



Global Student Mobility 2025

Insights into Global Competition and Australia's Market Share

AUSTRALIAN INTERNATIONAL EDUCATION CONFERENCE
MELBOURNE <<< 22 OCTOBER, 2003



Modelling destination choice

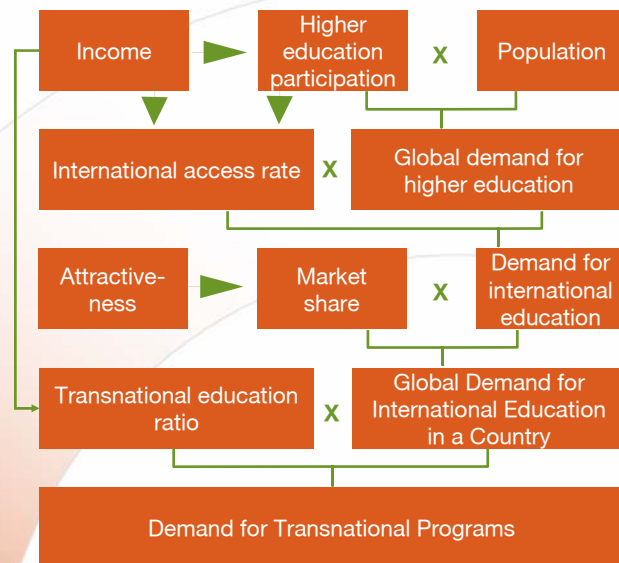
David Pearce

AUSTRALIAN INTERNATIONAL EDUCATION CONFERENCE
22 October, 2003

Outline

- Recap
- Objective of new research
- The framework
- The empirics
- The findings
- Strengths and weaknesses

Recap: Original Forecasting Model



Objective of new research

To explain destination choice (and therefore market share) as a function of particular attributes of those destinations

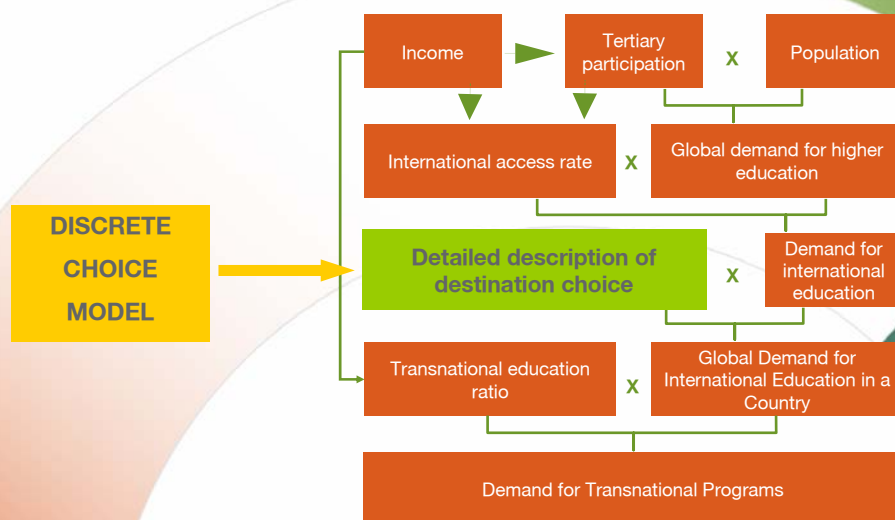
Destinations

Australia
US
UK
Canada
NZ

Attributes

Quality
Employment prospects
Affordability
Personal security
Lifestyle
Education Accessibility

How the new research fits in



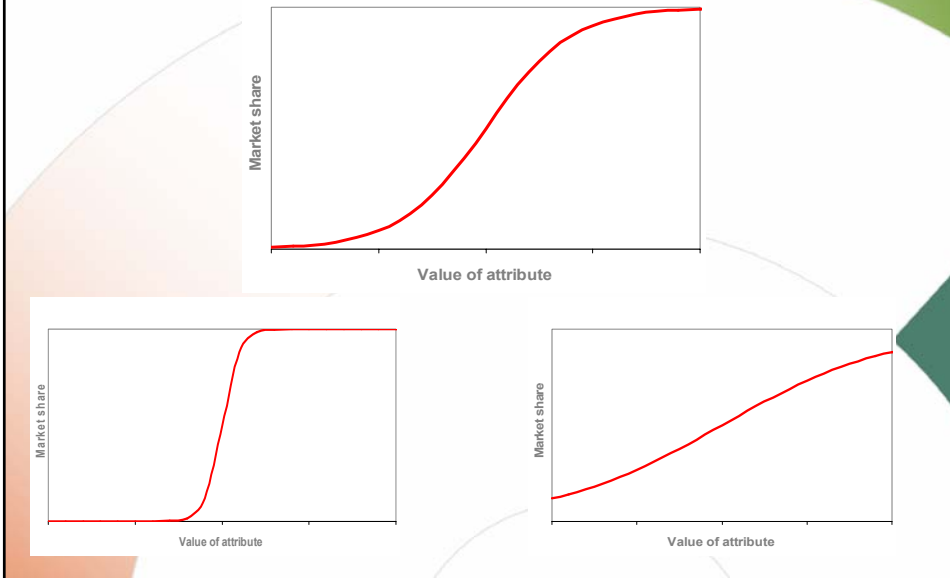
The framework

- Discrete choice (or discrete decision) analysis
- A subset of general choice theory
- Used for those cases where only one alternative can be chosen, rather than a continuum
- Alternatives in the *choice set* are:
 - mutually exclusive
 - exhaustive
 - finite

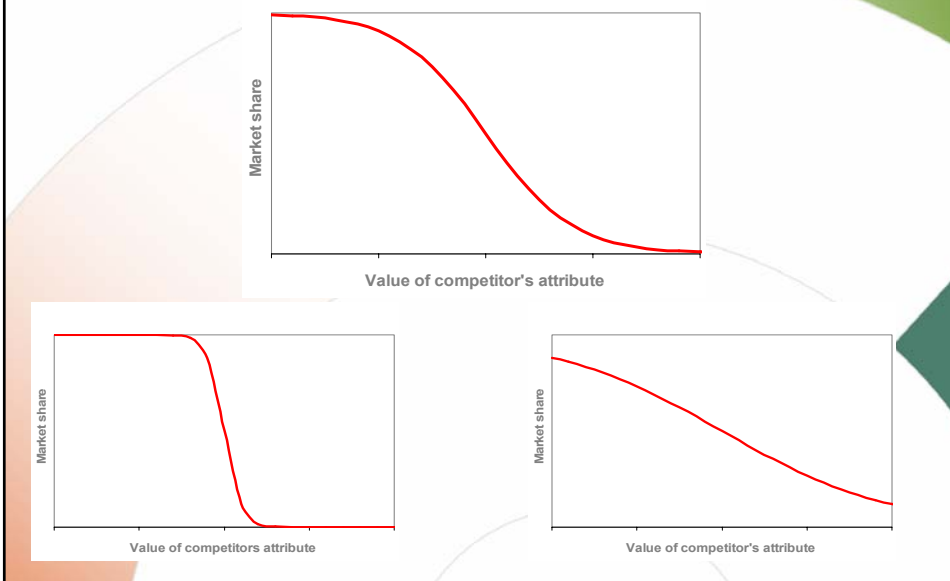
The framework

- Starts with psychology in the 1920s looking at stimulus and response
- Taken up in economics in late 1950's and early 1960s
- Early pioneer, Daniel McFadden, won Nobel Economics Prize in 2000
- Has been applied to many areas:
 - choice of transport mode
 - tourist/recreation destination choices
 - occupational choice
 - various environmental applications

The framework



The framework



The empirics

- **Choose the attributes**
 - Literature review
 - On-line survey
 - Workshops
- **Determine country ratings for each attribute**
 - Literature review
 - On-line survey
 - Workshops
 - Industry review
- **Collect data on market shares**
- **Combine the above to estimate the model**

The empirics: the attributes

- **Quality of education**
- **Employment prospects**
- **Affordability**
- **Personal security/risk**
- **Lifestyle**
- **Education accessibility**

The empirics: country ratings for attributes

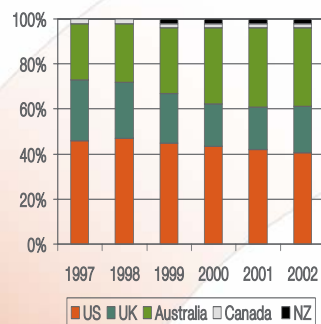
13 Sub-regions:

- Sub-Saharan Africa
- North Africa
- Middle East
- East Asia
- South East Asia
- South Asia
- Central Asia
- North America
- Central America
- South America
- Western Europe
- Eastern Europe
- Oceania

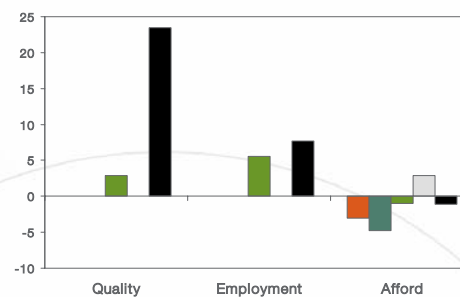
- Ratings allocated for
 - Each sub-region
 - Each study destination
 - 1997-2003
 - 2005-2025
- Workshops
- Ratings validated by industry representatives
- Global Ratings used as validation and consistency tests

The empirics: illustration

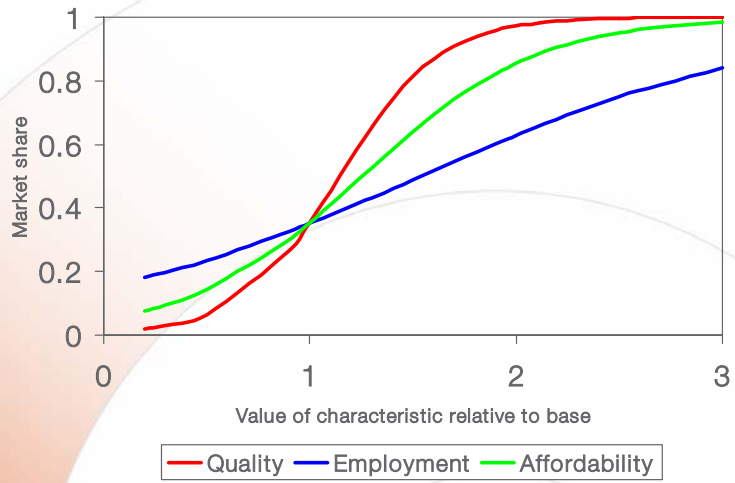
Market shares



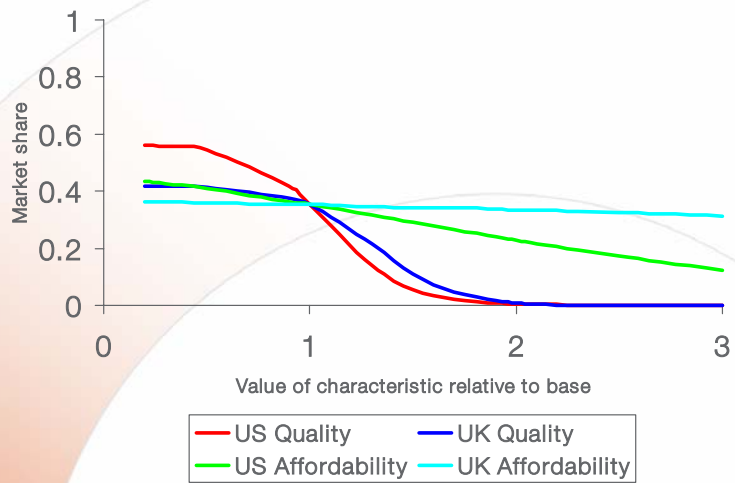
Changes in attribute ratings



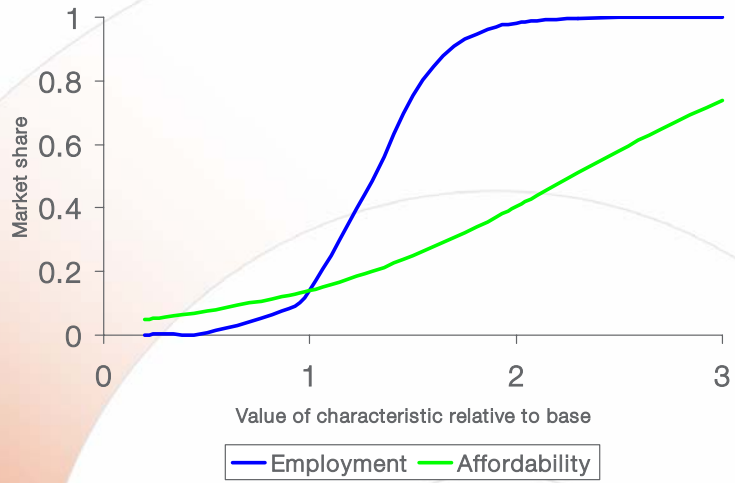
Results: SE Asia Australia's attributes



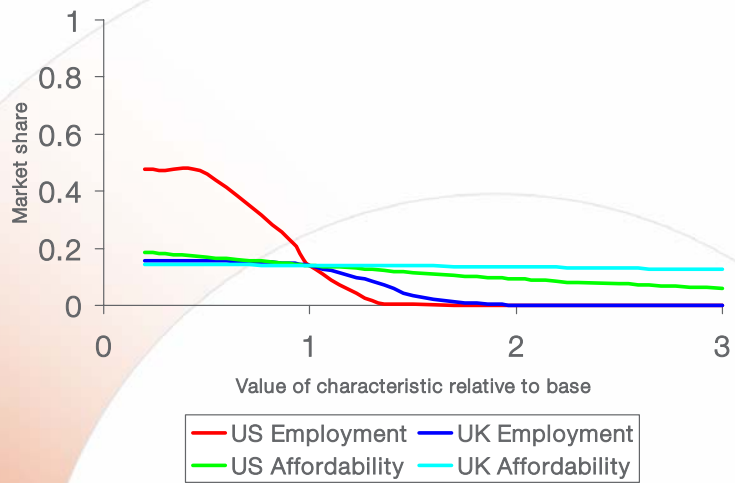
Results: SE Asia competitors attributes



Results: E Asia Australia's attributes



Results: E Asia competitors attributes



Strengths

- Choice modelling approach with a good pedigree
- Logical framework for choice
- Allows focus on important decision factors
- Uses available data well
- Provides convenient and tractable model
- S-curve relationships have some intuitive appeal...
- ... and can be made quite general
- Explicit formulation of 'index of attractiveness'

Weaknesses

- Tractable but complicated: many dimensions
- Underlying datasets are poor
- Difficult to identify parameters in rapidly changing market
- Segmentation
- Full student decision context not yet entirely clear
- BUT, there is a clear path for working through each of these



Looking to the future

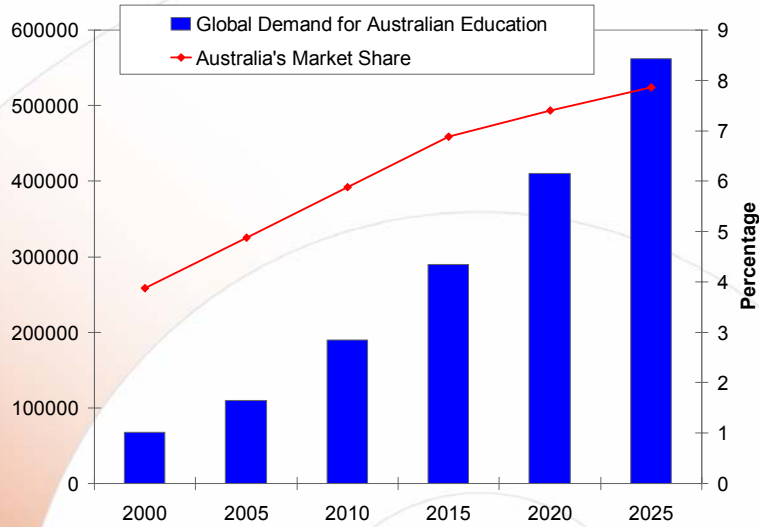
Insights into Global Competition and Australia's Market Share

Anthony Bohm

AUSTRALIAN INTERNATIONAL EDUCATION CONFERENCE
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**How might Australia's market
share change in the future?**

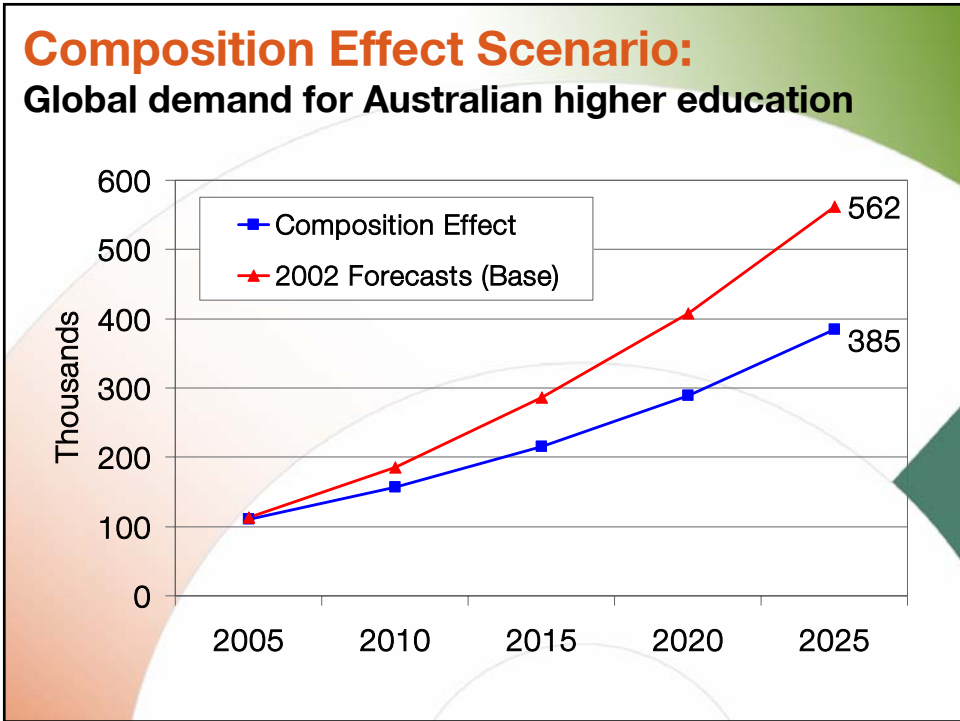
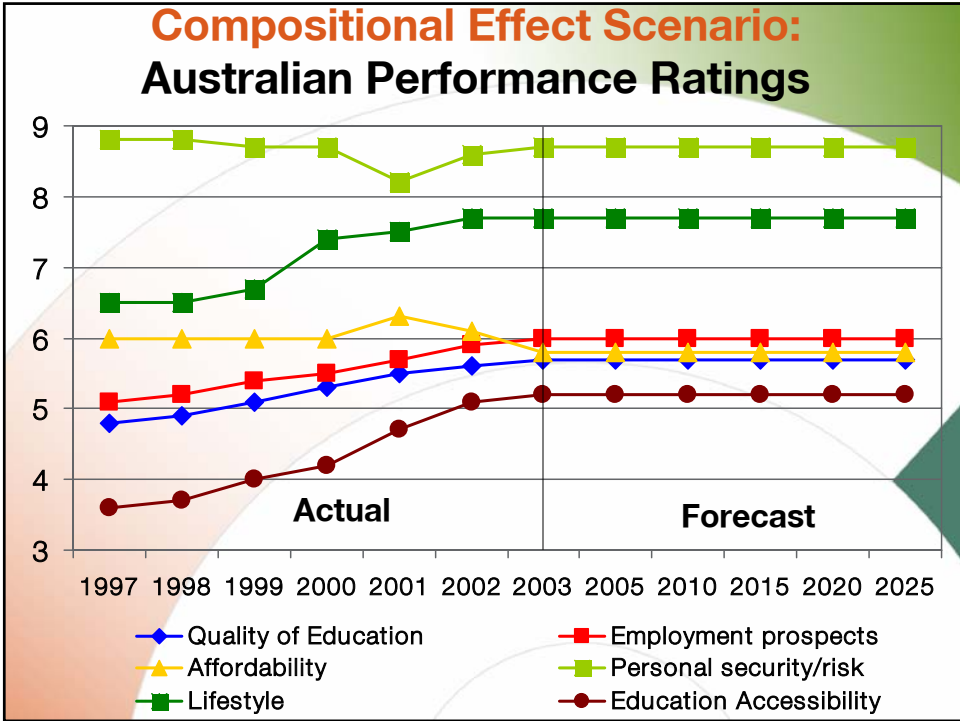
Our 2002 research... Forecast global demand for Australia



Scenario 1:

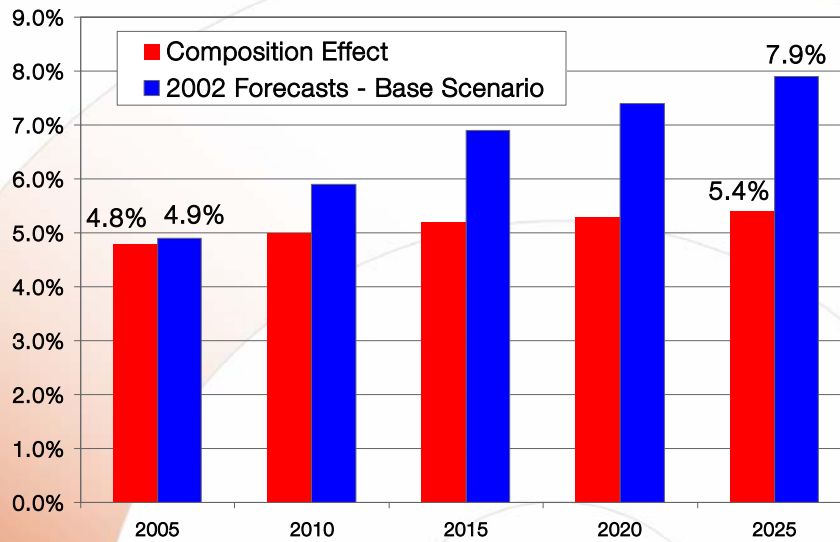
What happens if there is no relative change in attractiveness between the major destination countries?

Composition Effect Scenario



Composition Effect Scenario

Australia's share of global market



Snapshot of Demand for Australia

- Global Demand => From 98,800 in 2003 to 384,527 in 2025
- Asia will be the dominant source region
- Relative Importance of Europe as source region will decline
- China and Malaysia will drive the growth
- All top ten source countries will be Asian countries

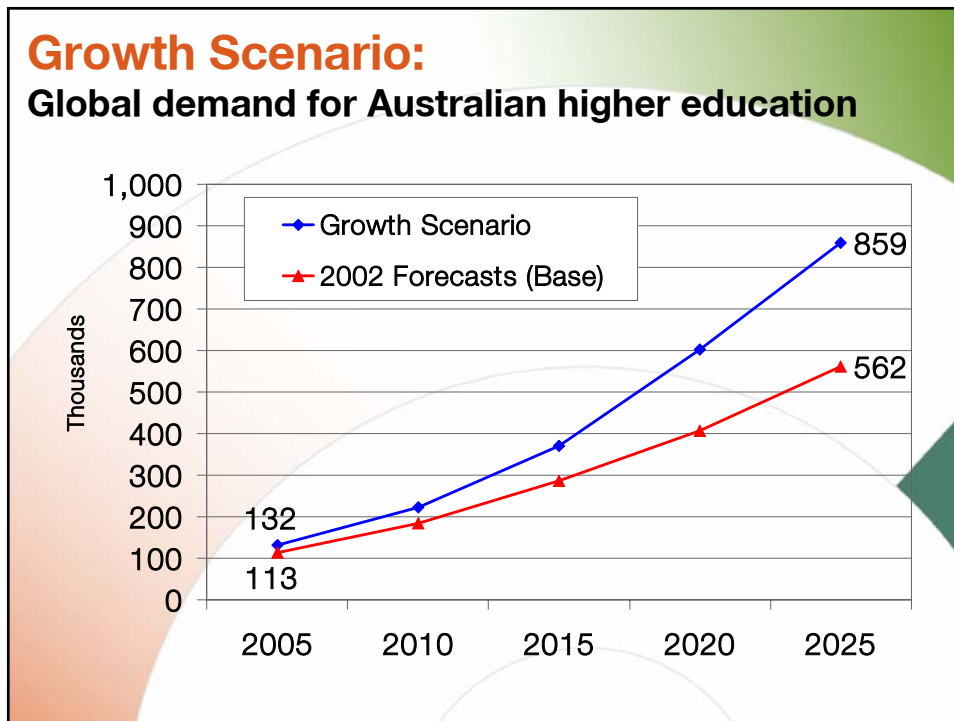
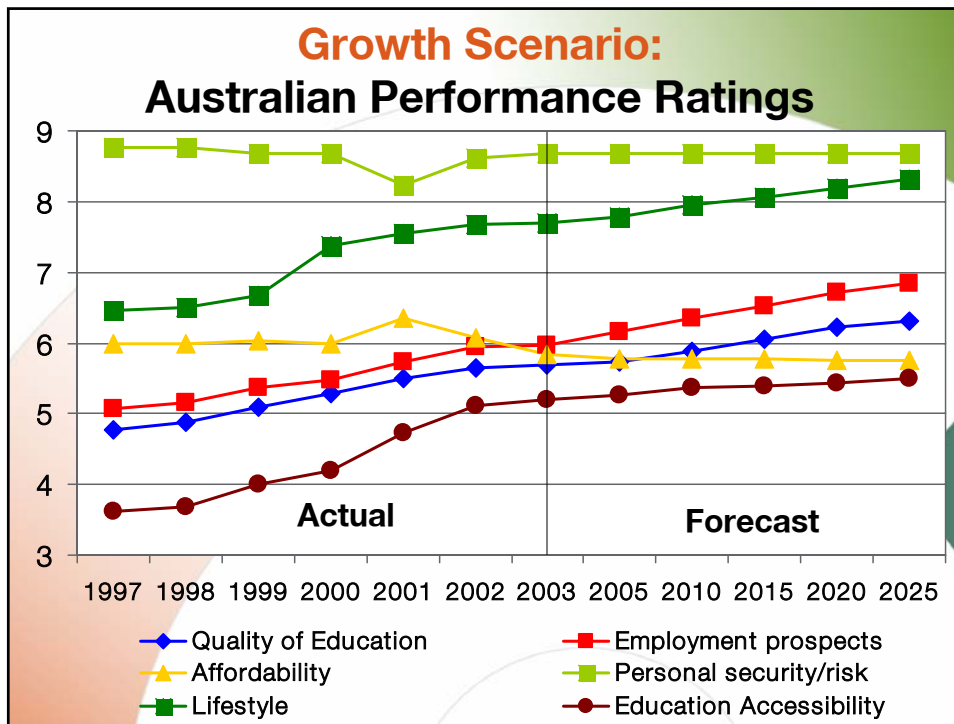
Scenario 2:

What happens if Australia experiences a strong improvement in relative attractiveness compared with the other major destination countries?

Growth Scenario

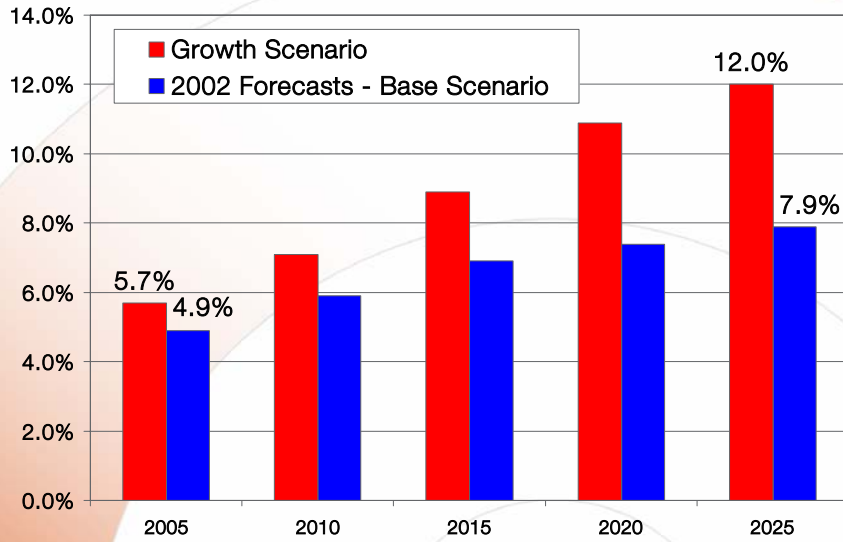
Growth Scenario: The Story...

- Australia invests in research to underpin quality teaching
- Rigorous quality assurance mechanisms
- Forge links with global industries
- Recognised as a 'global knowledge center'
- Competitive exchange rates
- Australian education delivers high 'private rates of return'
- Strong perceptions as top lifestyle destination will continue
- Australia is perceived as a safe destination.
- Ageing population => national drive to increase students
- Continued investment in marketing, promotion and branding



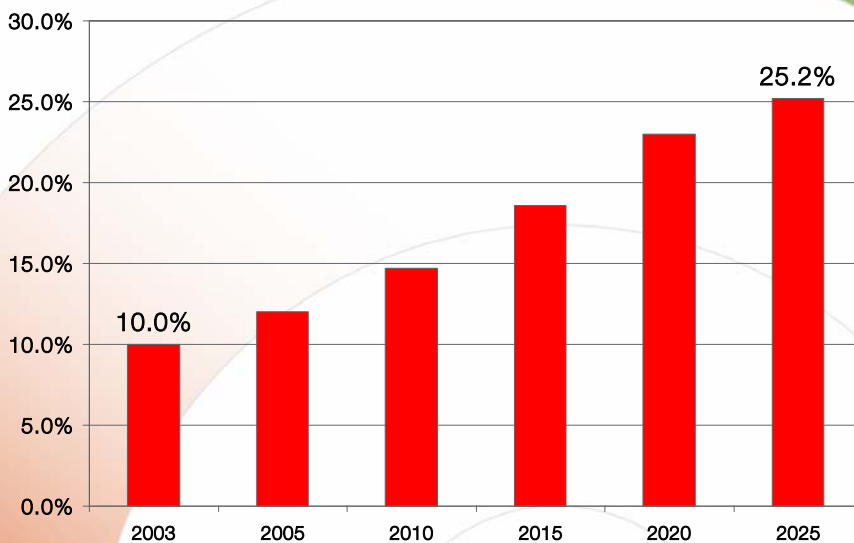
Growth Scenario

Australia's share of global market



Growth Scenario

Australia's share of MESDC market

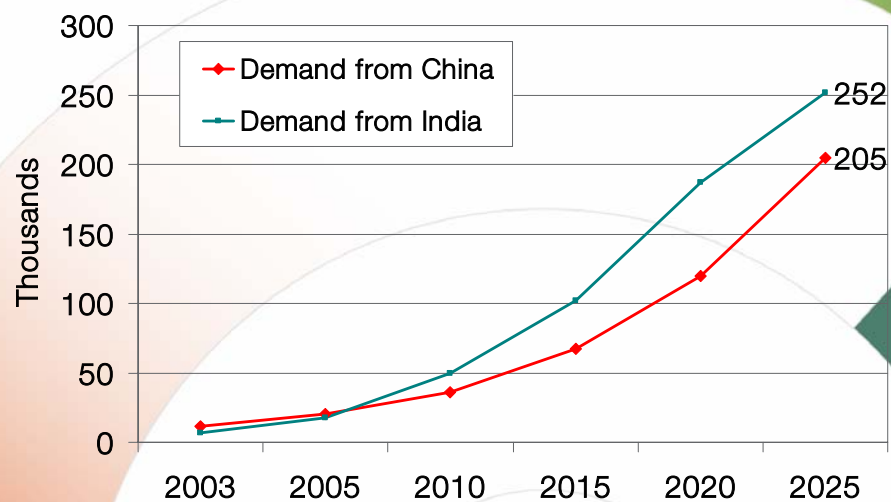


Snapshot of Demand for Australia

- Global Demand => From 98,800 in 2003 to 858,800 in 2025
- Asia will dominate
- Relative importance of Europe will decline
- Top 5 source countries:
 - India
 - China
 - Malaysia
 - Indonesia
 - Pakistan
- All top ten source countries will be Asian countries

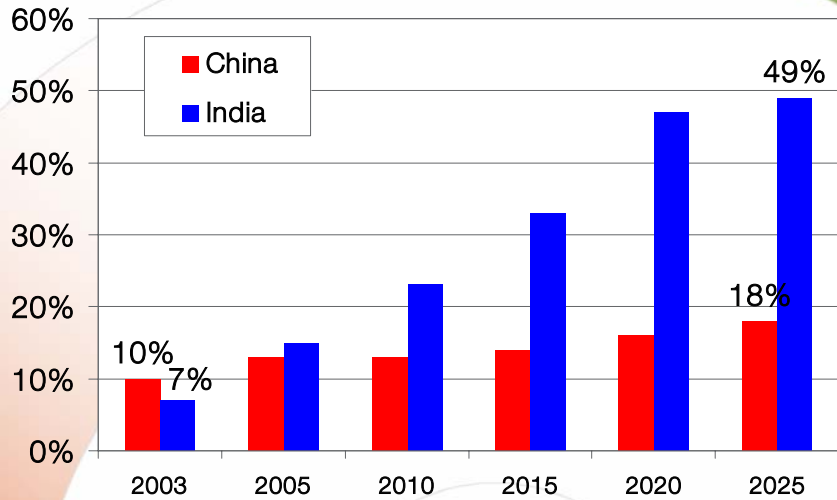
Growth Scenario:

Demand from China and India for Australia



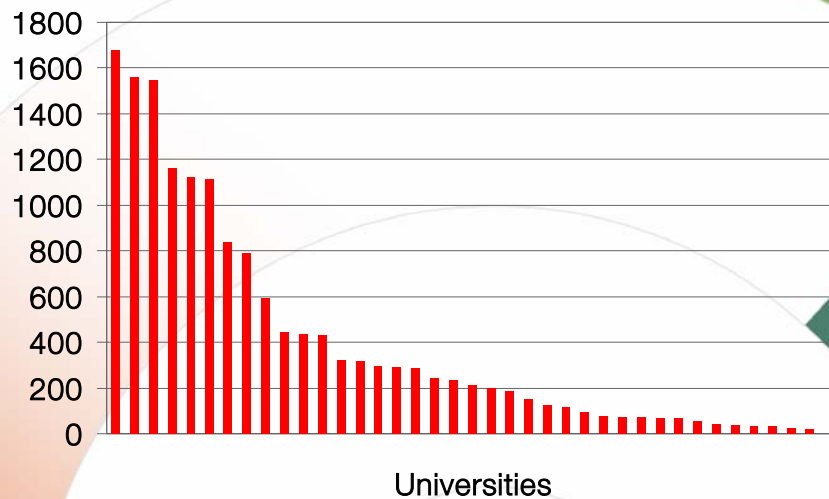
Reality Check:

Australia's MESDC market share in China and India



Reality Check:

Chinese students in Australian universities 2003



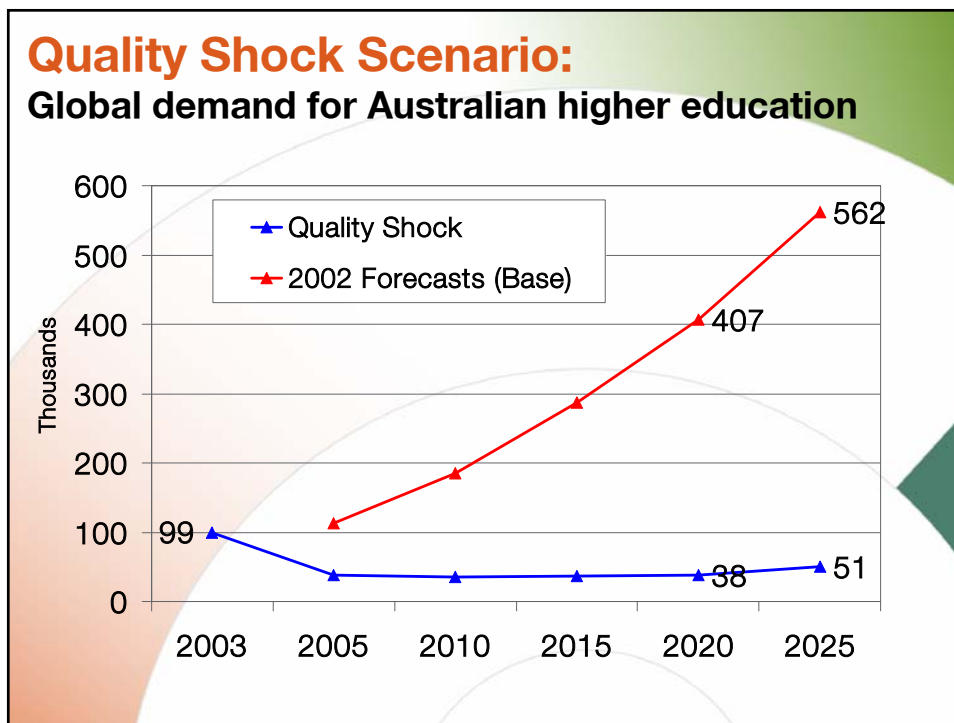
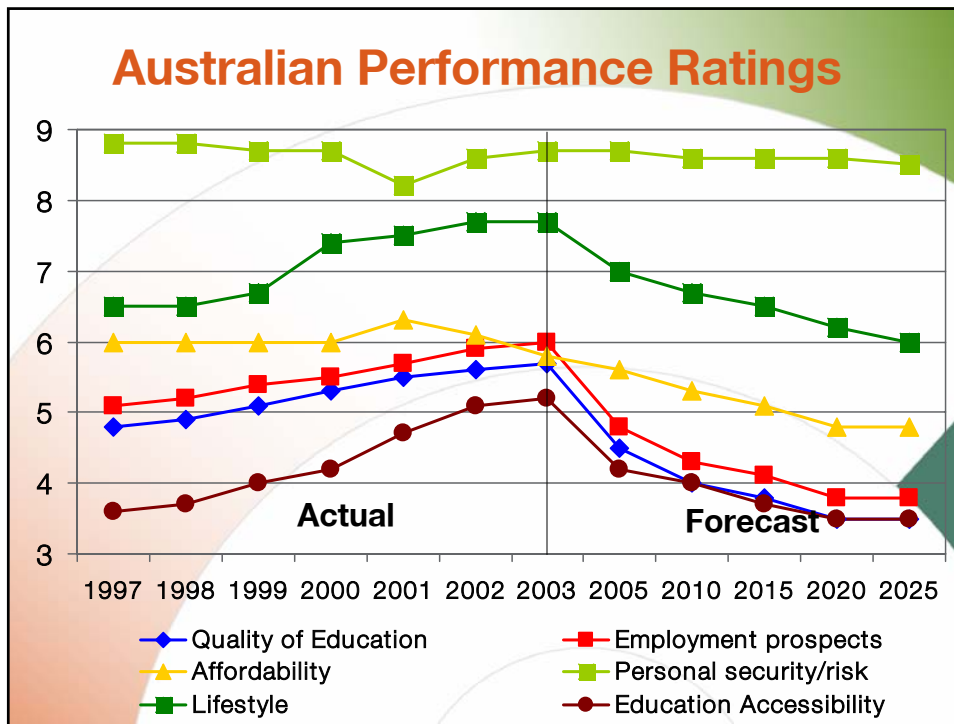
Scenario 3:

What happens if Australia experiences a quality shock?

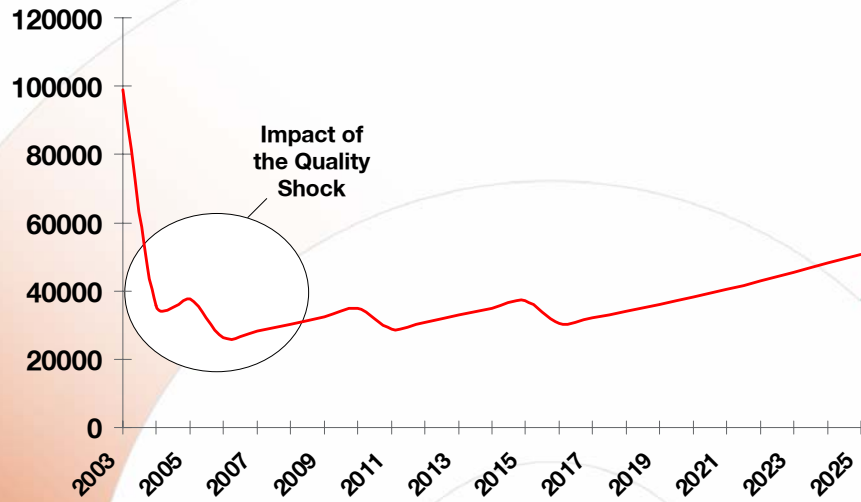
Quality Shock Scenario

Quality Shock Scenario: The Story...

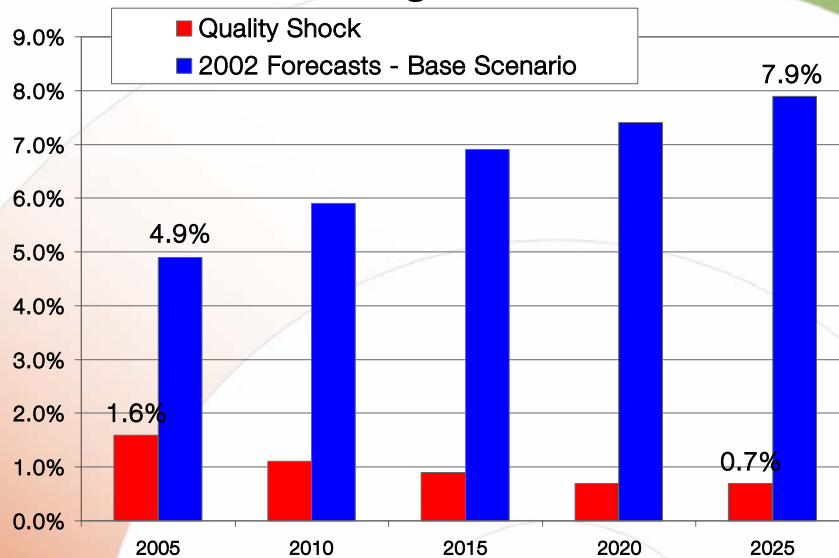
- Plagiarism and corruption scandal in Australian TNE programs
- Impacts on TNE enrolments for all Australian universities
- Concerns over viability of institutions with high TNE exposure
- A number of key institutions close campuses in the region
- Contagion effect for perceptions of education in Australia
- **International professional associations de-register Australia**
- Less favourable exchange rate
- Increasing cost of living in major Australian cities
- Accommodation crisis for students drive up living costs
- Perceived lack of 'diversity' impacts on USA and Europe
- Absence of active marketing, promotion and branding



Quality Shock Scenario: Global demand for Australian higher education

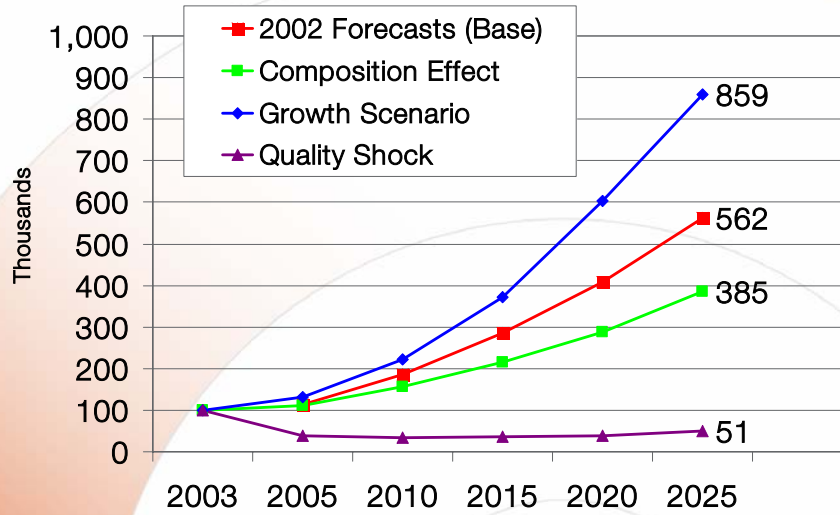


Quality Shock Scenario Australia's share of global market



Summary of scenarios:

Global demand for Australian higher education



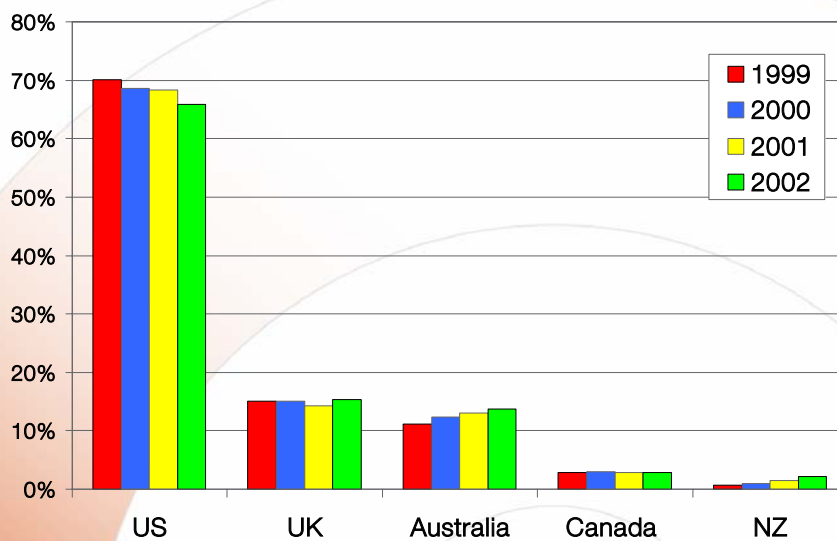
**What does this tell us about
global competition in
international education?**

Key Findings...

IMPLICATION 1:

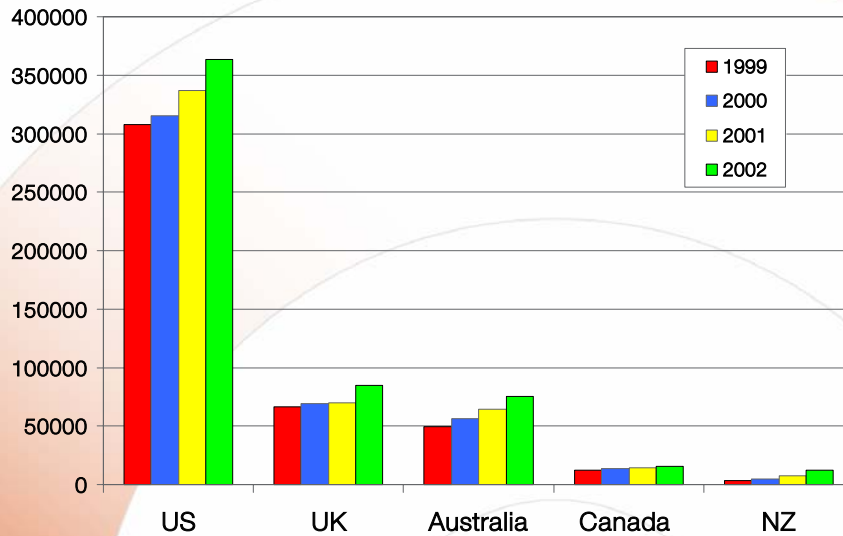
Global competition will increase overtime...

Historical global competition MESDC market share in Asia



We operate in a high growth market

Total student numbers from Asia



Key Questions:

- Is there so much growth, that market share is not important?
- How many international students do we need?

Future Global Competition:

The projected growth in the demand for international education in MESDCs will not meet the requirements of industrialised ‘ageing’ populations making the transition to sustainable knowledge economies.

How many international students do we need?

“Life expectancy has risen more over the past 50 years, than over the previous 5,000 years.”

“Twenty-five years from now, one out of every two adults in developed countries will have reached retirement age.”

“Some developed countries may have more retired beneficiaries than tax paying contributors”

Source: Jackson, R., 2002, *The Global Retirement Crisis: The Threat to World Stability and What to Do About It?*

Old Age Dependency Ratio Major English Speaking Destinations

	Old Age Dependency Ratio (%)		
	2000	2010	2020
Australia	16.7	18.2	23.7
Canada	17.0	18.9	25.6
UK	22.2	23.7	28.9
US	16.8	17.4	22.8

Maintaining OADR and Immigration

	Population Required ('000)	1985-1995 Migration ('000)
Australia	4,853	930
Canada	9,024	1,490
UK	9,334	720
US	73,535	5,800

“To keep the ratio of working-age adults to elderly from falling, the UN calculates that Europe would have to accept **25 million immigrants annually”**

Source: Jackson, R., 2002, *The Global Retirement Crisis: The Threat to World Stability and What to Do About It?*

So, what does this mean?

- Industrialised 'ageing' economies will require a new wave of skilled migration to underpin **future economic growth** and **sustainability**.
- Assume half the OADR is met by increased productivity, demand for migration will be **18 times** the global demand for international education in these countries.
- A new phase of competition will emerge – driven by **national economic imperatives** in industrialised 'ageing' economies.
- International education is set to become a **strategic national asset**.

IMPLICATION 2:

Global competition is driven by the perceived quality of education...

Own Elasticities of Market Share

South East Asia

	Quality of Education	Employment Prospects	Affordability
US	3.20	0.83	0.52
UK	4.30	0.90	0.24
Australia	2.73	0.74	1.56
Canada	3.55	0.83	1.75
New Zealand	1.78	0.40	2.92

Cross-Elasticities of Market Share

South East Asia

	Quality of Education	Employment Prospects	Affordability
US	-2.24	-0.58	-0.37
UK	-1.13	-0.24	-0.06
Canada	-0.07	-0.02	-0.03
New Zealand	-0.03	-0.01	-0.05

What does this tell us?

- Australia's market share is very sensitive to changes in perception of quality and employment prospects.
- Compared with the USA and UK, Australia's market share is more sensitive to changes in price.
- Australia's market share is very sensitive to changes in the perception of quality and employment prospects within the UK and USA.
- The perceived quality of New Zealand and Canada education has relatively little effect on Australia's market share.

Critical question: What is quality?

- Quality and employment prospects = parallel.
- Core driver = **private rate of return**
- Human capital theory
- "Education is more productive the more volatile the state of technology" (Psacharopoulos and Patrinos, 2002).
- Social versus private rates of return

Private rate of return and international education

Q: In 2003, what was the average graduate starting salary for MBA graduates from Wharton Business School?

A: **US\$162,867**

Q: On average, how much did the MBA increase the student's salary on completion?

A: **212%**

Q: What proportion of the MBA students were international?

A: **42%**

Source: Financial Times MBA 2003

What creates a higher perceived PRR?

- Quality education facilities
- Quality human resources
- Recognition & endorsement by high value industries
- Links to global industries and labour markets
- Quality 'global' student population
- Effective graduate employment services
- Extensive alumni networks
- On-going professional development support
- Effective marketing strategies

How do these national 'brands' reflect PPR?



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change by **exchange**



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WORLD CLASS.

EDUCATED IN
NEW ZEALAND.

Across the globe there is an
exceptional new class of graduates emerging...

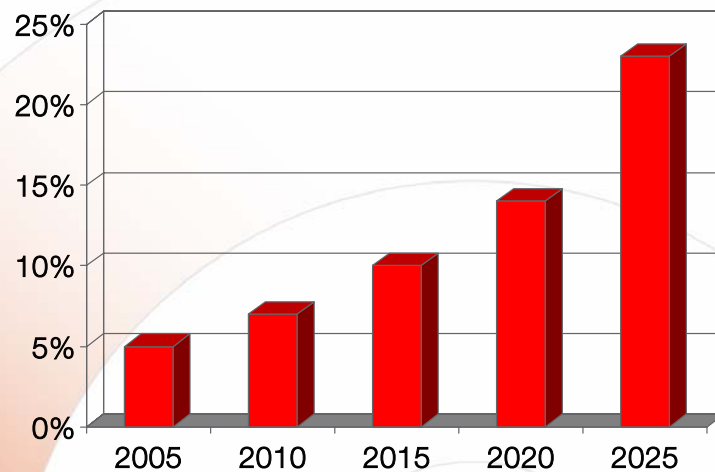
Conclusion:

Global market share in the future will be driven by the effective provision and promotion of private rates of return from international education

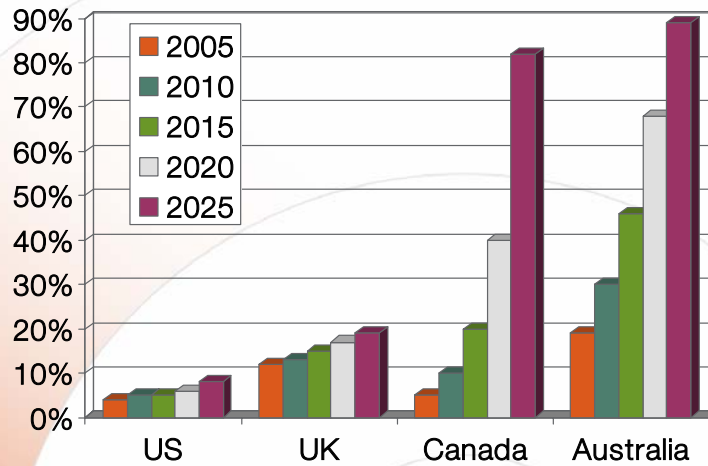
IMPLICATION 3:

Global competition will be influenced by our ability to supply...

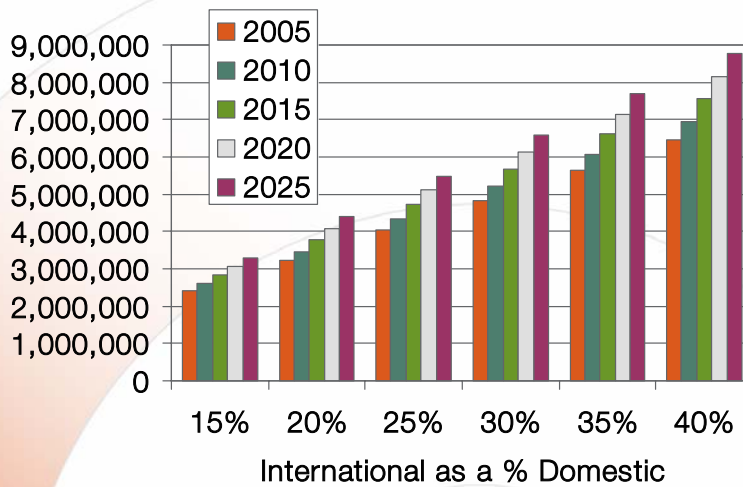
Is there a natural limit to supply?
International as % of domestic in MESDCs



Is there a natural limit to supply? International as % of domestic in MESDCs



USA has enormous supply capacity Potential international enrolments in USA



Key questions emerge...

Is the international-domestic student ratio a barrier to supply?

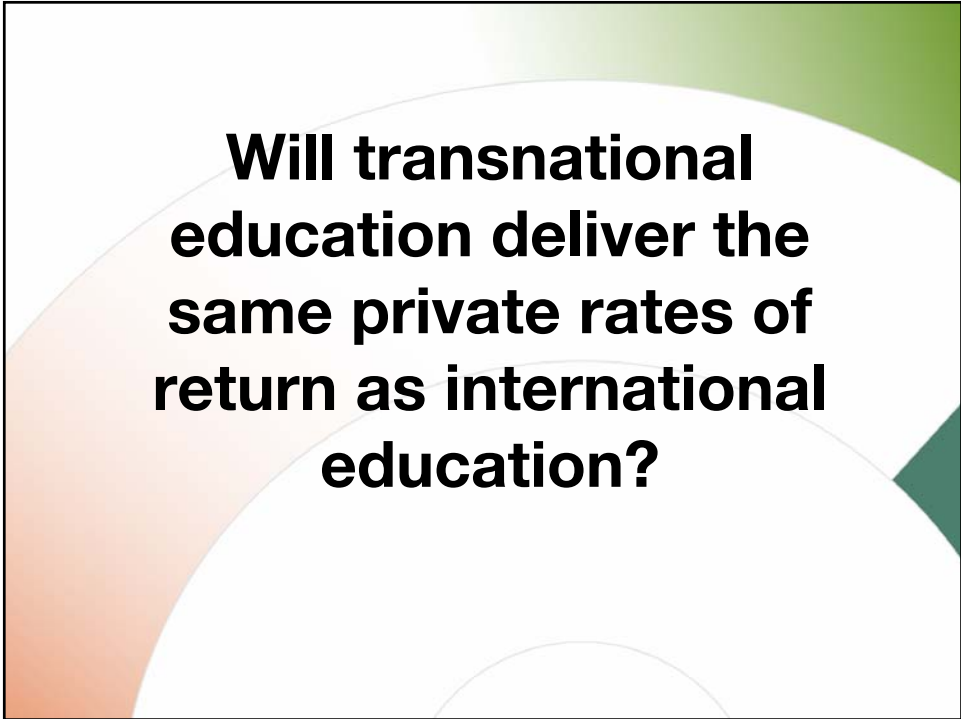
If so, what will be the role of the private sector in meeting the unmet global demand for international education?

IMPLICATION 4:

Transnational education has the potential to dramatically change the future of global competition



**Will transnational
education become a
substitute for international
education?**



**Will transnational
education deliver the
same private rates of
return as international
education?**



Dr Neil Kemp
British Council

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