

**INTERNATIONAL TUITION FEES:
FROM COMPREHENSIVE BENCHMARKING
TO COMPETITION STRATEGY**

NAFSA 2013

DISCLAIMER

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AGENDA

Housekeeping

Why International Tuition Fees Analysis Matters

Methodology of Tuition Fees Benchmarking

Perspectives from the International Tuition-based Competition Database

Competition Strategy for International Tuition Fees

Perspectives from Griffith University (Australia)

Discussion

HOUSEKEEPING

- **The session will be Chaired by Nicole Brigg (Griffith University).**
- **The ICG presentation is scheduled to run for about 35 minutes.**
- **The Chair will discuss tuition fees analysis at Griffith University for about 15 minutes.**
- **20 minutes are set aside for questions and discussion.**

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WHY INTERNATIONAL TUITION FEES ANALYSIS MATTERS

- **The total cost for international education participation has increased notably over the last two decades.**
- **At the upper range some bachelor's degree programs now require an investment of close to USD 300,000 for an international student.**
- **At the same time a number of higher education institutions have become dependent on international tuition fees revenue to drive their institutional budgets.**
- **At this scale of magnitude institutions can no longer use traditional policy models to set tuition fees.**
- **Mis-positioning of tuition fees pricing can result in negative outcomes for institutions:**
 - **Lost revenue**
 - **Reduction of quality student intake**
 - **Damage to institutional brand**

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METHODOLOGY OF TUITION FEES BENCHMARKING

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**

METHODOLOGY OF TUITION FEES BENCHMARKING

Tuition Fees: Research Overview

- **International tuition fees were captured from the perspective of an international student.**
- **All tuition fees sourced were retrieved from publicly available sources:**
 - **Websites**
 - **Academic Calendars**
 - **Viewbooks**
- **Degree programs covered include:**
 - **Bachelor's**
 - **Honors (Undergraduate)**
 - **Master's**
- **Not currently covered:**
 - **PhD's**
 - **JD's**
 - **MD's**

METHODOLOGY OF TUITION FEES BENCHMARKING

Tuition Fees: Considerations

Fees

- Per Credit
- Per Unit
- Per Term
- Per Year
- Per Program

Requirements

- Credits
- Units
- Terms
- Years

Fee Fluctuations

- Static
- Constant Rate
- Floating
- Entry-exit guaranteed
- Cohort-based (constant)
- Cohort-based (floating)

METHODOLOGY OF TUITION FEES BENCHMARKING

Cost of Living: Research Overview

- **Cost of living is an area of an international student's overall cost portfolio that institutions often overlook when setting tuition fees.**
- **Cost of living is often the highest portion of an international student's budget.**
- **ITBCD covers two different methodologies for cost of living data:**
 - **Institutional Estimates**
 - **ICG's Standard Model for International Living Expenses (SMILE)**
- **SMILE was created as an independent assessment tool, due to the fact that many institutions significantly underestimated cost of living in their official projections to international students.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Cost of Living: Expense Categories

- **Rent/Housing – Expenses for on- and off-campus rent and utilities.**
- **Food**
- **Books – Expenses on books and stationery.**
- **Transport – Public transportation expenses.**
- **Communication – Ongoing expenses for using a phone and accessing the Internet and television services.**
- **Health Insurance**
- **Apparel – Expenses for clothing and shoes.**
- **Entertainment**
- **Travel – Estimated price of a return ticket from Beijing/Shanghai to the closest major airport to the institution's location (annual).**

METHODOLOGY OF TUITION FEES BENCHMARKING

Cost of Living: MIN-MAX and SMILE

- **ICG's MIN-MAX approach**
 - **Estimating cost of living ranges for today's highly diverse and economically highly disparately resourced international student pool is subject to a high degree of uncertainty and variation.**
 - **To address this issue, ICG designed a MIN-MAX approach. Cost of living is thus calculated on the basis of the minimum (MIN) reasonable level of cost positions for the maximum (Max) number of (typical) students.**
- **ICG's Standard Model for International Living Expenses (SMILE)**
 - **SMILE estimates the average on- and off-campus standard minimum expenses incurred by a student. The typical student referred to in this model would be living in shared accommodation and using public transportation.**
 - **In order to ensure consistency and reliability, the research is based on institutional data, external data, and a combination of both. Sources other than institutional data include national household expenditure surveys and search engines for housing and airfare.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Additional Fees: Research Overview

- **Additional Fees are any fees charged to international students, beyond tuition fees.**
- **Includes: Student service fees; technology fees; program fees; etc.**
- **The ability to levy additional fees varies by national jurisdiction and the type of higher education institution.**
- **Additional fees are often a hidden way institutions extract further revenue from international students.**
- **ICG has analyzed additional fees at a program level.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Banding: Research Overview

- **In order to establish a strategic perspective on research universities' market power and brand in relation to international tuition fees setting, ICG undertook a banding exercise.**
- **Research universities were segmented into nine major bands through aggregated major international university rankings.**
- **Each band corresponds with a particular level of market power.**
- **Bands can be used to broadly segment markets for international research universities.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Overview of Nine Major Bands

Bands

- **Band 1:** Top 9. Includes Harvard, Yale, Princeton, MIT, Stanford, Caltech, UC Berkeley, Oxford, Cambridge. These institutions are true global brands with multi-billion dollar endowments.
- **Band 2:** Top 25 (i.e. 10-25). Includes Columbia, UCLA, U Penn, Imperial College, etc. These institutions are academic powerhouses with global reach and typically 1 billion plus dollar endowments.
- **Band 3:** Top 50 (i.e. 26-50). Includes University College London, Carnegie Mellon, UBC, U Toronto, ETH Zurich, etc. Leading institution in their countries (but for the US and UK). Partially performing at the level of Band 1 and 2 institutions, international brand position, and endowments of hundreds of millions of dollars.
- **Band 4:** Top 100 (i.e. 51-100). Institutions with an international reach, and partial Band 2 strength – and reflects on the psychologically important threshold of 100. Includes ANU, Melbourne U, TU Munich, LMU Munich, U Zurich, King's College, U Arizona, Leiden, etc. Often very limited endowments, and sometimes minimal endowments (if public flagship institution).
- **Band 5:** Top 200 (i.e. 101-200). This Band includes internationally active institutions with an elevated research profile and partial Band 3 strength in some departments/programs. It is probably the last Band with notable intra-Band differences in institutional performance. From Band 5 onwards, the next Bands will be defined by 100 rankings steps each.
- **Band 6:** Top 300 (i.e. 201-300). This Band continues the 100 ranking step approach.
- **Band 7:** Top 400 (i.e. 301-400). Reflects the THES cut off. Band assigned to Griffith.
- **Band 8:** Top 500 (i.e. 401-500). Reflects the ARWU cut off and the psychologically important threshold of 500.
- **Band 9:** Top ~1000 (i.e. 501-1,000). Includes institutions with strong regional standing, institutions which are ranked at the lower end of one of the lead rankings (QS, THES, ARWU), and specialized institutions with strong programs etc. The lower threshold of this Band is ephemeral and is potentially better characterized by “somehow internationally ranked”.

METHODOLOGY OF TUITION FEES BENCHMARKING

Banding: Methodological Disclaimers

- **Banding clarity declines when moving down the ranking ladder. This is a reflection of the clear differentiation factors at the very top of rankings, and the much more amorphous nature of rankings differentiators starting around rank 100.**
- **Perceptions of rankings “users” matter. Since these include students, parents, secondary school principals, agents, scholarship bodies, faculty members, and so on, it is not possible to design a definitive roster of rankings perspectives.**
- **Instead, ICG’s banding methodology attempts to rationalize assumptions of the aforementioned stakeholders.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Total Cost of Degree Acquisition: Research Overview

- **In order to understand the full cost portfolio that international students face for a particular degree program, ICG created the concept of Total Cost of Degree Acquisition (TCODA).**
- **TCODA combines tuition fees, additional fees, and cost of living (from SMILE) data into one metric of cost.**
- **All costs have been converted to USD to facilitate comparisons.**
- **Using forward-looking modeling ICG can predict the TCODA for an international student over the life of a degree program.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Modeling: Research Overview

- **A range of technical calculations were conducted on the ITBCD.**
- **Static modeling of tuition fees, additional fees, and cost of living was mapped.**
- **Forward looking modeling of tuition fees, additional fees, cost of living and TCODA was conducted.**
- **A mapping of programs and institutions by market band was also conducted.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Modeling: Forward Looking Calculations (I)

- **Forward looking modeling for tuition fees was conducted using two possible methodologies.**
- **When an institution indicated a policy for future tuition fee increases, this policy was applied.**
- **When no policy was available (large majority of cases), historical tuition fees data was retrieved, using a three to five year sample.**
 - **The rate of change from this sample was then applied to future years.**

METHODOLOGY OF TUITION FEES BENCHMARKING

Modeling: Forward Looking Calculations (II)

- **Forward looking modeling for additional fees and cost of living data was conducted using similar methodology.**
- **Historical inflation rates for the last 20 years were retrieved and used as a baseline for future increase of additional fees and cost of living.**
- **All three forward looking models (tuition fees, additional fees, and cost of living) were aggregated to create complete TCODA models.**

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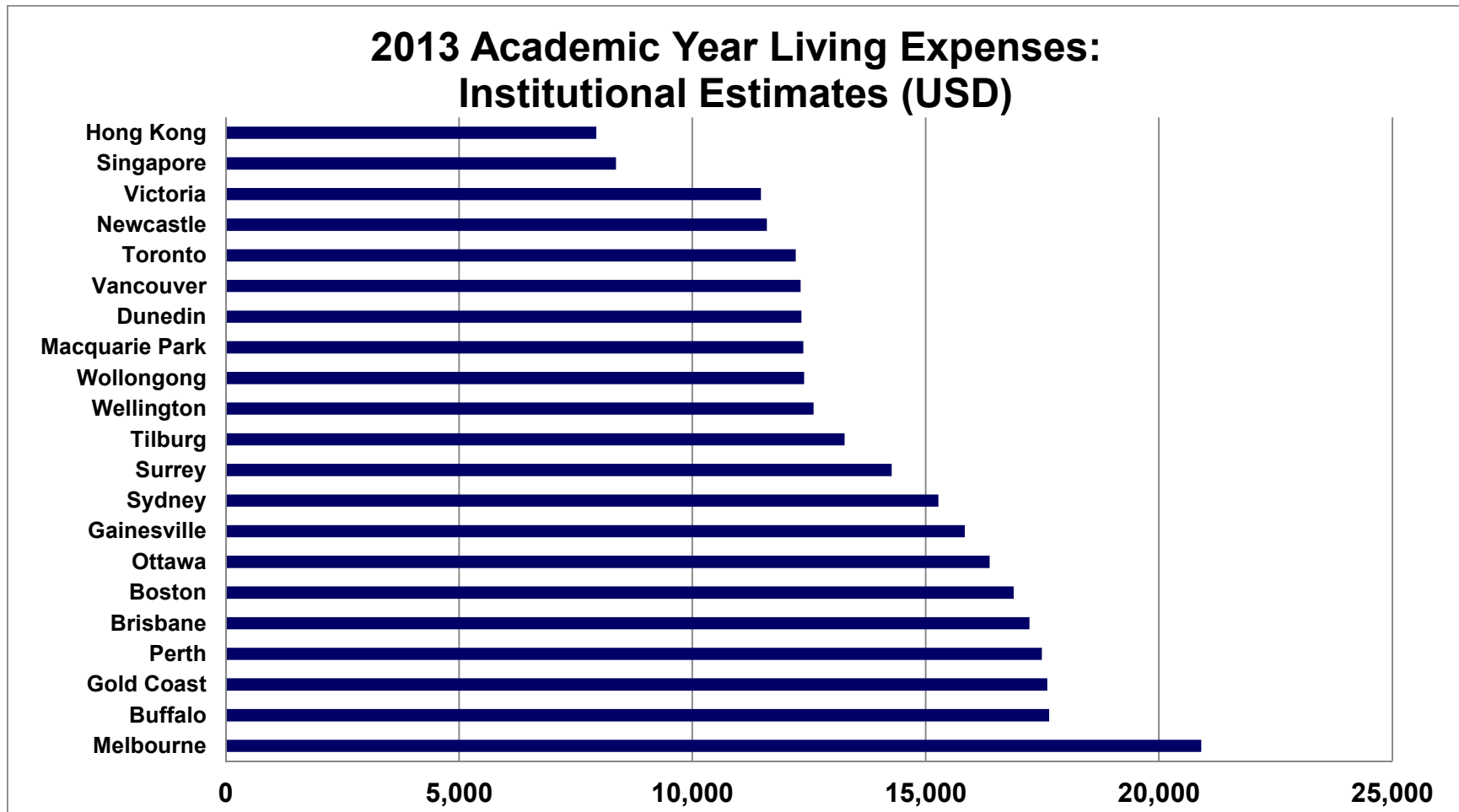
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PERSPECTIVES FROM ITBCD

2013 Academic Year Living Expenses: Institutional Estimates

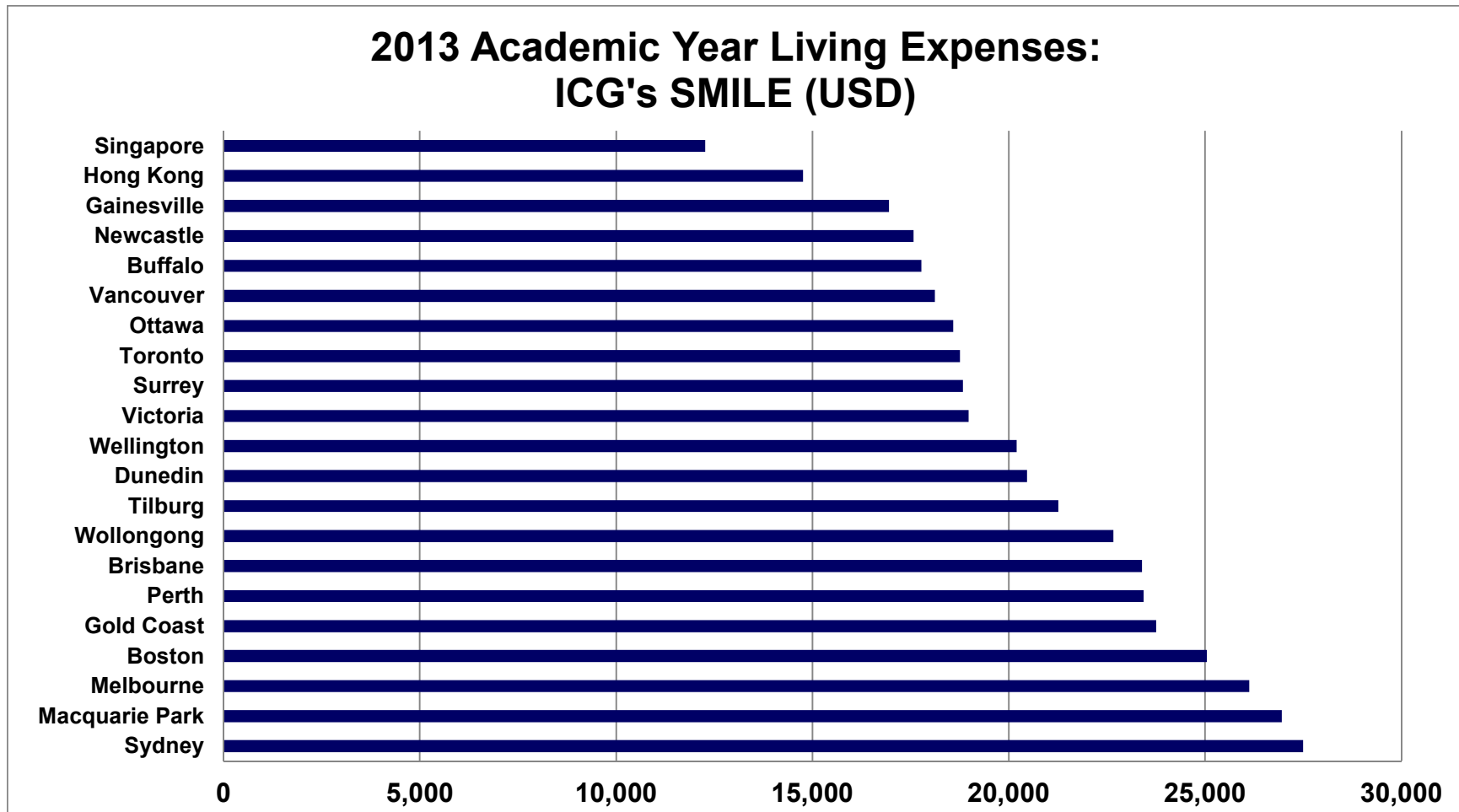


Asian, Canadian institutions offer lowest cost of living, Australia most expensive

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013 Academic Year Living Expenses: ICG's SMILE



Trends are similar to institutional estimates

Source: ICG ITBCD.

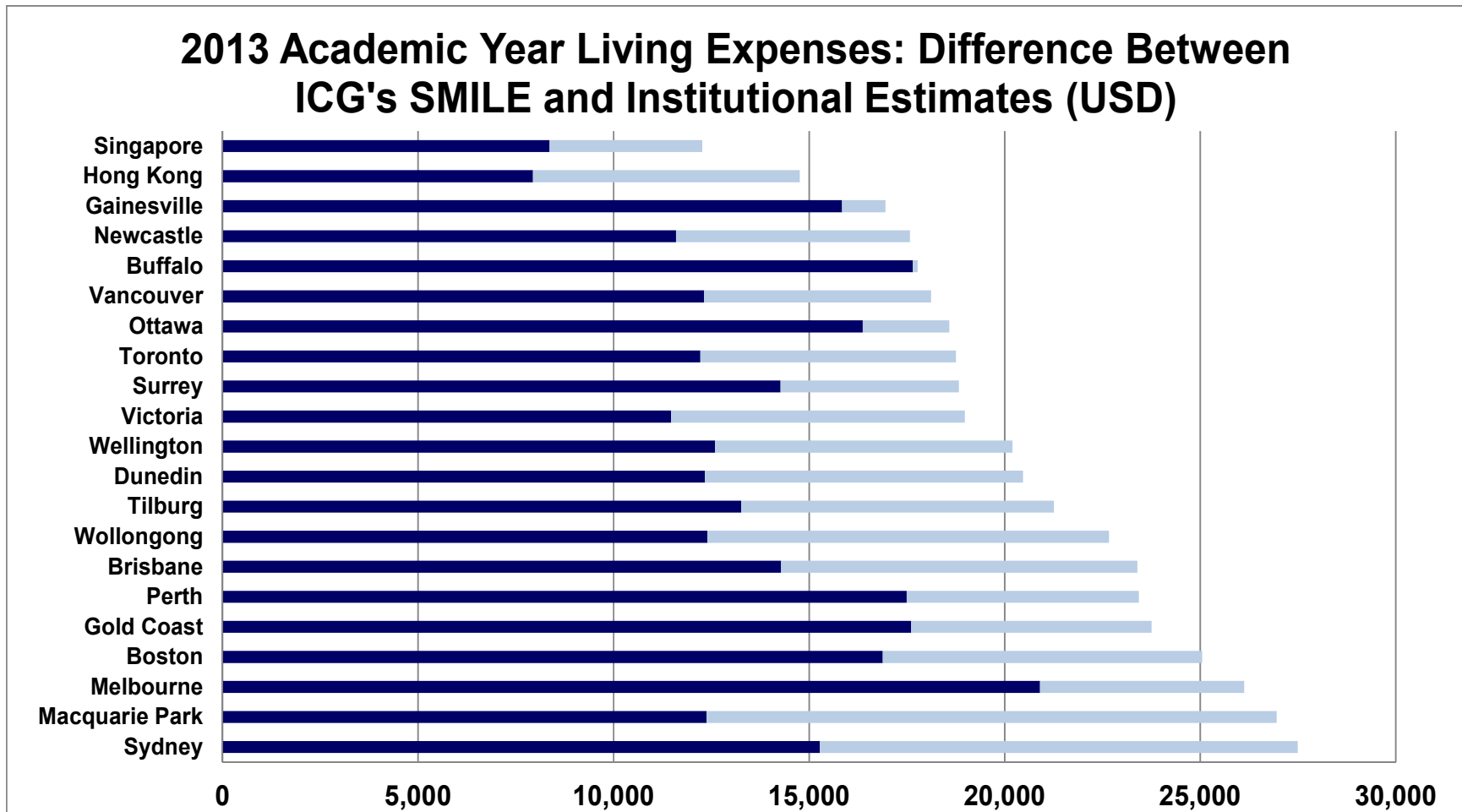
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PERSPECTIVES FROM ITBCD

2013 Academic Year Living Expenses: SMILE vs. Institutional Estimates

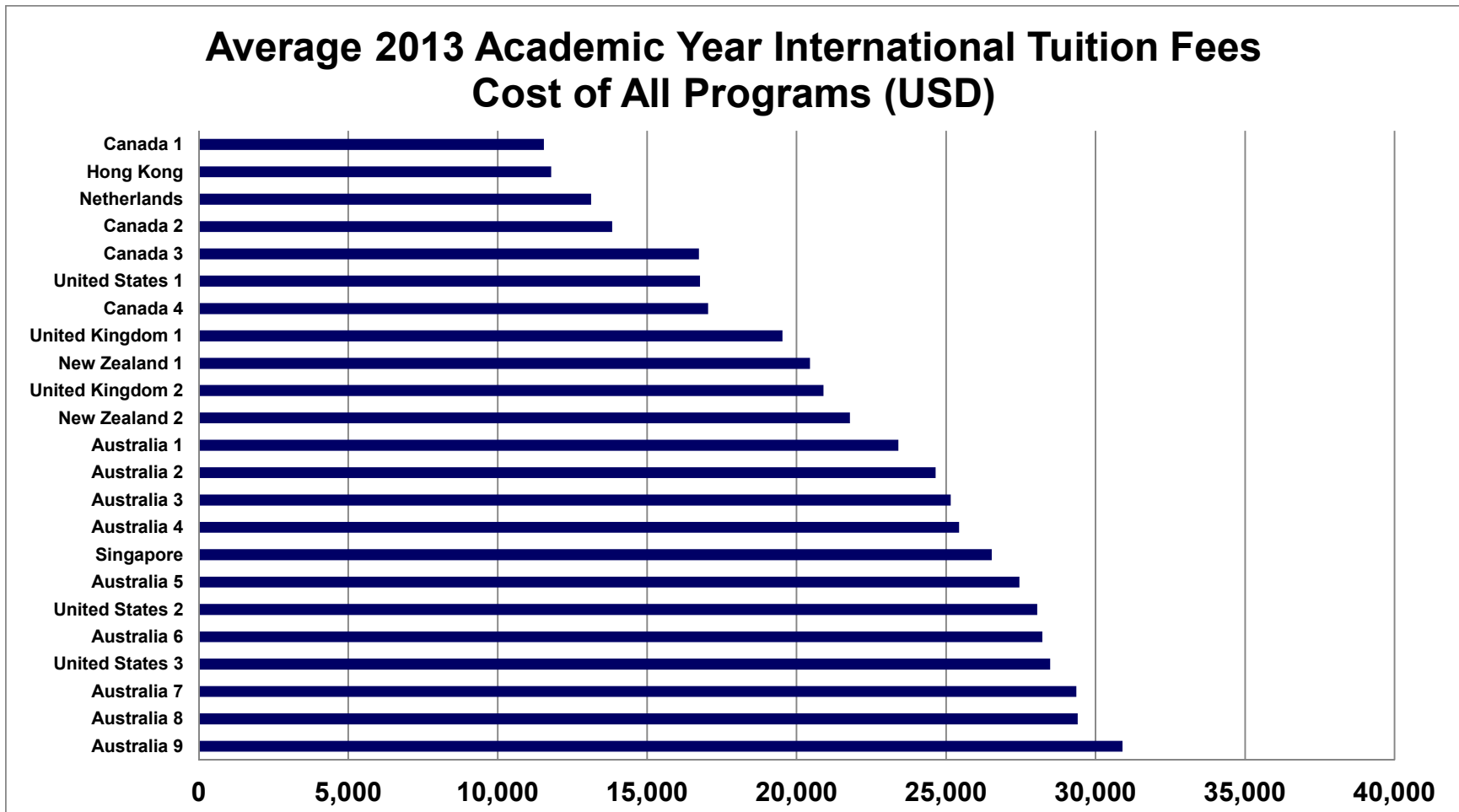


Many institutions significantly underestimate cost of living

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013 Academic Year Cost: All Programs at Research Universities

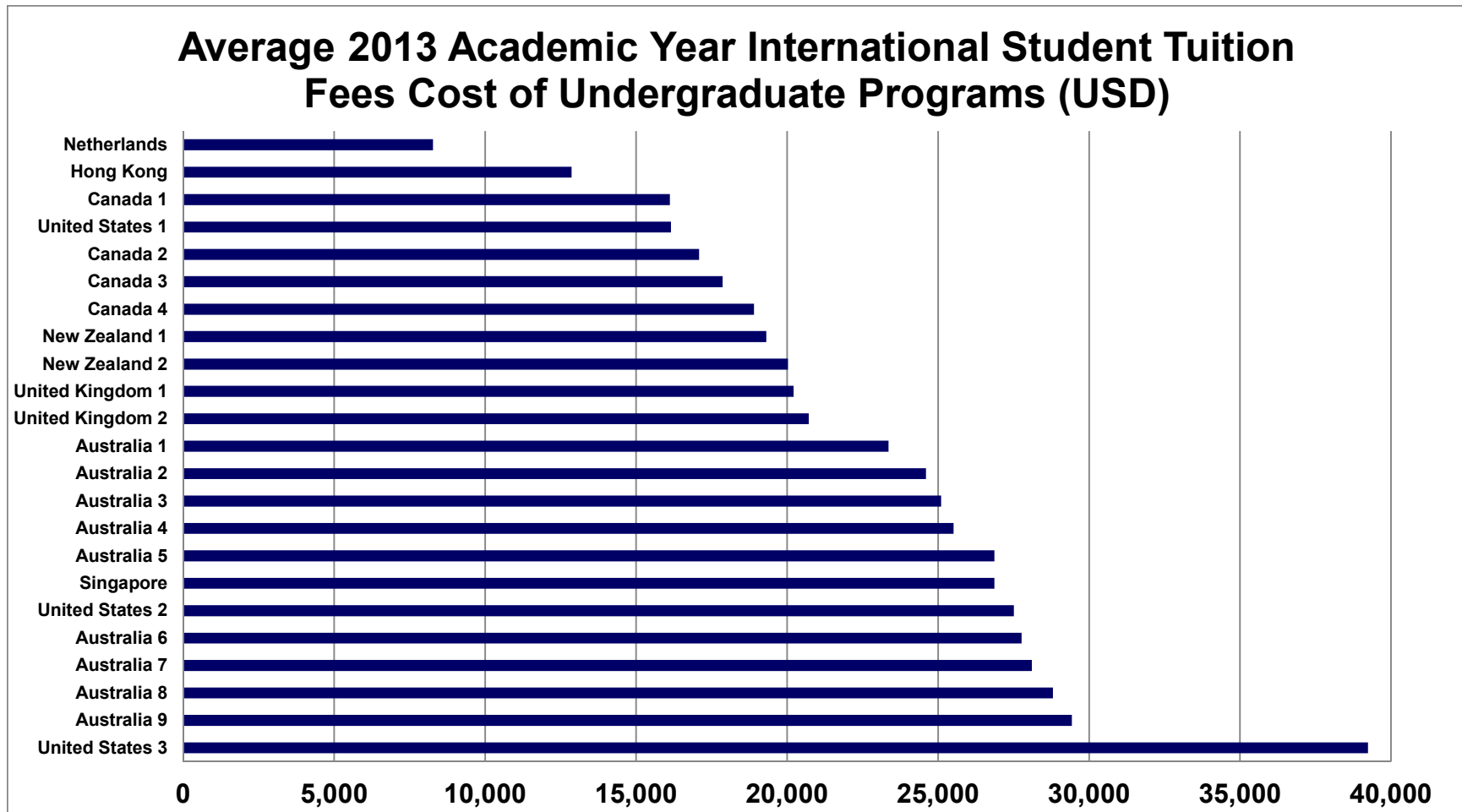


For research universities Australian institutions have the highest fees

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013 Academic Year Cost: UG Programs at Research Universities

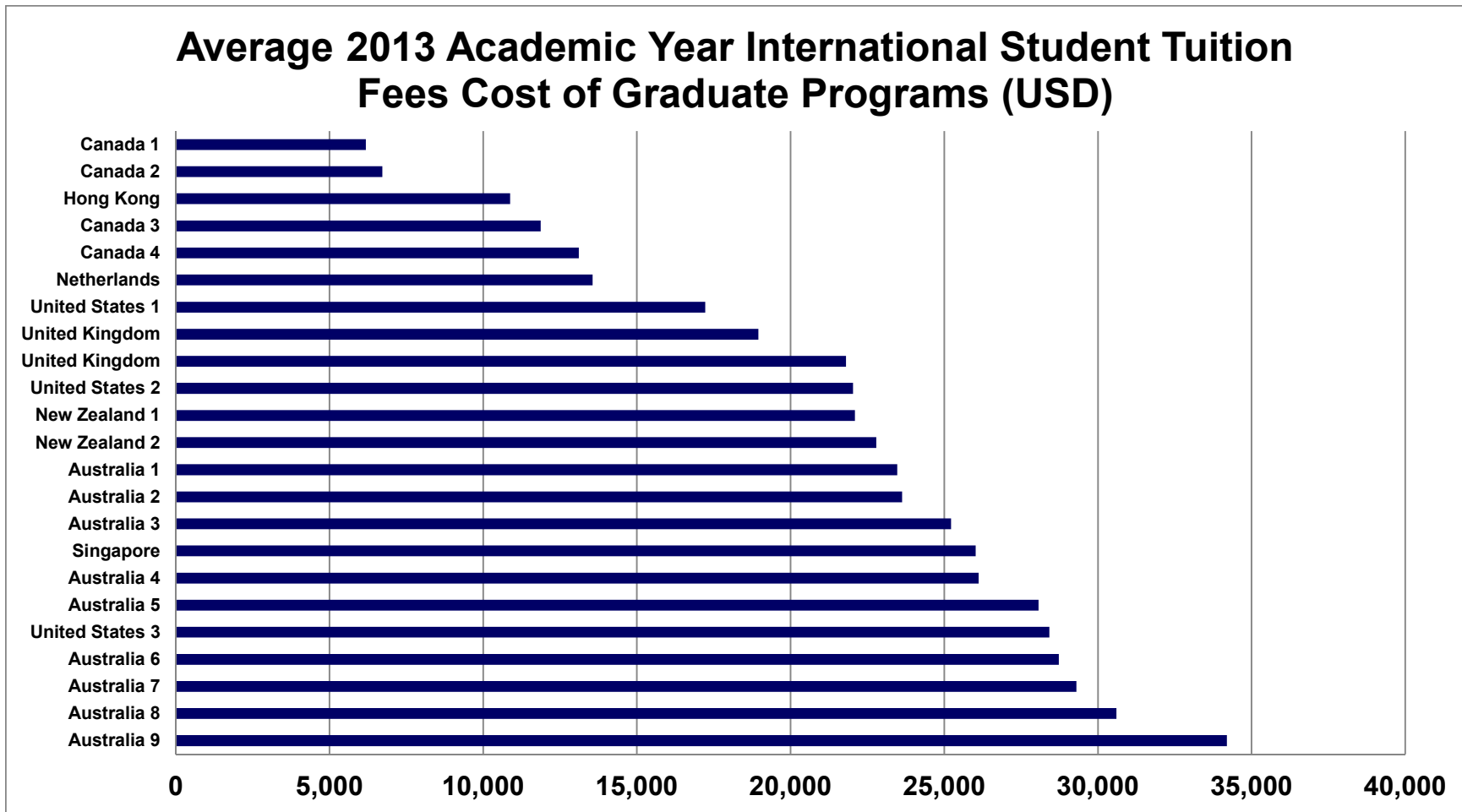


Private university pricing models account for United States 3's high cost

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013 Academic Year Cost: Graduate Programs at Research Universities

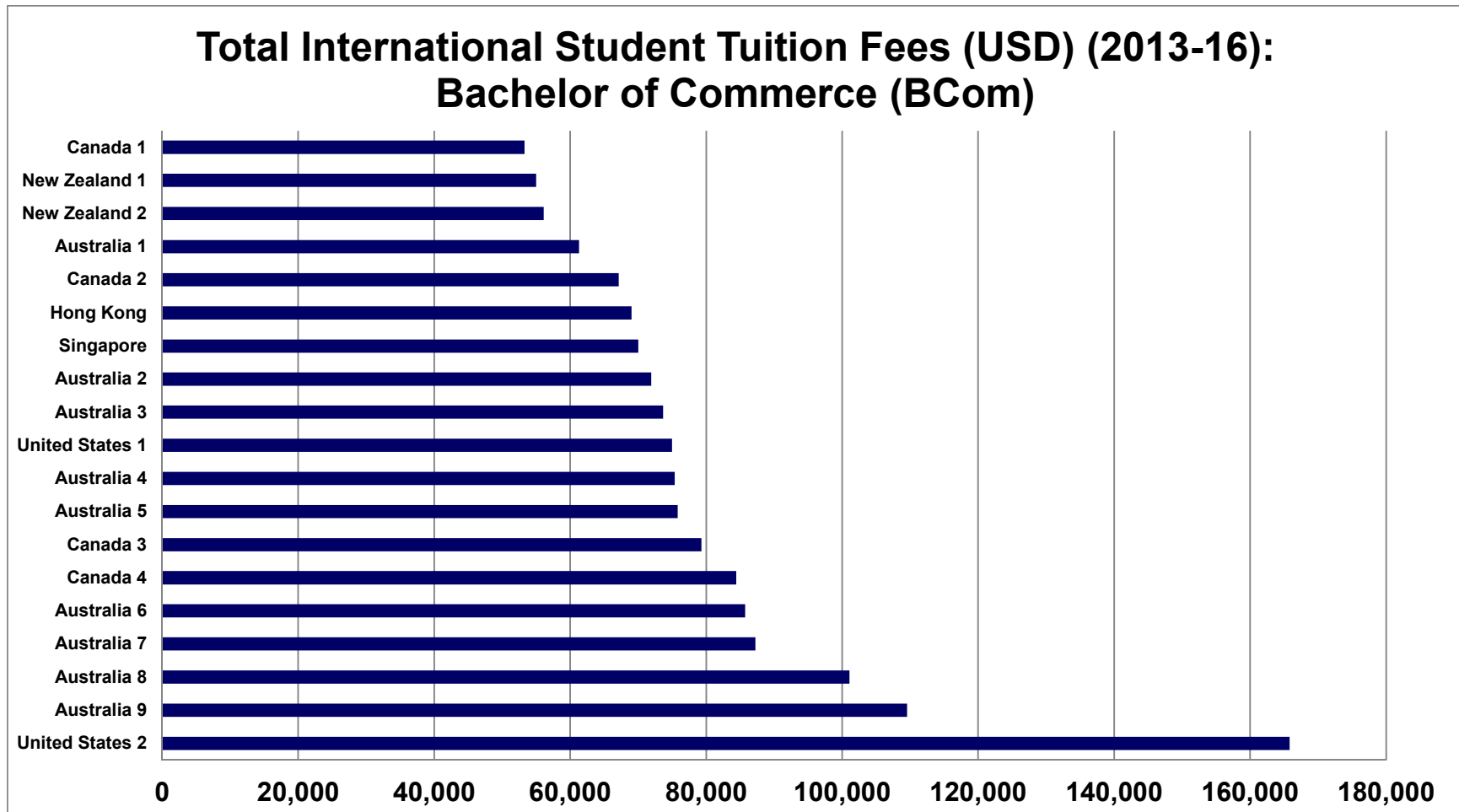


Canadian master's degrees heavily underpriced

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

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



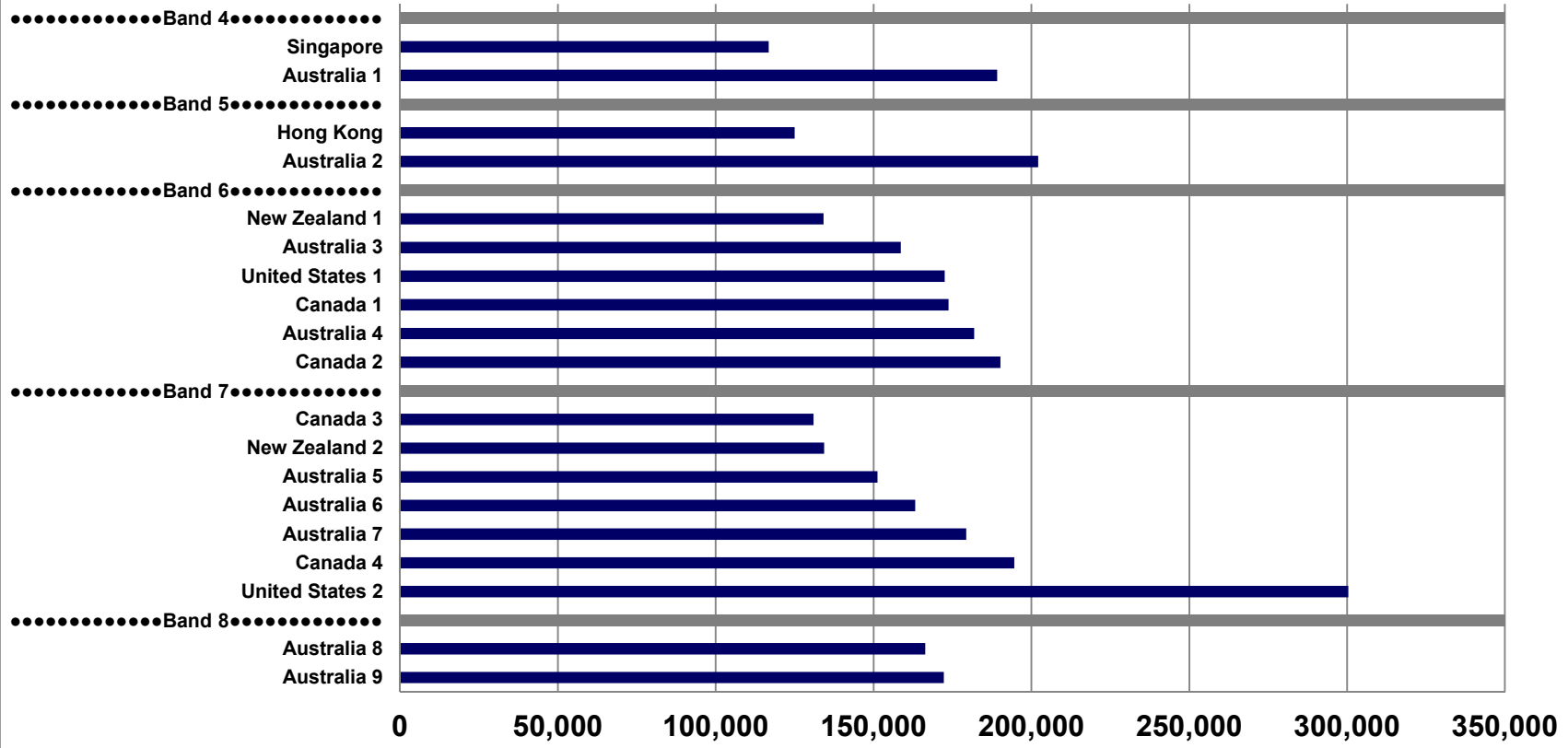
New Zealand evidences value for degree cost

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013-16 TCODA by Band: Bachelor of Commerce Programs

**Total Cost of Degree Acquisition by Band (USD) (2013-16):
Bachelor of Commerce (BCom)**

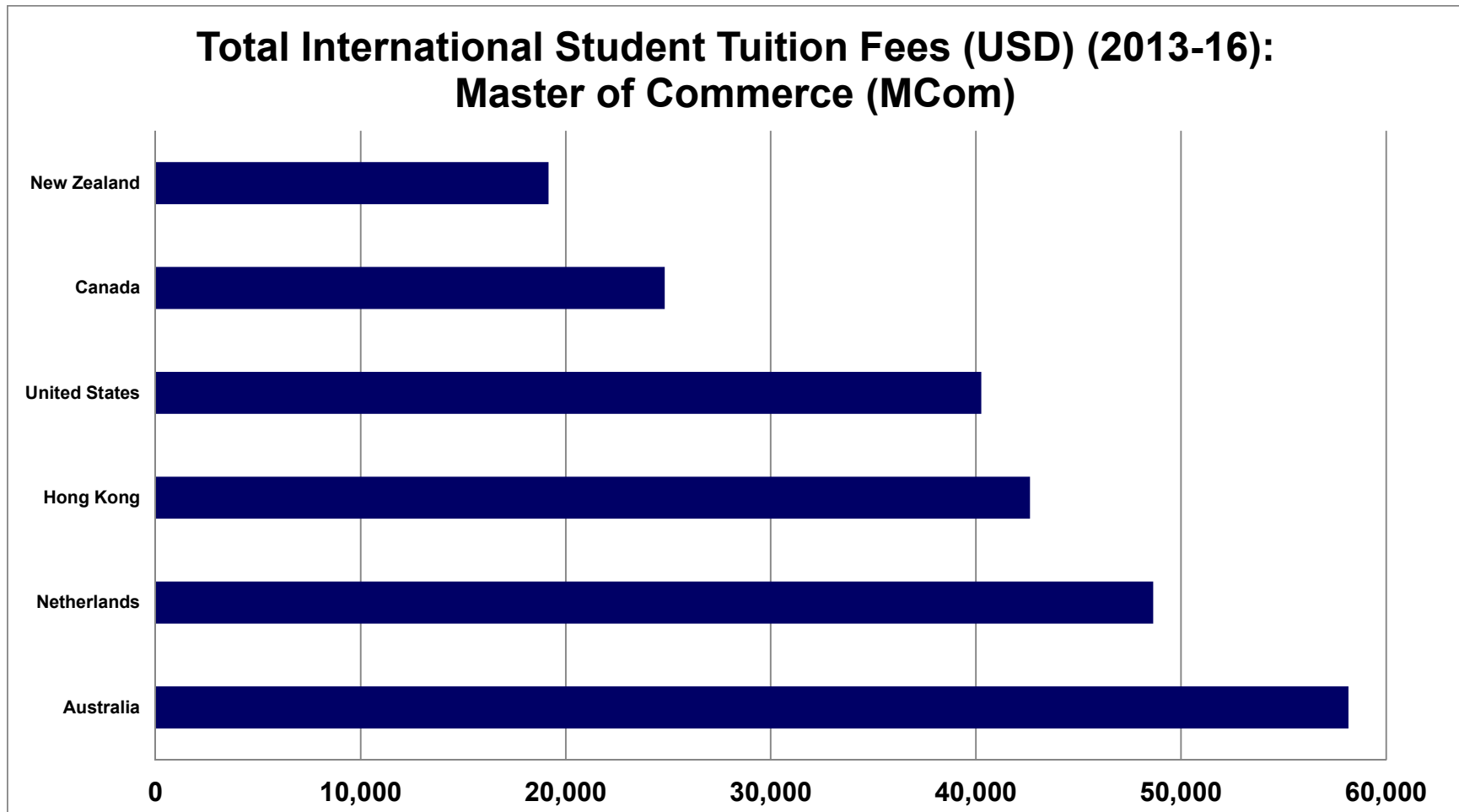


Price elasticity is a potent factor for BCom programs

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

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



Australian institutions drive revenue through popular programs

Source: ICG ITBCD.

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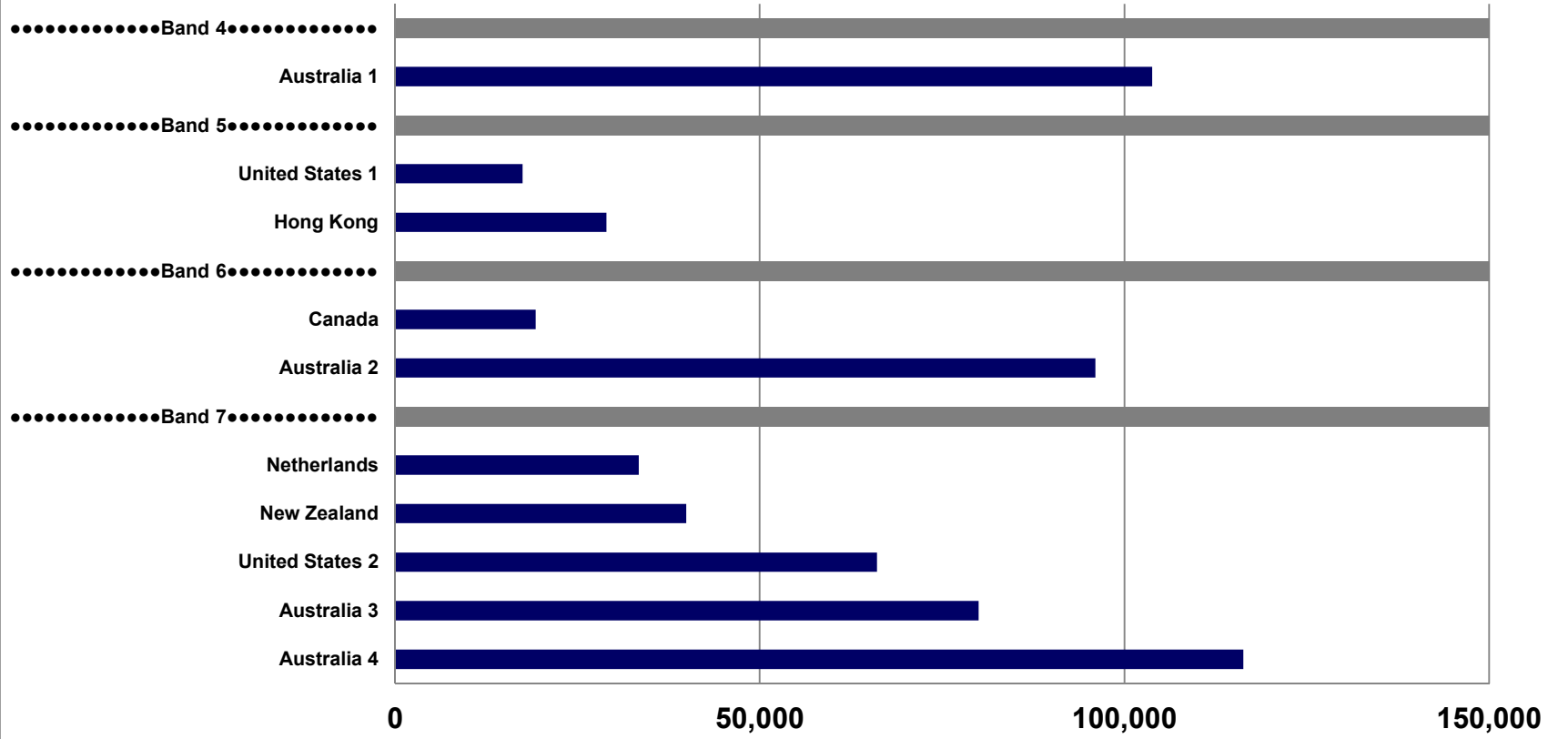
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PERSPECTIVES FROM ITBCD

2013-16 TCODA by Band: Master of Commerce Programs

**Total Cost of Degree Acquisition by Band (USD) (2013-16):
Master of Commerce (MCom)**



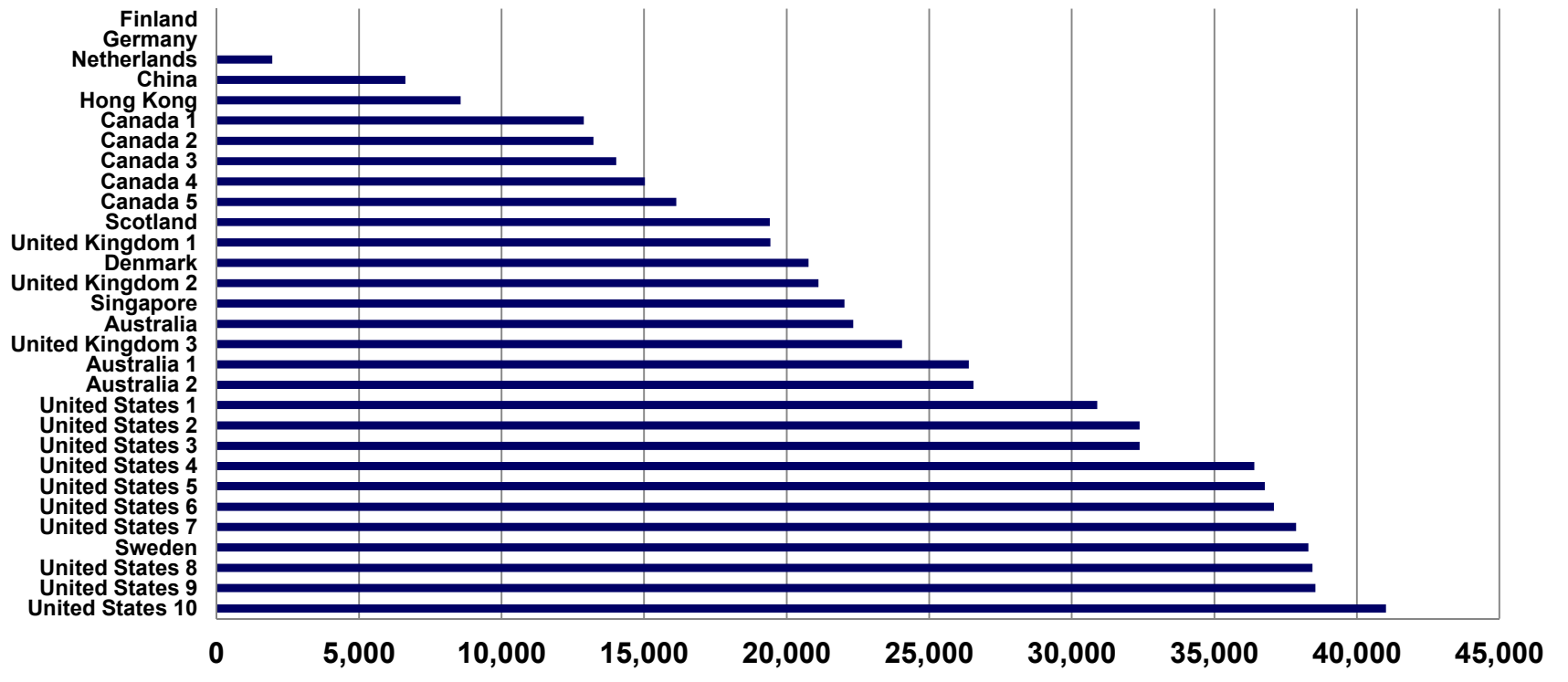
Strong contrast in price points within market bands

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

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

**Average 2013 Academic Year
International Student Tuition Fees Cost
of All Programs (USD)**



US institutions are highest priced for the art and design market

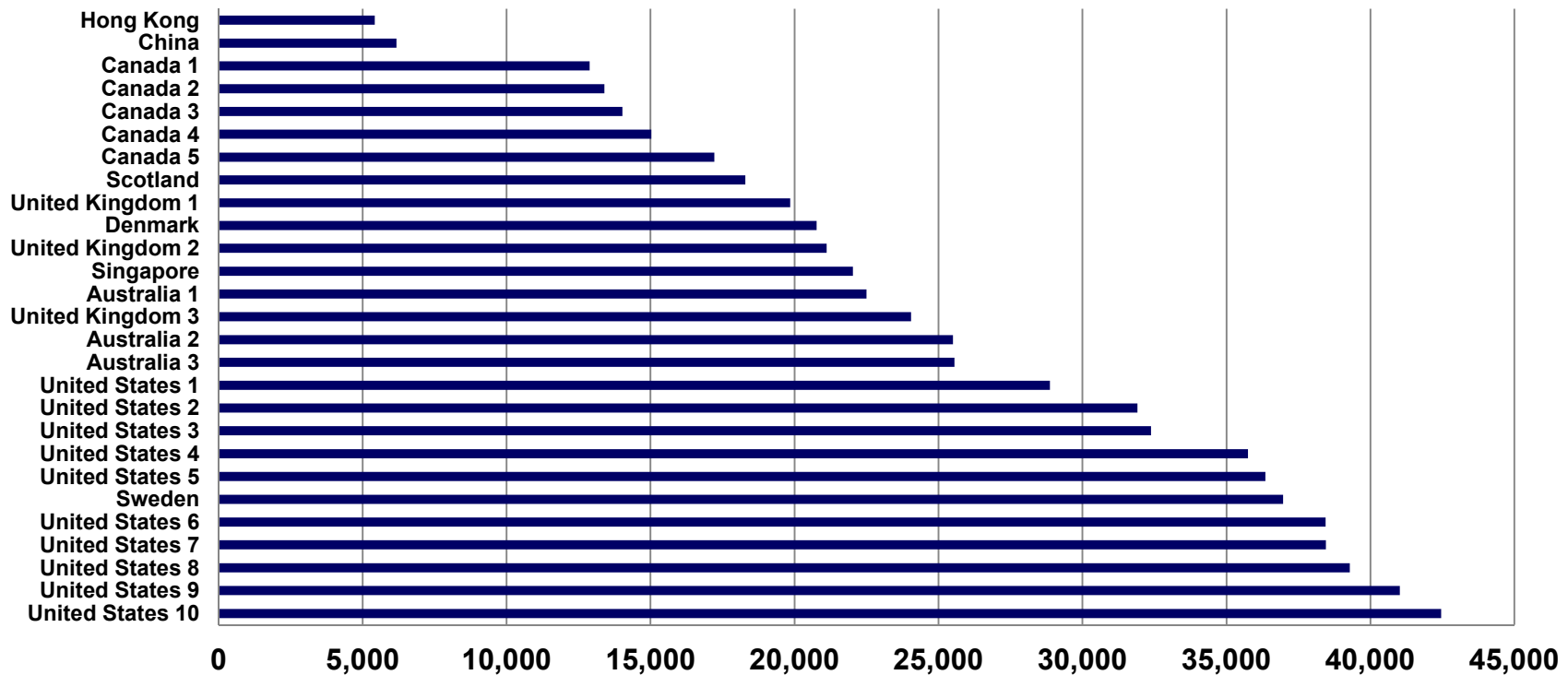
Note: Finland and Germany institutions do not charge tuition fees for these programs.

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

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

**Average 2013 Academic Year
International Student Tuition Fees Cost of Undergraduate
Programs (USD)**



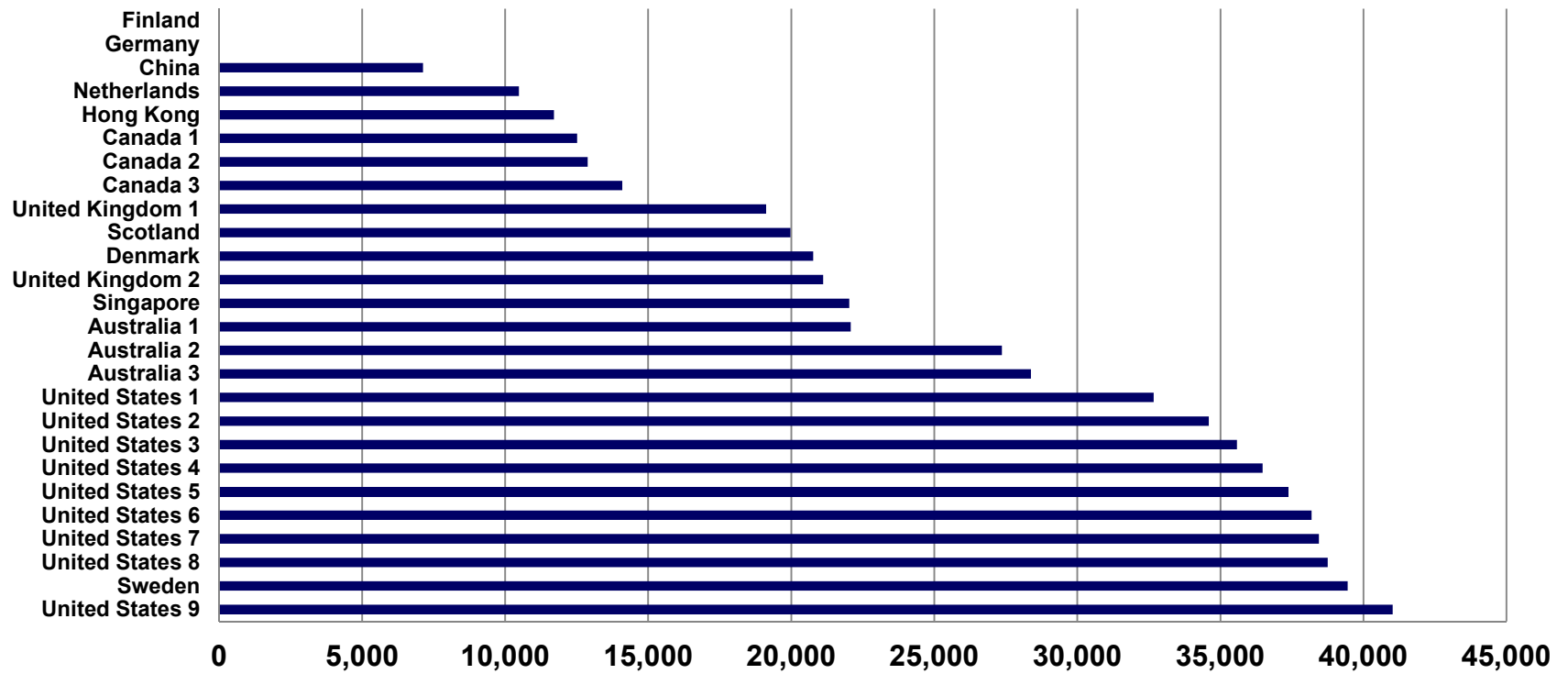
Canadian institutions offer value at the undergraduate level

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

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

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



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

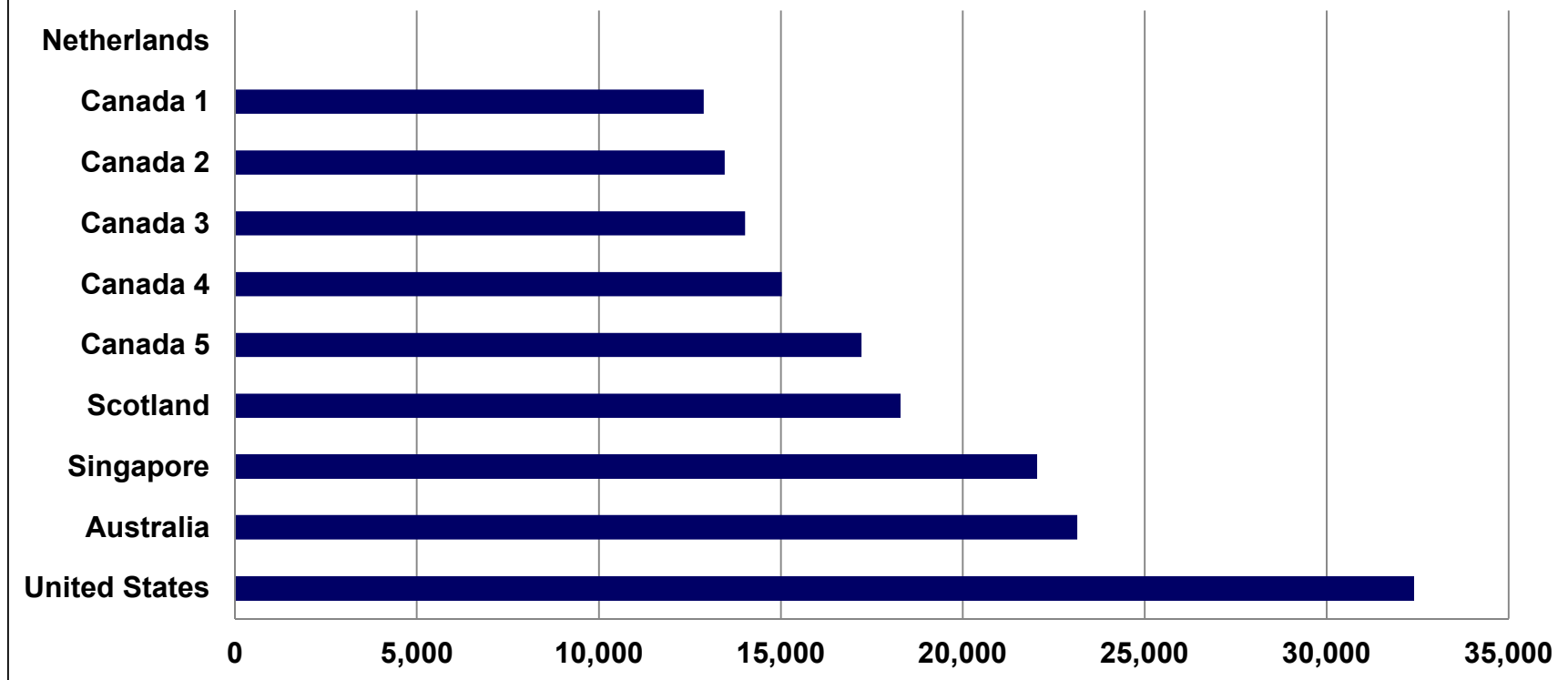
Note: Finnish and German institutions do not charge tuition fees for these programs.

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013 Academic Year Tuition Fees Cost: Bachelor of Design Programs

2013 Academic Year International Student Tuition Fees (USD): Bachelor of Design (BDes)



Room to increase tuition fees for BDes programs

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

Source: ICG ITBCD.

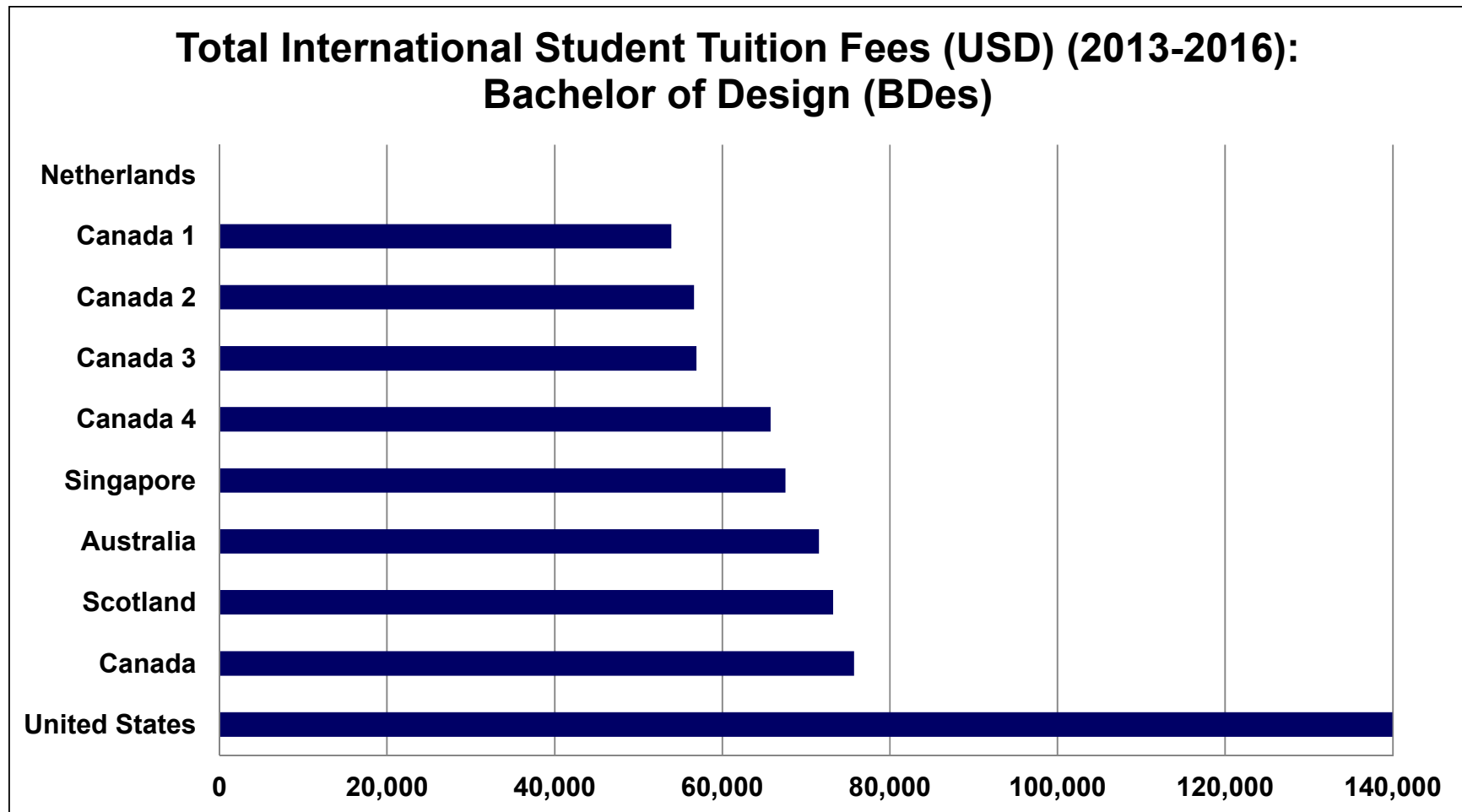
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PERSPECTIVES FROM ITBCD

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



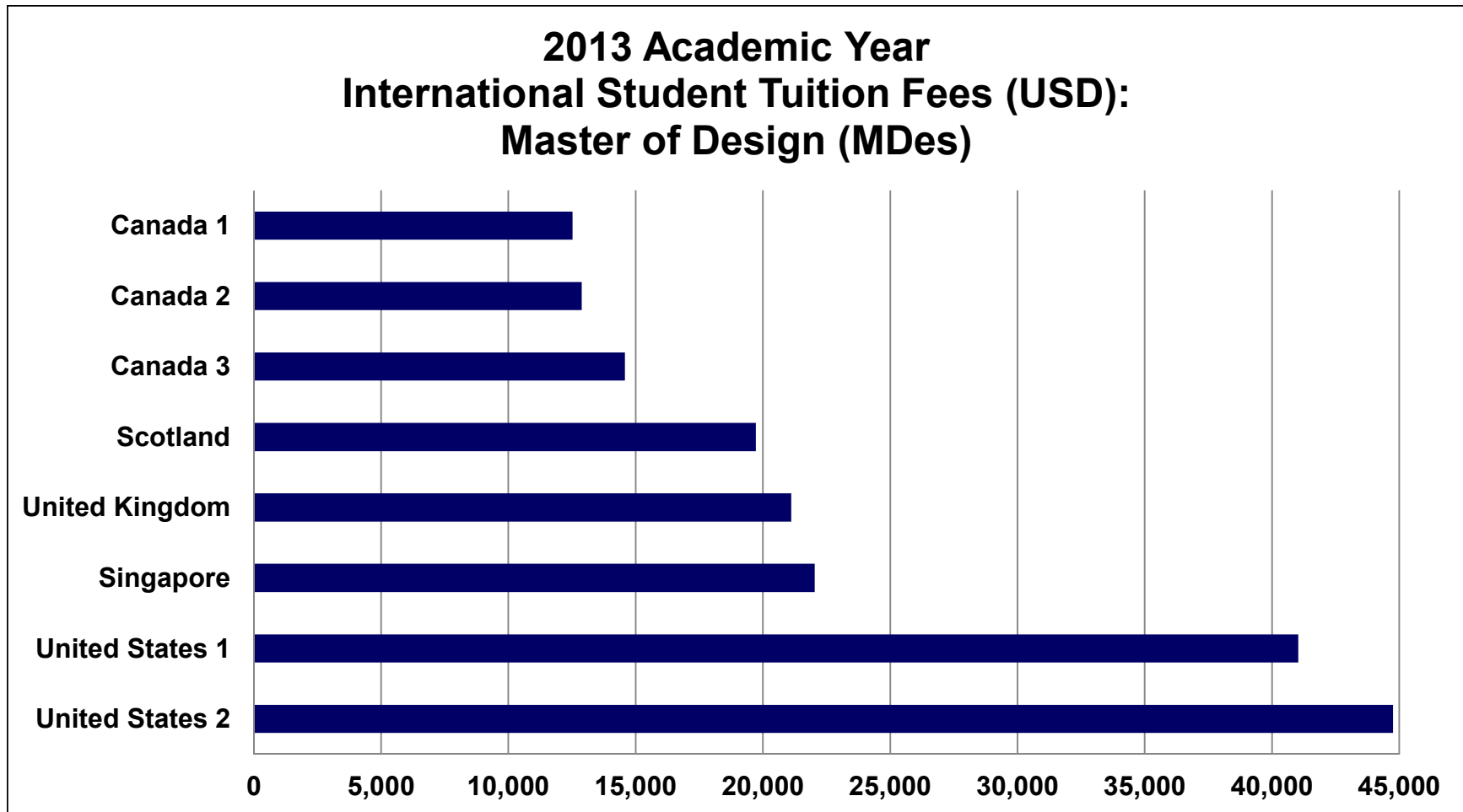
US institutions almost double next closest country competitors

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

Source: ICG ITBCD.

PERSPECTIVES FROM ITBCD

2013 Academic Year Tuition Fees Cost: Master of Design Programs



US once again highest tuition cost for art and design

Source: ICG ITBCD.

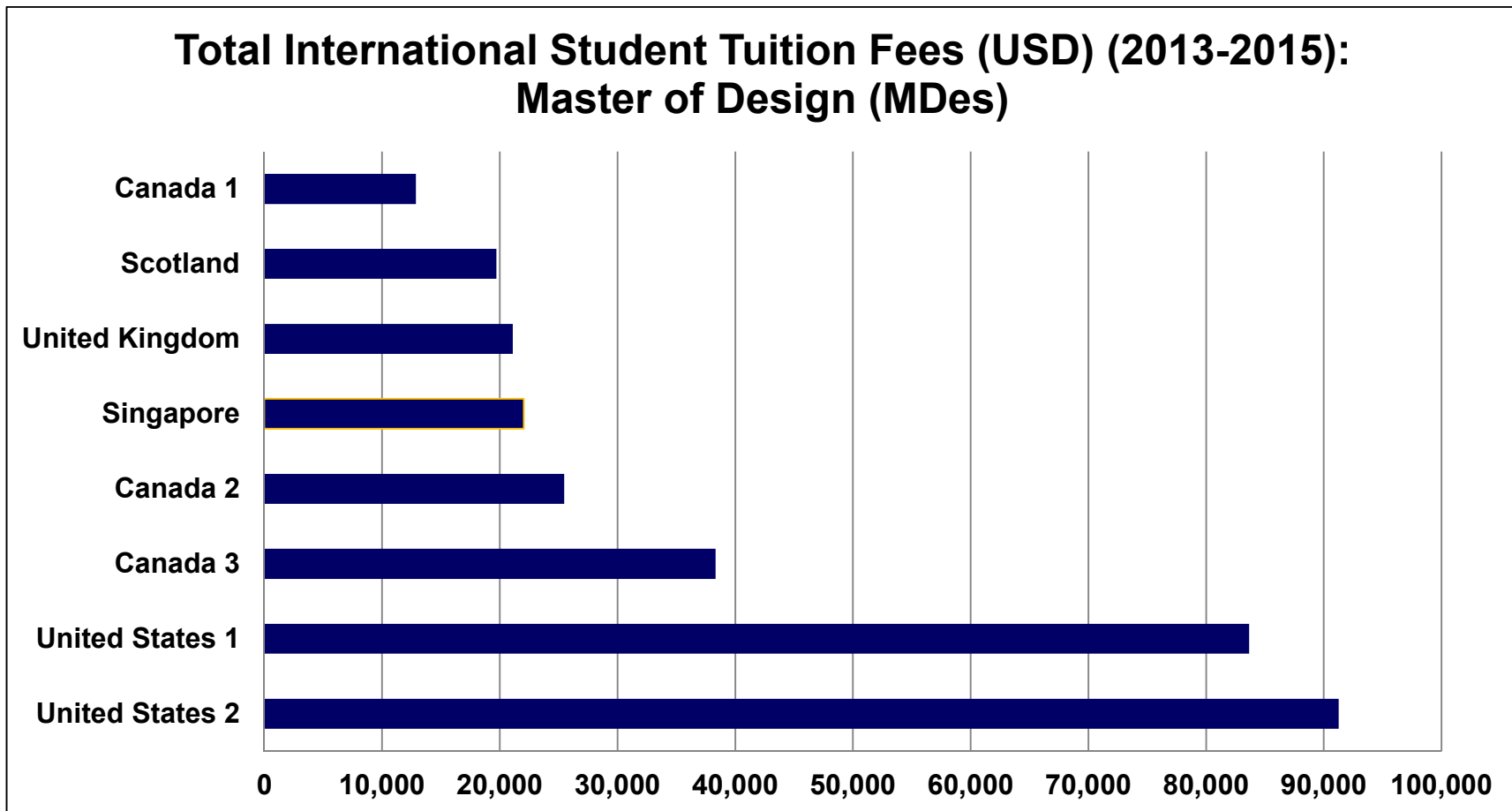
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PERSPECTIVES FROM ITBCD

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



Canadian institutions appear to be underpriced

Source: ICG ITBCD.

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COMPETITION STRATEGY FOR INTERNATIONAL TUITION FEES

Research and Analysis Summary

- **Research on how tuition costs inform student choice is divided into two theories:**
 - **Human Capital Theory**
 - **Signaling Theory**
- **Cost vs. expected return is central to both theories. Students will pay for:**
 - **Economically valuable skills**
 - **An economically valuable brand**
- **Premium Pricing Theory demonstrates that brand drives market power.**
- **In the higher education sphere discrete market (brand) bands exist which correspond to pricing power.**
- **The ability of higher education institutions to exceed their market power is limited.**
 - **Exceeding a market band can result in a severe correction on the supply side.**

COMPETITION STRATEGY FOR INTERNATIONAL TUITION FEES

International Student Perspectives on Presentation of Fees

- **ICG's experience in retrieving and assessing international student tuition fees has evidenced a haphazard approach by many institutions presenting their tuition fees to international students.**
- **Opaqueness and complexity are the norm and not the exception in how fees are presented to students.**
- **Tuition fees presentation policy is often driven by internal institutional regulations and policies.**
 - **These policies are not conducive to presenting clear information to students.**
- **Institutions that present their fees in a clear, concise manner, stand to gain market share from competitor institutions who are overly complex.**
- **International students can be attracted through clear static and future looking cost knowledge.**

COMPETITION STRATEGY FOR INTERNATIONAL TUITION FEES

Strategic Perspectives at an Institutional Level

- **Tuition pricing theory dictates that institutions should consider three factors regarding the setting of international student fees:**
 - **A clear mapping of the expected value for students**
 - **A thorough understanding of brand power**
 - **An assessment of current and future market band(s)**
- **Research does not support the idea that raising costs alone will result in greater brand power.**
- **Students use cross sectional data to assess whether an institution provides the appropriate signal or skills in relation to cost.**
- **Deviating from an expected price setting model could have unintended (negative) consequences for an institution.**

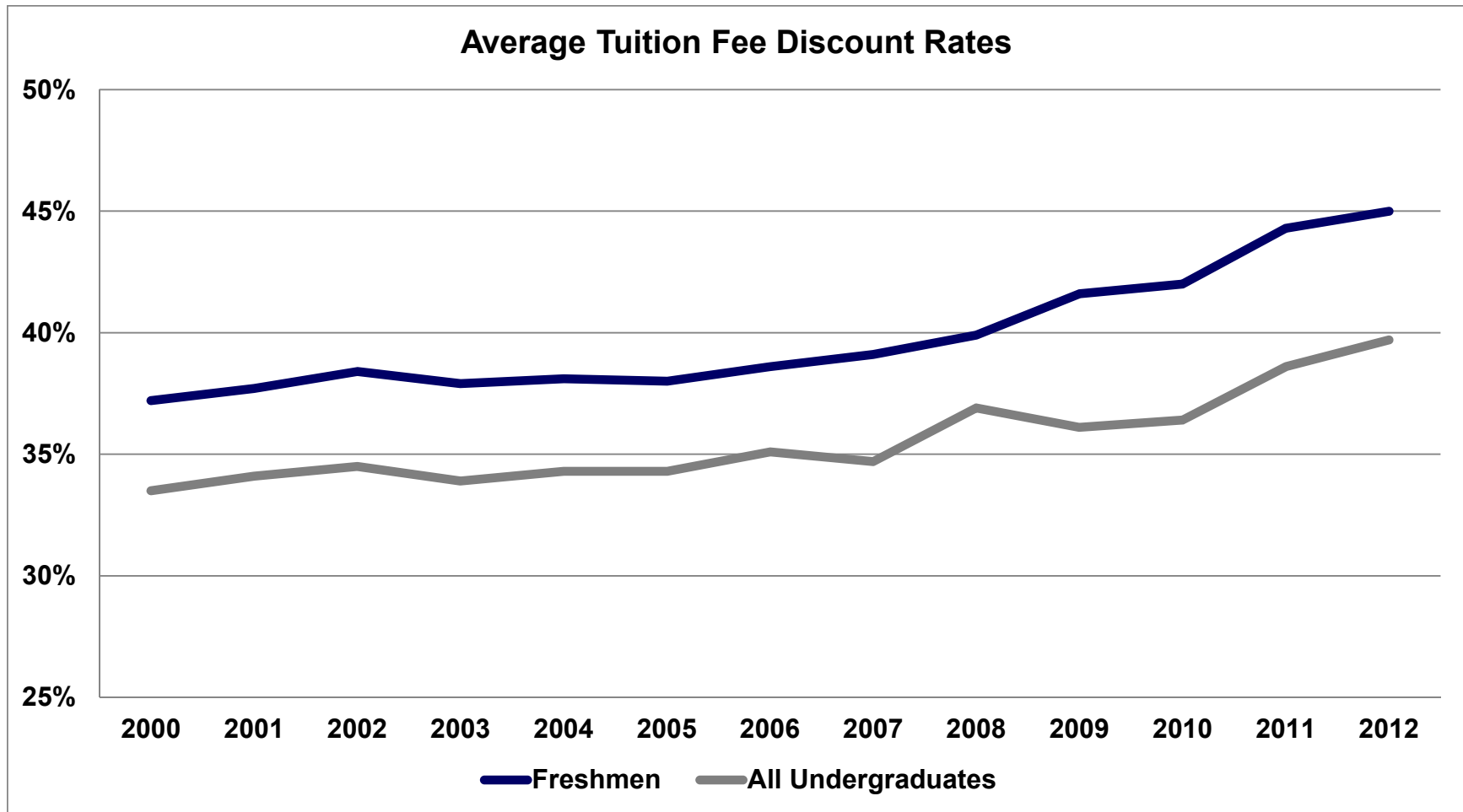
COMPETITION STRATEGY FOR INTERNATIONAL TUITION FEES

Game Theory and Tuition Fee Setting

- **Institutions can utilize game theory logic to understand basic tuition fees pricing dynamics within their particular market band.**
- **Understanding competitor actions and reactions to tuition fees pricing changes can ensure institutions do not price themselves outside their market band.**
- **Classic “tit for tat” game theory logic would indicate that as one competitor institution raises/lowers its tuition fees other within its market band will follow.**
- **However, repeated increases of tuition fees at moderate to extreme levels are likely to not be met with similar reactions from competitors and carry overpricing risk within the market band.**

COMPETITION STRATEGY FOR INTERNATIONAL TUITION FEES

Strategic Discounting



Hidden discounting has become more prevalent overtime

Source: NACUBO.

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