

HOW EVERYONE IN BC IS BEING RANKED

—

**THE MEANING AND IMPACT OF K-12 TO
RESEARCH RANKINGS EXPLAINED**

BCCIE Summer Conference

- **This presentation was delivered by ICG at the BCCIE Summer Conference in Kelowna on 20 June 2017.**
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About the Session

Country and Regional Rankings

K-12 Schooling Quality Assessments: PISA and TIMSS

International University Rankings

Implications for BC

Discussion

ICG Contact Information

The world of International Education operates with **few commonly agreed on** performance measurement models or definitive hierarchies.

Two major exceptions exist, however: For one, the **PISA** and **TIMSS** test batteries operated by the OECD launched as far back as the year 1995. **PISA** and **TIMSS** have become a key element of national comparison of K-12 school systems, and impacted domestic policy-makers and parents of prospective international students alike.

The second exception consist of the **19 international PSE institution rankings** which cover a wide range of topics. Some of these rankings have become critical arbiters of student and resource movement trends, and often directly or indirectly shape debates about International Education issues.

This session shares highlights of BC performances across all sectors, and discuss the impact of these tests / rankings on BC's provincial and institutional brand.

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Overview

- **Rankings of countries**
- **Rankings of social and humanitarian factors**
- **Economic factor based rankings**
- **Education-based rankings**

COUNTRY AND REGIONAL RANKINGS

Anholt-GfK Nation Brands Index (2016)

National

Anholt-GfK Nation Brands Index (2016)

Rank	Country	Score
1	USA (pre-election)	n/a
2	Germany	n/a
3	United Kingdom	n/a
4	Canada	n/a
5	France	n/a
6	Italy	n/a
7	Japan	n/a
8	Switzerland	n/a
9	Australia	n/a
10	Sweden	n/a

COUNTRY AND REGIONAL RANKINGS

United Nations Human Development Index (2014)

Social

United Nations Human Development Index (2014)

Rank	Country	Score
1	Norway	0.944
2	Australia	0.935
3	Switzerland	0.930
4	Denmark	0.923
5	Netherlands	0.922
6	Germany	0.916
7	Ireland	0.916
8	United States	0.915
9	Canada	0.913
10	New Zealand	0.913
11	Singapore	0.912
12	Hong Kong	0.910
13	Liechtenstein	0.908
14	Sweden	0.907
15	United Kingdom	0.907

COUNTRY AND REGIONAL RANKINGS

Cato Institute Human Freedom Index (2014)

Social

CATO Institute Human Freedom Index (2014)

Rank	Country	Score
1	Hong Kong	9.06
2	Switzerland	8.83
3	New Zealand	8.67
4	Ireland	8.64
5	Denmark	8.62
T=6	Canada	8.61
T=6	United Kingdom	8.61
T=6	Australia	8.61
9	Finland	8.55
10	Netherlands	8.54
11	Luxembourg	8.53
12	Austria	8.53
13	Germany	8.49
14	Norway	8.49
15	Sweden	8.42

COUNTRY AND REGIONAL RANKINGS

Vision of Humanity Global Peace Index (2017)

Social

Vision of Humanity Global Peace Index (2017)

Rank	Country	Score
1	Iceland	1.111
2	New Zealand	1.241
3	Portugal	1.258
4	Austria	1.265
5	Denmark	1.337
6	Czech Republic	1.360
7	Slovenia	1.364
8	Canada	1.371
9	Switzerland	1.373
10	Ireland	1.408
11	Japan	1.408
12	Australia	1.425
13	Bhutan	1.474
14	Norway	1.486
15	Hungary	1.494

COUNTRY AND REGIONAL RANKINGS

United Nations World Happiness Report (2017)

Social

United Nations World Happiness Report (2017)

Rank	Country	Score
1	Norway	7.537
2	Denmark	7.522
3	Iceland	7.504
4	Switzerland	7.494
5	Finland	7.469
6	Netherlands	7.377
7	Canada	7.316
8	New Zealand	7.314
9	Australia	7.284
10	Sweden	7.284
11	Israel	7.213
12	Costa Rica	7.079
13	Austria	7.006
14	United States	6.993
15	Ireland	6.977

COUNTRY AND REGIONAL RANKINGS

Social Progress Index (2016)

Social

Social Progress Index (2016)

Rank	Country	Score
1	Finland	90.09
2	Canada	89.49
3	Denmark	89.39
4	Australia	89.13
5	Switzerland	88.87
6	Sweden	88.8
7	Norway	88.7
8	Netherlands	88.65
9	United Kingdom	88..58
10	Iceland	88.45
11	New Zealand	88.45
12	Ireland	87.94
13	Austria	86.6
14	Japan	86.54
15	Germany	86.42

COUNTRY AND REGIONAL RANKINGS

Dual Citizen Global Green Economy Index (2016)

Economic

Dual Citizen Global Green Economy Index (2016)

Rank	Country	Score
1	Sweden	77.61
2	Norway	69.11
3	Finland	67.83
4	Switzerland	67.63
5	Germany	66.01
6	Austria	65.23
7	Iceland	63.68
8	Zambia	62.00
9	Denmark	61.84
10	Brazil	60.29
11	Costa Rica	58.69
12	Canada	58.00
13	France	57.76
14	Ethiopia	56.46
15	Italy	56.21

COUNTRY AND REGIONAL RANKINGS

The Economist Democracy Index (2016)

Social

The Economist Democracy Index (2016)		
Rank	Country	Score
1	Norway	9.93
2	Iceland	9.5
3	Sweden	9.39
4	New Zealand	9.26
5	Denmark	9.2
6	Canada	9.15
7	Ireland	9.15
8	Switzerland	9.09
9	Finland	9.03
10	Australia	9.01
11	Luxembourg	8.81
12	Netherlands	8.80
13	Germany	8.63
14	Austria	8.41
15	Malta	8.39

COUNTRY AND REGIONAL RANKINGS

Mercer Quality of Living Rankings (2017)

Social

Mercer Quality of Living Rankings (2017)

Rank	City	Score
1	Vienna	n/a
2	Zurich	n/a
3	Auckland	n/a
4	Munich	n/a
5	Vancouver	n/a
6	Düsseldorf	n/a
7	Frankfurt	n/a
8	Geneva	n/a
9	Copenhagen	n/a
T=10	Sydney	n/a
T=10	Basel	n/a
12	Amsterdam	n/a
13	Berlin	n/a
14	Bern	n/a
15	Wellington	n/a

COUNTRY AND REGIONAL RANKINGS

Heritage Foundation Economic Freedom Index (2016)

Economic

Heritage Foundation Economic Freedom Index (2016)		
Rank	Country	Score
1	Hong Kong	89.8
2	Singapore	88.6
3	New Zealand	83.7
4	Switzerland	81.5
5	Australia	81.0
6	Estonia	79.1
7	Canada	78.5
8	U.A.E	76.9
9	Ireland	76.7
10	Chile	76.5
11	Taiwan	76.5
12	United Kingdom	76.4
13	Georgia	76.0
14	Luxembourg	75.9
15	Netherlands	75.8

COUNTRY AND REGIONAL RANKINGS

Global Innovation Index (2016)

Economic

Global Innovation Index (2016)		
Rank	Country	Score
1	Switzerland	66.28
2	Sweden	63.57
3	United Kingdom	61.93
4	United States	61.40
5	Finland	59.90
6	Singapore	59.16
7	Ireland	59.03
8	Denmark	58.45
9	Netherlands	58.29
10	Germany	57.94
11	South Korea	57.15
12	Luxembourg	57.11
13	Iceland	55.99
14	Hong Kong	55.69
15	Canada	54.71

COUNTRY AND REGIONAL RANKINGS

CBoC Economic Report Card (2014)

Economic

CBoC Economic Report Card (2014)

Rank	Country/Province	Score
1	Alberta	A+
2	Saskatchewan	A+
3	Newfoundland & Labrador	A+
4	Australia	A
5	Ireland	A
6	United States	A
7	Norway	A
8	Canada	B
9	Switzerland	B
10	Ontario	B
11	United Kingdom	B
12	British Columbia	B
13	Sweden	B
14	Germany	B
15	Prince Edward Island	B

COUNTRY AND REGIONAL RANKINGS

CBoC Environmental Report Card (2014)

Economic

CBoC Environmental Report Card (2014)		
Rank	Country/Province	Score
1	Switzerland	A
2	France	A
3	United Kingdom	A
4	Sweden	A
5	Germany	A
6	Netherlands	A
7	Denmark	A
8	Ireland	A
9	Austria	B
10	Belgium	B
11	Ontario	B
12	Norway	B
13	Japan	B
...
16	British Columbia	C

COUNTRY AND REGIONAL RANKINGS

CBoC Innovation Report Card (2014)

Economic

CBoC Innovation Report Card (2014)

Rank	Country/Province	Score
1	Sweden	A
2	Denmark	A
3	Finland	A
4	United States	B
5	Ontario	B
6	Switzerland	B
7	Netherlands	B
8	Quebec	B
9	Austria	B
10	British Columbia	B
11	Norway	B
12	Canada	C
13	Germany	C
14	Japan	C
15	Alberta	C

COUNTRY AND REGIONAL RANKINGS

CBoC Education & Skills Report Card (2014)

Education

CBoC Education & Skills Report Card (2014)		
Rank	Country/Province	Score
1	Japan	A
2	Finland	A
3	British Columbia	B
4	Ontario	B
5	Alberta	B
6	Canada	B
7	Australia	B
8	Switzerland	B
9	Netherlands	C
10	Quebec	C
11	Germany	C
12	Nova Scotia	C
13	United Kingdom	C
14	Belgium	C
15	Sweden	C

COUNTRY AND REGIONAL RANKINGS

Universitas U21 Rankings (2017)

Education

Universitas U21 Rankings (2017)		
Rank	Country	Score
1	United States	100
2	Switzerland	86.9
3	United Kingdom	85.5
4	Denmark	83.5
5	Sweden	83.4
6	Singapore	80.8
7	Canada	80.2
8	Netherlands	80.0
9	Finland	79.9
10	Australia	79.6
11	Austria	75.0
12	Belgium	74.2
13	Norway	73.9
14	Hong Kong	73.7
15	New Zealand	72.1

Perspectives

- **Canada is typically ranked in the Top 10 in the world with regards to social, humanitarian, economic, and education factors.**
- **Few other countries rival Canada for its consistency in high placements across different factors**
- **British Columbia typically does well on intra-Canadian rankings of economic and education factors.**

About the Session

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K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

TIMSS Mathematics

TIMSS Mathematics Score – 8th Grade (2015)

Rank	Country	Score
1	Singapore	621
2	South Korea	606
3	Chinese Taipei	599
4	Hong Kong	594
5	Japan	586
6	Russia	538
7	Kazakhstan	528
8	Canada	527
9	Ireland	523
T=10	United States	518
T=10	England	518
12	Slovenia	516
13	Hungary	514
14	Norway	512
15	Lithuania	511

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

TIMSS Science

TIMSS Science Score – 8th Grade (2015)		
Rank	Country	Score
1	Singapore	597
2	Japan	571
3	Chinese Taipei	569
4	South Korea	556
5	Slovenia	551
6	Hong Kong	546
7	Russia	544
8	England	537
9	Kazakhstan	533
T=10	Ireland	530
T=10	United States	530
12	Hungary	527
13	Canada	526
14	Sweden	522
15	Lithuania	519

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

PISA Mathematics

PISA Mathematics Performance Score (2015)

Rank	Country	Score
1	Singapore	564
2	Hong Kong (China)	548
3	Macao (China)	544
4	Chinese Taipei	542
5	Japan	532
6	B-S-J-G (China)	531
7	South Korea	524
8	Switzerland	521
9	Estonia	520
10	Canada	516
11	Netherlands	512
12	Denmark	511
13	Finland	511
14	Slovenia	510
15	Belgium	507

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

PISA Science

PISA Science Performance Score (2015)		
Rank	Country	Score
1	Singapore	556
2	Japan	538
3	Estonia	534
4	Chinese Taipei	532
5	Finland	531
6	Macao (China)	529
7	Canada	528
8	Viet Nam	525
9	Hong Kong (China)	523
10	B-S-J-G (China)	518
11	South Korea	516
12	New Zealand	513
13	Slovenia	513
14	Australia	510
15	United Kingdom	509

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

PISA Reading

PISA Reading Performance Score (2015)		
Rank	Country	Score
1	Singapore	535
2	Hong Kong (China)	527
3	Canada	527
4	Finland	526
5	Ireland	521
6	Estonia	519
7	Korea	517
8	Japan	516
9	Norway	513
10	New Zealand	509
11	Germany	509
12	Macao (China)	509
13	Poland	506
14	Slovenia	505
15	Netherlands	503

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

PISA Mathematics by Region

PISA Mathematics Performance Score (2015)		
Rank	Province/Region	Score
1	Quebec	544
2	British Columbia	522
3	Flemish community	521
4	Bolzano	518
5	Navarre	518
6	Trento	516
7	Alberta	511
8	Ontario	509
9	Lombardia	508
17	Prince Edward Island	499
18	Nova Scotia	497
23	New Brunswick	493
28	Manitoba	489
30	Newfoundland & Labrador	486
32	Saskatchewan	484

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

PISA Science by Region

PISA Science Performance Score (2015)		
Rank	Province/Region	Score
1	Alberta	541
2	British Columbia	539
3	Quebec	537
4	Massachusetts	529
5	Ontario	524
6	Castile and Leon	519
7	Nova Scotia	517
8	Madrid	516
T=9	Flemish community	515
T=9	Bolzano	515
11	Prince Edward Island	515
17	New Brunswick	506
18	Newfoundland & Labrador	506
25	Manitoba	499
29	Saskatchewan	496

K-12 SCHOOLING QUALITY ASSESSMENTS: PISA AND TIMSS

PISA Reading by Region

PISA Reading Performance Score (2015)		
Rank	Province/Region	Score
1	British Columbia	536
2	Alberta	533
3	Quebec	532
4	Ontario	527
5	Massachusetts	527
6	Castile and Leon	522
7	Madrid	520
8	Nova Scotia	517
9	Prince Edward Island	515
10	Navarre	514
11	Trento	512
15	New Brunswick	505
17	Newfoundland & Labrador	505
26	Manitoba	498
29	Saskatchewan	496

Perspectives

- **Canada typically performs in the Top 10 in mathematics and science assessments.**
- **Canada performs exceptionally well on reading assessments.**
- **British Columbia performs in the global Top 5 across PISA (by region).**

About the Session

Country and Regional Rankings

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International University Rankings







Implications for BC

Discussion

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19 ACTIVE INTERNATIONAL UNIVERSITY RANKINGS BY RELEASE YEAR AND TYPE

	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
Academic Ranking of World Universities (ARWU, aka Shanghai Ranking)														
Ranking Web of Universities (Webometrics Ranking)														
World University Rankings (Quacquarelli Symonds (QS))														
University Web Rankings & Reviews (4 International Colleges & Universities (4ICU))														
Performance Ranking of Scientific Papers for World Universities (NTU (formerly HEEACT))														
CWTS Leiden Ranking														
University Ranking by Academic Performance (URAP)														
SCImago Institutions Rankings (new version)								R	R	R	R	R	R	
World University Rankings (Times Higher Education)														
Global Employability Rankings (Emerging/Trendence)														
Round University Rankings (RUR)								R	R	R				
U-Multirank (Universities Compared. Your Way)														
UI GreenMetric World University Ranking											E	E	E	E
Center for World University Rankings (CWUR)														
Global University Ranking (Youth Inc. / Education Times of India)														
nature INDEX														
Worldwide Professional University Rankings (RankPro)														
Best Global Universities Rankings (U.S. News & World Report)														
Reuters Top 100 Most Innovative Universities													I	I

 Acad. performance w/ league table	 Academic performance w/o league table	 Broad-based league table
 Multi-indicator ranking	 Employability-based league table	 Web presence league table

Notes: This overview does not list all world university rankings. Instead, it aims to highlight the variety of rankings that are being actively published, with a focus on key rankings tracked by ICG. "R" denotes retroactive. "E" denotes environmental focus. "I" denotes innovation.

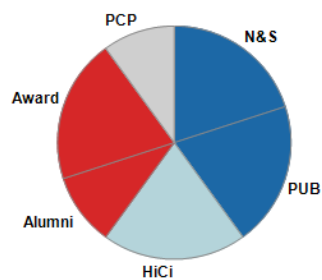
Source: Rankings agencies, ICG.

KEY INTERNATIONAL RANKINGS' METHODOLOGIES

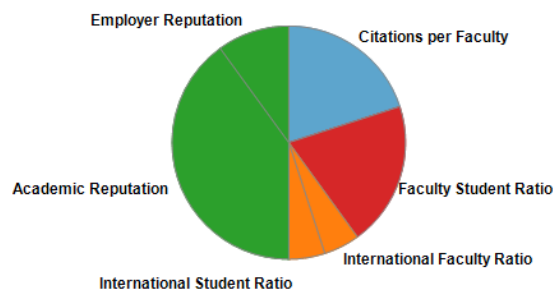
Rankings by Indicator Type and Weight (I)

Breakdown of Covered Rankings by Indicator Type and Weight

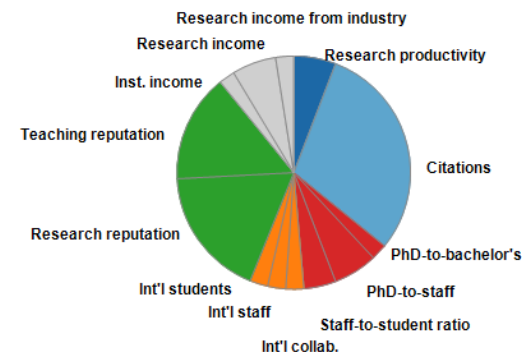
ARWU



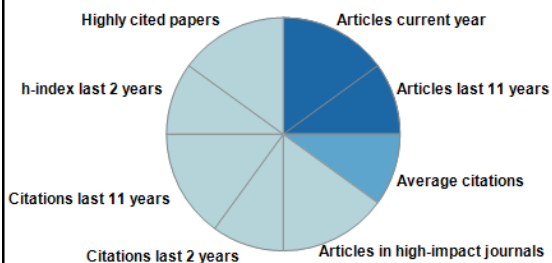
QS



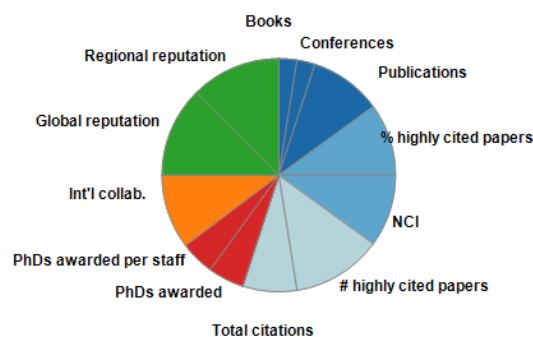
THE



NTU



USNWR



Indicator Type

Research Output

Research Impact (size independent)

Research Impact (size dependent)

Teaching-related

Internationalization

Reputation

Other



Notable differences between five key rankings

RANKINGS MODELS VERSUS PROFILES VERSUS BADGES

Global	Field/Faculty/ Subject	Regional	Reputation	Systems	Employability
<ul style="list-style-type: none"> • ARWU (Shanghai) • QS • THE <hr/> <ul style="list-style-type: none"> • NTU (HEEACT) • CWTS Leiden • URAP • SCImago • RUR • CWUR • U.S. News • RankPro <hr/> <ul style="list-style-type: none"> • U-Multirank <hr/> <ul style="list-style-type: none"> • Webometrics • 4ICU <hr/> <ul style="list-style-type: none"> • Emerging • LinkedIn <hr/> <ul style="list-style-type: none"> • UI GreenMetric • Reuters Top 100 	<ul style="list-style-type: none"> • ARWU Broad Subject Field (5 subjects) • ARWU Narrow Subject Field (5 subjects) • QS by Faculty (5 faculties) • QS by Subject (36 subjects) • THE by Subject (6 subjects) • NTU by Field (6 fields) • NTU by Subject (14 subjects) • URAP Field Based Ranking (23 fields) • U.S. News Subject Rankings (22 subjects) • U-Multirank (7 subjects) 	<ul style="list-style-type: none"> • Ranking of Top Universities in Greater China (Shanghai) • QS Rankings: Asia • QS Rankings: Arab Region • QS Rankings: Latin America • QS Rankings: BRICs • QS: Emerging Europe & Central Asia • THE Asia University Rankings • THE BRICs and Emerging Economies • THE Top 30 African Universities • THE Best Universities in the United States • Reuters Top 75 Innovative Asia 	<ul style="list-style-type: none"> • THE Reputation Rankings <div style="background-color: #f4a460; text-align: center; padding: 5px;">International</div> <ul style="list-style-type: none"> • THE Most International Universities <div style="background-color: #f4a460; text-align: center; padding: 5px;">Age-Based</div> <ul style="list-style-type: none"> • QS Top 50 Under 50 • THE 150 Under 50 Rankings <div style="background-color: #f4a460; text-align: center; padding: 5px;">Cities</div> <ul style="list-style-type: none"> • QS Best Student Cities 	<ul style="list-style-type: none"> • QS Systems Strength Rankings • U21 Ranking of National Higher Education Systems <div style="background-color: #f4a460; text-align: center; padding: 5px;">Business Schools</div> <ul style="list-style-type: none"> • The Financial Times • The Economist • Bloomberg/BusinessWeek • QS Global 200 Business Schools Report • Forbes • U.S. News (U.S. only) 	<ul style="list-style-type: none"> • Graduate Employability Ranking of Universities (QS) • The Global University Employability Ranking (E/T) <div style="background-color: #f4a460; text-align: center; padding: 5px;">Profiles and “Badges”</div> <ul style="list-style-type: none"> • Global Research University Profiles (Shanghai) • Global Institutional Profiles Project (GIPP, Thomson Reuters) • QS STARS

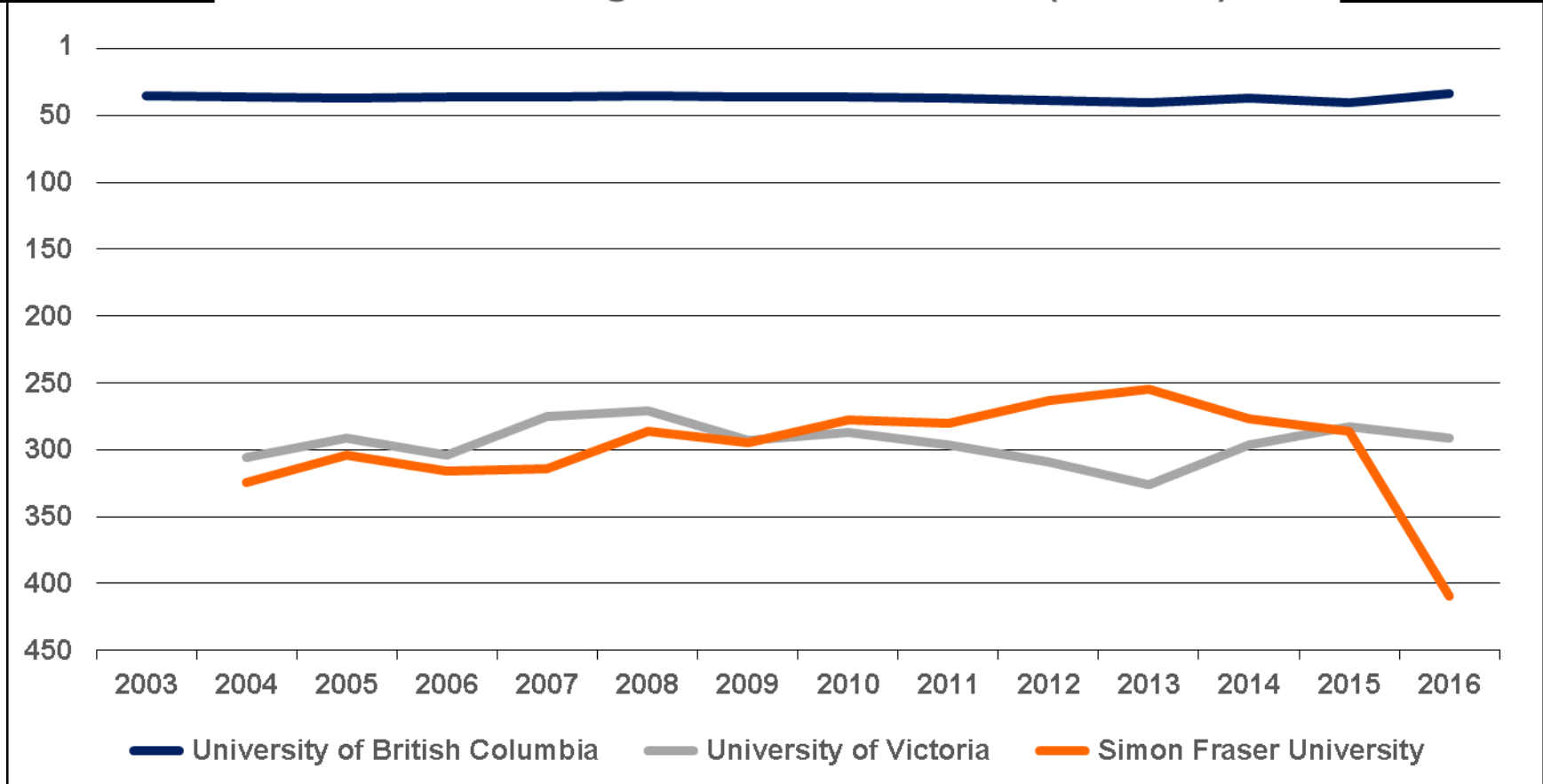
INTERNATIONAL UNIVERSITY RANKINGS

ARWU (Shanghai) Ranking

Academic

Top 500

ARWU Rankings of BC Universities (2003-16)

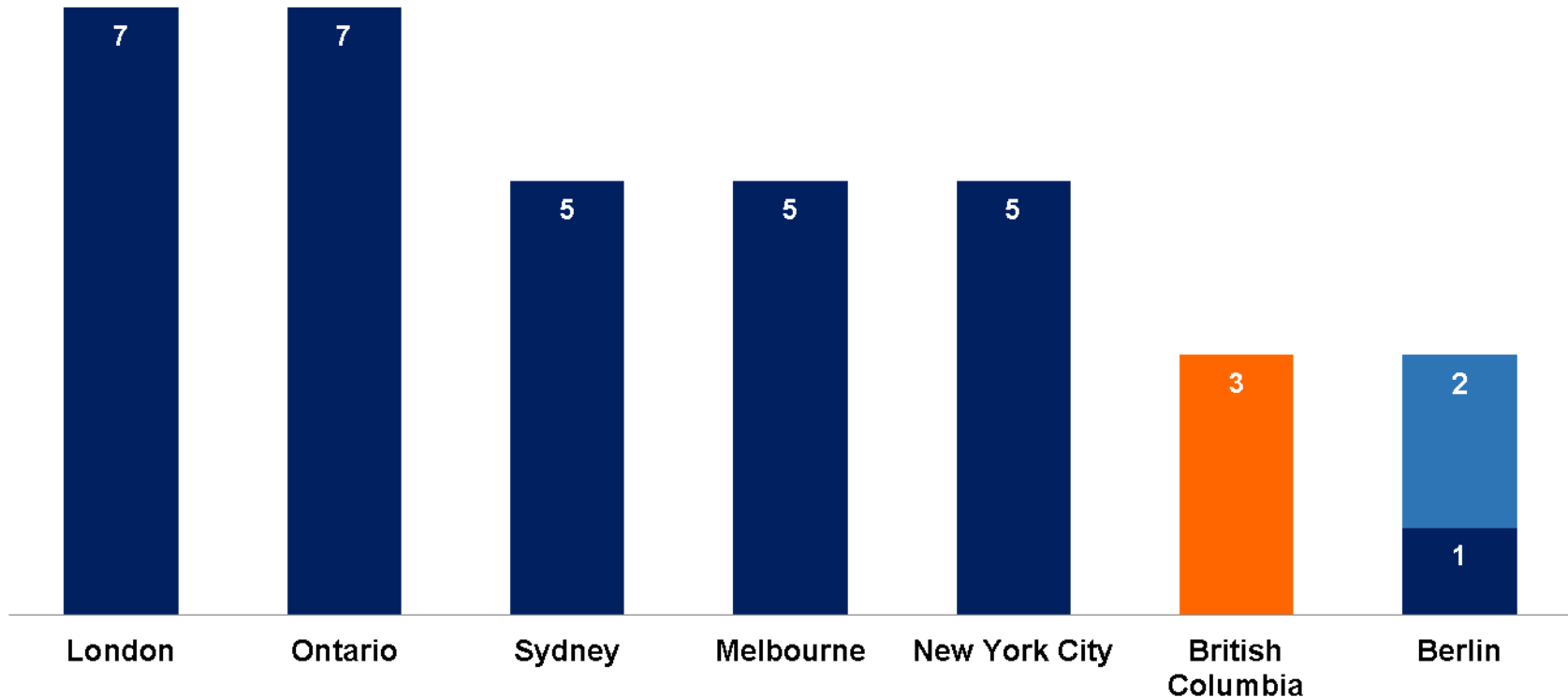


BC places three universities in ARWU – UBC inside of Top 50

INTERNATIONAL UNIVERSITY RANKINGS BC VERSUS COMPETITOR REGIONS

Top 500

Number of ARWU-ranked Universities (2016)



Notable rankings gap leads to significantly less quality student choice

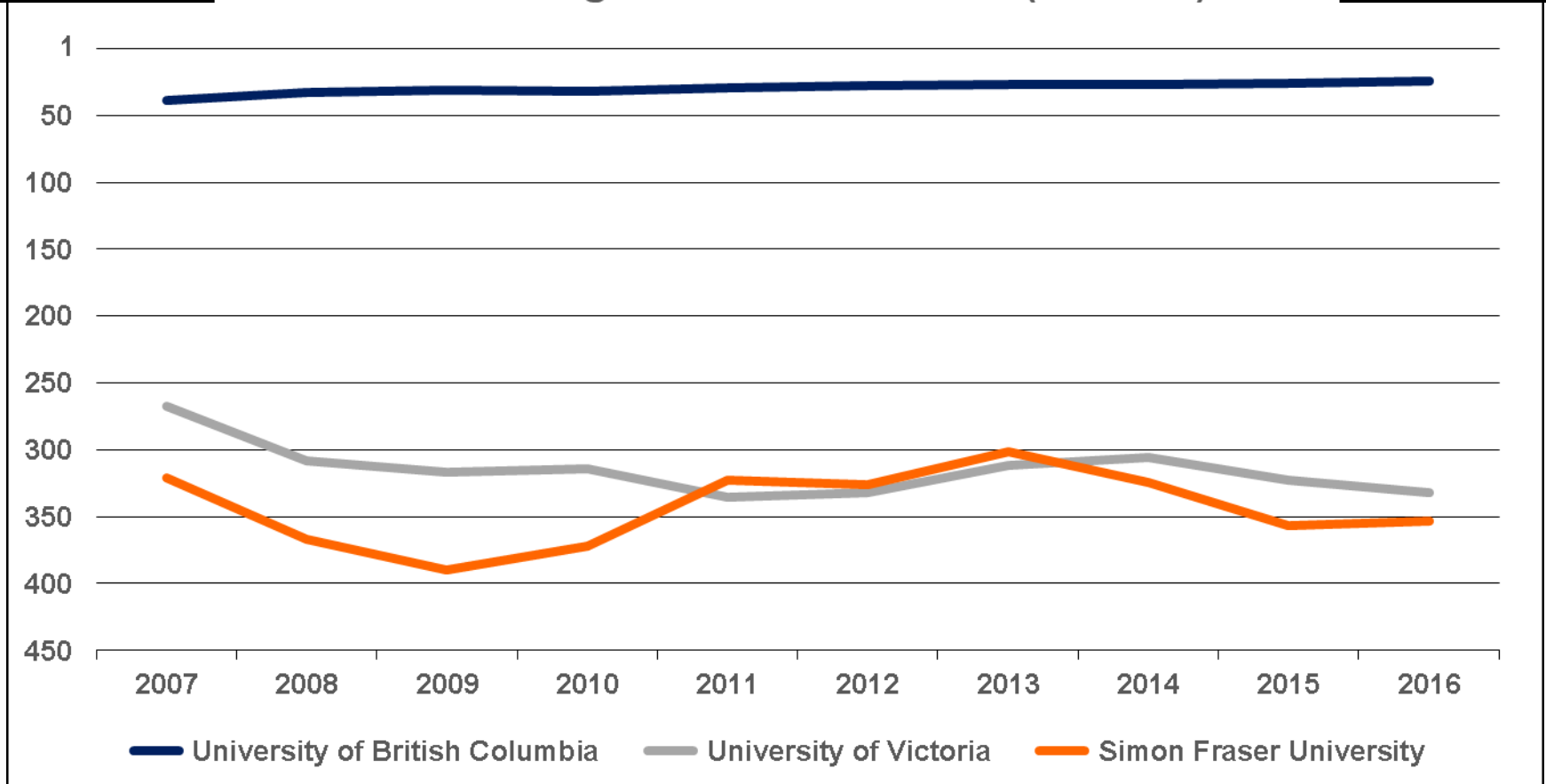
INTERNATIONAL UNIVERSITY RANKINGS

NTU Ranking

Scientific

Top 500

NTU Rankings of BC Universities (2007-16)



BC places three universities in NTU – UBC moving up, SFU & UVic at 350-ish

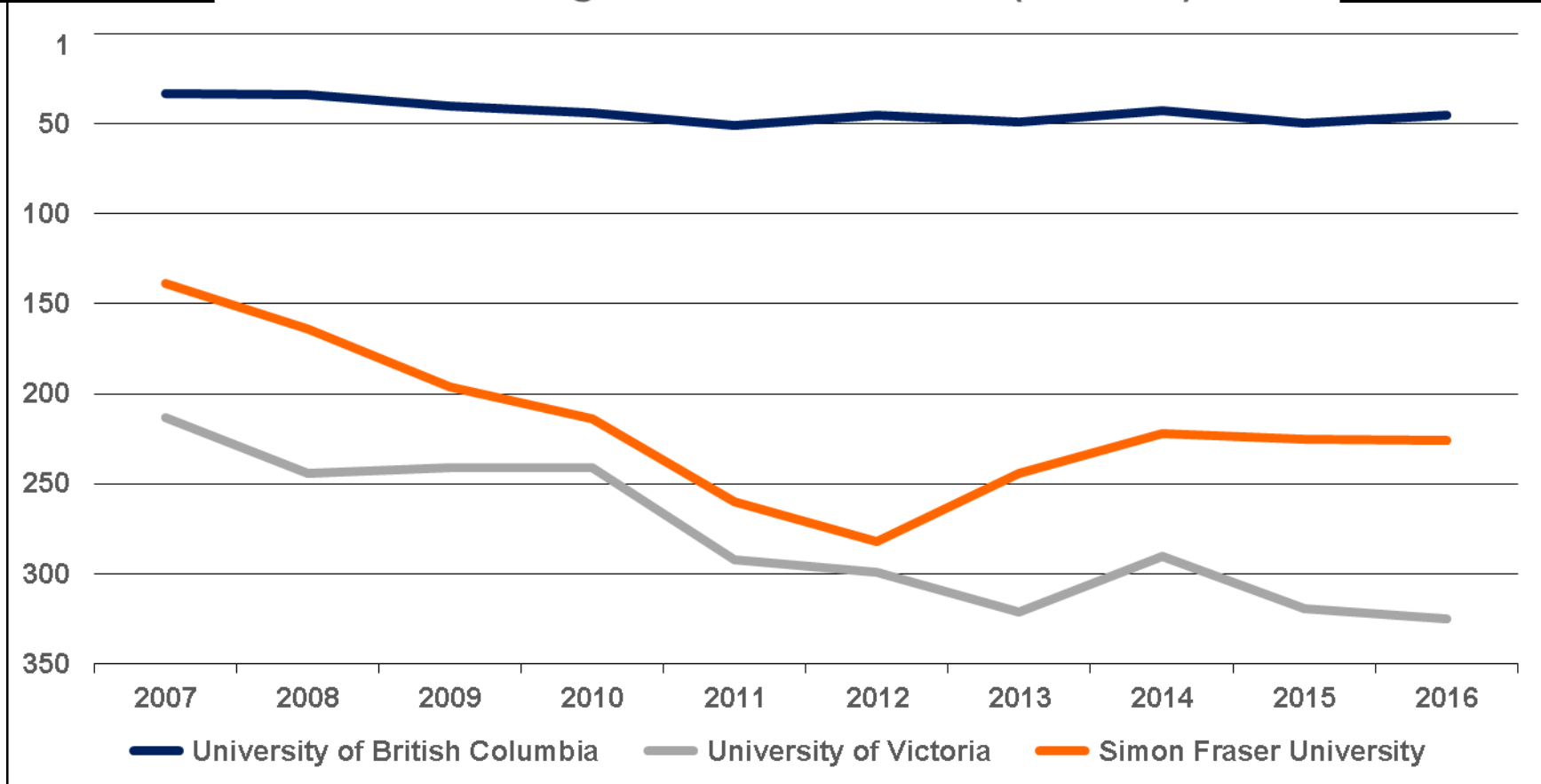
INTERNATIONAL UNIVERSITY RANKINGS

QS Ranking

Reputation

Top 1,000

QS Rankings of BC Universities (2007-16)



Declining across the board performance in key reputation-driven ranking

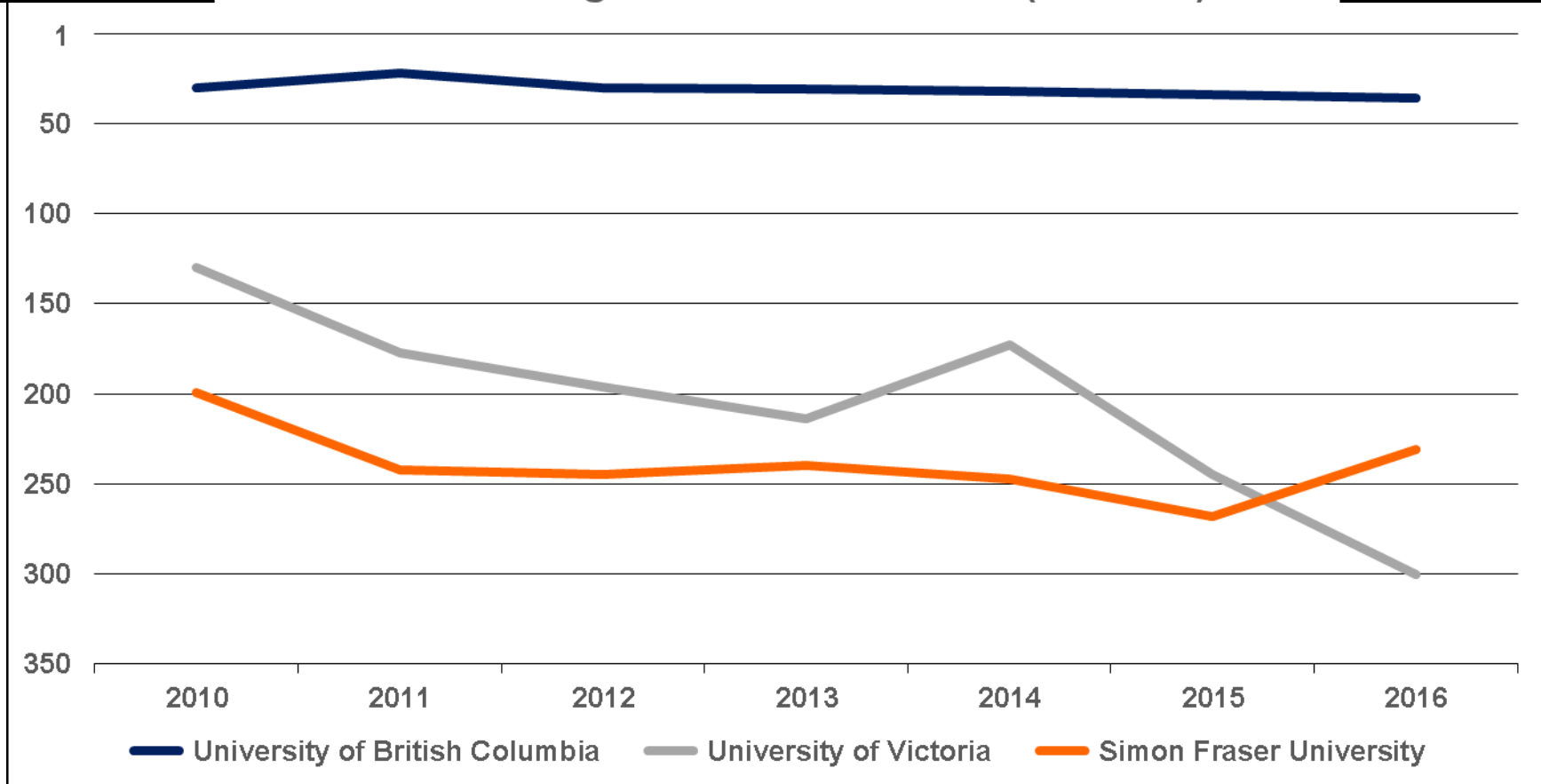
INTERNATIONAL UNIVERSITY RANKINGS

THE Ranking

Broad

Top 1,000

THE Rankings of BC Universities (2010-16)



UBC broadly stable, SFU down a bit, UVic strongly declining

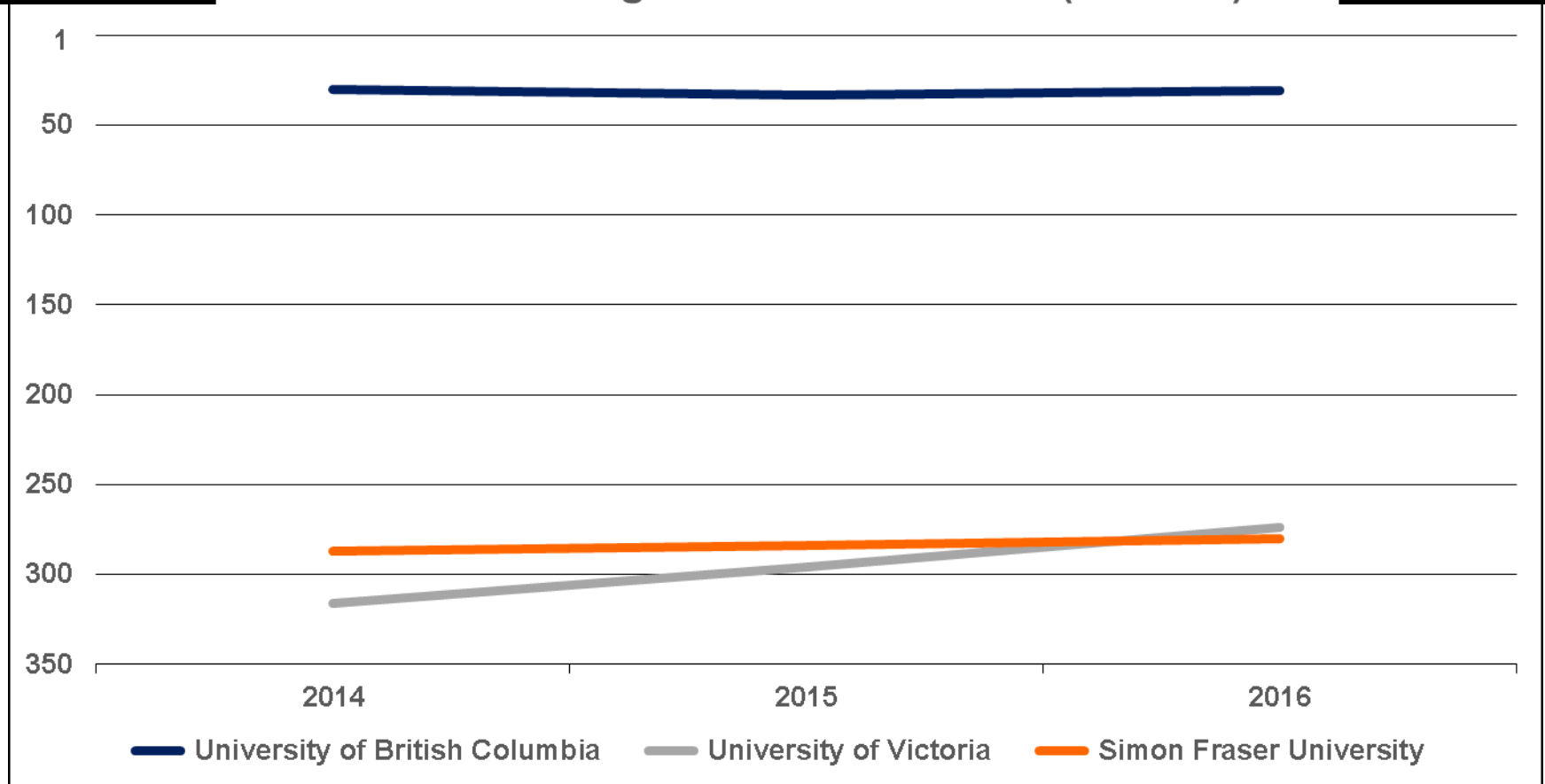
INTERNATIONAL UNIVERSITY RANKINGS

USNWR Ranking

Broad

USNWR Rankings of BC Universities (2014-16)

Top 1,000



Relatively stable across the board performance

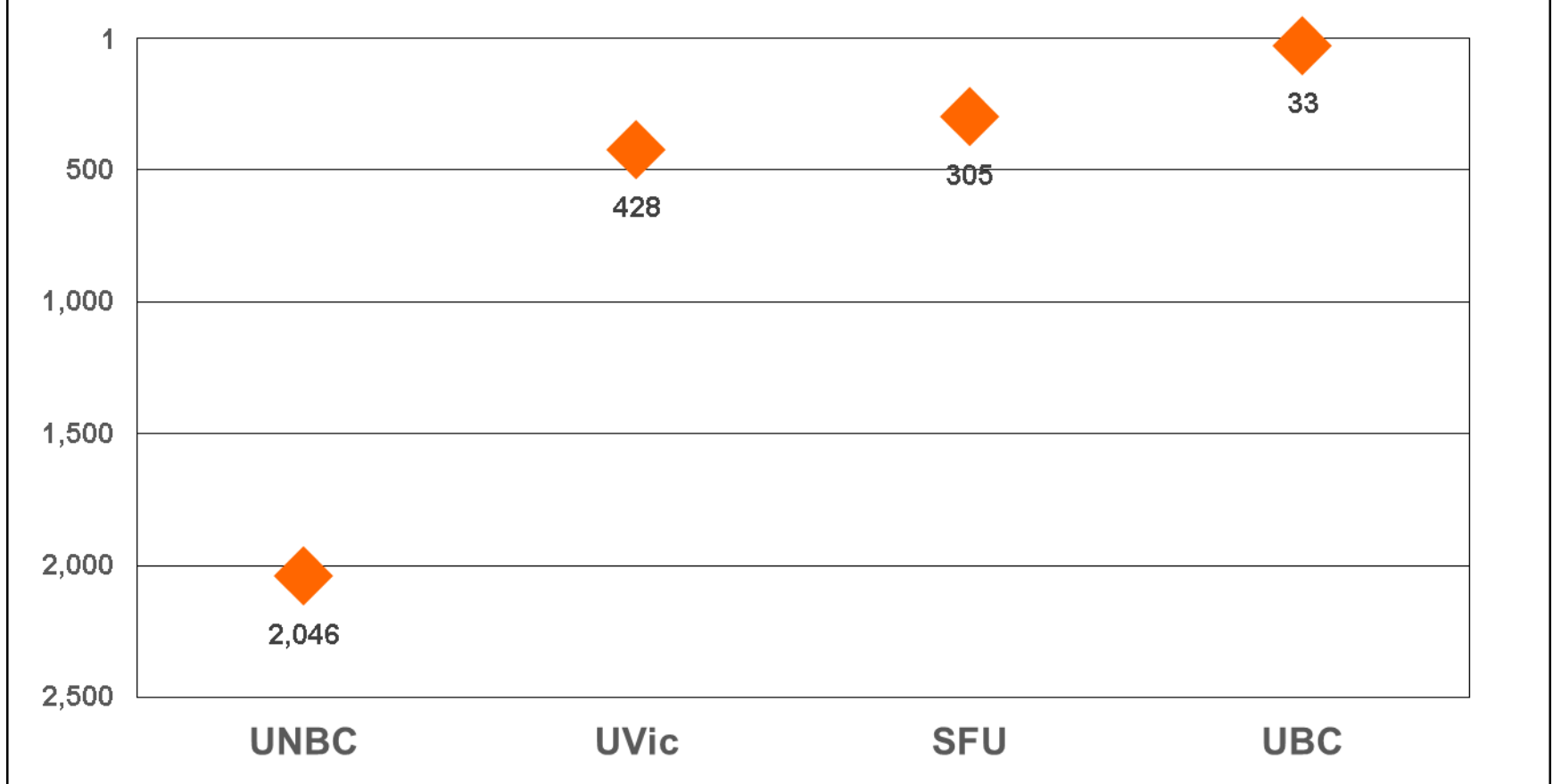
INTERNATIONAL UNIVERSITY RANKINGS

SCImago Ranking

Broad

2,000+

SCImago Ranking of BC Universities (2016)



BC places four universities in SCImago

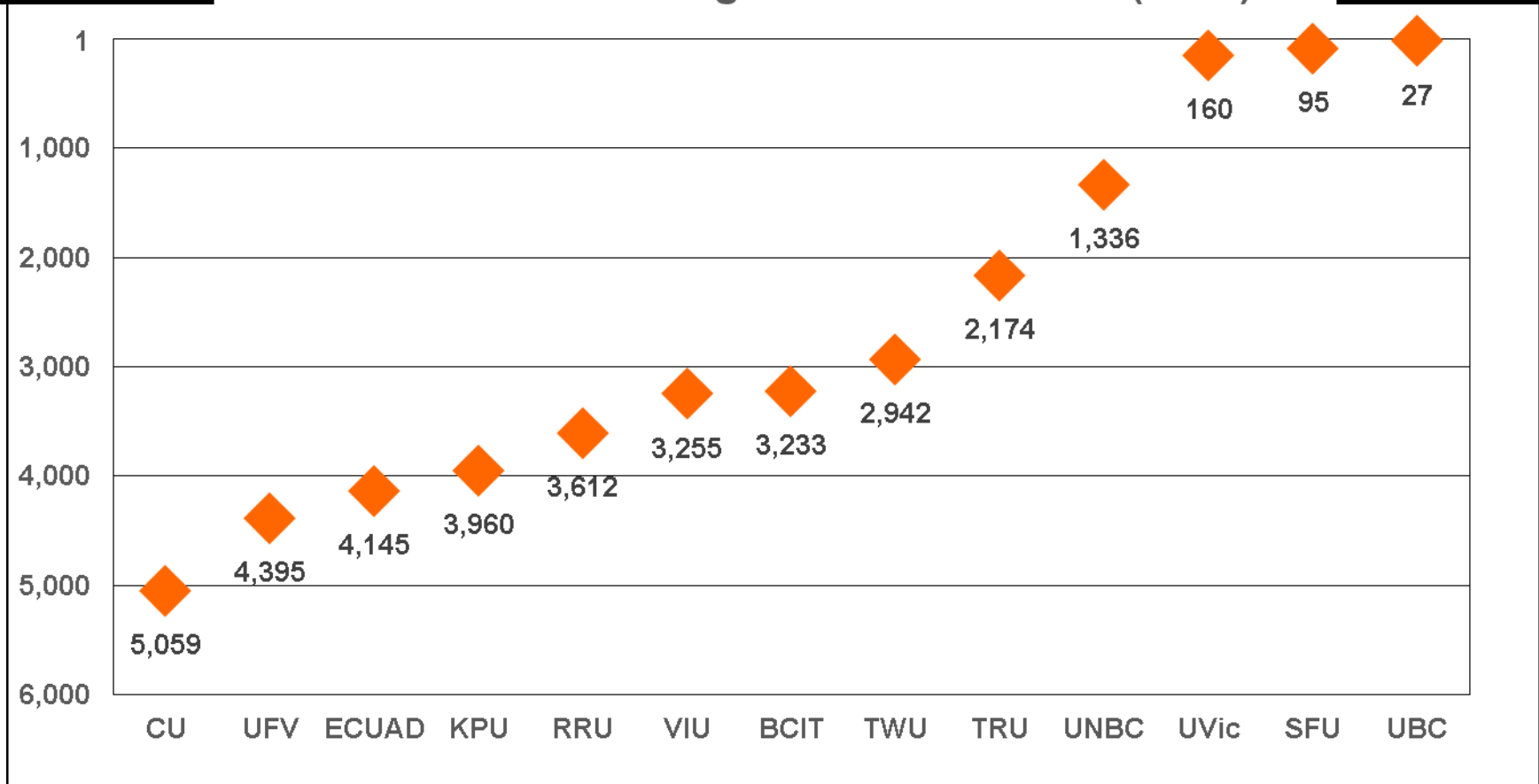
INTERNATIONAL UNIVERSITY RANKINGS

Webometrics Ranking

Online

Webometrics Ranking of BC Universities (2017)

~12,000



BC places 13 universities in Webometrics

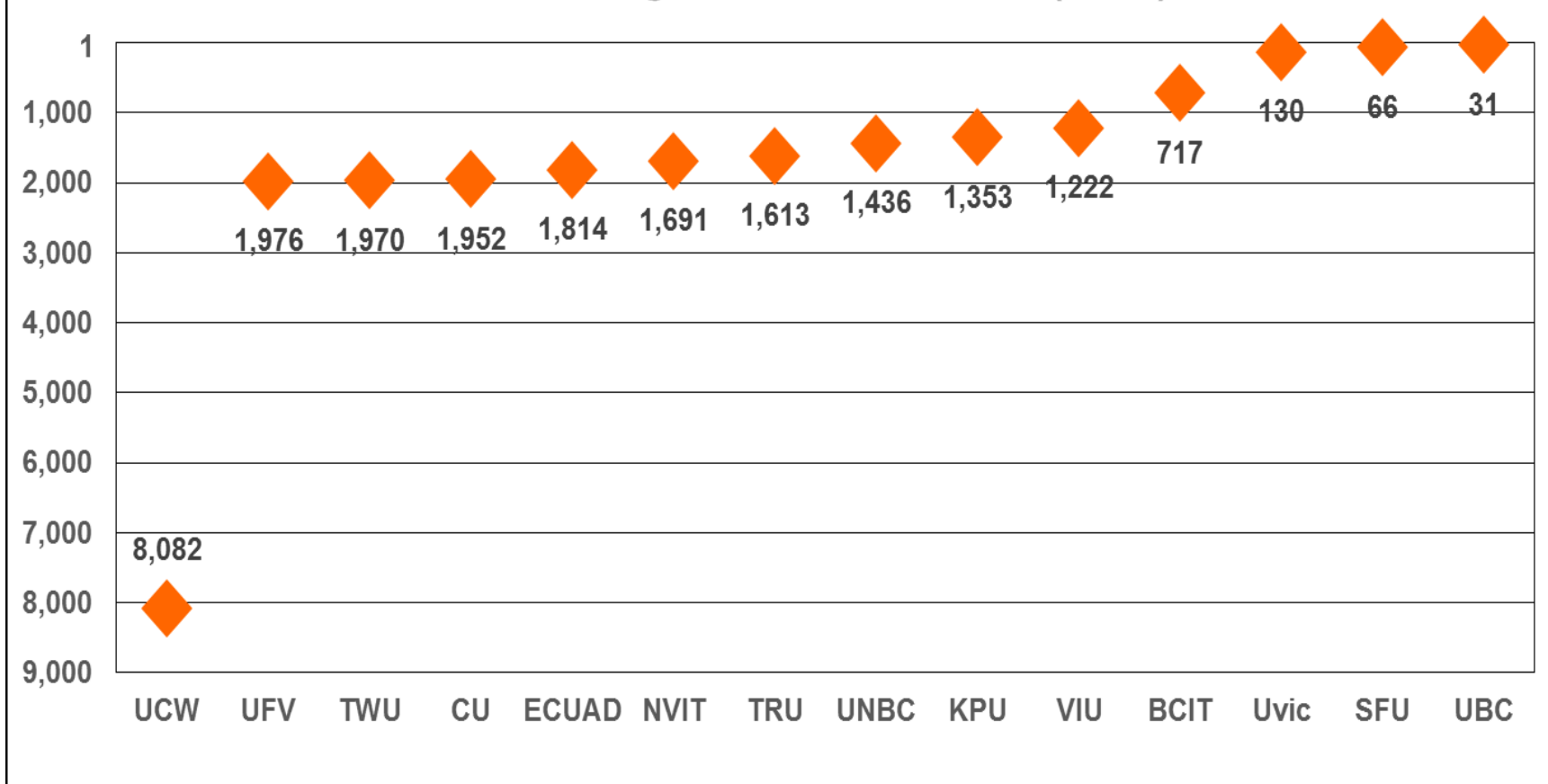
INTERNATIONAL UNIVERSITY RANKINGS

4ICU Ranking

Online

20,000+

4ICU Ranking of BC Universities (2017)



BC places 14 universities in 4ICU

Perspectives

- **BC is home to one global flagship (UBC) and two well-ranked research universities (SFU, UVic).**
- **The lack of other universities that would also be ranked in Shanghai, QS, THE, NTU, or USNWR constitutes a major “gap” in BC’s PSE institution portfolio.**
- **UNBC is the only other university that makes a sound ranking, SCImago, at 2,000 plus.**
- **Colleges are not reflected in these rankings, unfairly or not.**

About the Session

Country and Regional Rankings

K-12 Schooling Quality Assessments: PISA and TIMSS

International University Rankings

Implications for BC

Discussion

ICG Contact Information

Implications for BC

- **Canada is one of the most well-respected, well-liked countries in the world**
- **Canada scores highly on many national rankings.**
- **BC does so as well (though few regional rankings exist).**
- **BC does score exceptionally well on K-12 performance assessments.**
- **BC is home to one global flagship, and two ranked universities.**
- **BC suffers from a notable lack of additional ranked universities, putting it at a disadvantage to other regions such as Berlin, GTA, London, Sydney/NSW, or Melbourne/Victoria.**

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Discussion

- **What do you think about the rankings' views on BC and its education landscape?**
- **Does your institution use rankings to drive strategy setting?
Are they used for benchmarking?**
- **How can these rankings be used to promote BC?**
- **What is missing from these rankings?**
- **Any other comments?**

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