

EDUCATION AND EXAMINATION COMMITTEE
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CFE-SDM

CASE STUDY

List of Excel Functions That May Be Useful on CFE/ERM Exams

Below, find a list of Excel functions that may be useful when taking the exams on Corporate Finance and ERM track (ERM, Foundations of CFE, and Strategic Decision Making). Questions for this track have been developed assuming that candidates are familiar with these Excel functions. Candidates may also use other functions. Many times, Excel offers multiple functions and tools that can be used to perform the same task.

In the descriptions below, an array is one-dimensional, while a range can be two-dimensional (multiple rows and columns). Logical values are either True or False. Some Excel functions require that the arrays be in the same direction (SUMPRODUCT), but most do not. Other function inputs are variables. Some variables have limitations (a value between 0 and 1); others do not.

This document will be available to candidates when taking the exam. An Excel file, accessible on the exam study page, provides examples of most of the functions below. The Excel file will not be available to candidates during the exam.

AVERAGE(range1, [range2], ...) – returns the arithmetic mean of the cells in a range (ignores blank cells)
range1 is the first range, cell reference, or number for which you want in the average
range2, ... are additional ranges, cell references, or numbers for which you want to include in the average

BINOM.DIST(number_s, trials, probability_s, cumulative_logical_value) – returns the individual term binomial distribution probability when there are a fixed number of tests or trials, when the outcomes of any trial are only success or failure, when trials are independent, and when the probability of success is constant throughout the experiment

number_s is the number of successes

trials is the number of trials

probability_s is the probability of success for each trial

cumulative_logical_value is the logical values that determines the form of the function. If TRUE, the cumulative distribution function is returned, which is the probability that there are at most number_s successes; if FALSE, the probability mass function is returned, which is the probability that there are number_s successes

BINOM.INV(trials, probability_s, alpha) – returns the smallest value for which the cumulative binomial distribution is greater than the criterion value (or the number of successful trials for a cumulative binomial distribution based on a criterion value)

trials is the number of trials

probability_s is the probability of success for each trial

alpha is a criterion value from 0 to 1 that determines the number of successful trials

CORREL(array1, array2) – returns the correlation coefficient of two data sets

array1 is an array of cell values

array2 is a second array of cell values

COUNTIF(range1, criteria) – returns the number of cells in a given range that meet the criteria

range1 is a range of cells that could include values or formula results

criteria is the criteria to be met such as “>0” or “=15”

COVARIANCE.P(array1, array2) – returns the population covariance, the average of the products of deviations for each data point pair in two data sets (for a complete population, uses N in the denominator)

array1 is the first array of cell values

array2 is the second array of cell values

COVARIANCE.S(array1, array2) – returns the sample covariance, the average of the products of deviations for each data point pair in two data sets (for a sample, uses N-1 in the denominator)

array1 is the first array of cell values

array2 is the second array of cell values

MMULT(range1, range2) – returns the matrix product of arrays into an range with the same number of rows as range1 and the same number of columns as range2

range1 and **range2** contain the arrays to be multiplied. The number of columns in range1 must be the same as the number of rows as range2, and both ranges must contain only numbers. As an example, if both ranges are 2x2, the top left cell in the output will equal the sumproduct of the array in the top row in the first range and the array in the left column of the second range. To produce the output, the range of the output table must be highlighted, then the formula entered, and then cntl/shift/enter hit

NORM.DIST(x, mean, standard_dev, cumulative_logical_value) – returns the normal distribution for the specified mean and standard deviation

x is the value for which you want the distribution

mean is the arithmetic mean of the distribution

standard_dev is the standard deviation of the distribution

cumulative_logical_value is the logical value that determines the form of the function. If TRUE, the cumulative distribution function is returned; if FALSE, the probability density function is returned

NORM.INV(probability, mean, standard_dev) – returns the inverse of the normal cumulative distribution for the specified mean and standard deviation

probability is a probability corresponding to the normal distribution (a number between zero and one inclusive)

mean is the arithmetic mean of the distribution

standard_dev is the standard deviation of the distribution

NORM.S.DIST(z, cumulative_logical_value) – returns the standard normal distribution (has a mean of zero and a standard deviation of one)

z is the value for which you want the distribution.

cumulative_logical_value is the logical value that determines the form of the function. If TRUE, the cumulative distribution function is returned; if FALSE, the probability mass function is returned

NORM.S.INV(probability) – returns the inverse of the standard normal cumulative distribution (has a mean of zero and a standard deviation of one)

probability is a probability corresponding to the normal distribution (a number between zero and one inclusive).

PERCENTILE(range, k) – returns the k^{th} percentile of the values in a range, interpolating if necessary.

range is the array or range of data from which the percentile should be found; the data does not need to be sorted

k is the percentile value in the range 0 to 1 inclusive. 0 returns the lowest value; 1 returns the highest value.

RANK(number, range, [order]) – returns the rank of a number in a list of numbers.

number is the number whose rank you want to find

range is the range that includes the list of numbers from which to find the rank of the number

order (optional) is ascending when the value is 1 and descending when the value is 0

SMALL(array, k) – returns the k^{th} smallest value in a data set.

array is an array or a range of numerical data for which you want to determine the k^{th} smallest value.

k is the position (from the smallest) in the array or range of data to return.

SQRT(number) – returns a positive square root

number is the number for which a square root is desired.

STDEV.P(range1, [range2], ...) – calculates standard deviation based on the entire population given as arguments (ignores logical values and text; uses N in the denominator)

range1 is the first range, cell reference, or number corresponding to the population for which you want the standard deviation

range2, ... are additional ranges, cell references, or numbers corresponding to the population for which you want to include in the standard deviation

STDEV.S(range1, [range2], ...) – estimates standard deviation based on a sample (ignores logical values and text in the sample; uses N-1 in the denominator)

range1 – is the first range, cell reference, or number corresponding to the population for which you want the standard deviation

range2, ... are additional ranges, cell references, or numbers corresponding to the population for which you want to include in the standard deviation

SUM(range1, [range2]) – adds all the numbers in a range of cells

range1 is the first range, cell reference, or number for which you want to include in the sum

range2, ... are the additional ranges, cell references, or numbers for which you want to include in the sum

SUMPRODUCT(array1, [array2], [array3], ...) – returns the sum of the products of corresponding arrays

arrays1, array2, array3, ... are 2 to 255 arrays which the user wants to multiply and then add components. All arrays must have the same dimensions, vertical or horizontal

TRANSPOSE(array) – converts a vertical range of cells to a horizontal range, or vice versa

array is a range of cells on a worksheet or an array of value that the user wants to transpose (for example, to use in the SUMPRODUCT function). When using the TRANSPOSE function in another function, the formula must be entered and then cntl/shift/enter hit. When using the TRANSPOSE function to produce output, the range of the output table must be highlighted, then the formula entered, and then cntl/shift/enter hit

VLOOKUP(lookup value, table_range, column_index_number, logical_value) – looks for a value in the leftmost column of a table and then returns a value in the same row from a column specified by the user

lookup_value is the value to be found in the first column of the table. It can be a value, a reference, or a text string

table_range is a table of text, numbers, or logical values in which data is retrieved. It can be a reference to a range or a range name

column_index_number is the column number in table_range from which the matching value should be returned

logical_value is a logical value to find the next lowest match in the first column (must be sorted in ascending order) when equal to TRUE or omitted; or an exact match when equal to FALSE

List of Other Excel Tools (Besides Functions) That May Be Useful on CFE/ERM Exams

GOAL SEEK – used when a user knows the desired result from a formula but is not sure what input value the formula needs to get that result. The steps to use Goal Seek are as follows:

1. Select the cell that contains the output you want to change.
2. On the Data tab, select What-If Analysis.
3. Select Goal Seek.
4. In the “Set cell” box, enter the reference for the cell that contains the formula you want to resolve.
5. In the “To value” box, type the formula result you want.
6. In the “By changing cell” section, select the reference for the cell that contains the value that you want to change.
7. Click “OK”. Goal Seek runs and produces a result.

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Disclaimer

The companies and events depicted in this Case Study are fictitious. Any similarity to any event, corporation, organization, or person living or dead is merely coincidental. Some narrative material utilizes real locations and real news organizations to make the Case Study seem real. The Associated Press, Wall Street Journal, Standard & Poor's, A.M. Best, and other organizations used in this context have never actually commented on any of the fictitious companies.

The industry profiles included within each company are intended to be accepted as factual information for those industries, to provide context when you are evaluating the case study companies.

The case study should be read critically, with the understanding that it is meant to represent hypothetical organizations with some good policies and some flaws; it is not a representation of best practices.

Assumptions

The companies that are part of the Case Study are assumed to be operating in the following economic environment:

After a major financial crisis in 2008, interest rates dropped to historically low levels and remained at those levels for many years. Approximately 3 years ago, the inflation rate began increasing due to economic disruptions. Interest rates began rising and global inflation levels have risen about 8 percentage points from their prior lows.

RPPC Dynasty Corporation: A BOX FULL OF GROWTH

1 RPPC Dynasty Corporation

1.1 Introduction

RPPC Dynasty Corporation History

RPPC Dynasty was established in 2005 with head offices in Luxembourg by four founding partners. The corporation's name is derived from the four founders' surnames - Ruiz, Petrov, Patel, and Chan. They had ambitious goals to grow the corporation to become its namesake – a business dynasty respected throughout the world. From the beginning, the focus has been to meet the needs of a globally mobile clientele. Luxembourg was chosen due to its being a European low tax jurisdiction.

The business roots began in 1995. Jose Ruiz won a \$700,000 lottery. With his winnings and his \$20,000 savings, he started a coffee shop business. His business grew steadily and became a billion-dollar company known as Frenz.

In 2005, Jose Ruiz and Meiyong Chan formed a partnership. The Chan family had owned and operated a small business since 2000. Soon thereafter two other entrepreneurs, Sanjay Patel and Yelena Petrov, were brought in to expand the brand. Over the next year, RPPC developed its vision of future global expansion across diverse businesses.

In 2006, to increase access to capital in support of the company's expansion, RPPC made the decision to incorporate.

In 2007, with the guidance of Sanjay Patel, Big Ben Bank was acquired.

In 2007, shares equal to 30% ownership of the coffee business were offered to the public to bring in additional capital.

In 2013, Blue Jay Air, was bought to appeal to the growing global mobility of the group's clientele. The airline was put through a restructuring initiative to better fit into the group's vision. The purchase included Blue Jay Tire company, which the airline had acquired in 2009, to create a synergy with its airline business.

In 2015, RPPC acquired Darwin Life Insurance Company to expand the wealth management capabilities of the bank operations.

More information on these companies can be found in this case study.

Mission

Provide high quality and uniquely tailored services to families or businesses that are globally active.

Vision

We provide our customers with the comfort of a familiar friend whether they are home or away.

Executive Team

The Executive Team includes:

CEO –Gilroy Clyde (since inception)

CFO –Lamar Smith (5 years)

CRO – Julia Reich (recently appointed)

COO – Jane Mulrone (since incorporation, previously performed CRO functions)

1.2 Risk Management Overview

RPPC Risk Management Framework

Philosophy

We are exposed to a variety of risks that are inherent in carrying out our business activities. *Having an integrated and disciplined approach to risk management is key to the success of our business.* In order to achieve prudent and measured risk-taking that aligns with our business strategy, we are guided by a risk management framework that is embedded in our daily business activities and planning process.

Challenge

- Continued volatility in global economic conditions, causing heightened marketplace uncertainty. This is both a risk and an opportunity.

Our Priority

- Broaden and strengthen risk capabilities, including enhancing our stress testing functions to deliver better insights to both our risk and business groups. We believe strongly in assessing risk through a variety of lenses, not simply looking at past performance.

Risk Culture

Every employee is responsible for risk management at RPPC.

Risk Principles

All material risks to which the enterprise is exposed are identified, measured, managed, monitored, and reported. Risk awareness must be demonstrated to drive all decision-making within the enterprise. For any risk, a risk-based approach is used to calculate its reported Economic Capital. Economic Capital is used to measure and aggregate all risks.

Risk Appetite

The Risk appetite is at the center of our value-based enterprise risk management approach. The clear communication of risk appetite at all levels within each line of business is critical to effective risk-taking in decision making.

Incentive Compensation and Risk Appetite

The business management of RPPC is governed by Key Performance Indicators (KPI) and Key Risk Indicators (KRI). All officers of the company will have their compensation dependent on the following:

- For any risk, the return on its economic capital must exceed the cost of the capital acquired to fund that risk. The CEO of each business operating group must identify and report KPI that indicate that this requirement is being met.
- The payback period on capital invested in a business operating group must not exceed 10 years from the date that capital is first employed. Each operating group CEO must report KRI that indicate for the aggregate of all risk underwritten, that if the business group were to suffer a 1-in-100 year tail event that the capital thereafter would still be able to withstand another 1-in-100 year event. This is referred to as redundant capital. This is critical to RPPC's market discipline because client relationship management and sustainability is promoted over price leadership.
- Through the identification of KPI and KRI, business management indicates whether the risk being underwritten is within the group's risk appetite. The KPI and KRI are recommended by the business CEO and are approved by a Risk Appetite Consensus Meeting that includes the business executives, the CRO, and the appropriate risk and business Subject Matter Experts (SMEs).

1A RPPC Dynasty Corporation Exhibits

Exhibit 1

Global Market Outlook

Key factors for the global market outlook are summarized as follows:

1. Change in demographics
 - a. World population is growing by around 1.1 billion every 15 years. About 95% of this growth is accounted for by developing countries and about 5% by developed countries.
 - b. The world population is also aging, mainly due to greater life expectancy and to declining birth rates. Life expectancy has more than doubled since the beginning of the 20th century and is now over 70.
 - c. Global migration flows, whereby people are migrating from south to north and between developed countries, are increasing. Industrialized countries are reliant on immigrants to maintain their economies and compete with one another for resources.
2. Increasing complexity and accelerating globalization
 - a. In today's global economic system, countries exchange not only final products, but also intermediate inputs. This creates an intricate network of economic interactions that cover the whole world.
 - b. Global travel is expanding, increasing potential health risks.
3. Growing demand in micro-insurance
 - a. About 3 billion of the world population are in the target group for micro-insurance, mostly in the South Asia, East Asia, Africa and Pacific regions.
 - b. Micro-insurance is strongly supported by the governments of developing countries and emerging countries, aid agencies and NGOs as a means to tackle poverty.
4. Advancing climate change
 - a. Rising number of weather-related natural catastrophes
 - b. Higher losses from weather-related natural catastrophes
 - c. Changes in the availability of fresh water
 - d. Accelerated climate change could lead to a significant decline in the global GDP level.

Exhibit 2

Earnings Multiples

RPPC maintains current information on average industry multiples for those sectors in which it is currently engaged or potentially interested.

Industry	Mean Multiples	
	Price/Earnings*	Value/EBITA
Banking - US	6.0	18.4
Banking – Europe	9.0	6.0
Life Insurance - US	9.0	11.1
Retail Coffee - US	21.5	9.0
Retail Coffee – Europe	21.0	6.1
Retail Coffee – Asia	17.5	9.1
Airlines (major) - US	7.5	11.0
Regional Airlines – Canadian	9.0	6.7
Aircraft Manufacturing – US	20.5	8.9
Tire Manufacturing - US	7.6	7.1
Tire Manufacturing – Canada	23.6	11.8

*Earnings is based on one-year forward earnings.

2 Blue Jay Air

Services in other industries are customer-oriented. The airline industry is increasingly anti-consumer. It's become a real hassle to travel. That is our opportunity - as long as we are given a chance to compete fairly.

Susan Feather, CEO of Blue Jay Air, was pondering the future strategic direction of her company. Blue Jay Air had undergone a major corporate reorganization two years ago. With a newly appointed Board and a total replacement of senior management, the company had a completely new face. It was time to rebuild its image, re-position itself in the highly competitive local airline market, and reconsider expanding into the international arena.

Blue Jay Air had made substantial investments that included major infrastructure improvements. Change couldn't come fast enough for Susan. Every aspect of service and operations needed to get better. It was the only way. Changing infrastructure was hard up to a point. Changing attitudes and behavior and winning customers – that was really hard. How fast and how hard should she push? Some wanted reams of data to move forward. Stay local? Go international? Which routes? Which planes? Remodel or new? Did they have enough capital? Access the capital markets? Sell Blue Jay Tire? She had a good team. Susan was establishing a new reputation for Blue Jay Air. She was confident her team would meet the challenge.

2.1 Commercial Airline Industry Profile

Operations

The commercial airline industry provides air transportation for passengers and cargo. The United States (U.S.) has an extensive commercial air transportation network. Its passenger air transportation market is a thriving industry, taking individuals around the North American continent and around the globe. All U.S. passenger airline companies are privately owned.

Airports, on the other hand, are usually constructed and operated by local governments. Thus, most government air travel subsidies go to airport operations rather than to the passenger airline industry.

There is currently no government regulation on ticket pricing, although the federal government retains jurisdiction over aircraft safety, pilot training, and accident investigations through the Federal Aviation Administration and the National Transportation Safety Board.

Most airlines operate using a “hub and spoke” model such that passengers go through a centralized location, the hub, to transfer to their downline destination, i.e., the spoke city. This system gives the predominant airline in a given airport a strong competitive position as it maximizes the number of passengers on each flight. The model offers a very efficient means of relating supply to demand through a centralized distribution hub.

Most commercial airlines operate on a scheduled basis, flying regular routes even if the planes are not full. Airlines that operate on a non-scheduled basis usually fly during off peak hours and have more flexibility in the choice of airport, flight times and load factors. Non-scheduled carriers typically offer charter passenger flights, cargo/freight transport, and other flying services such as crop dusting and rescue operations.

Based on U.S. Passenger Airline Employment data published by the U.S. Department of Transportation, the annual full-time equivalent (FTE) employees working for all scheduled passenger airlines dropped significantly to 4,850,634 FTEs in 2021, which was 10% lower than the 2019 level due to the pandemic disruption in 2020. This decline has started to reverse, reaching 5,470,133 FTEs in 2022, which is more aligned with the historical average level of 5,424,866 FTEs.

Risk/Success Factors

The airline industry faces the following significant risks:

(1) Economic and Geopolitical Volatility

As most airline companies now operate in a global market, exposures to the political relationship and tensions as well as economic relationship and business cycle changes are increasingly significant. These external factors could have a major impact on the sustainable long-term growth of the airline industry.

Trade dispute and economic slowdown pose a major threat to the usage of commercial airline transportation.

Stagflation or hyperinflation could pose serious disruptions to the industry.

(2) Supply Chain Risk

The number of manufacturers of commercial aircraft is limited. Thus, timely aircraft deliveries could become a major issue for airline companies wishing to renew their fleets. In addition, as supply is limited, cost increase is very possible.

Continually advancing technology may result in airplanes not being tested thoroughly before delivery by suppliers, leading to possible lower quality control.

(3) Oil Price Increases

Profit margins for airline companies could be negatively impacted by increases and volatility in oil prices.

(4) Unpredictable and Malicious Acts

Three areas of unpredictable and malicious threats are:

- Cyber incidents and data breaches – concerns over privacy and safety
- Insider threats – workplace violence, exfiltration of information, physical security compromise, sabotage, terrorism, physical property theft
- Supply chain disruption – outsourcing can further increase risk of supply-chain disruption.

(5) Increased Regulation

The airline industry currently must comply with regulations on aircraft design, maintenance, pilot training activities, and safety requirements. These regulations are crucial in setting safety standards but can result in significant costs for the airline industry.

Airline companies own significant amounts of intellectual property (IP), consisting of patents, unpatented know-how data, software, and trademarks. These are valuable assets to companies but may be complicated to manage as they can be subject to different regulations in different countries.

(6) Accidents/Fatalities

When a plane crash event occurs, the airline industry could suffer severe reputational risks, especially if the event is not properly handled in areas of communication, investigations and recoveries.

(7) Foreign currency and commodity price fluctuations

As many airline companies operate on an international basis, currency fluctuations could cause undue financial strains when the earned revenue and expenses are in different currencies.

In addition, financial performance of the airline companies could be impacted by price fluctuations in key commodities or raw materials, such as aluminum, titanium and composites that affect the airline industry's supply chain profitability.

(8) Capacity to Innovate

As new technologies are being introduced, it becomes more costly for airlines to keep up with the necessary technological changes that their customers demand.

(9) Unforeseen Catastrophic Events

The recent COVID-19 pandemic significantly disrupted business operations in most industries, particularly the airline industry. Due to the rapid spread of the disease, governments around the world prohibited cross-country transportation. Domestic travel was also significantly impacted due to social distancing and sporadic lockdown requirements. As a result, demand for airline transportation dropped substantially, leading to shrinking market value of the airline business and increased liquidity risks, particularly for highly leveraged airline companies.

Key success factors for the airline industry include:

(1) Business Success Factors:

- Company's market position, including its route and hub network
- Business alliances and partnerships
- Company's market share
- Service standard/quality and reputation
- Fleet profiles – quality, age, and capacity
- Company's operating management including human resource management/labor relations

(2) Financial Success Factors:

- Management philosophy, strategy, and financial risk policies
- Hedging and other risk mitigation policies
- Capital structure and liability management
- Shareholder support and commitment

Competitive Environment

The competitive environment for the U.S. airline industry intensified since the Airline Deregulation Act of 1978. New carriers rushed into the market with new routes post deregulation, which resulted in declining fares as competition and the number of customers increased. Some major carriers, such as Pan American and TWA, which had dominated during the middle portion of the 20th century, began to collapse in the wake of competition. Such carriers disappeared completely following the Gulf War and subsequent recession of the early 1990s. Code sharing agreements and airline alliances (described further below) became widespread within the airline industry beginning in the 1990s.

During the early 2000s, the industry suffered setbacks due to economic downturns, fuel cost increases, and the 9/11/2001 attacks in the U.S. Profitability didn't return until 2006. The financial crisis in 2008 resulted in air traffic in the U.S. declining at rates of 10% to 24%, depending on the airport. The drop in customers prompted rapid consolidation and mergers of all of the nation's largest carriers. The combination of consolidation, mergers, and code sharing

alliances dampened competition and caused an upward pressure on airline fares. Profitability returned to the airline industry in 2009. Over two thirds of the U.S. domestic market share was controlled by the “Big Four” (American, Delta, United, and Southwest) at the beginning of 2020. In early 2020, the COVID-19 pandemic prompted a worldwide drop in air travel. Government financial assistance to most U.S. airlines was needed to avoid a collapse of the industry. The Transportation Security Administration (TSA) estimated a 96% drop in passenger traffic at most airports in the U.S. in early April 2020 compared to the prior year, but traffic had returned to pre-pandemic levels by April 2023.

The pandemic caused some small carriers to face restructuring or bankruptcy due to illiquidity. This may lead to further consolidation of the industry in the near future.

2.2 Company Profile

Blue Jay Air was originally incorporated in the United States in the mid-1980s. It was a small local commercial passenger carrier, operating only in the Eastern region of the United States. Its target market was high-end business clientele located in major cities along the east coast of the United States. Since then, Blue Jay Air has gone through three mergers and two significant acquisitions. The company has been transformed from a focused high-end regional company to an expanded price-competitive commercial carrier, covering the full geographical region of United States as well as major cities in Canada.

Blue Jay Air has been resilient in surfing the destructive waves of the industry by means of various reorganization and restructuring efforts. Blue Jay Air was acquired by RPPC in 2013. Susan Feather, who has over 20 years of airline experience, is viewed as a “turnaround” CEO.

Blue Jay Air also owns a subsidiary company, Blue Jay Tire, which supplies tires for some of the Blue Jay Air plane fleet. The two companies have integrated some of their operations. For example, a single IT department oversees systems development and operations for both companies. The overhead cost of this department is distributed across the two companies.

2.3 Strategies

Blue Jay Air’s new strategic vision is to become the most customer-oriented airline company in the world, providing the best services to the marketplace. Comfort, punctuality and safety are the three important virtues that the company has adopted. Thus, the number one priority for Blue Jay Air is to rebrand the company and image. In order to do so successfully, an extensive study of the company’s customer base was completed. Susan believes that understanding and knowing the customers is an important step to improving profitability for the company in the long run.

Based on the customer base study, the company found that more than 55% of its customers are travelling for business reasons, which is significantly higher than the industry average of 20%.

This could stem from the fact that the company was originally a commercial passenger carrier catering to business travelers; thus, its relationship with the business community is deep-rooted and unique compared to its competitors. In fact, the expansion to leisure travel over the last 15 years did not increase its market share and profit margin as the number of business travelers declined from over 80% to 55% due to reduced services. The rebranding and the change of business model may regain the company's marketability and improve profitability over time.

The company reconsidered its market operations, including the expansion to international operations due to increased demand for international travel caused by globalization of the business world. In order to make this strategy possible, the company has been negotiating with international airport authorities in several European and Asian financial centers and major cities over the last two years to secure boarding gates. Some of these negotiations are close to fruition. Despite its experience with the pandemic, the company still believes in the future of international travel.

Cost control is a key element in this industry. Labor relationship management is a key cost control element for Blue Jay Air as the labor force is not currently unionized, which is very rare in the industry. In order to maintain this niche, Blue Jay Air requires an effective management team to foster a cultural change without damaging the relationship with the employees and to ensure that their needs are addressed to reduce the desire to unionize. In the past few decades, the company has implemented profit sharing schemes, regular salary scale and benefit reviews, frequent employee networking events, employee suggestion boxes and an employee diversity team to foster communication and pay equity between management and regular staff. These efforts have been working as unionization has not materialized. Thus, the company would like to maintain its current employee relationship strategy. The only caveat is that in order to stay competitive, the company has to continue taking further significant expense control measures particularly in the areas of staff count, staff expenses and information technology expenditures. As a result, the company has started to cut back on most training programs, other than the current pilot and safety training programs needed to foster its vision of being the "safest" airline in the industry. The company also imposes tougher standards to qualify for the "top-scaled commercial pilot" category in order to ensure Blue Jay Air pilots are of the highest quality.

Another expansion option available today is to serve more customers through a code-share agreement (CSA) and/or by joining an airline alliance, options which have been widely used by many airlines. Blue Jay Air's executive team is actively looking into the option. More details about the CSA are described in Section 2A Exhibit 5.

In addition to CSAs, several airlines have also found success with other types of strategic alliances. Blue Jay Air wants to explore using strategic alliances as another opportunity to grow.

Balanced Scorecard

In order to clarify Blue Jay Air's vision and strategies and to enhance execution of these strategies, the business operations team has established a balanced scorecard for Blue Jay Air. The intent of this balanced scorecard is to provide senior management with feedback on both the internal business processes and external outcomes, which will allow for continuous improvement of strategic performance and results. The balanced scorecard framework is shown in Section 2A Exhibit 4.

Due to recent events -- the pandemic, inflation, and interest rate volatility, Blue Jay Air is reconsidering all of its expansion strategies, but no updates have yet been made to the balanced scorecard.

2.4 Risk Management

As a highly-leveraged capital-intensive company, the ability to raise and service debt is crucial to Blue Jay Air. The airline industry is plagued by high fixed costs due to labor, lease payments and plane maintenance. Thus, a key risk management objective is to maintain the credit rating of the company within the investment grade categories, i.e., BBB- or higher.

Blue Jay Air has significant pension liabilities for its existing labor force, and the ability to fund the pension liabilities is subject to interest rate volatility. Blue Jay Air also has increased exposure to interest rate volatility due to the entering into a significant amount of long-term debt and finance leases.

About five years ago, Blue Jay Air hired a hedge fund manager, Ruth Green. Ruth has put together a dynamically hedged portfolio to handle the interest rate risks and commodity exposures that the company has been facing.

In addition, Ruth has implemented a liquidity model and a credit model to monitor the company's ongoing liquidity and credit needs. These models are still in the process of refinement and adjustment. The staffing requirement to maintain these models is highly specialized, and it will take time to establish a full staff complement. As a result, the staff workload is currently intensive, and the turnover rate is higher than in other areas.

2.5 Operations

Planes

It has been ten years since Blue Jay Air purchased the current fleet of planes. The fleet is starting to age. Limited passenger capacity and range renders most of the fleet unsuitable for international flights. In order to implement an international expansion strategy, the company will have to order or lease some larger planes with updated features such as Wi-Fi, expanded

business classes, flat beds, bars, and stronger engines with additional safety features, to be delivered over the next few years. The new planes are designed for added comfort, safety and shorter flight time. They are the ideal planes for international travel. However, the costs of these new planes and refurbishments are significant and increasing debt to finance these costs could jeopardize the credit rating of the company.

Even for the short haul planes, the current fleet requires updates such as Wi-Fi capability and individual TV screens to provide additional comfort for business travelers. The fleet also needs more fuel-efficient engines. This will also require additional funding.

Given the current business needs, the majority of aircraft owned by Blue Jay Air are X730 manufactured by Xolar Aircraft. The X730 is a twin-engine short- to medium-range wide body jet airliner which can typically seat 280 passengers in a two-class layout, with a maximum range of 8000 km when fully loaded. Other than Blue Jay Air, only five airlines possess this type of aircraft. Four of them use X730 as well for short to medium distances. The remaining ones use the S999 manufactured by Skylite Aircraft for medium distance. The S999 is a twin-engine medium-range wide body jet airliner which is comparable to the X730. Xolar Aircraft has a very long history and is more famous than Skylite Aircraft. As of today, the stock price for Skylite Aircraft is substantially depressed as measured by its high book-to-market value.

Blue Jay Air is considering acquiring one of the two aircraft manufacturers above in order to extend the company's presence into another stage of the industry chain. Gungwoo Kwon, VP of Operations, has submitted the following information for both aircraft manufacturers.

- Xolar Aircraft is a United States-based corporation with a very long history that designs, manufactures and sells fixed-wing aircraft. The company produces the X730, which has been among the most recognizable aircraft for many years. The X730 has been involved in 27 accidents in 40 years of service, including a very famous incident known as the 306 Air Disaster. Xolar had been profitable for over ten years until last year, when it lost a number of new orders to competitor Skylite Aircraft. Considering the results of the past ten years, Gungwoo believes that last year was just a one-off bad experience and Xolar will perform at its normal level again next year. In particular, Xolar Aircraft is having a cost-cutting campaign and expects to see positive trends in cost control. Gungwoo believes that the campaign will be effective. Therefore, he included some cost reduction in his forecast, the result being that Xolar Aircraft would turn a profit next year.
- Skylite Aircraft is an aircraft manufacturing subsidiary of a global aerospace and defense corporation. The company produces and markets the S999, which has been a direct competitor of the X730 in the last 20 years. The S999 was involved in only 11 accidents in this period. Gungwoo is in favor of Skylite for safety reasons since safety is very important to airlines. On the other hand, due to its substantial operations, Skylite has had significant cost overrun issues, and the company has not been profitable for a 5-year period. However, last year Skylite engineered a turnaround due to a new marketing strategy, which led to a number of new orders during the year. Using the

latest data collected over the past year, Gungwoo has forecast a profitable position for Skylite Aircraft in the coming years.

In the recent pandemic environment the costs of Blue Jay Air's acquisition targets have decreased significantly due to substantial slowdowns in Xolar's and Skylite's manufacturing operations.

Loyalty Program

As part of Blue Jay Air's rebranding strategy, a business travel loyalty program is being considered to encourage frequent business travel. Blue Jay Air is considering a progressive bonus point system as flight frequency increases. In addition, Blue Jay Air would like to expand its reward systems by partnering with other business partners. This will substantially increase the incentive for travel by business executives.

For example, Blue Jay Air is partnering the loyalty card with a bank's credit and debit cards to introduce a combined credit card with an "enhanced air points reward system." This partnership should further increase the value of the loyalty program.

Travel Insurance Program

In addition to the travel loyalty program, Blue Jay Air is also exploring an opportunity to offer travel insurance to the airline's customers. As part of its commitment to become the most customer-oriented airline, the proposed solution envisions a fully customizable coverage package that allows all travelers to choose what best fits their needs.

Blue Jay Air has identified a life insurance company as an ideal strategic partner to successfully execute this venture. Susan Feather, the CEO, is very excited about the potential synergies this initiative could realize.

As part of the proposal, the risk function has completed a preliminary risk review and has identified concerns with how a tail event, such as a plane crash, could impact the potential travel insurance payout costs of this initiative.

Alternatively, Blue Jay Air could outsource the full insurance risk to the life insurance company and, in return, receive a referral commission for each customer who takes on the coverage.

Booking System enhancements

With the technological advancements over the last few decades, Blue Jay Air is considering revamping its booking system to enhance its internet booking capability as well as introducing mobile phone apps for the major mobile phone systems. The new system will automatically link up with the loyalty and credit cards for ease of use of loyalty points. It will include tracking of

flight schedules, weather systems, time zones and other information. It will incorporate many added features that will make business travel enjoyable.

Business Lounges

Blue Jay Air will renovate all of its business lounges in major cities to enhance the competitiveness of its business travel. New business lounges will offer free Wi-Fi, free internet access, and amenities such as gourmet coffee and specialty teas, snacks, massage chairs with music selections and flat beds. The goal is to make business travelers as comfortable as possible while waiting for their flights. Blue Jay Air is also considering offering lounge access to certain frequent fliers as part of an added “perk” of the loyalty program.

Basic Economy

Blue Jay Air will incorporate a new Basic Economy fare to align with its competitors’ pricing and gain some market share from low-cost carriers. The new fare tier promises lower fares but increased fees for add-ons. Passengers booking this fare class will be charged for each piece of checked luggage and for seat assignments. Basic Economy passengers will also board the aircraft last and will not be able to accumulate loyalty points or use any frequent flier benefits. The fare is aimed at gaining market share in the “leisure” passenger market where price is the most important factor in booking a flight. Basic Economy fares will also be available for international flights. Since most business travelers are not expected to travel on this fare, Blue Jay Air does not expect a negative impact in its target market.

Other Cost Measures

Blue Jay Air has recognized that its travel agency programs have been just breaking even rather than contributing to profits. The company has decided to discontinue the travel agency programs as part of its efforts to keep the company as cost efficient as possible. Instead, Blue Jay Air will negotiate direct contractual arrangements with its business clients to customize client needs and leverage long-term relationships. Blue Jay Air is also considering ending its partnership with Online Travel Agencies (OTAs) to encourage passengers to book directly on its website. OTAs are online companies that allow consumers to book flights directly via Internet (e.g., Expedia, Priceline, etc.) in exchange for a commission. Blue Jay Air has noted that some major players in the travel industry have terminated their partnerships with OTAs.

A referral program will also be offered to business clients in order to expand its customer base in the most direct and efficient manner. This referral program will be combined with the loyalty program to optimize value for existing customers.

Financial Statements

Detailed financial statements are shown in Section 2A Exhibits 1 to 3. (These statements exclude any impact of Blue Jay Tire on Blue Jay Air’s overall financial position.)

2A Blue Jay Air Exhibits

EXHIBIT 1

Blue Jay Air Corporation
NON-CONSOLIDATED STATEMENTS OF OPERATIONS
(US Dollars in millions)

Fiscal Year Ended	Dec 31, 2023	Dec 31, 2022	Dec 31, 2021
Total revenues	1,155	1,041	833
Depreciation and amortization	60	54	44
Other operating expenses	1,000	901	721
Total operating expenses	1,061	956	764
Net Operating income	95	85	68
Total non-operating Income	(24)	(25)	(25)
Income (loss) before income taxes	71	60	43
Income taxes	(15)	(13)	0
Net income (loss)	56	48	44
Earnings per share (Basic)	0.47	0.40	0.37
Earnings per share (Diluted)	0.44	0.38	0.35

EXHIBIT 2

Blue Jay Air Corporation
NON-CONSOLIDATED STATEMENT OF FINANCIAL POSITION
(US Dollars in millions)

Fiscal Year Ended	Dec 31, 2023	Dec 31, 2022	Dec 31, 2021
ASSETS			
Total current assets	1,367	1,299	1,152
Total assets	2,304	2,164	1,940
LIABILITIES			
Total current liabilities	855	789	606
Total liabilities	2,136	2,052	1,875
EQUITY			
Total shareholders' equity	169	113	65
Total liabilities & equity	2,304	2,164	1,940

EXHIBIT 3

Blue Jay Air Corporation

NON-CONSOLIDATED STATEMENT OF CASH FLOW

(US Dollars in millions)

Fiscal Year Ended	Dec 31, 2023	Dec 31, 2022	Dec 31, 2021
Cash Flows from (used for)			
Operating			
Net income (loss)	56	48	44
Adjustments to reconcile to net cash from operations:	56	69	(9)
Net cash flow from operating activities	112	117	34
Financing			
Net cash flows used in financing activities	75	152	157
Investing			
Net cash flows used in investing activities	(126)	(139)	(162)
Increase in cash & cash equivalents	61	130	29
Cash & cash equivalents, beginning of year	201	71	41
Cash & cash equivalents, end of year	262	201	71

EXHIBIT 4

Blue Jay Air Corporation's Balanced Scorecard Framework

	Objectives	Measures	Targets	Initiative
Financial	<ul style="list-style-type: none"> Revenue Growth Frequent Business Travels Expense Reduction Asset Utilization 	<ul style="list-style-type: none"> Total Revenues Business Class Load Factor Total Operating Expense Higher Tangible Assets 	<ul style="list-style-type: none"> 35% Annual Growth 95% 2% Annual Decrease Increase Service Capacity 	Refurbish/Purchase
Customer	<ul style="list-style-type: none"> Frequent Business Travel Enhance Loyalty Program Rebranding / Image Increase Direct Online Sales 	<ul style="list-style-type: none"> % Business Traveler Number of Participants Business Traveler Ranking Website Visits 	<ul style="list-style-type: none"> 85% 25% Annual Growth #1 10% Increase 	
Internal	<ul style="list-style-type: none"> Booking System Enhancements Enhance Comfort and Service Turnaround 	<ul style="list-style-type: none"> Utilization Internet, Mobile Increase Business Class Capacity On Time Departure 	<ul style="list-style-type: none"> 50% Annual Growth 80% of Fleet 85% 	
Innovation and Learning	<ul style="list-style-type: none"> Labor Relationship Management Labor Efficiencies Safety 	<ul style="list-style-type: none"> Employee Satisfaction Decrease Staff Expenses Industry Safety Index Rank 	<ul style="list-style-type: none"> Top 10% of Industry 10% Decline over next 5 years #1 	

EXHIBIT 5

Code-Share Agreement

A code-share agreement is an aviation business arrangement where two or more airlines share the same flight. Sharing, in this sense, means that each airline publishes and markets the flight under its own airline designator and flight number as part of its published timetable or schedule. A seat can be purchased on each airline's designator and flight number, but the flight is operated by only one of these cooperating airlines, commonly called the operating carrier. The carrier marketing the flight under its own code is commonly called the marketing carrier. The number of marketing carriers for one flight technically is not limited.

In certain situations, an operating carrier does not also act as a marketing carrier. These types of carriers primarily consist of smaller, regional airlines doing business as another marketing carrier or subsidiary thereof. For instance, a flight may be listed as operated by Endeavor Air DBA Delta Connection. It is often the case that these carriers do not have a sound infrastructure in place to market and sell seats to the consumer directly. These flights may also involve more than one marketing carrier.

Airlines are motivated to enter into code-sharing agreements primarily to expand the number of flights an individual airline can offer its customers. These additional offerings may take the form of additional routes or additional flight timings. The marketing carrier is able to avoid the costs and difficulties of obtaining equipment and gate access necessary to add an additional flight on its own. Code-share agreements do involve significant costs, however, due to the initial setup and continuing negotiations, as well as ever-changing contracts between airlines in dealing with how seats are exchanged between them.

Furthermore, the marketing carrier must be confident that the operating carrier offers a safe and suitable product when the marketing carrier's passengers board the operating carrier's planes. Likewise, the operating carrier must rely upon the marketing carrier's service and systems to bring them to their planes in a reliable manner. Moreover, the systems of all associated parties must reliably interact and provide the appropriate information to each other.

Code-share agreements are also subject to further regulatory scrutiny. Governments are concerned if entering into the agreement creates an unfair market position for any of the airlines involved. For instance, in 1999, the Department of Transportation in the U.S. demanded that a CSA between Continental and Northwest could not include flights between each airline's hub airports. Additionally, regulatory authorities will closely watch airlines with existing CSAs to make sure no collusion or other anti-competitive practices exist as a result.

3 Blue Jay Tire Co

“How many major strategic issues can pile on at once?” thought Pierre Beaudry, CEO of Blue Jay Tire Co (BJT). “We have difficult labor issues in the U.S. operation at the same time that oil prices are increasing, the minimum wage is increasing, and materials for tire production are not being delivered on time due to a global supply chain issue. And we are still trying to recover our sales after the tire recall we experienced in 2021.”

Increasing oil prices have proven to be a negative for tire sales as both consumer and commercial vehicle usage is on the rise. The industry is rife with growth, but global supply chain issues are impacting production times, and our production plants in the southern states are near capacity. BJT needs to overcome obstacles to expanding its production capacity soon to support its growth. This and other labor concerns need to be discussed with the union representatives as new contracts are negotiated. The tire recall had definitely affected consumer sentiment about BJT, though Pierre was hopeful the company was getting past that.

3.1 Tire Industry Profile

The North American tire industry supplies tires for new vehicles and replacement tires for existing vehicles. Its market includes passenger vehicles and trucks, in all size ranges. Tire manufacturers need to source materials used in production, particularly natural or synthetic rubber and various types of plastics and metal components. Tire manufacturers sell to wholesalers, automobile manufacturers, and retail dealers.

Risks to the industry include:

- Volatile raw material prices
- Rising competition from low-cost imports
- Increasing minimum wage
- Global supply chain issues with respect to raw materials

Factors that can lead to success include:

- Maintaining strong industry relations (with suppliers and customers)
- Aggressive marketing
- Rising demand in the replacement tires market
- Rising demand for new vehicles due to rising income

The competitive environment for tire manufacturers has been characterized by several major established tire companies competing fairly evenly for the business available in North America. However, more recently new emerging companies from lower-cost regions of the world have been extending their reach into the lucrative North American markets. These new competitors may have more direct access to raw materials and lower labor costs, enabling them to compete effectively.

3.2 Company Profile

Early History

The Durable Tire Corporation had been operating in Canada since 1928. The company founders, the Eastern family, focused on providing the best quality tires. The company had a small and loyal customer base in rural areas. Their high-quality products proved to be very well suited to the rugged Canadian frontier. Durable built tires for farm vehicles and small planes. These tires were intended for dirt roads or off-road on farms and in small community towns. Durable also manufactured specialty tires sold in niche markets.

In 2009, the family decided to sell its interest in the company. The company was acquired by Blue Jay Air (BJA). BJA had been one of Durable's clients for specialty tires in small aircraft that flew in the northern reaches of Canada.

Under BJA Since 2009

The BJA group felt that it could leverage the capabilities of the manufacturing process to develop a broader range of tires. The tire company was re-branded within the BJA group to become Blue Jay Tire (BJT). In 2009, the BJA team put in place a 5-year plan to expand the sales and distribution reach into commercial vehicles across the U.S.

The BJA management team increased its focus on the BJT venture and its ever-improving financial results, particularly as Blue Jay Air's own struggles worsened due to increased competition and squeezed margins.

In 2014, having successfully met and surpassed the 5-year plan objectives set out in 2009, BJT was directed by the BJA board to pursue an ambitious growth strategy. Driven primarily by the influence of BJA, BJT set as its vision: *Become a preeminent tire manufacturer for the U.S. and Canada, serving both specialty and mass market tire customers.*

BJT purchased two manufacturing plants in the southern U.S. and re-fitted the operations with direction from the Canadian operation. An executive team under the banner of Blue Jay Tire USA (BJT-USA) was set up by the BJA Board. BJT-USA operated with oversight from its Canadian head office. BJT-USA engineers were asked to set targets at 50% higher than their pre-acquisition production levels or about double the level of the Canadian manufacturing plant.

At the same time, BJT introduced a tire warranty program that helped to enhance tire sales and establish the tire brand. With a premium of about 50% of the tire cost, the warranty program provides free tire replacement for seven years from the purchase date of every tire. Since inception, this tire warranty program has been well received. The warranty program is currently maintained on a pay-as-you-go basis.

BJT-USA surpassed its sale targets every year from 2014 - 2020. Despite its relatively modest size, the company achieved a 3rd place market position in tire sales for compact cars and small SUVs in the southern U.S.

By 2016, BJT dominated the earnings of the Blue Jay Air group. BJT management was heralded by the executive team, the board, and its shareholders as the “star” of the Airline group.

Financials

Detailed financial statements are shown in Section 3A Exhibits 1 to 3.

3.3 Risk Profile

BJT management has identified the following risks facing the company.

Company Culture

Although BJT has received continual scrutiny from BJA since acquisition, BJA has recently concluded that disconnects continue to exist between the two companies. BJT is expected to adopt and act in accordance with BJA’s corporate vision and risk culture. Consequently, BJA has prioritized additional oversight and communication toward BJT management and operations.

Commodity Risk

Although there is a large amount of synthetic rubber used in the manufacturing process, the company still depends a great deal on natural rubber sourced in countries that are less stable than the developed world. Natural rubber production is also subject to weather related risks. In the tire industry, rubber represents about 50% of total manufacturing purchases. A \$0.10 per kilogram increase in natural rubber prices would lead to an estimated \$0.5 million increase in manufacturing costs.

Global Supply Chain Risk

As the pandemic subsides in the developed countries, demand for travel has increased dramatically. But a part of the world is still experiencing a lockdown or a disruption due to the lingering COVID-19 virus, which has caused a global supply chain issue. As a result, the tire industry is having difficulty getting materials for tire production delivered on a planned schedule and is seeing volatility in raw material prices.

Manufacturing Risk

The process of making tires involves chemicals and flammable ingredients. This process poses safety concerns for the workers, and the risk of fire is large. In addition, the size of the finished product increases the risk of worker disabilities.

A lost-time injury is defined as an occurrence that results in a fatality, permanent disability or time lost from work of one shift or more. The Lost Time Injury Frequency Rate (LTIFR), the number of lost-time injuries per million hours worked, is calculated as:

$$LTIFR = \frac{\text{Number of lost – time injuries} \times 1,000,000}{\text{Total hours worked}}$$

Overall, the BJT manufacturing plants have reported a LTIFR between 2.16 and 2.69 in recent years. This compares reasonably well to the industry average of 2.38. In particular, the LTIFR for the Canadian BJT plant has had best in class safety records at less than 2.0 since inter-company surveys began. In comparison, the U.S. plants have been between 2.56 and 2.99 since being acquired by BJT.

The manufacturing process has had proven success over many decades. The same process and standards are used in the Canadian and U.S. plants. The core competences for quality assurance have been developed by the managers, and the culture of quality management is passed on within the operations team from experienced staff to new associates. Quality management is considered by Executive Management to be a grass-roots competency of the company.

Manufacturing risk is currently considered to be medium for BJT. Management’s recent focus has been to return to the historical Canadian LTIFR level of 1.92. A program recently implemented invites retired Canadian and former BJT plant operators to conduct quality management training for existing staff.

Labor Risk

Tire manufacturing plants typically have unionized labor forces, which can lead to contentious labor issues.

Historically, the Canadian operation has not had unionized labor. However, 50% of the employees working in the two U.S. plants are union members. The current union contract expires in 2024. After normalizing for standard of living differentials and exchange rates between geographical locations, the labor cost in the Canadian operation is 35% lower than similar operations in the U.S.

Related to the labor risk, management notes that right-to-work laws exist in many U.S. states. They are intended to provide employees the right to work without the obligation to join a union and without the obligation to pay for any portion of the cost of union representation.

The U.S. federal government is considering a right-to-work law at the national level, which would extend the “right-to-work” laws to all U.S. states. The federal right-to-work law would allow employees more generous benefits and pay if they do not join a union.

BJT management has organized a task force to analyze the financial impact of right-to-work laws and explore potential strategic moves, which could include divestiture.

Legal Risk

The possibility of class-action lawsuits exists, particularly in the U.S. A large risk stems from the chance of paying out large claims or having wide-spread product recalls. BJT has not experienced any significant litigation action in its history. But the current tire recall issue raises the level of this risk.

Distributor Risk

BJT sells almost all its tires through independent distributors. BJT has long standing relationships with several Canadian car dealerships as their sole or primary tire supplier. The largest customer represents only 5% of BJT's total annual sales.

Product Liability

The key risks in a tire operation are product liability and product recall. Some companies use a captive insurance company to handle this exposure. Historically, BJT has retained its entire product liability and recall risks. A review of the company's tolerance for this risk is pending.

Environmental Risk

Tires are an easy target for environmental groups. Billions of tires are produced each year and billions are discarded. The materials to produce tires and the manufacturing process can be the subject of environmental concerns. BJT maintains a recycling plant for the rubber in its discarded tires and has established a program that reuses the rubber as equestrian mulch. Environmental risk is considered to be low due to operation size and overall market share.

Economic Risk

The number of miles driven has a large impact on the demand for tires. The state of the world economy has a direct impact on the company's ability to grow and expand. BJT has chosen to target compact cars and small SUVs. It was anticipated that increasing gasoline prices would continue the trend towards small vehicles. However, regulations and technology have made vehicles more fuel efficient. As a result, a trend is emerging as consumers are moving away from sedans to larger vehicles.

Overall, economic risk for BJT is considered medium.

Reputational Risk

One of the company's primary strengths is its brand name. BJT must constantly ensure that its products are of the highest quality and must invest in research and development to continually improve its products. BJT has growing brand awareness within the U.S. market. BJT uses social media monitoring tools to assess its brand awareness. Brand awareness is considered to be a critical determinant of BJT's growing presence in its chosen target market. BJT monitors mainstream and social media for positive and negative information about the company. Positive reports occur on average about twice as often as negative. Reputational risk is considered to be low.

Political Risk

The company is exposed to political risk through import/export quotas and price controls. The North American Free Trade Agreement (NAFTA) between the U.S., Canada and Mexico gave birth to the U.S. operations of BJT. BJT is exposed to future changes in this agreement. During the financial crisis and again in recent presidential elections, U.S. interest lobby groups demanded stronger nationalist policies.

The supply chain is also exposed to political risk due to the geographical location of the suppliers, which are primarily in Malaysia.

In addition, BJT faces the risk that the U.S. may adopt national right-to-work laws. Political risk is considered a high risk for BJT.

Currency Risk

Manufacturing costs and the revenue generated are in different currencies, resulting in a possible loss. BJT Canadian operations and sales are in Canadian dollars and the U.S. operations and sales are in U.S. dollars. 85% of the raw materials are sourced from Malaysia.

Risk Issue -- Tire Recall

Sales in 2022 and 2023 were impacted by a tire recall. Below are the headline news and a series of emails related to the recall uncovered by investigative journalists at that time.

Blue Jay Tire quality or quantity, you decide By Jennifer Truth

Smallville, Arizona (Associated Press – August 2nd 2021): The Blue Jay Tire Co (BJT) reported in May 2021 that a tire defect that caused a single car accident was an isolated incident. Pierre Beaudry, CEO, issued a statement saying “Blue Jay Tire has a long history of manufacturing excellence. But on behalf of our employees, we extend our condolences to the Franklin family for their loss. We regret that a BJT tire was responsible for this accident. On behalf of our engineers, line managers and production team, I can assure the Franklins and any family in the USA that we do everything in our power to ensure our tires represent the highest quality on the road”.

The tire involved was the RU42WD model. Over 40 million of these tires have been sold in the USA. The official report on the accident disclosed that the defective tire exploded, causing a sudden loss of driver control.

In July, this reporter uncovered a number of email records related to RU42WD tires in BJT’s manufacturing process.

In an email dated Aug 8, 2019, the BJT (Canada) head engineer, Latanya Williams, expressed reservations with the speed of the production line, resulting in uneven rubber density, to a BJT

(USA) executive, Jack Tavares. The follow-up responses indicate that some corrective action was taken to address the situation. When contacted, the BJT (USA) head engineer at the time, Chris Carpenter, reported to this paper: “The production process always ran within its design limits. But we did notice tire density variations. We never did test the possible impact of low density tires on automobiles travelling at high speed. Instead, we relied on the fact that the tire thread wear tests were always within the tolerances commonly used by all tire companies at the time”. Chris Carpenter now works for a rival firm.

BJT (USA) refused to comment on these internal memos and the comments of Carpenter.

Below are a series of emails that were uncovered by AP journalists:

From: Latanya Williams
To: Jack Tavares
Date: August 8, 2019
Subject: Sticky valves and rubber density on tires

Jack –

After visiting the BJT-USA plant, I do not feel that enough Quality Assurance is in place. I think production is too fast in order to match demand and not enough checks are being made. Specifically, I have noticed two items: sticky valves on model RU42WR and uneven rubber density on RU42WD. I recommend that the line managers monitor these issues more closely and tighten the allowed defects – even though this may slow production – so as to correct these issues. Although the valve is mostly a nuisance, the density is more of a safety issue. To be clear, the low density areas are still within prescribed density limits – there are just some noticeable variations within the tires.

Latanya Williams
Head Engineer
Blue Jay Tire (Canada)

From: Jack Tavares
To: Latanya Williams
Date: August 12, 2019
Subject: RE: Sticky valves and rubber density on tires

Latanya,
Good catch – I will follow up with Chris regarding both RU42WR and RU42WD.
Hope you enjoyed your visit!

Jack Tavares
Chief Risk Officer
Blue Jay Tire (USA)

From: Chris Carpenter
To: Jack Tavares
Date: September 9, 2019
Subject: Tire production

Jack,

This is to summarize our calls over the past month.

I think we have both issues solved: as I mentioned on the phone, the sticky values on RU42WR were easily fixed by increasing the lubricant on the silicon machine. RU42WD required more effort and took longer. We discovered a small inconsistency on the centrifuge console. My staff recalibrated it and we have eliminated the density issue. We also increased our spec inspections from 1 in 200 to 1 in 20 until we were confident the fix took.

We are back up to regular production levels again. We are actually considering increasing the production line speed.

Thanks again,

Chris Carpenter
Head Engineer
Blue Jay Tire (USA)

3.4 Competitive Advantages

Raw Material Sourcing

A major component in the manufacturing of tires is rubber. BJT is heavily dependent on natural rubber sourced from Southeast Asia, primarily Malaysia. It competes with other tire manufacturers for this resource and is dependent on price fluctuations, coupled with currency risk.

BJT has maintained the same rubber supplier for over 30 years. The relationship is very strong and the two companies have integrated their systems to provide an automated ordering and payment system. BJT benefits from stable pricing. In the past decade, BJT has achieved the lowest prices on its commodity purchases because its growth strategy and operational excellence have also benefited the supplier. Volume discounts and IT system integration savings have been passed on to BJT in the form of better pricing. For BJT, rubber now represents only 48% of company purchases, down from 60% at the start of the millennium. Commodity risk is considered to be lower for BJT than its competitors. However, the global supply chain issues have impacted BJT in the form of delayed delivery and volatile transportation costs.

As an alternative, some tire producers have begun to use synthetic rubber or a mixture of synthetic and natural rubber.

3.5 Strategic Initiatives

Production Expansion Committee

The Production Expansion Committee was formed in 2014 by BJA as a part of its ambitious growth strategy for BJT. The committee has consisted of the same five members since inception, all of whom are employees of BJT-USA. Oversight of the Committee is the responsibility of the president of BJT. The reporting structure has not changed since inception, and there remains no direct tie between the Committee and BJA.

Following some early successes, the committee has had more of a monitoring type of role, meeting only occasionally. It has been responsible for observing, from a high level, whether the two plants have met the needs of BJT-USA as anticipated. More importantly, the Committee is responsible for monitoring potential plants available for purchase or lease that would be a good fit for BJT, should the need arise.

In October of 2023, the Production Expansion Committee received word that a third plant was to be purchased and re-fitted during 2024. This plant would be used by BJT-USA as well as other divisions within BJT. The committee quickly expanded the due diligence work on their top two prospective plants, one in Mobile, Alabama and one in Buffalo, New York.

CCC Tire Stores

In order to improve name recognition in Southwest U.S., BJT acquired CCC Tire Stores, a small chain of tire stores located in Arizona, U.S. Although held by BJT, CCC is managed as a separate line of business. CCC's main focus is increasing its level of sales through aggressive marketing.

In addition to selling tires to its core customers, BJT-USA sells its products internally to CCC. Since the acquisition, transfer pricing has been a divisive issue between BJT-USA and CCC.

Right-to-work task force

A task force has been formed to analyze the financial impact on enterprise value due to the potential right-to-work law at the Federal jurisdiction and to provide senior management with strategic options including divestitures. Exhibit 5 presents the task force's breakdowns of current and revised financial information on BJT's Canada and U.S. business reflecting current and potential exchange rate move scenarios.

3A Blue Jay Tire Exhibits

EXHIBIT 1

Blue Jay Tire Corporation

NON-CONSOLIDATED STATEMENT OF OPERATIONS (US Dollars in millions)

FISCAL YEAR ending 12/31/YYYY	2023	2022	2021
Total Gross Sales	385	366	458
Total Costs of Sales	(214)	(226)	(272)
Net Revenue	171	140	186
Total Operating Expenses	114	117	172
Operating Income or Loss	57	24	14
Total Other Income/Expenses Net (Note 1)	21	36	45
Earnings Before Interest & Taxes	78	60	59
Interest Expense	41	40	38
Income Before Taxes	37	20	21
Income Taxes	8	4	4
Net Income from Continuing Ops	29	16	17

Notes:

(1) Performance of the tire warranty program and Sales from travel & restaurant guide books

EXHIBIT 2

Blue Jay Tire Corporation

NON-CONSOLIDATED STATEMENT OF FINANCIAL POSITION (US Dollars in millions)

FISCAL YEAR ending 12/31/YYYY	2023	2022	2021
ASSETS			
Current Assets	592	577	525
TOTAL ASSETS	1,420	1,370	1,334
LIABILITIES and EQUITY			
Total Current Liabilities	244	236	224
TOTAL LIABILITIES	1,038	1,002	967
Equity			
TOTAL EQUITY	382	367	367
TOTAL LIABILITIES and EQUITY	1,420	1,370	1,334

EXHIBIT 3

Blue Jay Tire Corporation

NON-CONSOLIDATED STATEMENT OF CASH FLOW (US Dollars in millions)

FISCAL YEAR ending 12/31/YYYY	2023	2022	2021
Net Income	29	16	17
Operating Activities, Misc Other	54	(9)	41
Total Cash Flow From Operating Activities	83	7	58
Total Cash Flow From Investing Activities	(88)	(35)	(33)
Total Cash Flow From Financing Activities	22	9	5
Cash & cash equivalents, beginning of year	139	158	128
Cash & cash equivalents, end of year	156	139	158
Change In Cash and Cash Equivalents	17	(19)	30

EXHIBIT 4

Blue Jay Tire Corporation

SELECT FINANCIAL INFORMATION BY COUNTRY (US Dollars in millions)

FISCAL YEAR ending 12/31/YYYY	2023	2022	2021
BJT - Canada	36	29	43
BJT-USA	135	111	143
Net Revenue	171	140	186
BJT - Canada	24	25	39
BJT-USA	90	92	133
Total Operating Expenses	114	117	172
BJT - Canada	405	391	382
BJT-USA	1,015	979	952
Total Assets	1,420	1,370	1,334
Cost of Capital			
BJT - Canada	12%	12%	12%
BJT-USA	10%	10%	10%
Tax Rates			
Canada	15%		
USA	21%		

ADDITIONAL INFORMATION BY COUNTRY

CALENDAR YEARS	2022- 2023
BJT - Canada	25,000
BJT-USA	75,000
Employees	100,000
BJT - Canada	1
BJT-USA	2
Manufacturing Plants	3

EXHIBIT 5

Blue Jay Tire Corporation

SELECT FINANCIAL INFORMATION BY COUNTRY (US Dollars in millions)

Revised Financial columns consider new U.S. right-to-work proposed law

FISCAL YEAR ending 12/31/2023	Current Financial		
	Canada	USA	BJT Total
Net Revenue	36	135	171
Total Operating Expenses	24	90	114
Total Operating income/loss	12	45	57
Total Other income/Expenses	5	16	21
EBITDA	17	61	78

Revised Financial		
Canada	USA	BJT Total
36	135	171
24	102	126
12	33	45
5	16	21
17	49	66

Ratio of Net Enterprise Value / EBITDA	20	10	12
Net Enterprise Value	340	610	950

20	7	10
340	343	683

Enterprise Value	Current (Converted to US \$)		
	Canada	USA	BJT Total
Exchange Rate = 1 CAD to 1 USD*	340	610	950
Exchange Rate = 1 CAD to 0.9 USD**	306	610	916

Revised (Converted to US \$)		
Canada	USA	BJT Total
340	343	683
306	343	649

*Current exchange rate

**Canadian \$ is depreciated (decreased in value) against US \$ by 10%

4 Frenz Corporation

4.1 Coffee Shops Industry Profile

Operations

Companies in the coffee shop industry sell coffee drinks and other food and beverages for consumption on the premises or for takeout. Coffee shops are part of the specialty eatery industry, which also includes outlets specializing in products such as bagels, donuts, and ice cream. Some coffee chains operate worldwide, primarily through licensing agreements. The world's largest coffee consumers include the U.S., Brazil, Germany, and Japan.

Risk/Success Factors

Key drivers of demand for premium coffee and snack products include:

- Disposable income: consumption increases and decreases with disposable income
- Coffee prices: since coffee beans are the primary input in the value chain, the volatile prices of coffee beans determine market costs and profitability margins
- Attitudes towards health: a shift toward healthy eating could be a potential threat to the industry
- Demographics: as an example, relative to older consumers, millennials drink more espresso, iced, frozen, and branded coffee drinks

Competitive Environment

The profitability of individual companies depends on the ability to secure prime locations, drive store traffic, and deliver high-quality products. Large companies have advantages in purchasing, finance, and marketing. Small companies can compete effectively by offering specialized products, serving a local market, or providing superior customer service.

Coffee shops compete with businesses such as convenience stores, gas stations, quick-service and fast-food restaurants, gourmet food shops, and donut shops.

This industry is in a mature stage with a medium level concentration.

4.2 Frenz Company Profile

Frenz Corporation is majority-owned by RPPC, with 30% public ownership. Frenz is a global premier roaster, marketer, and retailer of specialty coffee in European and American countries, incorporated in Belgium. It has operations in most major cities of Europe and the Americas, including all developed countries and some developing countries. In addition to company-

operated stores, Frenz also sells a variety of coffee and tea products and licenses its trademarks through other channels such as franchises, groceries, private clubs, hotels, cruise ships, and national food service accounts.

Frenz is one of the most recognized and respected brands in the “premier” coffee houses as well as a household brand in the developed world. Two of its main objectives are to maintain its competitive standing and to continue its disciplined expansion of the store base, primarily focused on growth in developing countries.

Frenz is dominant in the high-end specialty coffee market especially through its premier coffee house outlets which have over a 40% market share in Europe. However, its market shares in North America, Latin America, developing countries, and household coffee constitute only about 18%, 11%, 5%, and 16% respectively. There is significant growth potential in those countries where the customer base is still expanding, thus providing a chance to increase market share without the pressure to take customers from competitors.

Mission Statement

Frenz’s mission statement is:

One person, one cup, one community, one world.

This mission statement focuses on our objective of being the most recognizable coffee brand in the world.

Board of Directors

Frenz’s Board consists of eight members. Three board members are Chief Executive Officers or Board Chairs in leading public companies in Belgium, two are Board members of RPPC, and the remaining Board members are executive officers of Frenz.

Frenz’s Board recently hired an experienced Chief Risk Officer, Robert Kaplan, to develop risk management strategies for Frenz. Kaplan’s responsibilities include proper integration of risk management strategies and policies with the company’s global strategies and policies, smooth and controlled implementation of these strategies, and cultivation of an acceptable risk management culture for Frenz, facilitating its ultimate goal of becoming the top coffee company in the world.

Frenz has 25 million shares of stock outstanding. Its beta is 0.8. Its stock price at the end of each of the past three years is shown below:

<u>2021</u>	<u>2022</u>	<u>2023</u>
63.69	48.62	57.38

4.3 Risk Profile

Supply-Chain Risk

Commodity price risk is the primary supply-chain risk for Frenz. Price volatility of key ingredients such as green coffee, tea leaves and dairy products presents a substantial exposure to the stability of the product prices as well as profit margins. This is mitigated somewhat by the ability to keep coffee and tea for long periods of time, thus reducing storage costs.

In addition, oil prices have a direct impact on shipping costs. Frenz incurs substantial shipping costs in transporting the key ingredients to its worldwide retail outlets. Therefore, oil price increases could erode Frenz's profit margin.

Supply and price can be affected by multiple factors in the producing countries, including weather and political and economic conditions. The price for coffee is also impacted by trading activities by entities such as hedge funds and commodity index funds in the Arabica coffee futures market.

Furthermore, green coffee prices may be affected by actions of certain organizations and associations that have historically attempted to influence prices through agreements establishing export quotas, increased tariffs, embargoes, and customs restrictions or by restricting coffee supplies. Similar influences also exist for prices of tea leaves.

Relationships with the producers (coffee, tea, and dairy), outside trading companies, suppliers and exporters are also pertinent in assessing the risk of non-delivery on purchase commitments and the quality of ingredients delivered.

Demand Risk

Competition can be fierce as the capital required to enter the industry is low. The company is facing competition not only from the specialty beverage shops such as Starbucks, Timothy's, and Second Cup, but also from quick-service restaurants such as McDonald's, donut shops such as Tim Hortons, dessert shops, high-end restaurants, and other specialty retailers. Thus, the need for the company to keep expanding and differentiating its product lines and venture into unfamiliar territories is becoming inevitable.

Customer loyalty is pertinent in this business. As a result, the company will continue to expand its popular loyalty card program, which has been effective in preventing other companies from stealing away Frenz's customers.

Adverse economic conditions may cause declines in general consumer demand for these high-end products, driving an increase in costs and pressure to reduce the quality of products. This in turn, may increase impacts from negative publicity.

Negative publicity regarding business practices or health effects of consuming products may lead to reduction in demand and profitability and an increase in litigation.

Operational Risk

Risks are associated with each of the expansion plans that Frenz is exploring. Implementation of these plans can be very challenging and risky as these plans are disruptions to the ongoing business.

Delays in store openings, exposure to increased construction costs associated with new store openings, and lack of availability of desirable real estate locations would also negatively impact the net revenues and profit margins.

The degree to which Frenz is able to negotiate appropriate terms and conditions as it enters into, maintains, and develops commercial and other agreements could have significant impact on company financing and operation.

Loss of key personnel, difficulties in recruiting and retaining qualified personnel, or labor discord could result in staff shortages. Hiring and training new employees would require additional financial and human resources.

Political instability and natural disasters could cause significant business interruption which, in turn, adversely impacts the business and financial results.

Adverse public or medical opinions about health effects, food tampering, food contamination, regional or global health pandemic could severely and adversely impact the company's business.

Due to Frenz's heavy reliance on information technology, any material inadequacy, interruption, or security failure of the technology could harm the ability to effectively operate the business.

Litigation and Reputation Risk

Success depends substantially on the value of the brands, especially in the specialty business. Thus, the company must maintain product quality and be able to consistently deliver a positive consumer experience. It must engage in corporate social responsibility programs to enhance the company reputation. Brand value is based, in part, on consumer perceptions of a variety of subjective qualities. Even isolated business incidents that erode consumer trust, such as contaminated food or privacy breaches, can significantly reduce brand value, particularly if the incidents receive considerable publicity or result in litigation.

Reputation may be harmed by actions taken by third parties that are outside of the company's control. Third parties may include business partners, licensees, suppliers, vendors, and any business associates with whom the company engages.

Proper handling of customer complaints is very important in protecting the company's reputation and preventing potential litigation.

Foreign Currency Risk

Because Frenz has operations in many different countries, currency exchange risk exists due to the different currencies generated from the revenue and expense sides. Currency volatility has caused significant costs in operation due to timing differences.

Real Estate Risk

Frenz has significant exposure in real estate markets due to investments in commercial properties and operation plants.

Interest Rate Risk

Frenz has debt issuances, and fluctuation in interest rates could result in significant impacts on refinancing costs.

Capital Risk

In order to maintain the company's growth rate, Frenz is facing increasing capital risks.

4.4 Strategic Initiatives

Lotte Janssen, CEO, recalled the early days of Frenz, "What we were doing was new - specialty coffee for the worker on the move. We've always been in front of the curve – we were early pioneers of in-store Wi-Fi. With each passing year competition gets fiercer. Each success is copied. We are expanding globally and expanding product lines, but our competition is moving into our markets."

Lotte wanted to accelerate Frenz's expansion globally. How well did Frenz's advantages travel globally? What was the best way to grow, especially in the emerging markets? Frenz had an opportunity to secure its supply of coffee beans to fuel its growth. Lotte wanted to increase the rate of new store openings and enter new countries. She was concerned about the best geographic regions for expansion, whether stores should be franchisee-developed or company-owned.

Lotte wanted to expand product offerings. Frenz had a number of products in trial markets and cities. Which products should be expanded within a country, a region, or globally? How many variations? Should they be the same globally or customized for local tastes? She wanted to increase brand recognition and increase customer traffic, especially in recently entered countries. What was the most effective means of marketing?

Existing stores generated cash. Opening new stores was capital intensive. How would Frenz fund growth? Could Frenz continue to be choosy about site selection and new managers? Would corporate support and quality or service suffer with rapid expansion and new locales? New products had lower profit margins. Should they have promotional sales discounts upon introduction? Would new products sabotage sales of higher margin products? The competitors were offering products at lower price points. How should Frenz respond? With expansion of

the digital world, how would Frenz tackle this new market? Should Frenz expand and invest in digital technology which would take away resources and capital from its core business? Should Frenz continue to rely on debt to fund its growth or should it issue additional stock? Would capital be an issue with Frenz's expansion plan?

Marketing Strategies

Frenz's current marketing strategies are as follows:

- Continue its dominant market position in coffee houses by organic expansion in developed countries through building more company-operated coffee houses in financial districts and high socio-economic areas;
- Further nurture relationships with other distributors such as high-end hotels, private clubs, universities, cruise-lines, and upscale grocery and retail outlets such as bookstores and department stores;
- Expand into more developing countries through acquisition of local coffee house chains, franchising, and organic growth into more cities and financial districts of the developing countries, especially the fast-growing Asian market;
- Target local advertising in certain countries to expand its household brand recognition and add more endorsements in conjunction with certain significant events such as the World Cup, the Olympics, the World Exhibition, and events of regional significance;
- Maintain a significant budget devoted to Frenz's renowned marketing capability, which, due to investments over many years, has achieved significant economies of scale;
- Further enhance the company's ability to quickly develop and roll out new and innovative products, which helps defend against potential coffee substitutes and serves to further differentiate Frenz from its competitors;
- Expand and build the brand's digital presence and develop enhanced analytics to better understand customer preferences and profiles;
- Maintain a high Customer Taste Index (CTI) score. The CTI is based on customer feedback and reflects their satisfaction with various coffee beans.

Frenz is also exploring vertical integration through owning and controlling its sources of key ingredients, such as coffee bean and tea plantations. This would provide enhanced quality control and allow for development of its own niche products.

Expansion Strategy

The Marketing Vice President, Jade Phan, has been empowered to implement the recent marketing strategic goals set by the Board. Jade's first priority is to expand into the fast-growing Asian market. She currently leads a 20-person marketing team whose experience is predominantly in targeting the higher socio-economic clientele in the developed countries in Europe and the United States.

This expansion strategy will require significant capital. The new Chief Risk Officer, Robert Kaplan, is uneasy with the expansion strategy as cash flow in Frenz will be greatly strained

without additional debt financing. This, in turn, could increase Frenz's leverage ratio above the company's internal limit.

In addition, Jade is expanding certain of Frenz's product lines, such as the super-premium coffee market, bubble teas, specialty fruit drinks, and mixed coffee and tea drinks, which have given Frenz a reputation as a product innovator in the market. To this end, Frenz is exploring offering coffee made from exotic coffee beans and special tea leaves.

There are very few areas that can produce such high-quality premium coffee beans. The best coffee beans are from Costa Rica, the *Finca Palmilera*, but they are very expensive. However, through market research, Frenz has determined that its customers often cannot distinguish between the premier super-premium coffee bean, *Costa Rica Finca Palmilera*, and its cousin the *Vietombia Finca Palmilera*, whose popularity is not as great, but whose flavor is considered comparable to *Costa Rica Finca Palmilera*.

The Asian country of Vietombia is the largest producer of *Vietombia Finca Palmilera*. The historical statistics on Vietombia are summarized in Section 4A, Exhibit 2a. Although Vietombia is a major producer of coffee, its domestic consumption is very small. Vietombia has a growing, export-driven economy. Until recently, the Vietombian economy was unstable due to a corrupt government and weak laws. Two years ago, the political party in power was overthrown and a new party, focused on growth and economic stability, came into power. Unfortunately, it will take many more years to implement stronger laws, remove corrupt officials, and build a financially stable country.

Despite Vietombia's increased participation in international trade, ten years ago Vietombia put in place a policy to peg its currency to that of its neighboring countries. (This practice has continued under the new political party in power.) The effect of the currency peg has been to effectively deflate the value of Vietombia's currency, the *Rubiaceae*, and as a consequence, bolster Vietombia's export-driven economy. Independent economic analysis has suggested the deflation of Vietombia's currency has been instrumental to the growth of the Vietombia economy. However, the banking system in Vietombia has been slow in modernizing, and all domestic banks primarily engage in domestic thrift activity. As a consequence, their risk management and hedging programs are in their early stages. Further, the central banking system performs largely a symbolic role.

As a result of the Vietombia government's eagerness to stabilize its economy, the government is willing to give an exclusive dealership of the premium coffee beans produced there to Frenz, provided Frenz sets up a production facility for these super-premium coffee beans in Vietombia. This presents a significant opportunity for Frenz to gain favorable access to its key ingredient not easily duplicated by competitors, to reduce its reliance on other coffee suppliers, and to control costs as well as influence and control the quality of future coffee bean production.

However, this vertical integration strategy presents significant upfront cost requirements which may substantially increase the company's leverage ratio and lower the overall credit rating for Frenz. Details of the deal are given in Section 4A, Exhibit 2b.

Other significant companies in the market include King Coffee and Luna Beans.

King Coffee is a chain of premium coffee shops founded five years ago in Equabodia. Equabodia is an Asian country that neighbors Vietombia and is focused on growing its export-driven economy. However, it is also fraught with political corruption and legal challenges. In the short number of years since King Coffee was founded, it has opened nine more locations in Equabodia and now closely rivals Starbucks as the most popular chain in the country. King Coffee's success is largely due to its CEO and founder, Khan Ong, a native Equabodian who successfully adapted themes of international premium coffee shop chains to the local market.

Luna Beans is the largest coffee bean producer in South America. It is currently headquartered in Brazil but has production facilities that source and process beans in multiple other South American countries. The company was founded in 1970 and has expertise in producing a wide variety of both common and rare coffee beans. In addition to being Frenz's largest supplier of coffee beans by volume, Luna Beans also serves other multi-national chains, including many of Frenz's competitors.

Digital Strategy

Frenz is dedicated to maintaining its renowned marketing capabilities and reputation as an innovator in the industry. Given the increasing prevalence of technology as a preferred medium for communication and commerce, Frenz has launched a Digital Strategy Group (DSG) with the goals of:

- Building the brand's digital presence
- Using analytics to understand customer preferences
- Enhancing customer experience with technology
- Reaffirming Frenz's origins as the "specialty coffee for the worker on the move"

A Frenz smartphone app is under development, with the following features under consideration:

- GPS-enabled search to find the closest Frenz Coffee House. The DSG is contemplating a partnership with an existing GPS location provider (e.g., Google Maps) and would overlay a Frenz-branded interface. Users can check-in to a particular location and share through various social media platforms.
- Full menu browsing complete with pricing and nutritional information.
- Payment capabilities both through prepaid digital gift cards and charging a stored credit card directly. With respect to charging a credit card, the DSG is contemplating leveraging

existing digital payment options (e.g., Apple Pay) or storing credit card information directly within the app.

- Purchase history automatically recorded when in-app payment is used. Users can share recent purchases through various social media platforms.
- Loyalty program to reward frequent customers with exclusive promotions. Initially, every 10th coffee would be free. After the first year, the rewards would be dropped so that every 20th coffee is free as preliminary analysis shows that this level of reward is sustainable in the long run. For rewards members who have not made a purchase in the last six months, Frenz would give a coupon for a free drink to entice them to return.

An app of this scope is not currently being offered by any of Frenz's competitors; however, some of the features described above have been rolled out by other market participants.

The DSG is particularly interested in the customer data that will be collected through this app. The data architecture and information security are under development. Frenz recently hired Bill Arima, an acclaimed data scientist from Silicon Valley, to get the company's predictive modeling capabilities up and running as soon as possible. Bill's team has already demonstrated promising results using data collected from beta versions of the app. Frenz is currently seeking a Chief Data Officer to ensure proper data governance.

This strategy is a costly undertaking for Frenz and will be diverting capital away from its core business.

4A Frenz Corporation Exhibits

EXHIBIT 1

Frenz Financial Statements

INCOME STATEMENT

	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>
<i>Euros in thousands</i>	2026	2025	2024	2023	2022	2021
Sales	626,696	568,306	515,482	461,802	412,632	378,654
Cost of Sales	54,352	48,410	43,100	47,801	49,016	31,145
Store Operating Expenses	291,754	272,908	255,279	233,150	209,474	193,254
Depreciation	31,770	28,061	24,601	21,379	18,443	15,662
General and Administrative Expenses	64,902	61,398	58,229	55,008	52,058	50,019
Impairment of Goodwill	0	0	0	0	10,447	0
Total Operating Expenses	442,777	410,777	381,209	357,339	339,438	290,081
Operating Income	183,918	157,529	134,273	104,463	73,194	88,573
Interest Expense	8,664	8,144	7,623	8,317	5,921	4,919
Income Tax Expense	43,813	37,346	31,663	24,037	16,818	20,914
Net Income	131,440	112,039	94,988	72,110	50,454	62,741

EXHIBIT 1
Frenz Financial Statements

BALANCE SHEET

	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>
<i>Euros in thousands</i>	Dec. 31, 2026	Dec. 31, 2025	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2021
Current Assets:						
Cash	32,838	27,385	22,517	15,636	13,352	23,040
Accounts Receivable	5,033	5,188	5,349	5,173	5,067	5,170
Inventory	14,215	12,584	11,132	9,839	8,405	6,934
Total Current Assets	52,086	45,157	38,998	30,648	26,823	35,144
Long-term Assets:						
Long Term Investments	282,367	250,214	220,308	192,330	166,605	142,960
Goodwill	67,897	56,617	46,387	37,109	28,796	31,816
TOTAL ASSETS	402,350	351,989	305,693	260,086	222,225	209,920
Current Liabilities:						
Accounts Payable	10,066	10,377	10,698	10,346	10,133	10,340
Current Borrowing	8,200	8,500	8,800	9,100	9,400	9,700
Total Current Liabilities	18,266	18,877	19,498	19,446	19,533	20,040
Long-term Debt	143,280	134,400	125,520	116,640	107,760	98,880
Total Liabilities	161,546	153,277	145,018	136,086	127,293	118,920
Equity						
Paid-in Capital	25,000	25,000	25,000	25,000	25,000	25,000
Retained Earnings, accumulated	215,805	173,712	135,675	99,000	69,932	66,000
Total Equity	240,805	198,712	160,675	124,000	94,932	91,000
TOTAL LIABILITIES AND EQUITY	402,350	351,989	305,693	260,086	222,225	209,920

EXHIBIT 1
Frenz Financial Statements

STATEMENT OF CASH FLOWS

	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>
<i>Euros in thousands</i>	2026	2025	2024	2023	2022	2021
Operating Activities:						
Net Income	131,440	112,039	94,988	72,110	50,454	62,741
Adjustments						
Depreciation	31,770	28,061	24,601	21,379	18,443	15,662
Accounts Receivable	156	160	(176)	(106)	103	(170)
Inventory	(1,631)	(1,452)	(1,293)	(1,434)	(1,470)	(934)
Accounts Payable	(311)	(321)	352	213	(207)	340
Impairment of Goodwill	0	0	0	0	10,447	0
Net Cash Provided by Operating Activities	161,424	138,487	118,471	92,162	77,771	77,639
Investing Activities:						
Purchases of investments	(75,203)	(68,197)	(61,858)	(55,416)	(49,516)	(45,438)
Sales of investments	0	0	0	0	0	0
Net Cash Used by Investing Activities	(75,203)	(68,197)	(61,858)	(55,416)	(49,516)	(45,438)
Financing Activities:						
Change in Current Borrowing	(300)	(300)	(300)	(300)	(300)	(300)
Proceeds from Issuance of Long-Term Debt	13,200	13,200	13,200	13,200	13,200	13,200
Repayments of Long-Term Debt	(4,320)	(4,320)	(4,320)	(4,320)	(4,320)	(4,320)
Cash Dividends	(89,347)	(74,003)	(58,312)	(43,042)	(46,523)	(62,741)
Net Increase in Cash from Financing Activities	(80,767)	(65,423)	(49,732)	(34,462)	(37,943)	(54,161)
Net increase in Cash and Cash Equivalents	5,453	4,868	6,881	2,284	(9688)	(21,960)
Cash and Cash Equivalents:						
Beginning of Period	27,385	22,517	15,636	13,352	23,040	45,000
End of Period	32,838	27,385	22,517	15,636	13,352	23,040

EXHIBIT 2a
Vietombia Statistics

INFRASTRUCTURE	
Economy	
GDP (2023)	USD 70.1 billion
Exports (2023)	USD 62.9 billion (89.73% of GDP)
Population and employment	
Total population	86 million
Total employment in the coffee industry	600,000 coffee growers
% adult literacy	30%
Average school level for workers in the coffee industry (farms)	Grade 6
% of workers who are landowners	n/a
Forms of workers representation	
Association of coffee providers	None
% of employees who are part of a trade union	None
Geographical aspects	
Total area of production (hectares)	Cultivated area: 506,000
Number of farms	300,000
History of the coffee industry	
Date of creation	First coffee plantation in 1857 in French colony
Management system/style	n/a
Number of owned farms	n/a
Economic indicators of coffee industry (net profit, sales, etc.)	Total production: 57.6 million bags (2023) Total exports: 53.8 million bags (2021)
Exports (total exports, % exports against total production)	Total production 961 million tons (2023) Total export 897 million tons (2021) 93.34% of total production

EXHIBIT 2b

Vietombia Proposal

- Exclusive production agreement with government of Vietombia
- Gives Frenz rights to purchase all coffee grown in Vietombia
- Frenz must build production facility in Vietombia, but would own and run the facility
- Potential competitive advantage due to exclusive supply of high-quality coffee beans

Initial Cost	100M
Additional expected annual net earnings from exclusive beans	10M
Current Cost of Debt for Frenz (net of tax)	7%
Cost of Capital for Project	20%*

Risk of Losses from Coffee Price Fluctuation		
Percentile	Current Loss	Loss with Vietombia Deal
99	100	60
98	85	50
95	50	30
90	25	15

*The 20% is higher than Frenz's normal cost of capital rate.

5 Big Ben Bank

5.1 Industry Profile

A commercial bank performs several financial functions for consumers and businesses, such as accepting deposits, offering checking accounts, making loans, and offering basic financial products like certificates of deposit (CDs) and savings accounts. Commercial banks make money by providing loans and earning interest income on those loans. The types of loans a commercial bank can issue include mortgages, auto loans, business loans, and personal loans.

Customer deposits, such as checking accounts, savings accounts, and CDs, provide banks with the capital to make loans. Customers who deposit money into these accounts effectively lend money to the bank and are paid interest. However, the interest rate paid by the bank on the money “borrowed” is usually less than the rate charged on money loaned. This interest spread is a source of profit for commercial banks.

Private banking consists of personalized financial services and products offered to high-net-worth-individuals. It includes a wide range of wealth management services including investing and portfolio management, tax services, insurance, trusts, and estate planning. Banks charge fees for managing clients’ assets and the other wealth management services provided.

Risks to the industry include the following:

Strategic/Business Risks

- Significant competition in the rapidly evolving global financial services industry
 - Rapid growth of neobanks (digital-only banks using leading-edge technology)
 - Downward pressure on asset management fees
- Reputational risk

Profitability and Liquidity Risks

- Risks relating to models and assumptions
- Credit risk from failure of customers or counterparties to meet their financial or contractual obligations when due
- Liquidity risk that the bank may be unable to raise funds on a timely basis or at a reasonable cost to fund asset growth or settle liabilities
- Risk of adverse changes in market risk factors such as interest rates, credit spreads, foreign exchange rates, equity prices, mortgage rates and mortgage liquidity
- Contagion risk that a problem in one financial institution will spread to other otherwise healthy institutions

Operational Risk

- Inadequate or failed internal processes and systems
- Compliance

- Regulatory capital risk due to increasing stringency of banking regulations
- Fraud or conduct risk due to detrimental practices
- Technology, including maintaining legacy systems
- Competition and disruption emerging from new financial technology firms using innovative technologies
- Cyber-security breaches

Factors that can lead to success include:

- Strong positive relationships with clients and adapting to changing customer expectations
- Significant Assets Under Management (AUM)
- Superior investment results, leading to high net investment spread
- Effective risk management function so that risk exposures are within acceptable limits

5.2 Big Ben Company Profile

Background

Big Ben is a mid-sized full-service bank domiciled in Luxembourg. It was an independent bank before it was purchased by RPPC in 2007. Big Ben does business in Europe and North America. Big Ben has a reputation for personal service, especially amongst its high-net-worth customers.

Products / Services

Asset Management

Big Ben's asset management products cover a comprehensive list of asset classes including equities, fixed income, real estate, private equity, and sustainable investments. Big Ben offers exchange-traded funds, mutual funds, and separately managed accounts.

Advisory teams manage client relationships, provide advice, and enable clients to access Big Ben's asset management products and services. Service is individually tailored for Big Ben's high-net-worth clients who have their own dedicated advisors. Big Ben also markets its asset management products through its Commercial Banking division.

Commercial Banking

The Commercial Banking division's clients are primarily small businesses. Products offered are checking account services; business, personal and mortgage loans; credit and debit cards; and basic financial products such as certificates of deposit (CDs) and savings accounts. Big Ben has branches throughout Europe and North America. Customers can also do business on-line or using an app.

Private Banking

Big Ben's Private Banking group provides a suite of services to high-net-worth individuals designed to grow wealth. In addition to traditional retail banking services, Big Ben provides

custom-designed investment, tax, and estate planning solutions. The Private Banking group makes use of Big Ben's Asset Management products as part of its financial planning services.

Trading Book

Big Ben's trading book is its portfolio of financial instruments classified as available for sale. The financial instruments in the trading book are purchased or sold for reasons including: facilitating trading for the institution's customers, earning profits from trading spreads between the bid and ask prices, or hedging against various types of risk.

Investment Banking

Big Ben has a small investment banking division, located in London, which provides services related to the creation of capital for companies, governments, and other entities. Big Ben underwrites new debt and equity securities, aids in the sale of securities, facilitates mergers and acquisitions, and provides guidance to issuers regarding the issue and placement of stock. This division operates independently of the other Big Ben divisions.

5.3 Risk Profile

Big Ben prides itself on a strong risk culture and has had a robust risk management function. Big Ben actively complies with the RPPC Risk Management Framework.

Capital Management

Big Ben is committed to maintaining a strong capital base to support the risks associated with its businesses. Strength in capital management contributes to safety for Big Ben's customers, fosters investor confidence and supports high credit ratings, while allowing the bank to take advantage of growth opportunities as they arise.

Big Ben's capital management framework includes a comprehensive Internal Capital Adequacy Assessment Process (ICAAP), aimed at ensuring that the bank's capital is adequate to meet current and future risks and achieve its strategic objectives. Key components of the bank's ICAAP include sound corporate governance; managing and monitoring capital, both currently and prospectively; and utilizing appropriate financial metrics which relate risk to capital, including economic and regulatory capital measures. The assessment of risks is updated annually.

5.4 Strategic Initiatives

Digital Banking

Big Ben management is concerned about the growth of FinTech firms that use new technology to improve and automate the delivery and use of financial services. FinTechs benefit from an absence of legacy systems, which allows them to invest in the latest technology without worrying about keeping existing systems working. Big Ben is especially concerned about competition from digital-only banks, known as neobanks. Big Ben has seen that neobanks are

reaching “unbanked” customers as well as starting to take market share from traditional banks. See Exhibit 2 for Big Ben’s Market Analysis on Neobanks.

Big Ben has a strategic initiative to expand its digital banking presence. It is considering three options:

- I. Build an in-house digital banking division to compete with neobanks
- II. Partner with a neobank that lacks a banking license
- III. Acquire an existing neobank

New Product – Cryptocurrency

A cryptocurrency is a digital currency used as a medium of exchange. Cryptocurrencies use cryptography to secure transactions, control the money supply and verify the transfer of funds.

Big Ben is considering offering two new innovative, cryptocurrency related products:

Cryptocurrency Savings Account

- Personal banking customers will have the option to open a secondary savings account that holds cryptocurrencies.
- Customers can purchase, sell, or transfer cryptocurrencies within their accounts online or using the mobile app.
- Customers will pay monthly fees to maintain the accounts and a transaction fee when purchasing or selling cryptocurrencies.
- Big Ben will guarantee the storage of the cryptocurrencies.

Cryptocurrency Exchange Traded Fund (ETF)

- The ETF will allow investors to diversify within the cryptocurrency industry.
- The ETF will be managed to ensure a consistent mix of the largest cryptocurrencies.
- Due to the operating expenses of this strategy, the asset management fee is 2%, which is higher than most of Big Ben’s other ETFs.

Cryptocurrency banking products are not currently offered by Big Ben’s traditional banking competitors.

Insurance Opportunity with Darwin Life Insurance

At a recent marketing meeting within the Commercial Banking division, the marketing director proposed that the first collaboration with Darwin should be selling Darwin’s new travel insurance product via Big Ben’s mobile app. “Selling via the app will be very convenient for our globally mobile customers. Darwin has been part of RPPC for a while now. We need to take advantage of the synergies.”

5A Big Ben Bank Exhibits

EXHIBIT 1

Big Ben Bank Financial Data

2023 Annual Report – Big Ben
Statement of Income
in millions of euros

	Projected 2024	2023	2022	2021
Interest income	575	435	433	662
Interest expense	190	147	170	310
Net interest income	385	288	263	352
Commissions and fee income	320	296	255	257
Net gains (losses) on financial assets	0	90	83	(3)
Total noninterest income	320	385	338	254
Compensation and benefits	290	282	283	301
General and administrative expenses	295	292	277	331
Impairment of goodwill and other intangible assets	0	7	13	45
Total noninterest expenses	585	581	573	678
Income (loss) before income taxes	120	92	28	(71)
Income tax expense	30	24	11	71
Net income (loss)	90	68	17	(142)

Balance Sheet

<i>in millions of euros</i>	Projected Dec 31, 2024	Dec 31, 2023	Dec 31, 2022	Dec 31, 2021
Assets:				
Cash and central bank balances	5,630	5,616	4,969	4,364
Total financial assets	3,915	3,287	4,165	4,500
Loans	13,000	12,738	11,540	11,617
Property and equipment	150	150	150	133
Goodwill and other intangible assets	184	184	182	190
Income tax assets	210	201	190	187
Total assets	23,089	22,177	21,197	20,991
Liabilities and equity:				
Deposits	17,000	16,318	15,352	15,465
Tax liabilities	100	101	96	103
Long-term debt	4,025	3,919	4,067	3,743
Total liabilities	21,125	20,338	19,516	19,311
Total equity	1,964	1,839	1,681	1,680
Total liabilities and equity	23,089	22,177	21,197	20,991

Statement of Changes in Equity									
<i>in millions of euros</i>	Common Shares	Additional Paid-In Capital	Retained Earnings	Common Shares in Treasury at cost	Other Comprehensive Income Net of Tax	Total Shareholders' Equity	Additional Equity Components	Non-controlling Interests	Total Equity
Balance as of Dec. 31, 2022	143	1,097	271	(0)	(30)	1,481	157	43	1,681
Total comprehensive income (loss) net of tax	-	-	64	-	18	82	-	6	88
Gains (losses) through OCI	-	-	-	-	-	-	-	-	-
Cash dividends paid	-	-	(10)	-	-	(10)	-	(2)	(12)
Share repurchases	-	(3)	-	0	-	(3)	-	(0)	(3)
Other	-	3	16	-	-	19	67	(0)	85
Balance as of Dec. 31, 2023	143	1,097	341	(0)	(12)	1,568	224	46	1,839

Other Financial Information

Assets Under Management

<i>in millions of euros</i>	Dec 31, 2023	Dec 31, 2022	Dec 31, 2021
Assets under management	25,081	21,432	20,757

Trading Income and Assets

<i>in millions of euros</i>	2023	2022	2021
Trading Income	50	60	5
Net Trading Assets	1,289	1,719	1,995

Big Ben and Industry Beta

	Beta
Big Ben	1.5
International Banking Average	1.3

Big Ben Common Tier 1 Equity Ratio 2023: 13.2%

Exhibit 2

Market Analysis – Neobanks

This report on neobanks was prepared for Mr. Patel and the senior management team as part of Big Ben’s strategic initiative to expand its digital banking presence.

Neobanks are entirely digital, cloud-based businesses that use web platforms and mobile applications to reach customers. These companies emphasize technology and a superior customer experience, driven by excellent customer interface design and online chat systems using artificial intelligence to quickly and effectively resolve customer problems.

A recent study showed that in the U.S. 63% of neobank customers are satisfied vs 55% for traditional banks. On the other hand, another survey found that a majority of banking customers still prefer to get at least some of their banking services in branch.

Because they are digital only, neobanks have lower overhead costs and lower costs of customer acquisition. They have attracted customers with the promise of lower fees and many free services such as no fees for foreign currency transactions.

Some neobanks’ superior platforms allow an account to be opened in only five minutes. They are using their platforms to try to make banking cool.

Neobanks’ innovative web and mobile applications are built on scalable IT infrastructures based on third-party code. This enables them to release product updates faster and to quickly respond to evolving consumer demands.

Neobanks are targeting niche markets or going after unbanked consumers, instead of trying to compete with traditional banks on all fronts. As they grow, they are likely to target a more complete set of financial products and services.

Some have banking licenses and others do not. With a banking license, neobanks can provide their own checking accounts, prepaid, debit or credit cards, currency exchanges, cryptocurrencies, money transfers, retail payments, savings accounts and loans. Without a banking license, neobanks can offer financial services, but in conjunction with another bank that has a license. A neobank can provide its own unique interface and tools for bank account operations for customers that already have an account at a bank that the neobank links to. The tools could be transaction analysis, budget management and automated notifications to help users achieve their financial goals. Other neobanks use the license of a partner bank to offer financial products.

Neobanks have been prioritizing growth over profitability and only a few have shown positive income. They have relied on external funding to fund their growth. Analysts predict that neobanks could grow at a compound annual growth rate of 54.8% from 2023 to 2030.

6 Darwin Life Insurance Company

Darwin Life had tremendous top line growth in its Term, Universal Life (UL) and Variable Annuities (VA) over the past 5 years. Life sales had grown at a 30% rate in an industry with flat life sales. VA sales for the industry have been strong for more than 5 years. Darwin had not been a VA player until recently, noting that a number of companies exited the market or greatly reduced benefits.

Since 2019 the executive team has been in overdrive working on a few large initiatives. 2023 seemed to pose even more challenges. The external environment created headwinds, from interest rate volatility to new regulations and accounting requirements to less consumer disposable income to fierce competition. Companies have been continuing to exit riskier product lines and markets and shedding distribution capacity.

Gabriela Martinez, the CEO, was pondering: Was Darwin doing enough? Did the front line have enough authority and resources to handle the little things? How could Darwin continue its extraordinary growth? What would be the limits of that growth? How could the company take advantage of its position to extend its reach?

Or, was Darwin doing too much? Every time you turned around the Wall Street Journal's front page seemed to cover yet another high-risk meltdown. No industry, especially the financial sector, was immune. Darwin had aggressive plans. Did management have a handle on the risks they were taking? One thing Gabriela did know, standing still was a risk she wasn't going to take. She needed the front-line business managers to see and grab opportunities, opportunities that weren't planned for as one of their objectives at the beginning of the year.

6.1 Industry Profile

The life insurance and annuity industry mainly provides three types of financial products to its clients:

- Insurance products that protect against mortality and morbidity, for example, term or traditional whole life insurance
- Wealth accumulation products that help clients achieve their financial goals, for example, universal life
- Income generating products that provide retirement income for clients, for example, payout annuities

Current trends in the life insurance industry include:

1. As baby boomers retire, they have a need for products that provide lifetime income. The shift from life protection and pre-retirement accumulation to post-retirement income protection and retirement asset management will accelerate.

2. As the focus of protection moves from pre-mature death to longevity, there are opportunities for companies with product, distribution, and service (trust, process, and advice). Variable deferred annuities have transformed from tax-deferred mutual fund investments to guaranteed retirement income vehicles. For insurance companies, protection is the normal differentiator versus other financial services (e.g., 85% of all variable annuity sales have living benefit riders).
3. To remain competitive in different interest rate environments, insurers need to find higher yielding assets and diversify away from just investment grade corporate bonds. Often, insurance companies are the leading investors in mortgages, private placements, leveraged loans, high yield bonds, and emerging market debt. These investments introduce new forms of risk, such as foreign exchange and liquidity risk.

Success Factors

Successful companies will have well-positioned defensible market positions, pricing power, advanced technology and systems to enhance service and processes, and lower costs. They will exhibit operational efficiencies, experienced management, high-quality financial reporting and corporate governance, strong asset-liability management, investment and risk management, a focused and balanced growth strategy, the ability to innovate products and distribution by partnering with other services (financial planners, estate attorneys, tax experts, and healthcare advisors), and the ability to build customer relationships.

Risk Factors

There are four primary groups of risks associated with the insurance business:

1. Insurance Risk – when underwriting insurance policies, an insurance company undertakes mortality, longevity, morbidity, lapse, and policyholder behavior risk.
2. Investment Risk and Market Risk – like many financial institutions, insurance companies are exposed to interest rate, credit, and foreign exchange risks. Also, since the liability is usually sensitive to interest rates, the asset portfolio needs to have similar interest rate sensitivity. Such asset/liability mismatch could expose insurance companies to large loss and therefore needs to be managed.
3. Liquidity Risk – like all financial services companies, insurers may be unable to meet near-term obligations as they come due.
4. Operational Risk – like all businesses, insurers rely on various systems and processes to run their business. There are risks associated with their operations.

Competitive Environment

The insurance industry is highly competitive. Within the industry, there are large numbers of companies offering similar products. Differentiation comes from product features, pricing, service, and reputation. Regarding wealth management products, insurers also have to compete with banks and mutual fund companies, which could be advantaged or disadvantaged under different regulatory frameworks.

6.2 Company Profile

Darwin Life is a mid-size life insurer headquartered in Albuquerque, New Mexico with an increasing presence in the domestic U.S. market. Life sales are distributed primarily through an agency system, and annuity sales are distributed primarily through financial institutional channels (e.g., banks and broker-dealers). Darwin has experienced an era of success since embarking on a new strategic direction under new leadership ten years ago, measured by growth in earnings, revenue, and distribution capacity. Recent growth has been fueled by core competencies - distribution relationships and product/service development.

Prior to the strategic change, Darwin lacked focus, with little to no differentiation, high costs and stagnant sales. Prior management's view was that the customer was the agent rather than the policy holders. Operations lacked discipline, with frequent exceptions to administrative and underwriting standards. Products included traditional whole life, level term and current assumption Universal Life (UL). Although Darwin offered fixed and variable annuities there was no focus on asset accumulation products or distribution capacity within the financial institutional markets.

Ten years ago, new management shifted strategy to be focused on wealth management and a customer focus targeting middle to upper income individuals, professionals and small business owners with estate planning, tax-deferred accumulation, traditional income preservation and retirement income protection needs. This aligned with Darwin's vision statement: "Customers enjoy working with us to solve their life insurance and retirement income needs."

This strategic focus and management's solid execution caught the eye of RPPC. RPPC thought Darwin was a great strategic fit with RPPC's financial division. In 2015, RPPC evaluated Darwin's business and paid a premium to acquire the life insurer. RPPC believed that as a majority shareholder with deep operational expertise across different industries, there would be numerous opportunities to create synergy. Darwin, with the support of RPPC, is focused on continuing its growth strategy.

Lack of public market liquidity for Darwin means that RPPC should require a high return on this investment. Exhibit 1 shows various financial metrics of several comparable public life insurers.

Business Operation

Core product segments are universal life, high cash value traditional life, term life, and variable annuities. Non-core segments include group annuities and individual fixed annuities. Darwin enhanced its universal life products to better suit the consumers' insurance, estate and business planning needs and also introduced UL with secondary guarantees.

Darwin has pursued an aggressive organic growth strategy focusing on individual life and individual variable annuities through expanding and enhancing distribution channels. Today Darwin distributes life insurance primarily through career agents, banks, and direct marketing

channels. The traditional agency channel utilizes a variable cost structure with compensation incentives that promote persistency. Bank-owned life insurance (BOLI) products are marketed through independent marketing organizations that specialize in the BOLI market. In 2014 the company expanded annuity distribution into financial institutions. It aims to add major new outlets, penetrate existing outlets, and expand the agency distribution by 2 - 3 regional offices per year. Both the agent and institutional distribution expansions required a significant investment.

Over the past decade Darwin has become an innovator in service - providing wealth management solutions to individuals - including expertise in design and distribution of tax-sheltered or tax-minimizing strategies such as estate planning and small business owner succession planning. Darwin has invested in technology and staff to service both the customer and distribution channels and established a team so that a client service representative answers the phone within four rings 95% of the time. This attention on customer and distribution sets the company apart from its peer group and supports an aggressive organic growth strategy.

Darwin offers a broad array of competitive products with customization for specific distribution channels. Darwin has not pursued a first to market strategy but has developed competency to be a fast follower and replicate new product designs in the market. However, Darwin sometimes lacks the expertise to replicate processes and infrastructure. It has invested heavily in front-end distributing, issuing, and processing of new business. The company has built strong relationships with the agency and institutional distribution channels. Part of the reason for Darwin's strong relationship with the agency channel is its ability to bring competitive products to market quickly.

Darwin has had high costs partly due to misaligned resources. Resources are devoted to new products and new business, and priority is placed on customer service and growth in distribution channels. Dedicated resources to manage in force business have been insufficient. Legacy products and systems have drained resources.

Due to Darwin's focus on bringing products to market quickly, it often has not had time to fully build systems to issue policies and handle the back-end administration prior to product launch. The company felt that it could initially administer a new product using manual processes while the inforce was relatively small. It was intended that Darwin would finish building the administrative systems after the product launch, before the inforce block became too large. However, time constraints and lack of expertise in some cutting-edge product areas resulted in less than effective back end operations, including risk mitigation and management, operational monitoring, and reporting. Some administrative processes continue to be handled manually.

Greater speed is needed to respond to business problems, including more timely risk monitoring and quicker escalation. Operational areas are silo-based, resulting in less effective collaboration and cross-functional continuous improvement processes. Darwin is moving towards a disciplined operational focus in underwriting, investments and diversified competitive products.

Darwin has solid ratings from every major rating agency – A.M. Best, Standard and Poor’s, Moody’s, Fitch, and Insight Ratings.

Financial Performance

Darwin has outperformed the industry over the past 10 years in terms of growth in life sales, annuity sales, equity, assets, and distribution capacity. Relative to the industry and similarly rated companies, Darwin unfavorably has higher leverage, higher expenses, lower interest coverage, and lower liquidity. It favorably has higher return on capital. Relative to its peer group, Darwin has had a lower operating income margin and a lower net income margin, a lower investment yield, a higher expense ratio, higher growth in life insurance in force, and average mortality and persistency.

Risk Management

Darwin formalized its risk management function with the creation of an ERM Committee in 2015, followed by a new CRO position and establishment of a Risk Management department in 2016. The Committee meets quarterly. Its purpose is to build sustainable competitive advantages by fully integrating risk management into daily business activities and strategic planning. Excerpts from its Charter charge the Committee to:

- Increase the enterprise’s value through promotion of a robust risk management framework and processes.
- Align risk preferences, appetite, and tolerances with strategy.
- Monitor Darwin’s overall risk exposure and ensure risks are measured and well-managed.
- Anticipate risk exposure and recommend action where exposures are deemed excessive or where opportunities exist for competitive advantages.

The Charter also specifies the Committee’s Composition, Authority, Meetings and Responsibilities.

Darwin’s risk appetite statement is:

I. Capital The probability of a 15% loss of Statutory equity in one year is less than 0.5%.

II. Earnings The probability of negative GAAP earnings in one year is less than 5%.

III. Ratings Maintain an AA financial strength rating. Maintain capital 10% above minimum AA capital requirements. Maintain an A rating on senior unsecured debt.

Market risk, credit risk, underwriting risk, operational risk, strategic and liquidity risks are quantified using a variety of metrics to capture multiple perspectives.

Investment Policy and Strategy

The investment department manages the general account investments. The company's general account is invested primarily in fixed-income assets. Within the general account there are separate investment portfolios for each of the main product lines. Variable annuity investment accounts are held in a separate (segregated) account and are managed by a third-party investment advisor.

6.3 Initiatives

Gabriela Martinez, CEO, was up late thinking about potential strategies to present at an upcoming quarterly Board meeting. She knew there were opportunities to win market share from competitors as well as to sell to markets no other companies were reaching. She knew the Board was looking for bold ideas that would ensure the company could grow for years to come.

Digital Distribution

One idea that kept coming back to her was a direct marketing digital distribution channel. Many of Darwin's competitors have created their own platforms already. In order to compete, Darwin's app would offer a distinct experience compared to its rivals. It would have unique features like the ability to compare prices and features of Darwin's products against those of its competitors. This would allow Darwin to reach millions of new customers, potentially reduce commission expenses, and allow for a sales process that could appeal to a large section of the population, especially amongst millennials whom Gabriela found were particularly disengaged in traditional channels.

Gabriela's direct reports warned her that Darwin doesn't have the technical expertise to develop a seamless direct marketing sales process. They also worried that the current agents could view a website as a threat to their jobs. Conflict could ruin the digital initiative if losses on the agency side outweighed the gains from online distribution. Gabriela understood their apprehension, but she still felt it was time to start investigating direct marketing. She knew that the insurance industry had been around for hundreds of years and sooner or later every industry gets disrupted.

Gabriela decided to go ahead and engage an external start-up company to discuss the development of a digital distribution platform for Darwin. In the initial discussions, the start-up showed Gabriela that they will be able to help Darwin connect to potential customers through data analytics, which will allow for more direct and frequent customer connection. This model is more tangible than traditional distribution channels, and the retention value from this effort can then be used to do cross-selling and target marketing in a way that will allow Darwin to sell more products over time. Gabriela thought, "Wow, this initiative could help to increase both top line and bottom line for Darwin."

Innovation Program

A second idea presented to Gabriela by one of her trusted advisors in senior management is an innovation program to spur organic growth for the company. The focus of this innovation program is to explore ways of reducing Darwin's costs. Any savings generated would be used to reduce prices. This senior manager believes that Darwin could reduce its prices enough to become a leader in the industry. The goal would be to increase Darwin's new sales and improve retention. Distribution would continue through the existing broker network.

Travel Insurance

Darwin recently entered the travel insurance business and sees it as an important growth area for the future. Revenues had been growing steadily for travel insurers for many years. The pandemic reduced all travel, particularly international travel demand, but demand has now rebounded. The industry is expected to continue growing over the next five years and expand into niche markets catering to students and business travelers. The travel Insurance industry has a low level of market share concentration.

In order for Darwin to compete in this industry, it offers a comprehensive travel insurance program to its customers. The insurance program includes life and accidental death and dismemberment insurance, trip cancellation and trip interruption insurance, baggage loss insurance, and medical and hospitalization insurance. It even offers ambulance and air transportation coverage in case of medical emergencies that occur within the first 60 days of travel. The insurance can be purchased on a per trip basis or on an annual basis for frequent flyers. Unbundling of some benefits is also available.

To facilitate this wide range of services, Darwin has developed specialized expertise in the area of claims adjudication. It has also established partnerships with travel agencies to recover the salvage value of all cancelled trips by offering deep discounts in the last-minute travel markets. In addition, it has established partnerships with some hotel chains and with air ambulance service companies to accommodate its customers in case of emergencies or airline delays. These partnerships are a means of reducing the overall costs of the program. Despite its short history in this industry, Darwin has already made significant progress in establishing business relationships with its business partners. These relationships have become its competitive advantage in the travel industry. Darwin is also looking at partnering with an airline to offer travel insurance to the airline's customers.

Acquisitions and New Markets

Gabriela also thought that acquisitions would be a good way to accelerate growth. She had heard that several companies in the industry could be facing capital issues. Darwin's strong capital position could solve those capital needs.

Second, the rise of fintech and insurtech companies has been dominating headlines. Gabriela felt insurtech was the way of the future and that Darwin had to explore acquisitions or risk being left behind.

Third, a number of companies have had fantastic premium and asset growth over the past 10 years due to their entrance into the pension risk transfer business. The insurer charges a premium to take on the obligations of an organization's defined pension benefits. To become a prominent insurer, Gabriela felt Darwin should enter the pension risk transfer business.

Product Innovation

Even though Darwin has been successful using a fast follower strategy for products, several board members have commented that this strategy may not be as successful in the future. They felt that with advances in technology, being first to market with innovative products would be much more important in the future. Gabriela decided to create a new Product Innovation Team that would research market trends and develop new product ideas. With Darwin's strong distribution relationships, she felt that having unique products would give Darwin a huge competitive advantage.

Divestitures

At the last Risk Committee meeting, there was a discussion that over the past five years numerous insurers had stopped selling VAs and UL with lifetime secondary guarantees or had sold all or parts of those blocks of business. The stated reasons were a shift in strategy to derisk their exposure to market-based risks and guarantee risks. It was suggested Darwin should explore doing the same. Gabriela was reluctant to do so as Darwin's entrance and growth in these markets were among Darwin's top accomplishments under her leadership.

6.4 Risks

Credit Risk

Darwin invests in investment grade quality bonds (S&P BBB- or above). Fixed income securities in the general account have exposure limits at individual obligor (issuer) and sector levels. Obligor-level limits vary according to asset type and credit quality, as determined by external rating agencies. The investment department monitors compliance of the exposure limits.

For each portfolio, there are weighted average credit quality targets. Portfolio credit quality is measured by converting each asset's external credit rating into a numerical score. Scores are a linear function of credit ratings (AAA = 1, AA = 2, etc.). Sub-category ratings (i.e., + or -) are ignored in the scale. The company prefers to maintain a score below 3.5 for each line of business.

Market Risk

Semi-annually within each block of business, Darwin measures the effective duration of the assets and liabilities. If the asset and liability durations are further apart than 1.5, the asset portfolio is rebalanced such that its new effective duration equals that of the liabilities.

The VA hedging program uses a semi-static hedge updated for market factors weekly and for in force changes monthly. The key risk measures are the market Greeks. Darwin currently hedges delta and rho.

Market risk on group annuities with separate accounts and interest rate risk on general account products is currently unhedged. A small portion of the group annuity block has guaranteed minimum death benefits (GMDB) and guaranteed minimum income benefits (GMIB), exposing Darwin to a small amount of unhedged equity risk. However, the risk management team has determined that the capital at risk is within acceptable risk tolerances.

Liquidity Risk

The liquidity policy requires Darwin to hold sufficient liquid assets to meet demands for cash in a liquidity crisis. One scenario considers a reputational liquidity crisis where markets continue to operate normally and the liquidity crunch affects only the company. The liquidity stress test anticipates situations where the company's ability to sell assets to meet cash needs from its liability products is hindered by the market taking advantage of the company during the crisis. Another scenario considers a crisis in which the entire market is not able to sell assets at a reasonable value.

Operational Risk

The CRO is responsible for collecting and disseminating operational risk information. A report is prepared monthly and distributed to executive management.

6A Darwin Life Insurance Company Exhibits

EXHIBIT 1

	Beta	Volatility	Reinvestment Rate	Forward Price-to-Earnings Ratio (1)	Price-to-Book Ratio	Return on Equity	Dividend Yield
ABC Life	1.08	15%	20%	8.5	1.3	9%	5.5%
XYZ Life	1.12	18%	30%	10.3	1.1	8%	3.7%
Yolo Life	1.25	25%	50%	15.0	1.9	12%	2.5%
Industry Average	1.15	19%	33%	11.3	1.4	10%	3.9%

(1) Earnings equals Net Income

EXHIBIT 2

Financial Data: Management Accounting Income Statements (in 000s)

Note: Years 2021-2023 are actual results and years 2024-2026 are forecasts.

Total	2021	2022	2023	2024	2025	2026
REVENUES						
Premium - First Year	784,780	911,720	1,077,880	1,289,710	1,594,260	2,090,450
Premium - Renewal	222,890	255,630	293,230	329,160	365,520	401,560
Total Premiums	1,007,670	1,167,350	1,371,110	1,618,870	1,959,780	2,492,010
Net Investment Income	597,270	595,330	606,450	624,430	647,770	685,240
Other income	42,050	51,360	61,150	73,190	85,850	103,940
Total Revenues	1,646,990	1,814,040	2,038,710	2,316,490	2,693,400	3,281,190
BENEFITS AND EXPENSES						
Claims	100,500	129,890	143,730	168,890	198,370	235,170
Surrender and other benefits	601,710	659,910	722,420	726,080	791,210	863,940
Incr in reserves & S/A Transfers	588,460	695,250	835,020	1,052,600	1,320,810	1,776,940
Total Benefits	1,290,670	1,485,050	1,701,170	1,947,570	2,310,390	2,876,050
Field Compensation	83,650	100,920	119,100	138,800	161,100	193,200
Change in DAC	(49,100)	(63,270)	(75,070)	(87,090)	(100,330)	(120,350)
Total Acquisition Costs	34,550	37,650	44,030	51,710	60,770	72,850
Total Administrative Expenses	69,280	77,220	84,090	91,700	99,740	107,750
Total Benefits and Expenses	1,394,500	1,599,920	1,829,290	2,090,980	2,470,900	3,056,650
EBIT	252,490	214,120	209,420	225,510	222,500	224,540
Interest	18,000	18,000	18,000	18,000	18,000	7,375
Tax	82,100	68,600	67,000	72,600	71,600	76,000
Net Income	152,390	127,520	124,420	134,910	132,900	141,165

Income Statements For Selected Products:

Variable Annuities	2021	2022	2023	2024	2025	2026
REVENUES						
Premium - First Year	561,000	669,800	812,600	1,000,000	1,280,000	1,750,000
Premium - Renewal	0	0	0	0	0	0
Total Premiums	561,000	669,800	812,600	1,000,000	1,280,000	1,750,000
Net Investment Income	73,700	85,000	98,000	119,000	142,000	175,000
Other income	25,800	33,400	40,600	50,500	61,600	76,500
Total Revenues	660,500	788,200	951,200	1,169,500	1,483,600	2,001,500
BENEFITS AND EXPENSES						
Claims	16,200	28,800	36,000	46,600	59,200	75,100
Surrender and other benefits	114,650	161,100	193,650	228,100	276,450	315,700
Incr in reserves & S/A Transfers	474,250	536,300	649,250	807,400	1,038,000	1,464,500
Total Benefits	605,100	726,200	878,900	1,082,100	1,373,650	1,855,300
Field Compensation	30,200	38,300	46,400	56,100	69,000	90,800
Change in DAC	(13,400)	(20,900)	(24,300)	(28,500)	(36,900)	(52,300)
Total Acquisition Costs	16,800	17,400	22,100	27,600	32,100	38,500
Total Administrative Expenses	14,300	17,400	20,200	24,100	28,200	32,800
Total Benefits and Expenses	636,200	761,000	921,200	1,133,800	1,433,950	1,926,600
EBIT	24,300	27,200	30,000	35,700	49,650	74,900
Interest	0	0	0	0	0	0
Tax	8,500	9,500	10,500	12,500	17,400	26,200
Net Income	15,800	17,700	19,500	23,200	32,250	48,700

Universal Life	2021	2022	2023	2024	2025	2026
REVENUES						
Premium - First Year	58,780	72,420	89,480	106,810	125,360	145,650
Premium - Renewal	47,590	64,730	82,030	96,460	111,020	125,060
Total Premiums	106,370	137,150	171,510	203,270	236,380	270,710
Net Investment Income	110,770	106,530	105,850	109,730	114,170	121,040
Other income	5,850	6,760	8,450	9,490	9,750	11,440
Total Revenues	222,990	250,440	285,810	322,490	360,300	403,190
BENEFITS AND EXPENSES						
Claims	27,300	35,290	33,930	38,090	42,770	47,970
Surrender and other benefits	32,760	32,110	36,270	41,080	45,760	51,740
Increase in reserves	92,310	120,250	152,270	182,600	214,410	246,440
Total Benefits	152,370	187,650	222,470	261,770	302,940	346,150
Field Compensation	21,450	25,220	32,200	38,500	45,100	52,400
Change in DAC	(13,000)	(16,770)	(24,670)	(31,790)	(36,830)	(41,350)
Total Acquisition Costs	8,450	8,450	7,530	6,710	8,270	11,050
Total Administrative Expenses	13,780	14,820	15,990	16,900	17,940	18,850
Total Benefits and Expenses	174,600	210,920	245,990	285,380	329,150	376,050
EBIT	48,390	39,520	39,820	37,110	31,150	27,140
Interest	0	0	0	0	0	0
Tax	16,900	13,800	13,900	13,000	10,900	9,500
Net Income	31,490	25,720	25,920	24,110	20,250	17,640

Term	2021	2022	2023	2024	2025	2026
REVENUES						
Premium - First Year	14,300	17,500	19,400	21,400	22,700	24,100
Premium - Renewal	44,700	52,800	63,000	73,700	84,200	93,900
Total Premiums	59,000	70,300	82,400	95,100	106,900	118,000
Net Investment Income	20,400	20,500	22,000	24,100	26,800	30,100
Other income	0	0	0	0	0	0
Total Revenues	79,400	90,800	104,400	119,200	133,700	148,100
BENEFITS AND EXPENSES						
Claims	22,900	28,600	35,900	44,200	53,000	65,200
Surrender and other benefits	400	500	500	500	500	500
Increase in reserves	10,800	11,100	12,000	13,200	14,600	15,100
Total Benefits	34,100	40,200	48,400	57,900	68,100	80,800
Field Compensation	8,200	10,800	11,700	12,600	12,900	13,100
Change in DAC	(11,200)	(12,300)	(12,600)	(12,600)	(12,000)	(11,500)
Total Acquisition Costs	(3,000)	(1,500)	(900)	0	900	1,600
Total Administrative Expenses	21,200	23,100	24,800	26,500	28,000	29,500
Total Benefits and Expenses	52,300	61,800	72,300	84,400	97,000	111,900
EBIT	27,100	29,000	32,100	34,800	36,700	36,200
Interest	0	0	0	0	0	0
Tax	9,500	10,200	11,200	12,200	12,800	12,700
Net Income	17,600	18,800	20,900	22,600	23,900	23,500

EXHIBIT 3

Financial Data: Statutory Balance Sheets (in 000s) and Debt

Note: Years 2021-2023 are actual results and years 2024-2026 are forecasts.

Total	2021	2022	2023	2024	2025	2026
Cash, Invested and Other Assets	10,222,300	10,466,400	10,671,900	11,006,000	11,404,700	11,725,300
Separate Account Assets	1,878,100	2,128,200	2,515,900	3,057,800	3,777,900	4,872,200
Total Assets	12,100,400	12,594,600	13,187,800	14,063,800	15,182,600	16,597,500
Statutory Reserves	11,231,200	11,716,000	12,299,000	13,160,200	14,280,300	15,856,500
Debt	225,000	225,000	225,000	225,000	225,000	75,000
Total Liabilities	11,456,200	11,941,000	12,524,000	13,385,200	14,505,300	15,931,500
Statutory Equity	644,200	653,600	663,800	678,600	677,300	666,000

RBC Ratio	338%	333%	324%	312%	306%	287%
Debt Ratio	35%	34%	34%	33%	33%	11%

Balance Sheets For Selected Products:

Variable Annuity	2021	2022	2023	2024	2025	2026
Cash, Invested and Other Assets	365,100	457,300	459,700	532,900	608,800	687,600
Separate Account Assets	1,878,100	2,128,200	2,515,900	3,057,800	3,777,900	4,872,200
Total Assets	2,243,200	2,585,500	2,975,600	3,590,700	4,386,700	5,559,800
Statutory Reserves	2,086,200	2,417,400	2,797,100	3,398,700	4,198,300	5,385,700
Total Liabilities	2,086,200	2,417,400	2,797,100	3,398,700	4,198,300	5,385,700
Statutory Equity	157,000	168,100	178,500	192,000	188,400	174,100

Universal Life	2021	2022	2023	2024	2025	2026
Cash, Invested and Other Assets	1,929,200	2,001,900	2,102,300	2,237,100	2,406,800	2,617,100
Total Assets	1,929,200	2,001,900	2,102,300	2,237,100	2,406,800	2,617,100
Statutory Reserves	1,820,000	1,897,500	2,002,200	2,140,700	2,314,200	2,528,600
Total Liabilities	1,820,000	1,897,500	2,002,200	2,140,700	2,314,200	2,528,600
Statutory Equity	109,200	104,400	100,100	96,400	92,600	88,500

Term	2021	2022	2023	2024	2025	2026
Cash, Invested and Other Assets	442,000	478,800	530,000	598,600	687,600	798,700
Total Assets	442,000	478,800	530,000	598,600	687,600	798,700
Statutory Reserves	425,000	460,400	509,600	575,500	661,100	768,000
Total Liabilities	425,000	460,400	509,600	575,500	661,100	768,000
Statutory Equity	17,000	18,400	20,400	23,100	26,500	30,700

Asset Durations (as of Dec 31, 2023)

	Cash	Bonds	Mortgages
Duration	0	12	6
Market to Book Ratio	1	1.08	1.04

Debt Issuance (in 000's)

Issue	Issue Date	Maturity Date	Rate	Face Amount
Senior notes issue	1 Mar 2006	1 Mar 2026	8.50%	150,000
Senior notes issue	15 Jun 2018	15 Jun 2038	7.00%	75,000

EXHIBIT 4 Sensitivity Tests

Note: Years 2024-2028 are forecasts.

Term Sensitivities (in 000s)

Baseline	2024	2025	2026	2027	2028
Sales	21,400	22,700	24,100	25,600	27,200
Management					
Earnings	22,600	23,900	23,500	32,500	33,100

Lapse Rates Up 5%

Sales	21,400	22,700	24,100	25,600	27,200
Management					
Earnings	21,569	21,863	20,488	28,538	28,204

Lapse Rates Down 5%

Sales	21,400	22,700	24,100	25,600	27,200
Management					
Earnings	23,631	26,040	26,816	37,062	38,980

Sales Up 15%

Sales	24,610	26,105	27,715	29,440	31,280
Management					
Earnings	23,114	24,881	24,947	34,414	35,484

Sales Down 15%

Sales	18,190	19,295	20,485	21,760	23,120
Management					
Earnings	22,086	22,919	22,053	30,586	30,716

Variable Annuity Sensitivities (in 000s)

Baseline	2024	2025	2026	2027	2028
Sales	1,000,000	1,280,000	1,750,000	2,100,000	2,520,000
Management Earnings	23,200	32,250	48,700	58,400	70,100
Statutory Capital	192,000	188,400	174,100	178,300	181,900

Market Immediate Shock Up 15%

Sales	1,000,000	1,280,000	1,750,000	2,100,000	2,520,000
Management Earnings	27,100	36,200	52,800	62,600	74,400
Statutory Capital	232,000	230,400	218,200	224,600	230,500

Market Immediate Shock Down 15%

Sales	1,000,000	1,280,000	1,750,000	2,100,000	2,520,000
Management Earnings	19,300	28,300	44,600	54,200	65,800
Statutory Capital	112,000	104,400	85,900	85,700	84,700

Sales Up 15%

Sales	1,150,000	1,472,000	2,012,500	2,415,000	2,898,000
Management Earnings	23,800	34,300	52,600	64,800	79,500
Statutory Capital	190,500	184,980	168,055	169,105	168,925

Sales Down 15%

Sales	850,000	1,088,000	1,487,500	1,785,000	2,142,000
Management Earnings	22,600	30,200	44,800	52,000	60,700
Statutory Capital	193,500	191,820	180,145	187,495	194,875

EXHIBIT 5

Financial Data: Inforce Statistics

Note: Years 2021-2023 are actual results and years 2024-2026 are forecasts.

Total	2021	2022	2023	2024	2025	2026
Death Benefit Inforce (in 000's)	140,197,000	150,663,100	161,769,400	171,796,300	186,797,000	201,583,000
Policy Contract Count	303,125	332,459	364,656	400,000	420,400	441,844

Information For Selected Products:

Variable Annuity

Death Benefit Inforce (in 000's)	11,590,800	13,023,400	14,374,600	15,796,300	17,297,000	18,055,000
Policy Contract Count	30,053	33,058	36,364	40,000	42,000	44,100

Universal Life

Death Benefit Inforce (in 000's)	51,830,200	54,421,700	57,142,800	60,000,000	64,800,000	69,984,000
Policy Contract Count	32,652	34,938	37,383	40,000	42,400	44,944

Term

Death Benefit Inforce (in 000's)	48,075,000	51,921,000	56,074,000	60,000,000	66,000,000	72,600,000
Policy Contract Count	150,263	165,289	181,818	200,000	210,000	220,500

EXHIBIT 6**2023 Asset Portfolio for the Universal Life Segment (in 000s)**

USD \$	Statutory BV	Allocation	Credit Rating	Expected Book Yield	Post Tax Capital Charge (% of BV)	Statutory Capital Category
Cash/Treasuries	210,230	10%	AAA	0.50%	0.00%	C1o
Corporate Bonds	1,051,150	50%	AA	2.50%	1.03%	C1o
High Yield Bonds	0	0%	BB	7.00%	3.63%	C1o
Commercial Mortgages	0	0%	A	5.00%	2.05%	C1o
Equities	168,184	8%			7.90%	C1cs
S&P Derivatives	126,138	6%			0.32%	C1o
Interest Derivatives	252,276	12%			0.32%	C1o
Credit Default Swaps	294,322	14%			3.63%	C1o
Total	2,102,300	100%				
Statutory Equity	100,100					

7 Seaplane Expeditions and Aviation Company (SEA)

7.1 Seaplane Industry Profile

A seaplane is an aircraft designed to take off and land on water. Seaplanes are often used for tourism purposes in coastal or island areas. They also fly commuter routes within those same areas or as transportation in more remote areas.

There has been rising demand for the seaplane services, coincident with rising disposable income in both developed and emerging economies. Steady technological innovations have made the aircraft both safer and more comfortable.

There are significant risks associated with seaplane operations. In spring 2020, three crashes occurred in Alaska within the space of one week, killing nine people and injuring twelve. Scrutiny from the U.S. National Transportation Safety Board has been increased.

Risk factors include:

- Lack of uniform safety standards among seaplane operators and manufacturers
- Disruption to operations due to weather conditions
- Pressure from company management to operate under marginal weather conditions
- Logistical problems with handling passengers and cargo on water
- Disruption to operations due to global pandemic or local endemic

The market for seaplane operators has been improving internationally as more countries become aware of their capabilities and can afford to establish operations. In the U.S. and Canadian markets there is increased demand for seaplane trips but also an increasing amount of competition.

Operators can successfully distinguish themselves in the marketplace based on the following factors:

- Impeccable safety record
- Convenience to passengers, evidenced by frequency of flights and diversity of routes
- High-quality customer service

7.2 SEA Company Profile

SEA is an independent company, privately owned. Over the past few years, SEA has been considered as an acquisition target or a strategic partner by a number of other companies.

SEA started out as a one-man seaplane operation flying charters in Victoria, British Columbia, Canada in the 1950s. By the 1970s, SEA had added a scheduled service flying customers

between Victoria and Seattle, Washington, U.S. Since then, SEA has expanded its operations to include destinations in Alaska, Vancouver, and the many islands of the Pacific Northwest. In the 1980s, SEA acquired Gully Air to add more seaplanes to its fleet.

SEA offers regularly scheduled service to various destinations as well as charter flights and sightseeing trips. In addition to this tourist and commuter service, SEA offers cargo service to the many small islands of the Pacific Northwest. SEA has a highly-skilled seaplane maintenance operation which specializes in restoring and rebuilding seaplanes. SEA also runs a seaplane pilot school to train the next generation of seaplane pilots.

SEA has 25 seaplanes in its fleet and 50 seaplane pilots on staff. It employs an additional 125 at the peak of seaplane tourist season.

SEA's goal is to provide memorable seaplane experiences to its travelers at reasonable prices. SEA also prides itself on its seaplane repair and restoration operation, which is the highest quality operation around. SEA has had no fatal accidents in its six-decade history and is committed to having an impeccable safety record. Its capabilities are encompassed in its vision statement:

Through the sky and over the sea, Seaplane Expeditions is the choice for the safest and most enjoyable seaplane experience.

7.3 Risk Profile

Reputation Risk

A poor customer reputation could severely impact SEA's competitiveness. A significant portion of SEA's business is tourist flights, either chartered or via scheduled flights to tourist destinations. Positive customer reviews, word-of-mouth referrals, and frequent flyers are important factors in staying ahead of the competition. SEA offers discounts to flyers who purchase multiple fares at once that can then be used as needed throughout the year or transferred to friends or associates to give them the SEA experience. SEA also offers considerable flexibility in its reservation process to keep customers from being forced to use another service in case of last-minute changes in their plans.

Regulation Risk

Seaplane companies have to abide by both aviation and maritime regulations. Recently, as residential areas have expanded near the waterways that seaplanes operate in, noise complaints regarding seaplane takeoff and landing have resulted in some cities looking to restrict seaplane operations. Currently, no such restriction has impacted SEA's major operating locations. SEA regularly advocates on behalf of other seaplane owners when potential noise ordinances are being considered and continually gives back in the communities it operates in to foster goodwill with residents.

Operational Risk

Seaplanes require far more maintenance than regular aircraft because of the corrosive nature of seawater. SEA has a large maintenance operation which prides itself in its ability to maintain and restore aircraft. The skill of the maintenance team and the capacity in SEA's maintenance hangars allows SEA to efficiently conduct inspections and perform preventative maintenance to keep its fleet in the air. If SEA were to lose many of its skilled maintenance employees and were unable to replace them with new employees of like caliber, maintenance problems could become more frequent.

SEA gets many of its new pilots from its own seaplane pilot training school. Commercial seaplane pilots often make flying seaplanes a career, rather than using seaplanes as a stepping stone to flying bigger planes. Many other countries get their seaplane pilots from Canada and the U.S. so there is competition to retain the best seaplane pilots.

Seaplane crashes can be especially damaging to the seaplane business. SEA's fleet consists of mainly two types of seaplanes: the DHC-3 de Havilland Otter and the DHC-2 de Havilland Beaver. Any crash that isn't initially ruled as caused by weather conditions will draw scrutiny to the type of aircraft and whether there is any defect in the plane itself. A 2017 New Year's Eve fatal crash of a DHC-2 Beaver in Australia led to the grounding of Sydney Seaplane's entire fleet for two weeks until pilot error (and eventually pilot incapacitation) was ruled as the likely cause of the crash. The same model seaplane had been involved in crashes in Canada due to aerodynamic stalling. SEA has installed warning devices in its DHC-2 planes to detect impending stalls and prevent crashes. However, there is still potential that the U.S. National Transportation Safety Board or the Transportation Safety Board of Canada could ground all seaplanes of the same model should that model be involved in a crash where a plane defect is the suspected cause. Should either the DHC-2 Beaver or DHC-3 Otter be subject to grounding for an extended period of time, the lost revenue from cancelled flights could impact SEA's viability.

Political Risk

Operating in the Pacific Northwest, SEA constantly flies customers and cargo across the U.S.-Canadian border. If the relationship between the U.S. and Canada were to become strained, it could lead to cancellation of certain services or more cumbersome processes for those customers flying across the border.

Disruption Risk

Operations can be disrupted due to weather conditions, forest fires, global pandemic, or local epidemics.

7.4 Operations - Competitive Advantages and Limitations

Maintenance Process

All SEA planes are subject to frequent inspection and preventative maintenance in accordance with the schedule designed by the maintenance crew. This schedule has led to minimal aircraft downtime and few surprise maintenance problems. Maintenance also has an electronic log that tracks each aircraft and allows the maintenance staff to note trends in maintenance issues among the same model as well as any aircraft that are experiencing more problems than others of the same model. Aircraft identified to have continued difficulties receive special scrutiny during the slower winter season and are given more extensive repairs or rebuilds. This proactive step allows SEA to have the aircraft it needs to meet demand during the busy summer season.

Scheduled Service Process

When it comes to scheduled service, not only is SEA competing with other seaplanes to retain customers, it is also competing with ferries and traditional land aircraft. The scenic experience of flying by seaplane combined with the added advantage of better direct transport between certain locations makes flying by seaplane desirable as long as fares aren't considerably higher than the lowest cost alternative and the reservation process isn't too burdensome. Therefore, SEA has continually worked to streamline the customer experience for its scheduled service customers. From online booking to flexible fares that allow for last minute changes to last minute reservations at affordable prices, SEA wants to ensure flexibility and ease of use in its reservation process. SEA monitors its frequent flyer and multi-fare purchasers' flight bookings to identify any downward trends and then reaches out with discounts or customer service surveys so as to try to identify service-related issues early.

Charter Process

While the scheduled service customer experience has become more streamlined, chartered service still requires contacting the charter department to reserve a flight. Charters require 30 days' notice of cancellation to receive a full refund. SEA therefore recommends purchasing travel insurance for its more expensive charter flights. However, SEA doesn't have a preferred travel insurer to recommend to its customers. SEA has only limited information regarding charters on its website and at its seaplane terminals. Interest in SEA's charters has been declining of late.

Weather/Safety Management Process

SEA must monitor the weather constantly to ensure appropriate and safe flying conditions for its aircraft. Due to low-altitude flying and take-offs and landings in water, weather conditions

are critical information. SEA tracks weather data from weather stations throughout the Pacific Northwest and along all its flight paths to relay important weather information to its pilots. In addition, pilots are trained to report adverse weather conditions in a consistent and timely manner so that information is shared among all pilots and SEA safety management personnel. SEA is then able to quickly react to changing conditions and delay/cancel flights if needed for the safety of SEA customers and crew. Additionally, pilots, dock crew, and maintenance employees attend regular safety training and are committed to checking that equipment and personnel are all working properly to ensure the safety of SEA's customers and cargo.

Aircraft Restoration Process

In addition to maintaining its own fleet, SEA repairs and rebuilds seaplanes for customers from all over the world. Its renowned service attracts customers who are willing to wait for quality. This provides a steady pipeline of work. The dual work of rebuilding customer planes and maintaining its own fleet keeps the maintenance personnel's skill levels high.

Disruptions to Operations

During the global pandemic in 2020 to 2021, SEA operations were significantly impacted due to lockdowns and social distancing policies. Financial results were stressed as the company continued to retain its pilots and mechanics on the payroll rather than losing these valuable experienced employees. SEA's financial situation improved significantly after 2021 as lockdowns were discontinued and it had significantly lower employee attrition compared to competitors.

7.5 Strategic Initiatives

The Pacific Northwest's seaplane industry is highly competitive with many companies offering charters, scheduled flights, and/or cargo service. SEA believes the biggest growth potential for seaplane services will occur in international markets. Asian countries, especially China, have shown great interest in seaplane services recently. China has a large number of waterways in areas without the needed infrastructure for traditional land-based plane service. India and the European Union have conducted seaplane service viability studies. However, SEA would need a large infusion of capital and a partner or consultant with Asian or European business expertise to launch new services internationally.

7A SEA Financial Exhibits

Net Operating Statement (in CAD 000s)

	2023	2022	2021
Passenger revenues	7,235	7,024	6,820
Freight, charters, aircraft sales, and other	3,685	3,722	3,760
Total operating revenues	10,920	10,746	10,580
Operating expenses:			
Salaries, wages, and benefits	3,058	3,009	2,962
Aircraft fuel	2,457	2,128	2,021
Aircraft maintenance, material, repairs, and other	3,362	3,336	3,312
Depreciation and amortization	393	387	381
Other operating expense	1,194	1,159	1,125
Total operating expenses	10,463	10,019	9,801
Operating income	457	728	778
Interest expense, net	(123)	(126)	(129)
Income (loss) before income taxes	334	602	649
Income tax benefit (expense)	(117)	(211)	(227)
Net income (loss)	217	391	422

Summary of Balance Sheet (in CAD 000s)

	2023	2022	2021
Assets	6,552	6,448	6,348
Current Liabilities	2,532	2,458	2,387
Long Term Debt	1,365	1,400	1,436
Total Liabilities	3,897	3,858	3,823
Owner Equity	2,655	2,589	2,525