve the effectiveness of CPM are as follows:

1. Ulrich Pidum et al. "Corporate Portfolio Management: Theory and Practice," *Journal of Applied Corporate Finance*, Winter 2011.

- Analyse the businesses in the firm's corporate portfolio from all relevant perspec tives such as the market based view which considers market attractiveness and competitive strength, the value-based view which looks at current and anticipated financial returns, and the resource based view which considers parenting advantage.
- Instead of integrating the different perspectives in a single matrix, keep them distinct and allow the integration to happen in the strategy discussion. The process is usually more important than the matrix representation.
- Think like intelligent shareholders: What is the short-term and long-term value creation potential of the portfolio? What is the balance along critical dimensions such as risk versus return, growth versus profitability, cash generation versus cash deployment?
- Establish CPM as a regular process that is driven top-down by the corporate centre but also has strong involvement of SBUs in generating data and drawing conclusions.
- View generic portfolio roles with caution, as they can be a double-edged sword. Many boards love to classify their businesses into simple roles such as invest, hold, and divest, with role-specific strategic goals and financial targets. While this can reduce complexity, beware of the risk of oversimplification.

B.SNIPPETS

1. Environmental Factors Affecting the Investment Industry

There are some unique environmental factors that affect the investment industry:

- There is a daily report card on the performance of investment products.
- The quarterly evaluation of portfolio managers is at variance with the long-term nature of their role in the capital formation/ allocation process.
- The potential magnitude of funds that can move to a favoured manager have placed a lot of premium on marketing ability, a non- investment skill.
- It is very difficult to maintain a disciplined, long- range management perspective when rapid change and informational overload prod human beings to react to short- term events, not to long-term logic.
- Under the pressure of short- term performance, portfolio managers have a strong temptation to follow the crowd.

2. Overhaul of RIL's Incentive Scheme

RIL, India's largest private sector company, overhauled its performance linked system for its business heads in 2015. A spokesperson for RIL said, "RIL has been working on a major human resources transformation agenda for the last 20 months. A complete revamp of our performance management philosophy is one key pillar to enable our future readiness." He added, "The idea is to improve alignment of the individual and teams to the larger strategic purpose and priorities. We believe the approach will enhance collaboration and co- ownership of key outcomes while sharpening ownership and accountability."

The thrust of this initiative termed "Objective Key Results" is on de- mechanisation, de- siloisation, and de- bureaucracy, and sharpening of goals. Earlier, the leadership had chalked a set of 20-25 goals, which provided enough cushion for slip-ups. In the revamped system, the number of goals have been reduced to five to ensure that all targets are met.

3. Macro Liquidity and Market Illiquidity

In the "Flash Crash" that occurred in May 2014, major US stock market indices declined by 10 percent within 30 minutes before rapidly recovering thereafter. In October 2014, US Treasury yields fell by nearly 40 basis points, which statisticians thought should occur only once in three billion years. In May 2015, ten- year German bond yields rose from five basis points to almost 80 basis points, in a span of just few days.

These events suggest that even deep and liquid markets may not have adequate liquidity. What has caused this combination of macro liquidity (with trillions of dollars of liquidity injected by central banks) and market illiquidity?

Several factors seem to explain this phenomenon. First, high frequency traders(HFTs), using algorithmic computer programs, account for the bulk of the transaction in the equity markets. This leads to herd behaviour. Second, fixed income instruments trade mostly in the over the counter markets which by their nature are not very liquid. Third, most of the fixed income instruments (which have grown phenomenally, owing to substantial issuance of private and public debts) are held by open- ended funds which permit investors to exit overnight. When investors exit, they are forced to sell liquid assets, pushing prices very fast. Fourth, prior to the 2008 crisis, banks were active as market makers in fixed income instruments. They held large inventories of these assets, enabling them to provide liquidity and smooth excess price volatility. Since the new regulations after the crisis penalize such trading (thanks to higher capital charges), banks and financial institutions have curtailed their market-making activity. So, they are no longer a powerful stabilizing factor.

Thanks to market illiquidity, when surprises occur, stocks and especially bonds can be abruptly and dramatically re-rated.

The combination of macro liquidity and market illiquidity is potentially more dangerous than the volatile flash crashes and abrupt changes in bond yields and stock prices that we have witnessed. As Nouriel Roubini put it,"But, over time, the longer central banks create liquidity to suppress, short- term volatility, the more they will feed price bubbles in equity, bond, and other asset markets. As more investors pile into overvalued, increasingly illiquid assets- such as bonds, the risk of a long-term crash increases."

[*] Adapted from Nouriel Roubini, "The Liquidity Time Bomb," *Project Syndicate* May 31, 2015

4.Saving Economics from the Economists

Ronald Case, a Nobel laureate in economics, is very critical of economics as it is currently taught in textbooks and classrooms. As he put it, "Economics as currently practiced in textbooks and classrooms does not have much to do with business management, and still less with entrepreneurship. The degree to which economics is isolated from the ordinary business of life is extraordinary and unfortunate."

This was not so when modern economics was founded by Adam Smith who envisioned it as a study of the "nature and causes of the wealth of nations." The academic community at that time was small and economics addressed to a broad audience. Even till the turn of the 20th century, economics had relevance to industrialists. Alfred Marshall kept economics as "Both a study of wealth and a branch of the study of man."

As the profession of economics consolidated in the 20th century, economists enjoyed the freedom to write to each other in a very abstract manner using a hypotheco-deductive system based on unrealistic assumptions. So they did not provide any real guidance to managers and entrepreneurs in their endeavour to bring new products and services to customers in a rapidly changing environment. As a result, managers and entrepreneurs depend on their personal judgment, business acumen, and rules of thumb for decision making. As Ronald Coase lamented, "Today, production is marginalised in economics, and the paradigmatic question is rather static one of resource allocation."

Given the institutions- intensive character of a modern market economy (an intricate web of social institutions is required for coordinating the working of markets and firms across various boundaries), reducing economics to price theory is somewhat disturbing. As Ronald Coase put it, "It is suicidal for the field to slide into a hard science of choice, ignoring the influences of society of society, history, culture, and politics on the working of the economy. It is time to reengage the severely improverished field of economics with the economy."

- Adapted from Ronald Coase, "Saving economics from the Economists," *Harvard Business Review*, Decemeber 2012

PART C: WIT AND WIDSOM

1. HUMOUR

- A young lady, who inherited a huge fortune, asked Paderewski, a famous musician, to teach her music. Though she did not have much flair for music, she pretended that she was knowledgeable. One day Paderewski played a composition of Beethoven and said "This is a Beethoven piece." 'Oh,' she replied, with an air of smattering, "Is Beethoven still composing." "No madam," said Paderewski dryly, "He is decomposing."
- The proprietor of a highly successful optical shop was instructing his son as to how to charge a customer. "Son," he said, "after you've fitted the glasses, and he asks what the charge will be you say, The charge is $10. Then pause and wait to see if he flinches." If the customer does not flinch, you then say, "for the frames. The lenses will be another $ 10." Then pause again, this time only slightly, and watch for the flinch. If the customer doesn't flinch this time, you say firmly, "Each."

2. Wise Saws

- Happiness hides in life's small details. If you're not looking, it becomes invisible.
- It is always better to imitate a successful man than to envy him