



Case Study

SPRING 2022

Strategic Decision Making Exam
EXAM CFE SDM

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Disclaimer

The companies and events depicted in this Case Study are fictitious. Any similarity to any event, corporation, organization and person living or dead is merely coincidental, with the exception of Section 2A Exhibit 5 which includes some actual press releases related to the airline industry along with some fictitious press releases. 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.

RPPC Dynasty Corporation: A BOX FULL OF GROWTH

1 RPPC Dynasty Corporation

1.1 Introduction

RPPC Dynasty Corporation History

RPPC Dynasty was established in 2003 with head offices in Luxembourg by four founding partners. The corporation's name is derived from the four founders' surnames - Ruiz, Putin, 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 1993. Jose Ruiz won a \$700,000 lottery. With his winnings and his \$20,000 savings, he started a coffee shop business. His business had grown steadily and became a billion dollar company.

In 2003, Jose Ruiz and Meiying Chan formed a partnership. The Chan family had owned and operated a small business since 1998. Soon thereafter two other entrepreneurs, Sanjay Patel and Yelena Putin, were brought in to expand the brand. Over the next year, RPPC developed its vision of future global expansion across diverse businesses.

In 2004, to increase access to capital in support of the company's expansion, RPPC made the decision to incorporate.

In 2005, with the guidance of Sanjay Patel, a bank was acquired.

In 2011, an airline 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 airline had acquired a tire company in 2007 to create a synergy with its airline business.

In 2013, RPPC was presented with an opportunity to acquire a life insurance group to expand the wealth management capabilities of the bank operations.

In 2014, RPPC spun off the coffee company and the airline in order to concentrate on the financial businesses. Frenz Coffee and Blue Jay Air continue to operate as independent organizations.

Mission

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

Vision

We provide our customers with financial solutions 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 Mulroney (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.

Strengths and Value Drivers

- A Risk Appetite that shapes business strategies and is integrated into our decision-making processes. Risk management is considered a profit generating activity. We believe preventing our organization from experiencing loss is as beneficial as creating new profit streams from new arenas.

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.

Our Path to Differentiation

- Ensure that the risk-reward trade-off is applied effectively and consistently in all levels of decision-making.

Key Objectives and Recent Achievements

- A key objective is to continue embedding our strong risk culture across the enterprise: Emphasize and ensure that risk management is a process of continual improvement at RPPC.
- Reinforce our risk independence and our three-lines-of-defense approach to managing risk across the enterprise.

Recent Achievements

RPPC achieved the roll-out of our five step message on our value-based approach to enterprise risk management:

- Understand and manage
- Protect our reputation
- Diversify; limit tail risk
- Maintain strong capital and liquidity
- Optimize Risk-Return

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. This is achieved with business-specific risk appetite statements that are aligned with the RPPC risk appetite statement approved by our Board of Directors.

The following RPPC Risk Appetite Statement is a clear articulation of the value creation principles of RPPC. The Board of Directors of RPPC and its executive officers declare that the business operating groups, with the support of risk officers:

- Do not take risks that are opaque, are not well understood, or that cannot be well managed.
- Identify and quantify low probability tail events.
- Limit exposure to low probability tail event risks that could jeopardize RPPC's credit rating, capital position, or reputation.
- Subject all new products or services to a rigorous review and approval process.
- Ensure that the performance management system incorporates risk measures.

- Protect and enhance the RPPC brand by exceeding expectations in the products and services that we deliver to our clients.
- Promote focused differentiation on products and services that leverage RPPC's core competencies to build client trust and to surpass expectations.
- Maintain strong capital, liquidity, and funding positions that exceed regulatory requirements.
- Maintain compliance standards, controls, and practices that prevent regulatory exposures that could adversely affect our reputation.

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 1.2 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 pandemic risk, as recently became evident.
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. Changes in the availability of fresh water
 - c. Higher losses from weather-related natural catastrophes
 - d. Accelerated climate change could lead to a significant decline in the global GDP level.

2 Blue Jay Air

Other services 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 March 2020 U.S. Passenger Airline Employment data published by the U.S. Department of Transportation, there are 461,597 full-time equivalent (FTE) employees working for scheduled passenger airlines. This is the highest employment total since 2003, which indicates that the airline industry is well on its way to recovery following the recession of 2008 - 2009. Unfortunately, after the COVID-19 pandemic hit in 2020, the February 2021 employment data dropped significantly to 394,843 FTE.

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 the commercial airline transportation.

(2) Supply Chain Risk

The number of manufacturers of commercial aircrafts 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 has 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 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 US declining at rates of 10% to 24%, depending on the airport. The drop in customers prompted rapid consolidation and mergers of all of 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 is controlled by the “Big Four” (American, Delta, United, and Southwest) at the beginning of 2020. In early 2020, the novel Coronavirus (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. While the full financial impact of this pandemic is unknown, the Transportation Security Administration (TSA) estimated a 96% drop in passenger traffic at most airports in the U.S. in early April 2020 compare to the same period last year.

As the pandemic event persists, many small carriers could face restructuring or bankruptcies due to illiquidity. This will further lead to consolidation of the industry.

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 has gone through three mergers and two significant acquisitions over the last 35 years. 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. From 2011 through part of 2014, Blue Jay Air was owned by RPPC. In 2014, it was spun off and now operates as an independent organization again. Susan Feather, who has over 20 years of airline experience, is viewed as a “turnaround” CEO.

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 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 the ongoing 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 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 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 7.

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 6.

Due to the recent pandemic outbreak, 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.

As Blue Jay Air has significant pension liabilities for its existing labor force, ability to fund the pension liabilities has become a crucial issue for the company, especially in today's low interest rate environment. As well, Blue Jay Air 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 and considerations 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 in the air for many years. The X730 has been involved in 27 accidents in 40 years of services, 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 cost of blue Jay Air's acquisition targets has 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 and its affiliated companies. This will substantially increase the incentive for travel by business executives.

For example, Blue Jay Air is partnering the loyalty card with Big Ben 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.

A modification to the existing application form is required to accommodate the expansion of this new enhanced loyalty program. The current application is an online form which is an electronic version of a paper form. The paper form is currently five pages long with 30 different questions related to the customers' personal information and preferences. The customer data is crucial for current and future marketing analysis. However, the current completion rate is much lower than the target rate due to the extensive information requested.

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 each traveler to choose what best fits his needs.

Blue Jay Air has identified Darwin Life as the ideal strategic partner to successfully execute this venture, and CEOs Susan Feather and Gabriela Martinez have eagerly prepared a business case to bring forward to the Blue Jay Air and Darwin Boards. They are very excited about the potential synergies this initiative could realize.

As part of the proposal, the risk functions from both companies have collaborated on a preliminary risk review and have identified some concerns with the initiative.

An email thread discussing key issues of this new proposal is provided in Section 2A Exhibit 1.

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 pertinent 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 French 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 decided to discontinue its travel agency programs as part of the continuing effort to keep the company as cost efficient as possible. Instead the company will establish direct business relationships with its business client base. Blue Jay Air will negotiate direct contractual arrangements with its business clients in order to customize client needs and leverage long-term client relationships. Blue Jay Air is also looking into ending its partnership with Online Travel Agencies (OTAs) to encourage passengers to book directly on their website. OTAs are online companies whose websites 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 2 to 4. (These statements exclude any impact of Blue Jay Tire on Blue Jay Air’s overall financial position.)

Recent Industry News

Recent industry news relevant to Blue Jay Air and the airline industry is shown in Section 2A Exhibit 5.

2.6 Loyalty Program Proposal

Blue Jay Air had been promoting a marketing campaign for the two years before the pandemic hit. The campaign targeted Blue Jay Air's primary customer segment, the business traveler. Named the Lucky 7 program, the campaign offered 1 free one-way business class flight for every 7 one-way business class segments purchased (a round-trip is equivalent to two one-way segments). The program was very successful according to the results presented by the BJA CEO, Susan Feather, at a Board meeting in 2019. However, the program stalled after the pandemic hit due to border closures between Canada and USA as well as a significant reduction in domestic business travel.

Excerpts from the executive summary in 2019:

- Business Travelers now account for 57% of the total one-way flight segments with BJA.
- Business Travelers now provide 71% of the airline's total revenue.
- The marketing cost of the Lucky 7 program for the past two years was 12% below budgeted cost for the selected routes.
- In the two years prior to the Lucky 7 program, BJA's marketing campaigns achieved 23% lower sales revenue.
- The introduction of the Lucky 7 program has increased both the number of one-way flight segments and the average revenue per one-way segment.
- Purchases of business class one-way segments were up 13% in period over period comparatives due to the 30% increase in the routes with the Lucky 7 program.
- Most of these gains were attributed to the ability of the Lucky 7 promotion to overcome the higher than usual staff turnover in both air crew staff and the operational management team.
- The retirement of several long serving staff resulted in several employment promotions being offered to internal candidates. The operations have transitioned effectively to new leadership. In fact, in the year-end employee survey, the morale, energy, and commitment to the team showed a dramatic improvement in period over period comparatives.
- The BJA client persona has also changed due to the Lucky 7 program. The average age of the client, the average number of business class round-trips per client, and the amount of ancillary service purchases per stay were all up period over period in the routes with the program. On these routes the BJA client is now more likely to be an Executive Vice President or member of the C-suite rather a member of middle management.
- The Lucky 7 program was only offered on the Toronto to New York and subsequently Chicago to New York routes. But the research team believes similar results can be achieved on other BJA routes, especially the eight other commercial centers with population greater than one million in the USA across the carrier network.

After the pandemic hit in 2020:

- Marketing campaigns for the Lucky 7 program were suspended.

- Lucky 7 program was temporarily suspended on the Toronto to New York route but continued for the Chicago to New York routes only.
- Massive layoffs of air crew staff and operational management team reduced resources to support the program.

Marketing research committee discussion notes

In 2021, as the pandemic was starting to be brought under control, the BJA CEO formed a research committee to assess the feasibility of expanding the Lucky 7 program into a company-wide loyalty program.

The marketing research committee has concluded that if business returns to pre-pandemic levels, the loyalty program is a \$69 million value-added project on an NPV basis. The committee estimates that if the increased revenue from business class purchases of 30% from the Lucky 7 program can be achieved across the network, then the BJA gross margin will improve from 8.10% to 8.73% of annual revenues of \$1,500 million.

The marketing research committee has estimated that the loyalty program can be funded from within the existing operational margins; therefore, the current marketing budget is expected to remain the same as for the four years prior to the pandemic, at approximately 10% of revenue. The estimated IT system development work to launch the loyalty program, USD \$17 million, will be repaid in three years due to the anticipated revenue increases.

The additional cost of annual administration of a loyalty card program, namely, the development of promotional materials, management of a new customer relationship management (CRM) system and maintenance of a mobile app for customer engagement, will be funded by the anticipated continuation of the 12% marketing cost savings achieved by the Lucky 7 program. No new staff is anticipated to be required because the loyalty program will leverage the expertise developed from recently promoted managers of the Lucky 7 program. Cross-regional training programs are proposed which will be managed by Human Resources. The committee anticipates this will go smoothly at relatively low cost because the staff who manage other flying routes are very experienced and highly competent.

Also, the committee strongly believes that the proposed loyalty program will not require a contingency fund in support of the loyalty points system. The marketing research committee believes that being disciplined about applying the same structure and parameters of the Lucky 7 promotion is the best form of risk management for the loyalty program. Therefore, the committee proposes a loyalty points system that mirrors the 1 for 7 promotion: namely, each one-way business class segment earns 100 points and a 700-point redemption is needed to claim one free business class one-way segment. However, to appease economy class passengers the loyalty program will also offer 25 points earned for each purchased one-way economy class segment and a 300-point redemption is needed to claim 1 free economy class one-way segment. The 10-year historical data on BJA flights indicates that no client has ever purchased 12 economy class one-way flight segments in any one calendar year, so this economy class loyalty benefit is estimated to have no cost.

The research committee understands that this is not a risk that was tested within the Lucky 7 promotion but the committee is confident that the economy class passengers are a low risk because this passenger class is a small customer segment for BJA. Statistics indicate that economy class passengers are not as likely to be repeat travelers within a given calendar year. The committee proposes that all loyalty points will have a fixed duration for redemption.

The research committee also points out that their proposed approach will be a cost savings over the alternative of joining an existing loyalty Alliance. The committee estimates that an Alliance approach might save administrative development cost and ongoing operational maintenance. But the Alliance approach requires as part of its fee a contribution to build a contingency reserve fund that provides backing for the loyalty obligations. The market research committee believes this contingency reserve is overkill and that the Alliance fee at 9% revenue is not economical given that the Alliance fee plus staff cost will result in a budget overrun for the Marketing department. The research committee believes that the 9% is too high because it uses up 90% of their total marketing budget.

2A Blue Jay Air Exhibits

EXHIBIT 1

Email thread discussing the Travel Insurance program issues

From: Ruth Green
Sent: August 28th, 2022 9:00pm
To: Aaliyah Jackson
cc: Susan Feather, Gabriela Martinez
Subject: Travel Insurance Risk Review

Hi Aaliyah,
Has your team reviewed the pricing on the travel insurance proposal? I'm not comfortable that the tail risk is being picked up here. Isn't it possible that a tail event like a plane crash can affect multiple travel insurance policies?

Thanks,
Ruth Green
Head of Risk Management Committee, Blue Jay Air

=====

From: Aaliyah Jackson
Sent: August 29th, 2022 8:45am
To: Ruth Green
cc: Susan Feather, Gabriela Martinez
Subject: RE: Travel Insurance Risk Review

Hi Ruth,
I'm worried the tail risk is actually too high for us to retain. I think we need to do something to limit our exposure. We should sit down and discuss some risk transfer options.

Thanks,
Aaliyah Jackson
CRO, Darwin Life

=====

From: Ruth Green
Sent: August 29th, 2022 10:30am
To: Aaliyah Jackson
cc: Susan Feather, Gabriela Martinez
Subject: RE: RE: Travel Insurance Risk Review

I think that's worth exploring. I also have a few suggestions on the economic capital model you've been using for pricing. We'll need to ensure that tail dependence is properly modeled. I'll send you some of our work on this.

Ruth

EXHIBIT 2

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

Fiscal Year Ended	Dec 31, 2021	Dec 31, 2020	Dec 31, 2019
Total revenues	833	641	1,281
Total operating expenses	764	588	1,176
Net Operating income	68	53	105
Total non-operating Income	(25)	(33)	(133)
Income (loss) before income taxes	43	20	(28)
Income taxes	0	(5)	2
Net income (loss)	44	15	(26)
Earnings per share (Basic)	0.37	0.12	(0.22)
Earnings per share (Diluted)	0.35	0.11	(0.22)

EXHIBIT 3

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

Fiscal Year Ended	Dec 31, 2021	Dec 31, 2020	Dec 31, 2019
ASSETS			
Total current assets	842	626	406
Total assets	1,630	1,346	1,063
LIABILITIES			
Total current liabilities	606	446	309
Total liabilities	1,875	1,640	1,351
EQUITY			
Total shareholders' equity	(245)	(294)	(288)
Total liabilities & equity	1,630	1,346	1,063

EXHIBIT 4

Blue Jay Air Corporation

NON-CONSOLIDATED STATEMENT OF CASH FLOW

(US Dollars in millions)

Fiscal Year Ended	Dec 31, 2021	Dec 31, 2020	Dec 31, 2019
Cash Flows from (used for)			
Operating			
Net income (loss)	44	15	(26)
Adjustments to reconcile to net cash from operations:	(9)	12	18
Net cash flow from operating activities	34	27	(9)
Financing			
Net cash flows used in financing activities	157	184	(18)
Investing			
Net cash flows used in investing activities	(162)	(215)	(33)
Increase in cash & cash equivalents	29	(4)	(60)
Cash & cash equivalents, beginning of year	41	45	105
Cash & cash equivalents, end of year	71	41	45

EXHIBIT 5

Headline News Excerpts on Competitors

Expedia sues United in fight over ticket-distribution costs

By Justin Bachman.

United Airlines has threatened to withhold fare data as soon as next week as part of faltering contract talks between the companies. Such a move would halt Bellevue-based Expedia's ability to sell United's flights for trips after September 30, the travel seller said in a lawsuit filed Monday in federal court in New York. It would also threaten Expedia's ability to change itineraries that are already booked. The agency has sold about 2,000 tickets for United flights after September 30, according to the filing.

The lawsuit adds to a long-standing battle between airlines and travel agents over the costs of distributing tickets. Carriers have sought to entice more travelers to book directly, following the model at discounter Southwest Airlines Co. In 2018, JetBlue Airways Corp. removed its fares from a dozen online agencies to reduce selling costs.

The United contract dates to 2013 and was "reaffirmed" after negotiations in 2015 and 2018, Expedia said in the lawsuit. In August the airline "demanded to renegotiate" the terms of the contract, which had more than a year remaining, Expedia said. Alleging that United has breached the contract, Expedia is seeking to restrain the Chicago-based carrier from removing its fare data.

United Continental Holdings Inc. said it expects its fares won't be listed on Expedia sites in the U.S. and Canada as of Oct. 1. News of the lawsuit was first reported by Skift.com.

"For months, Expedia has refused to engage in constructive discussions with United about a new contract," United said in a statement Tuesday. Travel agencies such as Expedia and meta-search sites such as Kayak sold 70 million United tickets in 2021, the airline said.

Air Canada

Air Canada confirms novel financing for new planes

By Ross Marowits, THE CANADIAN PRESS

MONTREAL — Air Canada confirmed Wednesday that it plans to tap into a novel way — at least in Canada — of financing the purchase of five new Boeing 777 aircraft. The Montreal-based airline announced the private offering of three tranches of enhanced equipment trust certificates (EETC) worth US\$714.5 million.

The aircraft are scheduled for delivery between June 2021 and February 2022.

Loxley Aviation Ltd. has been created to facilitate Air Canada's inaugural offering, Moody's Investors Service said, in assigning ratings of Baa3 to tranche A, B1 to tranche B, and B3 to tranche C.

The aircraft, configured with 458 seats in economy, premium economy and premium classes, will be used as collateral. Air Canada (TSX:ACB) uses the largest planes in its fleet on long-haul routes.

...

Chris Murray of PI Financial Corp. had predicted the carrier would become the first Canadian airline to tap into a new way to finance aircraft purchases that reduces interest rates. Ottawa's approval in December of an aircraft protocol effective April 1 opens the doors to the EETC trust market that has been used by U.S. carriers for nearly 20 years. Murray added in a report last week that Air Canada may also consider the same financing arrangement for its new Boeing 787 planes set to begin delivery next year.

...

Passenger Dragged Off Overbooked United Flight

A man's refusal to give up his seat on an overbooked United Airlines flight led to a disturbing scene that has travelers up in arms over airline policies. The Department of Transportation said it will review the incident, in which a passenger was forcibly removed from the Louisville, United flight at Chicago O'Hare International Airport.

The incident has prompted one security officer's suspension and created a publicity nightmare for United. Several passengers recorded the incident on their phones and posted video on social media. Videos show three Department of Aviation security officers dragging the man down the aisle by the arms and legs while other passengers shout in protest.

The incident sparked criticism of a system that allows airlines to involuntarily boot passengers from flights. United was acting within their rights and following policy. Then, the situation turned physical. United asked passengers to give up their seats voluntarily for compensation. Four crew members needed to get on the flight in order to work another flight that would otherwise have been cancelled. When no one volunteered, the airline was forced into an "involuntary de-boarding situation".

Bo-Lock 555 Optimum plane expected to remain grounded until at least August

April 28, 2022 2:31 PM - Reuters

WASHINGTON (Reuters) - Bo-Lock's grounded 555 Optimum jet is expected to remain grounded until at least August as the manufacturer continues to grapple with software issues, people briefed on the matter told Reuters.

Bo-Lock, one of the largest plane manufacturers, has signaled it now hopes to win regulatory approval in August for the plane's return to service, but that could be pushed backed until fall, the sources said, as timing for meeting milestones is uncertain. The best-selling airplane has been grounded since March 2020 after two fatal crashes in five months killed 346 people.

Bo-Lock halted production in January and has 400 undelivered 555 planes in storage. Southwest Airlines Co, the largest operator of 555 Optimum airplanes worldwide, said Tuesday it was removing the 555 from its schedule through Oct. 30 based on Bo-Lock's "recent communication on the 555 return to service date." Last week, Reuters reported that a key certification test flight had been delayed until late May at the earliest and reported in early April the company was dealing with two new software issues.

The Federal Aviation Administration (FAA) has repeatedly said it has no timetable for approving the plane's return to the skies. Bo-Lock declined to comment ahead of its earnings release Wednesday. On Monday, Chief Executive Officer Drew Cahill, during the company's annual meeting, did not repeat prior guidance that Bo-Lock anticipated the plane would win approval for a return to service in mid-2022. "We remain confident in the 555," Cahill said. Bo-Lock said on April 7 it needed to make two new software updates to the 555 Optimum's flight control computer.

EXHIBIT 6

2017 Aviation Industry Safety Review (AISR)

From: Ruth Green
Sent: December 1, 2021 9:00am
To: Susan Feather
Subject: 2020 Aviation Industry Safety Review

Susan –

You may recall that each year my team reviews the AISR. There was no AISR report produced for 2020, most likely due to the pandemic. However, I'm providing a brief summary of the 2019 report that we reviewed last year. That report highlighted some issues that affect us here at BJA, which we still haven't addressed to my satisfaction.

Ruth

AISR reported that the number of people killed in air crashes in 2019 was significantly reduced from the previous year. 2019 was the third-safest year for air travel since World War II. The safest airline in the world in 2019 was Emirates. With a risk index of 95.48 percent, it ended up

only slightly ahead of another gulf airline, Etihad Airways (95.21 percent). Third place finisher was Spain's Air Europa.

Blue Jay Air finished in 4th place, consistent with our previous rankings, which have generally been in the 4th to 6th place range.

The accident statistics of 2019 were dominated by the second crash of a Bo-Lock 555 Optimum in Ethiopia, killing all 157 people aboard, which resulted in the aircraft model being grounded. Bo-Lock had scrapped the production of the aircraft at the end of 2019. (As we are aware from other news releases, Bo-Lock is trying to get the 555 back into service later this year.)

From: Susan Feather
Sent: December 1, 2021 9:05am
To: Ruth Green
Subject: RE: 2019 Aviation Industry Safety Review

Ruth –

Budget for improvements is limited, but interested in improving our rank. Please advise.

SF

EXHIBIT 7

Blue Jay Air Corporation's Balanced Scorecard Framework

	Objectives	Measurements	Targets	Initiative
Financial	Revenue Growth Frequent Business Travels Expense Reduction Asset Utilization	Total Revenues Business Class Load Factor Total Operating Expense Higher Tangible Assets	35% Annual Growth 95% 2% Annual Decrease Increase Service Capacity	Refurbish/Purchase
Customer	Frequent Business Travel Enhance Loyalty Program Rebranding / Image	% Business Traveler Number of Participants Business Traveler Ranking	85% 25% Annual Growth #1	
Internal	Booking System Enhancements Enhance Comfort and Service Turnaround	Utilization Internet, Mobile Increase Business Class Capacity On Time Departure	50% Annual Growth 80% of Fleet 85%	
Innovation and Learning	Labor Relationship Management Labor Efficiencies Safety	Employee Satisfaction Decrease Staff Expenses AISR Safety Index Rank	Top 10% of Industry 10% Decline over next 5 years #1	

EXHIBIT 8

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 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.

Membership in one of the three major Airline Alliances (Star Alliance, SkyTeam, and Oneworld) is distinguishable from code-share agreements, though alliance members often enter into CSAs. In fact, one alliance requires CSAs to become a member of the alliance. The mutual obligations among the members of an alliance are outside of the CSAs, and alliance membership does not dictate the agreement details.

One of the basic provisions of a code-share agreement is 'The Inventory Control Procedure', which specifies how booking classes are to be mapped among the parties and how access to the seat inventory will be provided to the marketing carrier by the operating carrier. Generally, booking classes (sometimes known as fare classes) refer to the type of fare (e.g., flexible or

non-refundable) and type of traffic (e.g., a flight with a long-haul connection). Revenue differs according to each booking class.

Seat inventory can be provided as one of the following:

- Free sale arrangement – The marketing carrier(s) and operating carrier both sell tickets from the same inventory of seats and booking classes for each carrier are directly mapped to each other.
- Hard Block Space arrangement – The marketing carrier pre-arranges with the operator to set aside a given number of seats for the marketing carrier to sell. The marketing operator will purchase these seats from the operator at an agreed upon price.
- Soft Block Space arrangement – Similar to a Hard Block Space arrangement, but with an option to return some of the seats at an agreed-upon number of days prior to departure.

Additional provisions of code-share agreements are as follows.

- List of routes
- Marketing and product display
- In-flight product and quality monitoring
- Technical and operational requirements
- Safety and security
- Passenger handling and airport procedures
- Pricing, revenue management, ticketing, commission payments and financial settlement
- Taxes
- Liability, indemnification, and insurance
- Exclusivity – The code-share agreement is exclusive for the parties entering into the agreement and those parties will not be able to enter into further code-share agreements with other carriers in certain markets.

In addition to the basic provisions of a code-share agreement, separate, parallel agreements between the parties involved may be established. The most common of these parallel agreements are Special Prorate Agreements (SPAs) and revenue settlement agreements.

The SPA will specify how revenue will be divided among the carriers in the case when a leg of a total passenger's journey is operated by the operating carrier and a leg is operated by the marketing carrier. SPAs may be "gross" or "net," as defined below.

- Gross SPAs – the SPA specifies a straight-rate proration among the operating carrier and marketing carrier(s)
- Net SPAs – the SPA specifies the amount to be paid to the airline carrying the passenger on a specific leg; the amount also depends on the booking class to which the passenger is booked

A revenue settlement agreement is similar to the SPA, but possesses a broader scope. Provisions for the allotment of revenues and the payment of code-share commissions, as well as the settlement procedures are likely included in such agreements.

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 US 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 union negotiations at the same time that oil prices are decreasing and the minimum wage is increasing. And we are still trying to recover our sales after the tire recall we experienced in 2019.”

Decreasing oil prices have proven to be a positive for tire sales as both consumer and commercial vehicle usage is on the rise. The industry is rife with growth, but production plants in the southern states are near capacity. BJT needs to expand 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 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

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 and decreasing oil prices

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 1946. 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 2007, 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 2007

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 2007, the BJA team put in place a 5-year plan to expand the sales and distribution reach into commercial vehicles across the USA.

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 2012, having successfully met and surpassed the 5 year plan objectives set out in 2007, 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 double their pre-acquisition production levels or about triple the level of the Canadian manufacturing plant.

At the same time, BJT introduced a tire warranty program that helped to enhance the 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 2012 - 2018. 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 2014, 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 4-year 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.

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 2022. 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.

There has not been any disruption in the workforce at any plants. Labor risk is currently considered by Executive Management to be low. However, the number of staff that elects union representation has been increasing.

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.

Right-to-work laws currently exist in 26 U.S. states, mostly in Southern, Western, and certain Midwestern states. These include Georgia and Alabama in the South, Nevada and Arizona in the West, and Indiana and Iowa in the Midwest. Business interests represented by the United States Chamber of Commerce have lobbied considerably to bring about right-to-work legislation.

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.

Insurance Risk

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 the 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 assure 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 U.S. states may repeal right-to-work laws. As of 2018, right-to-work laws exist in Alabama and Georgia, but not in the state of New York. Political risk is considered a medium 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 2020 and 2021 were impacted by a tire recall. Below are the headline news and a series of emails uncovered by an investigative journalist at that time related to the recall.

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

Smallville, Arizona (Associated Press – August 2nd 2019): The Blue Jay Tire Co (BJT) reported in May 2019 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, 2017, the BJT (Canada) head engineer, Latanya Williams, indicated 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 when contacted about 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, 2017
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, 2017
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, 2017

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.

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 2012 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.

The Committee experienced quick success as it was able to select and purchase the two manufacturing plants, and initiate and transfer the re-fitting process to the Canadian operations. During the selection period, Jack Tavares immediately became its natural leader, and the other four team members found it comfortable to get behind his direction in order to expand BJT's production capabilities. Moreover, after the acquisition of the first plant in Montgomery, Alabama, the committee members found themselves engaging in a very cohesive manner. The purchase of the second plant in Macon, Georgia occurred within a few months of the first.

Since the 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.

Overall, the plants have operated without major incident and have yet to reach capacity. In general, the amount of work contributed by the Committee has been limited, thus the need for less frequent meetings. Over time, these meetings have begun to be dominated by Jack Tavares. For the past three years, Jack has set the Committee's agenda, has individually interpreted the information supplied by the other team members, and has essentially dictated the leading potential plants for consideration. The other team members have shown no real resistance to this, due to their sincere respect for Jack; they credit him with making the two early plant purchases successful. Senior Management of BJT has shown no concern with these developments.

In October of 2021, the Production Expansion Committee received word that a third plant was to be purchased and re-fitted by the first quarter of 2023. This plant would be used by BJT-USA as well as other divisions within BJT, but production out of this plant was expected to be very limited in the first year or two. 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 USA, BJT acquired CCC Tire Stores, a small chain of tire stores located in Arizona, USA. 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.

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	2021	2020	2019
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	2021	2020	2019
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	2021	2020	2019
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	2021	2020	2019
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	381
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	2020- 2021
BJT - Canada	25,000
BJT-USA	75,000
Employees	100,000
BJT - Canada	1
BJT-USA	2
Manufacturing Plants	3

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 an independent public company. Prior to 2014, Frenz was part of the RPPC conglomerate. Frenz is a global premier roaster, marketer and retailer of specialty coffee in the

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 many other channels such as franchises, groceries, private clubs, hotels, cruise ships and national foodservice 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 and there is 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. We care about our family.

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 the risk management strategies for Frenz. Robert Kaplan’s responsibilities include proper integration of risk management strategies and policies with its 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.

The new global risk mandate has resulted in disagreement as to which Board Committee should oversee Kaplan’s work. Some Board members believe that the Audit Committee’s role should be expanded to include it. Other Board members believe that this new mandate involves significant strategic changes and belongs under the Executive Committee. Some believe that it should be under the Related Party and Conduct Review Committee as the strategies will involve significant related party transactions. The Board of Directors has requested that Robert Kaplan provide a recommendation.

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>2019</u>	<u>2020</u>	<u>2021</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, to include products from other sister companies in the conglomerate group.

Adverse economic conditions may cause declines in general consumer demands for these high-end products, driving the increase in costs and pressure for reduced quality of products, which 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, labor discord, 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 has to 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 on 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 customers' 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 having 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. Our customers were on the move via the internet. 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. She wanted to increase the rate of new store openings and enter new countries. She was concerned about which geographic regions to expand, whether stores should be franchisee-developed or company-owned. She 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 and how should marketing costs be allocated? How should Frenz leverage its relationship with other sister companies in promoting its brand through other channels?

Existing stores generated cash. Opening new stores was capital intensive. How would Frenz fund growth? What were the risks associated with franchising? How would Frenz manage the licensees? 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? How would the strategy fit in Frenz's risk framework? 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 the developed countries through building more of these company-operated coffee houses in financial districts and high socio-economic areas;
- Further nurture relationships with and loyalty from 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 customers' 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, is being 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 team of twenty experienced marketing staff 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 Exhibit 4B.1. 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, and 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 an exclusive 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 Exhibit 4B.2.

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 is being developed and 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>Euros in thousands</i>	2024	2023	2022	2021	2020	2019
Sales	546,031	507,235	471,308	438,035	407,212	378,654
Cost of Sales	46,737	42,286	38,240	46,390	48,602	31,145
Store Operating Expenses	254,217	243,595	233,418	221,156	206,725	193,254
Depreciation	30,000	26,980	24,059	21,215	18,424	15,662
General and Administrative Expenses	60,062	57,734	55,579	53,582	51,733	50,019
Impairment of Goodwill	0	0	0	0	10,442	0
Total Operating Expenses	391,015	370,595	351,295	342,343	335,925	290,081
Operating Income	155,016	136,640	120,014	95,692	71,287	88,573
Interest Expense	5,637	5,285	4,933	7,010	5,921	4,919
Income Tax Expense	37,345	32,839	28,770	22,171	16,341	20,914
Net Income	112,034	98,516	86,311	66,512	49,024	62,741

EXHIBIT 1
Frenz Financial Statements

BALANCE SHEET

	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>			
<i>Euros in thousands</i>	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019
Current Assets:						
Cash	28,759	24,762	21,021	14,367	12,998	22,870
Accounts Receivable	5,000	5,000	5,000	5,000	5,000	5,000
Inventory	13,602	12,200	10,931	9,784	8,392	6,934
Total Current Assets	47,361	41,962	36,952	29,151	26,390	34,804
Long-term Assets:						
Long Term Investments	264,005	238,310	213,552	189,537	166,072	142,960
Goodwill	64,031	54,202	45,072	36,589	28,704	31,816
TOTAL ASSETS	375,397	334,474	295,576	255,276	221,166	209,580
Current Liabilities:						
Accounts Payable	10,000	10,000	10,000	10,000	10,000	10,000
Current Borrowing	8,200	8,500	8,800	9,100	9,400	9,700
Total Current Liabilities	18,200	18,500	18,800	19,100	19,400	19,700
Long-term Debt	143,280	134,400	125,520	116,640	107,760	98,880
Total Liabilities	161,480	152,900	144,320	135,740	127,160	118,580
Equity						
Paid-in Capital	25,000	25,000	25,000	25,000	25,000	25,000
Retained Earnings, accumulated	188,917	156,574	126,256	94,536	69,006	66,000
Total Equity	213,917	181,574	151,256	119,536	94,006	91,000
TOTAL LIABILITIES AND EQUITY	375,397	334,474	295,576	255,276	221,166	209,580

EXHIBIT 1
Frenz Financial Statements

STATEMENT OF CASH FLOWS

	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>			
<i>Euros in thousands</i>	2024	2023	2022	2021	2020	2019
Operating Activities:						
Net Income	112,034	98,516	86,311	66,512	49,024	62,741
Adjustments						
Depreciation	30,000	26,980	24,059	21,215	18,424	15,662
Accounts Receivable	0	0	0	0	0	0
Inventory	(1,402)	(1,269)	(1,147)	(1,392)	(1,458)	(934)
Accounts Payable	0	0	0	0	0	0
Impairment of Goodwill	0	0	0	0	10,442	0
Net Cash Provided by Operating Activities	140,632	124,227	109,223	86,335	76,432	77,469
Investing Activities:						
Purchases of investments	(65,524)	(60,868)	(56,557)	(52,564)	(48,865)	(45,438)
Sales of investments	0	0	0	0	0	0
Net Cash Used by Investing Activities	(65,524)	(60,868)	(56,557)	(52,564)	(48,865)	(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	(79,691)	(68,198)	(54,591)	(40,981)	(46,018)	(62,741)
Net Increase in Cash from Financing Activities	(71,111)	(59,618)	(46,011)	(32,401)	(37,438)	(54,161)
Net increase in Cash and Cash Equivalents	3,997	3,741	6,654	1,369	(9,872)	(22,130)
Cash and Cash Equivalents:						
Beginning of Period	24,762	21,021	14,367	12,998	22,870	45,000
End of Period	28,759	24,762	21,021	14,367	12,998	22,870

EXHIBIT 2a
Vietombia Statistics

INFRASTRUCTURE	
Economy	
GDP (2021)	USD 70.1 billion
% exports (2021)	USD 62.9 billion FOB 89.73%
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
Number of workers associated to a cooperative	20,000
% workers with permanent contract	5%
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 ha
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
Number of owned thresher	n/a
Economic indicators of coffee industry (net profit, sales, etc.)	Total production: 57.6 million bags (2021) Total exports: 53.8 million bags (2021)
Exports (total exports, % exports against total production)	Total production 961 million tons (2021) Total export 897 million tons (2021) % participation of exports in total production: 93.34%

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

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
- 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 2005. 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 individuals (retail banking) and 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.

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

Investment Banking

Big Ben has a small investment banking division, located in London, which provides service 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; creating a comprehensive risk appetite of the bank; 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.

Materiality of Risk

Criteria used for evaluating whether a risk is considered material to the bank include any one or a combination of:

- pervasiveness of the risk across multiple business lines of Big Ben
- significance of the risk to a specific business line
- likelihood and potential impact of the risk, i.e., whether the risk may cause unexpected losses in income or value of portfolios up to a given confidence level over a specified time horizon
- evolving and emerging risks
- other qualitative considerations such as strategic, economic, or environmental factors

Capital Measures

Internal Capital / Economic Capital

- The Bank measures and reports its Internal Capital (IC) measures and capital adequacy to Basel's Pillar II requirements.
- The Bank's IC measures are based on its economic capital (EC) framework and methodologies, adjusted for certain regulatory requirements. EC is a single metric used to

measure multiple risks. All material risks to which the Bank is exposed are quantified and aggregated to determine the EC of the Bank.

- EC measures the risk of unexpected losses in income or value of portfolios up to a given confidence level (99.95%) over a one-year time horizon. It assumes that expected losses are a cost of doing business and are already reflected in loan loss provisions and product pricing.

Capital Requirement

Available capital should be at least 100% of required economic capital; however, it may be as low as 95% of required economic capital for short periods of time.

Risk Appetite Statement

Risk appetite is an important part of the strategic planning process. It defines how much risk Big Ben is willing to take to achieve its strategic goals and attain its performance targets. Big Ben is willing to accept risks that align with its strategic goals and provide a high level of risk adjusted returns.

Credit Risk

Big Ben has issuer limits and credit rating limits for its financial assets.

Liquidity Risk

Big Ben has a liquidity crisis plan that outlines the roles and responsibilities of each executive during a liquidity crisis. Furthermore, the plan defines a mandatory decision-making process and the communications that need to take place during the crisis. The plan also defines the criteria to trigger the liquidity crisis plan. These are the only measures or tools the bank has used to manage and monitor liquidity risk up to this point.

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

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. He said, "A buddy of mine just had to be airlifted out of Asia because he got sick while trekking in Nepal. I bet he wishes he had purchased travel insurance. 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."

Solar Energy Financing Business Opportunity

A new US government program has been created to:

- Provide subsidies for solar panel purchases
- Provide incentives to electric utilities

Big Ben is exploring the opportunity to provide financing arranged by solar panel service providers who participate in the program. Other participants in the program are homeowners and electric utilities.

Solar Panel Service Providers

- Responsible for solar panel installation, maintenance and repair

- Arrange financing for homeowners

Homeowners

- Purchase solar panels that provide 50% - 100% more capacity than needed to provide energy for the home using funds from financing arranged by solar panel service providers
- Sell excess energy to participating electric utilities and use proceeds to repay debt

Electric Utilities

- Participate in the program via one-year contracts which they are not obligated to renew
- Receive incentives to source 10% of their energy from solar energy from this program
- Must purchase energy units at 3x their normal retail sales rate in order to receive the incentives
- Can purchase energy units at their normal retail sales rate if they do not participate in the program

Big Ben would provide 20-year financing for the purchase of solar panels. Homeowners are expected to repay the loans in equal payments over 20 years with the proceeds from their sales of excess energy to utility companies. However, if in any year, the proceeds from the sale of the excess energy are not sufficient to make the full loan repayment, then Big Ben receives only the amount of the excess energy proceeds in that year. Based on the projected loan payments from homeowners and the government subsidies, Big Ben expects to receive attractive long-term returns on the loans it makes.

Big Ben has identified the following risk factors:

- Weather (number of sunny days)
- Solar panel installation issues
- Solar panel equipment failure
- Solar panel performance (energy conversion rate)
- Utility participation
- Demand for electricity

5A Big Ben Bank Exhibits

EXHIBIT 1

Big Ben Bank Financial Data

Big Ben – Annual Report 2021

Statement of Income

in millions of pounds sterling

	Projected 2022	2021	2020	2019
Net interest income	468	360	403	355
Commissions and fee income	320	317	345	335
Net gains (losses) on financial assets	0	96	132	142
Total noninterest income	320	414	477	478
Compensation and benefits	326	321	359	338
General and administrative expenses	424	428	510	404
Impairment of goodwill and other intangible assets	30	47	175	7
Total noninterest expenses	781	796	1,045	749
Income (loss) before income taxes	7	(22)	(165)	84
Income tax expense	10	15	18	39
Net income (loss)	(3)	(37)	(183)	46

Balance Sheet

in millions of pounds sterling	Projected Dec 31,2022	Dec 31,2021	Dec 31,2020	Dec 31,2019
Assets:				
Cash and central bank balances	5,200	6,198	4,481	3,438
Total financial assets	26,000	25,143	27,395	31,063
Loans	11,000	11,052	11,561	10,962
Property and equipment	76	76	77	79
Goodwill and other intangible assets	225	243	272	404
Income tax assets	250	276	245	235
Total assets	42,751	42,988	44,031	46,181
Liabilities and equity:				
Deposits	15,000	14,870	15,324	14,404
Total financial liabilities	20,708	21,190	22,050	25,343
Tax liabilities	300	346	315	256
Long-term debt	5,000	4,829	4,514	4,200
Total liabilities	41,008	41,236	42,203	44,202
Paid-in capital	1,143	1,143	1,136	1,136
Retained earnings	600	609	692	843
Total equity	1,743	1,752	1,828	1,979
Total liabilities and equity	42,751	42,988	44,031	46,181

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 business 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.

One study showed that 90% of neobank customers are satisfied vs 66% 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 to serve 20% of the population by 2023.

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 had rebounded since the financial crisis. Darwin had not been a player pre-crisis. But, since the crisis, VAs became attractive and reasonable. Pre-crisis, insurance companies had aggressively priced products with rich benefits by, in the view of many, taking on too much risk. The crisis had resulted in many companies exiting or greatly reducing the benefits.

Since 2017 the executive team has been in overdrive working on a few large initiatives. 2021 seemed to pose even more challenges. The external environment created headwinds, from low interest rates to new regulations and accounting requirements to less consumer disposable income to fierce competition. Since the crisis, companies have been continuing to exit 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 policies that protect against mortality and morbidity, for example, term or 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. As interest rates continue to stay low, 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 three primary groups of risks associated with the insurance business:

1. Insurance Risk – when underwriting insurance policies, an insurance company undertakes mortality, longevity, morbidity and lapse risk.
2. Investment Risk – like many financial institutions, insurance companies are exposed to interest rate, credit, market, liquidity 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. 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, who 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 2013, 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.

RPPC is a privately held company. 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 2012 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 back end administrative systems 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 2013, followed by a new CRO position and establishment of a Risk Management department in 2014. 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 percent loss of Statutory equity in one year is less than 0.5 percent.
- II. Earnings The probability of negative GAAP earnings in one year is less than 5 percent.
- 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 of the existing block. Distribution would continue through the existing broker network.

Travel Insurance

Darwin recently entered the Travel insurance business. Travel insurers faced steep revenue declines during the recession. The recession from 2008 to 2009 caused consumer discretionary spending and, therefore, consumer spending on travel to plummet. However, since 2010 industry revenues have grown. The recession and associated turmoil in the international airline industry boosted demand for travel insurance: consumers were more sensitive to protecting their investments in travel expenditures due to higher risk of flight cancellations and delays. 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 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 Blue Jay Air to offer travel insurance to Blue Jay Air's customers.

Acquisitions

Gabriela also thought that acquisitions would be a good way to accelerate growth. She had heard that several companies in the industry, including Snappy Life, could be facing capital issues. Darwin's strong capital position could solve those capital needs. Gabriela hired a consultant to help assess potential acquisition targets. See Exhibit 2 for insights from the consultants.

Although many of the recent acquisitions in the industry have experienced integration issues and have not produced the returns expected, Gabriela was confident that she and her management team would be successful. She felt that a transformative acquisition could be the

key to Darwin's growth and success over the new few years. Gabriela decided to hire an investment bank to help Darwin find the right acquisition target.

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.

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.

6.5 A New Product

Anne Kofsky, VP Life Insurance Division, has made a proposal to expand the offering of whole life insurance products into Indexed Universal Life to appeal to the middle to upper income clientele. For this product, the client would have two investment account choices: a fixed rate account and an indexed account.

For the fixed rate account, the return would fluctuate with market rates but never drop below the minimum floor rate (proposed to be 1%, but marketing prefers 2%).

For the indexed account, when funds are moved into the indexed account, a new "investment segment" would be created. The return of the investment segment for the next year would be equal to the return of the S&P index over the year, subject to a floor of zero and a cap (proposed to be 10%, but marketing prefers 12%). This would allow customers to participate in the market upside when the S&P does well (subject to the cap) while having the comfort of knowing that their investment accounts would not lose money when the S&P does poorly. To reduce hedging and operational issues, funds would move into the indexed account only once per month. This would limit the number of investment segments to 12.

Since death claims for the product could be paid out many years into the future, the product is expected to have a long liability duration.

Anne expects the following regarding the new product:

1. Annual sales volumes could be anywhere from \$50 million to \$500 million in face amount.
2. Sales volumes of universal life and high cash value traditional life will probably decrease once indexed universal life is introduced.
3. UL administration will need to be enhanced to track fund values in the indexed account.

4. The new hedging program and associated accounting will require resources to set up.
5. Actuarial will have to allocate resources to implementing new reserving methods.
6. After setup costs have been addressed, maintenance costs will be higher.

Initial product development efforts indicated that the product will produce a Statutory internal rate of return (IRR) of 15% which is above the hurdle rate set by the holding company. The new product design reflects a general account investment portfolio of investment grade corporate bonds, equities, S&P derivatives, interest derivatives, and credit default swaps (CDS).

There have also been discussions about replacing some of the investment grade corporate bonds with high yield bonds, private placement loans, and commercial mortgages. If these changes were made to the investment portfolio, the expected return of the investment portfolio would be higher and it would increase the IRR of the product. However, there would be additional credit risk and less liquidity in the investment portfolio.

Below is an e-mail excerpt from the CEO.

From: Gabriela Martinez, CEO
Sent: Monday, March 25, 2022 7:36 PM
To: Aaliyah Jackson, CRO
cc: Anne Kofsky, VP
Subject: Re: Indexed Universal Life Product

Anne's report on the proposed Indexed UL product looks very promising in terms of both revenue and profit. I see the actuaries used new stochastic models with multiple interest and equity scenarios and dynamic consumer behavior. Aaliyah, I know your team has been involved and is still reviewing. As aggressive as our 3-year UL sales growth targets are, I don't want to have a misfire on launching a UL product like ABC Life and XYZ did. They withdrew products from the market within a year after introduction. Their agents were not happy.

Below are some questions about this product:

- Could you perform a more comprehensive review than usual to evaluate if the models are adequate to capture all the major risk categories and if the additional risk-taking is aligned with our risk appetite?
- Could you also think about the marketing preferences to increase the interest rate floor for the fixed account and to increase the cap for the indexed account?
- Do you have concerns about the investment proposal to allocate some of the portfolio to high yield bonds, private placement loans, and commercial mortgages?
- For the indexed accounts, we will have 12 "investment segments". Although the hedging theory is the same as with one investment segment, I am wondering if we will have

operational issues because of the multiple investment segments. Do you have concerns about this?

- Do you have concerns about the long liability duration and our ability to manage interest rate risk?
- Have you settled on new risk metrics and what will be on the risk dashboard?

Also, please note that the target launch is still June 17.

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

Acquisition Considerations

Gabriela Martinez, Darwin's CEO, is interested in exploring an acquisition strategy. As this would be new territory for Darwin, she has engaged their consultants, Consultants R Us (CRS), to provide background information on acquisition considerations.

CRS believes that a major consideration, particularly if considering international acquisitions, is the need to recognize cultural differences and communication issues. CRS is aware of an acquisition that failed due to these issues and prepared the following report as an example of the issues.

CRS report

Background:

- An Asian software services company acquired a European tablet manufacturing firm in an attempt to expand into a new market and increase its profitability.
- Ultimately the acquisition failed as it resulted in the loss of \$1 billion over a two-year period.
- The failure was due in part to numerous cultural and communication issues that went unresolved over the period of the acquisition.

Lessons Learned:

- A decision was made to retain the European subsidiary management team to maintain harmony. However, this resulted in a slower transition. In retrospect, it may have been more effective to replace the entire leadership team post acquisition. The European company culture is more individualistic, and replacement of the management team would not have negatively impacted company culture as much as it would have if the acquired company had a more Asian collectivist culture.
- The parent company lacked the necessary expertise in negotiating with the labor unions operating on behalf of the European subsidiary's employees. Labor unions are less common in Asia and less powerful. The European subsidiary's employees enjoyed relatively rich benefits as a result of favorable past union negotiations; whereas the parent company expected that employees would put the needs of the company ahead of their own needs.
- Differences in how employees of each company used company time were unmanaged and contributed to project delays. While employees of the European subsidiary prioritized marketing activities and viewed deadlines as flexible goalposts, management at the Asian parent company prioritized production, set project schedules aggressively, and viewed deadlines as more immovable.

- The parent company assumed the employees of the acquired company understood the situation clearly. The parent provided minimal formal communication to describe the new strategic direction for the firm. The level of communication was wholly ineffective, as employees of the acquired firm spread many rumors as to their own career prospects and the actual strategic direction of the firm.
- Communications from the parent company, rooted in Asian culture, tended to be more indirect and ambiguous to avoid the risk of disagreement and conflict. However, this style of communication was not received well by the European subsidiary employees. It was misinterpreted as withholding, deceiving, or misdirecting.
- Attitudes toward defending the reputation of oneself vs. that of the company also differed sharply between the two companies. In the Asian company, the culture dictated protecting the reputation of the group over one's own, manifesting in greater conformity of the group, and relying on obligation as an employee motivator. For the European company, with a more individualistic culture, employees were used to being rewarded and punished for individual performance. The acquisition partly failed due to the inability of management to reconcile the two preferences.

EXHIBIT 3

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

Note: Years 2019-2021 are actual results and years 2022-2024 are forecasts.

Total	2019	2020	2021	2022	2023	2024
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	2019	2020	2021	2022	2023	2024
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	2019	2020	2021	2022	2023	2024
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	2019	2020	2021	2022	2023	2024
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 4

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

Note: Years 2019-2021 are actual results and years 2022-2024 are forecasts.

Total	2019	2020	2021	2022	2023	2024
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	2019	2020	2021	2022	2023	2024
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	2019	2020	2021	2022	2023	2024
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	2019	2020	2021	2022	2023	2024
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, 2021)

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

Debt Issuance

Issue	Issue Date	Maturity Date	Rate	Face Amount
Senior notes issue	1 Mar 2004	1 Mar 2024	8.50%	150,000
Senior notes issue	15 Jun 2016	15 Jun 2036	7.00%	75,000

EXHIBIT 5 Sensitivity Tests

Note: Years 2022-2026 are forecasts.

Term Sensitivities (in 000s)

Baseline	2022	2023	2024	2025	2026
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	2022	2023	2024	2025	2026
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 6

Financial Data: Inforce Statistics

Note: Years 2019-2021 are actual results and years 2022-2024 are forecasts.

Total	2019	2020	2021	2022	2023	2024
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 7**2021 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 Snappy Life Insurance Company

7.1 Company Profile

Background

Snappy Life Insurance Company is a stand-alone small life insurer that might be considered an acquisition target or a competitor for one or more of the RPPC companies. It was incorporated in 2015 and is domiciled in Wilmington, Delaware. Snappy was founded by Frank Veltro, a former general sales agent who learned the business at Epoch Life, a large insurance company. Veltro felt stymied by the conservative underwriting and slow processing of applications at Epoch.

Veltro recruited several like-minded agents and amassed sufficient funding to capitalize Snappy Life at the required regulatory level. Veltro serves as CEO and President of Snappy. His executive team comes primarily from the original founders of the company, all of whom have a sales or marketing background. In addition, a Chief Information Officer (CIO) was hired from a tech start-up company in California in 2018.

The company is owned by its founders and is not publicly traded. It offered securities through a private placement offering in early 2020 after finalizing its 2019 earnings statements, but no shares ended up being sold.

Products and Services

Snappy has a limited product line, consisting of level term and whole life insurance. Its sales are made exclusively through the internet or by call-in from a phone number displayed in television ads or on the website. Strong advertising with a quirky approach attracts customers.

The company's motto is "Make the sale, every time!" While the company founders had originally worked as agents selling face-to-face, they have now embraced the new technologies and the way it allows them to leverage the time of their associates.

The sales staff is divided into separate internet and phone teams. Snappy encourages healthy competition between the two groups, based on total sales, "sales closed" ratios, and percentage of sales in force after one year. Both teams consist of licensed agents who are compensated on a salaried basis, with additional bonuses available based on team results. Agents aggressively pursue any leads that come in.

Sales have been robust, enabling the firm to grow steadily since inception of the company.

7.2 Risk Profile

Pricing

Snappy's priority is to maintain competitive pricing compared to other providers of simplified insurance products. The marketing department has considerable influence with the actuarial and pricing group. Frank Veltro is very much involved with approving final pricing as new product series are rolled out.

The actuarial department produces basic experience studies and profitability analyses. The marketing department produces studies of competitor rates quarterly.

Risk Framework

Snappy does not have a separate corporate risk department, and it does not do any formal risk reporting. Veltro expects his direct reports to inform him of any issues in their departments.

Veltro believes that risk creates opportunities that Snappy can exploit. When risks are identified in a product, his standard response is that "we can sell our way out of this problem". If sales remain strong, he believes that profits will follow.

The company culture instilled by Veltro is to move forward aggressively. The result is that corporate managers are reluctant to point out obstacles.

Capital

Snappy reports earnings on a statutory basis, as required to the state regulators. It measures Risk-Based Capital as required and does not do any further economic capital modeling. The company has maintained its RBC ratio at approximately 250% over the past five years.

As part of the annual planning process, projected earnings and capital figures are developed for the next two years.

7.3 Competitive Advantages

Snappy's processes are extremely automated, allowing it to offer products at low cost. In the three years since the CIO has been on board, the company's systems have been modernized by the tech staff. Underwriting for new sales is based on a simplified medical questionnaire. Artificial intelligence software evaluates all applications and produces a final "Reject" or "Approve" decision. However, based on the company motto, the software is programmed with a bias toward accepting most risks.

7.4 Strategic Issues

Snappy has benefitted from its strong sales and has been fortunate to write business that is profitable overall. However, the CFO has recently identified challenges facing the company:

- Snappy's relatively small capital base is limiting future growth. If sales reach the targets set by Veltro, the RBC ratio is likely to drop significantly.
- New competitors are entering the marketplace, with a business model similar to Snappy's. If Snappy continues to compete solely on price, it is likely to start seeing reduced profitability.
- Models for customer data and servicing are state-of-the-art, but the tech area does not have expertise in producing robust financial projections. Snappy does not have the appropriate workforce in place to move the company forward.
- Data breaches have affected several insurance companies over the past two years, particularly those that are heavily dependent on internet sales. The CFO is not sure whether Snappy is sufficiently protected from cyber-risk.

7A Snappy Financial Exhibits

Financial Statements for Snappy for the past four years are shown below.

Summary of Operations (in 000s)

	2021	2020	2019	2018
Premiums	11,141	6,267	8,356	4,700
Net investment income	1,765	1,165	769	507
Total Revenues	12,906	7,432	9,125	5,207
Death Benefits	1,847	1,478	1,182	946
Surrender Benefits	567	510	459	413
Increase in Reserves	4,561	3,013	2,158	1,539
Total Benefits	6,975	5,001	3,799	2,898
Sales Expenses	623	555	263	263
General Insurance Expenses	1,110	1,063	681	681
Insurance Taxes, Licenses, and Fees	417	334	267	214
Total Expenses	2,150	1,952	1,211	1,158
Net Gain from Operations before FIT	3,781	479	4,115	1,151
Federal Income Tax	945	120	1,029	288
Net Income	2,836	359	3,086	863

Balance Sheet (in 000s)

	2021	2020	2019	2018
Assets				
Bonds	29,187	24,213	20,894	18,489
Cash	1,410	1,692	1,949	2,180
Furniture and Equipment	126	130	117	105
Total Assets	30,723	26,036	22,960	20,774
Liabilities				
Statutory Reserves	28,447	23,886	20,873	18,715
Surplus	2,276	2,150	2,087	2,059

8 Seaplane Expeditions and Aviation Company (SEA)

8.1 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 2018, 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

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

8.2 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.

8.3 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

Seaplanes 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 US-Canadian border. If the relationship between the US 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.

8.4 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. The employees at check-in understand that many of the customers flying SEA may have never flown on a seaplane before and are experts at guiding first-time flyers through the process. SEA monitors its frequent flyer and multi-fare purchasers' flight bookings to identify any downward trends and reach 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. Check-in employees are often not as knowledgeable about charter destinations/scenic stops as they are about the scheduled service destinations and will refer itinerary questions back to the charter department. 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 so that they are able to both provide high quality service when repairing customer planes and prevent maintenance problems from occurring in SEA's own fleet.

8.5 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.

8A SEA Financial Exhibits

Net Operating Statement (in 000s)

	2021	2020	2019
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 000s)

	2020	2019	2018
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