Twitter Thread by Bhavin Gandhi

Bhavin Gandhi
@bhavinjan1978

Return on invested capital (ROIC) can be a useful construct to compare investment opportunities, identify inconsistencies in forecasts, understand valuation discrepancies and focus on value creating strategies. It has several limitations too. Here's a quick checklist.

ROIC FRAMEWORK TO EVALUATE BUSINESS

NOTES BY BHAVIN C.

VALUE DRIVERS:

1. EXCESS RETURNS — ROIC (−) WACC
2. REINVESTMENT OPPORTUNITY — NPV '+'ve OPPORTUNITY
3. COMPETITIVE ADV PERIOD (CAP) — > CAP > VALUE
4. RISK PROFILE — > RISK > WACC < VALUE

CALCULATING ROIC:

ROIC = NOPAT ÷ INVESTED CAPITAL

NOPAT = EBITA (−) CASH TAX (UNLEVERAGED)

EBITA = REVENUE − OP. EXPENSES − DEPRECIATION − AMORTISATION (EXCEPT GOODWILL) ← Proxy for maintenance capex

TWO APPROCHES TO CALCULATE INVESTED CAPITAL

1. OPERATING APPROACH (ASSET SIDE OF BAL SHEET (B/S))

	A.	NON CASH CURRENT ASSET	X
(−)	B.	CURRENT LIABILITY	(X)
=	C	NET WORKING CAPITAL	XX
+	D	NET PPE	X
+	E	NON GOODWILL INTANGIBLE	X
+	F	OTHER LONG TERM ASSET	X
		TOTAL INVESTED CAPITAL (C+D+E+F)	XX

2. FINANCING APPROACH (LIABILITY SIDE OF B/S)

	A	TOTAL DEBT	X
+	B	DEFERRED TAX	X
+	C	OTHER LONG TERM LIAB	X
+	D	MINORITY INTEREST	X
+	E	PREFERRED EQUITY	X
+	F	SHAREHOLDER EQUITY	X
(−)	G	CASH	(X)
(−)	H	UNCONSOLIDATED INT	(X)
(−)	I	GOODWILL *	(X)
		TOTAL INVESTED CAPITAL	XX

* GOODWILL: Purpose of cal. ROIC is to find out payout business can make while sustaining growth. Since G/W is relating to past acquisitions – it does not affect the ability to payout – hence it's deducted.

USING ROIC TO EVALUATE PROJECTIONS:

$$ROIC = \frac{NOPAT}{INVESTED\ CAPITAL} = \underbrace{\frac{NOPAT}{REVENUE}}_{OP\ MARGIN\ \%} \times \underbrace{\frac{REVENUE}{INVESTED\ CAPITAL}}_{ASSET\ T/O}$$

FACTORS TO EVALUATE:

1. OP. MARGINS: Driven by industry dynamics & competitive intensity
2. ASSET T/O: Should remain unchanged unless there is specific reason
3. REINVESTMENT RATE: should adequately provide for growth
   - Reinv. opportunities available
   - Total capex (−) Maintenance capex → only growth capex to be considered.
   - use Capex/Rev. as a check.

USING ROIC TO EVALUATE DCF:

- 60-70% value attributable to terminal value
- Terminal value = $\frac{\text{Normalised CF}}{WACC - G}$ G = Reinvt Rate × ROIC → check if both are adequately provided.

VALUE OF ROIC DIMINISHES AS IT INCREASES: → High ROIC co's should focus on inc. growth

	COMPANY	ROIC	GROWTH	DIVIDEND (ASSUMING EPS=1)
FOR 2X INP. IN ROIC ABILITY TO PAYOUT DIMINISHES.	A	10	5	0.5
	B	20 (2X)	5	0.75 (50%)
	C	40 (2X)	5	0.875 (17%)

(Payout = 1 − G/ROIC)

LIMITATIONS OF ROIC: MAKE SUITABLE ADJUSTMENT FOR

1. R&D expenses
2. LEASES
3. RESTRUCTURING CHARGES.