Why SWP is Passive, BUT NOT Guaranteed Income

An Empirical Analysis of Systematic Withdrawal Plans, Sequence-of-Returns Risk & Retirement Allocation

Topic: SWP Risk vs. Guaranteed Annuities **Core Asset:** Equity Mutual Funds & Market Index **Target Audience:** Retirees & Financial Advisors

1. EXECUTIVE SUMMARY & CORE ARGUMENT

A frequent claim made by mutual fund houses and distributors is that a **Systematic Withdrawal Plan (SWP)** provides investors with a "guaranteed income" that significantly outperforms traditional fixed annuities. However, this claim conflates *automated execution* with *financial guarantees*.

The Fundamental Rule: SWP is a **Passive, but NOT Guaranteed** income mechanism. Because withdrawals are funded by redeeming market-linked units, a severe market downturn early in retirement can permanently erode capital—leaving retirees with zero income in their later years.

2. CATEGORIZATION OF INCOME TYPES

To evaluate SWP correctly, retirement income must be categorized into four distinct buckets:

1. Active Income

Requires direct, continuous daily labor and active time commitment (e.g., salaries, daily business operations).

2. Semi-Active Income

Requires periodic oversight, consultation, or management (e.g., board advisory, rental property oversight).

3. Passive Non-Guaranteed

Where SWP Belongs: Requires no active work, but the income depends on market performance and unit availability.

4. Passive Guaranteed

Fully contractually guaranteed payouts for life with zero market exposure (e.g., Annuities, Pension Plans).

3. HISTORICAL EMPIRICAL CASE STUDY (2007 – 2022)

To test the claim that SWP provides guaranteed income, consider a real-world case study using historical Sensex market data starting at the market peak in **December 2007**:

- **Initial Investment:** ₹1,00,00,000 (₹1 Crore) invested in a Sensex equity index fund.
- **Annual SWP Withdrawal:** ₹8,00,000 per year (8% payout rate).
- **Investor Profile:** Retired at age 60, expecting the payout to last through life expectancy (age 80–85+).

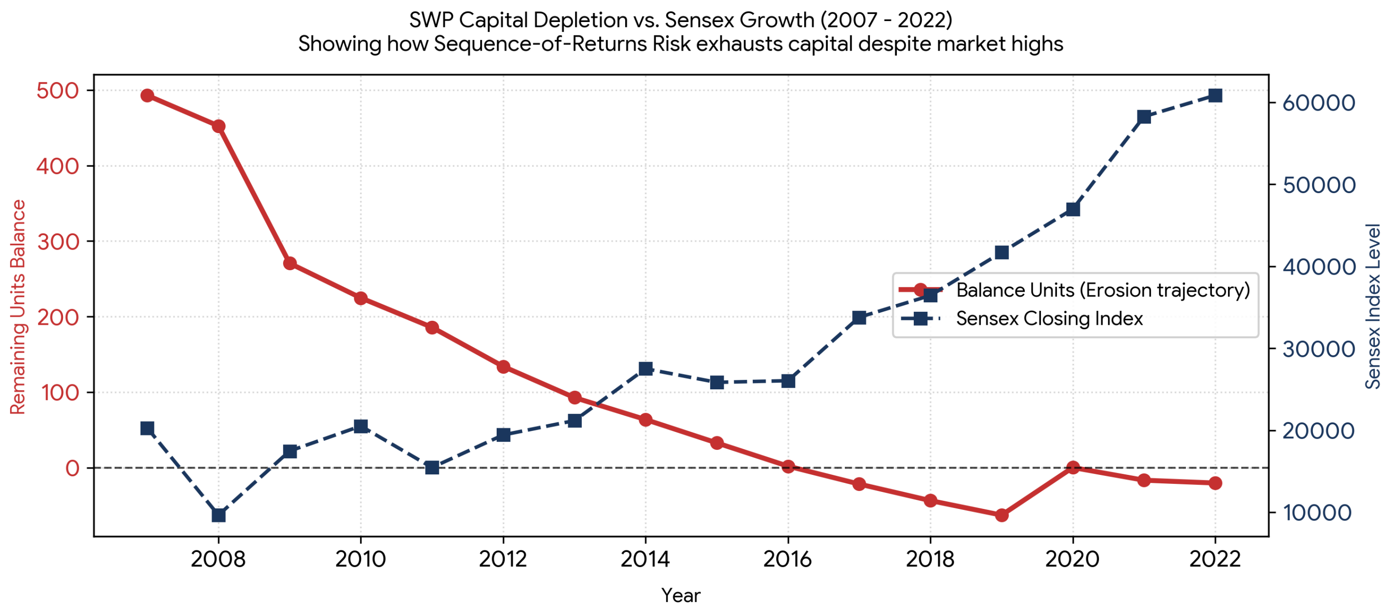
Historical Data: ₹1 Crore SWP Payout (8 Lakhs/Year)

Date	Sensex Closing	Capital Invested (₹)	Annual SWP (₹)	Units Debited	Balance Units Remaining
21.12.2007	20,286.99	10,000,000	800,000	29.4241	492.9267
21.12.2008	**9,647.21**	**-**	**800,000**	**82.9247**	**452.4926 (32% value loss)**
21.12.2009	17,464.81	-	800,000	45.8064	270.5679
21.12.2010	20,509.09	-	800,000	39.0071	224.7615

Date	Sensex Closing	Capital Invested (₹)	Annual SWP (₹)	Units Debited	Balance Units Remaining
21.12.2011	15,454.92	-	800,000	51.7625	185.7544
21.12.2012	19,426.71	-	800,000	41.1804	133.9910
21.12.2013	21,170.68	-	800,000	92.8105	92.8105
21.12.2014	27,499.42	-	800,000	29.0915	63.7190
21.12.2015	25,838.71	-	800,000	30.9608	32.7582
21.12.2016	26,040.71	-	800,000	30.7212	2.0370
21.12.2017	**33,777.18**	**-**	**800,000**	**23.6891**	**-21.6521 (DEPLETED)**
21.12.2020	*46,973.54*	*-*	*800,000*	*16.7525*	*0.1924 (Residual)*
21.12.2021	*58,253.92*	*-*	*800,000*	*13.7330*	*-16.5610 (No Capital)*
21.12.2022	*60,840.74*	*-*	*800,000*	*13.1491*	*-20.2940 (No Capital)*

4. VISUALIZING SEQUENCE-OF-RETURNS RISK

The illustration below highlights the critical flaw of relying purely on SWP. Even though the market (Sensex) eventually tripled from 20,286 to over 60,000 by 2022, the portfolio was completely wiped out because forced unit redemptions during the 2008 crash destroyed the underlying unit base.



5. KEY INSIGHTS & MATHEMATICAL REALITY

- **Sequence-of-Returns Risk:** The order of market returns matters more than average returns during retirement. A crash in Year 1 or Year 2 forces the fund to sell **almost 3x more units** (82.9 units in 2008 vs. 29.4 in 2007) to pay out the same ₹8 Lakhs.
- **Permanent Unit Erosion:** Once units are sold at depressed prices during a crash, they can never participate in the market recovery that follows.
- **Longevity Risk Exposure:** If the investor retired at age 60, their corpus was completely exhausted by age 72. Living to age 85+ would leave them destitute for 13+ years without any active earning capacity.

6. STRATEGIC ALLOCATION RULES FOR RETIREES

How should retirees structure their income strategy based on these findings?

Rule 1: Essential Needs MUST be backed by Guaranteed Income
Baseline essentials—Food, Clothes, Residence, Medicine, Transport, and Minimum Entertainment—must be funded using **Passive & Guaranteed** vehicles like Annuities or Guaranteed Survival Benefits. Never subject survival needs to SWP market risk.

Rule 2: SWPs are for Discretionary & Lifestyle Aspirations ONLY
SWPs from mutual funds should be reserved strictly for non-essential or luxury goals (e.g., annual international vacations, discretionary gifts, lifestyle upgrades). If market drops force an SWP payout reduction, basic living standards remain unaffected.

Strategic Conclusion

Do not presume past market crashes won't happen during your retirement. Beyond age 70–75, producing active income is no longer feasible. Prudence demands securing essential living expenses through guaranteed instruments while using SWPs only as a secondary, flexible supplement.