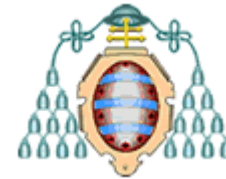




**Saïd Business School**  
UNIVERSITY OF OXFORD



Universidad  
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# Broadband Quality Score

## APPENDIX

A global study of broadband quality  
September 2009

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# Broadband Leadership 2009

Country name	BQS 2009	Penetration 2009	Leadership 09
South Korea	66	97	139
Japan	64	64	115
Hong Kong	33	99	111
Sweden	57	69	110
Switzerland	40	90	108
Netherlands	46	83	108
Singapore	32	96	107
Luxembourg	27	99	107
Denmark	45	82	106
Norway	38	84	102
Malta	27	89	98
Iceland	32	84	97
Australia	30	85	96
Lithuania	54	46	94
United States	37	75	93
Ireland	28	82	92
Canada	31	77	90
France	37	70	90
Estonia	32	75	89
Belgium	35	70	88
Finland	37	67	87
Slovenia	35	68	86
Taiwan	34	68	85
Latvia	48	45	85
United Kingdom	31	71	85
Bahrain	24	75	83
Germany	36	61	81
Cyprus	24	73	81
Czech Republic	38	54	79
United Arab Emirates	23	70	78

Romania	45	38	77
New Zealand	29	63	76
Spain	29	62	76
Bulgaria	49	18	75
Qatar	25	65	75
Austria	34	55	75
Portugal	37	50	74
Italy	28	56	70
Greece	32	47	67
Hungary	36	39	67
Slovakia	37	25	61
Turkey	28	39	58
Russian Federation	36	17	57
Poland	29	34	55
Chile	27	32	51
Mexico	23	34	49
Argentina	24	31	47
Malaysia	23	30	46
China	26	24	46
Costa Rica	24	27	45
Saudi Arabia	24	27	45
Ukraine	28	6	42
Brazil	24	19	41
Colombia	22	22	40
Tunisia	23	12	37
Philippines	23	8	36
Thailand	23	4	35
Vietnam	21	15	35
Morocco	22	8	33
Pakistan	22	1	33
South Africa	21	6	33
India	20	3	31
Indonesia	21	1	31
Egypt	19	5	29
Kenya	13	1	20
Nigeria	8	1	13



# Top Changes BB Leadership (2008-2009)

## CHANGES IN ABSOLUTE TERMS

Country name	Leadership 09	Delta L
South Korea	139	28
Lithuania	94	28
Bulgaria	75	26
Cyprus	81	23
Malta	98	22
Sweden	110	20
Latvia	85	20
Romania	77	18
Qatar	75	17
Czech Republic	79	16
United States	93	15
Kenya	20	13
Slovakia	61	12
Estonia	89	12
Norway	102	12
Ireland	92	12
Switzerland	108	12
Hungary	67	11
Portugal	74	11
Belgium	88	10
Denmark	106	10
New Zealand	76	10
Netherlands	108	10
Argentina	47	9
Taiwan	85	9

## CHANGES IN RELATIVE TERMS

Country name	Leadership 09	% Delta L
Kenya	20	187%
Bulgaria	75	52%
Lithuania	94	42%
Cyprus	81	38%
Latvia	85	30%
Romania	77	30%
Malta	98	29%
Qatar	75	28%
Czech Republic	79	26%
Vietnam	35	26%
Slovakia	61	25%
South Korea	139	25%
Argentina	47	25%
Philippines	36	22%
Sweden	110	22%
Ukraine	42	22%
Mexico	49	21%
Hungary	67	21%
China	46	19%
Colombia	40	19%
United States	93	19%
Tunisia	37	19%
Portugal	74	18%
Pakistan	33	17%
Estonia	89	16%
Turkey	58	15%
New Zealand	76	15%
Ireland	92	15%
Poland	55	15%
Saudi Arabia	45	15%



# BQS by Stage of Economic Development

	country	BQS 09	GDP/Capita	BQS/100,000 GDP per cap
1	Korea	65.99	27,600	239
2	Japan	63.92	34,000	188
3	Slovakia	37.44	21,900	171
4	Portugal	36.53	22,200	165
5	Estonia	32.46	21,000	155
6	Sweden	56.75	38,100	149
7	Czech Republic	38.01	25,900	147
8	Denmark	44.89	37,100	121
9	Slovenia	35.46	29,600	120
10	Netherlands	45.59	40,400	113
11	France	37.39	33,200	113
12	Taiwan	34.43	31,100	111
13	Malta	26.77	24,700	108
14	New Zealand	28.60	28,000	102
15	Germany	36.03	35,400	102
16	Finland	37.34	36,900	101
17	Greece	31.89	32,000	100
18	Switzerland	39.85	41,800	95
19	Belgium	35.29	37,400	94
20	Italy	28.10	31,300	90
21	Austria	33.90	40,200	84
22	United Kingdom	30.77	36,500	84
23	Spain	29.25	34,700	84
24	Argentina	23.87	28,600	83
25	Canada	31.34	39,100	80
26	Australia	29.96	38,100	79
27	United States	36.79	46,900	78
28	Iceland	32.10	41,800	77
29	Hong Kong	33.44	43,700	77
30	Norway	38.38	59,300	65
31	Ireland	28.26	45,300	62
32	Singapore	31.91	51,500	62
33	Malaysia	23.26	39,900	58
34	Luxembourg	26.59	81,000	33

## Stage 3 Economic Development (Innovation-Driven )

**Note: development stage based on GCI report by World Economic Forum 2009**



# BQS by Stage of Economic Development

country	GDP/Capita	BQS/100,000 GDP per cap
Romania	12,200	367.943
Lithuania	17,800	306.082
Latvia	17,300	278.125
Turkey	11,900	239.071
Russian Federation	16,100	226.404
Hungary	19,800	182.015
Chile	14,900	178.876
Poland	17,300	166.691
Mexico	14,200	162.662
Bahrain	37,300	63.442

Moving from stage 2 to 3 in Economic Development

country	GDP/Capita	BQS/100,000 GDP per cap
China	6,000	431.141
Ukraine	7,400	376.461
Bulgaria	12,900	376.197
Tunisia	7,900	297.096
Thailand	8,400	279.659
Colombia	8,800	248.810
Brazil	10,200	237.492
South Africa	10,100	211.368
Costa Rica	11,500	209.017
Malaysia	15,200	153.048

Stage 2 Economic Development  
**(Efficiency-Driven)**

country	GDP/Capita	BQS/100,000 GDP per cap
Morocco	4,000	541.149
Indonesia	3,900	526.239
Egypt	5,400	355.247
Argentina	14,200	168.113
Saudi Arabia	20,500	115.112
Qatar	110,700	22.448

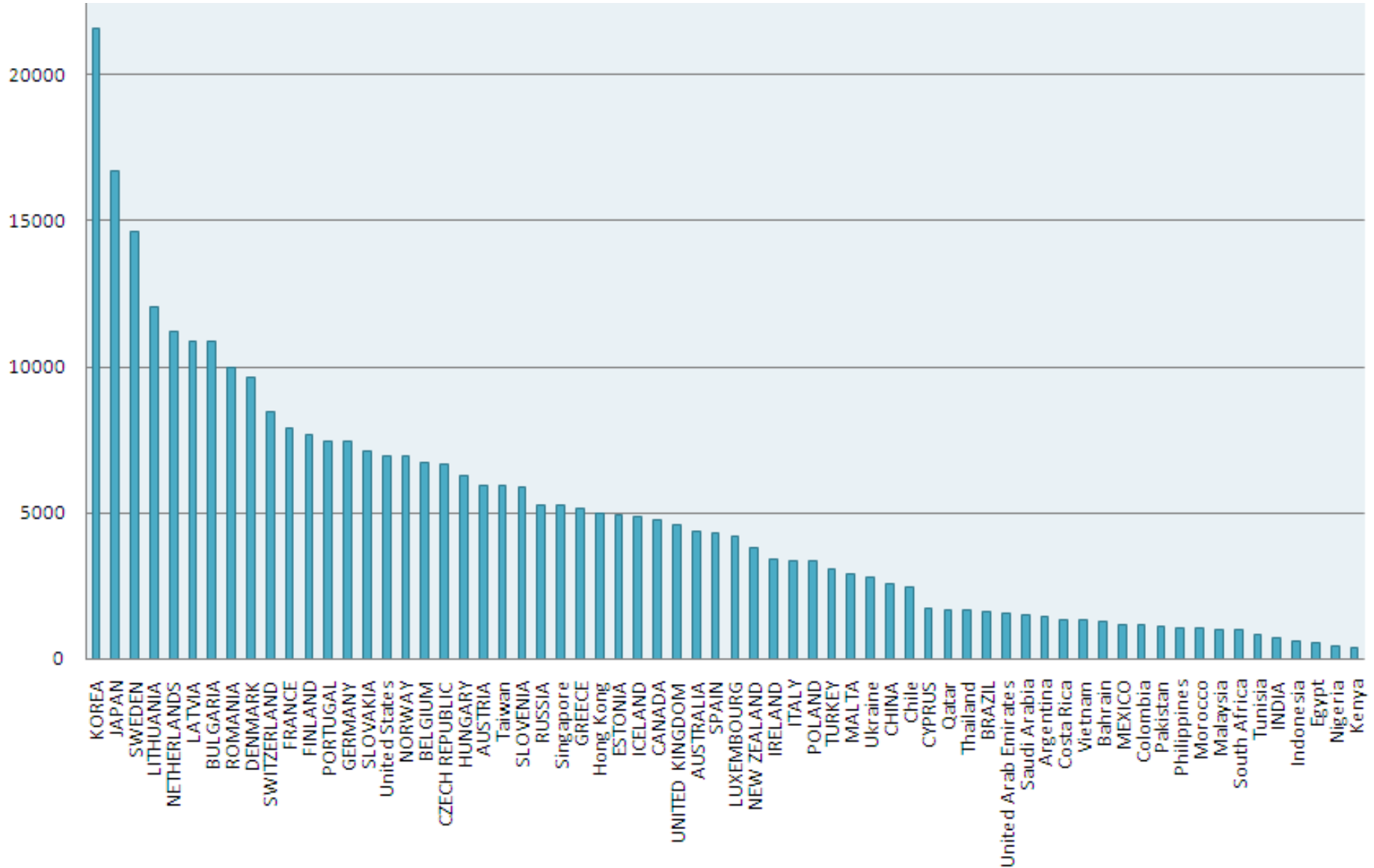
Moving from stage 1 to 2 in Economic Development

country	GDP/Capita	BQS/100,000 GDP per cap
Pakistan	2,500	889.173
Kenya	1,600	816.687
Vietnam	2,800	745.694
India	2,900	705.033
Philippines	3,300	702.251
Nigeria	2,300	365.097

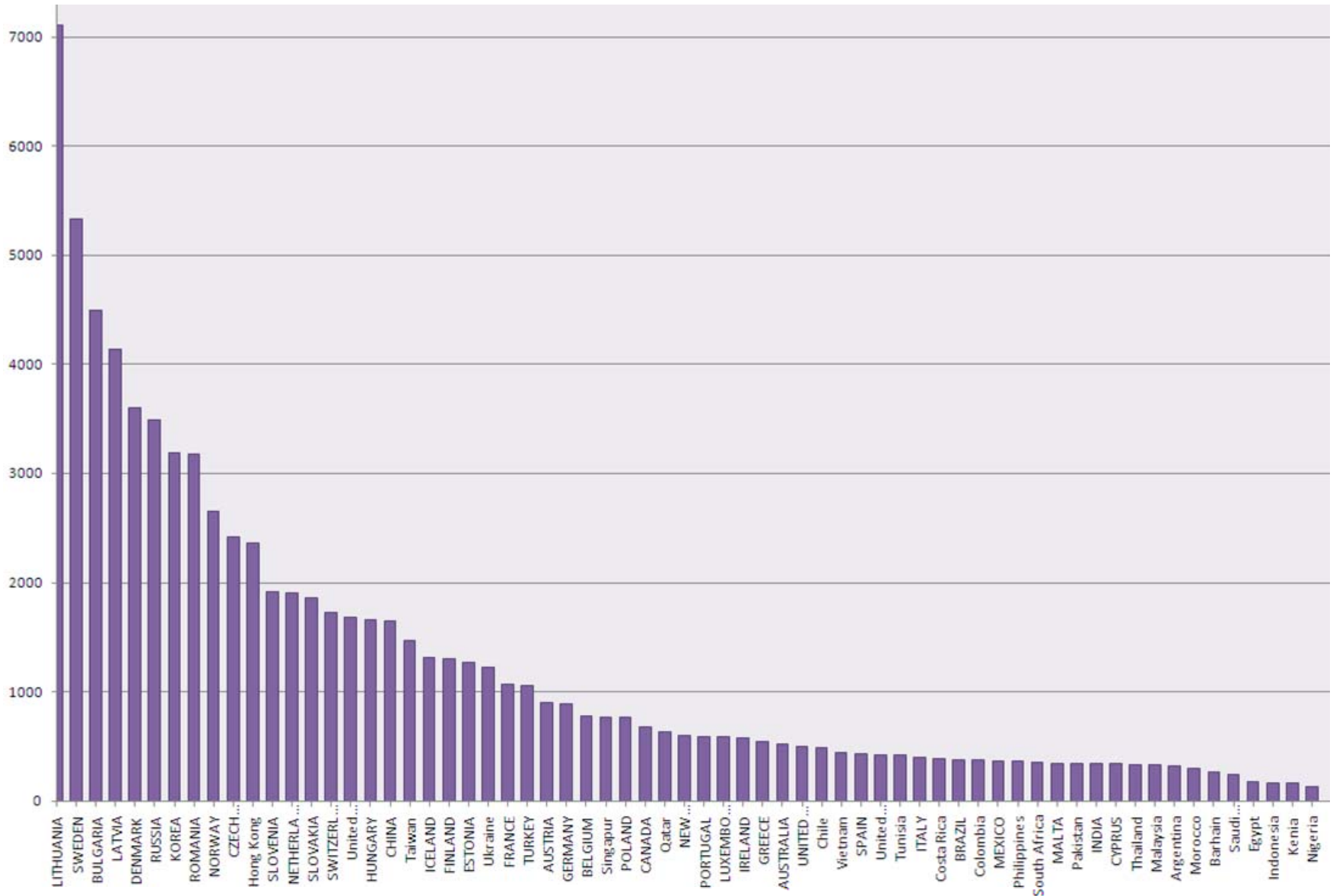
Stage 1 Economic Development  
**(Factor-Driven)**



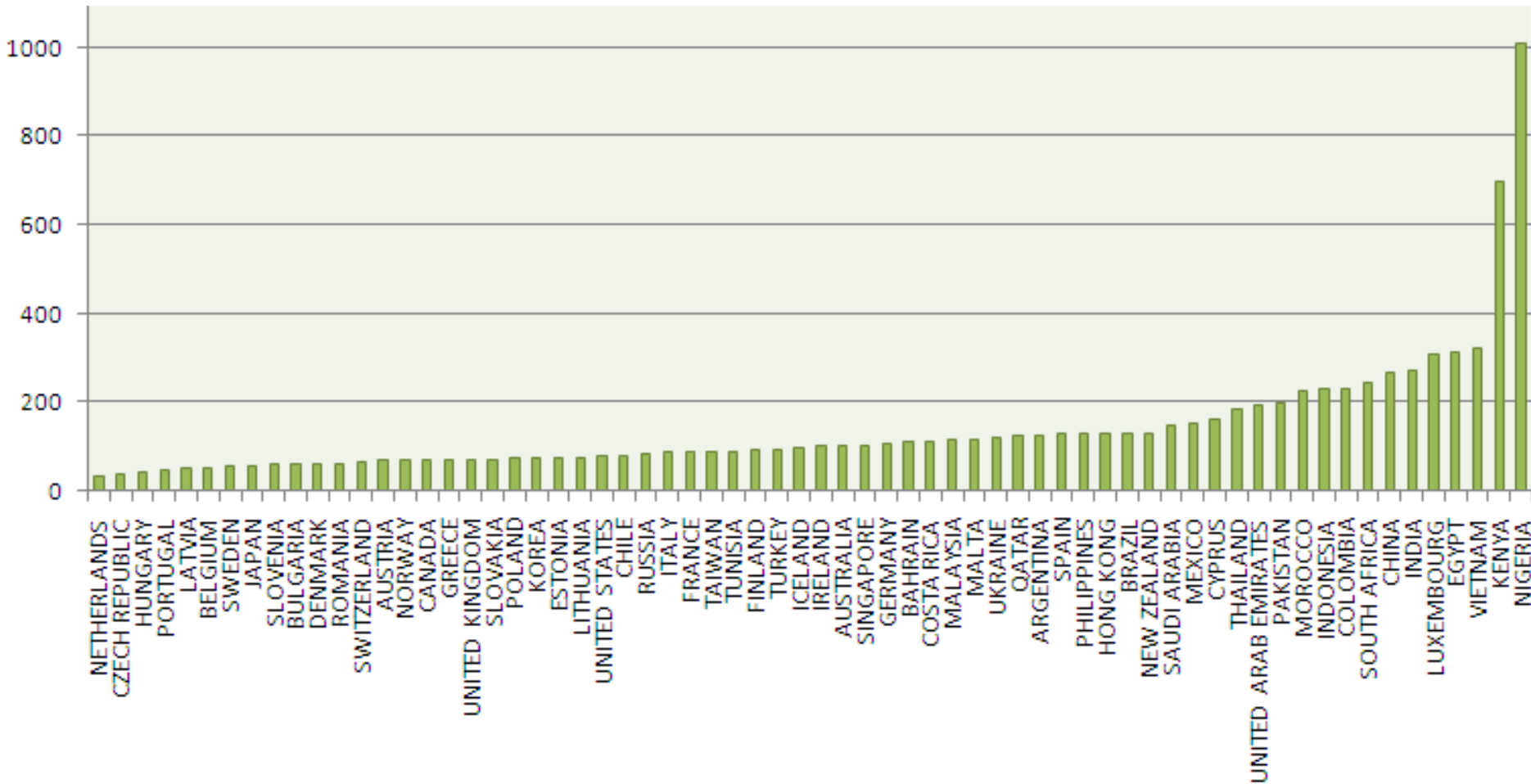
# Countries By Download Speed



# Countries By Upload Speed

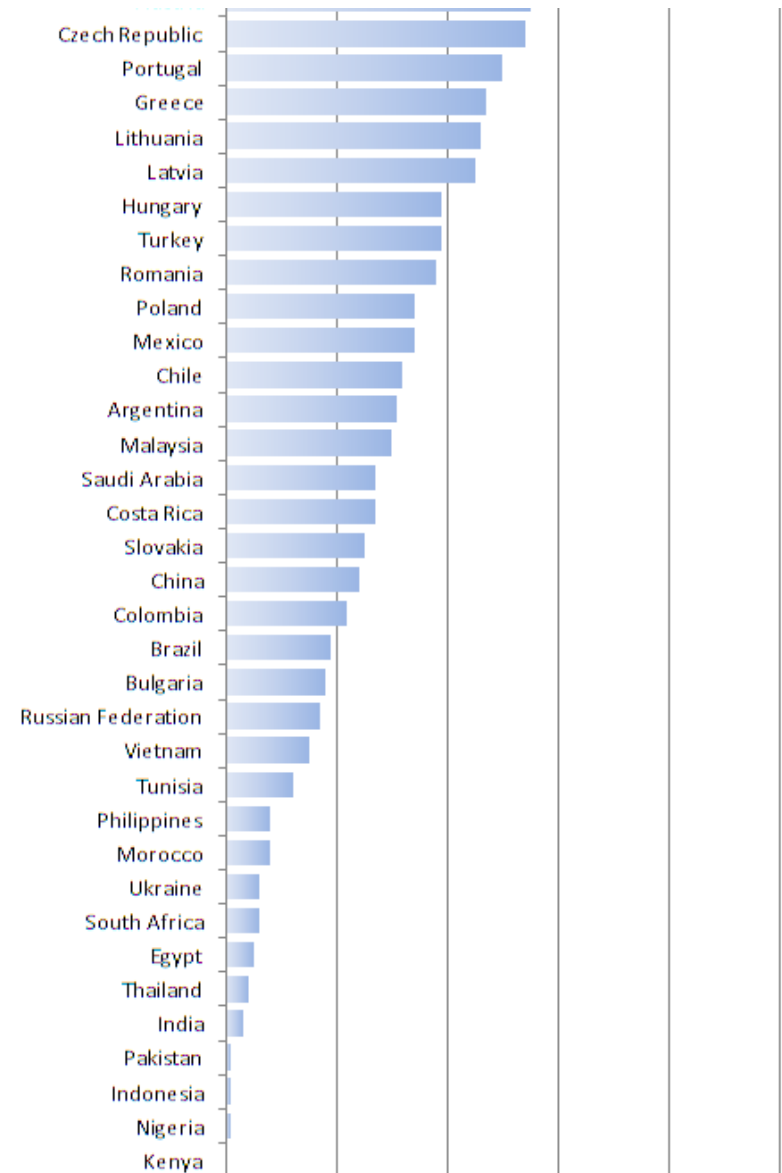
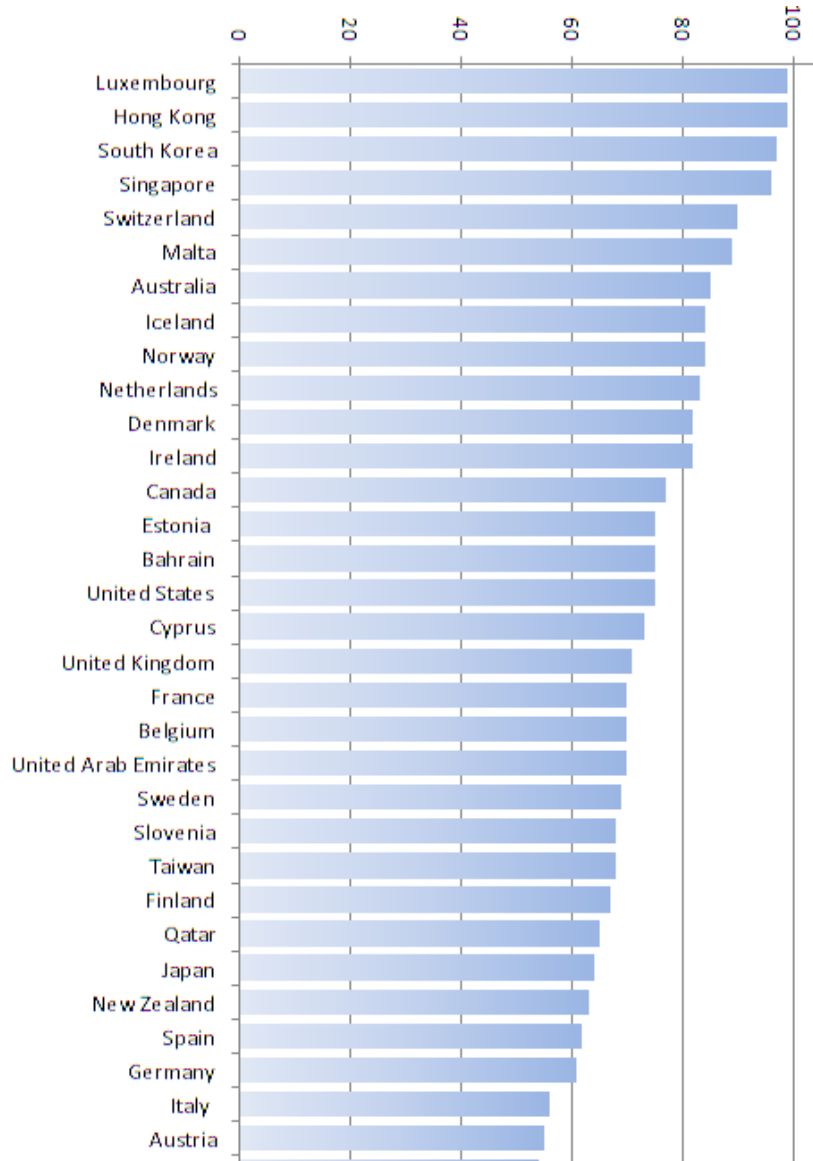


# Countries By Latency





# Penetration 2009



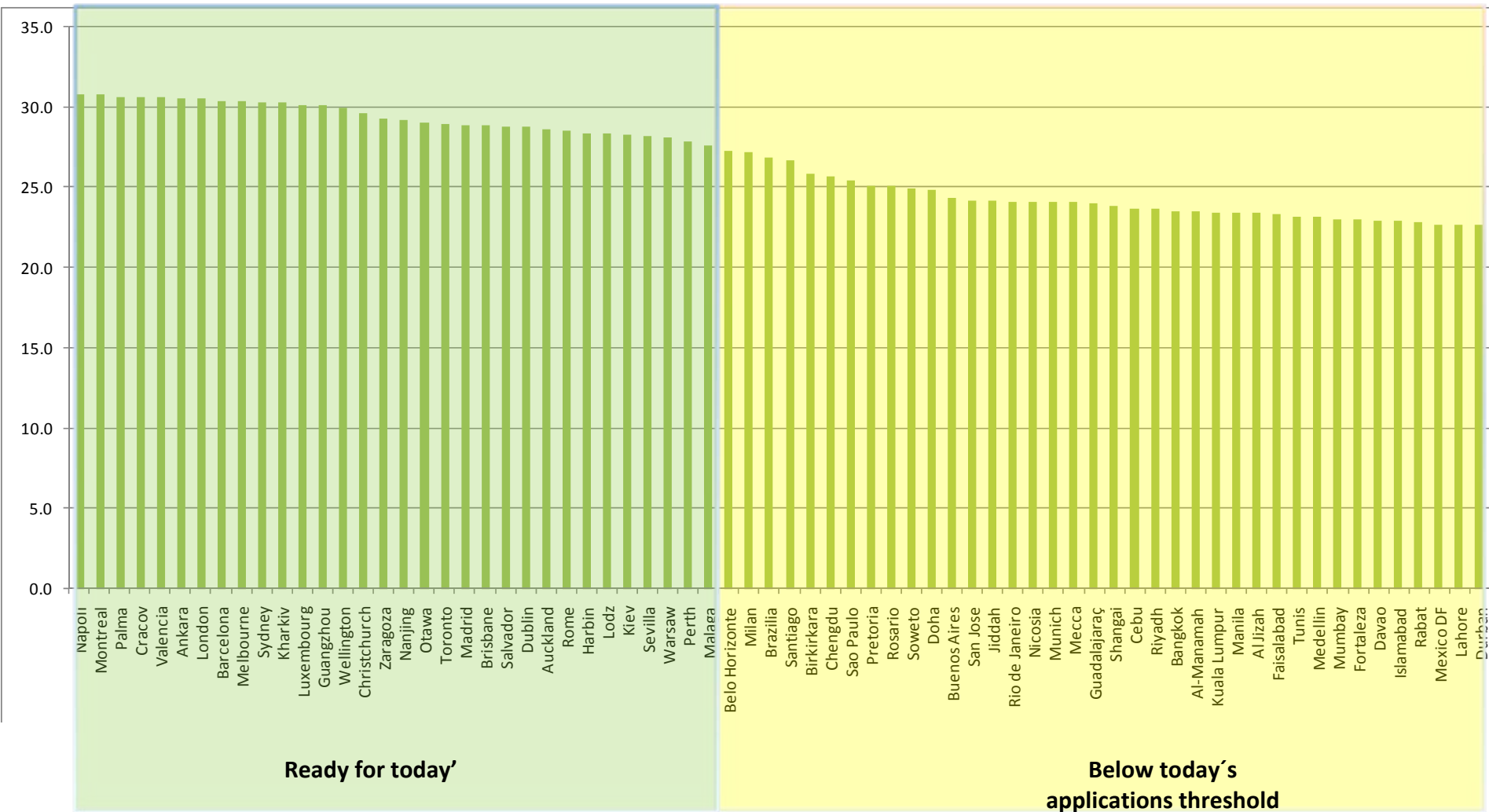
# Top Changes in Penetration (2008-2009)

Country	Penetration 2009	Penetration 2008	Delta %
Cyprus	73	48	25
Malta	89	66	23
Qatar	65	48	17
Luxembourg	99	87	12
Ireland	82	70	12
Mexico	34	22	12
Czech Republic	54	43	11
Switzerland	90	80	10
Estonia	75	65	10
United States	75	65	10
Norway	84	75	9
Bahrain	75	66	9
New Zealand	63	54	9
Latvia	45	36	9
Belgium	70	62	8
Greece	47	39	8
Costa Rica	27	19	8
Singapore	96	89	7
Australia	85	78	7
Germany	61	54	7
Hungary	39	32	7
Slovenia	68	62	6
Austria	55	49	6
Portugal	50	44	6
Lithuania	46	40	6
Romania	38	32	6
Saudi Arabia	27	21	6
Slovakia	25	19	6
Canada	77	72	5
United Arab Emirates	70	65	5
Italy	56	51	5
Turkey	39	34	5

Poland	34	29	5
Argentina	31	26	5
China	24	19	5
Colombia	22	17	5
Russian Federation	17	12	5
Vietnam	15	10	5
Tunisia	12	7	5
Iceland	84	80	4
United Kingdom	71	67	4
France	70	66	4
Sweden	69	65	4
Spain	62	58	4
Malaysia	30	26	4
Hong Kong	99	96	3
Netherlands	83	80	3
Japan	64	61	3
Chile	32	29	3
Brazil	19	16	3
Philippines	8	5	3
Ukraine	6	3	3
South Korea	97	95	2
Finland	67	65	2
Bulgaria	18	16	2
Egypt	5	3	2
Denmark	82	81	1
Taiwan	68	67	1
South Africa	6	5	1
India	3	2	1
Nigeria	1	0	1
Morocco	8	8	0
Thailand	4	4	0
Indonesia	1	1	0
Pakistan	1	1	0
Kenya	0	0	0



# BQS by cities (100 - 200)



# BQS by cities (200- 242)

