# FACT SHEET

Gini Coefficient

1.   Overview

1.1   Developed by an Italian statistician Corrado Gini in the 1910s, Gini Coefficient is commonly used to indicate income inequality in a society.   Gini Coefficient is a number which has a value between zero and one.   As the value of the Coefficient rises, the higher the degree of income inequality in a society becomes.

2.   Calculation

2.1   In the chart below, the concept of Lorenz Curve is employed to illustrate the calculation of Gini Coefficient.   The line of perfect equality, which is the diagonal, represents a perfectly equal income distribution in a society where every household has the same income.   The line of perfect inequality, which coincides with the horizontal and vertical axes, represents a perfectly unequal income distribution in a society where one household has all the income and everyone else has none. Sandwiched between the two lines is Lorenz Curve.

2.2   Lorenz Curve is constructed in the following manner.   Suppose a society is composed of 100 income-earning households.   Those 100 households are arranged in ascending incomes.   Lorenz Curve is constructed by plotting the cumulative share of households on the horizontal axis and the cumulative share of household income on the vertical axis.   Every point on Lorenz Curve represents one such statement that the bottom x share of households has y share of the total income.

Lorenz Curve and Gini Coefficient
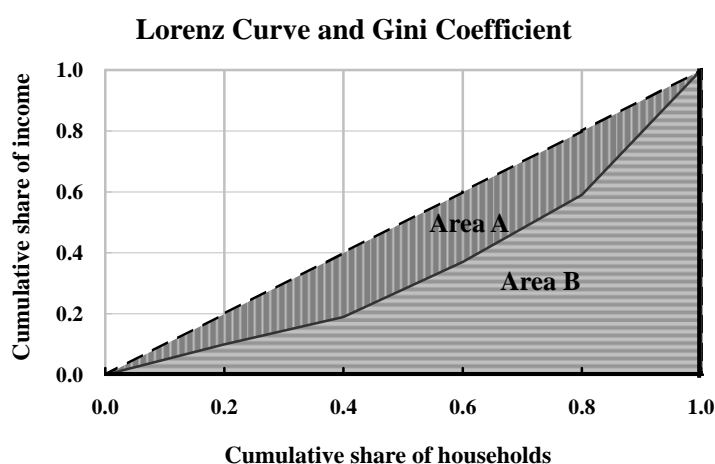
- - - - - Line of perfect equality   ——— Lorenz Curve   ▬▬▬ Line of perfect inequality

Sources: Lui (1997), Wikipedia (2004) and Census and Statistics Department (2002).

2.3   Gini Coefficient equals to Area A divided by Areas A and B.   In a society where income is evenly distributed and Lorenz Curve coincides with the line of perfect equality, Gini Coefficient is zero.   On the other hand, in a society where income is held by one household and Lorenz Curve coincides with the line of perfect inequality, Gini Coefficient is one.   In real life, Lorenz Curve of a society lies somewhere between the lines of perfect equality and inequality, making the corresponding Gini Coefficient somewhere between zero and one.

3.   Gini Coefficient of Hong Kong

3.1   The Census and Statistics Department calculates Gini Coefficient for Hong Kong using data from censuses and by-censuses.   Table 1 presents Gini Coefficient of Hong Kong between 1981 and 2001.

Table 1 - Gini Coefficient of Hong Kong

	1981	**1986**	**1991**	**1996**	**2001**
Gini Coefficient	0.451	0.453	0.476	0.518	0.525

Sources: Census and Statistics Department (1992) and (2002).

4.   Considerations in the use of Gini Coefficient

4.1   According to the Census and Statistics Department of the Hong Kong Special Administrative Region, Gini Coefficient does not take into account the effects of taxation and social benefits on the distribution of household income, which tend to reduce income inequality.

4.2   In addition, the Census and Statistics Department states that there is no direct relationship between the extent of poverty and Gini Coefficient.[1]   While an increase in Gini Coefficient implies rising income disparity, it does not necessarily indicate worsening of the poverty situation because both the rich and the poor may become richer simultaneously.   Therefore, to understand the poverty situation of a society, other income statistics should be considered in addition to Gini Coefficient.

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[1]   Census and Statistics Department of the Hong Kong Special Administrative Region (2002).

5.   Comparison of Gini Coefficient in selected places

5.1   The World Bank compiles Gini Coefficient for 127 places in the world and they are presented in the Appendix.

5.2   Table 2 compares Gini Coefficient of Hong Kong with a number of developed economies in the world. The World Bank has pointed out that Gini Coefficient is not strictly comparable across places because the underlying household surveys differ in terms of method and type of data collected.[2]

Table 2 - Gini Coefficient of selected developed economies

Places	Gini Coefficient	Survey year
Hong Kong, China	0.525	2001
Australia	0.352	1994
Canada	0.331	1998
France	0.327	1995
Germany	0.283	2000
Japan	0.249	1993
South Korea	0.316	1998
Singapore	0.425	1998
Sweden	0.250	2000
Taiwan	0.326	2000
United Kingdom	0.360	1999
United States	0.408	2000

Sources: The World Bank (2004), Census and Statistics Department (2002) and *Distribution of income in Taiwan.*

[2]   The World Bank (2004).

Gini Coefficient in the world

Gini Coefficient	Place	Survey year	Gini Coefficient	Place	Survey year
0.244	Hungary	1999	0.325	India	1999-2000
0.247	Denmark	1997	0.325	Spain	1990
0.249	Japan	1993	0.326	Netherlands	1994
0.250	Belgium	1996	0.327	France	1995
0.250	Sweden	2000	0.330	Pakistan	1998-99
0.254	Czech Republic	1996	0.331	Canada	1998
0.258	Norway	2000	0.331	Switzerland	1992
0.258	Slovak Republic	1996	0.333	Burundi	1998
0.262	Bosnia and Herzegovina	2001	0.334	Yemen, Republic	1998
0.268	Uzbekistan	2000	0.343	Indonesia	2002
0.269	Finland	2000	0.344	Egypt, Arab Republic	1999
0.282	Albania	2002	0.344	Sri Lanka	1995
0.282	Macedonia, FYR	1998	0.347	Tajikistan	1998
0.283	Germany	2000	0.352	Australia	1994
0.284	Slovenia	1998-99	0.353	Algeria	1995
0.289	Rwanda	1983-85	0.354	Greece	1998
0.290	Croatia	2001	0.355	Israel	1997
0.290	Kyrgyz Republic	2001	0.359	Ireland	1996
0.290	Ukraine	1999	0.360	Italy	2000
0.300	Austria	1997	0.360	United Kingdom	1999
0.300	Ethiopia	2000	0.361	Vietnam	1998
0.300	Ghana	1999	0.362	Moldova	2001
0.303	Romania	2000	0.362	New Zealand	1997
0.304	Belarus	2000	0.364	Jordan	1997
0.308	Luxembourg	2000	0.365	Azerbaijan	2001
0.313	Kazakhstan	2001	0.367	Nepal	1995-96
0.316	South Korea	1998	0.369	Georgia	2001
0.316	Poland	1999	0.370	Lao PDR	1997
0.318	Bangladesh	2000	0.372	Estonia	2000
0.319	Bulgaria	2001	0.379	Armenia	1998
0.319	Lithuania	2000	0.379	Jamaica	2000
0.324	Latvia	1998	0.380	Gambia, The	1998

Appendix (cont'd)

Gini Coefficient	Place	Survey year	Gini Coefficient	Place	Survey year
0.382	Tanzania	1993	0.475	Madagascar	2001
0.385	Portugal	1997	0.482	Burkina Faso	1998
0.390	Mauritania	2000	0.483	Guatemala	2000
0.395	Morocco	1998-99	0.491	Venezuela, RB	1998
0.396	Mozambique	1996-97	0.492	Malaysia	1997
0.398	Tunisia	2000	0.498	Peru	2000
0.400	Turkey	2000	0.503	Malawi	1997
0.403	Guinea	1994	0.505	Mali	1994
0.403	Trinidad and Tobago	1992	0.505	Niger	1995
0.404	Cambodia	1997	0.506	Nigeria	1996-97
0.408	Turkmenistan	1998	0.509	Papua New Guinea	1996
0.408	United States	2000	0.522	Argentina	2001
0.413	Senegal	1995	**0.525**	**Hong Kong, China**	**2001**
0.425	Singapore	1998	0.526	Zambia	1998
0.426	St. Lucia	1995	0.532	El Salvador	2000
0.430	Iran, Islamic Republic	1998	0.546	Mexico	2000
0.430	Uganda	1999	0.550	Honduras	1999
0.432	Guyana	1999	0.551	Nicaragua	2001
0.432	Thailand	2000	0.564	Panama	2000
0.437	Ecuador	1998	0.568	Paraguay	1999
0.440	Mongolia	1998	0.568	Zimbabwe	1995
0.445	Kenya	1997	0.571	Chile	2000
0.446	Cameroon	2001	0.576	Colombia	1999
0.446	Uruguay	2000	0.591	Brazil	1998
0.447	Bolivia	1999	0.593	South Africa	1995
0.447	Mainland China	2001	0.609	Swaziland	1994
0.452	Côte d'lvoire	1998	0.613	Central African Republic	1993
0.456	Russian Federation	2000	0.629	Sierra Leone	1989
0.461	Philippines	2000	0.630	Botswana	1993
0.465	Costa Rica	2000	0.632	Lesotho	1995
0.470	Guinea-Bissau	1993	0.707	Namibia	1993
0.474	Dominican Republic	1998			

Sources: The World Bank (2004) and Census and Statistics Department (2002).

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