
FLYING LESSONS: LEARNING FROM RYANAIR'S COST REDUCTION CULTURE

**Dr. Thomas C. Lawton
Royal Holloway University of London, UK**

ABSTRACT

Through radically improving the value equation for airline customers, Ryanair has served to shake-up established norms and practices in European aviation. Underpinning its price leadership and market success is a vigorous and relentless cost reduction ethos and resultant low break-even load factor. Ryanair has lowered European airline cost structures considerably, shattering existing cost floors. Few competitors are able to follow, either because they do not know how or they are unable due to social settlement obligations or service commitments. At the same time, the company has maintained high average load factors on its flights. Taken in conjunction with its low break-even load factor, this results in consistently high overall profit margins. On this basis, Ryanair is likely to remain a significant competitor and increase its market presence and success across Europe.

INTRODUCTION

This paper examines the cost reduction techniques of one of Europe's most successful low fare airlines, Ryanair, and advances an operational model for other small and medium-sized carriers in Europe. Section one examines the Southwest Airlines-Ryanair cost reduction model and advances it as a prototype for low cost competition in Europe. The second section comprises a critical assessment of Ryanair's cost reduction methods and their success in terms of achieving a consistent decline in unit cost. Specifically, the following two questions are addressed: first, how authentic are the cost reduction methods pursued by low fare airlines such as Ryanair and are these techniques sustainable over time and in the face of vigorous competition? Second, what best practices can Europe's low fare airlines emulate from the Southwest-Ryanair model? The main argument advanced is that through refining the set of techniques of U.S.-based Southwest Airlines,

Thomas Lawton is a Lecturer in European Business and Corporate Strategy at the School of Management, Royal Holloway University of London. He holds degrees from University College Cork and the London School of Economics and has a doctorate in international political economy from the European University Institute, Florence.

Ryanair pursues an authentic and successful cost reduction strategy. This enables the company to redefine European airline cost structures and floors and consistently provide the lowest prices and best value to its customers. Through emulating Ryanair's best practices, European low fare and regional airlines can strengthen their market position and remain a viable competitive challenge to the larger, more established airlines.

Despite the cyclical nature of the airline industry, the European market appears to be buoyant.¹ The U.S. experience indicates that the large number of low fare carriers that emerge in the wake of market deregulation will dwindle over time and only a handful will ultimately survive. Many are driven out of business by insufficient access to landing slots or by predatory activity on the part of larger airlines. Others simply cut prices further than they can afford, effectively pricing themselves out of the market. This is likely to happen in Europe too, particularly with the 1998 launch of British Airway's low cost subsidiary. It is not yet clear which of the cheap carriers will triumph. Ryanair would appear to be a front runner for survival and growth. What is evident is that a place in the market will be assured for cost efficient and reliable low fare airlines. As Ames and Hlavecsek argue, long-term market success is mainly attributable to being a lower cost supplier than all others providing equivalent products or services (1990, p.140). When product distinction fades, as it will inevitably for Europe's low fare airlines, being the low price leader will be one of the few means of achieving sustainable advantage.

The next section will analyse the reasons for Ryanair's likely long-term success and the lessons that might be provided for other low fare companies attempting to create sustainable advantage. This analysis begins by examining the cost reduction model pioneered in Europe by Ryanair, based on that developed by the U.S.-based Southwest Airlines in the 1970s.

THE RYANAIR-SOUTHWEST AIRLINES MODEL: A PROTOTYPE FOR LOW COST COMPETITION

Southwest's Formula for Success

Commencing service in 1971 with three Boeing 737-200 aircraft and flights to Houston, Dallas, and San Antonio, Texas, Southwest Airlines has grown to become the fifth largest U.S. airline, flying over 50 million passengers a year to fifty-two cities around the U.S. Year-end results for 1998 marked Southwest's twenty-sixth consecutive year of profitability and its seventh consecutive year of record profits.² Southwest became a major player in 1989 when it exceeded the billion-dollar revenue mark. The company was the only major U.S. airline to make net and operating profits during the first three years of the 1990s, when the U.S. airline industry experienced a major

downturn in growth and sales revenue. Southwest is the U.S.'s only major short haul, low fare, high frequency, point-to-point carrier.

Southwest Airlines serves price and convenience sensitive travellers. The essence of its strategy is in the activities—choosing to perform activities differently or to perform different activities than rivals. For instance, Porter provides evidence that Southwest tailors all its activities to deliver low-cost, convenient service on its particular type of route. Through fast turnarounds at the gate of only fifteen minutes, Southwest is able to keep planes flying longer hours than rivals and provide frequent departures with fewer aircraft (1996, p.64). Southwest does not offer meals, assigned seats, interline baggage checking, or premium class of service. Automated ticketing at the gate is thought to encourage some customers to bypass travel agents, allowing Southwest to avoid agent commissions. A standardised fleet of 737 aircraft boosts the efficiency of maintenance.

Southwest has staked out a unique and valuable strategic position based on a tailored set of activities. On the routes served by Southwest, a full service airline could never be as convenient or as low cost (Porter 1996, p.64). Collins and Porras argue that genuinely successful companies understand the difference between what should never change and what should be open for change, between what is truly untouchable and what is not (1996, p.66). Southwest is an example of such a company, regularly innovating and constantly differentiating itself from the competition but resisting the urge to tamper with the fundamental features of their strategy formula.

Southwest's rapid gate turnaround, which allows frequent departures and greater use of aircraft, is essential to its high-convenience, low-cost positioning. This is achieved in part due to the company's well-paid gate and ground crews, whose productivity in turnarounds is enhanced by flexible union rules. The bigger part of the answer lies in how Southwest performs other activities. With no meals, no seat assignment, and no interline baggage transfers, Southwest avoids having to perform activities that slow down other airlines. It selects airports and routes to avoid congestion that introduce delays.

The Southwest model is not necessarily easily transferable. Continental and United Airlines both attempted to copy the Southwest model for their low-cost U.S. subsidiaries. They were able to duplicate the route structure and other observable and quantifiable elements but they failed to emulate the Southwest culture (or organisational capabilities)—the key to its success (Couvert, 1996, p.61).

Ryanair: The Southwest of Europe

From its inception, Ryanair has purposefully and openly emulated the Southwest formula—albeit in a form 'refined' for the European context. With the advent of European airline liberalisation, many more low cost carriers

have entered the market. Companies like Virgin Express, Debonair, and easyJet also pursue a low fare, no frills service. They, like Ryanair, look for airports with lower charges and shorter turnaround times, with little concern for interline connections. However, as the UK Civil Aviation Authority point out, the underlying approach of these companies seems generally more like that of ValuJet in the U.S. than of Southwest. Most visibly, they place less emphasis than Southwest or Ryanair on providing a high frequency of operation in all of the markets they serve (CAA 1995, p57). Most of the other start-up airlines such as Jersey European Airways, Spanair, EuroBelgian, and Air Southwest, also offer a limited service and operate on a small number of routes. Therefore, it may be argued that Ryanair is the only true Southwest clone operating in Europe (although easyJet is rapidly gaining ground). This is sustained in a report conducted by U.S. equities research firm, the Robinson-Humphrey Company, who conclude that:

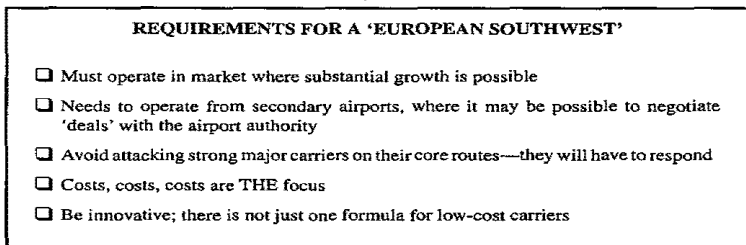
Ryanair is the Southwest Airlines of Europe...in its current stage of development in the European market, Ryanair's market position is analogous to that of Southwest in 1978 when it operated within the state of Texas only. It has the remainder of the United Kingdom, Continental Europe, and Scandinavia in which to expand (1997, p.1).

Like Southwest, Ryanair has a single fleet type, the Boeing 737 aircraft, and is the lowest cost scheduled operator on all its routes. It has high annualised load factors system-wide and unique low cost franchises (aircraft, suppliers, staff). The company's effective use of outsourcing has numerous benefits, serving to lower its long term capital investments, increase its flexibility, and significantly leverage its key capabilities (Quinn and Hilmer 1995, p.63).

Ryanair meets all of the criteria listed as requirements to be a European Southwest (Figure 1), with the possible exception of not invoking vigorous competition with a major carrier on its core routes. On the Dublin-London route in particular, Ryanair has gone head-to-head with Aer Lingus in the competition for air traffic. Whilst not initially flying to the same London airports (Stansted versus Heathrow), Ryanair did pose a significant threat to Aer Lingus's dominant position, prompting the state carrier to launch a low cost competitor in the form of Aer Lingus Commuter. Ryanair management argues that this offshoot carrier does not pose any significant challenge to them and that they are in fact usually vying for different market segments.³

Commentators point to a number of infrastructure problems that make it difficult to apply the Southwest model to the European air transport market. These include the high costs of European air traffic control, and landing and ground handling fees (Guild 1995, p.68). Ryanair has largely overcome such competitive impediments through negotiating deals on fees with airport authorities, particularly those seeking to increase their rate of air traffic. The

Figure 1



Reproduced from Sara Guild, 'Not so easy,' *Airline Business*, p. 71, 1995.

company has proven that the Southwest model can be applied in Europe, and, like Southwest, it has operated in what may be termed a niche market for the first few years, 'getting it right,' according to CEO O'Leary (Guild 1995, p.73). Once this base was consolidated, it was only a matter of time before Ryanair would embark on the next step of the Southwest strategy: expansion.

Ryanair is the European pioneer of low fares, no frills service and consistently delivers the majority of growth in all markets in which it operates. A Morgan Stanley report illustrates that typically passenger traffic on a route grows at an enormous rate after Ryanair's entry, often doubling or even trebling the existing traffic within a few years (1997, p.15). The airline pursues steady route network expansion: five Ireland-UK routes in 1992, which had grown to eight by 1994 and twenty-seven by 1998. Ryanair has certainly been a causal factor in the growth of traffic on major routes such as Dublin-London. In the decade prior to Ryanair's launch, passenger numbers on this route grew at a minuscule rate, going from 800,000 to around 1 million people per annum. Since 1985, this figure has soared, reaching the 4 million mark by the late 1990s. Similar growth rates are evident on other routes such as Dublin-Manchester and Dublin-Glasgow.

Ryanair has no formal association with Southwest but possesses many informal links. The company believes that it is more low-cost and more driven by low cost strategy than Southwest. Ryanair management acknowledges though that this may be a time factor—Southwest is established longer and not as eager as Ryanair is to expand and grow.

Southwest and Ryanair's aforementioned rapid gate turnaround, which allows frequent departures and greater use of aircraft, is essential to their high-convenience, low-cost positioning. The main factor behind this is the way in which the companies perform other activities. With no meals, no seat assignments, and no interline baggage transfers, they both avoid having to

perform activities that slow down other airlines. They select airports and routes to avoid congestion also, thus further decreasing the likelihood of delays. Possessing a standardised fleet further contributes to this advantage.

Thus, Southwest and Ryanair's competitive advantage derive in large part from the way their respective activities fit and reinforce one another. As Porter (1996) argues, fit locks out imitators by creating a chain that is as strong as its strongest link. Southwest/Ryanair's activities complement one another in ways that create real economic value and achieve substantial cost reductions.

Southwest's sense of regional focus (on the southwestern United States) and its development of its route network from that base, is also key to its competitive advantage (Couvret 1996, p.63). Similarly, Ryanair's regional focus is the UK/Ireland market and although it has begun to branch out from there to other parts of Europe, its focus on the home base remains clear and committed. As long as this continues, Ryanair will not be seriously threatened by competitors seeking to emulate its success. A danger may be if Ryanair expands too far, too quickly—losing sight of its regional base and entering into an industry position where it may be in danger of being sandwiched between the large, global carriers and the more focused regional carriers. Southwest has developed well beyond its original focus of the southwestern United States, offering services to other geographical locations such as Baltimore-Washington and Florida. There is no reason why Ryanair cannot do the same, provided its new routes are built on the solid base of home territory.

A COST STRUCTURE ANALYSIS OF RYANAIR

The logical next step in this analysis is to examine Ryanair's cost structure and clearly establish the authenticity of its cost reduction tactics. Are lower operating costs achieved through a genuine strategy of lowering the cost of fuel and ticketing or in-flight services and increasing productivity levels, or through an artificial form of cost reduction based on, for example, salary freezes or introducing more part-time positions? How sustainable is the Ryanair model if lower costs are achieved through lower service standards and lower wage rates? In addition, the author will explore the management of airline cost drivers. Holloway (1997) describes this as, in large part, the interplay between improved asset utilisation and increased employee productivity:

Unit costs are influenced by the absolute level of input prices and by the productivity of inputs used. High productivity can go some way towards countering the adverse impact of high input prices, but the ideal is clearly to combine in a single production process both high productivity and low input costs (Holloway 1997, p.188).

Previous studies support the argument that factors such as the number of aircraft types in a fleet, the range of markets served, remuneration packages, the level of service, and traffic charges, all contribute to higher operating costs for airlines (Seristö and Vepsäläinen 1997, p.12). On the first of these variables for instance, evidence derived from Seristö and Vepsäläinen's study of forty of the world's largest airlines shows that airlines with the most uniform fleet (Southwest, Singapore, Cathay Pacific) also have shown some of the best results in recent years. One reason for this is that:

the higher the number of aircraft per aircraft type, the smaller the number of flight crew needed per one aircraft. This again would imply that the more uniform the fleet of airline, the more efficiently the airline can utilise its pool of pilots (Seristö and Vepsäläinen 1997, p.17).

In addition to lower overall maintenance costs, a uniform fleet leads to savings in flight operations costs. Ryanair operates a single type aircraft fleet, comprising only Boeing 737s. Consequently, its overall employee per aircraft ratio is one quarter that of its traditional rival, Aer Lingus.⁴

Moreover, the company serves a limited number of markets, links employee salaries to performance, provides a basic—no frills service, and incurs the minimum in traffic charges. It therefore meets many of the criteria deemed necessary to bring about an authentic reduction in its operating costs.

Since 1995, Ryanair has managed to reduce costs annually in all areas of expenditure, with the exception of personnel and depreciation.⁵ Increases in depreciation reflect the increase in the number of aircraft operated by the company (an average of 17 during 1997, compared to 11 during 1996 for example).

It should be noted that in parallel with a rise in overall operating expenses, Ryanair witnessed a significant increase in overall passenger numbers and in the number of routes served. The route network more than tripled between 1995 and 1998. During the period 1995 to 1998, Ryanair's annual number of passengers increased from 2.3 million to just over 4 million. Equating these numbers with the comparable annual operating expenses⁶ to get a rough average of expenses per passenger head, demonstrates that the airline has in fact succeeded in successively lowering its operating expenses.

Checking for Consistency in Cost Reduction

Figure 2 lists the areas in which Ryanair has successfully pursued cost reductions. Some, such as maximising aircraft utilisation, are not particularly innovative and can be emulated relatively easily by competitors. Other techniques, such as the no frills service or offering a through service with no baggage interlining facilities, are more difficult to copy, particularly for larger carriers with reputations for high quality service.

Figure 2

Ryanair's Cost Reduction Techniques

1. *Secondary airports* (lower charges and less congestion means airline can increase punctuality rates and gate turnaround times).
2. *Standardised fleet* (lower training costs and cheaper parts and equipment supplies).
3. *Point-to-point services* (direct, non-stop routes; through-service with no waiting on baggage transfers).
4. *Maximise aircraft utilisation* (fewer aircraft used to generate higher revenue; leads to higher passenger capacity and greater staff productivity).
5. *Cheaper product design* (no assigned or multi-class seating; no free food or drink).
6. *No frequent flyer programme* (costs money to manage and to implement).
7. *Non-participation in alliances* (code sharing and baggage transfer services lowers punctuality and aircraft utilisation rates and raises handling costs).
8. *Minimise aircraft capital outlay* (purchase used aircraft of a single type).¹
9. *Minimise personnel costs* (increase staff-passenger ratio; employee compensation linked to productivity-based pay incentives).
10. *Customer service costs* (outsource capital intensive activities, e.g. passenger and aircraft handling; increase direct sales through telephone reservation system).
11. *Lower travel agent fees* (reduce associated travel agent commission – 9 to 7.5%).

¹This cost reduction technique is no longer valid in light of Ryanair's 1998 order for 45 new aircraft.

Ryanair configures its aircraft with 130 seats, with very little space dedicated to anything else other than a bar and duty free service. By optimising the space available for seating, the airline achieves about a 30 percent increase in seating compared to Aer Lingus. The company now has a twenty-five minute gate turnaround, compared with thirty minutes in 1996. This increases aircraft utilisation and flight crew efficiency and productivity by about 15 percent. This means for instance that on the Dublin-London route, Ryanair can get ten flights a day, compared with seven for Aer Lingus. Most companies show their fares to rise annually; Ryanair attempts to stay level or even move down, believing that is where the future for their business is—lower fares, more travel, easier travel, and more spontaneous decisions to travel.

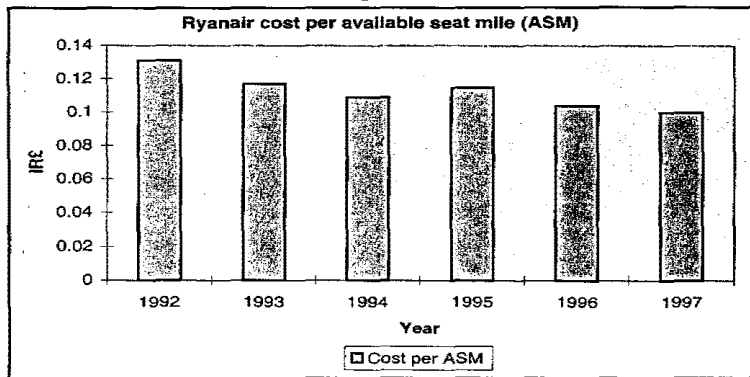
The British CAA argues that Ryanair's strategy seems to be working well, particularly in terms of stimulation of new demand. They conclude that:

it remains to be seen whether this concept will be taken up successfully by other airlines or will readily translate to those other markets in Europe which do not have the rather special characteristics of that between the UK and Ireland (CAA 1995, p.34).

The most solid evidence for the genuine success of Ryanair's cost reduction strategy is evident in the company's cost per available seat mile (ASM) over the past number of years (Figure 3).

Estimating cost, or operating expenses, per ASM is an efficient ratio for calculating an airline's unit cost outlay. The average cost for Ryanair compares very favourably with the European industry norm and is substantially lower than many of its immediate competitors on the routes it operates. Aer Lingus, British Midland, and KLM UK all have unit operating costs of about IR£0.15—roughly 50 percent more than those of Ryanair. Indeed, as a 1997 Morgan Stanley report argues, the other European carriers can produce unit costs equivalent to or below Ryanair's only when the average stage length (journey distance) is at least five times longer than Ryanair's.⁷ This suggests that their unit costs on the short-haul routes, which are Ryanair's mainstay, will be substantially higher—a proposition which is borne out by the evidence. Ryanair's unit operating costs are significantly higher than most U.S. low fare carriers, most notably the low fare benchmark, Southwest Airlines (\$0.14 versus \$0.75). The difference is partly due to longer stage lengths in

Figure 3



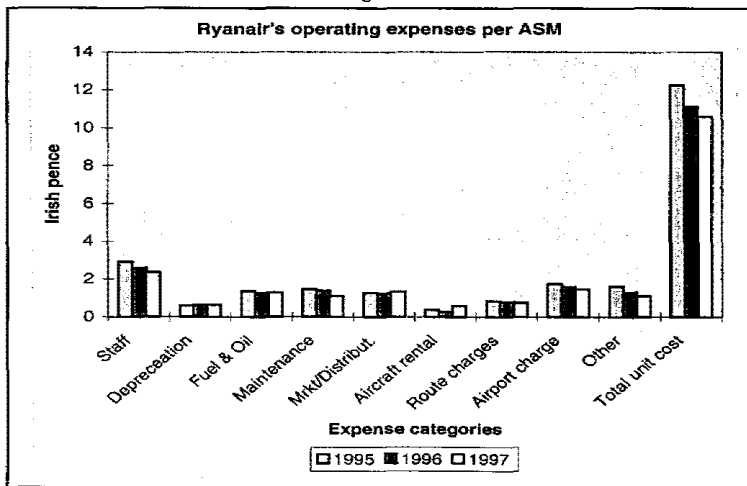
Source: company data

the U.S. (521 miles average for Southwest compared with a Ryanair average of 251 miles). It is estimated that if Southwest had an average journey length commensurate with Ryanair, its cost per ASM would be in the region of \$0.12. Another explanatory factor is the generally lower infrastructure costs and fuel prices in the U.S. (Morgan Stanley 1997, p.33). Estimates put operating costs in Europe at some 55 per cent higher than in the U.S. (Robinson-Humphrey 1997, p.13). Given that carriers operating in Europe are all constrained by these factors, it is difficult to see how unit costs comparable with Southwest could be achieved in the European industry. As such, Ryanair's competitive advantage in unit operating costs would appear secure.

If we deconstruct the overall cost per ASM for Ryanair over a period of time, we can establish whether or not the airline has achieved genuine and successive reductions right across its cost base (Figure 4).

Some anomalies exist in this data, e.g. aircraft rentals increased as a fraction of unit cost between 1996 and 1997. Such increases are generally outside of the direct control of Ryanair in terms of cost control activities. Overall, the figures illustrate that Ryanair in fact succeeds in progressively lowering most of its costs, even in the context of a rapidly expanding route network and fleet size and increased staff bonuses.

Figure 4



Source: company financial reports

Figure 5
Ryanair operating expenses as a percent of operating revenues

1994 - 89.7%	1996 - 82.2%
1995 - 83.4%	1997 - 82.4%

Costs have fallen faster than yields within Ryanair, allowing profits to rise consistently. Expressed as a percentage of operating revenues (Figure 5), operating expenses declined steadily between 1994 and 1996 and increased only marginally in 1997, despite above average rises in personnel and maintenance costs.⁸

This evidently translates into steadily increasing operating profit margins in the same period, going from 10.3 percent in 1994 to 17.6 percent in 1997.

Personnel Costs: Maximising the Return on Human Capital

Personnel costs account for the largest share of Ryanair's cost pie, as with all airlines. These accounted for 24 percent of operating expenses in 1995, 23.4 percent in 1996, and 22.3 percent in 1997. Such a large fractional cost is inevitably a prime target for reduction in outlay and has been gradually pared back. In absolute terms, Ryanair's staff costs have increased each year due to the release of accrued and unpaid staff bonuses and compounded by the growth in Ryanair staff from 698 to 988 employees during the same period.

The airline is, of course, bound to have a lower staff cost compared to its larger competitors because they have scaled down operations (their network is not as extensive) and the company has implemented more performance-related pay schemes. It has to be noted that personnel costs are an area where Ryanair has focused particular attention on cost cutting. For example they outsource their maintenance and customer service activities, other than cabin and flight crews. This move alone has reduced their headcount considerably, and provides an advantage over their competitors who bear the full cost of their own customer service, although their competitors are offering a full-service to their customers which may well mean having to carry out their own customer service activities. Such outsourcing of customer services has drawbacks also, with Ryanair passengers often are not receiving the same degree of support service which customers on competitor airlines receive.

On employee productivity, Ryanair again fares well (Figure 6). This is one of the most significant differences between Ryanair and other airlines. The graph clearly shows the astounding differences between the airlines.

These figures indicate overall that Ryanair generates more money per employee than its competitors, in part by utilising their aircraft more effec-

Figure 6

EMPLOYEE PRODUCTIVITY, 1996 versus 1997				
	Ryanair		Aer Lingus	Southwest
	1996	1997	1997	1997
Employees per aircraft	55	52	201	88
Revenue per employee (IRÚ)	185	186	116	87
Passengers per employee	3,967	4,377	666	2,247

Source: Ryanair internal company documents, 1997.

tively and therefore generating more revenue, which thereby means a greater return is made for the initial asset cost. The company also employs the capital initially invested so well that they receive more return on that investment by increasing its value.

The main conclusion to be drawn following consideration of company accounts and other financial information is that Ryanair has managed to hold down their employee costs and maximise productivity, largely through performance-related pay schemes. Considering that this particular cost is their largest outlay, its control would probably have a significant impact on the profit margins. Nonetheless, Ryanair is more efficient in its operations, compared to many competitors, despite its scaled down operation.

Operational and Relational Cost Reductions

Internal company sources⁹ indicate that Ryanair is targeting all areas for constant cost reduction but distribution is under particular scrutiny. This includes computerisation systems, ticketing systems, travel agencies costs and internal reservation costs. Maintenance is another area targeted for constant cost reduction. A long-term strategic relationship exists with providers such as Lufthansa and Airmotive Ireland. Giving them large volumes of extra work, and on that basis, Ryanair expects to see significant reductions in their unit costs.

The company is also unhappy with current airport and handling costs. The management believes that there is always room for further cost reductions. Many smaller, expanding airports (e.g. Bournemouth) offer much better deals than do the likes of Stansted. These airports benefit by having a much higher volume of traffic. Ryanair drives a hard bargain because they believe that airports have relatively low cost margins and can provide a low tariff for handling and landing costs. Airports can and should concentrate on earning profits from the revenue generated by passenger traffic. For instance, it is estimated that the average spent by Ryanair customers in Bournemouth Air-

port is over st£20. Airlines should get the cost base and airports get the revenue base. The lesson to be learned is that airports should provide the lowest possible tariffs to airlines and focus on the airlines' passengers for profit generation. A mutually beneficial sequence thus develops: airlines can reduce airports costs and can therefore reduce ticket prices; passengers get cheaper flights and can consequently spend more at airports and on in-flight gift items; airports get higher revenue generated by the passengers.

Since Ryanair's drive to reduce travel agent commissions, relations with this sector are described by Ryanair management as 'fraught if not bad'. There are some agents who won't sell seats on their flights but most of the major agencies are earning significantly more revenue from Ryanair each year and it is therefore in their interest to keep on good terms with the airline. Thus, travel agents get less commission from Ryanair but are getting increased capacity; therefore, they end up earning more from the company in the long run.

Fundamentally, cost is of the essence for Ryanair. There is nothing unique in an airline having such a corporate ethos. As Morrell argues, surveys of airline finance directors in Europe, North America, and Australasia illustrate that control of costs is the most pressing financial issue (1997, p.10). There are nonetheless, a few 'holy grails' that the company does not touch—safety for instance. Ryanair has a perfect safety record and regular aircraft maintenance and safety checks. The Irish Aviation Authority closely audits its safety and maintenance procedures.

Low Costs and High Profits

Ryanair performs well on standard determinants of revenue maximisation, defined by Seristö and Vepsäläinen as passenger load factor, weight load factor, passenger yield, cargo yield, and traffic composition (1997, p.12). Ryanair has shown continuous improvement in its figures since the early 1990s (Figure 7) and although its operating revenue is lower than route competitors such as British Midland or Aer Lingus, its costs are also in proportion, hence the airline's ability to maintain low price fares.

Ryanair has been consistently profitable since 1991. The carrier has average load factors of 72 percent¹⁰ and is driving yields down. The load factor measures the percentage of an airline's output that has been sold (Holloway 1997, p.437). In layman's parlance, it means basing an airline's financial strategy on the average number of seats sold per flight. This is distinct from yield management, which focuses on the average revenue generated per unit of output (seat) sold. As Ryanair CEO Michael O'Leary states, 'we do not manage yields, we manage the load factor...our budgets are based on driving costs down by x per cent next year' (Airline Business, June 1995, p.73). Managing load factors is not enough to ensure profitability. As Holloway illus-

Figure 7
Ryanair operating revenues and profit margins*

<i>Year ended</i>	<i>31 Mar. '95</i>	<i>31 Mar. '96</i>	<i>31 Mar. '97</i>	<i>31 Mar. '98</i>
Operating revenues	86.1m	110.1m	136.4m	182.6m
Adjusted net income ¹	14.0m	20.0m	23.0m	30.7m
Profit after tax ²	12m	13.4m	21.4m	30.2m

Source: Ryanair annual financial results

*All figures given are in Irish punts. The value of the punt to sterling was approximately 89p Irish to £1 sterling during 1998.

¹Adjusted net income includes non-continuing management bonuses and other 1998 bonuses

²Adjusted for the staff flotation bonus in 1997, which amounted to IR£1.3 million, net of tax.

trates, in 1993 for instance, Aer Lingus achieved a load factor of 70.4 percent and failed to make a profit, whereas both British Airways and Cathay Pacific had passenger load factors of 69.9 percent and 70.0 percent respectively and both made a profit (1997, p.442). The issue is rather one of relating the average load factor to the break-even load factor. Improving this equation is the objective of every airline. Selling seats on flights must be combined with overall cost reductions if an airline is to be profitable. Figure 8 illustrates that for Ryanair, the margin of difference between average load factor and break-even load factor has been consistently positive during the mid- to late-1990s.

Furthermore, the gap between these two sets of figures has increased annually, allowing the airline both further latitude in price-cutting and ensuring continued increases in absolute profit figures. Although Ryanair may periodically experience declining yields, it also secures falling costs, suppresses its break-even load factor, and therefore consistently turns a profit. To date, costs have consistently fallen by more than sales, resulting in overall net profits. From the evidence, it is therefore apparent that Ryanair's cost reduction strategy is accomplished through authentic means and is clearly achieving real results in terms of sustaining the company's price leadership strategy and ensuring profit maximisation.

Figure 8
Passenger load factors (PLF) and break-even load factors (BELF) compared

	<i>1995</i>	<i>1996</i>	<i>1997</i>
PLF	76%	73%	72%
BELF	72%	68%	64%

CONCLUSIONS

Low fare airlines have succeeded in revolutionising the European airline industry's price norms and costs structures. The leading industry shaker has been the independent Irish-based carrier, Ryanair. Through initially following the example set by U.S.-based Southwest Airlines, Ryanair has pursued an authentic and successful cost reduction strategy. This has enabled the company to achieve low break-even load factors and high overall load factors. This consequently allows the airline to provide consistently low prices to its customers, whilst simultaneously sustaining high profit margins. Ryanair's main cost reduction techniques include first, operating a standardised fleet; second, flying exclusively from or between secondary airports and establishing a secondary route dominance; third, operating a point-to-point service; fourth, offering a cheaper, no frills product (no seat classes or free food and drink); fifth, non-participation in restrictive alliances or expensive frequent flyer programmes; sixth, productivity-based pay schemes; seventh, an extreme focus on aircraft utilisation, leading to high load factors; eighth, reduced travel agent commission rates; and ninth, reduced customer service costs through outsourcing ground passenger and baggage handling for instance. Through emulating Ryanair's cost reduction practices and achieving similar low break-even load factors, European low fare and regional airlines can strengthen their market position and remain a viable competitive challenge to the larger, more established airlines.

BIBLIOGRAPHY

- Aer Lingus *Annual Report and Consolidated Accounts*, for year ended 31 December 1996.
- Air Transport Users Council (1998) *Annual Report 1997/98*, London: AUC.
- Air UK Group Limited *Financial Statements*, for year ended 31st December 1995.
- Airclaims (1997) *Airline Finance and Traffic*, Airclaims Publications, London.
- Ames, B. Charles and James D. Hlavacek (1990), 'Vital truths about managing your costs,' *Harvard Business Review*, January-February, pp. 140-7.
- Ashton-Davies, Tudor, 'Focus on customer service at all costs,' *Professional Manager*, July 1996, pp. 12-3.
- Banfe, Charles F. (1992) *Airline Management*, Prentice Hall, Englewood Cliffs, New Jersey.
- Barking, Thomas L., Hertzell, O. Steffan, Young, Stephanie J. (1995) 'Lessons from US airlines,' *The McKinsey Quarterly*, No. 4, pp. 87-99.
- Barrett, Sean D. (1987) *Flying high: airline prices and European regulation*, Avebury, Aldershot.
- Bendell, Tony, Louise Boulter and John Kelly (1993) *Benchmarking for competitive advantage*, Pitman, London.

- Bloomberg New Bulletin 8th and 13th August 1996.
- British Airport Authority (1996) *Heathrow: a celebration of 50 years*, London: BAA.
- British Midland (1996) *Clearing the flight path for competition*, BM, Castle Donington.
- British Midland (1997) *Unfinished Business: a report on competition, choice and value for money in European air travel*, Charles Barker Publishing, London.
- Buzzell, R. D., and B. T. Gale (1987) *The PIMS principle*, Free Press, London.
- Civil Aviation Authority (1995) *The single European aviation market: progress so far*, CAA, London.
- Civil Aviation Authority (1995-7) *UK airlines: monthly operating and traffic statistics*, CAA, London.
- Collins, James C. and Jerry I. Porras (1996) 'Building your company's vision,' *Harvard Business Review*, September-October, pp. 65-77.
- Couvret, Paul. 1996, 'Back to your routes,' *Airline Business*, November, pp. 60-3.
- Dobson, Alan P. (1995) *Flying in the Face of Competition*, Avebury, Aldershot.
- Doganis, Rigas (1991) *Flying Off Course: the economics of international airlines*, Harper Collins, London.
- Dresner, Martin, Jiun-Sheng Chris Lin and Robert Windle (1996), 'The impact of low-cost carriers on airport and route competition,' *Journal of Transport Economics and Policy*, Vol. xxx, no. 3, pp. 309-28.
- Feldman, Joan M., 'Booting up competition,' *Air Transport World*, October 1996, pp. 89-90.
- Garvin, David A. (1993) 'Building a learning organization,' *Harvard Business Review*, July-August, pp. 78-91.
- Guild, Sara. 1995, 'Not so easy,' *Airline Business*, June, pp. 68-73.
- Hamel, Gary, and C. K. Prahalad (1993) 'Strategy as stretch and leverage,' *Harvard Business Review*, March-April, pp. 75-84.
- Hamel, Gary (1996) 'Strategy as Revolution,' *Harvard Business Review*, July-August, pp.69-82.
- Hinthorne, Tom (1996) 'Predatory capitalism, pragmatism, and legal positivism in the airline industry,' *Strategic Management Journal*, vol. 17 no. 4, pp. 251-70.
- Holloway, Stephen (1997) *Straight and Level: practical airline economics*, Ashgate Publishing, Aldershot.
- Johnson, Kevan, and Gerry Scholes (1997) *Exploring corporate strategy*, Prentice Hall, London.
- Irish Department of Transport, Energy and Communications, *Statement of Strategy*, February 1997.
- Kay, John (1993) *Foundations of corporate success*, Oxford University Press, Oxford.
- Kim, W. Chan and Renée Mauborgne, 'Value innovation: the strategic logic of high growth,' *Harvard Business Review*, January-February 1997, pp. 103-12.
- Lawton, Thomas C. (1999) 'Governing the skies: conditions for the Europeanisation of airline policy,' vol. 1, no. 1, pp. 91-112.

- Lookturn Ltd. (1997) *Air transport progress '97*, London.
- McKinsey & Co. 'A new game plan for Europe,' *The Avmark Aviation Economist*, April 1995.
- Morgan Stanley, 'European Transport: Airlines (Ryanair: Flying Celtic Tiger),' *Investment Research UK and Europe*, 2 May 1997.
- Morrell, Peter S. (1997), *Airline Finance*, Ashgate Publishing, Aldershot.
- Oliver, N. and R. Wilkinson (1989) 'Strategic fit: the real lesson from Japan,' *University of Wales Review of Economics and Business*, 4.
- Porter, Michael E. (1985) *Competitive Advantage*, Free Press, London.
- Porter, Michael E. (1996) 'What is Strategy?', *Harvard Business Review*, November-December, pp. 61-78.
- Quinn, James Brian and Frederick G. Hilmer, 'strategic outsourcing,' *The McKinsey Quarterly*, No. 1, 1995, pp. 49-70.
- Ryanair plc. Annual reports, internal company documentation, marketing documentation, press releases.
- Seristö, Hannu and Ari P. J. Vepsäläinen (1997) 'Airline cost drivers: cost implications of fleet, routes, and personnel services,' *Journal of Air Transport Management*, vol. 3 no. 1, pp. 11-22.
- Shaw, Stephen (1985) *Airline Marketing and Management*, Pitman, London.
- Stalk, G., Evans, P., Shulman L. E. 'Competing On Capabilities: the new rules of corporate strategy,' *Harvard Business Review*, March-April 1992, pp. 57-69.
- The Economist, *Dream factories: a survey of travel and tourism*, January 10th, 1998.
- The Robinson-Humphrey Company, Inc. (1997) *Ryanair: the growth airline of Europe*, equities research, basic report, Atlanta, Georgia.

ENDNOTES

- 1 European air traffic grew by 11 per cent between 1996 and 1997 (*Financial Times*, October 22nd 1997).
- 2 Southwest Airlines Fact Sheet, May 1998.
- 3 *Financial Times*, op cit.
- 4 These statistics are taken from a Ryanair internal company document, 1997.
- 5 Ryanair's company accounts illustrate this fact.
- 6 The annual operating expenses were IR£71.9 million for year ended (FYE) 31 March 1995, IR£90.86 million FYE 31 March 1996, IR£112.4 million FYE 31 March 1997 and IR£149.5 million FYE 31 March 1998.
- 7 Unit costs naturally reduce as the journey distance gets longer as taking off and landing are relatively expensive compared with flying along at altitude. It is therefore important to take journey length into account when comparing unit costs.
- 8 Increased maintenance costs were caused by the acquisition of eight new aircraft during 1997/8.

9 Interview with Ryanair's Director of Operations, Dublin, September 1997.

10 This is considerably higher than the estimated European average load factor of 62 per cent.

My thanks to Colin Haslam, Peter Uittenbogaart and Antoin Daltún for their helpful comments on earlier versions of this paper. Thank you also to Virginia Mogge for her research assistance during the formative phase of this paper.