**Advanced Liquidity Analysis**

**Learning Outcomes**

After completing this module, students will be able to:

1. Account for cash, cash equivalents, short-term and long-term investments, and other financial assets using the amortized cost, fair value through profit or loss, and fair value through other comprehensive income methods.
2. Appraise a company’s accounts receivable, including any expected credit losses and the use of factoring and securitization.
3. Value raw materials, parts, supplies, work-in-progress, finished goods, and merchandise inventories at the lower of their cost or net realizable value (NRV).
4. Explain LIFO liquidations and reserves under U.S. GAAP.
5. Assess a company’s provisions, contingent assets, and contingent liabilities.
6. Record accounting policy changes, changes in accounting estimates, accounting errors, cases of estimation uncertainty, and events after the reporting period.
7. Analyze how a company’s related party transactions affect its operations.
8. Evaluate how efficiently a company manages its long-term assets, including any financial reporting quality issues.

**Introduction**

There is much more to financial statement analysis than calculating a 5-year trend of some key financial ratios with an industry average or benchmark. The interim and annual financial reports corporations issue are complex documents based on 61 IFRS Standards and Interpretations and 12 Canadian Securities Administrators (CSA) National and Multilateral Instruments. Financial analysts must thoroughly understand these complex documents and how different financial statement items are recognized and disclosed to assess a firm’s performance. This module examines the current assets and liabilities sections of the balance sheet including cash, cash equivalents, and short-term investments; receivables; securitization; inventories; provisions, contingent assets, contingent liabilities; related party transactions; accounting changes, estimation uncertainty, events after the reporting period; and an advanced liquidity analysis checklist.

* 1. **| Consolidated Balance Sheet (IAS 1)**

A consolidated statement of financial position, also called the consolidated balance sheet, combines the assets and liabilities of a parent company and its subsidiaries. A subsidiary is another legal entity that a parent company controls. Control exits when the parent owns over 50.0% of the outstanding shares. Other investors are entitled to a portion of the consolidated company’s net assets (i.e., assets minus liabilities) if the parent does not own 100% of its subsidiaries. The non-controlling interest is presented in the equity section of the consolidated balance sheet and is the portion of the company that the parent does not own. Unless the parent company decides to liquidate its operations, it can use the assets and incur liabilities as it thinks appropriate, and other non-controlling investors have little input. This is referred to as the economic entity perspective since the assets and liabilities represent the resources the parent company controls, not what it is legally entitled to. IFRS adopts an economic instead of a legal perspective to provide investors with a better measure of a company’s financial strength.

Exhibit 1 provides a relatively complete listing of the line items in a major corporation’s consolidated balance sheet. IFRS says to present additional line items if it gives users a better understanding of the company’s financial position.

**Exhibit 1 – Consolidated Balance Sheet**

|  |  |
| --- | --- |
| **Current Assets**  Cash and cash equivalents Trade and other receivables Inventories Prepaid expenses Income tax recoverable Other financial assets Assets held for sale**Long-term Investments** Other financial assets Investment property Investments in associates and joint venturesInvestment property**Property, Plant, and Equipment** Property Leasehold improvements Building EquipmentLeased assets**Intangible Assets and Goodwill**  Patents  Copyrights  Goodwill R&D Exploration and development**Other Assets**  Long-term trade and other receivables Deferred income tax assets | **Current Liabilities**  Trade and other payables Loans and borrowing Deferred revenues  Income taxes payable Provisions Other financial liabilities Liabilities relating to assets held for sale Current portion of long-term debt**Long-term Liabilities**  Provisions Long-term debt Lease obligations Other financial liabilities Employee benefit obligations Deferred income tax liability**Shareholders’ Equity** Share capital Contributed surplus Retained earnings Accumulative other comprehensive income Non-controlling interest |

**Classification of Current and Non-Current Assets and Liabilities**

Assets and liabilities are classified as current or non-current. Assets are classified as current when they are 1) expected to be sold or consumed within the normal operating cycle, 2) held for trading, 3) expected to be sold or consumed within 12 months, or 4) cash or cash equivalents. A company’s normal operating cycle is from when it purchases assets for processing till it collects cash after their sale. Most current assets have operating cycles of under 12 months, but some have operating cycles exceeding 12 months, such as construction projects. These assets can be classified as current, even though cash is not realized for over 12 months. The 12-month rule applies to all other assets. Cash equivalents are defined in IFRS as short-term investments that mature in under three months.

Liabilities are classified as current when they are 1) expected to be settled within the normal operating cycle, 2) held for trading, 3) due within 12 months, or 4) payment cannot be deferred beyond 12 months. Liabilities such as a line of credit used to finance assets for an operating cycle over 12 months are still classified as current. The 12-month rule applies to all other liabilities. A liability is classified as non-current if management can extend payment beyond 12 months, regardless of their intentions. If a company has the legal right to roll over a loan in the next 12 months, it is classified as non-current. If there is only the possibility of rollover, the liability is classified as current. If a company received a grace period from a lender after non-payment to rectify the situation, which could extend payment beyond 12 months, the liability is classified as non-current. However, the company shall disclose any loan covenants it must comply with under the grace period and indicate if it is having any difficulties. Liabilities are usually paid in cash, but if the company can pay the liability using its shares, the liability is still classified as current or non-current. If shares can be paid at the lender’s discretion, such as a convertible bond, the liability is treated as a compound financial instrument with separate liability and equity components.

**Share Capital**

A company must disclose its different classes of shares and their rights, preferences and restrictions, including any restrictions on voting, payment of dividends or repayment of capital. This includes the number of shares authorized, issued and outstanding, including a reconciliation of the number of outstanding shares at the beginning and end of the reporting period. Authorized shares are the number of shares a company can sell and are usually unlimited in Canada. Issued shares are the number of shares that have been sold and fully paid for. Outstanding shares are the number in circulation, which is the number of issued shares less treasury shares. When outstanding shares are repurchased, they are either cancelled or held as treasury shares, which can be resold more quickly, often to honour executive compensation plans. Treasury shares do not have a vote or pay dividends, so they are excluded from calculating basic EPS. Shares issued but not fully paid for must be disclosed along with any shares reserved for stock options or contracts to sell additional shares.

A company may assign a par value to each class of common shares in its articles of incorporation, depending on where it is registered. This is the minimum price at which it can sell its shares, but they are usually sold for considerably more. The par value is allocated to share capital, and the amount paid over par is allocated to contributed surplus. Par values are set low to give companies more flexibility in selling their shares. The federal and most provincial governments have done away with par value common shares, so most companies now indicate they have no par shares. Preferred shares must still have a face, stated or par value since the dividend is often expressed as a percentage of that amount.

Common shares are often divided into multiple share classes with different voting rights, so a shareholder group, such as the company’s founder, can maintain control. Multiple share classes with different voting rights consist of 1) non-voting shares, 2) restricted voting shares that limit the number of shares in a class that can be voted, or 3) subordinate voting shares that receive only one vote per share, while multiple voting shares receive more than one vote per share. These shares receive the same dividend as voting shares, are treated the same if the company is liquidated, and may have coattail provisions allowing them to be converted into voting shares to participate in major corporate decisions.

Non-voting, restricted, or subordinate voting shares trade at a significant discount to voting or multiple voting shares because of their limited voting rights. Many countries do not permit these shares as other investors are unfairly treated, and economic efficiency is reduced by enabling a company’s founder to retain control even when they do not have the skills to manage the business properly. Despite serious reservations, regulators in Canada do allow varying voting rights so more Canadian firms can remain independent and not be acquired by larger multinational firms. Independent companies tend to keep their high-paying head office and research and development jobs in Canada, and help protect Canadian economic sovereignty.

Preferred shares have no voting rights, so there is no potential loss of control for common shareholders and no dilution of EPS since preferred shareholders are not owners, only providing financing in exchange for a regular dividend. They are paid before common shareholders if the company is liquidated, receiving the share’s stated or par value, the current year’s dividend, and any dividends in arrears if funds are available. Different classes of preferred shares can also negotiate liquidation preferences to increase their distribution in bankruptcy. These preferences allow them to be paid in full before other classes of preferred shares or include a multiple, such as 2X, that increases the value of their claim, leaving less for other shareholders. Liquidation preferences are mostly given to venture capitalists to protect their investment if a startup business fails.

Preferred share dividends can be 1) fixed, 2) adjustable or floating rate based on a benchmark interest rate such as the bankers’ acceptance rate, or 3) participating. Conversion features allow investors to convert their preferred shares into common shares to take advantage of rising common equity prices. Redemption features force the company to buy back investors’ shares at their request if interest rates rise. Call features allow companies to buy back or refinance their preferred shares if interest rates fall.

Fixed preferred share dividends are a dollar amount per share or a percentage of a share’s face, stated, or par value. Some preferred shares are participating, which means they receive an additional dividend if the common share dividend is above a specified level or, in certain circumstances, such as a corporate take-over, but the majority are non-participating. Preferred dividends can be delayed indefinitely, but these dividends are nearly always cumulative, which means dividends in arrears must be paid in full before any common share dividends can be distributed. Also, preferred shareholders can usually vote like common shareholders if their dividends are in arrears, so companies have an incentive to pay preferred dividends on time.

**Consolidated Statement of Changes in Equity**

The consolidated statement of changes in equity is a separate financial statement. Still, it is an extension of the consolidated balance sheet, showing how each component of shareholders’ equity changed from the beginning to the end of the reporting period. The main components include common shares, preferred shares, contributed surplus, retained earnings, each component of other comprehensive income, and non-controlling interest. The changes are due to share issuances and repurchases, cash and stock dividends, equity-based compensation, net income, and other comprehensive income.

**Exhibit 2 – Consolidated Statement of Changes in Equity at George Weston**



* 1. **| Cash, Cash Equivalents, and Short-term Investments (IFRS 7, 9)**

Companies often hold considerably more cash than needed to meet daily transactional needs. A business may be:

* Using long-term financing to fund seasonal increases in net working capital, but then having idle cash once the peak sales period is over.
* Accumulating cash to fund a major expenditure, interest or principal payment, or semi-annual dividend.
* Investing the proceeds of a stock or bond issue until needed to finance a capital project.
* Establishing a contingency fund to protect the company against unforeseen events, such as a failed product launch or to take advantage of unexpected opportunities, such as a business acquisition.

A business chequing account pays little or no interest, so companies carefully invest surplus cash to earn a competitive return. Since these funds will soon be needed in operations, companies follow a conservative strategy and invest in a diversified domestic portfolio of short-term, fixed-income securities that do not put the principal at risk. Holding a variety of high-quality government and corporate issues from different regions of the country helps minimize credit or default risk. Their short maturities also significantly reduce interest rate risk as rate changes have little effect on market value. Liquidity risk is low since these investments mature quickly, are issued by large creditworthy institutions, and often have active secondary markets if a company needs to sell early. Buying securities issued in CAD eliminates exchange rate risk.

Cash is any funds on hand plus demand deposits such as chequing accounts. Cash equivalents are “short-term, highly liquid investments that are readily convertible to known amounts of cash and that are subject to an insignificant risk of changes in value” with an original term to maturity of three months or less. Short-term investments are like cash equivalents, but they have an original term to maturity of more than three months and a remaining term to maturity of less than a year. Both cash and cash equivalents and short-term investments are classified as current assets as they will mature within the year. Other securities with a remaining term to maturity of greater than a year are classified as long-term investments, but companies typically avoid these investments because of their higher interest rate risk. The money market consists of fixed-income securities with maturities of less than a year, although most have lives of just a few months. The main securities include:

**Treasury bills (T-bills).** Federal and provincial governments in Canada issue T-bills to finance their short-term cash flow needs. The Bank of Canada serves as the fiscal agent for the Government of Canada and issues T-bills with maturities of three, six, and twelve months at a weekly auction to a group of approved investment dealers and distributors. These dealers and distributors are major financial institutions that resell the T-bills to investors in amounts ranging from CAD 5,000 to CAD 100,000, making them accessible to smaller investors. T-bills are sold at a discount, and their yields increase with maturity. An active secondary market exists so they can be redeemed quickly if necessary. Provincial government T-bills offer slightly higher yields than federal government T-bills, with minimal additional default or liquidity risk, making them an excellent investment alternative. T-bills denoted in U.S. dollars can be purchased as part of a currency hedging strategy, but are sold in CAD 100,000 minimum amounts.

**Term deposits and certificates of deposit.** These deposits are available in minimum denominations ranging from CAD 1,000 to CAD 5,000 from Canadian financial institutions in USD, CAD, and GBP for 1 day to 10 years, making them suitable for small businesses. Interest on deposits that mature in less than a year is paid at maturity; longer-term deposits can have their interest paid semi-annually, annually, or compounded over the life of the investment and paid at maturity. Deposits may be redeemable or non-redeemable, but redeemable deposits earn a lower return because of the greater flexibility they provide investors. Certificates of deposit differ from term deposits in that an actual certificate is issued that can be pledged as collateral for other loans or sold in a secondary market. Overnight deposits allow companies to invest surplus balances in their chequing accounts from the end of the business day to the start of the next business day. These deposits are secured by the Canadian Deposit Insurance Corporation (CDIC).

In addition to the chartered banks, other financial institutions, including credit unions, trust companies, and mortgage companies, offer term deposits and certificates of deposits, as do direct or virtual banks. Direct banks operate without a branch network, relying on mobile phones, the Web, ATMs, or the postal system to conduct business. Their reduced overhead allows them to offer more competitive rates while still providing CDIC protection.

**Bearer deposit notes.** These notes are issued to sophisticated investors by financial institutions. They are sold for a minimum investment of CAD 100,000 for terms of up to 365 days. The notes are unsecured and subordinate to the financial institution’s other debt and are either sold at a discount or as interest-bearing securities. Notes are sold through banks, investment dealers, and securities brokers and are not insured by the CDIC.

**Commercial paper, sales finance paper, bankers’ acceptances, and asset-backed commercial paper.** These short-term investments are sold at a discount by large, credit-worthy corporations and investment trusts to finance their operations for periods of under a year.Some companies use commercial paper instead of lines of credit to reduce interest and loan administration costs. It allows them to bypass the bank and borrow directly from institutional investors such as money market mutual funds or other corporations with surplus cash. Commercial paper is as flexible as a line of credit when financing seasonal variations in NWC. Maturing issues can be rolled over and their size and maturity adjusted to match a company’s exact cash flow needs. Companies that issue commercial paper usually do so regularly as part of an ongoing financing program.

Commercial paper is unsecured, so investors typically buy the paper of large, high-rated corporations with low default risk. Also, only large companies with substantial funding requirements can justify the significant fixed costs of a commercial paper financing program. Riskier borrowers are advised not to issue commercial paper and instead borrow directly from a financial institution, and use collateral requirements and lending covenants to manage risk and reduce interest rates.

Because of the significant issuers, commercial paper is typically sold in denominations of CAD 100,000 for corporations and CAD 50,000 for sales finance companies. Maturities range from overnight to one year, but usually are 30 or 60 days and are no longer than 270 days since U.S. regulators require a formal public offering for longer issues. Most commercial paper is held till maturity because of its short duration, but some paper stipulates that the issuer must repurchase securities early at the investor’s request. An active secondary market also exists for some types of commercial paper, allowing securities to be sold early if needed. A sales finance company is a specialized financial institution that finances consumers or businesses who must borrow to purchase expensive capital items such as automobiles or equipment. These companies are usually subsidiaries of the manufacturer and generate significant profits.

Commercial paper is almost always issued at a discount because of its short maturity. Interest rates are calculated as the banker’s acceptable rate plus a spread which reflects the length of the issue and the credit rating of the issuer. Commercial paper is usually sold through an investment dealer who charges a dealer fee averaging 0.05%. High-volume issuers like sales finance companies sometimes sell their commercial paper themselves to reduce issuance costs.

Commercial paper can be a risky source of financing as it may disappear during a significant economic downturn when investors begin to doubt the financial health of even large corporations and financial institutions. Companies that use commercial paper generally maintain a backup bank line of credit or letter of credit for emergencies. The most creditworthy companies can avoid this, while others may only back up a portion of the commercial paper’s value. Others issue extendible commercial paper that allows them to increase the issue’s maturity if they cannot find replacement financing.

To issue commercial paper publicly, issuers must receive a high credit rating from one of the credit rating agencies. Based on S&P’s short-term credit rating scale, nearly all commercial paper has an A-1 rating.

**Exhibit 3: S&P Short-term Credit Ratings**

|  |  |
| --- | --- |
| **Category** | **Definition** |
| **A-1** | A short-term obligation rated ‘A-1’ is rated in the highest category by S&P Global Ratings. The obligor’s capacity to meet its financial commitments on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor’s capacity to meet its financial commitments on these obligations is extremely strong. |
| **A-2** | A short-term obligation rated ‘A-2’ is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor’s capacity to meet its financial commitments on the obligation is satisfactory. |
| **A-3** | A short-term obligation rated ‘A-3’ exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to weaken an obligor’s capacity to meet its financial commitments on the obligations. |
| **B** | A short-term obligation rated ‘B’ is regarded as vulnerable and has significant speculative characteristics. The obligor currently can meet its financial commitments; however, it faces substantial ongoing uncertainties that could lead to the obligor’s inadequate capacity to meet its financial commitments on the obligation. |
| **C** | A short-term obligation rated ‘C’ is currently vulnerable to nonpayment and is dependent upon favourable business, financial, and economic conditions for the obligor to meet its financial commitments on the obligation. |
| **D** | A short-term obligation rated ‘D’ is in default or breach of an imputed promise. For non-hybrid capital instruments, the ‘D’ rating category is used when payments on an obligation are not made on the date due unless S&P Global Ratings believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. The ‘D’ rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action, and where default on an obligation is a virtual certainty, for example, due to automatic stay provisions. An obligation’s rating is lowered to ‘D’ if it is subject to a distressed exchange offer. |

Source: S&P Global Ratings

A banker’s acceptance is commercial paper guaranteed by a bank. The bank charges a stamping fee of 0.25% to 0.75%, which varies with the company’s credit rating. The guarantee makes a banker’s acceptance safer, so its yield is lower than commercial paper but still higher than T-bills.

Dealer fees, backup line of credit charges, and rating agency expenses are significant and should be combined with the discount paid when comparing different sources of temporary financing. The quoted rate of return on commercial paper is calculated based on a 365-day year in Canada, while in the U.S. and Europe, 360-day years are used.

Annual cost = $\frac{Discount + Dealer fees + Backup line of credit charge + Rating expense }{Funds available for use}$

Asset-backed commercial paper (ABCP) is a special type of trust unit. ABCP units mature in 30 to 60 days, like regular commercial paper and are used to finance a trust containing different financial assets like credit card receivables. When the sponsor collects assets, the funds are used to pay off the ABCP. The assets have varying lives that are greater than 30 to 60 days, so a declining portion of the ABCP will have to be rolled over each period until all the assets are collected. During the life of the trust, the assets serve as collateral for the ABCP, resulting in a lower rate than regular commercial paper. In 2007, the value of ABCP issues peaked at CAD 1.2 trillion in the U.S. and CAD 250 million in Europe. During the financial crisis beginning in 2008, the value of much of the collateral pledged fell as excesses in the mortgage market were discovered. Because these trusts are separate legal entities whose debts are not guaranteed by their sponsors, ABCP investors began to panic, and many rushed to cash in their investments. The U.S. Federal Reserve was forced to give sponsors government funds to pay for withdrawals to stabilize the financial markets. This support did not end until February 2010, and by January 2018, the ABCP market was only CAD 246 billion in the U.S.

**Short-dated bonds.** These are long-term bonds with less than a year remaining till maturity. They have low interest-rate risk due to their short remaining maturity, so they are an alternative for investors who want to earn a higher return than T-bills or commercial paper. Publicly traded bonds or debentures are rated by multiple credit rating agencies and have an active secondary market if a company requires quick access to its cash.

**Repurchase agreements.** These agreements or repos are commonly used by securities dealers to finance their inventories of marketable securities such as stocks or bonds. Instead of pledging these securities as collateral for a loan, dealers raise short-term financing by selling them at a modest discount while agreeing to repurchase them shortly after at face value. By buying the collateral, investors are in a stronger financial position if difficulties occur. To the investor buying the securities and then selling them back, these agreements are called reverse repos. Repos are usually sold in CAD 100,000 multiples on a call or fixed-term basis, although overnight agreements are the most common.

**Euro deposits.** These deposits are made by foreign investors in European banks and are denoted in Euros. Many European banks offer above-market returns to attract needed capital. Euro deposits expose companies to exchange rate risk, so they are not recommended for operating funds, but they may be acceptable if used as part of a currency hedging strategy. Euro deposits are offered for varying periods and are sold in minimum denominations of EUR 10,000 or more. They are generally non-redeemable and have a limited secondary market. The popularity of Euro deposits has declined recently due to the European Central Bank’s negative interest rate policy.

**Money market funds (MMF)**. These funds are offered by major financial institutions that pool the surplus cash of small investors who cannot access most money market securities, such as commercial paper, on their own because of large minimum investments. MMFs also offer more professional management and greater diversification at a very modest management fee. These investments can be purchased as shares in a mutual fund or exchange-traded fund (ETF). Shares in ETFs can be redeemed more quickly because they trade daily on stock exchanges. ETFs also offer lower management fees, making them the best option for small investors.

Many companies maintain significant cash reserves for contingencies and acquisitions, but the CEO is often just overly cautious, and the acquisitions are mostly ill-conceived, generating poor returns. Companies should give any surplus cash back to shareholders by paying higher dividends, letting them find more profitable investments. The equity markets generate much higher returns than short-term investments in the long term. If a company does not do this, a private equity firm specializing in corporate take-overs may buy the poorly managed company and pay the dividend to shareholders for them.

**Accounting for Financial Instruments**

Financial instruments include financial assets and liabilities. Financial assets include cash, an equity instrument of another company, or a contract to receive cash or another financial asset, such as bonds or derivatives. They are monetary assets that can be legally converted into a precisely determinable amount of funds. Financial assets are initially recognized at their fair value and accounted for subsequently using one of three methods, depending on the investment objective of the company holding the instruments.

**Amortized cost.** This method is used if the company’s investment objective is to hold the instrument to maturity to collect its contractual cash flows. The company does not intend to sell the instruments before maturity. Still, it may occasionally trade some instruments for legitimate reasons, such as meeting emergency funding needs or managing credit risk by selling poorly performing investments or rebalancing investment allocations. Investment income is reported in profit and loss using the amortized cost method.This method is also referred to as held-to-maturity.

**Fair value through other comprehensive income (FVOCI).** This method is used if the company’s investment objective is to collect both contractual cash flows and sell the instruments. The investment objective employs a greater number and value of asset sales to earn higher returns through active trading, meet daily liquidity needs, or match the maturities of its financial assets and liabilities. Investment income is reported in profit and loss, and the investment is reported at fair value on the balance sheet. Unrealized gains and losses are recorded in other comprehensive income, while realized gains and losses are recorded in profit or loss.This method is also referred to as available-for-sale.

**Fair value through profit or loss (FVPL).** This method is used if neither the amortized cost nor the FVOCI methods apply. The investment objective is to buy and sell financial instruments to maximize the fair value of an investment portfolio only. Instruments are usually sold in the near term by active traders. All investment income is reported in profit and loss, including any unrealized gains and losses, and the investment is reported at fair value on the balance sheet. This method is also referred to as available-for-trading.

The amortized cost, FVOCI, and FVPL methods are not applied on an instrument-by-instrument basis but to groups or portfolios of financial instruments designed to achieve a particular business goal. Portfolios classified as amortized cost, FVOCI, or FVPL shall be reclassified if their investment objectives change. Companies can elect to use fair value through profit or loss for any investment group to eliminate or reduce measurement problems.

Cash and cash equivalents and short-term investments are classified as current assets unless they are subject to restrictions that prevent them from being used to settle liabilities in the next 12 months, such as when specific cash balances must be maintained as a loan condition. If cash is subject to these restrictions, it should be classified as a long-term investment. To manipulate their financial performance, companies may classify financial assets as current assets instead of long-term to improve their liquidity ratios or use the FVPL method to realize investment gains during a market upturn to inflate net income.

**1.3 | Receivables (IFRS 7, 9)**

**Trade Receivables**

Trade receivables are financial assets accounted for using the amortized cost method. All financial assets are initially recognized at their fair value or the present value of expected future cash flows at an appropriate risk-adjusted discount rate. Trade receivables typically do not charge interest but only have lives of 30, 60, or 90 days. The difference between the face value of the receivable and its fair value is minimal because of the short timeframe. IFRS allows trade receivables to be recorded at their face value if they do not have a significant financing component, like longer-term installment receivables.

An allowance for expected credit losses (ECL) is calculated at the end of each reporting period and deducted from the gross trade receivables. Any change in the ECL between reporting periods is recorded as a credit loss or reversal in net income. The allowance is estimated using an aging of trade receivables, historical loss rates established for each grouping of receivables, and known credit-impaired accounts. The historical loss rates are adjusted for forward-looking information that can affect the historical loss rate, like rising unemployment rates, higher inflation and interest rates, or a decline in GDP.

**Exhibit 4 – Aging of Trade Receivables for East-Wholesale-Hardware Grouping**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CAD 000** | **Current** | **30 Days Past Due** | **60 Days Past Due** | **90 Days Past Due** | **More than 120 Days Past Due** | **Credit-Impaired** | **Total** |
| Balance | 962,500 | 506,000 | 159,500 | 128,700 | 60,500 | 20,000 |  |
| ECL rate | 1.5% | 2.5% | 5.5% | 9.4% | 18.0% | 100.0% |  |
| ECL loss | 14,438 | 12,650 | 8,773 | 12,098 | 10,890 | 20,000 | 78,849 |

Groupings like the type of customer (i.e., wholesale or retail), industry, geographical region, product type, and customer credit ratings should only be used if there are significantly different loss patterns between customer segments. Separate groupings for receivables protected by collateral or trade credit insurance shall also be used. The allowances for each grouping are combined to determine the company’s ECL.

**Exhibit 5 – Customer Groupings**

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| --- |
| **CompCo Industries** |
| **Eastern Canada** | **Western Canada** |
| **Wholesale** | **Retail** | **Wholesale** | **Retail** |
| Hardware | Software | Hardware | Software | Hardware | Software | Hardware | Software |

Companies may factor or sell their trade receivables before the end of the normal trade credit period to raise cash, thus reducing their need for temporary financing. Factoring can be used as “window dressing” to increase a company’s current ratio if the proceeds from the sale of the trade receivables are used to pay down current liabilities. The return on assets and turnover ratios also rise as total assets fall. Receivables can be sold on a recourse or non-recourse basis. Recourse basis means the company selling the receivables is responsible for any bad debts. A provision should be established for this liability if it is probable and can be reliably measured.

Factoring is used primarily by small and medium-sized enterprises (SMEs) as an alternative to a bank line of credit. It can be employed regularly for all a company’s receivables or selectively for just some accounts. Factors buy business and not consumer receivables because of their established credit ratings. Companies must have high sales volumes to be accepted by a factor to justify the large, fixed collection costs.

**Securitization**

Securitization is a cost-effective alternative to factoring or line of credit financing used by larger corporations because of its complexity and high fixed costs. Like factoring, companies sell certain short-term and long-term receivables before converting them into cash as part of the regular cash conversion cycle to generate needed funds. These assets are securitized or packaged as negotiable instruments that are resold directly to investors. By bypassing their factor or bank, a company can borrow more quickly at a lower interest rate with fewer fees.

The receivables securitized and sold are called asset-backed securities (ABS). Most ABS are financial assets like residential mortgages (i.e., mortgage-backed securities), commercial loans, car loans (i.e., CARS), credit card receivables (i.e., CARDS), trade receivables, consumer loans, and leases.These assets are sold at a discount to an investment trust or special purpose entity (SPE) managed by a sponsor. The sponsor is typically a highly rated financial institution that resells units in the trust to various institutional investors. All payments are forwarded to the trust that redistributes them to investors. The difference between these payments and the discounted amount the company receives is the investor’s return, and the assets in the trust serve as their collateral. The financial institution that established the trust also charges a fee and may purchase some trust units to increase its profit.

The ABS market can shrink dramatically during a downturn in the stock markets, making securitization much more difficult. Many companies carry a backup bank line of credit to guard against this contingency. Operating companies that sell the assets to the trust may continue to administer the assets (i.e. collections) to earn valuable fee income and maintain an ongoing relationship with their customers so they can sell them other services.

The trust units are designed to have maximum appeal to investors and can become quite complex. Some typical features include:

* + Trusts focus on specific types of assets, such as mortgages or credit cards to help investors diversify their portfolios across many asset classes.
	+ Assets in the trust are diversified geographically to reduce credit risk.
	+ Different tranches or cash flow payout patterns are designed so investors can buy a unit that best suits their cash flow needs and provides the level of risk and return desired. Tranche risk is adjusted by giving certain tranches preference over cash flows called subordination, assigning more collateral than the face value of the obligations to allow for bad debts called over-collateralization, and providing cash flow insurance like a bank guarantee called credit enhancements. Credit rating agencies such as S&P or Moody’s measure the riskiness of different tranches.

Besides borrowing more quickly at a lower rate, securitization helps a company diversify its sources of financing and transfer credit risk to other parties. Like with factoring, the current ratio increases if the proceeds from the sale of operating assets are used to pay down current liabilities, and the return on assets and turnover ratios rise as total assets fall.

**Long-term Notes Receivable**

Installment loans are an essential form of consumer credit used to finance the purchase of costly durables such as automobiles, where more time is needed to pay. Customers sign a formal contract or note agreeing to pay for a purchase in blended payments of interest and principal over an extended period at a set interest rate. As discussed, some companies securitize these long-term installment contracts to generate funds quickly, while others hold the receivables till maturity to earn valuable interest income.

Instalment loans are financial assets measured at their fair value initially but subsequently at amortized cost using the effective interest rate method. The fair value of an installment contract equals the present value of the expected future interest and principal payments at the appropriate market rate. The market rate reflects the riskiness of the loan from the lender’s perspective, incorporating factors such as the business's forecasted cash flows and any pledged collateral. The fair value and face value of a loan are the same if the interest rate used to calculate the future interest payments equals the market rate. Going forward and then backward at the same rate cancels, leaving the loan’s face amount. An exception is a subsidized loan where the interest rate quoted is below the market rate, resulting in a fair value below the loan’s face value. Companies often use subsidized installment loans as a sales incentive.

**Risk Management**

Financial assets are exposed primarily to credit risk, while financial liabilities are exposed to liquidity and market risk. Credit risk is the risk that the other party to a financial asset will not meet their obligations. IFRS requires companies to disclose the risks affecting their financial assets and the strategies they have adopted to minimize exposures. For trade receivables, this includes:

**Risk management strategies.**  Companies should detail the actions taken to minimize credit losses such as having thorough credit approval policies and procedures; carefully reviewing the credit rating reports, credit scores, financial statements, and credit references of new and old customers; more closely monitoring international customers experiencing added country risk; strictly enforcing credit terms; imposing credit limits; selling or factoring receivables with limited or no recourse to transfer credit risk; selling on a cash basis only to customers experiencing financial difficulties; or requiring collateral or trade credit insurance.

**Credit management practices.** The aging process used to calculate the ECL is summarized, describing the grouping of receivables, the technique for estimating historical loss rates, how forward-looking information is incorporated into the historical loss rates, the rules for determining credit-impaired assets and write-offs, and any changes in the estimation techniques, assumptions, or inputs used.

**Aging of accounts receivable.** A provision matrix, like in Exhibit 1, is provided by groupings if appropriate.Indicate if the receivables are well diversified or concentrated among a few customers, a limited number of geographical regions, or a single industry.

**Reconciliation of ECL.** A reconciliation of the opening and closing balances of the ECL in table form, showing the sources of any changes, is required. The allowance changes when new accounts are added; old accounts are paid off, modified, reclassified as credit-impaired, or written off; and the model or assumptions are changed.

**Collateral and trade credit insurance.** A description of the nature and quality of collateral and trade credit insurance held as security and quantitative information on the amount of coverage is provided.

**1.4 | Inventories (IAS 2)**

Inventories are classified as raw materials, parts, supplies, work-in-progress and finished goods for a manufacturing business and merchandise for a wholesaler or retailer. Inventory is valued at the lower of its cost or net realizable value (NRV).

Inventory costs include purchase costs, conversion costs, and other costs. Purchase costs equal the purchase price plus import duties, excise taxes, transportation charges, handling fees, and other costs directly traceable to the acquisition less trade discounts, rebates and other possible price reductions. If payment is deferred beyond the normal credit terms, the cost is calculated as the present value of future consideration, and the additional amount paid is borrowing costs.

Conversion costs are relevant to manufacturers, including direct labour, direct materials and manufacturing overhead. Fixed overhead is allocated on a normalized basis, assuming a regular output level. If production is lower than expected, any unallocated overhead is expensed in the current period. If production is higher than expected, the fixed overhead allocated is reduced so inventories are not recorded at above cost.

Other costs are included if they directly relate to putting the inventory into its present location and condition. Borrowing costs are capitalized during production, but capitalization must cease once production is completed. Companies may try to increase operating income by capitalizing indirect costs. Storage costs that are not part of the production process, abnormal wastage during production, selling costs, and administrative overhead not directly related to production should not be capitalized.

Inventory costs are allocated to the cost of sales using the specific identification, FIFO, or average cost methods. Companies should select the most appropriate method. The same method should be used for similar inventories, but companies can employ multiple methods. Specific identification is used for unique, identifiable units that are not interchangeable with other items, like specialized equipment or an apartment complex. The FIFO or average cost methods are used when numerous interchangeable items, like bicycles or small appliances, are produced. Using the specific identification method when costing numerous interchangeable items is inappropriate, as companies could purposely select items with the lowest costs to increase net income. Companies prefer FIFO as it gives higher net income and inventory valuations than the average cost method when prices rise. FIFO determines the cost of sales using the oldest inventory in stock, which is usually purchased at the lowest prices, and inventory is costed using recent purchases made at the highest prices. Using different inventory costing methods than competitors may make it hard for companies to compare their inventory turnover ratios to industry averages.

NRV is the estimated selling price of an item in the ordinary course of business minus any costs to complete and sell the units. Companies should assess their inventories annually for write-downs due to damage, obsolescence, a general decline in selling prices, or increased costs to complete or sell the product. Inventories are written down by item or related groups of items. Write-downs can be reversed, but only up to the original amount of the write-down, so monitor companies for frequent inventory write-downs and reversals used to smooth earnings. Do not write down finished goods inventory due to lower selling prices if the company has already signed contracts to sell these units at a higher price. Finished goods can be written down if the selling price is not specified in a sales agreement. Do not write down materials and supplies if the NRV of the finished products is stable.

Agricultural, forest products and mineral producers can record their inventories at NRV at the different stages of the production process if the products trade in an active market or are guaranteed under a forward contract. Any subsequent changes in NRV are recognized in net income. Brokers and traders who buy and sell commodities for clients on their account can recognize inventories at fair value less the costs to sell the inventory. NRV and fair value are similar.

Companies shall disclose the policies adopted to account for inventories, the carrying amount of each inventory classification, what inventories are carried at NRV only, any write-downs or write-down reversals, an explanation of the write-down reversals, and any inventory pledged as collateral.

**LIFO Liquidation and Reserve**

LIFO is not allowed under IFRS, but it is permitted under U.S. GAAP. IFRS precludes LIFO because a company’s cost of sales is calculated using the most recent inventory purchases, leading to the lowest taxable income. It also undervalues inventories by using the oldest purchases. If inventory purchases and sales are the same each year, a company’s inventory under LIFO becomes quite old, vastly understating the value of its assets and distorting its turnover ratios. If sales exceed purchases or a company liquidates all or part of its operations, the cost of the old inventory is charged to the cost of sales, leading to much higher net income in the period. This is called a LIFO liquidation.

U.S. GAAP continues to allow LIFO because of lobbying from U.S. public companies that want to minimize their taxes. U.S. tax authorities require businesses to use the same inventory method for taxation and financial reporting. Most U.S. public companies choose FIFO because the higher net income is needed to maintain investor confidence. For firms with extensive inventories, like major retailers, the tax savings from using LIFO are significant, so they opt for the LIFO method.

Companies must disclose the LIFO Reserve under U.S. GAAP, which is the difference between FIFO and LIFO Inventory.

LIFO reserve = FIFO inventory - LIFO inventory

This reserve allows analysts to compare companies using different inventory valuation methods.

**1.5 | Provisions, Contingent Assets and Liabilities (IAS 37)**

**Provisions**

A liability is a current obligation resulting from past events requiring an outflow of resources. A provision is a liability of uncertain timing or amount. They are only accrued when it is probable that resources will be needed to settle the obligation, and it can be measured with sufficient reliability. An event is probable if it is more likely than not to be realized (i.e. over a 50% chance of occurring).

The amount of the provision is the best estimate of the current obligation, considering the risks and uncertainties of the obligation expressed on a present value basis using an appropriate discount rate. The increase in the provision due to the passage of time should be recognized as borrowing costs. The provision should be adjusted in the future as objective evidence becomes available regarding the amount of the obligation and changes in the discount rate. If the provision is no longer probable, it should be reversed. Provisions typically relate to decommissioning, restoration, legal, product warranty, product refund, and restructuring costs.

**Restructuring Provisions**

Companies can incur significant costs restructuring their operations by selling or terminating a line of business, closing several business locations, changing their organizational structure, or making substantial changes to their strategic direction. The costs include severance pay and retraining costs for terminated employees.

Restructuring provisions are abused by management to (1) smooth income by recognizing and then reversing the provisions as needed, and (2) move legitimate operating expenses “below the line” into restructuring costs to inflate operating income. To prevent this abuse, IFRS requires a detailed formal restructuring plan to be developed with a valid expectation that it will be implemented quickly before a provision can be recognized. Evidence of having a formal plan may include board approval, formal announcement of the plan, negotiating severance pay with employees, or selling assets.

Only the direct costs of the restructuring can be included in the provision. No costs associated with the company’s ongoing operations, such as marketing costs, development costs for new systems and distribution networks, and training/relocation of continuing staff, are included. No costs in future periods should be charged against the provision that does not relate to the original provision. Future operating losses and expected gains or losses on asset sales are not included in the provision. Gains or losses should be recognized in the future when a binding agreement is reached.

**Contingent Liabilities**

Contingent liabilities are either 1) a possible obligation resulting from past events that are contingent on an uncertain future event that is not wholly within the control of management, or 2) a present obligation of a past event where it is not probable that resources will be required to settle the obligation or the obligation cannot be measured with sufficient reliability. All contingent liabilities should be noted unless their probability is remote. Examples of contingent liabilities include a payout in a current or potential lawsuit or tax obligation as part of a tax reassessment.

**Contingent Assets**

Contingent assets are possible assets resulting from past events contingent on a future event that is not wholly within the control of management. Based on the conservatism principle, contingent assets should be reviewed regularly and not accrued until they become virtually certain. If it is probable that economic resources will be received, they should be noted. If they are not probable, they should not be disclosed. Examples of contingent assets include a potential award in a current or potential lawsuit, a gift such as government assistance, a tax refund as part of a tax reassessment, or the use of loss carry forwards.

Contingent assets and liabilities are only described in general terms if the company feels full disclosure would prejudice its position in a dispute, such as a lawsuit or tax reassessment.

**1.6 | Related Party Disclosures (IAS 24)**

Related party relationships with other people or companies can affect a reporting company’s financial performance. Companies can exercise significant influence, joint control, or control over other firms, forcing them to enter into agreements they usually would not. A parent company may require a subsidiary to sell its products to them at cost to maximize profits; determine where a subsidiary can sell its products or buy its inputs to benefit other subsidiaries; limit a subsidiary’s expansion options in favour of other related companies; and force subsidiaries to hire or give lucrative consulting contracts to family members of a parent company’s executives. Financial analysts must understand the extent of these relationships to judge the impact of related party transactions on the company’s bottom line.

**Exhibit 6 – Types of Business Relationships**

|  |  |  |
| --- | --- | --- |
| **Degree of Control** | **Percent Control** | **Asset Classification** |
| No influence |  Less than 20% | Financial assets |
| Significant influence | 20% and less than 50% | Associates |
| Joint control | Unanimous consent | Joint ventures |
| Control | More than 50% | Parents/Subsidiaries |

**Related Party Relationships**

A person or close family member is a related party to a reporting company if they:

* Can exercise direct or indirect control, joint control, or significant influence; or
* Are key management personnel, including directors of the company or its parent company.

Another company is a related party to a reporting company if they are a:

* Member of a group of related companies, including a parent, subsidiary, associate, or joint venture; or
* Benefit plan providers, such as pension plans.

Close family members include a spouse, domestic partner, children, a spouse or domestic partner’s children, or other dependents of the person or person’s spouse or domestic partner.

**Disclosures**

A reporting company’s related party transactions are categorized by relationship. The categories include 1) their parent company, 2) those with joint control or significant influence over them, 2) their subsidiaries, 3) their associates, 4) joint ventures they are part of, 5) key management personnel of the company or its parent, and 6) other related parties.

For each category, companies should disclose 1) the nature of the relationship, 2) the amount of any transactions, 3) all outstanding account balances such as accounts receivables or payables, 4) any future commitments to deal with them, 5) terms and conditions of any agreements including forms of consideration, security pledged, guarantees given or received, and 6) bad debts expenses recognized that period and any remaining bad debt allowances.

All parent and subsidiary relationships, including the party that ultimately controls the parent, should be disclosed, regardless of whether there are transactions between the two parties. If a government has control, joint control, or significant influence, the nature of that relationship and any significant transactions should be indicated.

The compensation of key management personnel of the reporting company should also be disclosed by the types of compensation they receive to determine if any potential conflicts of interest exist. These compensation categories include 1) short-term pay and benefits, including bonuses, 2) long-term pay, including stock options, 3) post-employment benefits such as pensions, and 4) termination benefits such as severance pay. This is done so that users of the financial statements know how managers are paid, as it will significantly influence their behaviour. For example, managers with poor termination benefits may try to prevent a corporate take-over even if it is in the best interest of shareholders, or managers with mostly short-term pay may not be willing to make decisions with mostly long-term benefits.

**1.7 | Accounting Changes, Estimation Uncertainty, Events After the Reporting Period (IAS 1, 8, 10)**

**Accounting Policies**

Companies shall provide a summary of the accounting policies and any judgements made applying these policies in the first explanatory note in a reporting company’s financial statements. All existing IFRS shall be followed, and any new standards shall be applied retrospectively following the transitional provisions in the new standard. Revisions to existing IFRS must also be applied retroactively following the transitional provisions unless the revised standard states that retrospective application is optional.

An IFRS does not exist for all transactions, so companies need to develop additional accounting policies and apply them consistently. These policies should fairly represent the financial position and performance of the company and consider IFRS’s Conceptual Framework, related IFRS, and the pronouncements of other standard-setting bodies. Many IFRS also provide companies discretion on how to apply the standard, such as the choice of inventory costing methods (i.e., FIFO, average cost, or specific identification). Much of the discretion in IFRS has been removed to improve the comparability of financial statements.

Accounting policy changes shall only be made if they 1) are required by IFRS or 2) improve financial reporting quality. The company’s financial statements beginning in the earliest year presented are restated as if the new policy had always been used. When it is impractical to trace the change in accounting policy to previous years, the opening balances of the appropriate asset, liability and equity accounts in the current period are restated. If it is impractical to determine the cumulative amount of the change in the past, the new policy is applied prospectively.

A description of any accounting policy changes stipulated by IFRS or made voluntarily in the current period is required. Companies shall also disclose the potential effect of any policies enacted by IFRS that are not yet effective. Analysts should monitor a company’s financial statements for frequent accounting policy changes to determine if they are being used to manipulate financial performance.

**Accounting Estimates**

The value of assets or liabilities, like accounts receivable, is often determined using estimates, and these estimates typically change in subsequent reporting periods as better information becomes available, conditions evolve, or companies become better estimators. Changes in accounting estimates, such as allowances for doubtful accounts, warranty obligations, useful lives, residual values, and fair values, are applied prospectively. These changes are not applied retroactively because the estimates were the best possible at the time. Changes in depreciation methods, such as straight-line, diminishing balance, or units-of-output, are considered changes in accounting estimates as the method selected is the one that best reflects the pattern in which the asset’s benefits are consumed. Again, the method chosen was the best possible estimate at the time, but that assessment can change in the future. A description of the change in accounting estimate and its financial impact in the current and future periods is disclosed.

**Error Corrections**

Error corrections are accounted for retrospectively. The amount of the error is not included in the current year’s net income; the company’s financial statements beginning in the earliest year presented in which the error occurred are restated. If the error occurred before the earliest year presented, the opening balances for asset, liability, and equity accounts for the earliest year presented are restated for the cumulative amounts. When it is impractical to trace the error correction to previous years, the opening balances in the current period are restated.

A description of each accounting error, the amount, and whether it was corrected retrospectively is disclosed. Users should be alerted to earnings manipulation if error corrections are frequent or relate to improper applications of accounting rules.

**Estimation Uncertainty**

The estimates companies make about future operations can significantly impact the value of their assets or liabilities. These estimates may include the actuarial assumptions used to determine a pension liability, sales estimates for new products under development, output predictions for proposed resource properties, asset residual values, and the discount rate applied to find the present value of a cash-generating unit’s future cash flows. IFRS requires that companies disclose the estimates made at the end of the reporting period that have a significant risk of materially impacting the carrying amounts of their assets and liabilities in the coming year. This may include a description of the methods, assumptions and estimates used to determine the carrying amount and a range of possible valuations in the coming year.

**Events After the Reporting Period**

Reporting companies have three months after year-end to complete their audited financial statements and explanatory notes in Canada. Many favourable or unfavourable events occur after year-end that materially affect a firm’s performance. To better inform users, these events should still be recorded or disclosed in the explanatory notes and recorded in the following period. Events after the reporting period include all events up to the date the financial statements were authorized for issue by the firm’s board of directors.

If conditions existed at year-end, an event occurring after year-end but before the annual report is authorized is incorporated in the financial statements by adjusting the amounts already recognized or recognizing those not previously recorded. Some examples include:

* + Settlement of a lawsuit;
	+ Bankruptcy of a customer;
	+ Asset impairment or reversal;
	+ Asset purchase or proceeds of a sale;
	+ Profit sharing or bonus payments; or
	+ Discovery of a fraudulent act or accounting error.

If conditions did not exist at year-end, the event should be noted if it is material. The note should include a description of the event and an estimate of the amount or the fact that an estimate cannot be made. Some examples include:

* + Decline in the fair value of an investment;
	+ Declaration of dividends;
	+ Mergers and acquisitions;
	+ Plan to discontinue operations or to reclassify assets as held for sale;
	+ Major asset purchases;
	+ Destruction of assets after a natural disaster;
	+ Major company restructuring;
	+ Changes in asset prices, exchange rates, and tax rates;
	+ Significant commitment such as a loan guarantee; or
	+ New litigation.

**1.8 | Liquidity Analysis Checklist**

In addition to analyzing liquidity ratios like the current or cash ratios to determine how well a company manages its net working capital, financial analysts must carefully examine the information in the explanatory notes to the financial statements and other disclosures to answer important questions.

1. Are cash and cash equivalent balances excessive? Is the company planning a large payout? Are shareholders lobbying for bigger dividends?
2. Has the company opted to account for financial assets using FVPL to recognize gain in profit or loss during an up market?
3. Is the company using “window dressing” to inflate its current ratio? Is it overusing expensive early payment discounts and factoring? Has it established a finance unit that it does not control to avoid consolidation?
4. Are long-term receivables or cash subject to restrictions being classified as current assets to improve the current ratio?
5. Has a provision been established for receivable factored on a recourse basis?
6. Are sales well diversified or focused on a few customers, a limited number of geographical regions, or a single industry?
7. Is the aging of receivables thorough? Are the historical loss percentages reasonable? Are the percentages updated for forward-looking information, like a recession? Are detailed groupings being used?
8. Are inventory write-downs and reversals used to “smooth” earnings? What about restructuring charges?
9. Are indirect costs, like selling or general administration, included in inventory to inflate earnings in the current period?
10. Do restructuring charges only include operating costs directly related to the company’s operations? Are they trying to move other expenses “below the line” by including them in the provision?
11. Are provisions being reclassified as contingent liabilities to remove them from the balance sheet? Are contingent assets being noted that are not probable?
12. Is the company forced to hire or give lucrative consulting contracts to family members of major shareholders or executives?
13. Do the compensation agreements for senior managers lead to conflicts of interest? Is pay too focused on short-term decision-making? Are managers more likely to fight corporate take-overs that benefit shareholders?
14. Are frequent error corrections and accounting policy changes signs of managed earnings?