

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA (Set up by an Act of Parliament)

## PUNE BRANCH OF WIRC OF ICAI



## Issue No. 9

## NEWSLETTER

# September 2022 

(Subscribers copy not for sale)

## Due Date Calender for the Month September 2022

| SR. | DATE | TAXATION UPDATES |
| :---: | :--- | :--- |
| 1. | 7th September, 2022 | TDS/TCS Payment August 22 |
| 2. | 10th September, 2022 | GSTR 7/8 August 22 |
| 3. | 11th September, 2022 | GSTR 1 August 22 Monthly |
| 4. | 13th September, 2022 | IFF August 22 QRMP <br> GSTR 6 August 22 |
| 5. | 15th September, 2022 | Advance Tax 2nd Inst AY 23-24 <br> PF/ESIC Payment August 22 |
| 6. | 20th September, 2022 | GSTR 3B, GSTR 5/5A <br> August 22 Monthly |
| 7. | 30th September, 2022 | Tax Audit AY 22-23 <br> DIR - 3 KYC |

## Heartiest Congratulations

CA. (Dr.) Rewati Paithankar from Pune For elected as a Chairperson of The Bhagini Nivedita Sahakari Bank Ltd., Pune

CA. Sampada Suresh Mehta from Pune For appointed as a Personal Secretary of Droupadi Murmu, Hon. President of India


## Chairman's Communique

## Dear Professional Colleagues,

September is usually the most busiest month for Chartered Accountants. Most of the CAs in practice are trying to finish off Company Audits and Tax Audits as $30^{\text {th }}$ September is the last date for submissions.

We have numerous events during the last month like Celebration on the occasion of Independence Day under 75th Year of Azadi Ka Amrit Mahotsav (AKAM), Interactive virtual Meeting with Chairman W.r.t. ICAI MSME Yatra \& Setu with Branch Managing Committee Members.


CA. Kashinath Pathare Chairman Pune Branch of WIRC of ICAI

Also, the branch organised ICAI MSME Setu and ICAI MSME Yatra jointly with Pimpri Chinchwad Branch It aimed at providing MSME Udyam Registration \& Solutions to the Problems of MSME at their doorstep and a vehicle stopover movement to showcase MSME ecosystem.

The branch also arranged various Career counseling sessions in schools and colleges for creating awareness in students.

For the ICAI students, arranged Helpdesk for Exam Form Related Issues.We organized various programmes in hybrid mode like "Treasury \& Forex Management", "International Taxation", "Practical Aspects of Statutory Audit - Documentation to Reporting Obligations"

We have organized Ganesh Festival, Talent Search for students, Teachers' Day Celebration "गौरव गुरू जनांचा!!" (Felicitation of CA's who is in Teaching Profession) in the month of September.

Do not forget to share your ideas, views and thoughts on any and every matter related to the branch.

Thanking you.

With warm regards,

CA. Kashinath Pathare,
Chairman
Pune Branch of WIRC of ICAI

## Retirement Planning - An Introduction to the Perpetual Portfolio Model

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## 1. Introduction and background:

It is commonplace nowadays to find queries on creation and review of investment portfolios on financial websites and media. Most advice is target-oriented - saving for a vehicle, a home, a child's education, future marriage, and finally, for the investor's retirement.
The guidance is generally to:

- Calculate savings towards the identified targets

Use a recommended asset allocation between equity and debt, and
Move the allocated funds from equity to debt at a particular period prior to the target date.
In addition, the guidance template will include:
Creation of an emergency fund of X months' worth of expenses, and
Counsel on acquiring both health and term life insurance.
The mathematical calculation to this exercise is based on the following factors:
Current expenditure
Years to target
Inflation rate
Returns from debt
Returns from equity
And finally, in the case of a retirement target:
Years of portfolio sustenance (for X years or till death of the investor and/or dependants)
Asset allocation between debt and equity is either based on a questionnaire or on a thumb rule such as investor age or alternate metric. These methods are supposed to quantify the risk profile of the investor.

## 1 (a). Uniqueness of the Retirement Target:

While this methodology serves some purpose, it fails to consider the fundamental distinction between retirement and other financial targets. The fact of retirement is an event like other life targets, but retirement is a process. Retirement is a process for the duration of the investor's retired life and the lives of his dependants. There is the very real possibility of Longevity Risk (the risk of outliving one's retirement portfolio) to be factored in.

Consider the investor's earning life a satellite launch - his savings during his working life boosts his upward financial trajectory. After sacrificing some momentum towards other financial targets, the remainder must be sufficient to stabilize his orbit for the rest of his life. Too little momentum, or momentum mismanaged, can be disastrous. Retirement is not the event of reaching the peak; it is the orbital path that follows.

Retirement is also fundamentally distinct in another way. During the investor's working life, the consequences of a missed target are not always disastrous. A budget can be reduced, another target can be eliminated, or the working life extended. A retirement target cannot be eliminated, and once retired, with a fixed retirement corpus, a missed retirement target can be ruinous.
Finally, a retiree's risk appetite is an extremely subjective element to quantify. It is contingent on a variety of factors and can even vary for the same person over time. A more retiree-friendly and relatable method than the usual thumb rule / questionnaire methods of asset allocation is required.

## 1 (b). Volatility vs. Risk:

Volatility and Risk are often understood to be equivalent, especially when applied to equity, and equity's downside volatility. Equity's upside volatility is always considered positive. This paper refers to volatility as downside volatility, unless otherwise expressly stated.
Consider equity purchased for 100 , which is now valued at 90 . Equity is volatile as its price has decreased by $10 \%$, but its holding risk remains unchanged. Any statistic that measures this difference in financial potential, no matter how sophisticated, is measuring volatility, not risk.

Equity risk arises not merely on account of a fall in price, but on the simultaneous necessity of realization at the low price. Equity risk must account for both limbs:

- The downside volatility of price change AND
- The simultaneous necessity to realize the low downside price at a particular time point

In other words, volatility is a potential loss but does not create risk or actual loss until the potential loss is realized. Risk arises out of the possibility that the investor is compelled to sell at the low price, thus making a mere potential loss into a realized one.

## 1 (c). Debt vs. Equity - Their Influence on Portfolio Capital:

Essentially, most investments are of two types - those whose future value can be precisely calculated and those that cannot. These are referred to in this paper as Stable Return Investments (Debt) and Volatile Return Investments (Equity) respectively.

Stable Return Investments (Debt) are characterized by non-volatile and generally low returns, while Volatile Return Investments (Equity) are characterized by volatile and generally high returns.

A retiree would prefer to invest his limited capital only in Debt, but low returns, however "safe" and nonvolatile, can only be sufficient, provided the initial portfolio capital is large. The lower the portfolio return, the larger must be the initial portfolio capital. Only a few fortunate retirees can invest their portfolio capital entirely in Debt - most must deal with the volatility of Equity.

## 1 (d). Debt and Equity - A New Perspective:

Equity investments are made for generating superior returns and higher portfolio growth, but have the drawback of high volatility. Debt investments are made for providing greater portfolio stability, but have the drawback of low returns and decreased growth. Debt and Equity are the yin and yang of any investment portfolio.
If the retiree views portfolio risk as the realization of potential loss in the Equity elements of his portfolio, the Debt elements acquire their true significance as his safety net / drawdown protection. This safety net permits him to bear with Equity volatility in the pursuit of higher portfolio growth.

Portfolio Debt is then more understandable as X months' protection against Equity risk, rather than a rule of thumb metric or questionnaire. A retiree may find it comfortable to quantify a safety net in terms of say 72 or 96 months of living expenses. The financial advisor can also base this on the retiree's portfolio equity cycle - this is the methodology followed in the Perpetual Portfolio Model.

## 2. The Perpetual Portfolio Model (PPM):

The model is the design of a self-perpetuating retirement portfolio - the bird's eye view:


Figure 1: Overview of the PPM

The model in Figure 1 consists of a simple two bucket portfolio with two main elements:

- The Investment Unit (IU), consisting of equities / mutual funds (Volatile Investments), and

The Buffer Unit (BU), consisting of debt instruments / bank deposits (Stable Investments).
The BU bucket is further divided to include:
The Withdrawal Unit (WU), and
The Bank \& Emergency Unit (B\&E)
The overall construct results in a simple and basic four bucket portfolio schema as illustrated in Figure 1. Each component has a distinctive profile of objective, target, volatility and liquidity attribute and purpose within the PPM as illustrated above.

## $\underline{2}$ (a). The Debt Components - BU, WU and B\&E:

The BU, WU, and B\&E are intimately linked, and fund flows for living expenses are systematically planned and withdrawn between the three sub-components.

These components are computed from the following factors:

- The annual expected inflation

The monthly withdrawal requirement for living expenses - adjusted for inflation and, if required, calculated forward from the present requirement to the requirement as of the retirement date

The target annual post-tax returns of the Debt component / sub-components
The total safety net / drawdown protection required is specified in months. In the illustration below, it is broken up into the protection required for the $\mathrm{B} \& \mathrm{E}$ (months $1-6$ of living expenses), WU (months 7 -12 of living expenses), and BU (months $13-72$ of living expenses). Thus, the B\&E, WU and BU taken together will cover the retiree's living expenses (with inflation), for the full safety net of say, 72 months, or as may be required by the retiree / his financial advisor.

## $\underline{2}$ (b). The Equity component - IU:

The IU is a separate and distinct component of the PPM. It comes into play only when the underlying Equity value equals / exceeds the portfolio target of Inflation-adjusted return. Typically, fund flows from the IU are unplanned and depend on market forces.
The IU is computed from the following factors:
The target annual post-tax returns of the Equity component
The monthly withdrawal requirement for living expenses (already quantified above) such that the planned annual yield of both the Debt and Equity components of the portfolio together are sufficient to sustain the retiree's forward inflated annual withdrawal requirement of living expenses in perpetuity.

## 2 (c). The Mechanism of the PPM:

The following illustration will highlight the mechanism of the PPM:
The annual expected inflation - 5\%
Retirement date - 10 years in the future
The monthly withdrawal requirement of living expenses - 50,000 at present, and adjusted for inflation 10 years to the future amounting to 81,114

The target annual post-tax returns of the Debt components (not accounting for inflation) - B\&E $3.5 \%$, WU $6.5 \%$, and BU $7 \%$

The total safety net / drawdown protection required - 72 months, allocated to B\&E 6 months (months 1-6 of retired living expenses), WU 6 months (months $7-12$ of retired living expenses) and BU the balance 60 months (months 13-72 of retired living expenses)

The target annual post-tax returns of the Equity component (not accounting for inflation) - 12\%

These input factors resolve into the following PPM configuration:


Figure 2: Sample PPM Configuration

## Mark Time Explanatory Notes to Figure 2 (Please refer arrows): in Fig Period

2
1 Initial The calculated initial PPM Capital is 1,98,82,309
2 Initial The PPM Debt to Equity asset allocation is $34.06 \%$ to $65.94 \%$
3 Initial The B\&E allocation is 4,91,670, which is the 6 months' Year 1 forward inflated withdrawal requirement for months $1-6$ of living expenses

4 Initial The Year 1 forward 12 months inflated withdrawal requirement of $9,95,481$ of living expenses has been allocated to B\&E $(4,91,670)$ as above, with the balance of 5,03,811 to the WU for months 7 - 12 of living expenses

5 Initial The 72 months' forward inflated withdrawal requirement of $67,71,175$ is allocated to the B\&E $(4,91,670)$ and $\mathrm{WU}(5,03,811)$ as above, with the balance of $57,75,694$ to the BU for months $13-72$ of living expenses

The PPM sets up the initial investment portfolio so that the retiree is assured of inflation adjusted funds for living expenses at the beginning of each month, as already available in the B\&E, WU, and BU. The B\&E and WU as set up initially are meant to be entirely consumed by the retiree during the year and are replaced from the incomes generated (during the forward year).

## Mark Time Explanatory Notes to Figure 2 (Please refer arrows): in Fig Period

The PPM income realization for Year 1 at the assumed rates of return is $19,89,597$. This income comprises of two elements: real returns of $10,22,241$ and an inflation adjustment of $9,67,355$. (Note that the income generated for the B\&E, BU and WU are not a direct multiplication of Capital $x$ Interest Rate because of the monthly withdrawals for living expenses).

7 Year 1 The inflation adjustment of $9,67,355$ (as in 6 above) is automatically divided into three parts of 23,014, 2,88,785 and 6,55,557 by the PPM.

The first part of 23,014 is added to the real income of $10,22,241$ (in 6 above) to total 10,45,25 5 (in 8 below) for the initial capital of B\&E and WU for the Year 2 Forward.

The second part of $2,88,785$ is reinvested in the BU for the initial capital of Year 2 Forward to take care of the inflation that occurred during Year $1(57,75,694+2,88,785=60,64,479)$.

Likewise, the third part of $6,55,557$ is reinvested in the IU for the initial capital of Year 2 Forward to take care of the inflation that occurred during Year 1 (1,31,11,133 + 6,55,557 = 1,37,66,690).

8 Year 2 The realized and withdrawable inco me of 10,45,255 generated in Year 1 is sufficient for the required Year 2 inflation adjusted living expenses. This is allocated to the Year 2 Forward B\&E as 5,16,253 for months 13 - 18 of living expenses and WU as 5,29,002 for months 19 - 24 of living expenses during Year 2 (10,45,255 = $5,16,253+5,29,002$ ). Note that the B\&E and WU are meant to be entirely consumed.

9 Year 2 As a result of 7 and 8 above, the initial capital of the PPM in the Year 2 Forward will be $2,08,76,424$, with a B\&E of $5,16,253$, a WU of $5,29,002$, a BU of $60,64,479$ and an IU of $1,37,66,690$.

The PPM income realization for Year 2 Forward at the assumed rates of return is $20,89,076$. This income comprises of two elements: real returns of 10,73,353 and an inflation adjustment of 10,15,723.

The inflation adjustment of $10,15,723$ is automatically divided into three parts of $24,165,3,03,224$ and $6,88,335$ by the PPM.

The first part of 24,165 is added to the real income of $10,73,353$ to total $10,97,518$ for the initial capital of B\&E and WU for the Year 3 Forward.

The second part of $3,03,224$ is reinvested in the BU for the initial capital of Year 3 Forward to take care of the inflation that occurred during Year $2(60,64,479+3,03,224=63,67,703)$.
Likewise, the third part of $6,88,335$ is reinvested in the IU for the initial capital of Year 3 Forward to take care of the inflation that occurred during Year $2(1,37,66,690+6,88,335=1,44,55,025)$.

## Mark Time Explanatory Notes to Figure 2 (Please refer arrows): in Fig Period 2

10 Year 3 As a result of 9 above, the initial capital of the PPM in the Year 3 Forward will be $2,19,20,245$, with a B\&E of $5,42,066$, a WU o $5,55,452$, a BU of $63,67,703$ and an IU of $1,44,55,025$.

The PPM income realization for Year 3 Forward at the assumed rates of return is $21,93,530$. This income comprises of two elements: rea returns of $11,27,021$ and an inflation adjustment of $10,66,509$.
The inflation adjustment of $10,66,509$ is automatically divided ints three parts of $25,373,3,18,385$ and $7,22,751$ by the PPM.

The first part of 25,373 is added to the real income of $11,27,021$ tc total 11,52,394 for the initial capital of B\&E and WU for the Year < Forward, to be consumed by the retiree.

The second part of $3,18,385$ is reinvested in the $B U$ for the initia capital of Year 4 Forward to take care of the inflation that occurres during Year $3(63,67,703+3,18,385=66,86,088)$.
Likewise, the third part of $7,22,751$ is reinvested in the IU for the initial capital of Year 4 Forward to take care of the inflation tha occurred during Year $3(1,44,55,025+7,22,751=1,51,77,776)$.

11 Year 4 As a result of 10 above, the initial capital of the PPM in the Year 4 Forward will be $2,30,16,258$, with a B\&E of $5,69,169$, a WU o $5,83,225$, a BU of $66,86,088$ and an IU of $1,51,77,776$.

The PPM income realization for Year 4 Forward at the assumed rates of return is $23,03,207$. This income comprises of two elements: rea returns of $11,83,372$ and an inflation adjustment of $11,19,835$.
The inflation adjustment of $11,19,835$ is automatically divided ints three parts of $26,642,3,34,304$ and $7,58,889$ by the PPM.
The first part of 26,642 is added to the real income of $11,83,372$ tc total $12,10,014$ for the initial capital of B\&E and WU for the Year ! Forward to be consumed by the retiree.

The second part of $3,34,304$ is reinvested in the BU for the initia capital of Year 5 Forward to take care of the inflation that occurrec during Year $4(66,86,088+3,34,304=70,20,392)$.
Likewise, the third part of $7,58,889$ is reinvested in the IU for the initial capital of Year 5 Forward to take care of the inflation tha occurred during Year $4(1,51,77,776+7,58,889=1,59,36,665)$.

This repetitive iteration results in the self-perpetuating attribute of the PPM.

## 3. The Equilibrium Withdrawal Rate (EWR):

The EWR, (sometimes called the Safe Withdrawal Rate or Four Percent Rule), is the rate at which withdrawals from a retirement portfolio avoid Longevity Risk (the risk of outliving the portfolio). This is a measure of prime importance in the management of a retirement portfolio and has so far only been estimated. The PPM automatically and accurately calculates the Equilibrium Withdrawal Rate (EWR),5.01\%, marked 12 in Figure 2 above.

The PPM reveals a significant fact - the EWR is independent of the underlying capital size or withdrawal requirement. It is entirely determined by these four parameters:

- The annual expected inflation
- The target annual post-tax returns of the Debt component / sub-components

The total safety net / drawdown protection required in terms of months
The target annual post-tax returns of the Equity component
Taking the very same illustration as above but modifying the retirement date to 5 years in the future and a present monthly withdrawal requirement of $1,00,000$, the required initial PPM capitalization would increase to $3,11,56,618$, but the EWR would remain $\mathbf{5 . 0 1 \%}$. Only the initial portfolio capital size would vary - not the EWR.
The conclusion to be drawn is that only a variation in any one or more of the four critical parameters would affect the EWR, and along with a change in the withdrawal requirement, necessitate a recalculation of the PPM.

## 4. Evaluation of the PPM:

## 4 (a). Assumptions of the PPM

Withdrawals for living expenses are made from the BU to the WU, from the WU to the B\&E and from the B\&E for the use of the retiree at the beginning of every month

Compounding of calculated interest is ignored for the sake of simplicity - all returns are accumulated separately till the end of each year and then reinvested (in any case a more conservative procedure)
The effect of taxation is ignored
Inflation is calculated monthly

## 4 (b). Utility of the PPM

As a benchmark of comparison for a retiree (or any investor) to measure his portfolio against
As a retirement target for currently working individuals
As a technique to evaluate portfolio Debt-Equity allocation decisions
As a technique to evaluate EWR decisions

## 4 (c). Pros and Cons of the PPM

Pros:
o Eliminates the element of Longevity Risk in a retirement portfolio
o Eliminates the need for a rule of thumb Debt-Equity allocation
o Encourages simple understanding and awareness of the necessity/purpose of Equity in a portfolio

- Evaluates financial sustainability and EWR

Cons:
o Debt other than sovereign Debt, though not subject to volatility, is subject to Default Risk
o The financial factors and assumptions of the PPM are subject to the same confidence levels as other existing financial models

## 5. Conclusion:

The self-sustaining Perpetual Portfolio Model (PPM) is a distinctive and useful concept. It eliminates traditional Longevity Risk assumptions, presents a more intuitive Debt-Equity allocation, and enables a straightforward calculation of the safe withdrawal rate.
However, as with all financial models, caution must be exercised in the assumptions input into the model and the consequent interpretation of the results.

## Celebration on the occasion of Independence Day under 75th Year of Azadi Ka Amrit Mahotsav (AKAM)



Lighting of Premises of Branch


Flag Hoisting Ceremony


Rally by Walk

7th International Study Tour to Turkey


Conference


Participants

ICAI MSME Setu and ICAI MSME Yatra \& Programme on "MSME"


A vehicle stopover movement to showcase MSME ecosystem


CA. Santosh Doshi, Speaker


MSME Udyam Registration \& Solution to the Problems of MSME by Respresentatives


CA. Maheshwar Marathe, Speaker


Participants

## Seminar on "International Taxation"



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