

Thai Airways International PCL: Hedging Strategies for Smooth Landing

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Abstract

On October 17, 2013, in the aftermath of the 3Q2013 Board Meeting of Thai Airways International Public Company Limited (“THAI”), Ms. Parn (hypothetical name), Financial Risk Manager, was asked by the THAI President, Dr. Sorajak Kasemsuvan, to prepare a financial risk management plan with which to fulfill the commitments that the President had made to the board of directors at the same meeting. The meeting had been a contentious one, with the chairman and board of directors having expressed much dissatisfaction with the report on the Company’s performance and the President’s performance during the first three quarter of the year 2013. They had been insistent in their call for prompt action by the President and management team to improve the airline’s performance.

In response to the board meeting, the President had stated that he was going to call for the internal meeting with the management team and discuss strategies to improve the airline’s performance. At the internal meeting, the President and the management team had analyzed that the losses resulted from the high competition in the airlines business, the global economic slowdown, the fuel price fluctuation, and the volatility of foreign currencies that were the sources of income and expenses of THAI.

By the end of the meeting, the President and management team had developed the strategies on various aspects to deal with such problems -- for example, to create advertisement and marketing campaign in order

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to be competitive in the airlines business, to reorganize the airlines routes in order to operate in the profitable environments, and to manage financial risk particularly fuel price risk and foreign exchange rate risk in order to protect the company's profits from the external factors and maintain financial health of the airline. In this latter connection, the President had assigned Ms. Parn to be responsible for conducting the financial risk management plan, including management of fuel price fluctuation in order to stabilize the company's fuel expense.

Keywords: Airline Industry, Thai Airways, Risk Management, Hedging Strategy

บริษัท การบินไทย จำกัด (มหาชน): ยุทธศาสตร์การป้องกันความเสี่ยง

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บทคัดย่อ

เมื่อวันที่ 17 ตุลาคม 2556 หลังจากการประชุมคณะกรรมการบริหาร ประจำไตรมาสที่ 3 ของ บริษัท การบินไทย จำกัด (มหาชน) (“การบินไทย”) กรรมการผู้อำนวยการใหญ่ บริษัท การบินไทย จำกัด ดร. สรจักร เกษมสุวรรณ ได้มอบหมายให้คุณปาน (นามสมมติ) ผู้จัดการฝ่ายบริหารความเสี่ยง ทางการเงิน (Financial Risk Manager) เตรียมแผนการบริหารความเสี่ยงทางการเงินไว้เพื่อ ทำการดำเนินการตามคำมั่นสัญญาที่กรรมการผู้อำนวยการใหญ่ได้ให้ไว้ต่อคณะกรรมการบริหารในที่ประชุม ในระหว่างการประชุมนั้นประธานใหญ่ และคณะกรรมการบริหารได้แสดงออกถึงความไม่พอใจ เป็นอย่างมากต่อรายงานผลประกอบการของบริษัทและการปฏิบัติงานของกรรมการผู้อำนวยการใหญ่ ในไตรมาสแรกของปี 2556 ผู้เข้าประชุมเรียกร้องให้ประธานกรรมการบริหารและคณะกรรมการบริหาร ดำเนินการปรับปรุงการปฏิบัติงานของสายการบินทันที

ตามข้อเรียกร้องจากที่ประชุมคณะกรรมการบริหาร กรรมการผู้อำนวยการใหญ่แจ้งว่า จะมีการประชุมภายในกับคณะกรรมการบริหารและจะอภิปรายถึงยุทธศาสตร์เพื่อปรับปรุงการปฏิบัติงาน ของสายการบิน ในที่ประชุมประธานกรรมการบริหารและคณะกรรมการบริหารที่กันว่าการสูญเสีย ยอดขายเกิดจากการแข่งขันสูงในธุรกิจการบิน ภาวะเศรษฐกิจโลกชะลอตัว ความผันผวน ของราคาน้ำมันเชื้อเพลิง และความอ่อนไหวของค่าเงินสกุลต่าง ๆ ซึ่งเป็นแหล่งที่มาของรายได้ และค่าใช้จ่ายของสายการบินไทย

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ในช่วงท้ายของการประชุม ประธานกรรมการบริหารและคณะกรรมการบริหารได้สร้างยุทธศาสตร์การทำงานขึ้นมาโดยรวมกลยุทธ์จากหลาย ๆ ด้านเพื่อใช้ในการเพิ่มรายได้และลดรายจ่าย เช่น การโฆษณาและส่งแคมเปญด้านการตลาดให้สามารถแข่งขันในธุรกิจการบินได้ การปรับปรุงเส้นทางการบินในเส้นทางที่สร้างกำไร และการจัดการความเสี่ยงทางการเงินโดยเฉพาะความเสี่ยงในเรื่องราคาน้ำมันเชื้อเพลิงเพื่อปักป้องผลกำไรของบริษัทจากตัวแปรภายนอกและรักษาความแข็งแกร่งทางการเงินของสายการบิน ในเวลาต่อมาประธานกรรมการบริหารได้กำหนดให้คุณปานรับผิดชอบต่อการดำเนินการตามแผนการบริหารความเสี่ยงทางการเงิน รวมถึงการจัดการเรื่องความผันผวนของราคาน้ำมันเชื้อเพลิงเพื่อสร้างเสถียรภาพของค่าใช้จ่ายผลกำไรของบริษัท

กรณีศึกษานี้ได้กล่าวถึง ภาพรวมโดยสังเขปและประวัติของการบินไทย ตามด้วยบทสรุปของข้อมูลเกี่ยวกับสถานการณ์ของธุรกิจการบินทั่วในระดับโลกและระดับประเทศไทย (ไทย) รวมทั้งโอกาสและการเตรียมการเพื่อรับมือกับอุปสรรคต่าง ๆ ในธุรกิจจากพันธมิตรด้านการบินรายหลักทั้ง 3 ราย มีข้อมูลโดยละเอียดเกี่ยวกับผลประกอบการของการบินไทยระหว่างปี 2555 รวมทั้งสถิติเบรียบเทียบรายได้ ค่าใช้จ่าย กำไร (ขาดทุน) และสัดส่วนทางการเงินที่สำคัญ (เช่น อัตรากำไรสุทธิ อัตราผลตอบแทนจากสินทรัพย์ และอัตราส่วนหนี้สินต่อสินทรัพย์) ย้อนหลัง 3 ปี การปฏิบัติการด้านการเงินของการบินไทย รวมถึงรายได้และโครงการค่าใช้จ่ายของการบินไทยที่แสดงว่าเหตุใดผลกำไรถึงเประบ้าง ต่ออัตราแลกเปลี่ยนค่าเงินตราต่างประเทศและความผันผวนของราคาน้ำมันเชื้อเพลิง

นักศึกษาจะต้องอนุมานบทบาทของคุณปานซึ่งเป็นผู้จัดการฝ่ายบริหารความเสี่ยง ด้านการเงินและเตรียมแผนบริหารความเสี่ยงทางการเงินตามที่กรรมการผู้อำนวยการใหญ่ได้มอบหมาย ให้โดยพิจารณาถึงความเสี่ยงชนิดต่าง ๆ ที่มีผลกระทบต่อการดำเนินธุรกิจของการบินไทย รวมถึงความผันผวนของราคาน้ำมันเชื้อเพลิงอากาศยาน ความเสี่ยงในอัตราแลกเปลี่ยน และความผันผวนจากอัตราดอกเบี้ย คุณปานจะต้องเตรียมการเพื่อนำเสนอแผนการป้องกันความเสี่ยงนี้ต่อประธานกรรมการบริหารและคณะกรรมการบริหารสำหรับการประชุมในครั้งต่อไปตอนท้ายสัปดาห์หน้า ดังนั้น คุณปาน จึงต้องเริ่มดำเนินการทันที

คำสำคัญ: ยุทธศาสตร์การบิน บริษัทการบินไทย การบริหารความเสี่ยง กลยุทธ์การป้องกันความเสี่ยง

It was during the Thai Airways board meeting held at the Head Office of Thai Airways on October 17, 2013, when the highlight agenda was raised to the management team. It had been a year since the new President Sorajak Kasemsuvan had joined Thai Airways on October 9, 2013. It was now the time for the chairman and board of directors to express their views on the performance evaluation of President Sorajak for his first six-month period started from January to June 2013.

“The year 2012 has been another challenging year for THAI Airways due to global economic slowdown stemming from European debt crisis, intense competition amongst low cost airlines, exchange rate fluctuation, and the volatility of oil prices.”

- Mr. Ampon Kittiampon,
Chairman of Thai Airways International PCL.

The board of directors observed that President Sorajak had passed the performance evaluation; however, they noted that his performance concerning profits was lower than the expectation, despite a rise in the number of incoming tourists during the indicated period. Accentuating the board's concern was management's report on company operating results for the third quarter and for the last nine months of the year 2013 (i.e., January through September), which revealed net losses of 6.1 billion baht and 6.3 billion baht, respectively. This represented a troubling decline from the same period of the previous year (January 1 to September 30, 2012), when the company had realized a profit of 5.6 billion baht. The management analysis showed that the losses resulted from a combination of high competition in the aviation business, the global economic slowdown, appreciation of the Thai baht, and volatility of major currencies that were the company sources of revenue. (Only 30% of Thai Airway's total ticket revenue came from tickets purchased with Thai baht currency, with the remaining 70% of ticket revenue derived from tickets sold in over 50 foreign currencies.)

The board expressed concern that President Sorajak's tenure as president might hang in balance, absent greatly improved performance in meeting profit expectations. The board thus enjoined him to redouble his efforts toward increased profit generation and to prepare a proposal explaining plans to improve revenue and decrease expenses.

Having been duly put on notice of the board's expectation, President Sorajak called for an internal meeting with the management team in order to discuss the preparation of the proposal for improved operating results that the board had directed be submitted at their next scheduled meeting. President discussed with responsible managers from various department ways to boost revenue by improving service quality, applying new marketing strategies, launching new promotions, and ways to control expenses by improving efficiency in various aspects.

At the end of the meeting, the President then expressed his view that any emerging strategic initiatives not only enable Thai Airways, through improved product and service or marketing strategy to sustain growth and remain a leading global airline, but also, very importantly, maintain the company's financial health. To achieve latter overarching objective, one of the most crucial tasks was to manage financial risk in order to prevent losses from currencies fluctuation and unexpected expenses from jet fuel price fluctuation. Effective financial risk management, he averred, would sustain the profit performance of Thai Airways over the long-term. Therefore, the President assigned the Financial Risk Manager, Ms. Parn (hypothetical name), to prepare a financial risk management plan, with a special focus on managing fluctuations of jet fuel prices, and to present the plan to him for integration with other departmental plans for presentation to the board at their next scheduled meeting on October 24, 2013.

Thai Airways International Public Company Limited: Overview & Developmental Highlights

Thai Airways International Public Company Limited (THAI) was the national carrier of the Kingdom of Thailand. It operated domestic, regional and intercontinental flights radiating from its home base in Bangkok to key destinations within Thailand and around the world (See Exhibit 1: THAI Global Routes). THAI was founded on May 1, 1960 (See Exhibit 2: The 1959-2010 Developmental Highlights of THAI) as a joint venture between Thailand's domestic carrier, Thai Airways Company (TAC), and Scandinavian Airlines System (SAS), which provided operations, managerial and marketing expertise, along with training assistance, aimed at building a fully independent national airline within the shortest possible time.

Over the course of the following decade and a half, the new airline grew rapidly, and profitably, in both passenger traffic and freight carried. For example, by the end of its fifth year of existence, THAI recorded its first annual profit of 3.9 million Baht. By the end of its tenth year, its annual profit reached U.S. \$1 million, and the airline achieved its ambition of serving more destinations around the Asia region than any other carrier. During its second decade, THAI started to expand its business further by launching intercontinental service to major cities, including Sydney, London, and Frankfurt. By the end of its fifteenth year of operations, THAI's international routes had leapt to twenty destinations in sixteen countries. With each successive five-year period, corporate profits kept pace with the growth in passenger and freight revenues. The joint venture had proved successful well beyond initial expectations.

Beginning in the mid-1970s, Thai government promulgated a policy whereby the government, on behalf of the Thai people, would assume majority ownership of joint-venture businesses that were considered to be among "the commanding heights of the economy." Thai Airways – the country's "flag carrier" and "face to the world" – fell into that category. Negotiations thus began between the Thai government and SAS to set the terms and conditions of the government's assumption of majority ownership of the Company. These discussions were successfully concluded in late-March 1977, paving the way for the Thai government to acquire 85% of the shares in Thai Airways Company on April 1, 1977. Thus did Thai Airways become majority-owned by the Thai people, through their government, while the SAS remained as minority owner, holding 15 % of the shares.

The Airline continued to grow and prosper over the course of the subsequent fifteen years following the Thai government's assumption of majority control. Several new domestic and international routes were opened, thereby advancing THAI's objective of providing air travel services to all major domestic and international destinations. To further strengthen the carrier's brand in the international market, where competition from the frequently much larger flag carriers from other nations was intense, the management of THAI undertook a number of measures aimed at enhancing the airline's overall competitive posture. These endeavors ranged from instituting a Training Centre, housing A300 and B747 flight simulators, with fully equipped cabin mock-up and classrooms, to expanding its customer base by launching its first transpacific flights to Seattle and Los

Angeles in 1980, to being among the first airlines to dedicate separate cabins for premium passenger service through the establishment of the Royal Executive Class in 1983.

These and other management initiatives went a long way toward increasing THAI's stature in the air travel marketplace. Indeed, by the late-1980s, THAI ranked 17th in size among world airlines (World Air Transport Statistics, International Air Transport Association – IATA, 1985) and was frequently found on lists of the world's "best" airlines, as rated by both business and leisure travelers. However, maintaining the airline's competitive edge in the continuous battle for passenger (and freight) revenue was becoming an expensive proposition. For example, periodic fleet upgrades to newer, larger, or more fuel-efficient aircraft were enormously expensive undertakings. Notwithstanding the fact that majority ownership by the Thai government afforded the national carrier reasonably ready access to funds for such capital investments, and on favorable terms, Thai governmental officials were increasingly of the view that THAI – like highly successful Singapore Airlines – should compete in the capital markets for access to the funds required to maintain and expand their operations.

Thus, on June 25, 1991, the Thai Cabinet approved a resolution authorizing THAI to list its shares on the Stock Exchange of Thailand (SET), with a first issue of 100 million shares at a par value of 10 Baht per share. Of those 100 million shares, five million shares were reserved for THAI employees, with the remaining 95 million shares offered to the public. The listing of THAI shares on July 19, 1991, with a registered share capital of 14,000 million Baht made the THAI share listing the largest in the history of the SET. Moreover, the THAI public offering of shares was the single largest such offering ever undertaken in Thailand. With the success of its initial public offering, THAI not only greatly enhanced its ability to continue to hold its own in the international market, but also both greatly expanded the number of shareholders committed to the carrier's continued success and made employee's and the Company's well-being more coincidental by enabling employees to become shareholders.

After being listed on the stock exchange, THAI continued to strengthen its competitiveness by creating customer loyalty through the establishment of a new rewards program for frequent fliers -- i.e., the highly innovative Royal Orchid Plus, which attracted more than 200,000 members from 115

countries during its inaugural year, 1993. Subsequent to the success of this marketing campaign, in the following year, THAI launched its Royal Orchid Plus Gold Card for super frequent flyers. The Royal Orchid Plus received worldwide attention; and over the subsequent decade, THAI experienced a good pace of continuous growth. During its 35th anniversary year (1995), THAI carried 12.8 million passengers, compared to 62,000 passengers during its first year of existence.

Despite the accomplishment of these milestones in the years immediately following the public listing, THAI quickly surmised that it could ill afford to rest on its laurels. First, the global airline industry itself continued to be under severe pressure, as the combination of high operating costs, gyrating demand, and increasingly intense competition constituted ongoing challenges. Second, the speculative attacks that precipitated the Thai currency crisis that began during the first quarter of 1997 had the effect of severely curtailing domestic, as well as regional, air travel demand as the crisis quickly spread from Thailand to envelop nearly all of Southeast Asia. Faced with an increasingly uncertain revenue picture, THAI executives were constrained to undertake a re-evaluation of the airline's strategic plans. With the Baht under severe devaluation pressure as the crisis deepened and spread, THAI could no longer be assured of access to the resources required to maintain a "go-it-alone" posture – at least not in the immediate future. Strategic alliances became the new imperative.

Thus, THAI executives entered into discussions with other major international airlines aimed at revenue-enhancing and cost-shaving cooperative arrangements that would benefit the group as a whole. The discussions produced fruit. On May 14, 1997, THAI and four other leading international airlines – namely, Lufthansa German Airlines, United Airlines, Scandinavian Airlines System, and Air Canada – officially announced the formation of "Star Alliance", an integrated worldwide air transport network. Partnership between the five carriers formed the strongest airline alliance in the history of commercial aviation with the most extensive network covering major destinations around the world. Being part of this strong global network facilitated and formalized the sharing of aviation resources among member airlines. As a result, it enabled THAI to offer its passengers a full complement of worldwide services and destinations.

During the early-2000s, THAI continued to expand its business in a variety of facets ranging from launching new routes around the region and over different continents to offering creative marketing programs comprising Golf and Honeymoon packages. In the remarkable year 2002, THAI received a record four Gold Awards from the Pacific Asia Travel Association (PATA) for excellence in various aspects of promotion and destination marketing. To maintain its strategic position, THAI decided to redefine and redesign its entire corporate identity and brand image with a comprehensive program for the year 2005 which covered everything from a new aircraft livery, redecoration of cabin interiors, crew uniforms, and all in-flight equipment. Another remarkable year for THAI was when its Royal First Class Lounge in Suvarnabhumi Airport was voted “Best in the World” in the 2007 annual Skytrax World Airline Survey.

Alas, after experiencing a decades-long period of prosperity, in 2008, THAI encountered a sudden reversal of fortune with the onset of severe financial difficulties precipitated by a dramatic downward trend in travel demand – a nearly unprecedented decline that resulted from, among other factors, the worsening global financial crunch triggered by the financial crisis that originated in the United States in late-2007, as well as escalating political unrest in Thailand. In addition, THAI’s operating expenses had markedly increased due to the upward trend in oil prices. In consequence of these factors, THAI experienced a loss of 21,379 million Baht during 2008, compared with a 4,368 million Baht profits during 2007. This was the airline’s worst loss since the Asian Financial Crisis of 1997. Concurrently, THAI racked up a range of other dubious honors including a 16-year low in its share price and a ratings downgrade that triggered the deferral of a planned bond issue.

In order to solve the problems, during the year 2009, the Company’s Board of Directors committed to turnaround measures such as reducing remuneration and benefits for management teams, restructuring its debt profile, acquiring new aircrafts, improving service quality, rationalizing routes and destinations, and enhancing technical and maintenance efficiency. These drastic measures resulted in Thai Airways being able to turn around the net loss in 2008 to a net profit of 7,344 million baht in the year 2009. This performance enabled the company to celebrate the milestone of its historic 50th anniversary in the year 2010 with the net profits of 14,792 million baht, which was the highest profit in its fifty years of operation. In addition, its stock price peaked at 57.75 baht, from the lowest level of 6.40

Baht in early 2009).

But, as fate would have it, additional storm clouds appeared on the horizon. More specifically, Thai Airways encountered its toughest year yet in 2011, when it suffered a net loss of 10,197 million baht due to heavy external pressure, including the 39% increase in world oil prices over 2010, on average the highest in history; severe natural disasters (a tsunami) in Japan, its major market; year-end major flooding in Thailand in 2011; and, the ongoing European financial crisis. Although the Company was able to turn around its operating performance and post a net profit of 6,510 million baht in the year 2012, there were more challenges ahead, including the continuing global economic slowdown, intense competition from low-cost airlines, exchange rate fluctuation, and the continuing high volatility of oil prices.

The Global and Local Airlines Industries: Status, Issues, and Trends

Like most other flag carrier airlines in nations around the globe, THAI competed in both the local (national) and the international arenas. THAI executives therefore had to maintain awareness of the contours and dynamics of the airline industry at both levels.

The Global Airlines Industry: Current Status, Salient Issues, and Noteworthy Trends

For all practical purposes, the global airlines industry was coterminous with the membership of the International Air Transport Association (IATA) that was formed in 1945 and was now comprised of 240 member airlines, accounting for 84% of international air traffic. As the “industry association” for airlines, IATA provided leadership for the industry by, among other things, promulgating various types of regulations pertaining to all aspects of airline operation and providing information and analytical reports concerning industry performance, outlook, and opportunities and threats. Thus, the same forces that impinged on IATA could be said to impact the global airlines industry as a whole. Several facets concerning the industry were of particular importance. (See Exhibit 3: IATA Industry Outlook for the Year 2013)

Growth Punctuated by Periods of Acute Financial Distress

Air travel grew at an average rate of 7% per year during the period 1990-2000, however, airlines' profitability had been closely tied to economic growth and trade. Therefore, this overall growth had been accompanied by periods of acute financial distress. For example, during 1990-1991, the industry suffered losses from both worldwide declines in demand precipitated by the Gulf War and excess capacity in the market due to airlines having over-ordered aircraft in the boom years of the late 1980s.

The financial distress precipitated by these events resulted in IATA's member airlines suffering cumulative net losses of U.S. \$20.4 billion in the years 1990 through 1994. The subsequent responses taken by individual airlines and groups of airlines to ensure their survival and prosperity soon spread industry-wide, and indeed have continued to shape competitive dynamics in the business.

Efficiency as the New Operational Imperative

Beginning in earnest in the 1990s and continuing through the first decade of the 21st century, airlines pursued a variety of approaches aimed at optimizing operating margins. Many mounted aggressive cost-cutting programs, cutting back on in-flight amenities as well as ground services heretofore made available to airline passengers. Others pursued a concerted focus on reducing capacity growth, thereby curtailing the periodic outbreaks of fratricidal fare wars that left all the participants poorer. Still others focused on increasing load factors (i.e., percentage of occupied seats to total available seats), thereby attempting to spread the monumental fixed costs of flying an airplane from Point A to Point B, in order to squeeze more marginal revenue out of each flight. (It is noted in passing that one European airline executive's near-desperate quest for increased marginal revenue per flight prompted him to propose – to subsequent public ridicule – the installation of pay toilets on all his airline's flights. To date, he has not done so.)

Globalization and Consolidation as the Way Forward

The combination of these factors led, in 1997, to the founding of the first global alliance of airlines, the Star Alliance, with THAI as one of the founding members. Other carriers soon followed suit. Within three years of the launching of the Star Alliance, two other competitor groupings had

emerged (and for similar reasons) – “SkyTeam” and “OneWorld”, each of which was comprised of a different constellation of major players in the industry. (See Exhibit 4: The Airlines Alliances.) The participants in each of these strategic alliances were very much of the conviction that the future prosperity of the industry lay in the ability of individual airlines to offer passengers a virtually “seamless” travel experience from any point on the globe to any other point. By linking their networks, members of these alliances not only expanded access to their customers, but also created the enabling infrastructure for seamless global travel.

Consolidation of the industry was another trend that was propelled by airline experiences during the 1990s. As a means of effecting maximum coordination between two or more erstwhile competitors, consolidation was variously viewed by industry participants either as an adjunct to the strategic alliances represented by SkyTeam, Star Alliance, and OneWorld (see Table 1: The Three Largest Airlines Alliance) or as an alternative approach to achieving a comparable end result – i.e., creating a seamless travel experience, globally, for their passengers. Thus, while mergers and acquisitions within the airline industry had periodically occurred over the years, beginning in the 1990s and continuing into the first decade of the 21st century, these phenomena were occurring with an ever-increasing frequency, particularly among carriers in the United States and the European Union.

Table 1: The Three Largest Airlines Alliance

	Star Alliance	Skyteam	Oneworld	Total
Founded	1997	2000	1999	NA
Members (As of October 2013)	28	19	13	NA
Market share (As of March 2013)	29.3%	24.6%	23.2%	22.9%

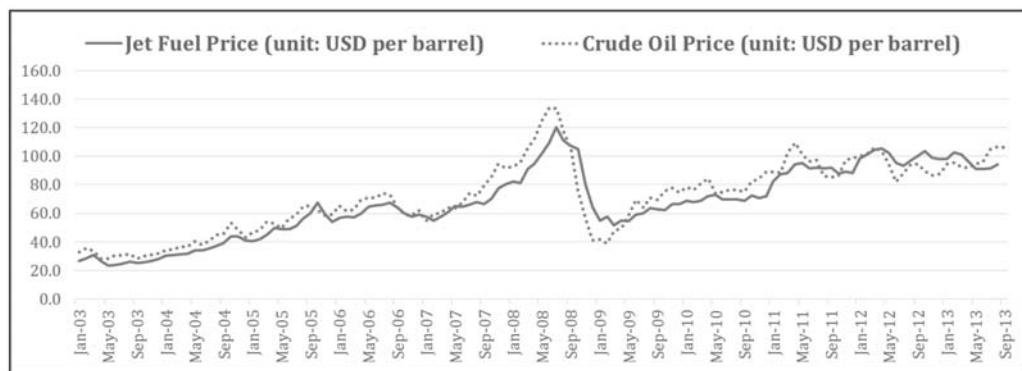
Sources: iata.org, oneworld.com, skyteam.com, staralliance.com (Access date: October 9, 2013)

Since late-2008, the commercial airline industry had been under tremendous pressure from a number of serious threats – threats ranging from the global economic slowdown triggered by the financial crisis that originated in the United States in late-2007 to disease outbreaks (that dampened passenger traffic to affected areas of the globe), to threats from terrorism (with increased airports security negatively impacting air travel due to the increased “hassle factor” of getting from the airline check-in counter to the gate). All these factors led to a 2.9% drop in overall travel

demand in the year 2009. Although the industry began to recover during the years 2010-2012, passenger transport outlook for 2013 as forecast by IATA was expected to grow by only 4.5%, as compared to 6.0% in 2012, due to a deceleration of economic growth and oil price fluctuation, the major drivers of airlines industry performance.

During 2012, there had been a continued global economic slowdown resulting from the European public debt crisis and the continuing woes of the United States economy, leading to the revision of global economic growth rate by the International Monetary Fund (IMF) to 3.3% from the previous year's 3.5%. Because the economic activities worldwide were intricately connected, emerging markets such as China and India, which relied heavily on the export to Europe and the United States, were also affected.

Due to the concern about European economic problems, the ongoing global economic slowdown, political instability in petroleum exporting countries, and the nuclear crisis between Iran and western countries, fuel prices in the global market remained high, fluctuating and unpredictable. Volatility of jet fuel prices, as a major factor in airlines' cost of operation, directly affected the airlines' business performance. The price of fuel had continued to fluctuate while still climbing along its long-term upward trend (See Figure 1: Crude Oil Price and Jet Fuel Price for the Period 2003-2013. Crude oil and jet fuel prices series are available in the accompanying Excel file). During the previous 12 months covered by September 2012-September 2013, jet fuel prices ranged between U.S. \$85 – 104 per barrel; and, IATA projected that the average jet fuel price would be U.S. \$130 per barrel for the year 2013.



Sources: Bureau of Transportation Statistics – BTS (Coordination between the Research & Innovative Technology Administration – RITA and the U.S. Department of Transportation - DOT, U.S. Energy Information Administration – EIA)

Figure 1: Crude Oil Prices and Jet Fuel Prices for the Period 2003-2013

The Local (Thai) Airlines Industry: Current Status, Salient Issues, and Noteworthy Trends

The local or domestic airlines industry in Thailand was comprised of those airlines that ferried passengers to and from Thailand and airlines that carried passengers between cities in Thailand. For the year 2012, there were 104 airlines providing international flights to Thailand with a total of 38.5 million passengers (13.2% increase over the previous year). Out of the total passengers, Thai Airways carried 12.5 million passengers or equivalent to 32.5% market share, which was the largest market share. For domestic routes, there were ten airlines, including Thai Airways, Bangkok Airways, SGA Airline, Happy Air, Business Air, Kan Air, Solar Air, Thai Air Asia, Nok Air, and Orient THAI Airline. In the year 2012, there were 15.9 million passengers on domestic routes, and Thai Airways had the highest market share, 32.6%, which was equivalent to 5.2 million passengers. The closest runner-up, Thai Air Asia, held only 7.1% of market share.

In addition to the impacts of trends and forces that affected the global airlines industry (see discussion in section above), Thai Airways, as a participant in the local airlines industry, had to contend with several other factors. Particularly salient among these were the impacts of a major external crisis and an unexpected natural disaster.

Impacts of the External Crisis Originating in the Euro Zone.

The external crisis was the global economic slowdown that arose from the euro-zone sovereign debt crisis that began in late 2009 and intensified in 2010 and thereafter. The crisis did not only cause adverse economic effects for the euro-zone countries, but also had a spillover impact on the global economy and financial markets. Paradoxically, however, according to the Thai Government Public Relations Department (PRD), the global economic slowdown had little impact on tourist arrivals to Thailand, given that the overall growth of visitor arrivals to Thailand from all European countries remained strong. Table 2 shows a summary of the overall figures for January-May 2012, with the percentage changes over the same period of 2011.

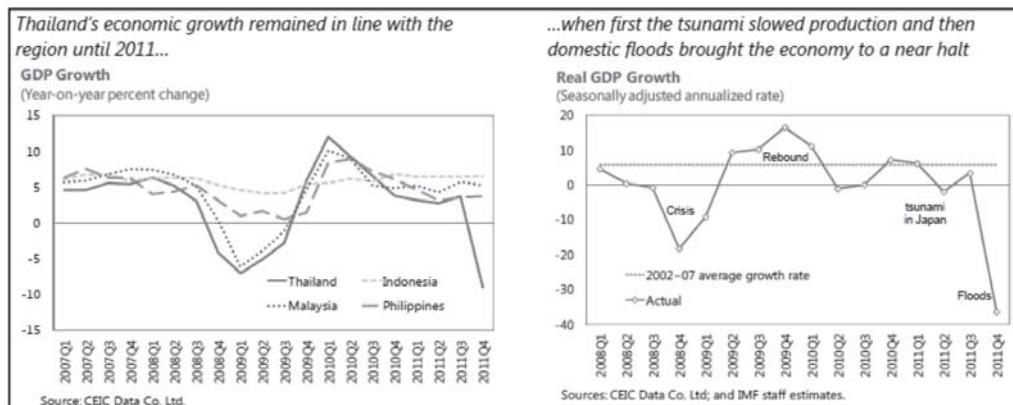
Table 2: The Arrivals to Thailand by Nationality

Region	Number of Visitors	Market Share	Growth
East Asia	4,510,488	50.84%	5.02%
Europe	2,690,783	30.33%	10.91%
South Asia	508,666	5.73%	5.58%
Americas	467,221	5.27%	10.92%
Oceania	394,500	4.45%	10.06%
Middle East	228,606	2.58%	-2.01%
Africa	71,666	0.81%	30.46%

Sources: thailand.prd.go.th/view_news.php?id=6362&a=4 (Date access: October 12, 2013)

The Unprecedented Flood of 2011.

The unexpected natural disaster was the historic flood in Thailand from 25 July 2011 to 16 January 2012. Floodwaters covered 65 of the country's 77 provinces. According to the World Bank, as of December 2011, the total damage was reported at 1.425 trillion Baht (about U.S. \$45.7 billion). The 2011 GDP growth rate fell to 0.1 percent, with a contraction of 8.9 percent (YoY) in Q4 alone [see Figure 2: Thai Economy Hit by Floods].



Source: International Monetary Fund (IMF) Country Report No. 12/124. June 2012

Figure 2: Thai Economy Hit by Floods

Due to the devastating flood in central Thailand and northern Bangkok during the last quarter of 2011, the number of passenger movement in the last quarter of 2011 has declined by 23.24% and 6.96% in November and December, respectively (compare to the same month of the previous year). After a number of measures to stimulate tourism in both the public and private sectors have boosted, the number of passengers was increasing, with an average growth rate of 13.49% during January-December 2012 (see Table 3: AOT Air Traffic - Passenger Movements at Suvarnabhumi Airport, Thailand).

Table 3: AOT Air Traffic – Passenger Movements at Suvarnabhumi Airport, Thailand

Month	FY 2011	FY 2012	FY 2013	% Change	
				2011-2012	2012-2013
Oct.	2,747,004	2,851,937	3,067,916	3.82	7.57
Nov.	2,853,751	2,190,429	3,382,136	-23.24	54.41
Dec.	3,136,984	2,918,747	3,610,585	-6.96	23.70
Jan.	3,248,780	3,329,168	3,611,404	2.47	8.48
Feb.	3,092,680	3,244,993	3,451,994	4.92	6.38
Mar.	3,253,722	3,514,708	3,796,611	8.02	8.02
Apr.	3,016,843	3,391,306	3,488,866	12.41	2.88
May.	2,756,126	3,042,155	3,166,572	10.38	4.09
Jun.	2,671,980	3,004,536	3,172,369	12.45	5.59
Jul.	3,125,786	3,311,743	3,364,100	5.95	1.58
Aug.	3,075,786	3,404,677	3,581,470	10.69	5.19
Sep.	2,805,984	3,054,416	3,176,980	8.85	4.01
Total	5,785,426	37,258,815	40,871,003	4.12	9.69

Source: airportthai.co.th/corporate/th/investor-relations (Date Access: October 12, 2013)

Further, the local airline industry was not immune to the impact of rising fuel prices that had afflicted the industry as a whole at points in time in recent decades. Dramatic jumps in fuel prices, often in combination with other factors (e.g., economic slowdowns, excess capacity, etc.) could precipitate losses for the local airline industry just as they occasionally did for the global sector of the market. In fact the Syrian crisis and disappointing growth in several key emerging markets have led to an increase in IATA forecast for oil price. Crude oil, from which jet fuel is refined, jumped 12 percent since IATA's last forecast on June 2013 to U.S. \$104.36 per barrel on September 2013. Jet fuel costs, which IATA estimated to account for approximately 31 percent of airline expenses for the year 2013, and which IATA recently had forecast would rise from U.S. \$124 to 130 per barrel, warranted the attention of all airline participants in the Thai segment of the international air travel market.

To cope with the vagaries of the fuel market, nearly all carriers in both the global and local segments of the airlines industry had adopted, or were in the process of adopting, measures such as “hedging” to provide some shield against sudden bursts of price increases. But, there was no gainsaying the fact that the continued upward march of fuel price volatility was likely to be determinative in terms of individual airlines’ ability to remain viable competitors, as well as the overall business and financial performance of the local airlines industry as a whole.

Thai Airways International PCL: Operating & Financial Performance Results

During the October 17, 2013 board meeting, Thai Airways management reported to the board of directors (see Exhibit 5: Thai Airways Management Team & Organization Chart) that although in the year 2011-2012 many factors (e.g., the global economic slowdown, particularly in Europe and the United States; foreign exchange-rate fluctuations; high jet fuel prices; and natural disasters) had adversely affected the airline industry, Thai Airways had been able to recover sufficiently to generate net profits of 6,510 million Baht, compared to the 10,162 million Baht net loss in the year 2011. Even so, this performance did not approach even half of the net profits of 14,792 million Baht realized in the year 2010. However, because of the stable interest-bearing debt to equity ratio during the past two years, TRIS Rating affirmed Thai Airways’ company rating and senior debentures rating of A+ (see Table 4: Thai Airways Operating and Financial Highlights 2010-2012).

According to the Thai Airways annual report, the year 2010 marked the highest profits in the airline’s fifty years of operation, while the year 2011 net loss had mainly been due to the severe flooding and the heretofore unprecedented 39% escalation in world oil prices. This evidence strongly showed how oil price fluctuation exercised great influence in Thai Airways’ operating and financial performance.

Table 4: Thai Airways Operating and Financial Highlights 2010-2012

	2012	2011 (Restated)	2010 (Restated)
Income Statement (Million Baht)			
Total Revenue	213,530	194,342	184,270
Total Expense	206,426	202,259	167,613
Net Profit (Loss)	6,510	(10,162)	14,792
Financial Ratios (Percent)			
Net Profit Margin	3.0	(5.2)	8.0
Return on Assets	2.3	(3.6)	5.2
Debt to Equity	2.3	2.3	1.9
Return on Equity	9.8	(14.6)	24.1
Shares (Baht)			
Earnings Per Share	2.85	(4.67)	8.06
Dividend Per Share	0.50	-	1.25

Source: Thai Airways International PCL Annual Report 2012

(Financial Statements of Thai Airways International PCL and Peers, 2010-2012 are available in the accompanying Excel file.)

Fuel and oil expense was the main expense of Thai Airways and it had a tendency to increase both in size and in proportion year by year. If the trend persisted, the fuel and oil expenses were expected to be at least 40% of the total expenses in the upcoming year. Thai Airways expenses were significantly exposed to the fluctuation in the fuel and oil price volatility (see Table 5: Expenses Structure of Thai Airways 2010-2012).

Table 5: Expenses Structure of Thai Airways 2010-2012

Unit: Million Baht	2012	2011	2010
Fuel and oil	80,179	76,389	56,519
Employee benefit expenses	32,087	31,009	34,525
Flight service expenses	21,321	20,428	19,064
Depreciation and amortization	20,524	19,989	20,236
Aircraft maintenance and overhaul costs	12,600	11,698	9,675
Inventories and supplies	9,530	9,042	9,046
Selling and Advertising expenses	6,833	5,885	6,103
Crew expenses	5,707	5,485	5,092
Lease of aircraft and spare parts	4,552	5,429	4,331
Insurance expenses	893	733	675
Other operating expenses	8,741	7,692	6,056
Other non-operating expenses	3,459	8,480	3,709
Total Expenses	206,426	202,259	175,031

Source: Thai Airways International PCL Annual Report 2012

Based on Table 5, fuel and oil expense for the year 2012 amounted to 80,179 million Baht, an increase of 5.0% over the previous year. According to the Annual Report, the main reasons were the increases in both average jet fuel price and fuel consumption, which had risen 1.2% and 0.5%, respectively. Therefore, the stronger U.S. dollar compared to the Thai baht affected the increase in THAI's fuel expense in baht terms. However, the current policy had generated 3,764 million Baht from fuel hedging.

Apart from the oil price fluctuation, another important factor that had profound impact on the performance of Thai Airways was the foreign exchange fluctuation. As of December 31, 2012, Thai Airways' route network spanned 73 destinations in 34 countries worldwide with 924 flights per week -- of which 472 weekly flights to 43 destinations in 19 countries were regional routes, 144 weekly flights to 20 destinations in 15 countries were intercontinental routes, and 308 flights per week to 10 domestic destinations were local routes. Because the major sources of revenue for Thai Airways came from passenger revenue, particularly from regional and intercontinental routes, Thai Airways revenue was in the form of many different currencies, which significantly exposed the airline to foreign exchange currency fluctuations (see Table 6: Revenue Structure of Thai Airways 2010-2012).

Table 6: Revenue Structure of Thai Airways 2010-2012

Unit: Million Baht	2012	2011	2010
Passenger revenue			
Regional	65,767	58,303	52,885
Intercontinental	53,810	55,970	52,885
Domestic	14,734	13,798	12,346
Fuel surcharges	28,827	24,098	24,139
Other revenue from passengers	2,349	2,526	2,396
Total passenger revenue	165,486	154,696	144,652
Non-passenger revenue			
Freight, Mail, and other activities	35,446	35,953	35,564
Revenue from subsidiaries	8,114	389	369
Other income	4,484	3,304	3,685
Total non-passenger revenue	48,044	39,646	39,618
Total Revenue	213,530	194,342	184,270

Source: Thai Airways International PCL Annual Report 2012

Thai Airways International PCL: Risk Management Committee

Due to numerous internal and external risks over the past few years, in the year 2012, the Company's Board of Directors had established a Risk Management Committee which was charged with the responsibility of setting risk management policies to ensure that management and employees had identified relevant risks, assessed and assigned risk priority and established measures to prevent, control and manage corporate and departmental risk at an acceptable level. Risk management activities performed by the Risk Management Department were reported to the Risk Management Committee and the Company's Board of Directors on a quarterly basis. The Risk Management Committee's Authority and Responsibilities were as follows:

1. Provide advice and consultation on risk issues and the management of such risks spanning all areas of the Company's operations.
2. Exercise authority to summon relevant persons and documents to clarify matters under consideration.
3. Execute other matters as assigned by the Board of Directors.

Thai Airways International PCL: Financial Risk Factors

For the year 2013, the Risk Management Committee had identified the three major financial risk factors that would have substantial impact on Thai Airways performance, including risks associated with the volatility of jet fuel price, risks associated with fluctuation of foreign exchange rates, and risks associated with fluctuation of interest rates.

1. Risk Associated with Volatility of Jet Fuel Price

Fuel price fluctuation depended on supply and demand within the context of the global economic situation and political uncertainty worldwide. Fuel price had direct impact on Thai Airways operating results, as was self-evident from the fact that fuel and oil expenses constituted 40% of Thai Airways' operating expenses in the year 2012. Consequently, the Company was taking a more proactive approach in regards to jet fuel price hedging to mitigate the effects of this fluctuation. The Thai Airways Risk Management Committee stated that risk management for jet fuel price would not be done for speculation or profits but rather as a hedging tool or buffer against the impact that the fuel price had on Thai Airways' operating cost. For 2012, hedging contracts had been designed to cover the Company's budgeted fuel consumption. Meanwhile, the Company had also been compensated by a fuel surcharge that was determined by the condition of the market and the competition, the fluctuation of jet fuel prices, market response to the surcharge, and anticipated changes in the estimated cost.

Further, the Company had undertaken measures to improve efficiency in fuel management and fuel stock management. Under approval authority of Fuel Price Risk Management Committee, Thai Airways' policy specified that fuel hedging was to be conducted on a regular basis at not lower than 20 percent and not more than 80 percent of annual fuel consumption. If the hedging was more than 80 percent or lower than 20 percent of annual fuel consumption, it had to be approved by the Company's Board of Directors. The duration of each contract was not to exceed a period of 18 months. The airline had been implementing financial contracts that established the lowest and highest prices of jet fuel, whereby Thai Airways would incur the difference in U.S. dollars if the jet fuel price fell below the lowest price but would be compensated the difference if the jet fuel price rose higher than the highest price. As of December 31, 2012, Thai Airways still had an obligation

from fuel price hedging until December 2013 in the amount of 12,180,000 barrels of jet fuel (84 percent of its annual fuel consumption) and for which the average lowest and the highest prices were at U.S. \$106.50 and 117.00 per barrel.

2. Risk Associated with Fluctuation of Foreign Exchange Rates

Thai Airways generated revenues in Thai Baht and more than 40 foreign currencies -- mainly in USD, EUR, and JPY -- as well as incurred expenses mainly in USD and Thai Baht (see Table 7: Thai Airways Total Passengers Breakdown by Region, and Table 8: Thai Airways Revenue, Expense, and Outstanding Loan Breakdown by Currency). Fluctuations in exchange rates affected revenues, expenses, and long-term liabilities denominated in foreign currencies. Currently the airline's risk management department managed the currencies by categorizing cash flow currencies into the big four main currencies (THB, USD, EUR, and JPY) to reduce the impact of fluctuations. Then, long forward contracts on currencies were used in order to reduce the cash flow volatility. The natural hedging approach had also been used to mitigate the Company's foreign currency exposure by matching expenses and revenues of the same denomination, and avoiding the volatility of foreign exchange profit/loss in the financial statements through the combination of foreign currency and Thai baht borrowing. The aim was to enable the company to use the surplus currencies to support debt payment.

Table 7: Thai Airways Total Passengers Breakdown by Region

Domestic	23.80%
Northern America	31.30%
Western America	11.10%
Southern America	9.30%
Europe	11.30%
Australia	5.50%
Indo-China	4.70%
Middle East	1.50%
North Pacific	0.90%
Africa	0.40%
Non-Schedule	0.10%

Source: Thai Airways International PCL, PowerPoint presentation file, 2Q2013 Analyst Briefing at Thai Airways International PCL Head Office, September 11, 2013

Table 8: Thai Airways Revenue, Expense, and Outstanding Loan Breakdown by Currency

Currency	Revenue	Expense	Outstanding Loan
THB	25%	22%	49%
JPY	11%	3%	14%
USD based	36%	66%	1%
EUR based	28%	9%	36%

Source: Thai Airways International PCL, PowerPoint presentation file, 2Q2013 Analyst Briefing at Thai Airways International PCL Head Office, September 11, 2013

Thai Airways had also employed the VaR software program¹ to determine funding strategies and establishing risk management guidelines through the use of financial tools, such as cross currency swaps (CCS) and forward contracts. The CCS contracts were used for a portion of Baht-denominating debts to adjust more of its loan payment to be based on the currency of its cash flow surplus to avoid the fluctuation risk from interest rates. The payment of floating rates Baht-denominating debts using THBFIX reference was made in fixed rate Yen-denominated debts at the amount of THB 1,000 million, as a new item in addition to its 2011 payment. Thus, after the currency swap contract, the outstanding balance of the company's debt in the four major currencies USD:EUR:JPY:THB were in the ratio of 1 : 36 : 14 : 49, as of December 31, 2013. Year 2012 operating results showed that Thai Airways recorded a gain on foreign currency exchange in the amount of 3,213 million Baht compared to a loss of THB 2,428 million Baht in the year 2011.

3. Risk Associated with Fluctuation of Interest Rates

Interest rate risk arose from changes in market interest rates which had an effect on the Company's present and future operating results. (See Table 9: Thai Airways Financial Liabilities 2010-2012 and Table 10: Thai Airways Weighted Average Interest Rate 2012.)

Table 9: Thai Airways Financial Liabilities 2010-2012

Unit: Million Baht	2012	2011	2010
Current liabilities (excluding current portion of long-term liabilities)	58,739	51,803	57,581
Long-term liabilities			
Debentures	34,677	27,797	29,335
Liabilities under financial leases	71,550	57,895	64,327
Long term borrowing	52,459	56,607	52,618
Total long-term liabilities	158,686	142,299	146,280
Other liabilities			
Employee benefits obligation	11,082	10,632	9,326
Other non-current liabilities	5,771	6,275	6,989
Total other liabilities	16,853	16,907	16,315
Total liabilities	234,278	211,009	220,176

Source: Thai Airways International PCL Annual Report 2012

Table 10: Thai Airways Weighted Average Interest Rate 2012

Unit: Million Baht	USD	JPY	EUR	THB	Total
Weighted average rate	7.07%	1.15%	1.54%	4.62%	
Floating					
< 1 year	-	2,637.29	6,017.78	8,823.37	17,478.44
1 to 5 years	-	6,881.77	24,974.50	33,680.89	65,537.16
> 5 years	-	7,988.01	16,617.00	4,054.74	28,659.75
Fixed					
< 1 year	1,225.26	-	1,283.43	3,956.79	6,465.48
1 to 5 years	-	-	5,149.55	18,295.00	23,444.55
> 5 years	-	-	-	17,100.00	17,100.00
Total	1,225.26	17,507.07	54,042.26	85,910.79	158,685.38

Source: Thai Airways International PCL Annual Report 2012

To manage the volatility of interest rates during the year 2012, Thai Airways entered 14 Interest Rate Swap (IRS) contracts for its THB-, JPY-, and EUR-denominating debts to change the floating interest rate of the debts to a fixed rate. The three IRS contracts pertained applied to THB debts had a total amount of 11,536 million Baht; the two IRS contracts that pertained to JPY debts and the nine IRS contracts that pertained to

EUR debts had a total amount of 15,992.72 million Baht. Following these undertakings, Thai Airways' debt ratio as between a fixed interest rate and a floating interest rate was 50:50 as of December 31, 2012. The two JPY contracts were to expire in 2013, while one THB debt would expire in 2016; the other two THB debt were to expire in 2017, while the five EUR contracts would expire in 2017. The other four EUR contracts were slated to expire in 2018.

Currently, both President Sorajak and the Risk Management Committee believed that the existing foreign exchange rate risk and interest rate risk management were effective and that Thai Airways could continue with the existing practice by simply performing natural hedges on the foreign exchange rate risk and rolling over all the Interest Rate Swap contracts. Therefore, President Sorajak had assigned Ms. Parn, the Financial Risk manager to analyze Thai Airways risk exposures by focusing on the most crucial financial risk stemming from *fuel price fluctuation* and then prepare a financial risk management plan to offer guidelines for implementation. The plan should start with an overview of Thai Airways exposure to each type of financial risk, followed by the alternatives for management of fuel price fluctuation, comparative analysis of different alternatives, and identification of the optimum appropriate solution for Thai Airways to manage fuel price risk.

A Propitious Time for Planning

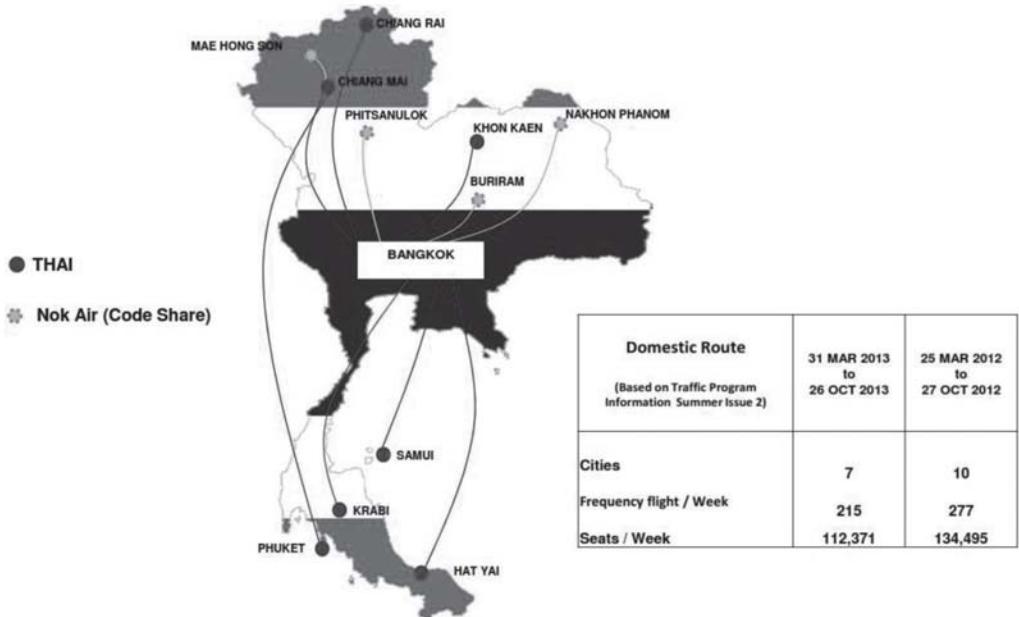
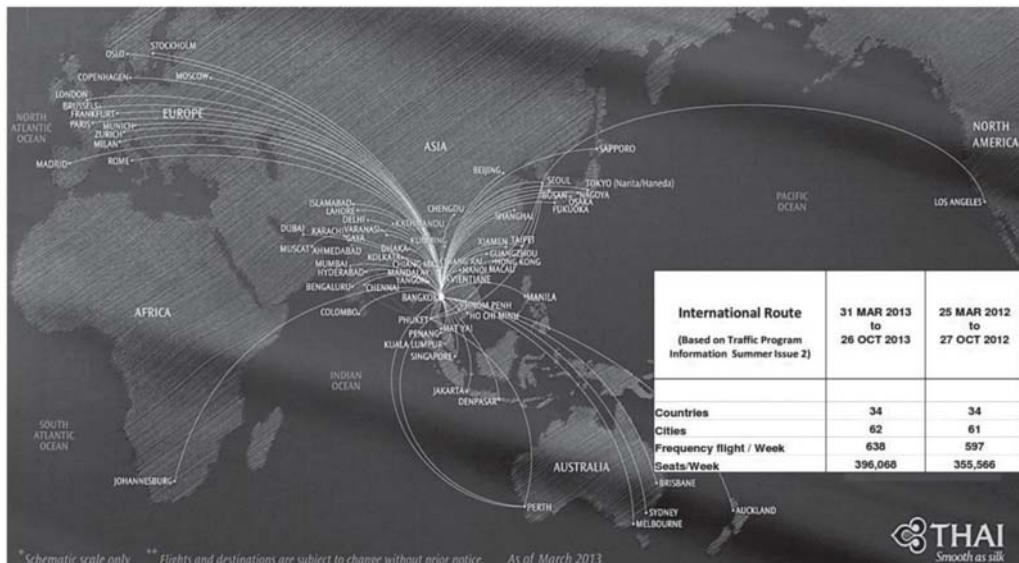
With ongoing global economic uncertainty and all the external financial risks, the board of directors, at its October 17, 2013 meeting, had charged the President of Thai Airways with the task of turning the national airline around, following its recently reported losses.

Ms. Parn recalled President Sorajak's interview on the first day at Thai Airways when he was asked about what he wanted to see with Thai Airways. Sorajak's answer was that "I want to bring back glory to THAI to make it an airline everybody will be proud of." A year later, however, the labour union of Thai Airways felt compelled to make a written plea to board Chairman Amporn and President Sorajak that management come up with clear plans to improve the company's financial performance after the 6.3 billion baht loss incurred in the first nine months of the year. The union also planned to submit the issue to Transport Minister Chadchart Sittipunt the following week for his consideration. The President of the labour union demanded that the management team develop a plan to restore the airline's profitability, adding

that the loss had damaged the morale of THAI employees, who were concerned that it would mean no pay rises or bonuses for them despite their hard work.

At the internal meeting, as the President Sorajak shifted the discussion from issues such as service quality, marketing strategies, brand management, etc. to the strategic task of enhanced risk management, he turned to Ms. Parn and invited her to share her thinking about how to preempt and minimize the impact of fuel price fluctuation on the airline's operations. In response, Ms. Parn put forth the broad contours of a plan to implement fuel hedging, alongside fuel surcharges, to stabilize fuel expense. It was then that the President, impressed with her idea, assigned her the task of crafting her plan into a detailed proposal that could be combined with restructuring plans from other managers and then reported to the board of directors at its last meeting of the year in December. At the end of the meeting, Ms. Parn assured President Sorajak that she would submit the requested financial risk management plan to him by the end of the following week.

Exhibit 1: Thai Airways International PCL Global Routes



Source: Thai Airways International PCL, PowerPoint presentation file, 2Q2013 Analyst Briefing at Thai Airways International PCL Head Office, September 11, 2013

Exhibit 2: The 1959-2010 Developmental Highlights of THAI

1959 - In August 1959, Thai Airways Company (TAC) entered into a partnership with the Scandinavian Airlines System (SAS) to create a dynamic new international airline for Thailand. The Thai Government through TAC held 70 percent and SAS 30 percent of shares in Thai Airways International Company Limited, registered with a capital investment of USD 100,000 (2 million baht).

1960 - On May 1st, a propeller-driven Douglas DC-6B with a full load of 60 passengers took off from Bangkok International Airport en route to Hong Kong, Taipei and Tokyo. This first flight launched THAI's services, which during the first year, linked Bangkok with 11 Asian destinations and utilised a fleet of 3 DC-6B aircraft.

1967 - The one millionth passenger was carried. THAI pioneered its highly profitable Bali route. This insightful move established THAI as an innovative airline, supportive of regional development.

1971 - THAI's first intercontinental route was launched, linking Bangkok to Sydney via Singapore. A new Cargo Terminal was opened at Bangkok International Airport. In its first year, it handled around 2,000 tons of cargo.

1973 - Long haul services to Frankfurt and London were inaugurated developing Bangkok as a major hub and gateway between Europe and Asia. THAI managed the Bangkok International Airport's spacious new Tax Free shop.

1976 - THAI's flights connecting Bangkok to Amsterdam, Paris and Athens, launched the year before, grew quickly in popularity. Passengers flying from Europe stopped over in Bangkok on their way to Australia or to other Asian cities.

1977 - After 17 successful years, the partnership between TAC and SAS ended. SAS shares were sold back to the Thai Airways International was now entirely Thai owned and managed. Backed by a routenet covering 3 continents, experienced staff and full operational support, Thailand's flag carrier was ready to take on the world.

1980 - With the arrival of the jumbo jets, THAI was now ready for trans-Pacific services to North America. Los Angeles became THAI's gateway city into the US. At the same time THAI increased its operations to the Middle East.

1981 - THAI pioneered the North Pacific Bangkok-Seattle route. It expanded its routenet into the People's Republic of China by serving Canton. During that year, the company's share capital was increased to 1,100 million baht.

1988 - THAI and its parent company, TAC, merged into a single airline, bringing together domestic and international air operations. With the addition of TAC's 11 aircraft, the combined fleet now consisted of 41 aircraft. The routenet comprised 48 cities in 35 countries around the world plus a network of 23 cities in Thailand.

1989 - THAI launched "Discover Thailand" promotional fares to stimulate inbound travel and further developed "Eurng Luang" domestic tours as well as gave full support to "Thailand Arts and Crafts". A brand new Flight Kitchen, one of the largest and most modern in Asia, was opened at Bangkok International Airport, with an initial production capacity of 20,000 meals per day.

1990 - There was much to celebrate on THAI's 30th anniversary. It was the second most profitable year in the Company's history. THAI recorded a profit before-tax of 6,753.6 million baht 8.3 million passengers were carried, the highest number ever recorded. Early that year, THAI took delivery of its first Boeing 747-400, which remains the largest commercial aircraft in passenger service.

1991-1992 - THAI became a full partner of AMADEUS Global Distribution System, a vast computerised network for reservations information that linked 98 airlines and over 47,500 travel agents worldwide. THAI's privatisation process began. 100 million of the company's shares were listed on the stock Exchange of Thailand, the country's largest share.

1994 - On 20 May 1994, THAI was formally registered as Thai Airways International Public Company Limited. Three new destinations were added: Shanghai, Lahore and Nakhon Phanom (domestic).

1997 - THAI and 4 of the world's major airlines joined together to form the Star Alliance, the largest airline consortium in the world. Being part of this strong global network enabled THAI to offer its passengers a world of services and destinations. In 1997 THAI provided major sponsorship and official carrier support to the 13th Asian Games in Bangkok.

2000 - THAI continues to grow and flourish. These first forty years of THAI have told of a remarkable success story. This year and in the years ahead, THAI will continue to operate with insight and innovation, expanding its network to cover more international and domestic destinations, providing passengers with increasingly modern and comfortable aircraft, saving the Kingdom of Thailand and the people of the world with the highest standards of air service and safety. The legend that is THAI continues on.

2004 - THAI signed a contract with InterBrand Co., Ltd. to develop the Company's new Corporate identity, THAI introduced new Premium Customer Service for its First and Business Class passengers, offering added travel convenience and comfort. THAI invested 39% shares in "Nok Air", a joint ventured low cost airline.

2005 - THAI celebrated 45th year of sucessful operations with the launch of its new identity, focusing on three main 3 main themes : High Trust, World Class and Thai Touch. The New Corporate Identity embodies the concept of Ayatana, the 6 sensory perceptions of sight, taste, smell, hearing, touch and feelings from the heart. To expand THAI's network, THAI signed a code share agreement with Air New Zealand and Air Madagascar. Social contribution activities this year included an opening of a library and providing financial aid for HIV infected children at Grada House, Lopburi province.

2007 - The first full year of operations at Suvarnabhumi Airport since its opening on September 28, 2006. THAI recommenced its domestic services at Don Muang Airport. As a result, THAI operated THAI city Air Terminal to provide an alternative check-in point for domestic passengers without flight connections flying out of Don Muang Airport. In order to facilitate passengers seeking to go on pilgrimage for merit making, THAI launched flights to Hyderabad, Bodgaya and Varanasi. Also, THAI launched direct services from Bangkok-Johannesburg.

2008 - THAI commenced direct flight to Samui Island, Surat Thani. THAI received numerous awards especially its number 2 ranking for its First Class Lounge from Skytrax. Thai also received the Best Intercontinental Airline award for the 4th consecutive year from the Norwegian travel lindustry. THAI took the initiative in revamping the company's website in favor of the customer's convenience both in reservation process and information access at the facility.

2009 - THAI introduced new destination – Oslo, Norway which is the 59th destination in 34 countries operated by THAI in response with the increasing demand of passengers travelling to several destinations in worldwide. This year was regarded to be the leading year of THAI with numerous awards from the various international institutions, for instance; the second rank under the category of Best Asian Carrier from Gold Awards and the second rank in Best Intercontinental Airlines regarding to the announcement in Grand Travel Award Ceremony. THAI also received Trusted Brands Platinum Award 2009 from Reader's Digest for 10 consecutive years. In addition, THAI's Royal First Class Lounge at Suvarnabhumi Airport ranked the Best in Skytrax 2009.

2010 marks a historic milestone in the history of THAI as we celebrate 50 successful years as the National Flag Carrier of the Kingdom of Thailand, while playing a key role in bringing Thailand to the world arena. Despite domestic challenges and natural disasters overseas, THAI was able to maintain confidence among its creditors, shareholders and customers, while building stability and positioning itself among the world's leading carriers. While the operating environment of the commercial airline industry remains in a constant state of flux and subject to a broad range of risks, THAI's "Mission TG100" vision places special emphasis on three core values - being customer oriented, being competitive and being dynamic. Improvements were made at every customer touch point in response to customers' demand as well as to further enhance the customer experience and overall satisfaction. Service improvements at Suvarnabhumi Airport, including both ground services and food and beverage services at THAI's premium class lounges, have earned THAI recognition as the Best Ground Service and Best First Class Lounge by Skytrax. To further improve aircraft fleet efficiency, THAI will be acquiring 15 new aircraft and have a long-term fleet plan was also drafted to acquire modern and fuel efficient aircraft with the target of decreasing the average age of the fleet from 11.9 years in 2010 to 8.5 years in 2017. Proactive fuel management and fuel hedging have been exercised alongside the use of fuel surcharges to minimize the impact of the fluctuation in fuel costs which constitute the largest portion of THAI's operating expenses. THAI is the first Southeast Asian airline to sign a cooperation agreement with IATA implementing carbon offset programs for passengers.

Source: <http://www.thaiairways.com/about-thai/company-profile/en/developments-and-advancements-of-thai.htm>

Exhibit 3: IATA Industry Outlook



Global commercial airline industry outlook

June 2013 update

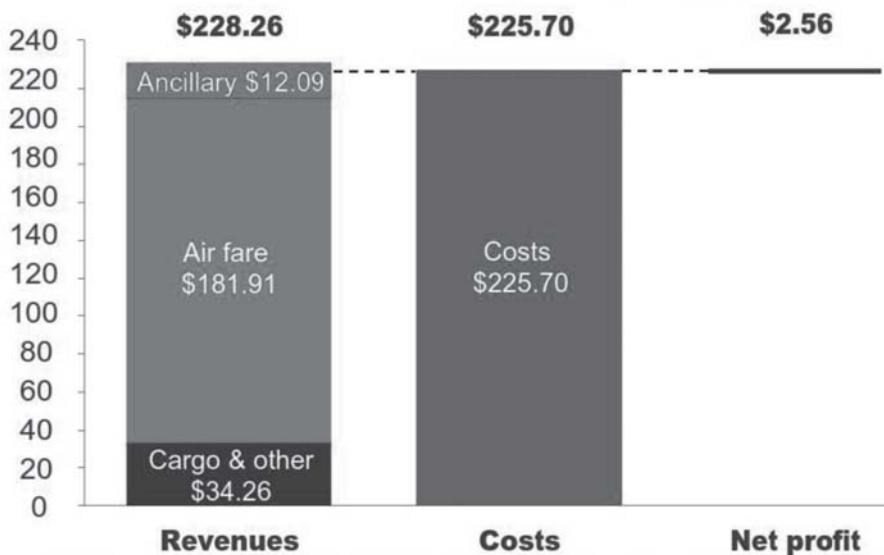
Brian Pearce
Chief Economist
www.iata.org/economics

To represent, lead and serve the airline industry



Last year profits were \$2.56 per passenger

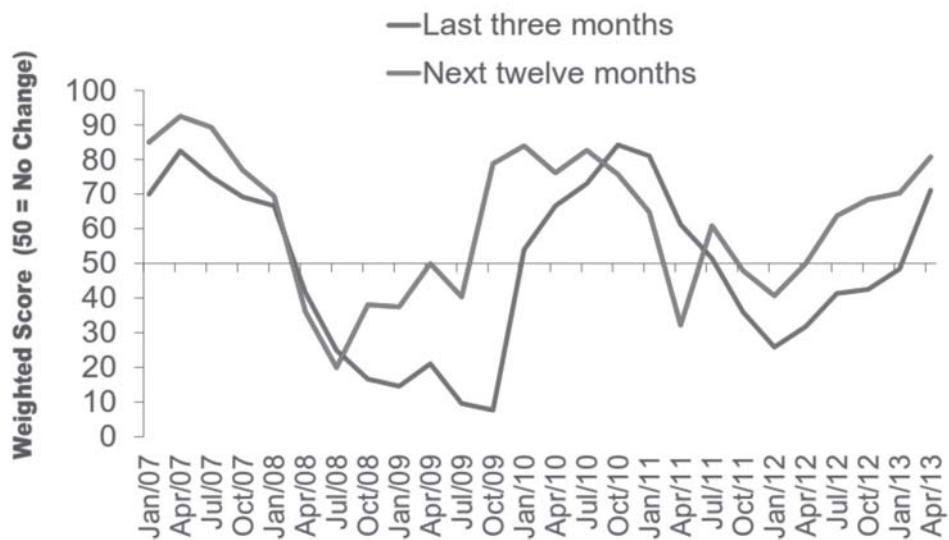
2012 worldwide airline financial results per departing passenger



Sources: Ancillary revenues from Idea Works 2012 estimate, other data IATA. Costs include operating items and debt interest.

Airline business confidence has risen

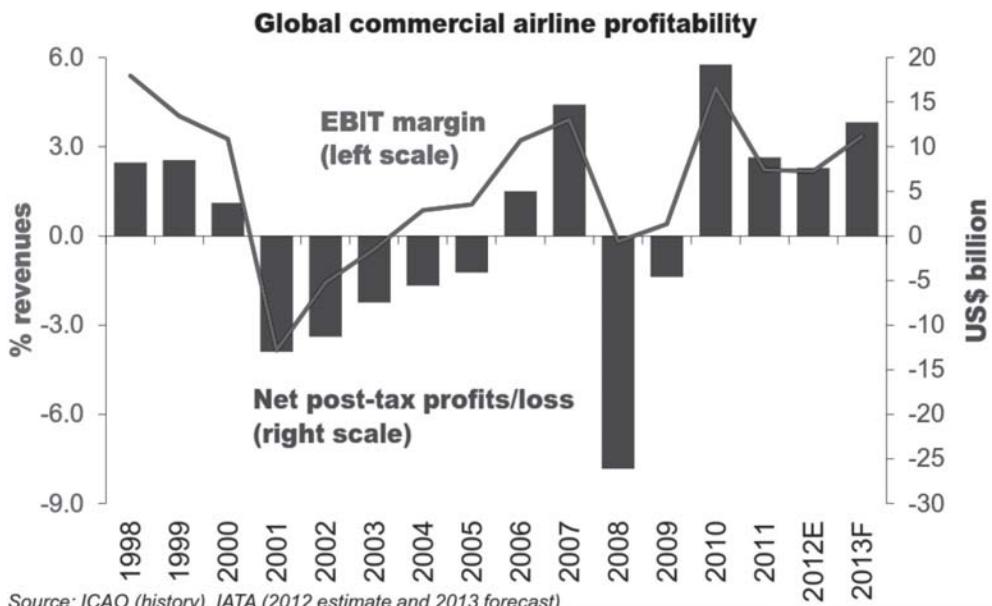
Survey question: What are your expectations for the change in profits?



But business conditions remain tough



Outlook for profitability is improving slowly



Still some way to go before returns 'normal'

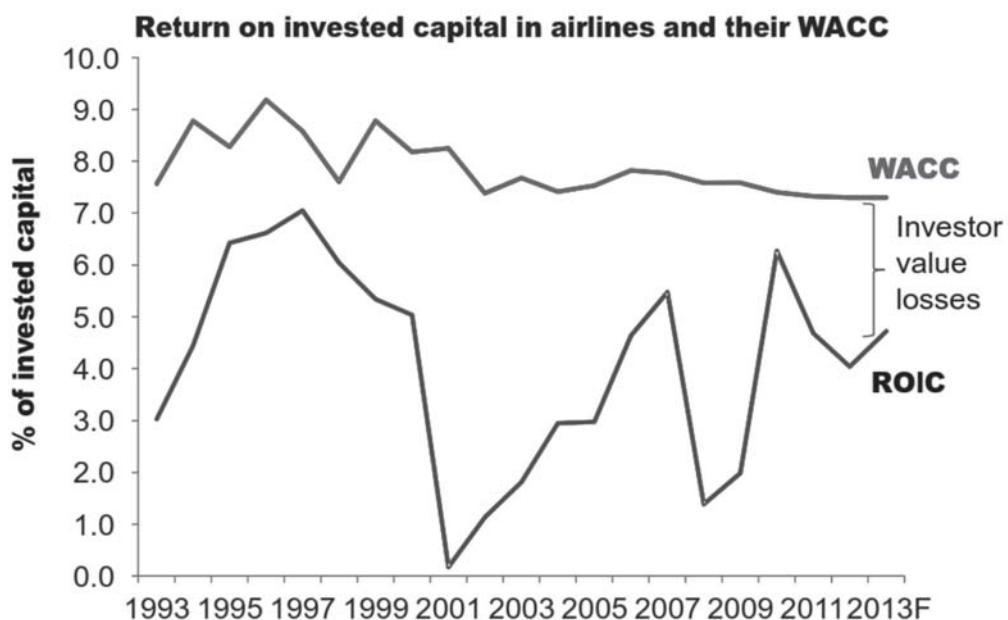


Exhibit 4: The Airlines Alliances

An airline alliance is an agreement between two or more *airlines* to cooperate on a substantial level. The three largest passenger alliances are the *Star Alliance*, *SkyTeam* and *Oneworld*. Alliances provide a network of connectivity and convenience for international passengers and international packages. Alliances also provide convenient marketing branding to facilitate travelers making inter airline *codeshare* connections within countries. This branding goes as far as to even include unified *aircraft liveries* among member airlines.

Benefits can consist of:

- An extended and optimized network: this is often realised through *code sharing* agreements. Many alliances started as only a code sharing network.
- Cost reduction from sharing of:
 - Sales offices
 - Maintenance facilities
 - Operational facilities, e.g. catering or computer systems.
 - Operational staff, e.g. ground handling personnel, at check-in and boarding desks.
 - Investments and purchases, e.g. in order to negotiate extra volume discounts.
- Traveler benefits can include:
 - Lower prices due to lowered operational costs for a given route.
 - More departure times to choose from on a given route.
 - More destinations within easy reach.
 - Shorter travel times as a result of optimised transfers.
 - A wider range of *airport lounges* shared with alliance members
 - Faster mileage rewards by earning miles for a single account on several different carriers.
 - *Round-the-world tickets*, enabling travelers to fly over the world for a relatively low price.

Membership and market data for the largest airline alliances (as of March 2013)

	Star Alliance	SkyTeam	Oneworld	Rest of Industry
28 members	19 members	13 members	Founded 1999	(selected major nonaligned carriers)
Founded 1997	Founded 2000			
Passengers per year	649 million	506 million	303 million	1,223 million ^[7]
Destinations	1,329	1,024	850	4,000 (total destinations) ^[7]
Revenue Billion US\$ (€)	160.9 (124)	97.9 (90)	89.875 (85)	4651,325 (3550) ^[7]
Market share	29.30%	24.6%	23.2%	22.9%
Current Participants	Members	Members	Members	Africa
(JP) Adria Airways	(SU) Aeroflot	(AB) Air Berlin	(AH) Air Algérie	
2004	2006	2012	(W3) Arik Air	
(A3) Aegean Airlines	(AR) Aerolíneas Argentinas	(AA) American Airlines	(AT) Royal Air Maroc	
2010	2012	Founder	(TU) Tunisair	
(AC) Air Canada	(AM) Aeroméxico	(BA) British Airways		
Founder	Founder	Founder	Asia	
(CA) Air China	(UX) Air Europa	(CX) Cathay Pacific	(KC) Air Astana	
2007	2007	Founder	(AI) Air India	
(NZ) Air New Zealand	(AF) Air France	(AY) Finnair	(HU) Hainan Airlines	
1999	1999	1999	(EK) Emirates	
(NH) All Nippon Airways	Founder	1999	(EY) Etihad Airways	
1999	(AZ) Alitalia	(IB) Iberia Airlines	(GF) Gulf Air	
(OZ) Asiana Airlines	2001–2009 as Alitalia- 1999	2001–2009 as Alitalia- 1999	(IR) Iran Air	
2003	rejoined 2009	2007	(9W) Jet Airways	
(OS) Austrian Airlines	(CI) China Airlines	(LA) LAN Airlines	(PR) Philippine Airlines	
2000	2011	2000	(PK) Pakistan International Airlines	
(AV) Avianca	(MU) China Eastern Airlines	(MH) Malaysia Airlines	(HY) Uzbekistan Airways	
2012	2007	Airlines		
(SN) Brussels Airlines	2011	2013	Airlines	
2009	(CZ) China Southern Airlines	(QF) Qantas	(PR) Philippine Airlines	
(CM) Copa Airlines	2001	Founder	(EI) Aer Lingus	
2012	2007	(QR) Qatar Airways	(BT) airBaltic	
(OU) Croatia Airlines	(OK) Czech Airlines	Airlines	(V3) Carpatair	
2004	2001	2013	(CY) Cyprus Airways	
(MS) EgyptAir	(DL) Delta Air Lines	(RJ) Royal Jordanian	(LY) El Al	
2008	Founder	2007		
(ET) Ethiopian Airlines	(KQ) Kenya Airways	(S7) S7 Airlines		
2011	2007	2010		
(BR) EVA Air	(KL) KLM	(MX) Mexicana		
2013	2004	2009 (ceased operations in 2010, but is considered an		
(LO) LOT Polish Airlines	(KE) Korean Air	Airways		
	Founder	but is considered an		

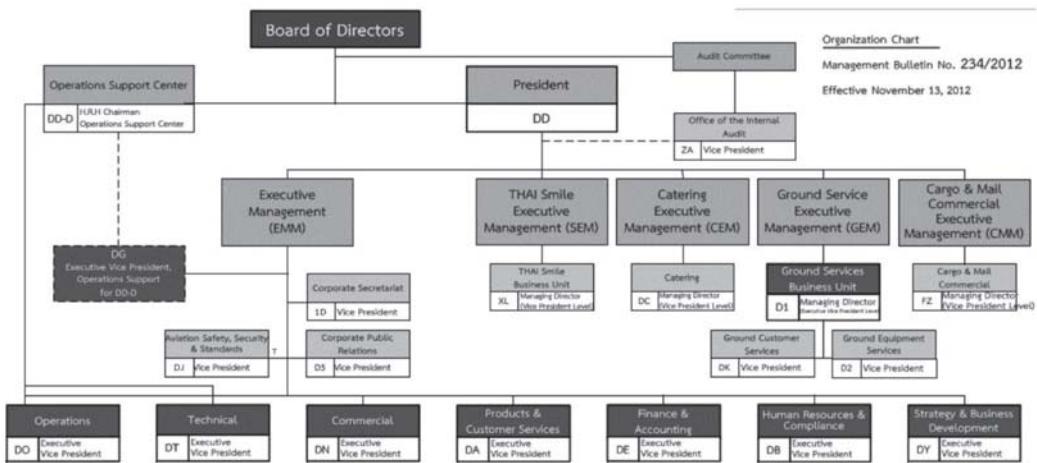
2003	(ME) Middle East	inactive member	(OV) Estonian Air
(LH) Lufthansa	Airlines		(FI) Icelandair
Founder	2012		(JU) Jat Airways
(SK) Scandinavian	(SV) Saudia		(DY) Norwegian
Airlines	2012		Air Shuttle
Founder	(RO) TAROM		(UN) Transaero
(ZH) Shenzhen Airlines	2010		(PS) Ukraine
2012	(VN) Vietnam Airlines		International
(SQ) Singapore Airlines	2011		Airlines
2000	(MF) Xiamen Airlines		(UT) UTair Aviation
(SA) South African	2012		(VS) Virgin Atlantic
Airways			
2006			North America
(LX) Swiss			(FL) AirTran Airways
International Air Lines			(AS) Alaska Airlines
2006			(G4) Allegiant Air
(TA) TACA			(BW) Caribbean
2012			Airlines
(JJ) TAM Airlines			(CU) Cubana
2010			(F9) Frontier
(TP) TAP Portugal			Airlines
2005			(HA) Hawaiian
(TG) Thai Airways			Airlines
International			(B6) JetBlue
Founder			(WN) Southwest
(TK) Turkish Airlines			Airlines
2008			(NK) Spirit Airlines
(UA) United Airlines			(SY) Sun Country
Founder			Airlines
(US) US Airways			(VX) Virgin
2004			America
			(WS) WestJet
			Oceania
			(DJ) Virgin
			Australia
			South America
			(G3) Gol
			Transportes Aéreos

Sources: <http://www.staralliance.com>, <http://www.skyteam.com>, <http://www.oneworld.com>

Exhibit 5: Thai Airways Management Team & Organization Chart

<p>Mr. Sorajak Kasemsuvan President of Thai Airways International Public Company Limited (THAI) Joined THAI since October 9, 2012.</p>	
<p>Mr. Chokchai Panyayong Senior Executive Vice President, Commercial Experienced in Business Development and Special Project at Suvarnabhumi Airport including asset management.</p>	
<p>Mr. Pandit Chanapai Managing Director, Ground Services Business Unit (Executive Vice President Level) Experienced in Marketing and Sale Management.</p>	
<p>Flt.Lt. Montree Jumrieng Executive Vice President, Technical Department Experienced in Flight Operation Department and Personnel Management Department.</p>	
<p>SQN.LDR. Asdavut Watanangura Executive Vice President, Operations Support for DD-D Experienced in Flight Operation.</p>	
<p>Mr. Teerapol Chotichanapibal Executive Vice President, Strategy and Business Development Experienced in Commercial and Catering.</p>	

<p>Mr. Danuj Bunnag Executive Vice President, Products and Customer Services Experienced in Amadeus System and Marketing.</p>	
<p>Mr. Niruj Maneepun Executive Vice President, Human Resources and Compliance Experienced in Legal and Compliance.</p>	
<p>Mrs. Wasukarn Visansawatdi Executive Vice President, Finance and Accounting Experienced in Finance and Accounting.</p>	
<p>Lt. Athisak Padchuenjai Executive Vice President, Operations Experienced in Flight Operations.</p>	



Source: <http://www.thaiairways.com/about-thai/company-profile/en/executive-management-team.htm>

Note

Data available in the excel file upon request includes: crude oil price series, fuel price series, treasury bills quoted yields, and all financial statements.

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Endnotes

¹ VaR software program is the computer program used in risk management. The program computes the VaR (Value-at-Risk) which is the maximum expected loss that will not be exceeded with a given probability during a given number of days.