



# Case Study

## SPRING/FALL 2020

### Strategic Decision Making Exam

### EXAM CFE SDM

---

CFESDM Morning Session

## Table of Contents

1	RPPC Dynasty Corporation.....	2
1A	RPPC Dynasty Corporation Exhibits .....	12
2	Blue Jay Air .....	14
2A	Blue Jay Air Exhibits .....	25
3	Blue Jay Tire Co .....	41
3A	Blue Jay Tire Exhibits.....	51
4	Frenz Corporation .....	55
4A	Frenz Corporation Exhibits.....	64
5	Blue Ocean P&C Company .....	71
6	Big Ben Bank .....	75
6A	Big Ben Bank Exhibits .....	83
7	Darwin Life Insurance Company .....	88
7A	Darwin Life Insurance Company Exhibits.....	98
8	Snappy Life Insurance Company .....	115
8A	Snappy Financial Exhibits .....	118
9	Seaplane Expeditions and Aviation Company (SEA) .....	120
9A	SEA Financial Exhibits.....	125

## 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.

# RPPC Dynasty Corporation: A BOX FULL OF GROWTH

## 1 RPPC Dynasty Corporation

### 1.1 Introduction

On October 6, 2016, Julia Reich, RPPC Dynasty's recently appointed CRO, was with eleven others waiting at the airport, part of two Corporate Planning Teams assigned to visit management at RPPC's major businesses and review their 3-year plans.

Julia's team had been on a whirlwind tour to Russia, Ontario, Texas, and their final stop in Antwerp, Belgium to talk tires, airlines and coffee.

The other team was already in the air on their way back from New Mexico to RPPC's headquarters in Luxembourg. That team had covered the financial businesses – life insurance, banking and P&C insurance. There were a lot of proposals and alternatives to evaluate in the next month before next year's plans were finalized in mid-December. There were questions and issues to resolve - products, markets, distribution, investment strategies and impending regulatory and accounting changes. Some thought they should grow cautiously. They felt that selling insurance products and making bank loans in the current environment squeezed out any margins and added too much additional risk. But one team member, Olivia, thought the opportunities were now and that RPPC couldn't move fast enough. The team leader, Harry said, "In any case, the financial and risk management areas are going to be busy the next eight weeks."

Julia thought herself lucky to have been given this opportunity – a chance to shine in a prominent role, a chance to really make a difference. The Risk Management function at RPPC had only been formally established in 2014. In reality RPPC Dynasty was lucky to have her. She worked long hours in preparation. She had read report after report, countless management memos, policies and process documents, and had looked at numbers, metrics, market intelligence analyses and even more numbers. She preferred meeting in small groups. Julia was known as the "Friendly Interrogator". You couldn't survive a meeting unless you'd done your homework and had thought through the issues. She helped you be at your best.

Julia had been the prior CRO's right hand and was just appointed as the new CRO recently. Her risk management team was earning the reputation of being business savvy. Her CERA studies had been useful but she was glad she had taken the Corporate Finance & ERM Track in getting her Fellowship in 2013. The material covered in the Strategic Decision Making exam gave her a solid business foundation and a strategic mindset, and it sharpened her critical thinking skills. By continuing to read business and strategy books, mixed in with first-hand experience, her communication skills and business acumen had been noticed.

## RPPC Dynasty Corporation History

RPPC Dynasty was established in 2004 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, and still to this day, the focus has been to meet the needs of a globally mobile clientele. The corporation holds a diverse group of businesses. Luxembourg was chosen due to its being a European low tax jurisdiction.

The business roots began in 1991. Mr. 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 2004, Mr. Ruiz and Ms. Chan formed a partnership. The Chan family had owned and operated a small business since 1999. Soon thereafter two other entrepreneurs, Mr. Patel and Mrs. Putin, were brought in to expand the brand. Over the next year, RPPC developed its vision of future global expansion across diverse businesses.

In 2005, to increase access to capital in support of the company's expansion, RPPC made the decision to incorporate.

In 2005, with the guidance of Mr. Patel, a Bank group was formed. The expansion required a significant amount of capital, which was made possible by the earlier decision to incorporate.

In 2005, shares equal to 30% ownership of the coffee business were offered to the public to bring in additional capital.

In 2009, with the influence of the mariner background of Mrs. Putin, RPPC acquired 80% ownership of a P&C Insurer. The P&C group is a leader in personal and commercial marine insurance.

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, an Airline was bought to appeal to the growing global mobility of the group's clientele. The Airline has been put through a restructuring initiative to better fit into the group's vision. The airline had acquired a tire company in 2005 to create a synergy with its airline business.

## Mission

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

*Our family is your family, come experience our difference that is so familiar to you!!*

## **Vision**

*We provide our customers the comfort of a family friend when they are away from home. We are your family away from home!!*

## **Executive Team**

The Executive Team includes:

CEO – Mr. Gilroy Clyde (since inception)

CFO – Mr. Houben Huang (5 years)

CRO – Ms. Julia Reich (recently appointed)

COO – Ms. Jane Mulroney (since incorporation, previously performed CRO functions)

## **Selling a Success Story**

On Houben Huang's desk were materials for a debt rating review session with the Trusty Rating Agency on January 6. Much of the material would also be used for the upcoming investor analysts' meeting and excerpts would form the theme in the 2019 Annual Report to shareholders. But the upcoming debt issuance was paramount to their growth plans. Later this morning he would be meeting for most of the day with Gilroy, Jane and Julia. Within the past few weeks, the Boards of RPPC and its many businesses had adopted many of Management's recommendations. The Board had also sent a few proposals back for further analysis and consideration. The Corporate Planning Teams had been invaluable working with the businesses and their planning teams.

The Trusty Presentation Materials highlighted the RPPC story - main messages and points Management wished to articulate. Some of the content was done and some needed to be updated or revised. Houben had scribbled some notes – how did the material convey and package the following themes?

### *Business Strategies*

<i>Airline</i>	<i>new management with a focus on customer</i>
<i>Tire</i>	<i>niche market, needs new investment or will be sold</i>
<i>Coffee</i>	<i>market leader, growth focused</i>
<i>P&amp;C</i>	<i>cash cow, niche market (Marine (UK), Pet (Canada), Liability, Commercial, Catastrophic) looking to expand to the US</i>
<i>Bank</i>	<i>customer oriented wealth management focus, growth by M&amp;A integration</i>
<i>Insurance</i>	<i>long term interest rate risk</i>

Trusty would hammer management on challenges, struggles and missteps. There were a few headaches but the biggest message to sell was the RPPC success story. There were tremendous opportunities in the company's major businesses and the acquisition team had several attractive prospects under consideration. RPPC was well positioned to grow.

Trusty Presentation Materials also included an executive summary of the global market outlook (see Exhibit 1A). This outlook helps the company in strategizing its global expansion plan. It identifies areas where the company has capitalized on these global market changes.

## 1.2 Risk Management Overview

### RPPC Risk Management Framework

#### Vision Statement

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.
- A unified and strong risk culture that is embedded across the enterprise means that there is consensus opinion on the value and purpose of risk management.

#### *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*

- Within our independent oversight framework and the limits of our risk appetite, contribute to the enterprise's customer focus.
- Ensure that risk awareness is pervasive throughout the organization, at all levels, and all functions.
- 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, including newly acquired businesses:

- 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

RPPC established and formalized the role of **Risk Champion** to ensure strengthened engagement between the office of the CRO and Business operating groups.

### **Value-Based Enterprise Risk Framework**

RPPC risk governance has three pillars.

- I      The first line of defense at RPPC is the Business operating groups, which are responsible for ensuring that products and services adhere to the approval process and profit guidelines of their businesses. Their mandate is to pursue suitable business opportunities within the Risk Appetite, and to adopt strategies and practices to optimize return on capital employed. They accomplish this by using complicated models of risk, reward and economic capital. RPPC officers must act within delegated risk taking authority and must have effective processes and controls in place to enable the businesses to operate within their delegated risk authorities and limits.
- II     The second line of defense is the office of the CRO, along with Enterprise Risk Officers (EROs) and Subject Matter Experts (SMEs) as assigned for specific risk categories or sub categories. The risk officers provide oversight, challenge and an independent assessment of risks. They have a significant influence on the level of risk that the company takes.
- III    The third line of defense is the Corporate Audit Division, which, in conducting the internal audit process, will provide assessment as to the effectiveness of internal controls including control, risk management and governance processes that support the Enterprise, its objectives and the Board of Directors' discharge of its responsibilities. The audit process includes assessment of the underwriting processes, claims management, and other processes that result in significant risks for the company.

The CEO is responsible for the business operating groups. This is known as the first line of defense. The second line is made up of risk officers (ERO's and SME's) who work collaboratively with the business operating groups and are engaged through corporate policies that support ERM & Portfolio Management (EPM). These risk officers are governed by the CRO and the Risk Management Committee. The second line has a direct line to the Board and therefore meets "in camera"<sup>1</sup> with the Board. The third line, the Audit officers, also has an "in camera" with the Board.

---

<sup>1</sup> In camera is a legal term that means in private.

RPPC Board			
Board Risk Committee	CEO		Board Audit Committee
Risk Management Committee	<i>Operating Groups</i> <i>ERM &amp; Portfolio Management</i> <i>ERO's and SME's</i>		Corporate Audit Group
<ul style="list-style-type: none"> <li>• Capital Management</li> <li>• Reputational Risk</li> <li>• Operational Risk</li> </ul>	1st line of defense	2nd line of defense	2nd line of defense
			3rd line of defense

### **Risk Culture**

Every employee is responsible for risk management at RPPC. The three lines of defense model promotes engagement and dialogue between the Business Operating Groups (first line) and the risk office (second line) within the protocols of the Corporate policies that support EPM. The key facilitator of this engagement process is the Risk Champion. The role of the Risk Champion is critical to ensuring that there is buy-in to the process among both business managers and risk officers, and ultimately that enterprise risk management (ERM) is successful. This engagement is central to a value based ERM approach as it promotes understanding and alignment with our risk appetite leading to sound decision making.

In support of an overarching goal of continual improvement, the company has two human resource corporate policies that improve risk management:

- (1) Two-way rotation policy (TWRP): allows employees to rotate between risk roles and business management roles;
- (2) Continued professional development policy (CPDP): obligates employees to attend training on risk management principles and techniques at least once every two years.

### *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, 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 and 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, CRO, the appropriate risk and business Subject Matter Experts (SME's).

When reporting business plans and KPI, the financial projection must be based on a complete business cycle inclusive of severe market conditions rather than simply best estimate assumptions.

When reporting KRI, scenario results and any stress testing must be demonstrated in the context of the business and directly related to its business driver. Such KRI value-based results must be reported, well-understood and actionable at all levels of management within each business group and in all risk decision-making. Scenarios and stress tests are based on transparent deterministic scenarios recommended by the Business and approved by the Risk team.

Only actual past events are deemed relevant in communicating the financial impact of a KRI. Severity is assessed when economic events or business impact are greater than three standard deviations from the average.

#### *Risk Review and Approval Policy*

This policy outlines the procedures for the development, review, and approval of new products and services within the RPPC conglomerate. The policy balances the goal of delivering new products in a timely and efficient manner with the need to manage pricing and product development risk. Pricing and product development risk is the risk of financial and/or reputational loss as a result of the unexpected performance of a product or where the costs incurred are greater than those assumed in the pricing of the product.

This policy requires the establishment of product pricing guidelines that describe profit targets for RPPC and performance metrics that must be calculated for all new products and services. This policy also requires the establishment of a product pricing committee that meets periodically to examine the profitability of current and future sales as compared to the product pricing guidelines.

This policy involves the following stages:

**Feasibility** – For all new products and services, a report assessing the feasibility of the new product or service must be created. This report will provide a high-level business rationale and risk assessment for the product or service and must be presented to the product pricing committee before any further development is undertaken. In this phase, all key stakeholders must be identified and interviewed, key issues would be identified, and further information may be required before proceeding with development.

**Product Assessment** – All aspects of the product design must be assessed including the marketing analysis and supporting research, the distribution plan, pricing estimates, sales projections, risk adjusted return on capital, and tax implications.

**Risk Assessment** – All aspects of the risks of the product or service must be assessed, including exposures and ratings as compared to the risk appetite statement. The assessment should also include a summary of the appropriate procedures and controls to be implemented, or already in place, that are required to manage the new product or service once it is launched.

**Sign-off and Approval** – Sign-off and approval of the new product or service by the office of the CRO, the product pricing committee, and the operational head of the business unit is required. This approval is gained through the initial feasibility study, the product and risk assessments, and any subsequent discussion and analysis.

**Documentation** – An official record must be kept of the feasibility study, product and risk assessments, and the approval and sign-off forms. These can be reviewed by the internal audit function, external auditors, or regulators as evidence of appropriate due diligence and compliance with internal procedures, as well as providing the rationale for the assessments and decision making.

### **The Role of Risk Champion**

The Risk Champion is a critical role which facilitates the Risk Review and Approval Process (RRAP). The Risk Champion is responsible for identifying the relevant business managers, risk managers and SMEs who are needed to complete the required risk assessment and risk analysis. In this way, the Risk Champion serves in the role of arbitrator for finding the appropriate forum to resolve areas of dispute between the business and the risk reviewers. The purpose of fostering dialogue and collaboration is to build and maintain the buy-in of all stakeholders throughout the RRAP. The Risk Champion is the key communication bridge between the first line and the second line of defense in the risk framework.

### **Risk Monitoring**

There are three disciplines to the risk monitoring approach:

- Post implementation review
- Risk-based capital assessment
- Stress testing

Post implementation review is the core discipline within the engagement approach that embodies our three lines of defense model. Whenever a business operating group has launched an initiative, the group business managers are obligated to develop and report KPI and KRI that are specifically related to the initiative and that speak directly to the risk appetite of the enterprise.

The assessment of risk-based capital within an Economic Capital framework is one of the key metrics in the measurement and communication of any risk taken on. Economic capital is determined by the Risk Management Committee and is underpinned by the Redundant Capital philosophy. Capital is determined to withstand a 1-in-100 year event, after which the capital position is still sufficient to meet another 1-in-100 year event. Economic capital is also compared with regulatory capital to ensure compliance.

Allied with the Economic Capital framework, strong risk management and good business management relies on identifying “what-ifs”. Stress testing is the use of historical extreme economic events and/or periods of poor market conditions to quantify and to communicate the impact on the financial results of a given business operation. Scenarios based on historical events

are easy to communicate and make it easy to get engagement when assessing value based impact.

On an ongoing basis, key risk factors are identified on a global basis by the Risk Management Committee. These key risk factors are developed from global market research and outlook studies that identify global market trends and areas of emerging risks. Exhibit 1 provides an executive summary of the recent global market outlook completed by the Risk Management Committee.

### **Operations Committee**

In an effort to create a more holistic risk oversight structure, the CRO, in conjunction with the Risk Champion, seeks to better understand the commonality and interaction of risks between individual business operating groups.

A new initiative this year is to establish a CRO-sponsored Operations committee. The Operations committee will meet on a quarterly basis, separate from the Risk Committee, to assess ongoing risk in RPPC. The goals of the Operations Committee are to understand the risks being taken throughout the company, discuss different risk policies and issues, and strengthen governance. One of the major mandates of the Operations Committee will be to explore in depth the risk of different operating functions.

The members of this Committee are the COO, CEO, CRO, Risk Champion, and a Human Resources representative from RPPC. Guest attendees are invited on an as-needed basis from the various business groups, depending on the agenda of the meeting.

### **Risk Modelling**

Julia, the CRO, has recently hired a risk consultant group, to propose a quantitative framework for measuring and managing RPPC's risks due to the diversity of its investment and business ventures.

## **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 doubled from 30 to 60 years in the 20th century. At the same time, the global average age has risen from 23 years to 30 years.
  - 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. Complex and international trade flows. Global trade continues to increase each year, though the rate of increase has slowed in recent years. Global capital transactions are still important, though the volume of capital flows may have peaked in 2018.
  - b. Increasing value chains. Multinational companies are on the rise, from 7,000 in the 1990s to some 65,000 parent companies today, with 85,000 foreign subsidiaries.
  - c. Increasing complexity in terms of the number of parties involved and all of their inter-connections, stability of the connections, networking of systems, etc. These measures increased significantly as globalization processes increased beginning in the 1990s.
  - d. Transport and travel are expanding, increasing pandemic risk.
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.*

John Feather, CEO of Blue Jay Air, was pondering the future strategic direction of his 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 John. 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 he 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? He had a good team. John was establishing a new reputation for Blue Jay Air. He was confident his 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 February 2019 U.S. Passenger Airline Employment data published by the U.S. Department of Transportation, there are 443,058 full-time equivalent (FTE) employees working for scheduled passenger airlines. This is the highest February employment total since February 2003, which indicates that the airline industry is well on its way to recovery following the recession of 2008 - 2009.

### **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.

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 20<sup>th</sup> 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 (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 has dampened competition and caused an upward pressure on airline fares. Profitability has returned to the airline industry since 2009. Over 80% of the US domestic market share is now dominated by the top seven largest domestic airlines as of March 31, 2019.

## **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. The acquisition of Blue Jay Air by RPPC was viewed positively by shareholders and investors. In 2014, the Wall Journal quoted that "RPPC's takeover is a step forward for Blue Jay Air." John Feather, who has over 20 years of airline experience, is viewed as a "turnaround" CEO. Thus, RPPC has high expectations of John's new strategic vision.

## **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 successfully rebrand the company, the company has done an extensive study on its customer base and identified its customers. John 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. This percentage is significantly above the industry norm of about 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.

Under RPPC's influence, 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.

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), which has been widely used by many airlines. Blue Jay Air's executive team is actively looking into the option. More details about CSA are described in Section 2A Exhibit 8.

## 2.4 Risk Management

As a highly-leveraged capital-intensive company, the ability to raise and service debt is crucial to Blue Jay Air. 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. Blue Jay Air has increased exposure to interest rate volatility due to the significant amount of long-term debt and finance leases that it has entered into since incorporation.

Since being acquired by RPPC, Blue Jay Air has established a risk management committee headed by a well-known risk manager, Jim Peters. Jim was formerly the Chief Risk Officer (CRO) of a major Canadian bank and he was recruited by John based on the recommendation of Howard Creston, former CRO of RPPC. Jim was a hedge fund manager before he became the CRO of the bank and has extensive knowledge in implementing risk management strategies. Over the last two years, Jim has put together a dynamically hedged portfolio that handles the commodity exposures that the company has been facing as well as interest rate risks.

In addition, Jim has established a Treasury role under the risk management committee to centralize long-term and short-term fund raising activities and deal with liquidity and credit risks. This role is headed by Elaine Saunders who was a former Treasurer of a New York-based investment bank. Elaine has a significant network with venture capitalists, pension fund managers, and private equity fund managers. Elaine has also worked in the Investor Relations area of a major US Commercial Bank and thus has dealt with credit rating agencies such as Standard & Poor's, Moody's, A.M. Best and Fitch. Over the last two years, she has implemented a liquidity model and a credit model to monitor the company's ongoing liquidity and credit needs.

The Risk Management roles and functions are still in the process of refinement and adjustment. The staffing requirement in these areas 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 slightly 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 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 will require a capital injection or debt guarantees from RPPC as Blue Jay Air alone cannot bear these costs without jeopardizing 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 and support from RPPC.

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. Rebecca Gibbs, 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, Rebecca 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. Rebecca believes that the campaign will be effective. Therefore, she included some cost reduction in her 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. Rebecca 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, Rebecca has forecast a profitable position for Skylite Aircraft in the coming years.

### **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 Blue Ocean as the ideal strategic partner to successfully execute this venture, and CEOs John Feather and Edward Blue have eagerly prepared a business case to bring forward to the RPPC Board. They are very excited about the potential synergies this initiative could realize for RPPC.

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 the key issues of this new proposal are shown 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 Frenz 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.

### **Baggage and Baggage Systems**

Blue Jay Air will incorporate a charge for each piece of checked luggage, consistent with its competitors' pricing. Since most business travelers do not check in their luggage, this is not expected to be a negative in Blue Jay's target market. Free luggage check-in will no longer be available except for international flights, for which Blue Jay Air will reduce its free luggage check-in policy from two pieces to one piece with no change to the current weight limit. The current Baggage Tracking system seems to be adequate and Blue Jay Air has no plan to upgrade its systems.

### **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.

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 News on Competitors**

Recently, several airline companies have appeared in the headlines in both the US and Canada as shown in Section 2A Exhibit 5.

### **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.

## **2.5 Loyalty Program Proposal**

Blue Jay Air has promoted a marketing campaign for the past two years for its primary customer segment, the business traveler. This campaign, named the Lucky 7 program, 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 has been very successful according to the results presented by the BJA CEO, John Feather, at a recent RPPC Board meeting.

### **Excerpts from the executive summary**

- 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.
- Much 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.

### **Marketing research committee discussion notes**

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 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 the past four years, 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: Jim Peters  
Sent: August 28th, 2019 9:00pm  
To: Geoff Olive  
cc: John Feather, Edward Blue  
Subject: Travel Insurance Risk Review

Hi Geoff,  
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,  
Jim Peters  
Head of Risk Management Committee, Blue Jay Air

---

From: Geoff Olive  
Sent: August 29th, 2019 8:45am  
To: Jim Peters  
cc: John Feather, Edward Blue  
Subject: RE: Travel Insurance Risk Review

Hi Jim,  
I'm worried the tail risk is actually too high for us to retain. As we all know, RPPC wants to limit its exposure to tail event risks. We should sit down and discuss some risk transfer options.

Thanks,  
Geoff Olive  
CRO, Blue Ocean Inc.

---

From: Jim Peters  
Sent: August 29th, 2019 10:30am  
To: Geoff Olive  
cc: John Feather, Edward Blue  
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.

Jim

=====

**Exhibit 2**  
**Blue Jay Air Corporation**  
**NON-CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(US Dollars in millions)**

Fiscal Year Ended	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
Operating revenues:			
Passenger	1,544	1,235	1,074
Other	298	238	207
<b>Total revenues</b>	<b>1,841</b>	<b>1,473</b>	<b>1,281</b>
Operating expenses:			
Aircraft fuel	576	461	401
Wages, salaries and benefits	361	289	251
Capacity purchase agreements	173	138	120
Airport and navigation fees	158	127	110
Depreciation, amortization & impairment	96	77	67
Aircraft maintenance	111	89	77
Sales & Distribution costs	73	59	51
Aircraft rent	49	39	34
Food, beverages and supplies	42	33	29
Communications and Information technology	33	26	23
Other	19	15	13
<b>Total operating expenses</b>	<b>1,691</b>	<b>1,352</b>	<b>1,176</b>
<b>Net Operating income</b>	<b>151</b>	<b>121</b>	<b>105</b>
Non-operating income (expenses)			
Foreign exchange gain/(loss)	15	10	(29)
Interest income	5	5	5
Interest expense	(45)	(36)	(31)
Interest capitalized	2	1	(5)
Net financing expense relating to employee benefits	(2)	(2)	(15)
Loss on financial instruments recorded at fair value	(3)	(7)	(33)
Other	(1)	(2)	(19)
<b>Total non-operating expense</b>	<b>(29)</b>	<b>(31)</b>	<b>(127)</b>
<b>Income (loss) before income taxes</b>	<b>122</b>	<b>90</b>	<b>(22)</b>
Income taxes	(26)	(19)	5
<b>Net income (loss)</b>	<b>97</b>	<b>71</b>	<b>(17)</b>
<b>Earnings per share (Basic)</b>	<b>0.82</b>	<b>0.57</b>	<b>(0.15)</b>

**EXHIBIT 3**  
**Blue Jay Air Corporation**  
**NON-CONSOLIDATED STATEMENT OF FINANCIAL POSITION**  
**(US Dollars in millions)**

Fiscal Year Ended	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
<b>ASSETS</b>			
Current:			
Cash and Cash equivalents	56	49	41
Short-term investments	210	182	83
<b>Total cash &amp; Short-term investments</b>	<b>266</b>	<b>231</b>	<b>124</b>
Restricted cash	15	15	15
Accounts receivable	200	160	127
Aircraft fuel inventory	91	63	48
Spare parts and supplies inventory	120	80	33
Prepaid expenses & other current assets	150	100	70
<b>Total current assets</b>	<b>842</b>	<b>649</b>	<b>417</b>
Property and equipment	545	509	474
Intangible assets	21	21	21
Goodwill	31	31	31
Deposit and other assets	46	24	9
<b>Total assets</b>	<b>1,484</b>	<b>1,234</b>	<b>952</b>
<b>LIABILITIES</b>			
Current:			
Account payable & accrued liabilities	150	107	70
Advance ticket sales	310	250	181
Current portion of long-term debt & finance leases	112	79	57
<b>Total current liabilities</b>	<b>572</b>	<b>436</b>	<b>308</b>
Long-term debt and finance leases	384	367	240
Pension & other benefit liabilities	545	556	580
Maintenance provisions	60	55	60
Other long-term liabilities	50	48	43
<b>Total liabilities</b>	<b>1,611</b>	<b>1,462</b>	<b>1,231</b>
<b>EQUITY</b>			
Shareholders' equity			
Share capital	90	90	90
Contributed surplus	30	25	45
Deficit	(247)	(343)	(414)
<b>Total shareholders' equity</b>	<b>(127)</b>	<b>(228)</b>	<b>(279)</b>
<b>Total liabilities &amp; equity</b>	<b>1,484</b>	<b>1,234</b>	<b>952</b>

**EXHIBIT 4**  
**Blue Jay Air Corporation**  
**NON-CONSOLIDATED STATEMENT OF CASH FLOW**  
**(US Dollars in millions)**

Fiscal Year Ended	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
Cash Flows from (used for)			
Operating:			
<b>Net income (loss)</b>	<b>97</b>	<b>71</b>	<b>(17)</b>
<b>Adjustments to reconcile to net cash from operations:</b>			
Adjust for non-cash items:			
Depreciation, amortization & impairment	96	77	67
Fuel & other derivatives	(20)	(11)	14
Adjust for Changes in non-cash working capital items:			
Change in inventories	(68)	(62)	(32)
Change in account receivable	(40)	(33)	(59)
Change in Account Payable	43	37	(37)
Change in advance ticket sales	60	69	57
Change in pension & other benefit liabilities	(11)	(24)	24
Change in maintenance provisions	5	(5)	5
Other	(50)	(30)	(20)
<b>Net cash flow from operating activities</b>	<b>112</b>	<b>89</b>	<b>2</b>
Financing			
Proceeds from borrowings	150	100	125
Reduction of long-term debt obligations	(63)	64	(104)
Reduction of finance lease obligations & Distributions related to aircraft special purpose leasing entities	(35)	(10)	(74)
Contributed Surplus	5	(20)	35
<b>Net cash flows used in financing activities</b>	<b>57</b>	<b>134</b>	<b>(18)</b>
Investing			
Short-term investments	(28)	(99)	(8)
Additions to property, equipment & intangible assets	(136)	(114)	(36)
Proceeds from sale of assets	4	2	4
Foreign exchange gain(loss)	(4)	(3)	7
Other	2	(1)	0
<b>Net cash flows used in investing activities</b>	<b>(162)</b>	<b>(215)</b>	<b>(33)</b>
<b>Increase in cash &amp; cash equivalents</b>	<b>7</b>	<b>8</b>	<b>(49)</b>
Cash & cash equivalents, beginning of year	64	56	105
Cash & cash equivalents, end of year	71	64	56

## **EXHIBIT 5**

### **Headline News Excerpts on Competitors**

#### **Southwest Airlines**

**Demonstrators at Bay Area airports say Southwest's staffing practices affect flier safety**

**By Alyssa Pereira, SFGATE Updated 1:46 pm PDT, Monday, April 22, 2019**

The Service Employees International Union (SEIU) is reportedly facilitating demonstrations Monday on behalf of Southwest Airlines employees to protest against working conditions and the airlines' alleged practice of hiring non-union workers.

Part of the issue, the SEIU says, is that the airline carrier's "outsourcing" of staffing has led to consequences that can affect flier safety. KRON reports that Southwest is hiring contractors for jobs around cleaning and security. Others note that some are being hired to work in baggage handling and to help with accessibility issues...

Earlier this month, the SEIU asked fliers to tweet at Southwest CEO Gary Kelly to "invest in passenger and worker safety."

"With taxpayer dollars flowing into airline coffers through programs like the California Statewide Travel Program, airlines like Southwest and their contractors should be providing good jobs that allow workers to care for themselves and their families, with living wages and family healthcare," the letter read. "Instead, Southwest has been switching jobs that were previously union to irresponsible non-union contractors, leaving many workers with inadequate and expensive healthcare and grueling workloads that call worker and passenger safety into question."

#### **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 2019 and February 2020.

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.

...

**Air Canada's poor punctuality could cost customers, expert warns**

**Carrier ranked last of 28 major international airlines**

**CBC News**

Air Canada has the worst on-time arrival performance of any major international airline, a CBC *Marketplace* investigation has found.

Numbers from travel information group FlightStats showed just 60.89 per cent of the Canadian carrier's flights landed on time in 2019, the worst on-time performance record of 28 international airlines.

Air Canada's record worsens on the popular Vancouver-Toronto corridor where only 55 per cent of flights arrived on time in 2019. Air Canada competitor WestJet landed on time 70 per cent of the time on that same route.

The airline's performance is "not good," says Anming Zhang, professor of air transportation at the University of British Columbia. He speculates that the airline's poor punctuality will cost it customers.

"If you can arrive on time, it is considered by passengers as a quality of service," he said. "Unhappy customers are not willing to take your flight if there's a competitor flight [that's on time]."

Zhang says many factors can cause late flights, including poor weather and international connections.

He points out that WestJet has the advantage of being a largely domestic airline, while Air Canada flies to Europe and Asia, long-haul flights that are more prone to delays.

He also says Air Canada's fleet could be a problem, since the variety of aircraft types can slow maintenance and repairs.

"If the airline works with a single aircraft type, it's much easier; you know the aircraft inside and out," he told *Marketplace* co-host Erica Johnson. "Once you mix different aircraft types and parts, there will be more complicated operations."

WestJet uses just one aircraft type.

"[Using one model] is much simpler," he said. "If you have just one aircraft type, versus seven or eight aircraft types, the parts are uniform and mechanics know exactly what happened. It's much faster."

Top-ranked Japan Airlines, which lands more than 90 per cent of flights on time, has 10 different aircraft types.

Air Canada responded to *Marketplace*'s investigation with a written statement saying, in part, "Air Canada is now engaged in a company-wide, on-time-performance initiative that is resulting in continuous improvement in this area."

Starting April 10, Air Canada will require customers on most flights to check their bags 45 minutes before departure time, instead of the current 30 minutes.

Zhang says checking bags earlier is a positive step that should save time, but he also encourages Air Canada to be more transparent about its delays.

"Customers pay for this service and they have the right the right to consume the product as the company has advertised," he said. "They have a scheduled departure time [and] a scheduled arrival time, and they are entitled to see why there is a deviation from the product you provide and the product you declared in terms of quality aspects."

## **Recent Airline Incidents**

### **Airlines face lawsuits over 'toxic' cabin air**

**BBC March 28, 2019**

Five of the UK's largest airlines are facing legal action which claims pilots and cabin crew are regularly exposed to toxic fumes during flights.

The Unite union said legal notice has been served in 51 cases, the majority of which are against British Airways.

EasyJet, Thomas Cook, Jet2 and Virgin Atlantic are also subject to the legal action over "aerotoxic syndrome".

The airlines said that previous studies found no proof of long-term ill-health arising from cabin air quality.

The Unite union, which represents airline staff, claims pilots and crew are exposed to frequent "fume events" when air drawn into the aircraft becomes contaminated by toxic compounds.

The union says the fumes, which originate from the oil used to lubricate the jet engines, contain organophosphates and TCP, and that long-term exposure can lead to chronic ill-health and life-threatening conditions.

"Independent expert evidence concludes that air on board jet planes can contain a toxic mix of chemicals and compounds that potentially damage the nervous system and may lead to chronic irreversible health problems in susceptible individuals," said Unite's assistant general secretary for legal services, Howard Beckett.

"The airline industry cannot continue to hide from the issue of toxic cabin air whilst placing the health and safety of aircrew at risk." ...

### **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 deboarding situation".

### **Boeing 737 MAX Grounded**

After two fatal crashes of MAX 8 aircraft in October 2018 and March 2019, regulatory authorities grounded the aircraft series until further notice. The planes have been grounded worldwide since the two crashes, which killed 346 people. Both accidents were blamed on a defect in the anti-stall system.

On March 19, 2019, the United States Department of Transportation requested an audit of the regulatory process that led to the aircraft's certification in 2017.

Boeing has reportedly admitted for the first time that there was a flaw in its 737 MAX flight simulators. "Boeing has made corrections to the 737 MAX simulator software and has provided additional information to device operators to ensure that the simulator experience is

representative across different flight conditions,” the manufacturer told the AFP news agency in a statement. Boeing acknowledged that the flight simulators were incapable of reproducing the kind of flight conditions that occurred at the time of the Ethiopian Airlines crash in March or the Lion Air crash in October.

### **The Crash of Delta 1086: Typical!**

**The Economist**

MOST aviation accidents aren't like the disappearance of Malaysia Airlines Flight 370 in 2014. The crash of Delta Air Lines Flight 1086 at New York's LaGuardia airport last week is far more typical. Delta 1086, a McDonnell Douglas MD-80, was landing at LaGuardia in a snowstorm when it skidded off the runway and into an earthen berm that separates the airport from Flushing Bay. Three people were hospitalized, but no one was killed and all passengers were successfully evacuated.

This is as close to a prototypical airline accident as you can get. It was survivable, happened during takeoff or landing, and didn't result in the total loss of the plane. Many planes get into trouble because of bad weather, which certainly could have been a contributing factor in this case (the National Transportation Safety Board is still investigating). It is also not clear whether pilot error played any role, but the crew of the plane certainly deserves credit for managing a quick and complete evacuation, especially since the aircraft was leaking fuel. The Associated Press has a good roundup of possible causes the NTSB will investigate.

As Dennis Mersereau notes over at *Gawker*, one of the lessons here is that travelers should resist complaining to the airlines about bad weather. It is totally outside of their control, and poor conditions make flying significantly more dangerous. American airports have, in recent decades, struck a good balance between remaining open when it is safe to do so and closing when it's not. And when you think about airplane accidents, remember: you're incredibly unlikely to be in one. But if you are, it'll probably be more like Delta 1086 than MH370.

## EXHIBIT 6

### Blue Jay Air Corporation's Balanced Scorecard Framework

**Blue Jay Airlines' Balanced Scorecard Framework**

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

## EXHIBIT 7

### JACDEC 2018 Aviation Safety Review

From: Jim Peters  
Sent: December 1, 2019 9:00am  
To: John Feather  
Subject: JACDEC 2018 Aviation Safety Review

John –

My team has reviewed results of the 2018 Aviation Safety Review and summarized it as follows. Please let me know if you would like to discuss changes to any of our programs based on the results of this report.

- Jim

In 2018 the world's death toll in commercial air transport has risen nearly four times over the 2017 numbers. Spectacular accidents crippled the unprecedented safety record of last year.

"This is the second highest in the past ten years." writes Jan-Arwed Richter, founder of the Hamburg Aircraft Accident office, called "Jet Airliner Crash Data Evaluation Centre" (JACDEC). The number lies almost four times higher than in the previous year, when only 251 people were killed in aviation accidents, Richter explained in a previously published paper for the aviation magazine "Aero International".

About half of the fatalities came from the Asia-Pacific region. Although flying remains the safest way of travelling, 2018 marks an atypical year compared to a series of years with falling numbers of victims.

2018 also whirled through the JACDEC security list of the 100 largest airlines.

The world's new leading airline in terms of its safety record is **Finnair**, followed by **Scoot Tigerair** of Singapore, **Norwegian**, **Emirates**, and **Air Europa** of Spain.

Two major disasters affected **Malaysia Airlines**, which fell from 34th to 57th place.

**Lufthansa** remains unchanged and claimed 12th place. Germany's second largest airline **Air Berlin** climbed from 26th to 20th place.

"From the observed 60 largest airlines more than half a dozen lost one of their aircraft", it says in the article. The JACDEC safety score is primarily calculated by the revenue traffic performance

of an airline in relation to the number of serious incidents and total losses it experienced up to 30 years back.

The safest regions were North America and Eurasia (including Russia plus all GUS<sup>2</sup> States east of Ukraine): There was not a single flight accident death.

For Latin America, the analysis came to 10 deaths mostly on flights with vintage machines on non-scheduled operations. The Middle East and Central Asia remained at 57.

Africa was once again a point of focus; it experienced 18 aircraft losses and 134 fatalities, although the total was exceeded by Europe. Including the disaster of the Malaysian Boeing 777 over eastern Ukraine, the region had a total number of 300 fatalities and came in 2<sup>nd</sup> to last place.

The most deaths occurred in the Asia-Pacific region, where half of all fatalities occurred in the past year.

From: John Feather  
Sent: December 1, 2019 9:05am  
To: Jim Peters  
Subject: RE: JACDEC 2018 Aviation Safety Review

Jim –

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

JF

---

<sup>2</sup> GUS States are members of the Commonwealth of Independent States which is a regional organization formed during the dissolution of the Soviet Union.

## **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:

- Freesale 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**

“Who said any publicity is good publicity,” wondered Pierre Beaudry, CEO of Blue Jay Tire Co (BJT). BJT was experiencing both publicity and a crisis. Pierre was confident his team would navigate the recall crisis successfully. It was not the first challenge they had faced nor would it be the last.

“How many major strategic issues can pile on at once?” thought Pierre. “We have a tire recall and union negotiations at the same time that oil prices are decreasing and the minimum wage is increasing.”

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.

Even though the tire recall had caused only a small ripple in consumer sentiment so far, Pierre remained wary. In light of the recall, Pierre knew the press would show no mercy. He knew the Board would demand change. What went wrong? They had risk governance policies, they had risk dashboards, they performed policy audits, they had training programs, and they had a well-staffed risk management function. How would the recall crisis alter the company’s plans and growth strategies? Before the crisis, management had tough choices to make. Now the choices would be even tougher. How should Pierre reshape their plans?

### **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

Factors that can lead to success include maintaining strong industry relations (with suppliers and customers), aggressive marketing, and the rising demand in the replacement tires market.

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 (also referred to as Durable) has been operating in Canada since 1927. 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.

When the family patriarch passed away in 2004, 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 2005

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 2005, 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 and oversight toward the BJT venture and its ever-improving financial results, particularly as Blue Jay Air's struggles worsened due to increased competition and squeezed margins.

In 2010, having successfully met and surpassed the 5 year plan objectives set out in 2005, the BJA board directed the BJT division to pursue an ambitious growth strategy. BJT purchased two manufacturing plants in the southern USA 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 costs, 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 2010-2019. Despite its size, the company achieved a 3<sup>rd</sup> place market position in tire sales for compact cars and small SUVs in the southern U.S.A.

By 2012, 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 of 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 was established by the company founders and 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 in 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 operational 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 2020. 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 elect union representation has been increasing.

Related to the labor risk, management notes that right-to-work laws exist in many U.S. states and are intended to provide employees the right to work without an obligation to join a union and without the obligation to pay for any portion of the cost of union representation. These laws are allowed under the 1947 federal Taft-Hartley Act.

Right-to-work laws or constitutional provisions 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.

### **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 to 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 five media channels for their positive/negative ratio.

<b>Media channel</b>	<b>Positive/negative ratio</b>
Blog	1.5
Internet Forum	2.7
Newspaper	1.9
Online newspaper	1.7
Associated Press (AP) Newswire	3.2
All media combined	2.2

If the outlier of 3.2 corresponding to the AP Newswire is omitted, then the average positive/negative ratio is 2.0 with a standard deviation of 0.4. Pro-BJT information is generally about twice as persuasive as con-BJT messages. The ratio has grown from 1.8 to 2.2 since BJT began monitoring its brand. This is held to be a sign of BJT's growing reputation in its chosen market. 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 U.S.A., 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 the most recent presidential election, 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 (see section 3.5.) As of 2019, 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 as a small Canadian firm operating in the U.S.

### **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.

### **Current Risk Issue -- Tire Recall**

Below are the headline news and a series of emails uncovered by an investigative journalist related to BJT's recent tire recall.

### **Blue Jay Tire quality or quantity, you decide by Jennifer Truth**

Smallville, Arizona (Associated Press – August 2<sup>nd</sup> 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, Paul Gosling, 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 Mr. Carpenter.

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

From: Paul Gosling  
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.

Paul Gosling  
Head Engineer  
Blue Jay Tire (Canada)

---

From: Jack Tavares  
To: Paul Gosling  
Date: August 12, 2017  
Subject: RE: Sticky valves and rubber density on tires

Paul

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 product 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 2010 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 also 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 2019, the Production Expansion Committee received word that a third plant was to be purchased and re-fitted by the first quarter of 2021. 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. 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 STATEMENTS OF OPERATIONS (US Dollars in millions)

FISCAL YEAR ending 12/31/YYYY	2019	2018	2017	2016
<b>Total Gross Sales</b>	<b>277</b>	<b>259</b>	<b>242</b>	<b>230</b>
Cost of Sales (1)				
Cost of Raw Materials	(14)	(13)	(12)	(12)
Production Costs (2)	(28)	(26)	(24)	(23)
Depreciation & Amortization	(20)	(20)	(20)	(5)
Shipping Costs	(5)	(4)	(3)	(3)
Other	(6)	(7)	(8)	(4)
Total Costs of Sales	(73)	(70)	(67)	(47)
<b>Net Revenue</b>	<b>204</b>	<b>189</b>	<b>175</b>	<b>183</b>
<b>Operating Expenses</b>				
Research Development	22	23	24	25
Selling General & Administrative (3)	43	40	37	35
Non-Recurring (4)	66	23	27	17
Foreign Exchange Gain(Loss)	(8)	(10)	20	14
Other (5)	50	80	27	10
<b>Total Operating Expenses</b>	<b>173</b>	<b>156</b>	<b>135</b>	<b>101</b>
<b>Operating Income or Loss</b>	<b>31</b>	<b>33</b>	<b>40</b>	<b>82</b>
<b>Income from Other Revenue and Continuing Operations</b>				
Other Revenue – Warranty program	69	65	61	58
Other Revenue – Book Sales	9	8	7	5
Tire Replacement Expenses	(35)	(32)	(30)	(29)
Total Other Income/Expenses Net (6)	43	41	38	34
Earnings Before Interest & Taxes	74	74	78	116
Interest Expenses	28	28	24	18
Income Before Taxes	46	46	54	98
Income Taxes	9	9	11	20
<b>Net Income from Continuing Ops</b>	<b>37</b>	<b>37</b>	<b>43</b>	<b>78</b>

**Notes:**

- (1) Includes cost of material & production with overhead
- (2) Includes salaries & overheads directly related to production
- (3) Includes salaries other than production related
- (4) Includes operational process upgrades
- (5) Predominantly injury claims
- (6) 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	2019	2018	2017	2016
<b>ASSETS</b>				
<b>Current Assets</b>				
Cash and Cash Equivalents	50	57	52	49
Short Term Investments	80	84	89	111
Receivables	23	11	9	4
Inventory	53	58	48	37
<b>Total Current Assets</b>	<b>206</b>	<b>210</b>	<b>198</b>	<b>201</b>
Long Term Investments	1,100	1,109	1,004	940
Property Plant and Equipment	140	160	180	50
Accumulated Amortization	40	-	-	-
Intangible Assets	25	25	25	5
Other Assets	68	42	33	53
<b>TOTAL ASSETS</b>	<b>1,579</b>	<b>1,546</b>	<b>1,440</b>	<b>1,249</b>
<b>LIABILITIES and EQUITY</b>				
<b>Current Liabilities</b>				
Accounts payable	4	4	2	2
Short/Current Term Debt	5	5	5	-
Other Current Liabilities	4	3	3	2
<b>Total Current Liabilities</b>	<b>13</b>	<b>12</b>	<b>10</b>	<b>4</b>
Long Term Debt	457	465	380	250
Other Liabilities	35	32	30	18
<b>TOTAL LIABILITIES</b>	<b>505</b>	<b>509</b>	<b>420</b>	<b>272</b>
<b>Equity</b>				
Retained Earnings	1,044	1,007	970	927
Capital	50	50	50	50
<b>TOTAL EQUITY</b>	<b>1,094</b>	<b>1,057</b>	<b>1,020</b>	<b>977</b>
<b>TOTAL LIABILITIES and EQUITY</b>	<b>1,579</b>	<b>1,546</b>	<b>1,440</b>	<b>1,249</b>

**EXHIBIT 3**  
**Blue Jay Tire Corporation**  
**NON-CONSOLIDATED STATEMENT OF CASH FLOW (US Dollars in millions)**

FISCAL YEAR ending 12/31/YYYY	2019	2018	2017	2016
<b>Net Income</b>	<b>37</b>	<b>37</b>	<b>43</b>	<b>78</b>
<b>Operating Activities, Cash Flows Provided By or Used In</b>				
Depreciation	20	20	20	5
Amortization of deferred expenses	20	0	0	0
Adjustments To Net Income:				
Changes In Accounts Receivables	(12)	(2)	(5)	(1)
Changes In Liabilities/Account Payables	1	1	1	(4)
Changes In Inventories	4	(9)	(11)	3
Changes In Other Operating Activities	(60)	0	0	0
<b>Total Cash Flow From Operating Activities</b>	<b>10</b>	<b>47</b>	<b>48</b>	<b>81</b>
<b>Investing Activities, Cash Flows Provided By or Used In</b>				
Capital Expenditures	0	0	(170)	(10)
Investments	3	6	22	(91)
Foreign exchange gain/(loss)	0	0	0	(2)
Other Cash flows from Investing Activities	(17)	(114)	(44)	0
<b>Total Cash Flow From Investing Activities</b>	<b>(14)</b>	<b>(108)</b>	<b>(192)</b>	<b>(103)</b>
<b>Financing Activities, Cash Flows Provided By or Used In</b>				
Dividends Paid	0	0	0	0
Sale Purchase of Stock	0	0	0	0
Net Borrowings	(8)	85	135	22
Other Cash Flows from Financing Activities	5	2	14	5
<b>Total Cash Flow From Financing Activities</b>	<b>(3)</b>	<b>87</b>	<b>149</b>	<b>27</b>
Cash & cash equivalents, beginning of year	57	52	49	42
Cash & cash equivalents, end of year	50	57	52	49
<b>Change In Cash and Cash Equivalents</b>	<b>-7</b>	<b>5</b>	<b>3</b>	<b>7</b>

**EXHIBIT 4**  
**Blue Jay Tire Corporation**  
**SELECT FINANCIAL INFORMATION BY COUNTRY (US Dollars in millions)**

FISCAL YEAR ending 12/31/YYYY	2019	2018	2017	2016
BJT - Canada	34	40	40	48
BJT-USA	170	149	135	135
<b>Net Revenue</b>	<b>204</b>	<b>189</b>	<b>175</b>	<b>183</b>
BJT - Canada	28	33	31	26
BJT-USA	145	123	104	75
<b>Total Operating Expenses</b>	<b>173</b>	<b>156</b>	<b>135</b>	<b>101</b>
BJT – Canada	450	441	412	359
BJT-USA	1,129	1,105	1,028	890
<b>Total Assets</b>	<b>1,579</b>	<b>1,546</b>	<b>1,440</b>	<b>1,249</b>
<b>Cost of Capital</b>				
BJT – Canada	<b>12%</b>	<b>12%</b>	<b>12%</b>	<b>12%</b>
BJT-USA	<b>10%</b>	<b>10%</b>	<b>10%</b>	<b>10%</b>
Tax Rates				
Canada	<b>15%</b>			
USA		<b>21%</b>		

**ADDITIONAL INFORMATION BY COUNTRY**

CALENDAR YEARS	2018-	2019
BJT - Canada	25,000	
BJT-USA	75,000	
<b>Employees</b>	<b>100,000</b>	
BJT - Canada	1	
BJT-USA	2	
<b>Manufacturing Plants</b>	<b>3</b>	

## **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 a subsidiary of RPPC Dynasty with RPPC holding a 70% controlling interest and minority shareholders owning the remaining interests. 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.

During the financial crisis in 2008 Frenz suffered significant losses due to reduced market demand and significant investment losses. Some Board members were unhappy with the geographical market concentration, which exacerbated Frenz's losses.

### **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 Chairmen in leading public companies in Belgium, two are Board members of RPPC Dynasty, and the remaining Board members are executive officers of Frenz.

In recent years RPPC has adopted a global company risk management mandate in order to ensure consistent and unified risk management policies, strategies and processes among the conglomerate's group of companies. In response, Frenz's Board hired an experienced Chief Risk Officer, Robert Kaplan, to develop the risk management strategies for Frenz and to ensure that

these strategies fit in RPPC's global risk management mandate. Robert Kaplan's responsibilities include proper integration of risk management strategies and policies with the 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 consult with Ms. Julia Reich, RPPC Dynasty CRO, and provide a recommendation.

## **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**

David Gillet, 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."

David 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. He wanted to increase the rate of new store openings and enter new countries. He was concerned about which geographic regions to expand, whether stores should be franchisee-developed or company-owned. He 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? He 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 choosey 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? The parent company, RPPC, wanted a global risk management framework for all its subsidiaries. How did Frenz fit in this framework? Was the current global funding allocation from RPPC adequate for the future growth of Frenz? Should Frenz continue to rely on debt to fund its growth or request more equity investment from RPPC? 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, Anthony Pirot, is being empowered to implement the recent marketing strategic goals set by the Board. Anthony's first priority is to expand into the fast-growing Asian market. He 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 conglomerate mandated threshold.

In addition, Anthony 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, that 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, 10 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 (e.g., every 10<sup>th</sup> coffee is free). Additional loyalty reward points would be credited for other activities (e.g., signing up a friend to the app).

An app of this scope is not currently being offered by any of Frenz's competitors; however, various 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

<b>INCOME STATEMENT (in dollars thousands)</b>					
	2019	2018	2017	2016	2015
<b>Sales</b>	452,812	343,612	410,827	391,464	373,108
Cost of Sales	45,804	41,578	37,700	34,148	30,896
<b>Store Operating Expenses</b>	226,166	216,716	207,662	198,985	190,671
Depreciation	24,850	22,880	20,850	18,287	15,642
<b>General and Administrative Expenses</b>	54,469	47,917	51,950	50,788	49,686
Impairment of Goodwill	-	-	-	10,383	-
<b>Total Operating Expenses</b>	351,288	329,091	318,161	312,592	286,895
<b>Operating Income</b>	101,523	14,521	92,666	78,872	86,212
<b>Interest Expense</b>	8,057	7,533	7,010	6,486	5,962
<b>Income Tax Expense</b>	23,367	1,747	21,414	18,097	20,063
<b>Net Income</b>	70,100	5,241	64,242	54,290	60,188

**BALANCE SHEET (in dollars  
thousands)**

	Dec. 31, <b>2019</b>	Dec. 31, <b>2018</b>	Dec. 31, <b>2017</b>	Dec. 31, <b>2016</b>	Dec. 31, <b>2015</b>
<b>Current Assets:</b>					
Cash	15,746	3,636	14,656	16,323	23,522
Accounts Receivable	5,000	5,000	5,000	5,000	5,000
Inventory	<u>11,704</u>	<u>10,330</u>	<u>9,082</u>	<u>7,951</u>	<u>6,927</u>
<b>Total Current Assets</b>	<b>32,450</b>	<b>18,965</b>	<b>28,739</b>	<b>29,274</b>	<b>35,449</b>
<b>Long-term Assets:</b>					
Long Term Investments	218,617	197,280	185,112	164,058	142,415
Goodwill	<u>50,110</u>	<u>41,959</u>	<u>35,774</u>	<u>28,379</u>	<u>31,716</u>
<b>TOTAL ASSETS</b>	<b>301,176</b>	<b>258,205</b>	<b>249,625</b>	<b>221,711</b>	<b>209,580</b>
<b>Current Liabilities:</b>					
Accounts Payable	10,000	10,000	10,000	10,000	10,000
Current Borrowing	<u>8,500</u>	<u>8,800</u>	<u>9,100</u>	<u>9,400</u>	<u>9,700</u>
<b>Total Current Liabilities</b>	<b>18,500</b>	<b>18,800</b>	<b>19,100</b>	<b>19,400</b>	<b>19,700</b>
<b>Long-term Debt</b>	<b>134,400</b>	<b>125,520</b>	<b>116,640</b>	<b>107,760</b>	<b>98,880</b>
<b>Total Liabilities</b>	<b>152,900</b>	<b>144,320</b>	<b>135,740</b>	<b>127,160</b>	<b>118,580</b>
<b>Equity</b>					
Paid-in Capital	25,000	25,000	25,000	25,000	25,000
Retained Earnings, accumulated	<u>123,276</u>	<u>88,885</u>	<u>88,885</u>	<u>69,551</u>	<u>66,000</u>
<b>Total Equity</b>	<b>148,276</b>	<b>113,885</b>	<b>113,885</b>	<b>94,551</b>	<b>91,000</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>301,176</b>	<b>258,205</b>	<b>249,625</b>	<b>221,711</b>	<b>209,580</b>

**STATEMENT OF CASH FLOWS (in dollars thousands)**

	2019	2018	2017	2016	2015
<b>Operating Activities:</b>					
<b>Net Income</b>	70,100	5,241	64,242	54,290	60,188
<b>Adjustments</b>					
Depreciation	24,850	22,880	20,850	18,287	15,642
Accounts Receivable	\$0	\$0	\$0	\$0	\$0
Inventory	(1,374)	(1,247)	(1,131)	(1,024)	(927)
Accounts Payable	0	0	0	0	0
Impairment of Goodwill	0	0	0	10,383	0
<b>Net Cash Provided by Operating Activities</b>	<b>93,576</b>	<b>26,874</b>	<b>83,961</b>	<b>81,935</b>	<b>74,903</b>
<b>Investing Activities:</b>					
	(54,337	(41,233	(49,299	(46,976	(44,773
Purchases of investments	)	)	)	)	)
Sales of investments	0	0	0	0	0
	(54,337	(41,233	(49,299	(46,976	(44,773
<b>Net Cash Used by Investing Activities</b>	<b>)</b>	<b>)</b>	<b>)</b>	<b>)</b>	<b>)</b>
<b>Financing Activities:</b>					
Change in Current Borrowing	(300)	(300)	(300)	(300)	(300)
Proceeds from Issuance of Long-Term Debt	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)
	(35,708		(44,909	(50,738	(60,188
Cash dividends paid to parent	)	(5,241)	)	)	)
<b>Net Increase in Cash from Financing Activities</b>	<b>(27,128</b>	<b>)</b>	<b>(36,329</b>	<b>(42,158</b>	<b>(51,608</b>
		3,339	)	)	)
			(11,021		(21,478
<b>Net increase in Cash and Cash Equivalents</b>	<b>12,110</b>	<b>)</b>	<b>(1,667</b>	<b>(7,199</b>	<b>)</b>
<b>Cash and Cash Equivalents:</b>					
<b>Beginning of Period</b>	<b>3,636</b>	<b>14,656</b>	<b>16,323</b>	<b>23,522</b>	<b>45,000</b>
<b>End of Period</b>	<b>15,746</b>	<b>3,636</b>	<b>14,656</b>	<b>16,323</b>	<b>23,522</b>

**EXHIBIT 2a**  
**Vietombia Statistics**

<b>INFRASTRUCTURE</b>	
<b>Economy</b>	
GDP (2019)	USD 70.1 billion
% exports (2019)	USD 62.9 billion FOB 89.73%
<b>Population and employment</b>	
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%
<b>Forms of workers representation</b>	
Association of coffee providers	None
% of employees who are part of a trade union	None
<b>Geographical aspects</b>	
Total area of production (hectares)	Cultivated area: 506,000 ha
Number of farms	300,000
<b>History of the coffee industry</b>	
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 (2019) Total exports: 53.8 million bags (2019)
Exports (total exports, % exports against total production)	Total production 961 million tons (2019) Total export 897 million tons (2019) % 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 RPPC's or Frenz's normal cost of capital rate.

## **EXHIBIT 3**

### **Overhead Allocation**

Jeff Bemowski, Frenz Division head of Non-Coffee Product Marketing, slunk down in the guest chair in the office of Kitty Dunn, Frenz's Chief Accounting Officer. "You are killing me with your overhead," Bemowski begins.

"I'm not sure what you mean," replies Dunn. "Our policy for allocating corporate overhead is pretty straightforward and hasn't changed in several years. Overhead costs such as corporate advertising, executive salaries, the rent on this home office building, and so on are accumulated. Then that bucket of corporate overhead is spread over all sales on a uniform basis."

"That's exactly the problem!" retorts Bemowski. "I think we need to change the policy and we need to change it now before...."

"Wait a minute," says Dunn. "We have worked very hard to keep our overall corporate overhead under control. In fact, corporate overhead has increased at only a 5% rate per year over the last five years. That's at a time when the company has grown by over 250% in those same five years. Every summer, we review the overhead allocation ratio and, well, with all our growth, it has gone down every year."

"I know that," responds Bemowski. "What I'm talking about is HOW corporate overhead is allocated. Look, a big part of my bonus is dependent on the profitability of Frenz' non-coffee products. You know, the music CDs, greeting cards, coffee cups, etc. that we sell. I've been pushing our store managers to move these products but your allocation method for corporate overhead disguises the true profitability of my part of the operation."

"Well, it is a zero sum game. The overhead is the overhead and it all has to be allocated somewhere." replied Dunn.

"Yeah, but a CD costs more than a cup of coffee," argued Bemowski. "When Frenz does something like run a commercial, we are advertising the whole brand. We want to get customers to come into our stores to have the whole Frenz experience. We get them to come in to our store regularly for coffee. Eventually, they may buy our other products in addition to their coffee. Why should the one CD be saddled with more overhead than all those cups of coffee? It just feels wrong to me!"

"Again," began Dunn, "each product gets an allocation of corporate overhead based on its standard price. That keeps it the same from market to market, where prices might be different and it negates the impact of sales and discounts on items. That seems like a fair system to me but if you don't want to do it that way, what would you suggest?"

"Well I believe our model is that each store is a profit center," says Bemowski. "We tell our store managers that corporate supports them but once they are part of the Frenz family, they can make their shop as profitable as they want it to be. The upside is unlimited; their hard work will pay off."

"Wait," interjects Dunn. "There are rules for how the stores must be set up and how the product is displayed. Not to mention quality..."

"I know all that," Bemowski cut in. "But we are allocating overhead in a way that punishes our most successful store managers. Take that corporate overhead and allocate it as \$X per store. Corporate supports the store; the store manager is the one who determines how much business the store does. Better yet, allocate Corporate overhead to each store based on smoothed, budget amounts. That way each store manager knows just how much Corporate overhead he has to cover in his store at the start of the year."

"I suppose we could look at it," concedes Dunn. "We have most of the data and we could collect some....."

"You financial types always want more data. You are afraid to make a decision! It is obvious; change and you are going to get a better look at which stores are on top and which are on the bottom." sputtered Bemowski. "And you will see how important my non-coffee products are to making those top stores, the top stores. I can feel it in my bones; you need to get on board or get out of the way."

"We are most certainly not going to change anything without studying it first," responded Dunn calmly, "and there are channels to go through for making any expense allocation change. We need to weigh the pros and cons."

"You can't save your way to greatness," said Bemowski getting up and heading toward the door. "Call me when this company is serious about making real money."

And with that, Bemowski was gone. Dunn rubbed her temples. "Marketing," she murmured under her breath.

## 5 Blue Ocean P&C Company

Ruth Green, Chief Actuary, reflected on the culture of Blue Ocean. Blue Ocean had been built on innovation and speed to opportunity and to market. The company viewed product development as a long-term strategy. Blue Ocean saw a niche and filled it. Everyone looked at the same information. Not everyone saw the same things. Others saw only dots. Blue Ocean made connections. This was the benefit of having cross-functional teams across the organization, all with a common understanding of the company's mission, strategy, goals, marketing, sales, and logistics.

There are always questions. Other companies choke from paralysis. Blue Ocean underwriters don't just sit on ideas ignored by a management too busy to be persuaded. Instead, Blue Ocean management asks what action to take. Management supports the new product development process.

Ruth keeps an open channel of communication for new product development ideas, which recently resulted in several new proposals coming across her desk. How could she make them happen? How would the company underwrite and manage the risks? Which segments should be targeted? Would these most recent niche offerings add value? Why might Blue Ocean fail? What should she do to remove or mitigate those risks? How would she balance the number of projects with available resources?

### 5.1 Industry Profile

Property and Casualty (P&C) insurers provide insurance covering personal property losses and liabilities arising from certain types of events. More specifically, P&C insurance companies insure homes, contents of homes, commercial properties, goods and merchandise aboard shipping vessels, and automobiles. P&C companies can also insure liabilities related to automobile or shipping accidents, injuries at work, professional malpractice, and damages from products. P&C companies use experience studies to understand the likelihood and severity of historical claims. The companies can then price products such that the products would generate profits if historical trends continue.

Another source of profit for P&C companies is investment income. After collecting premiums, the companies can invest the premiums and earn income until the premiums are needed to pay claims. Because most P&C coverages are short-term, this is usually a less significant source of income than for life insurance companies.

Risks to the industry include:

- Higher frequency of natural disasters such as hurricanes, fires, and floods
- Unfavorable performance of the investment portfolio
- Impacts of new technologies (e.g., autonomous vehicles may lessen the need for auto insurance)
- Failure in cyber or other information security controls
- Regulatory changes, including limits on premium rates

Factors that can lead to success include:

- High quality insurance products at competitive prices

- Underwriting competency to ensure that products are priced appropriately
- Strong distribution channels to sell a company's products
- Effective risk management function to ensure that risk exposures are within acceptable levels

**Competitive Environment** - The P&C market is highly competitive in that many companies offer similar products. Low interest rates have led to lower investment income on premiums and lower profitability. Many companies are investing in technology. Some companies are looking at new ways to underwrite risks (e.g., using GPS technology to better understand driving habits). Other companies are using technology to improve their current operations (e.g., using drones to more quickly assess property damage).

## 5.2 Company Profile

### Mission and Strategic Plan

Our mission is to strengthen the brand identity as a dominant innovator in the UK market and maximize sustainable long-term growth in shareholder value. Our strategic plan is to capitalize on arenas with new opportunities.

### History

RPPC acquired 80% of Blue Ocean, the 5<sup>th</sup> largest property and casualty insurance company in the United Kingdom (UK), in 2009. This acquisition gave RPPC access to Blue Ocean's lucrative insurance market in the UK and continental Europe. Products included marine, property catastrophe and reinsurance. Since then, Blue Ocean has continued to expand and develop its insurance businesses worldwide. In September 2015, Blue Ocean began writing Pet and Travel insurance business in North America. As of the beginning of 2019, the capital base stood at \$3 billion.

### Rating

Guided by experienced management and backed by an impressive team of underwriters, actuaries and catastrophe risk modelers, Blue Ocean earned an A.M. Best rating of A (Excellent) and quickly established itself as a market leader.

Management Team				
CEO	Edward Blue			
CFO	Michael Tan			
Chief Actuary Ruth Green	CLO Jerome Black	CRO Geoff Olive	Business Ops Andrew Grey	CAO Michelle Rouge

## **5.3 Strategic Initiatives**

The traditional business arena for Blue Ocean has been the marine insurance market. This focus has been very successful in the company's traditional geographical market, the United Kingdom. With the post-acquisition expansion into a new region, company management decided to expand its focus into Pet and Travel Insurance. In keeping with its mission to be an innovative leader, the executive team is considering an offering within the emerging Renewable Energy sector.

Blue Ocean has an ongoing initiative to identify new opportunities and can redirect the strategic plan in real-time to respond to market forces and new technologies.

Within the Pet and Travel insurance lines, the goal is to establish a dominant market share in this relatively young insurance field. The financial goals are to generate as much profit and premium from this new risk arena as Blue Ocean currently earns in the core Marine business.

Other innovative ideas have also come through the Chief Actuary's e-mail related to insurance opportunities in the Online Peer-to-Peer Commerce space, also known as the "Sharing Economy".

### **Travel Insurance**

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 Blue Ocean 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, Blue Ocean 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, Blue Ocean has already made significant progress in establishing business relationships with its business partners. These relationships have become its competitive advantage in the travel industry.

## Pet Insurance

While pet insurance remains a relatively underdeveloped product in North America, with less than 1% of all pets being insured, European levels of insured pets range from 12% to 50%. In many European countries, insuring your pet is just as common as insuring your home or car. The UK pet insurance industry is a mature industry. 50% of dogs and 30% of cats are insured, with a population estimated at 8.3 million dogs and 11.9 million cats.

Pet Insurance is coverage for Veterinary Medical Expenses – so the underlying inherent risk is a health risk similar to medical expenses in humans. Although pet insurance is primarily a health risk, in the US, it is regulated as a P&C product, since in most states pets are considered property under the law. Typically, it is regulated under the Inland-Marine line of business.

The industry is diverse and provides consumers with a multitude of choice in terms of products and types of coverage available. Three clear strategies have appeared. The first is the ‘menu-based’ proposition, where customers are provided with the standard ‘vet fees only’ product and allowed to choose various coverage options to produce a product that meets their needs. The second option, which the majority of providers offer, is a ‘multiple cover’ offering, whereby customers are able to choose products based on set coverage limits. These types of products are often displayed as ‘bronze, silver, or gold’, reflecting the levels of cover offered. The third option is a ‘one size fits all’ product that offers a static veterinary fees limit and does not allow for flexibility to increase or decrease this limit.

In continental Europe there are 120 million dogs and cats. The percent insured varies by country. For example, in Sweden, 55% and 35% of dogs and cats are insured respectively. The U.S. pet insurance industry is in its infancy. Approximately 1% of a population of 155 million cats and dogs is insured. The U.S. industry has grown 15% compounded annually on a premium basis since 2007.

Pet Insurance is characterized by traits associated with really low risk.

- Low Severity (\$230/claim)
- High Frequency (1.3 claims per policy/year)
- Ultra-Short-Tail
  - 95% of claims are paid out within 3 months of the loss
  - 99.9% are paid out in 12 months

Because of the ultra-short tail properties there is very little opportunity to earn investment on reserves.

	<b>2019 Premium Income*</b>	<b>2019 Reported profit*</b>
Marine	1,600	120
Pet	400	25
Travel	300	30

\* (millions)

## **6 Big Ben Bank**

Maggie Crawley, Chief Risk Officer, looked across the table. She wondered when to bring the intense ongoing debate to a close. Such forthcoming dialogue was a sought after dimension in the risk management process. However, unless the management team came up with successful ideas and effective market positions, opportunities would fade away. Sophisticated products and services need considerable time for development and securing commitment from partners.

Was Big Ben identifying the right risk metrics? How should the risk profile behave and evolve over time? Were difficult-to-quantify Black Swan tail risk events considered thoughtfully? Were they simply monitoring business intelligence or was risk information forming their decisions? How could they leverage the expertise of RPPC's insurance group, Darwin? How could they cross sell to RPPC's high-end clientele? New regulations and scrutiny seemed never-ending.

### **6.1 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
- 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
- Competition and disruption emerging from new financial technology firms which develop new services and products based on innovative technologies including cloud, big data analytics, internet of things and digital payments processes
- 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

### **Competitive Environment**

There has been downward pressure on asset management fees. Some companies have started using robo advisors (i.e., computer programs that provide investment advice) with lower fees compared to human financial advisors. Other companies have made headlines by cutting management fees to zero on some of their ETFs. Lower management fees are good for consumers, but have reduced profits for banks.

### **Regulatory Challenges**

In response to the 2008 financial crisis, a number of measures were taken to improve the banking system. In the U.S., in July 2010, President Obama signed the Dodd–Frank Act. Dodd-Frank aimed to improve the regulation of financial markets, better evaluate measures of systemic risk, and improve consumer protection. Part of Dodd-Frank is the Volcker Rule which put limits on how much banks could invest in risky assets (i.e., private equity and hedge funds).

In the 10 years after the 2008 financial crisis, the U.S. economy performed well and equity markets reached record levels. Proponents of Dodd-Frank say that it has helped prevent the economy from a

crisis like that in 2008. Detractors of Dodd-Frank say that the burden of complying with the law has made U.S. banks less competitive compared to their foreign counterparts. In May 2018, President Trump signed a law that eased the Dodd-Frank regulations except for a few of the largest banks.

In December 2010, the Basel Committee issued the Basel III rules text, which presents the details of global regulatory standards on bank capital adequacy and liquidity agreed by the Governors and Heads of Supervision, and endorsed by the G20 Leaders at their November 2010 Seoul summit.

The rules text presents the details of the Basel III Framework, which covers both micro-prudential and macro-prudential elements. The Framework sets out higher and better-quality capital, better risk coverage, the introduction of a leverage ratio as a backstop to the risk-based requirement, measures to promote the build-up of capital that can be drawn down in periods of stress, and the introduction of two global liquidity standards.

In December 2017, the Basel Committee finalized additional standards which are often referred to as Basel IV. A key component of Basel IV is the revised credit risk calculation used to determine capital requirements. Banks will need to calculate capital requirements using a standard approach and can also calculate capital requirements using internal models. If the internal models approach produces a lower capital requirement, the lower figure will be the capital requirement, subject to a “capital floor”. The “capital floor” will be a percentage of the standardized capital calculation.

For most banks, it is expected that the internal models approach will produce lower capital requirements than the standardized approach. Therefore, most banks will want to build robust models to calculate capital requirements using internal models, but will also need to calculate capital requirements using the standardized approach to determine the “capital floor”. This may create challenges for banks in regards to data and IT architecture.

Basel IV is targeted to be phased in from 2022 through 2027, with the “capital floor” increasing over that time period. Basel IV will likely lead to banks having to hold higher amounts of capital. With higher capital requirements, banks will likely review business strategies and investment portfolios. Investments that may have been attractive in the past may no longer be attractive with the new capital requirements.

## 6.2 Big Ben Company Profile

### Background

The banking group was formed in Luxembourg in 2005 under the directorship of Mr. Saleen Patel. Mr. Patel gained his wealth as a self-directed fund manager using fundamental asset selection and key insights into the business models of his investments. The initial focus of Mr. Patel’s banking group was finding best in class funds for its high net worth (HNW) clients. Mr. Patel’s fund management business was formed in 1994 and its success was primarily built within European financial centers.

A key growth differentiator in the initial years was Big Ben's Private Banking division, which offered exclusive concierge services to its HNW clients. Another competitive advantage that Big Ben enjoyed was Mr. Patel's network of connections, which included many members of NYC, London, and Zurich high society. Mr. Patel's reputed fund management, and tax management, prowess also contributed to the success of Big Ben.

However, the financial crisis presented some unexpected challenges. The AUM fell dramatically and some of the investors experienced hardships in their own businesses. The fund performance was dramatically negative and the subsequent increase in redemptions severely impacted overall AUM and forced a revision in the strategic approach.

### **Products / Services**

Since inception the critical profit driver has been the excess of the MER (management expense ratio) charged on the AUM over the operational costs of fulfilling the fund management mandate. Big Ben Bank is a world leader in the exchange-traded fund (ETF) market and has a strong brand and a loyal investor base. But MERs for ETF's are coming under increased downward pressure as more competitors come into this fund arena.

Traditional personal and commercial banking has been a smaller, but significant, component of the revenue pie. The operational model of the personal banking division is primarily online, rather than physical branches. This approach was meant to meet the needs of a globally mobile clientele. Fund transfer and foreign exchange transactions were once the majority of transactions but the travelers' check business is slowing. Transfers and transactions are now dominated by an ultra-high limit VISA credit card program. Foreign exchange transactions and "best rates" are an attractive feature of the VISA program.

The physical distribution model is almost non-existent and cannot support broad-based banking, but expertise exists on emerging technologies and connectivity with a time-critical customer base.

## **6.3 Risk Profile**

### **Risk Management Process**

Big Ben Bank has from the beginning prided itself on a strong risk culture and has had an active risk management function. During the 2008 Financial crises, the bank capital was somewhat strained, but Big Ben has regained a good capital position in recent years.

With a greater focus on innovation-based solutions and wealth management solutions intertwined with the Insurance group, the risk management function will need to evolve and adapt its strengths to a more agile environment.

The Executive mindset has been to increase focus on the financial planning sales approach, to leverage the wealth management capabilities within insurance contracts, and to formulate a one-stop shopping interface to our globally mobile clientele.

Big Ben Bank uses various models to manage market risks and to provide insight into decision making. The three most important ones are as follows:

- i) A model to capture the correlation between mortgage prepayment rates and interest rates using statistical best fit techniques
- ii) Black-Scholes option pricing model based on the underlying asset price, the strike price and assumptions on asset price distributions in the hedging program
- iii) Short-cut bond price model based on assumptions about yield movements to provide some quick estimates

Big Ben Bank uses frequency tests to validate VaR risk models based on the number of losses exceeding VaR and a significance level.

Big Ben conforms with the documentation standards of RPPC's model risk management framework.

*The key is still our private club; our brand; our family!!*

## **Capital Management**

Big Ben Bank 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 and to enhance shareholder returns through increased dividends and share repurchases.

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 following are the core principles that govern the Capital Management of the bank:

- Manage capital within the framework set by the regulators, monitor capital based on planned changes in the Bank's strategy, and identify changes in its operating environment or changes in its risk profile.
- Ensure appropriate governance and oversight, including clear delineation of roles and responsibilities.

- Establish a capital management framework that focuses on the interrelationship of risk appetite, risk profile, and capital capacity.
- Implement a sound risk management process that ensures management identifies and stress tests all material risks, understands the nature and level of risk taken by the Bank and how this risk relates to capital adequacy.
- Ensure a robust capital adequacy assessment process that is supported by appropriate governance, oversight and internal control review.
- Ensure adequate systems, resources, processes and controls are in place to support the planning, forecasting, monitoring and reporting of capital both internally to Executive Management and the Board of Directors and externally to the regulators.

## **Risk Appetite**

Common Equity Tier 1 (CET1) Ratio – Internal Target of 9.5%

Tier 1 and Total Capital Ratios – Internal Target of 11.5% and 13.5%

Economic Capital – For economic capital, the internal target within the Bank's 2020 Risk Appetite Statement is based on the Bank's long term definition of available capital, which is mainly common shareholders' equity. For the Bank's medium term internal target, common shareholder's equity should be at least 100% of required economic capital; however, in the short term, it may be as low as 95% of required economic capital and supported by preferred shares

Leverage Ratio – include an operating buffer of 1% over minimum leverage ratio requirement of 3.0%.

## **6.4 Strategic Initiatives**

The executive group, following strong direction from the four partners, has been asked to re-engineer the business focus, by lowering the minimum investable assets requirement for participation in the services that had been traditionally offered exclusively to the Bank's high net worth customers. The bank will also offer more holistic wealth management and financial planning services. As a result, RPPC decided to acquire Darwin Life insurance group in 2013.

Mr. Patel articulated Big Ben's revised strategy in the following excerpt from a recent speech:  
 "Our vision is to be the wealth management solutions provider of choice, and to expand the Bank's client base by expanding our retail banking, wealth management, and insurance divisions. We will also build new global platforms to support this new growth. Our path to differentiation is to deliver a personalized and unique financial planning experience to our clients, and by building a culture of innovation."

### **New Product - Long Term Principal Preservation Fund (LTPPF)**

As a result of the company's vision to appeal to a wider customer base, Big Ben Bank has introduced a new product called the Long Term Principal Preservation Fund (LTPPF). Clients buying this product deposit their assets into a fund, which is expected to appreciate over time.

Clients are pooled together based on issue year. This provides economies of scale by allowing smaller clients to enjoy benefits that a typical HNW client of Big Ben Bank would enjoy. This also allows Big Ben Bank to appeal to more clients outside of its HNW customer base.

Crediting rates for LTPPF are reset quarterly and are subject to a minimum rate, which is never below 0%. In this way LTPPF guarantees the preservation of book value for the client. Crediting rates are first determined for the pool based on pooled asset performance and then adjusted for each client individually based on a contractual management fee. This type of product has been successfully offered by other banks for at least the last five years. The consensus is that clients enjoy the protection offered by the principal preservation and that crediting rates are very competitive due to the pooling structure. Furthermore, clients can withdraw their assets at any time at market value or book value, whichever is higher. The assets backing LTPPF liabilities will be managed by Big Ben Bank, leveraging its core competencies from the bank's wealth management and personal banking lines.

### **New Product – Cryptocurrency**

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

Under the revised strategy outlined by Mr. Patel, BBB 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 hold cryptocurrencies
- Customers can purchase, sell or transfer cryptocurrencies within their account online or in the mobile app
- Customers will pay a monthly fee to maintain the account and a transaction fee when purchasing or selling cryptocurrencies
- BBB 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 passively managed to ensure a consistent mix of the largest cryptocurrencies

Cryptocurrency banking products are not currently being offered by any of BBB's competitors.

### **Solar Energy Opportunity**

#### **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

## 6A Big Ben Bank Exhibits

### EXHIBIT 1 Big Ben Bank Financial Data

#### I. Year End Balance Sheet

	2019 \$million	2018 \$million	Increase/ (Decrease) \$million	Increase/ (Decrease) %
<b>Assets</b>				
<b>Advances and investments</b>				
Cash and balances at central banks	4,736	3,272	1,464	45%
Loans and advances to banks	6,598	5,206	1,392	27%
Loans and advances to customers	2,638	2,436	202	8%
Investment securities held at amortized cost	549	483	66	14%
	14,521	11,397	3,125	27%
<b>Assets held at fair value</b>				
Investment securities held available-for-sale	7,979	7,097	882	12%
Financial assets held at fair value through profit or loss	2,483	2,702	(219)	(8)%
Derivative financial instruments	6,793	4,786	2,007	42%
	17,255	14,585	2,670	18%
<b>Other assets</b>				
	4,392	4,074	317	8%
<b>Total assets</b>	36,168	30,056	6,112	20%
<b>Liabilities</b>				
<b>Deposits and debt securities in issue</b>				
Deposits by banks	6,548	5,037	1,511	30%
Customer accounts	3,758	3,699	58	2%
Debt securities in issue	6,128	4,085	2,043	50%
	16,434	12,822	3,612	28%
<b>Liabilities held at fair value</b>				
Financial liabilities held at fair value through profit or loss	2,160	2,268	(108)	(5)%
Derivative financial instruments	6,893	4,713	2,179	46%
	9,053	6,981	2,071	30%
<b>Subordinated liabilities and other borrowed funds</b>	3,272	3,116	156	5%
<b>Other liabilities</b>	5,152	4,938	214	4%
<b>Total liabilities</b>	33,910	27,857	6,053	22%
<b>Equity</b>	2,258	2,199	59	3%
<b>Total liabilities and shareholders' funds</b>	36,168	30,056	6,112	20%

## II. Liquidity Risk Policy

The following data are the three liquidity measures the bank has used to monitor their liquidity exposures for the past five years (mm denotes millions).

Measure	2015	2016	2017	2018	2019
Liquidity Index (%)	82%	88%	89%	90%	90%
Financing Gap (\$mm)	\$1,050mm	\$813mm	\$1,392mm	\$750mm	-\$850mm
Net Liquidity (\$mm)	-\$750mm	\$1,187mm	\$608mm	\$1,250mm	-\$800mm

Liquidity Index is defined by calculating a ratio of fire-sale price to fair-market for each asset in a portfolio and then calculating a weighted average of these ratios, where the weight is a percentage of each asset in the portfolio.

Financing Gap is defined as the difference between average loans and average deposits.

Net Liquidity is defined as the difference between sources of liquidity and uses of liquidity.

The bank also has a liquidity crisis plan that outlines the roles and responsibilities of each executive during a liquidity crisis. Furthermore, the plan also defines a mandatory decision-making process and 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.

The bank came out from the 2008 financial crisis unscratched. The bank stayed solvent and did not have severe liquidity problems. The executives of the bank are very happy with the performance of the bank after looking at these historical measures and are comfortable with the current liquidity risk mitigation policy.

## III. Investment Limits and triggers

Criteria	Instructions	Limit per issuer
Fixed Income	Permitted	20% of portfolio Market Value
Real Estates	Permitted	10% of portfolio Market Value
Equities	Permitted	20% of portfolio Market Value
Derivatives *	Permitted	15% of portfolio Market Value

FI Category	Limit (% of portfolio Market Value)
Treasury / Agency	100%
Sovereign Treasury	100%
Corporate / Credit <= B+	10%
Corporate / Credit > B+	50%

\*Derivative Financial Instruments written:

- Forward Contracts
- Interest swaps
- Currency Swaps
- Put/Call options

## **EXHIBIT 2**

### **Big Ben Bank Internal Capital Adequacy Assessment**

The adequacy of the capital is assessed against the current risk profile of the consolidated Bank, as well as its future expected (or possible) profile based on strategic initiatives and objectives, including the results of the bank's enterprise stress testing program. Capital adequacy is also assessed against current and prospective regulatory requirements and internal capital adequacy targets.

#### **Principles**

- Maintain a sound ICAAP to periodically evaluate the adequacy of both economic and regulatory capital in relation to the Bank's risk profile and risk appetite.
- Ensure Executive Management assesses the adequacy of capital in the context of its current position, as well as under various potential stress scenarios. A forward looking capital adequacy assessment includes consideration of the results of appropriate stress testing.
- Report the outcome of the capital adequacy assessment to the Board and ensure it is appropriately incorporated in the Bank's capital planning.
- Ensure periodic review of differences between regulatory and economic capital.

#### **Methods**

- Documented ICAAP procedures and methodologies have been formalized and are reviewed on a periodic basis.
- Executive Management continuously monitors its regulatory and economic capital in relation to its risk profile and risk appetite and internal capital adequacy targets.
- A comprehensive capital adequacy assessment is completed at least annually and monitored on an ongoing basis.
- The comprehensive capital adequacy assessment is closely integrated with the Bank's annual capital planning process.
- The capital adequacy assessment includes forecasts of various scenarios of capital generation and growth in risk-weighted assets, both through organic growth and acquisitions for current and future periods.
- The results of the Enterprise Wide Stress Testing Program are incorporated in the overall assessment of the adequacy of capital.
- The results of the capital adequacy assessment are reported to the Board and incorporated, as relevant, in the Bank's capital planning.
- Executive Management regularly reviews and documents the differences between regulatory and economic capital computations to determine the impact on the adequacy of capital. Where differences cannot be justified, consideration is given to changing either the economic or the regulatory capital models to align treatment of risk and capital measurements.
- An annual self-assessment of the effectiveness of the ICAAP is performed.

## **Assessment of Risk**

The Assessment of Risks is owned by Enterprise Risk, Global Risk Management (GRM) and is updated annually in consultation with relevant management for each risk type. It is an integral part of the Bank's Internal Capital Adequacy Assessment Process (ICAAP) conducted by Capital Management, E.O. Finance. The Assessment of Risks is reviewed and approved by the ICAAP Oversight Committee (IOC), which reviews, objectively challenges, and approves the inclusion and exclusion of risks per this document.

### **1. Outcomes**

The outcome of the assessment for a given risk may be any of the following:

- included in economic capital;
- excluded from economic capital;
- excluded from economic capital, but included as part of internal capital considerations.

### **2. Criteria for Inclusion**

This section describes the definition for the Materiality of Risk and the criteria for inclusion in Economic Capital or Internal Capital.

#### **2.1 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 the Bank;
- 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.

#### **2.2 Relevance to Economic Capital**

Criteria for evaluating whether a material risk is considered relevant for economic capital include any one or a combination of:

- whether holding economic capital would mitigate the risk;
- qualitative considerations such as strategic, economic, or environmental factors.

#### **2.3 Inclusion in Economic Capital Model**

Criteria used to assess whether a material and relevant risk should be included in the economic capital model include any one or a combination of:

- is the risk reliably quantifiable, either through a model or scenario-based process? Risks that are not quantifiable should not be included in the economic capital model;
- has the risk been captured as part of another risk that is quantified for economic capital? A risk should not be included in the economic capital model if the risk is already captured by another risk already quantified in the model;

- the amount of economic capital to include should be based on the remaining risk after consideration of existing mitigants and controls;
- risks that are estimated to have a maximum loss level which is not material in relation to the financial statements may be excluded; and
- other qualitative considerations such as strategic, economic, or environmental factors.

## 2.4 Inclusion in Internal Capital Adequacy Assessment

### **Definition**

#### Internal Capital / Economic Capital

- o The Bank measures and reports its Internal Capital (IC) measures and capital adequacy to Basel's Pillar II requirements.
- o 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.
- o 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.

## 7 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 2015 the executive team has been in overdrive working on a few large initiatives. 2019 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.

Brandon Kaladin, 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 Brandon did know, standing still was a risk he wasn't going to take. He 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.

### 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 rate, 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 number 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.

## **Background**

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 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. Darwin's valuation became more attractive when the financial sector took a nose-dive after the financial crisis. 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 2 shows various financial metrics of several comparable public life insurers.

## **Business Operation**

Core product segments are universal life, high cash value traditional life, and variable annuities. Non-core segments include group annuities, individual fixed annuities, and term life. 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 2013 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, higher growth in equity, and average mortality and persistency.

## **Risk Management**

Darwin formalized its risk management function with the creation of an ERM Committee in 2011, followed by a new CRO position and establishment of a Risk Management department in 2012. 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.

Risk tolerances are based on the estimated impact of quantified risks on statutory capital since the core mission is policyholder protection. 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 Chief Investment Officer (CIO), Ken Huang, reports to the CFO, Alexis Marino. Investment policy and strategy is reviewed and approved by an internal management committee consisting of the CEO (Kaladin), CFO (Marino), CIO (Huang), and SVPs (or VPs) of the major business lines. Internal management committee decisions are subject to review by the board's investment committee. The internal management committee meets

quarterly and is responsible for reviewing investment results and approving the use of new investment instruments. Day-to-day decision-making authority is delegated to the CIO, up to specified limits. The CIO may delegate approval authority to his or her subordinates. Transactions in excess of the CIO's approval limit require approval by the CEO and CFO.

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.

## New Initiatives

Brandon Kaladin, CEO, was up late thinking about potential strategies to present at an upcoming quarterly Board meeting. He knew there were opportunities to win market share from competitors as well as to sell to markets no other companies were reaching. He 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 him 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 Brandon found were particularly disengaged in traditional channels.

Brandon's direct reports warned him 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. Brandon understood their apprehension, but he still felt it was time to start investigating direct marketing. He knew that the insurance industry had been around for hundreds of years and sooner or later every industry gets disrupted.

Brandon 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 Brandon 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. Brandon thought, "Wow, this initiative could help to increase both top line and bottom line for Darwin."

## **Innovation Program**

A second idea presented to Brandon by one of his 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.

## **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 0.5, 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. The program purchases derivatives so that at least 90% of liability delta and 50% rho are hedged. Existing hedges are not sold if the hedge ratio exceeds these thresholds. Gamma, vega and cross greeks are self-insured due to system complexity, the cost of hedges, and the tendency of equity volatility to mean revert. U.S. GAAP and Statutory reserves, in and of themselves, are not hedged. There is risk that this may result in insufficient protection on GAAP and Statutory bases.

The hedge program has not yet been integrated into the main legacy system as there is a backlog in getting back-end risk reporting on the system. Currently it is run separately by Tim Ballmer and his risk management team who develop the necessary assumptions for the hedging models. There has been an effort to integrate the assumption-setting process across product development, financial reporting and risk management, but it is only in the planning stages, as the company culture of silo-based operations has been hard to overcome. The only assumption currently shared across functions is the static policyholder behavior assumption. While hedges are updated weekly, hedge effectiveness, liability attribution, and risk factor calculation are only tested quarterly.

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.

## **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:** Brandon Kaladin, CEO  
**Sent:** Monday, March 25, 2020 7:36 PM  
**To:** Jane Smith, 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. Jane, 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.

## **7A Darwin Life Insurance Company Exhibits**

### **EXHIBIT 1 Business Intelligence**

#### **Product Comparisons**

Darwin tracks market position within each business segment. Considerations include premiums paid, benefits, features, credited rates and guarantee period, other guarantees, fees, surrender charges, service, and policy cash values over time (under current assumptions and under guarantees). Competitors tracked vary by segment and product.

#### **Distribution Capacity**

Darwin tracks Agency distribution growth by number of agents, by geographic penetration, total sales by agents, year over year sales by agents banded by years of service, retention rates and training costs. Darwin tracks Institutional distribution growth by distributor count, number of wholesalers, number of appointed representatives, ranking within each partner, change in percentage share and dollar volume within each partner and number of appointed reps.

#### **Financial Growth**

Darwin measures financial growth using the following KPIs: GAAP earnings, Statutory equity, total assets under management, life insurance sales (first year premium), variable annuity sales and fixed annuity sales, RBC ratio and debt ratio.

#### **Darwin vs. Industry vs. Peer Group**

Darwin uses the following to benchmark itself:

1. NAIC Risk Based Capital (RBC) Ratio
2. Capital Growth Sharpe Ratio
3. Financial Leverage
4. Earning Interest Coverage
5. Cash Flow Interest Coverage
6. Return on Capital
7. Expense Ratio
8. Liquidity Ratio
9. Individual Life Premium as a % of Total

## EXHIBIT 2

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

## **EXHIBIT 3**

### **Acquisition Considerations**

Brandon Kaladin, Darwin's CEO, is interested in exploring an acquisition strategy. As this would be new territory for Darwin, he 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.
- Management focused on relationship building and creating a more informal family feel. They decided not to implement a rigorous set of policies and procedures, opting instead to allow more flexible business practices to maximize adaptability and responsiveness to a variety of business situations. This approach, however, failed to bring out necessary synergies -- Employees of the European firm floundered as they were used to more structured decision-making processes and more explicit rules to guide employee behavior.
- 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 and would readily surrender personal privileges upon request of the employer.

- 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, the actual strategic direction of the firm, and what actions the Asian company would take in the future.
- 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. A better approach may have been to communicate more openly and directly, especially to employees from “low-context” cultures, where messages are more direct. This contrasts instead with “high-context” cultures, where the meaning of the message is primarily derived from other aspects of the communication, such as tone, body language or the surrounding social context, such as status differences, or group affiliation.
- Attitudes toward defending the reputation of one’s self 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 4**  
**Financial Data: Management Accounting Income Statements (in 000s)**

Note: Years 2017-2019 are actual results and years 2020-2022 are forecasts.

<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>REVENUES</b>						
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
<b>Total Premiums</b>	<b>1,007,670</b>	<b>1,167,350</b>	<b>1,371,110</b>	<b>1,618,870</b>	<b>1,959,780</b>	<b>2,492,010</b>
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
<b>Total Revenues</b>	<b>1,646,990</b>	<b>1,814,040</b>	<b>2,038,710</b>	<b>2,316,490</b>	<b>2,693,400</b>	<b>3,281,190</b>
<b>BENEFITS AND EXPENSES</b>						
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
Inc. in reserves & S/A Transfers	588,460	695,250	835,020	1,052,600	1,320,810	1,776,940
<b>Total Benefits</b>	<b>1,290,670</b>	<b>1,485,050</b>	<b>1,701,170</b>	<b>1,947,570</b>	<b>2,310,390</b>	<b>2,876,050</b>
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)
<b>Total Acquisition Costs</b>	<b>34,550</b>	<b>37,650</b>	<b>44,030</b>	<b>51,710</b>	<b>60,770</b>	<b>72,850</b>
Total Administrative Expenses	69,280	77,220	84,090	91,700	99,740	107,750
<b>Total Benefits and Expenses</b>	<b>1,394,500</b>	<b>1,599,920</b>	<b>1,829,290</b>	<b>2,090,980</b>	<b>2,470,900</b>	<b>3,056,650</b>
<b>EBIT</b>	<b>252,490</b>	<b>214,120</b>	<b>209,420</b>	<b>225,510</b>	<b>222,500</b>	<b>224,540</b>
<b>Interest</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>7,375</b>
<b>Tax</b>	<b>82,100</b>	<b>68,600</b>	<b>67,000</b>	<b>72,600</b>	<b>71,600</b>	<b>76,000</b>
<b>Net Income</b>	<b>152,390</b>	<b>127,520</b>	<b>124,420</b>	<b>134,910</b>	<b>132,900</b>	<b>141,165</b>

<b>Variable Annuities</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>REVENUES</b>						
Premium - First Year	561,000	669,800	812,600	1,000,000	1,280,000	1,750,000
Premium - Renewal	-	-	-	-	-	-
<b>Total Premiums</b>	<b>561,000</b>	<b>669,800</b>	<b>812,600</b>	<b>1,000,000</b>	<b>1,280,000</b>	<b>1,750,000</b>
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
<b>Total Revenues</b>	<b>660,500</b>	<b>788,200</b>	<b>951,200</b>	<b>1,169,500</b>	<b>1,483,600</b>	<b>2,001,500</b>
<b>BENEFITS AND EXPENSES</b>						
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
Inc. in reserves & S/A Transfers	474,250	536,300	649,250	807,400	1,038,000	1,464,500
<b>Total Benefits</b>	<b>605,100</b>	<b>726,200</b>	<b>878,900</b>	<b>1,082,100</b>	<b>1,373,650</b>	<b>1,855,300</b>
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)
<b>Total Acquisition Costs</b>	<b>16,800</b>	<b>17,400</b>	<b>22,100</b>	<b>27,600</b>	<b>32,100</b>	<b>38,500</b>
Total Administrative Expenses	14,300	17,400	20,200	24,100	28,200	32,800
<b>Total Benefits and Expenses</b>	<b>636,200</b>	<b>761,000</b>	<b>921,200</b>	<b>1,133,800</b>	<b>1,433,950</b>	<b>1,926,600</b>
<b>EBIT</b>	24,300	27,200	30,000	35,700	49,650	74,900
<b>Interest</b>						
Tax	8,500	9,500	10,500	12,500	17,400	26,200
<b>Net Income</b>	<b>15,800</b>	<b>17,700</b>	<b>19,500</b>	<b>23,200</b>	<b>32,250</b>	<b>48,700</b>

<b>Universal Life</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>REVENUES</b>						
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
<b>Total Premiums</b>	<b>106,370</b>	<b>137,150</b>	<b>171,510</b>	<b>203,270</b>	<b>236,380</b>	<b>270,710</b>
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
<b>Total Revenues</b>	<b>222,990</b>	<b>250,440</b>	<b>285,810</b>	<b>322,490</b>	<b>360,300</b>	<b>403,190</b>
<b>BENEFITS AND EXPENSES</b>						
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
<b>Total Benefits</b>	<b>152,370</b>	<b>187,650</b>	<b>222,470</b>	<b>261,770</b>	<b>302,940</b>	<b>346,150</b>
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)
<b>Total Acquisition Costs</b>	<b>8,450</b>	<b>8,450</b>	<b>7,530</b>	<b>6,710</b>	<b>8,270</b>	<b>11,050</b>
Total Administrative Expenses	13,780	14,820	15,990	16,900	17,940	18,850
<b>Total Benefits and Expenses</b>	<b>174,600</b>	<b>210,920</b>	<b>245,990</b>	<b>285,380</b>	<b>329,150</b>	<b>376,050</b>
<b>EBIT</b>	<b>48,390</b>	<b>39,520</b>	<b>39,820</b>	<b>37,110</b>	<b>31,150</b>	<b>27,140</b>
<b>Interest</b>	-	-	-	-	-	-
<b>Tax</b>	<b>16,900</b>	<b>13,800</b>	<b>13,900</b>	<b>13,000</b>	<b>10,900</b>	<b>9,500</b>
<b>Net Income</b>	<b>31,490</b>	<b>25,720</b>	<b>25,920</b>	<b>24,110</b>	<b>20,250</b>	<b>17,640</b>

<b>Traditional Life</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>REVENUES</b>						
Premium - First Year	34,000	34,000	36,400	38,500	40,200	41,700
Premium - Renewal	54,900	63,100	71,200	80,000	89,300	98,600
<b>Total Premiums</b>	<b>88,900</b>	<b>97,100</b>	<b>107,600</b>	<b>118,500</b>	<b>129,500</b>	<b>140,300</b>
Net Investment Income	51,200	50,500	51,700	53,000	54,500	56,700
Other income	-	-	-	-	-	-
<b>Total Revenues</b>	<b>140,100</b>	<b>147,600</b>	<b>159,300</b>	<b>171,500</b>	<b>184,000</b>	<b>197,000</b>
<b>BENEFITS AND EXPENSES</b>						
Claims	15,800	15,800	17,200	18,800	20,500	22,300
Surrender and other benefits	31,900	29,800	31,200	33,000	34,900	36,800
Increase in reserves	34,400	45,400	51,300	58,300	64,800	71,300
<b>Total Benefits</b>	<b>82,100</b>	<b>91,000</b>	<b>99,700</b>	<b>110,100</b>	<b>120,200</b>	<b>130,400</b>
Field Compensation	18,100	20,500	22,500	25,100	27,500	30,000
Change in DAC	(9,300)	(11,200)	(11,700)	(12,600)	(13,200)	(13,800)
<b>Total Acquisition Costs</b>	<b>8,800</b>	<b>9,300</b>	<b>10,800</b>	<b>12,500</b>	<b>14,300</b>	<b>16,200</b>
Total Administrative Expenses	9,200	10,300	10,900	11,500	12,200	12,700
<b>Total Benefits and Expenses</b>	<b>100,100</b>	<b>110,600</b>	<b>121,400</b>	<b>134,100</b>	<b>146,700</b>	<b>159,300</b>
<b>EBIT</b>	<b>40,000</b>	<b>37,000</b>	<b>37,900</b>	<b>37,400</b>	<b>37,300</b>	<b>37,700</b>
<b>Interest</b>	-	-	-	-	-	-
<b>Tax</b>	<b>14,000</b>	<b>13,000</b>	<b>13,300</b>	<b>13,100</b>	<b>13,100</b>	<b>13,200</b>
<b>Net Income</b>	<b>26,000</b>	<b>24,000</b>	<b>24,600</b>	<b>24,300</b>	<b>24,200</b>	<b>24,500</b>

<b>Term</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>REVENUES</b>						
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
<b>Total Premiums</b>	<b>59,000</b>	<b>70,300</b>	<b>82,400</b>	<b>95,100</b>	<b>106,900</b>	<b>118,000</b>
Net Investment Income	20,400	20,500	22,000	24,100	26,800	30,100
Other income	-	-	-	-	-	-
<b>Total Revenues</b>	<b>79,400</b>	<b>90,800</b>	<b>104,400</b>	<b>119,200</b>	<b>133,700</b>	<b>148,100</b>
<b>BENEFITS AND EXPENSES</b>						
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
<b>Total Benefits</b>	<b>34,100</b>	<b>40,200</b>	<b>48,400</b>	<b>57,900</b>	<b>68,100</b>	<b>80,800</b>
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)
<b>Total Acquisition Costs</b>	<b>(3,000)</b>	<b>(1,500)</b>	<b>(900)</b>	-	<b>900</b>	<b>1,600</b>
Total Administrative Expenses	21,200	23,100	24,800	26,500	28,000	29,500
<b>Total Benefits and Expenses</b>	<b>52,300</b>	<b>61,800</b>	<b>72,300</b>	<b>84,400</b>	<b>97,000</b>	<b>111,900</b>
<b>EBIT</b>	<b>27,100</b>	<b>29,000</b>	<b>32,100</b>	<b>34,800</b>	<b>36,700</b>	<b>36,200</b>
<b>Interest</b>	-	-	-	-	-	-
<b>Tax</b>	<b>9,500</b>	<b>10,200</b>	<b>11,200</b>	<b>12,200</b>	<b>12,800</b>	<b>12,700</b>
<b>Net Income</b>	<b>17,600</b>	<b>18,800</b>	<b>20,900</b>	<b>22,600</b>	<b>23,900</b>	<b>23,500</b>

<b>Other</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>REVENUES</b>						
Premium - First Year	116,700	118,000	120,000	123,000	126,000	129,000
Premium - Renewal	75,700	75,000	77,000	79,000	81,000	84,000
<b>Total Premiums</b>	<b>192,400</b>	<b>193,000</b>	<b>197,000</b>	<b>202,000</b>	<b>207,000</b>	<b>213,000</b>
Net Investment Income	341,200	332,800	328,900	318,600	310,300	302,400
Other income	10,400	11,200	12,100	13,200	14,500	16,000
<b>Total Revenues</b>	<b>544,000</b>	<b>537,000</b>	<b>538,000</b>	<b>533,800</b>	<b>531,800</b>	<b>531,400</b>
<b>BENEFITS AND EXPENSES</b>						
Claims	18,300	21,400	20,700	21,200	22,900	24,600
Surrender and other benefits	422,000	436,400	460,800	423,400	433,600	459,200
Increase in reserves	(23,300)	(17,800)	(29,800)	(8,900)	(11,000)	(20,400)
<b>Total Benefits</b>	<b>417,000</b>	<b>440,000</b>	<b>451,700</b>	<b>435,700</b>	<b>445,500</b>	<b>463,400</b>
Field Compensation	5,700	6,100	6,300	6,500	6,600	6,900
Change in DAC	(2,200)	(2,100)	(1,800)	(1,600)	(1,400)	(1,400)
<b>Total Acquisition Costs</b>	<b>3,500</b>	<b>4,000</b>	<b>4,500</b>	<b>4,900</b>	<b>5,200</b>	<b>5,500</b>
Total Administrative Expenses	10,800	11,600	12,200	12,700	13,400	13,900
<b>Total Benefits and Expenses</b>	<b>431,300</b>	<b>455,600</b>	<b>468,400</b>	<b>453,300</b>	<b>464,100</b>	<b>482,800</b>
<b>EBIT</b>	<b>112,700</b>	<b>81,400</b>	<b>69,600</b>	<b>80,500</b>	<b>67,700</b>	<b>48,600</b>
<b>Interest</b>	-	-	-	-	-	-
<b>Tax</b>	<b>39,400</b>	<b>28,500</b>	<b>24,400</b>	<b>28,200</b>	<b>23,700</b>	<b>17,000</b>
<b>Net Income</b>	<b>73,300</b>	<b>52,900</b>	<b>45,200</b>	<b>52,300</b>	<b>44,000</b>	<b>31,600</b>
<b>Corp</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Total Revenues</b>	-	-	-	-	-	-
<b>Total Benefits and Expenses</b>	-	-	-	-	-	-
<b>EBIT</b>	-	-	-	-	-	-
<b>Interest</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>7,375</b>
<b>Tax</b>	<b>(6,200)</b>	<b>(6,400)</b>	<b>(6,300)</b>	<b>(6,400)</b>	<b>(6,300)</b>	<b>(2,600)</b>
<b>Net Income</b>	<b>(11,800)</b>	<b>(11,600)</b>	<b>(11,700)</b>	<b>(11,600)</b>	<b>(11,700)</b>	<b>(4,775)</b>

**EXHIBIT 5**  
**Financial Data: Statutory Balance Sheets (in 000s) and Debt**

Note: Years 2017-2019 are actual results and years 2020-2022 are forecasts.

<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash	1,022,230	1,046,640	1,067,190	1,100,600	1,140,470	1,172,530
Bonds	6,133,380	6,279,840	6,403,140	6,603,600	6,842,820	7,035,180
Mortgages	3,066,690	3,139,920	3,201,570	3,301,800	3,421,410	3,517,590
Subtotal: Cash & Invested 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
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>12,100,400</b>	<b>12,594,600</b>	<b>13,187,800</b>	<b>14,063,800</b>	<b>15,182,600</b>	<b>16,597,500</b>
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
<b>Total Liabilities</b>	<b>11,456,200</b>	<b>11,941,000</b>	<b>12,524,000</b>	<b>13,385,200</b>	<b>14,505,300</b>	<b>15,931,500</b>
<b>Statutory Equity</b>	<b>644,200</b>	<b>653,600</b>	<b>663,800</b>	<b>678,600</b>	<b>677,300</b>	<b>666,000</b>
RBC	338%	333%	324%	312%	306%	287%
Debt Ratio	35%	34%	34%	33%	33%	11%
<b>Variable Annuity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
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
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>2,243,200</b>	<b>2,585,500</b>	<b>2,975,600</b>	<b>3,590,700</b>	<b>4,386,700</b>	<b>5,559,800</b>
Statutory Reserves	2,086,200	2,417,400	2,797,100	3,398,700	4,198,300	5,385,700
<b>Total Liabilities</b>	<b>2,086,200</b>	<b>2,417,400</b>	<b>2,797,100</b>	<b>3,398,700</b>	<b>4,198,300</b>	<b>5,385,700</b>
<b>Statutory Equity</b>	<b>157,000</b>	<b>168,100</b>	<b>178,500</b>	<b>192,000</b>	<b>188,400</b>	<b>174,100</b>
<b>Universal Life</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash, Invested and Other Assets	1,929,200	2,001,900	2,102,300	2,237,100	2,406,800	2,617,100
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>1,929,200</b>	<b>2,001,900</b>	<b>2,102,300</b>	<b>2,237,100</b>	<b>2,406,800</b>	<b>2,617,100</b>
Statutory Reserves	1,820,000	1,897,500	2,002,200	2,140,700	2,314,200	2,528,600
<b>Total Liabilities</b>	<b>1,820,000</b>	<b>1,897,500</b>	<b>2,002,200</b>	<b>2,140,700</b>	<b>2,314,200</b>	<b>2,528,600</b>
<b>Statutory Equity</b>	<b>109,200</b>	<b>104,400</b>	<b>100,100</b>	<b>96,400</b>	<b>92,600</b>	<b>88,500</b>

<b>Traditional Life</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash, Invested and Other Assets	936,000	966,100	1,005,700	1,050,500	1,101,500	1,158,100
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>936,000</b>	<b>966,100</b>	<b>1,005,700</b>	<b>1,050,500</b>	<b>1,101,500</b>	<b>1,158,100</b>
Statutory Reserves	900,000	928,900	967,000	1,010,100	1,059,100	1,113,500
<b>Total Liabilities</b>	<b>900,000</b>	<b>928,900</b>	<b>967,000</b>	<b>1,010,100</b>	<b>1,059,100</b>	<b>1,113,500</b>
<b>Statutory Equity</b>	<b>36,000</b>	<b>37,200</b>	<b>38,700</b>	<b>40,400</b>	<b>42,400</b>	<b>44,600</b>
<b>Term</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash, Invested and Other Assets	442,000	478,800	530,000	598,600	687,600	798,700
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>442,000</b>	<b>478,800</b>	<b>530,000</b>	<b>598,600</b>	<b>687,600</b>	<b>798,700</b>
Statutory Reserves	425,000	460,400	509,600	575,500	661,100	768,000
<b>Total Liabilities</b>	<b>425,000</b>	<b>460,400</b>	<b>509,600</b>	<b>575,500</b>	<b>661,100</b>	<b>768,000</b>
<b>Statutory Equity</b>	<b>17,000</b>	<b>18,400</b>	<b>20,400</b>	<b>23,100</b>	<b>26,500</b>	<b>30,700</b>
<b>Other</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash, Invested and Other Assets	6,300,000	6,312,300	6,324,200	6,336,900	6,350,000	6,363,800
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>6,300,000</b>	<b>6,312,300</b>	<b>6,324,200</b>	<b>6,336,900</b>	<b>6,350,000</b>	<b>6,363,800</b>
Statutory Reserves	6,000,000	6,011,800	6,023,100	6,035,200	6,047,600	6,060,700
<b>Total Liabilities</b>	<b>6,000,000</b>	<b>6,011,800</b>	<b>6,023,100</b>	<b>6,035,200</b>	<b>6,047,600</b>	<b>6,060,700</b>
<b>Statutory Equity</b>	<b>300,000</b>	<b>300,500</b>	<b>301,100</b>	<b>301,700</b>	<b>302,400</b>	<b>303,100</b>
<b>Corp</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash, Invested and Other Assets	250,000	250,000	250,000	250,000	250,000	100,000
Deferred Tax Asset	-	-	-	-	-	-
<b>Total Assets</b>	<b>250,000</b>	<b>250,000</b>	<b>250,000</b>	<b>250,000</b>	<b>250,000</b>	<b>100,000</b>
Debt	225,000	225,000	225,000	225,000	225,000	75,000
<b>Total Liabilities</b>	<b>225,000</b>	<b>225,000</b>	<b>225,000</b>	<b>225,000</b>	<b>225,000</b>	<b>75,000</b>
<b>Statutory Equity</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>

### **Asset Durations (as of Dec 31, 2019)**

	Cash	Bonds	Mortgages
Duration	0	10	6
Market to Book Ratio	1	1.08	1.04

### **Debt Issuance**

<b>Issue</b>	<b>Issue Date</b>	<b>Maturity Date</b>	<b>Rate</b>	<b>Face Amount</b>
Senior notes issue	1 Mar 2005	1 Mar 2024	8.50%	150,000
Senior notes issue	15 Jun 2014	15 Jun 2034	7.00%	75,000

## EXHIBIT 6

### Sensitivity Tests

Note: Years 2020-2024 are forecasts.

#### **Term Sensitivities (in 000s)**

<b>Baseline</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Sales	21,400	22,700	24,100	25,600	27,200
GAAP Earnings: In force	7,100	6,900	7,100	6,300	5,100
GAAP Earnings: New Business	15,500	17,000	16,400	26,200	28,000
GAAP Total Earnings	22,600	23,900	23,500	32,500	33,100
Statutory Capital	23,100	26,500	30,700	33,765	34,294

#### **Lapse Up 15%**

Sales	21,400	22,700	24,100	25,600	27,200
GAAP Earnings: In force	7,455	7,935	8,875	8,505	7,395
GAAP Earnings: New Business	15,190	15,470	13,776	20,174	19,600
GAAP Total Earnings	22,645	23,405	22,651	28,679	26,995
Statutory Capital	22,638	25,175	27,630	28,363	26,749

#### **Lapse Down 15%**

Sales	21,400	22,700	24,100	25,600	27,200
GAAP Earnings: In force	7,455	5,865	4,615	2,835	1,275
GAAP Earnings: New Business	15,190	16,830	16,400	26,462	28,560
GAAP Total Earnings	22,645	22,695	21,015	29,297	29,835
Statutory Capital	23,793	28,090	33,463	38,154	40,124

#### **Sales Up 15%**

Sales	24,610	26,105	27,715	29,440	31,280
GAAP Earnings: In force	7,100	6,900	7,100	6,300	5,100
GAAP Earnings: New Business	17,825	19,550	18,860	30,130	32,200
GAAP Total Earnings	24,925	26,450	25,960	36,430	37,300
Statutory Capital	23,562	28,090	33,770	38,830	40,810

#### **Sales Down 15%**

Sales	18,190	19,295	20,485	21,760	23,120
GAAP Earnings: In force	7,100	6,900	7,100	6,300	5,100
GAAP Earnings: New Business	13,175	14,450	13,940	22,270	23,800
GAAP Total Earnings	20,275	21,350	21,040	28,570	28,900
Statutory Capital	22,638	25,175	27,630	28,363	26,749

## Variable Annuity Sensitivities (in 000s)

<b>Baseline</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Sales	1,000,000	1,280,000	1,750,000	2,100,000	2,520,000
GAAP Earnings: In force	17,400	17,900	18,200	18,900	19,200
GAAP Earnings: New Business	5,800	14,350	30,500	39,500	50,900
GAAP Total Earnings	23,200	32,250	48,700	58,400	70,100
Statutory Capital	192,000	188,400	174,100	178,300	181,900
<b>Market Immediate Shock Up 15%</b>					
Sales	1,000,000	1,280,000	1,750,000	2,100,000	2,520,000
GAAP Earnings: In force	24,000	25,000	25,900	27,200	28,200
GAAP Earnings: New Business	5,800	14,350	30,500	39,500	50,900
GAAP Total Earnings	29,800	39,350	56,400	66,700	79,100
Statutory Capital	232,000	230,400	218,200	224,600	230,500
<b>Market Immediate Shock Down 15%</b>					
Sales	1,000,000	1,280,000	1,750,000	2,100,000	2,520,000
GAAP Earnings: In force	10,800	10,800	10,500	10,600	10,200
GAAP Earnings: New Business	5,800	14,350	30,500	39,500	50,900
GAAP Total Earnings	16,600	25,150	41,000	50,100	61,100
Statutory Capital	112,000	104,400	85,900	85,700	84,700
<b>Sales Up 15%</b>					
Sales	1,150,000	1,472,000	2,012,500	2,415,000	2,898,000
GAAP Earnings: In force	17,400	17,900	18,200	18,900	19,200
GAAP Earnings: New Business	26,700	37,100	56,000	67,200	80,600
GAAP Total Earnings	44,100	55,000	74,200	86,100	99,800
Statutory Capital	190,500	184,980	168,055	169,105	168,925
<b>Sales Down 15%</b>					
Sales	850,000	1,088,000	1,487,500	1,785,000	2,142,000
GAAP Earnings: In force	17,400	17,900	18,200	18,900	19,200
GAAP Earnings: New Business	19,720	27,413	41,395	49,640	59,585
GAAP Total Earnings	37,120	45,313	59,595	68,540	78,785
Statutory Capital	193,500	191,820	180,145	187,495	194,875

**EXHIBIT 7**  
**Financial Data: Inforce Statistics**

**Note: Years 2017-2019 are actual results and years 2020-2022 are forecasts.**

<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Death Benefit Inforce (in 000's)	103,119,763	105,583,877	108,447,334	120,000,000	127,697,000	134,299,000
Policy Contract Count	303,125	332,458	364,656	400,000	420,400	441,844

**Variable Annuity**

Death Benefit Inforce (in 000's)	12,355,000	11,843,000	11,519,000	18,000,000	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)	51,830,256	54,421,769	57,142,857	60,000,000	64,800,000	69,984,000
Policy Contract Count	32,652	34,938	37,383	40,000	42,400	44,944

**Traditional Life**

Death Benefit Inforce (in 000's)	28,571,000	28,571,000	28,571,000	30,000,000	32,400,000	32,400,000
Policy Contract Count	75,131	82,645	90,909	100,000	105,000	110,250

**Term**

Death Benefit Inforce (in 000's)	4,807,507	5,192,108	5,607,477	6,000,000	6,600,000	7,260,000
Policy Contract Count	150,263	165,289	181,818	200,000	210,000	220,500

**Other**

Death Benefit Inforce (in 000's)	5,556,000	5,556,000	5,607,000	6,000,000	6,600,000	6,600,000
Policy Contract Count	15,026	16,529	18,182	20,000	21,000	22,050

**EXHIBIT 8**  
**2019 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	96,460	10%	AAA	0.50%	0.000%	C1o
Corporate Bonds	1,061,060	50%	AA	2.50%	1.027%	C1o
High Yield Bonds	0	0%	BB	7.00%	3.634%	C1o
Commercial Mortgages	0	0%	A	5.00%	2.054%	C1o
Equities	154,336	8%			7.900%	C1cs
S&P Derivatives	115,752	6%			0.316%	C1o
Interest Derivatives	231,504	12%			0.316%	C1o
Credit Default Swaps	270,088	14%			3.634%	C1o
<b>Total</b>	<b>1,929,200</b>	<b>100%</b>				
Statutory Equity	109,200					

## **8 Snappy Life Insurance Company**

### **8.1 Company Profile**

#### **Background**

Snappy Life Insurance Company is not affiliated with or owned by RPPC. It is a company that might be considered an acquisition target or a competitor for one or more of the RPPC companies.

Snappy Life is a small life insurer domiciled in Wilmington, Delaware. It has been in existence since 2015. 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, "close" 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. They aggressively pursue any leads that come in.

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

## **8.2 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.

## **8.3 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.

## **8.4 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.

## **8A Snappy Financial Exhibits**

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

### **Summary of Operations**

	2019	2018	2017	2016
Premiums	11,140,952	6,266,786	8,355,714	4,700,089
Net investment income	1,765,159	1,165,005	768,903	507,476
<b>Total</b>	<b>12,906,111</b>	<b>7,431,790</b>	<b>9,124,617</b>	<b>5,207,565</b>
Death Benefits	1,847,279	1,477,823	1,182,259	945,807
Surrender Benefits	566,560	509,904	458,914	413,022
Increase in Reserves	4,561,141	3,013,197	2,157,807	1,539,494
<b>Total</b>	<b>6,974,980</b>	<b>5,000,924</b>	<b>3,798,979</b>	<b>2,898,324</b>
Sales Expenses	623,301	555,128	262,955	262,955
General Insurance Expenses	1,109,553	1,063,368	681,404	681,404
Insurance Taxes, Licenses, and Fees	417,434	333,947	267,158	213,726
<b>Total</b>	<b>2,150,288</b>	<b>1,952,443</b>	<b>1,211,517</b>	<b>1,158,086</b>
Net Gain from Operations before FIT	3,780,843	478,424	4,114,121	1,151,156
Federal Income Tax	945,211	119,606	1,028,530	287,789
<b>Net Income</b>	<b>2,835,632</b>	<b>358,818</b>	<b>3,085,591</b>	<b>863,367</b>

**Balance Sheet**

	2019	2018	2017	2016
<b>Assets</b>				
Investment Grade Bonds	29,186,733	24,213,205	20,893,643	18,488,513
Cash	1,410,466	1,692,452	1,949,362	2,179,759
Furniture and Equipment	125,678	130,047	117,042	105,338
Total	30,722,877	26,035,704	22,960,047	20,773,610
<b>Liabilities</b>				
Reserves for Life Contracts	28,447,108	23,885,967	20,872,770	18,714,964
Surplus	2,275,769	2,149,737	2,087,277	2,058,646

## **9 Seaplane Expeditions and Aviation Company (SEA)**

### **9.1 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 remain significant risks associated with seaplane operations. In spring 2019, three crashes occurred in Alaska within the space of one week, killing nine people and injuring twelve. Scrutiny from the U.S. National Transportation 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

### **9.2 SEA Company Profile**

Seaplane Expeditions and Aviation is not affiliated with or owned by RPPC. It is a company that might be considered an acquisition target or a strategic partner for one or more of the RPPC companies.

SEA started out as a one-man seaplane operation flying charters in Victoria, British Columbia, Canada in the 1950s. Bob Otterwein soon grew his business enough that he needed more pilots and more planes. By the 1970s, SEA had added a scheduled service flying customers between Victoria and Seattle. 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. Bob's experience with seaplane maintenance also led to a highly-respected seaplane repair and restoration operation. Bob Otterwein died in 1995, passing the ownership of SEA to his son Bill who now oversees operations, but does not personally pilot planes.

## **SEA Company Today**

SEA offers both 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.

## **9.3 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 to 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 be unable to replace them with new employees of like caliber, maintenance problems could become more frequent. This could, in turn, lead to aircraft being out of service for longer periods of time, leading to flight cancellations and unhappy customers.

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.

## **9.4 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 and not lose frequent customers.

## **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 that it can 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 must be constantly monitored. 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 while allowing the maintenance personnel to take the time needed to rebuild and restore planes to their best condition. The dual work of rebuilding customer planes and maintaining its own fleet keeps the maintenance personnel's skill level high so that they are able to both provide high quality service to repairing customer planes and prevent maintenance problems from occurring in SEA's own fleet.

## **9.5 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.

## 9A SEA Financial Exhibits

### Net Operating Statement (in 000s)

	<b>2019</b>	<b>2018</b>	<b>2017</b>
Passenger revenues	7,235	7,024	6,820
Freight, charters, aircraft sales, and other	3,685	3,722	3,760
<b>Total operating revenues</b>	<b>10,920</b>	<b>10,746</b>	<b>10,580</b>

### 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
<b>Total operating expenses</b>	<b>10,463</b>	<b>10,019</b>	<b>9,801</b>

<b>Operating income</b>	<b>457</b>	<b>728</b>	<b>778</b>
Interest expense, net	(123)	(126)	(129)
Income (loss) before income taxes	334	602	649
Income tax benefit (expense)	(117)	(211)	(227)
<b>Net income (loss)</b>	<b>217</b>	<b>391</b>	<b>422</b>

### Summary of Balance Sheet (in 000s)

	<b>2019</b>	<b>2018</b>	<b>2017</b>
<b>Assets</b>	<b>6,552</b>	<b>6,448</b>	<b>6,348</b>
Current Liabilities	2,532	2,458	2,387
Long Term Debt	1,365	1,400	1,436
<b>Total Liabilities</b>	<b>3,897</b>	<b>3,858</b>	<b>3,823</b>
<b>Owner Equity</b>	<b>2,655</b>	<b>2,589</b>	<b>2,525</b>