

Economic Evaluation of Taxi Industry Reform in Sydney

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Disclaimer

- The author is a Visiting Scholar in the Department of Economics. The author also manages consultancy firm Applied Economics P/L and works as a part-time economic advisor to the NSW Treasury. This paper is private academic work. It has not been sighted by Treasury before presentation to the ITLS at the University of Sydney. All information in this paper is drawn from public sources or based on data that the author has collected from industry participants or observers. All estimates made and views expressed in the paper are the responsibility of the author. They are not official NSW Treasury views.

Layout of the paper

- Nature of the taxi industry
- Main quantity, quality and price regulations
- Major performance outcomes
- Efficiency and equity arguments for taxi industry regulation
- Evaluation methods
- Benefits and costs of deregulation

Nature of the taxi industry

- Figure 1
- Annex A
- Snapshot of industry: Table 1

Major regulations: quantity

- Increase in licences since 1990 – 1% p.a.
- Price of licences
 - 1990, \$175,000
 - 2004, \$250,000
 - 2009, \$380,000
- Why have so few licences been issued?
 - Regulatory capture (taxi driver view)?
 - Prices too high?
 - Virtual monopoly controls?

Major regulations: quality (pp 8-9)

- Numerous micro regulations
- Dominant role of the network
 - Taxi operator requirements
 - Taxi driver requirements
 - Network standards
- Size of vehicle

Price regulations

- IPART recommendation designed to achieve a return on capital and labour to all parties
- IPART maximum fare automatically adopted by all taxi operators
- Nighttime surcharge
- No peak / off-peak differentiation

Perfromance background

- Excess demand (page 10)
- Controls of network(s)
- Highly detailed regulations

Performance standards

- Ministerial inquiry (undated) – see Box 1
- Confirmed by taxi driver interviews
- “There is a cancer at the heart of the taxi industry. The control of the networks has eroded responsibility and reward for providing a quality service.”

Key performance indicators

Table 3 Bookings and pick-ups shown in 2007-08 (excluding WATs)

Measure	No.	%
Number of bookings requested ('000)	13,350	
Number of jobs accepted by taxi drivers	10,700	80.1
Total pick-ups	9,357	70.1

Source: IPART, 2008

Table 4 Pick-up times as % of total pickups made and bookings requested

	<15 minutes	15-30 minutes	30-60 minutes	>60 minutes	Other
All pick-ups	91.4%	7.6%	1.0%	0.0%	n/a
Bookings requested	64.1%	5.3%	0.7%	0.0%	29.8%

Source: IPART, 2008

Colmar Brunton national survey

- Of all Australian cities, Sydney recorded lowest scores for
 - taxi trip satisfaction.
 - taxi driver behaviour and standards.
- 38% of respondents in inner Sydney and 22% of respondents in outer Sydney had tried to get a taxi in the last six months and failed.
- In inner Sydney, 5% of respondents had made a complaint to a taxi-related agency but 26% had felt like complaining and did not do so. The comparable figures for outer Sydney were 4% and 12%.

Market failures

- Imperfect competition
 - Natural monopoly
 - Falling AC (monopolistic competition)
- Externalities
- Asymmetric information
- Multiple equilibria

Market failures

- In summary, competition can be expected to improve services in the taxi industry rather than the reverse.
- Information failures justify regulating vehicles and drivers for safety issues.
- Other market failures provide little justification for substantive regulation of the industry.

Equity issues

- Protecting consumers
- Protecting industry
- A public transport (consumer service) rationale

- In so far as these objectives exist, the paper shows they come at a high cost.

Evaluation of reform: Figure 3

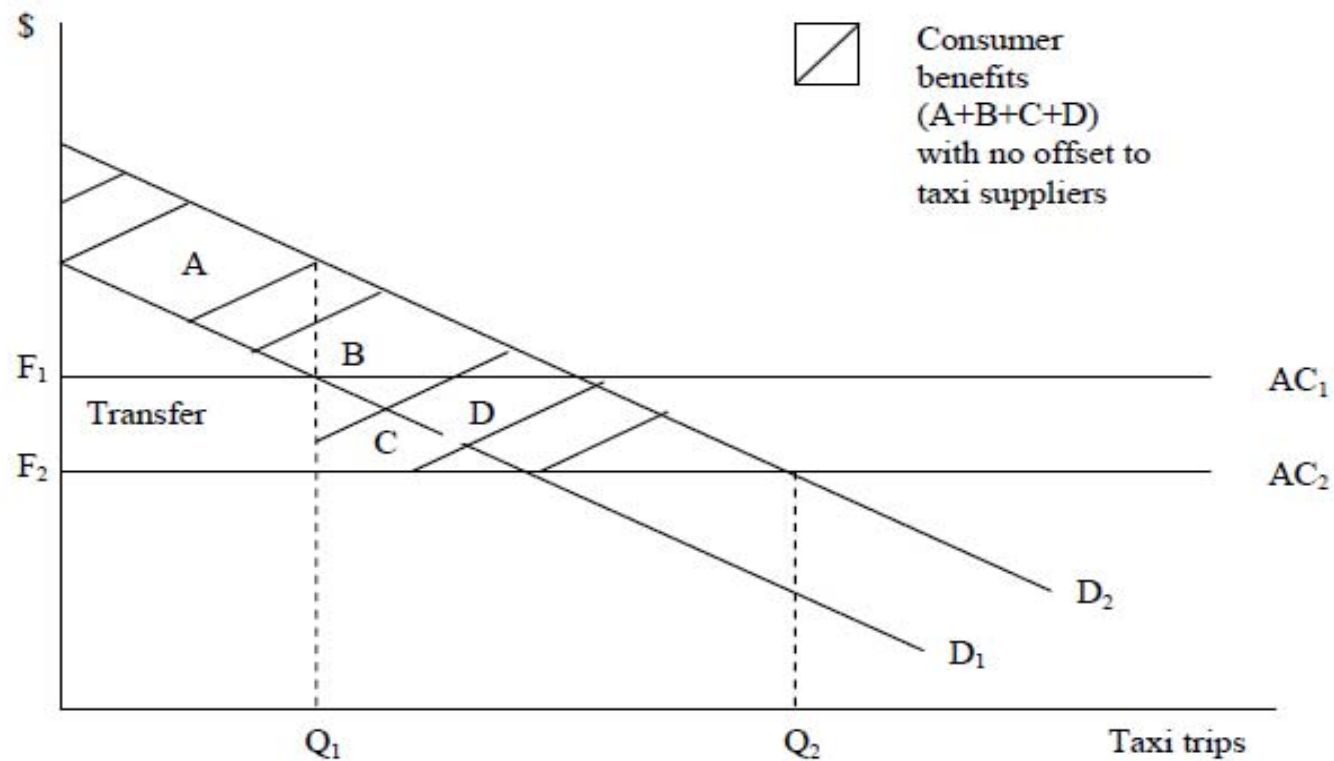
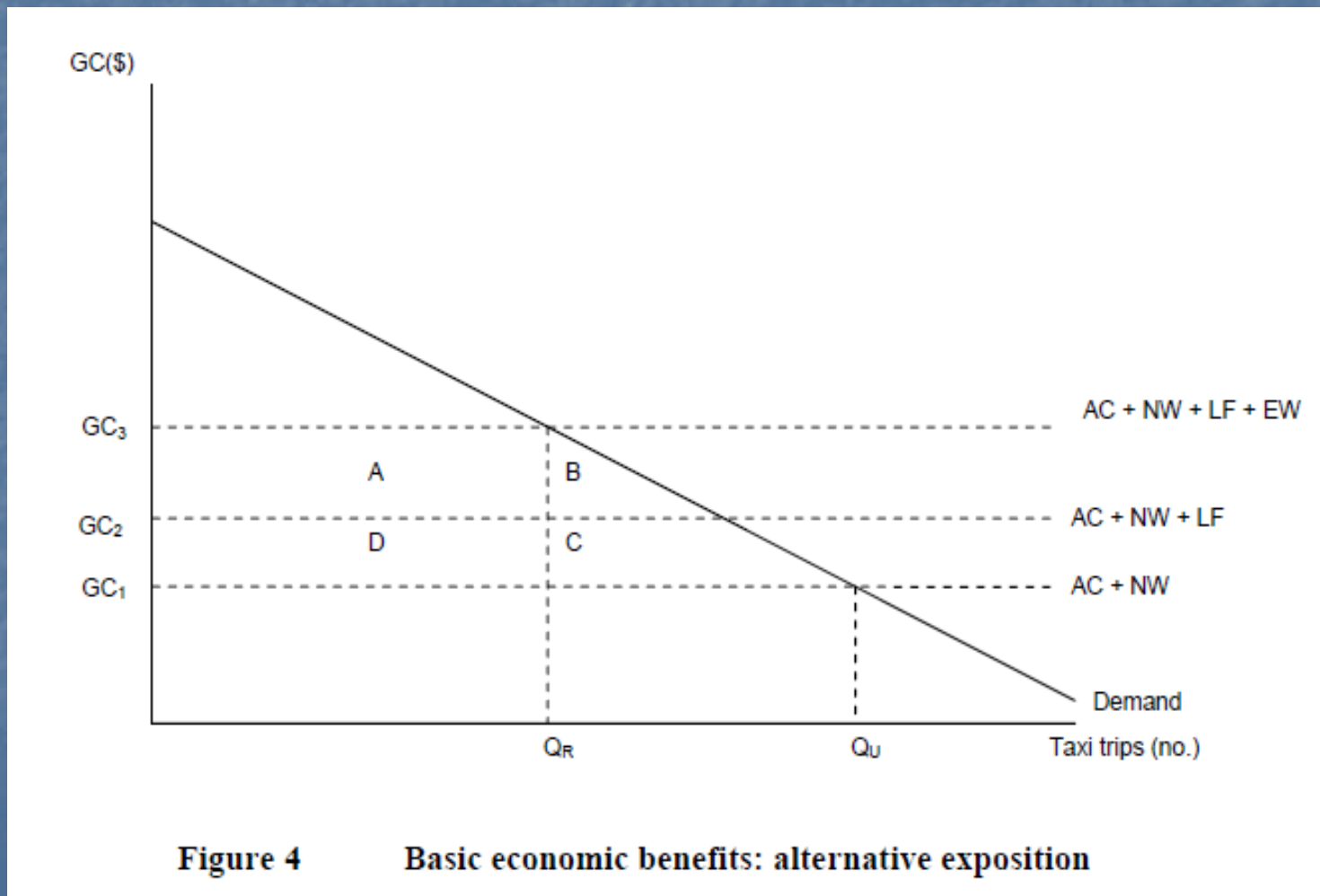
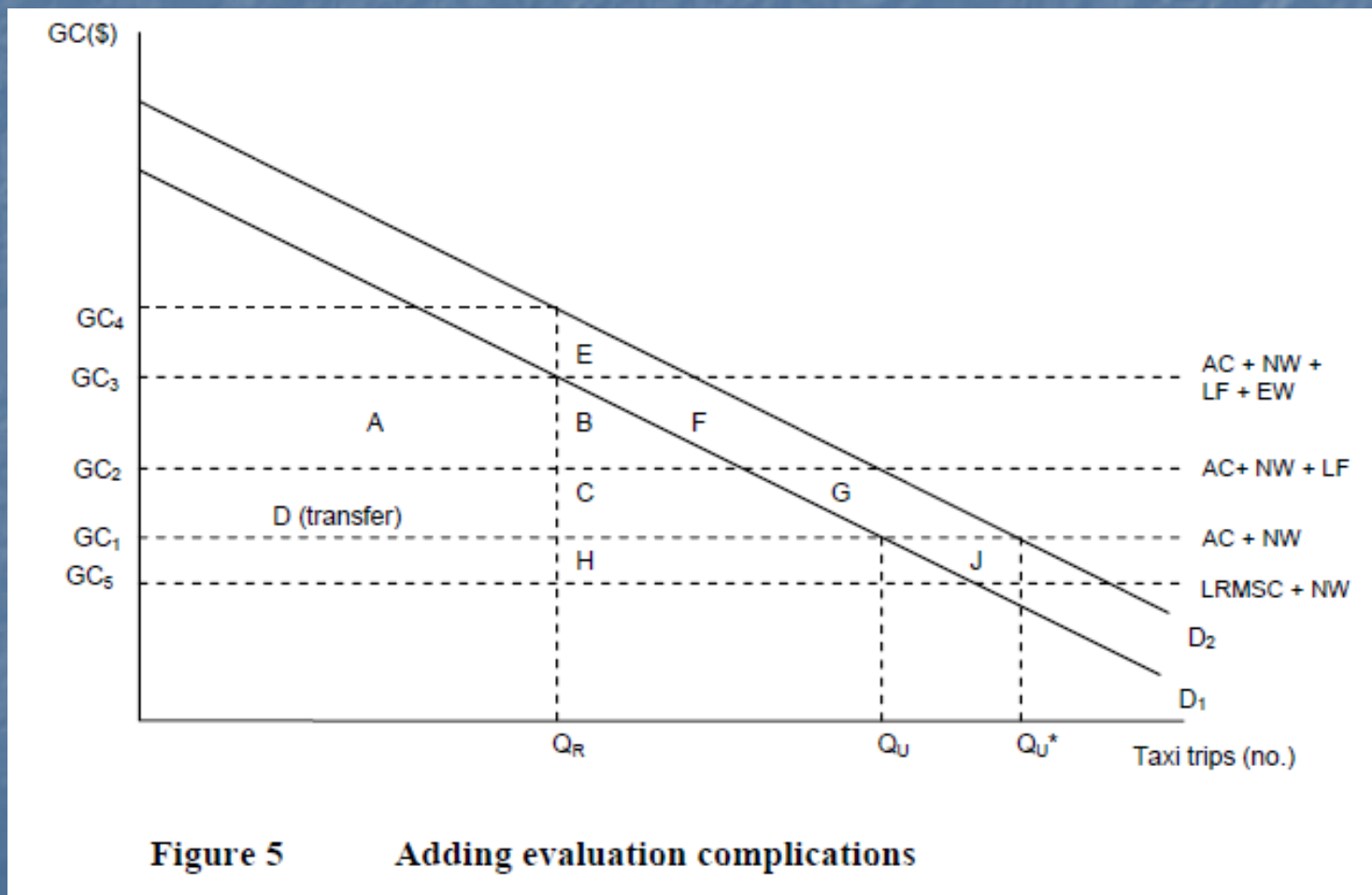


Figure 3 Consumer benefits from increase in taxi services

Evaluation of reform: Figure 4



Evaluation of reform: Figure 5



Evaluation of reform: Figure 6

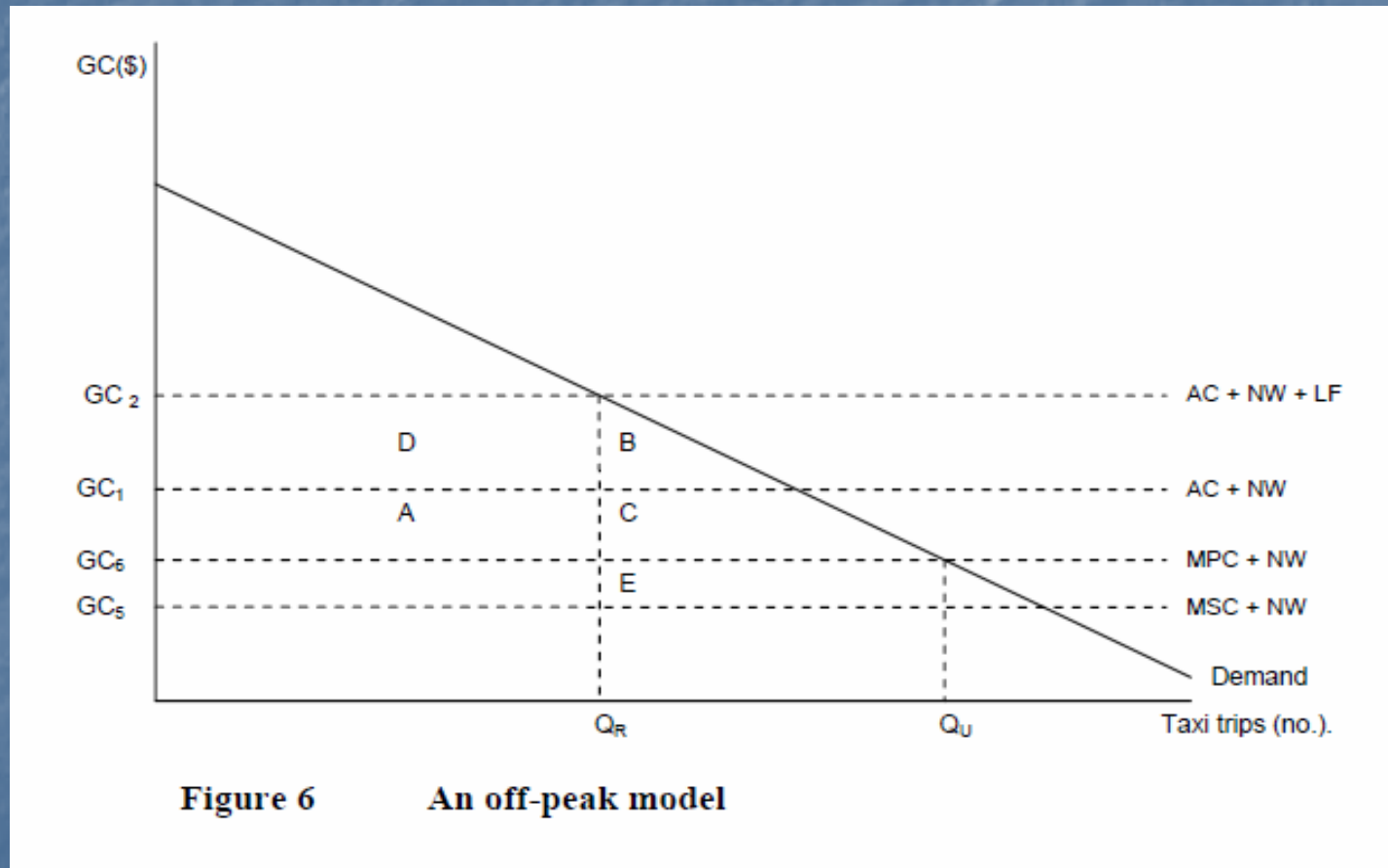


Figure 6 An off-peak model

Key data assumptions

- $AC = \$20.20 - LF (\$2.43)$ per trip
- $NW = 5$ minutes; $EW = 11.60$ minutes
- 1.8 pax per taxi
- Weighted average value of time = \$27/hour
- Existing market clearing peak hour price premium \$5.50
- New peak hour fare = $AC + \$2.43$
- Off-peak fare = $AC - \$2.43$
- Elasticity of demand with respect to $GC = -1$

Summary of results

- Table 6, page 23 for full results

■ Total annual impacts	(\$m)
■ Gains to consumers	367.4
■ Losses to taxi industry	-123.8
■ Social gains	21.5
■ Total net benefits	265.1

Conclusions

- Regulations of the taxi industry have produced a virtual monopoly in Sydney.
- There are few market failures in this industry. Other than basic safety regulations, there does not appear to be a strong case for regulation.
- The current regulations may be intended to protect the Sydney public by guaranteeing services to all areas within specified regulated times. This is not being achieved and evidence suggest that performance standards are low.

Conclusions

- Estimated gains from free entry and increased competition in the taxi industry are in order of \$265 million per annum. Over 20 years, this produces a net benefit with a present value of about \$2.8 billion.
- To achieve these gains the oligopolistic nature of the industry would have to be undone.
- Further modelling of the taxi market may refine these results. However, I have little doubt that it would produce broadly similar results.