



# Impacts of the micro environment on airline operations in southern Africa: A literature review study

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## Abstract

Operating airlines in southern Africa has proved to be fraught with challenges in the micro environment resulting in several airlines terminating their services after short periods of operation. This article focuses on the impacts of the micro environment on airline operations in the region. From the study it is clear that the only opportunities for the airline industry in southern Africa are the low threat of substitutes and new entrants, which are not enough to mitigate intense rivalry and, the high bargaining power of buyers and suppliers. Several suppliers can easily 'bully' airlines, and even though the threat of new entrants is low, wherever there is potential, there will be new entrants, creating overcapacity and reducing yields (as has been the case in South Africa). It is therefore clear why there is such a high failure rate in the airline industry in southern Africa relative to other industries.

**Key words:** Airlines, opportunities, failure rate, southern Africa, overcapacity, yields

## Introduction

Southern Africa is touted as one of the toughest aviation markets, due to highly price-sensitive customers (Eze, 2016). Overcapacity exacerbated by intensive price competition have resulted in continued losses for majority of airline operators. Consequently, because of a difficult micro environment in southern Africa many airlines have failed whilst those that are still in operation are traversing through turbulent times and fighting for survival (Mhlanga & Steyn, 2017).

According to Steyn and Mhlanga (2016), South Africa is a case in point where out of the fifteen airlines to enter the airline industry between 1991 and 2016, only seven are still in operation. Other privately owned airlines such as Nationwide, Velvet Sky and 1Time operating from 1995 to 2008, 2011 to 2012, and 2004 to 2012 respectively, had exited even after remaining in the market for significant periods (Mncube, 2014). The national carrier, South African Airways (SAA), had also suffered losses over the past decade requiring several government bailouts and guarantees, including one in January 2015 and the latest in September 2016. Only few airlines, namely SAA and Comair have been operating for a lengthy period of time while the majority had very short life-spans, some of them survived for only a matter of months. This according to Smith (2015) is indicative of a difficult micro environment in southern Africa.

However, despite a difficult micro environment in the region, the industry has not been able to develop and implement necessary organisational and sustainable strategic changes (Heinz & O'Connell, 2013). Consequently, a clearer understanding of how the micro environment impacts on airline operations will help management devise strategies to



strategically manoeuvre out of these challenges and thereby boost tourism growth (Budd, Francis, Humphreys & Ison, 2014).

### **Problem statement**

The airline industry in southern Africa is paradoxical and dichotomous (Mutegi, 2016). Nowhere is the potential for aviation growth greater than in southern Africa where there is the fastest burgeoning middle class income group (AFRAA, 2016) and air traffic growth (CAPA, 2016). However, despite air traffic growth, the profitability of airlines in southern Africa has plummeted to unprecedented levels with all national carriers struggling with colossal losses (South African Airways, Air Namibia, Air Zimbabwe and Botswana Airways) whilst private airlines tend to have very short life-spans, which explains the dichotomy (The Herald, 2016). Consequently, various scholars (Roese & Smith, 2015; Ssamula, 2012; Eze, 2016) have long pondered the enigmatic question of why southern Africa has become an airline graveyard.

According to Indetie (2015) the major problem is the poor financial performances of airlines in southern Africa which does not seem to match the growth in demand. Consequently, the collapse of carriers such as Zambian Airways, Flitestar, Phoenix and Fly Africa underscores the grim financial reality the industry faces (Smith, 2015). Some research endeavours (Campbell, 2014; Styan, 2013; Riwo, Njanja & Ochieng, 2013) argue that identifying the impacts of the micro environment on airline performances could significantly unlock the industry's potential for future financial sustainability.

### **Methodology**

The research involved an extensive literature search of the air transport agreements, their evolution, and impacts on airlines operating in southern Africa, followed by several interviews with key personnel at six south African airlines, namely, Comair, Flysafair, South African Airways (SAA), Air Zimbabwe, Air Botswana and Air Namibia. In order to select respondents purposive sampling, which is a non-probability based sampling technique (Babbie, 2010), was used. Choosing respondents with a specific objective in mind is termed purposive sampling (Tustin, Ligthelm, Martins & Van Wyk, 2010).

Purposive sampling was used to choose respondents that were deemed to have sufficient relevant knowledge to participate in the interview sessions. Only CEOs were interviewed. This criterion was used to ensure that selected respondents provided insightful answers to the questions which were asked (Wiid & Diggines, 2009). In purposive sampling the researcher chooses the sample based on who is thought would be appropriate for the study (Cooper & Schindler, 2003). This method is useful in situations when there is a limited number of people who have expertise in the area being researched (Maree, 2005). The office of the CEO from each mentioned airline was approached for permission to conduct interviews. This was supported by a letter of introduction to the study. Interviews were conducted in June and July 2016. This study was conducted according to the research ethics guidelines of informed consent and confidentiality as given by Leedy and Ormrod (2013). As such, the airlines and respondents engaged were only those that expressed interest to participate in this study; participation in this study was voluntarily since it was based on oral consent. Furthermore, all respondents' information and responses shared during the study were kept private and the results were presented in an anonymous manner in order to protect the identities of the respondents. Airline managers were assured that their names would be treated as anonymous.

## The micro environment

The micro environment refers to all the factors that affect firms within a specific industry (Thompson & Martin, 2005). According to Kotler and Armstrong (2006) the micro environment is made up of factors which have a direct impact on the airline's ability to achieve its goals. This involves the customer, supplier, competitors, new entrants, and substitutes that affect the operations of the organisation (Porter, 1980:35). Porter (1980) coined these elements collectively as the five forces of competition. Figure 1 portrays the five forces framework.

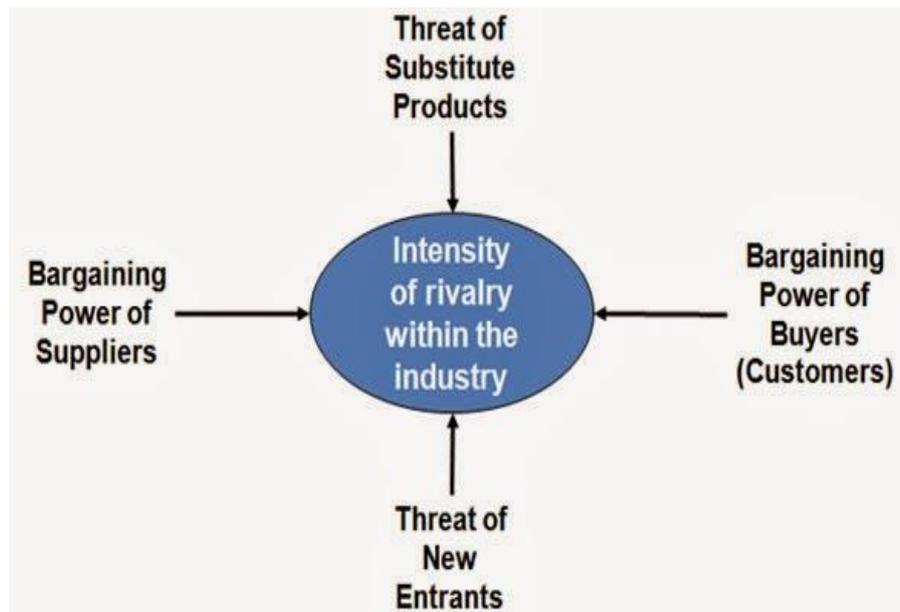


Figure 1: Porter's five forces model (Source: Porter, 1980)

Porter (2008) proposed this framework to help organisations understand the underlying structural elements that influence industry profitability. The framework suggests that the higher the intensity of each force, the lower the potential for industry profitability (Demydyuk, 2011). Therefore, it is important to analyse the impacts of the five forces on airline performances namely; the threat of new entry, the buyer's bargaining power, the supplier's bargaining power, the threat of substitute and competitive rivalry that affect the performance of airlines.

To determine industry attractiveness, an understanding of the competitive pressures is vital (Thompson & Martin, 2005). Porter (2008) used theoretical frameworks derived from Industrial Organisation (IO) economics to derive five forces which determine the competitive intensity and therefore attractiveness of a market. This theoretical framework, based on five forces (threats of new entry, buyer's bargaining power, and supplier's bargaining power, threat of substitute, and competitive rivalry), describes the attributes of an attractive industry and thus suggests when opportunities will be greater, and threats less, in these of industries (Thompson & Martin, 2005).

Attractiveness in this context refers to the overall industry profitability and also reflects upon the profitability of the firm under analysis (Kotler & Armstrong, 2006). An "unattractive" industry is one where the combination of forces acts to drive down overall profitability. A very unattractive industry would be one approaching "pure competition", from the perspective of pure industrial economics theory. It is important to note that this framework is not for the



analysis of individual firms but for the analysis of the industry. Nonetheless, the model has proved a veritable tool in the analysis of the operating environment of the airline industry.

### **Impacts of the micro environment on airline operations**

Below, Porters' (1980) five forces model is analysed to the airline industry in southern Africa.

#### **i. Rivalry among existing competitors**

Porter (1980) conceptualised rivalry within an industry as existing on a continuum from low to high. However, some research endeavours (Stonehouse & Campbell, 2004; Thompson & Martin, 2005; Moiseiwitsch, 2014) argue that rivalry among existing competitors significantly impacts on airline performances. Moiseiwitsch (2014) concurs that rivalry amongst existing competitors tend to be high especially in a deregulated industry leading to a price war which significantly impacts on the performance of airlines. For example, the deregulation of the South African airline industry in 1991 paved the way for the entry of a number of low cost carriers (LCCs) which significantly impacted on the performance of airlines (Luke & Walters, 2013). As a consequence, of the eleven airlines to enter the industry between 1991 and 2012, only one is still in operation (Luke & Walters, 2013).

Other privately owned airlines such as Nationwide, Velvet Sky and 1time operating from 1995 to 2008, 2011 to 2012 and 2004 to 2012, respectively, have exited even after remaining in the market for significant periods (Mncube, 2014). The national carrier, South African Airways (SAA), has also suffered losses over the past decade requiring several government bailouts and guarantees, including one in September 2016 (Ensor, 2016). This suggests intense rivalry amongst existing competitors which has significantly impacted on airline performance (Gernetzky, 2016).

Furthermore, an increase in the number of airlines on particular routes in South Africa has intensified rivalry amongst existing competitors and thereby impacting on airline performance (Eller & Moreira, 2014). To illustrate this point Ensor (2016) noted that the entry of LCCs (Fly Safair and Fly Blue Crane) has resulted in overcapacity in the South African domestic market because the South African market is not large enough to support three LCCs. Maqutu (2015) re-affirms that three LCCs are not sustainable for the long term because South Africa's domestic market is too small (and too seasonal) to provide the scale that an independent LCC will need in order to thrive over the long term in an economic environment that continues to be lacklustre.

According to the Oxford Business Group (OBG, 2017) similar sized domestic markets have two or fewer LCCs, for example, Vietnam has two LCCs, Saudi Arabia one and Chile does not have any. Even much larger Australia, which is about four times the size, currently has only two LCCs (Maqutu, 2015). Maqutu (2015:9) cautions that there are around 17 million people flying in South Africa each year and the market is served by nine domestic carriers, which is far more airlines per person than there are in the US, Europe or China. Mondliwa (2015) further argues that South Africa does not possess the requisite attributes of more developed markets that allow multiple LCCs to thrive. In Europe, competing LCCs such as EasyJet and Ryanair do not fly on the same routes or serve the same city pairings (Wood, 2016). However, in South Africa, LCCs cover the main domestic routes, since there are few commercially viable secondary routes to fly (Gernetzky, 2016). For instance, in South Africa, only Johannesburg has a secondary airport (Wood, 2016).

Due to intense rivalry among existing competitors in the South African domestic market airfares have dropped by as much as 39% along each of the ten routes on which FlySafair and Fly Blue Crane have entered (McLennan, 2015). To illustrate the impact of intense



rivalry among competitors, in October 2015, Comair reported a stagnation in its revenues and a 17% fall in profits due to competition with the new airlines (Sokana, 2015). Comair's profits dropped from R265 million in 2015 to R219 million in 2016, while Mango recorded its first loss in 10 years in the 2015/16 financial year (Mungadze, 2016).

In Zimbabwe the national carrier (Air Zimbabwe) is facing intense rivalry after the Zimbabwean Government opened the skies. According to Chipunza (2013) three South African airlines namely; South African Airways, Comair and Airlink now control over 90 percent of the market share on the Harare to Johannesburg, Johannesburg to Victoria Falls and Johannesburg to Bulawayo routes, against Air Zimbabwe's 10 percent and this has significantly impacted on Air Zimbabwe's performance.

## ii. The threat of new entrants

This aspect of the Five Forces refers to the extent to which new entrants can be accommodated within the industry (Porter, 1980). However, Bryson (2012) claims that the threat of new entrants does not significantly impact on the performance of airlines. Hitt, Ireland and Hoskisson (2010) concur that in the airline industry new entrants cannot enter and compete on the same level as long established airlines. To illustrate this point, the South African airline industry is a case in point. According to Nolutshungu (2013) in South Africa it is difficult for new entrants to acquire primetime or peak hour landing slots at major airports because established airlines fiercely guard their landing slots and gates, and with little spare capacity in the business, it is tough for prospective entrants to gain a foothold. Subsequently, the slot's right to take off or land at a designated time, particularly primetime slots, becomes an essential commodity for airlines in South Africa (Mncube, 2014).

Moreover, in southern Africa a new entrant would require a considerable amount of capital to penetrate a market characterised by a number of structural barriers, primary of which are high cost of entry, access to finance and poor cash flow management (OBG, 2017). Jarvis (2016) opines that new entrants also face a problem of accessing effective distribution channels which tend to favour established carriers. As a consequence, new entrants often have to by-pass distributions channels and create their own as gaining access to the same sales channels as those used by established airlines are often costly. For instance, in South Africa new entrants (such as Flysafair) tend to avoid using travel agents who often favour established higher fare carriers such as SAA because of the rates of sales commission received (McLennan, 2015). As such, new entrants often encourage their passengers to book directly with the airline via the internet (OBG, 2017). These barriers tend to reduce the threat of new entrants and according to Young (2015) this is one of the main reasons for the demise of new entrants such as Skywise.

However, although these barriers significantly impact on the performance of new or prospective entrants they do not appear to have deterred entry as airlines such as FlySafair, Fly Go Air and Fly Blue Crane have entered the market (McLennan, 2015). Gernetzky (2016) cautions that although these barriers are substantial, they do not appear to prevent entry but rather restrict sustained entry. Nonetheless, new entrant FlyBlue Crane is traversing through turbulent times. Launched in September 2015, the airlines' future hangs in the balance and the airline has reportedly sought business rescue of R240m from the Industrial Development Corporation (IDC) (in July 2016) (Gernetzky, 2016). This is indicative of the challenges new entrants face in the airline industry in southern Africa.

In another vein, Williams (2012) opines that as entry barriers are lower in a deregulated market such as South Africa, it places the market as an attractive prospect for new entrants. However, to set up an airline in South Africa, a prospective entrant has to overcome legal barriers wherein it must comply with strict rules and legislation (Makhaya, 2015). For



instance, the South African Civil Aviation Authority requires a new airline to apply for an operating certificate prior to operation and it has to meet the minimum 75% South African ownership requirement before being issued with a licence to operate by the Air Service Licensing Council (Makhaya, 2015). For example, in 2013 Fastjet failed to acquire defunct operator 1time when it could not meet South Africa's ownership regulations, which limit foreign companies to a 25% stake in a domestic airline (Brock, 2015).

Furthermore, prospective entrants tend to be discouraged to enter the market in southern Africa because of retaliatory strategies from established carriers (Bryson, 2012). Any strategy employed by a new entrant is likely to attract a retaliatory reaction from existing airlines (Nolutshungu, 2013). Serpen (2014) stresses that newcomers should expect retaliation based on: previous reactions to new entrants; excess cash and unused borrowing power of existing firms; available productive capacity; existing relationships within the industry between customers, suppliers, buyers and competitors; and industry growth rate at time of entry.

When a new entrant enters a market it changes the competitive dynamics (Bryson, 2012). Airlines already serving the market have little choice but to respond and the most basic competitive response is to match price Serpen (2014). One of the reasons air fares have declined in the years after liberalisation in South Africa is the practice of established carriers to fight aggressively for customers by meeting the competitive challenge of new rivals in the marketplace (Campbell, 2014). Major airlines have used this retaliatory strategy to guard against new entrants (Serpen, 2014). Established airlines often tend to exhibit complacency and arrogance in the face of newcomers, especially when the new entrant moves into untapped and undeveloped markets on the fringe of the existing market (Porter, 2008). This is the case in South Africa where, for instance, following Fly Go Air's entry into the Johannesburg to Pietermaritzburg, and Johannesburg to George routes, the entrant experienced substantial competition from SAA associates Airlink and Mango, respectively (Paelo, 2016). Airlink and Mango dropped prices on these routes, increased the frequency of their flights and moved their time slots to those close to Fly Go Air (Wood, 2016). The increased capacity and competition forced Fly Go Air to reduce its total number of weekly flights on these routes (Winsen, 2016). Paelo (2016) avers that SAA has the exclusionary conduct of increasing capacity by donating or leasing old aircrafts to Mango whenever it acquires new aircrafts.

According to Nolutshungu (2013) predatory pricing is a common retaliatory strategy used by airlines in South Africa to deter new entrants from making profits. Predation is characterised by a drop in price to match that of the new entrant that is below average variable costs and increase capacity or flights on the route (Mahlaka, 2015). For instance, following entry by new airlines SAA and its subsidiaries (Mango and SA Airlink), have similarly dropped their ticket prices in all the routes new entrants have gone into (Travelstart, 2015). According to Spooner (2015) when 1Time entered the market in 2004, prices reduced by as much as 35% whilst following the entry of Kulula and 1Time in 2001 and 2004 respectively, SAA retaliated by launching Mango as a fighting brand in an effort to undermine entry into the LCC market. Consequently, this significantly impacted on the performance of new entrants with 1Time eventually being forced out of the market in 2012 (Wood, 2016). Although the airline industry in southern Africa is rather attractive in terms of deregulatory, the following factors: bureaucracy, slot problems, retaliatory strategies from established carriers and large financial outlay required to start a new airline reduce the threat of new entrants to established airlines (The Herald, 2016). The airline industry has a number of structural barriers, primary of which are high cost of entry, high operational costs and legal barriers, however, while substantive, these barriers do not seem to discourage entry and for the most part can be overcome (Wood, 2016). The more significant barriers to entry appear to be related to competing on the same level with established airlines as well as the relationships



SAA as the dominant player, has with other smaller airlines on secondary routes as well as its access to state funds and support (Paelo, 2016).

### iii. The threat of substitute products or services

This aspect of the Five Forces refers to the extent to which the product or service offered by an industry incumbent can be replaced by another similar service (Porter, 1980). Doganis (2010) posits that time, cost, personal preference and convenience determine the threat that substitute products pose to the airline industry. However, Walters (2010) argues that airlines outperform other forms of transportation when it comes to cost and convenience. Clark (2011) claims that because airlines outperform other forms of transportation when it comes to cost and convenience the threat of substitute products does not significantly impact on the performance of airlines.

According to Porter (2008) substitute products have the potential of diminishing profits within an industry by placing a ceiling on prices. The threat of substitutes is highest if the alternative product offers an attractive price performance trade off or if the buyer's cost of switching to the substitute is low (Porter & Kramer, 2011). In a competitive industry a producers' product is replaceable by that of another and no producer can influence price such that it increases the income of only one producer (Mohr & Fourie, 2004). It is therefore essential in business to remain alert to changes in other industries that may make them attractive substitutes (Bryson, 2012).

In southern Africa, transportation by road and rail are forms of substitutes for air travel (Mondliwa, 2015). Potential travellers can choose other means of transportation such as cars, buses or trains to go to other destinations (Gernetzky, 2016). Intercity train services in South Africa run between cities, for instance between Johannesburg, Cape Town, Durban and other towns (Travelstart, 2015). However, the major cost to switch is time. For instance, although travelling by train is cheaper, most journeys may go overnight (Gernetzky, 2016), whilst bus operators such as Greyhound, Translux and Intercapex arrive at inconvenient times and also travel overnight. In contrast, despite the time taken to reach the airport and check in for flights, the overall journey times by air is relatively much shorter than other travel substitutes (Wood, 2016). Therefore, there is low propensity to substitute, given that for most routes the substitutes' cost/benefit ratio is weak compared with air travel (Travelstart, 2015).

### iv. The bargaining power of suppliers

This aspect of the Five Forces refers to the extent to which suppliers can negotiate with businesses over materials and equipment (Porter, 1980). Porter (1980) argues that where suppliers have strong bargaining power, the relative position of businesses is relatively weak. However, according to Pandey (2010) suppliers in the airline industry tend to be in a relatively strong bargaining position because fleets to the industry are supplied by what is effectively a duopoly, (Boeing and Airbus), while an oligopoly exists in the supply of engines (General Electric, Pratt and Whitney, and Rolls Royce). With so few suppliers in operation, manufacturers are able to unilaterally establish prices and set delivery times (Bryson, 2012).

Furthermore, airlines usually engage in long term contracts in the production or leasing of aircrafts over a period of time (Olienyk & Carbaugh, 2011), therefore, switching suppliers after signing a contract is a breach of the contract which often results in financial penalties. According to Campbell (2014) the supplier switching costs for airlines is extremely high due significant amount of expenses involved associated with pilot retraining needs. Therefore, airline pilots have a strong bargaining power because there is no abundant supply of highly qualified and experienced pilots (Kamau & Stanley, 2015).



Nhuta (2012) argues that the suppliers of airline fuel have a higher bargaining power because airlines have little control over fuel prices. Eller and Moreira (2014) concurs that since there is no substitute for jet fuel this further increases supplier power. In turn, this reflects a difficulty in finding substitutes for the airlines inputs (Campbell, 2014).

In another vein, airports and ground handling companies are local monopolies with significant power charging fees for gate usage as well as for take-off and landing slots (Wyman, 2010). Airport services are concentrated in a small number of firms but they have low switching costs (Porter & Kramer, 2011). Privatization has led to the entry of private companies, some of which operate airports around the world (Uwagwuna, 2011). The competitive timing of flights into particular airports is controlled by airport authorities thereby giving them direct control of the profitability and competitiveness of airlines operating from their stations (Jenks, 2013). Therefore, the bargaining power of aircraft manufacturers is high, as there is a limited number of suppliers (Kamau & Stanley, 2015).

#### v. The bargaining power of customers

According to Porter (1980), where buyers have strong bargaining power, the relative position of suppliers of goods and services is relatively weak. In such industries, product and service providers must be particularly cognisant of the needs and demands of their customer base if they are to develop and maintain their market share (Heracleous, Wirtz & Pangarkar, 2009). However, in his study Clark (2011) found a significant difference between the bargaining power of customers and the performance of airlines. The reason for the significant difference is attributed to the increased level of price sensitivity of customers which contributes to their bargaining power (Clark, 2011).

Mondliwa (2015) claims that in the airline industry the bargaining power of customers is relatively high since most airlines are forced to cut costs by aggressive competitors. Ismael (2015) re-affirms that the bargaining power of customers in the airline industry is relatively high because airlines are highly vulnerable to any price reduction measures introduced by their competitors due to the lack of brand loyalty associated with the airline industry. Therefore, customers enjoy high bargaining power because switching to another airline is simple and is not associated with additional expenses (Winsen, 2016).

According to Nolutshungu (2013) there are a large number of airlines in the southern Africa hence passengers tend to be highly price-sensitive which increases buyer power. Mondliwa (2015) argues that since buyers have no switching costs when switching from one airline to another as such they are free to compare prices at no cost which further increases buyer power. Spooner (2015) opines that the bargaining power of consumers is increased marginally by the presence of online booking sites, allowing customers to compare prices. Therefore, aggregator websites which focus on price comparisons have significantly increased the transparency of air fares across airlines and concentrated the buying power of consumers (Ferreira, 2016).

Furthermore, travel agencies are also able to influence the travelling public not only on the mode of transport to use but also on the particular airline to use (Kamau & Stanley, 2015). Travel agents who operate a supermarket of services in the travel and transport field including hotel accommodation, sightseeing trips, airline bookings, car rentals, vacation tours, buses and cruise lines represent most large corporate clients with significant power to shift demand across carriers. Therefore, buyers are becoming more informed and this has given them power over the airlines (Mawson, 2015). When buyers are informed, they are in a position to know about differences in prices among competitors and availability of substitutes (Travelstart, 2015).



## Conclusion

From above, it is clear that the only opportunities for the airline industry in southern Africa are the low threat of substitutes and new entrants, which are not enough to mitigate intense rivalry and, the high bargaining power of buyers and suppliers. Several suppliers can easily 'bully' airlines, and even though the threat of new entrants is low, wherever there is potential, there will be new entrants, creating overcapacity and reducing yields (as has been the case in South Africa). It is therefore clear why there is such a high failure rate in the airline industry in southern Africa relative to other industries.

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