



Structured Products

May 31, 2008

What is this creature all about? Why bother with them?

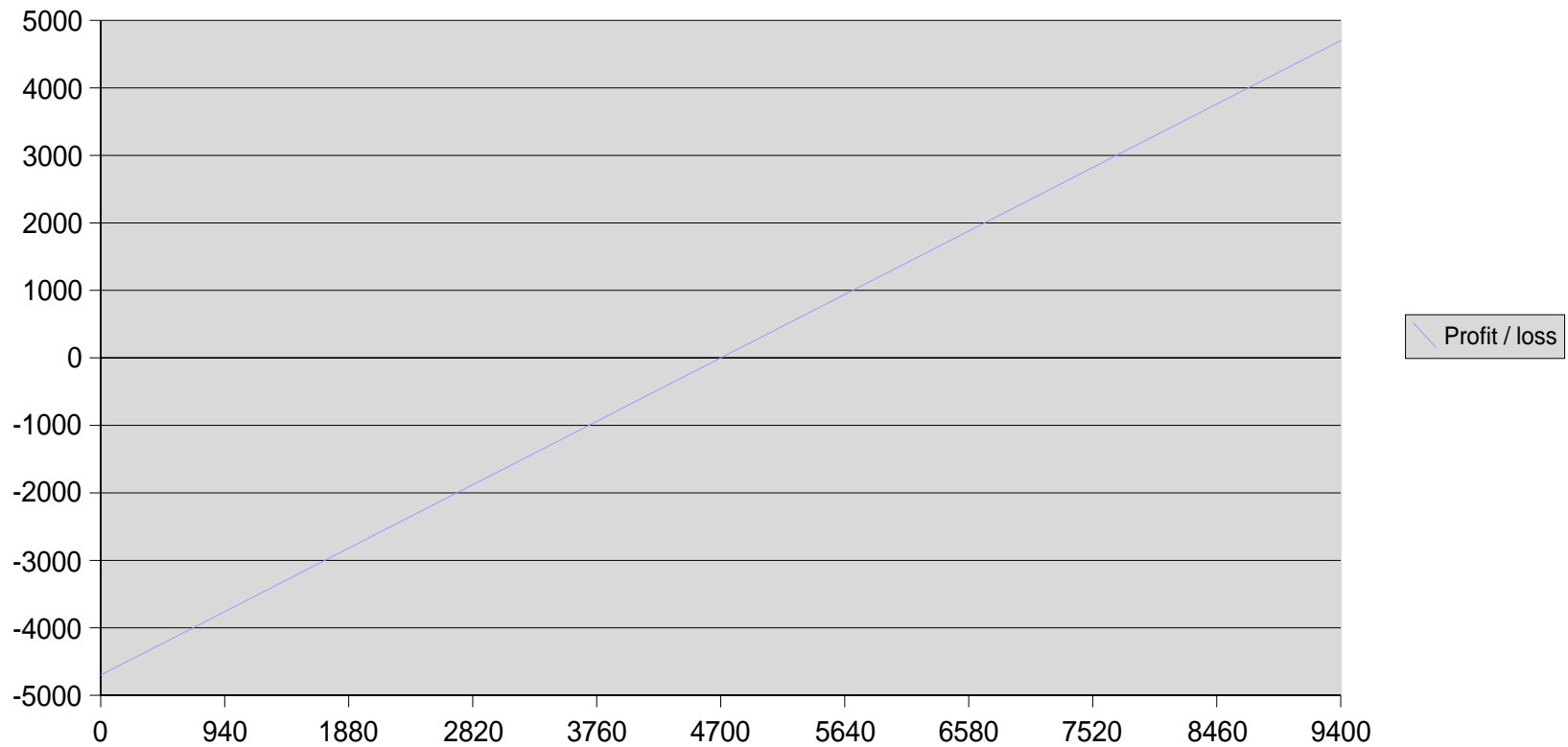
- Combines features of equity and debt instruments
- Created by combining debt instruments and equity options
- Customised risk / reward
- Occasionally mispriced, give opportunities
 - Right now

What if?

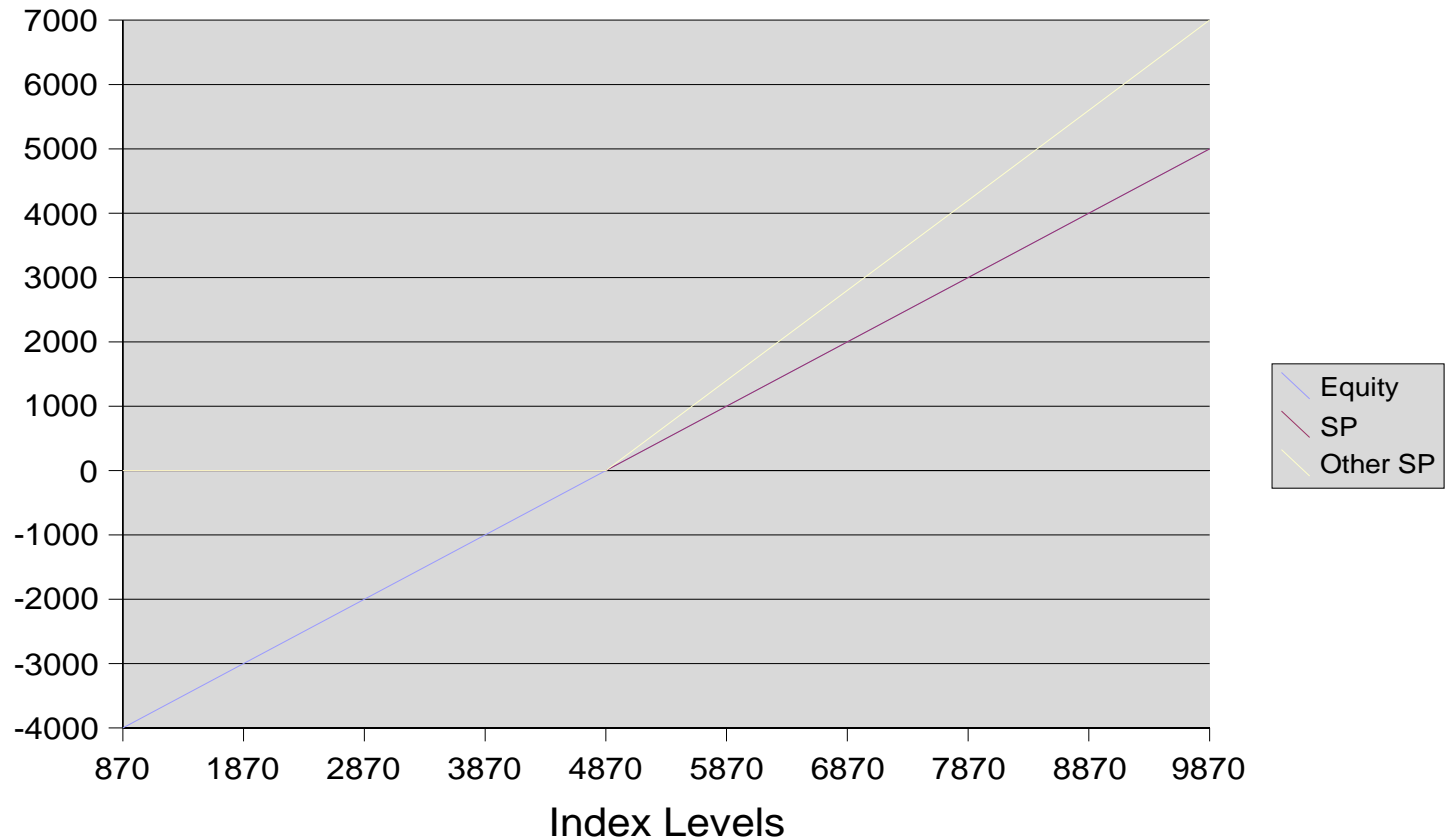
- Your investment only went up in line with equity markets and did not come down? OR
- Your investments went up 1.4 times the increase in equity markets and did not come down? OR
- You could buy NIFTY at a 17% discount OR
- You could select a basket of stocks and get returns only linked to the best performing stocks OR
- You could earn around 15% per annum fixed, provided equity markets did not fall more than 20% below current levels after 3 years

Typical equity payoff

Payoff chart



Structured product pay off



Common features

- Either
 - Buy debentures (directly / indirectly) issued by brokers, investment banks (Citi, Deutsche, Kotak, Edelweiss) OR
 - Make one yourself
- Capital protection OR at risk
- Equity linked returns

Common structures

- Capital protected equity linked notes (capital protection and upside of equity markets), with / without locking in of interim profits, with / without cap on annual returns
- Reverse convertibles (high interest, no capital protection)
- Returns linked to a basket of stocks
- & thousands of more structures

Live example 1 – Cautious outlook

- Alternative A
 - Invest in NIFTY @ 4,870
 - Say you invest in 100 NIFTY with an investment of Rs. 4,87,000
 - Investment will move up and down in value based on movement of NIFTY
- Alternative B Create a capital protection structure
 - Maturity June 30, 2011
 - Capital protection
 - Full equity upside
- Structure
 - Buy 100 call options maturing on June 30, 2011 @ 952, Investment of Rs. 95,200
 - Invest (Rs. 4,87,000 – Rs. 95,200) = Rs. 3,91,800 @ 8.5% quarterly for 3 years and 1 month.

Profit / loss from Alternative B

- If NIFTY is lower than 4,870
 - Rs. 3,91,800 will grow to Rs. 5,07,800 in 3 years and 1 month.
 - The call option expires worthless. You get a return of approximately 1% pa. on your money after 3 years and one month
- However
 - If the market is up 20%
 - You get 20% return on your portfolio
 - If market is up 40%
 - You get 40% return on your portfolio
 - And so on.....

Live example 2 – Full faith in equity markets

- Alternative A
 - Invest in NIFTY @ 4,870
 - Say you invest in 100 NIFTY with an investment of Rs. 4,87,000
 - Investment will move up and down in value based on movement of NIFTY
- Alternative B Create a future investment structure
 - Maturity June 30, 2011
 - **NO** capital protection
 - Full equity upside **AND** downside
 - Buy NIFTY at a **discount**
- Structure
 - Buy 100 call options @ 952 & sell 100 put options @ 900, Net investment of Rs. 5,200
 - Invest (Rs. 5,00,000 – Rs. 5,200) = Rs. 4,94,800 @ 7% p.a. for 3 years and 1 month.

Profit / Loss from Alternative B

- Invested amount of Rs. 4,94,800 grows to Rs. 6,09,578
- Effectively Nifty purchase at $5000 + 52 - 1095 = \text{Rs. } 3,957$
 - Discount of 17.7%
- Participate in all upside AND downside from these levels

Why not invest in the 140% participation structure?

- Do not forget credit risk!!!!
- We have assumed 8.5% returns considering SBI returns
- If Interest rate is higher, amount invested in bank FD / debt funds is lower, more options can be purchased
- Participation period and maturity period not the same
- Do not forget compound interest
- Profit booking structures also lower participation in a big upmove
- Consider caps and floors Etc.

Which car is better?



..... depends.....

Understanding = knowing what questions to ask

- Importance of understanding the product and not being swayed by the packaging
- Understanding the creation of structured products
- Strong advice: do not buy anything that you do not understand
- Comparing
 - Apples, oranges, mangoes, bananas

Thank You

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