

Reconciliation of IRR, WACC, and WARA in Valuation

In the domain of valuation, especially under ICAI Valuation Standards and the Insolvency and Bankruptcy Code (IBC), a precise understanding of discount rates is paramount. Among the most debated aspects is the reconciliation of **Internal Rate of Return (IRR)**, **Weighted Average Cost of Capital (WACC)**, and **Weighted Average Return on Assets (WARA)**.

Understanding the Trio: IRR, WACC & WARA

1. IRR (Internal Rate of Return)

IRR is the discount rate at which the net present value (NPV) of future cash flows from an investment becomes zero. In a transaction context, it reflects the investor's expected return and is backward-looking—derived from actual cash flows and purchase price.

2. WACC (Weighted Average Cost of Capital)

WACC represents the blended cost of a company's capital—debt and equity—weighted by their proportions in the capital structure. It is forward-looking and is often used to discount future free cash flows in a DCF model.

As per ICAI's Concept Paper on Estimating Discount Rates, WACC is crucial in determining enterprise value and is calculated as:

$$\text{WACC} = (E/V \times K_e) + (D/V \times K_d \times (1 - T_c))$$

Where:

- E = Market value of equity
- D = Market value of debt
- $V = E + D$
- K_e = Cost of equity
- K_d = Cost of debt
- T_c = Corporate tax rate

3. WARA (Weighted Average Return on Assets)

WARA measures the average return expected on various assets (tangible and intangible) acquired in a business combination. Each asset's expected return is weighted by its fair value contribution. It is primarily used in Purchase Price Allocation (PPA).

Why Reconcile IRR, WACC & WARA?

While these metrics originate from different contexts, they ultimately serve the same purpose—assessing investment performance and value. Reconciliation is essential for consistency and auditability, particularly under financial reporting standards and valuation engagements.

The Reconciliation Approach

1. Start with IRR:

- Derived from the purchase price and projected cash flows of the transaction.
- Validates the reasonableness of the business valuation model.

2. Compare with WACC:

- WACC should be close to IRR if market-based assumptions are correct.
- If $IRR > WACC \rightarrow$ Implies value accretion or undervaluation.
- If $IRR < WACC \rightarrow$ Indicates overpayment or risk understatement.

3. Reconcile with WARA:

- Check if the WARA (asset-side return) aligns with WACC (capital-side cost).
- If $WARA < WACC$, the asset base is undervalued or risks are understated.
- If $WARA > WACC$, return assumptions might be aggressive.

Practical Implications in Valuation and Insolvency

Under ICAI Valuation Standard 103 – *Valuation Approaches and Methods*, the Income Approach using DCF mandates appropriate discounting. Aligning WACC with IRR and WARA ensures compliance with fair value frameworks like Ind AS 113 and valuation norms under the Companies (Registered Valuers and Valuation) Rules, 2017.

In insolvency scenarios, especially during resolution or liquidation, this reconciliation aids:

- Justifying resolution plan valuations
- Defending asset valuations in NCLT
- Addressing stakeholder queries during CoC meetings

Conclusion

Reconciling IRR, WACC, and WARA is not just a best practice—it's an expectation under contemporary valuation governance. For Registered Valuers, it bridges the theoretical

framework and real-world application, reinforcing credibility and transparency in valuation assignments.