Do Global Critical Events Impact Organizational Sustainability Attitudes? The Case of the Airline Industry

Dynamics and complexity within the aviation industry increase as a result of new internal processes and exogenous factors . At the same time, this industry acts as a major drive for globalization, which is a trend that makes the world more interconnected and dynamic (Goel, 2003). A study by Oxford Economic Forecasting (OEF), commissioned by the International Air Transport Association (IATA), shows that air transport is also of vital importance for dynamics in other business industries: the surveyed companies (N=600) indicate that 25 per cent of their sales were dependent on air transport. This is even 40 per cent in high-tech industry. Moreover, 90 per cent of Chinese companies appear to be dependent on air transport for servicing and meeting costumers. Finally, half of the businesses studied expected to become more dependent on aviation services in the coming 10 years (Pearce, 2005).

By Bastiaan Zoeteman*, Oscar van Reisen, Bram Kaashoek

Although globalization increases the dynamism of the market, the high level of interconnectivity also has its drawbacks. A major disruption anywhere on the globe can spread rapidly through the interconnected global system. Examples of such disruptions are terrorist attacks, epidemics such as SARS, or economic recessions, such as the 1997 Asian crisis. Other factors that have an impact on the growth and stability of the airline industry are regulative pressures concerning sustainability challenges, including airport congestion prevention, safety issues, and environmental regulations.

Research question

Although the airline industry is dependent on many internal and external factors, the economic component is dominant in current research (e.g. IATA, 2003; Brück and Wickström, 2004; Mason, 2005). Factors that originate from areas outside the classic economic realm are often not considered in interaction with business performance in those kinds of studies. As a result, little is known of the effects of internal and external factors in relation to the economic performance, and the broader sustainability performance of airlines. Are environmental performance and social performance, for example, negatively impacted when economic constraints become tighter for the sector during a global disruption? Is the attention of the company management solely focused on improving economic performance in periods of crisis, or do broader market requirements for sustainability persist under these circumstances? Gulati (1998) concluded that there is an under-socialized perspective on organizational behavior related to effects of critical events and factors in the airline industry.

In this paper, sustainability is chosen as focus for the study of the impact of global disruptions on the performance of the airlines industry. As sustainability includes the economic, social and environmental aspects of organizations, the challenge is to develop a simple way to measure this broad issue. An elegant way to quantify the overall sustainability performance of organizations is to abstract from detailed indicators of, for example, emissions and flows to a more general level of attitudes from which the concrete behavior in the three sustainability domains follow. According to Zoeteman (2001) and Ajzen (2002), organizational attitudes are the bases of action, organizational behavior and performance. In order to understand the organizational sustainability attitude, including economic, social and environmental aspects, an attitude model is developed by Zoeteman (2001), which discerns five implicit behavioral codes or mindsets that underlay concrete measurable types of actions of organizations. An elaboration of the model is presented in the following section on methodology.

Concerning the definition of sustainable development, it should be mentioned that there is an ongoing discussion in recent literature on how to define sustainable development. See e.g. Rennings (2000) for an elaboration of this discussion. Proponents define sustainable development predominantly according to the United Nations Commission on Environment and Development (1987:43): “A development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. The broad concept of sustainable development is often operationalized in a way that fits a specific purpose. A general key element is that balanced attention is given to economic, ecological and social aspects of investments and operations. Furthermore, future impacts and impacts outside the industry or the geographical core area are included.

Critical global events can be studied in order to measure effects of exogenous

factors on sustainability attitudes. Global distortions have an impact on the equilibrium of social, economic and environmental performance indicators, and set off a chain of diverse reactions (Ang, 2001). Global critical events are incidents that threaten the goals of airline organizations worldwide. In line herewith, the study included medium to large network airlines that fly intercontinentally.

The study focused on two issues: (i) organizational sustainability attitudes of airlines as such, and the development over time, and (ii) the effects of two global critical events, namely SARS and the threat of terrorism after 9/11 on organizational sustainability attitudes. Consequently, the following research questions were studied for the aviation industry:

1. What is the attitude and development path of airlines with respect to sustainable development?
2. What impact did global critical events have, namely SARS and the terrorist attacks of 9/11, on the organizational sustainability attitude?

Methodology

A selection of 50 globally operating airlines is used for the investigation, characterized by a spread of continent and country the airlines are based in. Publicly available information from the selected airlines is used to quantify an overall organizational sustainability attitude. Information was available from the airlines itself during the period 1999-2003, including annual and quarterly reports, social or responsibility reports, form 10-K reports and in-flight magazines. Additionally, external information is used, including transport magazines, international journals and newspapers. A main advantage of the sustainability model is comparability; in case industry-specific indicators, like reduction of emissions in the aviation industry, are used, it is not possible to control for parallels in interindustry research or comparative studies. The quantification model of Zoeteman (2001) is based on the categories listed in table 1.

Sustainability level	Attitude to sustainability	Argumentation
1. Very unsustainable	Ignorance	Exhausts resources for short-term profit maximization
2. Unsustainable	Reactive	Resists lawmaking, may react to external pressure
3. Almost sustainable	Proactive	Accepts tightening of regulations, takes responsibilities seriously
4. Sustainable	Organizationwide involvement	Anticipates on global consumer needs, trends within industry
5. Beyond sustainability	Beyond scarcity	Participates in development of the industry (industry wide level) and related industries

Table 1:Levels of organizational sustainability attitude for business organizations

Furthermore, the three issues of sustainable development are specified by subcategories and parameters as follows.

Economic sustainable development is specified by three subcategories: operations-based (3 parameters), investment-based (1 parameter) and strategic value creation (1 parameter). All economic parameters have in common that they address responsibility to create value for the shareholders. So, it is assumed in this study that economic health of airlines reflects the long-term economic sustainability. An overview of the economic parameters and the possible scores on the organizational sustainability attitude are shown in table 2.

The second issue (social sustainable development) touches upon the social context of the network airline and the empirical relation with key stakeholders. Consequently, three subcategories address the attitude towards identifiable social groups, like employees. These subcategories are: operations-based (4 parameters), investment-based (1

Table 2: Economic sustainability parameters (Airlines)

Economic Sustainability	Level I- Ignorance	Level II- Reactive	Level III- Pro-active	Level IV-Company-wide involvement	Level V- Beyond scarcity
Operations-based					
Risk management	*no risk management	*risk management policy focused on short-term operational performance *apart from other aspects	*complimenting risk management and companywide performance	*own risk management system	*companywide involvement *part of company philosophy *all individuals within the organization involved
Handling financial distress	*applied one or more times for bankruptcy or protecting articles	*straight retrenchments, measures but not clear strategy behind	*somewhat healthy to industry standards *union labor is contacted to cut cost	*sophisticated cost-cutting programs *high degree of union involvement	*financial distress cost is/ has been not relevant at all
Integration of sustainability in the organizational structure	*no responsibilities assigned	*some governance policies, apart from other aspects *only a public relations issue	*integrated corporate governance policy *following research in the industry	*sustainable management represented on high level *undertaking activities by doing research	*sustainable management/ Dept. represented on highest level
Investment-based					
Kind of investments & investment policy (including measures for trends and forecasts)	*short-term cost reduction *no specific strategy *based on survival	*only efficiency-driven and cost-driven	*continuous innovation program *sustainable business growth	*3 principle bottom-line taken into account *development of own standards	*undertakes only fully sustainable projects *investment in common goods & beyond legal requirements, industrywide
Strategic Value Creation					
Attitude towards partnerships (network, alliance)	*no participation. very limited participation	*limited participation with other airlines, network parties	*member of alliance, developed strategic group *a developed network created	*stimulation other airlines to join alliance *contacts on higher level to improve sustainability	*leading alliance regarding economic sustainability

Table 3: Social sustainability parameters (Airlines)

Social sustainability	Level I- Ignorance	Level II- Reactive	Level III- Pro-active	Level IV-Company wide involvement	Level V- Beyond scarcity
Operations-based					
Employee facilities	*no policy *survival of the strongest	*unhealthy relations with unions *handles employee issues at most basic content *does not care for all employees equally	*established relations with social/trade unions *pension funds *care for all employees	*independent and flexible working conditions *tracking employee satisfaction *manager-employee contact on high level	*security, self-steering of career *coaching *board openness towards individual employees
Human rights	*internal and external complaints *no specific care for human rights	*only compliance when legally enforced	*preventive attitude, legal policy *stimulates ethnic minority development	*co-operation to solve problems on platform level	*integrated responsibilities in local and regional development planning-NGO
Customer care, transparency and responsiveness/ SMM	*sales driven on the short-term	*improvement of customer targeting *mainly sales-driven *loyalty programs to improve flight participation	*study of consumer wishes and sophisticated loyalty programs *takes care of allergic, diet customers and vegetarians on high level *company & customer win both, value-enhancing for both	*annually screens and reviews consumer wishes *adapted sophisticated loyalty programs *interaction with consumers *company, customer and society win all	*Far beyond profit-making *Health and care promotions, active participation with ideas customers, society *Pilot studies to improve sustainability *customers involved in improving policy
NGO-relations and participation	*ignored *no policy	*conflicts or very limited contact *legally required interest groups	*some contact with local NGOs from own industry or industry-related *via in-flight charity program	*cooperation with NGOs on governmental/international level *representatives local NGOs	*representatives of all stakeholder groups (platform building) *co-management of initiatives
Investment-based					
Employee development & safety issues	*no educational investment *safety issues ignored	*work related safety education, but only compliance to regulations *some training program	*management education programs *consistent and continuous program with training	* continuous development of training program to improve safety *knowledge management system and cross-functional skill transfer	*skills development planning *education for a sustainable lifestyle *self-knowledge management systems
Strategic Value Creation					
Stakeholder relations long-term	*policy of only pleasing financial stakeholders	*involvement of other stakeholders but still regulatory based *not much influence of other stakeholders	*participate and develop relations with stakeholders on all levels	*goals of all stakeholders are equally valued towards performance of company *balanced view	*all stakeholders participate equally in policymaking and decision-making on the long-term

parameter) and strategic value creation (1 parameter). An overview of the social parameters and how organizational sustainability attitudes are defined is given in table 3.

Finally, environmental sustainability is related to the focus on nature and ecological components. The aviation industry is facing more and more environmental regulative pressure, national as well as international, to innovate on reduction of e.g. noise, CO2 – and NOx emissions. The current study indicates that obtaining a high score on environmental sustainability implies a broad perspective on environmental affairs. Consistent with the previous two components of sustainable development, three subcategories are chosen: operations-based (2 parameters), investment-based (2 parameter) and strategic value creation (1 parameter). An overview is presented in Table 4 (on next page).

Based on the abovementioned parameters and the five levels of sustainability attitudes, information is coded. Higher sustainability attitudes develop from resistance to managing commons (level 1-5). So, a level of organizationwide involvement (level 4) is indicated by a score of 4. Based on the levels of sustainability, true numbers are given for each parameter. Overall economic, social and environmental sustainability are weighted equal. Because the total number of parameters per sustainability category is different, namely 5 economic, 6 social and 5 environmental ones, weights of each parameter are as follows: each economic parameter has a weight of 0.2x0.33, each social parameter 0.16 x 0.33 and each environmental parameter 0.2 x 0.33 of the total score. As a result of the weight consideration, scores with 2 decimals are created.

This method of quantification can result in a benchmark of airlines, as well as in a specification per continent and per airline alliance, as presented in the results part. Furthermore, due to the longitudinal design of the study, with data over the period 1999-2003, it is possible to address a development in organizational sustainability attitude. Whereas this design provides the opportunity to outline trends, it is also applicable to put emphasis on the effects of global critical events during the research period.

Results

Based on the previously discussed methods, the parameters are matched for each airline (N=50) during five years. Consequently, multiple matrices regarding some airlines are developed in order to understand the overall meaning concerning organizational sustainability attitudes. An example of such an elaboration, including motivation and qualification is mentioned in table 5 (see page 6).

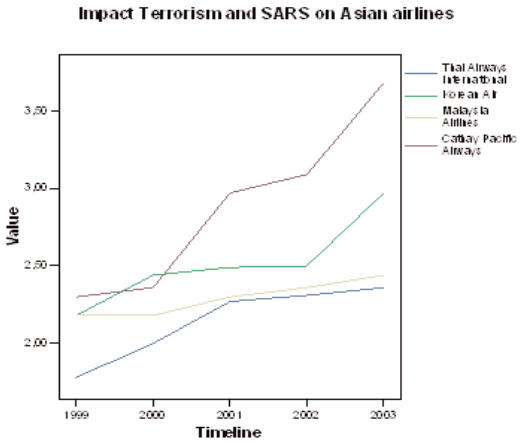
Overall, the sustainability index of airlines is not well advanced. Merely 8.5 per cent of the cases is currently sustainable. In other words, a minor part of all airlines scored on average above 4.0 on the sustainability index. In order to provide a benchmark of sustainability, table 6 (see page 7) shows all comprehensive scores of 2003. A more in-depth look at the index of airlines per continent (table 7, see page 6) shows that in particular less developed parts of the world have low scores, for example Latin America and Africa. Airlines that are based in (Northern) European countries, the United States or Oceania, on the other hand, have relatively high scores. Moreover, a statistical addition, in which the sustainability attitudes of each organization are correlated with country scores on sustainability (Zoeteman and Harkink, 2005), points out that the national institutional context plays a role in organizational attitude: r (Pearson correlation) = 0.59, significant at the 0.01 level (2-tailed).

Table 4: Environmental sustainability parameters (Airlines)

Environmental sustainability	Level I- Ignorance	Level II- Reactive	Level III- Pro-active	Level IV-Company wide involvement	Level V- Beyond scarcity
Operations-based					
Transparency of activities & communication	*no information to receive *not taking part on official publications *neglecting environmental impact	*legally required reporting *monitors waste and emissions *informing about activities	*extended reporting *foundation with environmental impact *dialogues	*Quarterly reporting including indexing *very ambitious target-setting *extended dialogues	*up-to-date, real time information *development of the natural environment
Position regarding legislation	*refuses international agreements	*ignores international agreements *following aviation authorities legislation	*accepts Kyoto, Global compact to some extent	*supports international environmental regulations *tries to improve Kyoto	*voluntary man of global commons
Investment-based					
Ecological product development-focus suppliers	*ignorance, only market oriented	*monitors developments at suppliers	*negotiates and participates with suppliers on ecological sense	*cooperative bonds and investments with suppliers to support the environment	*co-manages suppliers (e.g. aircraft-building support)
Local environmental communities	*ignorance or not able/willing to invest this year	*educational assistance *local involvement, but very basic	*housing and medical assistance or other noteworthy assistance	*educational development *supported by large investments	*investments for personal development *support for unrelated areas
Strategic Value Creation					
Engagement overall, (incl. Code of Business Conduct)	*no guidelines, no mentioned engagement or Code of Business Conduct	*prevention of conflicts *relates to mission statement	*direct guidelines to enhance value & mission statement *positive engagement	*active participation to enhance value *persuading improvement policy (action-oriented)	*industry-wide activism

Another issue to be studied is the progress of the sustainability attitude of airlines over time. As is discussed in the methodology part, data is gathered for the period 1999-2003. An in-depth analysis shows that in general, also in less developed countries and continents, the sustainability attitude is increasing systematically. For example, Aeroflot starts in 1999 with an overall score of 1.57 and ends with 2.48 in 2003. In addition, a major increase in sustainability attitude is showed by Cathay Pacific airlines: ranging from 2.30 (overall) to 3.68 (overall). Airlines that were not sustainable (score < 4.0) in 1999, but can be mentioned as sustainable in 2003 (score > 4.0) are e.g. Delta Airlines, Lufthansa and SAS. Furthermore, it must be noted that the environmental score of airlines has definitely increased; assuming that the overall institutional context of airlines positively affects this.

Figure 1: Impact 9/11 and SARS – Asia



A key question that can now be answered is whether or not global critical events like SARS and 9/11 did affect the sustainability attitude of organizations. Three different visualizations are presented to show the impact for the European, Asian and American airlines (see Figures 1, 2 and 3). By presenting the results in this way, it is possible to control for regional moderating effects, although the focus is on global critical events. For example, 9/11 could have had a negative effect on the sustainability indexes of American airlines, while not affecting the results for European airlines.

IATA (2003) mentioned that the financial status of airlines decreased by the global critical events. A very striking result of this study is that, although less passengers are scheduled after 9/11 and SARS, and net profits of airlines decreased, all airlines paid more attention to sustainability. Global market requirements and consumer expectations obviously prevailed over short-term cost limitation or were not in contradiction with cost-saving programs.

Conclusion

Although there is lack of scientific consensus on how to define the concept of sustainable development, this paper outlines a practical approach towards measuring the sustainability attitude. The first question investigated concerned organizational sustainability attitudes of airlines and their progress in time. The results made clear that overall the sustainability attitude of airlines is around a value of 3, as a result of considerable improvements in the years before. In addition, airlines that are based in well developed countries are more concerned with sustainability issues than airlines from less devel-

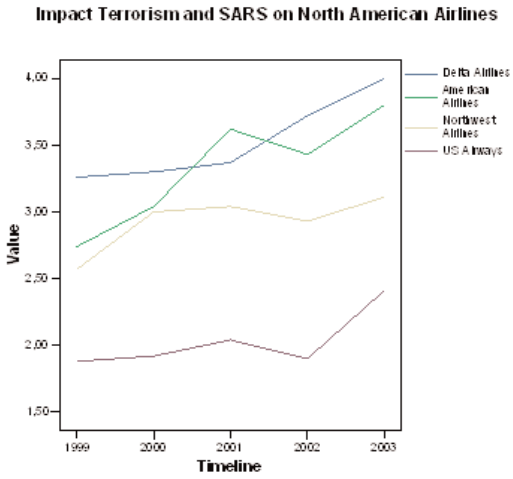
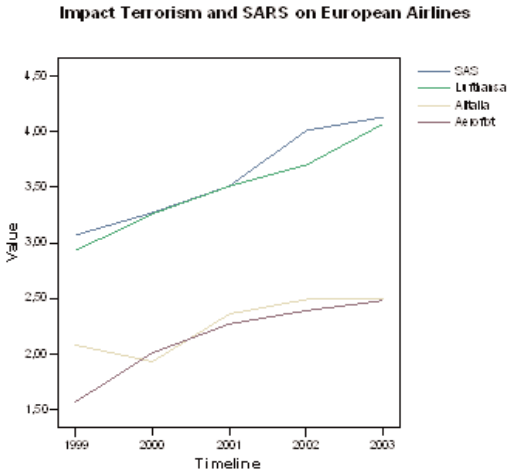


Figure 2: Impact 9/11 and SARS - America

Figure 3: Impact 9/11 and SARS - Europe



oped countries. This study shows a gap between Oceania, Europe, North America and Asia on one side and Africa, Latin America and the Middle East on the other side: so there is a significant role of the institutional context of organizations. A parallel can be seen concerning the attention on the environmental aspects of sustainability: just as the total institutional context (e.g. governments), airlines are paying more attention to environmental issues. However, a remarkable finding is that the sustainability attitudes of airlines are dominantly higher than the country-based attitudes of their country of origin (Zoeteman and Harkink, 2005). This puts emphasis on increasing global standards of aviation and on the role of a level playing field.

Concerning the progress of sustainability, there is a continued positive development for all areas investigated. Consequently, there is no significant negative impact of two major global critical events. The longitudinal analysis shows no effects for the terrorism attack of 9/11 2001 and for SARS in 2003 for the regions of North America, Europe and Asia, covering 75 per cent of the world air transport. In addition, as IATA (2003) showed, airlines are definitely influenced by the defined critical events in a financial manner.

In conclusion, although the economic status of airlines is influenced by global critical events like terrorism attacks and SARS, this does not influence the continuing trend of improved sustainability attitudes. How can this be explained? (Neo-) Institutional organization theories address the legitimacy argument and social pressures given by the formal and informal institutional environment of organizations (Scott, 2001; Gößling, 2003). So, because of the institutional pressures from regulators and the business environment airlines are forced towards higher levels of the sustainability attitude as they have to prove to act in a social manner. In addition, a study on the Dutch aerospace cluster concludes that a high level of organizational network embeddedness leads to a more complying organizational behavior, which is also the result of regulatory institutional pressures (Kaashoek, 2006). Furthermore, a profound and well-established sustainability attitude may also improve the capacity to compete in turbulent and uncertain times.

Research agenda

The authors recommend to continue this study and broaden it to include airports, original equipment manufacturers as representatives of the aerospace and manufacturing industry. Also, research conducted at other transportation modes provides better insight in chances for improvement in sustainability in our global transport system (Stella Project, 2004).

Moreover, a study with a policy perspective can be developed in order to increase sustainability in areas with a low average sustainability, for example Latin America. Although it is widely recognized that these regions are still emerging, global organizations regarding air transport, like IATA, are able to develop a policy framework as a stimulus. Finally, an in-depth theoretical analysis is recommendable in order to explain the current findings. Notably the inconsistency of sustainability attitude and economic performance requires deeper explanations from a business sociological or institutional perspective.

Note from the authors:

This paper is mainly derived from thesis work done by the co-author Oscar van Reisen. The full digital document with background information can be obtained at http://www.tilburguniversity.nl/globus/publications/publications05/publ05.03.html

Footnotes:

[1] For example technological developments of aircraft products.

[2] For example the entrance of new (low cost) airlines and the predicted booming tourism industry of China.

[3] Previous applications of the Zoeteman model are not limited to organisational levels. E.g. sustainability attitude of nations (Zoeteman, 2005), on of consumers (Globus, 2006).

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Table section

Table 5: Elaboration of a parameter. Delta Airlines - 2003

Sustainability (Delta Airlines)	Level III- Pro-active	Level IV- Company-wide involvement	
2003- Economic	3.80 (4, 4, 4, 3, 4)		4. Risk management: companywide involvement
			4. Handling financial distress: companywide involvement
			4. Integration of sustainability: companywide involvement
			3. Proactive investment policy
			4. Attitude towards partnerships: companywide involvement
2003- Social		4.00 (4, 4, 4, 4, 4, 4)	4. Employee facilities: companywide involvement
			4. Human rights: companywide involvement
			4. Customer care/ Strategic Marketing Management: companywide involvement
			4. Companywide involvement regarding NGO-relations
			4. Companywide involvement regarding employee development & safety
			4. Companywide involvement stakeholder relations long-term
2003- Environmental		4.20 (4, 4, 5, 4, 4)	4. Companywide involvement regarding transparency of activities & communication
			4. Position regarding legislation: companywide involvement
			5. Ecological product development-focus suppliers: beyond scarcity
			4. Companywide involvement regarding local environmental communities
			4. Companywide involvement regarding overall engagement/CCC
2003- Overall		4.00	(3.80+4.00+4.20)/ 3

Table 6 is printed on page 7!

Table 7. Position of the Average Regional Airline

Position	Airline	Overall sustainability	EC	SOC	ENV	Overall level of sustainability
1.	Average European Airline	3.19	3.40	3.22	2.95	Almost sustainable
2.	Average Airline of Oceania	3.15	3.40	3.34	2.70	Almost sustainable
3.	Average N. American Airline	2.96	3.03	3.21	2.63	Unsustainable
4.	Average Asian Airline	2.86	3.18	2.85	2.56	Unsustainable
5.	Average African Airline	2.45	2.60	2.59	2.15	Unsustainable
6.	Average M. E. and Gulf Airline	2.14	2.20	2.50	1.73	Unsustainable
7.	Average Latin American Airline	2.08	2.40	2.19	1.66	Unsustainable

Table 6. Sustainability attitudes ranking airlines (2003)

Postition	Airline	Overall sustainability	EC	SOC	ENV	Overall level of sustainability
1.	SAS	4.13	3.80	4.00	4.60	Sustainable
2.	Lufthansa	4.07	4.20	4.00	4.00	Sustainable
3.	Iberia (IB)	4.01	4.20	3.83	4.00	Sustainable
4.	Delta Airlines	4.00	3.80	4.00	4.20	Sustainable
5.	British Airways (BA)	3.99	4.20	4.17	3.60	Almost sustainable
6.	Air France	3.90	4.40	3.50	3.80	Almost sustainable
7.	American Airlines (AA)	3.80	4.00	4.00	3.40	Almost sustainable
8.	KLM	3.76	4.00	3.67	3.60	Almost sustainable
9.	Cathay Pacific Airlines	3.68	3.80	3.83	3.40	Almost sustainable
10.	Finnair	3.62	4.00	3.67	3.20	Almost sustainable
11.	All Nippon Airways (ANA)	3.38	3.40	3.33	3.40	Almost sustainable
12.	Japan Airlines (JAL)	3.32	3.20	3.17	3.60	Almost sustainable
13.	Qantas Airlines	3.23	3.20	3.50	3.00	Almost sustainable
14.	Singapore Airlines (SIA)	3.20	3.80	3.00	2.80	Almost sustainable
15.	Kenya Airways	3.19	3.20	3.17	3.20	Almost sustainable
16.	Northwest Airlines (NWA)	3.11	3.20	3.33	2.80	Almost sustainable
17.	Air New Zealand	3.06	3.60	3.17	2.40	Almost sustainable
18.	Austrian Airlines (AUA)	2.99	3.20	3.17	2.60	Unsustainable
19.	Korean Air	2.97	3.40	2.50	3.00	Unsustainable
20.	Continental Airlines	2.92	3.40	3.17	2.20	Unsustainable
21.	Ethiopian Airlines	2.87	3.20	3.00	2.40	Unsustainable
22.	TAP Air Portugal	2.80	2.80	3.00	2.60	Unsustainable
23.	Czech Airlines (CSA)	2.68	2.80	2.83	2.40	Unsustainable
24.	Kuwait Airways (KAC)	2.64	2.60	3.33	2.00	Unsustainable
25.	Asiana Airlines	2.61	3.00	2.83	2.00	Unsustainable
26.	China Airlines (CAL)	2.50	2.80	2.50	2.20	Unsustainable
	Alitalia	2.50	2.60	2.50	2.40	Unsustainable
	Varig	2.50	2.60	2.50	2.40	Unsustainable
29.	Aeroflot	2.48	2.60	2.83	2.00	Unsustainable
30.	Malaysia Airlines (MAS)	2.44	3.20	2.33	1.80	Unsustainable
	United Airlines (UAL)	2.41	2.40	2.83	2.00	Unsustainable
	US Airways	2.41	2.60	2.83	1.80	Unsustainable
33.	Thai Airways International	2.36	2.60	2.67	1.80	Unsustainable
34.	LOT Polish Airlines	2.30	2.40	2.50	2.00	Unsustainable
35.	Avianca	2.29	2.60	2.67	1.60	Unsustainable
36.	Aero Mexico	2.24	2.60	2.33	1.80	Unsustainable
37.	Garuda Indonesia	2.18	2.60	2.33	1.60	Unsustainable
38.	South African Airways (SAA)	2.17	2.20	2.50	1.80	Unsustainable
	LAN	2.17	2.60	2.50	1.40	Unsustainable
40	Aer Lingus	2.13	2.80	2.00	1.60	Unsustainable
41.	Air Canada	2.04	1.80	2.33	2.00	Unsustainable
42.	Turkish Airlines (THY)	1.93	2.20	2.00	1.60	Very unsustainable
43.	Saudi Arabian Airlines	1.86	1.80	2.17	1.60	Very unsustainable
44.	TACA	1.83	2.20	1.67	1.60	Very unsustainable
45.	Mexicana	1.81	2.20	1.83	1.40	Very unsustainable
46.	Cubana	1.74	2.00	1.83	1.40	Very unsustainable
47.	Egypt Air	1.56	1.80	1.67	1.20	Very unsustainable
	Average Airline	2.80	3.01	2.90	2.49	Unsustainable

Please note: Excluded from this list are British Midland, Spanair, and Copa Airlines because of missing information.