ZERODHA VARSITY

search

≡

Module 11 — Personal Finance

Chapter 1

Background and Orientation

54

1.1– What's in the name?

I recently heard Joe Rogan's podcast with Naval Ravikant. This is a 2-hour conversation and I think this is one of the most thought-provoking and stimulating conversations I've heard in a while. The topics discussed are quite scattered and covers a diverse set of topics, but it has a great flow to it with one thing leading to another. I'm awestruck with Naval's multi-disciplinary approach to many things in life including inner peace, creativity, capitalism, and of course, wealth creation. The granular clarity he has on these topics is quite impressive. I'd suggest you check out the podcast/YouTube video if you've not already done that yet.

For obvious reasons, the wealth creation bit lingered on in my mind for a while. I was thinking about what Naval said in this podcast and it resonated with everything I have ever learned and experienced with money and my own pursuit to generate wealth. I'm nowhere close to the 'financial freedom' state he describes in the podcast, but at least I know that I'm not deviating much from the track. While I continue this journey, I thought why not share some of my experiences and learning with you all.

Hence this topic on 'Personal Finance'.

When you think about personal finance, it often circles around planning your financials today, so that you have a better tomorrow. While some can do this themselves (or so they believe), few consult a financial advisor to chart this map for them. However, I'm not a big fan of approaching a financial advisor to help you chart a plan for yourself and your family. You should be able to do this yourself and your family.

After all, you know your family and their requirements best. You know what is good for the family and what is not. You work hard for your family today and dream of a secure future for them.

Your 'Financial Advisor', won't do any of this.

He is most likely eager to peddle you a financial product that will earn him a good return. He will do the same with you and 20 other clients he may have.

So eventually, the onus is on you to secure your family's and your own financial wellbeing. Remember, this is called 'Personal' finance for a reason. Its best kept personal and dealt with care and diligence.

Good news is, this is not rocket science. If you have the skills to do basic arithmetic, then half the battle is won. The rest of the work is just the application part where you'll figure what is good and what is not.

This is exactly the objective of this module. At the end of this module, you will be in a position to do these things –

- Develop a deeper understanding of financial products and what goes under the hood
- Set up a financial goal and work towards achieving that
- Identify financial setbacks and address towards correcting them

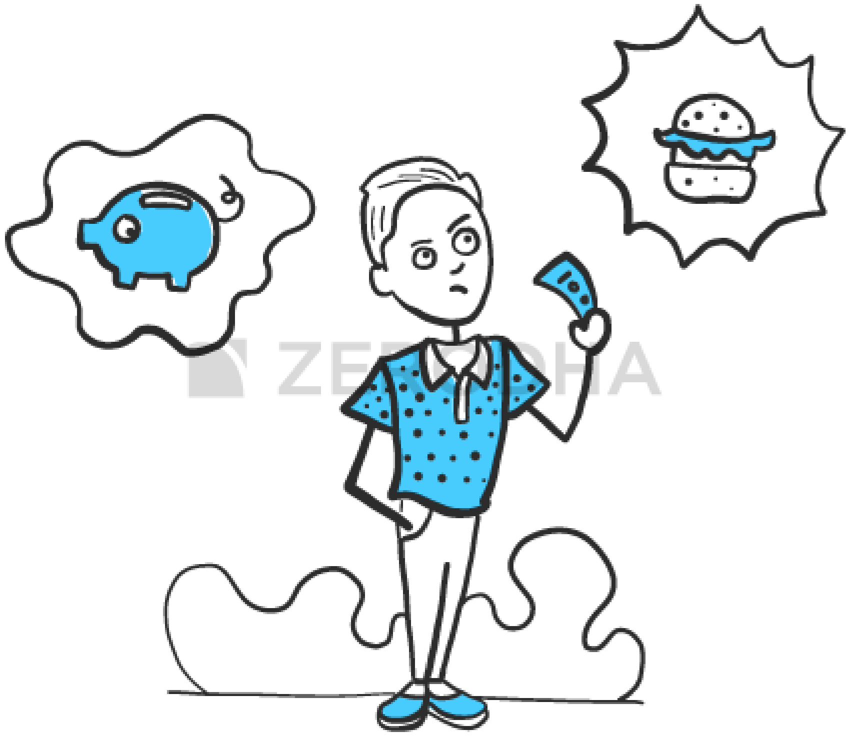
I hope you are as excited as I'm about this module!

1.2– I'm not ready yet

Getting my first job was a struggle. I spent 6-8 month meeting tons of people, desperately looking for a job. I finally landed up with a 'job' to do. This was my first job and it was special. After working for a month, I got my first pay cheque ever and I was ecstatic. I felt responsible for the first time in my life.

I had a bunch of things planned with my first pay. Right from buying my mother a saree to taking my girlfriend (now my wife) out for dinner J. Being in a position to do things for your loved ones always feels good.

After all the expenses, I still had some money left in the account, albeit very little.



A good friend of mine suggested that I should invest that money. I brushed away his advise, thinking that the money left in my account was very little and would not make any difference whatsoever. However, I convinced myself that I would start saving next month onwards.

As predictable as it can get, next month to a similar story. I spent all the salary money and had nothing left to save. No points of guessing, this continued for years and I never saved a dime.

Even today, I regret doing this. In fact, this probably is one of the top regrets in my life. I wish I had started saving early on in life.

I'm sure most of your reading this may relate to my story. We all brush aside saving money today because the 'amount' of money we intend to save is very small. We all keep waiting to receive a sizable amount of money so that we can start our savings journey with that.

This never happens and unfortunately, we never start saving in life.

Here is an advise – even if it is a small amount, save it. This will make a huge difference in your financial life.

Allow me to tell you the story of 3 sisters to help you understand why you need to start saving early in life.

A father had triplet daughters. On their 20th birthday, the father declared that he would pay each daughter a sum of Rs.50,000/- on their birthday, till they were 65 years old. They were free to use this money in whichever way they wanted.

As a good father, he also suggested to his daughters that they could invest this money in a promissory note, which would pay them a return of 12% compounded year on year, with a condition that once invested, they were prohibited to withdraw that money till they turn 65.

Although they were triplets, their attitude towards money and savings were very different. Here is how each daughter utilized this money –

- The first daughter started investing right away i.e on her 20th birthday. She invested the first nine 50Ks that she received in the promissory note, and then the remaining 50K that she received (from 28th birthday to her 65th birthday) were all spent on frivolous things.
- The second daughter initially spent all the money she received. However, on her 28th birthday, she got a little serious. She decided to save the same amount as her other sister. So she saved 50K from her 28th birthday till her 36th birthday, and the money she received from 37th to 65th was spent.
- The 3rd sister was a bit casual till her 28th birthday. She spent all the money she received from her dad. However, on her 28th birthday, she got a little serious and decided to invest the 50k cash all the way up to 65 years.

Here is a summary of what each sister did with the money –

Birthday	Sister 1	Sister 2	Sister 2
20	50000	Spend	Spend
21	50000	Spend	Spend
22	50000	Spend	Spend
23	50000	Spend	Spend
24	50000	Spend	Spend
25	50000	Spend	Spend
26	50000	Spend	Spend
27	50000	Spend	Spend
28	50000	50000	50000
29	Spend	50000	50000
30	Spend	50000	50000
31	Spend	50000	50000
32	Spend	50000	50000
33	Spend	50000	50000
34	Spend	50000	50000
35	Spend	50000	50000
36	Spend	50000	50000
37	Spend	Spend	50000
38	Spend	Spend	50000
39	Spend	Spend	50000
40	Spend	Spend	50000
41	Spend	Spend	50000
42	Spend	Spend	50000
43	Spend	Spend	50000
44	Spend	Spend	50000
45	Spend	Spend	50000
46	Spend	Spend	50000
47	Spend	Spend	50000
48	Spend	Spend	50000
49	Spend	Spend	50000
50	Spend	Spend	50000
51	Spend	Spend	50000
52	Spend	Spend	50000
53	Spend	Spend	50000
54	Spend	Spend	50000
55	Spend	Spend	50000
56	Spend	Spend	50000
57	Spend	Spend	50000
58	Spend	Spend	50000
59	Spend	Spend	50000
60	Spend	Spend	50000
61	Spend	Spend	50000
62	Spend	Spend	50000
63	Spend	Spend	50000
64	Spend	Spend	50000
65	Spend	Spend	50000

- The first sister saved for the first 9 years (between 20th to 36th birthday) totaling Rs.450,000/-.
- The 2nd sister saved for 9 years (between her 28th birthday to 36th birthday), totaling Rs.450,000/-
- The 3rd sister started saving from her 28th birthday, but saved all the way till her 65th birthday, totaling a sum of Rs.1,900,000/-

I have a question for you now – on the 65^{th} birthday, which sister do you think would have saved the most? Remember, once the money gets invested the promissory note, it gets locked till the 65th birthday and do not forget the promissory note gives a 12% compounded return year on year.

Pause and think about it for a moment.

Chances are here is how you'd think about this –

- The first sister saved too little, very early on, so she would not have saved much
- The 2^{nd} sister again has saved very little very randomly, so she may not have much on her 65^{th} birthday
- The 3^{rd} sister, although started late, has saved quite a bit and continued to save for the entire duration, hence she must have the highest savings on her 65th birthday

This is expected (in fact I'd be surprised if it is anything else) as we humans see things in a very linear fashion. Here we equate the future value of our savings to the amount of money saved today. But there are two other variables at play here – time and return, both of these when concocted together, works in a beautiful nonlinear way.

So, here are how the numbers stack up for the 3 sister problem, the numbers may put you off guard so hold your breath –

- The 3^{rd} sister saves 19L, which grows to a massive 3.05Crs by the time she turns 65
- The 2^{nd} sister saves 4.5L, which grows to an impressive 1.98Crs by the time she turns 65
- The 1^{st} sister saves 4.5L, however, she ends up with a whopping 4.89Crs by the time she turns 65!

Are you confused?

I'm sure some of you are. So here is what I want you to note –

- The first and 2^{nd} sister saved similar amounts, but the difference was the amount of time they both gave their money to grow. The first sister gave full 45 years for the investment to grow, but the 2^{nd} sister gave only 38 years. See the difference it makes? This is the reason why I regret not starting to save early on in my life
- The 3^{rd} sister ends up with the 2^{nd} highest corpus, but for to that happen she had to save for a very long time. But please note, this still does not match up to the 1^{st} sister's corpus.

So if you are someone like me, who missed savings during my early days, then the best option we have now is to save for a really long time.

I hope by now, I've convinced you why you need to start saving early. By starting early, you use time to your advantage and it does play a major role.

Wait for a second – how did I calculate the growth of money for each sister? How did I figure sister 1 saved 4.89Cr and sister 2 saved 1.98Cr?

Well, this is calculated by applying the core concept of 'Time value of money'. Time value of money is the central theme of personal finance. Hence, for this reason, we need to understand this concept right at the beginning. So in the next chapter, we will discuss time value and its application in more detail.

Download the excel sheet used in the chapter below.

Download

Key takeaways from this chapter

- Personal finance is best when kept personal to oneself.
- Eventually, you as an individual should be able to build a financial plan for yourself and your family
- Savings early on in life makes a huge difference in the savings corpus at the end of the tenure
- Time value of money plays a key role in personal finance.

Module 11

Chapters

54 comments

1. *jaya* says:
   June 22, 2019 at 12:03 am

   sir next chapter

   Reply

   - *Karthik Rangappa* says:
     June 22, 2019 at 11:56 am

     Will try and put it up soon.

     Reply

2. *Pradyumna Chatterjee* says:
   June 22, 2019 at 1:41 am

   Awesome Sir. Finally A new module. Still going through the previous ones over again in the mean time :))

   Reply

   - *Karthik Rangappa* says:
     June 22, 2019 at 11:57 am

     Hope you like this new module as well, happy reading ☺

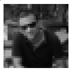
     Reply

3. *Pradyumna Chatterjee* says:
   June 22, 2019 at 1:47 am

One feature suggestion for Varsity site:
Allow us to read through all the recent comments in descending order instead of top five.
1. More like a “Read more” link below the top 5
2. This link will take us to a Varsity wide commend feed in descending order.
3. An option to view thread beside each comment to take us to respective page (with auto scroll to that comment in respective page)

This way, it would be easier to keep track of conversations developing and to get interesting insights from fellow traders

Reply

-  *Karthik Rangappa* says:
  June 22, 2019 at 11:57 am

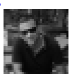
  Hey thanks for the suggestion, will pass this feedback to the tech team.

  Reply

4. *Sankar* says:
   June 22, 2019 at 3:18 pm

   Thanks a lot for putting up the Module on Personal finance. This will help us who are very conservative and want safe method of savings. I have the same feeling of third sister narrated in the story and did not understood the importance of saving early on life.

   Reply

   -  *Karthik Rangappa* says:
     June 23, 2019 at 10:30 am

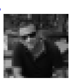
     I hope we can deliver a good module on this topic, Sankar. Yeah, as I’ve mentioned, I too feel bad for not starting from early on.

     Reply

5. *Rahul* says:
   June 24, 2019 at 1:04 am

   Hi Karthik. Your work is really inspiring. I am facing a difficulty, would appreciate your help. I’ve cleared CFA level-1 and gave level-2 a week back. I am a fresher with an engineering background. Could you please tell me how does one get a good job in an investment banking firm, Private Equity firm or an asset management firm with no prior experience with just CFA certification. Thank you.

   Reply

   -  *Karthik Rangappa* says:
     June 24, 2019 at 11:18 am

     Rahul, I think the best place to look for jobs is in the asset management side (mutual funds) and credit rating agencies. Cracking through anything else without prior work experience could be a challenge. However, few IBs do accept freshers.

     Reply

6. *Rajesh* says:
[June 24, 2019 at 8:28 am]

Thank you karthik Sir for this beautiful story and the BIG thank you for the lessons from this story. I may be find myself in this story as not saving or not investing for long term. I will try to save first and spent later. I am hoping you may post some more learning lessons in near future. Thank you sir again….

Reply

    - *Karthik Rangappa* says:
    June 24, 2019 at 11:19 am

    Welcome, Rajesh. I'm glad you liked the content. Will try and put up the next lesson soon ☺

    Reply

7. *Sundeep* says:
June 24, 2019 at 9:52 am

Sir I am personally excited about the module completely dedicated to personal finance. I just want to know what are some other chapters that we can expect in this Module? Thanks.

Reply

    - *Karthik Rangappa* says:
    June 24, 2019 at 11:23 am

    Sundeep, plan to cover everything from the math involved in personal finance to MFs and insurance. Let's see how this goes ☺

    Reply

8. *Sujeet Raj* says:
June 25, 2019 at 10:23 pm

Sir… A big thank you for starting on this topic. I recently gave my Level 1 CFA. In the process learnt a lot. And realized a lot. As per Ethical Standards, advisors should have client interests first. But I guess it doesn't happen in the real world. Everyone is after referral fees and commissions which is sad. I also think as a normal person who doesn't have much financial knowledge, nor is in the finance industry, investing completely on own is very challenging as time passes on. Yes one should still strive to increase their financial literacy if they want to generate wealth. If Advisors truly remained failthful for their client needs, much more can be achieved.

I believe the best way for them is to invest in passive funds, either Index or ETFs. But there is a huge lack of sectorial ETFs in India. I was impressed with Smallcase after realizing it's value. Thank you to Zerodha for seed funding such a platform.

I know you are 100% believer in equity (as said in Module 1 of varsity). But hope you talk about other options in this personnel finance too. Varsity focused primarily on trading. But this is a much needed module. Thank you again for bringing it out ☺

Reply

    - *Karthik Rangappa* says:

June 26, 2019 at 10:47 am

Thanks for the kind words, Sujeet. Yes, the idea is to focus on everything that matters to the financial life of an individial.

Reply

9. *leephen* says:
June 26, 2019 at 8:06 am

WOW
Waiting for TIME VALUE OF MONEY.
😆😆😆

Preparing for CAIIB. this module helps me for both (career & personnel life).

Reply

   - *Karthik Rangappa* says:
     June 26, 2019 at 10:58 am

     Good luck for CAIIB. Will try and put up the chapter soon.

     Reply

10. *Sarthak Aiyappa* says:
June 26, 2019 at 9:40 pm

Y'all are growing in a fantastic manner. Love y'all for creating varsity!
Keep at it.
You've got a lot of admirers who are millennials 😀

Reply

   - *Karthik Rangappa* says:
     June 27, 2019 at 11:25 am

     Sarthak, I'm happy to note that 🙂
     We will do our best to put up great content regularly!

     Reply

11. *Yash* says:
July 3, 2019 at 11:21 am

When will the remaining chapters be published?

Reply

   - *Karthik Rangappa* says:
     July 4, 2019 at 10:31 am

     Yes sir, one chapter at a time: 🙂

     Reply

12. *jaya* says:
    [July 3, 2019 at 5:52 pm]

    sir will you discuss about multi regression analysis ?

    Reply

    - *Karthik Rangappa* says:
      July 4, 2019 at 10:49 am

      Not anytime soon, Jaya.

      Reply

13. *sandip* says:
    July 4, 2019 at 11:58 pm

    Hello,thank you for all the modules, can you introduce an upvote button for your chapters?? Many times i want to "upvote" after reading the chapters and your answers to question but cannot!

    Reply

    - *Karthik Rangappa* says:
      July 5, 2019 at 12:03 pm

      Your good wishes are the biggest upvote for us ☺

      Reply

14. *fefr* says:
    July 19, 2019 at 12:49 am

    Daughter turns 65 but father still alive and gives 50000 to each.

    Reply

    - *Karthik Rangappa* says:
      July 19, 2019 at 11:51 am

      No, at 65 it stops ☺

      Reply

15. *shambu* says:
    July 20, 2019 at 8:05 pm

    how would you manage to have a GF before even getting your first pay cheque. You surely were saving from your pocket money right from your early school days 😀

    Reply

    - *Karthik Rangappa* says:
      July 21, 2019 at 7:58 am

Lol ☺
Luckily a few things in life are still not associated with money!

Reply

16. *shivam* says:
July 29, 2019 at 7:48 pm

Thank you karthik anna and team for writing this module.When can we expect valuation module

Reply

- *Karthik Rangappa* says:
  July 30, 2019 at 12:06 pm

  Thanks Shivam ☺

  We already have a module on valuations here – https://zerodha.com/varsity/module/fundamental-analysis/

  Reply

17. *Saurabh Shrivastaba* says:
July 30, 2019 at 11:59 pm

Good article for kids

This article is not for people who wants to be in fast train.

Retire Rich Retire early.

Reply

- *Karthik Rangappa* says:
  July 31, 2019 at 2:10 pm

  Well, if you can find that fast train, then don't forget to educate the rest of us ☺
  Good luck!

  Reply

18. *Rohit Upmanyu* says:
August 4, 2019 at 12:34 pm

Good content. Simple to understand. Nice effort. The table needs a small typo correction for the column heading. "sister 2" repeats two times

Reply

- *Karthik Rangappa* says:
  August 5, 2019 at 10:32 am

  Hey Rohit, thanks for pointing that out. Will make te change.

  Reply

19. *Raja* says:
[August 9, 2019 at 8:42 pm]

Dear Karthik,

Could you please provide me any study material, information or link with respect to Interest Rate Futures MARKET which is there in NSE. It would be a great help. Thanks in advance. ☺

Reply

- *Karthik Rangappa* says:
  August 10, 2019 at 10:25 am

  Raja, check this, hope this helps – https://www.nseindia.com/content/press/interest.pdf

  Reply

20. *Raja Singh* says:
August 11, 2019 at 5:12 pm

THANKS KARTHIK.

Reply

- *Karthik Rangappa* says:
  August 12, 2019 at 10:48 am

  Welcome!

  Reply

21. *Raja Singh* says:
August 11, 2019 at 7:55 pm

Dear Karthik,

Could you please tell me what are the technical and Theoretical factors which influence the yield of GOI Bonds.

Regards,
Raja

Reply

- *Karthik Rangappa* says:
  August 12, 2019 at 10:52 am

  Two main things –
  1) The perception of the risk factor in the economy, which will, in turn, influence the monetary decisions
  2) The monetary policies itself.

  Reply

22. *Raja* says:
[August 12, 2019 at 2:04 pm]

Ohkk.. So how the recent Interest rate cut by RBI affects the yield of the bonds? so does the rate cut mean increasing in the Bond's yield and decreasing Bond price ?

[Reply]

- *Karthik Rangappa* says:
  [August 13, 2019 at 11:08 am]

  As the interest rate goes down, the price of the bond increases, and therefore the yield of bond drops. Likewise, if the interest rate increases, the price of the bond decreases, and hence the yield increases.

  [Reply]

23. *Raja* says:
[August 13, 2019 at 11:37 am]

Thanks a lot Karthik…. ☺

[Reply]

- *Karthik Rangappa* says:
  [August 14, 2019 at 11:12 am]

  Cheers! Happy reading, Raja ☺

  [Reply]

24. *Bobba Sathwik* says:
[August 17, 2019 at 1:49 am]

Dear Sir,
I love your work and have been reading them since weeks. The best thing about it is the way you put the most complicated(which I used to feel before) things into the simplest way possible and easy to understand. I have asked some of friends to go through it and they too are very happy to find such usefull content.
Thanks a lot.

In this module, I just found a small typo error. I hope it will help you in correcting it.
The first sister saved for the first 9 years (between 20th to 36th birthday) totaling Rs.450,000/-.
It Should Actually be- The first sister saved for the first 9 years (between 20th to 28th birthday) totaling Rs.450,000/-.

[Reply]

- *Karthik Rangappa* says:
  [August 17, 2019 at 9:26 am]

  Hey thanks for the kind words, Bobba! Let me look at the numbers again, thanks for pointing that out ☺

Reply

25. *Naveen Prakash* says:
August 19, 2019 at 10:43 am

Hi Karthik,

Is there any topic/article exclusively on intraday trading/BTST in Varsity?

Thanks!

Reply

- *Karthik Rangappa* says:
August 19, 2019 at 12:00 pm

  The modules on TA/Futures/Options can be used for intraday trading.

  Reply

26. *Govil* says:
September 9, 2019 at 1:01 pm

Hi Karthik,
I was waiting for this module badly. I'm doing my own personal finance and for my family's finance. I had been doing this for long time. I'm personally an electrical engineer and working in power sector for last 8 years. I don't have any degree in finance. Can you suggest options or opportunities for me with this background to switch career to personal financing? Your own experience, knowledge or reference to someone or any other website where I can explore the opportunities will be of great help.
Thank you!! Keep writing,keep inspiring!!

Reply

- *Karthik Rangappa* says:
September 10, 2019 at 10:22 am

  Thanks for letting me know, Govil. If personal finance interest you, then maybe you should check out the CFP certification. That will put you on the right track.

  Reply

27. *santosh patidar* says:
September 23, 2019 at 3:15 pm

Hi,

Invest early is best option, then for children anyone can start,it will help children.
Please advice about children plans also.

Thanks,
Santosh

Reply

- *Karthik Rangappa* says:
September 24, 2019 at 11:17 am

Yes, we will cover that as well Santosh.

Reply

Post a comment

Name (required)
Mail (will not be published) (required)
Comment
Post comment

@ZerodhaVarsity Signup Login
Close

Modules