BCG

Victoria

International education

Fact Pack

27 February 2015

The Boston Consulting Group

Note to the reader

This material is one of seven fact packs produced by BCG across priority industry sectors in the space of a short, 4 week engagement

In compiling these fact packs, we have drawn on a range of existing sources

- Research and information held within the Department
- Publicly available information and reports
- BCG research and experience
- Discussions within the Department, with a number of BCG experts and with select individuals within the relevant industries
- However, within the available time, we were not able to undertake broad engagement within the industries

Data availability was highly variable across the seven industries covered

- In some cases good public information (e.g. ABS data) was available
- In others we needed to draw on a variety of different (and sometimes inconsistent) sources of varying depth and quality, and to use proxies and other indicators where data was unavailable
- We have made our best efforts within the available time to synthesise the data available and to develop a consistent basis of comparison across industries, however, data gaps remain in a number of areas
- We have made an attempt across all industries to provide an indicative estimate of the potential opportunity by 2025. Some of these estimates are necessarily rough. The intention is to provide some basis for high level comparison of the relative opportunity rather than to provide an accurate forecast of growth by industry

The objective is that these will form the starting point for further work by the taskforces within each industry

- We have attempted to highlight gaps and questions for further investigation
- We have not had the time to model the potential impact of exchange rate movements on these sectors and that should also be the subject of future work
- We expect that details, and particularly industry forecasts, will be refined by the taskforces

Industry snapshot

Definition

Includes international students in Australia and offshore students enrolled in school, VET, higher education and other forms of formal education

- Includes direct fee income and indirect spend by students while in country
- Limited data availability for $ value of offshore students and services

Overlaps with tourism and health exports (education)

Current status (2012-13)

Metric	Size	Growth (08-13)	Comments/assumptions
GVA	$3.2b	-1%	Using exports data, proportional to industry revenues/GVA
Employment	16-18k	1%	Assume proportion employed corresponds to proportion if international students – ABS data
Exports	$4.4b[1]	-1%	Using exports data, ABS

Industry incremental opportunity (2025)

Metric	Size	Growth	Comments/assumptions
GVA	$1.8-2.6b	3.5-5.1%	Recent growth 7% and BCG demand forecast 7%, halved to approximate increasing competition and capacity constraints in diversity; opportunities in schools and TAFE specifically identified and quantified
Employment	10-11k	3.5-4.3%	
Exports	$2.5-3.0b	3.5-4.4%	

Competitiveness

+	Access to resources
~	Infrastructure and regulatory costs
+	Scale
+	Market position
+	Innovation

Key

- ++ Significant strength
- \+ Advantaged
- ~ On par globally
- – Disadvantaged
- – – Significant barrier or risk

1. Through-out, refer to $4.7b as quoted for 2014, using 2013 here to maintain consistency with other fact packs

Executive summary
International education

Victoria has a strong position in international education and demand is likely to continue to grow

- 30% share of Australia's international education exports worth $4.7b pa with skew towards higher education enrolments
- Advantage in market share in students from India, Malaysia, Vietnam, Pakistan and Sri Lanka; with competitive China share
- 2 of 5 Australian universities ranked in top 100 globally are based in Victoria contributing to 'Brand Melbourne'
- Liveability and large migrant population (family) all contribute to attractiveness as a study destination

Global competition increasing as new capacity opens up in Asian markets and US becomes increasingly active

Potentially hitting some capacity constraints in higher education, but postgraduate continues to grow

- Percentage of international students already high, at 33% for Victorian universities (29% excluding offshore enrolments). Insufficient student diversity becoming an increasing issue given success in attracting students from China
- Insufficient student accommodation is emerging as significant capacity constraint
- Victoria's enrolment growth driven by postgraduate students (3%pa) with stagnating undergraduate enrolments (-0.2%pa)
- Online and full 'third semester' present opportunities to increase capacity
  - Victoria advantaged in aspects of private online ed. capability based in Melbourne (44% share nationally in some elements), but more work required to determine most effective way to leverage

Victoria has high levels of offshoring within some elements of international education

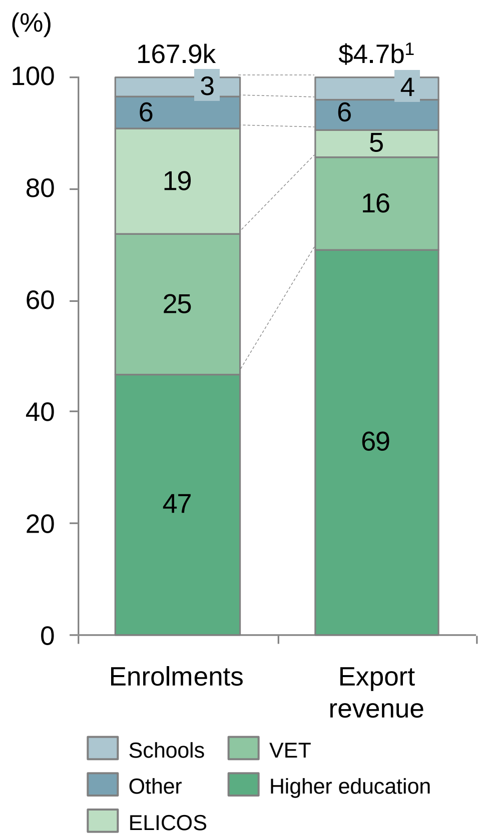
- Major offshore enrolments by RMIT and Monash (58% and 42% of international students respectively)
- Victoria is the major Australian player (77% share) in offshore delivery of VET/TAFE

Strong potential growth options in schools and VET/TAFE

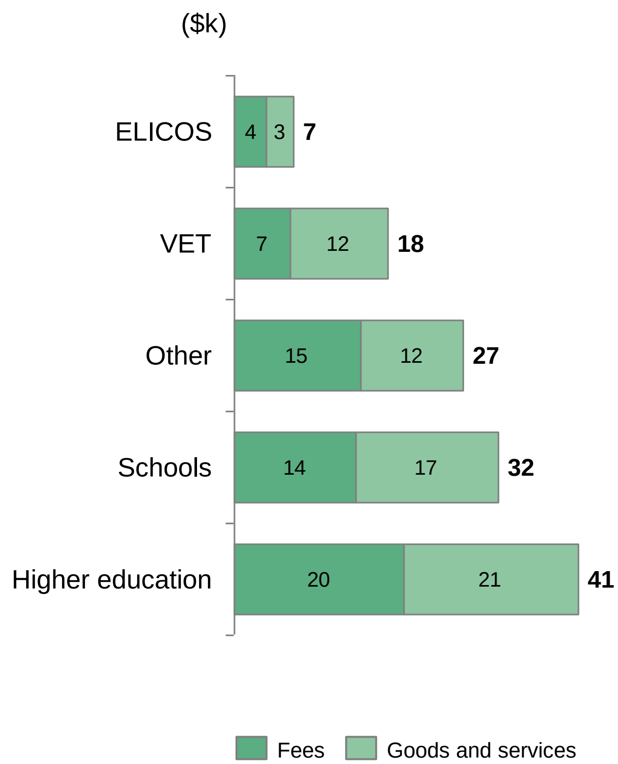
- Opportunity to grow international students in government schools could bring significant benefits to the broader economy (potentially $400m pa) and to the school sector
- Increasing international students in VET/TAFE to NSW's level could could deliver $100m pa

International education contributes $4.7b to Victorian economy, mostly from Higher Education

Enrolments and revenue, 2013



Expenditure per student, 2014



Other benefits

Support to wider higher education industry

- Cross-subsidisation of domestic students
- Contributes to overall financial sustainability and global standing of Australian universities
- Growing contribution to research student cohort

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

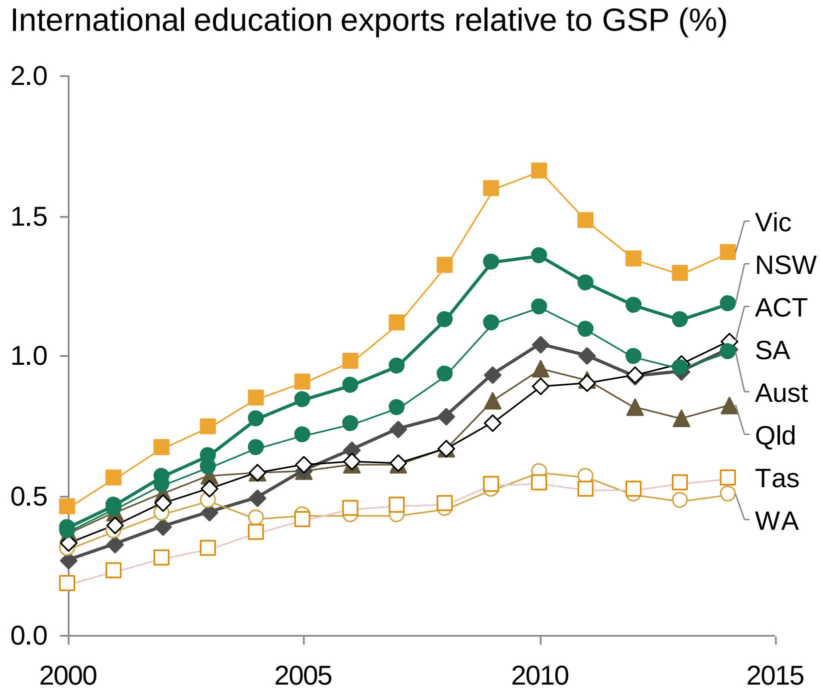
Cross-cultural interaction

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

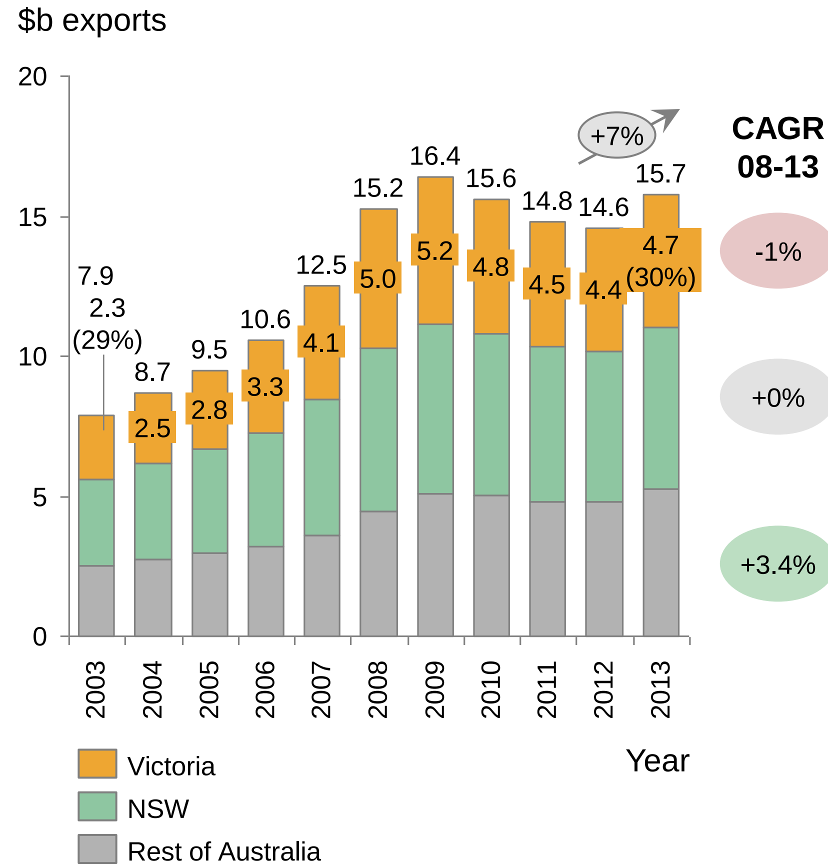
1. Revenue estimated using per-student fees for Victoria's student numbers, and scaling to ensure alignment with total exports figure
Note: Expenditure per student allocates all expenditure to the highest level of enrolment for those students enrolled in multiple sectors
Source: Australian Education 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

International education a priority industry for Victoria's GSP, with 30% market share and growing at 7%

Ratio to GSP (measure of magnitude of importance)



International education value[1] by location over time



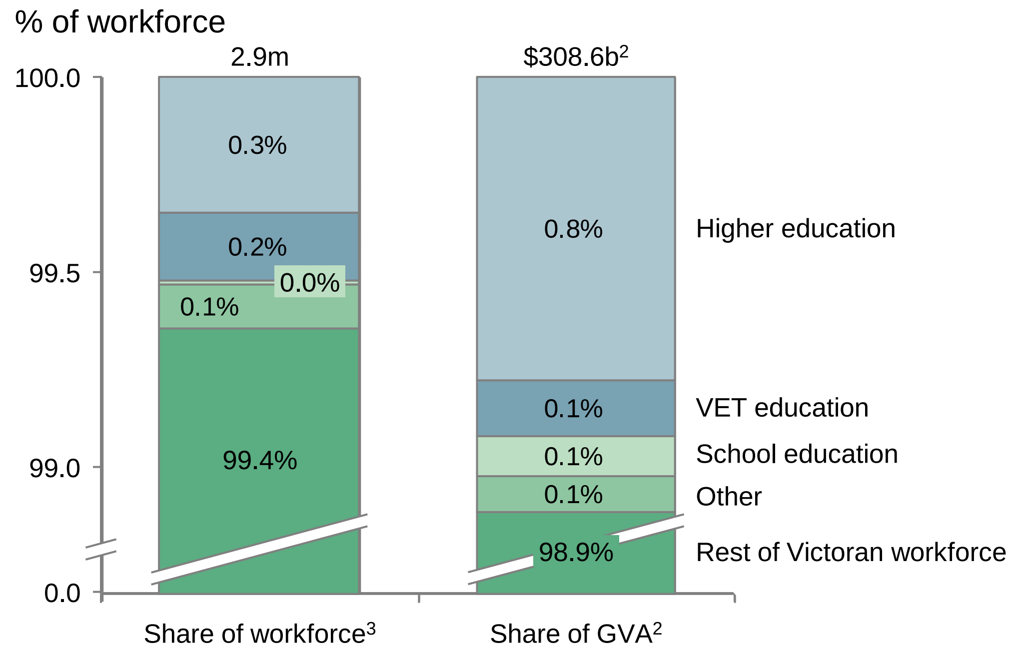
1. Personal travel expenses related to Education, $ foreign credit, includes externalities associated with presence in country e.g. rent

Source: ABS 5368.0.55.03

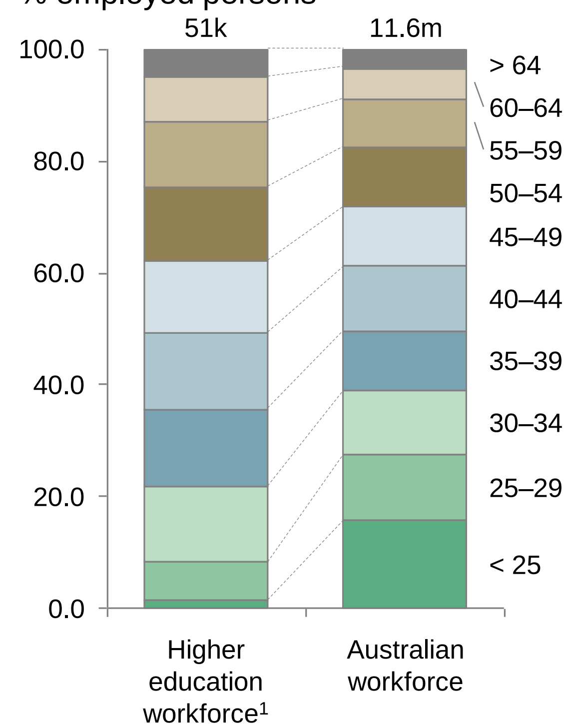
Industry is small but value-adding direct employer, with an ageing workforce for Higher Education

International education supports ~0.6% of employment but almost double GVA[5]

State workforce and GVA by education sector, 2013[4]



Higher education workforce age profile

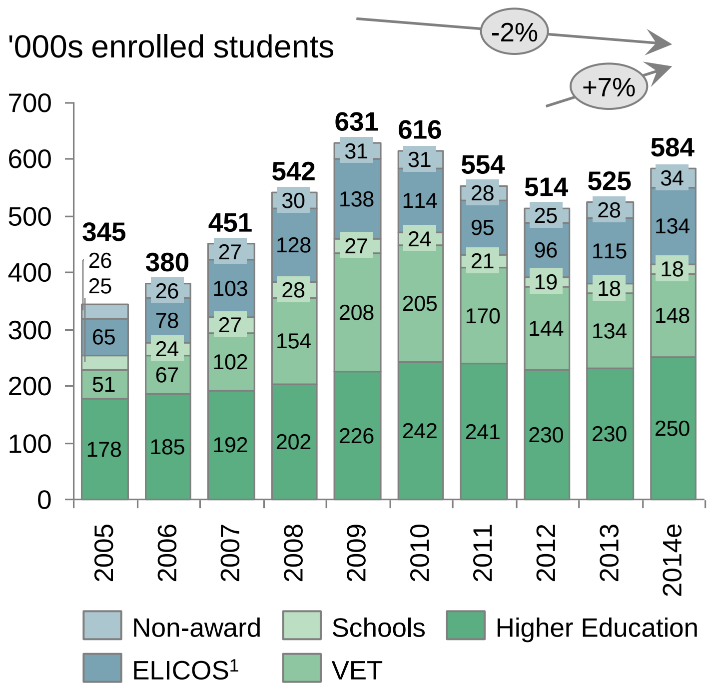


1. Profile of Victorian higher education workforce closely matches national profile based on distribution of teaching staff qualification levels, which is highly linked to age of staff 2. Estimate only, based on national profile of industry value added per $ of sales income by industry, and export income from each sector; may understate GVA given additional value driven by higher education students, averaged in overall GVA calculation by ABS 3. Employment assumptions based on proportion of university staff dedicated to international students, assumed ratio the same as proportion of international students; proportion of school staff at government schools servicing ratio of international students, scaled up by number of students at all Victorian schools; and VET staff assume same ratios as higher education per student, scaled down by number of students enrolled (approximately half of number of higher education) 4. Uses GVA from 2013 overall, but uses international education estimates from 2014 5. GVA calculated on an export revenue to GVA proportional to the services income / GVA ratio for schools, higher education and other education forms in Australia
Source: Universities Australia 2014 staff numbers; ABS 6278.0 Training and work experience

Overall, enrolments on the rise again, but numbers of Indian students have declined

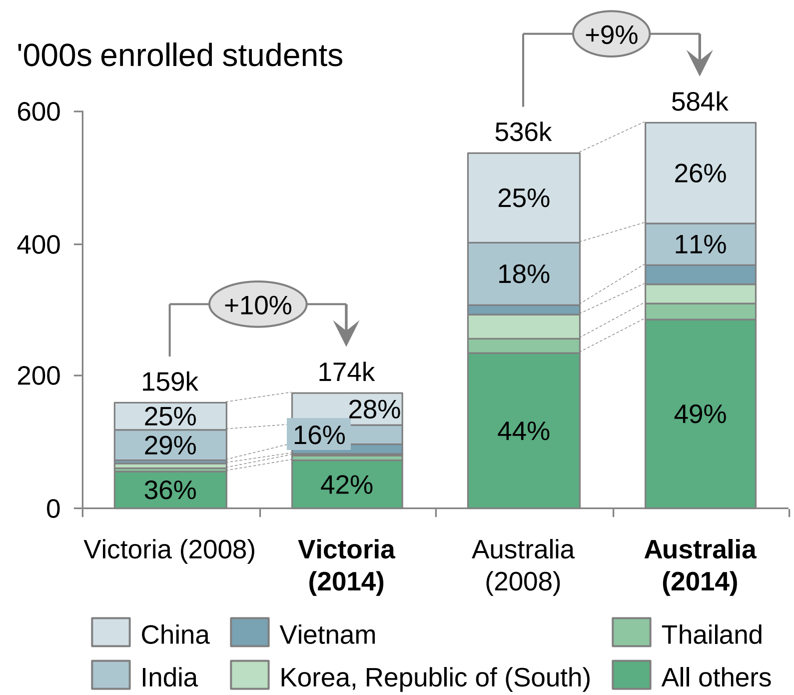
International student enrolments have bounced back in recent years

Overseas enrolments by degree type (Australia)



Victoria has higher reliance on Indian and Chinese students, potential risk

Overseas enrolments by country of origin



Accommodation a challenge for growing international student cohort

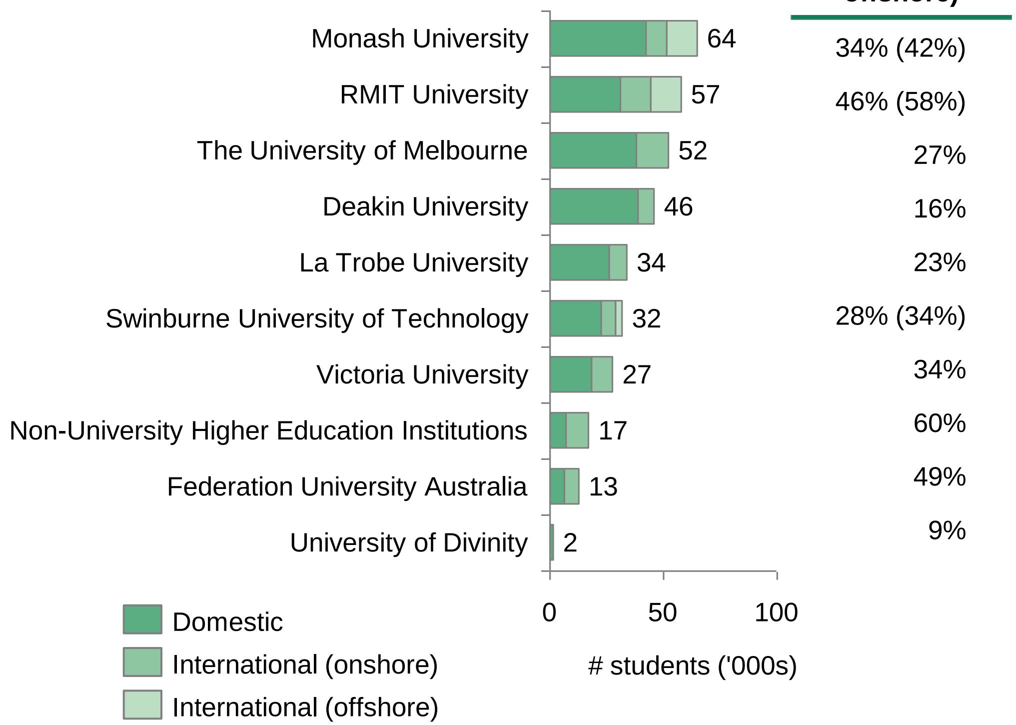
1. English language courses

Source: Australian Education International, monthly international student data release, November 2014 Australian Bureau of Statistics catalogue 5368.0 (Sep 2014)

Variable levels of internationalisation in Victorian HE, with fees slightly lower than fees in most states

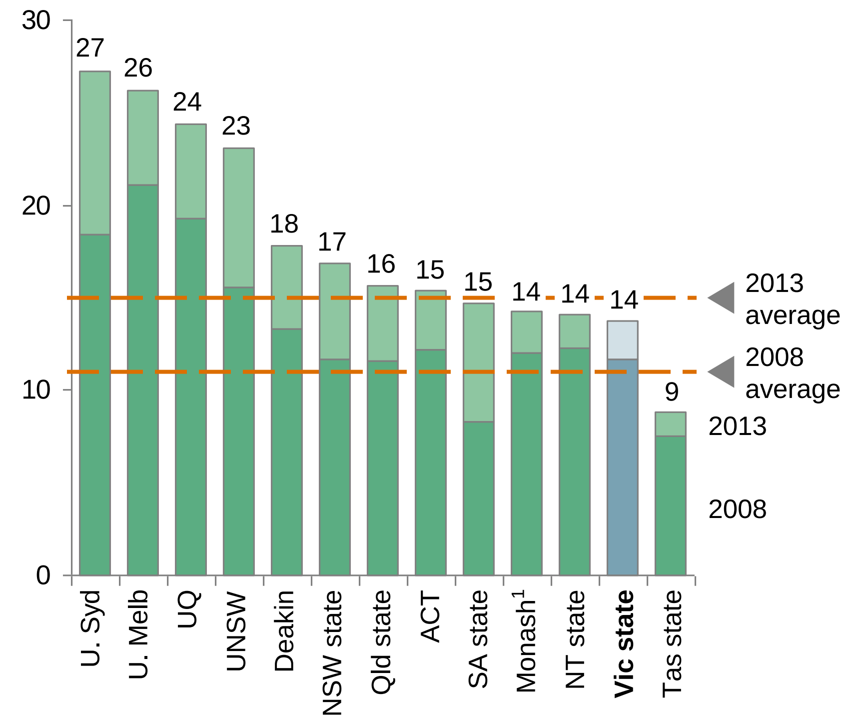
Significant variation in levels of internationalisation in HE institutions

Number of student enrolments, 2014



Victorian fees slightly lower than other states for international students

Fee revenue per international student, 2008 and 2013

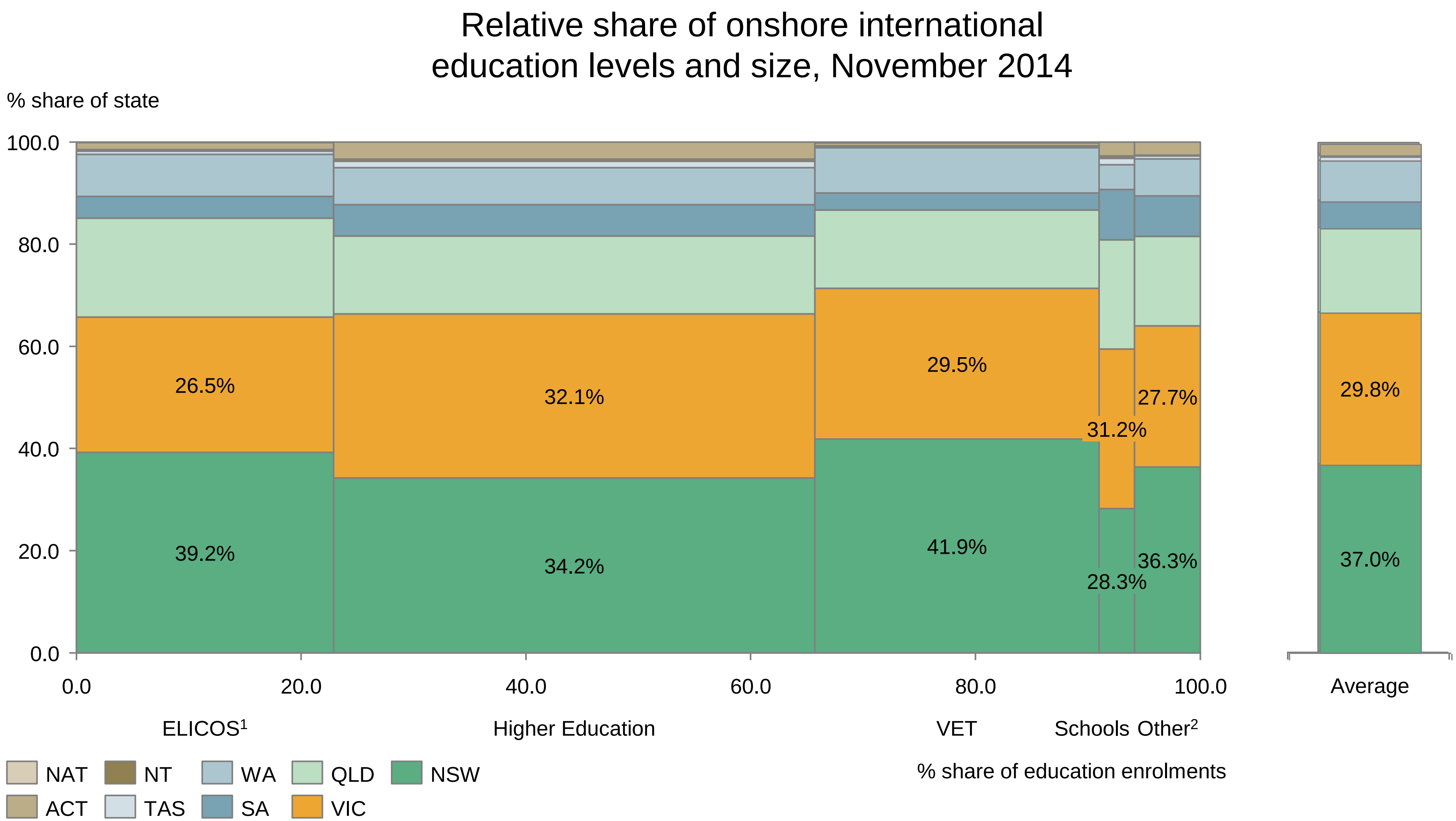


Fee deregulation may reduce overseas student focus as local students able to support universities' commercial needs

1. Monash includes significant enrolments of international students in offshore campus, skewing data towards lower-fee students

Source: Department of Education data cube – enrolment count by state and institution; University Australia financial accounts database

Victoria performs well across most areas, however ELICOS under-represented and NSW dominant in VET



1. English language courses. Note that estimated 38% of ELICOS students Australia-wide do not hold a student-visa and therefore will not be included in this total, however assume that this applies to Victoria equally compared with other states 2. Non-award / enabling courses

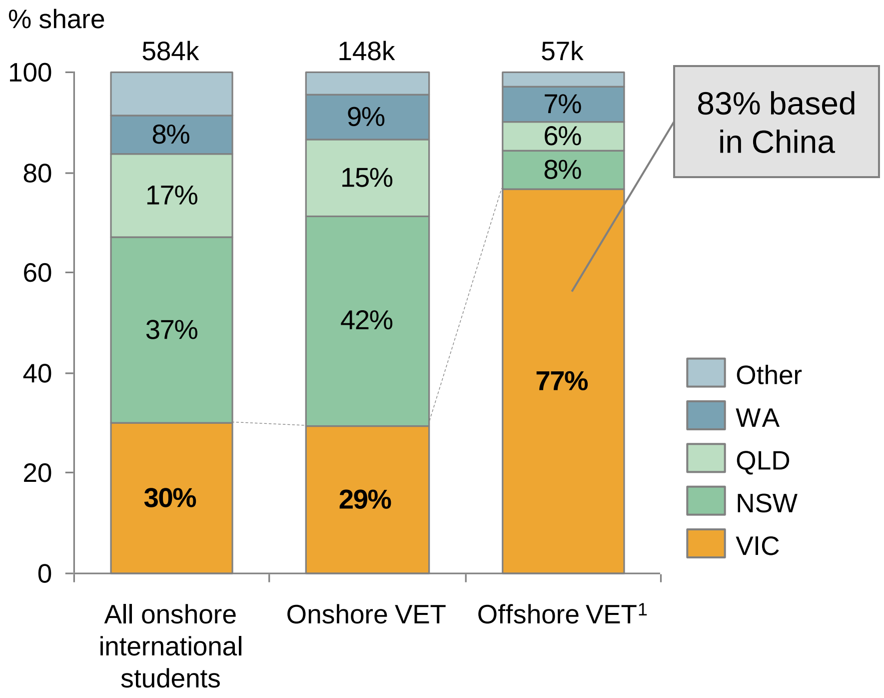
Source: Universities Australia 2014 (using data from AEI);

Draft—for discussion only

Victoria has a strong presence in offshore delivery which delivers range of benefits

Strong performance in offshore VET delivery

Share of students enrolled in each state, Nov. 2014



Offshore delivers a range of benefits to Victorian institutions

Financial

- Student fees and licensing income
- Though some restrictions of repatriation of funds in some markets

Provides a pathway for students to Australia for higher value education offering

- Offshore provision allows students to complete some of activities in country (lower cost) and then complete part of studies in Australia

Supports research collaborations

- May ultimately enable access to offshore research funding sources

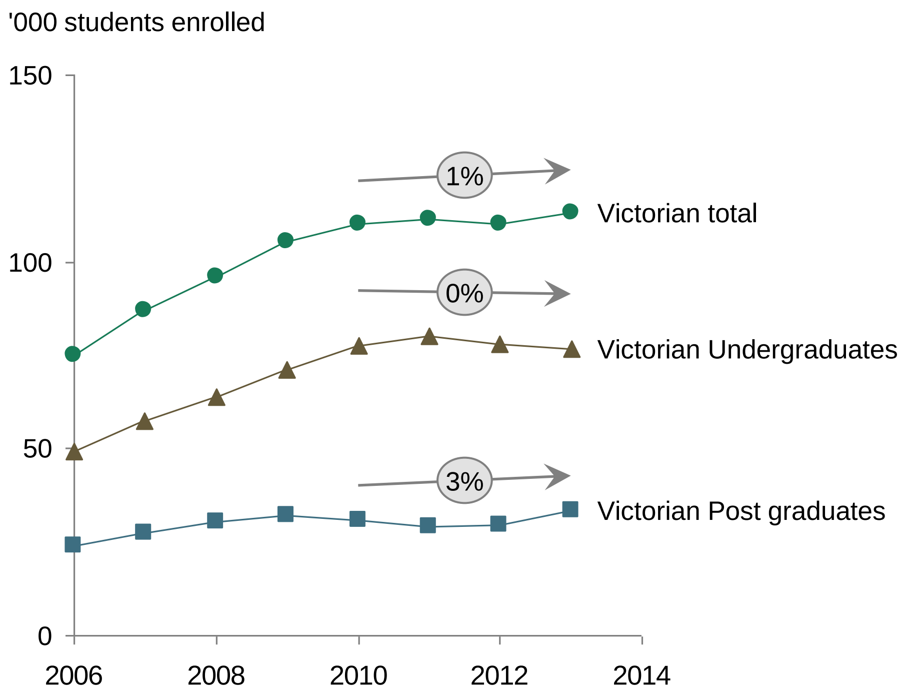
1. Data only available from 2012

Source: Universities Australia 2014 (using data from AEI); ABS 5368.0 service exports data; Delivery of VET offshore by public providers, 2012, Department of Education

Post graduate enrolments driving growth, undergraduate stagnating and Commerce dominating as a discipline

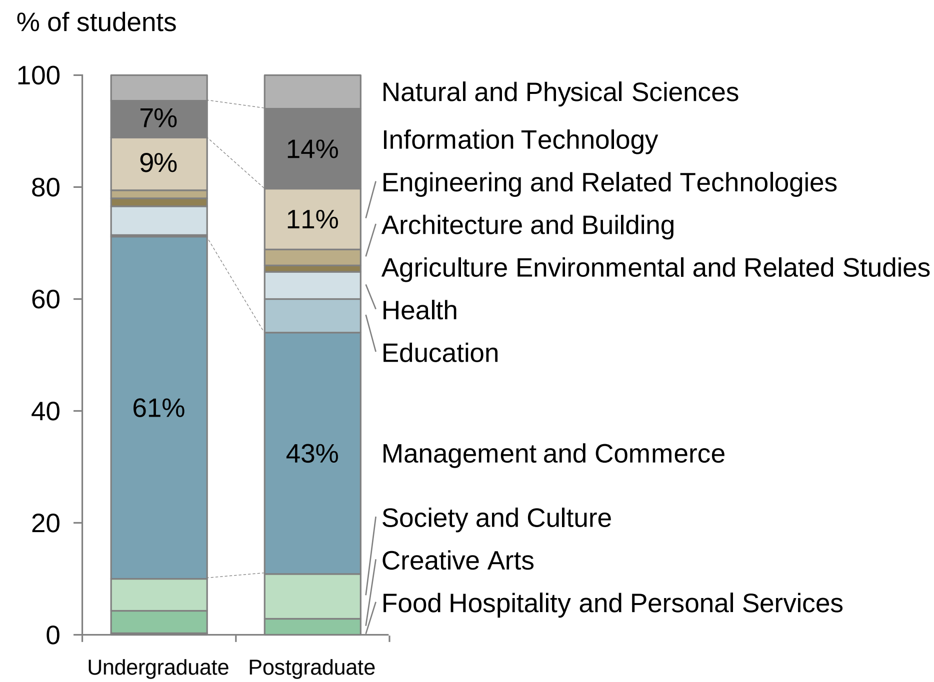
Recent rise in Victorian total driven by post graduates

Number of overseas student enrolments in different course levels (HE)



Commerce dominates discipline choice

Share of overseas students by discipline area

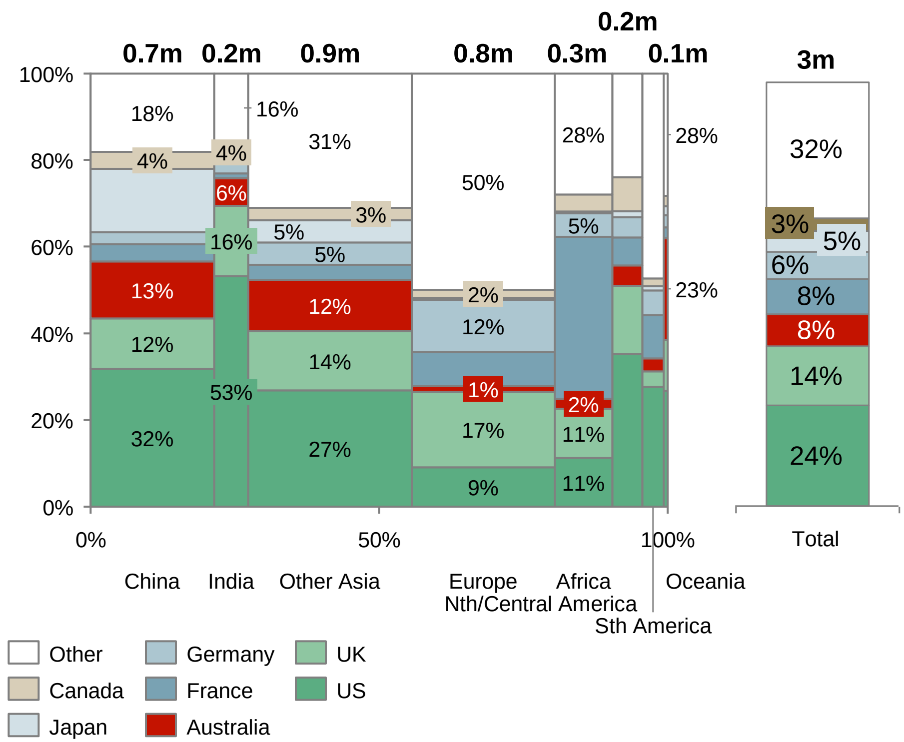


Source: Higher Education Statistics, Department of Education

Australia significant global player with strengths in Asia, but limited numbers elsewhere

Australia significant global player in international higher education

Higher education share by country of origin, 2012



Strengths in core Asian markets, with limited numbers outside of Asia

Australia is the third largest international higher education provider globally

- US is largest player (~ triple the size of Australia)
- UK second largest

Australia has strong market position in China (no. 2 globally) and rest of Asia (no. 3 globally)

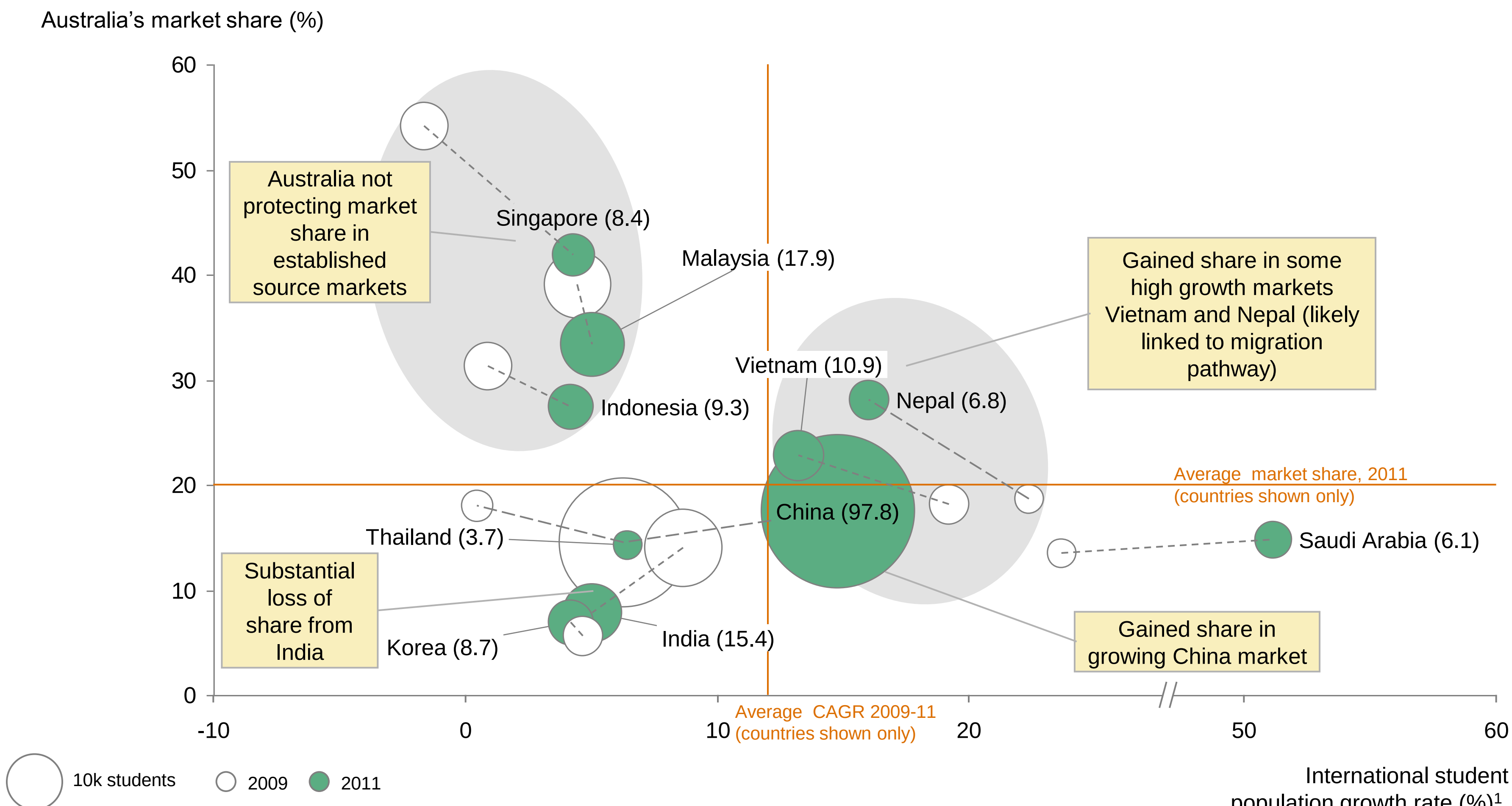
Moderate position in India with US dominating this market

Australia has minimal students from large European and African markets

Note: Data set represents approximate total mobility of students in 2009 based on provider country reported data; Canada data unreported for 2012, so 2011 data used; UNESCO data used for 2004-2009 analysis; Austrade and UN data used for 2011 analysis
1.2004-2009 CAGR used for 2009 Source Country data points; 2009-2011 CAGR used for 2011 Source Country data points
Source: UNESCO; Austrade; UNdata; BCG analysis

Australia has lost share in established markets, but picking up share in large growing China market

Australia's market share versus international student population growth rate, 2004–11

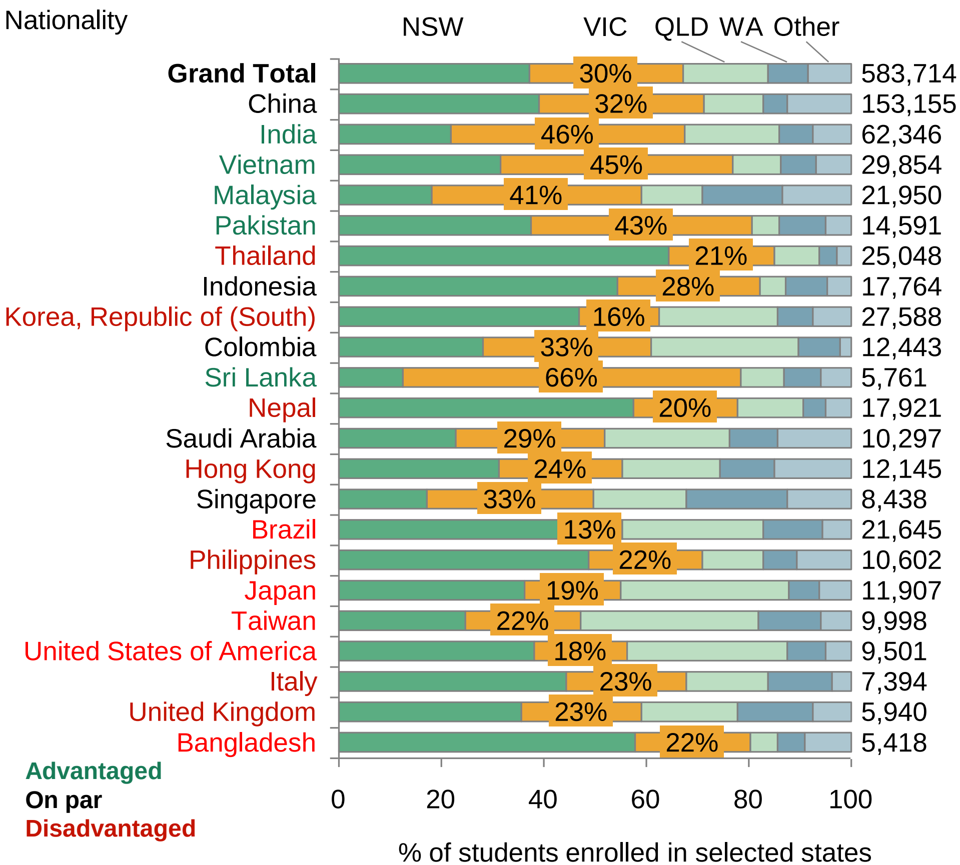


1.2004-2009 CAGR used for 2009 Source Country data points; 2009-2011 CAGR used for 2011 Source Country data points
Note: UNESCO data used for 2004-2009 analysis; Austrade and UN data used for 2011 analysis
Source: UNESCO; Austrade; UNdata; BCG analysis

Victoria advantaged in key Asian markets, with opportunities to grow in a number of markets

Victoria's strength predominantly in Asian countries

Share of all int'l students enrolled in each state, 2014



Source: Australian International Education 2014 enrolments datacube

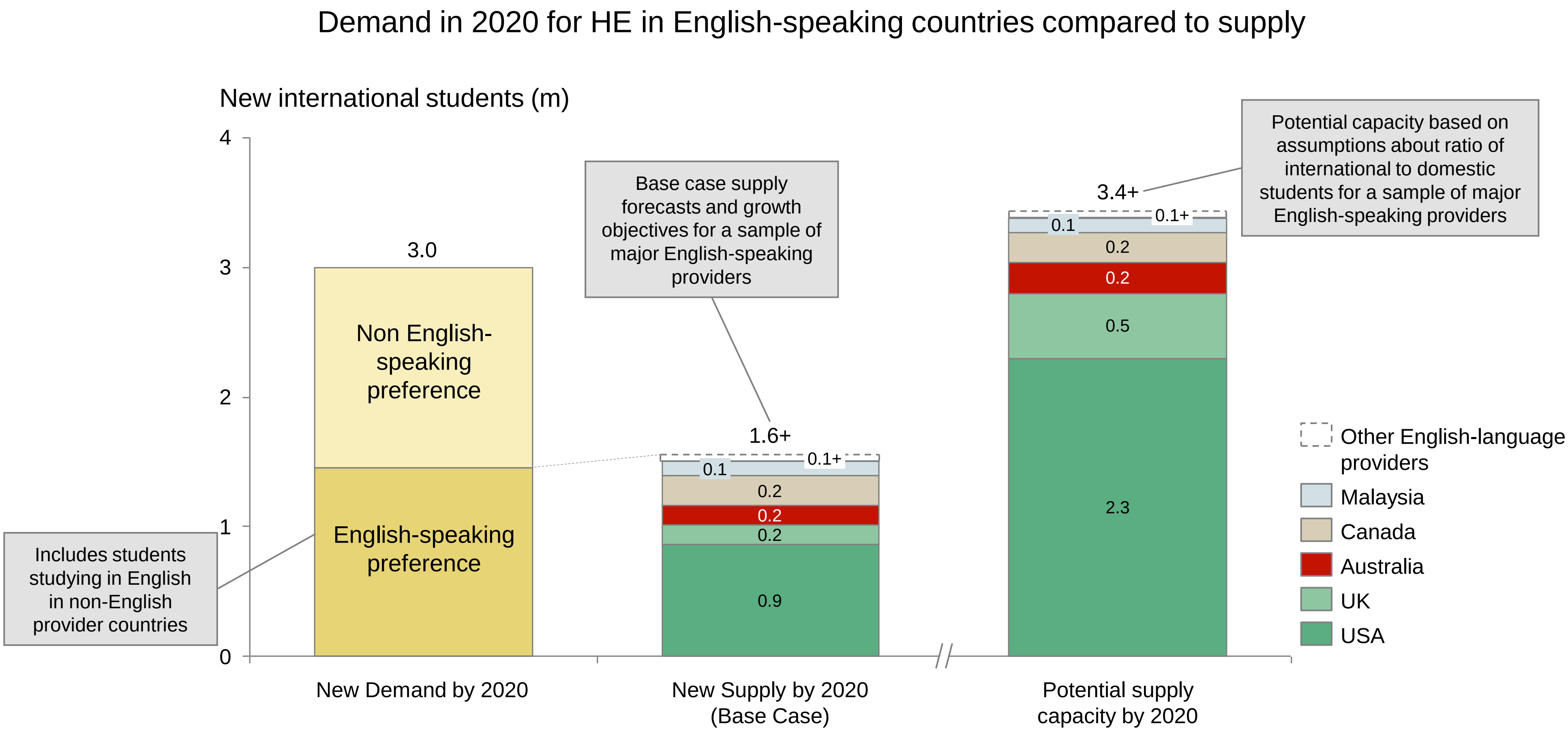
Market position varies considerably between countries

Victoria achieving expected share in China
- However, NSW is slightly overachieving in this very large market

Victoria substantially over achieving in a number of key markets which increases broader risk to state of external factors
- India
- Malaysia
- Vietnam
- Pakistan
- Sri Lanka

Number of markets which present growth opportunities to Victoria
- Indonesia
- Korea
- Thailand
- Nepal
- Philippines

By 2020, potential for significant increased capacity in global markets, putting pressure on Australia



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

Australia likely to face increased competition as capacity for international students increased

Country	Growth projections and objectives	Institutional strategies	Government policies and initiatives	Materiality of risk
United States	• Base case 860,000 with high case forecast of 2,300,000	• Lows levels of international students. Universities under substantial financial pressure and seeking alternative revenue	• Relaxation of rules surrounding use of agents	• Significant. US brand strong and high ability to take share from Australia
United Kingdom	• Base case forecast of 511,000 international student placements by 2020, of which 71% are non-European. • High case forecast of 869,000 placements of which 77% are non-European	• Universities lobbying Government to remove international university students from the net migration statistics for policy purposes	• Restrictions on work placements, closure of the post-study route, higher English speaking requirements and 100,000 few places since March 2011	• Risk depends on Government approach to immigration, student visa regulations and financial pressures • Substantial risk if recent policies are relaxed or reversed
Canada	• Government goal of 230,000 additional international students within 10 years	• Broad support from Canadian universities for government initiatives	• Most students to receive preferred status (can permanently reside)	• Potential to become larger player and take share from Australia, particularly from students seeking migration opportunities
Malaysia	• Government goal to double intake of international students from 93,300 (2011) to 200,000 by 2020	• Branch campuses of internationally recognised universities to further attract students and raise appeal of Malaysia	• Malaysia working to establish itself as an international education hub in its region • Initiative to enable top-tier students to seek employment in Malaysia	• Potential to become larger player but unlikely to gain share from major English language provider countries

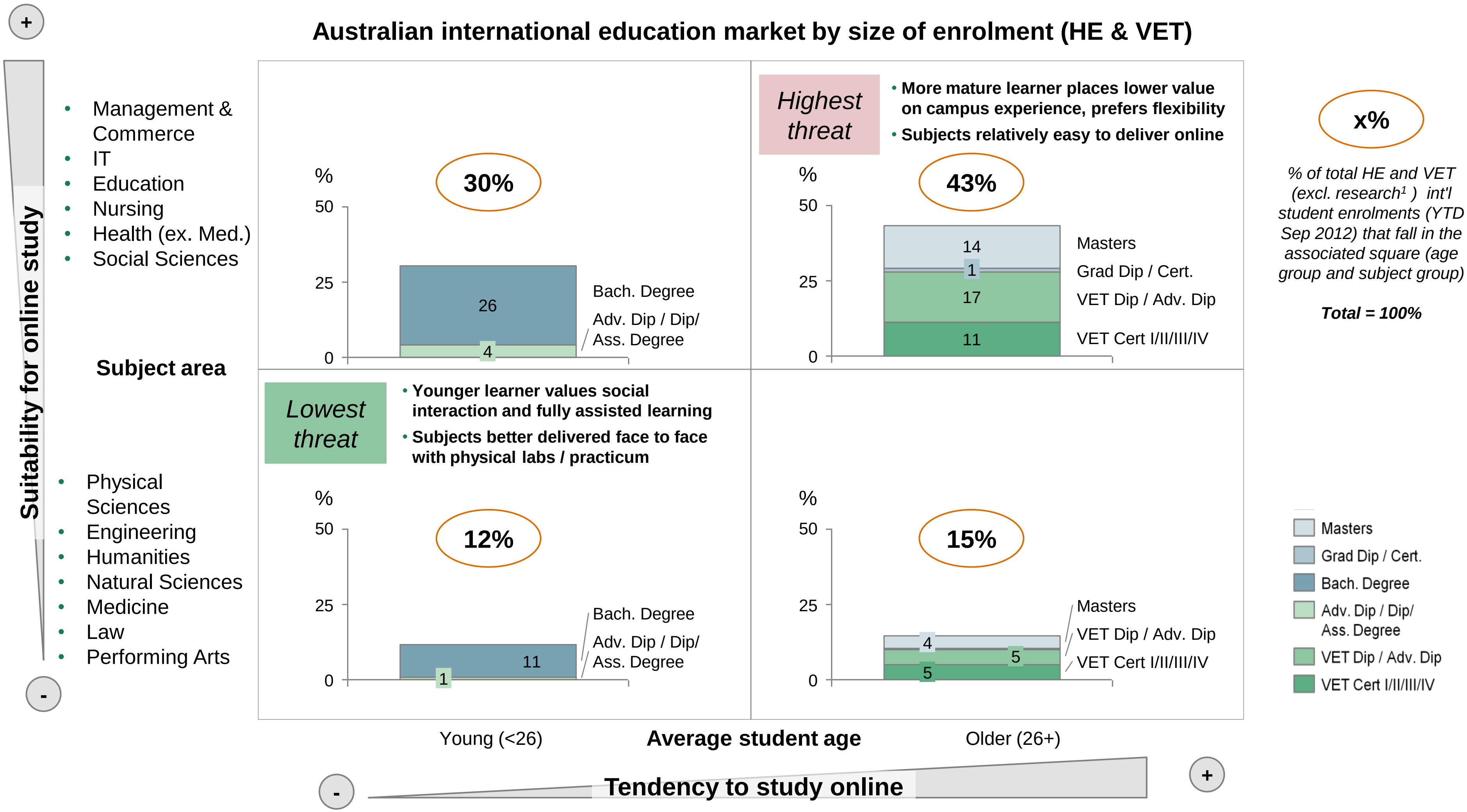
Source: British Council, Vision 202 0– Forecasting International Student Mobility, a UK Perspective; International Education: A Key Driver of Canada's Future Prosperity (August 2012 Report); Press articles; BCG analysis

Changing context for international education in Australia

		Historical trend: 2005–14	Emerging trend: 2015–25
Strategic context …	**Global demand and supply**	✓✗ Broadly strong Asian-led demand for HE, but declines in some areas ✓ 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
	Competitiveness of traditional Australian offering	✓✗ Varying policies on career prospects and migration ✓✗ Quality education and broader experience (with specific issue in India) ✗ Period of high cost driven by $	✓ Boosting career prospects and streamlining applications ? Recovering from hits to previously strong reputation ✓ Exchange rate - improving cost
	Threat of disruption	✓ Low recognition of online qualifications ✓✗ Steadily increasing embrace of online by prestige Universities ✓ Single-country delivery ✓ Standard education qualification types	✗ Growing credibility of online learning ? High-profile providers growing in online space. Models evolving ✓✗ Mixed on/offshore delivery to reduce costs ✓✗ Non-traditional qualifications and tailored content
… impacts Australia	**Australian trends**	✓ Strong feeder pathways to higher education ✓✗ Broadly strong international student growth, with period of reset	? Rebuilding momentum in feeder pathways ✓ Recovering from falling commencements

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

Significant parts of Australian and Victorian market appear vulnerable to substitution by online offerings...

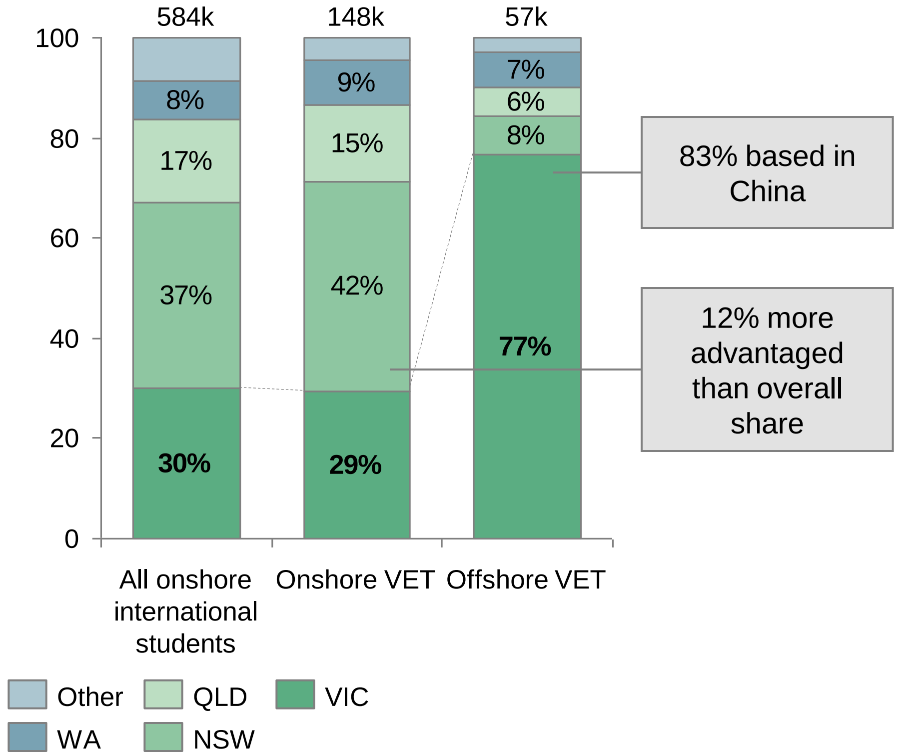


1. Excludes PhD and Masters by Research students (6% of total enrolments)
Note: Does not take account of other benefits of being onshore in Australia (e.g. access to Australian lifestyle and job market)
Source: AEI data on international student enrolment in Australian courses onshore, YTD September 2012;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

Victoria could achieve $100m incremental revenue in onshore VET by increasing share from 29% to 33%[1]

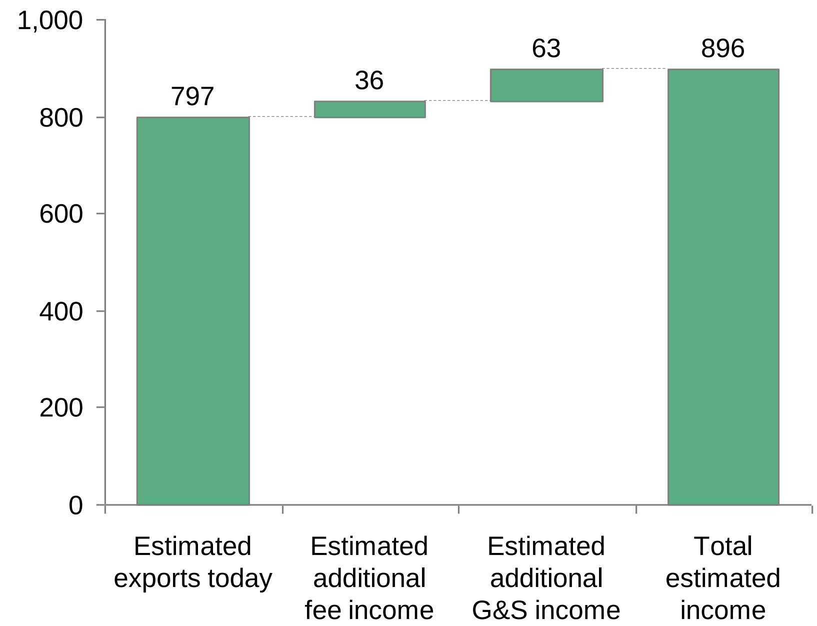
Victoria advantaged in offshore VET, but NSW achieves higher onshore share

Share of students enrolled in each state



Opportunity of $100m if 'over achieve' to NSW levels (moving to 33% share)[1]

Opportunity estimate



1. Assumes Victoria achieves same proportional level of 'over-achievement' in VET market share as NSW – i.e. VET market share is 42% relative to 37% of NSW's average, therefore 42/37 = 1.12 advantage. Victoria's share moves from 29% to 33% with a similar advantage multiplier

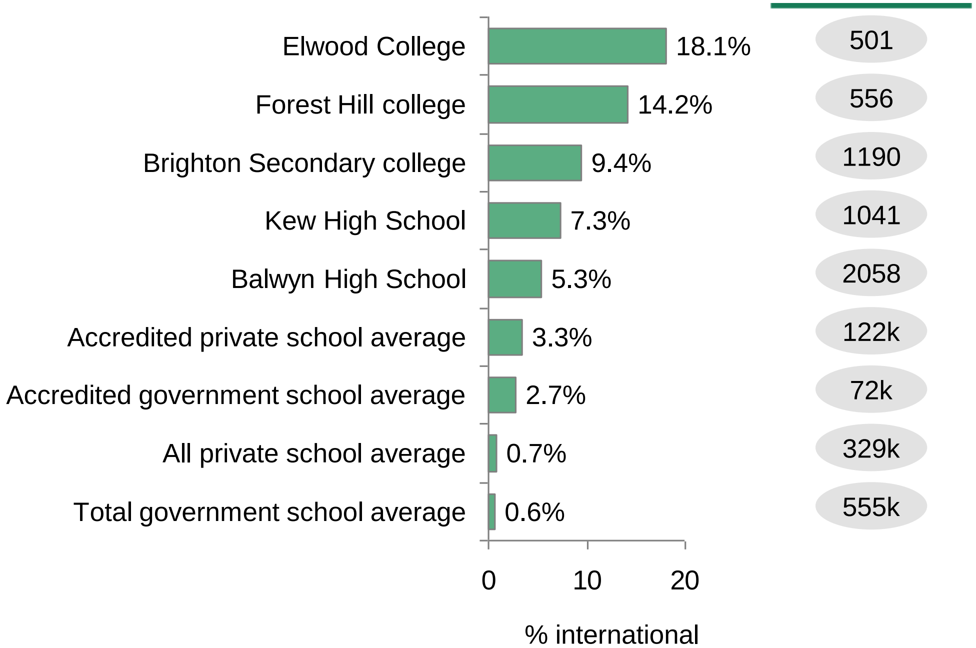
Source: Universities Australia 2014 (using data from AEI); ABS 5368.0 service exports data; Delivery of VET offshore by public providers, 2012, Department of Education

High performing state schools attract more international students than private schools

Some schools disproportionately attract international students...

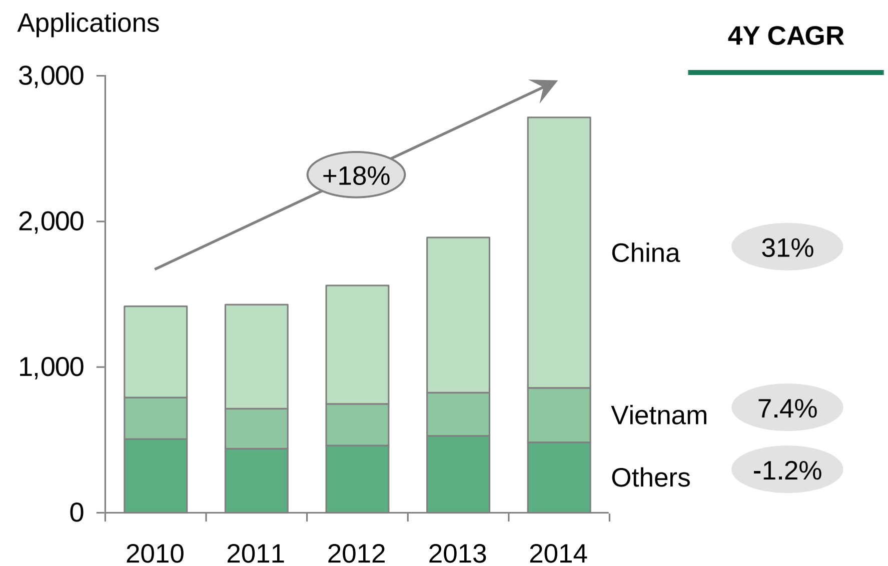
International students as proportion of student population, selected schools, 2014[1]

Total enrolled students



...with demand rates for international education growing, particularly Chinese

International full-fee paying applications to Victorian govt school places over time by source



1. Includes top schools, high volume schools and sector averages
Source: Victorian Department of Education; AEI data cube of school enrolments, year ending 2013; DET (OSP) database application data as at 31 December

International school education potential to grow by $440m supported by government

Sector is worth exploring due to value and ease-of-intervention

Government actions can influence growth
- Currently low penetration of int'l students (0.6%)
- Combined sector marketing presence overseas
- Address supply-side barriers e.g. accommodation
- Policy restrictions on proportion of international students

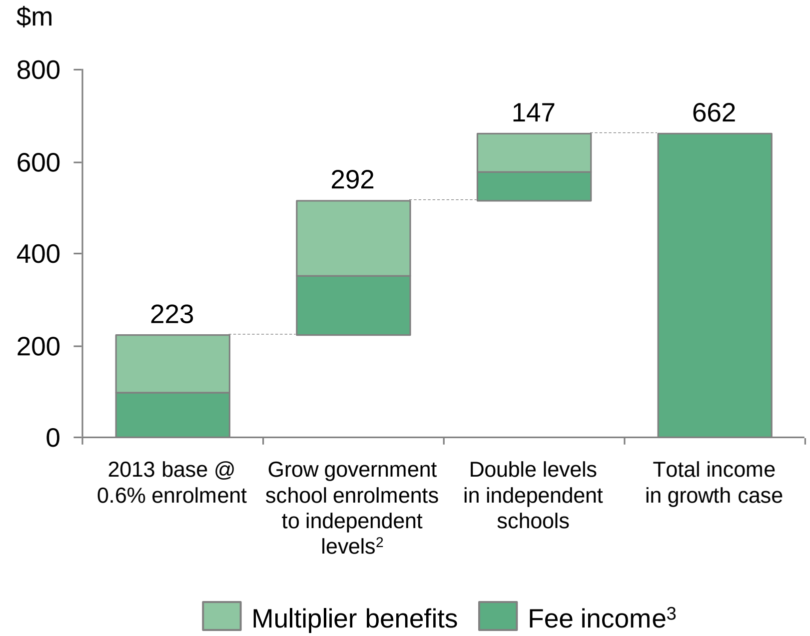
Significant multiplier benefits indirectly and over time
- More than half of value per school student is in indirect 'tourism' or living expenses while in country
- Increases likelihood of selecting Victoria for higher education options
- Promotes Victoria to more overseas customers through networks

Injects money into school system
- Similar to higher education situation 20 years ago

Sets up schools to provide 'Asian awareness' for their students if managed properly by school leadership

Potential growth in income of $440m

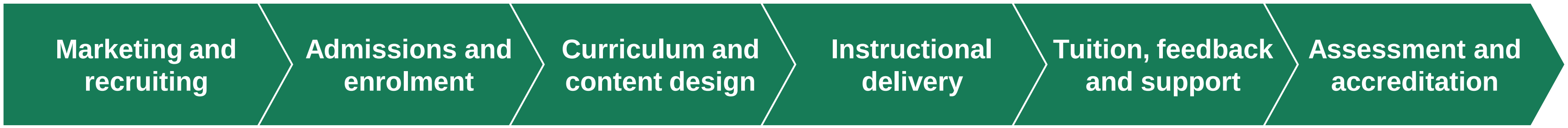
School education opportunity estimate



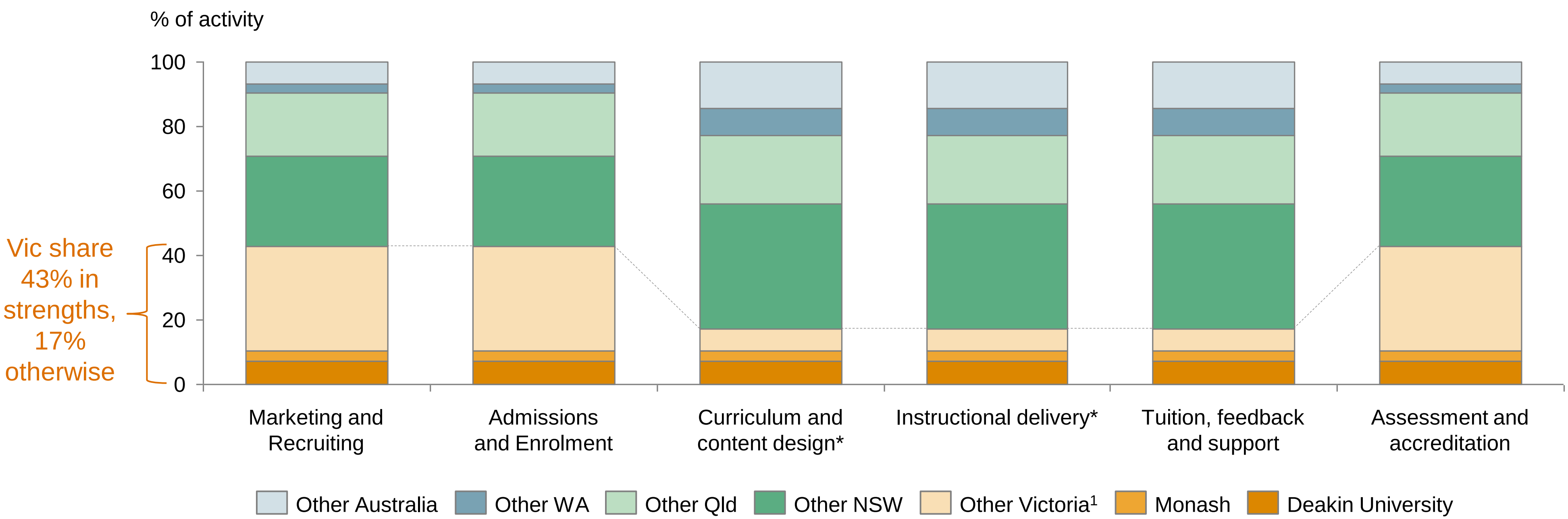
Strong opportunity, fully leveraged by focusing on- *and* offshore, and engaging VET and higher education providers

1. Based off range of fees from $10,000 to $15,000 (approximate primary and senior secondary rates), standard fees for government school international students. Private schools charge higher tuition fees, up to $30,000 tuition and $15,000-$30,000 boarding (this estimate excludes boarding revenues) 2. 2.3%, based off 2014 student numbers total (126.5k) and 2010 enrolled full-fee paying overseas students (2.7k) 3. Based on ratio between fees and G&S spending for school students in Sustainable Tourism CRC 2010, $15k:$18k fees to goods and services
Source: Victorian education department 2013 statistics snapshot; Australian International Education 2013; Boarding Schools Australia; International School Consulting 2014 report (as reported in World Education News and Reviews online; Independent Schools Victoria; Sustainable Tourism CRC, 2010

Victoria has emerging strengths in online with many outsourcers based in Melbourne



Activity Basis - Total undergraduate and postgraduate enrolments in external degrees, 2013



Options to leverage Melbourne-based outsourcers should be considered, e.g. OUA, Pearson, Swinburne Online

1. Includes Open Universities - 12 member organisations, representing their marketing, admissions and assessment on their behalf

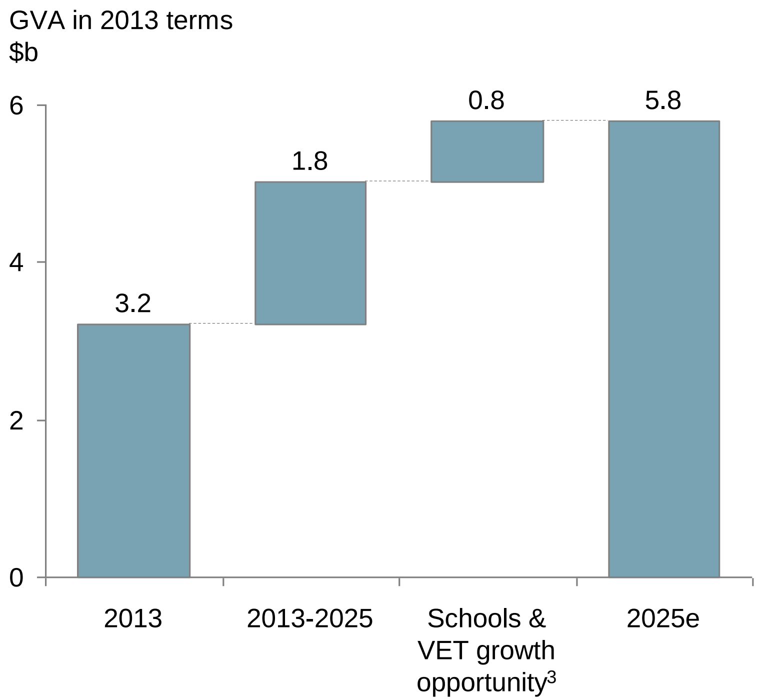
* - Outsources are increasingly supporting Universities in these activities

Source: Higher Education statistics, Education department; Open Universities Australia website

International education opportunity could be worth $2.5b, with schools growth representing significant prize

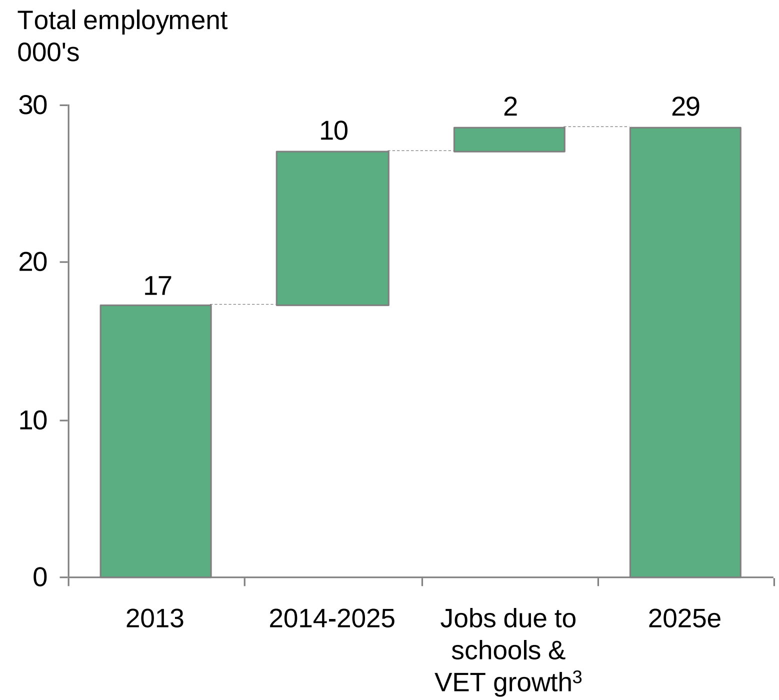
International education forecast to grow, with schools effort adding 30% of growth

International education, estimated industry GVA by 2025[1]



Natural growth, schools and VET opportunities delivering 10-12,000 new jobs

International education, estimated employment by 2025[2]



1. Assumes GVA proportional to revenue in the sector, revenue measured as exports and growth rate is forecast growth in student enrolment of 3.5%, based on 7% recent growth, 7% historic projections of China / India demand and dampening effect of 0.5 to reflect capacity constraints and deregulation risk 2. Employees measured by number of employees per student for number of international students enrolled, by student type, growth rate is forecast growth in student enrolment of 3.5% 3. Based on schools growth opportunity identified, with GVA calculated using school sales and service income:GVA ratio nationally, and similar approach to calculating VET opportunity in GVA and Employment tems
Source: AEI student numbers data; ABS 8155 industry data; ABS 4368 service exports; Department of education uCube statistics; University and school annual reports; Victorian department of Education

Competitiveness assessment
International education

Competitive advantage

✚	**Access to resources**	• High quality, but ageing workforce in place, with variation across sectors • Highly liveable city, regularly ranked in top 5 globally • Well-regarded Australian education frameworks (AQF, VET)
~	**Infrastructure and regulatory costs**	• Core infrastructure in place for education provision with public transport supporting most locations • Significant onshore education infrastructure ageing and below international competitor standardEmerging shortage of accommodation may hamper ability to grow • Fee deregulation in HE may have unintended consequence of reducing international fee paying students for some Universities
✚	**Scale**	• Australia is third largest recipient of students in the world with a globally recognised brand, core infrastructure in place to support student volumes. Victoria overachieves on a national basis • Some limitations emerging around level of diversity in student populations and impact on student experience
✚	**Market position**	• Australia has highly regarded education brand, but market becoming increasingly competitive • HE market competitive on key global rankings. Victoria has two top 100 Universities, but Australia in general still below premium destinations of UK and US • VET market is recovering from more migration focused activities. Strong offshore presence, but NSW outperforming on onshore student basis
✚	**Innovation**	• Fully competitive VET market, with private providers growing share within Victoria • Education technology development appears to be focused in NSW • Diverse range of markets served, some levels of product innovation in sector (eg. Melb model at Melb Uni) • Emerging core of private outsourcersin online based in Victoria, but Victoria has underperformed in HE online

Key ✚✚ Significant strength ✚ Advantaged ~ On par globally — Disadvantaged — — Significant barrier or risk

Potential government actions to achieve growth

International education

Challenges	Example actions
Growing international schools market	• Increased marketing of Victorian schools into Asian markets, and focusing school offering on distinctive components of VCE compared to others • Support training of principals on how they can participate in benefits of international students • Advocate for improved fast track visa arrangements for wider category of students
Growing onshore VET/TAFE market	• Facilitate coordination of marketing of TAFE/VET products into offshore markets • Lobby Commonwealth government as appropriate to ensure appropriate visa access to support growth • Work with Commonwealth to relieve constraint on VET products to tailor to market needs • Promote education offering to international migrants to encourage family study in Melbourne
Capacity constraints	• Consider planning changes which facilitate increases in student accommodation in appropriate locations • Further utilise Victorian government offices to support connecting Australian institutions with offshore partners to grow blended and offshore delivery options • Work with institutes to assess options for upgrading or replacing aged infrastructure
Maximising the multiplier	• Explore opportunities to increase promotion of Victoria as a tourist destination to international students and their friends and family • Find ways to remain connected to and leverage the international student alumni to promote Victoria

Questions to be answered

International education

Higher education	• How will domestic fee deregulation of higher education impact international students in Victoria? And associated tourism revenues? • How can capacity constraints on Victorian universities be eased? • What is the size of the prize for off-shoring universities and the downside risk? • What is government's role in addressing ageing education infrastructure?
VET	• Can central marketing grow Victorian onshore VET/TAFE market? • How can Victoria further leverage international VET strengths?
Schools	• How many government schools could meet the standards required of fee paying families? • What are the obstacles to take on significant numbers of additional international students? Can the political considerations be managed? • What is the demand for international school student places and at what price? • What can government do to better equip schools to take advantage of this opportunity? • Is there a significant return from further promoting the VCE off-shore?
Cross-sector issues	• Which market segments (countries) have most potential? What is the risk involved? • What are the infrastructure requirements to expand student numbers? How will this differ based on student type? • How can Victoria leverage the student pathway through schools and VET into higher education? • Can the concentration of private online outsourcers in Victoria be leveraged? • Can government play a role in increasing the multiplier for international students – tourism, trade and investments links etc.? • What is the interplay between onshore/online/offshore and their contribution to revenue generation?

Draft Taskforce brief

International education

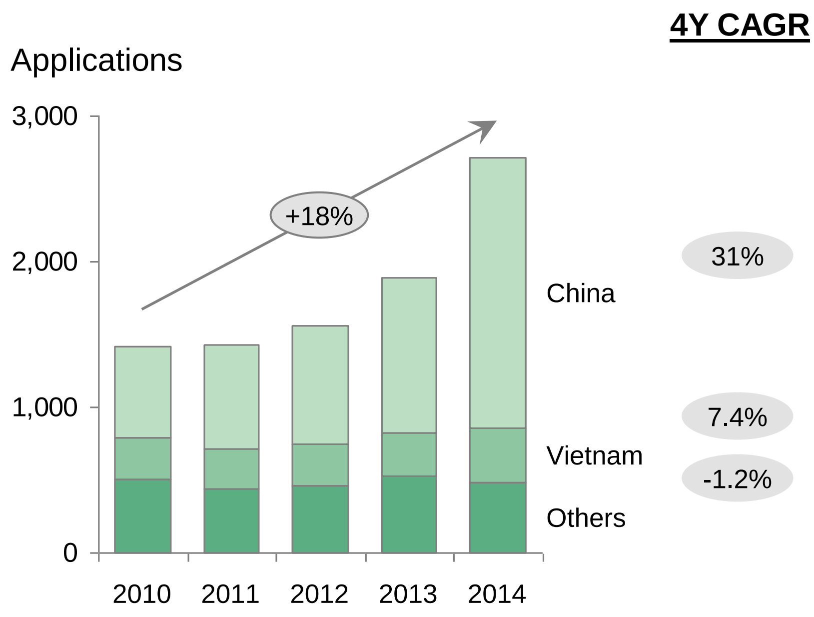
Scope	
• Develop a set of initiatives to support the growth of international (and potentially interstate) education sector • Determine their potential costs and benefits	
Schools	**Explore feasibility of significantly expanding international students in Victorian schools and identify Government actions needed to grow this market** • Document number of international students in schools today – including full and discount fee paying • Calculate the multiplier benefits of those students • Understand success models at small number of Government schools with high international student numbers • Understand potential to grow the number of schools receiving international students • Determine obstacles to supporting that growth and how the government could proactively support that growth
VET/ TAFE	**Develop proposals to expand the number of international students in TAFE colleges** • Investigate the cost and benefits of a more central approach to marketing Victorian TAFE colleges in target markets • Explore opportunities to fast track visa applications for all TAFE colleges • Investigate opportunities to leverage the local Asian communities to promote TAFE offering to family and friends
Higher education	**Understand the motivation and capacity of Victorian Universities to increase the numbers of international (and interstate) students and identify what can be done to remove obstacles to expansion** • Identify obstacles to growing student accommodation • Review opportunities to support universities offering mixed on-/off-shore models to partner with institutions in source countries • Understand potential impact of fee deregulation on University motivation to attract int'l students and possible mitigating actions • Understand the recent increase in interstate students at some Universities and identify opportunities for the Government to support that trend through interstate marketing
Cross-sector	**Understand and quantify other significant levers to grow the international education sector and contribution to economy** • Determine what drives the goods and services multiplier by student type, and opportunities to grow • Quantify the interplay between onshore, offshore, online and 'feeder' pathways and value created vs. cannibalised

Appendix

Demand for places growing despite decreasing acceptance rates[1]

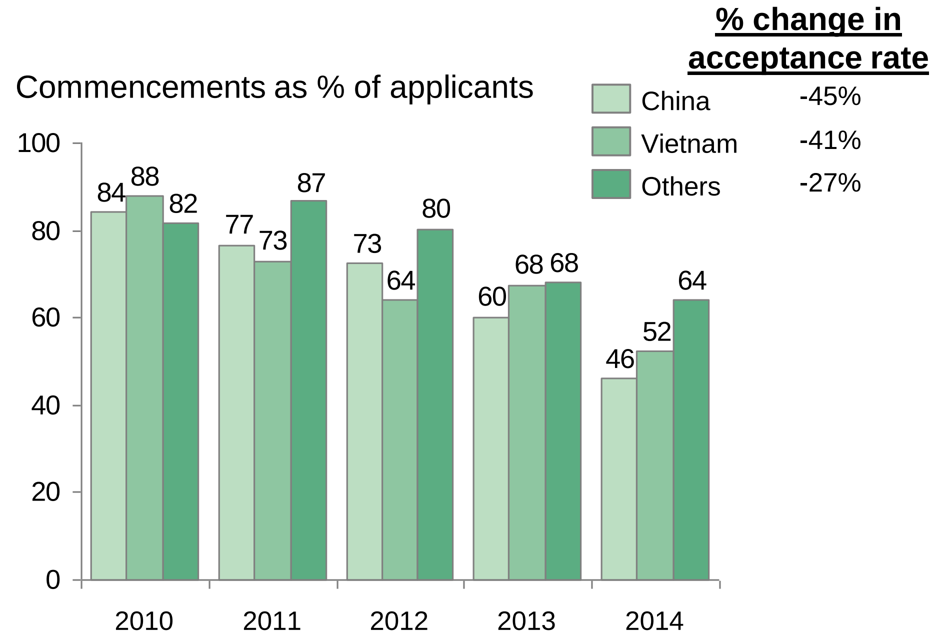
With demand rates for international education growing, particularly Chinese

International full-fee paying applications to Victorian govt school places over time by source



While acceptance rate decline indicates cap in students, most notably Chinese

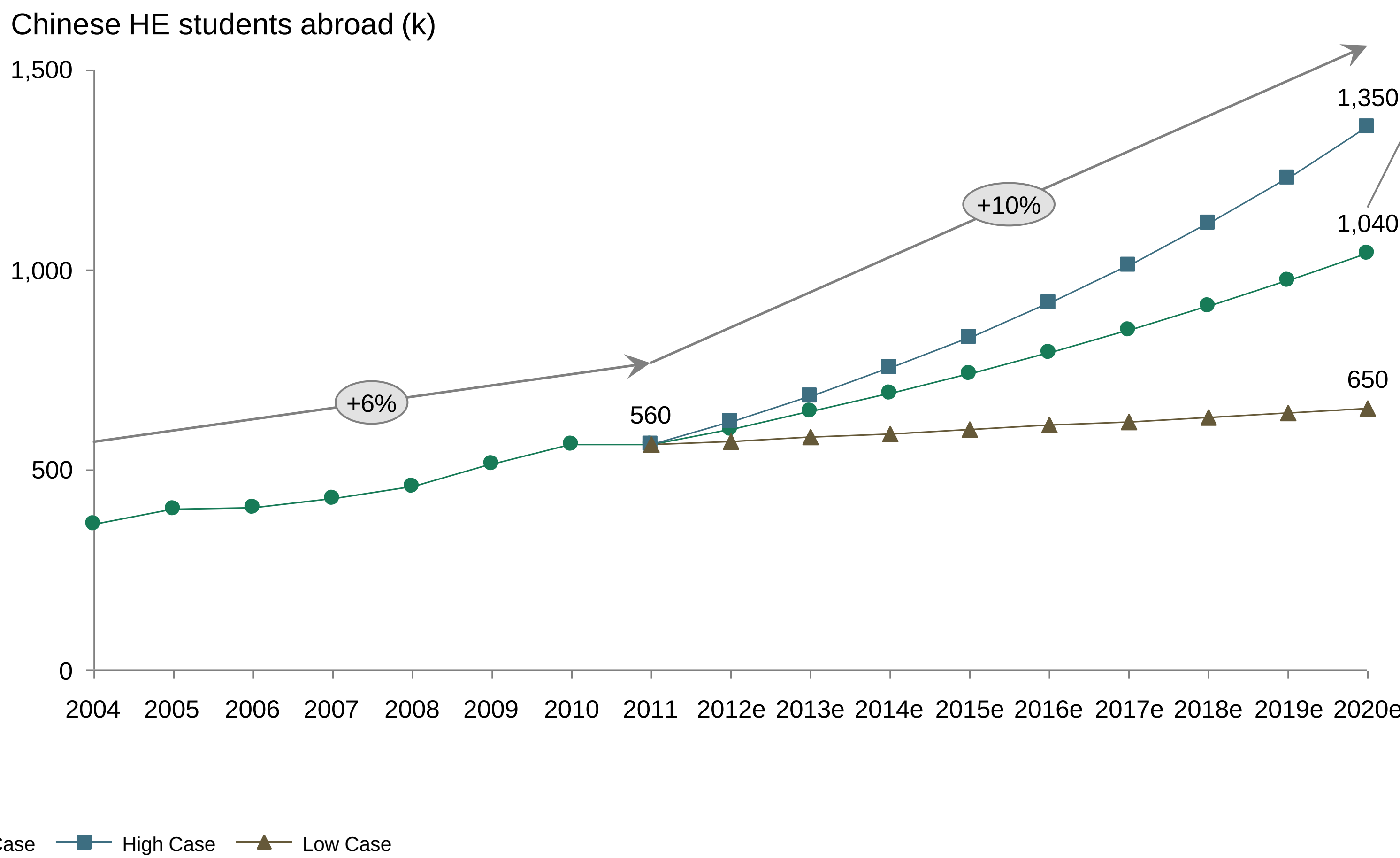
International full-fee paying 'acceptance rate'[1] into Victorian govt school places over time by source



1. Acceptance rate developed as a concept using the commencements in that year divided by the applicants in that year. Department feedback indicates that there is ~3-6 months and up to 2 years lead time between application and enrolment commencement, which has not been accounted for in this analysis
Source: Victorian Department of Education; AEI data cube of school enrolments, year ending 2013; DET (OSP) database application data as at 31 December

1 Additional 500–800k international HE students from China by 2020 possible based on recent trends

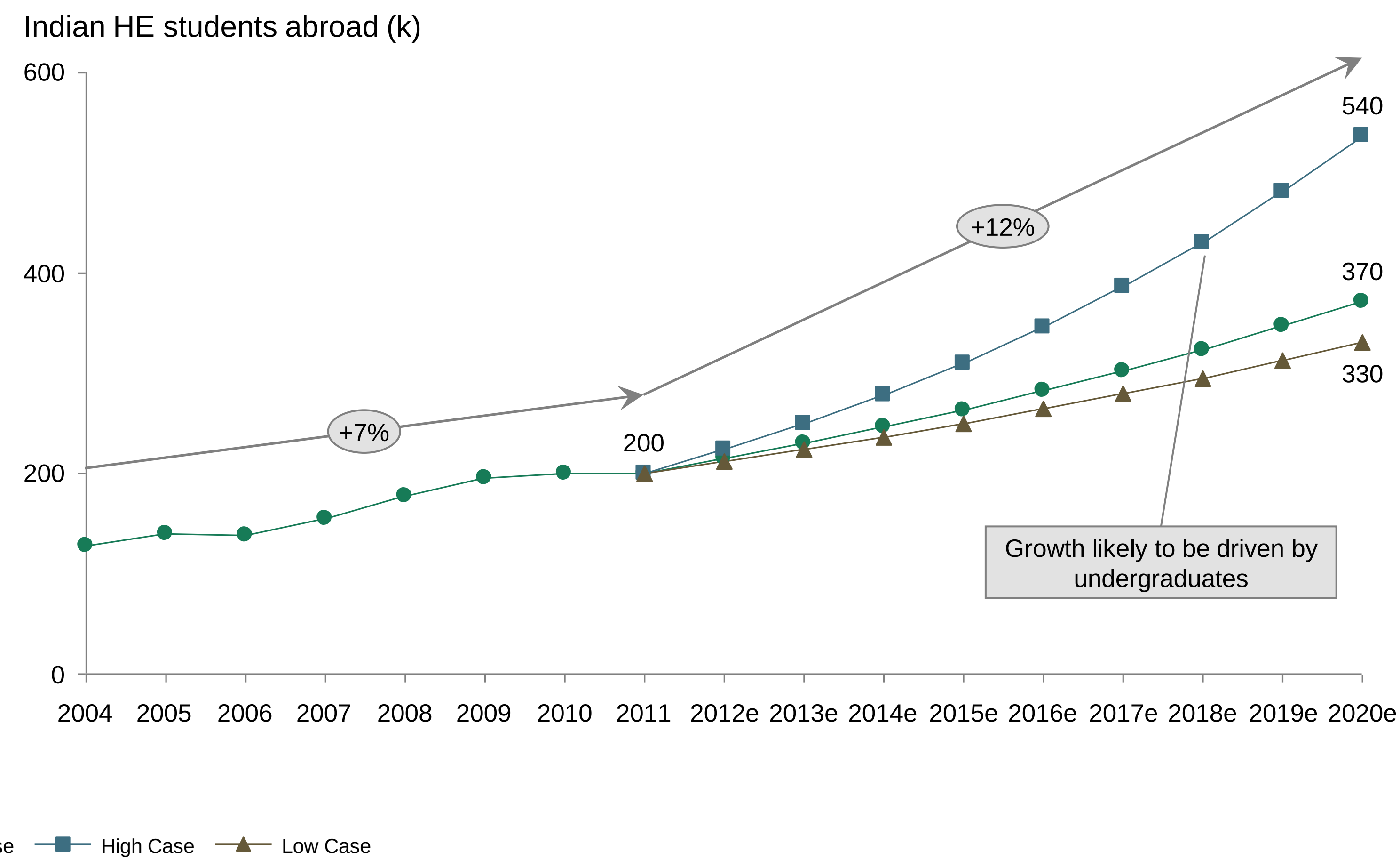
Number of Chinese HE students enrolled abroad in 2020 (scenarios)



Notes: Base Case assumes OECD 7.1% CAGR projected forward to 2020; High Case assumes 4% of 18-22 years from top 3 income brackets in China studying abroad in 2020 (assumption based on 2010 figures which indicate 4% of 18-22 years in top 3 income brackets study abroad); Low Case assumes overall HE domestic demand CAGR of 1.7% applies equally to international HE demand
Source: UNdata; Ministry of Education of China; OECD; BCG analysis

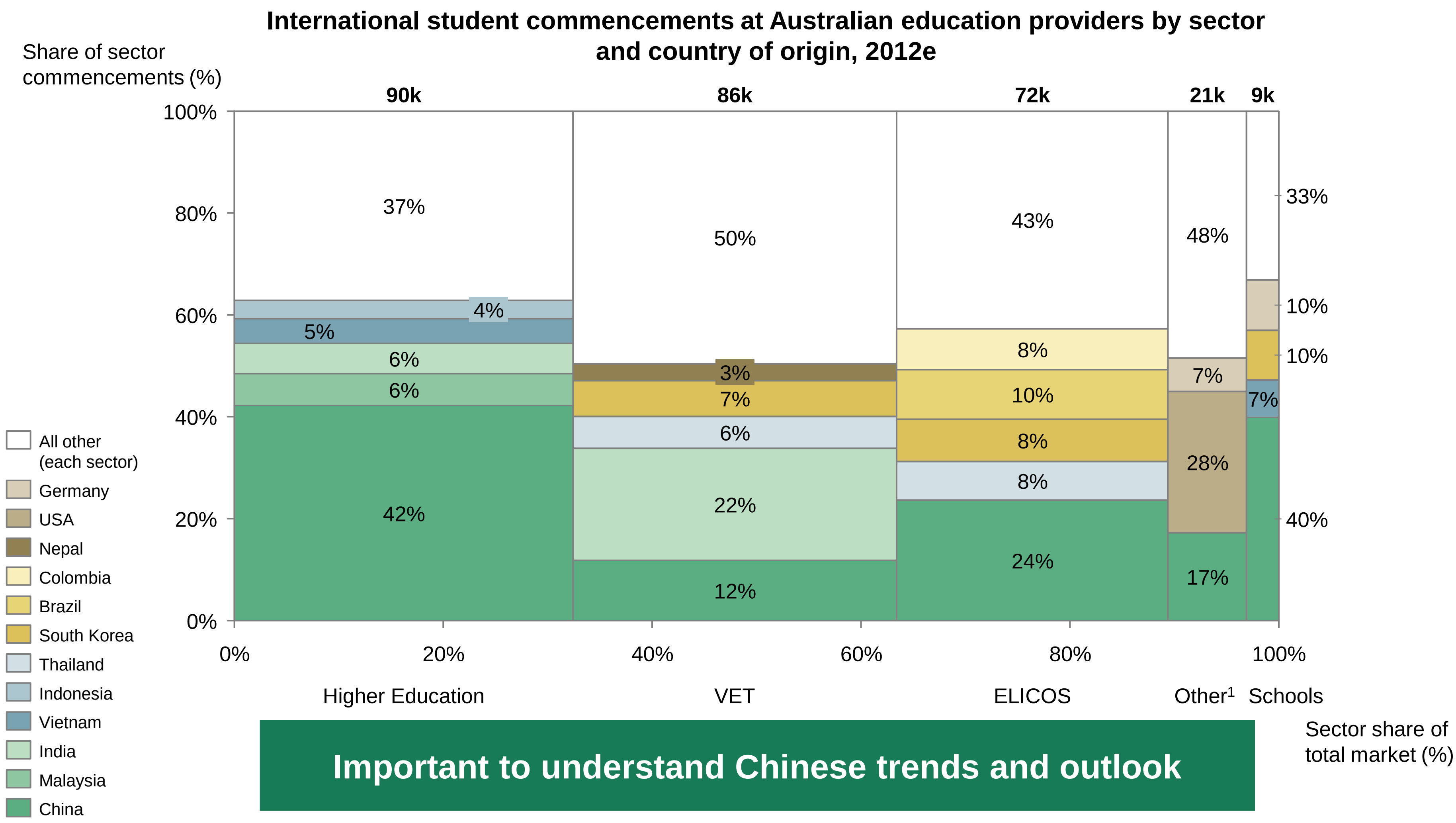
1 Additional ~130–340k Indian international HE students by 2020 based on recent trends

Number of Indian HE students enrolled abroad in 2020 (scenarios)



Notes: Base Case assumes OECD 7.1% CAGR projected forward to 2020; High Case assumes 1.5% of 18-22 years from top 3 income brackets in India studying abroad in 2020 (assumption based on 2010 figures which indicate 1.5% of 18-22 years in top 3 income brackets study abroad); Low Case assumes overall HE domestic demand CAGR of 5.7% applies equally to international HE demand
Source: UNdata; Ministry for Human Resource Development in India; OECD; BCG analysis

China is Australia's biggest single source of international students, by a wide margin in higher education

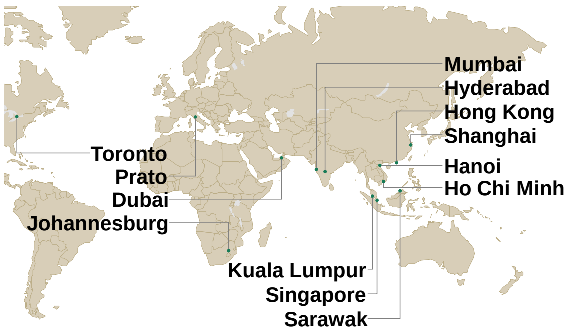


Important to understand Chinese trends and outlook

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

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

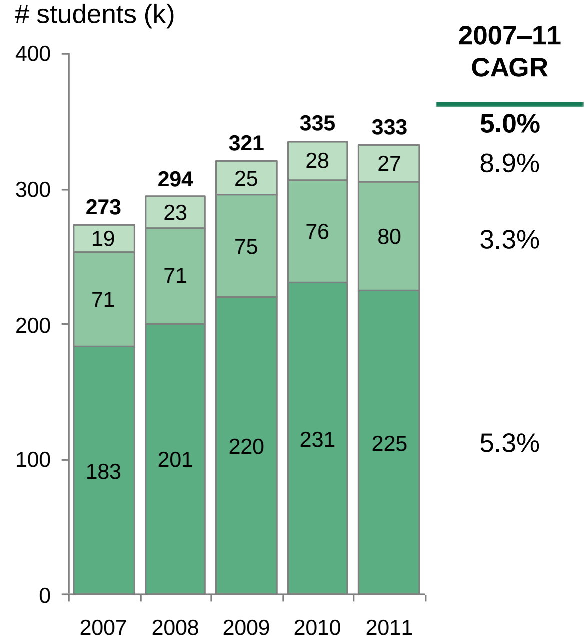
Australian universities' offshore campuses/centres



Number of Australian universities with offshore campuses/centres:

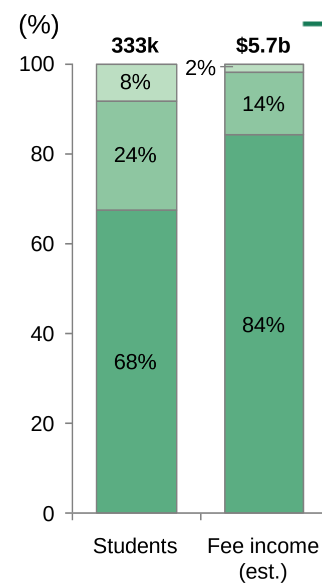
11

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[1]	$0.1b
~$10k[2]	$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. Fee income per student estimate based on distance education economics published by University of Southern Queensland 2. 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

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