Australia's International Education Industry

Analysis of Strategic Trends

February 2013

The Boston Consulting Group

Purpose of this document

The International Education Advisory Council (IEAC) was formed in 2011 to advise the Australian Government on the development of a five year national strategy to support the sustainability and quality of the international education sector

In late 2012, The Boston Consulting Group provided pro bono support to IEAC in the form of analysis of strategic trends affecting Australia's international education industry, including the potential impact of digital education

This document summarises BCG's analysis and conclusions

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Summary: After a decade of success, Australian international education providers face challenges to remain competitive

International education in Australia has been extremely successful, delivering economic benefits in many ways, although enrolments and revenues have dropped since their 2009 peak

- Leading export industry, worth $15b in 2011 (down from $18b in 2009), plus revenue from transnational operations
- Internationalisation of experiences and curricula for staff and both domestic and foreign students
- Building business, community and government linkages with Asia and elsewhere

Some positive factors will favour Australia in the coming decade

- Growth in key countries of origin, China (up to 800k more students by 2020), and India as undergraduate courses are favoured (up to 340k more students by 2020)
- Attractive policy settings in Australia for post-university work

However, the market dynamic has changed, meaning recent negative trends in commencements may reflect a fundamentally more challenging environment for Australian education providers

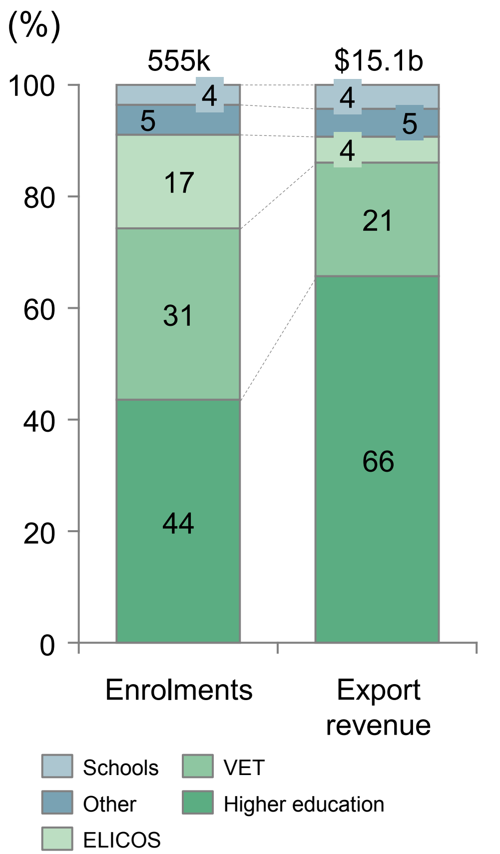
- Australia has become a relatively expensive education option (now costing ~20% more than US)
- Competing provider countries are becoming increasingly active with aggressive growth plans (supply growth expected to match or exceed demand growth)
- Growing online offerings will test brand strength and agility, threatening some segments with substitution, but also presenting an opportunity to greatly strengthen Australia's ties and influence in Asia

To sustain international student populations and revenue mixes, Australian education providers need to play a different game, and play it well

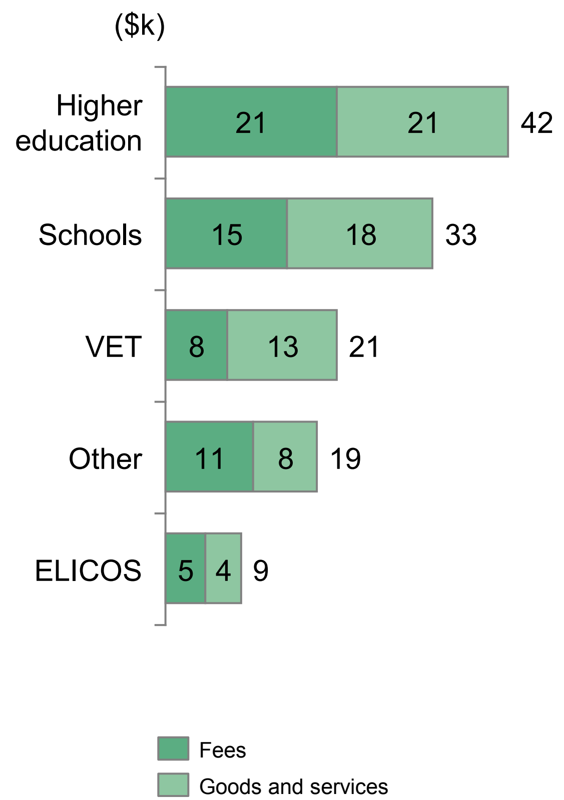
- Addressing affordability, maintaining quality standards, and constantly assessing and reinforcing the broader value of Australian qualifications in the global marketplace
- Thoughtfully targeting new sources of demand, as competing supply grows
- Constantly innovating in the delivery of competitive educational outcomes
- Supportive national and state government policies are critical (e.g. work and migration rules)

International students, especially those in higher education, benefit the Australian economy in many ways

Enrolments and revenue, 2011



Expenditure per student, 2011



Other benefits

Support to wider higher education industry

- Cross-subsidisation of domestic students
- Contributes to overall financial sustainability and global standing of Australian universities

Support to other industries

- Tourism from visiting friends and relatives (>70% students expect visits from friends/family, worth >$300m)
- Creates skilled base of migrant labour accustomed to Australian life

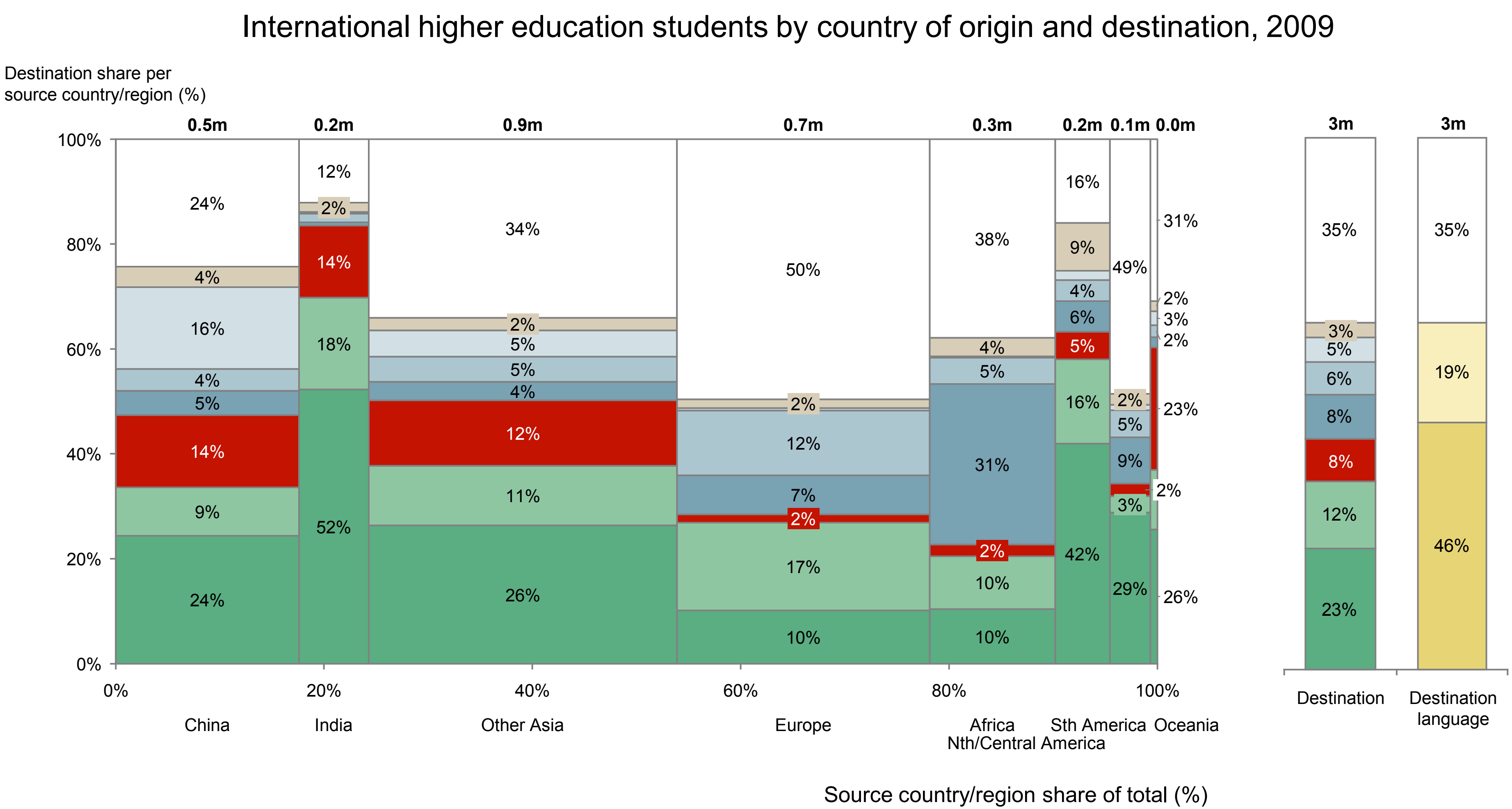
Cross-cultural interaction

- Cross-cultural exposure and exchange of ideas
- Building business, community and government linkages with Asia and elsewhere

Note: Expenditure per student allocates all expenditure to the highest level of enrolment for those students enrolled in multiple sectors
Source: Australian Education International, monthly international student data release, August 2012, Australian Bureau of Statistics catalogue 5368.0 (Sep 2011); Glenn Withers "Reform now and we'll stay world class", Australian Financial Review 22 Oct 2012; Sustainable Tourism CRC, 2010

Australia's int'l higher education market share was 8% in 2009

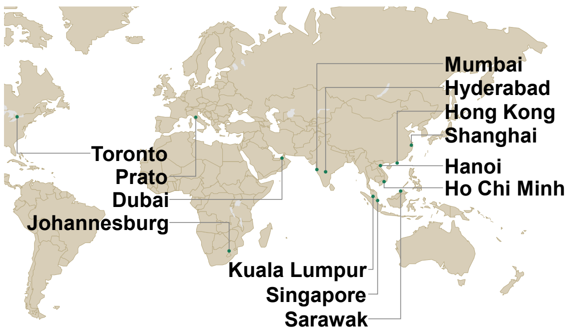
Ranked third behind US and UK, Australia has punched above its weight



Note: Data set represents approximate total mobility of students in 2009 based on provider country reported data; Canada data unreported for 2009, so 2008 data used
Source: UNESCO 2009

A quarter of Australia's international students attend offshore campuses and generate an estimated ~14% of fee income

Australian universities' offshore campuses/centres



Number of Australian universities with offshore campuses/centres:

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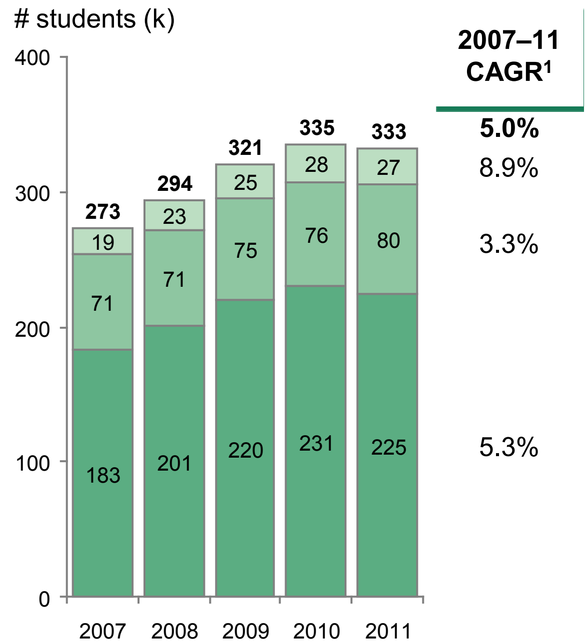
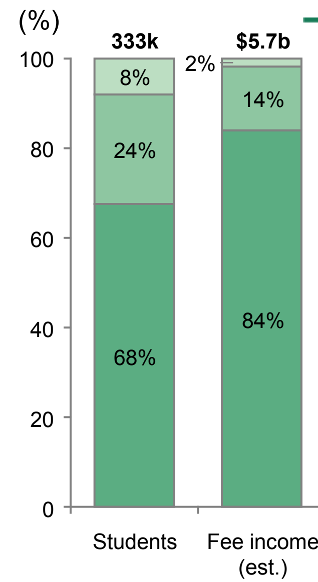
Onshore and offshore international students, 2007–11



This view based on number of students, not enrolments

International student fee income, 2011



Est. fee income per student	Est. fee income total
~$3.4k[2]	$0.1b
~$10k[3]	$0.8b
$21k	$4.8b

While revenue opportunity is clear, profitability of transnational offerings varies

- Distance students
- Students at offshore campuses
- Students in Australia

1. Compound Annual Growth Rate 2. Fee income per student estimate based on distance education economics published by University of Southern Queensland 3. Fee income per student estimate based on survey of basket of courses at various transnational campuses
Source: Australian Education International - Research Snapshots 'Transnational education in the higher educations sector' 2009, 10, 11; BCG analysis; MyUniversity

Australia's strength in the international education market reflects a decade of highly favourable trends …

Inherent strength in the Australian international education offering

- Large number of highly-ranked universities relative to population size
- Proximity to growing Asian student pools
- Desirability of English language for many international students

Structural incentives for Australian universities to actively seek full fee-paying international students

Australian education providers developing and delivering a compelling value proposition

- Assertive, agent-based recruitment
- Successful back-office and support services for international students
- Innovations in language testing, educational pathways and internationalised courses
- Relatively low cost compared to other top destinations (US, UK)

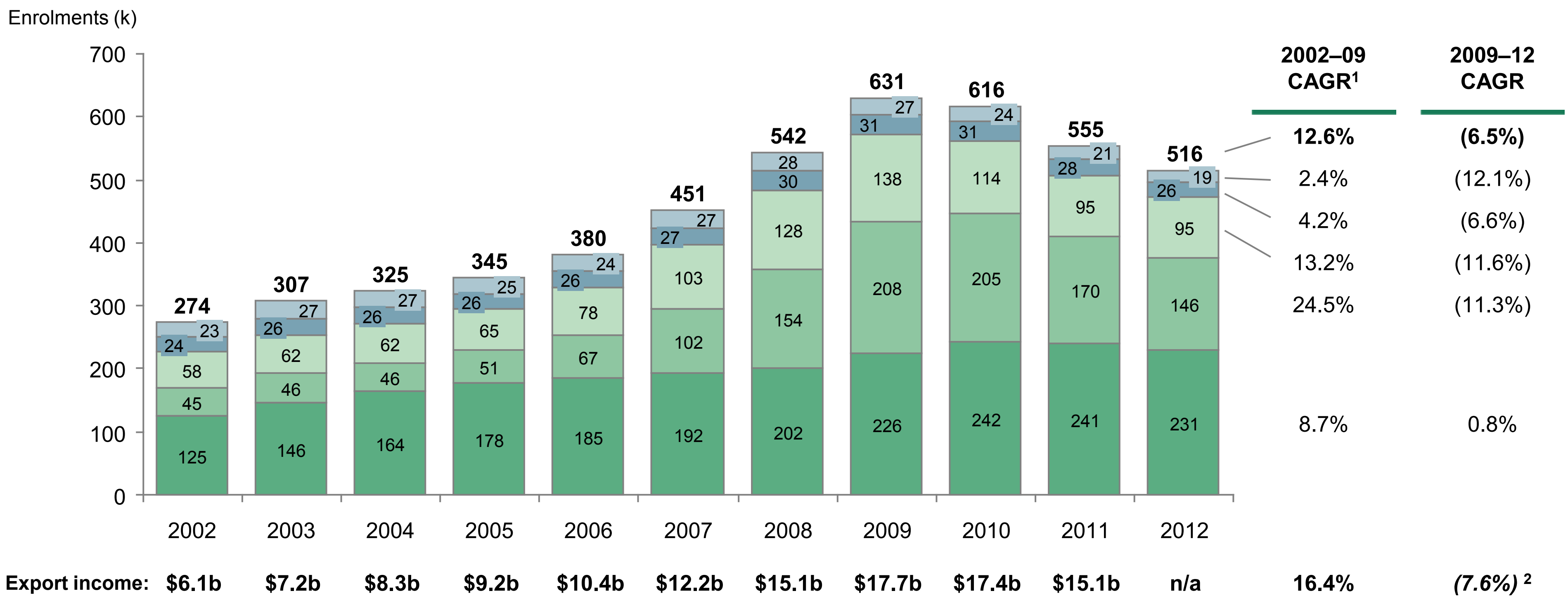
Favourable external factors outside of Australia's control

- US reduced intake of foreign students post 2001, forcing large numbers of international students to look elsewhere

Source: Glenn Withers "Reform now and we'll stay world class", Australian Financial Review 22 Oct 2012

… However, total international student enrolments and export revenues have declined since 2009 peak

International student enrolments at Australian education providers by sector, 2002–12e



Sector	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2002–09 CAGR[1]	2009–12 CAGR
Total	274	307	325	345	380	451	542	631	616	555	516	12.6%	(6.5%)
Schools	23	27	27	25	24	27	28	27	24	21	19	2.4%	(12.1%)
Other[3]	24	26	26	26	26	27	30	31	31	28	26	4.2%	(6.6%)
ELICOS	58	62	62	65	78	103	128	138	114	95	95	13.2%	(11.6%)
VET	45	46	46	51	67	102	154	208	205	170	146	24.5%	(11.3%)
Higher Education	125	146	164	178	185	192	202	226	242	241	231	8.7%	0.8%
Export income:	**$6.1b**	**$7.2b**	**$8.3b**	**$9.2b**	**$10.4b**	**$12.2b**	**$15.1b**	**$17.7b**	**$17.4b**	**$15.1b**	**n/a**	**16.4%**	***(7.6%)*** [2]

Enrolments down across all sectors, growth flattening in higher education

1. Compound Annual Growth Rate 2. 2009-11 CAGR shown 3. Non-award courses, enabling courses
Source: Australian Education International, monthly international student data release, December 2012, Australian Bureau of Statistics catalogue 5368.0 (Sep 2011)

Strategic context for international education in Australia looks less favourable over the next decade

Chinese-led global demand will remain strong, with undergraduates from India an emerging growth area

- OECD forecasting 7% growth in the pool of international students through 2020, adding ~3m new students
- Asian demand for high quality education will continue to outstrip domestic supply, with increasingly wealthy populations willing/able to fund overseas education
- However, competing providers are positioned to aggressively expand capacity

Australia's competitiveness has dropped due to rising relative cost and tighter migration pathways and employer demand driven policy settings

- Exchange rate-driven cost increases have impacted Australia's global market share
- New student visa settings for universities support a competitive and high integrity international education sector

These influences are clearly reflected in Australian trends, with commencements declining since 2009

- Historically strong enrolments supported by cross-sectoral feeder pathways
- Declining competitiveness has affected commencements, but leading indicators suggest stabilisation; future increases in HE enrolments will depend on sustained growth in commencements

Additionally, online offerings will test the brand strength and agility of Australian providers

- Gaining reach and credibility
- Threatening to change industry dynamics with innovative models
- Also present an opportunity to greatly extend Australia's ties and influence in Asia

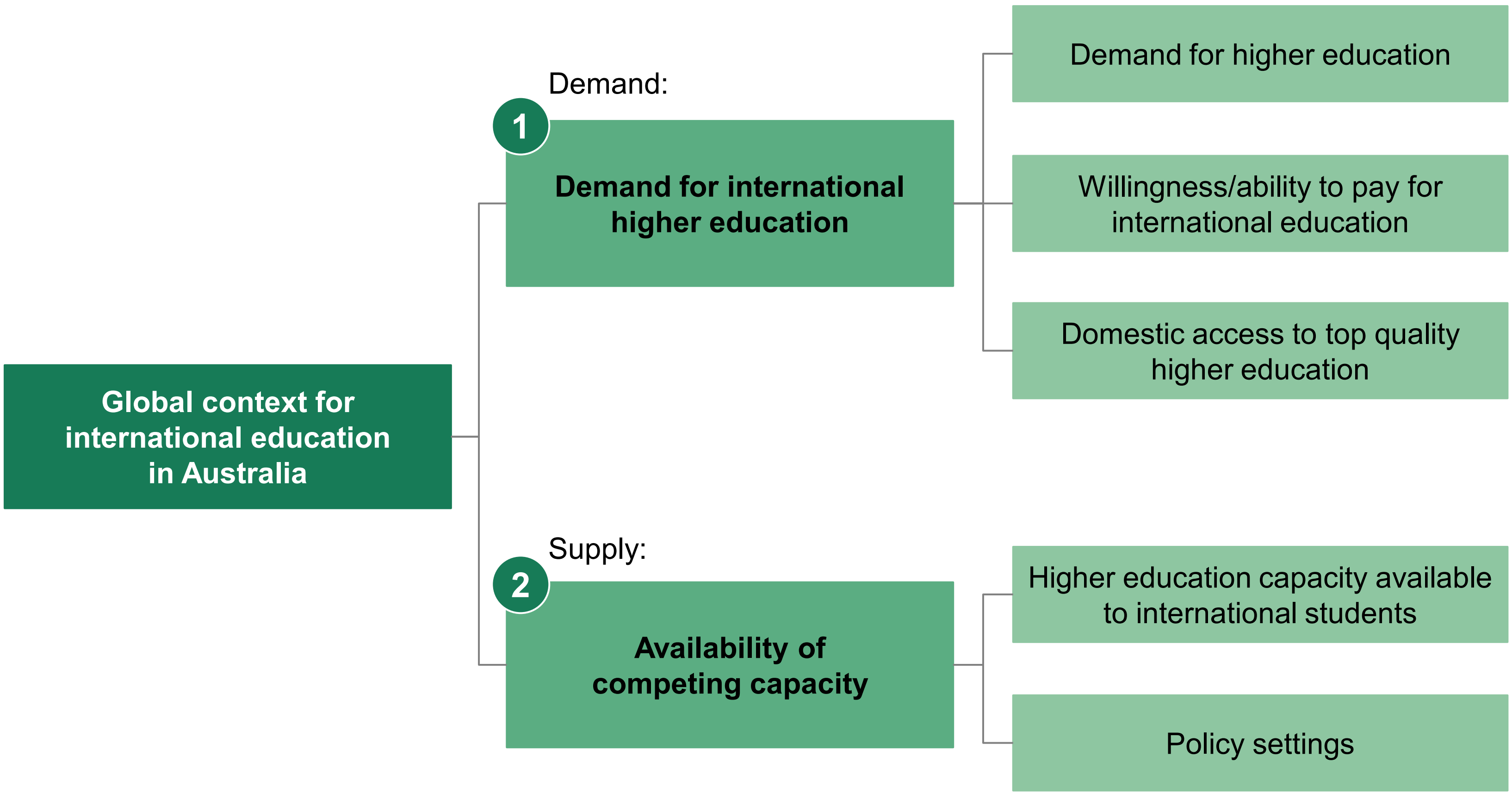
Changing context for international education in Australia

		Historical trend: 2001–10	Emerging trend: 2011–20
Strategic context …	**1 Global demand and supply**	✓ Strong, Asian-led demand for higher education ✓ Limited domestic supply in source countries ✓ Proportionally fewer places offered to foreign students by competitors	✓ Ongoing strong demand for higher education ✓✗ Some advancement in domestic supply in source countries ✗ Potential for significantly more capacity at competing providers
	2 Competitiveness of traditional Australian offering	✓✗ Varying policies on career prospects and migration ✓✗ Quality education and broader experience (with specific issue in India) ✓ Comparable costs	✓ Boosting career prospects and streamlining applications ? Recovering from hits to previously strong reputation ✗ Exchange rate-driven high costs
	3 Threat of disruption by online offering	✓ Low recognition of online qualifications ✓ Technology barriers to online education	✗ Growing credibility of online learning ? High-profile providers entering online space
… Impacts Australia	**4 Australian trends**	✓ Strong feeder pathways to higher education ✓ Strong international student populations, growth and revenues	✗ Negative momentum in feeder pathways ? Recovering from falling commencements

✓ ? ✗ Favourable, unclear, or unfavourable implications for Australian international education providers

1 Global context is the demand versus supply balance for international higher education enrolments

Drivers of supply and demand for international education



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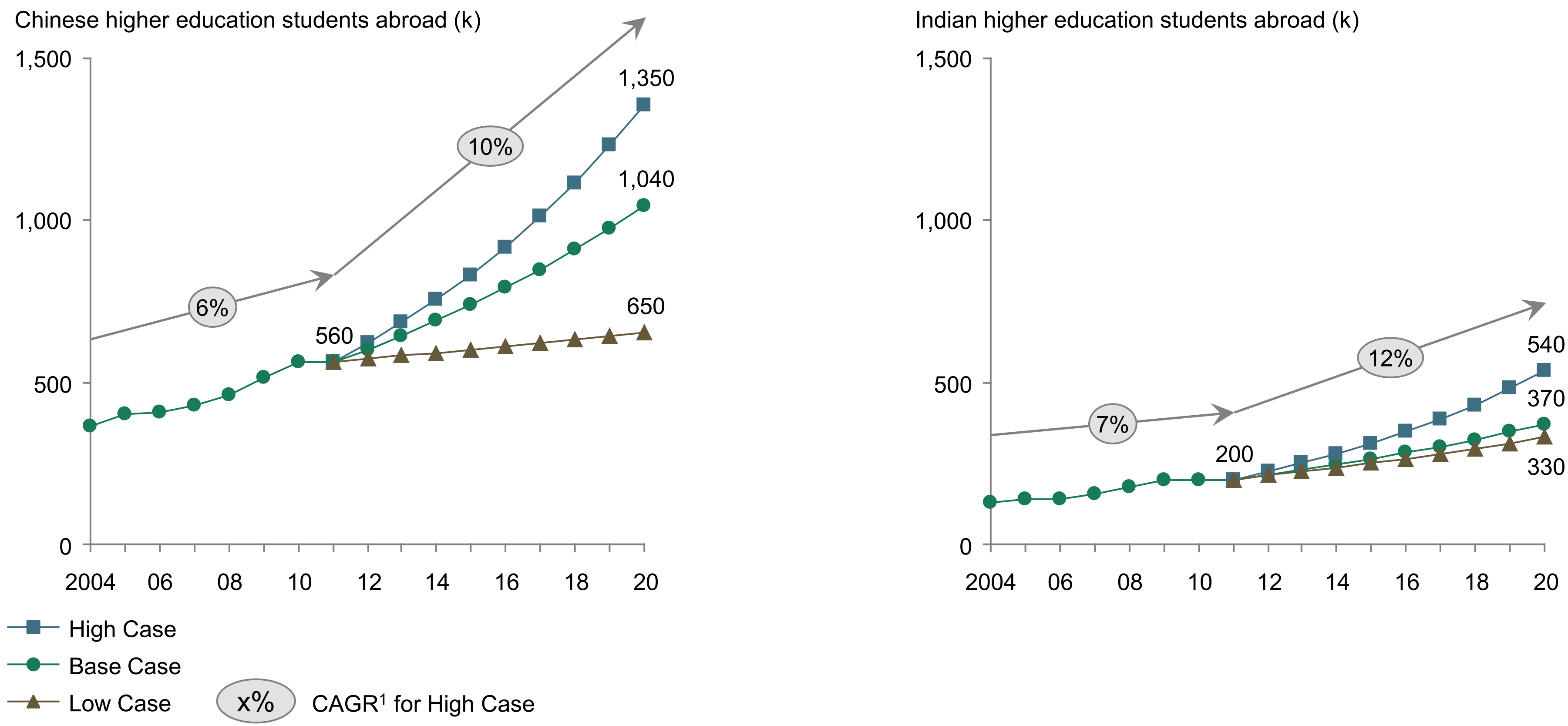
Growing middle-class in China and India will continue to drive demand for international education through 2020 …

Additional 500-800k Chinese international higher education students by 2020

Additional 170–340k Indian international higher education students by 2020

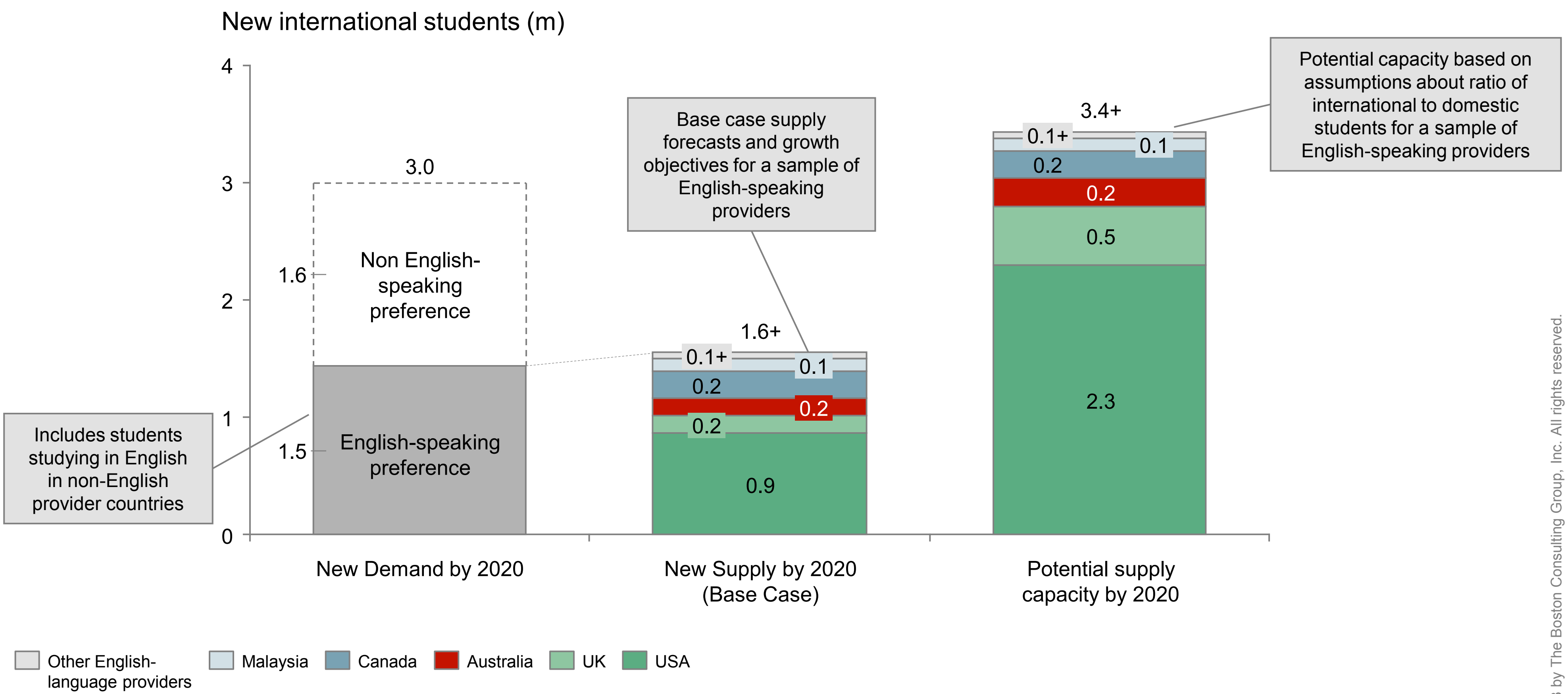


1. Compound Annual Growth Rate Note: Base Case assumes OECD 7.1% CAGR projected forward to 2020; High Case assumes 4% and 1.5% (for China and India respectively) of 18–22 year-olds from top 3 income brackets studying abroad in 2020, based on 2010 figures; Low Case assumes overall HE domestic demand CAGR of 1.7% and 5.7% (for China and India respectively) applies equally to international HE demand
Source: UNdata; Ministry of Education of China; Ministry for Human Resource Development in India; OECD; BCG analysis

1

… However, supply of English-language international higher education places to meet or exceed demand by 2020

Demand in 2020 for HE in English-speaking countries compared to supply

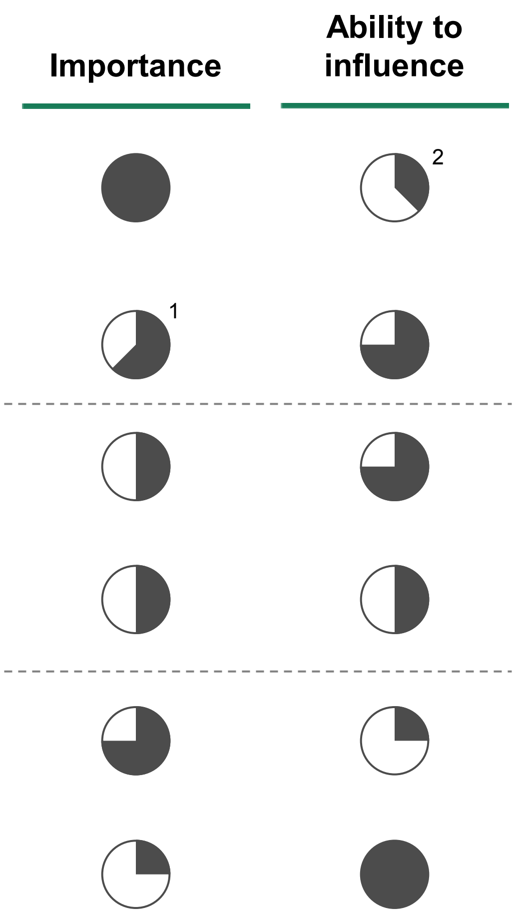


Note: 2020 demand assumes growth of 7% p.a. for international HE demand and current 48%/52% split of English vs. Non-English preferences ; US base case supply forecast assumes ratio of international students increases from 3.5% to 6.5% by 2020; US potential capacity scenario assumes Public universities increase ratio to 10% and Private universities increase to 20%; UK base case assumes growth to 511,000 international students by 2020; UK potential capacity case assumes growth to 860,000 international students by 2020; Australia base case assumes growth of 5% increasing placements by 150,000 by 2020; Australia potential capacity case assumes 7% growth increasing placements by 240,000 places; Malaysia and Canada base and stretch case assume stated growth objectives for both countries (110,000 and 230,000 additional places respectively)
Source: OECD; NCES; British Council; International Education: A Key Driver of Canada's Future Prosperity (August 2012 Report); Press articles; BCG analysis

2

Cost, career and migration are the most important drivers of international student choice

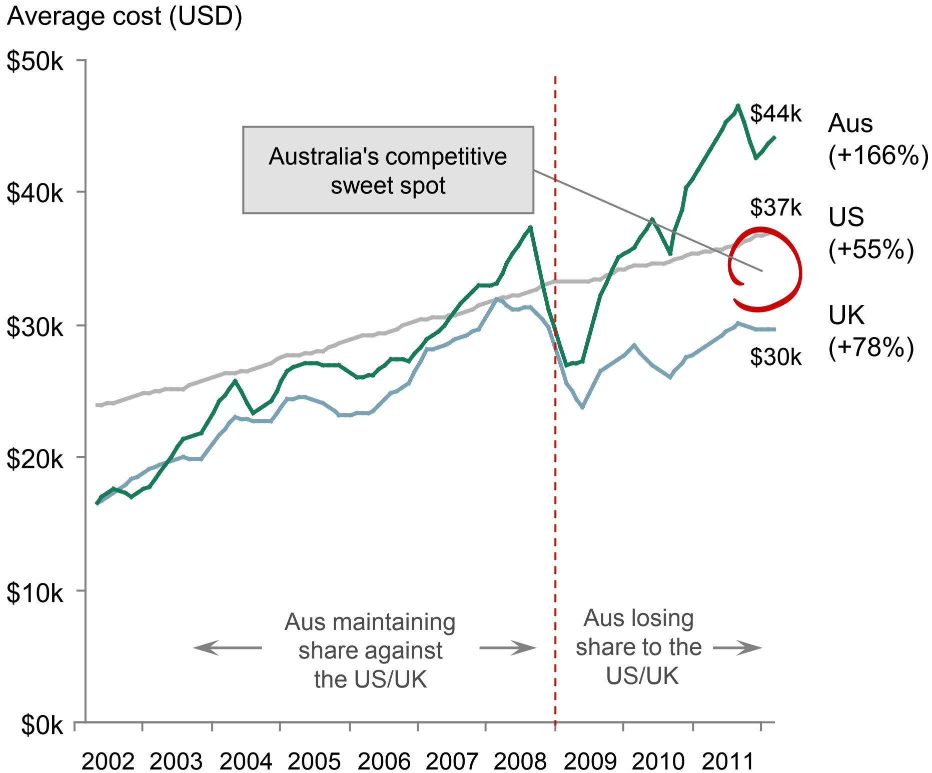
		Drivers	
Opportunities	The opportunities open as a result of course completion	**Career prospects**	• Reputation of the qualification/institution • Reputation of country's education system • Strength of alumni network • Work experience opportunities
		Migration prospects	• Eligibility criteria, migration pathways • Efficiency and integrity of process • Strength of local job market
Experience	The overall experience during the course of study	**Education experience**	• Staff/student ratios • Quality of teaching and facilities • Screening rigor for admission
		Broader experience	• Personal safety • Culture and environment • Access to health and other services
Accessibility	The extent of financial and other barriers	**Financial costs**	• Tuition fees and living costs • Exchange rate • Income from part-time work during study
		Visa process	• Eligibility criteria and time required • Efficiency, integrity of application process • Visibility/popularity of education pathways



1. The importance of migration prospects can vary significantly between countries 2. Reputation of institutions is difficult to improve in the short term, but recent visa policy changes will facilitate the obtaining of substantial work experience in Australia after graduating from a Bachelor's degree or higher Source: BCG analysis

As cost competitiveness declines, Australia must work harder on other drivers of student choice

Cost for int'l higher education students (fees plus living costs)



Implications for competitiveness

All else being equal, history suggests Australia is competitive on price when

- 10–20% premium against the UK
- 0–5% discount against the US

This means Australia's average cost of education would need to be ~15–25% lower than currently

= Tuition fees: ~25–45% reduction; OR

= Living expenses: ~33–55% reduction; OR

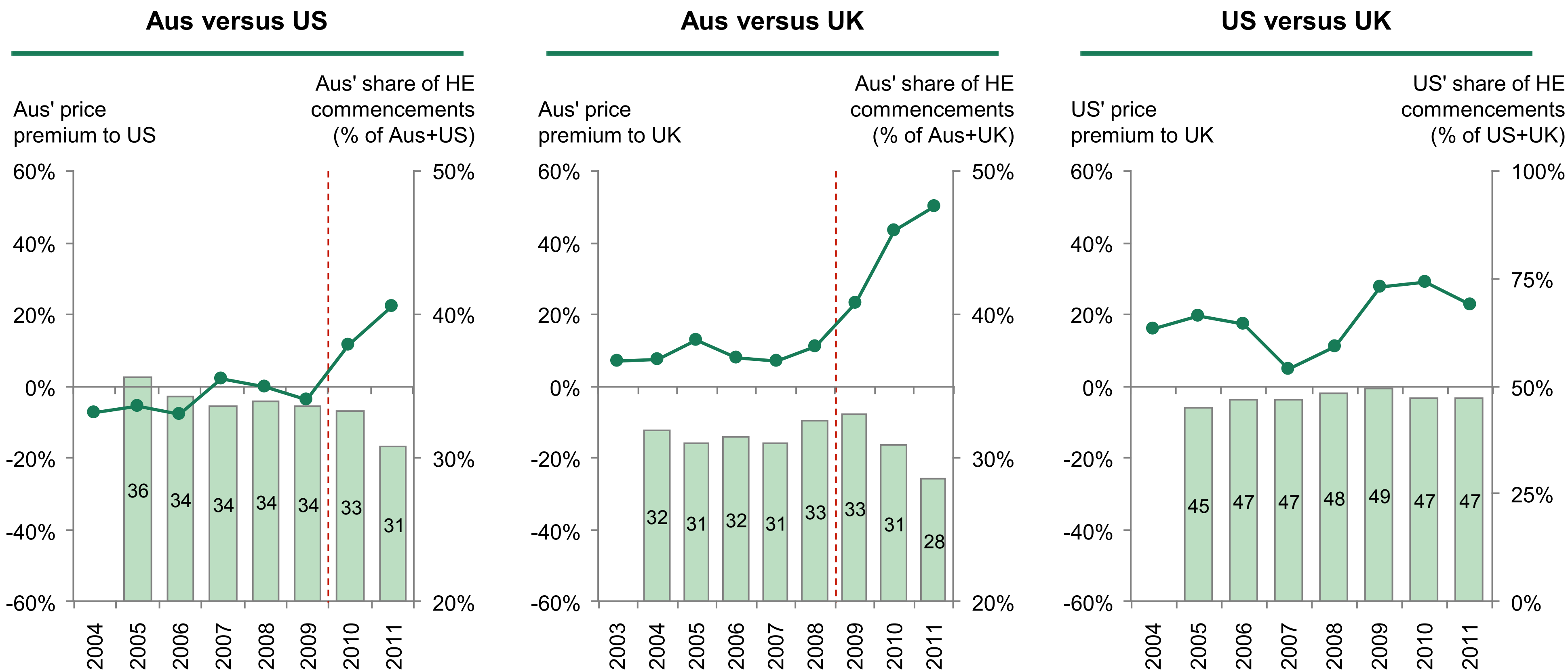
= Exchange rate: ~0.75–0.85 USD per AUD

Achieving this level of cost reduction is unrealistic

Therefore, significant improvements are needed on other drivers of student choice to stay competitive

Source: ABS, BLS, ONS, RBA, CollegeBoard, studyinaustralia.gov.au, EducationUK, uk.internationalstudent.com, Charles Sturt University

Deep dive: the impact of price on international student choice



Historically, Aus has maintained share against the US with ~0-5% price discount

Historically, Aus maintained share against the UK with ~10% price premium

Historically, the US has maintained share against the UK with ~20% price premium

Price premium (tuition plus expenses) | Share of commencements

Note: Only includes international HE students. Price is the average total cost of education (including fees and living expenses)
Source: AEI, IIE, HESA, ABS, BLS, ONS, RBA, CollegeBoard, studyinaustralia.gov.au, EducationUK, uk.internationalstudent.com, Charles Sturt University

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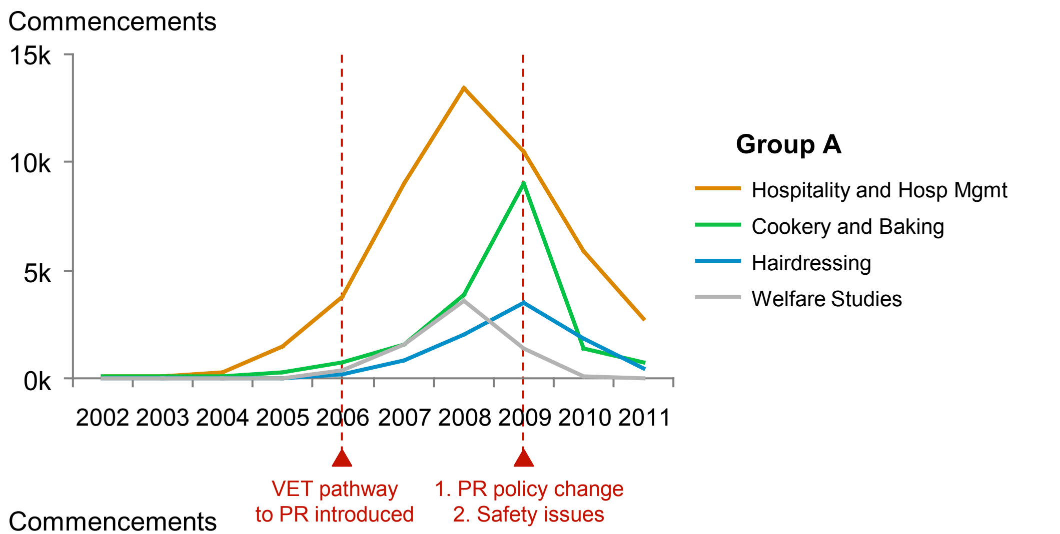
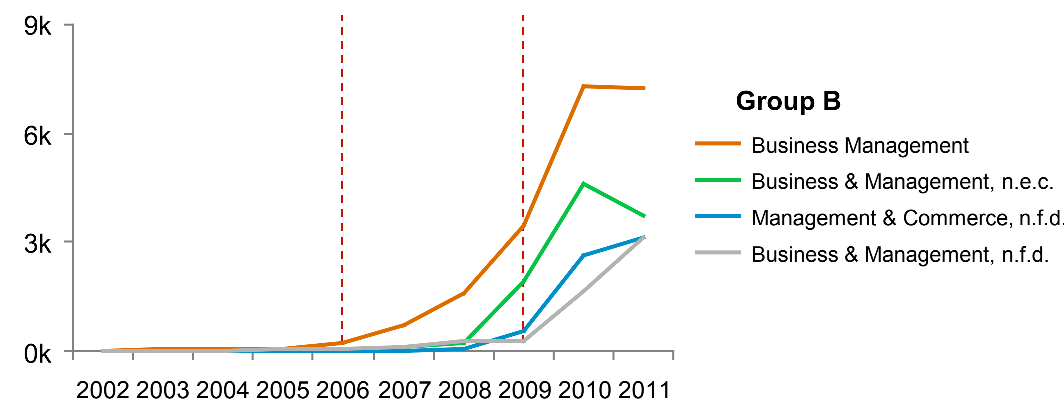
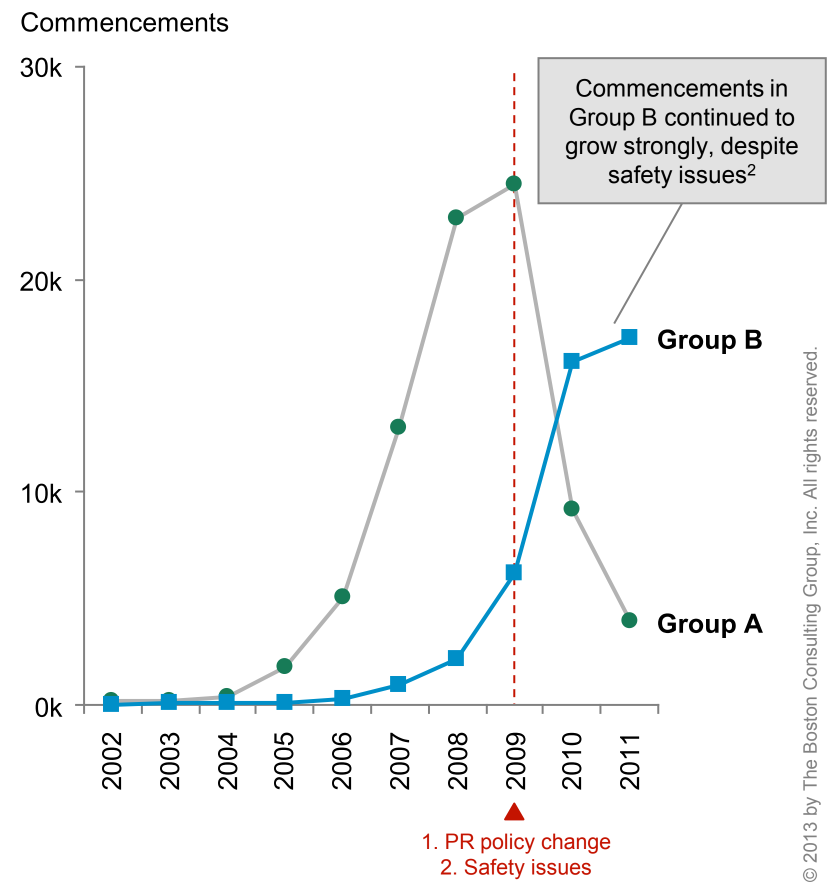
Of the other drivers, migration prospects had a much stronger impact than safety issues for India VET

Two major[1] groups of VET commencements from India …





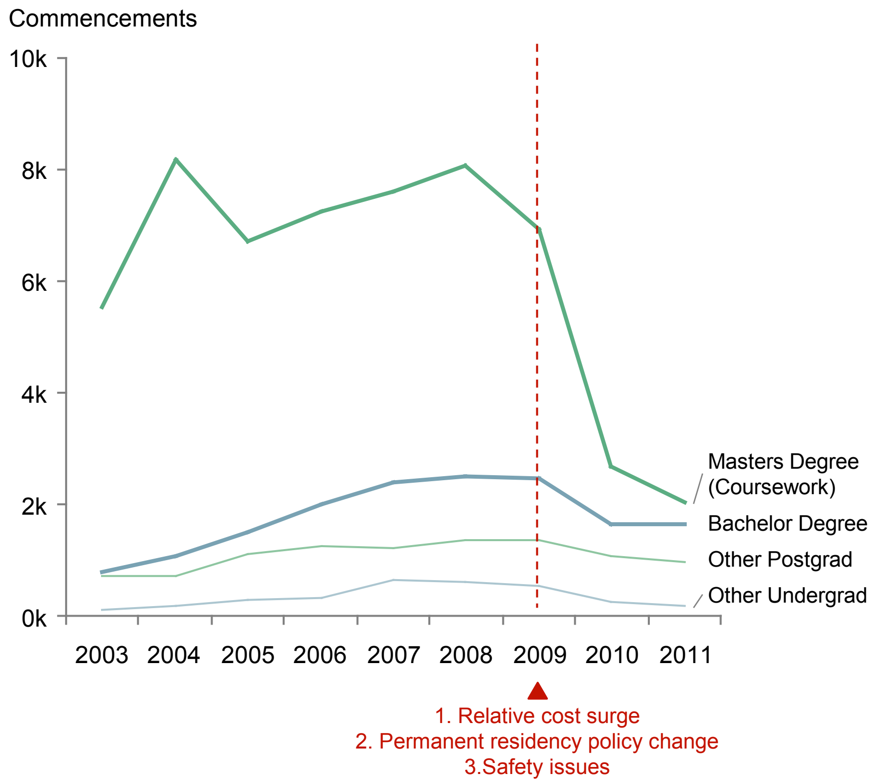
… followed very different trajectories after 2009



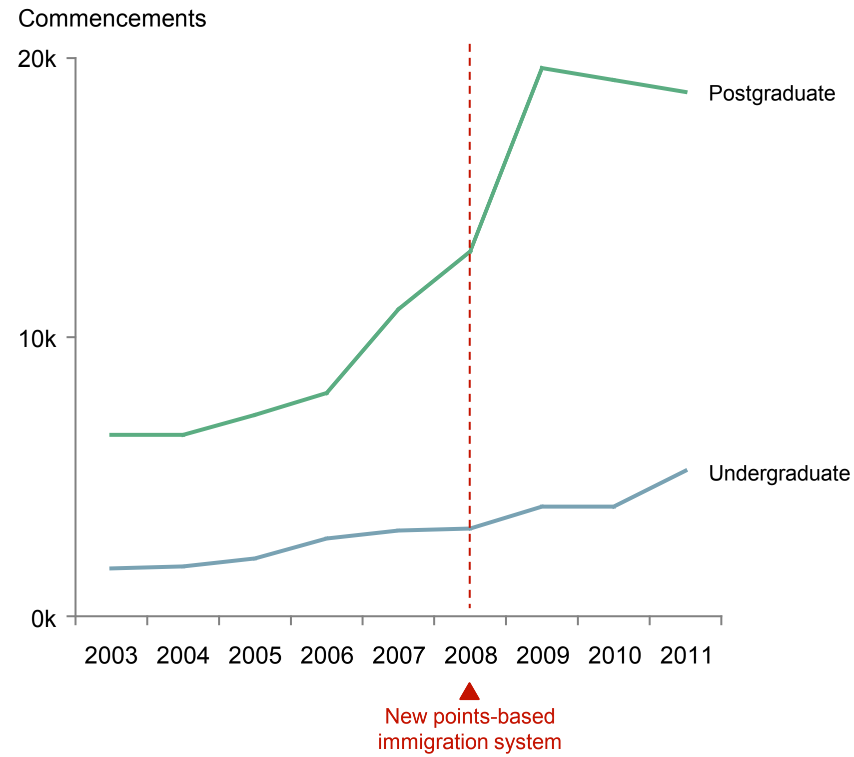
1. Group A + Group B accounted for ~75% of India's VET commencements from 2005-2011 2. Business & management courses are linked to Accounting, which is on the Skilled Occupations List.
Note: Some commencements in Group B are attributable to existing students switching over from their current courses. Source: AEI

Deep dive: migration policy settings are especially important to Indian postgraduate students

Indian postgraduate commencements in Aust. dropped sharply after policy change in 2009...



...while surging in UK after immigration system changed to favour postgraduate study



Source: AEI, HESA

3

Online education will test the brand strength and agility of Australian providers

Online education offerings are gaining reach and credibility

- Expanding presence across the education value chain
- Increasingly viable alternative to international education
- Most threatens management, commerce and IT courses for older students (~43% of enrolments[1]), protected to the extent that students seek access to Australian lifestyle and job market

Online innovations threaten to disrupt market for on campus providers, but also open up opportunity to expand into new markets

- Expansion of market to those previously unable to afford or access international higher education
- Global market dominated by top brands
- Decoupling of content delivery from accrediting institution

Digital education will produce winners and losers

- Winners will be those with best brands and agile business models that balance scale, selectivity and price
- Winners will include providers of large-scale technology platforms that deliver the best, branded content
- Losers will be those institutions that lack the brand status to compete in a global pool of suppliers, or who fail to reinvent their business models
- Supportive policy environment needed to assist Australian providers to adapt to and win in changing market

If delivered successfully by Australian providers, online education presents an opportunity to greatly extend Australia's ties and influence in Asia

1. 43% of international onshore HE and VET enrolments YTD Sept. 2012 (excl. PhD and Masters by research)

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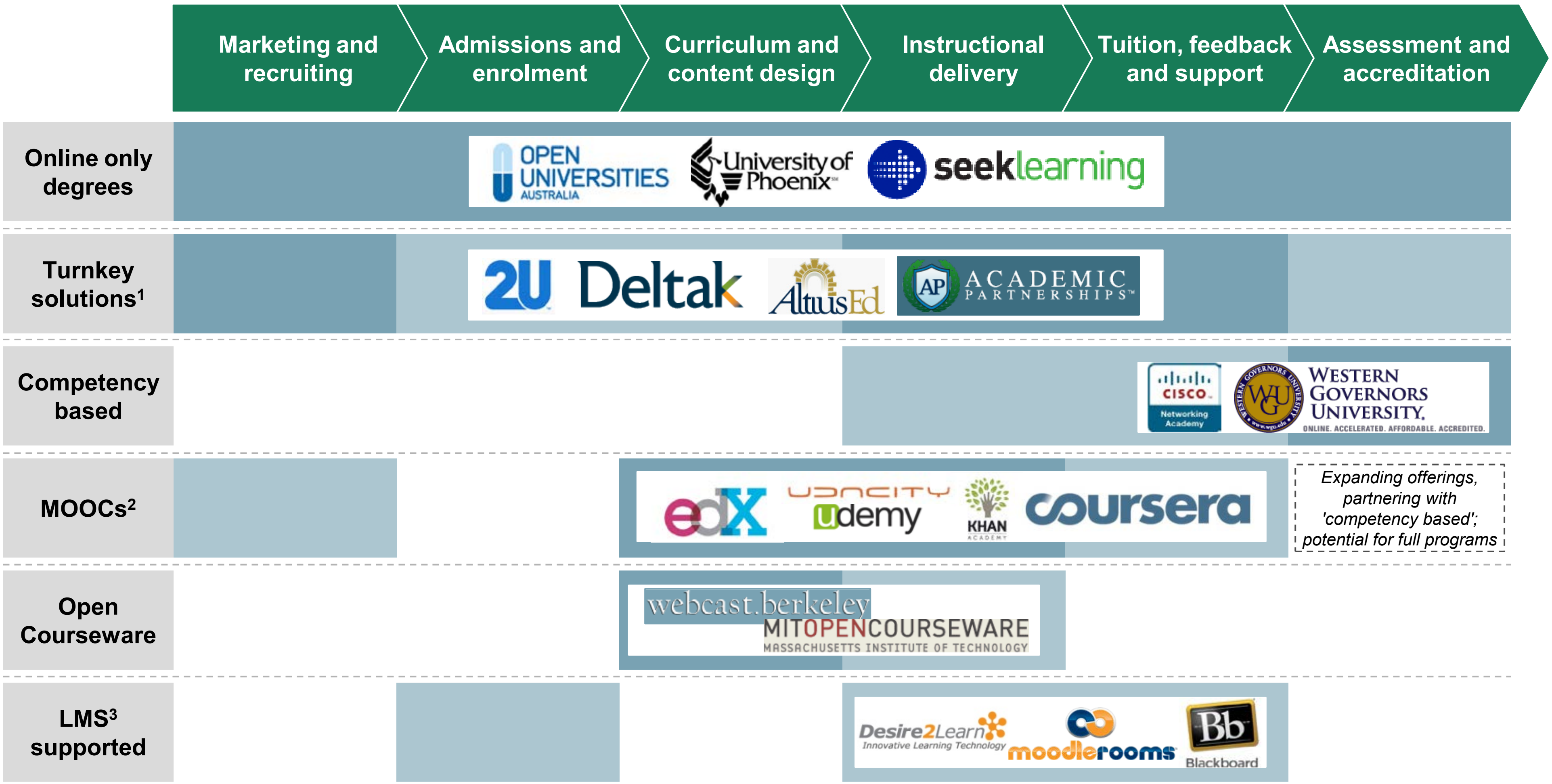
Online education providers play in all parts of the post-secondary education value chain



Depth of involvement (high/low)

1. Providers specialise in conversion of offline curriculum to online offering, aka 'School as Service' 2. Massive Open Online Course 3. Learning Management System (i.e. platform support).
Note: Sampling of providers, not exhaustive list. Source: BCG analysis

Online alternatives are increasingly viable for int'l students

Improving in traditional areas of weakness, but lack of access to foreign job markets still a barrier

Strengths

Improving

International students' choice of education provider

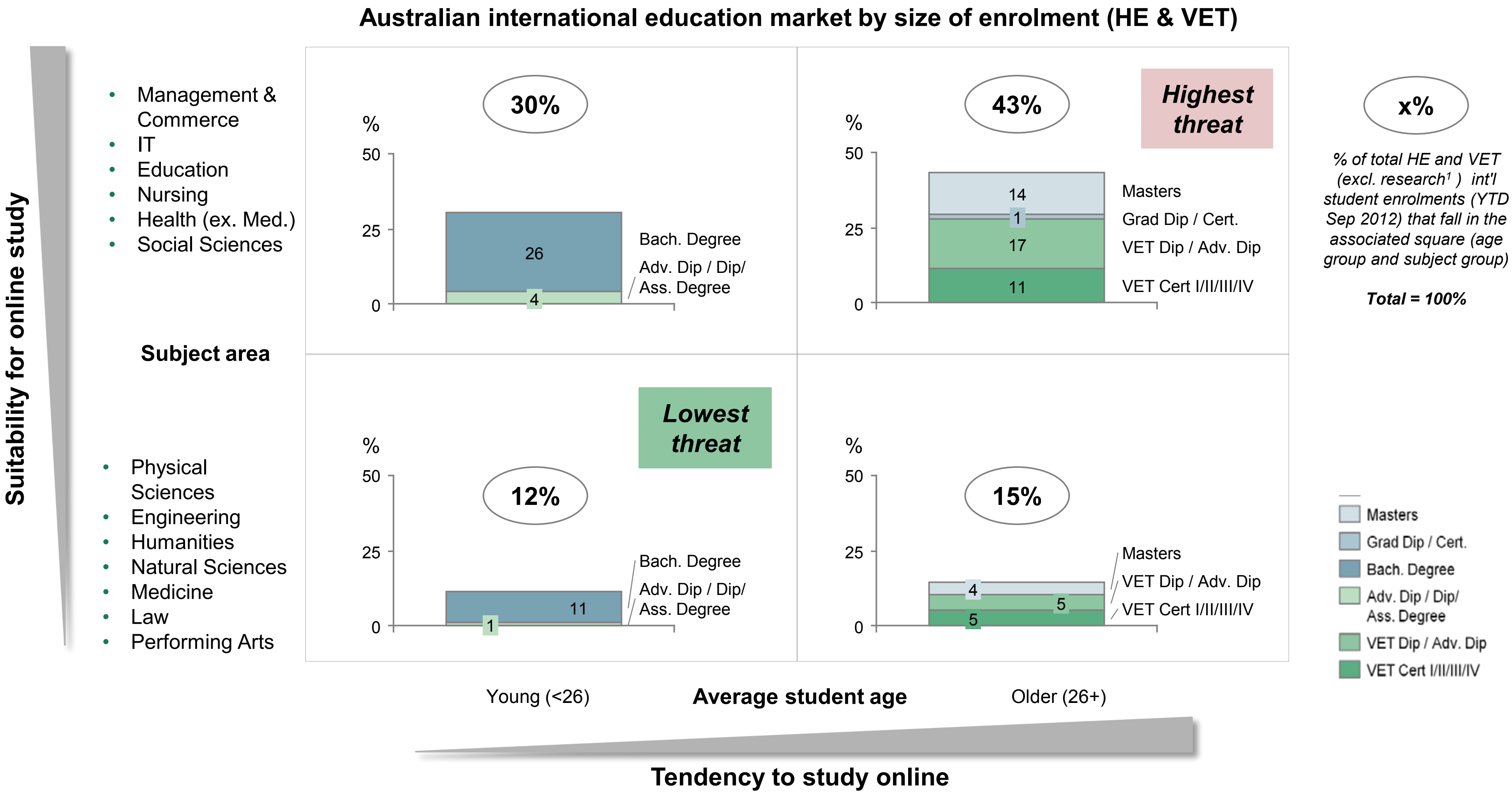
		Importance[1]	Transnational	International	Online
Opportunities	**Career prospects**		High quality providers Recognition of qualifications by employers	Access to foreign job market *during* study	**Traditional weaknesses being overcome** High quality providers starting to participate Growing credibility of online qualifications
	Migration prospects			Access to foreign job market *post* study	
Experience	**Education experience**		Physical labs and practicum Face to face instruction		Increasing virtualisation of labs Increasing use of virtual classrooms and study groups Hybrid models combine face to face with online learning (partner with local provider or deliver part of course on campus in Aust.)
	Broader experience		On campus social interaction	English-language immersion	
Accessibility	**Costs**		Lower costs of living		Lower costs of living Potentially low tuition fees Anytime, anywhere study
	Visa process		No need for visa		No need for visa

1. See slide titled "Cost, career and migration are the most important drivers of international student choice"

Source: BCG analysis

3

Significant parts of Australia international education market appear vulnerable to substitution by online offerings …



1. Excludes PhD and Masters by Research students (6% of total enrolments)
Note: Does not take account of other benefits of being onshore in Australia (e.g. access to Australian lifestyle and job market)
Source: AEI data on international student enrolment in Australian courses onshore, YTD September 2012; BCG analysis

3

... But online education also opens up new student market opportunities

Income: Potential students in source countries (e.g. China, India)		Australian international student market: Existing	Australian international student market: Potential
Can afford an Australian education (tuition + living costs)	*Threatened by substitution for online offering*	On campus, Aust. Transnational	On campus, Aust. Hybrid (online/on campus) Transnational
Can afford Australian tuition but not living costs		Transnational	Hybrid (online/on campus) Transnational
Cannot afford full priced Australian tuition or living costs	*Online offerings create massive new market*	*None*	Large scale low cost online offering
Cannot afford any tuition fees		*None*	Large scale free online offering

Source: BCG analysis

3

Digital education will bring challenges as well as opportunities for Australian providers

Potential changes	Implications for Australia
Global market dominated by top brands • Elite brands unrestrained by geography • Wider reach of elite degrees increases their relevance • Innovative teaching models leveraging "star" professors	**Top Australian universities less protected by geography** • High relative ranking within Australia less meaningful when facing competition from best in world • Implications for both domestic and international students
Decoupling of content delivery from accrediting institution • Greater scale enables large investments in high-quality/niche content • Students able to access best content from multiple providers • Growing demand for competency-based certification	**Greater need for best-in-class content, whether licensed or generated in-house** • Content licensees need to differentiate on value-adding services (e.g., dedicated teaching roles, tutoring, student support, etc.)
International higher education more accessible in developing economies • Affordable and flexible low end online offerings, driven by scalability and low marginal cost • Large, previously untapped market	**Australia well-positioned to capture share in Asia** • Similar time zones enable synchronous learning • Strong regional presence enables a range of hybrid models to combine face to face with online learning • Opportunity to materially contribute to development of Asian economies and strengthen regional ties, a "virtual Colombo Plan"

Source: BCG analysis

Higher education commencements are down from 2009

However, leading indicators suggest stabilisation followed by the possibility of growth

Declines in higher education commencements post 2009 correlate with reduced Australian competitiveness

- Negative trend applies across most top countries of origin
- Reversal of earlier growth correlates with higher cost of Australian education and tighter migration pathways

Commencements in other sectors provide a short-term forward view of higher education, given the strength of cross-sector pathways. While commencements have fallen across sectors since 2009, there are emerging positive signs in ELICOS

- Commencements dropped sharply since 2009 across feeder pathway sectors
- However, latest data (Jul-Dec 2012) is indicating an increase in ELICOS commencements

Based on the leading indicators, higher education enrolments are expected to stabilise around the 2009 level, with the possibility of future growth

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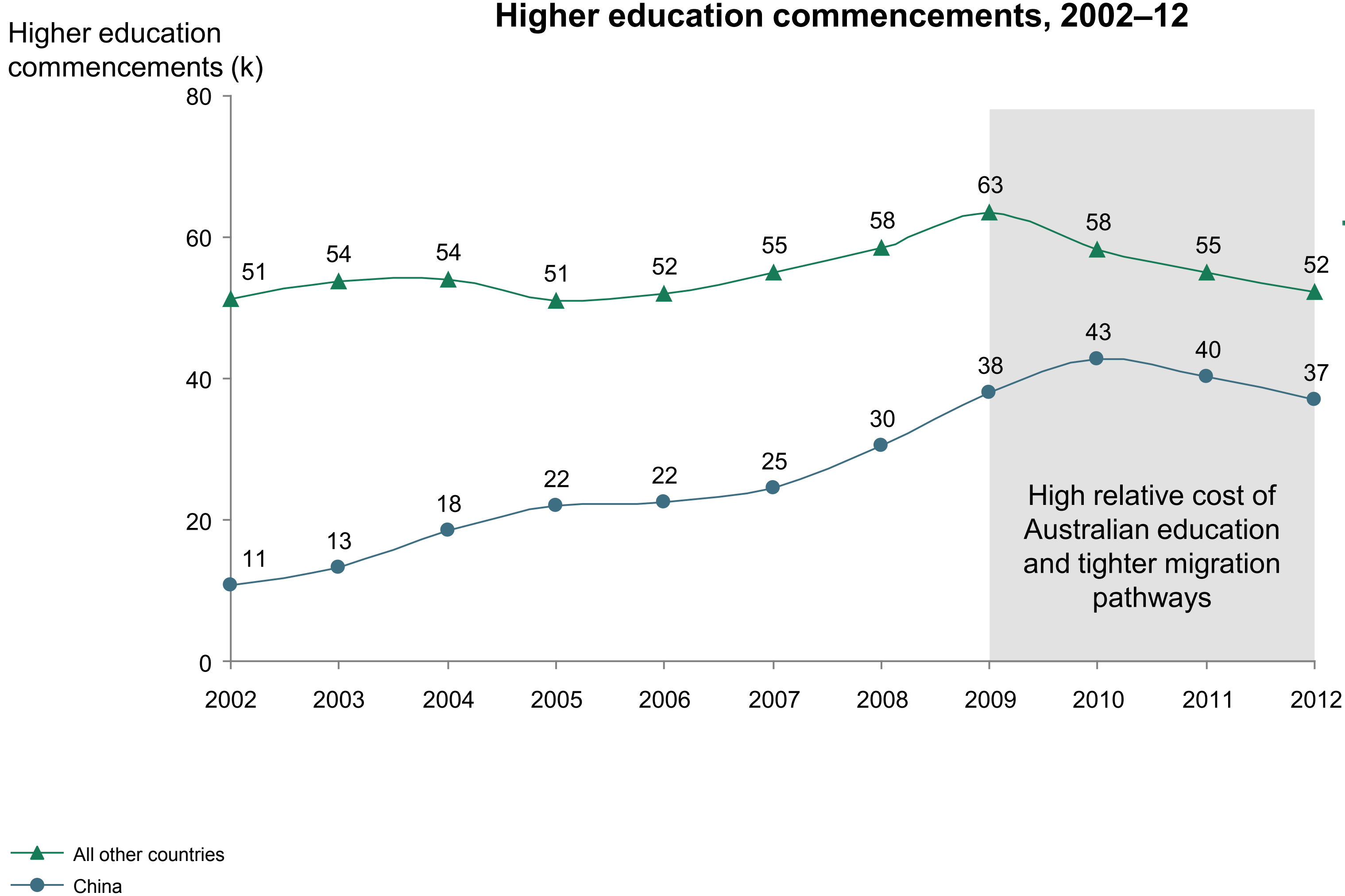
Declines in higher education commencements post 2009 correlate with reduced Australian competitiveness

Higher education commencements, 2002–12

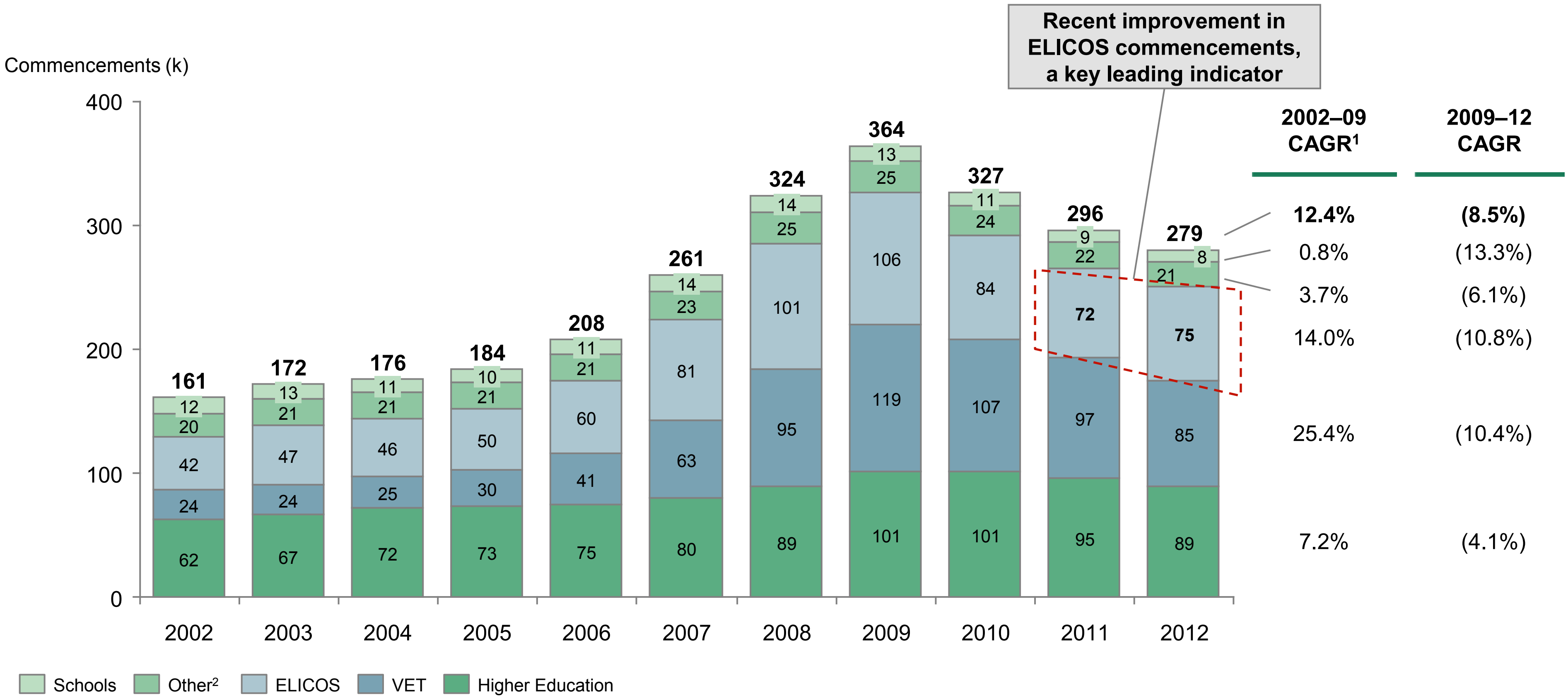


2002–09 CAGR[1]	2009–12 CAGR
3%	(6%)
20%	(1%)

1.Compound Annual Growth Rate
Source: Australian Education International, monthly international student data release, December 2012, Australian Bureau of Statistics catalogue 5368.0 (Sep 2011)

To assess whether the emerging trend is likely to continue, need to understand cross-sector pathways

International student commencements at Australian education providers by sector, 2002–12



Year	Schools	Other[2]	ELICOS	VET	Higher Education	Total
2002	12	20	42	24	62	161
2003	13	21	47	24	67	172
2004	11	21	46	25	72	176
2005	10	21	50	30	73	184
2006	11	21	60	41	75	208
2007	14	23	81	63	80	261
2008	14	25	101	95	89	324
2009	13	25	106	119	101	364
2010	11	24	84	107	101	327
2011	9	22	72	97	95	296
2012	8	21	75	85	89	279

Based on cross-sector commencements, Higher Education enrolments are expected to stabilise around 2009 levels

1. Compound Annual Growth Rate 2. Non-award courses, enabling courses
Source: Australian Education International, monthly international student data release, December 2012, Australian Bureau of Statistics catalogue 5368.0 (Sep 2011)

Given changing strategic context, the international education sector in Australia is being challenged

Recent drops in commencements and sector revenue are significant and returning to sustained growth will require action:

Addressing competitiveness, now that Australia is a high cost option

- Rankings, teaching standards, and resourcing will be important
- Affordability of both fees and living costs need to be addressed
- The broader value proposition, including the value of Australian qualifications in a global marketplace, needs to be constantly assessed, and reinforced

Thoughtful targeting of future sources of demand in the face of increasing supply

- Focus on high growth markets (e.g. undergraduate demand from India)
- and the implications of maturing markets like China

Constant innovation in the delivery of competitive educational outcomes

- and constant innovation in the mix of Australian and transnational campus, and online, models

Supportive government policies at both national and state level

- but the individual performance of public and private institutions will ultimately drive the outcome

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Thank you