Basic Accrual Accounting and Financial Reporting Concepts

Adapted with permission from a plenary presentation by Professor Patricia Dechow at the 2018 Annual Conference of the Accounting and Finance Association of Australia and New Zealand. Professor Dechow is the Robert R. Dockson Professor of Business Administration & Professor of Accounting at the University of Southern California Marshall School of Business.
The following slides are adapted from Professor Patricia Dechow’s presentation at the 2018 Annual Conference of the Accounting and Finance Association of Australia and New Zealand.

Professor Dechow is the Robert R. Dockson Professor of Business Administration & Professor of Accounting at the University of Southern California Marshall School of Business. She earned her PhD at the University of Rochester.
Defining Earnings Quality

HIGH QUALITY EARNINGS
Reflect the economics of the business
Are sustainable (are a good indicator for the future)

LOW QUALITY EARNINGS
*Do not* reflect the economics of the business
Have been manipulated/contain errors
Are not sustainable (are a poor indicator for the future)

Understanding the factors that distinguish high and low earnings quality is a key research area in accounting.

- Important for investing, auditing, SEC in monitoring and regulating, banks providing loans, etc.
Chris starts a business

Acquires:
• One cup and straw for 5 cents
• One lemon for 15 cents
• Sugar for one cup for 10 cents
Total = 30 cents
I will pay you $1.00 for that delicious cup of lemonade

That’s perfect (my precious)!
Chris’ earnings and cash flows:

Revenue:
   Cup of Lemonade = $1.00

Expenses:
   Cost of goods sold = -0.30

   Earnings = 0.70
Milli starts a business

Acquires:
• Twenty cups and straws for $1.00
• Six lemons:
  • The first five cost 15 cents each
  • The sixth costs 25 cents
• A box of sugar for 2 dollars
Total = $4.00
I will pay you $1.00 for that lemon sugar drink

TOMORROW

IT’S A DEAL!
Milli’s Earnings (on a cash basis)

Revenue:     =  0
Expenses:    =  $ -4.00
Cash earnings =  -4.00
Comparison of CASH FLOWS

Chris’ Earnings = cash flows + accruals

0.70 = 0.70 + 0

Milli’s Earnings = cash flows + accruals

0.70 = $-4.00 + $4.70

Similar transaction occurred but cash-based performance looks very different
Accrual Accounting

THE TIMING OF CASH FLOW RECEIPTS AND PAYMENTS IS NOT IMPORTANT

Focus on underlying economics
Milli’s Earnings (on an accrual basis)

Revenue:
- Cup of Lemonade = $1.00

Expenses:
- Costs of good sold = 0.30

\[
\text{Earnings} = \text{Revenue} - \text{Expenses} = 1.00 - 0.30 = 0.70
\]
Comparison of ACCRUAL EARNINGS

Chris’ EARNINGS
0.70

Milli’s EARNINGS
$0.70

Earnings on accrual basis makes businesses comparable
Reconciling Earnings to Cash Flows

Earnings = cash flows + accruals

Chris

0.70 = 0.70 + 0

Milli’s

0.70 = $-4.00 + $4.70

Earnings are the same even though cash flows are very different

ACCRUALS = + 1.00 + 3.70 = $4.70

Receivable Inventory
1.00  3.70
Quality Issues with Milli’s accruals

I will pay you $1.00 for that cup of lemonade

TOMORROW

Accounts Receivable
Sold Lemonade!
Timely useful information

Good News
High inventory:
Milli anticipates future sales!

Bad News
Obsolete inventory
Nobody wants to buy lemonade

Gandalf may disappear
Comparison of Business Models

Chris’

Has Cash!!
Simple business

CASH = 0.70

Milli’s

Accruals are indicators of growth in RISKY investments

Accruals are estimates of the value of these investments but they can be wrong

ACCRUALS = 1.00 + 3.70
Comparison of Earnings Quality

Chris’

Earnings = cash flows + accruals

\[ 0.70 = 0.70 + 0 \]

Milli’s

Earnings = cash flows + accruals

\[ 0.70 = -4.00 + 4.70 \]

ACCRUALS CAN BE FUZZY AND CONTAIN ERRORS

CHRIS’ EARNINGS ARE HIGHER QUALITY THAN MILLI’S

CASH = 0.70

ACCRUALS = 1.00 + 3.70
Concepts of earnings persistence and predictability

- $Earnings_{t+1} = \beta \times Earnings_t + e$

  - $\beta$ closer to 1 means earnings are more persistent (sustainable)
  - VAR(e) closer to 0 means earnings are more predictable
Persistence of cash flow and accrual earnings components

• $Earnings_{t+1} = + \beta_1 \text{Cash flows}_t + \beta_2 \text{Accruals}_t + e$

\[\beta_1 > \beta_2\]
Understanding Earnings Quality

EARNINGS = CASH FLOWS + ACCRUALS

Earnings Quality research tries to disentangle

“Good” Accruals
that correctly reflect the
underlying economics of
the business

“Bad” Accruals
that reflect errors,
manipulation, and
overinvestment
• Philosophical Question:

• What is the objective of accrual accounting?

1. Economic perspective: (Balance Sheet perspective)
   – Investors care about firm value. The objective is to measure the value of assets and liabilities.

2. Performance evaluation (Income Statement perspective)
   – Investors want to know what management did this period. The objective is to measure how much income was generated this period.
Performance Evaluation Perspective

Assets\(_t\) – Liabilities\(_t\) = Shareholders’ Equity\(_t\)

Shareholders’ equity is the residual resulting from subtracting liabilities from assets.

Assets include cash
- assets that emerge from recognizing revenue when earned in periods before collecting the cash (e.g., accounts receivable)
- assets that emerge from deferring recognition of expense until recognition of related revenue (e.g., inventory).

Liabilities include interest-bearing debt
- liabilities that emerge from recognizing expense when incurred in periods before paying the cash (e.g. wages payable)
- liabilities that emerge from receiving cash in advance of the period of performance (e.g., receipts from customers prior to delivery of product or services).

In other words, the objective is to recognize: revenue whenever it is earned, and expense in periods when related revenues are recognized.
Economic Perspective

\[ \text{Assets}_t - \text{Liabilities}_t = \text{Shareholders' Equity}_t \]

\[ \Delta \text{Value (excluding “other comprehensive income” and capital transactions between the firm and its shareholders)} = \text{Income} \]

\[ \text{Assets}_{t+1} - \text{Liabilities}_{t+1} = \text{Shareholders' Equity}_{t+1} \]

\[ \Delta \text{Value includes transitory and unpredictable items} \]