Budding Markowitz contest

On the "Option"of using Investment Banking as a Magical Wand for Big Firms

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Contents:

- Abstract
- Introduction
- What are industrial investments?
- Advantages of the "Industrial Investments"
- Related issues
- Case study: a) Porsche vs Volkswagen
- Case study: b) Microsoft vs Yahoo
- An assessment of the potential of "industrial investments" with a historical perspective
- Conclusion
- References

ABSTRACT:

The recent affairs of Porsche trying to expand its stake at Volkswagen due to capital gained from derivatives instruments are well known. In this paper, we suggest that it is indeed a great advantage for major industry players to cleverly invest their liquidity in industry specific financial instruments for their various needs including hedging competitor risk, foreign exchange risk and industry risk as a few examples, which we term as *industrial investment*. In this context, we discuss the pros and cons of such an investment scheme along with two case studies, a. Porsche vs. Volkswagen b. Microsoft vs. Google/Yahoo. We conclude with a list of possible firms which would benefit by ascribing to such a strategy and a historical assessment to validate our claims.

INTRODUCTION:

It is not uncommon to hear about huge institutions like schools, universities, city boards of Scandinavian countries put billions of dollars of their savings into the hands of money managers who in turn invest this money into stocks, commodities, foreign exchange, real estate etc. hoping to extract no less than 20% p.a of consistent growth. To top this, huge governments of nations like Singapore, Dubai, Qatar have begun to manage huge investment pools of the order of a few trillions. Then, the natural question is how huge firms have missed out on this sudden "finance" rush, which paradoxically seems to be becoming more popular after the latest crisis[12].

However, the recent business model of most of the fortune 500 companies has been to specialize and establish core competencies. Hence, one sees the surge in outsourcing and consulting in what we would term as the advent of a knowledge economy. It is in the very midst of such a *knowledge economy* that it becomes all the more important to avoid unexpected losses due to the various risks associated with day-to-day business in national and international markets. Also, as any investment banker would have us believe, it cannot be an overstatement to say that there are market based solutions to every firms needs.

Hence, one does wonder whether firms in general, should start investing their excess cash, in liquid or illiquid instruments mostly relevant to their own industry. It is our strong opinion that such an activity would be extremely beneficial, especially if the firm in question were a sizeable player in the industry. To keep an in-house team of specialized quants, traders, structurers to trade and ensure smooth processing of industry related deals is surely an advisable course of an action. We notice the fragile nature of investor psychology is all the time. If Microsoft were to announce that it wishes to acquire Yahoo one more time, stocks of Yahoo would automatically sky rocket and Microsoft's stocks would plummet, all in a matter of hours.

WHAT ARE INDUSTRIAL INVESTMENTS?

What we suggest is that in-order to remain abreast in such a highly competitive business domain, one needs to leverage the full power of such relevant financial instruments to "*beat the market*" and become a successful player in any given industry. The exact ramifications of such advice are hard to describe. One would need to cater to the specific needs of that firm. In each of the benefits entailed below and in the case studies discussed, specific examples have been quoted to show the implications intended by the authors. None the less, in general, a firm should look at its long term strategy and identify its area of profit margins (in some sense, arbitrage).

Depending on its appetite for risk, it should hedge against all the other risks at appropriate levels. The other possible risks include exchange rate risk, consumer risk, inflation risk, discount rate risk, market risk etc. These investments which satisfy the purpose of helping the company go about with its day to day needs and assist in supplemental income are called "Industrial Investments". It is also well known that many companies possess several billions in hard cash which generally tend to earn almost no interest deposited in current accounts. It is only rational to profess that such money would do better service if invested in stocks related to the industry in which the company can claim experience and expertise.

It is in this context, interestingly, Satyam's records started looking suspicious when it had shown records of Rs. 5000 crores in bank deposits and current account [5]. Also, Porsche is raising its stake in Volkswagen as a result of "options" trading in the last couple of years. One must not be joking if he calls Porsche is a hedge fund with car making as an avocation.

ADVANTAGES OF INDUSTRIAL INVESTMENTS

In this section, we list out the various advantages of incorporating the suggestions

* **Industry experience**

Every major player in that industry would very likely possess several years of experience in that specific markets. In other words, they would be easily able to tell when the "rainy day" would come. Hence, the kind of products that would be needed by such companies will be well understood to them. Also, they would have had a huge database of copyrighted information about the past and present trends in their respective market. It is only obvious that they should make use of such experience and receive the fruits of years of hard labour of their employees.

* **Evaluation models can be more industry specific.**

Many great mathematicians and industry specialists have preached that the current approach of solve all with one model is blasphemously flawed. There is recent evidence to believe that pricing and trading at industry specific contexts supplemented by market diversifications is an appropriate method of trading [13]. A string of companies applying specialized finance techniques to cater to their industry will herald this long-awaited shift to more accurate models.

* **Industry season based liquidity requirements.**

It is well known that most industries operate in seasons.[14] It is therefore likely that stock prices themselves follow yearly or seasonal cycles, or the companies' liquidity requirements have cyclic issues. To ensure that a small perturbation in this cyclic variation does not adversely affect the company's accounts and shareholder confidence, companies could buy themselves insurance against the onset of peak seasons, the absence of peak seasons and possible macro-obstacles like elections etc which could otherwise direly delay the relevant business process by years, because one would've "missed" the season. This will also simplify their accounting and transfer all the risk to a bank or another entity which can manage this sort of products effectively in their inventory.

* **Risk hedging against competitor**-

Companies which are facing tough times and wish to lie low for a certain quarter perhaps can exploit the fact that stock prices are almost directly related to company performance. Hence they can go long on competitor shares in the appropriate ratio to ensure that although their profit margins will thin, they will not face the prospect of loss.

* **International competition**

In the era of international competition, one needs to hedge against foreign exchange- Paul Krugman has very nicely demonstrated the need for trade with many different nations for which he deservedly won the Nobel in 2008. [11]

Often many of these large firms have trades across nations in different currencies. Exchange rate risk is a palpable factor in decision making that could, if safely hedged, end up saving millions of dollars for both sides, because of what is well known to economists, as "comparative advantage". Hence, it makes sense for these firms to bet safe on changes in exchange rates, as making profits would be risky and usually unexpected, and due to managerial decisions, be hard to realize. This is also, going to help companies like Ford and Toyota whose major assets are in different countries to work the exchange rates to their advantage.

* **Slow Mergers / Acquisitions:-** It is the deepest ambitions of many companies to acquire the No. 2 or No. 1 in that industry to become the sole major and the unbeatable competitive player in the market by expanding the market share. The recent attempts by Microsoft to acquire Yahoo have failed for many reasons. But if Microsoft were to use its deep cash-rich pockets to buy Yahoo stocks guided by appropriate derivatives, we could easily reach the point where Yahoo would have to concede to the demands of Microsoft.

* **Additional source of income**- As discussed above, companies tend to have good amounts of free cash that at most times. Hence they can use money to earn an (almost) consistent 20% as interest, annually. There are risk specific solutions available for every company direct needs. If the liquidity requirements are well understood, these companies can also ensure that they invest in sufficiently liquid assets. Famed traders like Louis Navallier have pioneered the idea of industry

applying specific products especially for the "Big Uglies" like Steel, Copper, and firms in FMCG etc.[7]

Related Issues

A small caveat: All this said, it must be stated that such an investment process does not entirely imply gains and could cause more drastic and unexpected consequences. We must be careful in our endeavours with the demon that is the stock market. Here, we present some of the potential issues with the ideas suggest above.

- **Legality** – Since the possession of competitor's stocks could lead to some sort of a conflict of interest, the legality of such acts in some countries is in question. Although, we safely confirm that up to 30% of the shares of any firm can be acquired by any entity without having to make any disclosures, at least as of now. This is not the case in Germany and this enabled Porsche to build up its position in secret.

  Also, the ethics of such dealings might be a matter of concern. Warren Buffet has once suggested that derivatives themselves are a bane to society and it undermines the hard work of all the employees which is what the shareholder is expected to revere.

- **Investor dissatisfaction** – As was quite clearly visible from the Satyam's case, an active base in any company might get jitters over the purchases which would've been the choice of the shareholder if he had originally found the competitors firm a place to invest in. This could lead to potential reductions in stock price as was visible in the Microsoft approach.

- **Monopolization** Such a systematic takeover could lead to monopolization of industries by well established giants and not allow creativity and innovation to thrive in the economy, as should be. Also, in general, it is always considered that a monopoly is not useful for the economy.

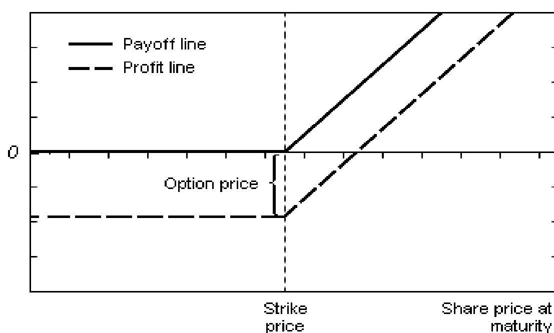
- **Unnecessary Risks** - The obvious disclaimer is being told here. Financial markets are prone to severe risk. As was mathematically well explained by Taleb [10] and as we've seen in the historic moments of the financial world over the past few months, such frivolous exposures and unrestrained wrong judgement can lead to potential collapse of the entire firm from its very roots, with an absolute loss of investor confidence.

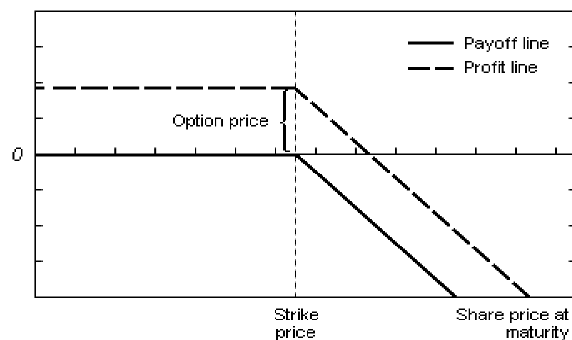
CASE STUDIES
a. PORSCHE vs. VOLKSWAGEN

Making and selling cars has just become one part of the iconic sport scar manufacturer Porsche's business. Last year it made six times as much on the stock market as it did making cars. All this was in the race to take over the automobile giant Volkswagen. The rebirth of Porsche after the crisis in 1990's was a dramatic one. The then CEO (Weidenberg) and CFO (Harter) of Porsche used the company's cash to enter financial markets using their expertise in investment banking.

How Porsche praised and priced the options?

Porsche was able to build its secret holding by using financial instruments called cash settled call options. Call options essentially give the buyer the option to buy shares at a competitive price at a future fixed date. A cash settled call option enables the buyer to either take delivery of the share, or the difference between the strike price agreed when the option was bought and the market price when deal is settled. The buyer can then use this money to purchase the share on the open market.





(From a call buyer's perspective) (From a call writer's perspective)

Porsche proved to be masters at this type of transaction, which, as long as it got the bets right and Volkswagen prices continued to rise, let it buy Volkswagen shares at favourable prices.

By July 2008, the credit crunch was hitting the car industry hard and car company share values were plummeting around the world. It can be clearly seen by the fall in stock prices of General Motors, Chrysler etc. and their debates on mergers. Ironically, Volkswagen's stocks were remaining stubbornly high.

Hedge fund managers calculated that Volkswagen shares could not remain so high indefinitely and believed there was an opportunity to make some cash by short selling the shares - borrowing Volkswagen shares off a third party in the expectation that the price would fall so they would be able to buy them back cheaper, later and pocketing the difference. Volkswagen shares became some of

the most "shorted" stocks in Europe. But despite the downturn, by the end of the summer it was clear there was something peculiar about Volkswagen shares.

The price was not dropping and the reason was about to be revealed.

On Sunday 26 October 2008, Porsche revealed a shocker. It announced it had increased its stake in Volkswagen to 42.6% and held cash settled options on a further 31.5% - meaning it had positions on up to 74.1% of all Volkswagen shares. It seemed it had effectively cornered the market and short sellers who needed to buy back shares to close their positions were forced to fight over the remaining available stock. [6]

Winners

Investors who were caught short have questioned Porsche's behaviour and the timing of its announcement of its secret positions in Volkswagen shares. The advantages for Porsche as a major stock holder in Volkswagen includes cut in production costs, access to high end technology, larger customer base and brand name and more importantly, ever needed cash (Volkswagen proved to be a stable industry)

However, Porsche's ultimate aim to takeover Volkswagen's policy making decisions completely is still a legal battle. As per the rules of VW, one needs 80% majority to make any takeover decision, whereas, the Govt. of Lower Saxony, in Germany, has 20.1 % stake in VW. But, the battle is still on.

b. **<u>MICROSOFT vs. GOOGLE/ YAHOO</u>**

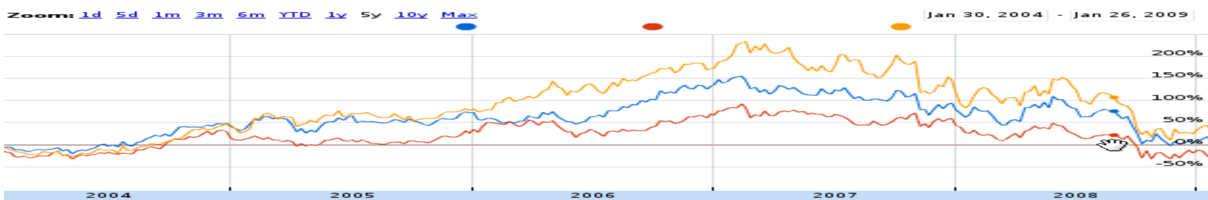
The recent episodes of Microsoft announcing its intentions to acquire Yahoo when the there was a sudden and massive shift in the stock prices of both the companies concerned is well known [10]. We now suggest that a huge monopoly like Microsoft with other cash generating businesses whose sole intent is to acquire market power(with such a move) should perhaps consider going "long" on Yahoo's stock, while it makes further advancements towards effecting a take over, to nullify consumer cynicism that is likely to manifest in over reaction. It is indeed easy to see that there are many other more complex methods like using cash settled options, barriers and digitals. The historic change in share prices on the days of historic announcements by Microsoft are shown in the picture below.

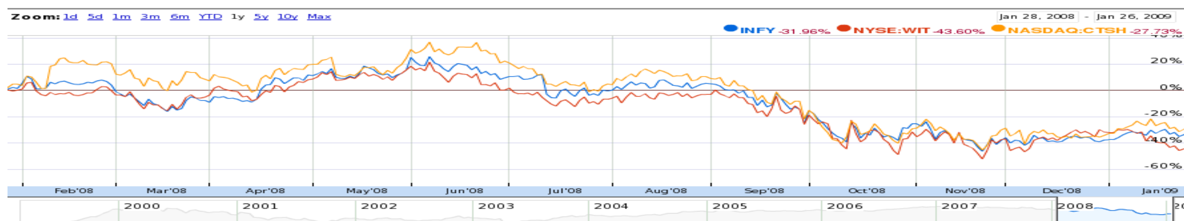
AN ASSESSMENT OF RELATED STOCK PRICES IN ANY GIVEN INDUSTRY.

Upon historically regressing the realized correlations of related stocks behaviour for given time periods, for the following pairs, we've come to conclude that there is a high correlation between these company stock prices, and an actively growing finance industry should welcome the introduction of such related financial instruments.

For example. consider TOYOTA and FORD. For certain periods of huge deviation between the stocks, one notices a clear negative correlation in the movements.

However, INFOSYS, WIPRO and Cognizant technologies seem to be consistently having a positive correlation in the range of observation. In the Last 5 years,

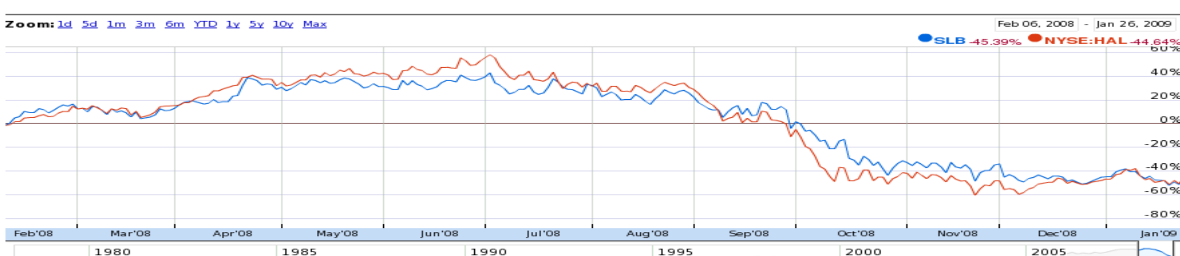




In the last 1 year, it seems to be even more closely correlated

Microsoft vs Google

Schlumberger vs Halliburton



CONCLUSION:

We've shown an entirely new paradigm of investment management, which at the cost of minute amounts of labour and setting up could multiply income for firms in huge numbers. Based on the various other industrial and managerial needs of the company, which will be answerable to the shareholder, the board and its employees, firms can leverage the huge financial markets across the world to their advantage.

We've also analyzed the case of Porsche vs. VolksWagen, which is easily the most viable demonstration of our claims. We suggest the same for Microsoft and Yahoo, in another analysis. We've pointed out various Indian IT firms, which would resort to such measures along with other automobile majors. Further information regarding such procedures is available with many consulting corporate banks [15].

We note in this context that, while such methods have been historically used by some of the more sophisticated firms in the fortune 500 list, Tata Steel, for instance, what we are suggesting is an entirely different strategy which involves combining corporate targets with investments, which we call "*industrial investments*".

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