Monash Centre for Financial Studies

The Future of the 60/40 Allocation

Modelling the performance of the 60/40 portfolio in Retirement

33rd Colloquium on Pensions and Retirement Research

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MONASH University

MONASH BUSINESS SCHOOL

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Presentation outline

1. Part 1: The performance of the 60/40 portfolio
2. Part 2: Background of the research
3. Part 3: Can 60/40 portfolio be sufficient for retirement?
4. Q&A

Part 1. The performance of the 60/40 portfolio

Market Crash Timeline: Growth of $1 and the US Stock Market's Real Peak Values

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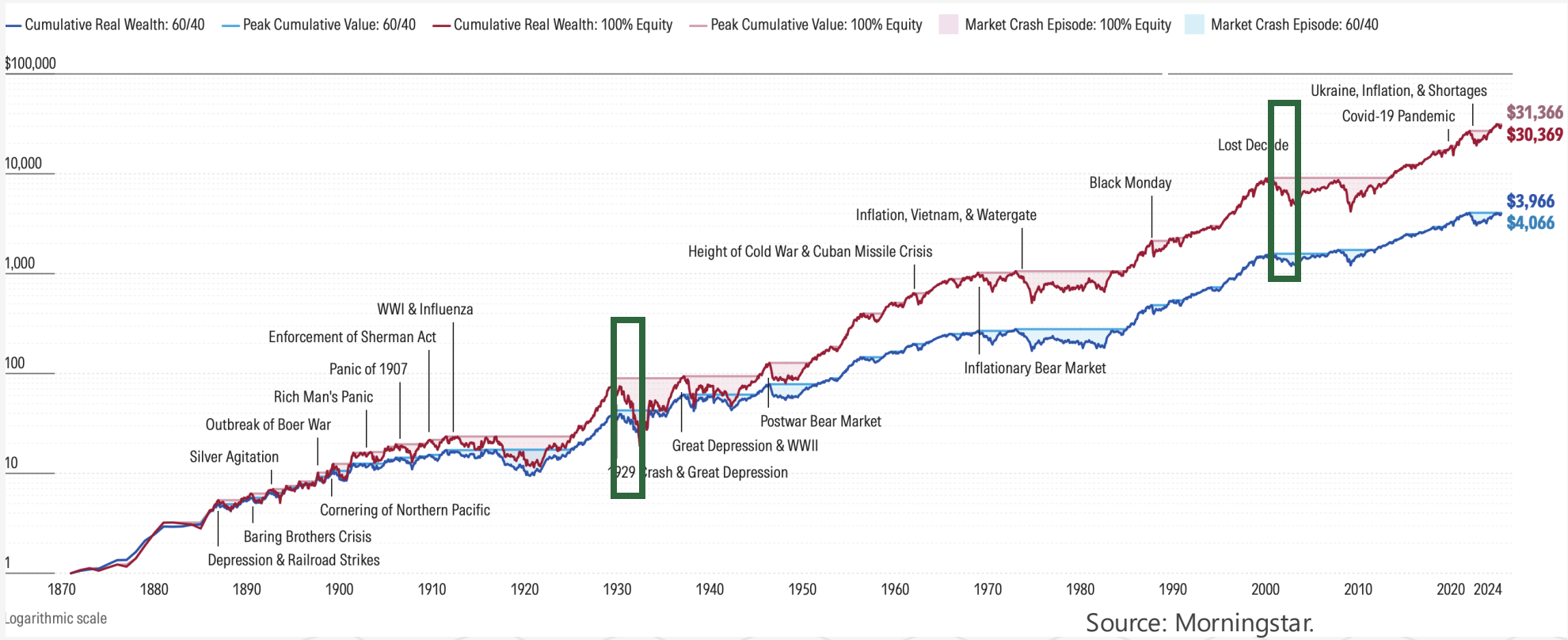

Source: Morningstar.

- Unsurprisingly, the ultimate growth was much less for the 60/40 portfolio.
- It is how much it did not lose during downturns:
  - The Great Depression
  - Lost Decade (Dot-Com Bust & Global Financial Crisis)
- The 60/40 portfolio softened the blow of nearly every market crash.

Exhibit 1. Market Crash Timeline: Growth of $1 and the US Stock Market's Real Peak Values. Data as of 31 May 2025.

Part 2: Background of the Research

CFA Institute/Monash Retirement and Pension Research 2

Report 1: The Performance of the 60/40 Portfolio: A Historical Perspective

This report examines the historical performance of the 60/40 equity/bond portfolio, highlighting its benefits, challenges from variable stock–bond correlations, generational differences, market-specific risks, and the role of alternative assets.

Report 2: The Future of the 60/40 Allocation
Modelling the Performance of the 60/40 Portfolio in Retirement

This report examines the 60/40 portfolio's ability to sustain retirees, emphasizing the impact of savings, lifestyle, gender, and market volatility. It advocates flexible, personalized retirement planning to ensure long-term financial security.

Motivation

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- **Shift from DB to DC systems globally**
  Retirement responsibility is moving from governments/employers to individuals, increasing financial uncertainty.

- **Longevity risk and market volatility**
  Longer life expectancies and unpredictable returns challenge traditional retirement strategies.

- **Questioning the 60/40 portfolio's adequacy**
  Historically popular for balance and simplicity, but its sustainability under current and forecasted conditions is unclear.

- **Complex influencing factors**
  Initial savings, lifestyle (modest vs. comfortable), gender disparities, and sequence-of-returns risk all affect outcomes.

- **Need for evidence-based guidance**
  Retirees require robust, data-driven insights to plan withdrawals and manage risk effectively.

Retirement account balance for Australian retirees

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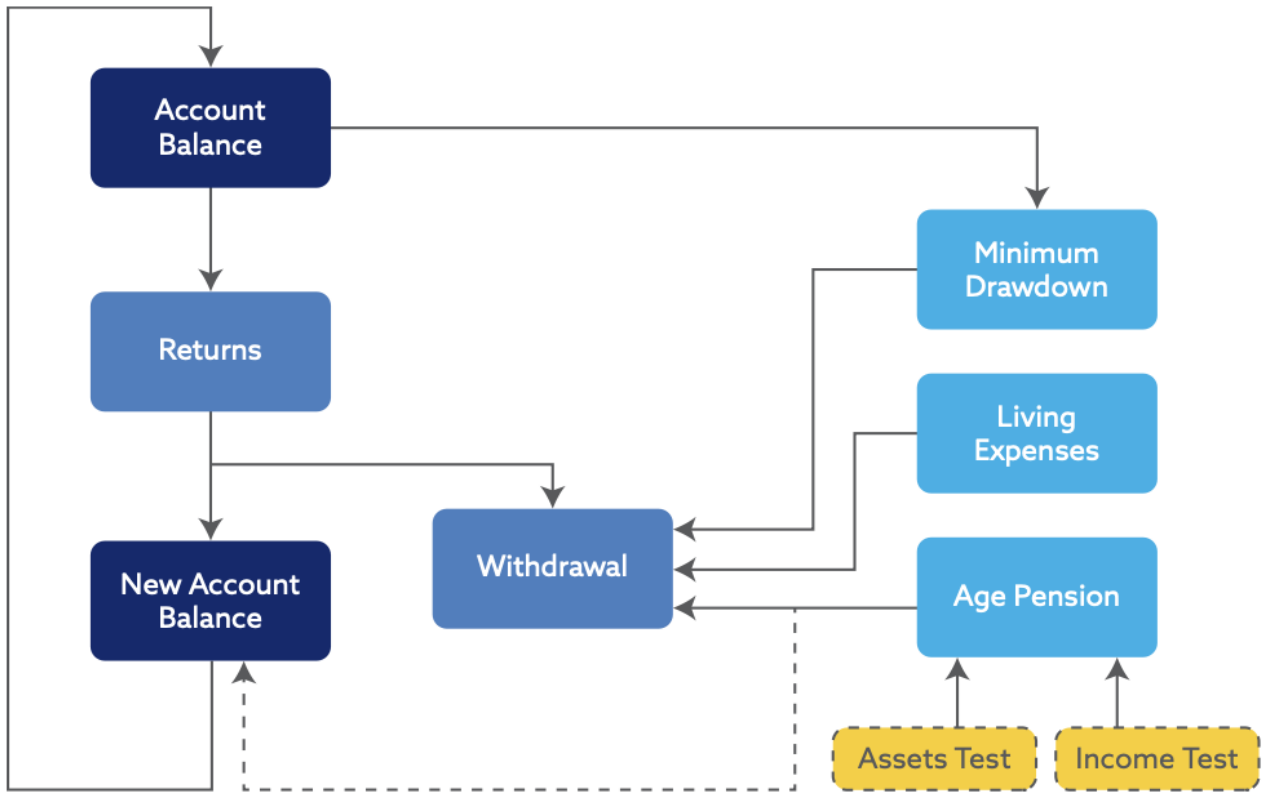

Exhibit 2. The Flow Chart of the Retirement Account Balance for Australian Retirees.

$$AB_{i+1} = \max\left[AB_i \left(1 + R_{FP_i}\right) - \max(L_i - P_i, AB_i \times D_i), 0 \right].$$

Retirement account balance for US retirees

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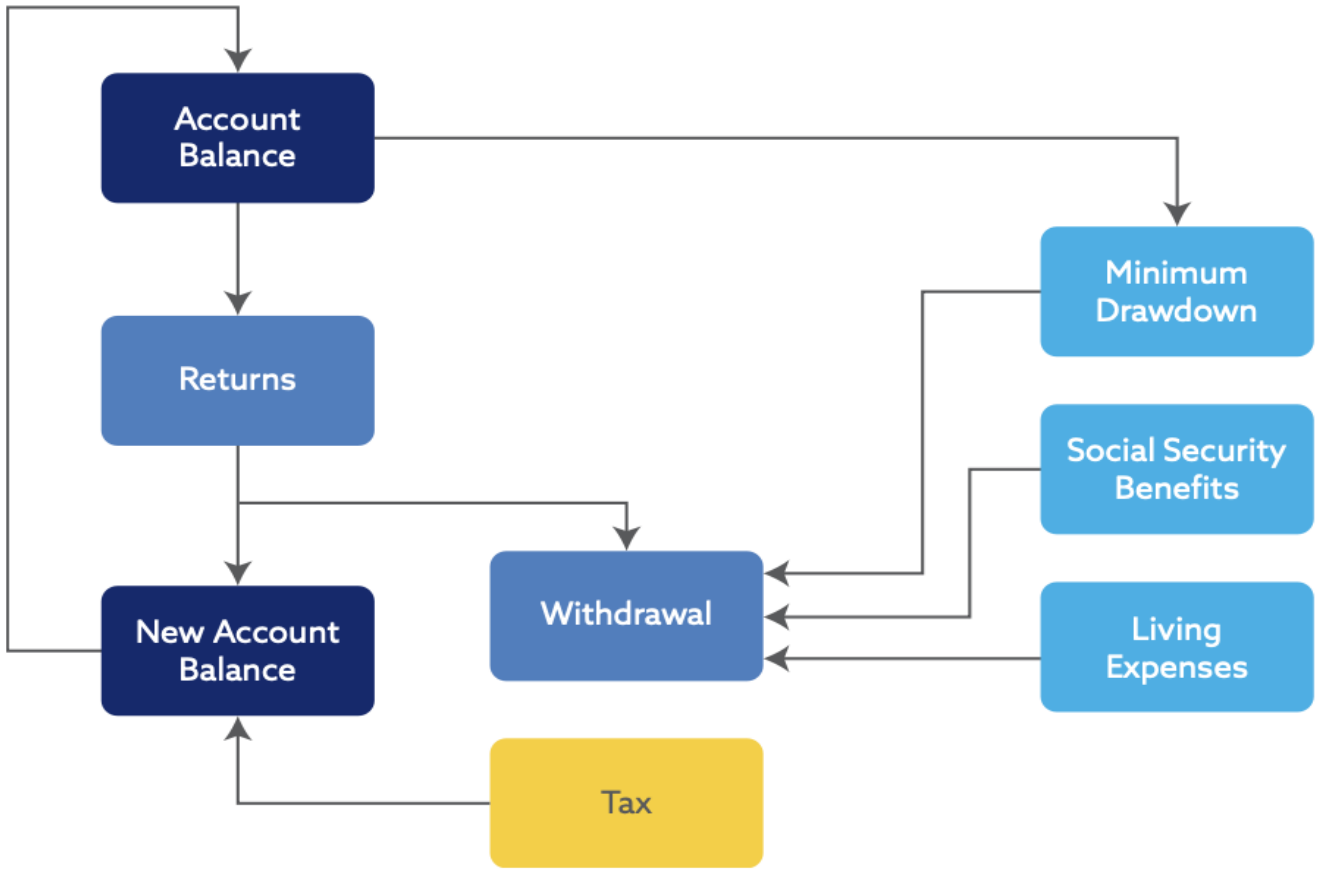

Exhibit 3. The Flow Chart of the Retirement Account Balance for US Retirees.

$$AB_{i+1} = \max\left[AB_i\left(1+R_{FP_i}\right) - \max\left(L_i - SSB_i, \frac{AB_i}{DP_i}\right) - T_i, 0\right].$$

60/40 portfolio return assumptions

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- Monte Carlo Method to simulate 10,000 paths to generate a distribution of future portfolio performance outcomes

$$\left(R_{FE_i}, R_{FB_i}\right)^T \sim \mathcal{N}(\boldsymbol{\mu}, \boldsymbol{\Sigma}).$$

$$\boldsymbol{\mu} = [\text{mean}(R_E), \text{mean}(R_B)]^T.$$

$$\boldsymbol{\Sigma} = \begin{bmatrix} STD^2(R_E) & STD(R_E)STD(R_B)\text{corr}(R_E, R_B) \\ STD(R_E)STD(R_B)\text{corr}(R_E, R_B) & STD^2(R_B) \end{bmatrix}.$$

Then, the forecast portfolio return is

$$R_{FP_i} = 0.6R_{FE_i} + 0.4R_{FB_i}.$$

Method 1: Historical return year 1 to Year 25

Dimson-Marsh-Staunton (DSM) Global Investment Returns Database: 25-year rolling return returns from 1901 to 2022

Method 2: Forecasted return: Year 1 to Year 10

Capital Market Assumption (CMA) from MCFS

Year 11 to Year 25

Dimson-Marsh-Staunton (DSM) Global Investment Returns Database: 25-year rolling return returns from 1901 to 2022

Model specification

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	Australia	United States
Portfolio returns	10,000 series of Monte Carlo simulated future returns based on the mean, volatility, and correlations of the historical equity and bond returns	
Initial amount	(1) Median balance Men: AUD213,986 Women: AUD201,233 (2) Mean balance Men: AUD453,075 Women: AUD403,038	(1) Median balance: USD170,000 (2) Mean balance: USD513,200
Withdrawal amount	Minimum pension drawdown	
Withdrawal frequency	Yearly	
Benefits	Age Pension, if applicable Maximum amount: AUD24,356.80	Social Security benefit Men: USD18,108 Women: USD14,204
Living standards	(1) Modest: AUD30,582 (2) Comfortable: AUD44,034	USD54,975
Simulation period in years	25 years	
Inflation	Inflation-adjusted	
Tax	Not taxable	Taxable
Rebalance	Yearly without rebalancing expenses	

Exhibit 4. Model Specification.

Part 3. Can 60/40 portfolio be sufficient for retirement?

60/40 retirement portfolio sufficiency - Australian retirees with median account balance

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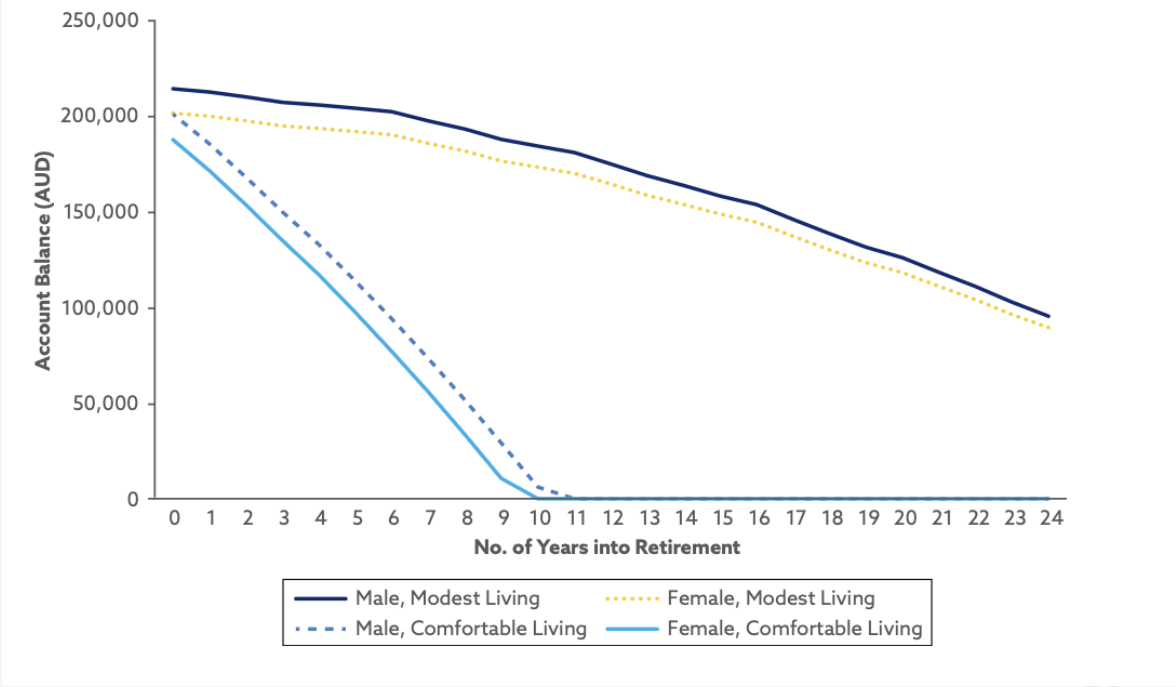

Exhibit 5. Australian Retirees: Median Remaining Account Balances for a Median Starting Balance, Simulated Returns

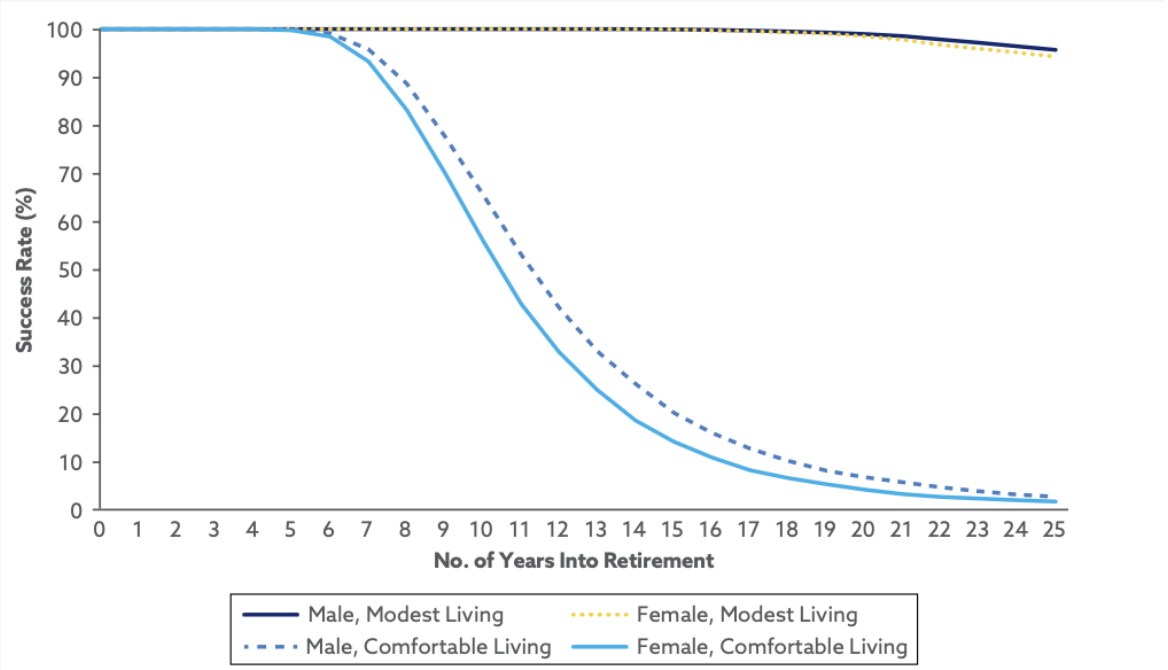

Exhibit 6. Australian Retirees: Success Rate for a Median Starting Balance, Simulated Returns

60/40 retirement portfolio sufficiency - Australian retirees with mean account balance

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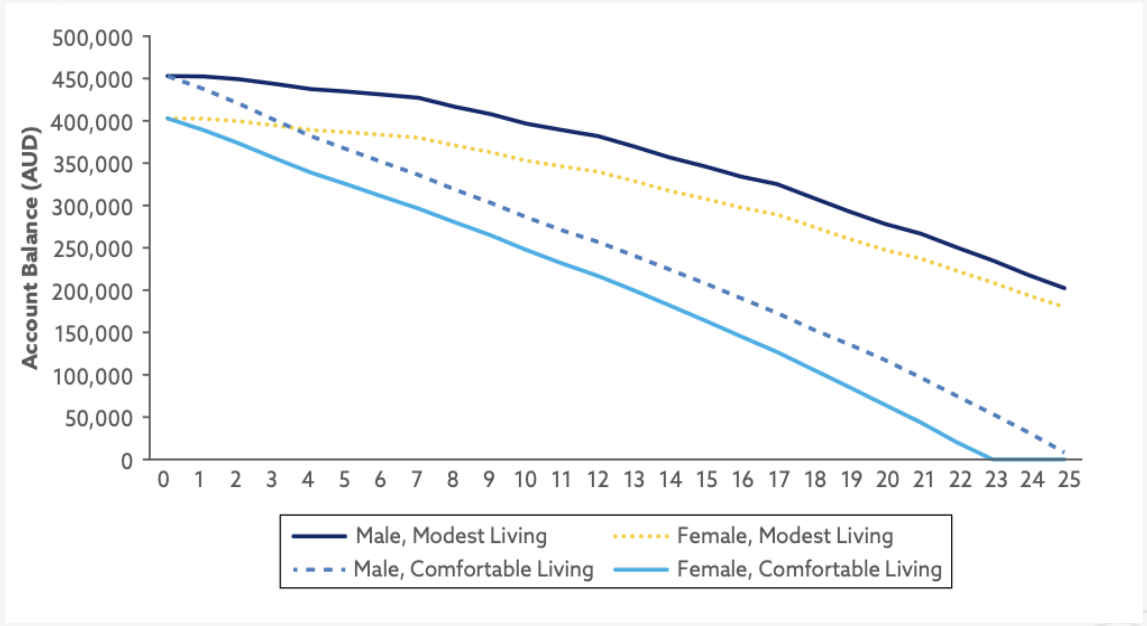

Exhibit 7. Australian Retirees: Median Remaining Account Balances for a Mean Starting Balance, Simulated Returns

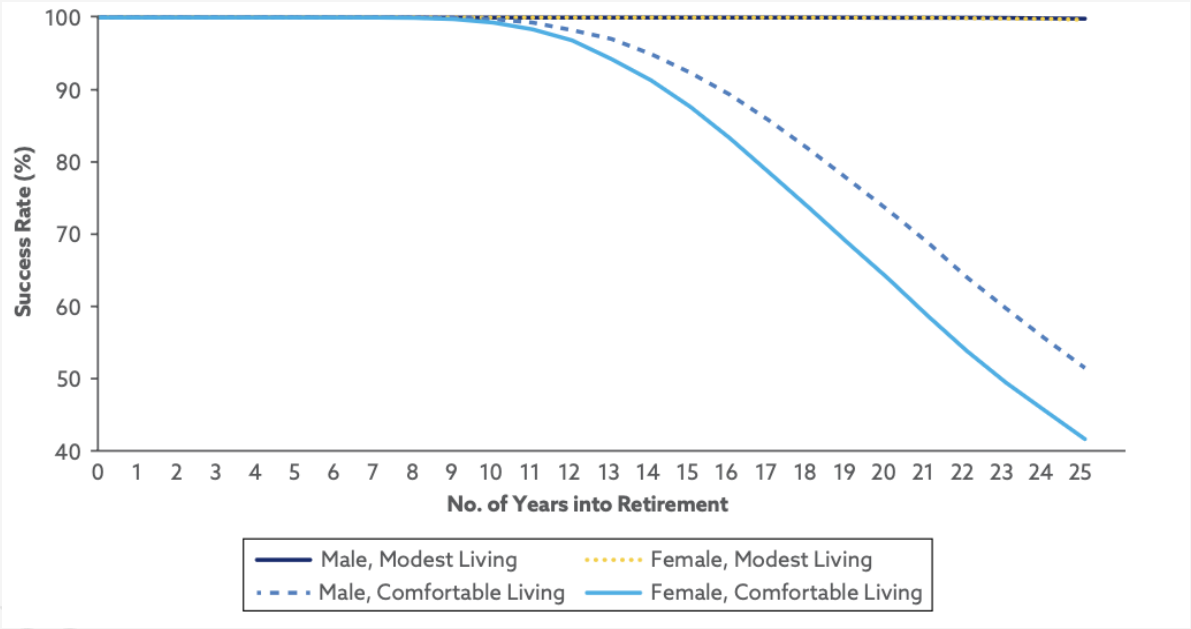

Exhibit 8. Australian Retirees: Success Rate for a Mean Starting Balance, Simulated Returns

60/40 retirement portfolio sufficiency for a higher starting balance

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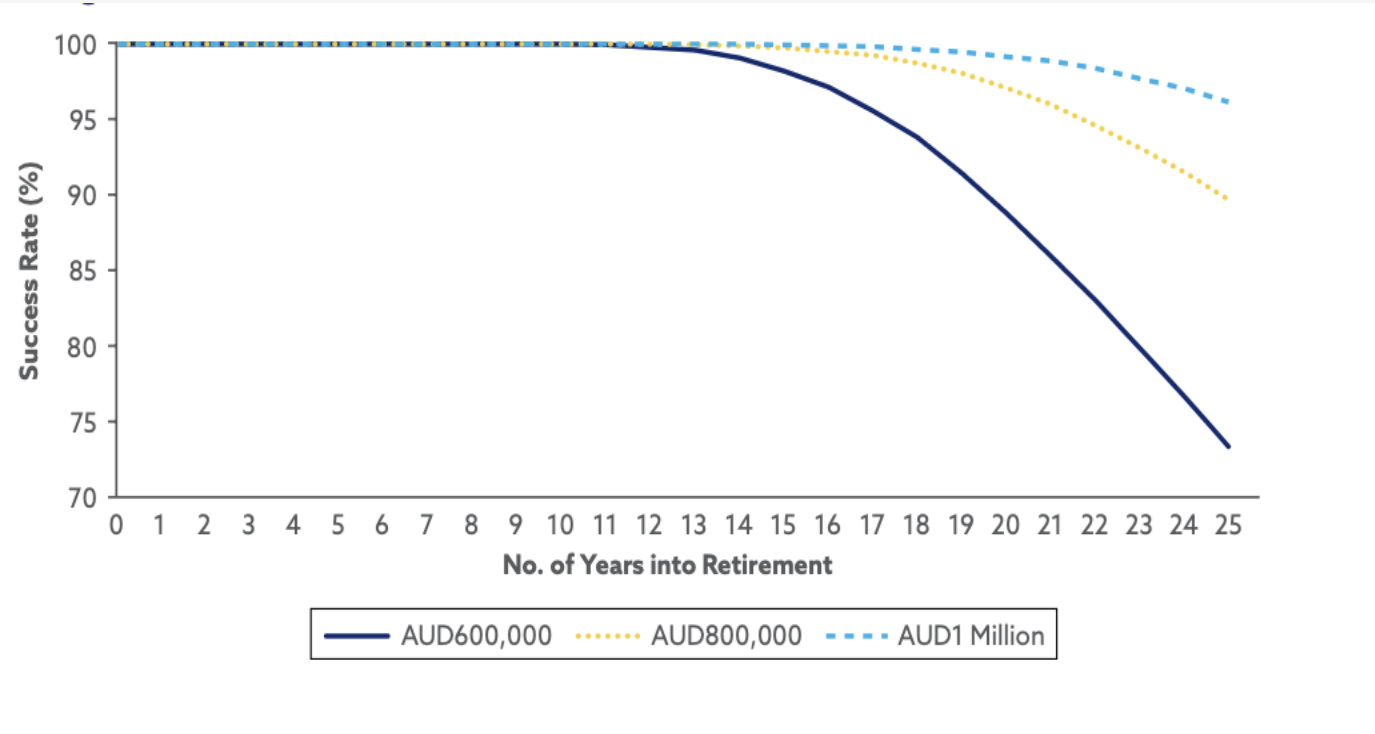

Exhibit 9. Australian Retirees: Comfortable Lifestyle Success Rates for a Range of Starting Balances

60/40 retirement portfolio sufficiency - Australian retirees

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Highlight 1: A 60/40 portfolio could be sufficient for some Australian retirees, particularly those with modest living expenses and a higher starting balance. For others, however—especially those with higher expenses created by their desire for a comfortable lifestyle—it might be inadequate, necessitating a larger starting balance or an alternative investment strategy.

60/40 retirement portfolio sufficiency – sequence-of-return risks

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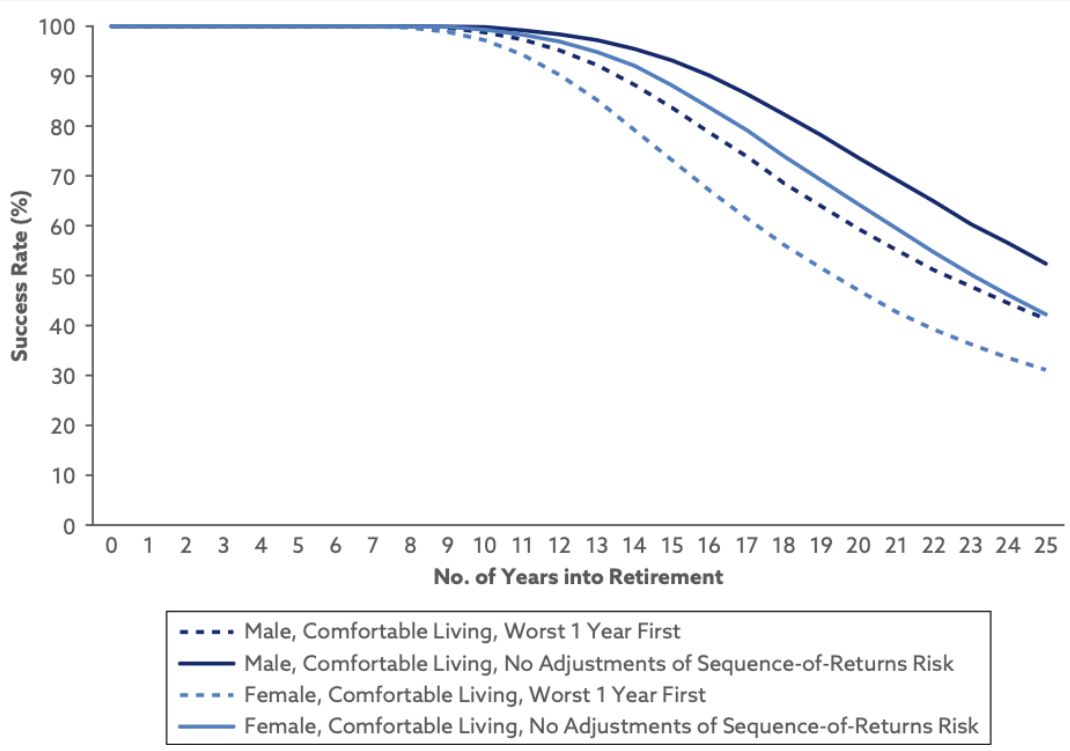

Exhibit 10. Australian Retiree Success Rates: Worst Return in the First Year vs. No Adjustments of Sequence-of-Returns Risk—Mean Starting Balance, Comfortable Living Standard

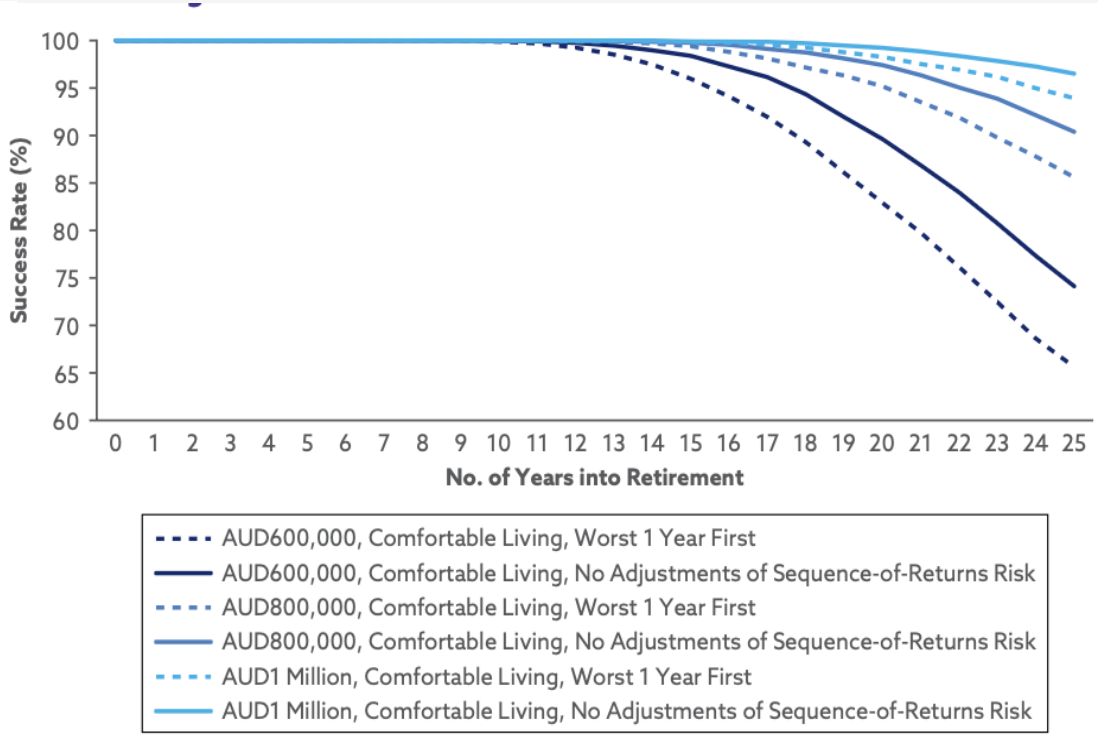

Exhibit 11. Australian Retiree Success Rates: Worst Return in the First Year vs. No Adjustments of Sequence-of-Returns Risk—Various Starting Balance, Comfortable Living Standard

60/40 retirement portfolio sufficiency - Australian retirees

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Highlight 2: In Australia, the 60/40 portfolio's ability to sustain retirement expenses is significantly affected by sequence-of-returns risk, particularly for retirees living comfortable lifestyles that require higher withdrawals. Avoiding early negative returns improves the 60/40 portfolio's sustainability but does not eliminate the risk of eventual depletion, especially for those seeking a more comfortable lifestyle. A larger initial retirement balance is beneficial to buffer against potential early investment volatility.

60/40 retirement portfolio sufficiency - US retirees

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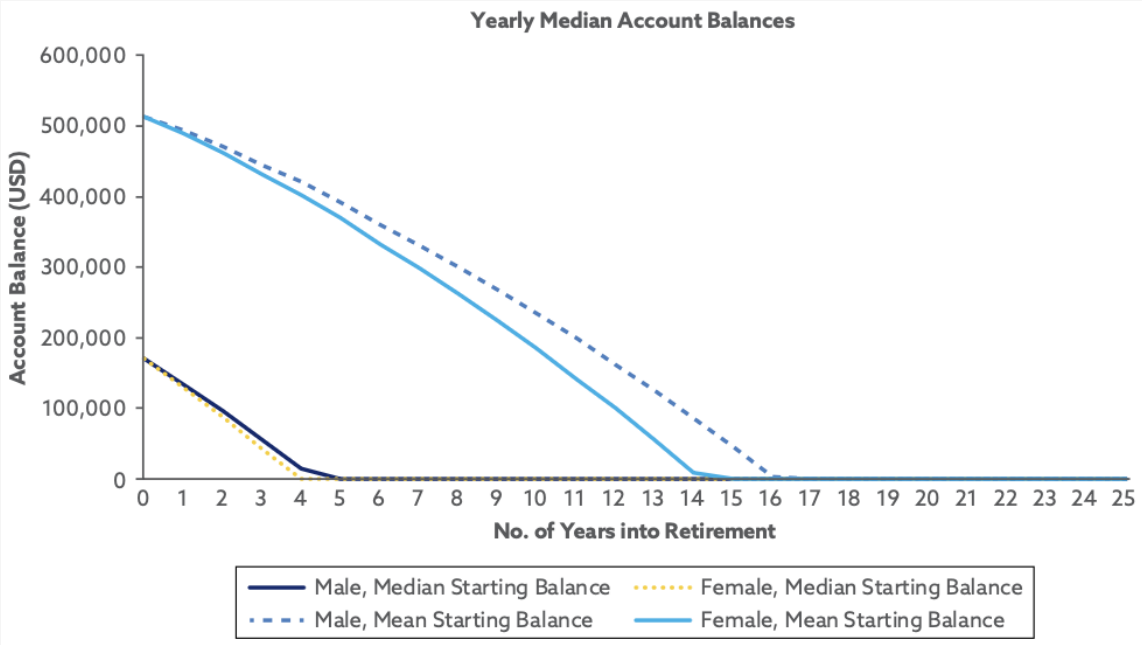

Exhibit 12. US Retiree Median Remaining Account Balance: Male vs. Female Retirees, Mean vs. Median Starting Balance, Simulated Returns

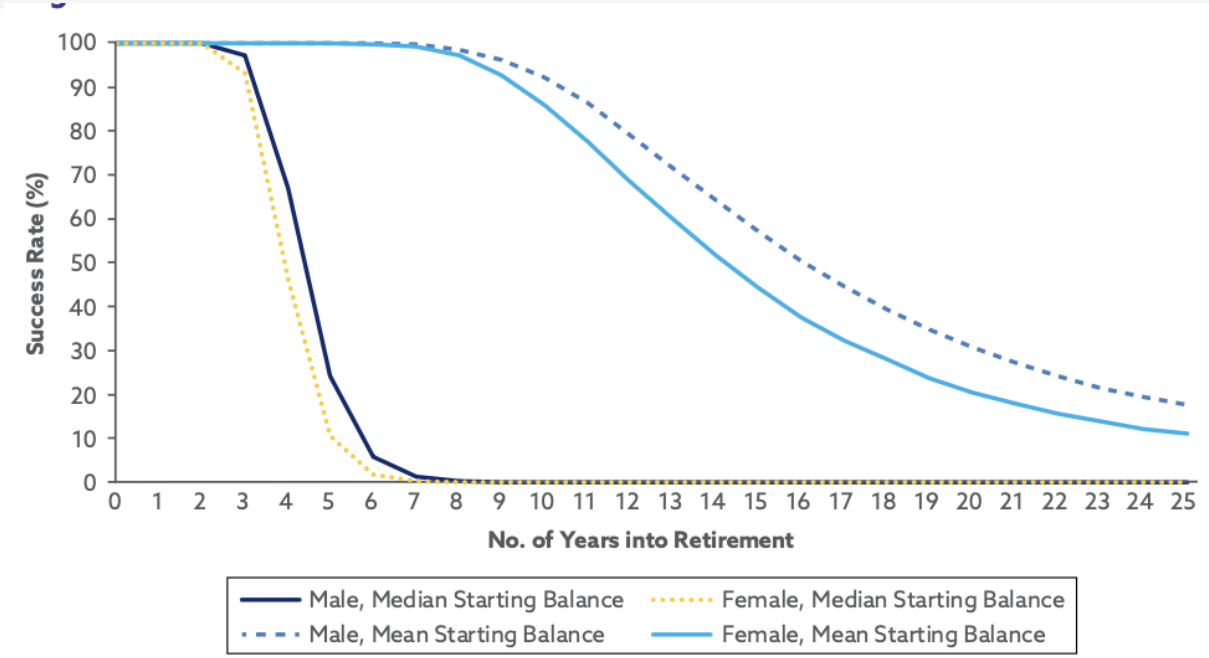

Exhibit 13. US Retiree Success Rates: Male vs. Female Retirees, Mean vs. Median Starting Balance

60/40 retirement portfolio sufficiency - US retirees

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Highlight 3: A one-size-fits-all approach, such as the traditional 60/40 strategy, might not be adequate for everyone. Although higher initial balances offer a better chance of sustaining retirement expenses, they are not a guaranteed safeguard against the risk of fund depletion.

These trends illustrate the importance of considering initial savings, gender disparities, and the need for realistic expectations when planning for retirement based on a 60/40 investment strategy in the United States.

Factors affecting sustainability of a 60/40 portfolio

- **Starting balances**: A 60/40 portfolio's sustainability is greatly influenced by the size of the initial investment. Higher starting balances have consistently shown a higher success rate in sustaining retirees throughout the 25-year period.
- **Living standards**: There is a stark contrast in portfolio sustainability between modest and comfortable living standards. Portfolios tend to last significantly longer for retirees living modestly, while those seeking a comfortable lifestyle are at a higher risk of depleting their funds entirely, often well before the 25-year mark.
- **Gender differences**: The data indicate some gender-based disparities, with female retirees facing a higher risk of fund depletion because of lower starting balances compared with male retirees.
- **Market volatility and timing**: Sequence-of-returns risk is particularly pivotal. Portfolios that encounter negative returns early in retirement show a markedly decreased sustainability, which can jeopardise long-term financial security.
- **Geographic context**: The principles of portfolio sustainability remain consistent for both countries. For US retirees, the relatively high living cost and low Social Security benefits diminish the sustainability of a 60/40 portfolio upon retirement.

Conclusion

- Although a 60/40 portfolio can form the cornerstone of a retirement strategy, its sustainability is not assured under all conditions. Future retirees to engage in comprehensive financial planning that goes beyond conventional wisdom.
  - Personalised and dynamic retirement planning
  - Flexible withdrawal strategies and proactive risk management
  - Comprehensive planning and enhanced financial literacy

More questions about SMSF performance and the winner portfolio?

It's time for Q&A.

Access our report

For other research by MCFS

MCFS Research Team

Bei Cui, PhD

Dr. Bei Cui is a PhD-trained finance researcher whose work bridges academic research and practical application in the financialsector. She conducts practitioner-relevant research and promotes thought leadership on issues shaping contemporary finance, with active engagement across industry and policy circles.

Her research spans sustainable investments, retirement and superannuation funds, credit markets, and market microstructure, with a particular focus on projects that advance sustainability, transparency, and financial resilience.

Nga Pham, PhD

Nga Pham is an Associate Professor and Director of Research Impact at the Monash Centre for Financial Studies (MCFS), Monash University. She holds a PhD and MBA from La Trobe University and a Bachelor of Commerce from the University of Melbourne. A CFA charterholder since 2011, Dr. Pham serves on the Board of Directors of CFA Society Australia and co-chairs the International Corporate Governance Network (ICGN) Financial Capital Committee. Her research focuses on corporate governance, sustainable finance, pension systems, and shareholder activism.

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Ummul Ruthbah is an Associate Professor and Deputy Director at the Monash Centre for Financial Studies (MCFS). She holds a PhD degree in Economics from the Massachusetts Institute of Technology (MIT), where she was an IMF Scholar. Ummul's industry experience includes five years of consulting to the World Bank. Early in her career, she worked at the International Monetary Fund. Her current research interests include issues related to sustainable finance and retirement planning.