Excerpt from Chapter 3 of:

Cash Flow Analysis: A Guide for the Corporate Financial Analyst

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Explaining Cash Flow Activity

Cash flow information is also useful for evaluating profitability. Although accrual-based indications of income should remain the primary source for assessing profits, cash-based analyses are an excellent source for testing the quality and resilience of the accrual-based returns. This visibility is a fundamental tool for both internal and external analysts.

Audiences use cash flow analysis to understand the differentiations between accrued and monetized profits. As discussed in the Staff Draft on Financial Statement Presentation, direct cash flow information "improves the ability to predict future cash flows [and]… improves insight into an entity's cash conversion cycle."[1] To achieve this, analysts should compare income with cash flow so as to decipher volume and timing differences between the two measures.

Calculations of operating income rarely translate to equivalent amounts of operating cash flow, even when adjusted to remove interest and tax-related activity. For some firms, the differences may be a matter of timing. Timing differences can result from changes in working capital or movements in longer-term contingencies. In fact, timing differences can produce drastic variances between income and cash flow for some firms. Other variances can result from a firm's evolution; where periods of growth or business life cycle decline can influence capital investments and asset sales. Analysts use cash flow information to dissect these particulars.

In fact, reconciling the variance between cash- and accrual-based activity forms the basis for advanced analytical use of direct cash flow information. Such differences can point to structural risk between the moment of accrued income and the ultimate production of monetized value.

Accruals versus Cash Flow

External audiences, which are typically either shareholders or lenders, contemplate cash-based return information in order to surmise how much cash can be paid to them, either through dividends (if the audience is a shareholder) or debt service (if the audience is a lender). In order to competently communicate this dimension, you must first examine the relationships between accrued and realized returns.

[1] Financial Accounting Standards Board, "Staff Draft of an Exposure Draft on Financial Statement Presentation", Norwalk, CT, July 1, 2010, BC172.

Exhibit 3-1: Cash Flow versus Accrual Analysis Table

IMAGINARY COMPANY

US Dollars in millions

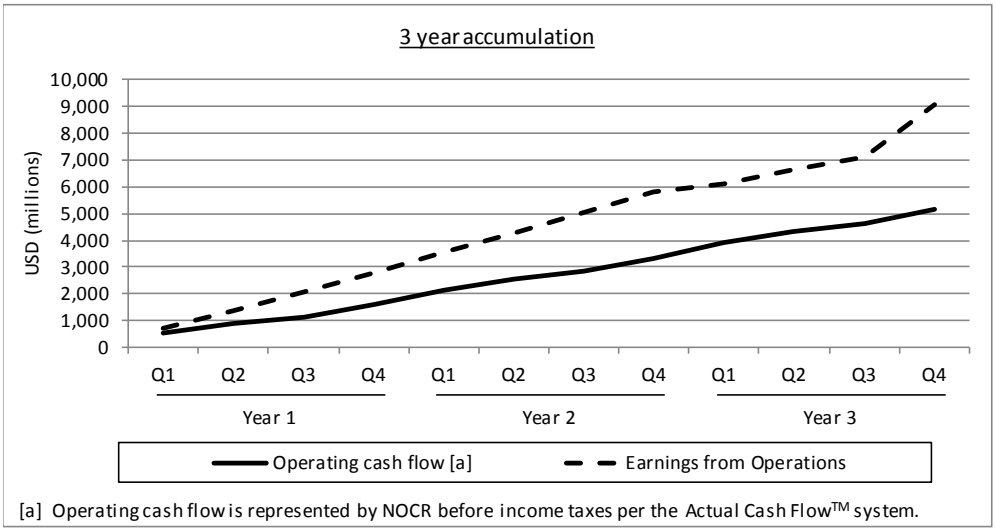
			FCF versus OI			FCF versus NI	
	FCF	**Operating Income**	higher / (lower)	as a % of	**Net Income**	higher / (lower)	as a % of
Year 3	**1,717**	**3,279**	(1,562)	52%	**2,326**	(610)	74%
growth v. PY	*12%*	*9%*			*10%*		
Year 2	**1,539**	**3,016**	(1,477)	51%	**2,118**	(579)	73%
growth v. PY	*17%*	*9%*			*13%*		

Analyzing the Difference

Analysis of the differences between accrued and realized return starts with a simple comparison as seen in Exhibit 3-1. The table lists Free Cash Flow, as provided in the last Chapter in Exhibit 2-1, followed by comparisons to Operating Income and Net Income. Here it is clear that the accrued returns present a rosier picture than the Free Cash Flow measure of monetized return.

Be careful here. This initial, high-level analysis only provides a snapshot of the connections between accrued versus monetized return. You should expect differences between income and Free Cash Flow. Our focus is to identify the primary causes for such differences. This identification process is the key to testing the quality and resilience of earnings.

Exhibit 3-2: Accrual versus Cash Flow Chart



The snapshot view of cash- versus accrual-based returns, as seen in Exhibit 3-1, is only a starting point. Snapshots cannot dissect the organization's entire cash flow cycle and its relationship to accrued earnings. This is instead deciphered by comparing the accumulation of operating cash flow (adjusted to remove the

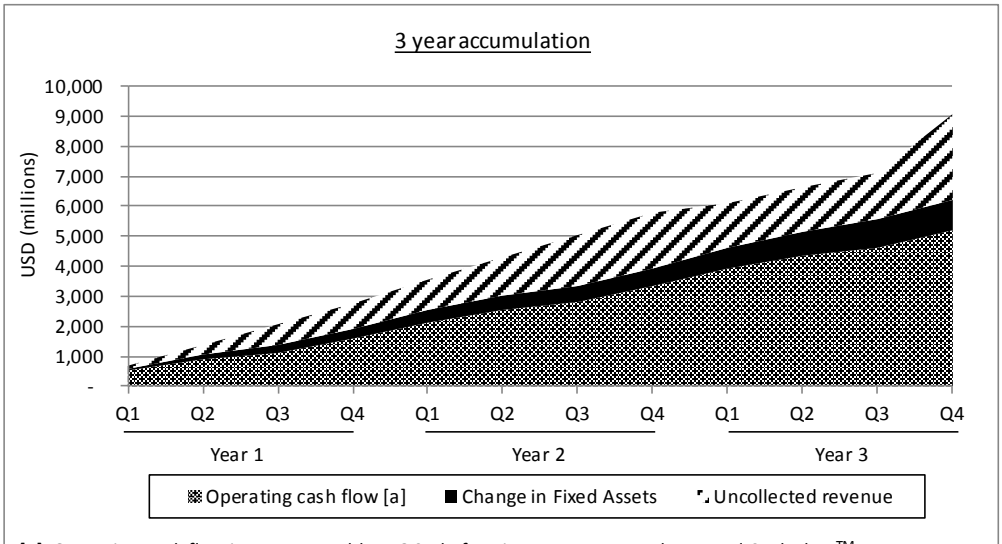
impacts of interest and tax) to operating income over a statistically significant time horizon. A graphical example is shown in Exhibit 3-2.

The example depicts the pattern of how cumulative operating cash flow is not equal to cumulative operating profit over time. Here, your focus is the distinction between the two measures, which demonstrate the time-based association between accruals and their related cash settlements. In the long term, the disparity between operating cash flow and earnings would diminish to the extent short-term accruals are predominant within the firm. In other words, periodic variances in accruals versus cash flows should naturally eliminate on a cumulative basis over time, and remaining differences should almost exclusively relate to previous material investment.

These patterns will vary from company to company, so you will need to analyze the relationships between the cash- and accrual-based profitability in order to distinguish the particular differences for your subject firm. An example of this type of analysis is demonstrated in Exhibit 3-3.

Exhibit 3-3 delineates a simple example of identified differences between the cash- and accrual-based operating profits. The bottom shaded area represents cumulative operating cash flow for the 3-year period, showing an identical pattern to that depicted in Exhibit 3-2. Then, the black shaded area represents the net change in fixed assets (related to approximately $300 million of annual capital expenditures with an increase to approximately $400 million in Year 3), and the top shaded area presents cumulative uncollected revenue. The combination of these components equals the accumulation of operating income as previously seen in Exhibit 3-2.

Exhibit 3-3: Cumulative Accrual versus Cash Flow Chart



This visual is particularly useful in depicting the seasonality of cash flow in relation to income. We see that the primary difference between operating cash flow and operating income over time, in this example, relates to uncollected revenue. It is clear that collections lag accrued revenue over the initial fiscal quarters. This equates to a delay in economically realized return. The delay, in turn, infers a higher risk to profitability as the value of the delayed economic profits would be rated lower than equivalent returns that are immediately monetized.

Exhibit 3-3 includes an anomaly at the end of Year 3 where incremental accounts receivable remain

uncollected. This is a sample disparity that should prompt further review. What is the increase related to? Was there more than one customer's receipt underlying the anomaly? Will the difference reverse during the next period, because it relates to past due receipts? Or is the difference a predictor of future variances, where the firm has begun to grant excess credit terms to all of its customers? These preliminary analytical exercises form the basis for depicting differences between accrued and monetized return.

Communicating Variances

External audiences do not want detailed analytics covering line-item variances. They instead only want direction on how to interpret the relationships of accrued profits versus monetized returns. In this, your goal is to clearly explain these variances.

For example, when describing Year 3 Free Cash Flow results as portrayed in Exhibit 3-1 and the variance analyzed through Exhibit 3-3, it would be appropriate to present a statement such as: "Free Cash Flow grew 12% in Year 3 versus 17% growth in Year 2. The 5% decrease relates to a strategy to increase market share through enhanced customer credit terms. This strategy supported consistent 9% growth in Operating Income." The comparative analytical exercises provide initial guidance for developing such targeted and clear statements.

The reconcilement exercises above offer pictorial direction on where the differences between income and cash flow reside. The leap to then be able to explain those differences requires further cognitive consideration. A thorough understanding of your firm's working capital is particularly useful. And here, an understanding of working capital in the context of cash flow is essential.

As inferred in the preceding sections, there is an inexact relationship between net working capital measures and real cash flow. Usually calculated as current assets less current liabilities, the formulaic approach to computing working capital is not in question. A problem instead arises with the common misconception of what working capital means. The terminology is assumed to measure the cash investment a firm holds in current operations. It is therefore expected to infer a corresponding increase in debt or equity from which to fund the working capital balance. As such, the existence of working capital is assumed to directly impact liquidity since it is an indication of cash outflow or incrementally invested capital (i.e., excess capital base).

Unfortunately, this assumption is not accurate. The material error exists in assuming that working capital is directly linked to tangible cash outflow. In reality, working capital includes estimates of future expected cash flows related to profits that are earned but not yet received. In other words, future cash inflows are part of working capital by virtue of including accounts receivable. This inconsistency ensures that working capital changes cannot explain cash flow in isolation.

The problem with standard working capital measures is not a flaw of intent but of functionality. Today's analysts use measures of net working capital to calculate the short-term investment in operations. In turn, changes in net working capital are expected to equal the change in cash needed to run the business. Yet, this expectation is misguided. Working capital does not mandate cash investment, but it does explain some of the differences between accrued and monetized return.

Such confusion ensures that you must spend time dissecting your firm's balance sheet, taking time to understand the periodic fluctuations and categorization of each material balance. For instance, you should identify working capital calculations that contain balances of accrued but uncollected profit margin. Then, as you work through the balance sheet, watch for changes in assets and liabilities that are accrued but not yet monetized. In other words, find the journal entries that are not recorded against cash. Balance sheet

changes frequently include measures of dilution, fair value adjustments, and other non-cash items, which you want to ignore. Such a process of elimination will help to identify key contributions to the differences between income and cash flow.

In this exercise, be careful to only isolate measures of operating balances. You want to disregard the impacts of non-operating items such as interest, dividends, and extraordinary reserves. Without an accurate striation of the incorporated components of the specific balance sheet measure, you could misinterpret the metric as an indication of the short-term capital required to run operations when the metric might also incorporate components of the capital structure itself.

A thorough examination of the balance sheet, ensuring comparison and reconcilement with monetized return, will guide your understanding of the firm's cash-based activity. This knowledge is directly applicable to an ability to craft clear communication on realized profitability.

Some of this competence will only be built through practice. For instance, statements about working capital, including concepts within the context of changes in working capital needed to support revenue growth, must be carefully crafted to avoid assumptions related to investment. Your formulated cash flow commentary must focus on key influencers in cash flow versus income disparity. This elevated approach requires focus.

Inferior analytical communication, for example, would simply point to an increase in working capital as an explanation for declining cash flow. Your newly forged knowledge, though, allows for communication that is clearer than this. Superior analytical communication would explain the specific actions behind the increase. For example, our earlier comment included commentary on strategy, connecting the specific variances in cash flow results to operational activity. This content, specifically "…relates to a strategy to increase market share through enhanced customer credit terms. This strategy supported consistent 9% growth in Operating Income.", provides guidance that is actually useful to the audience.

Again, note that the external audience does not need granular insights to line-item balance sheet impacts on cash flow. The internal audience, on the other hand, will want detail. Internal managers require insight to the mechanics and segmentation of cash flow in order to efficiently manage the firm's internal liquidity.

[Internal, managerial cash flow analysis is discussed further in Chapter 3 of **Cash Flow Analysis: A GUIDE for the COPORATE FINANCIAL ANALYST**]