

## CHAPTER 3

### CASH VERSUS ACCRUAL ACCOUNTING

#### Introduction

It is important that the banker understand the key differences between accrual and cash accounting. The general assumption here is that the banker ~~at least~~ has ~~at least~~ some basic accounting background and education. As such, an abbreviated review or discussion of accrual accounting is provided, but the training focuses on the big picture and presents some real life case studies and issues bankers need to understand. Both accrual accounting and cash accounting in some cases can be deceptive to the banker.

For instance, many small businesses may only produce cash basis financial statements and cash basis tax returns. In these cases, the banker needs to understand what the cash basis financial statements show and don't show. Cash basis financial statements, in particular, can be extremely deceptive, and are not in line with Generally Accepted Accounting ~~Principals-Principles~~ (GAAP). The consequence potentially could be incorrect loan decisions.

#### I. Key Accrual Accounting Concepts

##### A. *Accrual Accounting Defined*

From an accounting perspective, the term accrual means recording or recognizing an accounting transaction to the financial statements when earned and incurred ~~regardless of when actual cash is received or paid.~~

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For example, revenues are recorded as such when "earned" often defined as when the seller has performed on their part of the bargain or transaction and when the transaction is measurable in terms of an amount. A seller agrees to sell a product for a price and such agreement includes shipping. In this case the seller may sell the product with 30-day ~~interest-free~~ terms to the buyer. The seller records the sale on its accounting records when they have shipped the product to the buyer regardless of the fact that they may be paid in cash 30 days later. For our example, the seller has earned the ~~sell~~sale when they shipped the product and completed their side of the sales agreement. The act of recording a sale via an accounting journal entry is called "recognition." The term "accrual sales" refers to sales recognized as such where the cash has not yet been received. Such sales are also recorded on the balance sheet as an account receivable.

See ~~the income statement chapter~~Chapter 7: Income Statement Analysis for more details on "revenue recognition" as this concept over time has become a bit complex, especially for companies with contracts. New accounting rules related to revenue recognition are summarized in ~~the income statement chapter~~Chapter 7.

On the expense side, transactions are recorded when expenses are incurred regardless of when cash payment is received. Examples are a utility bill for electricity or salaries for employees not yet paid. The term *accrued expenses* refers to expenses recorded but not yet paid. Such expenses are recorded on the balance sheet as an accrued liability. For inventory purchased and not yet paid for, this is recorded on the balance sheet as an accounts payable.

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### ***B. Matching Principle***

As noted above, proper accrual accounting requires revenues be recognized in the period earned not necessarily when cash is received. And the matching principle requires expenses, which help generate such revenues, are recorded in the corresponding period in which the revenues are recognized. Various types of expenses are outlined below in terms of how they apply to the matching principle.

For example, cost of goods sold (inventory costs as well as other costs related to such inventory) is matched up with the corresponding inventory sales. Companies cannot expense inventory when purchased but must wait to recognize any costs until the actual sale occurs.

#### 1. Cost of Goods Sold

Cost of goods sold presents somewhat of a challenge for companies to properly record and expense inventory costs since purchases are numerous and difficult to track costs on a specific item basis for many companies. The following formula is a simple example of how cost of goods sold is calculated by many companies. See [the Chapter 6: Balance Sheet Analysis chapter](#) for more details on specific inventory accounting methods such as [First In First Out](#)[first in, first out \(FIFO\)](#) and [Last in First Out](#)[last in, first out \(LIFO\)](#).

Beginning Inventory	\$100,000
+ Purchases in Period	<u>\$100,000</u>
= Subtotal	\$200,000
Less Ending Inventory	<u>\$150,000</u>
= Cost of Goods Sold	\$50,000

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Thus, in this case the company sold \$50,000 of inventory. If the total sales were \$75,000 during the period, and cost of goods sold was \$50,000, then the gross profit for the period is \$25,000.

Sales	\$75,000
Cost of Goods Sold	<u>\$50,000</u>
Gross Profit	\$25,000

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Thus, the actual inventory purchases in the period do not match up with cost of goods sold. The cost of goods sold shows only the cost of actual items sold during

the period being in line with the matching principle. For some companies, the formula is more complex because other expenses may be allocated to cost of goods sold. For example, direct labor, equipment expense and other costs used to produce inventory would be allocated to cost of goods sold.

#### Companies with Inventory Using Cash Accounting

Generally the IRS requires most businesses with inventory to use accrual accounting to account for sales and inventory costs via the above methodology. Exceptions where true cash accounting is allowed include small sized businesses with sales \$10 million or less. In ~~our~~ Exercise 1 below, there is no inventory recorded on the balance sheet and the company qualifies for true cash accounting under the IRS exceptions. Thus, for our cash basis statements, cost of goods sold represents amounts paid to the suppliers. The IRS still requires tracking of costs that would otherwise be treated as inventory, and allows inventory costs to be deducted later of the period sold or period purchased. No beginning and ending inventory are assumed in this case, since all cash purchases go directly to COGS. ~~-(See cash accounting section below.)~~ It is the author's experience that most companies with inventory use accrual accounting.

#### 2. Period Expenses

Period expenses are general expenses incurred during the period, which help the company generate sales but cannot be associated with specific item sales. Examples are rent expense, utility expenses, general payroll expenses, etc. GAAP calls for these types of expenses to be recorded as an expense during the period incurred, regardless of when they were paid.

#### 3. Expenses Associated ~~W~~with Fixed or Capital Assets (Depreciation)

Fixed assets are assets that last longer than a year and help the company produce revenues over several periods. GAAP does not allow a company to expense fixed asset purchases in the same period they were purchased. Because such assets help the company produce revenue over multiple periods, ~~then~~ the cost of such assets must be allocated through depreciation expense over the useful life of such assets. For example, if equipment has a useful life of 5 years, then the equipment cost must be spread over 5 years through depreciation expense. This is in line with the Matching Principle, matching expenses with associated revenues generated over time.

#### Example of the Matching Principle and Accrual Accounting

A prime example of the matching principle is the *allowance for doubtful accounts method for bad debt expense*. Under this method the bad debt expense is projected for an upcoming period based on historical bad debt expense levels. The projection is usually based on average historical bad debt as percentage of sales or receivable. Essentially, you are recognizing in advance any bad debt expense that may occur in an effort to match in the same period accrual sales and bad debt expense that may ultimately occur on such recognized sales. Since sales are recognized on an accrual basis before actual cash collection, a portion may not ultimately be collected.

Without recognizing bad debt expense in advance under the allowance method, there may be a mismatch of accrual sales recognized in one period, and then if not collectible, the write-off may occur in the next period. Under the "Direct Method" of accounting for bad debt expense, bad debts are not recognized until an actual bad debt occurs. This is not in line with GAAP's matching principle.

*Example of Direct Method (not in line with matching principle)*

Under this example, let's assume that a sale is made on November 10, 2014 to ABC Company for \$100,000 with 30-day terms. The account becomes 120 days past due in early 2015, and the company wrote off the receivable in 2015.

November 2014 Sale to ABC Company on Accrual Basis	\$100,000
Write- Off in 2015 of Receivable from ABC Company	\$100,000

Impact on Profitability:

2014 Net Profit Overstated By	\$100,000
2015 Net Profit Understated By	\$100,000

One can see the choppiness that occurs under the direct method since bad debt is not matched up with the period when the "accrual sales" were recognized. Under the allowance method, as noted, the company projects in advance an estimated bad debt expense based on actual historical bad debt history.

*Example of Allowance Method*

Using our same example above, let's assume that based on the company's bad debt history through 2013, it estimates that bad debt expense will be \$90,000. As a result, it adds \$90,000 to its bad debt allowance or reserve account on the balance sheet (a contra asset account) and recognizes \$90,000 on its income statement as bad debt expense. It does not know in advance, obviously, which accounts may end up being uncollectible. The actual write-off occurs in 2015 at \$100,000 as noted above. Under the allowance method, at least we are very close to properly reflecting the actual 2014 profitability of the company based on ultimate write offs of 2014 accrual sales, although there is a \$10,000 variance. And 2015 profitability is now largely unaffected by the write-off of 2014 sales. An additional \$10,000 may need to be added to the reserve in 2015 because of the underestimation, but profitability is less choppy and the matching principle largely works as a result of the allowance method.

2014 Net Profit Overstated by	\$10,000
2015 Net Profit Understated by	\$10,000

| Under this method, a "contra asset" account is created, which has a credit balance and reduces accounts receivable, which has a debit balance. See Journal Entries

section below for details. When an actual bad debt occurs, both the accounts receivable and the allowance account are reduced, resulting in no net impact to the net accounts receivable number.

### ***C. Double Entry Accounting***

Double entry accounting means that with each accounting transaction there are always two accounting entries made and always two accounts that are impacted as a result. Many transactions impact both the income statement and the balance sheet, although there are some transactions that only impact one of the financial statements.

The left side of an accounting entry is called a debit and the right side of an accounting entry is called a credit. Assets and expenses have debit balances, and liabilities and revenues have credit balances. A debit entry to assets and expenses increases these accounts. A debit entry to liabilities and revenues reduces these accounts. A credit entry to assets, and expenses is a reduction to these accounts. A credit entry to liabilities and revenues is an increase to these accounts. The following includes a sampling of common journal entries, but in no way is this intended to be an exhaustive accounting chapter, ~~but Instead, treat it~~ as an abbreviated refresher focused on accrual accounting.

Common Sample Journal Entries:

*To Record an Accrual Sale*

Accounts Receivable (asset)	\$100,000
Sales	\$100,000

*To Record a Receivable Collection*

Cash	\$100,000
Accounts Receivable	\$100,000

*To Create An Allowance For Bad Debt Reserve Account or Increase the Account*

Bad Debt Expense (income statement)	\$90,000
Allowance for Doubtful Accounts (contra asset)	\$90,000

*To Write-Off an Uncollectable Receivable*

Allowance <del>for</del> Doubtful Accounts	\$90,000
Accounts Receivable	\$90,000

| *To Record an Expense Incurred **B**ut Not Paid*

Payroll Expense	\$1,000
Accrued Liability	\$1,000

*To Record a Payment on Such Expense/Liability*

Accrued Liability	\$1,000
Cash	\$1,000

*To Record an Expense Paid When Incurred*

Supplies Expense	\$500
Cash	\$500

*To Record Inventory Purchase*

Inventory (asset)	\$100,000
Accounts Payable (liability)	\$100,000

*To Record Equipment Purchase Financed by a Loan with 10% cash down*

Equipment (fixed asset)	\$50,000
Cash	\$5,000
Notes Payable	\$45,000

*To Record Accrued Interest on a Line of Credit*

Interest Expense	\$500
Accrued Interest	\$500

| *To Record **A**q Payment On a Line of Credit*

Short Term Notes Payable	\$1,500
Accrued Interest	\$500
Cash	\$2,000

## II. Issues with Accrual Accounting

First of all, accrual accounting in conjunction with the matching principle is in line with GAAP accounting and is greatly preferred by all parties including bankers and other financial statement users. However, while accrual accounting normally presents the best and most accurate financial picture, there are occasions when accrual accounting may be deceptive to the financial statement users.

### A. Occasional Issues with Accrual Sales

The fact of the matter is that accrual sales have not yet been collected. Recording such sales before cash collection occasionally comes back to bite a business as well as the financial statement user as decisions are made ~~on~~-based on recognized sales that are later reversed and not collected. This also potentially means accounts receivable collateral that goes away.

1. **A sale may end up being bad debt.** Banks may be exposed to large sales where the receivable or multiple receivables are not collected. The issue arises when the actual bad debt is much greater than any reserves that may be in place. Accrual sales impact sales, bottom line profitability as well as EBITDA (Earnings ~~B~~before Interest Taxes, Depreciation and Amortization). Decisions may be made on accrual sales that may ultimately become uncollectible.
2. **A sale or sales may be reversed.** This may occur through returns, discounts and allowances. While this may normally be low, the company may record accrual sales only to find out that their product or service was defective. Product issues including recalls are well publicized for larger companies, but are also somewhat common for smaller companies as well. Bank credit decisions may be made on accrual financial results before such issues are known.
3. While year-end audits normally catch uncollectible accounts receivable or sales issues, the audit only occurs once a year, and between year-ends numerous issues may and do occur. Companies may be very hesitant or slow to recognize problems on their accrual internal financial statements during the year.

#### *| Case Study 1: Contractor ~~not~~ Able to Collect Large Receivables*

A contractor building commercial properties for one of its customers suddenly ~~ran~~ into collection issues on over \$4 million of receivables. This ~~occurred~~ during the past economic downturn. Compounding the problem was the apparent failure of two smaller banks that were funding the construction on two of the

projects. Finally, the underlying customer strayed from their core business and got into other illiquid investments, which used up their liquidity just before the economic downturn. In the end, the contractor's customer was unable to fund further construction given the bank failures and its own financial mess. Unfortunately, the contractor had done a lot of work without getting paid because of past strong relationships.

The contractor had also recorded "accrual sales" of over \$4M on these projects. In addition, the bank had a sizeable line of credit with the contractor. When the banker pressed the contractor regarding the potential write-off of these receivables, they indicated that they still expected collection and were very hesitant to write off such receivables. The bank ~~downgraded~~ the line of credit. At year-end, the auditors wrote off the receivables, causing a large loss as well a substantial reduction to the contractor's net worth as predicted by the banker and underwriter.

It was the loan underwriter's initial questions on large past due receivables that revealed the issue. The contractor did not discuss the issue with the bank before being questioned. It was only good detective work on the part of the underwriter and the banker that fully flushed out the issues.

#### ***Case Study 2: Product Defects***

A company, engaged in the manufacture of food products, ran into an issue with some of its products. When the issues were found, a recall was needed. Clearly, the company had recognized sales and then had to later recognize the issue from a financial statement perspective. The net result was a write-off, a temporary loss, and a reduction to net worth. The bank had been relying on the company's accrual financial statements and had even approved an increased line amount to accommodate sales growth only to find out about the recall.

#### What the Banker Can Do:

- Always thoroughly examine current and recent accounts receivable agings for every credit request, even when the request has nothing to do with a line of credit.
  - Look for past due accounts and especially larger past due accounts that may be a sign of trouble.
  - Look for frequent and substantial credits memos on the accounts receivable aging. These are negative amounts on the aging, and signs of sales reversals.
  - Look for larger concentrations and any past dues from such concentrations.
  - Look for any negative trends of the above three bullet points.
  - Ask the customer about any issues you see on the receivable aging.

- Always ask the customer if there are any current major disputes or issues regarding its products or services. As occurred in [eCase Study #1](#) above, the customer unfortunately does not always volunteer negative information.

#### ***B. Deferred Revenues***

Deferred revenues are a liability and represent cash received in advance of the company earning and recognizing sales or revenues. Sometimes these may be referred to as deposits. While it is appropriate to account for such advance payments as a liability per GAAP, the nature of the accounting can be deceptive as briefly detailed below and in greater detail in both the Balance Sheet and Income Statement chapters. Deferred revenues are common for some companies that may work on large projects, franchisors who sell franchisees, etc. These companies typically need upfront funding in order to construct or complete projects or inventory. From an analytical perspective, the trouble arises when a company shows lumpiness in deferred revenues and, in particular, shows declining trends in this account.

From an accounting perspective, a company may receive a \$100,000 deposit on a large project, and not recognize the \$100,000 in revenue until the following period when the work is completed and the revenue is "earned," which is appropriate under GAAP accounting.

##### **Example**

The banker needs to be aware of overall trends of the deferred revenues, and the impacts on the financial statements due to accrual accounting. For example, a company shows a large reduction in its deferred revenue account between 2014 and 2015 from \$2 million to \$1 million. Typically, such declines represent a reduction in work. Once revenues are recognized, the account moves from a liability to revenues or sales. Revenues are credited and deferred revenues are debited or reduced. The net effect is recognizing revenues in 2015 when the cash was collected in prior periods. If the account were stable, this would not be an issue. However, when companies are experiencing declining sales and reduced profitability performance, the deferred revenue account can artificially pump up earnings and EBITDA from a cash flow perspective as well as mask negative trends to some extent.

Since the banking industry as a whole puts substantial weight on EBITDA as a cash flow measure, the banker should be aware in this case that \$1M of the EBITDA number contains non-cash revenues (revenues for which the cash was received in the prior period). This could be the difference between positive cash flow and negative cash flow for a business borrower. The following table assumes no change between 2013 and 2014 deferred revenue levels.

	<b>2014</b>	<b>2015</b>
Deferred Revenues	\$2,000,000	\$1,000,000
Sales	\$10,000,000	\$8,000,000
EBITDA	\$1,500,000	\$1,250,000
EBITDA Adjusted for non-cash revenues	\$1,500,000	\$250,000

In our case, the deferred revenues trends as a whole are down, and the net result is an EBITDA that is not even close to an accurate approximation of actual cash flow available to service debt from a banker's perspective. The UCA Cash Flow report does pick this change in deferred revenues as cash sales are reduced by the change amount. The other major concern is the negative trends here. Lower deferred revenues could frequently be a reflection of less work in the pipeline, and should always be thoroughly analyzed and discussed with the business.

-It is noted that 2015 is proper accounting, but sometimes, proper accounting presents a picture that may be not terribly useful from a banker's perspective. Most bankers rely heavily on the most recent historical results. They frequently ask in looking at the financial performance, "if the company performs as it did last year, will the company be able to service existing and proposed debt?"

New accounting rules for ~~Revenue~~ revenue recognition should help with this issue, but it is still something for the banker to look out for. See [Chapter 7: Income Statement Chapter Analysis](#) for a summary of the new accounting rules and more details on deferred revenue accounting.

**What the Banker Can Do:**

- Be aware of the impact of large changes in the deferred revenue account, especially declines in this account, which could result in earnings and EBITDA with substantial non-cash revenues.
- Adjust EBITDA for non-cash revenues. Just as EBITDA is before non-cash depreciation expense it should also be exclusive of non-cash revenues if significant. Again, as noted in ~~prior-the previous~~ chapter, the nature of accrual sales means a portion of sales is non-cash already as well as some accrued expenses. But one should look out for major shifts or one-time non-cash revenue sources such as reserve reversals for receivables and inventory.
- Ask customers to explain any significant negative trends in the deferred revenue account, as this is often a predictor of lower sales.

***C. Accrual Profits and Cash Flow***

As shown in the prior two sections, accrual based profitability is not always a good measure of cash flow. As a result, the banker needs to focus on the statement of cash flows or the UCA Cash Flow report in the spreadsheet in order to accurately access cash flow. As noted, bankers tend to use the accrual based measure of cash flow, ~~- EBITDA~~, which is not always accurate as explained in detail in ~~the~~Chapter 8: Cash Flow Chapter Analysis. See Exercise 1 below.

### III. Cash Accounting

Cash basis accounting recognizes revenues or sales when cash is received and expenses when cash is paid. Accrual accounting is much preferred as it applies the matching principle, where expenses are matched up with the revenues they help produce. The IRS allows small businesses with revenues up to ~~\$10 million~~ to use cash method of accounting for tax purposes (the \$10 million revenue limit is based on a three year average). As a result of small business owners not wanting to do two different sets of books, such owners may also use cash financial statements to match up with their cash tax returns. Cash accounting is very common for smaller businesses and nearly all individuals. As a result, bankers need to understand cash accounting and the ramifications of using this accounting method from an analytical standpoint.

**Comment [AB1]:** I notice you sometimes vary between saying "\$1 million" and "\$1M." It might be beneficial to do a find-and-replace of the entire book and standardize it one way or the other.

#### Types of Financial Statements a User May See:

- Accrual GAAP financial statements
- Accrual ~~Tax R~~turn with ~~N~~on-GAAP deductions and revenue items.
- Cash ~~B~~basis financial statements
- Cash ~~B~~basis tax returns with Non-GAAP deductions and revenue items.

#### A. *Issues with Cash Accounting*

1. **Matching Principle ~~is-Is~~ Not Applied.** As a result, the cash basis income statement may not reflect true GAAP profitability, and the cash basis balance sheet shows a limited number of accounts providing very limited analytical value as detailed below. Timing of cash receipts and payments can heavily skew profits from one year to the next. It is common for many small businesses to produce cash basis financial statements and cash basis tax returns. Cash ~~T~~ax returns, however, may adjust cash financial statements back to accrual accounting in Schedule M-1 of the tax return. These adjustments often result in an accrual financial statement that is still non-GAAP because many of the tax specific deductions are not adjusted in Schedule M-1, but are at least somewhat closer to GAAP. See Chapter 2: Financial Statement Quality and Spreadsheets for more details on how to spread a tax return and adjust back to an accrual financial statement using Schedule M-1.

- A small business owner may be more motivated to reduce taxes ~~versus instead of~~ showing strong results for bankers. And since they may prepare only one set of books (cash basis financial statements), the banker may receive "tax incented" financial statements, which may match up with the tax returns. The cash basis method of accounting tends to promote additional spending prior to year-end in order to reduce taxes or even the delay of cash receipts at year-end, although such tactics are not necessarily allowable by the IRS.
- Some major legitimate tax deductions include the ~~S~~pecial ~~B~~onus ~~D~~epreciation deduction and the Section 179 Election, which both allow substantial deductions for new capital expenditures. Both of these deductions are non-GAAP and result in large differences between tax and accrual GAAP financial statements. Given the fact that under GAAP capital expenditures must be depreciated over the life of the asset, these deductions represent a major departure from the matching principle. See prior chapter for explanations on these deductions.
- In addition, the IRS allows farmers and ranchers to "expense," as a deduction, prepaid expenses such as fertilizer, feed, etc. This further exacerbates distortions for cash basis financial statements and tax returns. Thus, the tendency is to prepay these expenses prior to year-end to gain a deduction.
- Thus, there can be substantial differences between cash and accrual financial statements and further differences between the accrual statements and cash tax returns due to allowed tax deductions, which are non-GAAP.

2. **Companies with Declining Sales Using Cash Basis Financial Statements.**

Companies with lagging accrual sales experience a temporary surge in cash receipts that may exceed the accrual sales number. Thus, a company could be doing very poorly from an accrual and true profitability perspective but ~~be~~ doing well from a cash basis perspective, at least temporarily, because of rapidly declining receivables, which spike cash receipts.

***Cash Study #3***

A ~~E~~company, sensitive to the economy, experienced a huge drop in sales the year following the ~~9/11~~ terrorist attack. Annual sales declined from \$10 million to \$5 million. The accrual financial statements showed a \$400,000 loss. In addition, the company's receivables declined in half from nearly \$2 million to \$1 million. This \$1 million decline was a boon to actual cash flow. While the accrual financial statements appropriately reflected a loss for the period, the company actually showed positive cash flow. If the company had prepared cash basis statements, the cash basis statements would have reflected positive profitability because of the additional \$1 million in revenues or cash collections, which were not reflected on the accrual financial statements. Effectively, the \$1 million decline in receivables

represents sales already recognized in prior periods on the accrual statements, but now recognized in the most recent period for the cash basis financial statements.

In this case, assuming the banker only had cash basis financial statements, then an incorrect credit decision could have been made because the company showed positive profitability, albeit not reflective of the current year accrual profitability (losses). Here is an example of some made-up numbers reflecting what you might find with such financial statements.

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	2001	2002
Accounts Receivable	\$2,000,000	\$1,000,000
Accrual Sales	\$10,000,000	\$5,000,000
Net Profit	\$1,000,000	<b>-\$400,000</b>
Cash Sales	\$9,500,000	\$6,000,000
Cash Net Profit	\$700,000	\$600,000

While the above numbers are made up, it is not too much different than from what the banker might expect under a severely declining sales scenario. Basically, there is a lag in recognized sales on cash accounting versus accrual accounting. In our case above, the cash basis profit is in no way reflective of true profitability in 2002. The boon to cash flow cannot be expected to continue if the sales decline continued. Losses would have accelerated and losses will ultimately be cash losses as receivable collections continue to decline. Essentially, the cash basis statements substantially distort the true profitability picture under this scenario. One will also see substantial differences between accrual and cash basis financial statements for rapidly growing businesses. In this case of rapid sales growth, however, the cash basis statements will at least show conservative profitability in most cases.

#### 4. Cash Basis Balance Sheet.

A cash basis balance sheet has very limited analytical value. Receivables, inventory, payables and accrued liabilities are typically excluded from the cash basis balance sheet. The net result is a financial statement that understates liquidity and net worth. See the following balance sheet as an example. There are different variations of cash basis financial statements including modified cash basis financial statements. Some modified cash basis balance sheets may show inventory and accrued liabilities and other accounts.

<b>Sample Accrual Balance Sheet</b>		
	<b>2001</b>	<b>2002</b>
Cash	\$100,000	\$100,000
Accounts Receivable	\$2,000,000	\$1,000,000
Inventory	\$3,000,000	\$1,500,000
Current Assets	\$5,100,000	\$2,600,000
Fixed Assets	\$1,000,000	\$1,000,000
Total Assets	\$6,100,000	\$3,600,000
Notes Payable	\$1,000,000	\$500,000
Accounts Payable	\$500,000	\$250,000
Accrued Liabilities	\$500,000	\$250,000
Current Liabilities	\$2,000,000	\$1,000,000
Long Term Debt	\$50,000	\$50,000
Total Liabilities	\$2,050,000	\$1,050,000
Net Worth	\$4,050,000	\$2,550,000
Total Liab. + Net Worth	\$6,100,000	\$3,600,000

**Comment [AB2]:** These are warped

<b>Sample Cash Basis Balance Sheet</b>		
	<b>2001</b>	<b>2002</b>
Cash	\$100,000	\$100,000
Current Assets	\$100,000	\$100,000
Fixed Assets	\$1,000,000	\$1,000,000
Total Assets	\$1,100,000	\$1,100,000
Notes Payable	\$1,000,000	\$500,000
Current Liabilities	\$1,000,000	\$500,000
Long Term Debt	\$50,000	\$50,000
Total Liabilities	\$1,050,000	\$550,000
Net Worth	\$50,000	\$550,000
Total Liab. + Net Worth	\$1,100,000	\$1,100,000

With the exclusion of a major accrual accounts, we get a very distorted picture of the company's balance sheet.

#### Quick Adjustments ~~To~~to Estimate Accrual Balance Sheet

With accounts receivable and payable agings that match up date wise to the cash basis balance sheet, the banker can quickly estimate what an accrual balance sheet may look like. It would still likely exclude accrued liabilities and if substantial the banker can request that figure or require accrued financial statements. This will not be 100% accurate in many cases, but will at least get the banker a relatively accurate quick estimate.

##### **Step 1:**

Add ~~a~~Accounts ~~R~~eceivable balance per A/R ~~A~~ging to ~~C~~urrent ~~A~~ssets.

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##### **Step 2:**

Add ~~A~~ccounts ~~P~~ayable balance per A/P ~~A~~ging to ~~C~~urrent ~~L~~iabilities. If you can get an accrued liabilities figure, then this account should be added as well to current liabilities..

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### Step 3:

The difference between newly added current assets and A/P is added to **Net Worth**.

The net result of the above steps is an estimate of the balance sheet from an accrual perspective. Some modified cash balance sheets may include inventory and accrued liabilities. An adjusted balance sheet is certainly better than using a cash basis balance sheet, which has little analytical value.

### Quick Adjustments to Estimate Accrued Sales

#### Using A/R ~~a~~gings

Beginning of Period A/R Aging Balance	\$1,000,000
End of Period A/R Aging Balance	<u>\$1,250,000</u>
Increase in A/R (accrued sales)	\$250,000
Cash Sales Per Cash Basis Income Statement	\$3,000,000
Add Accrued Sales*	<u>\$250,000</u>
Total Sales <del>On</del> on Accrual Financial Statement	\$3,250,000

\*If A/R declined in the period, it would be a reduction to cash sales to derive an accrued sales figure.

Since ~~the~~ cost of ~~the~~ goods ~~are~~ sold is a complicated formula, and accrual accounting requires tracking of beginning and ending inventory, simply adding or subtracting changes in accounts payable balances may not provide an accurate accrual COGS number, but at the very least, sales can be accurately estimated and a rough income statement and profit can be estimated by the banker to assess overall trends.

If you have accrued liability balances at the beginning and end of period, accrued expenses can be calculated as well by adding or subtracting the difference to cash operating expenses.

### ***Exercise 1: A Comparison of Accrual and Cash Basis Financial Statements***

For the exercise, our sample small business, a wholesaler, has historically produced cash basis financial statements and tax returns, as well as accrual financial statements. Reflected in Exhibit A and Exhibit B are spreadsheets for both the accrual financial statements and cash basis tax returns for the wholesaler. The differences between the cash basis tax returns and the compiled accrual financial statements cannot be completely reconciled regarding differences in the operating expenses and related party receivables. Some of the differences may be tax versus GAAP accounting along with differences between accrual and cash accounting. The banker should reconcile the differences with the customer.

However, we can reconcile sales and COGS differences, and most accounts match up relatively well, especially in the past couple of periods. The following exercise shows the stark differences between the types of accounting. It also illustrates some

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lumpiness that occurs with cash basis financial statements. In addition, there is a lag between accrual sales and cash sales, which may cause substantial distortion of true profitability for individual periods.

**Questions:**

Attached are Exhibit A and Exhibit B, which contain spreads on the accrual financial statements and cash basis tax returns, respectively. Using the exhibits, please answer the following questions focusing on the big picture versus unexplained differences.

**Comment [AB4]:** None of them are actually questions, just FYI

1. Discuss why accrual accounting is the accepted accounting method under GAAP.
2. Using Exhibit A and Exhibit B, identify the major differences between the accrual balance sheet and the cash basis balance sheet. Discuss why the cash basis balance sheet presents such a distorted picture of the company's balance sheet?
3. Using Exhibit A and Exhibit B, identify the major differences between the between the accrual income statement and the cash basis income statement.
4. Discuss several incorrect conclusions a banker may have regarding the cash basis financial statements (assuming the banker did not have the accrual financial statements).
5. Discuss ways to estimate an accrual income statement and balance sheet.

After the reader has you have answered the questions, they you are encouraged to check the answers to Exercise 1 at the end of Exhibit B. The answers are a critical part of this training, and essential to gaining additional perspective regarding differences between accounting methods.

**Comment [AB5]:** Here's another consistency concern—referring to the reader as "the reader" and "you" interchangeably. It'd be best to stick with one form of address.