
4. Managers' tools to meet earnings management incentives

Kalash Jain and Doron Nissim

1. OVERVIEW

Earnings management encompasses actions taken by managers to influence reported financial results, often to present a more favorable view of the company's performance.¹ In this chapter, we discuss the various earnings management tools that managers have at their disposal. We first consider manipulation of net income through *accruals* and *real earnings management*. Then, we disaggregate earnings management along the income statement, comparing manipulation of revenue, expenses, and gains and losses. We next consider how managers can leave bottom-line earnings unchanged but instead engage in *expectations management* to meet or beat earnings forecasts. We also explain how managers can manipulate the market perception of the firm's performance, risk, and growth prospects through *classification shifting* and *non-GAAP reporting*. After describing the various tools managers have access to, we conclude with a discussion of the trade-offs of earnings management tools.

2. ACCRUALS VERSUS REAL EARNINGS MANAGEMENT

2.1 Accruals Management

Earnings are the sum of two components: the cash component of earnings, known as “cash flow from operations,” and the “accrual” or non-cash component of earnings. Some example accounts that increase (+) or decrease (−) accruals are depreciation and amortization (−), stock-based compensation (−), deferred income taxes (−), impairment charges (−), gains and losses (+/−), and changes in working capital line items (e.g., inventory (+), accounts receivable (+), accounts payable (−), and accrued expenses (−)).

As an example, consider the following transactions related to inventory. In January, a company purchases \$10,000 worth of inventory with cash, decreasing the cash account by \$10,000 and increasing the inventory account by the same amount. Earnings equal cash flow from operations plus accruals = $-10,000 + 10,000 = 0$.

In February, the company sells \$4,000 worth of inventory for \$15,000 in cash. The sale increases the cash and revenue accounts by \$15,000. The inventory account decreases by \$4,000 (i.e., accruals are $-\$4,000$), and the cost of goods sold (COGS) account increases by \$4,000. Earnings again equal cash flow from operations plus accruals = $15,000 - 4,000 = 11,000$. The transactions are summarized in Table 4.1.

From this simple example, the difference between accrual and cash basis accounting can be seen. Cash flow is negative in January and positive in February, while earnings are

Table 4.1 *Timing of cash flow, accruals, and earnings implications of acquiring and selling inventory*

-	Cash flow	Accruals	Earnings
January	-10,000	10,000	0
February	+15,000	-4,000	11,000
Total	5,000	6,000	11,000

non-negative in both periods. At the end of February, the company still has inventory, meaning that the total profit (and cash flows) from the inventory purchase is not yet known.

This demonstrates that earnings are not equivalent to cash flow, and the \$6,000 accrual (net increase in inventory) is therefore necessary because cash paid for inventory is not equivalent to inventory expense. Accrual accounting, which matches revenues with the expenses incurred to generate those revenues, provides a more accurate picture of financial performance than cash basis accounting. That is, by recognizing revenue when earned and expenses when incurred, regardless of cash transactions, accrual accounting better reflects the economic performance of a business.

While accruals help adjust for timing discrepancies in cash flows, managers can manipulate accruals, either for personal gain or to benefit shareholders and other stakeholders. *Accruals management* occurs when a manager manipulates the accounting estimates and judgments reflected in accruals in order to impact earnings.

Accruals are susceptible to manipulation due to the inherent discretion in their measurement. Examples of when discretion is used to measure accruals include expected sales returns, uncollectible accounts, useful lives of fixed and intangible assets, salvage values, future warranty costs related to current and past sales, and expected return on pension plan assets. In some cases, the assumptions relate to the nature of the asset, liability, or activity. For example, whether (1) an expenditure should be capitalized or expensed; (2) an acquired intangible asset has an indefinite or finite life (affecting subsequent amortization); or (3) a lease should be classified as operating or financing (which have different patterns of expense recognition).

Accrual assumptions and estimates also relate to the identification and measurement of components in multiple-element transactions, including (1) assets and liabilities acquired in a business combination (affecting some gains and losses and subsequent expenses); (2) performance obligations in contracts with customers (impacting the pattern of revenue recognition); and (3) acquired buildings and the land they occupy (affecting subsequent depreciation, as land is not subject to depreciation).

Detailed examples of accruals management include:²

- *Expected sales returns:* When a firm makes a sale and returns are allowed, it must provision for returns using an estimate of the probability that an item is returned. This provision is an "accrual," and the estimate gives the manager discretion in how much revenue will be booked initially versus in the future. If the manager wants to delay revenue recognition, they can apply a high estimate of return probability and create a large provision for returns. Conversely, if the manager wants to book more revenue today, they can provision less of the recently sold goods. Over time, the manager also has the ability

to create a “cookie jar” of return provisions, which they can release into revenue when needed. While not entirely flexible, as managers have to maintain some consistency in provisioning behavior across time, there is enough leeway for them to adjust sales returns to manipulate earnings in the short term. However, these sales returns will eventually need to be recognized, potentially reversing earlier gains and harming future earnings.

- *Bad debt expense* functions similarly to expected sales returns. Firms book bad debt expense when they anticipate a failure to collect from customers who purchase on credit. If managers want to smooth earnings, they can overstate the bad debt expense when earnings are high, and they can understate the expense when earnings are low. The manager can also decide to book higher earnings in the current period by understating the bad debt expense. However, the credit sales associated with the understated bad debt expense will eventually go uncollected in a future period, and the firm will have to take a write-down at that time and replenish the allowance by recognizing a bad debt expense. Thus, eventually, earnings will be negatively impacted, and the overstatement will be reversed.
- *Warranty costs*: When a firm sells a product with an assurance-type warranty, a provision must be made for a warranty liability. This warranty cost involves substantial discretion and is susceptible to accruals management. Similar to returns and bad debts, warranties can be used to both overestimate and underestimate earnings.³ If the warranty liability is initially underestimated (or overestimated), earnings will be inflated (or reduced) initially. As before, in the long run, actual warranties will need to be honored. Thus, the estimates impact short-term reported profits but will not alter the true realizations of products coming back under the warranty. Depending on the incentives of the manager, managers can manipulate these estimates to achieve higher or lower short-term profitability.

2.2 Features of Accruals Management

Accruals management has several key features that managers must consider.

- Not all accruals are susceptible to manipulation, and there is heterogeneity in the ease of manipulation of the different line items. The recognition and measurement of some accruals involve substantial discretion, making them relatively easy to manipulate. Examples include bad debt, warranty claims, depreciation, impairment, and restructuring costs. Other accruals, especially those related to contractual liabilities like accounts payable, are more difficult to manipulate.⁴
- Accrual accounting choices have both direct and indirect effects. Due to the interconnected nature of accounting entries, certain accrual management decisions impact multiple accounts.⁵ As an example, write-offs, bad debt expense, and the allowance for doubtful accounts are jointly affected in the following SEC case:
 - From 2001 to 2003, Friedman’s Inc. engaged in systematic earnings inflation by granting management wide discretion in writing down receivables. The company manipulated its procedures to avoid taking write-offs, as write-offs would have necessitated recognizing bad debt expense to replenish the allowance for doubtful accounts. Proper accounting of receivables would have revealed that an allowance significantly greater than 10% of accounts receivable was needed, further increasing bad debt expense and demonstrating Friedman’s lack of financial health. The company eventually settled the charges with the SEC and paid a \$2 million fine.⁶

- From the manager's (CEO/CFO) perspective, accruals management within the bounds of GAAP is a legal but limited tool. When managers engage in accruals management that exceeds GAAP boundaries, they face risks of auditor or regulatory detection, potentially leading to legal consequences. In the post-SOX era, CEOs and CFOs are held more accountable for financial reporting accuracy.⁷
- Accruals management can be utilized throughout the year, including after the fiscal year has ended (before the issuance of the financial statements). However, some accruals – especially impairments and write-downs – are typically recognized later in the fiscal year, especially in the fourth quarter.⁸
- With few exceptions (e.g., stock-based compensation), the earnings effect of accruals management is temporary and will eventually reverse. If accruals are overstated in one period, the firm will face a future write-down, impairment, or other adjustment. Therefore, accruals management can only provide a short-term boost to income unless the manipulation grows continuously over time. This cumulative effect, where each round of manipulation necessitates even larger adjustments, is known as the “slippery slope.”⁹ In other words, initial overoptimism about an accrual (e.g., estimated sales returns) may temporarily inflate earnings, but it makes achieving future earnings targets more challenging. This leads to increasing pressure on managers to manipulate earnings further, pushing them down a “slippery slope” of escalating manipulation.
- Once accruals management snowballs, earnings and cash flows will begin to exhibit divergent trends. For example, if sales are made to higher-risk (or even fictitious) clients, a larger portion of earnings will come from accruals, like Accounts Receivable, rather than cash payments, resulting in earnings and cash flow showing different trends. Inconsistent patterns between earnings and cash from operations (as seen in the cash flow statement) are a key red flag for analysts and CFOs when spotting accruals management.¹⁰ And because accruals increase non-cash assets on the balance sheet, a bloated balance sheet (e.g., abnormally high Accounts Receivable balance) also indicates accruals overstatement.¹¹ A common example of this manipulation is under-depreciating assets by overestimating salvage values or extending asset life estimates, which can be identified from abnormally high net PP&E on the balance sheet.

2.3 Real Earnings Management

Real earnings management involves engaging in business transactions specifically to alter reported financial figures. In real earnings management, both the accrual and cash flow components of earnings can be manipulated.

Examples of real earnings management activities include:¹²

- *Cutting discretionary spending:* This practice involves reducing expenses that are immediately expensed on the income statement, with the goal of temporarily boosting earnings. As suggested by their name, the magnitude and timing of discretionary expenses can be manipulated by management. Examples include expenditures on Research and Development (R&D), advertising, maintenance, IT spending, startup costs, and relocation expenses. When engaging in this earnings management activity, executives need to decide which discretionary expenditure to cut and by how much. There is evidence that

firms prefer to cut discretionary SG&A relative to discretionary R&D, given that the market views R&D as more value-increasing than SG&A.¹³

- *Channel stuffing* is a practice where a company deliberately sends retailers or other distributors more products than they can sell, in an attempt to inflate sales figures for a particular period. This artificial boost in sales can mislead investors and analysts about the company's financial health. A prominent example of channel stuffing can be found in the case of Sunbeam Corporation. In the late 1990s, Sunbeam shipped large quantities of products to its distributors ahead of demand, offering deep discounts and extended payment terms to entice them to accept the excess inventory. This practice temporarily boosted Sunbeam's sales and earnings, creating a false impression of strong financial performance. The scheme began to unravel when distributors were unable to sell the excess inventory, which led to a significant decline in Sunbeam's future sales as the unsold products remained in the distribution channels. The SEC investigated the company, finding evidence that revenues were recognized prematurely through "bill-and-hold" transactions, where customers had not yet taken possession of the inventory. This led to charges against Sunbeam and its executives, as these transactions violated revenue recognition standards.¹⁴
- "*Sales pull-in*" activities involve accelerating sales that would normally occur in future periods into the current period. Companies achieve this by offering excessive discounts or favorable credit terms to customers to incentivize early purchases. While similar to channel stuffing (which targets distributors), sales pull-in activities are directed toward end customers. A notable example is Computer Associates (CA) in the early 2000s, where CA offered steep discounts and favorable terms to customers to close deals by the end of the quarter, allowing the company to recognize higher revenues immediately. This is a form of real earnings management because CA manipulated actual business operations (pricing through discounts) to meet earnings targets. CA also engaged in accruals-based earnings management by improperly recognizing revenue from contracts that were signed after the quarter-end, which violated GAAP. Unlike real earnings management, this strategy involved manipulating accounting entries to record revenue prematurely, without altering actual business operations. This example demonstrates how a company can use multiple earnings management strategies to inflate earnings.¹⁵
- *Overproduction* is a practice where a company produces more goods than are needed to meet current demand. The goal of this tactic is to spread fixed production costs – such as machinery depreciation, utilities, and factory overhead – over a larger number of units, thereby reducing the per-unit cost of goods sold and inflating profit margins. For example, there is evidence that the Big Three US auto manufacturers used this technique in 2005–2006 given their excess capacity to produce cars and high fixed costs, despite there not being sufficient consumer demand to purchase the vehicles.¹⁶ While overproduction can temporarily improve financial performance by lowering the reported cost per unit, it often leads to excess inventory, higher future costs per unit (due to lower levels of future production), higher inventory carrying costs, and potential inventory write-downs.

2.4 Features of Real Earnings Management

Real earnings management differs from accruals management in the following ways:

- While accruals management only affects the non-cash, accruals portion of earnings, real earnings management can affect both accruals and cash flows. Some forms, such as cutting discretionary spending, primarily affect cash flows, while other forms, such as channel stuffing, can affect both accruals and cash flows (often in partially offsetting ways).¹⁷
- Real earnings management directly affects the firm's operational decisions and activities, whereas accruals management merely adjusts financial estimates. As such, real earnings management activities typically have adverse impacts on the firm's future economic performance, such as reduced R&D leading to less innovation or overproduction leading to increased inventory holding costs. These actions can harm the firm's future earnings and can also harm employees. For example, research shows that when firms are incentivized to meet or beat analyst earnings forecasts, they tend to reduce investments in workplace safety, leading to an increase in injury rates.¹⁸ These firms also engage in "wage theft," such as not paying employees for overtime or forcing employees to underreport hours worked.¹⁹
- The direct effect of real earnings management on operations, by definition, leads to sub-optimal decisions from an NPV perspective. These are actions that managers would not have taken absent financial reporting incentives. For example, selling appreciated assets to report a gain inflates net income, but it also triggers immediate income taxes that could have been deferred, and the firm forgoes the ongoing benefits of the productive asset.²⁰
- From the firm's perspective, real earnings management is more costly than accruals management, as the transactions managers undertake impose carrying, tax, or other costs.²¹
- Real earnings management must be conducted during the fiscal year, often much before the end of the fiscal year (e.g., share buybacks to increase EPS). This makes real earnings management significantly less flexible than accruals management.²²

Given the potential impact on future performance, transaction-related costs, and lack of flexibility, one might expect managers to avoid real earnings management entirely. However, despite these costs, managers may still prefer real earnings management over accruals management due to its reduced detection risk, as auditors and regulators typically cannot influence operational decisions.²³ This makes detection primarily a concern for external users, such as investors. While some forms of real earnings management, like cuts in R&D or advertising, are relatively easy to detect, others are less obvious, making them attractive once within-GAAP accrual manipulation options are exhausted.

3. EARNINGS MANAGEMENT BY INCOME STATEMENT LINE ITEM

While the major goal of earnings management is to affect bottom-line net income, managers can do so by manipulating any part of the income statement. We have already categorized two forms of earnings management that managers can use: accruals and real activities. We

can also segment these earnings management tools by the *line item* on the income statement that the manipulation affects. There are three categories of line items that can be managed: revenue, expenses, and gains and losses.

3.1 Revenue

Under the joint FASB and IASB revenue recognition standard, an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.²⁴ This is achieved by following a five-step process:

1. Identify the contract(s) with a customer. A contract creates enforceable rights and obligations.
2. Identify the performance obligations in the contract. Performance obligations are promises to transfer distinct goods or services to the customer.
3. Determine the transaction price (including variable consideration). The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer.
4. Allocate the transaction price to the performance obligations in the contract. If a contract has more than one performance obligation, the transaction price should be allocated to each performance obligation based on the relative standalone selling prices of the goods or services promised.
5. Recognize revenue when (or as) the entity satisfies a performance obligation. Revenue is recognized when control of the promised goods or services is transferred to the customer, either over time or at a point in time depending on the characteristics of the transaction.

Each of these steps involves substantial discretion, which can be exploited by management to manipulate revenue and earnings.

- Step 1: Managers may recognize revenue from contracts that do not provide sufficient protection of their rights or that are negated by side agreements. This may occur in channel stuffing, sales pull-in, or other real earnings management activities, as well as when there is high uncertainty about cash collections or the terms of the contract.
- Step 2: Managers may deliberately combine or separate performance obligations in ways that accelerate revenue recognition or achieve other reporting objectives. For example, they might bundle a service with a product and claim the service is incidental, allowing for earlier recognition of the entire contract value. Alternatively, managers may separate performance obligations that should not be considered distinct to increase the portion of “recurring” revenue (e.g., improperly separating service revenue, which is often considered by investors to be more persistent than product sales).
- Step 3: Managers may manipulate the transaction price by underestimating expected discounts, rebates, or returns. For example, managers might strategically form a lower-than-expected probability that customers will take a 10% discount for early payment to inflate the transaction price and recognize higher revenue.

- Step 4: Managers may allocate more of the transaction price to performance obligations that are satisfied earlier. For example, by overstating the standalone selling price of initial deliverables – where one or more deliverables are not sold separately – managers can recognize more revenue upfront, leaving less for later performance obligations.
- Step 5: For performance obligations satisfied at a point in time (such as most product sales and some service transactions), revenue is recognized when there is a transfer of control to the customer, as indicated by factors such as the customer accepting the product, the customer having a present obligation to pay, the transfer of physical possession, the transfer of legal title, or the customer assuming the risks and rewards of ownership. However, managers may sometimes recognize revenue inconsistently with these principles, for example through channel stuffing and sales pull-in activities, as discussed in Section 2.3. Beyond these tools, managers may recognize revenue before there is a transfer of control by falsely asserting that the customer has accepted the asset, has an obligation to pay, or has taken on the risks and rewards of ownership. For performance obligations that are satisfied over time (most service contracts and some products), managers can overstate the degree of completion of the performance obligation or the estimated profit (e.g., by understating the estimated total cost to satisfy the performance obligation) to recognize more earnings in the current period.

3.2 Expenses

Under the matching principle, costs should be expensed in the periods in which the revenue that they helped generate is recognized. Implementing the matching principle is relatively straightforward for costs that are directly related to specific revenues; for example, the cost of inventory sold and sales commissions are matched against the related sales revenue in the same income statement. Other costs provide capacity to generate revenue and are recognized in the periods in which they are incurred or “consumed.” These include most SG&A expenses (e.g., administrative salaries, headquarters rent), interest expense, and even income taxes (deferred taxes are essentially motivated by a matching rationale). Costs that jointly benefit several periods (e.g., acquisition of fixed assets) require a systematic allocation to the periods that benefit (e.g., through depreciation), which in turn is based on estimates (e.g., useful life, salvage value).

Still, not all costs are recognized based on the matching principle. Costs that are expected to benefit future periods and for which the amount or timing of benefits is highly uncertain (e.g., R&D) are generally charged to expense as incurred. In addition, new information about prior years' activities, assets, and liabilities may lead to the recognition of expenses that are unrelated to current revenue. Examples include litigation, asset impairment, and restructuring charges.

Managers can manipulate expenses in various ways. Some techniques were covered in Section 2, such as *cutting discretionary spending*, *overproducing* units to spread fixed costs and inflate gross margins, and *understating estimated expenses* such as warranty, bad debt, and pension expenses. Other examples can be found below.

- Firms can *manipulate special or exceptional items* such as restructuring, impairment, or resolution of contingencies. For example, Tidewater, a company that operates offshore service vessels, kept the classification of non-functional vessels as “active,” instead of

classifying them as “withdrawn.” This manipulation allowed them to bypass the need to test the vessels for recoverability, as required whenever there are indicators of potential impairment such as significant adverse changes in asset use. Consequently, Tidewater avoided recognizing potential impairment losses, thereby inflating its earnings. Additionally, Tidewater did not review or adjust its depreciation estimates as required under GAAP when circumstances changed, further impacting reported earnings.²⁵

- *Capitalizing expenses* involves treating costs that should be expensed in the current period as capital expenditures, thus spreading the expense over multiple periods. This can artificially inflate current period earnings (and cash from operations) by deferring costs to future periods. A notorious example of this practice is the case of WorldCom. WorldCom, which was one of the largest telecommunications companies in the United States, engaged in massive accounting fraud by capitalizing operating expenses as capital expenditures. Specifically, WorldCom treated line costs, which should have been expensed, as capital assets. This manipulation allowed WorldCom to spread these costs over several years instead of recognizing them immediately, thus significantly inflating its earnings. The fraud was eventually uncovered, leading to one of the largest bankruptcy filings in history and severe legal consequences for its executives.²⁶
- *Overstating asset useful lives or salvage value* can inflate earnings by reducing depreciation expenses. In a particularly aggressive case, between 1988 and 1996, Waste Management manipulated its depreciation estimates for garbage trucks, containers, and equipment, representing about \$6 billion of its assets. These changes were recorded as headquarter adjustments and were often applied cumulatively from the start of the year, consistently reducing depreciation expenses and inflating earnings. The SEC eventually issued an AAER against Waste Management.²⁷
- *Changing the useful life designation of intangible assets* can reduce amortization or impairment charges. For example, licenses and trademarks can be classified as either finite or indefinite based on specific conditions. Firms may classify assets as indefinite-lived to avoid amortization and inflate earnings in the current period. Conversely, if an indefinite-lived asset approaches impairment, firms may reclassify it as finite-lived to spread out impairment costs through amortization. Since finite-lived assets are amortized over time, they are subject to less frequent impairment scrutiny. Specifically, their impairment test is based on undiscounted cash flows rather than fair value, allowing for greater managerial discretion. In contrast, indefinite-lived assets are subject to annual fair value impairment tests, making them more regularly scrutinized.
- Firms can also *understate the fair value of assets* acquired in business combinations that are subject to expensing, like equipment. By undervaluing the acquired equipment, a firm reduces future depreciation expense. The difference between the total purchase price and the understated value of the equipment is then attributed to goodwill, which is not subject to periodic expensing. This allows the firm to manage earnings by minimizing future depreciation costs and instead inflating the amount attributed to goodwill, which does not impact earnings over time.

3.3 Gains and Losses

Unlike revenue and expenses, gains and losses relate to peripheral or incidental activities and are reported in net earnings terms. For example, selling inventory with a book value of \$100

for \$150 results in revenue of \$150 and COGS of \$100, while selling an investment at these terms yields a \$50 gain. Consistent with their non-core nature, gains and losses are typically aggregated together and reported combined with other non-operating items immediately before pretax income under a caption such as “other income (expense).”

Managing gains and losses generally requires engaging in a real transaction, although some gains and losses result from the revaluation of assets or liabilities. There are several methods to manage earnings by recognizing gains or losses.

- One common approach, often referred to as “*cherry-picking*” or “*gains trading*,” involves selling debt securities or other productive assets for the recognition of gains or losses. While this form of earnings management can generate accounting gains, it may hurt future performance if the firm could have benefited from holding onto the investments or other productive assets for longer. Historically, investments in equities could also be cherry-picked in this way, but since ASC 321 became effective in 2018, most equity investments are measured at fair value. Therefore, most unrealized equity gains are now included in net income, and it is more difficult for firms to cherry-pick gains by selling equity securities.
- Firms can also *manipulate the fair value estimates* of various assets and liabilities, including private investments and those acquired in business combinations, to recognize gains through net income. Below are two examples illustrating these methods:
 - Private investment: Company A holds a 10% stake in a private startup, initially valued at \$5 million. A could potentially overstate the startup’s valuation, claiming it is now worth \$100 million instead of a more realistic \$50 million. This inflated estimate allows A to recognize a \$5 million gain (10% of the \$50 million increase) on its income statement.
 - Gains from step acquisitions: Company C owns 30% of Company D, recorded at a book value of \$20 million. C then buys the remaining 70% for \$70 million, implying a total valuation of \$100 million for Company D. As a result, C revalues its original 30% stake at \$30 million (30% of \$100 million) and recognizes a \$10 million gain on the income statement.²⁸
- The fair value of contingent consideration liabilities, known as “*earnouts*,” can be initially overstated and subsequently reduced to recognize a gain. For example, the company Swisher Hygiene acquired its franchisees, and the franchisees had an earnout based on a gross margin target. Swisher recorded a \$1 million earnout liability at the time of acquisition, based on unrealistic assumptions of the gross margin target. Later, Swisher claimed that the performance of the acquiree was worse than expected and thus reduced the earnout accrual by \$500,000, thereby artificially increasing earnings for the quarter.²⁹
- Gains or losses from the *securitization or sale of receivables* can be manipulated by managing the fair value estimates of retained interests, servicing rights or obligations, or recourse obligations, or by accounting for the transaction as a sale when control has not been surrendered. For example, Doral Financial Corporation sold “non-conforming” mortgages to First BanCorp. The SEC alleged that these transactions were not true sales under GAAP because of oral and email agreements by Doral to extend recourse provisions that effectively kept all the risk of the mortgages with Doral. These sales artificially created a gain on sale for Doral and inflated earnings.³⁰

4. EXPECTATIONS MANAGEMENT

One of the strongest motivations for managing earnings is to meet or beat analysts' earnings forecasts.³¹ For example, according to the SEC, from December 2016 through April 2018, PPG Industries manipulated accounting entries by improperly delaying the recording of certain expenses, understating expense amounts, and misclassifying gains from discontinued operations as income from continuing operations. These actions inflated PPG's core earnings and "were designed to enable PPG to meet, or come closer to meeting, analysts' consensus earnings estimates."³²

When executives are concerned that unmanaged earnings may fall below analyst estimates, they can either overstate earnings (as discussed in Sections 2 and 3), or they can manage the market's expectations of future earnings. The latter can be done by issuing, revising, or reiterating management guidance as well as through communications with analysts and other market participants.³³ For example, in June 2016, Citigroup's investor-relations department referred analysts to prior comments by the CEO predicting lower profits, leading to a sharp drop in forecasted earnings estimates. Consequently, when Citigroup reported its earnings in July 2016, the results exceeded these lowered expectations, resulting in a share price increase despite a year-over-year earnings decline. This strategic guidance allowed Citigroup to positively surprise the market and demonstrates how companies can manage investor expectations without new disclosures.³⁴

Private communications with investors can also influence expectations, but firms must be careful about violating Regulation Fair Disclosure (Reg FD), which mandates broad public disclosure of any material information. For example, in March 2016, AT&T's Investor Relations executives selectively disclosed material nonpublic information about a steeper-than-expected decline in smartphone sales to research analysts at approximately twenty firms. This private communication led analysts to significantly lower their revenue forecasts, aligning the consensus estimate with AT&T's expected revenue. This action helped AT&T manage market expectations and avoid a negative earnings surprise, but it violated Reg FD.³⁵

Another approach to manage analyst forecasts is through management's choice of exclusions in measuring non-GAAP earnings. The earnings construct that sell-side analysts forecast – referred to as "street earnings" – often excludes the same items that management excludes.³⁶ Evidence shows that when management does not provide guidance, analysts exclude significantly fewer items from their earnings estimates, suggesting that managers can influence analyst forecasts and market perceptions through their definition and guidance of non-GAAP earnings.³⁷

5. MARKET PERCEPTIONS MANAGEMENT

The discussion thus far has focused on the management of (reported and expected) bottom-line earnings. However, shareholders value not only current earnings but also the firm's future potential. Rather than merely inflating current earnings, effective managers adopt a valuation lens, aiming to maximize long-term shareholder value. From a shareholder value perspective, "high quality earnings" should have three characteristics: earnings should be highly recurring, have future growth prospects, and be associated with a low level of risk.³⁸ We next show

how earnings management can be used to increase the *perceived* degree of each earnings quality characteristic.

5.1 Recurring Earnings

Historical earnings are relevant to investors and other stakeholders primarily because they help predict future earnings. Thus, transitory earnings components are discounted by market participants, which may incentivize companies to “manage” the market perception of the transitory and recurring portions of earnings. This can be achieved by a method known as *classification shifting*. Classification shifting involves manipulating earnings classification by reporting recurring expenses as “unusual” or “special,” or as part of discontinued operations, or by reporting gains as revenue. It is especially common to classify recurring expenses as restructuring or repositioning charges.³⁹

Firms may similarly manage the classification of earnings between accruals and cash from operations to increase the perception of the firm's earnings quality.⁴⁰ For example, to increase cash earnings (and reduce accruals), a firm may sell receivables, engage in reverse factoring, or simply delay making payments to suppliers. In some cases, companies may inappropriately remove receivables from the balance sheet, thereby decreasing the accrual component of earnings (change in working capital) and increasing cash from operations.

One notable example of this is L&H Korea, which orchestrated a series of transactions with four Korean banks to improve market perceptions of its earnings quality by removing receivables and increasing cash flow. These transactions were accounted for as factoring on a non-recourse basis. However, L&H Korea entered into side agreements with the banks requiring L&H Korea to maintain blocked deposits to cover the amounts of the “factored” receivables, which the banks could apply to satisfy any collection shortfalls. Thus, these transactions were essentially fully secured loans from the banks to L&H Korea, rather than sales of receivables from L&H Korea to the banks.⁴¹

Another tool used to manage the market perception of recurring earnings is *non-GAAP reporting*. Among other adjustments, non-GAAP earnings exclude items that are considered non-recurring or non-core, and so they purport to measure recurring core earnings. However, these metrics often overstate recurring profitability. There are two primary methods for manipulating non-GAAP reporting: by adjusting metrics to enhance earnings perception and by selectively disclosing information to skew investor focus.⁴²

- Adjustments to metrics:
 - Excluding recurring costs such as amortization or stock-based compensation (SBC). Research shows that analysts often ignore SBC, which can contribute to inflated valuations and investor optimism, particularly when SBC is excluded from non-GAAP earnings.⁴³
 - Adjusting only for transitory losses while leaving transitory gains in non-GAAP earnings.
 - Creating new metrics with misleading labels like “community-adjusted EBITDA” (as seen in WeWork) to present an earnings measure that is not reflective of true recurring earnings.⁴⁴

- Disclosure practices:⁴⁵
 - Providing coarse or uninformative reconciliation between GAAP and non-GAAP figures, thus preventing market participants from fully assessing the appropriateness of adjustments.
 - Selectively disclosing non-GAAP metrics only when they enhance performance perception.
 - Highlighting non-GAAP metrics prominently while downplaying GAAP metrics, leading to an imbalanced view of the company's financial health.

For non-GAAP methods to change market perception effectively, firms rely on sell-side analysts to disseminate the adjustments to market participants, thereby embedding these adjustments into valuation metrics. As an example, the software company Adobe provides guidance on non-GAAP exclusions, and analysts can then use the guidance to adjust their earnings forecasts.⁴⁶ Driven by the coordination between sell-side analysts and firm managers, analyst earnings numbers line up with management's non-GAAP EPS projection and affect the price targets of Adobe. For example, after Adobe increased its non-GAAP earnings per share target from \$17.60–18.00 to \$18.00–18.20 in 2024 Q2, Morningstar increased its earnings forecast and valuation target from \$610 to \$635, citing “an adjusted P/E multiple of 35 times.” The updated adjusted EPS figure embedded in its price target exactly corresponded to Adobe's new guidance range.⁴⁷

Firms may also use non-GAAP metrics to manage perceptions of recurring earnings by introducing or emphasizing KPIs that measure recurring performance. An example of such a metric is Cisco's annualized recurring revenue (ARR), which measures the annualized revenue run-rate from active subscriptions, term licenses, and maintenance contracts and includes both revenue recognized ratably and upfront. This metric illustrates Cisco's strategic shift toward more predictable, recurring revenue streams and potentially provides investors with clearer insights into its business transformation.⁴⁸ However, since Cisco internally defines ARR, management can tailor the metric to present an overoptimistic view of recurring revenue growth.

5.2 Growth

Managing bottom-line earnings may affect growth expectations. For example, by overstating earnings, managers increase the current earnings growth rate, potentially implying higher expected growth (to the extent that growth is expected to persist). As another example, a firm may recognize a “big bath” charge, reducing subsequent depreciation or other operating expenses and increasing future earnings growth.⁴⁹

However, managers may also manipulate perceptions of growth in ways that do not affect bottom-line earnings. One method is to manipulate earnings classification, for example, by reporting operating expenses as R&D or advertising, or by shifting costs from COGS to SG&A.⁵⁰ Unlike other costs and operating expenses, R&D, advertising, and other SG&A expenses (e.g., hiring and information technology costs) are expected to yield future benefits. Another approach is to overstate revenue and costs by the same amount (i.e., no impact on earnings), increasing reported revenue growth; examples include overstating barter revenue or improperly reporting revenue gross instead of net (when serving as an agent).⁵¹ For instance, the SEC required Groupon to restate its pre-IPO revenues to nearly half of what was

previously reported because it was forced to recognize revenues at net proceeds, reflecting only the commission or fee earned, instead of gross proceeds, which included the merchant's share.⁵² Yet another tool to manipulate growth perceptions is through non-GAAP reporting; for example, by making adjustments that reduce comparative prior years' non-GAAP earnings to imply higher historical earnings growth rates.⁵³

5.3 Risk

An important motivation for earnings management is to "smooth" earnings over time to appear less risky.⁵⁴ However, managers may also manipulate risk perceptions in ways that do not affect bottom-line earnings. The activities discussed in Section 5.1 to increase the market perceptions of recurring earnings may also reduce risk perceptions, as a high proportion of recurring earnings suggests a low likelihood of subsequent earnings declines.

Beyond overstating recurring earnings, a common method for firms to appear less risky is to manipulate the balance sheet by shrinking reported liabilities. There are three key ways a firm can achieve this. First, it can remove "sold" receivables from the balance sheet while retaining significant risk, instead of reporting the transaction as secured borrowing (e.g., the L&H case described in Section 5.1). Second, firms may net assets and liabilities when there is no right of offset, such as netting recourse obligations against receivables. Third, they may avoid consolidating controlled entities and their debt. This can involve adjusting the percentage of ownership to be no more than 50% while retaining effective control (e.g., if other shareholders are not coordinated), engaging in related party transactions, or using special-purpose entities (SPEs) or off-balance-sheet financing.

Separate from balance sheet manipulations, managers can improve risk perception by manipulating earnings through non-GAAP reporting. It is easier for managers to meet or beat non-GAAP consensus benchmarks than GAAP consensus benchmarks, and beating consensus estimates helps reduce uncertainty about the firm's prospects and improves a firm's risk perception.⁵⁵ However, since the introduction of Regulation G in 2003 (Reg G), public companies are required to reconcile non-GAAP financial measures with the most directly comparable GAAP measures, providing investors with a clearer picture of the adjustments being made.⁵⁶ While Reg G was successful in improving non-GAAP reporting quality, it also increased classification shifting. Recent research suggests that about one-third of non-recurring expenses that are shifted to special items may, in fact, be recurring in nature.⁵⁷ This strategy can inflate short-term adjusted earnings, but it also increases long-term risks for the manager, such as increased stock price crash risk.⁵⁸ Thus, while non-GAAP adjustments and

classification shifting may benefit managers by boosting short-term performance, they also carry the potential cost of heightened crash risk and investor skepticism in the longer term.

6. CONCLUSION: TRADE-OFFS OF EARNINGS MANAGEMENT TOOLS

Managers have many tools to manage earnings. The broad categories of tools covered in this chapter are:

1. Discretionary accruals
2. Real earnings management
3. Expectations management
4. Non-GAAP exclusions
5. Classification shifting

With so many tools at their disposal, how do managers decide which tool to use? Research suggests that the choices of earnings management tools used by companies depend on the specific circumstances.⁵⁹ Deciding which tool to use entails evaluating the costs and benefits of each tool relative to another, and that choice is contextual.

Many managers may start with *accruals management*, as there is no direct impact on business operations. Managers use accruals management due to significant historical benefits, as investors did not fully differentiate between cash flow-driven and accruals-driven earnings.⁶⁰ Accruals were historically negatively related to future stock returns, as investors failed to internalize the lower persistence of accruals-driven earnings.⁶¹ However, after the discovery of this return pattern, investors increasingly price in accruals' lower persistence, reducing the relative attractiveness of relying on accruals for earnings management.⁶² Moreover, accruals management that is outside the bounds of GAAP can have legal implications.

If the cost of accruals overstatement is excessive (e.g., due to a bloated balance sheet or excessive detection risk), managers may conduct *real earnings management*.⁶³ The increase in (1) investors' awareness of accruals management; and (2) the risk to the CFO and CEO of engaging in these activities following SOX has made real earnings management activities more attractive, despite their negative NPV implications to the firm. However, if managers do not have real transactions they can credibly undertake during a fiscal period to manage earnings without incurring excessive costs, they may be forced to turn to other tools. For example, selling long-term investments, such as appreciating assets like land or patents, may yield a gain but can also trigger a significant tax cost and the loss of future growth potential. Moreover, managers may not even benefit from such earnings management if investors view the gains as transitory and exclude them from their assessments of core profitability.

If managers anticipate that managing earnings is either too risky or insufficient to meet analysts' forecasts, they may resort to *expectations management*. A key benefit of the tool is the ability to mitigate negative market reactions to earnings announcements using strategic communication, as opposed to directly manipulating earnings. However, expectations management carries significant risks, including potential violations of Regulation Fair Disclosure (Reg FD) if material information is selectively disclosed. Violations of Reg FD can result in

legal repercussions and damage to the company's reputation, as illustrated by the AT&T case in 2016. Overuse of expectations management can also erode investor trust and credibility, as stakeholders may become wary of consistently managed expectations. In addition, unlike the other tools, expectations management does not increase investors' perceptions of core profitability.

Non-GAAP exclusions provide managers significant flexibility to enhance the presentation of the company's performance and financial health, as they allow selective adjustments to current-period figures without directly impacting future earnings. This flexibility has made non-GAAP adjustments a valuable tool for meeting or beating earnings targets. However, increased regulatory scrutiny, particularly from the SEC's GAAP reconciliation requirement, has limited the scope of these manipulations. Investors are also increasingly skeptical of non-GAAP metrics and often discount earnings surprises driven by these exclusions.⁶⁴ Research shows that as the costs of other earnings management tools increase, firms rely more on non-GAAP reporting, though this often comes with a decline in the quality of these metrics.^{65, 66} Thus, while non-GAAP exclusions might be less costly than other tools in terms of immediate financial impact, excessive use can lead to a loss of credibility for management and investor trust.

Classification shifting allows managers to improve reported core earnings by reclassifying recurring expenses as non-recurring "special items." Unlike accrual or real earnings management, classification shifting does not affect future bottom-line earnings, making it relatively low-cost. However, as regulatory scrutiny and auditor detection capabilities have increased, this strategy carries the risk of reputational damage and potential penalties.⁶⁷ Additionally, as investors become more adept at detecting overstated "core" profitability, they may apply lower earnings multiples to these companies, or even reclassify "transitory" items as recurring, thereby diminishing the perceived value of the firm's adjusted earnings. Thus, similar to non-GAAP reporting, classification shifting is a useful yet risky tool, effective only to the extent that managers can avoid investor and regulatory backlash.

In conclusion, the choice of earnings management tools is a strategic decision that depends on the specific circumstances faced by managers. Each tool – discretionary accruals, real earnings management, expectations management, classification shifting, and non-GAAP exclusions – offers distinct advantages but also carries unique costs and risks. Managers must weigh these trade-offs carefully. Importantly, these trade-offs are not static, as the rising awareness among investors and increasing regulatory scrutiny will constantly force managers to adjust the portfolio of tools they deploy. Ultimately, managers must navigate these complexities to balance short-term performance with long-term sustainability and earnings quality.

Table 4.2 *Summary of costs and benefits of earnings management tools*

Tool	Benefits	Costs and Risks
<i>Discretionary Accruals</i>	• No direct impact on operations • Historically high benefits	• Reduced attractiveness due to investor awareness • Difficult to employ as balance sheets get bloated • Detection risk from auditors and regulators if outside of GAAP
<i>Real Earnings Management</i>	• Can circumvent increased scrutiny of accruals • Higher immediate impact	• Negative NPV implications • Direct impact on business operations
<i>Expectations Management</i>	• Manages market expectations without altering actual earnings	• Potential to violate Reg FD • Potential loss of credibility • Does not increase perceptions of core profitability
<i>Non-GAAP Exclusions</i>	• High flexibility • Does not borrow from future earnings • Can increase perceptions of core profitability	• Investor skepticism • Increased regulatory scrutiny in recent years (Reg G) • Required reconciliation reduces flexibility • Potential loss of credibility
<i>Classification Shifting</i>	• Lowest immediate cost • Can be hard to detect • Does not borrow from future earnings	• Regulatory and auditor detection risks • Potential loss of credibility

ACKNOWLEDGEMENTS

We thank the editors – Weili Ge, Allison Koester, and Sarah McVay – for their thoughtful comments and suggestions. All errors are our own.

NOTES

1. Healy and Wahlen (1999).
2. For additional examples, see Nissim (2024).
3. Cohen et al. (2011).
4. There is also variation in a firm's ability to manage earnings, depending on its internal controls. Robust internal controls, as highlighted in Chapter 2, act as a barrier to earnings management by limiting opportunities for manipulation. Firms with stronger controls (like segregation of duties and periodic reconciliations) have less room to adjust accruals or engage in classification shifting.
5. Calomiris and Nissim (2014).
6. <https://www.sec.gov/litigation/litreleases/lr-19477>

7. Beyond external monitors like auditors and regulators, internal monitors like the board of directors play a vital role in overseeing financial reporting and deterring earnings management practices. Effective board governance, particularly through independent audit committees, can help ensure that financial reporting is accurate and transparent, thus curbing management's ability to engage in earnings manipulation. Strong oversight from the board is part of the broader corporate governance framework that aims to align managerial actions with the best interests of shareholders. This is discussed in greater detail in Chapter 11.
8. Elliott and Shaw (1988).
9. Schrand and Zechman (2012).
10. Brown et al. (2015); Dichev et al. (2013).
11. Barton and Simko (2002).
12. For additional examples, see Nissim (2024).
13. Sun (2021).
14. <https://www.sec.gov/enforcement-litigation/administrative-proceedings/33-7976>
15. <https://www.sec.gov/enforcement-litigation/litigation-releases/lr-18891>
16. Brüggén, Krishnan and Sedatole (2011).
17. Note that an impact on accruals does not necessarily mean that the manager is performing *accruals management*.
18. Caskey and Ozel (2017).
19. Raghunandan (2021).
20. Another example of how earnings management can interact with income taxes is the "book tax trade-off," highlighted in Chapter 6. In the book tax trade-off, firms may forgo certain tax benefits to present better financial statement outcomes. This trade-off is related to earnings management, as firms sometimes prioritize financial statement appearance over tax minimization. For example, firms may choose FIFO (First-In, First-Out) inventory accounting for financial reporting to show higher earnings during periods of rising prices, even though LIFO (Last-In, First-Out) would provide tax benefits by postponing taxable income. Due to the LIFO conformity rule, if a firm uses LIFO for tax purposes, it must also use it for financial reporting. Firms can opt to forgo these tax benefits in order to present higher book earnings.
21. Cohen and Zarowin (2010); Kothari et al. (2016).
22. Investing in IT systems, such as Enterprise Resource Planning systems (ERPs), can alter this flexibility trade-off. On the one hand, ERPs can limit the flexibility of accruals-based earnings management by automating transaction recording and minimizing manual interventions. Conversely, these systems provide real-time data that allow managers to engage in real earnings management, offering more immediate insight into performance gaps and enabling them to make earnings-enhancing decisions, such as cutting discretionary spending or adjusting production during the reporting period.
23. These benefits from real earnings management may have increased after SOX, according to Graham et al. (2005).
24. https://fasb.org/page/getarticle?uid=fasb_NewsRelease05-28-14Body_0228221200
25. <https://www.sec.gov/files/litigation/admin/2007/34-56557.pdf>
26. <https://www.sec.gov/enforcement-litigation/litigation-releases/lr-17588>
27. <https://www.sec.gov/litigation/litreleases/lr-17435>
28. If a control premium were involved in the purchase of majority control, it would not affect the revaluation of the initial minority stake. In this example, we have assumed no control premium to simplify the arithmetic.
29. <https://www.sec.gov/files/litigation/admin/2016/33-10081.pdf>
30. <https://www.sec.gov/enforcement-litigation/litigation-releases/lr-20227>

31. For example, Graham et al. (2005).
32. <https://www.sec.gov/files/litigation/admin/2019/33-10701.pdf>
33. Management guidance is more thoroughly discussed in Chapter 8.
34. Johnson et al. (2020).
35. <https://www.sec.gov/news/press-release/2021-43>
36. Brown et al. (2015).
37. Christensen et al. (2011)7.
38. Nissim (2024).
39. McVay (2006).
40. As discussed in Section 2, investors and analysts consider the cash flow component of earnings as having higher quality than accrual earnings.
41. <https://www.sec.gov/enforcement-litigation/litigation-releases/lr-17782>
42. Alternate performance measures, including Non-GAAP metrics, are more thoroughly discussed in Chapter 7.
43. Mohanram et al. (2020).
44. “We define Community Adjusted EBITDA as Adjusted EBITDA before Growth Investments further adjusted to remove general and administrative expenses.” <https://www.ft.com/content/884e7da3-2de7-3c56-bdff-a308152ce086>
45. The SEC has increased regulation on such disclosure practices, but they are difficult to eliminate entirely.
46. <https://news.adobe.com/news/news-details/2023/Adobe-Reports-Record-Q4-and-Fiscal-2023-Revenue/default.aspx>. “Reconciliation of GAAP to Non-GAAP Financial Targets.”
47. <https://www.morningstar.com/stocks/after-earnings-is-adobe-stock-buy-sell-or-fairly-valued-3>
48. <https://www.wsj.com/articles/cisco-introduces-new-metrics-to-showcase-shift-toward-software-11631734200>
49. Moehrle (2002); Riedl (2004).
50. Traina (2018); Fan and Liu (2017).
51. Davis (2002).
52. <https://www.wsj.com/articles/BL-DLB-34865>
53. Schrand and Walther (2000).
54. Graham et al. (2005).
55. Graham et al. (2005).
56. It is important to note that Reg G will only help investors if they refer to the reconciliation tables. In practice, however, sell-side analysts and media outlets can choose to only focus on the non-GAAP “street earnings” figure during earnings reports and overlook the details of the adjustments. As a result, adjustments that might materially affect a firm’s risk perception can go unnoticed, allowing managers to report aggressive non-GAAP earnings with little consequence.
57. Cain et al. (2020).
58. Hsu et al. (2022).
59. Black et al. (2017); Doyle et al. (2013).
60. Bradshaw et al. (2001).
61. Sloan (1996).
62. Green et al. (2011).
63. Barton and Simko (2002).
64. Black et al. (2017).
65. Kolev et al. (2008); Guggenmos et al. (2022).
66. Laurion (2020).
67. Kolev et al. (2008).

REFERENCES

- Barton, J. and Simko, P.J. (2002) 'The Balance Sheet as an Earnings Management Constraint', *The Accounting Review*, 77(s-1), pp. 1–27. <https://doi.org/10.2308/accr.2002.77.s-1.1>
- Black, E.L., Christensen, T.E., Joo, T.T. and Schmardebeck, R. (2017) 'The Relation Between Earnings Management and Non-GAAP Reporting', *Contemporary Accounting Research*, 34(2), pp. 750–782. <https://doi.org/10.1111/1911-3846.12284>
- Bradshaw, M.T., Richardson, S.A. and Sloan, R.G. (2001) 'Do Analysts and Auditors Use Information in Accruals?' *Journal of Accounting Research*, 39(1), pp. 45–74. <https://doi.org/10.1111/1475-679X.00003>
- Brown, L.D., Call, A.C., Clement, M.B. and Sharp, N.Y. (2015) 'Inside the "Black Box" of Sell-Side Financial Analysts', *Journal of Accounting Research*, 53(1), pp. 1–47. <https://doi.org/10.1111/1475-679X.12067>
- Brüggen, A., Krishnan, R. and Sedatole, K.L. (2011) 'Drivers and Consequences of Short-Term Production Decisions: Evidence from the Auto Industry', *Contemporary Accounting Research*, 28(1), pp. 83–123. <https://doi.org/10.1111/j.1911-3846.2010.01042.x>
- Cain, C.A., Kolev, K.S. and McVay, S. (2020) 'Detecting Opportunistic Special Items', *Management Science*, 66(5), pp. 2099–2119. <https://doi.org/10.1287/mnsc.2019.3285>
- Calomiris, C.W. and Nissim, D. (2014) 'Crisis-Related Shifts in the Market Valuation of Banking Activities', *Journal of Financial Intermediation*, 23(3), pp. 400–435. <https://doi.org/10.1016/j.jfi.2014.05.002>
- Caskey, J. and Ozel, N.B. (2017) 'Earnings Expectations and Employee Safety', *Journal of Accounting and Economics*, 63(1), pp. 121–141. <https://doi.org/10.1016/j.jacceco.2016.12.002>
- Christensen, T.E., Merkley, K.J., Tucker, J.W. and Venkataraman, S. (2011) 'Do Managers Use Earnings Guidance to Influence Street Earnings Exclusions?' *Review of Accounting Studies*, 16(3), pp. 501–527. <https://doi.org/10.1007/s11142-011-9158-3>
- Cohen, D.A., Darrrough, M.N., Huang, R. and Zach, T. (2011) 'Warranty Reserve: Contingent Liability, Information Signal, or Earnings Management Tool?' *The Accounting Review*, 86(2), pp. 569–604. <https://doi.org/10.2308/accr.000000021>
- Cohen, D.A. and Zarowin, P. (2010) 'Accrual-Based and Real Earnings Management Activities around Seasoned Equity Offerings', *Journal of Accounting and Economics*, 50(1), pp. 2–19. <https://doi.org/10.1016/j.jacceco.2010.01.002>
- Davis, A.K. (2002) 'The Value Relevance of Revenue for Internet Firms: Does Reporting Grossed-up or Barter Revenue Make a Difference?' *Journal of Accounting Research*, 40(2), pp. 445–477. <https://doi.org/10.1111/1475-679X.00056>
- Dichev, I.D., Graham, J.R., Harvey, C.R. and Rajgopal, S. (2013) 'Earnings Quality: Evidence from the Field', *Journal of Accounting and Economics*, Conference Issue on Accounting Research on Classic and Contemporary Issues, 56(2), Supplement 1, pp. 1–33. <https://doi.org/10.1016/j.jacceco.2013.05.004>
- Doyle, J.T., Jennings, J.N. and Soliman, M.T. (2013) 'Do Managers Define Non-GAAP Earnings to Meet or Beat Analyst Forecasts?' *Journal of Accounting and Economics*, 56(1), pp. 40–56. <https://doi.org/10.1016/j.jacceco.2013.03.002>
- Elliott, J.A. and Shaw, W.H. (1988) 'Write-Offs as Accounting Procedures to Manage Perceptions', *Journal of Accounting Research*, 26, pp. 91–119. <https://doi.org/10.2307/2491182>
- Fan, Y. and Liu, X. (2017) 'Misclassifying Core Expenses as Special Items: Cost of Goods Sold or Selling, General, and Administrative Expenses?' *Contemporary Accounting Research*, 34(1), pp. 400–426. <https://doi.org/10.1111/1911-3846.12234>
- Graham, J.R., Harvey, C.R. and Rajgopal, S. (2005) 'The Economic Implications of Corporate Financial Reporting', *Journal of Accounting and Economics*, 40(1), pp. 3–73. <https://doi.org/10.1016/j.jacceco.2005.01.002>
- Green, J., Hand, J.R.M. and Soliman, M.T. (2011) 'Going, Going, Gone? The Apparent Demise of the Accruals Anomaly', *Management Science*, 57(5), pp. 797–816.

- Guggenmos, R.D., Rennekamp, K., Rugar, K. and Wang, S. (2022) 'The Relationship Between Non-GAAP Earnings and Aggressive Estimates in Reported GAAP Numbers', *Journal of Accounting Research*, 60(5), pp. 1915–1945. <https://doi.org/10.1111/1475-679X.12434>
- Healy, P.M. and Wahlen, J.M. (1999) 'A Review of the Earnings Management Literature and Its Implications for Standard Setting', *Accounting Horizons*, 13(4), pp. 365–383. <https://doi.org/10.2308/acch.1999.13.4.365>
- Hsu, C., Wang, R. and Whipple, B.C. (2022) 'Non-GAAP Earnings and Stock Price Crash Risk', *Journal of Accounting and Economics*, 73(2), 101473. <https://doi.org/10.1016/j.jacceco.2021.101473>
- Johnson, T.L., Kim, J. and So, E.C. (2020) 'Expectations Management and Stock Returns', *The Review of Financial Studies*, 33(10), pp. 4580–4626. <https://doi.org/10.1093/rfs/hhz141>
- Kolev, K., Marquardt, C.A. and McVay, S.E. (2008) 'SEC Scrutiny and the Evolution of Non-GAAP Reporting', *The Accounting Review*, 83(1), pp. 157–184. <https://doi.org/10.2308/accr.2008.83.1.157>
- Kothari, S.P., Mizik, N. and Roychowdhury, S. (2016) 'Managing for the Moment: The Role of Earnings Management via Real Activities versus Accruals in SEO Valuation', *The Accounting Review*, 91(2), pp. 559–586. <https://doi.org/10.2308/accr-51153>
- Laurion, H. (2020) 'Implications of Non-GAAP Earnings for Real Activities and Accounting Choices', *Journal of Accounting and Economics*, 70(1), 101333. <https://doi.org/10.1016/j.jacceco.2020.101333>
- McVay, S.E. (2006) 'Earnings Management Using Classification Shifting: An Examination of Core Earnings and Special Items', *The Accounting Review*, 81(3), pp. 501–531. <https://doi.org/10.2308/accr.2006.81.3.501>
- Moehrl, S.R. (2002) 'Do Firms Use Restructuring Charge Reversals to Meet Earnings Targets?' *The Accounting Review*, 77(2), pp. 397–413. <https://doi.org/10.2308/accr.2002.77.2.397>
- Mohanram, P., White, B. and Zhao, W. (2020) 'Stock-Based Compensation, Financial Analysts, and Equity Overvaluation', *Review of Accounting Studies*, 25(3), pp. 1040–1077. <https://doi.org/10.1007/s11142-020-09541-0>
- Nissim, D. (2024) 'Earnings Quality, Fundamental Analysis and Valuation', *SSRN*. <https://doi.org/10.2139/ssrn.3794378>
- Raghunandan, A. (2021) 'Financial Misconduct and Employee Mistreatment: Evidence from Wage Theft', *Review of Accounting Studies*, 26(3), pp. 867–905. <https://doi.org/10.1007/s11142-021-09602-y>
- Riedl, E.J. (2004) 'An Examination of Long-Lived Asset Impairments', *The Accounting Review*, 79(3), pp. 823–852.
- Schrand, C.M. and Walther, B.R. (2000) 'Strategic Benchmarks in Earnings Announcements: The Selective Disclosure of Prior-Period Earnings Components', *The Accounting Review*, 75(2), pp. 151–177.
- Schrand, C.M. and Zechman, S.L.C. (2012) 'Executive Overconfidence and the Slippery Slope to Financial Misreporting', *Journal of Accounting and Economics*, 53(1), pp. 311–329. <https://doi.org/10.1016/j.jacceco.2011.09.001>
- Sloan, R.G. (1996) 'Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings?' *The Accounting Review*, 71(3), pp. 289–315.
- Sun, E.Y. (2021) 'The Differential Role of R&D and SG&A for Earnings Management and Stock Price Manipulation', *Contemporary Accounting Research*, 38(1), pp. 242–275. <https://doi.org/10.1111/1911-3846.12634>
- Traina, J. (2018) 'Is Aggregate Market Power Increasing? Production Trends Using Financial Statements', *SSRN*. <https://doi.org/10.2139/ssrn.3120849>