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CASE STUDY ON PERSONAL FINANCIAL STRATEGY PLANNING Pooja Giri¹; Varshik M.S²; Yash Shrimali³

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ABSTRACT

The case is ideal for an upper-level finance course with an emphasis on financial institution risk Management and financial performance. This case connects the myriad of risk factors to which families are exposed in the due course of their smooth running. These include interest rate risk, market risk, credit risk, off-balance sheet risk, foreign exchange risk and liquidity risk. In addition, the case incorporates other critical elements important to personal finance management, such as capital redeeming and asset securitization. The case also includes a thorough family financial strategy analysis with certain goals and liabilities. It also gives an opportunity for students to present the analysis findings.

I CASE DESCRIPTION

In today's scenario large number of families incurs losses because of the lack of existence of a financial plan. This case is about a family which constitutes of 5 members and is presided by a person named Mr. ROBIN FERNANDIS. The family has 7 real life desires which need to be fulfilled by manipulating and using the available assets and anticipated income out of the interest rates on this property he possess and also the regular income flow of Mr. Fernandis and his wife. This case studies the financial problem in INDIA. All the solution of the case is solved keeping in mind the interest rate of India. The Calculation of inflation rate, interest rate of RD, SIP MF, and PPFis done online.

The description of the desires and the personal property possessions has been detailed in the further part of the report.

II CASE GUIDELINESS

The case includes the following seven parts:

- Part 1- Loan Repayment
- Part 2- Contingency plan
 - Part 3- Insurance
 - Part 4- Education Provision for Silvette
 - Part 5- Marriage Funding for Silvette
 - Part 6- Retirement Plan of Mr. Fernandis and Caroline
 - Part 7- World Tour

2.1 Case Data/Information

S.NO	NAME	AGE	RELATIONSHIP	HEALTH HISTORY
1	Mr ROBIN FERNANDIS	36	Self	Normal

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2	CAROLINE	30	Wife	Normal
3	STEFAN	68	Father	Hypertension (BP High)
4	ALLENA	60	Mother	Thyroid + High BP
5	SILVETTE	8	Daughter	Normal

Their cash flows& net worth are given below:

	MONTHLY (in \Box)	YEARLY (in \Box)
Inflows	4,00,000	48,00,000
Outflows	60,000	7,20,000
Household & lifestyle expenditure	1,38,000	16,56,000
Insurance Premium(Life only Kunal)	4,583	55,000
Car Insurance	1,333	16,000
House Insurance(Fire-Flat)	250	3,000
EMI for car loan	27,304	3,27,644
EMI for house loan	53,538	6,42,456
Investments		
PPF(both husband & wife)	16,667	2,00,000
MF Investment(both husband & wife)	20,000	2,40,000
Bank Recurring Deposit(wife)	5,000	60,000

• Surplus:

Ass	ets (Personal):		
\succ	Flat	□ 92, 25,000	
\succ	Car		□ 10, 00,000
\triangleright	Jewelry□ 5, 50,000		
Ass	et (Financial & investable)		
\triangleright	PPF (Both husband & wife)		□ 20, 28,000
\triangleright	EPF (wife)		□ 3, 50,000
\triangleright	Bank FD (both husband & wife)		□ 12, 00,000
\triangleright	Savings Bank A/c (both husband &	z wife)	□ 4, 50,000
\triangleright	Mutual Fund (both husband & wife	e)	□ 9, 20,000
O/s	liabilities:		
\triangleright	Car		□ 10, 00, 00
\succ	Flat		□ 43, 21,727
. •			

- Assumptions:
 - General inflation (post &pre-retirement) 7.5%
 - Education & Marriage inflation 10%
 - Expected annual increase in salary 8%
 - Returns on Equity Mutual Funds 12%
 - Returns on Debt Mutual Funds 8%
 - FD return 9%
 - Returns on PPF 8.7%
 - Return on EPF 8.7%
 - Income tax: as per income slab.
 - Assumptions regarding other data are allowed provided proper reference or a proper justification is given for the assumption.

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The values stated in each of the 7 parts are based on assumption relevant to the real life needs of the family and the strategy developed is with respect to these values assumed.

Mr. Fernandis and Caroline are working couple, where Mr. Fernandis is a doctor (Chest specialist) attached to private hospital and Caroline works in accounts department in an IT firm. The family comprises of 5 members, but Mr. Fernandis and Caroline have 1 school going kid -Silvette and Mr. Fernandis parents – Stefan and Allena are staying with them.

Here are the seven desires and the best possible strategy that can be possibly employed:

2.2 Part 1 - Loan Repayment

They had taken a loan of Rs. 48, 00,000/-in July 2011 at a floating rate of interest of 10% p.a. for tenure of 20 years from a housing finance company. The company sent a notice raising the interest rate to 10.75% p.a. effective January 2014 thereby increasing EMI. He decides to refinance the loan at 10.25% from a bank which charges a processing fee of 1% of loan sanctioned. The aim is to find out an absolute amount he stands to save in the remaining tenure if the outstanding loan amount as at the end of March 2014 is refinanced so that the new loan terminates as per original tenure; thereby also estimating the financial benefits.

The possible strategy could be:

The following table shows the existing outstanding amount of loan which is \Box 43,21,727.00/-which is to be paid in 17 years tenure at the interest rate of 10.75%. EMI for this loan is \Box 53,538.00-.

Existing O/S Loan	Remaining Terms	Interest Rate	Present EMI
□ 43,21,727.00	17 years	10.75%	□53,538 Per Month

So hence it is suggested to shift the housing loan at interest rate of 10.25% (resetting the EMI)and reduce the existing outstanding loan amount to \Box 25, 00,000.00/- for 17 years thus having an EMI of \Box 25,927.00 Per Month. The Emi is calculated using Loan Calculator in excel sheet which is given in Appendix A.

Existing O/S Loan	Remaining Terms	Interest Rate	Revised EMI
□25,00,000.00	17 years	10.25%	□25,927.00 Per Month

Hence according to this strategy the money saved out of resetting the EMI is the difference between present EMI and the new reset EMI

Present EMI-New EMI=
53,538.0025,927.00

Net Savings = \Box 27,611.00/

Since the outstanding loan amount has been reduced to \Box 25,00,000.00/ from existing loan amount of \Box 43,21,727.00/- the arrangement of difference amount of \Box 18, 21,727.00/- to repay the loan can be possibly done by redeeming the entire Mutual Fund of \Box 9, 20,000.00/, withdrawal of FD of \Box 8, 00, 000.00/ from an amount of \Box 12,00,000/ and withdrawal of SB of \Box 1, 01, 727.00 from an amount of \Box 4,50,000/-.

Money arrangement to repay the loan 18, 21,727.00/

Money arrangement

- Redeem MF = \Box 9, 20,000.00/
- Withdrawal of FD=□ 8, 00, 000.00/

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• Withdrawal of SB= \Box 1, 01, 727.00/

□18, 21,727.00/-

In addition of the savings of \Box 27,61.00/- this strategy also provides the savings of 4.75%. This savings is possible by redeem of savings. With savings he is getting an interest of 6% approximately post tax deduction while he has to pay 10.75% interest, so there is net lack of 4.75% in profit. After redeeming of savings he will not incur the loss of 4.75% which he was incurring.

2.3 Part 2 - Contingency Planning

If the parents emergency funding is included the amount of provision the family will need and the logic behind this is discussed here.

For contingency planning included parents medical emergency at present parent's health insurance is nil. So Mr. Fernandis and Caroline keep FD/SB deposits for emergency funding. So this strategy suggest a family health insurance of \Box 5 Lakhs floater basis for whole family including parents from Nationalize insurance company through Nationalize bank. \Box 5 Lakhs family floater health insurance yearly cost \Box 8000/. For more details visit ORIENTAL BANK OF COMMERCE. Here the strategy is focusing on two main points –nationalize bank and Oriental bank of commerce. Now Nationalize bank is preferred over private banks because nationalize bank give health insurance at less premium than private banks. In nationalize bank a person can select different banks to do health insurance but with Oriental Bank of Commerce a person can do health insurance up to 70 years without any medical problem and after two years of the policy he will get claims in his existing diseases and regular checkups also. Furthermore using this strategy a person can avail Tax benefit U/S 80(D).

2.4 Part 3 – Insurance

Although Mr. Fernandis pays Rs. 55,000 yearly life insurance premium he has coverage of 10 lakhs only. Sridevi has no life insurance coverage. Mr. Fernandis Employer provides group floater mediclaim cover of Rs. 5, 00,000 for the family of 3, excluding the parents. Parents are not covered by any form of medical insurance. The aim is to find out whether both husband & wife need life insurance and if yes, then how much life insurance coverage do they require?

According to the strategy both husband and wife needed life insurance cover for their family and social commitment according to their Human Life Value. According to human life value a person should have assets (including health insurance and property) equal to ten times their annual income. This will give liquidity to them.

This strategy suggests that both Fernandis and Caroline purchase term life insurance on their own life from LIC as given below:

Name	Age (in yrs.)	Sum Insured	Term (in yrs.)	Premium
Mr Fernandis	36	□2,00,00,000.00	20	□28,877.00
Caroline	30	□1,00,00,000.00	20	□18427.00

Total Yearly Premium = \Box 47304.00

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The premium of Term life insurance is calculated online. Term life insurance is preferred because it gives more life cover at less premium amount than any other life insurance policy. After taking the term life insurance it is suggested to surrender the existing life insurance which he had to repay back his car and home loan.

2.5 Part – 4 Education Provision For Silvette

Mr. Fernandis and Caroline have the need to provide for their daughter engineering college education costs. They envisage that 4 annual payments of \Box 3, 50,000/- including hostel facilities in India, in current money terms, would be needed beginning 10 years from now.

Considering the future cost due to inflation the investment strategy to achieve the goal could be as follows:

For daughter Silvette's education Mr. Fernandis and Caroline assumes that he will have to incur an expense of \Box 3, 50,000/- every year for the next consecutive 3 years beginning from 2014. With the given inflation rate \Box 3, 50,000/- is thought to be summing up to \Box 9, 00,000/- after 10 years. Therefore the strategy involves the accumulation of \Box 4200000 by the end of 2027. The inflation amount is calculated according to the assumption in the inflation interest rate online.

Present Cost		Future Cost		
□Year	Cost in INR	Year	Cost in INR	
2014	□ 3,50,000.00	2024	□ 9,00,000.00	
2015	□ 3,50,000.00	2025	□10,00,000.00	
2016	□ 3,50,000.00	2026	□11,00,000.00	
2017	□ 3,50,000.00	2027	□12,00,000.00	

Total= \Box 42, 00,000.00

The suggested investment strategy for Silvette is to pay \Box 1000/- only every month continuing the recurring deposit for the next 120 months. Similarly also having a systematic investment planning mutual fund of worth \Box .3100/- for the same number of months in order to estimate to the sum of per annum college fee required for Silvette. The same investment plans are employed for all the four years.

Product	Name	A/C No	Amt Invest P.M in INR	Term(in months)	Future Value	Remarks
RD (Bank/PO)	Silvette	****	□1,000.00	120	□1,94,229.00	
SIP MF equity	Silvette	****	□3,100.00	120	□7,15,256.00	Tax free
RD(Bank/PO)	Silvette	****	□1,000.00	132	□2,24,906.00	
SIP MF equity	Silvette	****	□2,900.00	132	□7,90,215.00	Tax free
RD(Bank/PO)	Silvette	****	□1,000.00	144	□2,58,438.00	
SIP MF equity	Silvette	****	□2,700.00	144	□8,62,623.00	Tax free
RD(Bank/PO)	Silvette	****	□1,000.00	156	□2,95,091.00	
SIP MF equity	Silvette	****	2,500.00	156	□9,30,975.00	Tax free

Total= 15,200.00 Total= 4271,733.00

Systematic Investment Planning Mutual Fund is a sort of investment that is completely subject to market risks. In an event where the Sensex shoots and the share market booms there is an expectation of a good amount to be earned in return. However this anticipation is with respect to the fluctuations in the market and can have a negative result also.

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Note: All these investments are made on Silvette's name since after 10 years Silvette becomes an adult and the ownership status of RD (Bank/PO) will shift to her and become nontaxable for the fact that she is a student who has no source of income. An added advantage is that SIP MF equity under long term capital gain becomes tax free.

2.6 Part – 5 Marriage Funding For Silvette

The anticipated marriage funding of Silvette at 26 years needs \Box 5, 00,000, in current money term.

The strategy includes the accumulation of \Box 29, 58,614 which is the estimated amount at the end of year 2031 with the given inflation rate.

For Daughter Silvette's Marriage Mr. Fernandis and Caroline assume:

Present Cost		Future Cost		
Year	Cost in INR	Year	Cost in INR	
2014	□5,00,000.00	2032	□29,58,614.00	

The suggested provision is to again invest in RD and a SIP MF with the ownership status on Silvette and putting an amount of \Box .2000/- for the next 216 months.

Product	Name	A/C No	Amt Invest P.M in INR	Term(in months)	Future value in INR	Remarks	
RD (Bank/PO)	Silvette	****	□2,000.00	216	□10,72,697.00		
SIP MF equity	Silvette	****	□2,500.00	216	□18,87,004.00	Tax free	

Total= \Box 4,500.00 Tota \models 29, 59,701.00

REMARKS- SIP MF equity under long term capital gain became tax free. SIP MF is a long term capital gain since it gives an opportunity to directly involve in the anticipated and the pre- empted industrial growth especially in India which has a constantly growing economy. However keeping in view, the worst case scenario, this combination of RD and SIP MF is maintained so that RD which will act as a fixed interest earning instrument will now compensate for the losses that might be incurred in an event where the stock market crashes down, thereby ensuring that the financial goal is still achieved.

2.7 Part - 6 Retirement Plan Of Mr. Fernandis And Caroline

Retirement of Mr. Fernandis and Caroline in 2036, when he attains the age of 58 & Caroline attains 52. She may extend another 6 years after. But they have unanimously agreed to want to retire in 2036. HoweverFernandis and Caroline want to maintain the same life style immediate after their retirement. They currently spend \Box 1, 40,000/- per month. Considering the inflated cost the provision is designed along with the plan so that they can they can fulfill their desires after their retirement.

In order for them to maintain the same life style it is important for them to be financially sound enough to bear a monthly expenditure of $\Box 1$, 40,000/- in current money terms.

After 22 years considering the fixed rate of inflation the future worth of \Box 1,40,000.00/ will be \Box 7,16,000.00/. To obtain the monthly living cost of \Box 7, 16, 000.00 P.M after 22 years they should have deposit base of \Box 8,44, 00,000.00/. To deposit this amount following alternatives could be undertaken:

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Step 1-Personal Asset Growth:

Step 2- Present Monthly Savings

Step 3-Future Monthly Savings

Step 4- Future Living Cost

The following tables detail the strategy:

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Step 1-Personal Asset Growth with a combination of public provident fund, equity provident fund and a bank fixed deposit for the amounts reflected in the tabular column.

Product	Name	A/C No	Amount invested in INR	Term (in yrs)	Future Value in INR	Remarks
PPF	Fernandis and Caroline	***	□20,28,000.00	22	□1,34,70,907.00	Tax free
EPF	Caroline	****	□ 3,50,000.00	22	□ 23,24,860.00	Tax free
Bank FD	Fernandis and Caroline	****	□ 4,00,000.00	22	□ 15,55,160.00	Tax paid

 $Total = \Box 27, 78,000.00$ $Total = \Box 1, 73, 50,927.00$

Step 2- Present Monthly Savings

Product	Name	A/C No	Amt Invest P.M in INR	Term(in months)	Future Value in INR	Remarks
PPF	Fernandis and Caroline	**	□22,400.00	264	□1,76,95,681.00	Tax free
SIP MF	Fernandis and Caroline	****	□20,000.00	264	□2,54,58,306.00	Tax free
RD(Bank)	Fernandis and Caroline	****	□ 5000.00	264	□28,14,637.00	Tax paid

 $Total = \Box 47,000.00$ $Total = \Box 4,59,68,624.00$

Step 3-Future Monthly Savings

As expected future increment in salary will be 8%, so I will suggest from next year (2015) increment

new savings of \Box 22000.00to be invested as below mention provision to achieve future financial goal.

Product	Name	A/C No	Amt Invest P.M in INR	Term (in months)	Future Value (RS.)	Remarks
PPF/EPF	Fernandis and Caroline	****	□8,000.00	252	5703221.00	Tax free
SIP MF	Fernandis and Caroline	****	□14,000.00	252	□15674322.00	Tax free

Total= \Box 22000.00 Total= \Box 21377543.00 Step 4- Future Living Cost

Future Value of Fund and Monthly Income is shown in this table. However what needs to be noticed here is while 51.4% of the total investment is dependent on the fixed interest earnings only 48.6% is subject to market risks. Therefore the strategy is completely foolproof and can bear the consequences of the worst case scenario.

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Step1+Step2+Step3	Future Value	%	Future Income Yearly	Future Income Monthly
PPF/EPF	□3,91,94,669.00	46.2	□34,09,936.00	
Basic Deposit	□43,69,797.00	5.2	□2,71,801.00	□ 7,18,137.00
MF	□4,11,32,628.00	48.6	□49,35,915.00	
Total	□8,46,97,094.00	100.00	□80,17,652.00	

2.8 Part 7 – World Tour

Mr. Fernandis and Caroline after their retirement want to go for a world tour which $costs \square 5$, 00,000/- in current money term.

Future worth of \Box 5, 00,000.00/- after 22 years will be \Box 25, 64,000.00/-. To accumulate this amount Mr.

Fernandis and Caroline should create a SIP MF through their account on their name with an amount of

 \Box 2000.00/ invested per month continuing for 264 months.

Post Retirement World Tour

Prese	ent Cost	Future Cost		
Year	Cost in INR	Year	Cost in INR	
2014	□5,00,000.00	2036	□25,64,000.00	

I suggest the following provision

Product	Name	A/C No	Amt Invest P.M in INR	Term(in months)	Future Value in INR	Remarks
SIP MF	Mr Fernandis and Caroline	****	□2000.00	264	□25,45,830.00	Tax free

III SUMMARY

Without changing the present outflow this strategy suggested the solution which will be able to cover all the present and future demand of Mr. Fernandis and his family.

Present Out Flo	W	Suggested Present Out Flow		
Life Insurance	□ 4,583.00	Life+Health Insurance premium	□ 4,608.00	
EMI Home Loan	□53,538.00	EMI Home Loan	□25,927.00	
PPF	□16,667.00	PPF	□22,400.00	
MF	□20,000.00	MF	□ 35,700.00	
RD	□ 5,000.00	RD	□11,200.00	
Total	□99,788.00	Total	□ 99,835.00	

IV CONCLUSIONS

1. Keeping present outflow cost same, we are achieving financial goal of home loan/health insurance/ life insurance/daughter education/ daughter marriage/ world tour, except retirement future's living cost which will partly achieved from step 3 through future 1 year increment savings.

2. All PPF/EPF returns are tax free.

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All SIP mutual fund equity scheme are tax free under long term capital gain. All bank FD/RD are calculated after tax treatment @30% slab of Income Tax

APPENDIX A

Number of Payments

Total Cost of Loan

Total Interest

Loan Amount	□2,500,000.00
Annual Interest Rate	10.25%
Loan Period in Years	17
Start Date of Loan	1-Apr-14
Monthly Payment	□25,927.29

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□2,789,166.58

□5,289,166.58

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