Where have all the gemstones gone? The success and failures of the human capital investment approach in Hong Kong

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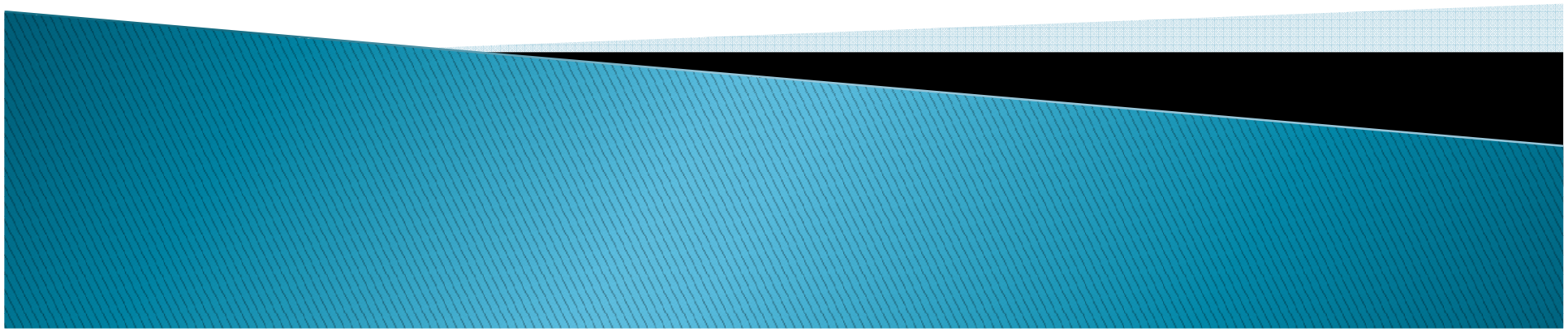
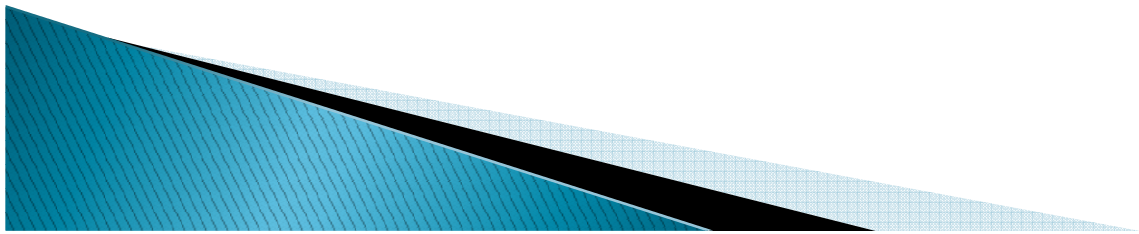
Nov 2009



- Importance of human capital investment
- Hong Kong: investment and output comparing to OECD
- Hong Kong case study: what happened to young adults with mainland connections

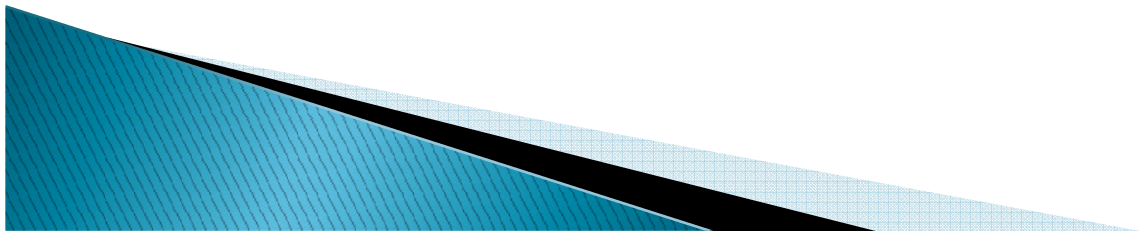


Importance of human capital to knowledge economy

- Education system from selection of talent, into identify and develop talents for all students (OECD, 2009, p.3)
- OECD Secretary-General Angel Gurria : Investments in human capitals will contribute to the economic recovery from the recent global financial crisis
- World economy is increasingly driven by innovation, making skills outdated at a much faster pace than ever. Education is the best response to this change
- Should help young individuals to constantly adapt and grow, to develop their capacity and motivation, expand their horizons and transfer and apply knowledge in new settings.

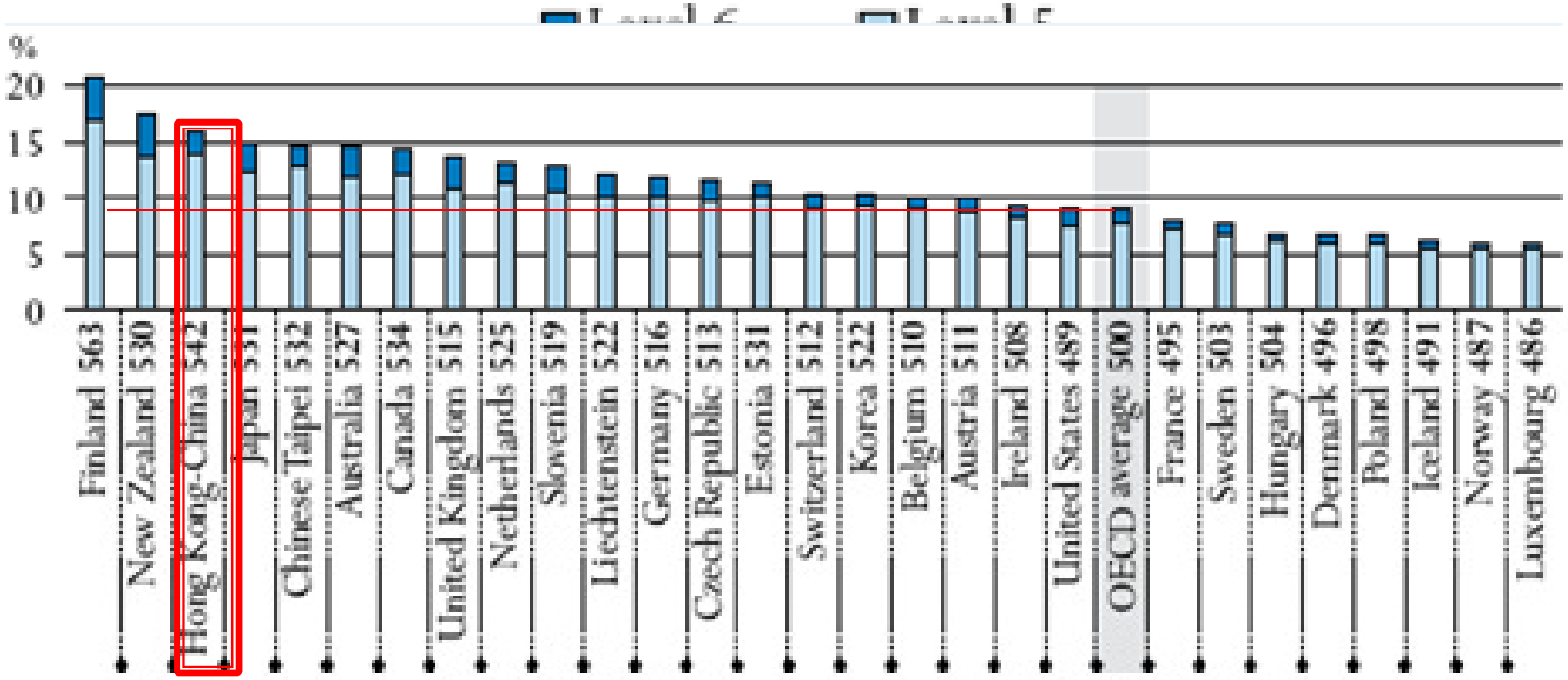
In OECD countries

- A male degree holder can look forward to a gross earnings premium over his lifetime of more than US$186,000 compared to those with only secondary school
- Average net public return from providing a male student with a university education, after factoring in all the direct and indirect costs, is almost US$52,000 or 2 times the investment

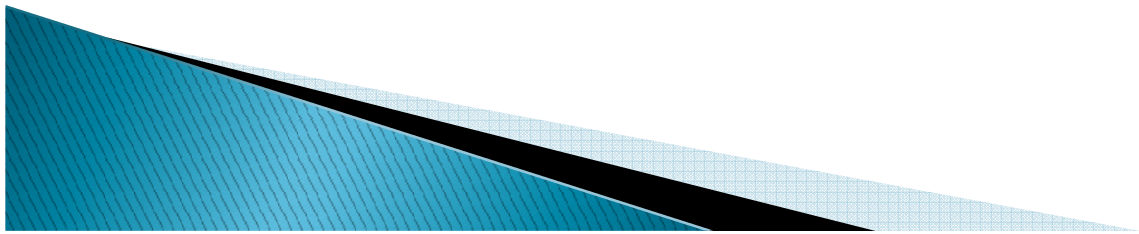


Education performance PISA 2006

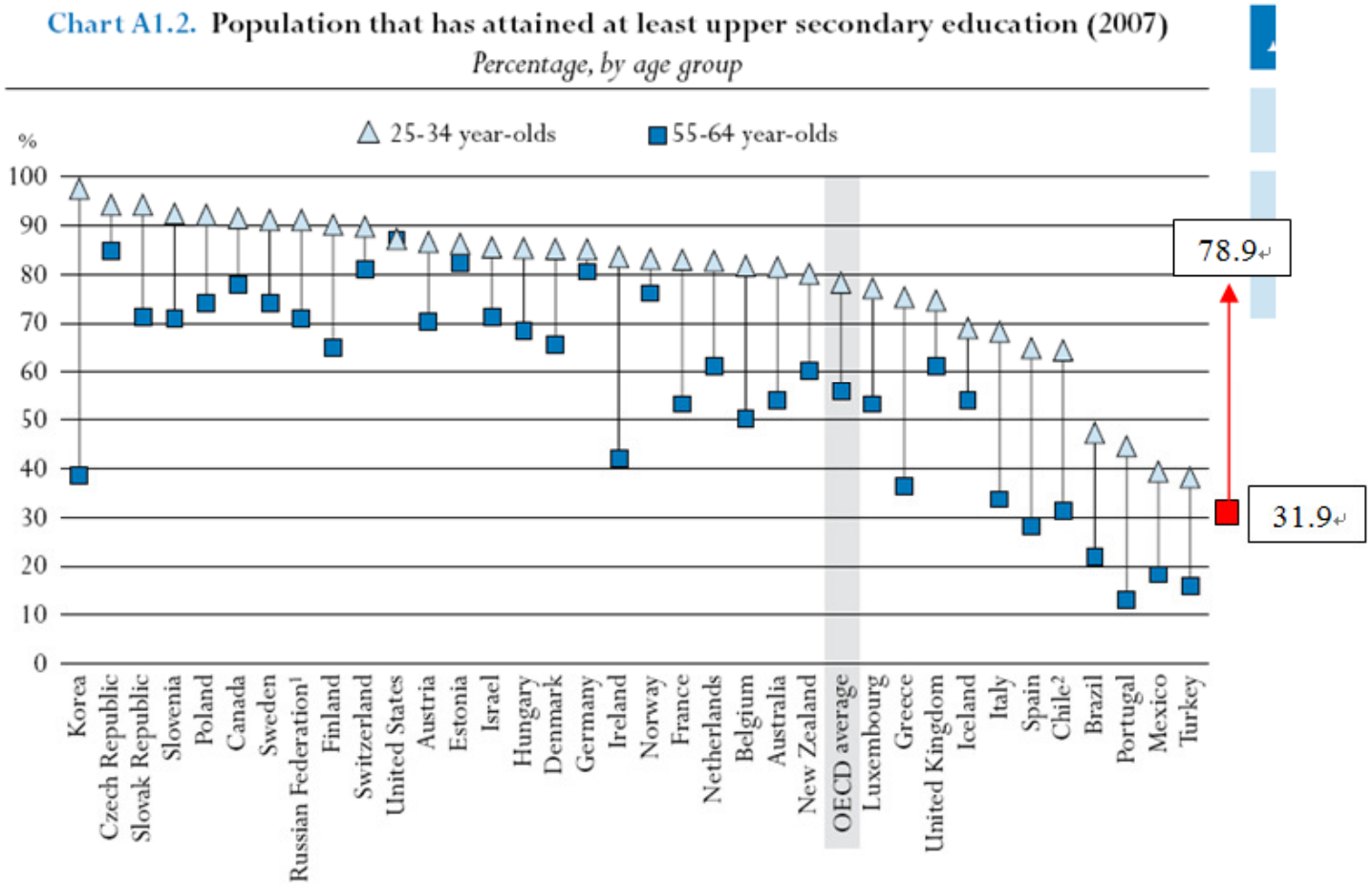
Programme for International Student Assessment



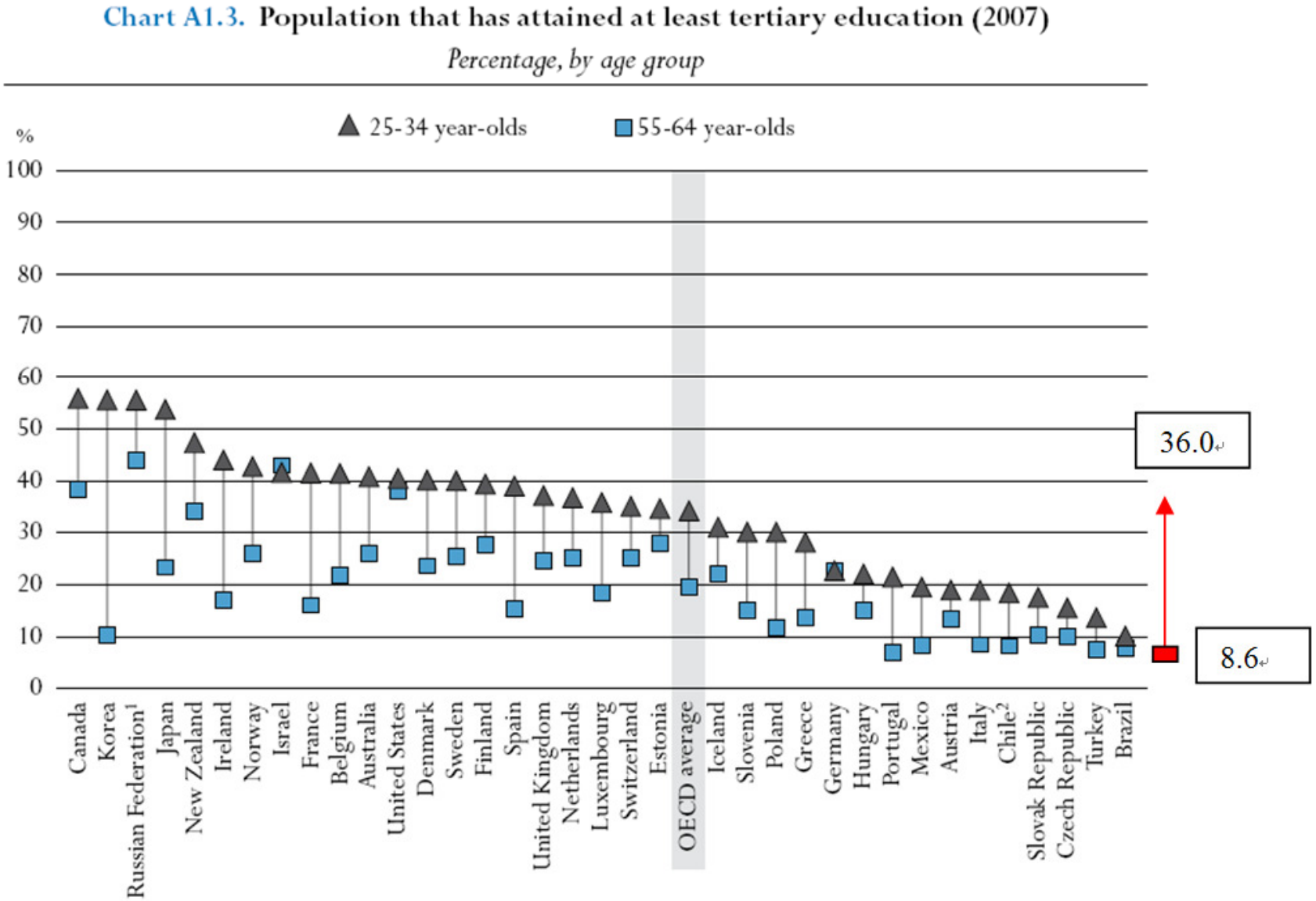
- Science ranked 2 542 (next to Finland 563)
- Reading ranked 3 536 (next to Korea 556 & 547 Finland)
- Mathematics ranked 3 547 (next to Taipei 549 & Finland 547)



Upper Secondary School Attained

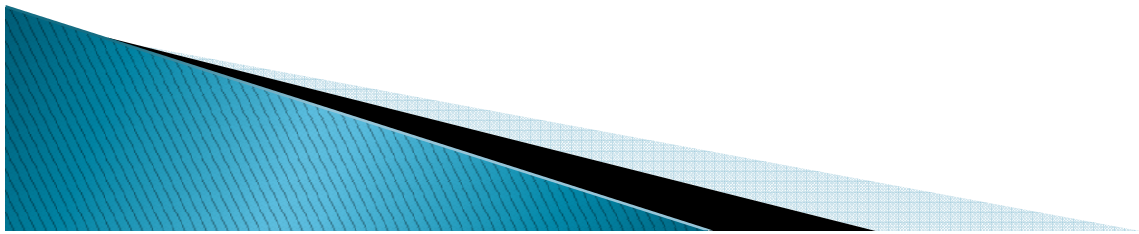


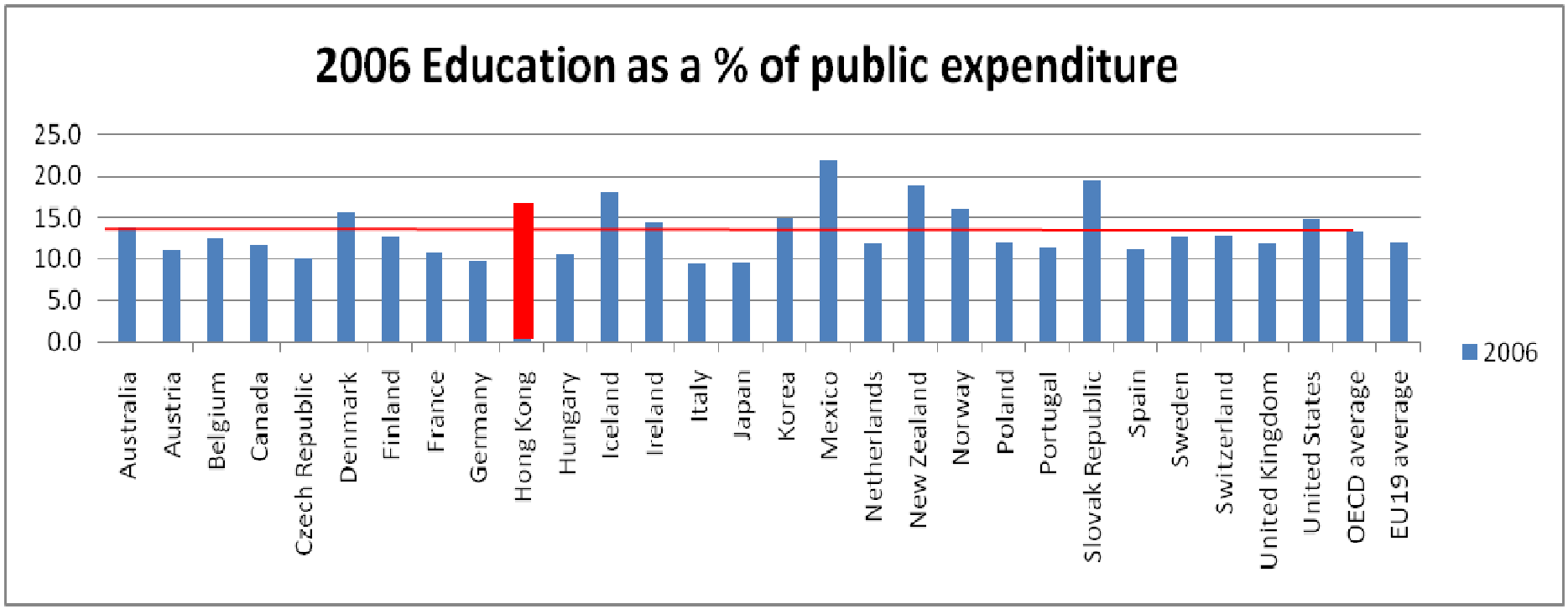
Tertiary education attained

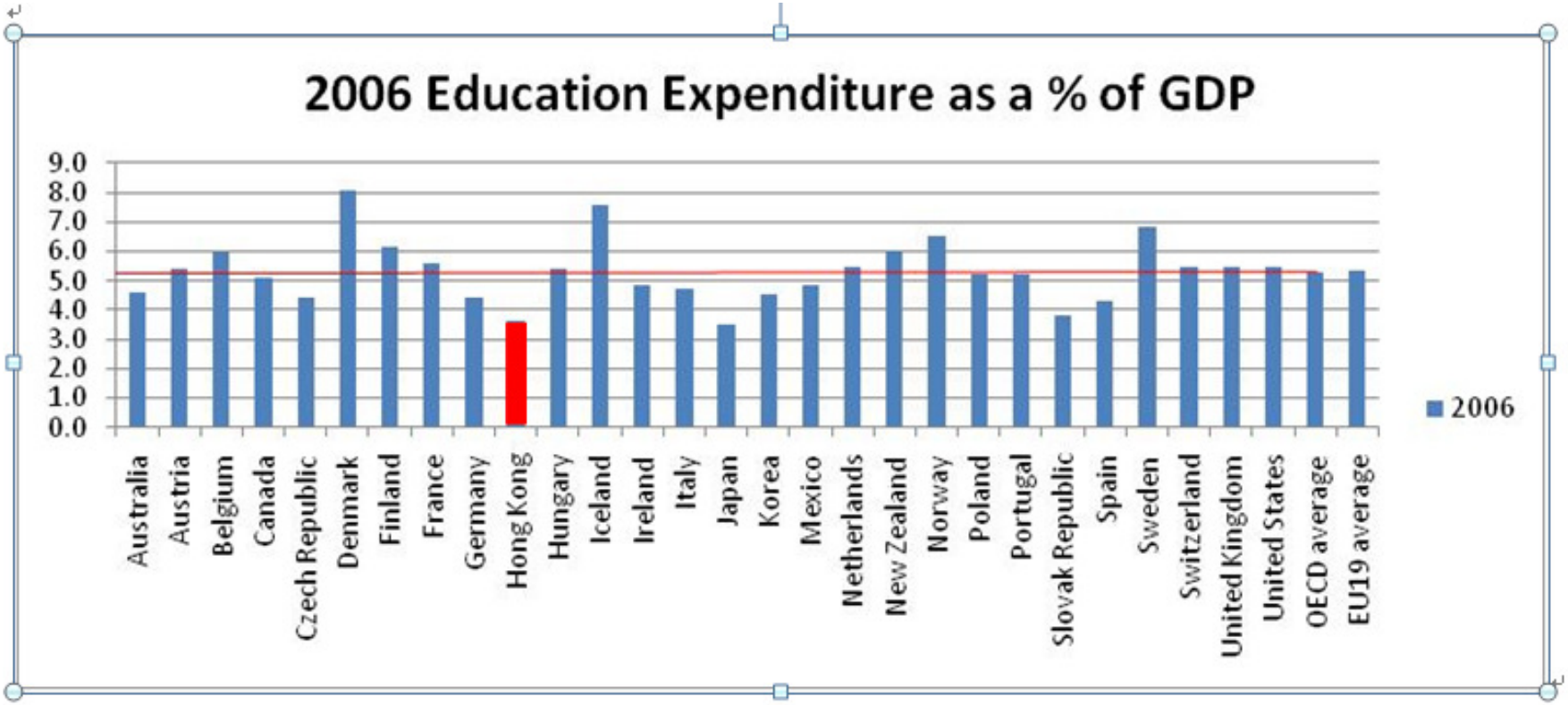


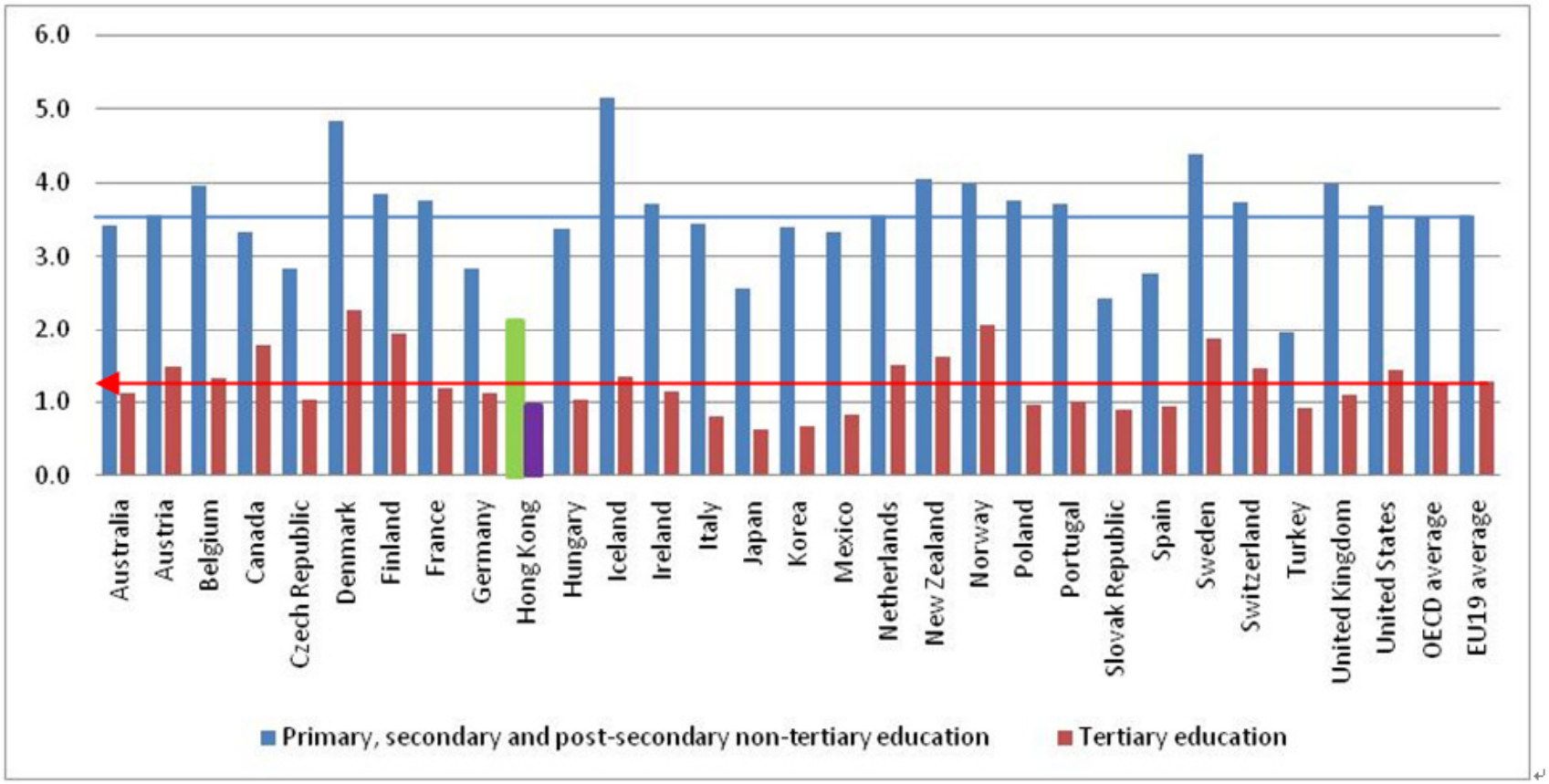
Public education expenditure

	2006-07	2000-01	1995-96
Public expenditure as a % of GDP	16.7	21.9	18.2
Education expenses			
% of public expenditure	21.5	19.2	17.6
% of GDP	3.59	4.20	3.20



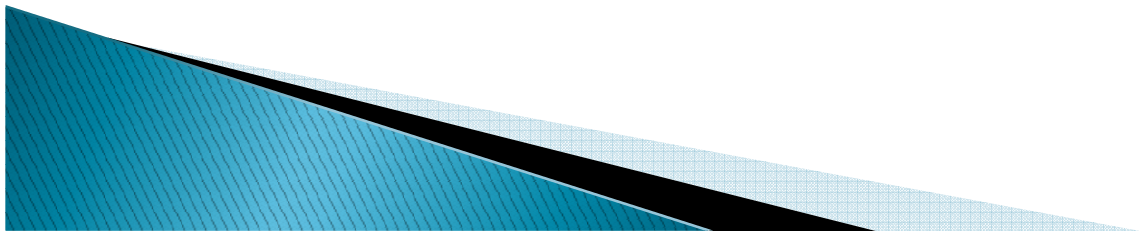

2006 Education as a % of public expenditure
25.0
20.0
15.0
10.0
5.0
0.0
Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Finland
France
Germany
Hong Kong
Hungary
Iceland
Ireland
Italy
Japan
Korea
Mexico
Netherlands
New Zealand
Norway
Poland
Portugal
Slovak Republic
Spain
Sweden
Switzerland
United Kingdom
United States
OECD average
EU19 average
2006

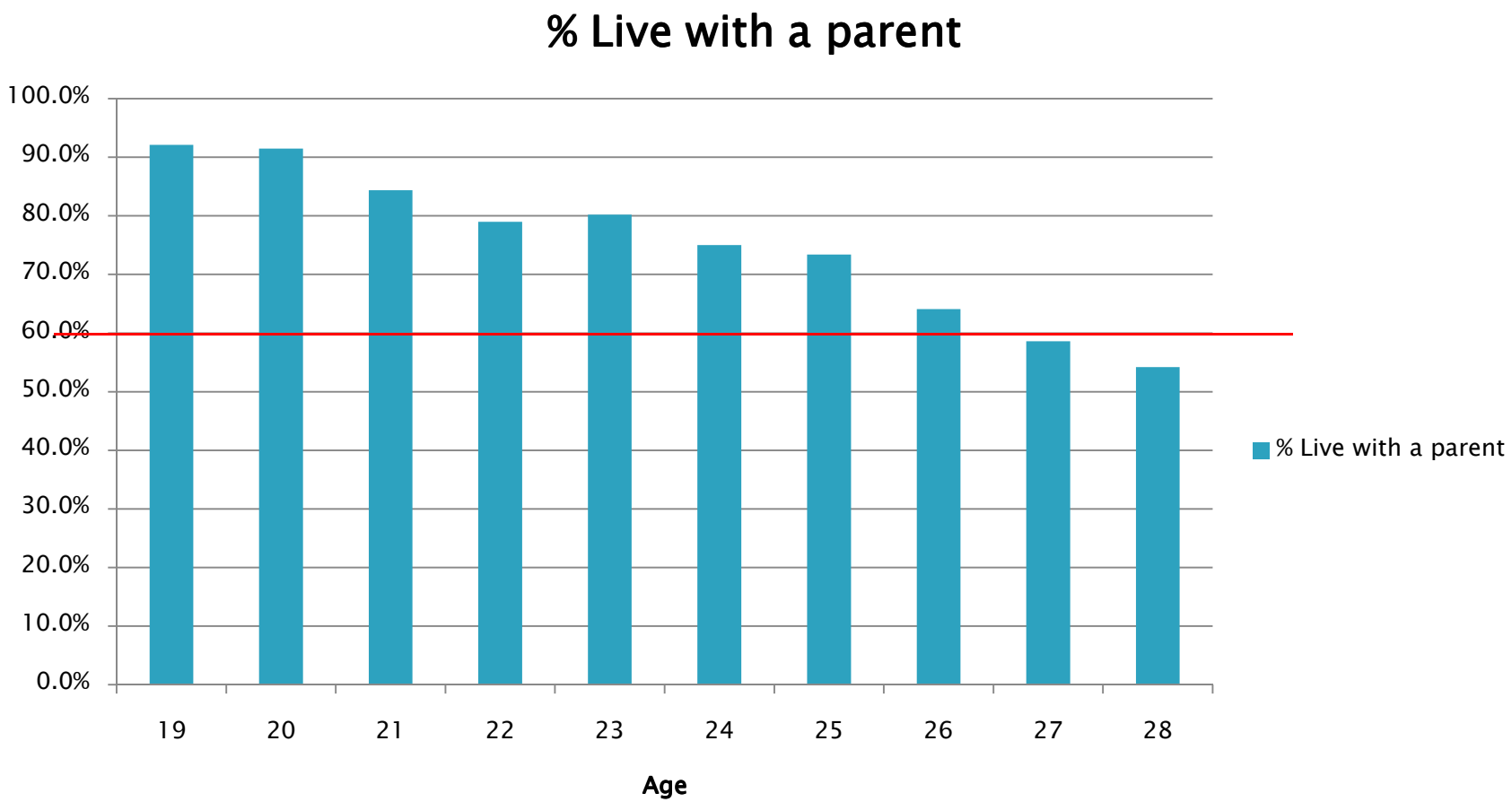

2006 Education Expenditure as a % of GDP
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Finland
France
Germany
Hong Kong
Hungary
Iceland
Ireland
Italy
Japan
Korea
Mexico
Netherlands
New Zealand
Norway
Poland
Portugal
Slovak Republic
Spain
Sweden
Switzerland
United Kingdom
United States
OECD average
EU19 average
2006


6.0
5.0
4.0
3.0
2.0
1.0
0.0
Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Finland
France
Germany
Hong Kong
Hungary
Iceland
Ireland
Italy
Japan
Korea
Mexico
Netherlands
New Zealand
Norway
Poland
Portugal
Slovak Republic
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States
OECD average
EU19 average
Primary, secondary and post-secondary non-tertiary education
Tertiary education

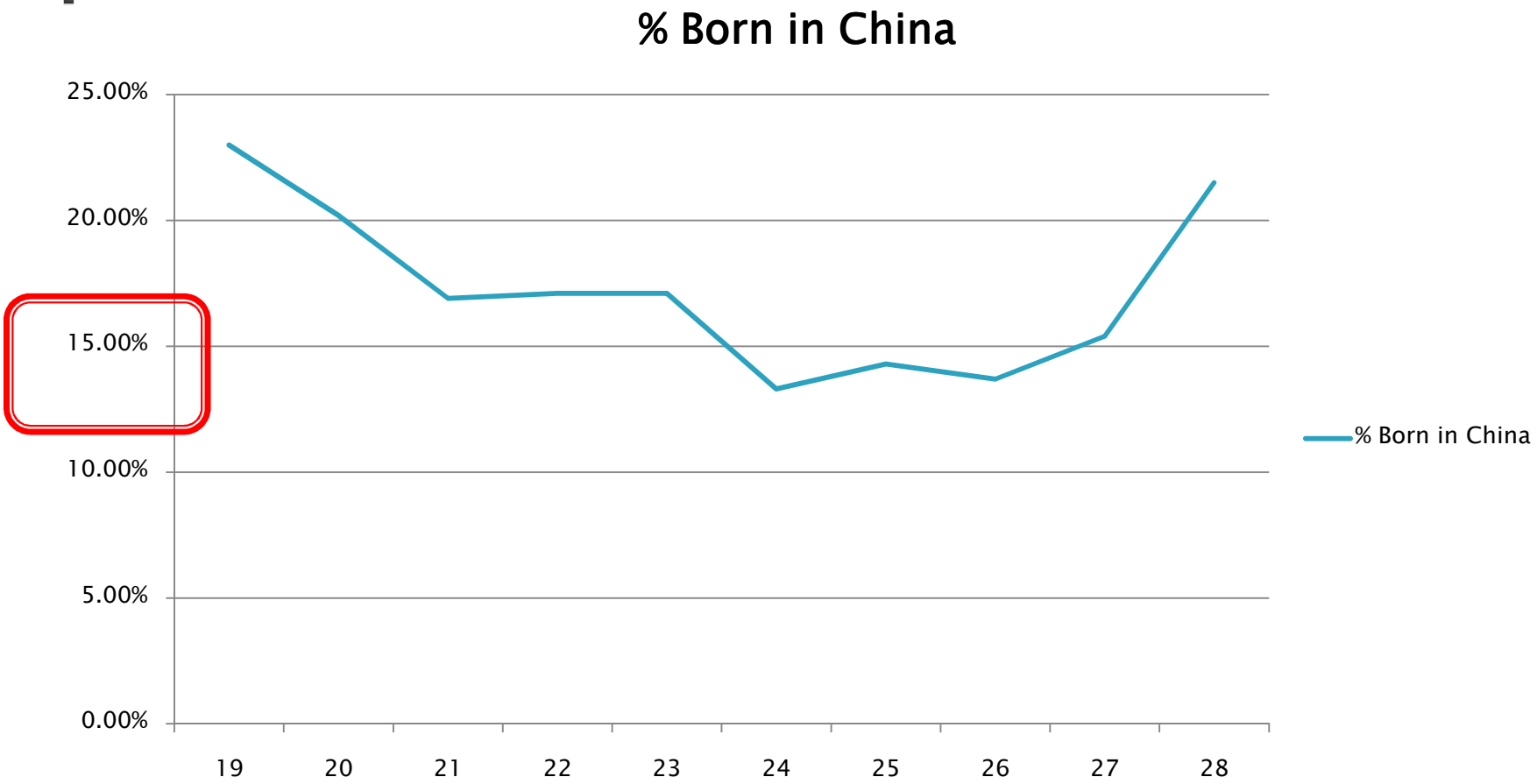
Hong Kong 2006

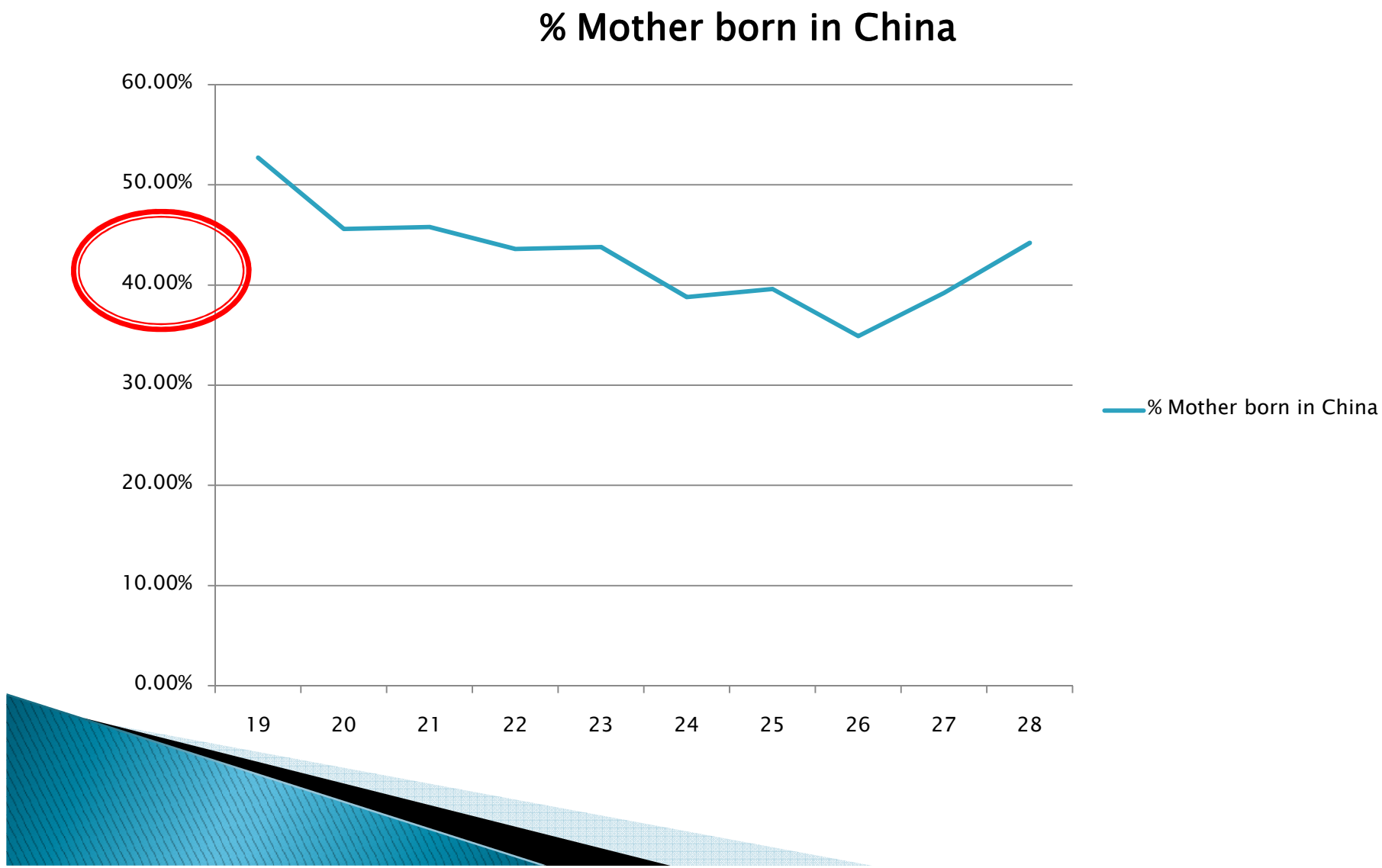
- Sub-sample of 11,777 households
- 34,295 individuals
- 4,932 (14.4%) aged 19 – 28 in 2006
- Born in 1978 to 1987
- Among them, 74.9% live with their parents
- Information regarding SES of their parents are available
- Purpose: study their education trajectory after secondary education




% Live with a parent
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
19
20
21
22
23
24
25
26
27
28
Age
% Live with a parent

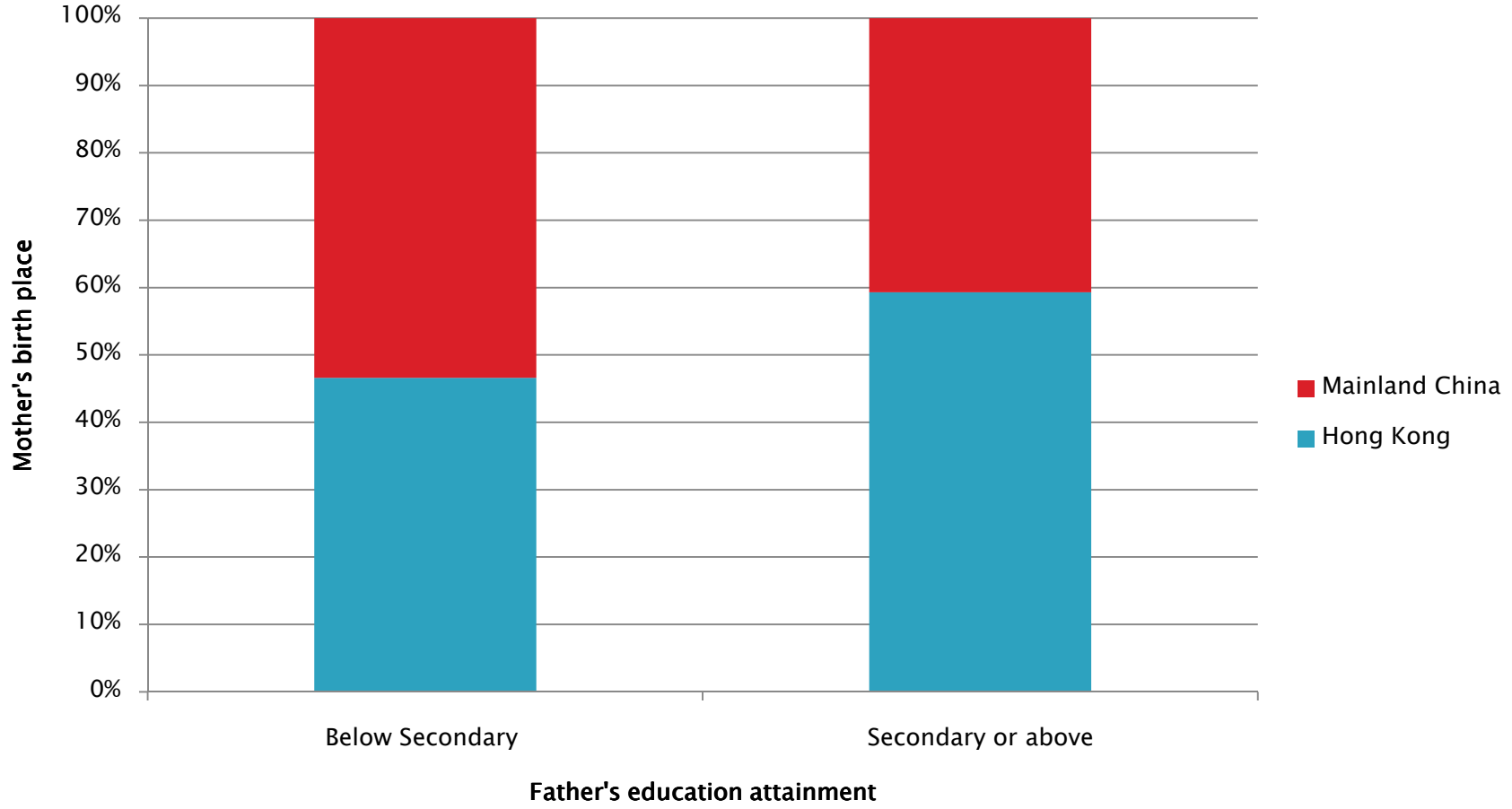
% born in mainland China Among those (19-28) living with a parent in 2006



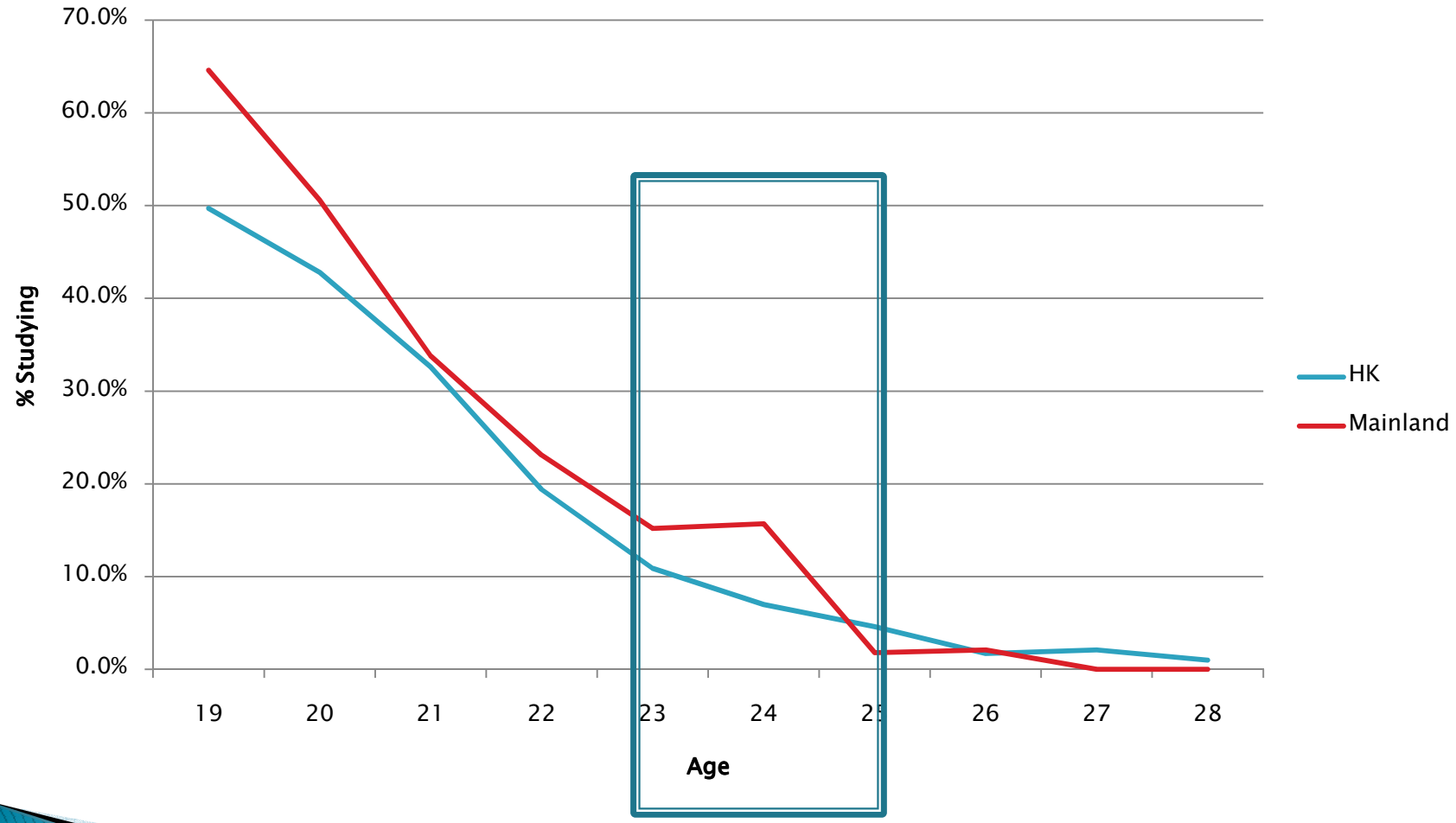

% Mother born in China
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
19
20
21
22
23
24
25
26
27
28
% Mother born in China

Father's education & mother's place of birth

χ^2 (1, N=2164) = 33.58, p < .001.

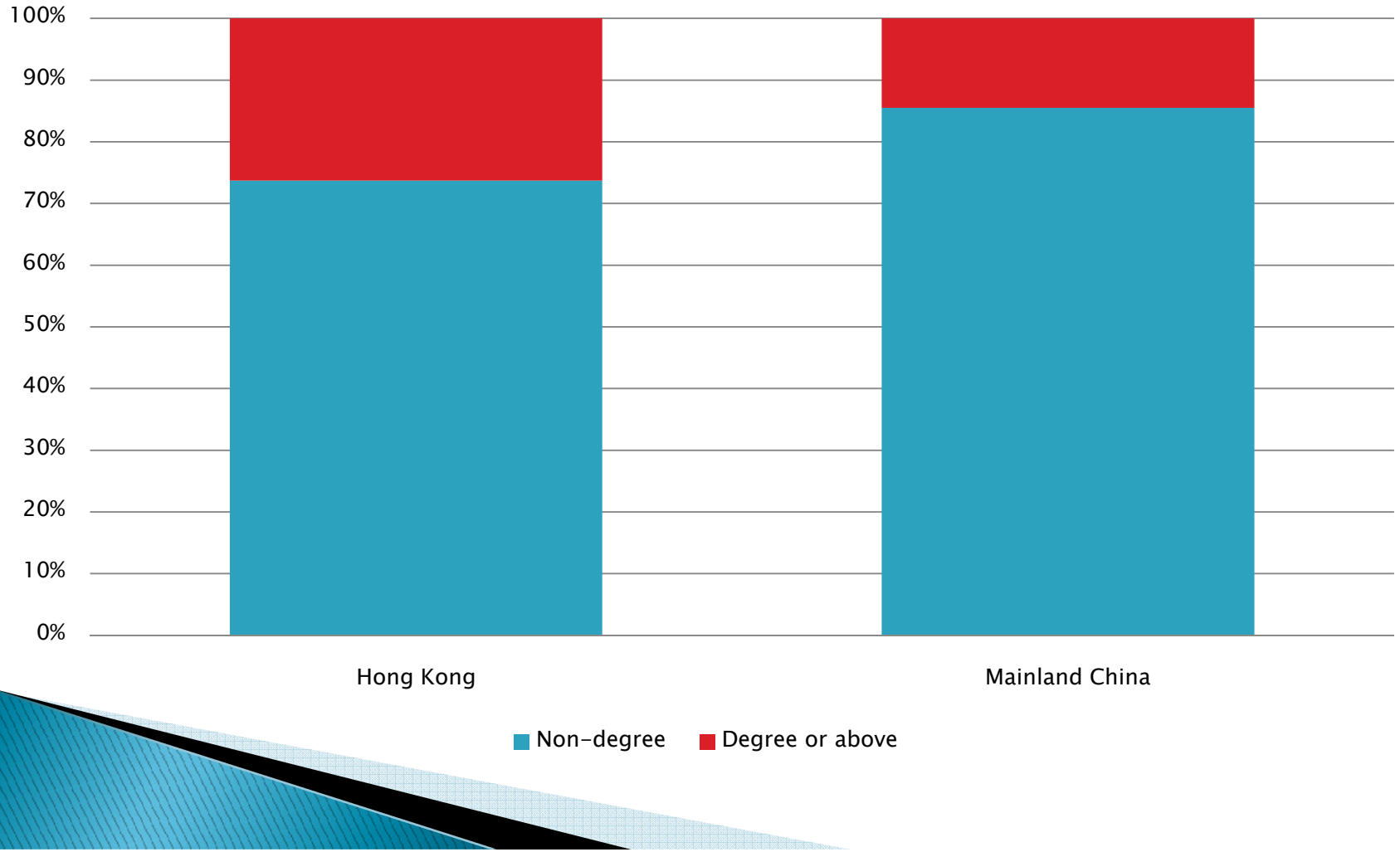


Age and % of studying

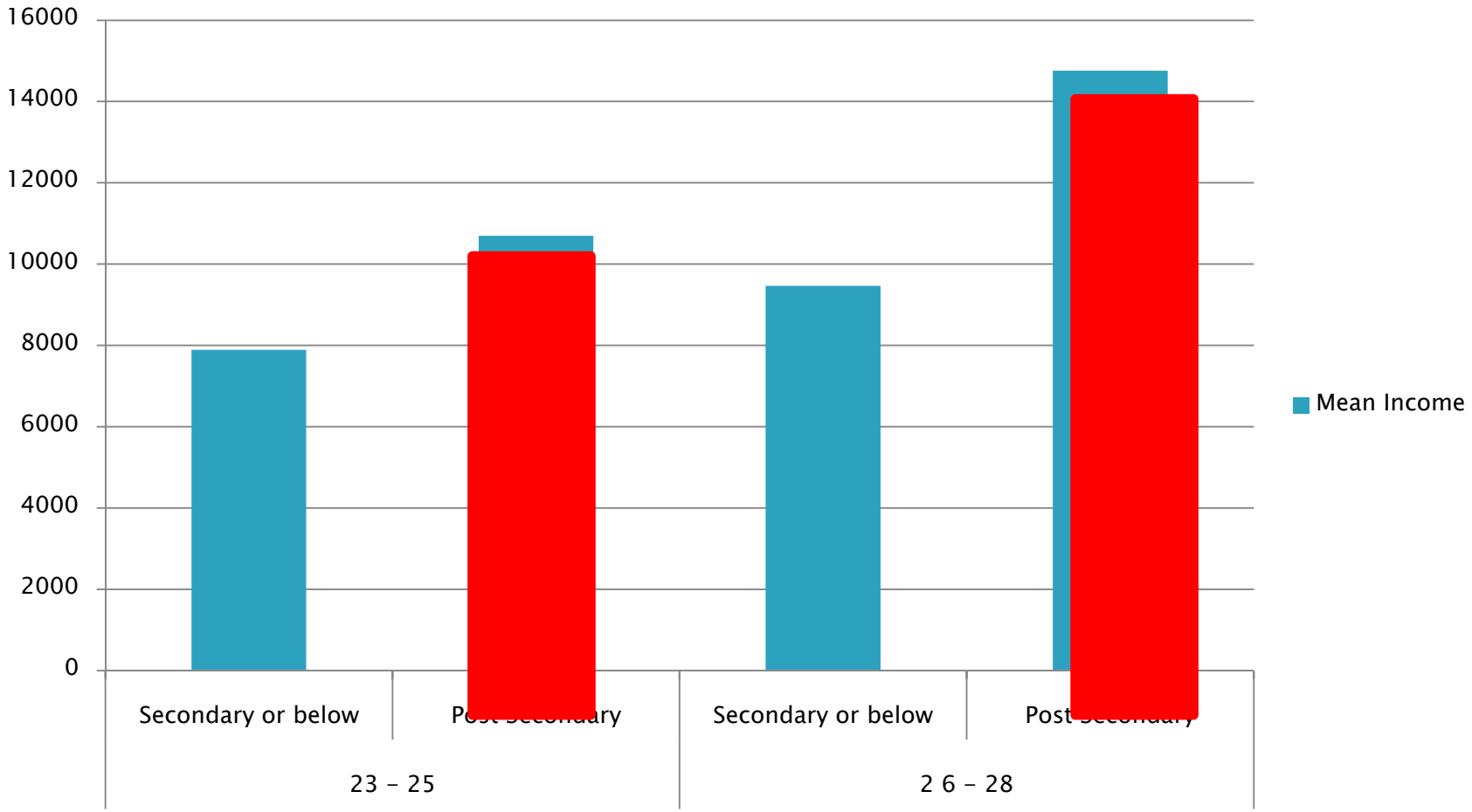


Place of birth & degree holder (23-25yrs)

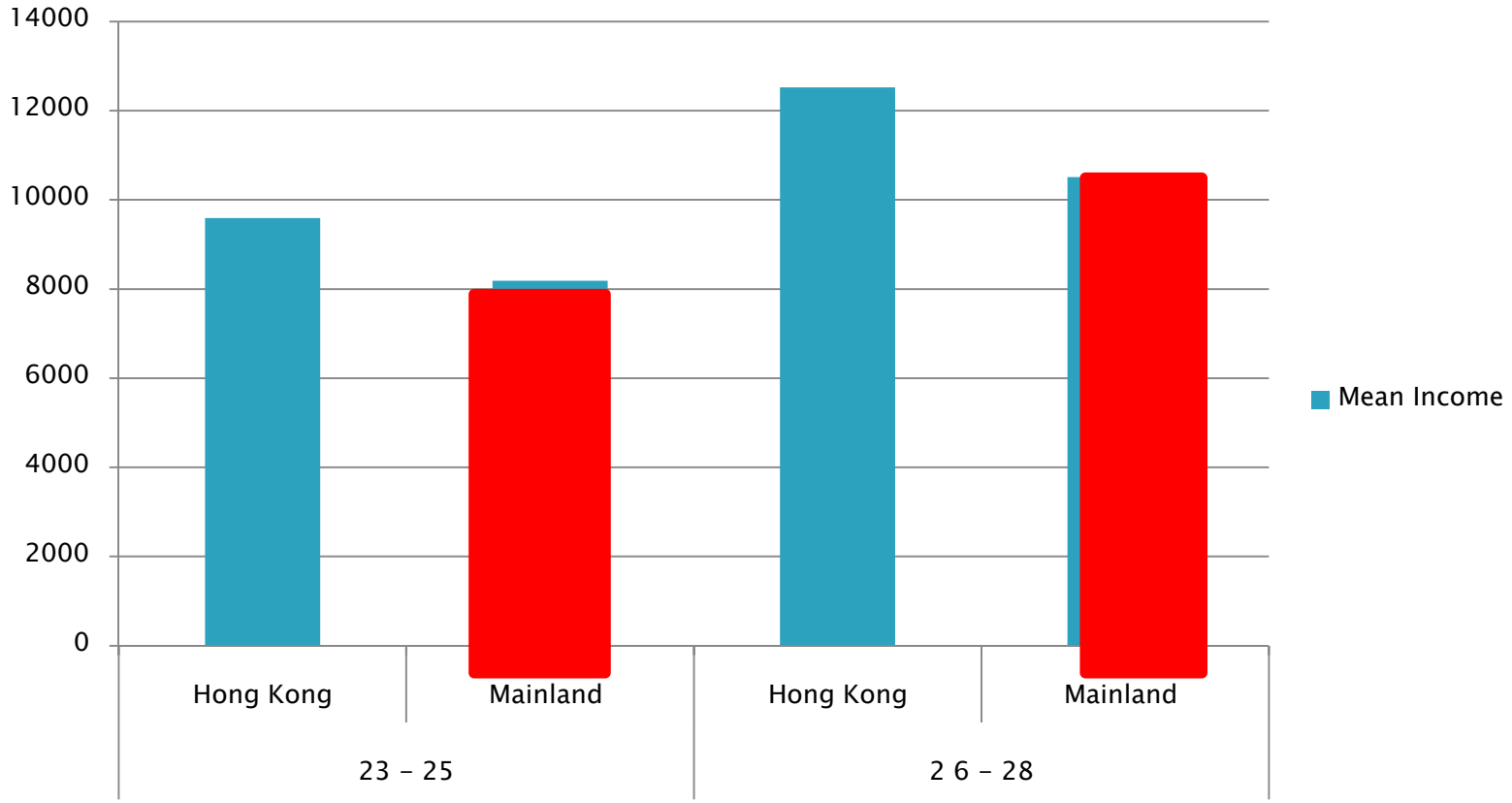
χ^2 (1, N=1140) = 10.45, p = .001. On an ordinal scale, Mann-Whitney U-test, z = -2.73, p < .01



Income & Education attainment



Place of birth and income

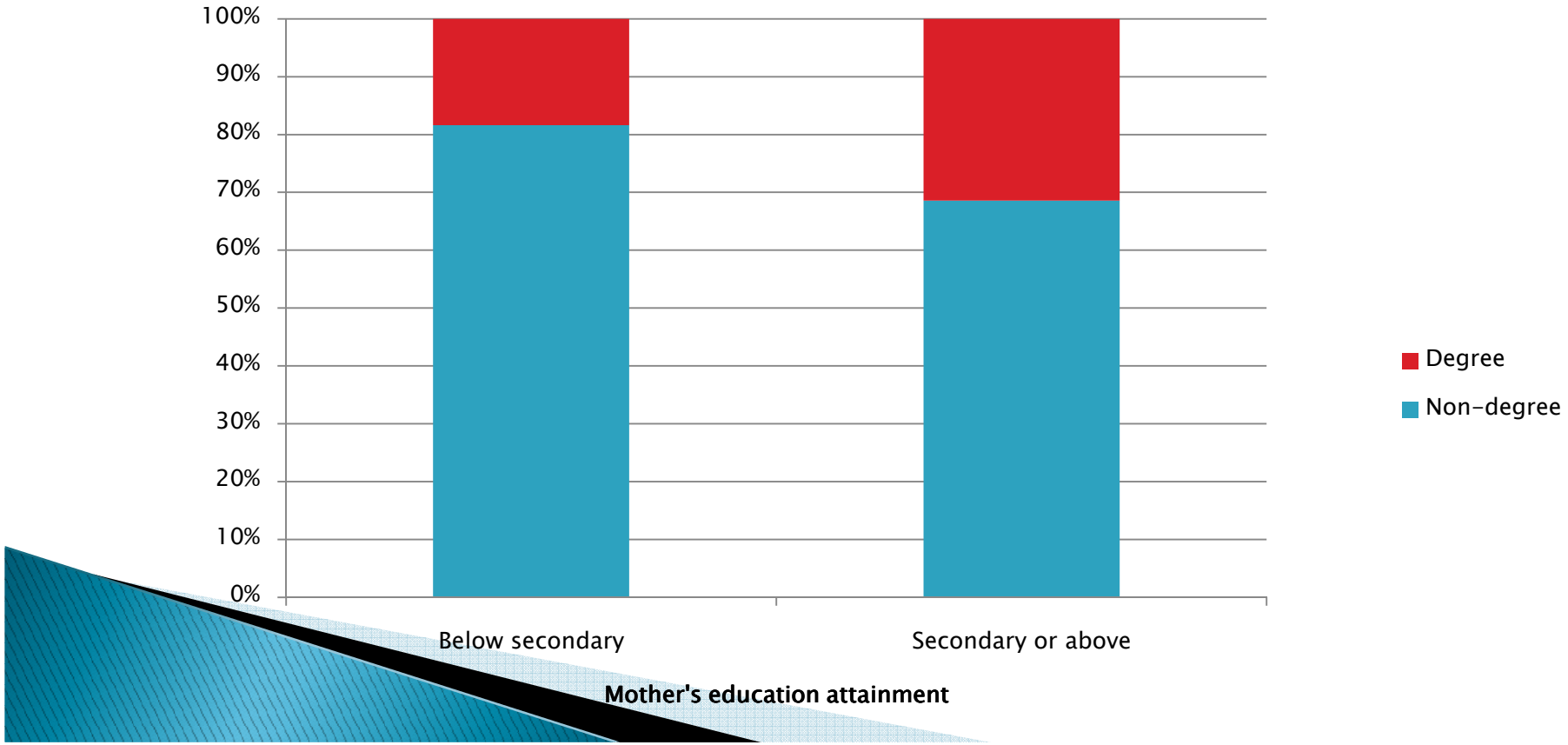


Association with father's education attainment

χ^2 (1, N = 973) = 37.678, p < .001.
On an ordinal scale, Mann-Whitney U-test, z = -7.132 (N = 973), p < .001
Spearman's *rho* = .274 (N = 973), p < .001

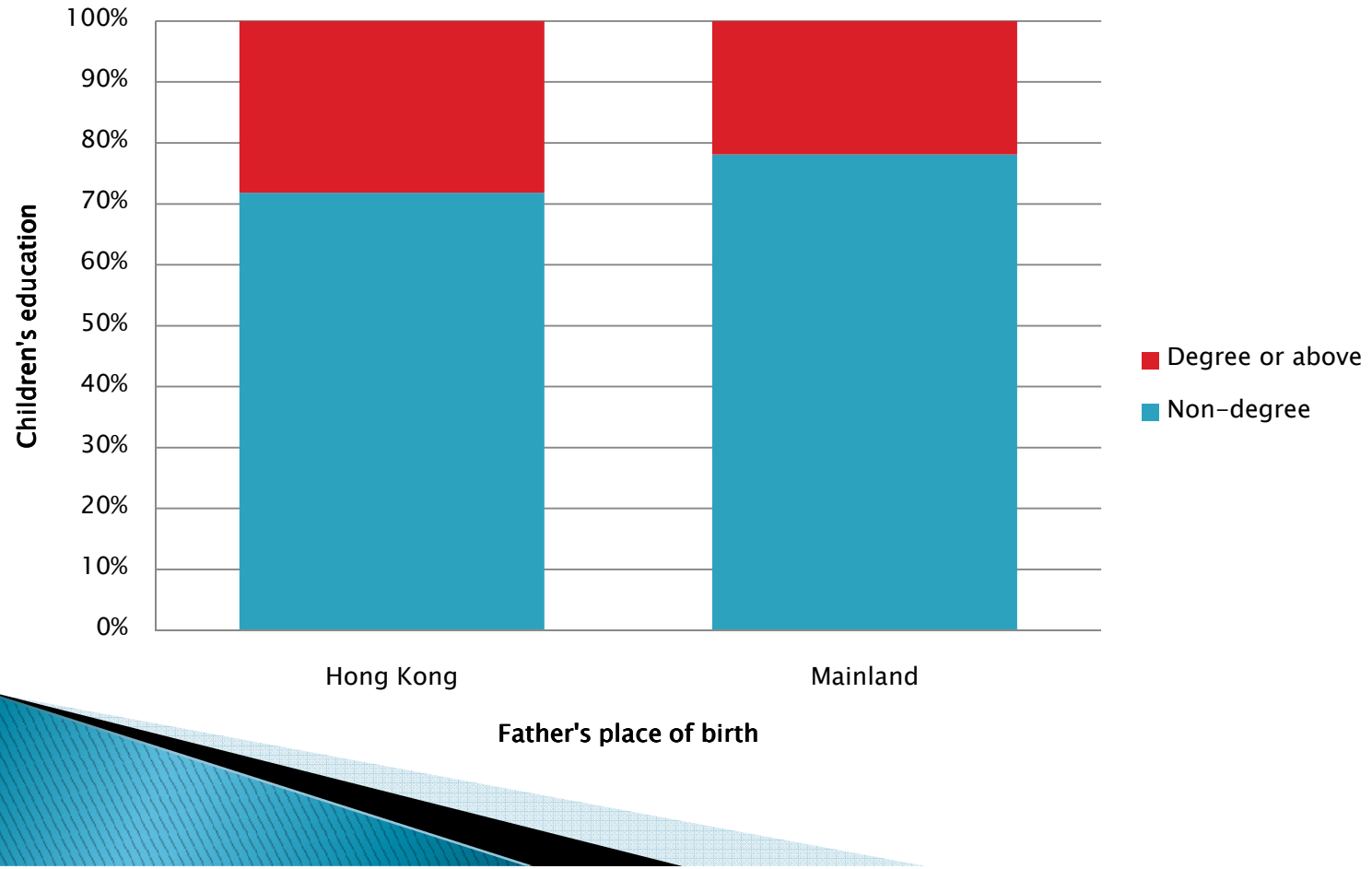
Association with mother's education attainment

χ^2 (1, N = 1116) = 24.611, p < .001.
On an ordinal scale, Mann-Whitney U-test, z = -7.539 (N = 1116), p < .001
Spearman's *rho* = .257 (N = 1116), p < .001



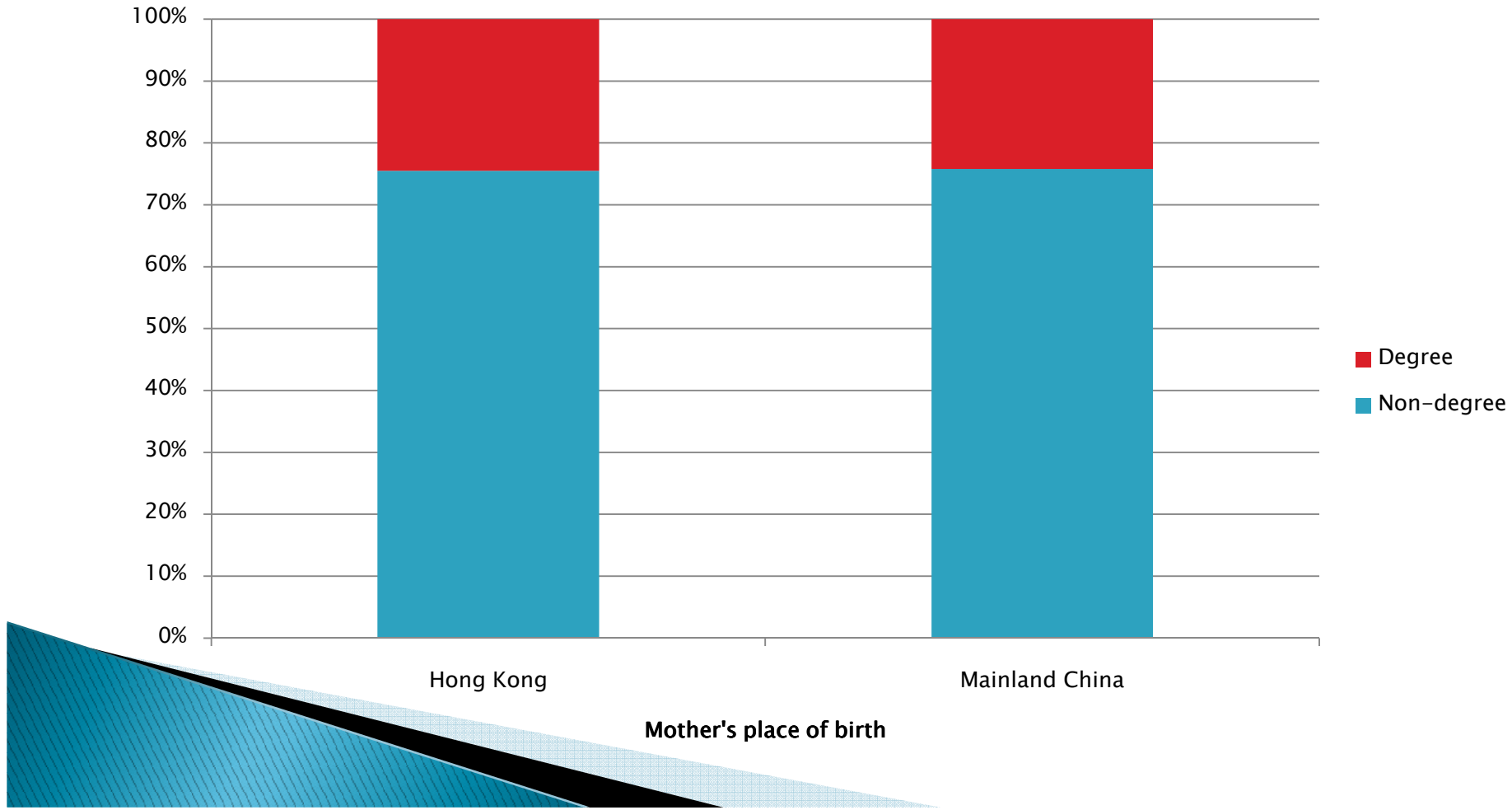
Association with father's placement birth

χ^2 (1, N = 926) = 4.522, p = .033.
On an ordinal scale, Mann-Whitney U-test, z = -1.297 (N = 926), p = .195



Association with mother's place of birth

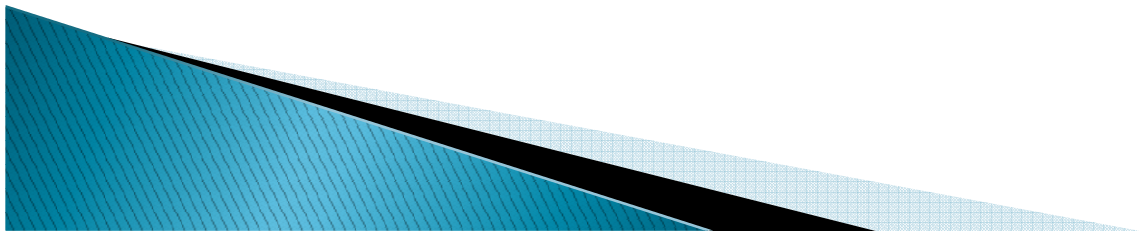
χ^2 (1, N = 1053) = .002 p = .942.
On an ordinal scale, Mann-Whitney U-test, z = -.484 (N = 1116), p = .628



Regression: education attainment of young adults (23-25) living with both parents

Measures	B	SE	Beta	*t*
Father's education attainment	.269	.061	.164	4.45***
Mother's education attainment	.355	.082	.160	4.39***
Place of birth (1=HK, 2=Mainland)	-.718	.220	-.116	-3.26**
Mother's place of birth (1=HK, 2=Mainland)	.320	.158	.073	2.03*
R^2			.088	
R^2_{adj}			.084	
F (df1, df2)			20.948*** (4, 871)	

***$p < .001$. **$p < .01$. *$p < .05$.

Discussion

- Hong Kong spent less in social services, including education
- The outcome, however is still good (PISA 2006, education attainment for younger cohorts)
- However, social mobility is still a question
- Male with lower education attainment, tends to have spouse in mainland China, also with lower education attainment
- Children born in mainland China had less chance of success in the present education system (as far as those 23-25 cohort is concerned)
- More investment is needed
- Investment among the disadvantaged had the biggest pay off…