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Closure and restart as an option for a sustainable South African national airline

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Background: The non-implementation of certain key initiatives of South African Airways' (SAA's) turnaround strategy poses a risk that SAA may not recover financially.

Objectives: The establishment of SWISS (previously known as Crossair and Swiss International Air Lines) as a successor airline to Swissair's liquidation was studied to determine the viability of closure and restart of a smaller successor state-owned airline as an alternative option to a sudden liquidation of SAA.

Method: The study is based on a literature review of analysis, official reports and financial results.

Results: Three distinct phases for the establishment of the successor airline for Swissair were identified: (1) Financial distress of the SAirGroup (Swissair's holding company) and the factors which contributed to Swissair's demise. (2) The transition from Swissair to SWISS. Swissair's grounding was caused by a liquidity crunch followed the announcement of bankruptcy protection. Flight operations were restarted a few days later with financial support from both the State and the private sector. Some of Swissair's assets, routes, staff and flight operations were transferred to a subsidiary, Crossair, as successor airline, later re-branded as SWISS. SWISS, however, continued to incur losses despite progressively reduced scale of activities and four restructuring plans. (3) As a Swiss-based national airline SWISS, which became profitable following its acquisition by Lufthansa.

Conclusion: The transformation of SWISS as successor airline to Swissair is an option to mitigate the risk of a sudden service disruption of SAA. Serious pitfalls require detailed preparation and funding before implementation. SWISS only became successful following its acquisition by Lufthansa.

Keywords: national airline; turnaround strategy; airline restructuring; financial distress; funding requirements; business rescue; SAA; SAirGroup; Crossair; Swiss International Air Lines; Lufthansa; Phoenix; successor state-owned airline.

Background

Doganis (2006:227) stated that the vast majority of state-owned airlines suffer from what he termed the 'Distressed State Airline Syndrome' of which serious financial difficulties represent a key characteristic.

Doganis concluded that any airline that suffers from the symptoms of the 'Distressed State Airline Syndrome' is in 'serious trouble and in danger of becoming extinct' in today's increasingly deregulated and competitive world, unless 'corrective action' is taken urgently (Doganis 2006:234) by means of a fundamental restructuring of the airline (Doganis 2006:227).

The research problem relates to South African Airways' (SAA) technical insolvency at 31 March 2017. South African Airways was already technically insolvent, with the value of its liabilities exceeding the value of its assets by R17.802 billion (SAA 2018:107). South African Airways' financial distress was highlighted by the Auditor General's (AG) report, which expressed doubt on SAA's ability to continue as a going concern. The factors considered by the AG included SAA's history of losses, lack of capital and volatility in foreign exchange rates, maturing loans and lack of working capital (SAA 2018:99).

In June 2018, SAA reported an unaudited loss of R5.673bn for its 2018 financial year (SAA 2018:8), R2.9bn worse than its budgeted losses (SAA 2018:7) Sales were R2.04bn below the budget and expenses were R855 million above the budgeted levels (SAA 2018:8). South African Airways estimated that R1.6bn of the R5.673bn loss was attributable to the non-implementation of initiatives of its long-term turnaround strategy (LTTS) in 2018 financial year (SAA 2018:9). This poses a risk to SAA and it may not recover financially.

The cumulative impact of the non-implementation of initiatives of SAA's January 2017 5-year turnaround strategy (named Project Phakama) (SAA 2018:70) affects the credibility and the likelihood of SAA's expected turnaround by 2021, which requires a funding of R21.7bn (Paton 2018). South African Airways confirmed the receipt of commitments that SAA will be recapitalised with incremental amounts from 2018 to 2021 (SAA 2018:94).

South African Airways has not been successful in the implementation of a sustainable turnaround plan. Koornhof (2012) noted that by 2012 SAA did not implement any one of the nine turnaround strategies previously presented to Parliament. On 29 November 2017, SAA identified 16 initiatives involving external consultancy firms in its presentation to the Standing Committee on Finance, including a full 5-year plan to stabilise the company based on proposals of Seabury (SAA 2018:9).

The purpose of this study was to propose the closure and restart of a smaller successor state-owned airline as an alternative option to a sudden liquidation of SAA.

Introduction

The social value of the study

The absence of a realistic, achievable turnaround plan combined with the lack of funding to maintain losses thereof poses a risk that SAA simply may go out of business if it cannot settle debts as they become payable in future. Chapter 6 of South Africa's *Companies Act* makes provision for business rescue of financially distressed companies (Companies Act 2008). However, placing SAA under business rescue was ruled out by SAA's Chief Executive Officer (CEO) who stated that business rescue could 'trigger the release of the guarantee' which would have consequences for SAA as well as the country (Carrim 2018:2, 5).

An alternative option, which is explored in this study, is to mitigate the risk and economic impact of a sudden liquidation of SAA by means of a planned closure and restart (or carve-out) of viable operations – a smaller and more focussed successor state-owned airline. This would establish a smaller sustainable state-owned airline to continue operations. South African Airways' unviable operations and excessive costs would then be settled in a planned and coordinated manner by the government.

The study provides a practical alternative approach to resolve the dilemma of increasing trend of SAA's losses, SAA's failure to achieve and maintain a successful turnaround and government's inability to accommodate these losses in the normal budgetary process.

The scientific value of the study

This study fills the gap in the knowledge base of the option of a start-up of such successor state-owned airline and identifies the risks associated with such alternative course of actions and important lessons learnt. Real-life examples of such an approach exist in Switzerland and Belgium where the demise of their two national airlines – Swissair and Societé Anonyme Belge d'Exploitation de la Navigation Aérienne (SABENA) – was followed by smaller successor airlines: SWISS and SN Brussels Airlines. To maintain sizable proportions, this study is limited to Swissair – SWISS International developments. A later study will focus on the SABENA – SN Brussels Airlines developments.

This study is original in that it examines an alternative option to mitigate a sudden unplanned closure of all SAA's operational activities and its catalytic effect on the South African economy in the event that further funding for losses cannot be assured.

Another option, to simply rely on private sector and foreign airlines, to fill the gap which would be created by a sudden cessation of SAA's operations, would require a policy shift in the provision of scheduled air services by the government. This is, however, an area of future research.

Aim and objectives

The research objective relates to the study of the closure and restart as an option for the development of a sustainable South African national airline.

Two well-established national flag carriers, Swissair and SABENA, experienced unsurmountable financial difficulties for some time prior to the general aviation downturn immediately following the terrorist attacks of 11 September 2011. However, both airlines' operations were grounded before financial rescue packages facilitated their regional subsidiary airlines to take over some of the holding company's operations (European Commission Directorate-General for Mobility and Transport [DG Move] 2003:14). These two cases represent the most high-profile bankruptcies in European aviation history (DG Move 2003:43).

This article considers the demise and restart of former national (flag) carrier Swissair through the subsequent start-ups of SWISS International as an example to be considered for SAA's circumstances.

Research method: Literature study

The study identifies three distinct phases:

- Firstly, the financial distress of the SAirGroup (the holding company of Swissair) and the salient factors contributing to the demise of Swissair and lessons learnt are identified. The termination of a cash-pooling banking facility, which increased liquidity requirements, is considered. The causes for the cessation of flight operations (lack of liquidity and inadequate preparation for the bankruptcy protection) are analysed.

- Secondly, the transition from Swissair to SWISS (previously known as Crossair and SWISS International Airlines) is analysed. Seven alternative transitional restructuring plans as well as the liquidity crunch, which caused Swissair's grounding of flight operations, are examined. The financial support (by both the state and the private sector) for the restart of Swissair's flight operations a few days following Swissair's grounding is determined. This included some of Swissair's assets, routes, staff and flight operations. SWISS' post-restart losses are identified from the perspective of sustainability.
- Thirdly, the undertakings to ensure a Swiss-based airline, the salient commercial and structural elements of the Lufthansa's takeover of SWISS, are identified. SWISS' profits following its association with Lufthansa are determined.

The study is based on the following salient sources:

- The causes and reasons for the distress and failure of Swissair were identified from official reports by *inter alia* the Swissair Liquidator, Heinrich (2003a), Ernst & Young (2003) as well as DG Move (2003). Salient economic considerations during this phase were identified from the analyses of Suen (2002) and Knorr and Arndt (2003, 2004).
- Swissair's grounding, restart and transition into a successor airline SWISS were extensively described in official reports on the role of the Swiss Federal Council by Leuenberger and Huber-Hotz (2001), Béguel (2002), Federal Council of the Swiss Government (n.d.), SWI (swissinfo.ch – Swiss Broadcasting Corporation) (2001) and economist Ehrbar (2011). The article reflects the contents of the original German reports in English.
- Details of Lufthansa's takeover of SWISS were ascertained from *inter alia* ABN AMRO (2005), Regan and Armitage (2005), Credit Suisse, First Boston and UBS AG (2005) and Deckstein (2005), whilst state aid elements were discussed by Zurkinden and Scholten (2004).

Official reports and published articles were identified through online and Science Direct searches. Reports in German were translated into English by the author and reflected in English in this article. The content of the above-mentioned reports were cross-checked with press releases to confirm their accuracy and timelines.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Research results

Swissair and SABENA

During 2001, the operations of two well-known flag carriers, Swissair and SABENA, were grounded. Swissair became bankrupt in October 2001 and SABENA became bankrupt in November 2001. Both these airlines were in severe financial distress for some time prior to the general downturn in air transport demand, which resulted from the terrorist attacks of 11 September 2001. The financial failures of the airlines were related. Swissair's holding company, SAirGroup, held 49% of SABENA and was committed to increase its shareholding to 85% (Langendries 2003:58). The Belgium State, in turn, owned a 3.3% share in the capital of SAirGroup and had an option to exchange the remaining 15% held in SABENA for an additional 2.2% stake in the SAirGroup (Langendries 2003:8). Business integration between the SAirGroup and SABENA was facilitated by an airline management partnership (AMP) which envisaged that the SAirGroup would become SABENA's majority shareholder (Langendries 2003:58).

Strategic positioning of SAirGroup

In 1996, Swissair's corporate structure was restructured by the introduction of a holding company, SAirGroup (Meyer 2016:99).

Swissair lacked the scale of the three European global alliance leader airlines (Lufthansa, British Airways and Air France) and its small home market (Switzerland) was inadequate to support the scale of a 'major' international airline (DG Move 2003:14).

Instead of joining one of the major alliances, Swissair opted to create two Swissair-led and equity-based alliances. These alliances were:

- Qualiflyer (with smaller non-aligned European flag carriers as members) (Knorr & Arndt 2003:7, 2004:20)
- the European Leisure Group (charter airlines) (Knorr & Arndt 2003:7, 2004:20).

In 1998, SAirGroup adopted the 'hunter strategy' to buy several European airlines to:

- become the third largest network airline in Europe (DG Move 2003:14)
- create a network of high-quality airlines (DG Move 2003:14)
- remain an attractive partner for its overseas alliance partner airlines Singapore International Airlines and Delta Air Lines (DG Move 2003:14).

SAirGroup's financial distress was the result of its excessive but failed objective to develop a 'fourth force' in Europe (DG Move 2003:14), which, according to Capper (2001:1), was an 'unrealistic ambition of becoming a major European player'.

The majority of its losses during 1997–2001 was caused by Swissair's expansion and alliance investment strategy (DG Move 2003:102; Suen 2002). The investments and support there of were financed by increased debt levels (Suen 2002). SAirGroup was contractually committed to the survival of its unprofitable second-tier airline investments, and became vulnerable to their financial performance. Swiss also did not have sufficient financial resources to absorb external shocks (Suen 2002:1). Upon merging the operations of the three French airlines, a combined loss of Swiss franc (CHF) 2592bn was recorded for 2000 (DG Move 2003:14).

Salient factors contributing to the demise of Swissair

Swissair had to provide cash to cover the operating losses or restructuring of its large investments in minority stakes of large airlines (in the Qualiflyer Group) which were in financial trouble. The cost of disposal of its airline investments was very high, and without controlling stakes, Swissair's ability to stem losses was limited (DG Move 2003:108).

From 1997 onwards, Swissair's holding company SAirGroup forged alliances with European national airlines in its 'hunter strategy' to gain market access to the European Union (EU). This was adopted as a result of Swissair's lack of market access to the European market, as a result of the Swiss' referendum which rejected the European Economic Community (EEC) Agreements on 06 December 1992. The hunter strategy however exclusively targeted smaller European countries, airports and markets with large growth potential (e.g. Belgium, Austria, Finland, Hungary, Portugal and Ireland) to be served via the Zurich and Brussels airports as the Qualiflyer Alliance's principal hubs (gateways) to provide market access to and from the European market as opposed to direct flights to the mature EU markets such as Germany, France, Great Britain and Italy (DG Move 2003:101; Wüthrich 2003:2). However, contrary to its strategy, many of the SAirGroup's airline acquisitions targeted distressed airlines in the major EU markets of Germany, France and Italy. The SAirGroup also accepted near full financial responsibility for the financial obligations of its airline investments (Knorr & Arndt 2004:122).

SAirGroup also increased the group's revenue of ancillary services by the grant of preferred or exclusive supplier status from its airline investments. However, the approach dramatically raised the costs of the exit from these investments. Moreover, Swissair supported many of its financially struggling partners with huge capital injections, both to keep the Qualiflyer alliance viable and to protect its aviation-related businesses (Knorr & Arndt 2004:121).

SAirGroup's maximum shareholding in European airlines was limited to 49.9% as a result of the European Community (EC) Ordinance (O 2407/92 of 23 July 1993), which required that the majority of the direct or indirect shareholders of an EU-based airlines must be citizens of EU member states in order to be issued with an aircraft operating permit (Wüthrich 2003: 2). This implied that Swissair could not acquire a majority shareholding in any EC-licenced airline without losing the operating permit of such an airline. Although Swissair formally complied with the EU Ordinance, in reality it circumvented this regulation (Wüthrich 2003:2).

The SAirGroup implemented complex structures, containing call/put options, portage solutions, guarantee commitments as well as multiple tiered and opaque intermediate financing to exercise direct management control, majority interest and the assumption of full financial and commercial risk, despite communication to outsiders that only minority interests were involved (Ernst & Young 2003:2). Call/put options and guarantees issued by the SAirGroup resulted in substantial cash payments to be made by the SAirGroup (Ernst & Young 2003:2). Full consolidation of the financial results of significant subsidiaries was not done, as their consolidation would have confirmed the existence of effective control. As a result, the SAirGroup's financial statements for 1999 and 2000 did not present a fair and reasonable economic and financial situation of the SAirGroup as required by accounting standards (Ernst & Young 2003:2). In particular, French subsidiaries, LTU in Germany and SABENA in Belgium, were not consolidated despite effective control, economic benefits and risks which vested in the SAirGroup (Ernst & Young 2003:3). Over the 2 years (1999 and 2000) the off-balance sheet commitments increased by Swiss Franc (CHF, from the Latin *Confoederatio Helvetica Franc*) 5bn (Ernst & Young 2003:2). In particular, the existence of CHF 1.1bn of newly issued guarantees was not disclosed as contingent liabilities (Ernst & Young 2003:3). The investment of SAirLines was overvalued by CHF 1bn to CHF 1.5bn (Ernst & Young 2003:3). The unconsolidated financial statements of SAirGroup for 2000 would have reflected a share capital deficit had these been fairly presented (Ernst & Young 2003:3). At 31 December 2000, SAirGroup noted concern of over-indebtedness (Ernst & Young 2003:3). Ernst & Young (2003:3) noted that the SAirGroup's ability to continue as a going concern was already questionable at the time that both 1999 and 2000 financial statements were prepared and formally approved by the Board of Directors (30 March 2001), as well as at the publication thereof (press conference on 02 April 2001) and at the annual general meeting on 25 April 2001.

The SAirLines Investments reported group-earnings before income tax (EBIT) loss of CHF 2592m for 2000, which included an EBIT loss of CHF 3256m derived from SAirLines Investments, which basically overwhelmed the smaller profit contributions of CHF 664m from all the other divisions, including SAirLines, which included Swissair, Crossair, Balair and Flightlease (SAirGroup 2001:12).

Earnings before income tax by business unit of the SAirGroup for 2000

The composition of the SAirGroup's earnings before interest and tax is presented in Table 1.

One-off charges of CHF 2714m constituted 83% of the loss of CHF 3256m from SAirLines Investments whilst 24% (CHF 796m) was attributed to their operating losses for the year. CHF 1337m or 41% of the loss from SAirLines Investments was caused by recognising the contractual liabilities for underwriting losses of these investments for the next 3 years. The detailed composition of the amounts is presented in Tables 2–4.

Abandonment of the 'hunter strategy'

In December 2000, the SAirGroup abandoned the 'hunter strategy' to build the 'fourth power in Europe', and the CEO's duties were suspended in January 2001 (DG Move 2003:14). The functions of the CEO and Chairman of the Board of Directors were combined, and 9 out of 10 board directors resigned (DG Move 2003:14). The Group's Chief Financial

TABLE 1: Breakdown of SAirGroup 2000 earnings before income tax by business unit.

Source of Earnings	1997	1998	1999	2000	Half Year 2001
SAirLines (Swissair, Crossair, Balair, Flightlease)	264	354	188	35	138
SAirServices (Swissport, SR Technics etc)	127	145	165	162	-6
SAirLogistics (Cargo)	43	33	6	99	17
SAirRelations (Swissotel, Gourmet restaurants)	181	153	269	300	56
SairGroup	43	15	95	68	-111
Sub-total of SAirLIne s own ope rations	**658**	**700**	**723**	**664**	**94**
SAirLines Investments (Air Littoral, AOM France, LOT Polish, Portugalia, Sabena, TAP Air Portugal, Volare Air, Cargolux, LTU Group, SAA)	-	-	-80	-3256	-137
EBIT	**658**	**700**	**643**	**-2592**	**-43**

Source: SAirGroup, 2001, *Geschaftsbericht* [*Annual Report*], SAirGroup 2000, Zurich, 12, 19, 27, 48, 24 March, SAirGroup, viewed 25 September 2018, from http://www.sr692.com/misc/printed/reports/; Suen, W.W., 2002, 'Alliance strategy and the fall of Swissair', *Journal of Air Transport Management*, 8, 355–363, https://doi.org/10.1016/j.jairtraman.2003.08.002

SAA, South African Airways; EBIT, earnings before income tax; LTU Group, LTU Lufttransport-Unternehmen.

TABLE 2: Analysis of losses of SAirLines Investments included in SAirGroup losses.

Nature of loss	CHF (millions)
Losses of SAirGroup Airline Investments for 2000	-796
One-time proceeds relating to other investments	271
One-time charges	-2714
Amortisation of goodwill for LOT and SAA	-17
Total losses of SAirLInes Investements	**-3256**

Source: SAirGroup, 2001, *Geschaftsbericht* [*Annual Report*], SAirGroup 2000, Zurich, 12, 19, 27, 48, 24 March, SAirGroup, viewed 25 September 2018, from http://www.sr692.com/misc/printed/reports/

LOT, LOT Polish Airlines; SAA, South African Airways; CHF, Swiss franc.

TABLE 3: Losses of SAirGroup Airline Investments for 2000 (associated companies).

Source of loss	CHF (millions)
SABENA	-51
AOM	-237
AIR LITTORAL	-3
LTU	-498
VOLARE GROUP	-30
SAA	16
LOT	7
Total losses of SAirLines airline investments	**-796**

Source: SAirGroup, 2001, *Geschaftsbericht* [*Annual Report*], SAirGroup 2000, Zurich, 12, 19, 27, 48, 24 March, SAirGroup, viewed 25 September 2018, from http://www. sr692.com/misc/printed/reports/

SABENA, Societé Anonyme Belge d'Exploitation de la Navigation Aérienne; AOM, AOM French Airlines; LTU, Lufttransport-Unternehmen; SAA, South African Airways; LOT, LOT Polish Airlines.

TABLE 4: One-time charges for SAirLines airline investments.

Nature of one-time charges	CHF (millions)
Restructuring costs	-466
Reduction in the asset values	-120
Contractual liabilities for underwriting losses for the next 3 years	-1337
Put options	-410
Others	-90
Sub-total	**-2423**
Less reclassification	215
Total provisions for SAirLines airline investments	**-2208**
Impairment loan associated companies	-506
Total One -time charges for SAirLines airline investments	**-2714**

Source: SAirGroup, 2001, *Geschaftsbericht* [*Annual Report*], SAirGroup 2000, Zurich, 12, 19, 27, 48, 24 March, SAirGroup, viewed 25 September 2018, from http://www.sr692.com/misc/printed/reports/

Officer (CFO) was suspended in May 2001, and a new CFO was appointed on 27 June 2001 by a new Board of Directors (Heinrich 2003b:3).

The SAirGroup published its half-year interim report on 30 August 2001 together with a series of restructuring measures, in which the planned divestments of Swissport and Nuance Trading were announced to strengthen its liquidity and equity position (Federal Council of the Swiss Government, n.d.:1; Heinrich 2003b).

The SAirGroup lost most of its capital as a result of the cost of acquisition of these investments, significant losses at several of its airline investments and not undertaking the necessary reforms to recover for the failure of its 'hunter strategy', which destroyed both the Qualiflyer alliance and Swissair by the end of 2001 (Doganis 2006:101; Meyer 2016:101). SAirGroup's equity reduced to 5.7% of total assets in 2000 compared to 23.4% of the previous year, and within half-year (30 June 2001) its equity only comprised 2% of the balance sheet total (Leuenberger & Huber-Hotz 2001:6449).

Ernst & Young (2003:2) (which was appointed by the Swissair Administrator, in consultation with the Federal Government and the Canton of Zurich) concluded that SAirGroup's Board of Directors severely underestimated the funding required to implement the 'hunter strategy'. The funding requirement was not provided for in SAirGroup's business plan nor in its annual budgets. Cumulatively, the funds invested in airlines significantly exceeded the amounts approved by the Board of Directors. Airlines that were acquired required financial restructuring for which the liquidity requirements increased excessively ('over-proportionally'). To reduce the steadily growing financing gap, divestments of CHF 2.7bn were undertaken. However, these were of temporary nature of sale and leaseback transactions involving the group's own aircraft fleet. This implied that an initial improvement of cash flow and finances was followed by corresponding cash outflow through high lease payments in subsequent years. Within 2 years (1999 and 2000), the off-balance sheet commitments increased by CHF 5bn (Ernst & Young 2003:2).

Requirements of Federal Council for financial support

At the time of the SAirGroup's financial distress, the Swiss Confederation owned about 3% of the SAirGroup's share capital and was the second largest individual shareholder (the Canton Zurich being the first) of the listed company (Leuenberger & Huber-Hotz 2001:6443).

At first, on 05 September 2001, the Federal Council of the Swiss Confederation was not prepared to grant state financial aid to Swissair (Federal Council of the Swiss Government n.d.:1). However, following the worldwide downturn in aviation demand as a result of the 11 September 2001 terrorist attacks, it revised its approach as a result of submissions by SAirGroup's CEO and CFO on 17 September 2001, which projected that the SAirGroup would be insolvent at the beginning of October 2001 (Federal Council of the Swiss Government n.d.:1; SWI 2001:2).

The negative impact of the interruption of flights on North Atlantic routes and subsequent downturn in passenger volumes on cash flow and equity of Swissair was estimated at CHF 3.7bn–CHF 4.4bn by the end of 2001, during which period contractually guaranteed payments to the foreign group subsidiaries SABENA and AOM French Airlines (AOM) (previously Air Outre-Mer) were also due (Ehrbar 2011:3). A federal guarantee support of CHF 1bn was requested to ensure liquidity, solvency until balance sheet restructuring could take place, at which time a recapitalisation of up to CHF 4bn of equity was required. However, the Federal Council required a proposal for restructuring before financial support could be considered (Federal Council of the Swiss Government n.d.:1; Ehrbar 2011:3).

The Federal Council in principle accepted public participation in a recapitalisation (referred to as *Swissairsanierung*) on a temporary basis, on the following conditions:

- The funding should be part of an overall restructuring plan to ensure the long-term viability of Swissair (Federal Council of the Swiss Government 2001:1; Leuenberger & Huber-Hotz 2001:6450).
- The private sector has to take the initiative and lead the impetus for the development of such a restructuring plan (Federal Council of the Swiss Government 2001:1; Leuenberger & Huber-Hotz 2001:6450).
- The public interest would serve as a guide and legal basis (Article 102 of the *Aviation Act* was to be considered) (Federal Council of the Swiss Government 2001:1; Leuenberger & Huber-Hotz 2001:6450).
- All stakeholders (banks, private sector, creditors and shareholders, staff and unions) are to participate equally in the process (Federal Council of the Swiss Government 2001:1; Leuenberger & Huber-Hotz 2001:6450).
- Government's commitment would remain of a temporary nature (Federal Council of the Swiss Government 2001:1; Leuenberger & Huber-Hotz 2001:6450).

Termination of cash-pooling facility caused an increas in SAirGroup's liquidity requirement

On 10 September 2001, shortly before the grounding of Swissair, the UBS Group AG (UBS) unilaterally terminated its contract for cash management (zero-balancing and cash-pooling facility) for SAirGroup with effect from 30 October 2001 (Ehrbar 2011:4). From 24 September 2001, transactions over CHF 5m had to be pre-arranged, and from 26 September 2001 any 'overnight exposure' was prohibited, and all accounts of the pool members had to be manually balanced (Ehrbar 2011:4). This massively increased the liquidity requirements of the system as well as the administrative burden (Ehrbar 2011:4). Requests for a 'daylight overdraft' in excess of the credit limit were rejected and on 28 September 2001, the sweeping mechanism (to balance the all group companies at the end of the day) was abolished without notice (Ehrbar 2011:4). The UBS Group AG demanded that payments would only be accepted on a credit balance basis, which implied that the cash-pooling facility was effectively cancelled and transfers had to be initiated in advance (Ehrbar 2011:4). This implied that group companies were no longer able to make any payments without the necessary money being available in their company bank accounts (Ehrbar 2011:4). The increased liquidity requirements caused by the termination of the cash-pooling facility caused major financial distress as SAirGroup's group-wide liquidity requirement for cash immediately increased by about CHF 250m (Ehrbar 2011:4).

Filing for bankruptcy protection

SAirGroup and Swissair filed for bankruptcy protection (a moratorium against payment to creditors) on 02 October 2001 (Lechner 2002:977). Operations of certain branches were to be liquidated whilst other divisions, such as flight services, were to be restructured (Lechner 2002:977). A day before the filing of bankruptcy protection, the SAirGroup sold the majority shareholding of its subsidiary, Crossair, to two Swiss banks: UBS and the Credit Suisse Group AG (CS) (Lechner 2002:977). The intention was that Crossair would continue the flight operations previously operated by Swissair until the reorganisation plan would be approved by creditors (Lechner 2002:977).

Several foreign bank creditors of Swissair initially considered the transaction as a preferential transfer under Swiss bankruptcy law (Lechner 2002:977). The reorganisation plan was eventually approved by the creditors (Lechner 2002:977). This exacerbated the liquidity problems for Swissair and caused the grounding of Swissair's entire fleet on 02 October 2001 (Lechner 2002:977; Meyer 2016:99,100).

Ernst & Young's (2003:4) formal ex post facto finding was that the grounding of Swissair was caused by the filing of bankruptcy protection (debt moratorium) on 01 October 2001, which was not prepared on an appropriate basis and timely (Lechner 2002:977). However, the announcement of the filing for a moratorium (bankruptcy protection) caused uncertainty on the recovery of amounts owed to commercial creditors, who then required immediate payment and cash on delivery for ongoing supplies to operate air services (Lechner 2002:977). This caused Swissair's liquidity requirements to maintain flight operations to increase dramatically ('exploded'), which caused regular flight operations to be suspended on 02 October 2001 and grounded by 15:35 central European time (CET) (Ernst & Young 2003:4).

The Swissair liquidator officially concluded that:

- Swissair 'tried to grow too fast' funded by loans instead of shareholders' funds (Editor SonntagsZeitung 2006).
- The rules of corporate governance were inadequate and not sufficiently independent (Editor SonntagsZeitung 2006).
- The Swissair management 'missed earlier opportunities to sort out its financial problems' (Editor Sonntags Zeitung 2006:1).
- The dominant CEO 'always believed the government would step in and save the company from being liquidated' and consequently did not have an emergency contingency plan (Editor SonntagsZeitung 2006).
- Swissair's 'demise was not inevitable and could have been avoided with better preparation' (Editor Sonntags Zeitung 2006:1).

With regard to the roles of the Board of Directors, Ernst & Young concluded that:

- None of the Board of Directors had any experience in the operational management or in the monitoring of an international airline (Heinrich 2003a:4).
- With the exception of the full-time Office of the President, SAirGroup's Board of Directors occupied senior leadership positions in other large enterprises (banks, insurance and industrial companies) or high-ranking political positions (Heinrich 2003a:4, 5).
- The Board of Directors and management relied largely on outside parties (the federal government, banks and consultants) rather than the adoption of essential restructuring measures timely, nor did the directors prepared themselves for the crisis scenarios (Heinrich 2003a:4).
- Key persons were not familiar with the legal requirements pertaining to the critical conditions and did not take the necessary timely measures (Heinrich 2003a:4).
- The filing for a bankruptcy moratorium was not prepared timely or appropriately (Heinrich 2003a:4).

State and private sector financial supports for the takeover of Swissair fleet and air routes were taken over by Crossair

Crossair, a subsidiary of SAir Holdings, took over the Swissair fleet and intercontinental air routes under the terms of a Federal Decree issued on 07 November 2001 as part of the restructuring plan that had been agreed earlier to ensure that Switzerland would retain a national airline with intercontinental connectivity (Zurkinden & Scholten 2004:220, 221).

The Swiss Confederation and private sector institutions financially supported the transition from Swissair to Crossair.

The Swiss Confederation provided the following financial support:

- An investment of CHF 600m in support of Crossair's capital increase of CHF 2561m (Zurkinden & Scholten 2004:221).
- Loans to Swissair for CHF 1.450m, comprising an interest-free loan of CHF 450m on 05 October 2001 to assure flight operations until 28 October 2001 (Zurkinden & Scholten 2004:221) as well as another loan amount of CHF 1bn to allow flight operations to be maintained, to facilitate such operations to be transferred to Crossair as the new national airline (Zurkinden & Scholten 2004:221). It was agreed that if full respayment was not possible following the sale of Swissair's assets, the Swiss government would surrender the unsecured portion of its loan (Zurkinden & Scholten 2004:221).
- Only CHF 1.150bn of the total approved loan of CHF 1.450bn was actually drawn down (paid out). In May 2016, the Swiss Federal Audit Office (SFAO) recovered 19.1% of the loans (CHF 220m) mostly in relation to items that pre-dated the loan agreement's entry into force in October 2001 (Swiss Federal Audit Office 2016).

The banks were committed to:

- the purchase of the almost 70% of Crossair shares from the SAirGroup for CHF 260m (Luenberger & Huber-Hotz 2001:6451)
- additional share capital of CHF 350m (Luenberger & Huber-Hotz 2001:6451)
- a bridging loan of CHF 250m (Luenberger & Huber-Hotz 2001:6451)
- a working capital loan of CHF 500m (Luenberger & Huber-Hotz 2001:6451).

Swissair operated its last flight on 31 March 2002. In April 2002, Crossair replaced some of Swissair's flights under the new brand 'Swiss International Air Lines' (shortly 'SWISS') from May 2002 (Meyer 2016:99, 100; Zurkinden & Scholten 2004:221).

The transition from Swissair to SWISS

An overview of the key events in the transition from Swissair to SWISS is outlined in Table 5.

TABLE 5: Overview of key events in the transition from Swissair to SWISS.

Date of event	Key event
01 October 2001	Swissair filed for bankruptcy/creditor protection.
	Flights were suspended as a result of fuel suppliers not making more deliveries and aircraft were impounded at Heathrow airport to recover payment for landing fees and other essential supplies.
02 October 2001	Swissair's 70% shareholding in Crossair was transferred to UBS and Credit Suisse for CHF 260m ($160m).
	Foreign creditors objected to the plan of transferring Swissair's most profitable routes to Crossair from 27 October 2001.
	The Phoenix Plan envisaged Crossair to take over 52 aircraft, 70% of Swissair's fleet of 75 aircraft.
03 October 20018	Following emergency injection of CHF 450m ($277m) by the Swiss government, about one-third of Swissair flights commenced to be operated.
	The European Commission raised its concern that the cash injection could constitute illegal state aids and that the Swiss government aid for airlines had to be approved by the European Commission in accordance with the EU-Swiss treaty.
15 October 2001	The Swiss government pressured Swiss business executives to invest in Crossair's recapitalisation.
	Crossair required new recapitalisation of CHF 1.9bn ($1.2bn) plus CHF 1.7bn ($1.0bn) to maintain Swissair long-haul operations until April 2002. Redundancy payments for 9400 employees required CHF 650m ($398m).
	The Phoenix Plan for Crossair to acquire 52 of Swissair's fleet of 75 aircraft from the end of October was not regarded as feasible upon assessment.
22 October 2001	Announcement of a revised Phoenix Plus rescue plan with funding of CHF 4.24bn ($2.59bn) for Crossair. The Swiss government provided CHF 1bn ($612m) in bridge financing and underwrote a 20% stake in Crossair.
	Swiss cantons and the City of Zurich would acquire an 18% stake while private sector companies committed investments totalling CHF 1.7bn ($1.04bn).
31 January 2002	Crossair was re-branded as SWISS.

Source: Adapted form European Commission Directorate-General for Mobility and Transport (DG Move), 2003, *DG TREN – Analysis of the European Air Transport Industry 2001 Final Report Contract Number: B2-7040B-S07.17962*, Aerohabitat.EU, 14, AviaSolutions, July, viewed 13 August 2018, from http://www.aerohabitat.eu/uploads/media/13-02-2006_-_DG_TREN_2001__analysis_air_transport_2001__6MB_.pdf

EU, European Union.

Alternative Swissair transition plans

Altogether, seven alternative transition restructuring plans emerged in the transition from Swissair to SWISS. These included Swiss Air Lines, New Crossair Project, Phoenix Term Sheet, Restructured Operations of Swissair, Phoenix Plus, Collective Society (for the formation of a restructured operation of Swissair) and the Project Globus Rescue Plan.

Their evaluation is relevant for the development of such transition plans. Their context and chronological order are presented in Table 6.

Phase 2: The transition to successor company SWISS (previously known as Crossair and SWISS International Airlines)

The Federal Council motivated its financial support for the establishment of a new Swiss airline on the following:

- to safeguard Switzerland's international connectivity with the rest of the world for Swiss citizens
- to assure the availability of aviation infrastructure in Switzerland
- to prevent a large number of job losses, which would have resulted from a collapse of Swissair (ABN AMRO 2005:7).

The capital requirements for the new SWISS International Air Lines (Crossair) was estimated to be CHF 3040m as set out in Table 7.

SWISS' three strategic objectives were:

- To downsize its aircraft fleet in order to establish a sustainable and profitable route network.
- The focus of its long-haul flight operation and the European air services would no longer have a European-wide scope but would be primarily geared towards the Swiss market and visitors to Switzerland.
- Its cost structure (for flight operations and administration) needs to significantly reduce.
- To establish 'SWISS in Europe' in response to the increase in European low-cost carriers (ABN AMRO 2005:7).

The two banks UBS and CS purchased approximately 70% holding of Swissair in Crossair for CHF 260m and proposed to provide a bridging loan of CHF 250m for the sole use of non-airline operations like SR Technics, Swissport, GateGourmet, Nuance, RailGourmet, Gourmet and Atraxis) in accordance with the Phoenix Term Sheet (Luenberger & Huber-Hotz 2001:6451). A part of the sale of the shares of Crossair could be used to maintain Swissair's flight operations until 03 October 2001 (Luenberger & Huber-Hotz 2001:6451). The banks further undertook to underwrite a recapitalisation of CHF 350m and a working capital loan of CHF 500m (Luenberger & Huber-Hotz 2001:6451). The Federal Council also required that the banks should take the necessary steps to support the risk of a liquidity shortage to prevent the closure of the Swissair fleet (Luenberger & Huber-Hotz 2001:6451).

Subsequent to the grounding of Swissair flight operations, the Federal Council provided an interest-free loan of CHF 450m to guarantee flight operations by Swissair until 28 October 2001 (Luenberger & Huber-Hotz 2001:6453). The loan was increased by CHF 1.000m on 25 October 2001 to facilitate the continuance of flight operations and enable them to be handed over to Crossair as a new national airline (Luenberger & Huber-Hotz 2001:6453).

This project was renamed Phoenix + (Plus) as a result of the government's inclusion in the funding of the establishment and development of a new Swiss intercontinental airline, positioned as a premium airline. SWISS started operations on 38 long-haul and 147 short-haul routes, effective with the introduction of the summer timetable on 31 March 2002, based on 134 aircraft, the 26/26/82 concept of 26 long-haul and 26 medium-haul aircraft and 82 Crossair aircraft as resolved on 22 October 2001 (ABN AMRO 2005:7; Luenberger & Huber-Hotz 2001:6454).

Shareholding in recapitalised SWISS

The percentage shareholding in SWISS is presented in Table 8.

Profitability of SWISS

SWISS was however not a profitable airline. It incurred losses of CHF 1803m for 3 years (2002–2004). Although the levels of losses for 2004 reduced substantially (80%) in comparison to that in 2003, the losses increased again by 27% in the next year, 2005. The accumulated losses amounted to CHF 1980m for the 4 years of 2002–2005, as set out in Table 9 and Figure 1.

SWISS business restructuring plans

SWISS launched four restructuring plans to adjust its activities to conditions in the market. These generally included a reduction of the scale of operations combined with cost reductions:

- On 25 February 2003, SWISS launched a 'Results Enhancement Strategy' in response to a changed business environment brought about by the outbreak of the communicable disease, Severe acute respiratory syndrome (SARS) and hostilities in Iraq early in 2003. SWISS' European network was reduced by 20% in terms of available seat kilometres (ASKs) in April 2003 compared to the previous year, and 700 employee positions were eliminated (ABN AMRO 2005:6).
- In June 2003, SWISS' network and fleet were further downsized in addition to a drastic cost reduction and a comprehensive rightsizing of the workforce through a reduction of 3000 positions (a reduction of 33%) in a 'Fundamental Restructuring of Business Processes'. A unit cost reduction of 20% was achieved from suppliers, and the redefinition of products and non-core activities were outsourced (ABN AMRO 2005:6).
- A further project to identify further cost savings and improvements was launched during autumn 2004 (ABN AMRO 2005:7).

TABLE 6: Alternative Swissair transition restructuring plans.

Date	Salient measures taken with regard to restructuring plans
17 September 2001	SAirGroup requested state aid of CHF 1 billion guarantees for liquidity and CHF 4bn for equity as a result of the downturn in demand following the 11 September 2001 terrorist attacks. This was rejected as it was not supported by any restructuring plan (Federal Council n.d.).
20–22 September 2001	The emergence of project 'Swiss Air Lines', which proposed a merger of Swissair and Crossair with an overall reduced route network, a fleet reduction from 152 to 136 aircraft [11 300–9900 seats], job cuts and integration of Gate Gourmet and Swiss technology. However, by 22 September 2001, the immediate liquidity requirements of this plan increased to CHF 1.5bn (Jud 2007).
28 September 2001	The restructuring and refinancing cost of CHF 7bn–CHF 8bn could not be considered by the Federation alone (Federal Council n.d.).
29 September 2001	A 'New Crossair' project based on the purchase of Crossair by outside investors and the settlement of SAirGroup and Swissair debt was proposed to the board (Federal Council n.d.).
30 September 2001	The Federal Council was advised that the restructuring of Swissair is not feasible as its cost projections increased to CHF 8–CHF 9bn. The 'New Crossair' project was proposed, which required a CHF 500 million guarantee to ensure the transition of flight operations to Crossair. This was not accepted as it required that legacy liabilities should be borne by government alone (Federal Council n.d.).
01 October 2001	A new 'Phoenix Term Sheet' was drafted by UBS and CS. The 70% interest in Crossair owned by Swiss would be bought by the banks and investors for about CHF 250m and the proceeds retained by Swiss for the maintenance of flight operations until 03 October 2001 based on the 26/26/82 concept of 134 aircraft (by which Crossair would acquire 26 long-haul and 26 medium-haul aircraft from Swissair in addition to its 82 aircraft). Swissair's staff would be reduced by 30% or 2560 employees. Crossair would purchase the Swissair brand; Crossair would obtain route concessions for international flights. In the interim Swissair would operate flights on behalf of Crossair, whose working capital requirements of about CHF 650m would be funded by the banks and private investors (Federal Council n.d.; Jud 2007).
01 October 2001	The 'Phoenix Plan' was announced at a joint press conference, which included the banking consortium, Swissair and Crossair (Federal Council n.d.; Jud 2007).
01 October 2001	The debt reconstruction moratorium (bankruptcy protection) of SAirGroup, SAirLines and Flightlease was announced. Crossair applied for the acquisition of 24 Swissair's existing European routes (Jud 2007).
02 October 2001	Swissair's commercial creditors (for fuel, ground handling and airports), on whose services Swissair's continued operations relied, required immediate settlement of outstanding invoices and cash on delivery because of uncertainty on the recovery of amounts owed. Pilots were initially provided with cash to pay fuel and landing fees, but later the fuel suppliers refused to refuel aircraft, which resulted in most flights being 'delayed until further notice' (Ehrbar 2011:10). The increase in liquidity requirements from suppliers, the risk of creditor preference and the loss of the UBS cash pooling effectively grounded Swissair's operations (Ehrbar 2011:10, 11). UBS assumed that the daily liquidity requirements would not increase and was not prepared to release the purchase price of the 70% interest in Crossair (proposed by CS) to relieve Swissair's liquidity problem until a new option or license agreement to acquire the 'Swissair' brand and legal formalities could be resolved (Ehrbar 2011:13). Two hundred sixty-two Swissair flights were suspended as from 12:30 central European time (CET) which stranded 19 000 passengers worldwide (Ehrbar 2011:14). Passengers already seated in aircraft were disembarked, flight duty regulations were exceeded and standby crews were mobilised. Kuoni, Switzerland's largest tour operator, cancelled all Swissair tickets and American Airlines cancelled their codeshare agreement. The liquidity problems resulted in the grounding of Swissair's entire fleet on 02 and 03 October 2001 (Ehrbar 2011:10,11,13,14; Lechner 2002:977; Meyer 2016:99, 100).
03 October 2001	Following intervention of the Federal Council, the banks paid the purchase price for Crossair on the day following Swissair's grounding (UBS – CHF132m and CS – CHF126.8m) and agreed that such funds may be used to sustain flight operations under the 'Phoenix Term Sheet' until 05 October 2001 (2 days longer than originally planned) (Ehrbar 2011:13,14).
03 October 2001	The Swiss Federal Council and Finance Delegation granted the first loan of CHF 450m for the maintenance of a reduced scale of flight operations. The two Swiss big banks (UBS and CS) provided CHF 510m, inclusive of the CHF 260m already paid for Crossair) (Federal Council n.d).
04 October 2001	Swissair resumed 160 of the scheduled 486 flights at low load factors because of cancelled bookings as customers switched to competitors (Ehrbar 2011:17, 18). Two options for ensuring flight operations were considered: The 'Phoenix Term Sheet' already negotiated with the banks. A 'Collective Society' (for the formation of a restructured operation of Swissair). However, its financial needs were uncertain and considered too risky (Federal Council n.d.).
05 October 2001	The Federal Council approved the establishment of a national airline on the basis of the 'Phoenix Plus' project. The moratorium was made effective, and the administrator (liquidator) was appointed. The loan agreement for CHF 450m to maintain Swissair flight operations until the end of October 2001 was signed, which enabled the gradual resumption of flights (Federal Council n.d.).
07–09 October 2001	The Federal Council set up the 'Airlift Task Force', which concluded that the transfer of Swissair's long-haul and short-haul aircraft could not be implemented within the planned time schedule (Ehrbar 2011:19, 20). It was established that the 'Phoenix' project could not be implemented as planned because of difficulties in personnel and cultural integration of the Swissair and Crossair employees. The practical impossibility of taking over flight operations on 28 October 2001 (from air traffic, operational and technical perspectives) and much higher capital requirements than those originally foreseen in the Phoenix Term Sheet (Federal Council n.d.).
14 October 2001	Three scenarios, supported by business plans (which included the additional funding requirements), were considered by the Federal Council. These were: Scenario A '26/26/82' as previously considered (Federal Council n.d.). Scenario B '15/26/82' concept of 123 aircraft, by which Crossair would acquire 15 long-haul and 26 medium-haul aircraft from Swissair in addition to its existing 82 aircraft (Federal Council n.d.). Scenario C '0/0/82', which would only maintain Crossair's then existing number of aircraft (Federal Council n.d.).
17–22 October 2001	The Federal Council supported a reduced winter flight schedule of Swissair with an additional loan of CHF 1bn and agreed to participate in the share recapitalisation of Crossair, under specific conditions (Federal Council n.d.). The Airlift Task Force consolidated the necessary decision-making resolutions based on the '26/26/82' aircraft fleet model, which was renamed as the 'Phoenix Plus' plan, as a result of the participation by the Federation (Federal Council n.d.).
22 October 2001	The subscription of shares in Crossair was agreed to (Federal Council n.d.). The Federal Council and the Finance Delegation approved a second loan of CHF 1bn to maintain flight operations until the end of Swissair's winter timetable as well as a recapitalisation of CHF 600m (Federal Council n.d.). The Phoenix Plus rescue plan announced at a joint press conference held by the Federal Council, Finance Delegation, private sector and airlines (Federal Council n.d.).
07 November 2001	The Swissair Protection Association (SVSA), Merill Lynch International and Kleinwort Benson proposed an alternative 'Globus Rescue Plan', which envisaged no savings, but required an additional guarantee of CHF 2bn–CHF 3bn for debt restructuring from the federal government for the restructuring of Swissair (Federal Council n.d.). This represented an alternative but would prevent the 'Phoenix Plus' plan to be implemented (Federal Council n.d.).
09 November 2001	The signature of the memorandum of understanding between the private and public investors for the funding of Crossair under the 'Phoenix Plus' plan (Federal Council n.d.).
14 November 2001	Representatives of the US investment bank Merrill Lynch (ML) and the Airlift' Task Force briefed each other on two alternative approaches to resolve the Swiss aviation problems: the 'Phoenix Plus' plan (supported by both private and public investors) and the alternative 'Globus' project, following which ML supported the 'Phoenix Plus' plan (Federal Council n.d.).
16 and 17 November 2001	Special Session of the Federal Councils adopted the report 'Botschaft über die Finanzierung des Redimensionierungskonzeptes für die Nationale Zivilluftfahrt' [Communique on the financing of the national civil aviation reduction concept] (Federal Council n.d.).
29 November 2001	A foundation for hardship cases from the SAirGroup restructuring was established (Federal Council n.d.).
04 December 2001	The applications for Crossair's long-haul routes are filed (Federal Council n.d.).
06 December 2001	Annual General Meeting of Crossair elected new Board of Directors.
01 January 2002	The former Swissair short-distance operations were taken over by Crossair (Federal Council n.d.).
13 January 2002	Canton Zurich granted the required credit applications (Federal Council n.d.).
16 January 2002	The announcement of an incentive agreement with social partners (Federal Council n.d.).
31 January 2002	Presentation of SWISS branding concept (Federal Council n.d.).
04 March 2002	Crossair obtained route authority to operate 38 long-haul destinations from 31 March 2002, subject to Air Operator Certificate (AOC) and aircraft operating license (Federal Council n.d.).
26 March 2002	SWISS concluded an alliance with American Airlines (Federal Council n.d.).
27–31 March 2002	Conditions for route authorities fulfilled. Air Operator Certificate and air operating license were granted by the Swiss Federal Department of Environment, Transport, Energy and Communications (DETEC) to Crossair (Federal Council n.d.).

Source: Please see the full reference list of the article, Ehrbar, S., 2011, *Swissair Grounding – Die Hintergründe* [*The background*], 10, 11, 13, 14, Ehrbar, Oktober, viewed 22 September 2018, from www.swissair-grounding.net, for more information.

UBS, UBS Group AG, Auditor General; CS, Credit Suisse Group AG.

TABLE 7: Capital requirements for the new SWISS International Air Lines.

Source of earnings	CHF (millions)
Operational capital requirement (35% equity to debt ratio)	2100
Estimated operational losses to 2002	800
Transformation costs	140
Gross capital requirement	**3040**

Source: Please see the full reference list of the article, Leuenberger, M. & Huber-Hotz, A., 2001, *Botschaft über die Finanzierung des Redimensionierungskonzeptes für die nationale Zivilluftfahrt* [*Communique on the financing of the national civil aviation reduction concept*], 6443, 6449, 6451, 6456, The Federal Council of the Swiss Confederation, viewed 07 November 2018, from http://www.admin.ch/ch/d/ff/2001/6439.pdf, for more information.

CHF, Swiss franc.

TABLE 8: Percentage shareholding in SWISS.

Project shareholdings	CHF million	Percentage shareholding
Committed Private Sector Shareholders-Private investors	**1620**	**53**
Private investors	1070	35
Banks (UBS & CS)	550	18
Committed Public Sector Shareholding	**1051**	**35**
Federal council	600	20
Canton Zürich (ZH)	300	10
Cantons basle city & country (BS BL)	31	1
City of Zurich	50	2
Other cantons	70	2
New subscription of shares	**2671**	**88**
Pre-existing equity of Crossair	300	10
Total committed equity	**2971**	**98**
Future targeted investors	69	2
Total projected equity	**3040**	**100**

Source: Please see the full reference list of the article, Credit Suisse, First Boston & UBS AG, 2005, 'Public offer by AirTrust Ltd, Zug for all publicly held Registered Shares with a nominal value of CHF 18 each of Swiss International Air Lines Ltd', *Offer Prospectus*, Basle, 3, 5, 7, 12, viewed 04 May 2005, from http://www.takeover.ch/documentprovider/contentelements/nr/746/lang/3, for more information.

Note: Data in bold represent overall totals.

TABLE 9: Losses of SWISS International Air Lines.

Variable	2002	2003	2004	2002–2004	2005	2002–2005
Profit (Loss) before tax (EBT)	-981	-683	-139	-1803	-177	-1980

Source: Please see the full reference list of the article, Swiss International Air Lines (Group), 2003, Financial Results 2002, Press release 20030325, 23 March, viewed 23 September 2018, from https://www.swiss.com/corporate/EN/media/newsroom/press-releases/press-release-20030325-2, for more information.

EBT, Net profit (loss) before tax.

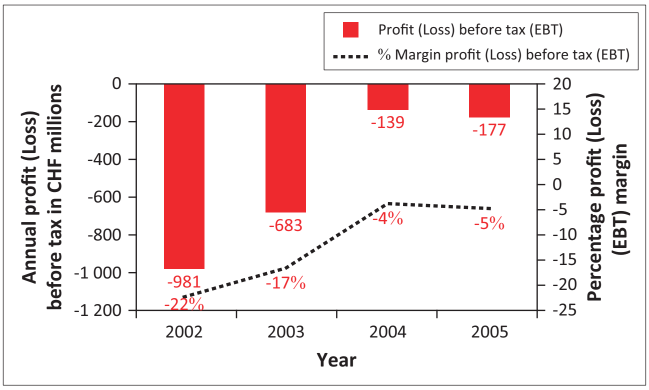
- In January 2005, SWISS announced a fleet downsize of 13 regional aircraft, the reduction of its workforce by 800–1000 positions, renegotiation of collective labour agreements (geared to achieve productivity improvements) and cost savings through contractual renegotiations with suppliers (ABN AMRO 2005:6).

None of the SWISS' restructuring plans resulted in a turnaround of SWISS' losses. SWISS also announced that it was not likely to reach break-even in 2005 (ABN AMRO 2005:7). The Swiss government identified that SWISS required up to CHF 600m in fresh capital to replace obsolete assets (ABN AMRO 2005:7).

Phase 3: Takeover of SWISS by Lufthansa

Phased takeover

On 04 May 2005, Lufthansa launched a takeover offer for the public shareholders of Swiss International Air Lines Ltd with the objective of achieving a full takeover of Swiss. However, the transaction was complicated by the ownership and



Source: Please see the full reference list of the article, Swiss International Air Lines (Group), 2003, Financial Results 2002, Press release 20030325, 23 March, viewed 23 September 2018, from https://www.swiss.com/corporate/EN/media/newsroom/press-releases/press-release-20030325-2, for more information.

EBT, Net profit (loss) before tax; CFH, Swiss franc.

FIGURE 1: SWISS – Annual losses before tax following relaunch.

control requirements of bilateral air services treaties for foreign aviation traffic rights. As a result, the transaction was broken down into several sequential steps:

- On 22 March2005, 17 so-called 'lock-up shareholders' committed to transfer their shares in SWISS to AirTrust. These were AMAG (Automobil- und Motoren AG), Zurich; Coop Schweiz, Basle; Credit Suisse Group, Zurich; F. Hoffmann-La Roche AG, Basle; Holcim (Schweiz) AG, Würenlingen (AG); Canton Zurich; La Genevoise, Compagnie d'Assurances sur la Vie, Geneva; Nestlé AG, Vevey and Cham; Novartis Pharma AG, Basle; Swiss Confederation; Schweizerische Rückversicherungs-Gesellschaft, Zurich; Swisscom AG, Ittigen (BE); Schweizerische Lebensversicherungs- und Rentenanstalt, Zurich; UBS AG, Zurich and Basle; Zürcher Kantonalbank, Zurich; 'Zürich' Versicherungs- Gesellschaft, Zurich; and 'Zürich' Lebensversicherungs-Gesellschaft, Zurich (Credit Suisse et al. 2005:5).
- AirTrust acquired 82.88% of all SWISS shares on 26 April 2005 and later a further 1.67% in SWISS (84.55% in a total). AirTrust was to settle the acquisition of the Swiss shares by means of an exchange of Lufthansa shares for the equivalent value instead of cash payments as well as earn-out debtor warrants (*Besserungsschein*) (Credit Suisse et al. 2005:12).
- On 04 May 2005, AirTrust made a public offer for the remaining 15.45% shares in SWISS together with conditional shares to be issued to employees until the end of the offer's period of acceptance on behalf of Lufthansa (Credit Suisse et al. 2005:5).
- Initially, Almea owned 89% of the capital and voting rights of AirTrust and Lufthansa owned remaining 11% (Credit Suisse et al. 2005:3, 7).
- Apart from a Shareholder's Agreement between Almea and Lufthansa, various option agreements and conditional rights were negotiated between Lufthansa and Almea (Credit Suisse et al. 2005:7, 8).
- Lufthansa's interest in AirTrust would increase to 49% after the receipt of antitrust (competition) clearance (Credit Suisse et al. 2005:3).

- Upon securing full air traffic rights, Lufthansa would acquire 100% of SWISS directly (Credit Suisse et al. 2005:3).

Lufthansa limited its offer to a maximum of €265m to Swiss' major shareholders' €45m to individual investors (Done 2008). SWISS' shares were suspended on Monday 23 March 2005 (Done 2008; Regan & Armitage 2005). Lufthansa paid a total of €217m ($339m) for the takeover of Swiss International Air Lines as a result of the price rise of 44.67% of Lufthansa shares relative to its main European rivals (Air France-KLM, British Airways and Iberia) (Done 2008; Regan & Armitage 2005).

SWISS's share price closed at CHF 9.6 per share upon the suspension of trading its shares on 22 March 2005 (at the company's request) at which time the share price was equivalent to about one-tenth of its capital value when SWISS was launched (DW Staff 2005).

Although Lufthansa's offer price only represented a fraction of the Swiss Confederation's and Canton Zurich's investment, it was accepted on the basis that other strategies would have put jobs at risk (DW Staff 2005). The Federal Council stated that it could not afford imminent investment requirements to upgrade equipment and aircraft. Government's commitment for financial support was provided on a temporary basis (DW Staff 2005). The Federal Council received CHF 63.67m from Lufthansa, which represented 10.6% of the CHF 600m invested in share capital (Federal Department of Finance – Swiss Confederation 2008).

The Lufthansa and SWISS 'Integration Agreement' ensured the 'fair development' of the Zurich hub, the scope of its long-haul fleet, the brand 'SWISS', and the continued existence of SWISS as an international airline based in Switzerland (Swisscom.com 2005). Furthermore, an independent Swiss foundation was established for a period of 10 years to nominate a member of the Lufthansa supervisory board and two members of the SWISS Board of Directors to preserve the Swiss air traffic infrastructure over the long term (Swisscom.com 2005).

The takeover envisaged significant synergies both the revenue and on the cost side, of about €160m (approximately CHF 250m) per year from 2007 onwards (Swisscom.com 2005).

Commercial arrangements between SWISS and Lufthansa

The salient commercial arrangements between SWISS and Lufthansa required that SWISS would practically remain an independent airline, with its management and base of operations in Switzerland, its own fleet and crew, and managed within the Lufthansa system as a profit division. SWISS would retain its own brand, develop its strengths and expand its base for the Swiss market (Done 2008). Much of SWISS' long-haul network would remain intact, but SWISS would cede important functions like future route planning and the processing of frequent flyer data to Lufthansa, and Zurich would become the third major hub for Lufthansa after Frankfurt and Munich (Deckstein 2005; Done 2008).

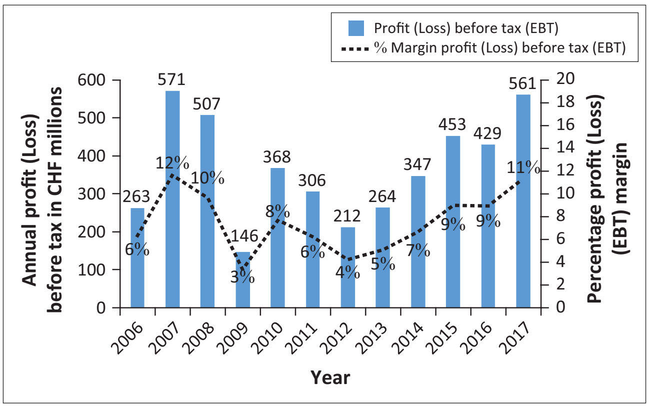
By 2007, the SWISS fleet increased by five more long-haul and seven more short-haul aircraft and the workforce expanded by 10%. Passenger volumes rose by one-third, whilst its load factor increased by 5% – 80%. Network capacity in ASKs increased by 14% (Done 2008).

Financial success under Lufthansa

SWISS' inclusion onto Lufthansa's large European network turned SWISS into a profitable airline, as shown by the data in Table 10 and Figure 2.

The SWISS profitability under Lufthansa control was ascribed to the following factors:

- The integration of SWISS into the Lufthansa Group was more successful than what was originally forecasted and was completed earlier than expected (SWISS 2007).
- More synergies were generated by the merger than what was initially expected (SWISS 2007).
- The partnership approach underpinned the sustainability of a team-oriented strategy (SWISS 2007).



Source: Please see the full reference list of the article, Swiss International Air Lines (Group), 2003, Financial Results 2002, Press release 20030325, 23 March, viewed 23 September 2018 from https://www.swiss.com/corporate/EN/media/newsroom/press-releases/press-release-20030325-2, for more information.

EBT, Net profit (loss) before tax; CHF, Swiss franc.

FIGURE 2: SWISS – Earnings before tax (EBT) since Lufthansa takeover.

TABLE 10: SWISS' profitability following Lufthansa's takeover.

Income, profit and margin	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total income from operating activities	**4 153**	**4 895**	**5 267**	**4 363**	**4 774**	**4 927**	**5 033**	**5 167**	**5 212**	**5 035**	**4 799**	**4 950**
% Increase in Total income	11%	18%	8%	-17%	9%	3%	2%	3%	1%	-3%	-5%	3%
Profit (Loss) before tax (EBT)	**263**	**571**	**507**	**146**	**368**	**306**	**212**	**264**	**347**	**453**	**429**	**561**
% Margin Profit (Loss) before tax (EBT)	**6%**	**12%**	**10%**	**3%**	**8%**	**6%**	**4%**	**5%**	**7%**	**9%**	**9%**	**11%**

Source: Please see the full reference list of the article, Swiss International Air Lines (Group), 2006, *SWISS substantially improves its annual EBIT result*, Swiss International Air Lines (Group) Media release on the 2005 annual results, n.d, SWISS Corporate Communications, viewed 27 September 2018, from www.swiss.com/AboutSWISS/Financial-information, for more information.

- The SWISS business model consisted of its own brand identity built on its strengths and utilising the advantages of its geographic location (SWISS 2007).
- The integration offered an expanded route network with more destinations and better connections, interlinked frequent flyer programmes and mutual lounge access, within the Lufthansa Group and Star Alliance networks (SWISS 2007).

SWISS and Lufthansa were successful in the creation of new jobs in Switzerland and the development of the Zurich hub. Consumer benefits included better services, whilst Switzerland benefitted from increased connectivity. Shareholders enjoyed higher levels of profitability (SWISS 2007).

Within the Lufthansa Group's strategy, SWISS remained an autonomous carrier with its own business management and headquarters based in Switzerland, with its own crew and fleet. The Zurich hub was to be developed in conjunction with the development of other Lufthansa hubs in Frankfurt and Munich (SWISS 2007).

Key findings

Discussions of key findings

The non-implementation of key initiatives of SAA's January 2017 5-year turnaround strategy (Project Phakama) against the background of not achieving a sustainable turnaround (in circumstances of SAA's technical insolvency) poses a risk that SAA may not recover financially.

The transformation of SWISS (Crossair) as successor airline to Swissair provides an option to mitigate the risk and economic impact of a sudden liquidation of SAA. This would require a planned closure and restart (or carve-out) of viable operations by means of a smaller and more focussed successor state-owned airline along to continue essential and viable operations. South African Airways' remaining unviable operations should then be wound up and liabilities would be settled in a planned and coordinated manner by the government.

The SWISS/Swissair example, however, demonstrated serious pitfalls that need to be avoided, which require sufficient preparation before implementation.

The key findings of the study, within each of the three phases, are presented below and discussed within parentheses.

Phase 1: The financial distress of the SAirGroup

With regard to leadership, it was established that:

- None of the directors had operational management or monitoring experience of an international airline. (As a result, the board was not in a position to gauge the risks of overexpansion and the exposure because of the circumvention of ownership and control requirements as well as the contractual commitments and guarantees to support losses and restructuring of airline investments.)
- Most of the directors occupied leadership positions in other enterprises. (This implies that the directors did not have sufficient time to devote to SAirGroup's critical matters.)
- The board relied on the support of external consultants. (Independent consultants are not subject to the same fiduciary obligations [of due care and skill] towards the company as directors are.)
- Professional crisis management was not established. (This was required to assist stranded passengers and to maintain critical supplies.)
- Key persons should have familiarised themselves with the applicable legal requirements. (Apart from the normal legal prescripts, airlines operate in complex legal and regulatory frameworks.)

The Swissair liquidator concluded that:

- Swissair expanded too rapidly funded by debt instead of shareholders' equity. (Airline expansion is associated with start-up losses, which have to be within the financial resources of the company. Funding for expansion through debt increases the business risk and exposes the company to decisions of bankers.)
- The rules of corporate governance were inadequate. (The combination of CEO and chairperson in the same person weakened the effective oversight over the executive management.)
- The dominant CEO always believed the government would provide financial assistance to save the company from liquidation and consequently did not develop an emergency contingency plan as the 'worst-case scenario' of liquidation was not expected. (The CEO's belief on external government financial aid stood in the way of remedial action to be taken timely.)
- The Swissair management did not sort out its financial problems earlier. (Once the 'hunter strategy' expansion strategy was abandoned, progressive and timely steps should have been taken and implemented to resolve the company's financial problems including funding plans based on realistic financial forecasts.)

The filing for bankruptcy protection was not planned properly. Swissair's liquidation could have been avoided with better preparation. (It was unrealistic to assume that service suppliers would continue to supply fuel, ground handling and airport services without outstanding amounts being paid and credit terms being established. It is evident that significant additional cash resources were required to meet the rise in liquidity requirements. Interim funding is required to fund losses for the periods required for regulatory approvals by outside regulatory authorities for the transfer of air traffic rights, licensing of operational and technical aspects, access to air traffic rights and flight operations. This requires interim funding to bridge the time requirements of processes).

Internally developed restructuring measures were not sufficient to strengthen Swissair's liquidity and equity position. (A clear objective to achieve a stand-alone airline should have been planned and implemented to replace the failure of the 'hunter strategy' expansion strategy. This should have included aggressive measures dictated by the financial resources of the company.)

The Board of Directors severely underestimated the funding requirement of the SAirGroup's expansion strategy. The business plans and annual budgets did not address the funding requirements for expansion, operating losses and restructuring commitments. (Funding plans based on realistic forecasts should have been developed and considered by the Board of Directors.)

Aircraft sale and leaseback transactions only provide temporary cash flow relief as the initial cash flow improvement is rapidly followed by high lease payments in subsequent years. (The subsequent implications of the lease payments were not appreciated because of the absence of funding plans.)

Annual financial statements should consolidate and include adverse results. Off-balance sheet obligations and contingent liabilities need to be disclosed. (The board did not appreciate the overall financial situation of Swissair.)

Exposure to bank debt was not limited, and by December 2000 SAirGroup's equity reduced to 5.7% of total assets. By 30 June 2001 SAirGroup's equity represented only 2% of the total assets. (The SAirGroup was effectively in the hands of its bankers. Remedial action should have been taken at an earlier stage by the Board of Directors to achieve a higher level of shareholders funding and to reduce debt exposure.)

The SAirGroup's liquidity requirement increased as a result of the termination of the cash-pooling facility by UBS and creditors' requirements for cash on delivery for essential operating supplies during the transition phase. (UBS action was in response to the deteriorating creditworthiness caused by Swissair's poor financial results, which should have been foreseen by the Board of Directors. Commercial creditors faced uncertainty regarding the collection of outstanding amounts. No credit terms were established for supplies during the transitionary phase, and it was erroneously assumed that the daily liquidity requirements would remain the same as before the announcement of a moratorium on payment of creditors. This implies that additional working capital is required during the transitionary phase.)

(The Federal Council supported a Swiss-based airline operation but left the SAirGroup and its subsidiaries to be resolved by the liquidator [administrator]. The conditions set by the Federal Council of the Swiss Confederation for financial support for Swissair represent excellent guidance of how such financial support may be structured in SAA's circumstances. The Federal Council's salient conditions were as follows:

- Funding needs to be part of an overall restructuring plan to ensure the airline's long-term viability.
- The private sector should lead the development of the restructuring plan.
- All stakeholders, banks, the private sector, creditors and shareholders, staff and unions were to participate and support the restructuring on an equal basis.
- The plan must serve the public interest.
- Government's commitment for financial support would only be on a temporary basis.)

Phase 3: The transition from Swissair to SWISS

The two Swiss banks (UBS and CS) bought the majority shares of a SAirGroup subsidiary, Crossair, from the SAirGroup a day before filing for bankruptcy protection, in terms of the Phoenix Term Sheet (one of the seven alternative transition restructuring plans) so that Crossair could continue the Swissair's flight operations until creditors approved a reorganisational plan.

However, the announcement of the filing of bankruptcy protection resulted in demands for immediate payment and cash on delivery for ongoing supplies to operate air services, which was beyond Swissair's liquidity. As a result, Swissair's entire fleet was grounded progressively on 02 and 03 October 2001 as it ran out of cash. Two hundred sixty-two Swissair flights were suspended, which stranded 19 000 passengers worldwide. (Apart from the immediate impact on passengers grounded, existing bookings for future flights on Swissair tickets became worthless. Codeshare agreements (e.g. with American Airlines) were cancelled, supply credit facilities and settlement through the International Air Transport Association (IATA) clearing house would have been suspended. All of these exacerbated Swissair's lack of liquidity.)

On 05 October 2001, gradual resumption of flights was facilitated by a loan agreement of CHF 450m until the end of October 2001 in terms of a resolution of the Federal Council for the establishment of a national (successor) airline on the basis of the 'Phoenix Plus' project, which enabled about one-third (160 of the scheduled 486 flights) of Swissair flights to be resumed, at low load factors (because of cancelled bookings as customers switched to competitors). (Liquidity requirements for the restart would also have increased as a result of demands for refunds of cancelled flights as well as the flights which were not relaunched following Swissair's grounding.)

The project 'Phoenix Plus' could however not be implemented within the planned time schedule because of the impossibility of taking over flight operations on 28 October 2001 (from air traffic rights, operational and technical perspectives), problems to integrate personnel and cultural barriers as well as much higher capital requirements than those originally foreseen.

On 22 October 2001, a second loan of CHF 1bn was granted by the Federal Council to maintain flight operations until the end of the winter timetable as well as a recapitalisation of

CHF 600m for a business model comprising 26 long-haul and 26 medium-haul aircraft and 82 Crossair aircraft (the 26/26/82 concept). Crossair acquired 69.3% (52 aircraft) of Swissair's 75 aircraft (a 30.7% reduction in Swissair's fleet). Swissair's staff was reduced by 30% or 2560 employees. The other two, more conservative options of 123 aircraft (15/26/82) and Corssair's existing 82 aircraft (0/0/82) were not proceeded with. (The network size and structure of the relaunch were determined by supply-side network connectivity considerations of Switzerland and Zurich airport's role as the gateway hub and not by demand-side considerations or viability studies. A conservative perspective of the balance of supply to lower levels of demand is critical to the success of the successor airline.)

Swissair's last flight was operated on 31 March 2002. In April 2002, Crossair replaced some of these flights under the new brand 'Swiss International Air Lines', which was later shortened to 'SWISS' from May 2002.

SWISS incurred losses of CHF 981m in 2002, which was only 4% more than the combined projected CHF 940m (CHF 800m of estimated operational losses and CHF 140m transformation costs). SWISS continued to incur losses, which in aggregation amounted to CHF 1980m for the 4 years of 2002–2005 and the Swiss Federal Council identified that SWISS would need up to CHF 600m in fresh capital to replace obsolete assets. (This implies that in the 4 years to 2005, SWISS lost 65.1% of the original targeted equity base of CHF 3040m [with CHF 1060m or 34.9% remaining]. The additional CHF 600m required for asset replacement would reduce the original capital resources from CHF 3040m to CHF 460m or 15.1% remaining.)

SWISS launched four restructuring plans to reduce the scale of operations and costs, which were not sufficient to turn SWISS' losses around. Their focus is summarised in Table 11.

Phase 3: Lufthansa's takeover

Lufthansa launched a phased takeover offer of Swiss International Air Lines Ltd with the objective to achieve a full takeover of Swiss. The transaction was phased to accommodate renegotiation of ownership and control requirements of bilateral air services treaties for foreign aviation traffic rights.

SWISS was not absorbed into Lufthansa, as SWISS remained an independent airline with its own brand, management and base of operations in Switzerland, its own fleet and crew, and operated within the Lufthansa system as a profit division. However, certain important responsibilities like future route planning and the processing of frequent flyer data were ceded to Lufthansa.

Lufthansa's offer price only represented about one-tenth of the Swiss Confederation's and Canton Zurich's investment; it was accepted on the basis that other strategies would have put more jobs at risk and the Federal Council could not afford imminent investment requirements to upgrade equipment and aircraft. Measures to preserve the Swiss air traffic infrastructure and a Switzerland-based operating airline included the right to propose a member of the Lufthansa supervisory board and two members of the SWISS Board of Directors. Government's commitment for financial support was from the outset required to be on a temporary basis, which facilitated its privatisation through the agreement with Lufthansa.

SWISS' inclusion onto Lufthansa's large European network turned SWISS around and resulted in continual profits from 2006 to 2017 as a result of synergies, an expanded route network with more destinations and better connections, interlinked frequent flyer programmes and mutual lounge access, within the Lufthansa Group and Star Alliance networks. (This was unlike to the smaller SWISS stand-alone network.)

Conclusion

Phase 1: The period of financial distress

The non-implementation of certain key initiatives of SAA's turnaround strategy poses a risk that SAA may not recover financially. A planned closure and restart (or carve-out) of a smaller and more focussed successor state-owned airline is a better alternative than a sudden service interruption of SAA and related economic impact.

The establishment of SWISS International Air Lines (formally Crossair) as a successor airline to Swissair's liquidation represents a real-life example of closure and restart (or carve-out) that can be applied to SAA's viable operations to establish a smaller and more focussed successor state-owned airline as an alternative to a sudden liquidation of SAA.

TABLE 11: Components of SWISS restructuring plans.

Date of restructuring	Restructuring programme	Impact on the fleet and network size	Reduction of employment	Other cost items
25 February 2003	Results enhancement strategy	European network in ASKs reduced by 20% in April 2003	700 employee positions eliminated	-
June 2003	A fundamental restructuring of business processes	Network and fleet further downsized	3000 positions reduced by 33%	Unit cost reduction of 20% derived from suppliers, the redefinition of products and outsourced non-core activities
Autumn 2004	Cost Saving Programme	-	-	Further cost savings and efficiency improvements
January 2005	Restructuring	Downsize of the fleet by 13 regional aircraft	Reduction of its workforce by 800–1000 positions	Cost savings through contractual renegotiations with suppliers

Source: ABN AMRO Bank N.V., 2005, *Fairness Opinion delivered to the board of directors of Swiss International Air Lines AG*, Opinion as to whether the consideration is fair, from a financial point of view, to the shareholders, ABN AMRO Bank N.V., Amsterdam, viewed 27 April 2018, from http://www.takeover.ch/documentprovider/contentelements/nr/745/lang/3

Note: The focus of the four restructuring programmes was on a reduction of operational scale, a fleet of aircraft, number of employees and costs. This demonstrates that the business model (in terms of a number of routes and aircraft) with which SWISS (Crossair) was launched as the successor airline was too large for the market demand that SWISS as a stand-alone airline could generate.

ASK, available seat kilometres.

Airline expansion should be paced and not be fully reliant on debt funding; rather, it should rely on shareholders' equity. Normal corporate governance rules need to apply, and funding plans based on realistic financial forecasts need to be considered by the Board of Directors. The airline should not rely on government financial assistance and develop and implement contingency plans and remedial measures to make a meaningful difference at first opportunity in order to rapidly improve cash flow and solvency to resolve the company's financial problems.

Phase 2: The transition to a smaller and more focussed successor state-owned airline

Any filing for bankruptcy protection or sudden restructuring needs to be planned in advance. An announcement of bankruptcy protection increases liquidity requirements for an airline as service suppliers (for fuel, ground handling, airport and other services) require outstanding amounts being paid, new supplies and services to be paid on delivery until new credit terms have been established. Therefore, sustaining air services within bankruptcy protection, following its announcement, requires higher levels of cash resources than before, when the airline enjoyed normal credit terms. The assumptions for cash flow forecasts need to be revised and re-modelled as normal credit terms would no longer remain in place.

Interim bridging funding is required to support losses until regulatory approval for the transfer of flight operations, licencing of operational and technical aspects and access to air traffic rights have been procured.

It is preferable that air services are not interrupted in the transition phase. The grounding of the fleet results in stranded passengers, immediate refund claims, cancellation of codeshare agreements and lower patronage for future flight bookings. A rapid transition to lower number flights also requires the facilitation of rebooking of passengers on alternative flights through planned crisis management.

The government may prescribe conditions for the provision of financial support. The purpose of providing financial support needs to be clarified as well as the period over which such support would be available or maintained. Even successful airlines require additional capital to update product offerings and systems and to replace obsolete assets.

During the transition phase, the business model, aircraft, fleet and network size need to be reduced sufficiently to prevent the need for later scale-down of operations and employees in a continual cycle of restructuring plans. This requires conservative assumptions of demand as a result of passenger expectations that flights may not be operated according to previous schedules or levels of frequencies.

Financial projections and funding plans need to be modelled on realistic and conservative assumptions to determine the cost of transformation, losses that would be incurred during the implementation phase and levels of sustainable debt equity that can be accommodated.

The required capital would have to be determined and the role of government and other financiers needs to be clarified. Funding should preferably be channelled through a listed company (a share issue privatisation [SIP]), which would facilitate trading in the company's shares, if successful.

Phase 3: Lufthansa's takeover

Unlike SWISS' losses, its inclusion into Lufthansa's large European network benefitted SWISS, resulting in an immediate turnaround and continual profits from 2006 to 2017. However, SAA operates a relatively larger network than its immediate neighbours. Therefore, the same benefits of network scale are not available to SAA from alignment with airlines based in neighbouring countries (as was available to SWISS from Lufthansa). This implies that the planned closure and restart (or carve-out) of successor state-owned airline for SAA needs to rapidly result in a much smaller and more focussed profitable airline. South African Airways cannot be scaled-up in the short term as there is not a larger airline investor with a larger network geographically close to South Africa that could provide significant incremental passenger feed (demand) to generate profitability through growth. Furthermore, access to air traffic rights and ownership and control rules within the African aviation context are not as liberal as is the case within the European Community, which will also limit the synergies that may result from a similar takeover within the African context.

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Authors' contributions

I declare that I am the sole author of this research article.

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