Essay Question 2: 2003 A-Levels Q2

In 2001 there was a world-wide reduction in airline business. Smaller airlines with lower costs and cheaper discount fares suffered less than the high-cost larger airlines such as Air France, Swissair and Lufthansa.

(a) Explain why, according to economic analysis, there are benefits from large scale organisations. [12]
(b) Discuss to what extent the above extract concerning costs disproves that economic analysis. [13]

Suggested Answers

(a)

INTRODUCTION (Key Terms, Issue and Approach)

There are many large scale companies that exist in an economy, such as Air France, Volkswagen and Giant Hypermarket. The size of these firms are often determined by quantity of output sold, sales revenue or market share. As firms' traditional objective is to maximize profits, their existence do show that there are advantages enjoyed by large scale companies. These large companies tend enjoy cost savings due to internal economies of scale (EOS) and revenue advantages.

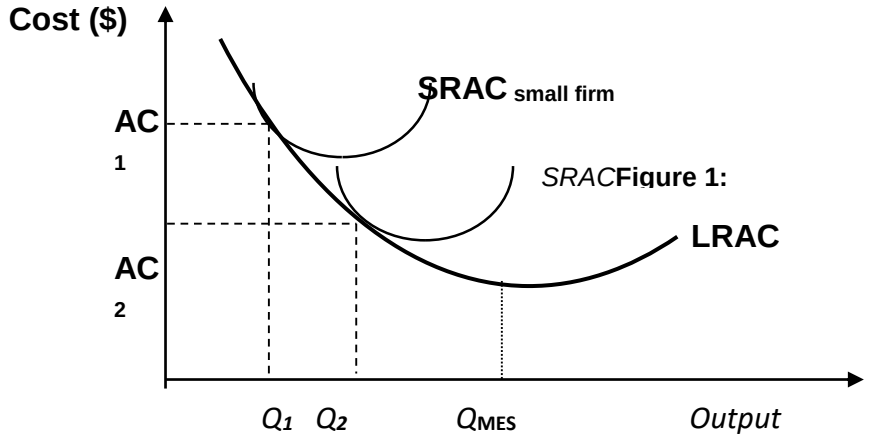
Internal EOS is cost savings enjoy by a firm when it expands its scale of production while revenue advantages are in terms of pricing power and ability to practice non-price competition~~market power~~.

This essay will explain the above benefits enjoyed by large companies.
Note: Students can explain and illustrate internal economies of scale in the context of the airline industry - such as Air France, Swissair and Lufthansa OR use a variety of examples since the question is on 'large scale organisations'.

BODY

Part 1: Explanation with diagram on how large firms experience lower unit cost of production through its ability to reap internal economies of scale.

Figure 1: Internal Economies of Scale are reaped by Large Scale Organisation



Large scale organisations usually have high MES relative to the industry demand. MES occurs at the output level where LRAC first stops falling, and it corresponds to the lowest point on LRAC.

As firms get bigger by increasing scale of production, the high cost savings they enjoy from the *various internal EOS* can offset the higher cost that may occur due to some mismanagement and the overall unit cost will fall.

Any 3 points:

Technical economies (indivisibilities):

With such higher annual revenue and large international consumer base, international airline such as the American Airline (merged with US airways in 2013) is able to reap **technical economies of scale** through indivisibilities. For example, large airlines have the financial ability to purchase large aircrafts such as Airbus A380, which is a double deck aircraft with maximum capacity of 500 seats.

A380 is now able to have double the load factor (depending on the proportion of luxury suites), its cost associated with fuel cost has increased, but in fact is less than proportionately. This is because airlines are now able to fly a single flight, rather than 2 separate flights to a location. Furthermore, Some 25 per cent of the A380 structure is made of composites, generating a total weight saving of 15 tonnes, which contributes to its low fuel consumption.

Therefore, large airlines which are able to purchase such aircrafts are able to make its average cost of production (provision of service) lower, as shown by a downward movement along the LRAC from AC_1 to AC_2.

Marketing economies:

The car manufacturing industry is considered to be highly capital and labor intensive. The major costs of car manufacturer such as Volkswagen for producing and selling automobiles include labour cost, raw materials to be purchased such as steel, aluminium, seats, tires. They can buy raw material such as steel in bulk at favourable (discount) rates. It is also able to dictate its requirements with regard to quality and delivery much more effectively than smaller firm. All these mean that the firm can sell their product and/or services at a reduced unit cost.

In addition, Volkswagen can spend billions on print and broadcast advertising. They spent large amounts of money on market research to anticipate consumer trends and preferences in order to strategise and compete with other rivals. These advertising cost can only be spread across large output (of cars), reducing their average cost from AC1 to AC2.

Administrative and managerial economies:

In a large supermarket, it is possible to practice functional specialisation by employing specialist such as accounting manager, sales manager, finance manager, departmental manager, etc. These middle-management staffs are allocated to tasks according to their skills and abilities thus raising productivity and lowering unit costs.

Different expertise are required, such as to examine market trends and do market research, finance management, etc. The cost of employing these managers and expertise is also spread over a larger output. This means that cost per unit of output is lower.

Financial economies:

It is cheaper for big airlines to raise capital either through bank loans or issue shares. They have a higher sales volume and more assets to offer as collateral, is deemed by lenders to be more credit-worthy compared to a small airlines. Hence banking & financial institutions are more willing to offer loans or extend credit to them. They could get access to capital through public listing of their companies.

All these **cost savings can be translated to lower pricing to capture larger market share.**

Most important of all – link these internal EOS to fall in per unit costs.

Part 2: Explain how large scale organisations enjoy revenue advantages

A large firm is likely to be one that controls a significant share of the market. American Airlines (after merger with US airway for eg) is now the largest airline in US, taking up about 25% of the domestic market. Thus it has market power and is able to set the price at a level that generates more revenue than a small firm. The large firm can increase price if demand is price-inelastic and output will fall less than proportionate since consumers have few substitutes to turn to. (Note: In traditional firm theory, we assume firms aim to maximize profits.)

A large Firm is able to set aside a bigger budget for advertising. A successful advertising campaign establishes a strong brand name, increases product awareness and fosters consumer loyalty e.g. Singapore Airline - The Singapore Girl. The demand for the firm's product increases and becomes more price inelastic. Thus, at a given price, a large firm is able to sell a substantially larger quantity than a small firm. Since demand is relatively price-inelastic, the firm can increase its price to raise total revenue.

A large firm earns supernormal profits (due to barriers to entry) and thus have the avenue to do R&D and will be able to improve the quality of its services and thus compete better especially when the market is getting more contestable.

CONCLUSION

(b)

In 2001 there was a world-wide reduction in airline business. Smaller airlines with lower costs and cheaper discount fares suffered less than the high-cost larger airlines such as Air France, Swissair and Lufthansa. Discuss to what extent the above **extract concerning costs** disproves that economic analysis. [13]

Step 1: Paraphrase the question in the context:
This question requires me to discuss whether smaller airlines can have costs savings which help them to suffer less than bigger airlines even though the latter are the ones which enjoy internal EOS and revenue advantage as explained in part (a).

Step 2: Dissect using 3 Cs

Command	*Discuss… use a thesis/anti-thesis framework/approach*
Content/concept	*Focus on the advantages of small firms*
Context	*Airline industry*

Schematic Plan

INTRODUCTION	
BODY	
Thesis: YES, the extract seems to disproves the	***Anti-thesis: NO, the extract does not disproves/contradicts the economic analysis in part (a).***

economic analysis in part (a)	
Smaller airlines seem to have: *(a) lower costs – contradicts/disproves the concept of internal economies of scale* *(b) cheaper discount fares – contradicts/disproves the concept of pricing power which bigger airlines enjoy.*	***(a) Performance by Big Airlines during a Recession*** • ***Fall in Demand*** *for Premium Services during a Recession* • *The fall in demand leads to* ***excess capacity and thus higher unit costs*** • ***Big airlines are more bureaucratic & inflexible*** *in responding to solve the problem of excess capacity* **Note: They key problem to why the extract contradicts the theory in (a) is that there's the assumption of a LARGE output that may not hold during a recession for national carrier services.** ***Evaluation?*** ***(b) Performance by SMALL AIRLINES, i.e. LOW-COST or Budget Airlines during a Recession*** • ***Rise in Demand*** *for No-Frills Services during a Recession* • **Niche or specialised markets**. • **Nimble and flexible**
CONCLUSION	

Suggested Answers:

INTRODUCTION

Key words: *For this question the link between (a) and (b) is almost seamless. There is therefore no necessity to begin with key words all over again.*

Contextual Issue: Better to start off by bridging (a) + (b), linking them to a common contextual issue: *Economic analysis as explain in part (a) suggests that larger airlines such as Air France, Swissair and Lufthansa enjoy both cost and revenue advantages and thus should incur less losses than smaller airlines. However, it is stated in the extract that smaller airlines actually suffered less than the high-cost larger airlines.*

Approach:
Thus in this essay, I shall discuss the extent the extract disproves the economic analysis in part (a) of my answer.

BODY

Thesis: YES, the extract seems to disproves the economic analysis in part (a)

The extract seems to disprove the economic analysis in part (a) for 2 key reasons:

Smaller airlines seem to have:
(a) lower costs – contradicts/disproves the concept of internal economies of scale
(b) cheaper discount fares – contradicts/disproves the concept of pricing power which bigger airlines enjoy.

In theory, the big airlines should have lower average costs because they can reap potential internal economies of scale. Hence it would be much easier for them to lower or cut fares or offer cheaper discount fares without sustaining losses.

Small firms in theory on the other hand, do not have as much pricing power as their bigger counterparts because of their lack of resources to sustain losses. With vast reserves of accumulated supernormal profits, it is easier for big airlines to sustain temporary losses by cutting fares.

However, in the context of the question what actually happened is the exact opposite of what economic analysis suggests/predicts. It was the smaller airlines and not the big airlines that were able to operate at lower costs and offer cheaper discount fares.

So the extract does seem to disapprove the theory.

Anti-thesis: NO, the extract does not disproves/contradicts the economic analysis in part (a).

HOWEVER,
on closer examination of the circumstances related to the extract/context/stem it can be inferred that the ability of small airlines to operate at lower costs and offer cheap discounted fares do not disprove the economic analysis in part (a).

In the context of the extract, the entire industry was hit by a world-wide reduction in airline business – fall in demand due to probably the fear of travelling since the terrorist attack and also the recession that followed.

(a) Performance by Big Airlines during a Recession
Thus, in the context of falling demand in a recession, big airlines tend to suffer more for the following reasons:

- ***Fall in Demand for Premium Services during a Recession***

Big airlines that provide premium services (i.e. luxury goods) tend to suffer drastic fall in demand due to the fact the YED for luxury travel tends to be high and positive (income-elastic).

- ***The fall in demand leads to excess capacity and thus higher unit costs***

State	**Higher Costs faced by Larger Carriers due to Excess Capacity** Big airlines would suffer from excess capacity. Large planes tend to be under-utilised when demand falls. Even though the seats are only half filled, the planes still have to take off as scheduled. Thus, whilst revenue falls, unit costs rises for big airlines.
Elaborate by linking to part (a)	**Economies of scale and Market size** The economic analysis in part (a) suggests that big airlines can enjoy cost savings in terms of various forms of technical and non-technical. However these cost savings assumes/presupposes that the airline is able to operate on a big scale and produce a LARGE output. Thus, like "big fishes" they can better survive or thrive in an ocean environment. However, when the market size shrinks, as it will in a recession, these big firms find themselves with excess capacity (i.e. over-size scale) and hence they become inefficient in utilising the existing over-sized capacity. For example, unlike small airlines that use smaller planes, big airlines use jumbo jets. In times of recession, it is much harder for big airlines using jumbo jets to sell enough tickets to fill up all available seats. Many big aeroplanes fly half-empty (unable to fully

	uilitise load factor). Moreover overcapacity in the industry makes it difficult for big airlines to reap potential economies of scale. During such times, it is best for such big firms to "downsize" or right-size to be efficient in producing the output. In short big firms thrive when the market is large enough for them to reap potential economies of scale. However when the market size shrinks (e.g. recession) they faced more problems to stay afloat compared to small firms as their unit costs rises whilst their revenue falls.

- ***Bureaucratic & inflexible***

Large airlines are more bureaucratic and take a longer time to response to changes in market conditions. They are less flexible due to the need to upkeep the reputation and image they have built up over the years. They find it a struggle to generate enough revenue to cover their high fixed costs (e.g. large fleet of aircrafts and crew).

Evaluation: Larger Carriers do survive in such a situation

- Ways to cut costs - retrench redundant workers
- Ways to minimise loss and increase revenue - cut services to some cities and shift focus to money-making destinations (may want to concentrate on services like long-haul flights which face little/no competition from the smaller rivals).
- Continue to exhaust the revenue advantages by using the funds they have to attract more customers - continue their frequent flyer programmes, provide good services which smaller counterparts cannot provide, emphasize the safety of travelling on reputable airlines, etc

(b) Performance by SMALL AIRLINES, i.e. LOW-COST or Budget Airlines during a Recession

- ***Overall demand might fall less than the big airlines***

Demand rose during recession

During bad times, business for small airlines assuming budget air travel services tends to grow. This is because the demand for such so-called cheap or inferior goods has negative YED. As incomes fall due to recession, demand increases because consumers tend to switch to consuming more of a cheaper/inferior substitute. ***(DD↑)***

- **Ability to charge a lower fare due to no-frills services & niche/specialised markets**

Lower cost for providing no frills/budget services. Lower overheads or fixed costs. No need to spend a lot on differentiating the product e.g. advertising cost is saved; no in-flight entertainment; catered food etc.

Small airlines cater to niche markets e.g. short-haul rather than long-haul operations, using smaller and cheaper airports, lower pay scale and more flexi-working hours, small airlines do have an edge over the bigger counterparts in cost savings even without much internal economies of scale of that of bigger airlines.

- **Nimble and flexible**

Small airlines are quicker to respond to changes in market conditions. They have less overheads or fixed costs to worry about in bad times (e.g. small fleet of aircrafts and crew to maintain).They are usually budget airlines and thus they can be more flexible in their airfare and number of flights. For example, they could more easily cut fares and cancel number of flights without much worry about reputation in response to an economic downturn.

To conclude, budget airlines probably suffered a lesser overall fall in demand as compared to their bigger counterparts and together with the lower costs due to the no-frills services, they are able to survive during the worldwide reduction for airline services.

CONCLUSION
Synthesis
It is clear from the above discussion that in theory/principle, big airlines do enjoy cost advantages in the form of potential economies of scale. However this potential economies of scale cannot be realised in a depressed market (i.e. 2001 recession) when the market size or industry is shrinking.

Thus in the context of the extract, they appear to suffer more than small airlines. {Analogy: Like putting a big fish in a small tank. The big firms are just "too big" to survive in a small tank}.

On the other hand, a depressed market (2001) offers opportunities for small airlines to take advantage of the demand for no frill travel services. Thus small airlines are likely to suffer less because the nature of their business enables them to operate at lower costs (no frills) and still be able to offer cheap discounted fares to boost sales.

Stand:
Thus I would say the above extract does not disprove the economic analysis related to benefits from large scale organizations.