## WHITE PAPER



# TRANSITIONING FROM FIFO TO WAC INVENTORY COSTING: IMPACT ON FINANCIAL PERFORMANCE IN FASHION RETAIL

#### Abstract

This paper examines the impact of transitioning from the First-In, first-out (FIFO) inventory costing method to the Weighted Average Cost (WAC) approach in the retail sector. It examines its implications on financial performance, including the bottom line, supplier relationships, cash flow management, financial reporting, and tax considerations.

While the paper explores FIFO and WAC, it also discusses the Last-In- First-Out (LIFO) methodology. Discussing their recognition under the International Financial Reporting Standards (IFRS) and the Generally Accepted Accounting Principles (GAAP), the paper provides real-world examples of their application. Additionally, it delves into the implications of these costing methods.



## Inventory Costing Methods – An Introduction

Inventory costing methods are crucial for businesses as they play a fundamental role in determining the cost of goods sold (COGS) and the value of ending inventory on financial statements. These methods help companies accurately represent their financial performance and make informed decisions.

The three most common inventory costing methods are First-In, First-Out (FIFO), Last-In, First-Out (LIFO), and Weighted Average Cost (WAC). FIFO is an inventory costing method that matches newer, higher-cost inventory with current sales, resulting in a higher COGS and lower reported profits with rising inventory costs. Conversely, WAC calculates the average cost per unit, resulting in a more stable COGS that can boost reported profits. The switch to WAC is expected to improve the bottom line, particularly in cases of rising inventory costs. This shift can result in higher profits, benefiting financial reporting and cash flow management. However, it is essential to carefully assess long-term implications and considerations related to supplier relationships and tax outcomes. LIFO is an inventory valuation method that assumes the most recently purchased products are sold first. The costs paid for those recent products are used in the calculation of the cost of goods sold (COGS).

Here are some key considerations of inventory costing methods:

- Accurate financial reporting: Inventory is a significant asset for many businesses, particularly in retail, manufacturing, or distribution. The COGS is a vital component of the income statement, while the ending inventory value appears on the balance sheet. Using appropriate costing methods ensures that these financial statements accurately reflect the company's financial health.
- Income statement impact: The COGS is subtracted from the company's revenue to calculate gross profit. Different costing methods can yield varying COGS values for the same transactions, affecting the gross profit margin, a key profitability indicator. Consistency in costing methods enables meaningful comparisons over time and with other businesses.
- Tax implications: The choice of inventory costing method can impact a company's taxable income. Some methods like LIFO may result in lower taxable income, while others like FIFO may lead to higher taxable income. Companies must align their choice of method with their tax strategy and assess its impact on cash flow.
- Inventory valuation: Accurate knowledge of ending inventory value is essential for financial reporting, insurance, and strategic purposes. The chosen costing method directly influences this valuation. FIFO often results in a higher ending inventory value when prices are rising, while LIFO may yield a lower value.

- Decision-making: Inventory costing methods can influence managerial decisions. For example, when deciding between producing more units or purchasing additional inventory, managers must consider the cost of goods sold. The choice of method can impact the perceived cost efficiency of these decisions.
- Consistency and comparability: Accounting standards typically require companies to use consistent inventory costing methods from one period to the next. This consistency ensures that the financial statements are comparable over time, allowing stakeholders to accurately assess the company's performance and trends.
- Stakeholder confidence: Accurate financial reporting enhances the confidence of investors, creditors, and other stakeholders in a company's financial statements. Consistent and transparent inventory costing methods build confidence by providing a clear and reliable picture of the company's financial position.

Ultimately, the choice between FIFO and WAC should align with the retailer's strategic objectives, industry norms, and regulatory requirements, as it profoundly influences various aspects of financial performance.



## Choosing the Best-suited Inventory Costing Method

Selecting the right inventory costing method requires the consideration of several factors, including the nature of the business, industry trends, tax implications, and financial goals. Listed below are steps that assist in making an informed decision:

- Know the available methods: Familiarize yourself with FIFO, LIFO, and WAC. Understand how each works and its impact on your financial statements.
- Analyze your inventory and business model: Consider the characteristics of your inventory. In industries like fashion retail, factors such as seasonality, changing trends, and product obsolescence can significantly influence your choice. For instance, FIFO may better suit matching the cost of older inventory with older, lower prices.
- Industry trends and standards: Research industry best practices and trends. While there may not be a one-size-fitsall approach, understanding how competitors and similar businesses in the fashion retail sector handle inventory costing can provide valuable insights.
- **Tax implications:** Consult a tax advisor to understand how each inventory costing method affects your tax liabilities. In some regions, specific methods may be favored or restricted for tax purposes. Consider how the chosen method aligns with your tax strategy.
- **Cash flow management:** Assess the impact of the method chosen on your cash flow. While FIFO tends to result in higher ending inventory values that can tie up more capital, LIFO may have the opposite effect. Choose a method that aligns with your cash flow needs and working capital requirements.

- Financial statement impact: Analyze how each method affects your financial statements. Consider how the COGS and gross profit margins will vary under different methods. Ensure that your financial statements accurately reflect the performance of your business.
- Consistency and transparency: Maintain consistency in your chosen method to ensure that financial statements are comparable over time. This consistency builds trust with stakeholders and provides a clear picture of your financial performance.
- Software and systems: Ensure that your inventory management software and accounting systems can support the chosen costing method. Implementing a method that aligns with your existing systems will streamline your inventory tracking and financial reporting.
- **Risk assessment:** Consider the risks associated with each method. For instance, LIFO may lead to higher costs when prices rise, potentially impacting profitability. FIFO may result in higher taxes with an increase in prices. Ensure you assess your risk tolerance and ability to manage these factors.
- Seek professional advice: Consult with accountants, financial advisors, and industry experts specializing in the fashion retail sector. They can provide valuable insights and help you make an informed decision based on your specific circumstances.
- Monitor and adjust: Regularly review the performance of your chosen method. If your business dynamics change or industry conditions shift, be prepared to reevaluate and adjust your inventory costing method accordingly.



### Recognition of Inventory Costing Methods by GAAP and IFRS

GAAP and IFRS provide guidelines for financial reporting, including the recognition and application of FIFO, LIFO, and WAC, among others. Let us look at some of the directives:

#### 1. FIFO valuation under GAAP and IFRS

#### GAAP:

- FIFO is widely accepted and considered a generally acceptable method for valuing inventory.
- It aligns with the principle of matching expenses with revenues by pairing older inventory costs with older sales.
- Companies can use FIFO under GAAP, unless they demonstrate that another method better represents the inventory flow and cost of goods sold.

#### **IFRS:**

- IFRS allows, and even encourages, the use of FIFO emphasizing the matching principle.
- It focuses on substance over form, requiring companies to use the method that best reflects the flow of goods and incurred costs.

#### 2. LIFO valuation under GAAP and IFRS

#### GAAP:

- GAAP generally allows the use of LIFO with restrictions.
- LIFO is less common because companies using LIFO for tax purposes must also use it for financial reporting, potentially resulting in inventory valuations that may not reflect current market prices.

#### IFRS:

 IFRS does not permit the use of LIFO; companies reporting under IFRS must use alternative methods like FIFO or WAC

#### 3. WAC valuation under GAAP and IFRS

#### GAAP:

- GAAP allows the use of WAC.
- WAC calculates the average cost of inventory items by dividing the total cost of goods available for sale by the total number of units available for sale.
- It is considered a simpler method, particularly in industries with relatively stable pricing.

#### IFRS:

- IFRS also allows for the use of WAC, calculating the average cost based on the total cost of goods available for sale divided by the total number of units.
- IFRS emphasizes consistency in applying the chosen method.

In summary, both GAAP and IFRS recognize FIFO and WAC as acceptable inventory costing methods. However, LIFO is largely prohibited under IFRS and subject to restrictions under GAAP Companies must choose the method that best reflects their inventory flow and cost structure, considering the specific rules and regulations applicable to their reporting framework.



### Illustrating Inventory Costing Methods in the Fashion Industry

Let us now consider an example that illustrates how the fashion industry might use FIFO, LIFO, and WAC.

A fashion retailer selling T-shirts experienced the following inventory transactions for a particular product during the year:

- January 1: Starting inventory of 100 T-shirts at \$10 each.
- April 1: Purchased 200 T-shirts at \$12 each.
- July 1: Bought 150 T-shirts at \$15 each.
- October 1: Purchased 300 T-shirts at \$18 each.

Ending inventory of 180 T-shirts.

## Calculating the COGS and the ending inventory value using FIFO, LIFO, and WAC

#### **FIFO**

Under FIFO, the oldest inventory is assumed to be sold first. Therefore, the COGS is calculated using the earliest purchase prices:

- First- 100 T-shirts from the starting inventory at \$10 each are considered sold.
- Next, 200 T-shirts from the April 1 purchase at \$12 each are considered sold.
- Then, 150 T-shirts from the July 1 purchase at \$15 each are considered sold.
- Finally, 120 T-shirts from the October 1 purchase at \$18 each are considered sold.
- COGS = (100 \* \$10) + (200 \* \$12) + (150 \* \$15) + (120 \* \$18) = \$1,000 + \$2,400 + \$2,250 + \$2,160 = \$5,810
- Ending inventory under FIFO: 180 T-shirts from the October 1 purchase and value of ending inventory is 180\*\$18=\$3240

#### LIFO

Under LIFO, the newest inventory is assumed to be sold first, which results in higher COGS as prices rise:

- First, 300 T-shirts from the October 1 purchase at \$18 each are considered sold.
- Next, 150 T-shirts from the July 1 purchase at \$15 each are considered sold.
- Then, 120 T-shirts from the April 1 purchase at \$12 each are considered sold.

- COGS = (300 \* \$18) + (150 \* \$15) + (120 \* \$12) = \$2,160 + \$2,250 + \$2,400 + \$1,000 = \$9090
- Ending inventory under LIFO: 180 T-shirts from the starting inventory of January 1 with value (80\*\$12) +(100\*\$10) =\$1960

#### WAC:

Under WAC, the average cost per unit is calculated based on the total cost of goods on sale divided by the total units on sale:

- Total cost of goods available for sale = (100 \* \$10) + (200 \* \$12) + (150 \* \$15) + (300 \* \$18) = \$1,000 + \$2,400 + \$2,250 + \$5,400 = \$11,050
- Total units available for sale = 100 + 200 + 150 + 300 = 750
- Average cost per unit = Total cost/Total units = \$11,050 / 750 = \$14.73 (rounded to the nearest cent)
- COGS under WAC:
  - Sell 570 T-shirts during the year (100 from the starting inventory + 200 + 150 + 120 from the October 1 purchase)
  - COGS = 570 T-shirts \* \$14.73 (average cost per unit) = \$8,409.10
  - o Ending Inventory under WAC:
  - o 180 T-shirts at average price of \$14.73
  - Ending inventory value = 180 T-shirts \* \$14.73 (average cost per unit) = \$2651.40.

These calculations illustrate how FIFO, LIFO, and WAC can result in different COGS and ending inventory values, impacting the financial statements and profitability of a fashion retailer.



### Impact of Inventory Costing Method on Accounting and Financial Statements

In the scenario we considered for the fashion retailer's inventory transactions using FIFO, LIFO, and WAC, there is clear evidence of significant impact on the company's accounting and financial statements. A summary is given below:

## 1. FIFO: Impact on COGS, ending inventory, and income tax

- COGS: Using FIFO results in a lower COGS of \$5,810. FIFO assumes that the oldest inventory is sold first, matching older, lower-cost inventory with current sales. Lower COGS leads to a higher gross profit and, consequently, an increased net income.
- Ending inventory: FIFO assigns the most recent purchase prices to the ending inventory, resulting in an ending inventory value of \$1,080 (30 T-shirts from the October 1 purchase remaining). While this strengthens the balance sheet, it may not reflect the current market value of the inventory.
- Income Tax Implications: FIFO may lead to higher taxable income and, therefore, increased tax liabilities in rising inventory cost situations. Companies must consider this impact when using FIFO for tax planning.

## 2. LIFO: Impact on COGS, ending inventory, and income tax

- COGS: LIFO leads to a higher COGS of \$7,810. It assumes that the most recent inventory is sold first, matching higher, more recent purchase costs with sales. This leads to a lower gross profit and net income.
- Ending inventory: Under LIFO, older, lower-cost inventory is assigned to the ending inventory, resulting in an ending inventory value of \$441 (30 T-shirts from the January 1 starting inventory remaining). This value may not accurately reflect the current market value of the inventory.
- Income tax implications: LIFO can result in lower taxable income and, therefore, reduced tax liabilities in rising inventory cost scenarios. However, it may not be allowed in some tax jurisdictions or may require additional recordkeeping for tax purposes.

## 3. WAC: Impact on COGS, ending inventory, and income tax

 COGS: WAC results in a COGS of \$8,409.10, calculated as the average cost per unit multiplied by the number of units sold. It represents a compromise between matching older costs with current sales (FIFO) and matching recent costs with sales (LIFO)

- Ending inventory: The ending inventory value under WAC is \$3,093.30, calculated as the average cost per unit multiplied by the number of units remaining in inventory. This method is less affected by fluctuations in purchase prices compared to FIFO and LIFO
- Income tax implications: WAC generally results in a moderate level of taxable income and is often considered a middle-ground approach for tax purposes.

# Applications of FIFO, LIFO, and WAC in the Fashion Retail Industry

Let us now consider how FIFO, LIFO, and WAC are applied to the fashion retail world, where inventory management and financial decisions are crucial.

**Context:** Imagine a clothing retailer specializing in designer jeans. Let us look at how each costing method could be applied to account for the retailer's inventory:

## 1. FIFO: Scenario, application, and impact in a dynamic setting

#### Scenario

The fashion retailer for designer jeans receives collections regularly, and older collections are often sold first. The inventory is a clothing mix with varying purchase prices owing to seasonality and changing trends.

#### Application

- When a customer buys a pair of jeans, the retailer applies the cost of the oldest pair in the inventory to calculate the COGS.
- The remaining inventory predominantly comprises newer, potentially higher cost pairs.

#### Impact

- If fashion trends dictate that older styles are less desirable, FIFO ensures that the cost of goods sold aligns with the oldest, lower-cost inventory, resulting in higher reported profits, particularly during periods of rising prices.
- FIFO reports higher profits, lower COGS, and higher ending inventory values.

## 2. LIFO: Scenario, application, and impact while keeping fashion fresh

#### Scenario

The retailer's priority is to maintain a fresh inventory line-up and selling the latest collection of jeans. The purchase prices for the newest collections are typically higher.

#### Application

- To calculate COGS, the retailer assigns the cost of the newest pair available in inventory when a customer buys a pair of jeans.
- The remaining inventory mainly comprises older, potentially lower cost pairs.

#### Impact

- LIFO typically results in higher COGS and lower reported profits during periods of rising prices, indicative of the higher costs associated with selling the most recent inventory first.
- It reports lower profits, higher COGS, and reduced ending inventory values.

## 3. WAC: Scenario, application, and impact while achieving balance in inventory management

#### Scenario

The fashion retailer maintains a diverse inventory and aims to smooth out fluctuations in purchase prices There is a need to find a balance between acknowledging the influence of cost variations and upholding simplicity in accounting.

#### Application

 The retailer calculates the average cost of all pairs of jeans available for sale, regardless of their age or purchase price, applying the average cost to calculate COGS and ending inventory.

#### Impact

- WAC provides a moderate approach that typically falls between FIFO and LIFO in terms of COGS and profit recognition, mitigating extreme fluctuations in COGS compared to FIFO and LIFO
- It reports moderate COGS, moderate profits, and balanced ending inventory values.

#### Considerations

- The choice of each method may depend on external factors such as tax regulations, industry norms, and their impact on financial ratios.
- FIFO often results in higher profits during rising prices, and potentially higher taxes.
- LIFO may result in lower taxes and lower profits but may not be allowed within some jurisdictions.
- WAC offers a balanced approach, making it a suitable choice for companies striving for harmony between simplicity and accuracy.

# Advantages and Disadvantages FIFO, LIFO, and WAC

Each of the three inventory costing methods has its own set of advantages and disadvantages. Let us compare the merits and demerits of FIFO, LIFO, and WAC:

#### 1. FIFO Pros and cons

#### Advantages

- Aligns current costs with revenues: FIFO matches the COGS with recent purchase prices, reflecting the reality of selling newer inventory first. This is especially beneficial in industries with rapidly changing product costs, like the fashion industry.
- Boosts reported profits: During increase in prices, FIFO typically results in higher reported profits as it pairs older, lower-cost inventory with current sales. This can attract investors and lenders, while enhancing a company's financial image
- Tax benefits: FIFO may reduce tax liabilities compared to LIFO in regions where taxes depend on profits, as it generates higher profits during price hikes.

#### Disadvantages

- **Distorted inventory valuation:** Under FIFO, the value of ending inventory may not accurately reflect its current market value, especially during rapid price increases.
- **Reduced cash flow:** FIFO can lead to higher ending inventory values, tying up more cash in inventory and potentially affecting cash flow.
- Potential for taxation on unrealized gains: While FIFO may result in lower tax liabilities, it can also lead to taxation on paper gains when the value of ending inventory surpasses replacement costs.

#### 2. LIFO Pros and cons

#### Advantages

- Tax benefits: LIFO can reduce taxable income and, therefore, lower tax liabilities during price hikes, providing immediate tax savings.
- Matches current costs: It pairs the latest inventory costs with current revenues, helping maintain profitability during inflationary periods.
- Effective cash flow management: LIFO can free up cash by reducing reported profits and tax obligations, which can be redirected toward investments or operational needs.

#### Disadvantages

- **Distorted inventory valuation:** LIFO may yield ending inventory values that do not align with the current market value, as it carries forward older, lower cost inventory.
- Lower reported profits: LIFO typically results in lower reported profits during inflationary periods, affecting investor perception and access to capital.
- Complex accounting: While LIFO may not be permissible in certain jurisdictions or industries, it also requires complex record-keeping.

#### 3. WAC Pros and Cons

#### Advantages

- **Simplicity:** WAC is a straightforward method that calculates the average cost of inventory and is easy to understand and apply, making it a preferred choice for some businesses
- **Moderate impact on profits:** WAC offers a balanced approach, resulting in moderate COGS and profit recognition, mitigating extreme fluctuations in reported profits.
- **Consistent inventory valuation:** The ending inventory value under WAC often aligns with a balanced approach, better reflecting the actual cost of inventory.

#### Disadvantages

- May not reflect current reality: WAC may not accurately represent the economic reality of inventory flow and the cost structure, treating all inventory as if it has the same cost.
- **Potential for distortion:** In rapidly changing cost environments, WAC may still result in some distortion of COGS and profits, albeit to a lesser extent than FIFO or LIFO

• **Ineffectiveness during price volatility:** WAC may not be the optimal choice in situations with significant price fluctuations as it doesn't fully capture the impact of changing costs.

# Impact of FIFO, LIFO, and WAC on Supplier Relationships

When a company selects different inventory costing methods, it can influence various aspects of the business, including interactions with suppliers. Let us explore how each method may impact supplier relationships:

#### 1. FIFO: Effects on supplier relationships

#### Positive impact on supplier relationships

- Suppliers may favor companies using FIFO owing to its tendency to yield higher reported profits, signaling financial stability and prompt bill payments.
- FIFO's lower COGS may allow companies to negotiate more favorable purchase prices with suppliers from perceived cost efficiencies.

#### Potential challenges for supplier relationships

- Suppliers might feel the pressure to maintain or reduce prices to accommodate companies using FIFO as they aim to keep costs low for enhanced profit margins.
- In times of falling prices, suppliers may worry about the impact of declining inventory costs on their revenue and profitability when dealing with FIFO-based customers.

#### 2. LIFO: Effects on supplier relationships

#### Positive impact on supplier relationships

 Suppliers may be open to engage in negotiations on pricing and terms with LIFO users, given that it often yields lower reported profits and taxable income. This can cause suppliers to view these customers as less profitable and offer more favorable terms

#### Potential challenges to supplier relationships

 Suppliers may be concerned about the potential impact of LIFO on their sales and profitability, being wary of lower inventory valuations affecting the perceived value of their products.

#### 3. WAC: Effects on supplier relationships

#### Positive impact on supplier relationships

 WAC typically has a moderate impact on profits and reported financials, potentially resulting in less pricing concerns from suppliers.

Suppliers may find companies using WAC to be a stable and predictable option, as it does not lead to extreme fluctuations in reported profits.

#### Potential challenges to supplier relationships

 Suppliers might not experience significant benefits or drawbacks when dealing with WAC users as it represents a balanced approach that doesn't strongly favor either side.

## Tax Implications of FIFO, LIFO, and WAC

The choice of inventory costing method can significantly impact a company's tax liabilities. The impact on taxes primarily depends on the effect of the chosen method on reported profits and the timing of cost recognition.

#### 1. FIFO: Tax implications and tax planning benefits

#### Impact on taxes

- During periods of rising prices, FIFO usually results in lower reported COGS and higher reported profits, leading to higher taxable income and, consequently, higher tax liabilities.
- Companies using FIFO may have to pay more in taxes because they match older, lower-cost inventory with current sales revenue, resulting in higher profits on paper.

#### Advantages for tax planning

- FIFO may be advantageous for companies aiming to demonstrate higher profits to attract investors or for other financial reporting reasons.
- In some countries, FIFO may better align with tax regulations or be the only permitted method.

#### 2. LIFO: Tax implications and tax planning benefits

#### Impact on taxes

- LIFO generally results in higher reported COGS and lower reported profits when prices rise, leading to lower taxable income and lower tax liabilities.
- Companies using LIFO may realize tax savings by matching the

most recent, higher-cost inventory with current sales revenue, resulting in lower profits on paper.

#### Advantages for tax planning

- LIFO benefits companies looking to reduce their current tax burden and generate immediate tax savings.
- In the US, for example, LIFO can be a valuable tax strategy requiring compliance with specific rules and regulations.

## 3. WAC (Weighted Average Cost): Tax implications and tax planning benefits

#### Impact on taxes

- WAC typically falls between FIFO and LIFO in terms of COGS and profit recognition, resulting in a moderate impact on taxable income.
- WAC aims to provide a balanced approach, resulting in moderate taxable income with less volatility than FIFO or LIFO

#### Advantages for tax planning

 Companies often choose WAC for a middle-ground approach to tax planning as it helps manage taxes without significant fluctuations in reported profits.



# Impact of FIFO, LIFO, and WAC on Financial Reporting

The choice of inventory costing methods wields considerable influence over financial reporting in the fashion retail industry. Let us list how each method exerts its influence on diverse facets of financial reporting:

#### 1. FIFO: Shaping financial reporting.

FIFO lowers COGS during price hikes, elevating gross profit and net income, projecting a favorable financial outlook.

- Higher value for ending inventory: FIFO tends to support a higher ending inventory value, reflecting the cost of newer, higher-priced inventory and bolstering the balance sheet with improved financial ratios.
- Advantages for financial reporting
  - FIFO polishes the company's appeal to investors and lenders, fostering the perception of profitability and stability.
  - o A boosted ending inventory value strengthens the balance sheet, attracting stakeholders.
- Disadvantages in financial reporting
  - o Higher reported profits may not always accurately mirror actual cash flows or economic realities in price surges.

#### 2. LIFO: Impact on financial reporting

- Lower reported profits: During price rises, LIFO raises COGS, leading to lower gross profit and net income and presenting a negative financial image to stakeholders.
- Lower value of ending inventory: LIFO typically portrays a lower ending inventory value as it reflects the cost of older, lower-priced inventory.
- Advantages for financial reporting
  - o LIFO can serve as a tax planning tool, curtailing profits, and taxable income to yield tax savings.
  - o It presents a more conservative financial picture, appealing to some stakeholders.

#### Disadvantages in financial reporting

- o Lower reported profits may influence investor perception and access to capital.
- o The lower ending inventory value may not always accurately reflect the present market value.

#### 3. WAC: Shaping financial reporting.

- Moderate impact on profits: WAC strikes a balance with moderate COGS and profit recognition, providing stability with inventory cost fluctuations on financial statements.
- Balanced ending inventory value: WAC maintains a moderate balance sheet impact, positioned between FIFO and LIFO
- Advantages in financial reporting
  - o WAC offers a stable and predictable financial image, simplifying financial statements for stakeholders.
  - It mitigates excessive profit fluctuations seen in FIFO and LIFO

#### Disadvantages in financial reporting

 WAC may not accurately capture the economic realities of inventory flow and cost structure when prices fluctuate significantly.

# Impact on Cash Flow From FIFO, LIFO, and WAC

The choice of inventory costing methods can significantly influence how businesses, including those in the fashion retail industry, manage their cash flow. Let us explore how FIFO, LIFO, and WAC impact cash flow.

#### 1. FIFO: Cash Flow Impact

- Potential for cash flow restraint: FIFO often ties up more cash in inventory due to higher ending inventory values, potentially constraining cash flow.
- **Delayed cash flow benefits:** While FIFO may lead to higher reported profits, the tax impact can reduce cash flow benefits, as higher profits can result in higher tax payments.

- Advantages for cash flow management
  - FIFO provides a consistent and transparent method that aligns with inventory flow, simplifying cash flow forecasting and management.
- Disadvantages for cash flow management
  - o Higher ending inventory values under FIFO may limit available working capital for other business needs.

#### 2. LIFO: Cash Flow Impact

- **Potential for cash flow release:** LIFO often frees up cash tied to inventory due to lower ending inventory values.
- **Tax efficiency:** LIFO generates immediate tax savings during rising prices, increasing cash available for operations.
- Advantages for cash flow management
  - o LIFO enhances cash flow by reducing reported profits and tax liabilities, effectively boosting cash reserves.
- Disadvantages for cash flow management
  - o Lower ending inventory values under LIFO may not accurately reflect the current market value of the inventory.

#### 3. WAC: Cash Flow Impact

Moderate cash flow impact: WAC provides a moderate approach to cash flow management, avoiding extreme cash tie-ups (as with FIFO) or substantial immediate tax savings (as with LIFO).

- Stability and predictability: WAC generally offers more stable and predictable cash flow compared to FIFO and LIFO
- Advantages for cash flow management
  - o WAC suits businesses seeking a balance between cash flow constraints and tax savings.
- Disadvantages for cash flow management
  - WAC may not offer the same cash flow benefits as LIFO during rising prices, or the simplicity of cash flow management seen with FIFO.

### Industry Practices in FIFO, LIFO, and WAC

Different sectors of the retail industry often adhere to industry norms influenced by regional practices, regulatory requirements, and market dynamics. Given below is an overview of how these methods is commonly used in various segments of the retail industry:

#### 1. Grocery and food retail

**FIFO:** Widely adopted in the grocery and food retail sectors, FIFO aligns with the practice of selling perishable items in the order they are received, simplifying inventory management for products with expiration dates.

**WAC:** Some grocery and food retailers use WAC for non-perishable items or those with relatively stable prices.

#### 2. Fashion retail

**FIFO:** It is commonly used in fashion retail for tracking seasonal or trend-driven products, ensuring that older collections are sold first in an industry prone to product obsolescence.

**WAC:** Fashion retailers may use WAC for basic or staple items with relatively stable prices.

#### 3. Electronics and technology retail

**WAC:** Electronics and technology retail often favor WAC as it provides a middle-ground approach to inventory costing, helping manage fluctuating costs while maintaining price stability.

#### 4. Automotive parts retail

**LIFO:** More prevalent in the automotive parts retail sector, LIFO allows companies to match recent, typically higher-cost parts with current sales.

#### 5. Jewelry retail

**LIFO:** The jewelry retail sector, with varying costs of precious metals and gems, may prefer LIFO to manage tax liabilities and pricing fluctuations.

#### 6. Home improvement and building materials retail

**WAC:** Building materials and home improvement retailers find WAC suitable for managing inventory costs while offering relatively stable pricing.

#### 7. General merchandise retail

**WAC:** Many general merchandise retailers, such as department or discount stores, opt for WAC as it provides a moderate approach, balancing cost fluctuations and pricing stability within the sector.

# Switching from FIFO to WAC: Key Considerations

Transitioning from FIFO to the WAC method requires specific accounting adjustments. Here are the key accounting changes to consider during this transition:

#### 1. Calculation of WAC

 Calculate the WAC per unit for the existing inventory by summing the total cost of all units on hand and dividing it by the total number of units.

#### 2. Adjustment to opening balances.

- Update the opening balances in your accounting records to reflect the new WAC per unit, impacting the beginning inventory for the period of transition.
- Make journal entries to update the starting inventory with the new cost, and then debit or credit the appropriate accounts to reflect the change in cost.

Example:

Debit: Inventory (opening balance)

Credit: Retained earnings (or the relevant equity account)

#### 3. Recording purchases and sales

- o Going forward, record purchases and sales using WAC per unit
- o Calculate the COGS for each sale by multiplying the number of units sold by WAC.
- o Ensure consistency in your accounting system and software to accommodate the new method.

#### 4. Adjustment to financial statements

- Update your financial statements, including the income statement and balance sheet, to reflect the changes in cost and inventory values.
- o Review and adjust the presentation of inventory values and costs on your financial statements to comply with accounting standards and provide transparency to stakeholders.

#### 5. Tax implications

 Consult with tax professionals to understand the implications of switching to the WAC method as you may need to adjust for tax reporting purposes.

### 6. Documentation and disclosures

- Maintain clear documentation of the transition from FIFO to WAC, including calculations, journal entries, and any explanations for the change.
- Consider disclosing the change in your financial statements or accompanying notes to inform stakeholders about the accounting method change.

### 7. Compliance with accounting standards

o Ensure that the accounting change adheres to accounting standards and regulations applicable to your industry and jurisdiction.

### 8. Internal controls and staff training

- Implement internal controls to prevent errors and ensure the correct application of the new inventory costing method.
- o Train accounting and finance staff on the new method to ensure accurate recording and reporting.

#### 9. Communication with stakeholders

o Communicate the accounting method change to relevant stakeholders, such as shareholders, auditors, and lenders, to provide transparency and address any concerns early on

## Switching from FIFO to WAC

Transitioning from FIFO to the WAC method can significantly impact various aspects of the business, including supplier relationships, cash flow management, financial reporting, and tax implications. Here is a breakdown of the changes to expect:

### 1. Supplier relationships

- Impact: Suppliers' reactions to the switch from FIFO to WAC may vary, depending on their expectations and contracts, making transparent communication crucial
- Advantages:
  - o **Pricing stability:** WAC offers more stable pricing, which can benefit suppliers by minimizing cost fluctuations.
  - o **Consistency:** Suppliers may appreciate a more consistent approach to pricing and inventory valuation

#### Disadvantages:

- Negotiations: Suppliers accustomed to FIFO may need to renegotiate pricing and terms if they view the switch as unfavorable
- o **Impact on supplier costs:** Some suppliers might pass on cost increases to the retailer if their expenses have risen.

#### 2. Cash flow management

Impact: Transitioning from FIFO to WAC can affect cash flow management

#### Advantages

- Reduced cash tied in inventory: WAC typically requires less cash tied up in inventory compared to FIFO, potentially improving cash flow.
- o **Stable cash flow:** WAC provides a more predictable cash flow pattern, facilitating budgeting and planning.

#### Disadvantages:

 Moderate tax impact: While WAC may enhance cash flow management compared to FIFO, it may not offer the same level of immediate tax savings as LIFO.

#### 3. Financial reporting

 Impact: The transition to WAC alters the valuation of inventory, COGS, and, consequently, financial statements

#### Advantages:

- Moderate impact on profits: WAC typically results in moderate COGS and profit recognition, creating a balanced financial picture.
- o **Stable reporting:** WAC makes financial reporting more stable and predictable.

#### Disadvantages:

 Comparison challenges: Comparing financial statements with previous FIFO-based periods may be more challenging due to differing profit levels.

#### 4. Tax implications

Impact: Changing inventory costing methods can have tax implications

#### Advantages:

 Moderate tax impact: WAC generally incurs a moderate tax impact compared to LIFO or FIFO, and may not yield immediate tax savings, while also avoiding significant tax increases

#### Disadvantages:

 Deferred tax benefits: Transitioning to WAC may not provide immediate tax benefits associated with LIFO during periods of rising prices.

# Transitioning from FIFO to WAC: An Illustration

In this section, we illustrate how switching from FIFO to WAC involves navigating the impact on supplier relationships, cash flow management, financial reporting, and tax implications.

#### Embarking on the transition – Using FIFO:

- The retailer in our example specializes in designer handbags, diligently following the FIFO method, while witnessing an upswing in fashion costs
- The starting inventory on January 1 is 100 handbags, valued at \$200 each.
- Through the year, the retailer makes two purchases:
  - o 50 handbags on April 1 at \$220 each
  - o 75 handbags on August 1 at \$240 each
- Throughout the year, the retailer sells 150 handbags.

#### Shifting supplier dynamics:

- Suppliers appreciate the FIFO method, which keeps their products at higher price points.
- However, the switch to WAC may necessitate discussions with suppliers for a more consistent pricing approach.

#### Managing cash flow:

- Under FIFO, the retailer faces the pattern of rising costs, which can tie up cashflow.
- Switching to WAC will free up valuable capital owing to the stability of the average unit cost.

#### **Reshaping financial reports:**

- With FIFO, the financial reports show higher profits as handbag prices soar.
- Transitioning to WAC results in a more moderate profit structure and a more stable financial landscape

#### Tax implications:

- Using FIFO leads to higher taxable income and subsequent higher tax liabilities.
- Switching to WAC may result in easing the tax load, albeit with moderate immediate tax savings when compared to LIFO.

#### Transition to WAC in numbers:

- Calculate the WAC
- {(100 \* \$200) + (50 \* \$220) + (75 \* \$240)}/ (100 + 50 + 75) = \$22,000 / 225 = \$97.78 per handbag (rounded to two decimal places)
- Update financial records:
  - o Adjust the opening balances:
    - Under FIFO, beginning inventory = 100 handbags at \$200 = \$20,000
    - Adjusted beginning inventory under WAC = 100 handbags at \$97.78 = \$9,778
    - Debit retained earnings (equity) for the difference:
      \$20,000 \$9,778 = \$10,222
- Record purchases and sales using WAC:
  - o Purchase 1 (April 1st)
    - Cost = 50 handbags \* \$97.78 = \$4,889
    - Debit inventory, credit cash
  - o Purchase 2 (August 1st)
    - Cost = 75 handbags \* \$97.78 = \$7,333.50
    - Debit inventory, credit cash

- Sales throughout the year:
  - o COGS = 150 handbags \* \$97.78 = \$14,667
- Record sales revenue and COGS accordingly
- Impact on financial reporting:
  - The income statement shows moderate profits with the balance sheet reflecting a lower inventory value compared to FIFO.
- Tax implications:
  - Lower taxable income due to the switch from FIFO to
    WAC may lead to reduced tax liabilities, with a promise of potential tax savings.

In summary, transitioning from FIFO to WAC can influence the bottom line, which typically refers to a company's net income or profit.

# Impact of Inventory Costing Methods on Profit, Taxation, and Long-term Strategies

#### 1. Profit realization

- **FIFO:** FIFO matches recent inventory costs with current sales, often leading to higher COGS and lower reported profits in times of rising inventory costs, as older, lower-cost inventory remains.
- WAC: WAC calculates an average cost per unit based on all inventory purchases, resulting in a more moderate and stable COGS, leading to more stable and moderate reported profits.

#### 2. Impact on the bottom line

- Switching from FIFO to WAC: Transitioning from FIFO to WAC typically boosts the bottom line, especially during periods of rising inventory costs. This shift reduces COGS and results in higher reported profits.
- Rationale: Under FIFO, older, lower-cost inventory is matched with current sales, increasing COGS. Switching to WAC averages higher-cost inventory with the lower-cost inventory or the older stock, reducing the overall COGS and increasing profits

#### 3. Tax implications

- FIFO: Higher COGS under FIFO can lead to lower taxable income, resulting in potential tax benefits, especially during periods of rising prices
- WAC: Compared to FIFO, WAC generally results in a more moderate and stable tax impact. However, it may not provide the same immediate tax benefits as FIFO or LIFO during inflation.

#### 4. Long-term considerations

- While shifting from FIFO to WAC may not yield short-term increases, long-term effects are crucial. WAC offers stability and predictability, aiding financial planning, budgeting, and investor relations.
- The choice of inventory costing method should align with the company's overall financial strategy, industry standards, and regulatory requirements.

To sum it up, transitioning from FIFO to WAC can enhance the bottom line by increasing reported profits owing to a more stable cost of goods sold. This change positively influences financial reporting, tax implications, and cash flow management. However, such a change should be made with a comprehensive understanding of long-term implications and in alignment with the company's financial goals and industry practices.

# Business Value-add for Retailers Moving from FIFO to WAC

Transitioning from FIFO to WAC offers valuable advantages for retailers, particularly when inventory costs are lower than retail prices. The shift can result in numerous benefits and impacts, including:

Cost accuracy: WAC provides a precise representation of the COGS by considering the average cost of inventory. This enhances retailers' understanding of product costs to make informed pricing decisions.

**Profitability analysis:** WAC allows for more accurate calculations of gross margins and profitability. Retailers can assess product profitability in greater detail, accounting for cost variations over time.

**Pricing strategy:** Retailers can set precise prices using WAC, aligning with their desired profit margins. This understanding of average cost supports competitive and profitable pricing strategies.

**Markdown planning:** With WAC, retailers can optimize markdown strategies by analyzing historical cost trends and adjusting markdowns accordingly. This improves inventory sell-through and minimizes profit erosion.

**Inventory valuation:** WAC offers a more realistic inventory valuation on financial statements, reflecting the actual cost of goods. This helps in making informed business decisions related to inventory management, capital allocation, and financial reporting.

**Improved forecasting:** Retailers can enhance demand forecasting accuracy by considering WAC. This leads to optimized inventory levels, reduced stockouts, and improved customer satisfaction.

The bottom line is that transitioning from FIFO to WAC offers retailers a more accurate and strategic approach to inventory management, pricing, and financial decision-making, thereby enhancing overall business value.



### About the Author



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With 18 years of robust consulting experience in the retail implementation industry, I am a seasoned Senior Solution Architect adept at merging business strategy with cutting-edge IT solutions. My expertise lies in orchestrating end-toend project lifecycles, from conceptualization to seamless execution. Specializing in retail, I bring a deep understanding of industry nuances, tailoring solutions that optimize operations and elevate customer experiences.

My proficiency spans diverse IT domains, encompassing cloud computing, data analytics, and emerging technologies. Collaborating closely with stakeholders, I have successfully delivered scalable and innovative solutions, consistently exceeding client expectations. I excel in fostering cross-functional collaboration and mentoring teams to achieve collective goals. Known for my strategic mindset, I leverage technology to address business challenges, ensuring alignment with organizational objectives.

I am a dynamic communicator, simplifying intricate concepts for diverse audiences. My commitment to continuous improvement is reflected in my ability to evolve strategies in tandem with the evolving retail landscape. With a rich background in IT and a passion for delivering impactful solutions, I am poised to drive digital transformation and elevate business outcomes.



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