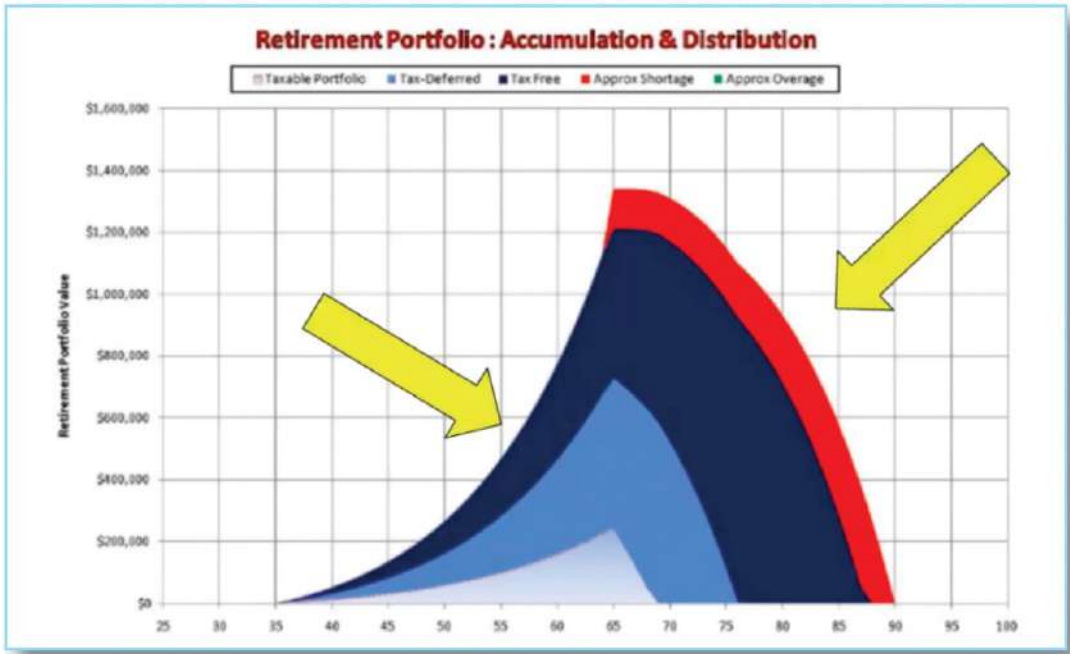
Chapter 23

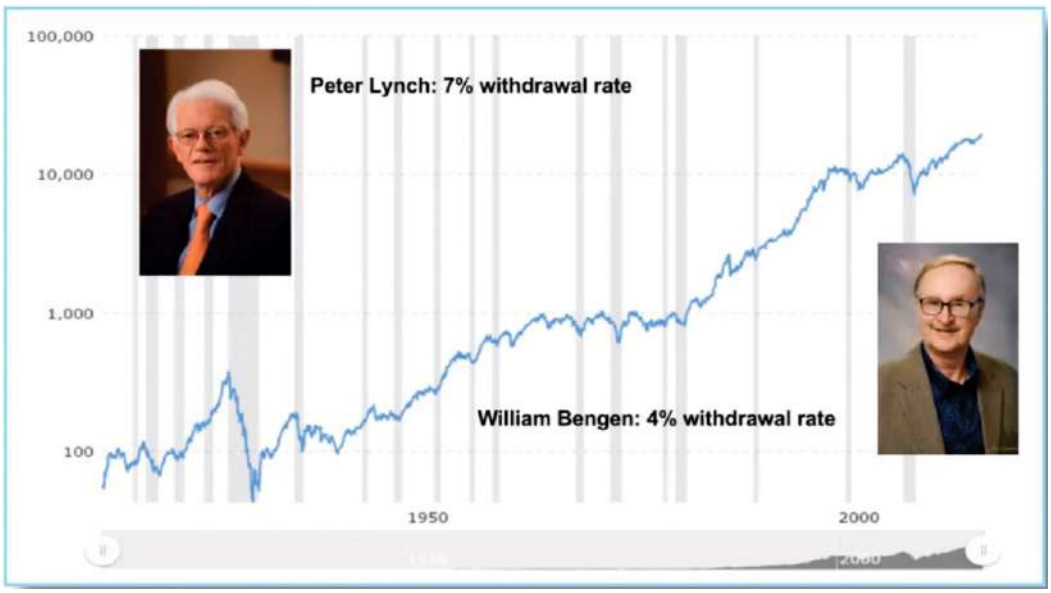
WHY THE 4 PERCENT WITHDRAWAL RULE IS USELESS IN MODERN-DAY RETIREMENT

23 WHY THE 4 PERCENT WITHDRAWAL RULE IS USELESS IN MODERN-DAY RETIREMENT

4 PERCENT WITHDRAWAL RULE



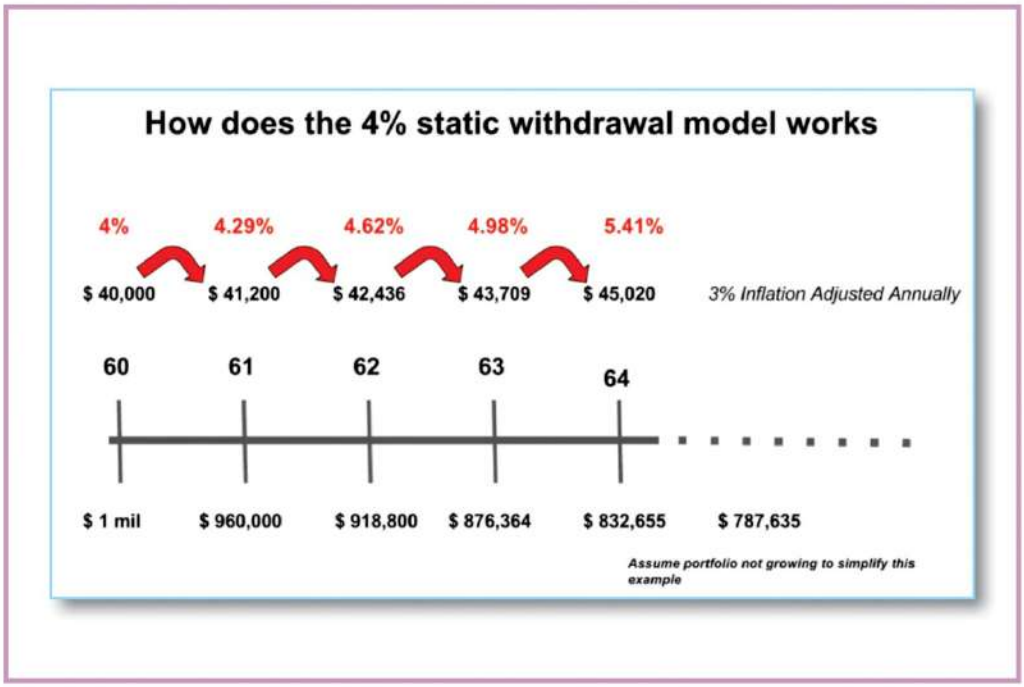
When people talk about retirement planning or how much money they need to retire, the focus is always on the asset accumulation stage. There is a stage where you convert income into assets. In reality, there are two sides to the coin. They are very different; one would not be complete without another. The other equally important stage is when you convert an asset into a sustainable income stream for retirement and this is called the withdrawal or the de-accumulation stage, it is about how to manage your withdrawal in retirement so it can sustain you for as long as you need.



How this kind of safe withdrawal rate percentage comes about in retirement. It goes back with Peter Lynch a legendary investor, quoted that a 7 percent withdrawal rate at the onset of your retirement that should be safe enough to have your retirement nest egg last you for life. Imagine if your life expectancy is around 100 years old. William Bengen, a financial planner in the US says that doesn't sound right. Let me analyze and develop some assumptions that can be tested. So he assumed that people who use a constant inflation-adjusted spending strategy and look at the long period from the market history in the U.S. He looked at someone retiring in 1926 and over the years to 1955. Now someone is retiring the next year 1927 and to 1956 and so on. So you have this 30 years period fixed map over a few duration which is more than enough to cover to encompass a few market boom and bear over that long period and he wanted to find out what sort of strategy would be sustainable and in his research he found that someone who retired in 1966 would be experiencing the worst-case scenario in the whole of U.S. market history.

Now he also assumed that if someone who has 50 percent S&P 500 50 percent in medium-term government bonds they could have sustained of withdrawal rate of only 4 percent of their retirement assets. Retirement assets at the onset of retirement are the 4 percent safe withdrawal rule come from and again that would just make to have a basic simple assumption to illustrate that what Peter Lynch said earlier 7 percent is too aggressive of a guideline to follow. But now many years after William Bengen's research and even a 4 percent rule might not be that safe anymore. The reason being the market is more volatile, the gain or risk-free rate was way lower now in the twenty-first century than the way it was in the 1940s 50s, or 60s where you could be in a certain country you have a 3 percent risk-free rate of fixed deposit, cash deposit rate but you still have like double-digit of this amount back 40 or 50 years.

How does 4% static withdrawal model works

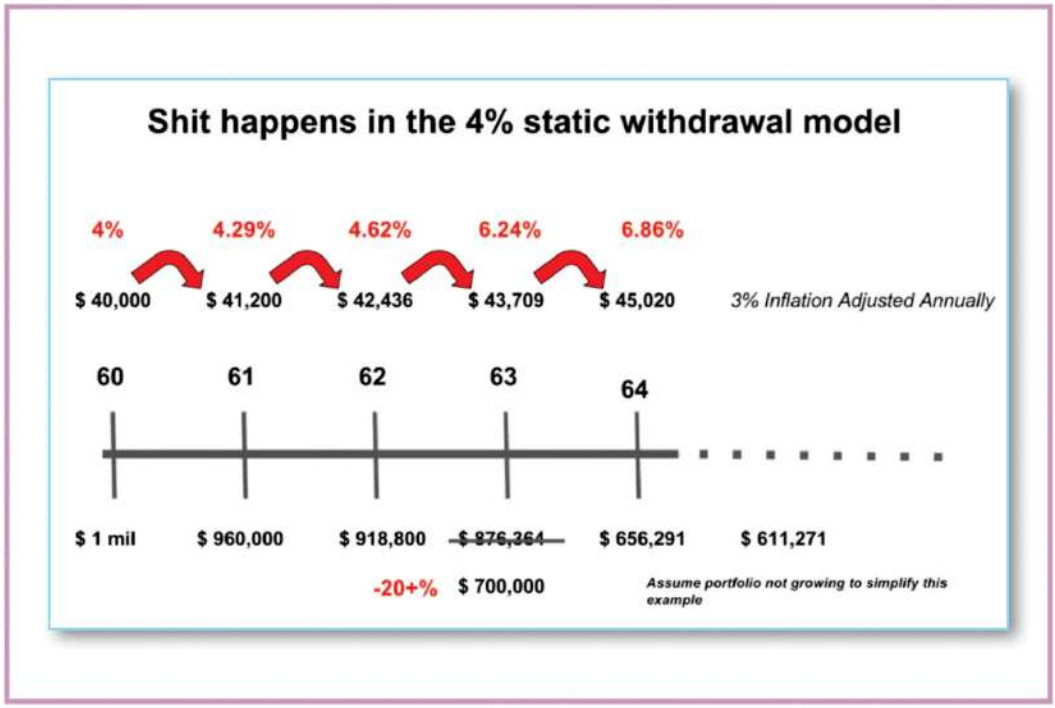


So again moving forward for those who are not so familiar with the 4 percent safe withdrawal rule.

You have to know the basics so you know what we're trying to cover in the subsequent chapters and what was the real issue with the 4 percent safe withdrawal rule as it becomes popularized this whole idea of static withdrawal rates. It cost a lot a great deal of concern among retirees. Now the thing is the 4 percent rule is a static model. A static model of the 4 percent rule means that at retirement year you can withdraw 4 percent of your retirement assets or any other asset which is dedicated for

retirement purposes. And then in the subsequent years, you can ignore whatever happens in your portfolio whether the market goes up or go down and you continue to blindly withdraw the same amount of retirement expenses needed before you can see that your retirement expense withdrawal from your retirement nest egg will naturally start from 4 percent but it will naturally grow over time because to adjust your retirement expenses up and the second thing is because your retirement nest egg or portfolio actually goes down it gets depleted and reduce gradually but surely. So to illustrate this point further let's look at this diagram.

Imagine you are retiring at 60 years old, you have one million portfolios in stocks, bonds, or whatever that is dedicated for retirement income purposes and you withdraw 4 percent of 40000 of that in the first year of retirement assuming 60 years old. In the second year you have a balance brought forward 9, 60,000 after deducting this 40,000 that was used up in the first year when you were 60, now you are 61 and at the same time you have 3 percent Inflation adjusted of forty thousand i.e., 41,200 and it goes on to your balance 9, 18,800 but your retirement expense withdrawal goes up by another three percent and it becomes 42,436. Your retirement nest egg is down to 876,364 after deducting for 2000 in the previous year. And now you would need to adjust again your retirement expenses to 43,709. So at the age of 64, you have a balance of 832,655 and you will need to withdraw 45,020 at age of 64 so it goes on from here but you get the point. Now if you were to take these retirement expenses withdrawal and you were to divide it as a percentage of the starting balance of that year, you would have this kind of progressive percentage increase naturally. So at age 64 for example, if you have withdrawn 45000 that would be a 5.4 percent of your opening balance at the age of 64 are 832,655. So this is what it means by the 4 percent static withdrawal model.



Now, this is to illustrate that this model brings a lot of anxiety concern for a lot of retirees and you see why because shit happens. What do you mean by shit happens? Starting with the same scenario as before, from start 3 percent inflation-adjusted annually and at 62 years of age you will have to withdraw 42,436, at 63 years you would be left with about 876,364. However, just imagine that every year your retirement portfolio investment in bonds or stocks is suffering a loss because the market went into a recession. So it suffers loss say 20 percent. So if it drops by 20 percent, your retirement portfolio essentially got reduced to 700000 plus-minus. When you're 63, you still need to use up about 43,709 of your balance retirement nest egg. But this is what you started with because your portfolio

drops at 700000. After withdrawing from 700000 you are left with 656,291 when you are at 64 and you keep on having the same withdrawal pattern. So you can see what's the problem here is that at the age of 64 the percentage of your retirement expenses is over your opening balance which is 700000 in this case has shot up to 6.24% and we shooting up going gradually by slowly after that. This reduces your sustainability there's no question about it. It would not be as sustainable as before. It's very realistic to expect your portfolio at one time or another during your retirement phase; it will be hit by any market drop. For investment, there is up or down. So how does this withdrawal rate they have to get? What would be the exact thing that we have to do to make it sustainable because the 4 percent rule was meant to say is sustainable over 30 years period based on the worst-case scenario in history and that was a very long time ago and it is not applicable again today.

So what you need to understand is that if you withdraw a starting amount that starts with four percent of your retirement portfolio and your portfolio fluctuates up and down and the amount of withdrawing is growing with inflation whether or not your portfolio is growing or not. You run out of money before running out of life. You know that of course, the historical performance should not indicative of future performance, and the markets more volatile nowadays. If your portfolio is declining you're essentially playing a game of chicken when you don't make any adjustment. You continue to withdraw the same amount of retirement expenses as your portfolio declines. And naturally, you're going to be a large percentage or an ever-growing percentage of your portfolio balance.

A static model is not realistic because in real-world retirees or even you're not a retiree when your portfolio goes down and you feel less wealthy. You should lower your expense and spending, to keep it a realistic percentage of your remaining portfolio or assets. That's how you will work. Similarly if your portfolio doubles maybe you can go on a shopping or a vacation. But you should always be dynamic instead of static.

You can't expect to have a constant spending stream from a portfolio and that's the whole story here. So if you are using a portfolio of volatile assets you can't assume you're going to be able to have a constant spending stream. It just makes no sense. Your life is dynamic, your retirement is dynamic and your portfolio for retirement is dynamic. How can your spending model be static? So what is the better way to manage this? Of course, there's a solution. Don't panic. They will be always a way and will discuss it in the next chapter.