

Calculating Free Cash Flow to Owners (FCFO)

With emphasis on understanding IOI's estimation of cash flows from anti-dilutive stock buybacks

April 7, 2016

Key Takeaways

For information, please contact:

[Erik Kobayashi-Solomon](#)

+1 646 801.2464

- Details regarding these calculations can be found in [The Intelligent Option Investor](#) and in the online appendices. This report is designed to provide an actual look at financial statements.
- We use two financial statements to find the information that goes into these calculations, the Statement of Cash Flows and the Statement of Changes in Shareholder Equity.

Introduction

Free Cash Flow to Owners is the measure we use at IOI to estimate the value of a company. It is a measure of how much cash is left over after all maintenance costs have been covered and all spending on investment programs has finished.

Investors are often intimidated by financial statements. Indeed, they are written by lawyers and accountants in a way as to seem intimidating! However, we believe that when investors simply understand the handful of important measures that drive the value of a company and where to find them, gaining information from financial statements is a much easier and less intimidating process.

Remember the sage words of Peter Lynch – the manager of Fidelity Investment's Magellan Fund from 1977 to 1990:

"If you don't study any companies, you have the same success buying stocks as you do in a poker game if you bet without looking at your cards."

Information provided by IOI Investment Services, LLC, should not be used as investment advice. IOI Investment Services, LLC does not act in the capacity of a Registered Investment Advisor. For investment advice geared towards your specific needs, we encourage you to contact your financial planner or advisor.

Elements of FCFO

Remember the definition of FCFO:

$$\text{FCFO} = \text{Owners' Cash Profits} - \text{Net Expansionary Cash Flow}$$

Net Expansionary Cash Flow is defined in the following way:

Deduct	Expenditures for Property Plant & Equipment over and above maintenance capex as defined in OCP ("Growth Capex")
Deduct	Cash spent on acquisitions
Deduct (Add Back)	Cash paid to (received from) JV partners (loans or investments)
Deduct	Net cash spent on anti-dilutionary stock repurchases
Add Back	Cash received from sale of assets / divisions
Equals	Expansionary Cash Flows

Let's look at an actual Statement of Cash Flows (for Union Pacific Corporation – the U.S. railway). Most of the information in the above equation can be found in a single section of this statement; that is the section dealing with Cash Flows from Investing.

	2015	2014	2013
Investing Activities			
Capital investments ¹	(4,650)	(4,346)	(3,496)
Proceeds from asset sales ²	251	138	98
Other investing activities, net	(77)	(41)	(7)
Cash used in investing activities	(4,476)	(4,249)	(3,405)

Figure 1. Source: Company Statements

The line item in figure 1 marked with the red "1" is the total amount of capital investment – some of which will be capital spent to maintain the business ("maintenance capex") and part of which will be spent to help the firm grow more quickly in the future. The portion of capital spending over and above the maintenance capex is what we need for our FCFO calculation. This amount equates to the first line of the above definition: "Expenditures for Property Plant & Equipment over and above maintenance capex".

The line item in figure 1 marked with the red "2" is the cash inflow from selling used equipment. We can think of this cash inflow in the same way we think of the money we receive when we "trade in" our old car to buy a new one. The cash received from the trade-in offsets some portion of the cash outflow for new equipment. Obviously, this amount corresponds with the last line of the above definition "Cash received from sale of assets / divisions".

Union Pacific did not make any acquisitions in the years listed here, so we would have a zero value in the second line in our definition of ECF. Similarly, there is no mention of loans or other investments made to joint venture ("JV") partners. Some companies will list an expenditure for the development of "Software for Internal Use" and we also include that as an expansionary cash flow.

For the last remaining value in our definition of expansionary cash flow – "Net cash spent on anti-dilutionary stock repurchases" – we must look on another statement. The name for this statement differs from company to company, but it is something like the Statement of Changes in Shareholder Equity.

This statement for Union Pacific is shown in figure 2.

CONSOLIDATED STATEMENTS OF CHANGES IN COMMON SHAREHOLDERS' EQUITY
Union Pacific Corporation and Subsidiary Companies

Millions	Common Shares	Treasury Shares	Common Shares	Paid-in-Surplus	Retained Earnings	Treasury Stock	AOCI [a]	Total
Balance at January 1, 2013	1,109.3	(170.3)	\$ 2,773	\$ 4,113	\$ 20,884	\$ (6,707)	\$ (1,186)	\$ 19,877
Net income			-	-	4,388	-	-	4,388
Other comp. income			-	-	-	-	436	436
Conversion, stock option exercises, forfeitures, and other	0.4	1.6	1	97	-	15	-	113
Share repurchases (Note 19)	-	(29.0)	-	-	-	(2,218)	-	(2,218)
Cash dividends declared (\$1.48 per share)	-	-	-	-	(1,371)	-	-	(1,371)
Balance at December 31, 2013	1,109.7	(197.7)	\$ 2,774	\$ 4,210	\$ 23,901	\$ (8,910)	\$ (750)	\$ 21,225
Net income			-	-	5,180	-	-	5,180
Other comp. loss			-	-	-	-	(460)	(460)
Conversion, stock option exercises, forfeitures, and other	0.4	3.0	1	111	-	71	-	183
Share repurchases (Note 19)	-	(32.0)	-	-	-	(3,225)	-	(3,225)
Cash dividends declared (\$1.91 per share)	-	-	-	-	(1,714)	-	-	(1,714)
Balance at December 31, 2014	1,110.1	(226.7)	\$ 2,775	\$ 4,321	\$ 27,367	\$ (12,064)	\$ (1,210)	\$ 21,189
Net income			-	-	4,772	-	-	4,772
Other comp. income			-	-	-	-	15	15
Conversion, stock option exercises, forfeitures, and other	0.3	0.8	1	96	-	-	-	97
Share repurchases (Note 19)	-	(35.3)	-	-	-	(3,465)	-	(3,465)
Cash dividends declared (\$2.20 per share)	-	-	-	-	(1,906)	-	-	(1,906)
Balance at December 31, 2015	1,110.4	(261.2)	\$ 2,776	\$ 4,417	\$ 30,233	\$ (15,529)	\$ (1,195)	\$ 20,702

[a] AOCI = Accumulated Other Comprehensive Income/(Loss) (Note 10)
The accompanying notes are an integral part of these Consolidated Financial Statements.

Figure 2. Source: Company Statements

This statement is different from all of the other major financial statements in several ways. One difference is that this statement not only shows dollar values (as the other statements do) but also the quantity of shares issued or bought back.¹

When making our estimate for cash flow due to anti-dilutionary stock buybacks, we will ignore the dollar values and focus in on the quantity of shares issued. You can find quantities in the columns above marked by red.

We will look at the shares issued during 2015, which you can find in the bottom third of figure 2 above. We see a line item entitled "Conversion, stock option exercises, forfeitures, and other" associated with the issuance of 0.3 (300,000) new shares and 0.8 (800,000) of "Treasury Shares".² In total, Union Pacific issued 1.1 million shares as compensation. Below that line, you can also see that they repurchased 35.3 million shares in the open market.

From an investor's perspective, we are glad for the 35.3 million shares bought, but realize that the 1.1 million shares issued will need to be bought back (incurring a cash cost). IOI's estimate for the cash flow expended for anti-dilutionary buybacks is based on this principle. In this case, we will find the average stock price for Union Pacific over this time period (\$99.44 / share) and multiply by the number of shares issued – 1.1 million, as shown above. Doing so, we estimate the cash flow for anti-dilutionary stock buybacks to be \$109 million.

¹ In fact, some companies do not list the quantity of shares on this statement. In that case, the quantity is shown somewhere in the notes, so we have to go dig for them.

² Treasury shares are those that have been bought back by the company and held in reserve. This company, like many companies, reissues Treasury stock as a form of compensation to its employees.

Sometimes, companies will show a cash inflow from issuance of shares. This cash inflow will be shown in the section of the Statement of Cash Flows dealing with cash flows from financing.

Here is Union Pacific's entire Statement of Cash Flows.

CONSOLIDATED STATEMENTS OF CASH FLOWS
Union Pacific Corporation and Subsidiary Companies

<i>Millions, for the Years Ended December 31,</i>	2015	2014	2013
Operating Activities			
Net income	\$ 4,772	\$ 5,180	\$ 4,388
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation	2,012	1,904	1,777
Deferred and other income taxes	765	895	723
Net gain on non-operating asset dispositions	(144)	(69)	(32)
Other operating activities, net	116	(216)	(194)
Changes in current assets and liabilities:			
Accounts receivable, net	255	(197)	(83)
Materials and supplies	(24)	(59)	7
Other current assets	(47)	(35)	1
Accounts payable and other current liabilities	(276)	295	40
Income and other taxes	(85)	(313)	196
Cash provided by operating activities	7,344	7,385	6,823
Investing Activities			
Capital investments	(4,650)	(4,346)	(3,496)
Proceeds from asset sales	251	138	98
Other investing activities, net	(77)	(41)	(7)
Cash used in investing activities	(4,476)	(4,249)	(3,405)
Financing Activities			
Common share repurchases (Note 19)	(3,465)	(3,225)	(2,218)
Debt issued	3,328	2,588	1,443
Dividends paid	(2,344)	(1,632)	(1,333)
Debt repaid	(556)	(710)	(640)
Debt exchange	-	-	(289)
Other financing activities, net	(26)	(3)	(12)
Cash used in financing activities	(3,063)	(2,982)	(3,049)
Net change in cash and cash equivalents	(195)	154	369
Cash and cash equivalents at beginning of year	1,586	1,432	1,063
Cash and cash equivalents at end of year	\$ 1,391	\$ 1,586	\$ 1,432
Supplemental Cash Flow Information			
Non-cash investing and financing activities:			
Capital investments accrued but not yet paid	\$ 100	\$ 174	\$ 133
Capital lease financings	13	-	39
Cash dividends declared but not yet paid (Note 13)	-	438	356
Cash paid during the year for:			
Income taxes, net of refunds	\$ (2,156)	\$ (2,492)	\$ (1,656)
Interest, net of amounts capitalized	(592)	(554)	(528)

The accompanying notes are an integral part of these Consolidated Financial Statements.

Figure 3. Source: Company Statements

Note that in the section labeled "Financing Activities", there is no mention of cash flow related to stock issuance for this company. If there were, we would net that cash inflow with the cash outflow of \$109 million calculated above.

Pulling all of this together for Union Pacific in 2015, we come up with the following calculation of OCP, ECF, and FCFO.

OCP Calculation

	Cash Flow from Operations	\$7,344
Deduct	Estimate for Maintenance Capital Expenditures ³	(\$2,027)
Equals	Owners' Cash Profits	\$5,317

Expansionary Cash Flow Calculation

Deduct	Expenditures for Property Plant & Equipment over and above maintenance capex as defined in OCP ("Growth Capex") ⁴	(\$2,623)
Deduct	Cash spent on acquisitions	-
Deduct (Add Back)	Cash paid to (received from) JV partners (loans or investments)	-
Deduct	Net cash spent on anti-dilutionary stock repurchases	(\$109)
Add Back	Cash received from sale of assets / divisions	\$251
Equals	Expansionary Cash Flows	(\$2,482)

FCFO Calculation

$$\text{FCFO} = \text{OCP} - \text{ECF} = \$5,317 - \$2,482 = \$2,836$$

Options involve risk and are not suitable for all investors. For more information, please read the [Characteristics and Risks of Standardized Options](#).

Seminars and reports are provided to you for educational purposes only. No information presented constitutes a recommendation to buy, sell or hold any security, financial product or instrument discussed therein or to engage in any specific investment strategy. The content neither is, nor should be construed as, an offer, or a solicitation of an offer, to buy, sell, or hold any securities. IOI Investment Services, LLC does not offer or provide any opinion regarding the nature, potential, value, suitability or profitability of any particular investment or investment strategy, and you are fully responsible for any investment decisions you make. Such decisions should be based solely on your evaluation of your financial circumstances, investment objections, risk tolerance and liquidity needs.

³ This estimate is based on the non-cash charge called "Depreciation". See *The Intelligent Option Investor* for more information.

⁴ \$4,650 was the total amount of capital expenditure. Of this, we deduct \$2,027 worth of estimated maintenance capex. The difference is listed here.