

3rd CANADA STRATEGIC OUTLOOK SESSION

NAFSA 2013 Conference

DISCLAIMER

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- **The presentation shall be considered incomplete without oral clarification.**
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AGENDA

Housekeeping

International Student Flows Into Canada

Canada's Competitive Position: Tuition Fees

Leveraging International University Rankings

PRISM: Measuring Student Success

Perspectives from Memorial University

Perspectives from the University of Victoria

Discussion

HOUSEKEEPING

- **The session will be Co-Chaired by Sonja Knutson (Memorial University) and Carolyn Russell (University of Victoria).**
- **The ICG presentation section is geared for about 20 minutes.**
- **The Co-Chairs will share their perspectives for about 20 minutes.**
- **About 20 minutes are allocated for discussion.**

HOUSEKEEPING

Current and Upcoming Research Releases

- **PRISM (Version 3): International Students Performance and Success Benchmarking (launched at NAFSA 2012 with institutions from Canada, Australia, and New Zealand)**
- **International Tuition-based Competition Database (ITBCD)**
- **International University Rankings (ICG strategy perspective)**

AGENDA

Housekeeping

International Student Flows Into Canada

Canada's Competitive Position: Tuition Fees

Leveraging International University Rankings

PRISM: Measuring Student Success

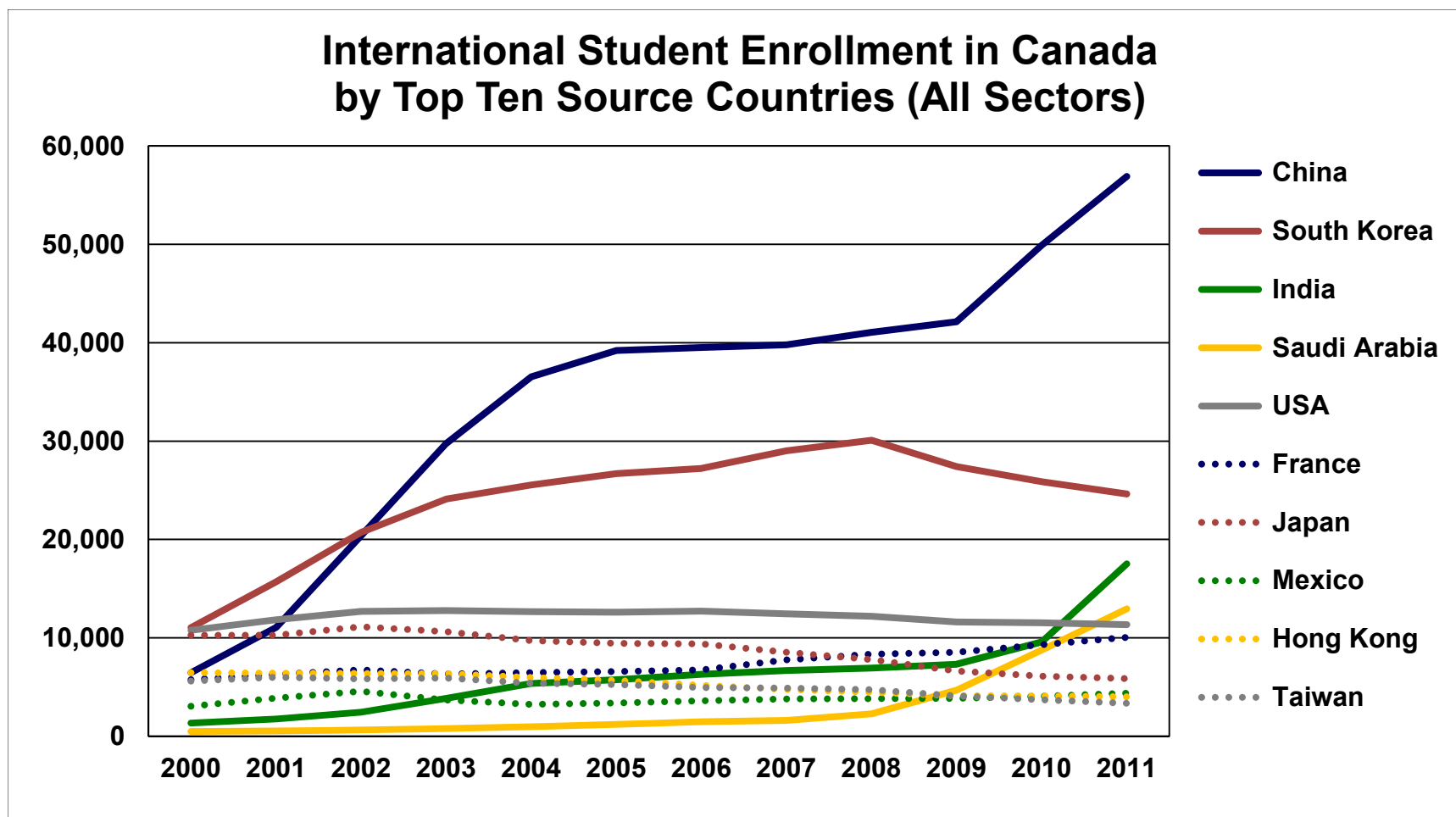
Perspectives from Memorial University

Perspectives from the University of Victoria

Discussion

INTERNATIONAL STUDENT FLOWS INTO CANADA

International Student Enrollment by Top Ten Source Countries (All Sectors)



Sources: CIC.

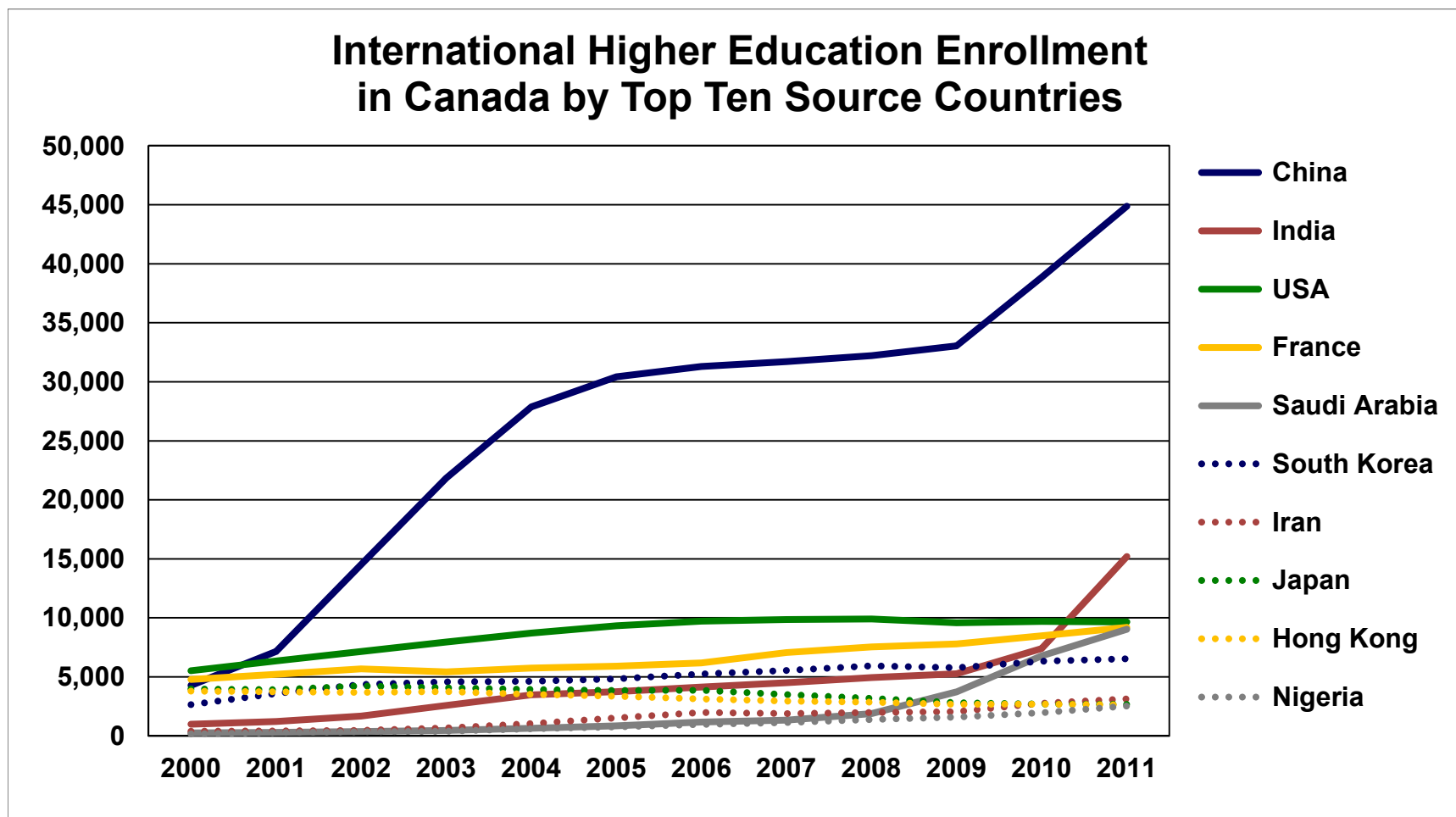
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INTERNATIONAL STUDENT FLOWS INTO CANADA

International Higher Education Enrollment by Top Ten Source Countries



Sources: CIC.

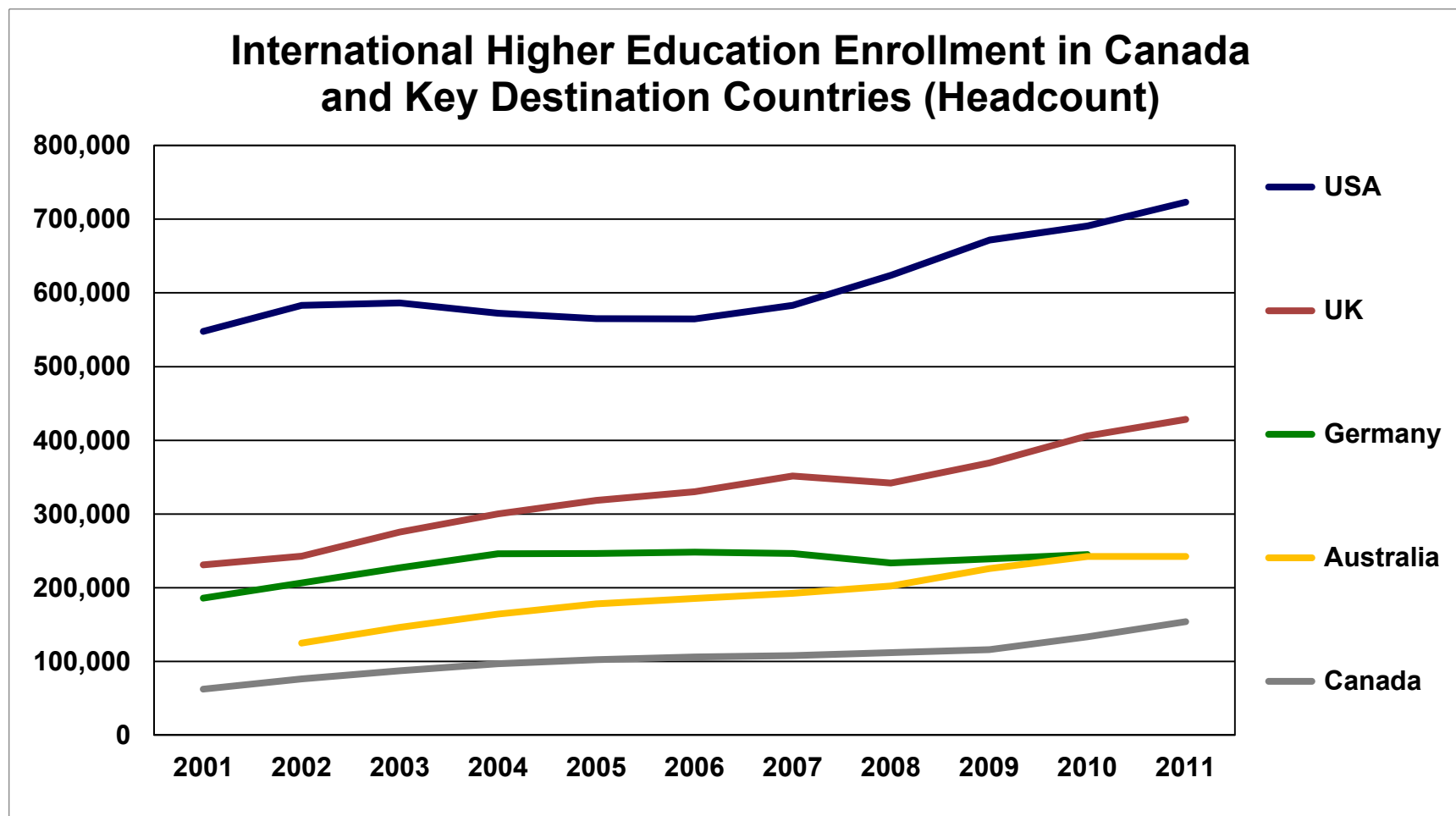
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INTERNATIONAL STUDENT FLOWS INTO CANADA

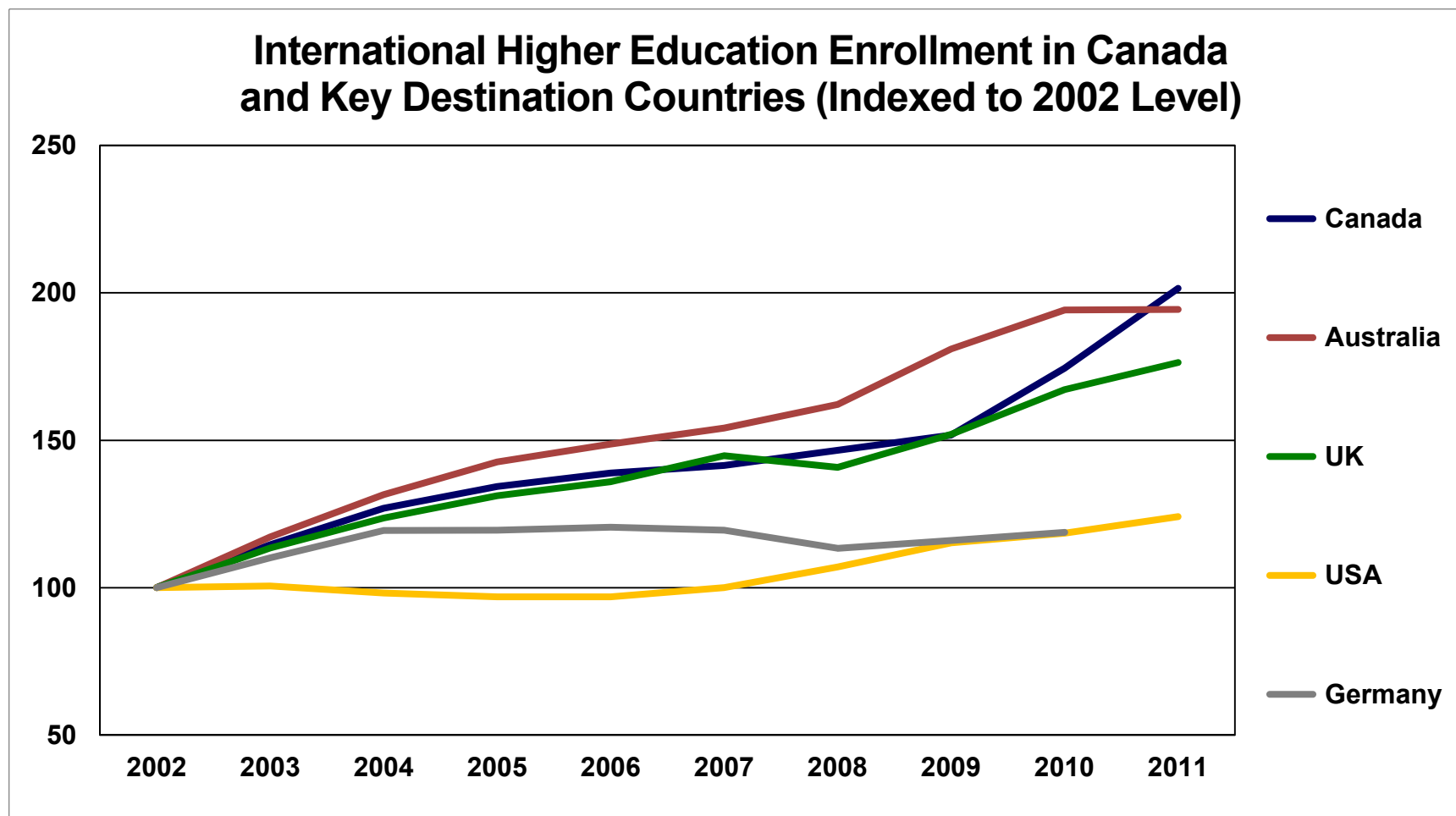
International Higher Education Enrollment in Key Destination Countries



Sources: IIE, HESA, HIS, AEI, CIC.

INTERNATIONAL STUDENT FLOWS INTO CANADA

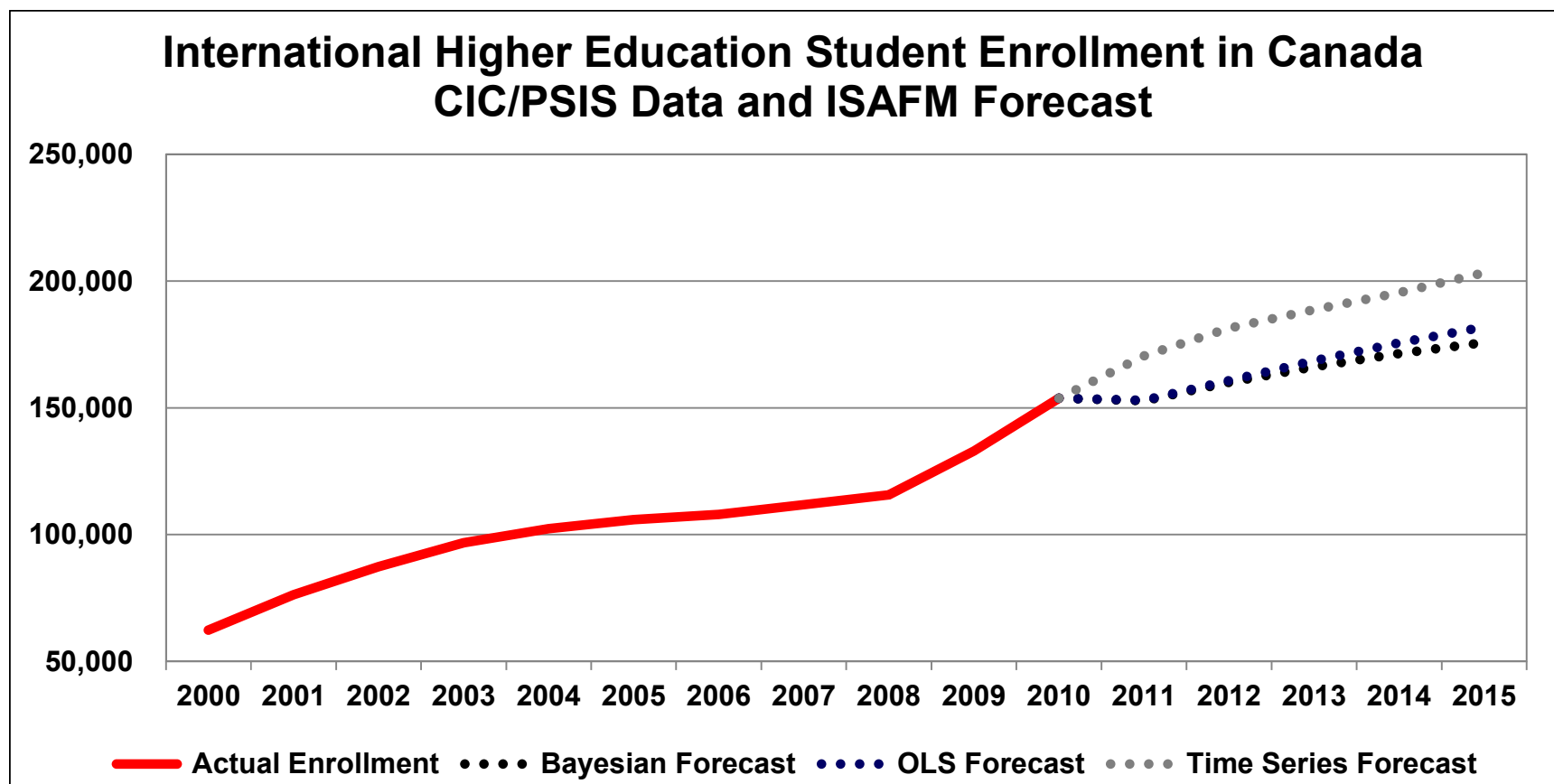
International Higher Education Enrollment in Key Destination Countries (Indexed)



Sources: IIE, HESA, HIS, AEI, CIC.

INTERNATIONAL STUDENT FLOWS INTO CANADA

Total International Higher Education Student Enrollment: ISAFM Forecast



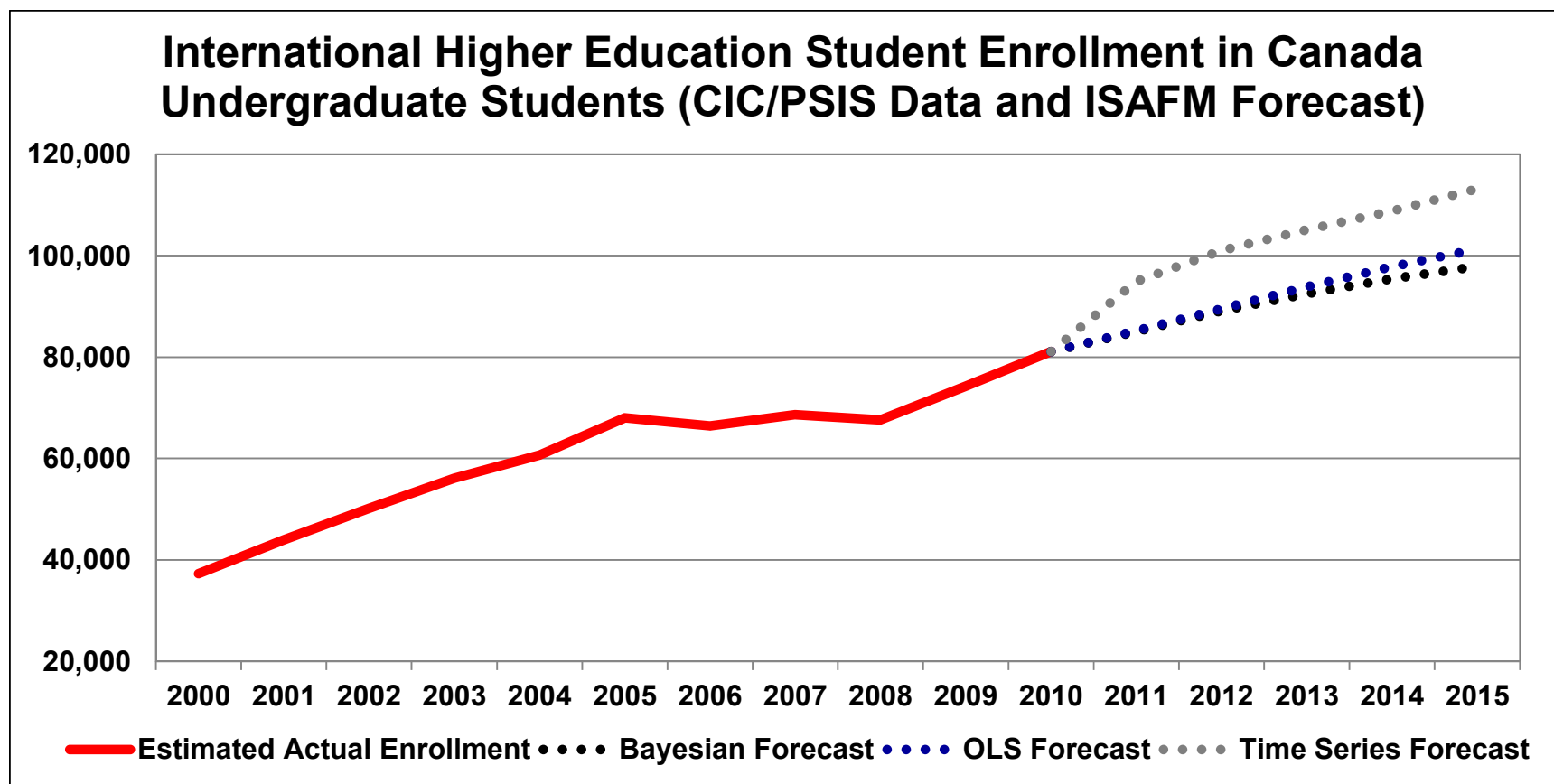
Steady growth, slight slow down

Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

INTERNATIONAL STUDENT FLOWS INTO CANADA

International Undergraduate Higher Education Enrollment: ISAFM Forecast



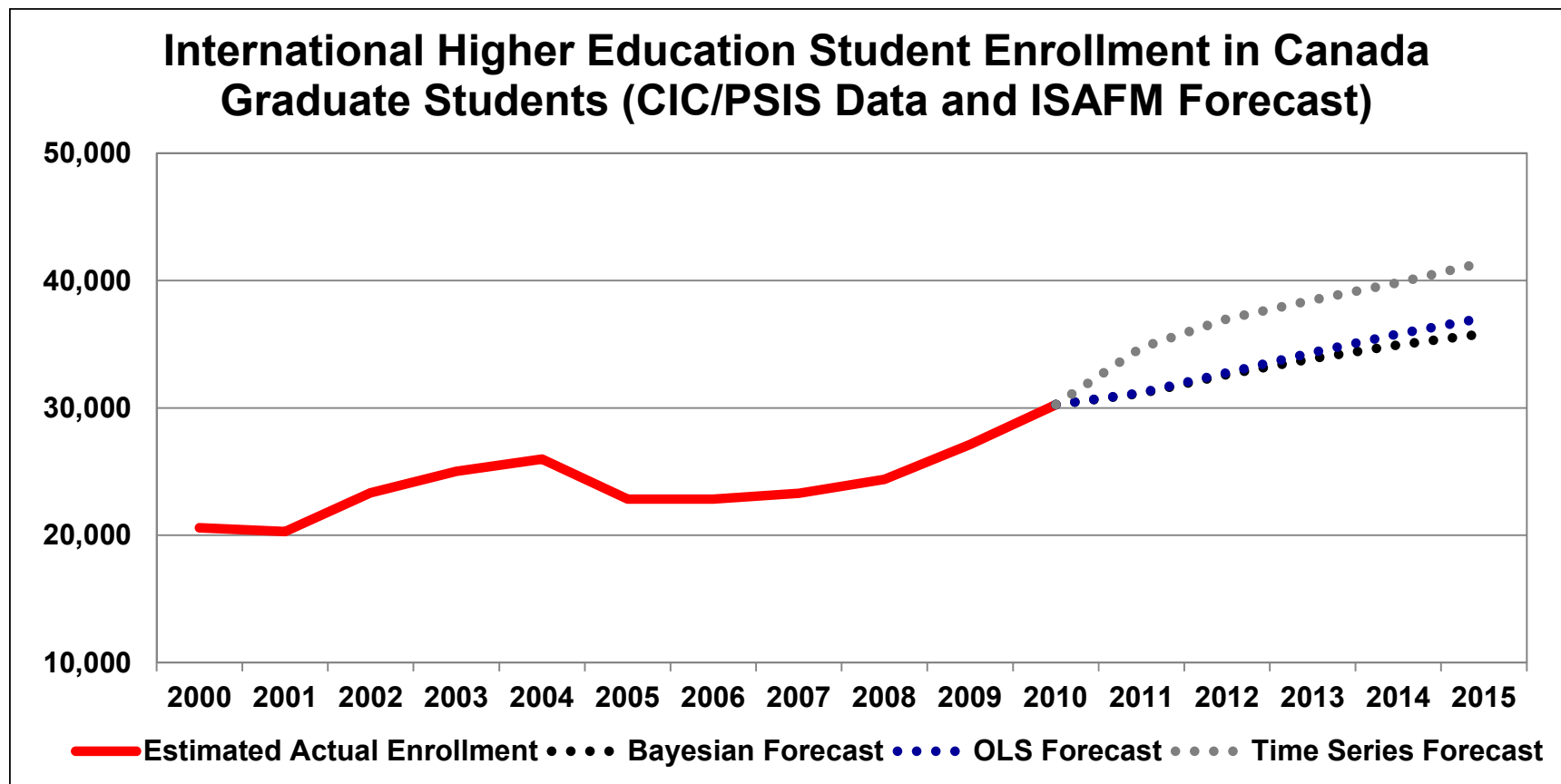
Continued strong growth

Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

INTERNATIONAL STUDENT FLOWS INTO CANADA

International Graduate Higher Education Enrollment: ISAFM Forecast



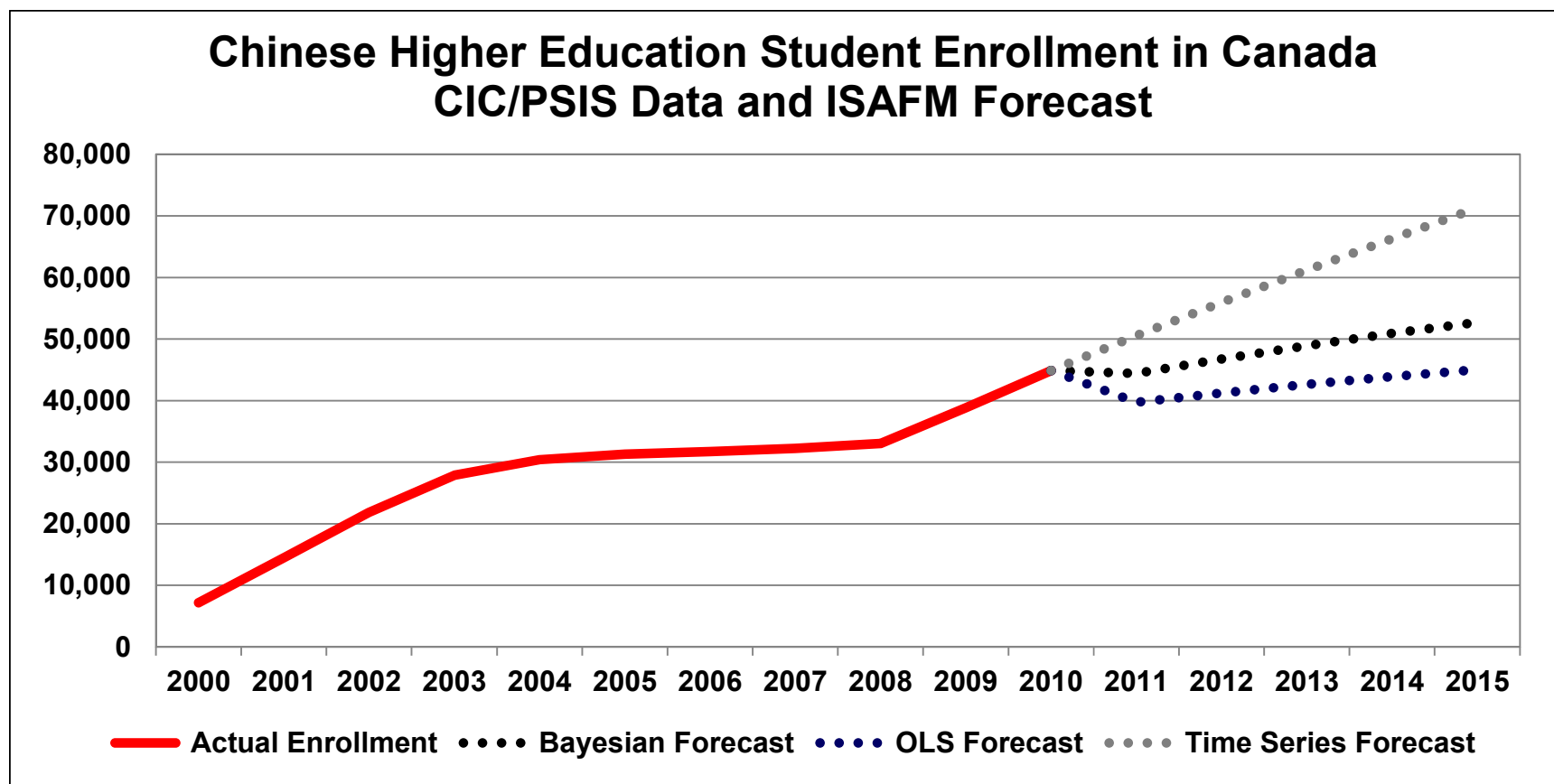
Slower growth than at undergraduate level

Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

INTERNATIONAL STUDENT FLOWS INTO CANADA

Chinese Higher Education Student Enrollment: ISAFM Forecast



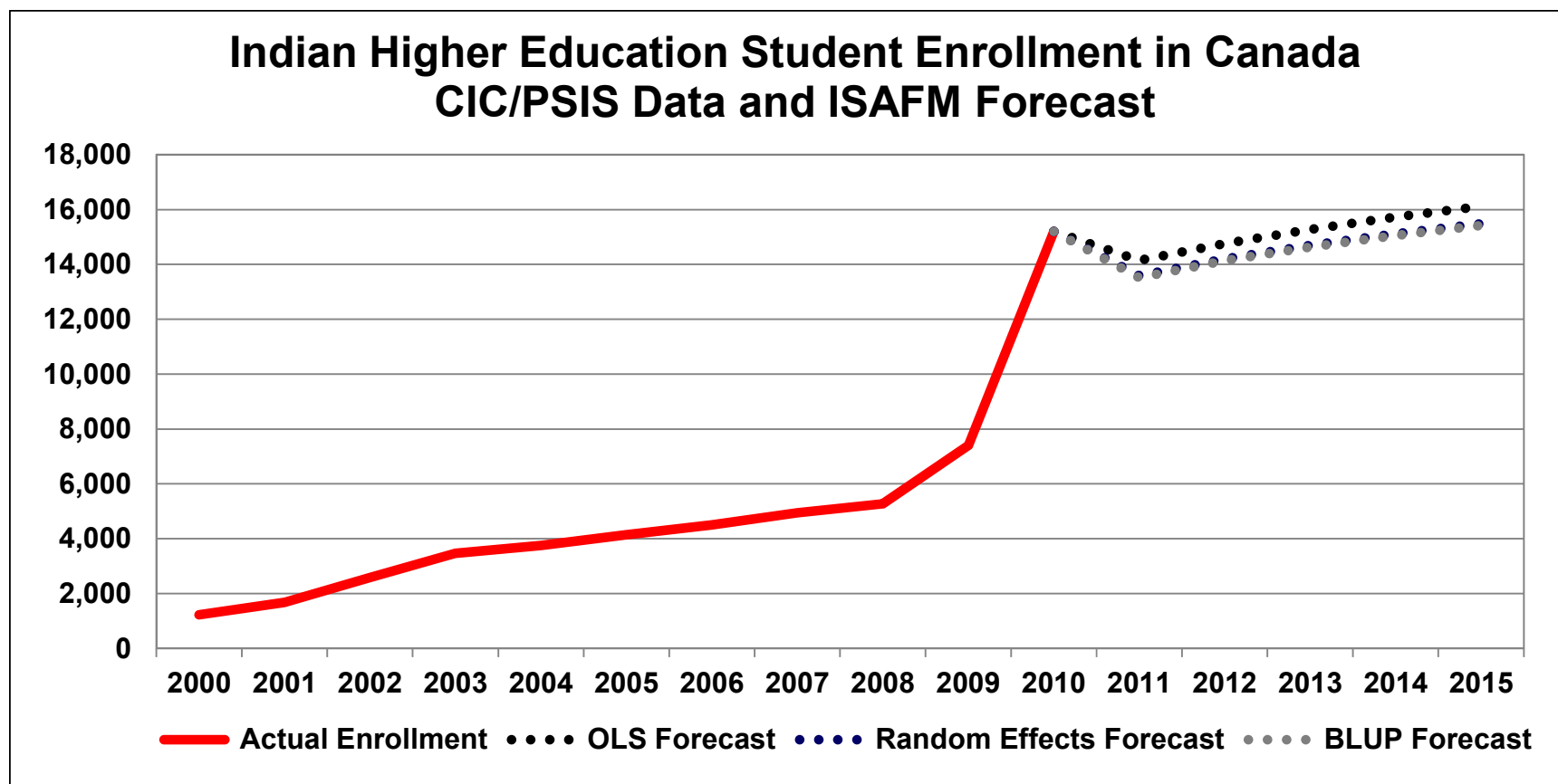
Strong growth is a distinct possibility

Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

INTERNATIONAL STUDENT FLOWS INTO CANADA

Indian Higher Education Student Enrollment: ISAFM Forecast

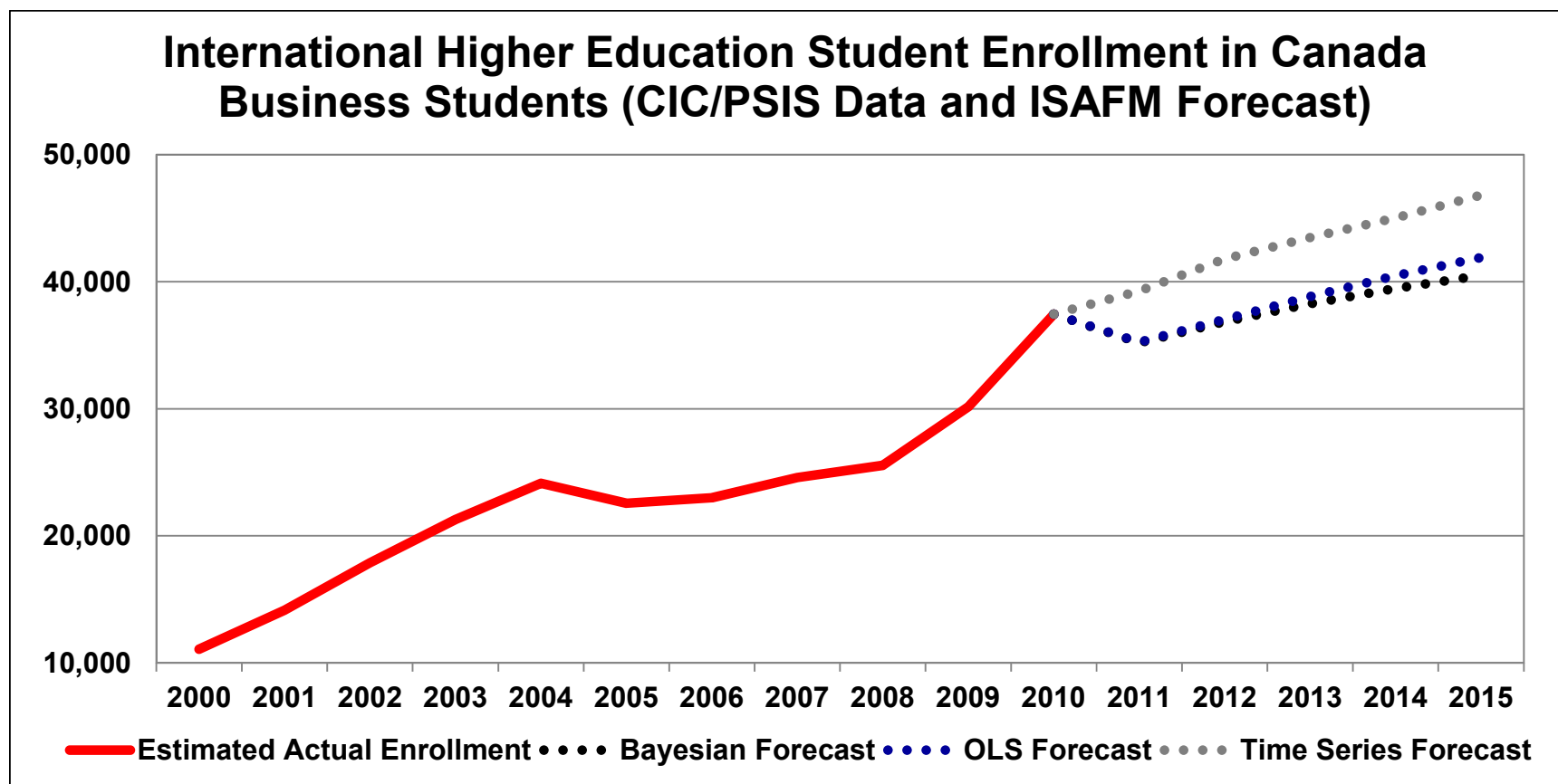


Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

INTERNATIONAL STUDENT FLOWS INTO CANADA

Higher Education Student Enrollment – Business: ISAFM Forecast

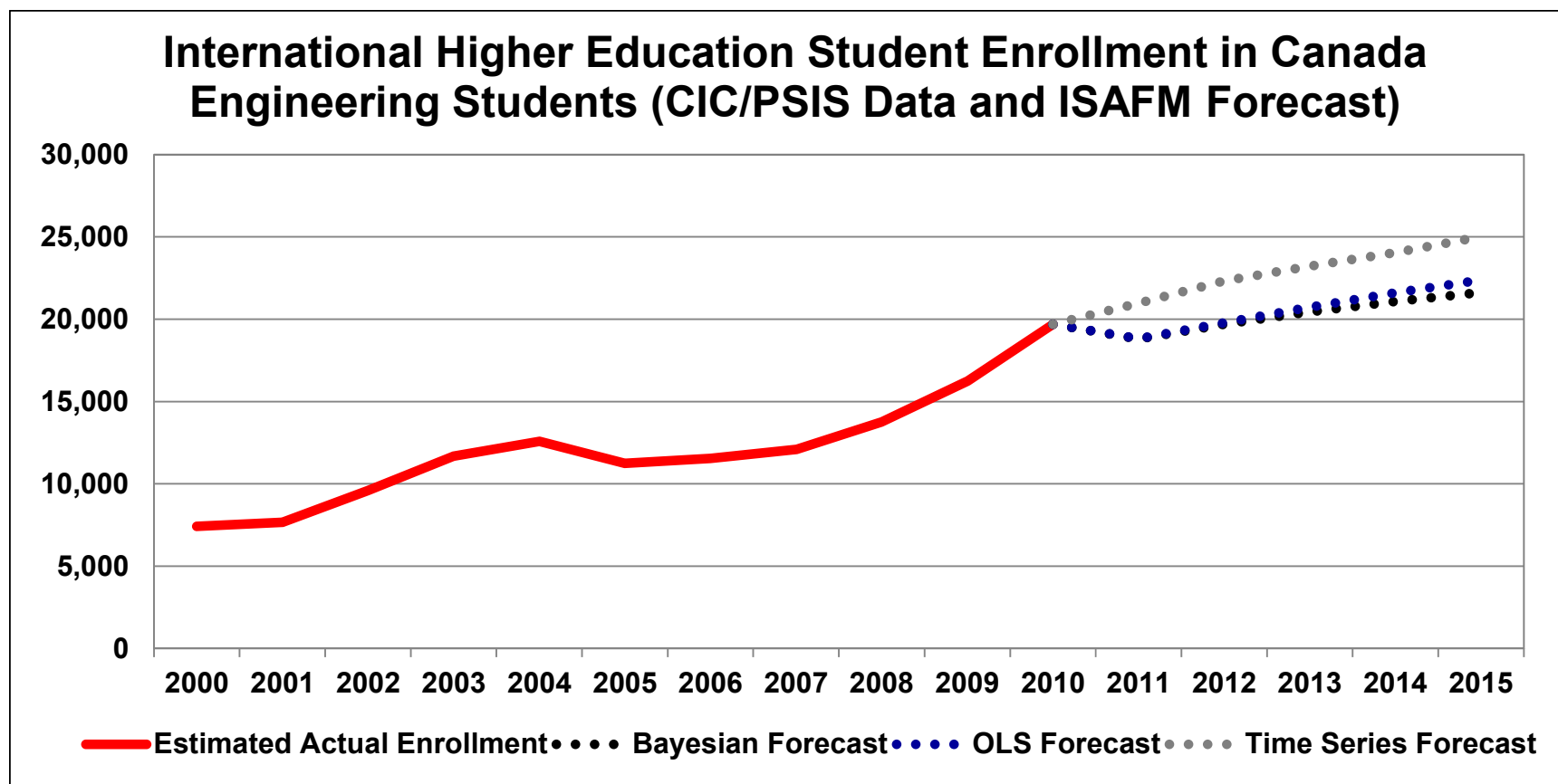


Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

INTERNATIONAL STUDENT FLOWS INTO CANADA

Higher Education Student Enrollment – Engineering: ISAFM Forecast



Notes: Actual enrollment data are based on both CIC total enrollments ("University" and "Other Post-Secondary" segments) and PSIS enrollment shares.

Sources: CIC, PSIS, ISAFM.

AGENDA

Housekeeping

International Student Flows Into Canada

Canada's Competitive Position: Tuition Fees

Leveraging International University Rankings

PRISM: Measuring Student Success

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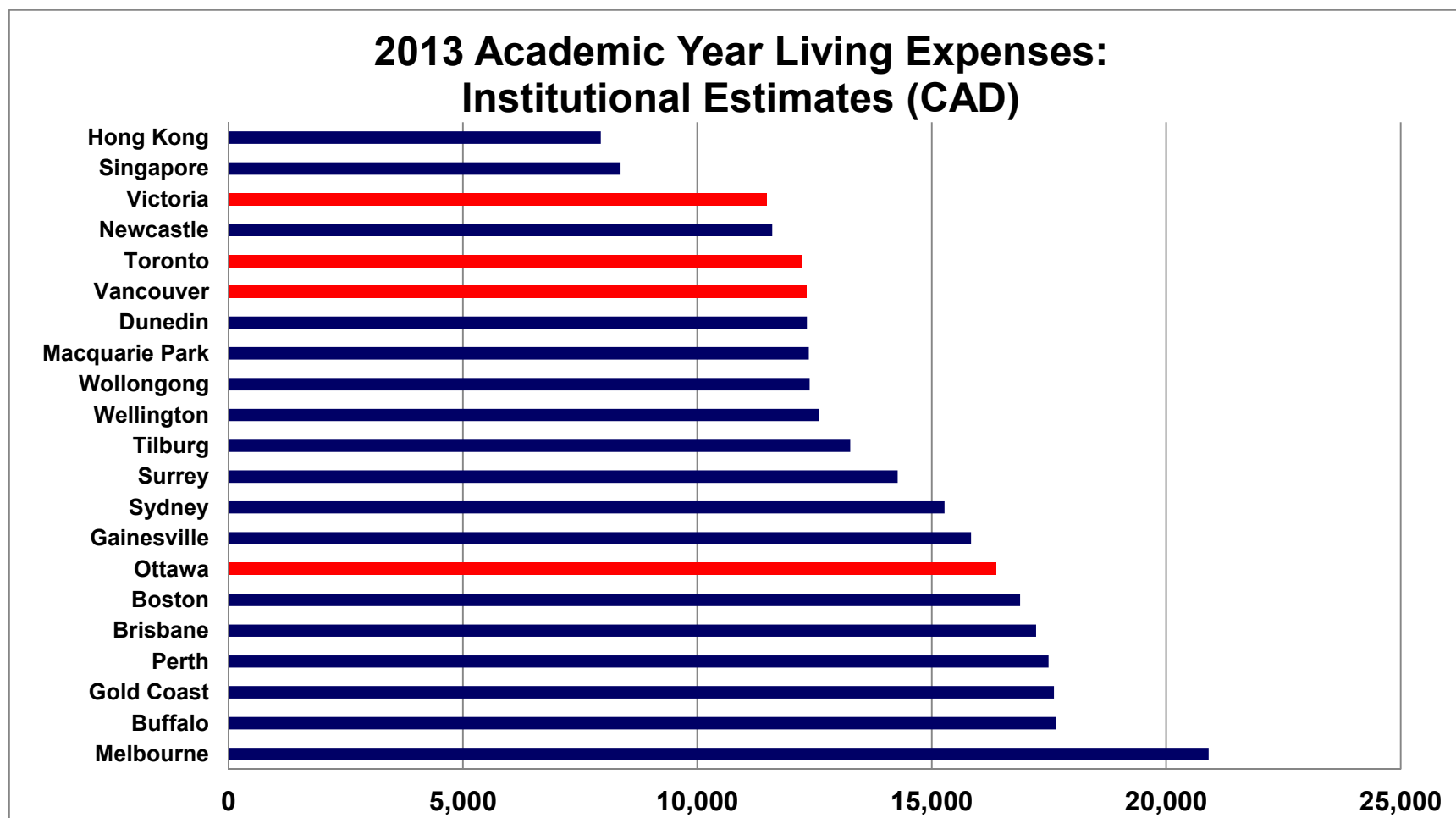
CANADA'S COMPETITIVE POSITION: TUITION FEES

Overview: International Tuition-based Competition Database

- **ICG's International Tuition-based Competition Database (ITBCD) contains over 7,000 individually benchmarked programs.**
- **Data has been compiled for tuition fees, additional fees, and cost of living for all 7,000 programs.**
- **A core set of institutions on four continents (Asia, Australia, Europe, and North America) are included in the ITBCD.**
- **Currently the ITBCD covers two kinds of higher education institutions:**
 - **Research Universities**
 - **Art and Design Institutions**

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Living Expenses: Institutional Estimates

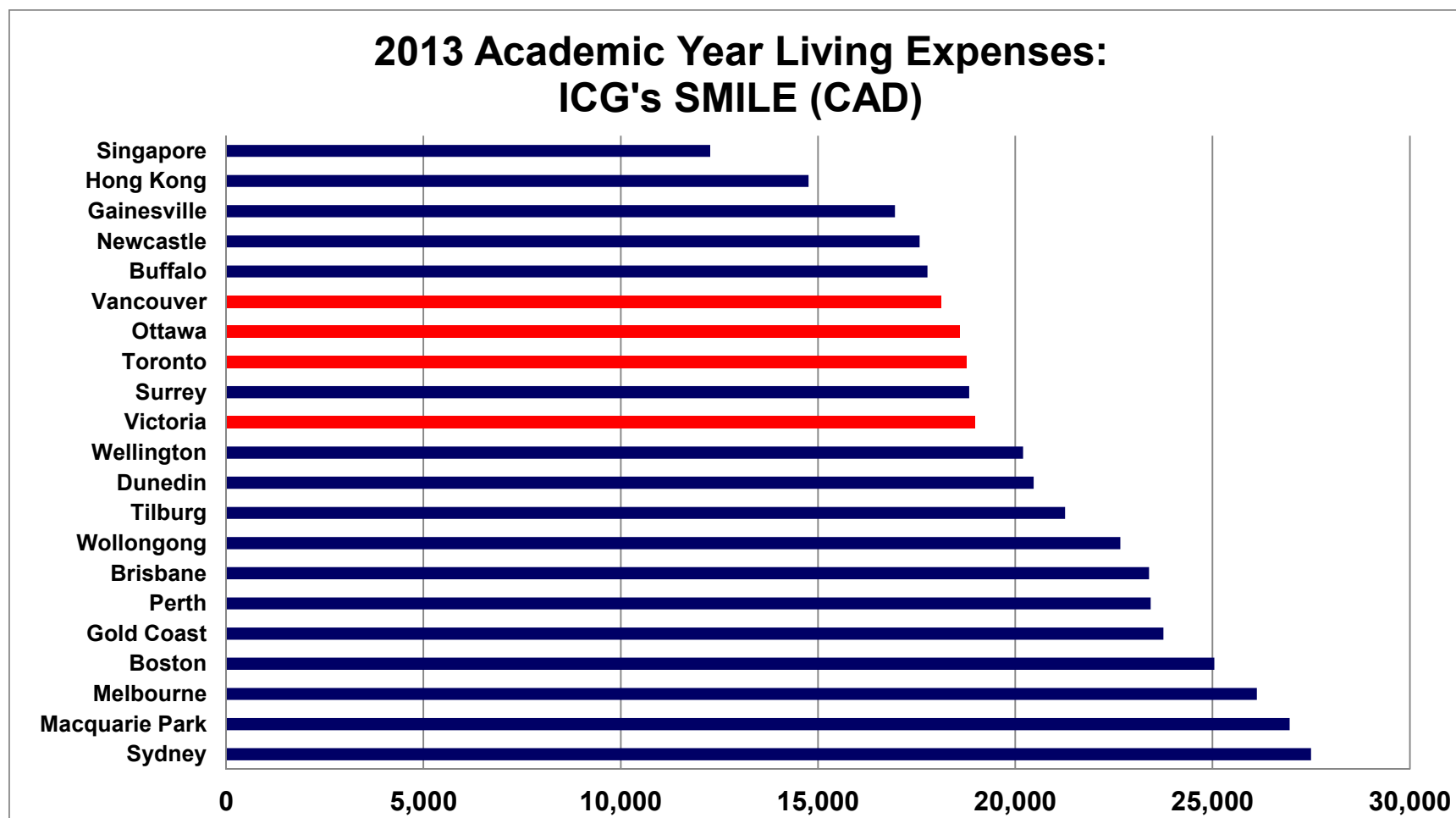


Canadian institutions underestimate cost of living

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Living Expenses: ICG's SMILE



ICG SMILE research shows that cost of living is increasing in Canada

Source: ICG ITBCD.

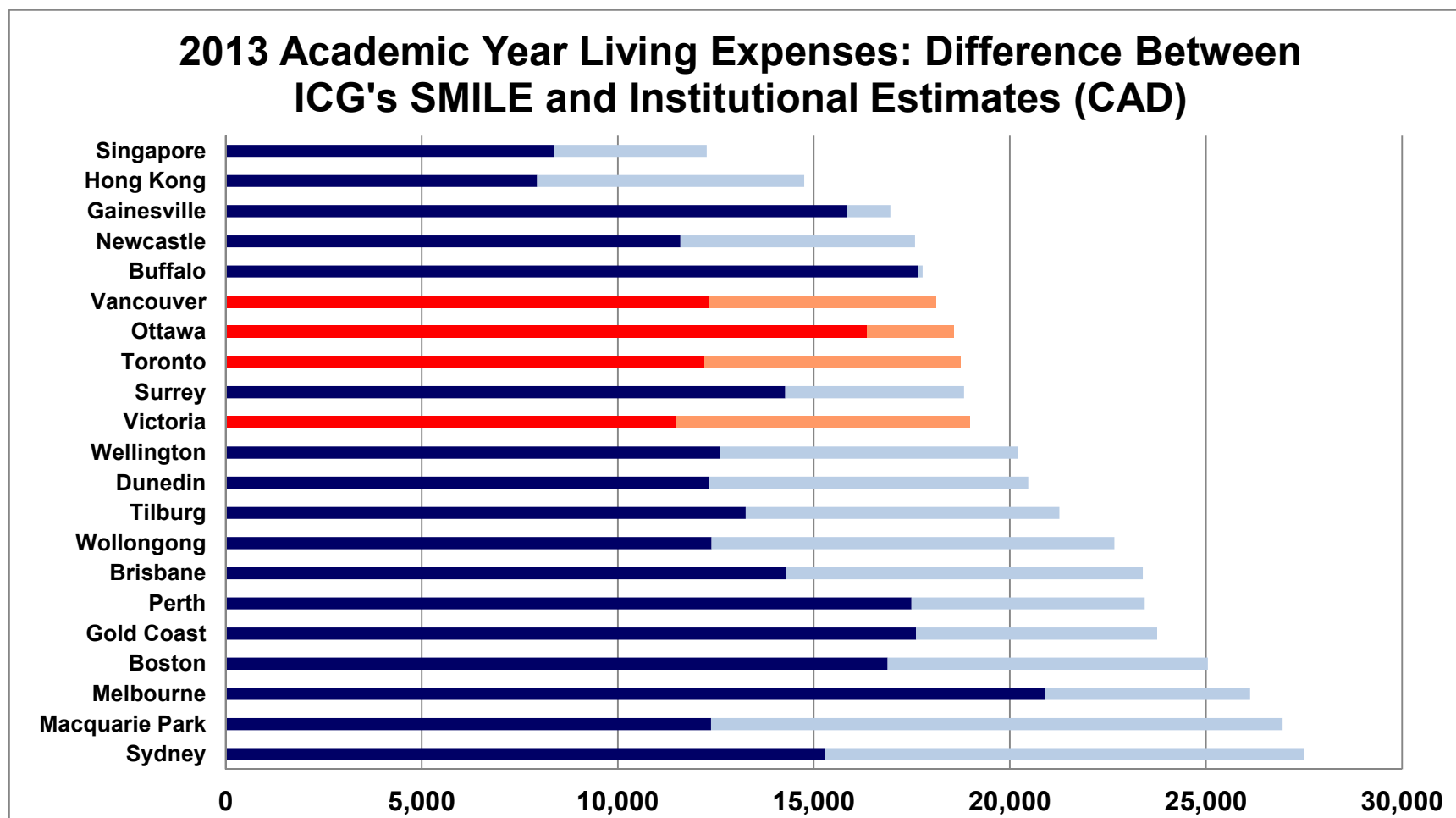
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CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Living Expenses: SMILE vs. Institutional Estimates



20 percent to 40 percent underestimation of cost of living

Source: ICG ITBCD.

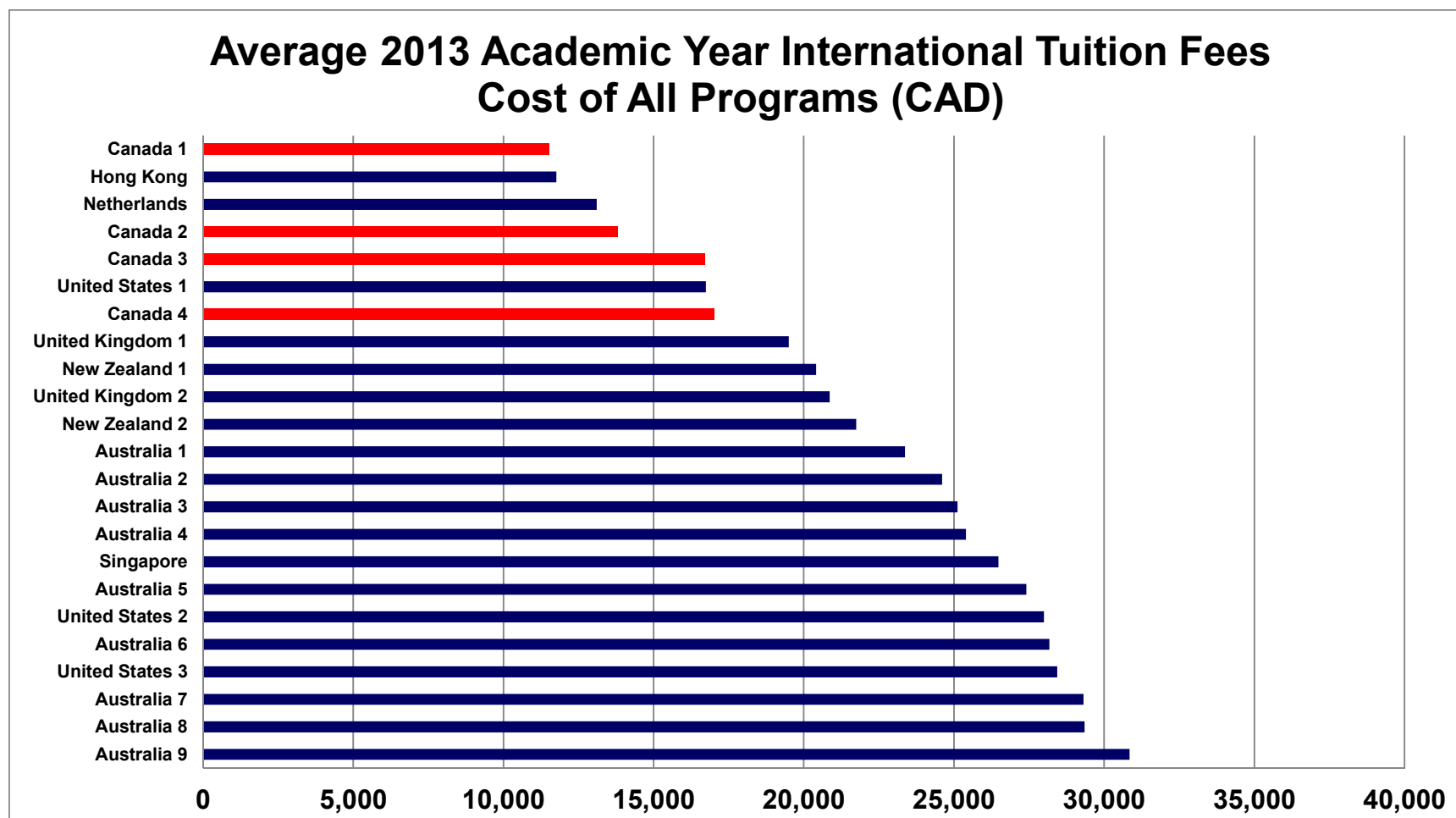
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CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Cost: All Programs at Research Universities

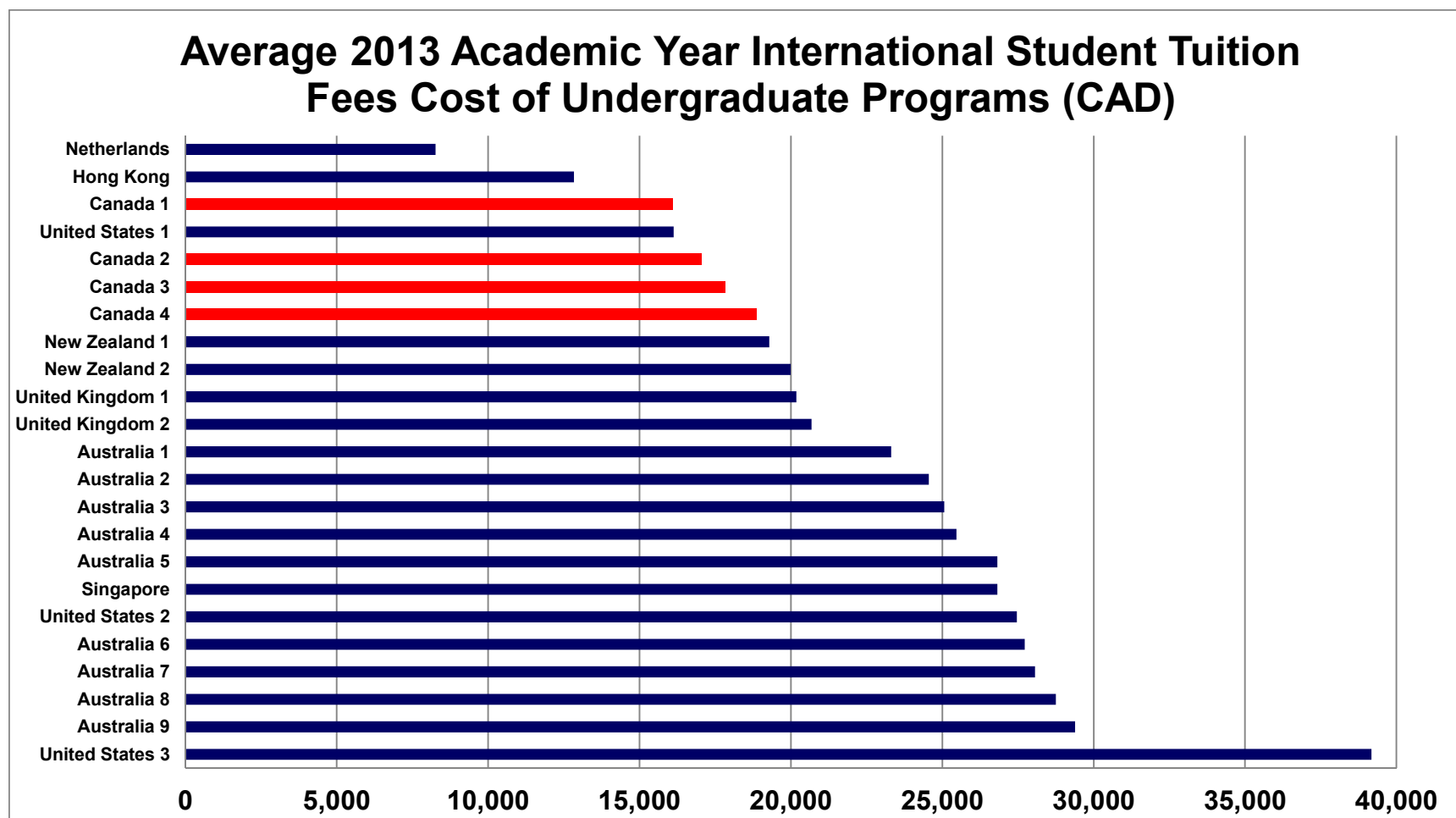


Canadian universities are among the lowest priced institutions globally

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Cost: UG Programs at Research Universities



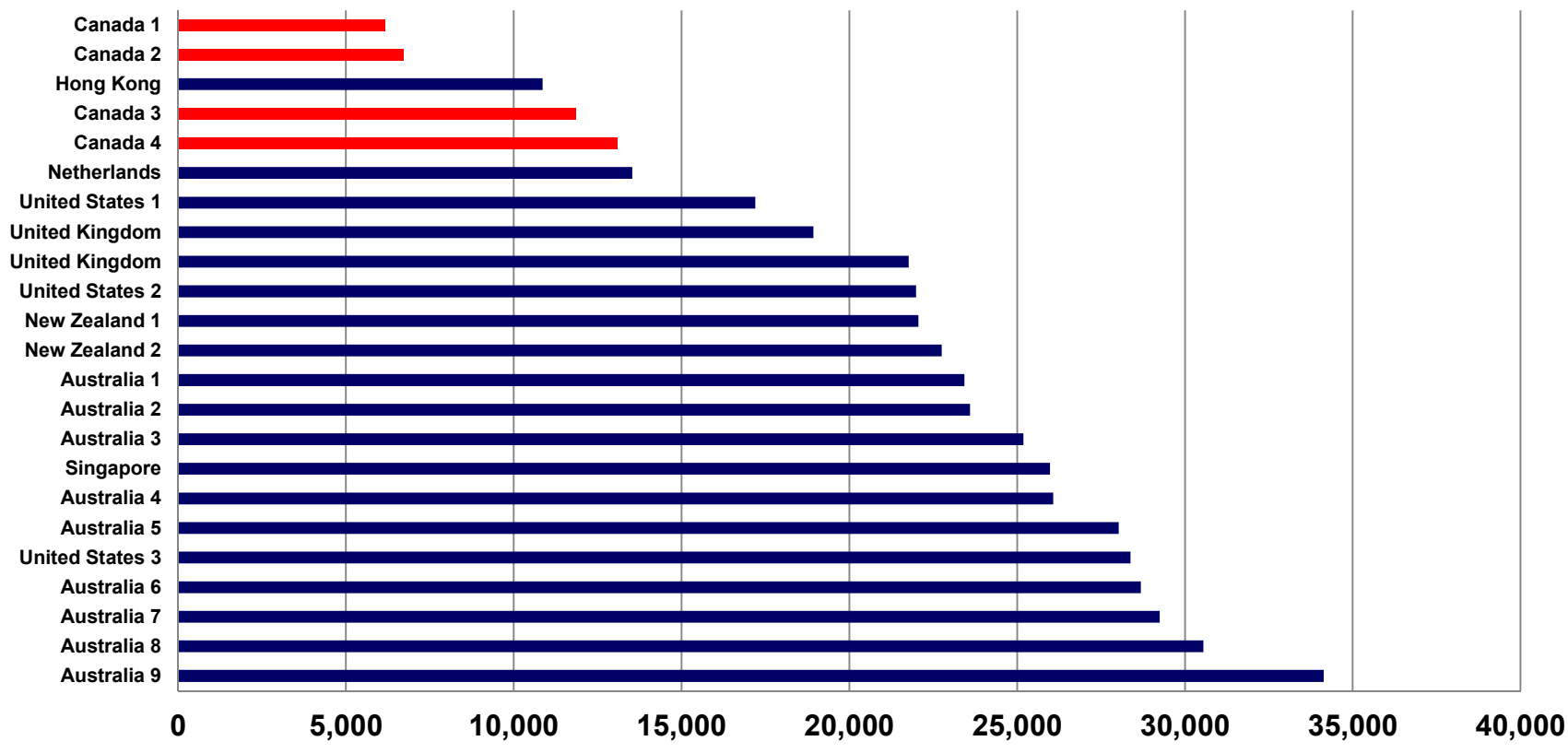
Similar low cost patterns for Canadian institutions at the undergraduate level

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Cost: Graduate Programs at Research Universities

Average 2013 Academic Year International Student Tuition Fees Cost of Graduate Programs (CAD)

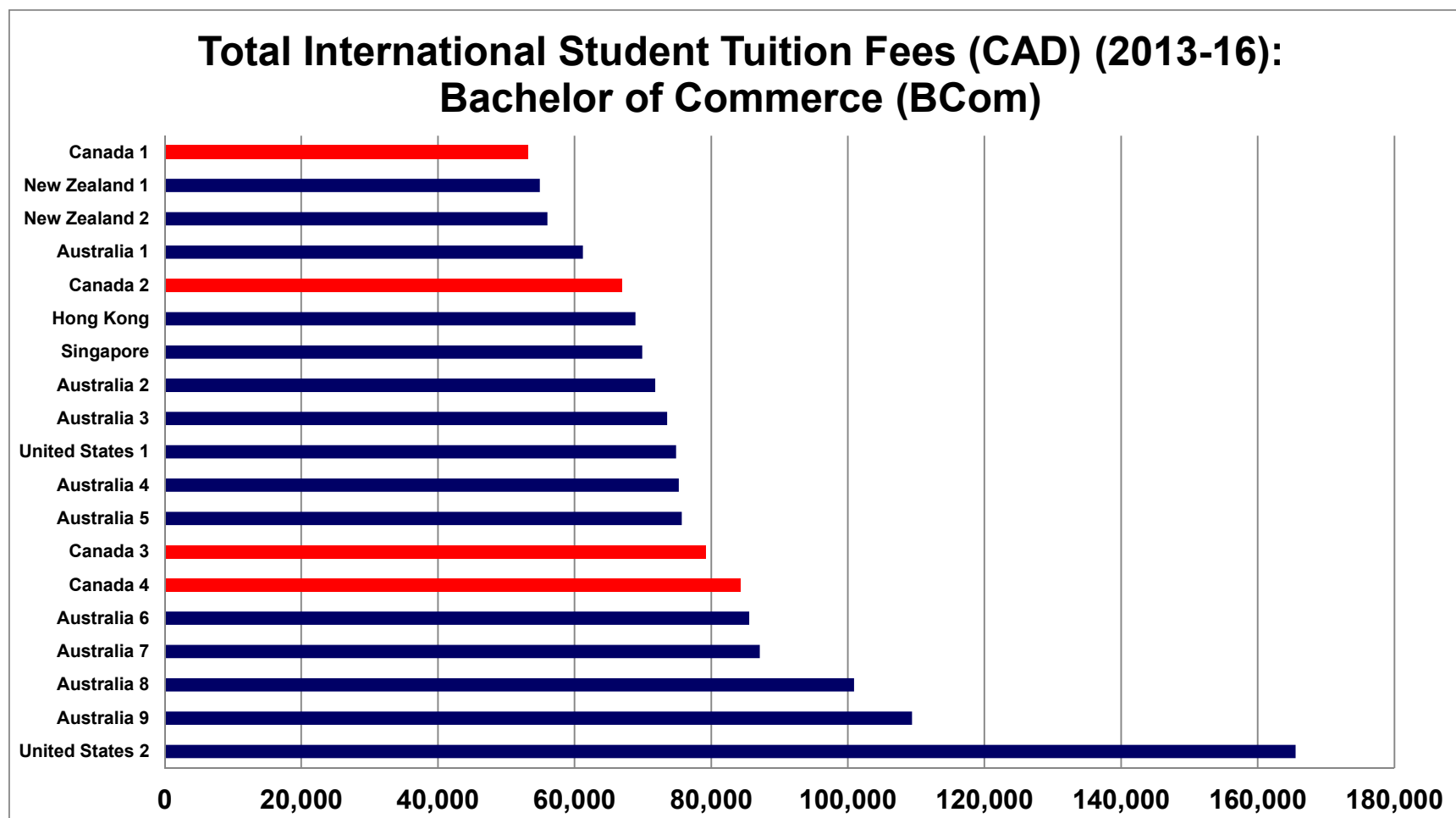


Canadian master's degrees heavily underpriced

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013-16 Total Tuition Fees Cost: Bachelor of Commerce Programs

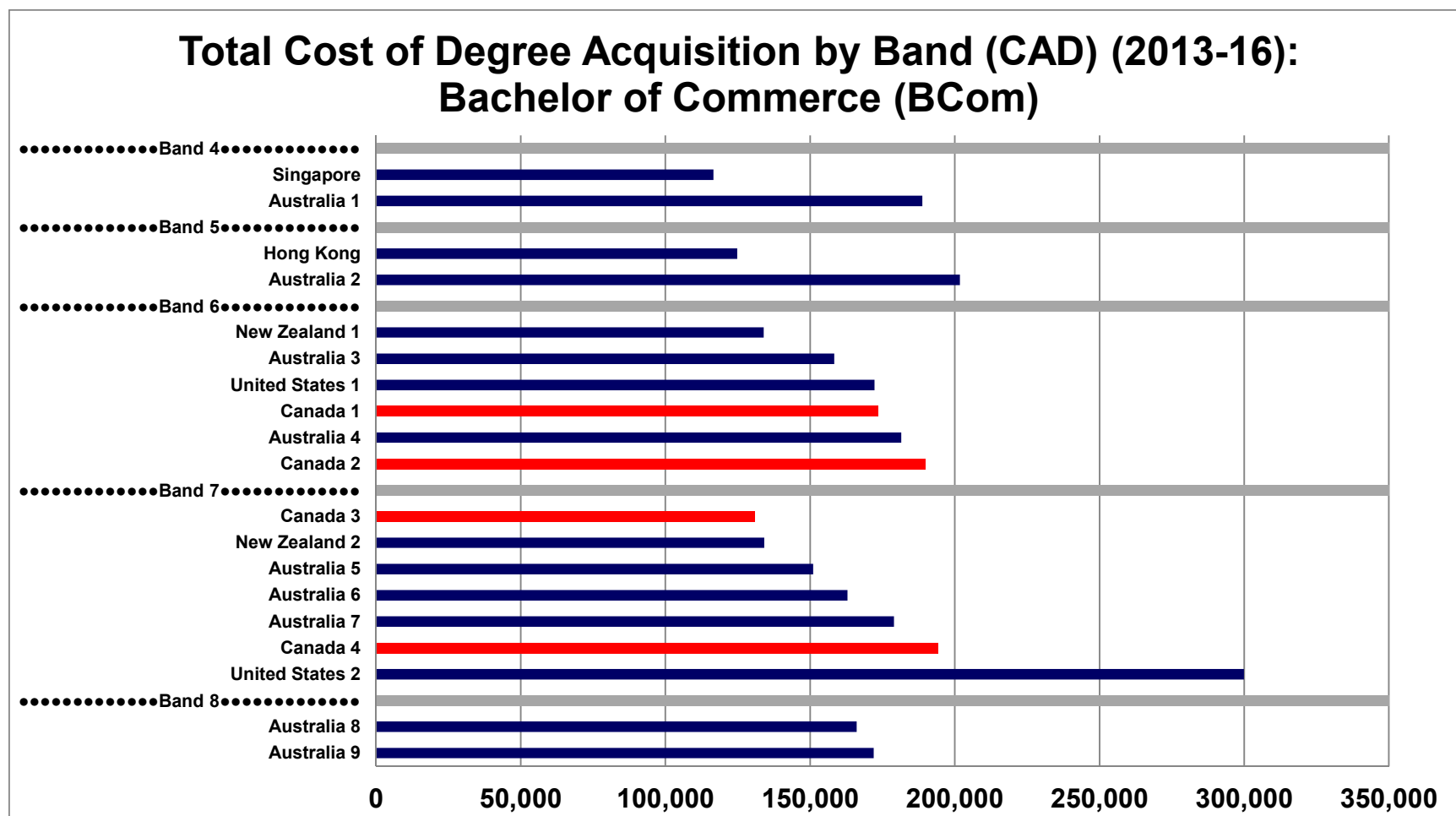


At a program level significant variations at Canadian institutions

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013-16 TCODA by Band: Bachelor of Commerce Programs



Price elasticity is a potent factor for BCom programs

Source: ICG ITBCD.

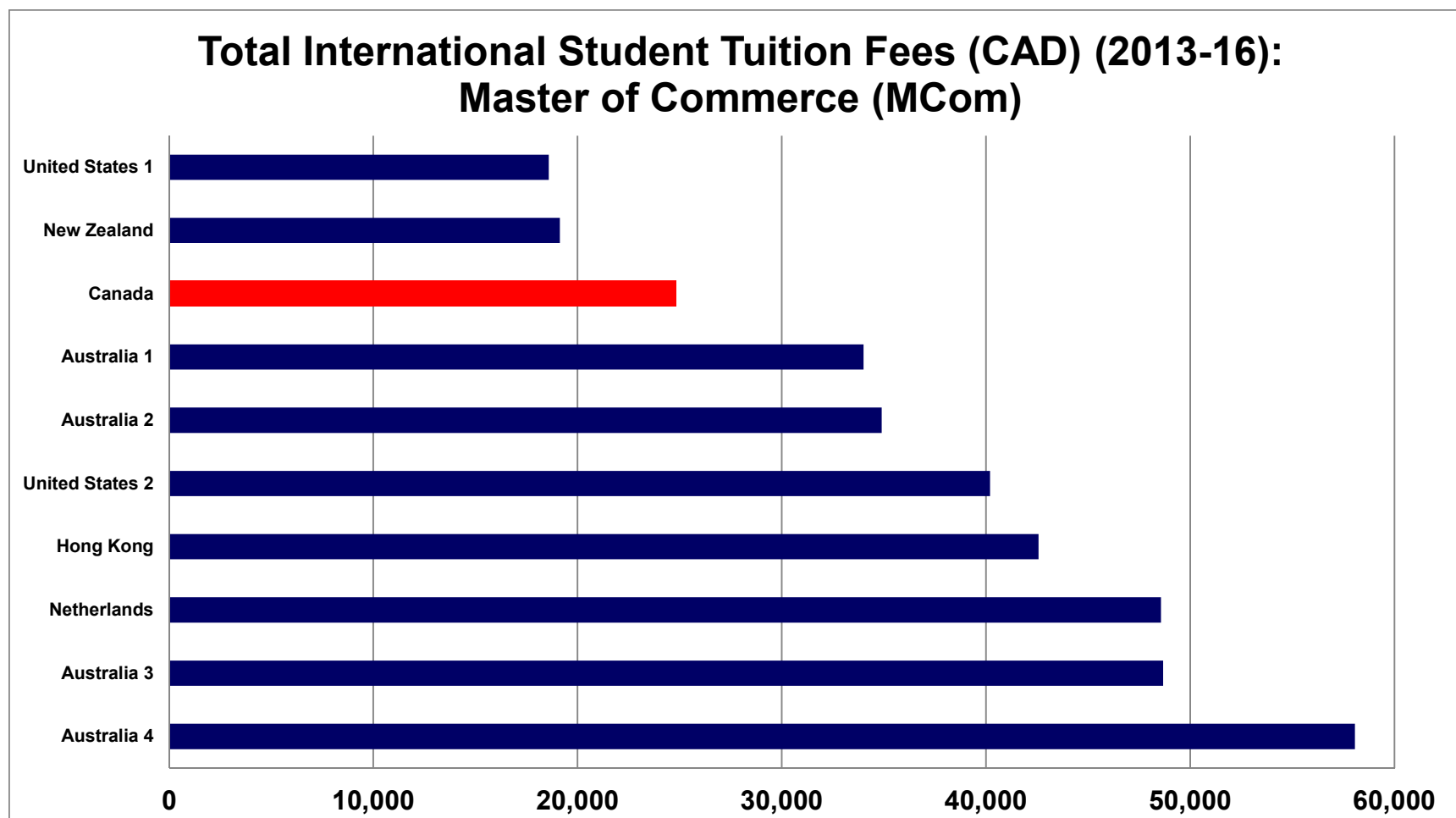
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CANADA'S COMPETITIVE POSITION: TUITION FEES

2013-16 Total Tuition Fees Cost: Master of Commerce Programs

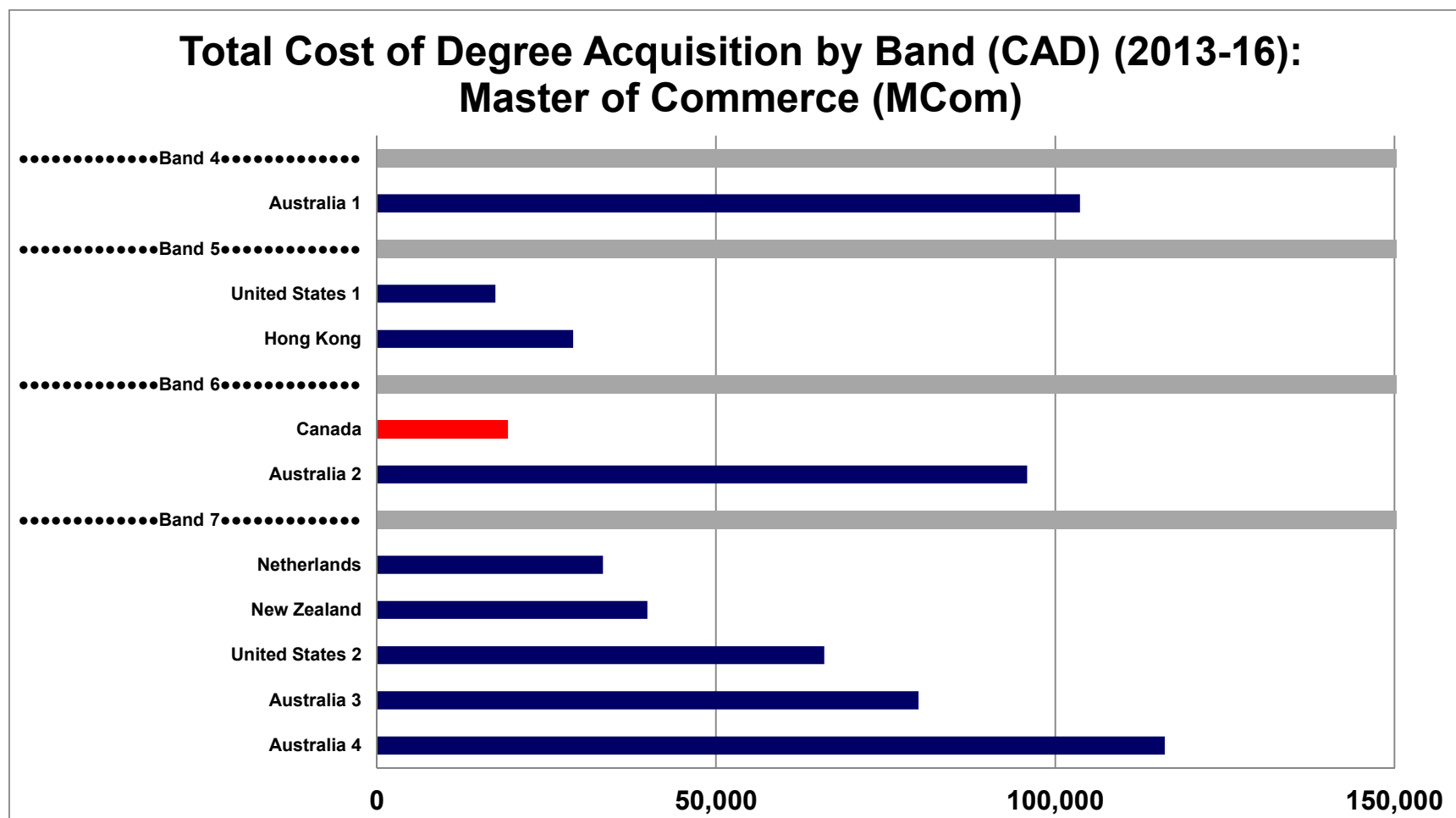


Once again Canada at the lower end of the fee scale

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013-16 TCODA by Band: Master of Commerce Programs



Strong contrast in price points within market bands

Source: ICG ITBCD.

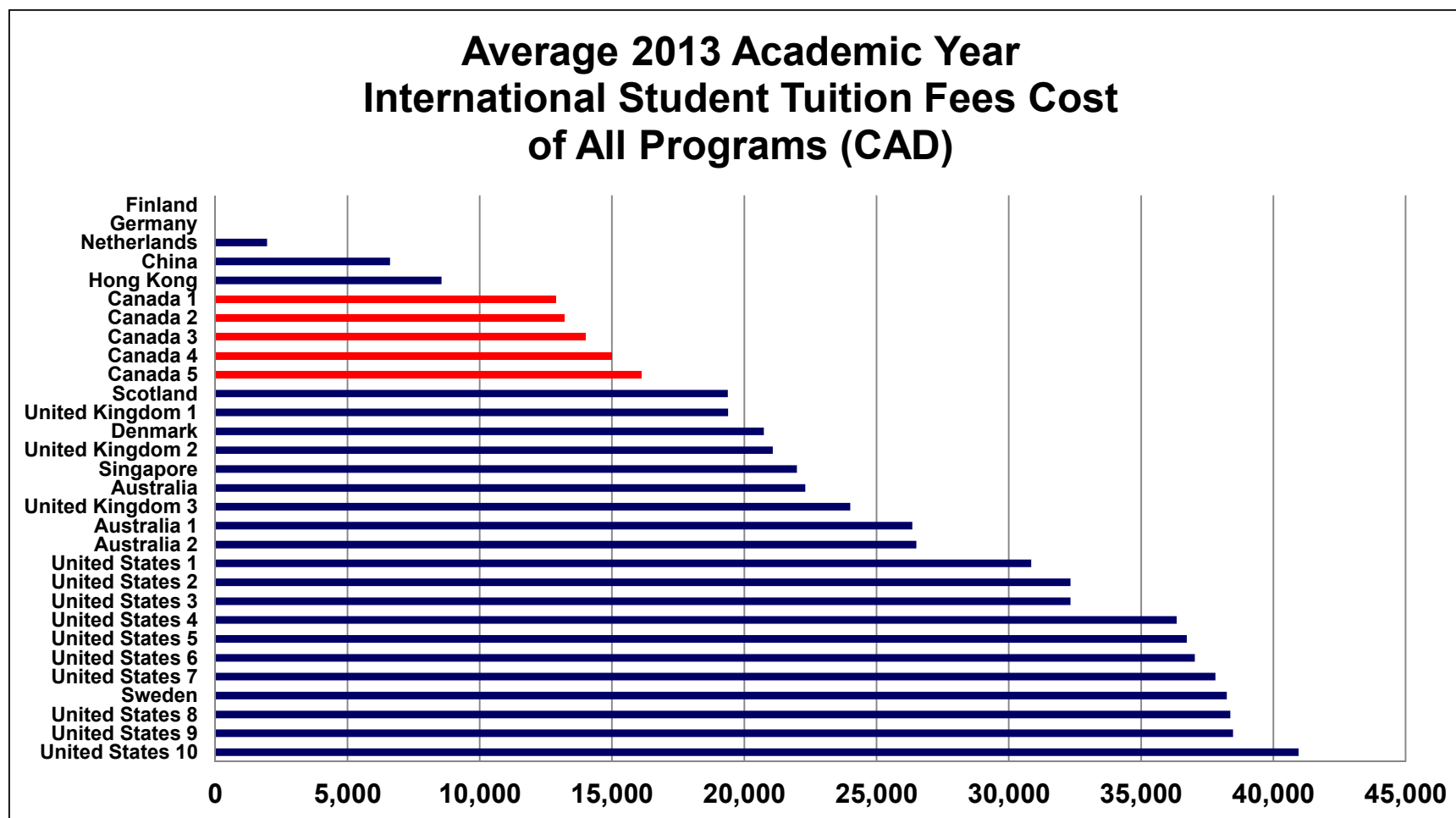
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CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Cost: All Programs at Art and Design Institutions



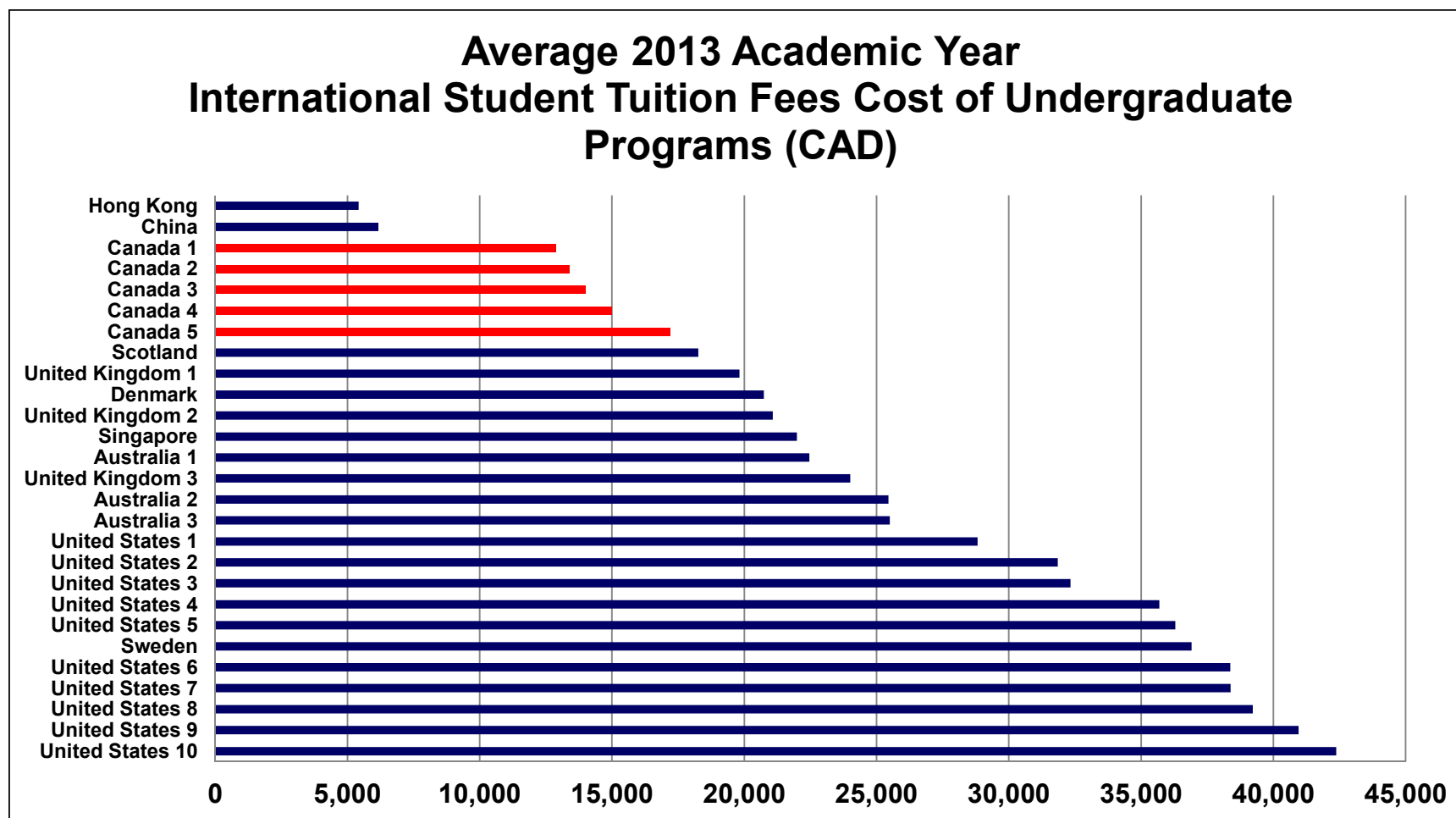
Canadian art and design institutions near the bottom of global price scale

Note: Finland and Germany institutions do not charge tuition fees for these programs.

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Cost: UG Programs at Art and Design Institutions



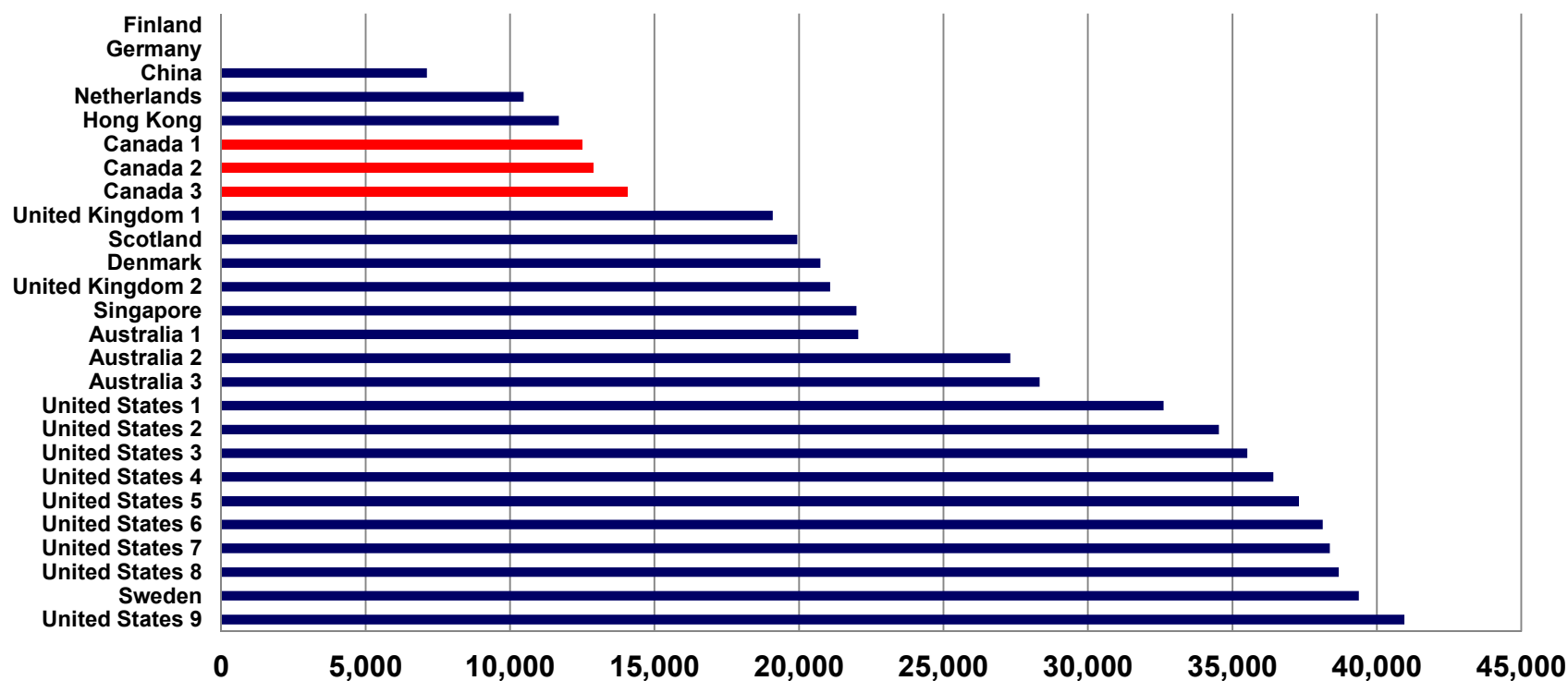
Canadian institutions offer value at the undergraduate level

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Cost: Graduate Programs at Art and Design Institutions

Average 2013 Academic Year International Student Tuition Fees Cost of Graduate Programs (CAD)



High tuition fees are common at the master's level for art and design

Note: Finnish and German institutions do not charge tuition fees for these programs.

Source: ICG ITBCD.

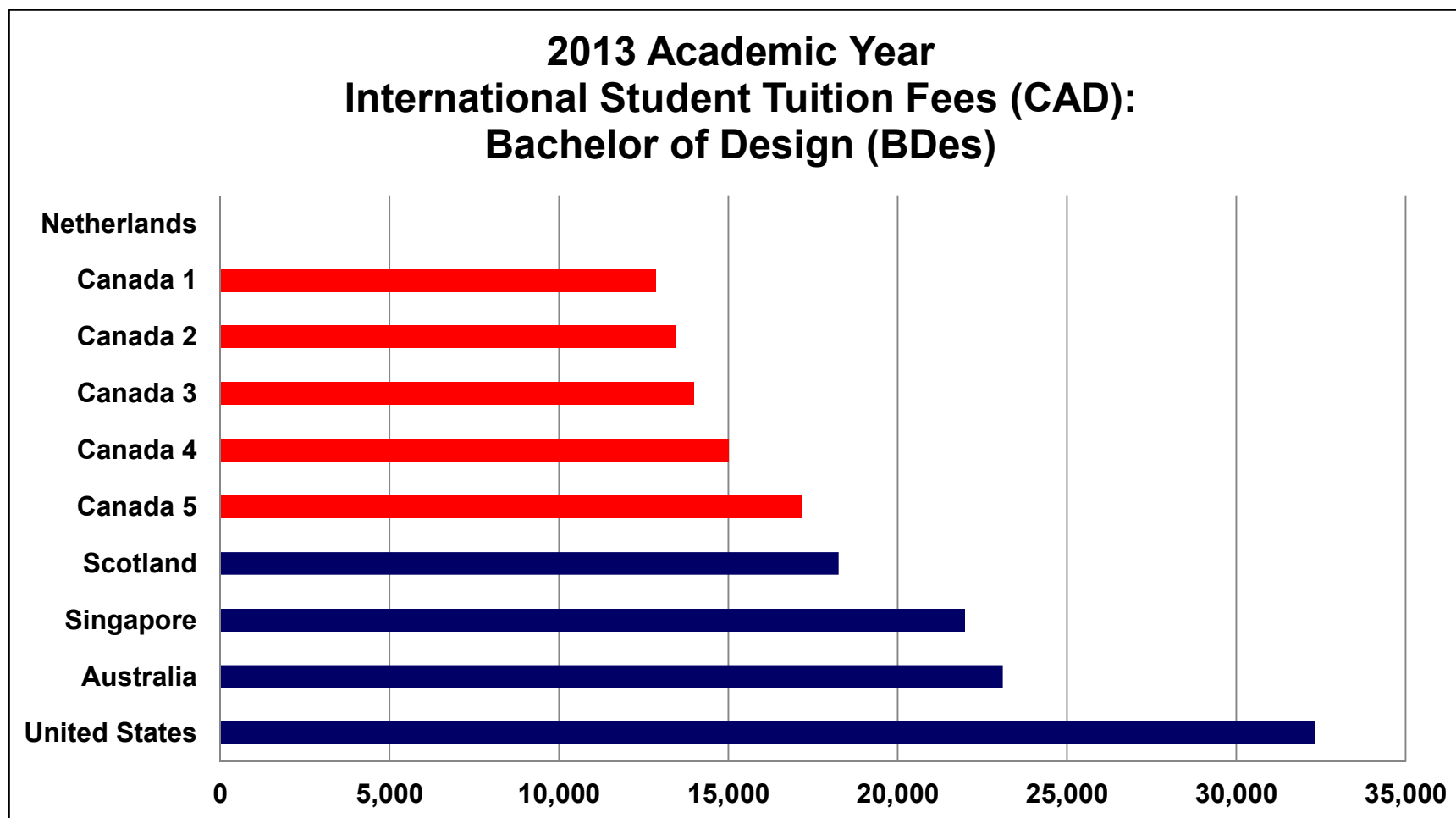
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CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Tuition Fees Cost: Bachelor of Design Programs



Room to increase tuition fees for BDes programs

Note: Netherlands institution does not charge tuition fees for this program.

Source: ICG ITBCD.

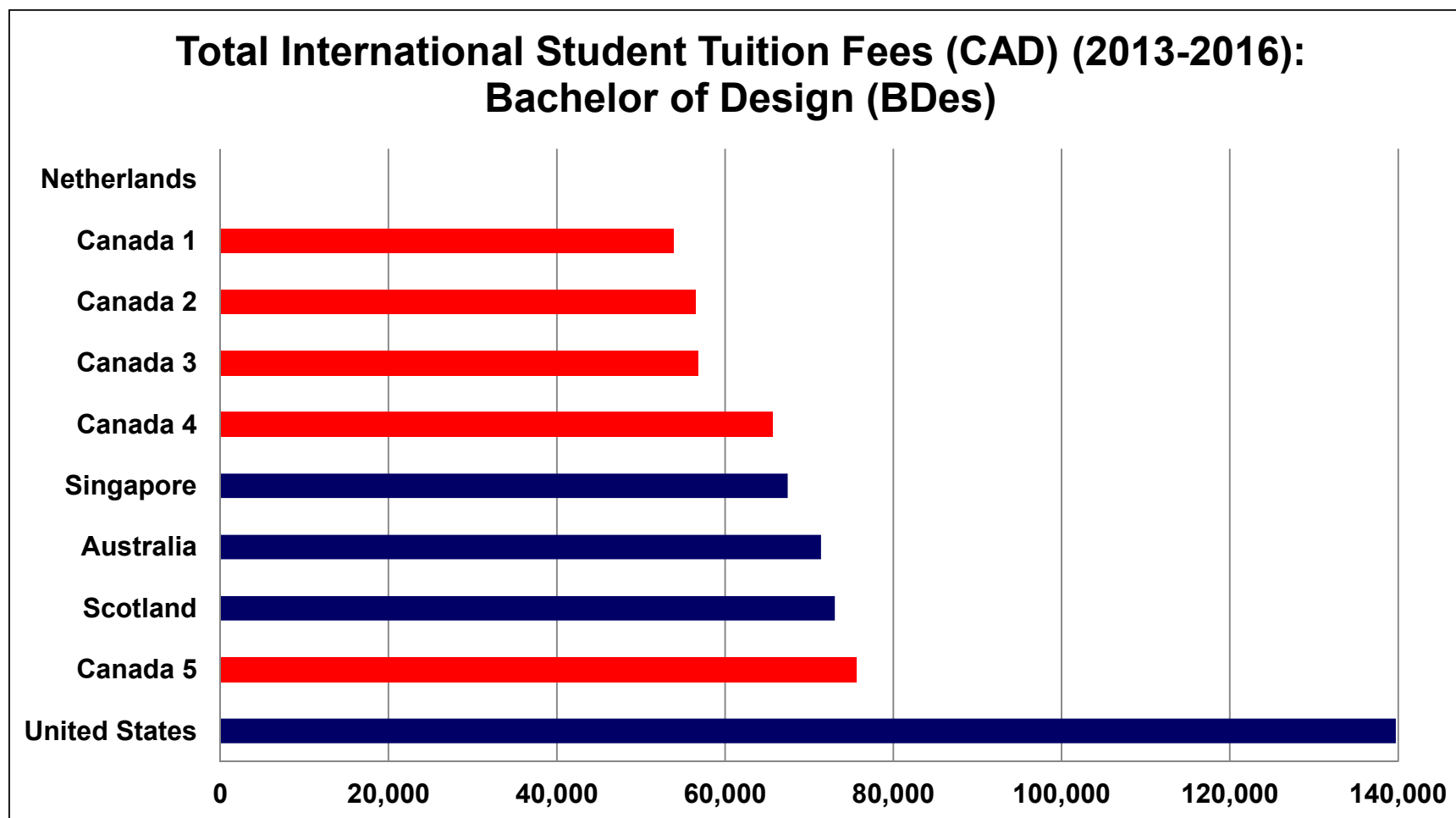
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CANADA'S COMPETITIVE POSITION: TUITION FEES

2013-16 Total Tuition Fees Cost: Bachelor of Design Programs



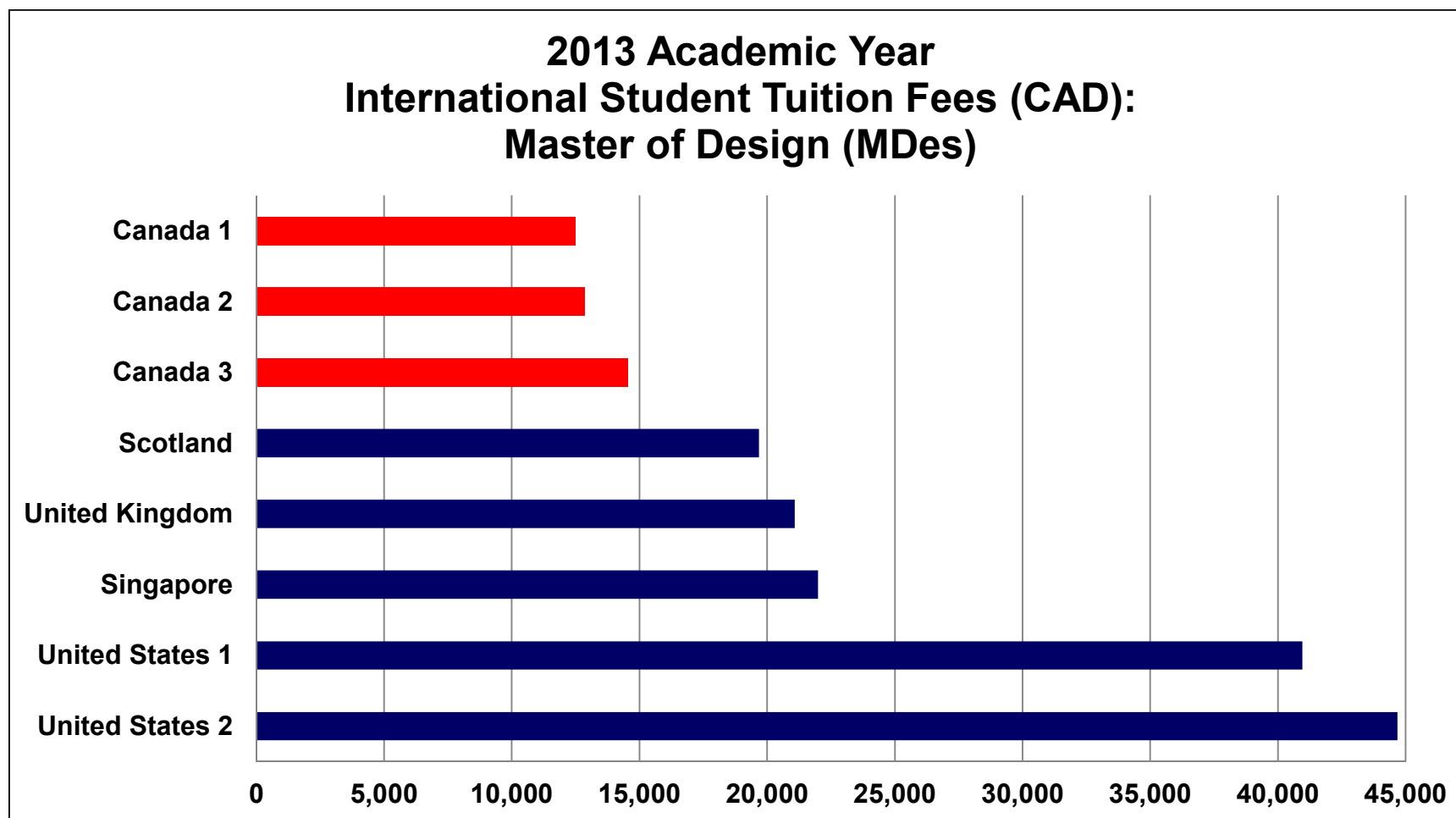
Leading US institution double the cost of most Canadian institutions

Note: Netherlands institution does not charge tuition fees for this program.

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013 Academic Year Tuition Fees Cost: Master of Design Programs

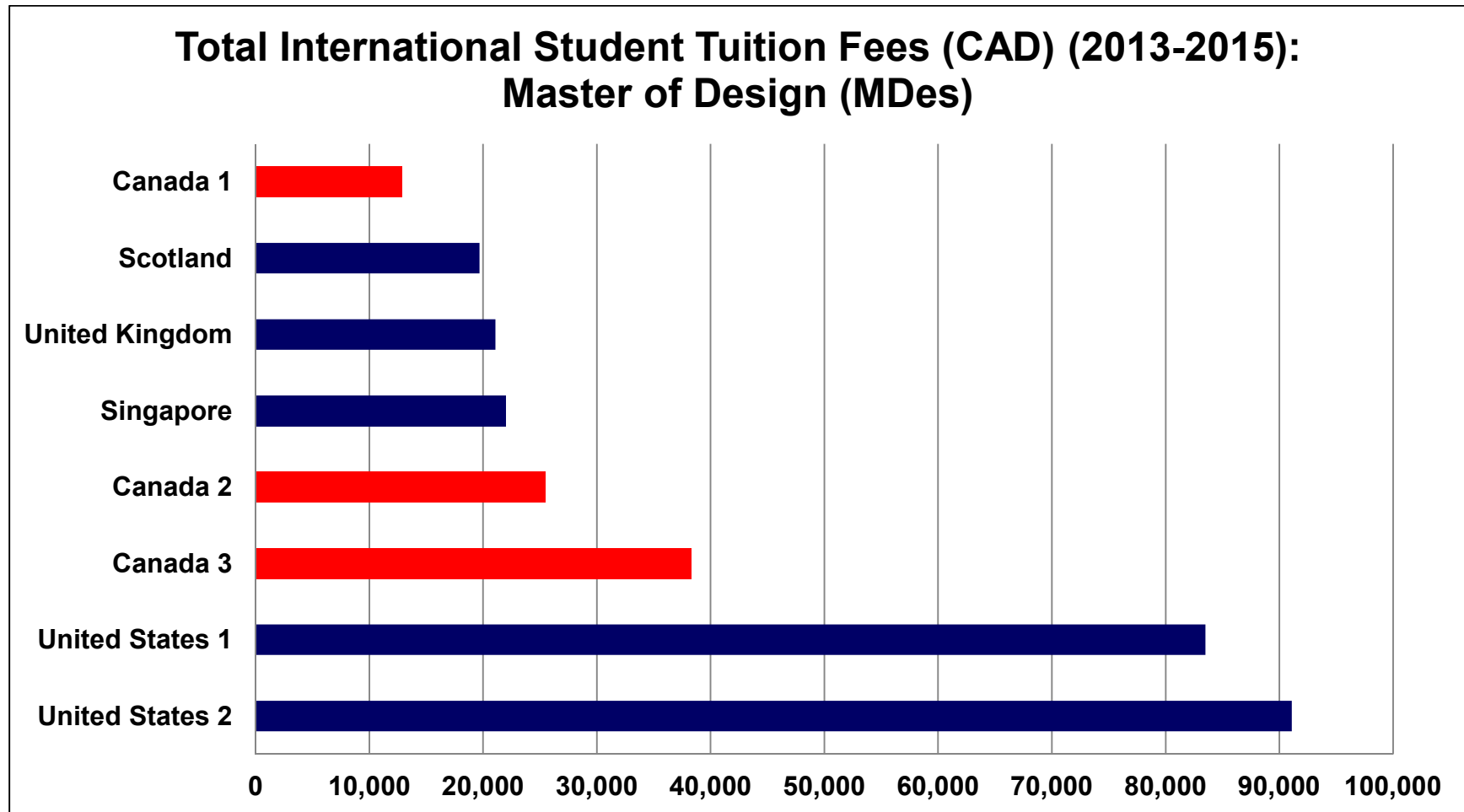


US once again highest tuition cost for art and design

Source: ICG ITBCD.

CANADA'S COMPETITIVE POSITION: TUITION FEES

2013-16 Total Tuition Fees Cost: Master of Design Programs



Canadian institutions appear to be underpriced

Source: ICG ITBCD.

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AGENDA

Housekeeping

International Student Flows Into Canada

Canada's Competitive Position: Tuition Fees

Leveraging International University Rankings

PRISM: Measuring Student Success

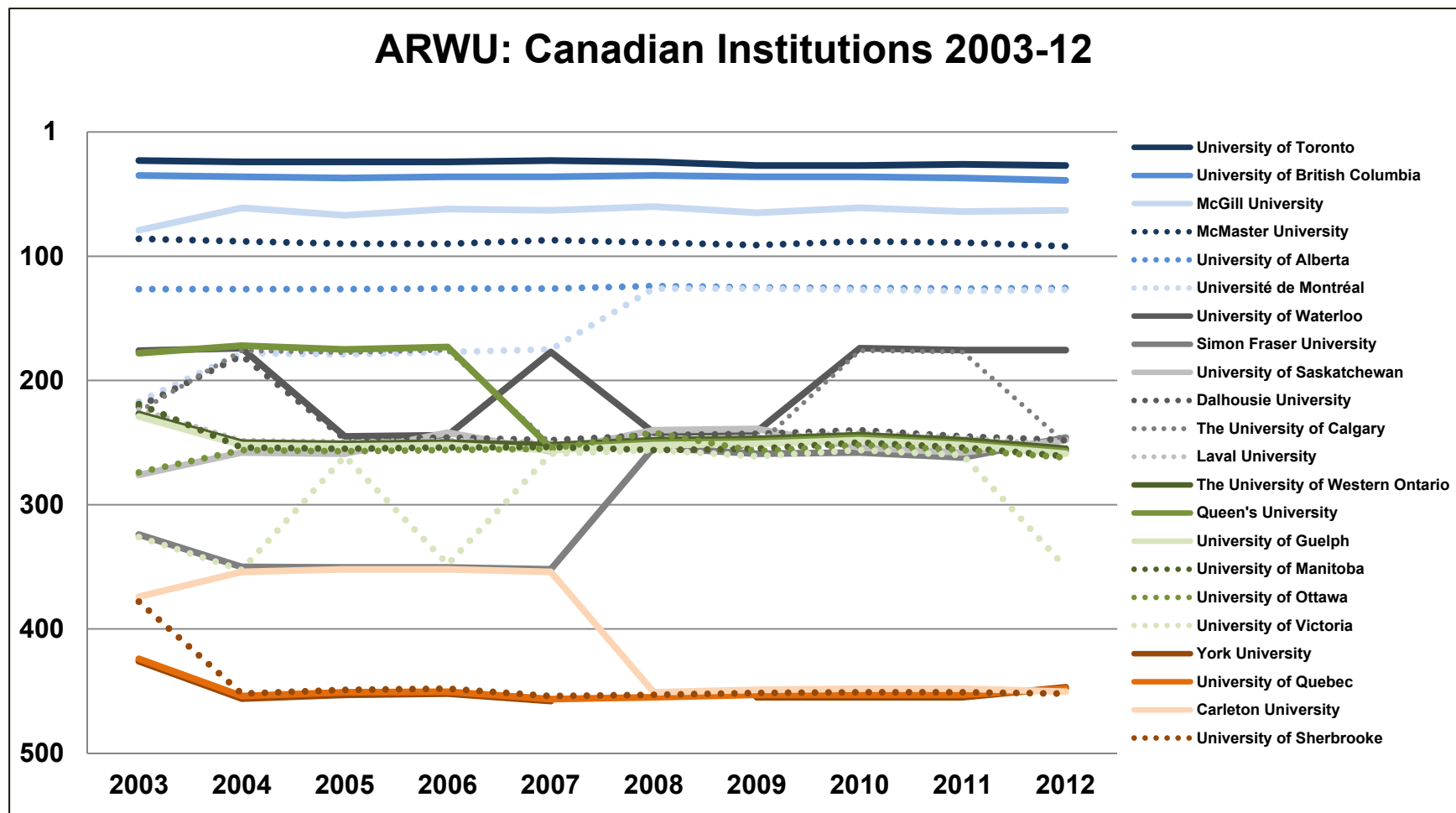
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LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: ARWU



22 Canadian universities ranked in the Top 500 (2012)

Notes: Ranges have been displayed with their mid point value.

Source: ARWU.

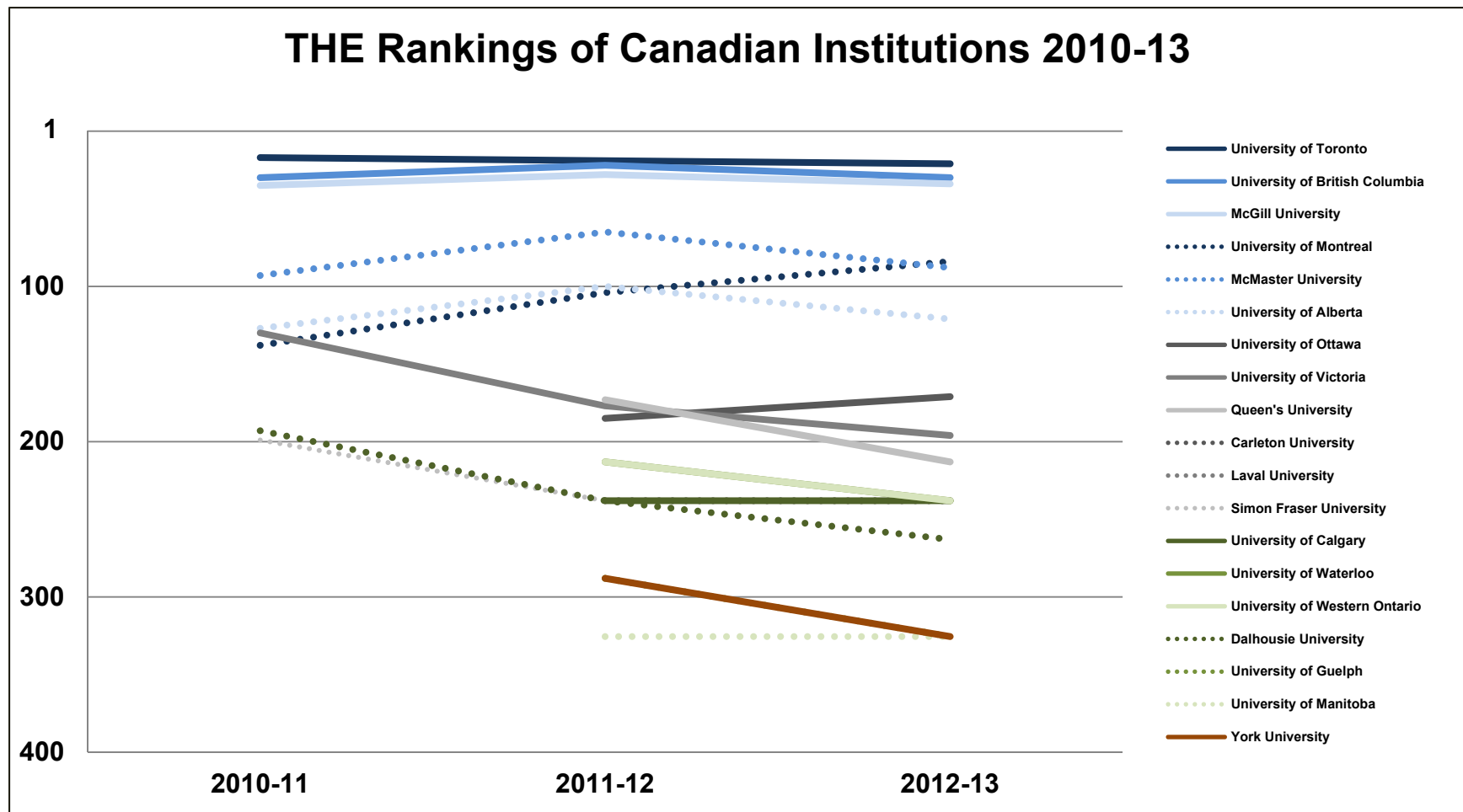
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LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: THE



19 Canadian universities ranked in the Top 400 (2012-13)

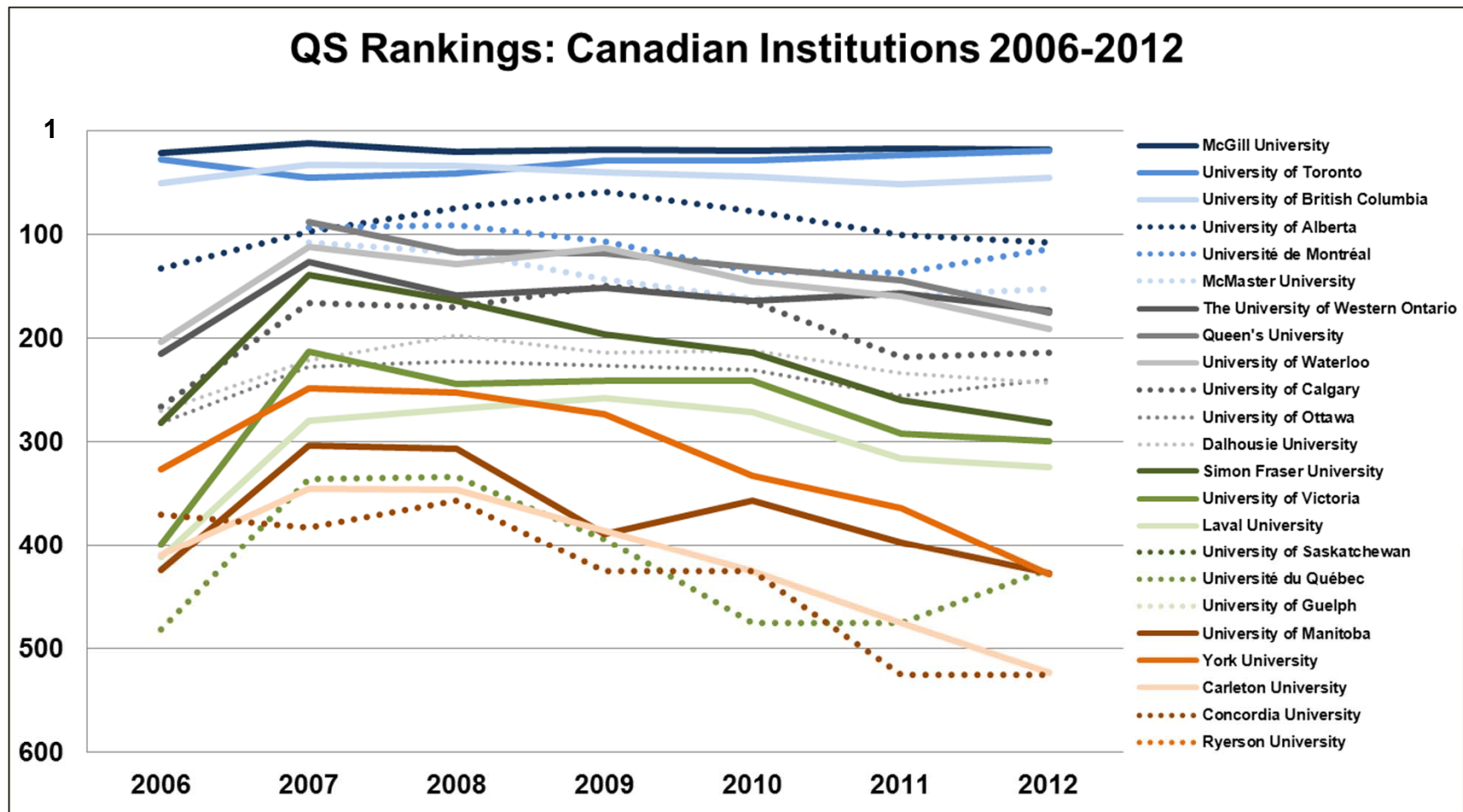
Notes: Ranges have been displayed with their mid point value.

Source: THE.

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LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: QS



23 Canadian universities ranked in the Top 600 (2012)

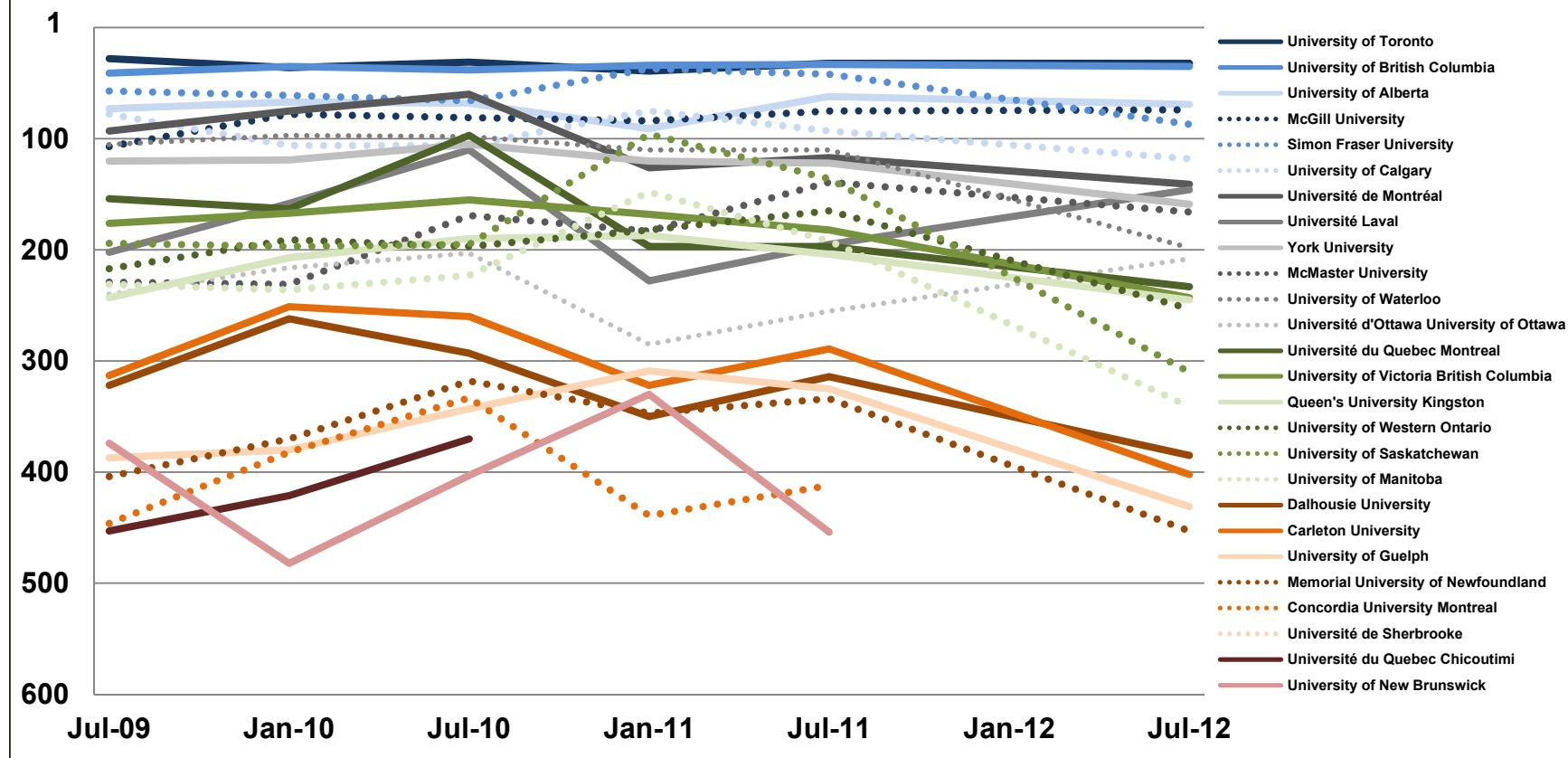
Notes: Ranges have been displayed with their mid point value.

Source: QS.

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: Webometrics

Webometrics Rankings for Canadian Institutions 2009-12



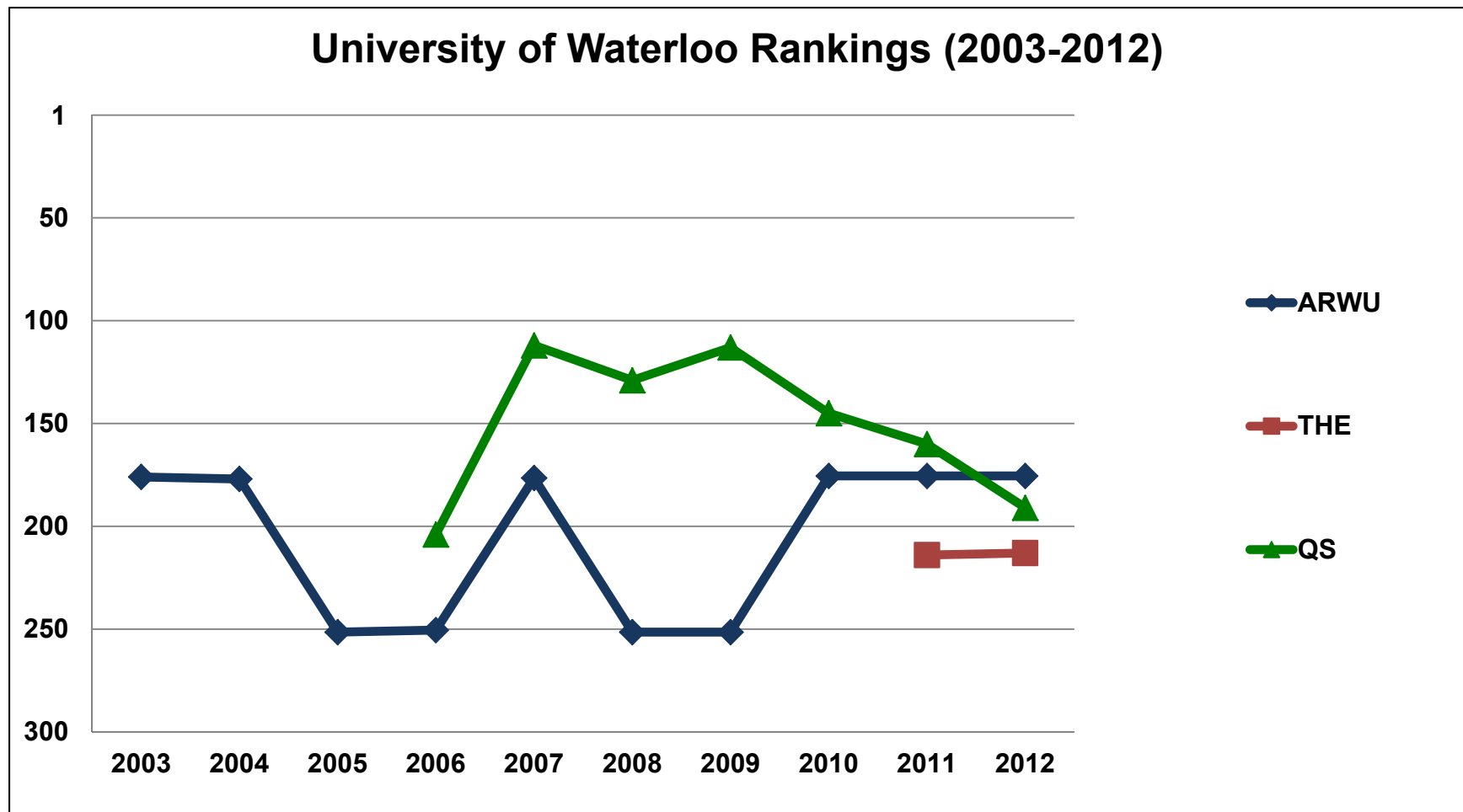
UofT (32nd) and UBC (35th) are Canada's top university web destinations

Notes: Ranges have been displayed with their mid point value.

Source: Webometrics.

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

University of Waterloo Rankings



Large fluctuations across rankings

Notes: Ranges have been displayed with their mid point value.

Sources: ARWU, QS, THE.

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: ARWU Subject Rankings (I)

Natural Sciences		Life Sciences		Medical Sciences	
1	Harvard University	1	Harvard University	1	Harvard University
34	University of Toronto	22	McGill University	25	University of Toronto
51-75	UBC	35	UBC	31	McGill University
101-150	McGill University	47	University of Toronto	46	McMaster University
101-150	McMaster University	76-100	University of Alberta	76-100	University of Alberta
101-150	University of Victoria	101-150	Université Laval	76-100	University of Manitoba
150-200	Simon Fraser University	101-150	University of Guelph	101-150	Université Laval
150-200	University of Alberta	101-150	Université de Montréal	101-150	UBC
151-200	University of Waterloo	151-200	Queens University	151-200	University of Calgary
		151-200	University of Calgary	151-200	Western
		151-200	University of Sask.	151-200	Université de Montréal

Only UofT consistently ranks in the Top 50

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: ARWU Subject Rankings (I)

Social Sciences

1	Harvard University
30	UBC
42	McMaster University
46	University of Toronto
51-75	McGill University
51-75	University of Alberta
76-100	Simon Fraser University
76-100	Western
76-100	Université de Montréal
101-150	Queens University
101-150	University of Calgary
101-150	York University
151-200	Dalhousie University

Engineering

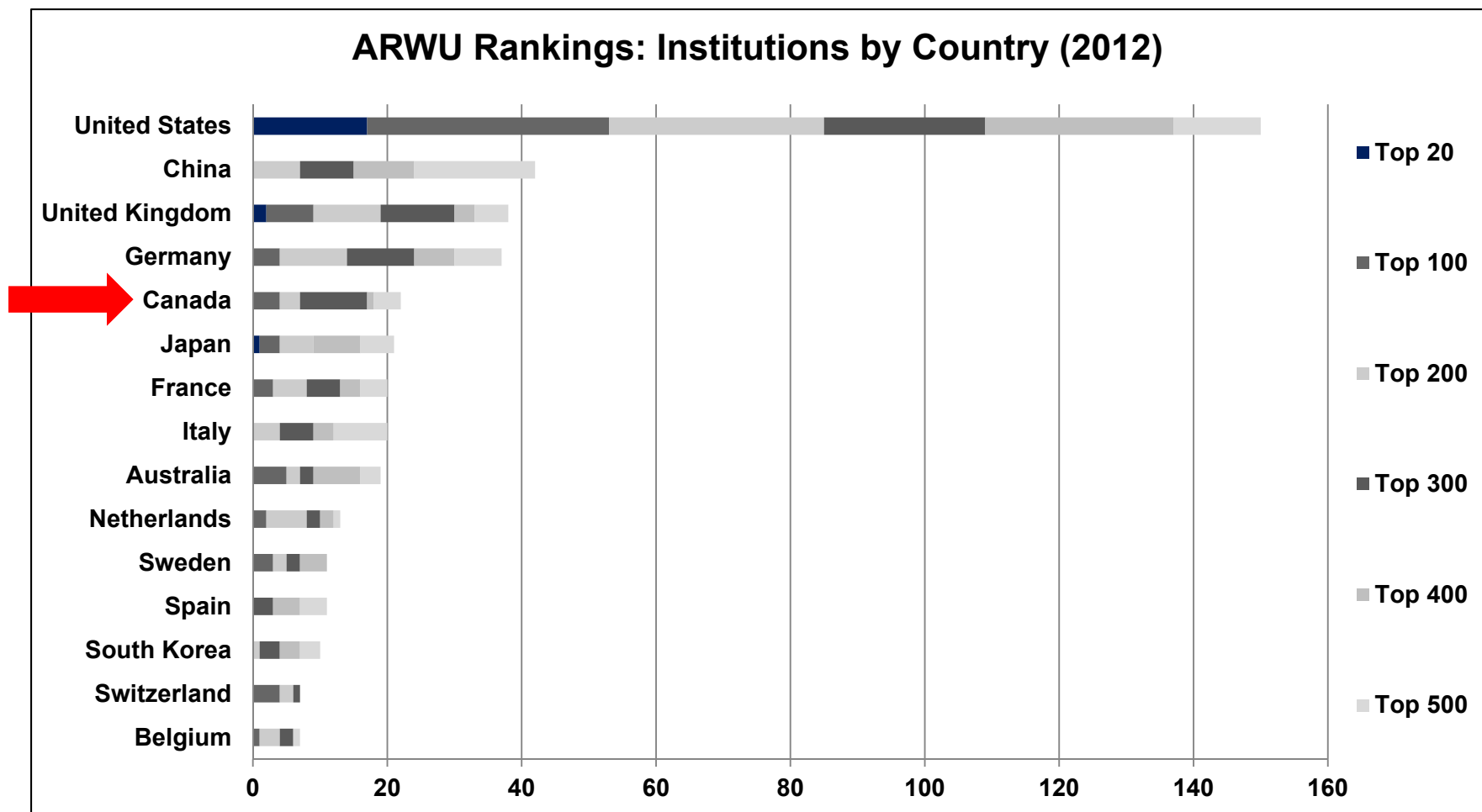
1	MIT
13	University of Toronto
43	University of Waterloo
51-75	McGill University
76-100	University of Alberta
101-150	UBC
101-150	Université de Montréal
151-200	McMaster University
151-200	Simon Fraser University
151-200	University of Saskatchewan

Again, UofT shows subject strength

Source: ARWU

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Canada in the Rankings: National Comparison (ARWU)



Canada ranks 5th overall and 7th for Top 100 universities

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Commentary on Maclean's

- **Maclean's publishes the most widely used ranking for Canadian higher education – in Canada.**
- **Maclean's remains virtually unknown outside of Canada.**
- **The ranking operates with three brackets:**
 - **Medical Doctoral universities (15)**
 - **Comprehensive universities (15)**
 - **Primarily Undergraduate universities (19)**
- **The above account for about half of AUCC's membership of 95 public and private not-for-profit universities and university degree-level colleges.**
- **The methodology chosen by Maclean's has resulted in top ranked universities from the comprehensive bracket out-ranking lower ranked universities from the Medical Doctoral bracket in international rankings.**

Maclean's is not necessarily helpful in international context

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Maclean's Rankings by Bracket 2013

Medical/Doctoral	Comprehensive	Undergraduate
<ol style="list-style-type: none"> 1. McGill University 2. UBC 3. University of Toronto 4. Queen's University 5. University of Alberta 6. McMaster University 7. Dalhousie University 8. University of Calgary 9. University of Saskatchewan 10. University of Ottawa 11. Western 12. Université de Montréal 13. Université Laval 14. Sherbrooke University 15. University of Manitoba 	<ol style="list-style-type: none"> 1. Simon Fraser University 2. University of Victoria 3. University of Waterloo 4. University of New Brunswick 5. University of Guelph 6. Carleton University 6. Memorial University 8. York University 9. University of Regina 10. University of Windsor 11. Wilfrid Laurier University 12. Ryerson University 13. Concordia University 14. UQAM 15. Brock University 	<ol style="list-style-type: none"> 1. Mount Allison University 2. UNBC 3. University of Lethbridge 4. Acadia University 5. UPEI 5. Trent University 7. St. Francis Xavier University 8. Bishop's University 8. Saint Mary's University 10. Université de Moncton 11. St. Thomas University 12. Lakehead University 13. Laurentian University 13. Winnipeg 15. UOIT 16. Brandon University 17. Mount Saint Vincent 18. Cape Breton University 19. Nipissing University

A broad alignment with international rankings at the top two brackets

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Country Rankings Matter, Too

- **FutureBrand has published a Country Brand Index since 2005.**
- **This Index captures a wide variety of dimensions, including Governance, Investment, Human Capital, Growth, Sustainability, and Influence.**
- **A country's academic landscape is increasingly important for a country's overall attractiveness (Futurebrand's related brand drivers: Education System, Job Opportunity, Advanced Technology, Skilled Workforce, Art and Culture).**
- **Only one country ranked in the Top 15 does not operate with a high quality/performance higher education landscape: Switzerland, Canada, Japan, Sweden, New Zealand, Australia, Germany, United States, Finland, Norway, United Kingdom, Denmark, France, Singapore, and Italy.**
- **The above list also contains 7 out of the 8 largest international student destination countries (but for China).**

Canada's nation brand is a critical positioning tool

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Country Rankings: Futurebrand

2010-2011	2011-2012	2012-2013
<ol style="list-style-type: none">1. Canada2. Australia3. New Zealand4. United States5. Switzerland6. Japan7. France8. Finland9. United Kingdom10. Sweden	<ol style="list-style-type: none">1. Canada2. Switzerland3. New Zealand4. Japan5. Australia6. United States7. Sweden8. Finland9. France10. Italy	<ol style="list-style-type: none">1. Switzerland2. Canada3. Japan4. Sweden5. New Zealand6. Australia7. Germany8. United States9. Finland10. Norway

Canada is one of the most well positioned countries

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Why Does A Strategic Approach To Rankings Matter?

- **This sampling illustrates a diversifying and changing rankings landscape.**
- **While the ARWU has remained stable, the THE has changed its methodology a number of times; the most recent change in data providers and methodology in 2010 has resulted in a fundamentally different ranking system.**
- **QS has decided not to substantially revise its methodology, thus past THE-QS rankings are broadly comparable to new QS-USN rankings.**
- **The development of U-Multirank will be another fundamentally different type of ranking system which will move away from the league table style of some of the biggest ranking to a more comparative approach,**

ICG white paper and articles will be published during the summer

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

The Good, the Good Again, and the Gap

- **The good:**
 - Canada is home to one of the world's strongest higher education landscapes.
 - International rankings reflect this strength (e.g. 24 universities ranked in the 2012 ARWU).
 - Canada is home to three flagship universities: McGill, UBC, and UofT.
- **The good again:**
 - Canada is growing into an attractive graduate talent destination which will shore up rankings performance.
 - Canadian colleges are becoming more active in positioning themselves internationally in the absence of rankings.
- **The gap:**
 - Canada is not home to a global brand university (ICG has identified 11 such universities). Global brand universities can produce strong halo effects for their national systems.
 - Most universities have not developed a strategic approach to international rankings (the focus has been on Maclean's). This is a notable shortcoming.

LEVERAGING INTERNATIONAL UNIVERSITY RANKINGS

Key Drivers

- **Address stakeholder interests**
 - Students and parents (awareness, attraction, validation)
 - Institutional management, donors (performance)
 - Public organizations (ministries, funding bodies) (policy, funding)
 - Agents (marketing, recruiting funnel)
 - Employers (cut-off, binary)
 - Academics (feedback)
- **Utilize information offered by rankings**
 - Rankings measure “something” useful
 - Educate the whole institution about the impact and importance of rankings
 - Create feedback loops
- **Improve rankings performance**
 - For the sake of a rank unto itself (on some level)
 - To improve internal processes, organizational design, and goal setting

Not having a ranking strategy is no longer an option for many institutions

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THE RATIONALE FOR PRISM

- **By 2012, international student enrollments had grown to 4.1 million (ICG estimate) – along the way increasing the variety of students studying abroad for different reasons relative to 20 years ago.**
- **During that time, the overall academic performance of international students has declined – partially owing to growth factors, and partially to an increased lack of linguistic preparation, curricular fit and learning style, or outright fraud and deception.**
- **The combination of these dynamics has resulted in student-institution mismatches, academic underperformance, high attrition rates and difficulties to focus on talent. This is proving costly to institutions on many levels.**

To date, no systematic analysis of this issue has been undertaken. PRISM offers a unique evidence-based, comparative, in-depth approach to analyze and model these issues.

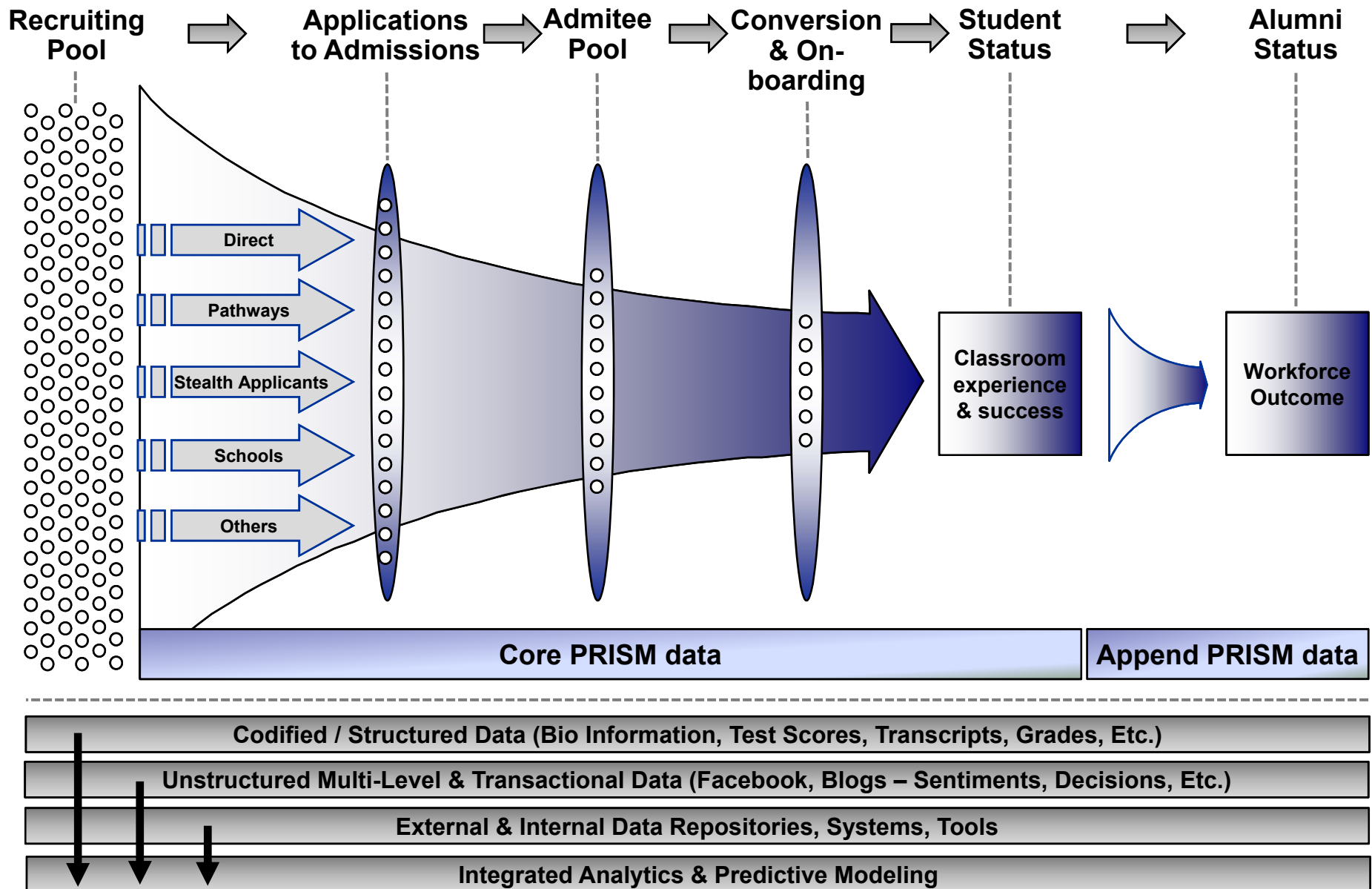
ANALYTICAL FRAMEWORK

Key Drivers to Benchmark International Students' Performance

- **The shift to outcome-based marketing and recruiting**
- **Institutional competition and differentiation (national and international)**
- **In-classroom quality improvement (learning, experience)**
- **Regulatory compliance**
- **The need to improve strategic data management across an institution**
- **Pressure through much more visible feedback loops (social media, etc.)**
- **Others...**

ANALYTICAL FRAMEWORK

Integrated Strategic Data Management Along the Student Lifecycle



ANALYTICAL FRAMEWORK

High Level Overview of PRISM

- **Participants:** Higher education institutions (and their partners) worldwide.
- **Data:** International students' admissions and registrar data (e.g., gender, nationality, secondary leaving qualification, language test scores, study field, pathways, agent code, degree type – grades, graduation rates).
- **Data add-on:** Minimal domestic students' cohort grades and graduation data for control group purposes.
- **Security, privacy, and brand protection:** PRISM operates with dedicated privacy, security and brand protection features.
- **On-boarding:** Supported by extensive templates, guides, and discussions with technical staff.
- **Results documentation:** Provided by ICG in two standardized formats – institutional and benchmark analysis.

ANALYTICAL FRAMEWORK

PRISM Student Data Attributes (Version 2)

International Students: Recruiting Profile and Pathways Data

Required Data

- Country of Citizenship (UN classification)
- Enrollment Type (full-time / part-time)
- Registration Status (degree, non-degree)
- Degree Type (Bachelor 3 years, Bachelor 3 years w/ Honors, Bachelor 4 years, Bachelor 4 years with Honors, Master's 1 year, Master's 2 years)
- Subject / Study Field (ICG roll-up table)
- "Technical" data
 - Commencement Year
 - Degree Program Expected Duration
 - Graduation Year (or: end of record)

Add-on Data

- Gender (male / female)
- English Language Proficiency at Admission
- Secondary Education Qualification (Country of Attainment)
- Secondary Education Qualification (Kind)
- Additional Education Post a Secondary Leaving Qualification
- Recruitment Channel
- Agent Identifier
- Scholarship status
- Degree track model (joint, dual, etc.)

International Students: Performance and Success Data

- Academic Performance (Grades)
- Transfer destination (if available)
- Student Success (Graduation)

Domestic Students: Performance and Success Data (for baseline purposes)

- Academic Performance (Grades)
- Student Success (Graduation)

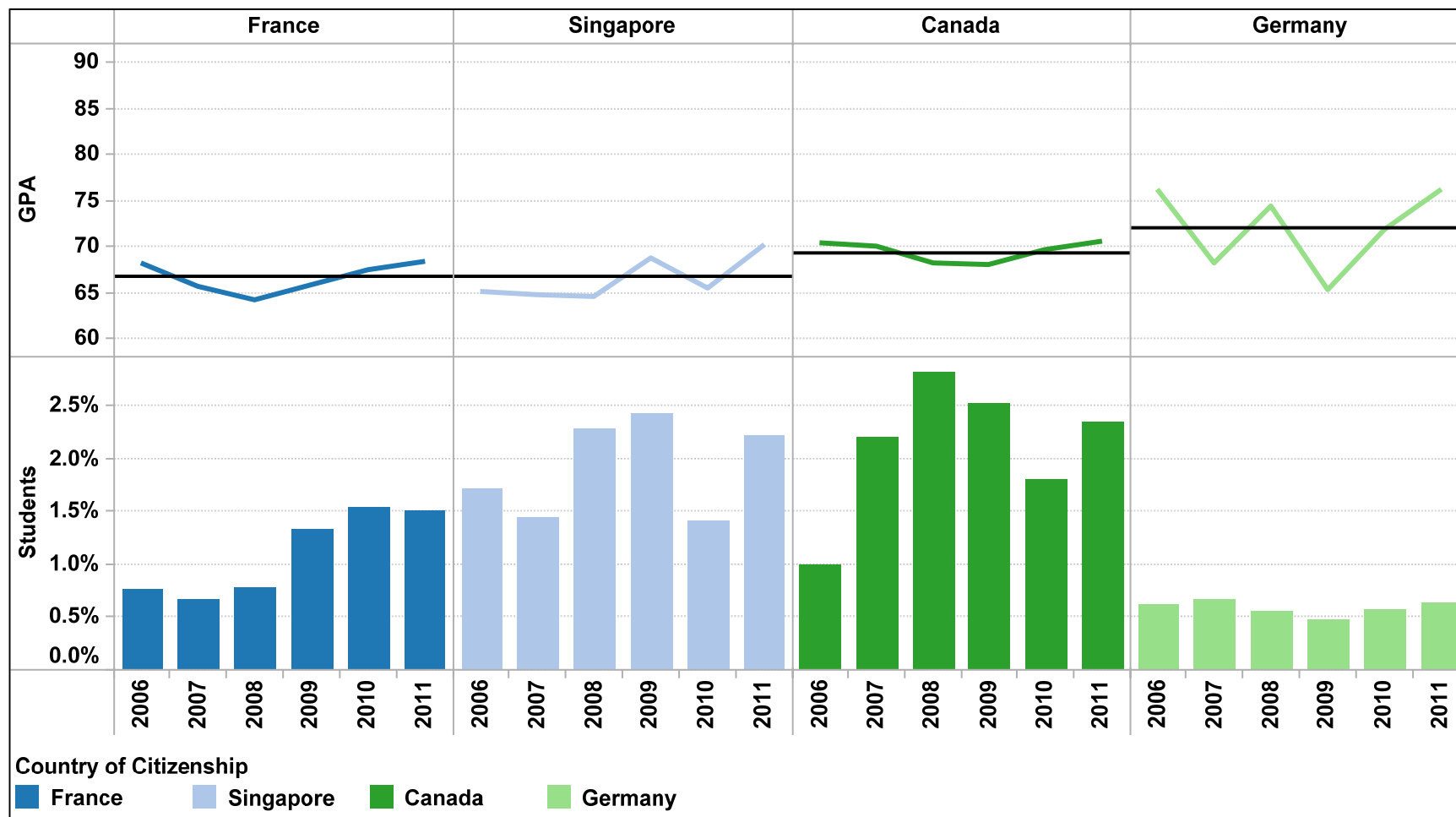
ANALYTICAL FRAMEWORK

Safeguarding Privacy and Protecting Data

- **PRISM operates with dedicated privacy, security and brand protection features.**
- **Student privacy – No data segments containing less than 5 records are displayed. Any names and identifiers have been deleted/sanitized/coded with numerical ID numbers.**
- **Institutional data transformation – Data can be delivered to ICG in a fully recoded manner, ensuring the ability of cross-jurisdictional data transfer.**
- **Institutional brand protection – Institutional information is sanitized and protected against involuntary discovery.**
- **Data security – Master data set is safely stored in ICG's office.**

INSTITUTIONAL ANALYSIS

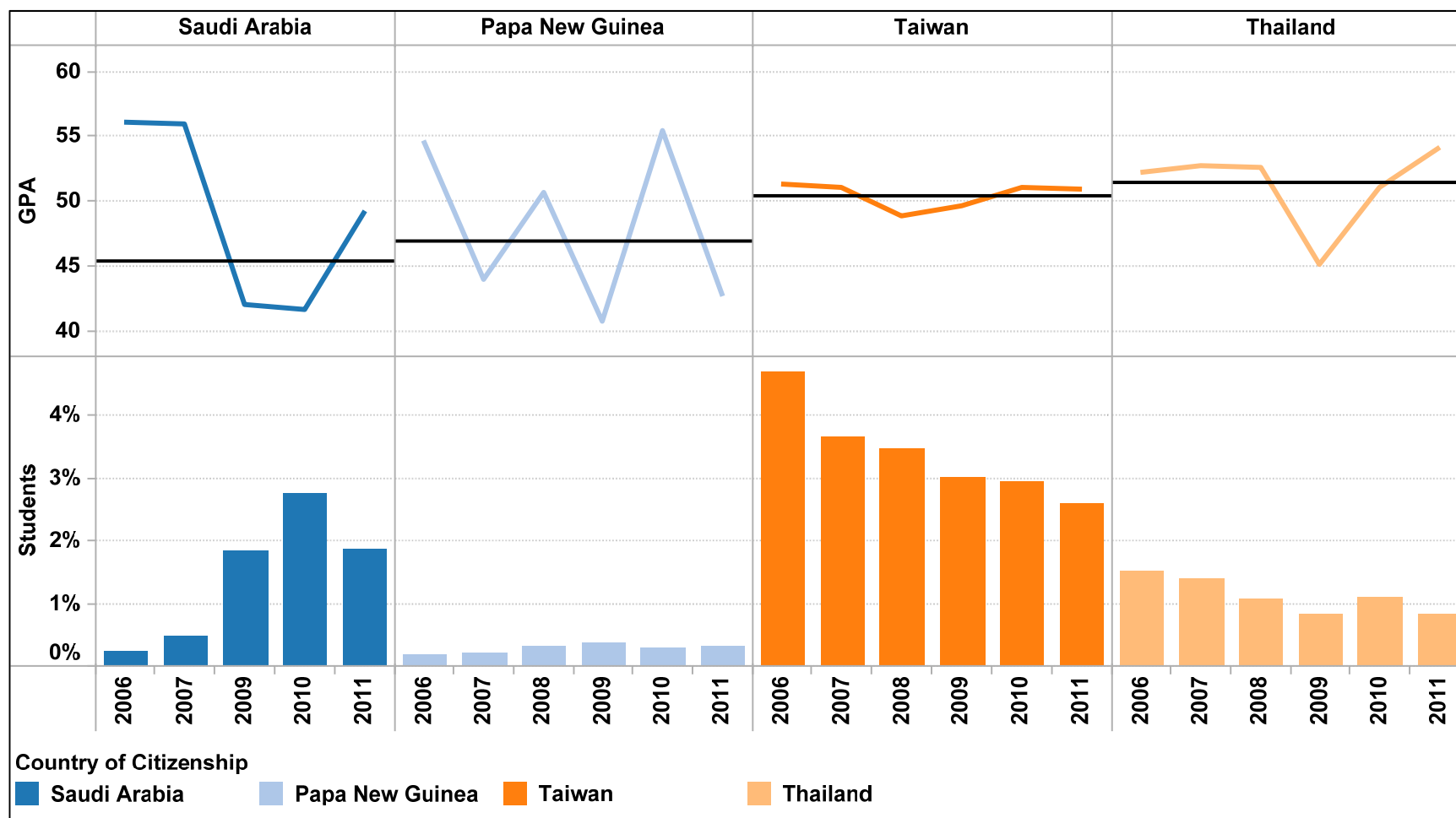
Measuring Student Performance by Nationality Over Time (I)



Four variable institutional analysis of well-performing international students

INSTITUTIONAL ANALYSIS

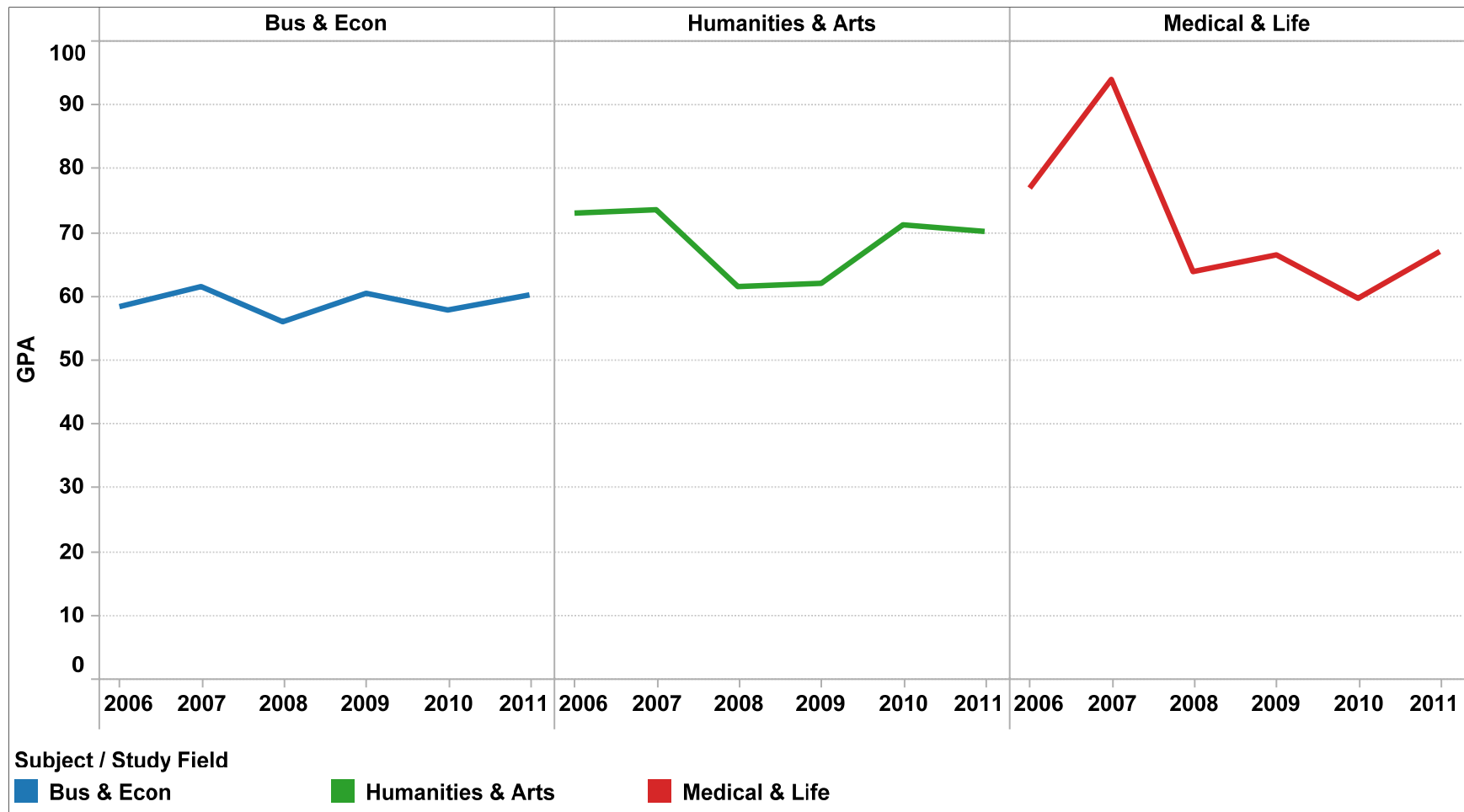
Measuring Student Performance by Nationality Over Time (II)



Four variable institutional analysis of low-performing international students

INSTITUTIONAL ANALYSIS

Measuring Student Performance by Study Field Over Time



Four variable institutional analysis of Malaysian students across study fields

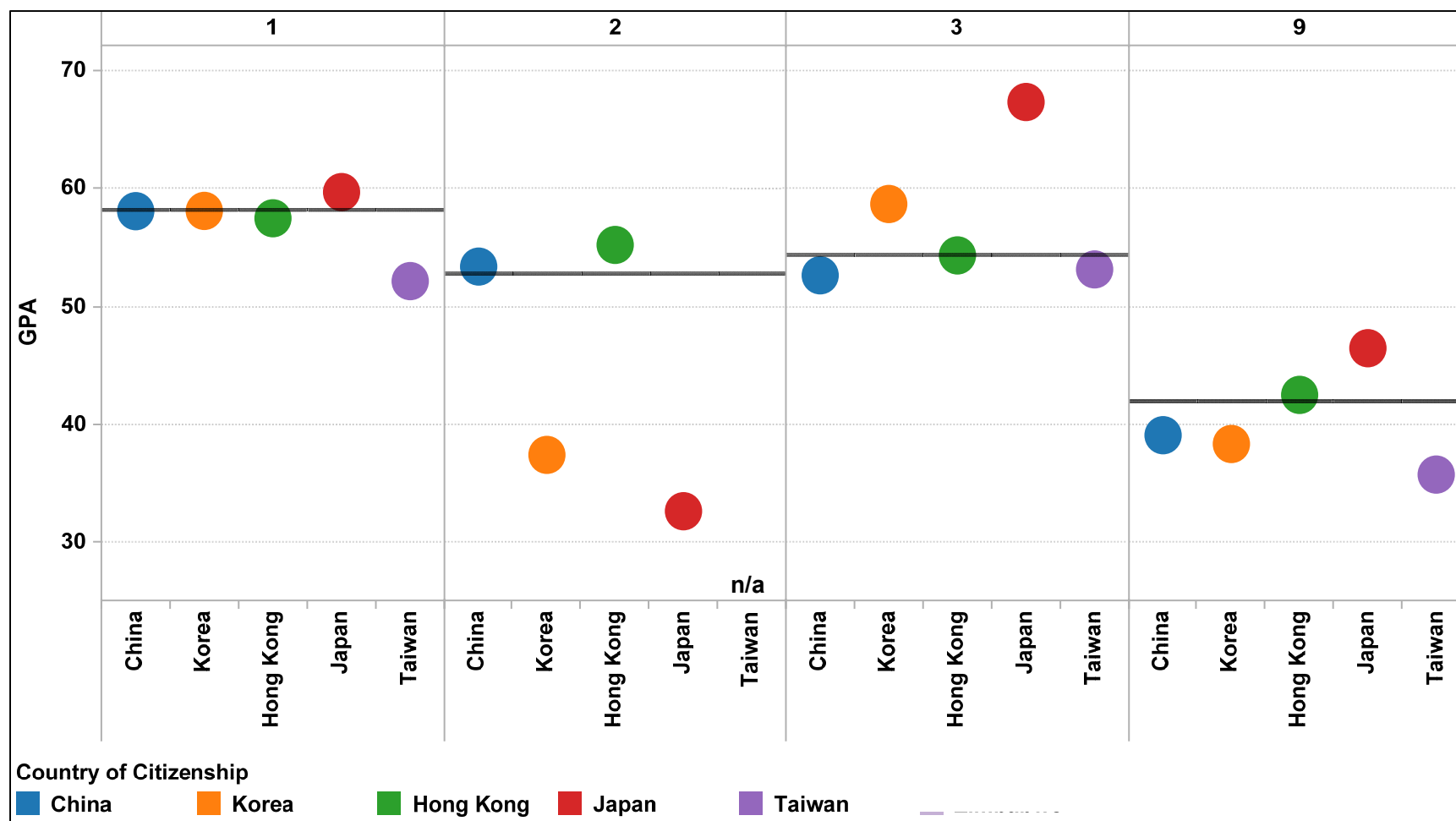
INSTITUTIONAL ANALYSIS

Summary of PRISM's Institutional Analysis Capabilities

- **PRISM offers two services at the institutional level:**
 - **Core data analysis:** Based on PRISM's 15 core student attributes.
 - **Custom data analysis:** Any institutional data which is properly codified, consistent, and connected to student records.
- **Student attributes can be analyzed on their own, or in combination with other attributes. Theoretically, all 15 attributes could be employed; practically five to seven offer the best possible depth.**
- **The institutional analysis provides powerful evidence on:**
 - **The actual student performance results of recruiting and admissions policies and practices.**
 - **Student performance changes over time (historical data can be loaded).**
 - **Risk and compliance issues with a view on magnitude and trajectory.**
 - **Forward looking dynamics (including *a priori* testing and predictive modeling).**

BENCHMARK ANALYSIS

Measuring Student Performance by Nationality Across Institutions



Benchmark analysis allows for feedback loops into recruiting channels

BENCHMARK ANALYSIS

Summary of PRISM's Benchmark Analysis Capabilities

- **PRISM offers three services at the cross-institutional benchmark analysis level:**
 - **Core benchmark analysis:** Based on the selection of key student attributes which provide the most meaningful insights.
 - **Custom benchmark analysis:** Available as an add-on service to institutions which wish to benchmark against specific peer groups, or run an analysis on non-core benchmark attributes (e.g. agents).
 - **Data harmonization:** This underlying service harmonizes institutional data for the full benchmark analysis (e.g., study fields, grades).
- **The benchmark analysis focuses on key student attributes such as country of citizenship, degree type, study field, English language proficiency, secondary leaving qualification, and pathways programs.**
- **The benchmark analysis provides powerful evidence on:**
 - **Multiple levels of relative performance aspects (global/peer/aspirational/etc.).**
 - **Global trend analysis.**
 - **Untapped and emerging challenges and opportunities.**

THEMATIC PERSPECTIVE: PATHWAYS ANALYSIS

Summary of PRISM's Pathways Analysis Capabilities

- **PRISM operates with a finely grained data structure to capture granular pathways aspects:**
 - **Category: ESL, EAP, Foundation**
 - **Function (I): Conditional admission**
 - **Function (II): Academic credit**
 - **Function (III): Duration (3, 6, 9, 12 months)**
 - **Instances: Count of any pathway program attended (1, 2, 3, ...)**
- **By differentiating the above categories and functions, specific analysis can be conducted, including:**
 - **Assessing the quality of specific pathways programs on their own and within a benchmark framework.**
 - **What thresholds (e.g., entry standards, duration) produce desired results.**
- **A key value is the ability to manage a given institutional pathway landscape based on outcome – addressing issues from recruiting funnels to admissions to classroom dynamics to regulatory compliance.**

THEMATIC PERSPECTIVE: PATHWAYS ANALYSIS

Performance of EAP Pathways Students v. Reference Student Cohort

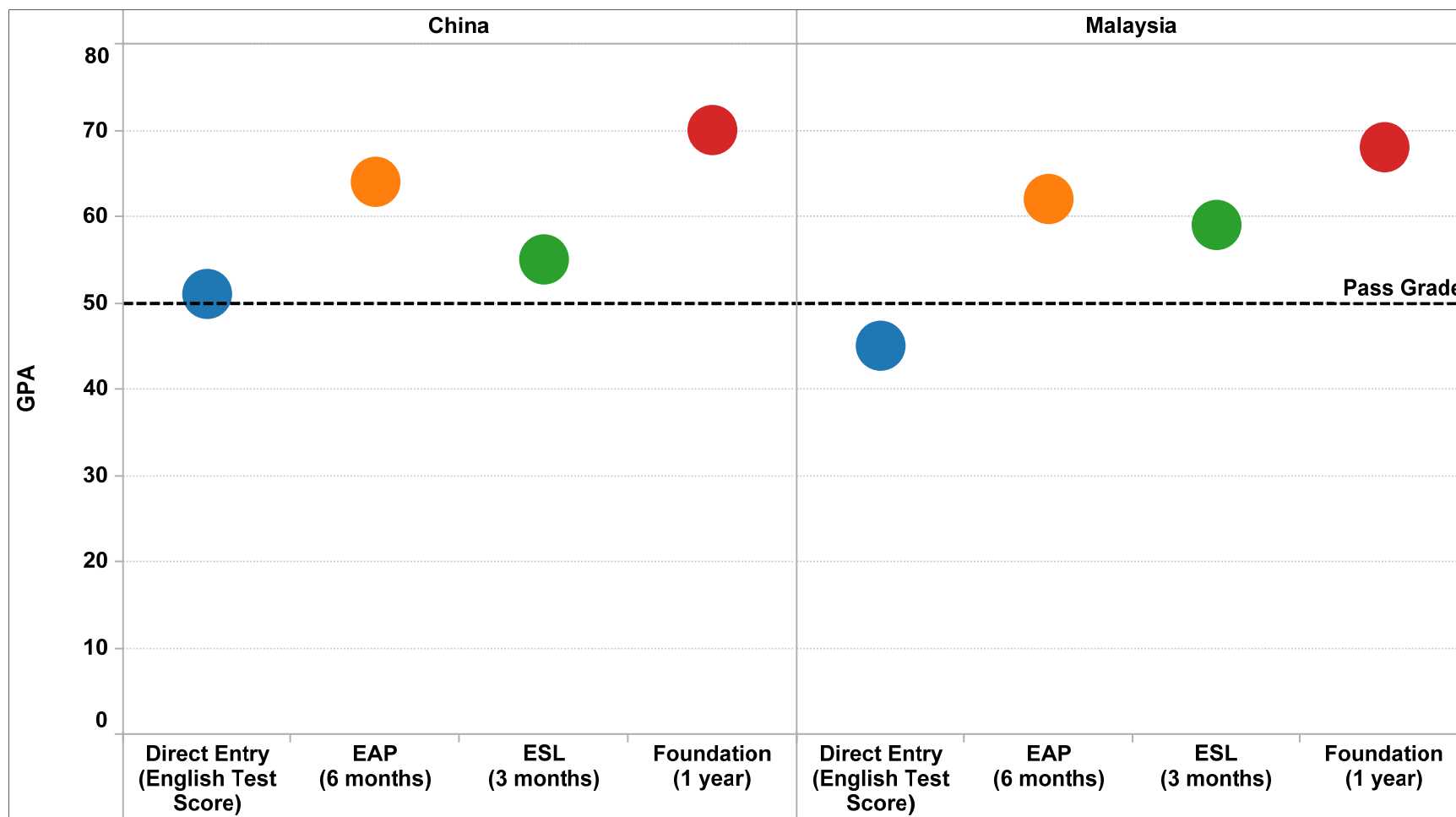


This specific EAP pathways program delivers well performing students

Notes: Data selected from a PRISM Version 1 institutional dataset.

THEMATIC PERSPECTIVE: PATHWAYS ANALYSIS

Comparison of Pathways Programs by Pathway Type and Citizenship



Three variable analysis of pathways programs

Notes: Modulated data.

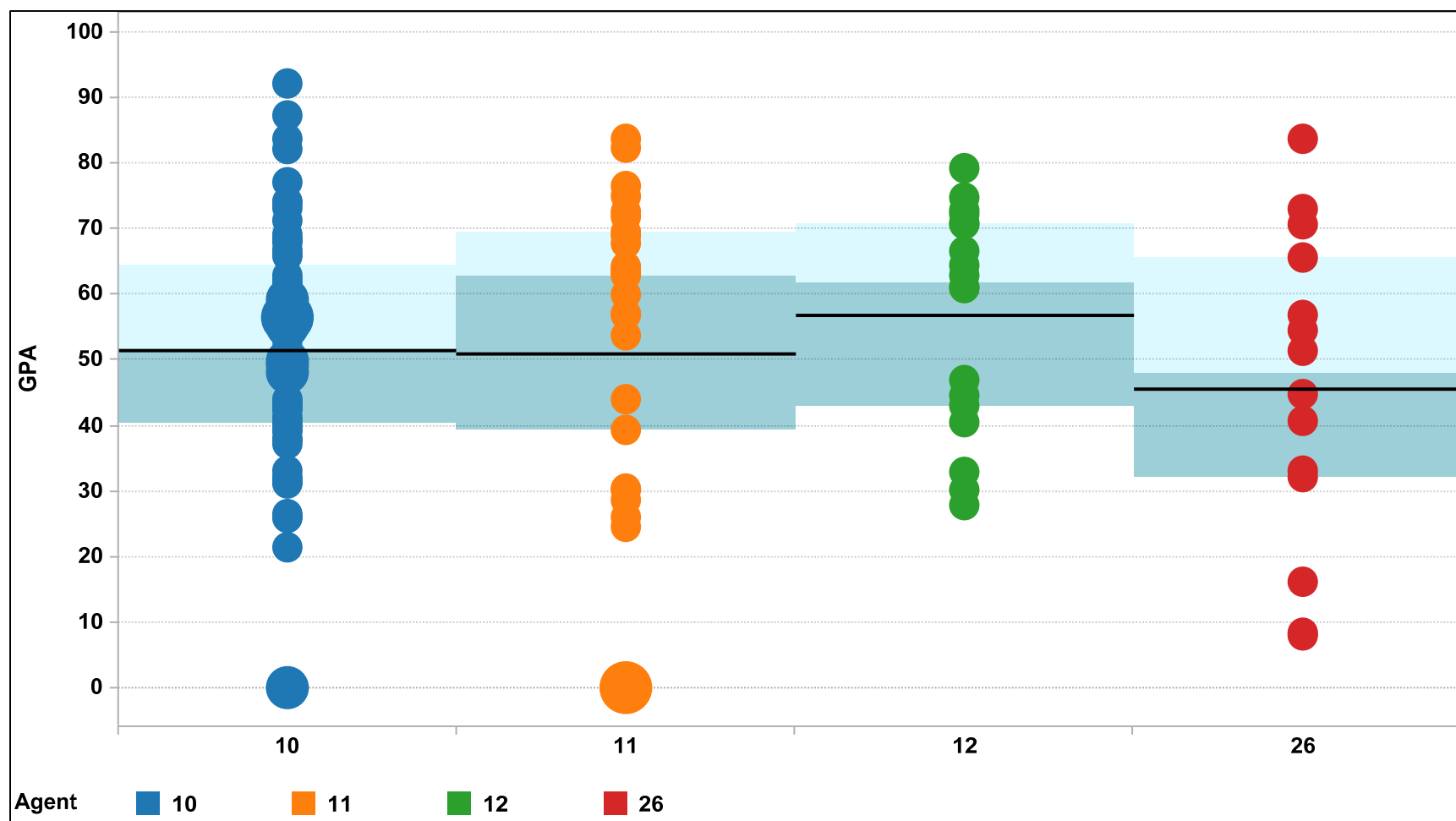
THEMATIC PERSPECTIVE: PATHWAYS ANALYSIS

The Relevance of Measuring Pathways' Performance

- **Pathway programs are growing to become a key component of international student intakes in most top destination countries.**
- **Pathway programs have become a necessity. The global pool of students who can be directly admitted into quality universities is not sufficiently large enough.**
- **Managing pathway programs for academic outcome is thus a critical task. This requires an in-depth analytical perspective on the specific aspects of a given pathway program relative to measured student outcomes over time.**
- **The Benchmark Model's analytical structure allows institutions to load highly detailed information. Depending on the granularity of the information supplied, highly specific feedback can be provided, which in turn can drive pathways program optimization and rationalization.**
- **Key value propositions include:**
 - **Regulatory compliance**
 - **Risk management**
 - **Operational and academic quality improvements**

THEMATIC PERSPECTIVE: AGENT MANAGEMENT

Student Performance by Recruiting Agent



The model enables fine-tuned performance-driven agent management

THEMATIC PERSPECTIVE: AGENT MANAGEMENT

Introducing Performance-based Agent Management

- **Typical agent contracts do not hold agents accountable for the downstream academic performance and success of students they recruited.**
- **Institutions can load agent codes into the benchmark model to develop an evidence-based understanding of the relative and overall performance of students by agent (i.e. outcome-based).**
- **In a second step, agent compensation can be pegged to outcome – to the point of not compensating agents for failing students, and raising compensation for agents recruiting students who perform well.**
- **Employing such a feedback-loop driven approach will incentivize agents to focus on student quality.**
- **Outcome-based agent performance management is a logical response to regulatory requirements and business improvement dynamics.**

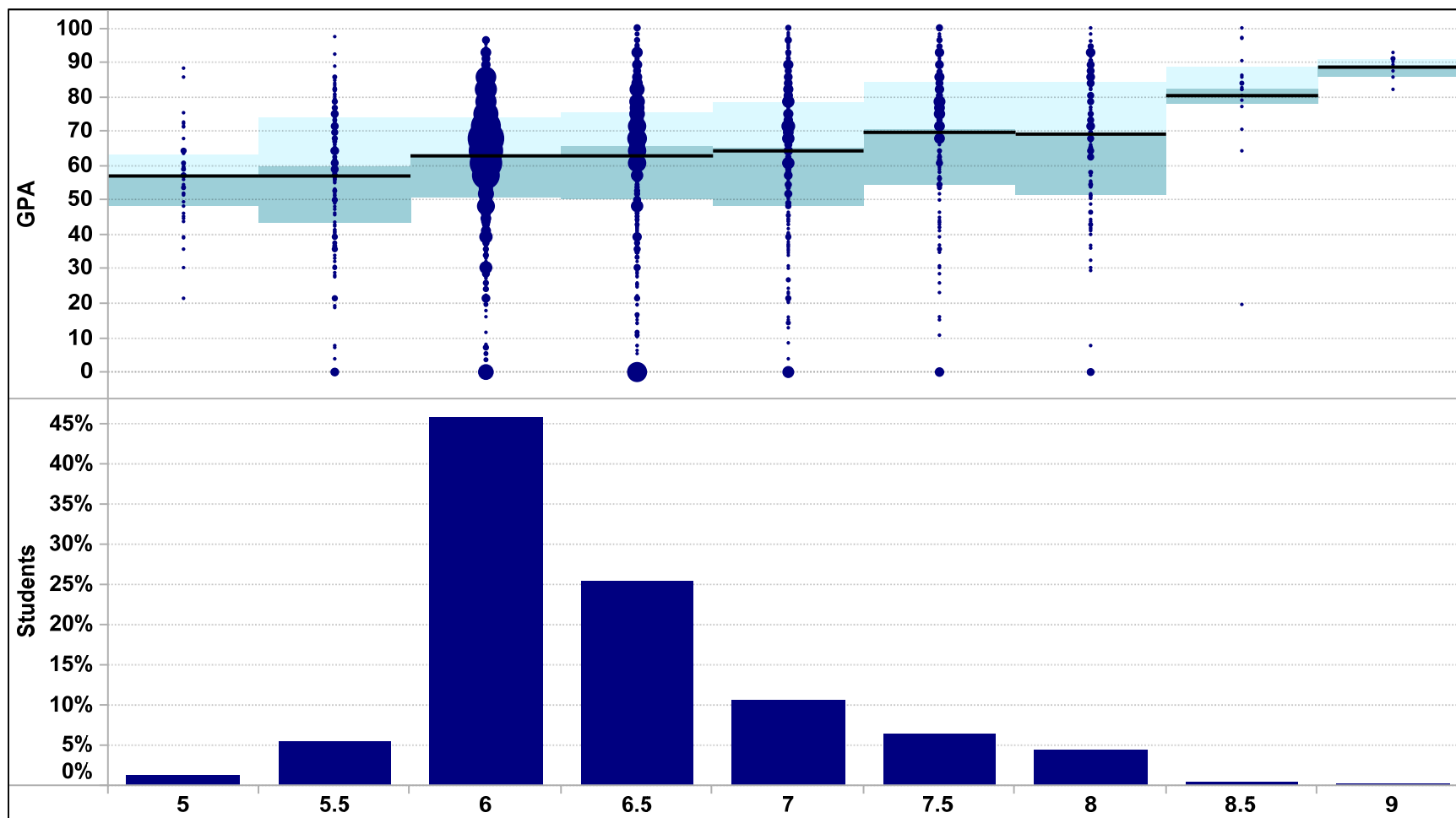
THEMATIC PERSPECTIVE: THE ROLE OF LANGUAGE

The Rationale for Measuring Student Performance Against Language Ability

- **Language proficiency is crucial to shape many (most) international students' academic performance trajectory.**
- **The impact of language proficiency has been long understood to be notable – but little systematic data has been gathered in the past.**
- **PRISM captures language proficiency data directly by loading any of 12 standardized English language tests, as well as indirectly by loading contextual data such as country of nationality, country of secondary leaving qualification, etc.**
- **Language capability serves as a multi-faceted tool in the admissions process, ranging from a cut-off to a ranking or predictor tool.**

THEMATIC PERSPECTIVE: THE ROLE OF LANGUAGE

PRISM Benchmark Results



This analysis informs institutional policies on language ability thresholds

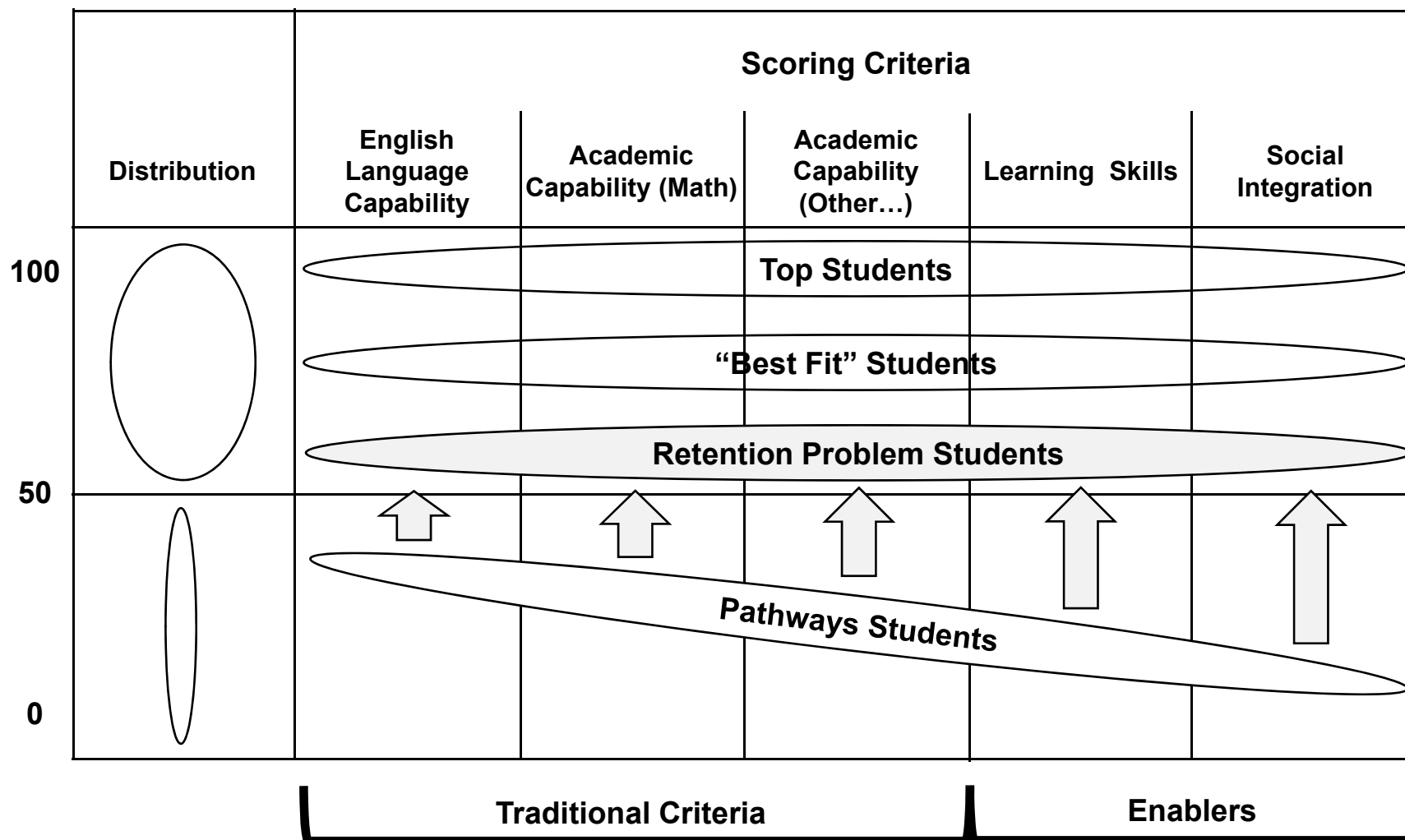
ADMITTING STUDENTS FOR RETENTION

From Threshold to Retention-Centric Admissions

- **Over the last five years, graduation rates have started to drop notably in many Canadian higher education institutions.**
- **Retention thus is rapidly becoming a key issue in managing the academic progress of international students.**
- **Many of the (by now evident) retention issues are based on a lack of comprehensiveness in the admissions process.**
- **PRISM is introducing a real-time model to scope, assess, and score applications for both traditional admissions models (since some are required by law) as well as for a student's probability to graduate.**
- **By adding this capability, PRISM drills into the root cause of retention issues rather than conducting post-fact analysis.**

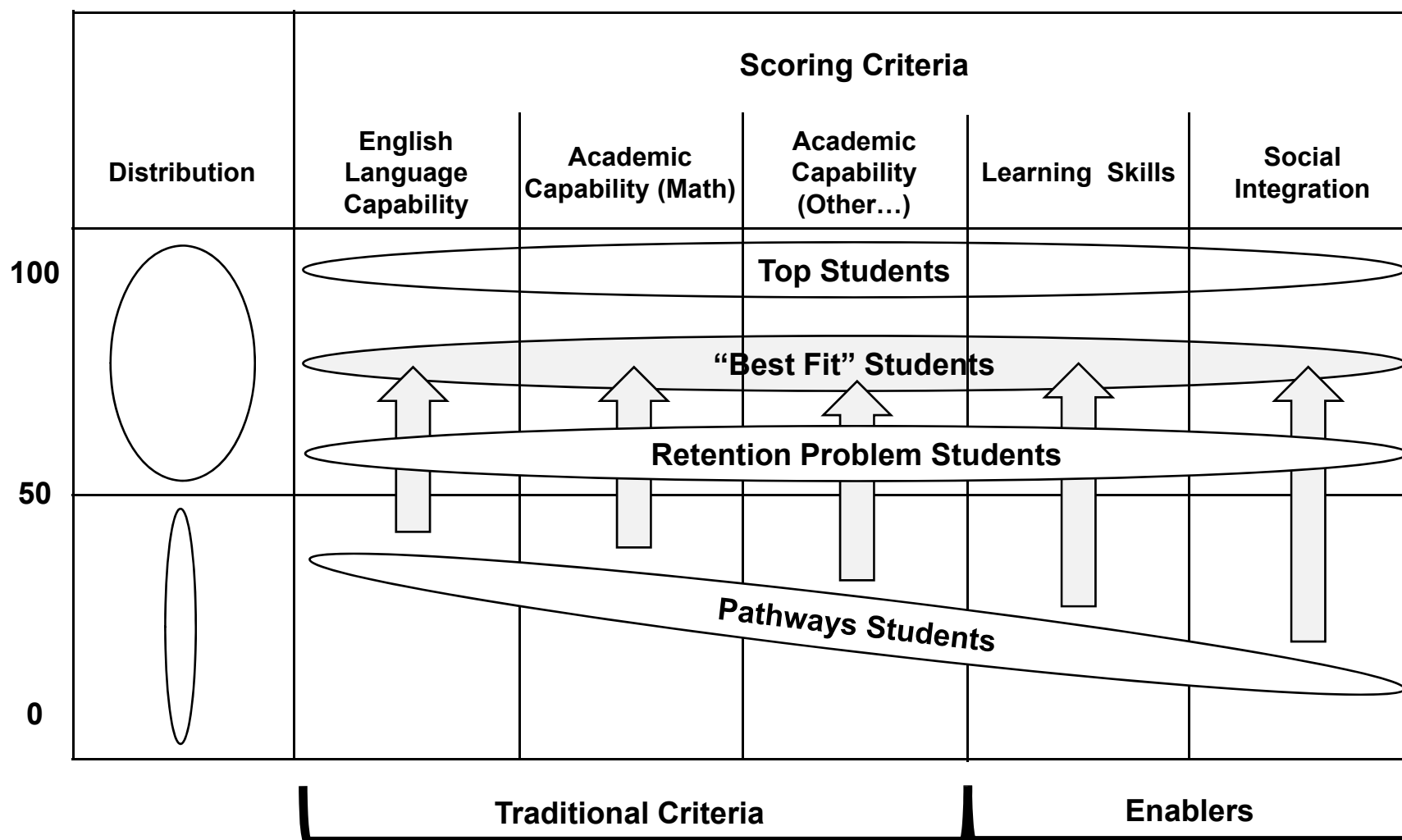
ADMITTING STUDENTS FOR RETENTION

The “Classic” Pathways Model: Threshold-based



ADMITTING STUDENTS FOR RETENTION

Introducing the “Best Fit” Model: Select for Retention



ADMITTING STUDENTS FOR RETENTION

How to Implement Admitting-for-Retention

- **Marketing: Re-shape messaging based on quantified, program-based “Student Profiles” (profile of the mid-point student).**
- **Recruiting: Drive student self-selection against a program/institution to reduce applications from non-fit applicants.**
- **Re-design application materials to capture critical context: Educational history (9th to 12th grade), all standardized test scores.**
- **Introduce comprehensive models through randomized questions responses (50 words), multiple smart essays (150 words), etc. to assess for learning culture and social integration.**
- **Use historical student performance data for forward-looking modeling, coupled with behavioral research on learning cultures, to design score modifiers.**

KEY PRISM VALUE PROPOSITIONS

- 1** The ability to benchmark against domestic/international as well as peer/comparator institutions.
- 2** An unprecedented systematic, integrated, in-depth, and multi-attribute analysis capability.
- 3** An evidence-based analysis allowing for tactical and strategic adjustments to marketing, recruiting, and admissions practices.
- 4** The *a priori* testing as well as predictive modeling of marketing, recruiting, and admissions policy changes.
- 5** The creation of performance feedback loops at the institution to increase overall competitiveness.

ON-BOARDING

- **Institutions joining will be provided with:**
 - **An on-boarding guide (mapping out processes)**
 - **Detailed requirement guidelines (including a 30-page technical guide)**
 - **Data dictionaries and data input templates (in MS Excel)**
- **Institutions can chose services à la carte:**
 - **The cross-institutional benchmark service**
 - **Multiple levels of institutional data analysis**
 - **The custom analysis of institution-specific data**
- **Institutions will receive:**
 - **A report covering the benchmark analysis (report)**
 - **A report covering the institutional analysis (annually or bi-annually)**
 - **Access to self-service data analysis (being built for 2013)**
- **PRISM operates as an annual subscription model.**

AGENDA

Housekeeping

International Student Flows Into Canada

Canada's Competitive Position: Tuition Fees

Leveraging International University Rankings

PRISM: Measuring Student Success

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Perspectives from the University of Victoria

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