

Income Inequality and Poverty

Outline

- Income Inequality and **Poverty**.
 - **Growth and inequality**
- Sources of income inequality and poverty
- Alleviation of income inequality and poverty
 - **Does inequality matter for poverty reduction?**
 - **Inequality (and poverty) reduction **or** growth-promotion ?**
- Data response questions
- Q & A



Income Inequality and Poverty

Measuring income inequality: Gini Coefficient

Income inequality

- Income inequality is unequal income distribution of an economy's total income among households
- It reflects the differences in living standards across a whole population. It matters for poverty and growth.
- It is often an important factor behind crime, social unrest and violent conflict and is critically important for the achievement of the development goals.
- **Measuring income inequality:**
 - **Gini coefficient**, Atkinson index, coefficient of variation, decile ratios, generalised entropy index: Theil index and the mean log deviation of income measure, Kakwani progressivity index, the proportion of total income earned by the poorest 50%, 60% and 70% of households, the Robin Hood index, **Sen** poverty measure....

Gini coefficients in HK

Gini Coefficients	2006	2011	2016
GC (Original household income)	0.533	0.537 [+0.004]	0.539 [+0.002]
GC (Post-tax household income)	0.521	0.521	0.524 [+0.003]
GC (Post-tax post-social transfer household income)	0.475	0.475	0.473 [-0.002]

Gini Coefficients in Hong Kong

Source: Census and Statistics Department, HKSAR Government

Three concepts of household income

Income concept	Calculation formula
Original household income (MHI)	= Income from main employment + Income from secondary employment + Other cash incomes (including dividends, rental incomes and other transfer incomes)
Post-tax household income	= MHI – Salaries tax – Property tax – Rates – Government rent
Post-tax post-social transfer household income	= Post-tax household income + social transfer e.g. education benefits + housing benefits + medical benefits

City	Gini Coefficient
San Francisco	0.521
Chicago	0.531
Los Angeles	0.531
Washington City, D.C.	0.535
Hong Kong	0.539 (2016)
New York City	0.551

Country	Gini Coefficient (2015)
Switzerland	0.386
Korea	0.396
Sweden	0.432
Canada	0.435
Austria	0.494
Belgium	0.5
Germany	0.504
United State	0.506
Finland	0.507
France	0.516
United Kingdom	0.52
Italy	0.524
Spain	0.524
Ireland	0.545

Gini coefficient (Original household income) in selected places in .
 Source: Census and Statistics Department, HKSAR and the Organisation for Economic Co-operation and Development **OECD**

Interpretation issues about measurement (Gini coefficient)

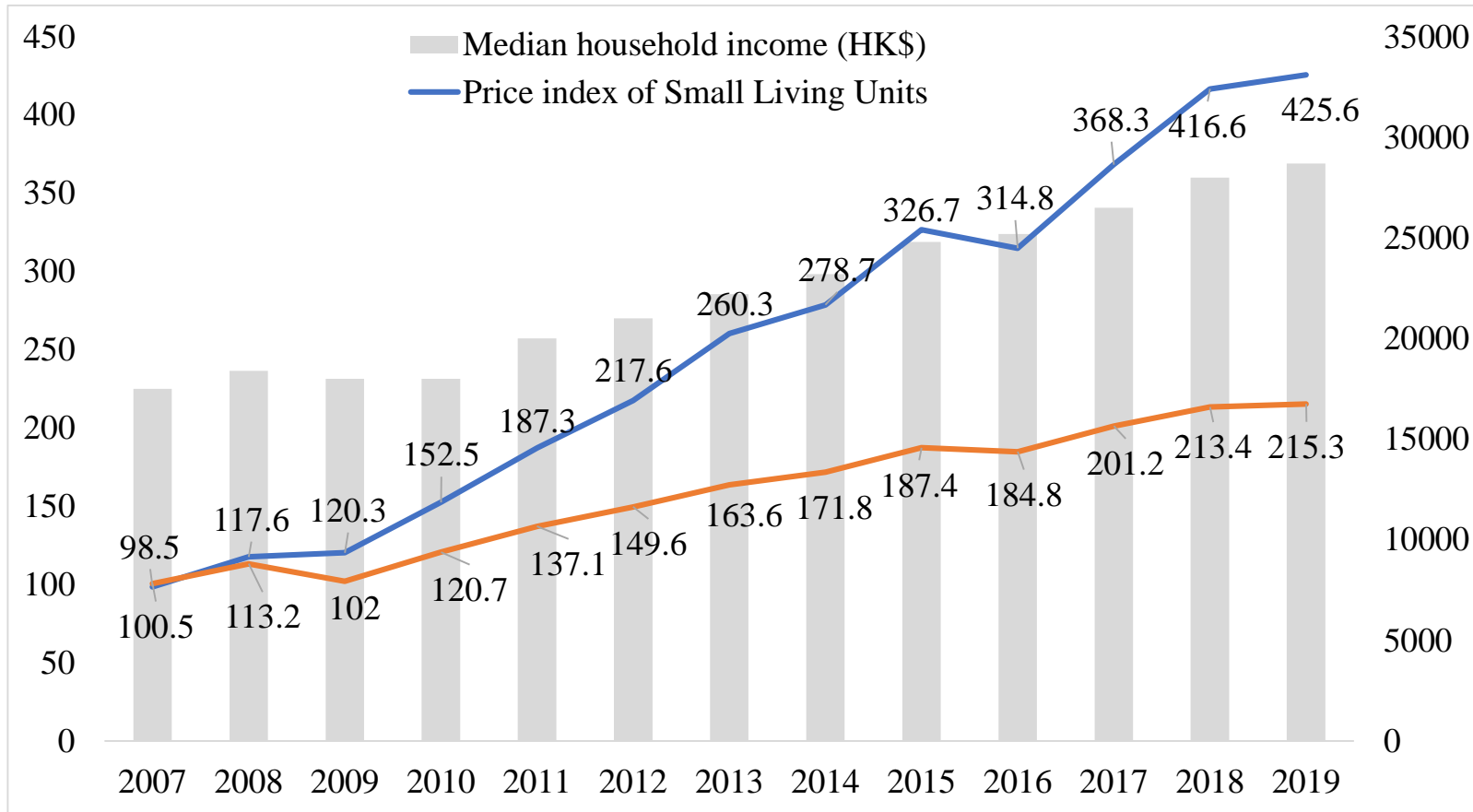
- Personal income? Household income?
- Before-policy income? After-policy income?
- Current US dollar? 2011 PPP (purchasing power parity) ?
- **Relative income principle**: only relative income should matter, **not** income levels.
 - A **high**-income country and a **low**-income country can yield the **same Gini Coefficient**, as long as their incomes are distributed in a **similar pattern**.
- **Independent of the size of the economy**
- **Income mobility**:
 - An individual undergoes **lifecycle stages** with different levels of income and accumulated wealth. → examining inequalities over the **life cycle instead of in any given year**.
 - However, **recent evidence** reveals that **lifetime inequality has strongly increased for the younger cohorts over time**.

Interpretation issues about measurement

- **Apart** from profits/salary, individuals may also have ...
 - **Assets/Wealth**: Inheritance, appreciation of assets, borrowings
 - **Other incomes**: rental income, investment income
 - Elderly: life-long savings
- **Sample bias**
 - For example, **small countries** or **countries with less economic diversity** frequently tend to show **low coefficients**, while **large economically diverse** countries usually demonstrate **high coefficients**.

(Reference: <https://corporatefinanceinstitute.com/resources/knowledge/economics/gini-coefficient/>)

Housing factor (Hong Kong)



Median household income, price and rent indexes of small living units (2007-2019)

Source: Rate and Valuation Department, HKSAR Government and Hong Kong Annual Digest of Statistics

- **Price and rent** of **small** units increased by **253.8%** and **111.1%** respectively, while the median household **income** only increased by **54.8%**.
- A property valued at HK\$**4 million** in 2009 appreciated to HK\$**14.1 million** in 2019.
- Ownership of **housing assets amplifies the wealth gap** between households with housing assets and those without housing assets.



Inequality and poverty

Inequality and Poverty

- **Inequality** is **unequal distribution** of an economy's total income among households.
- **Poverty** is defined as a condition in which a person or family does **not have the means** to satisfy basic needs for food, clothing, shelter, and transportation.
- The **Census and Statistics Department** states that there is **no direct relationship** between the **extent of poverty** and **Gini Coefficient**.
- 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** (and the rich are relatively richer).
- Therefore, to **understand the poverty situation** of a society, other income statistics should be considered in addition to **Gini Coefficient**.

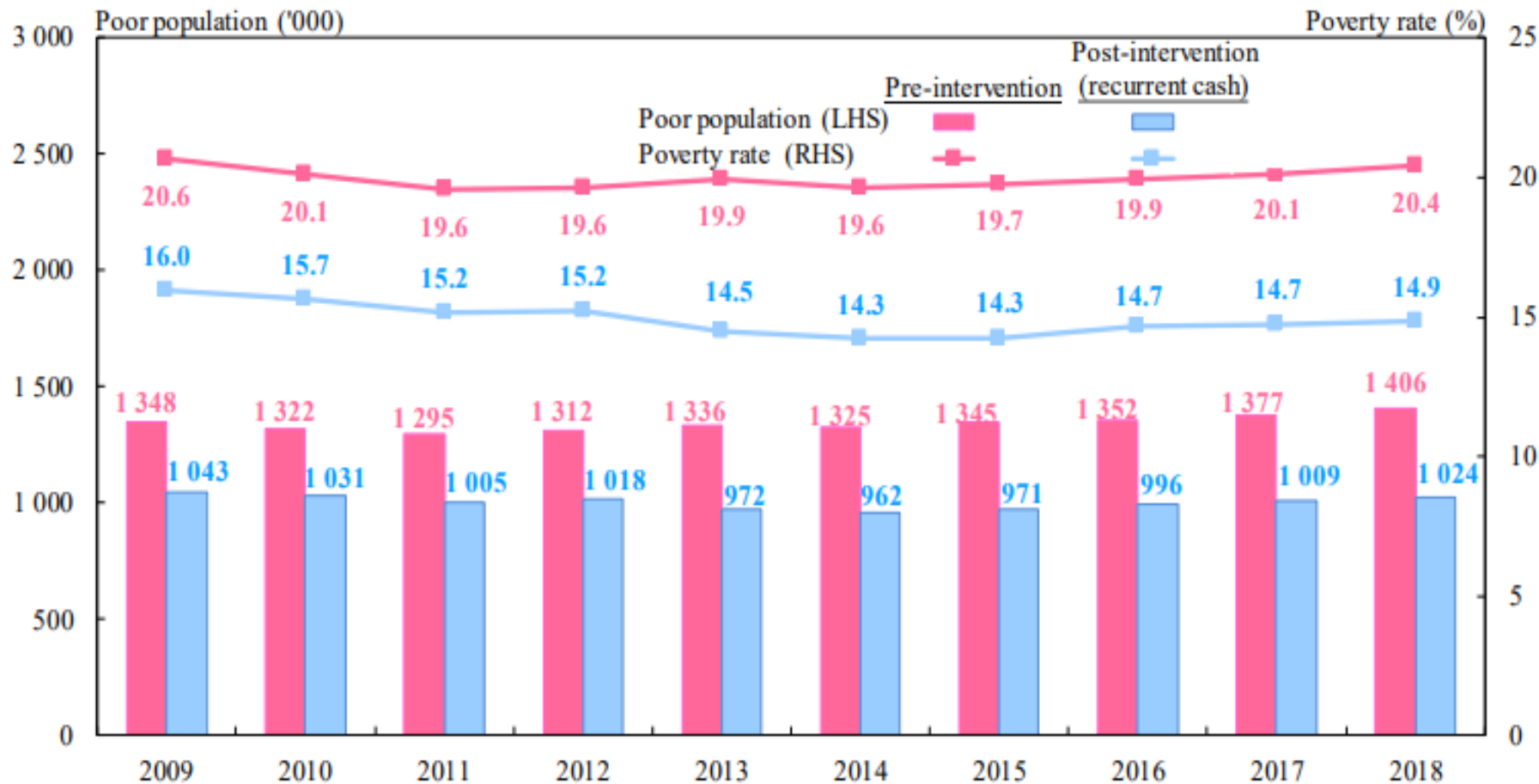
(Reference: <https://www.legco.gov.hk/yr04-05/english/sec/library/0405fs07e.pdf>)



Poverty in Hong Kong

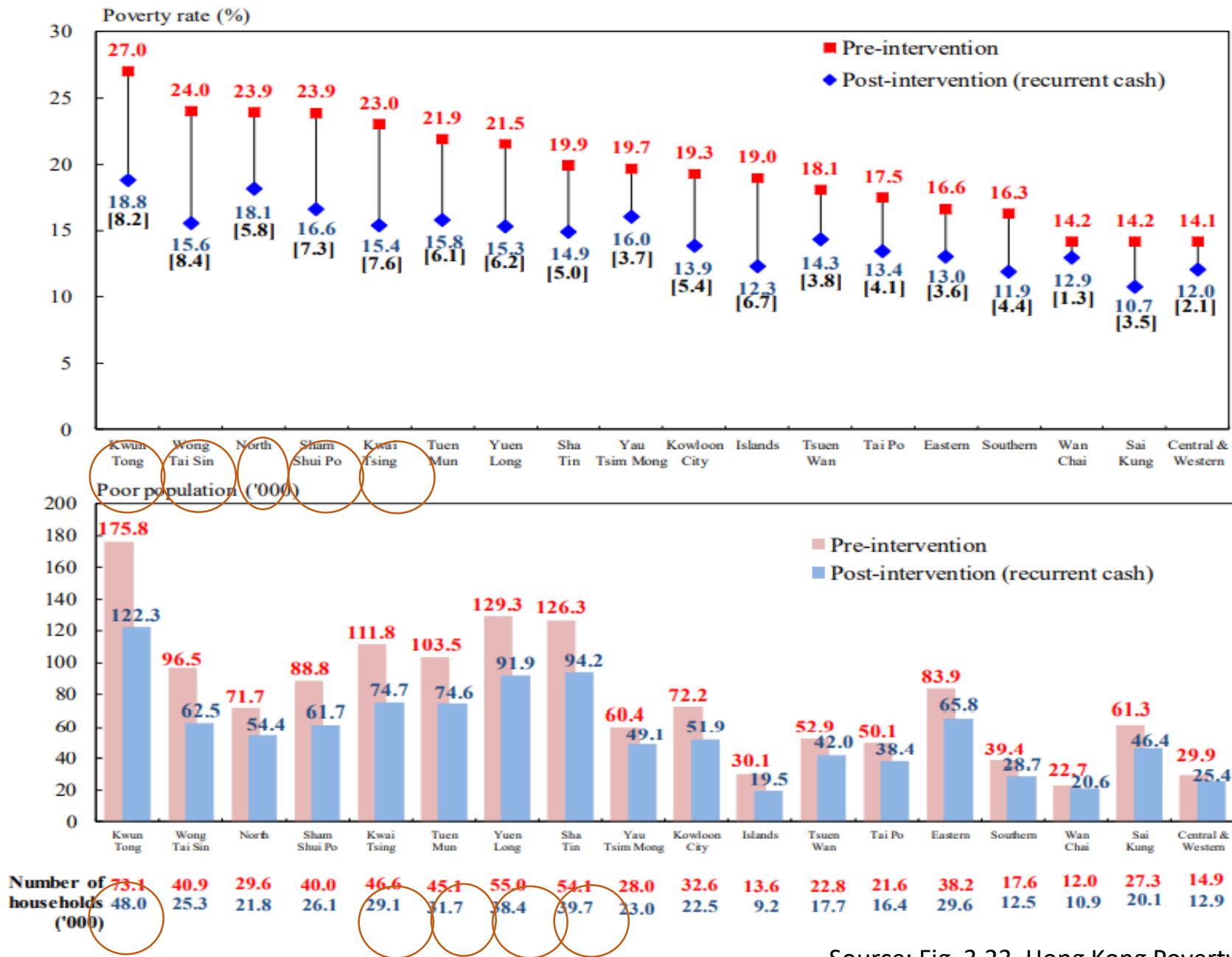
Poverty in Hong Kong

- **Poverty concentrates on the lowest part of the left tail only**, i.e. the segment below the poverty line.
- The official **poverty line** is set at **50 per cent of the median household income** by household size and is based on the concept of relative poverty.



Poor population and poverty rate, 2009-2018

Poverty rate is the percentage of the population living in poverty.

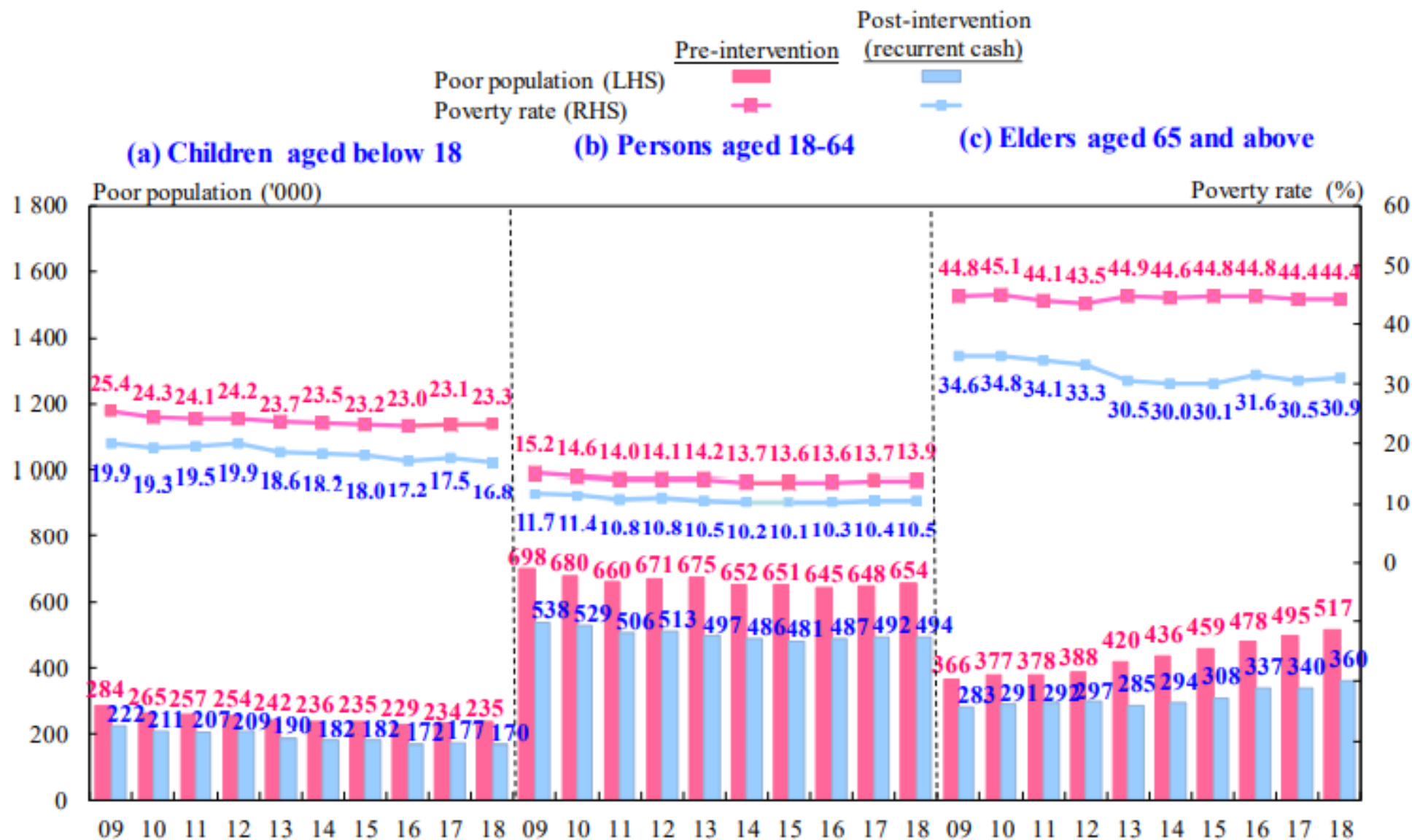


Poverty rate and poor population by **districts**, 2018

Note: Figures in square bracket [...] refer to the percentage reduction of poverty rates.

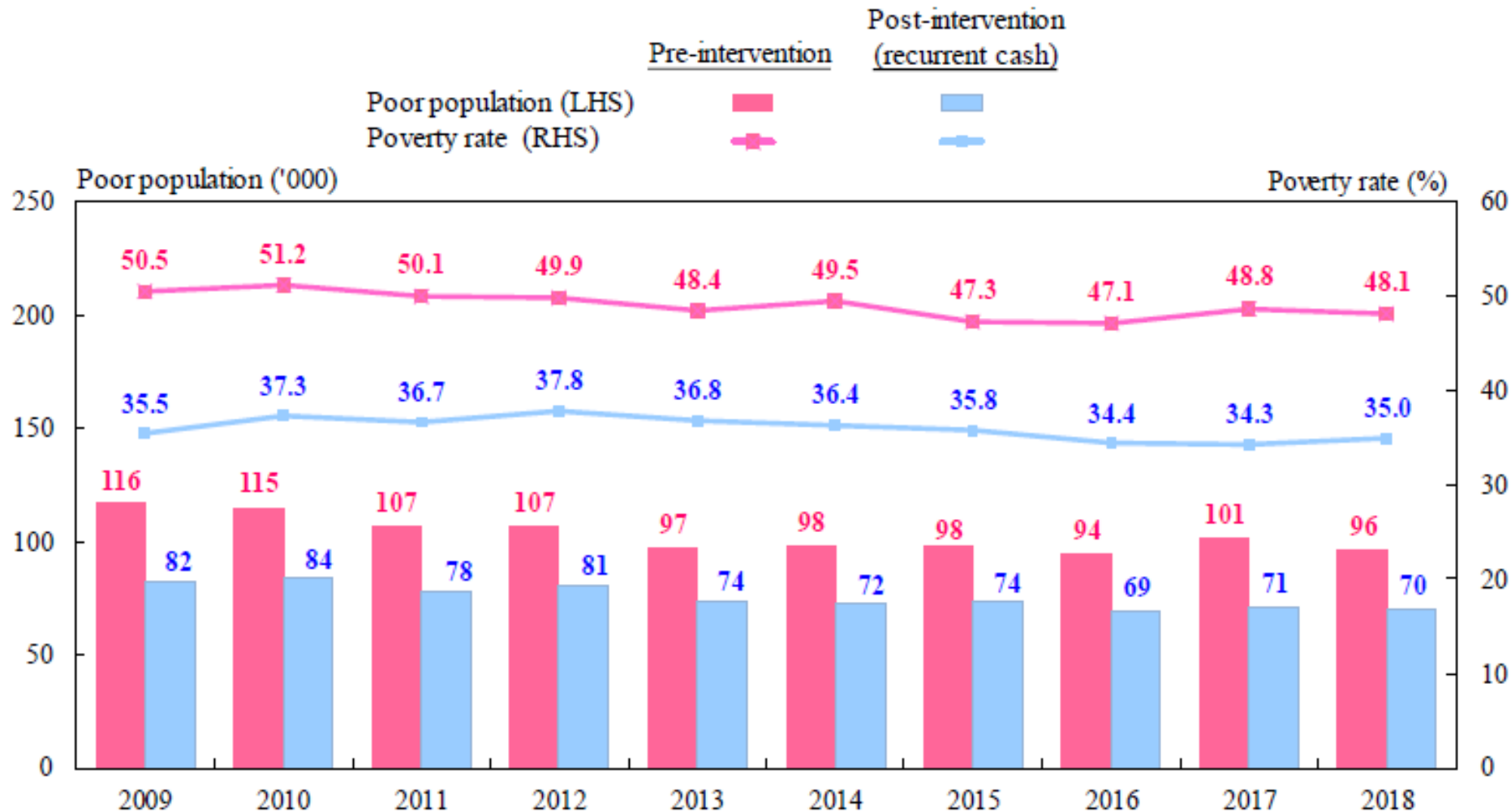
Source: Fig. 3.23, Hong Kong Poverty Situation Report 2018

Poor population and poverty rate by **age** of household head 2009-2018



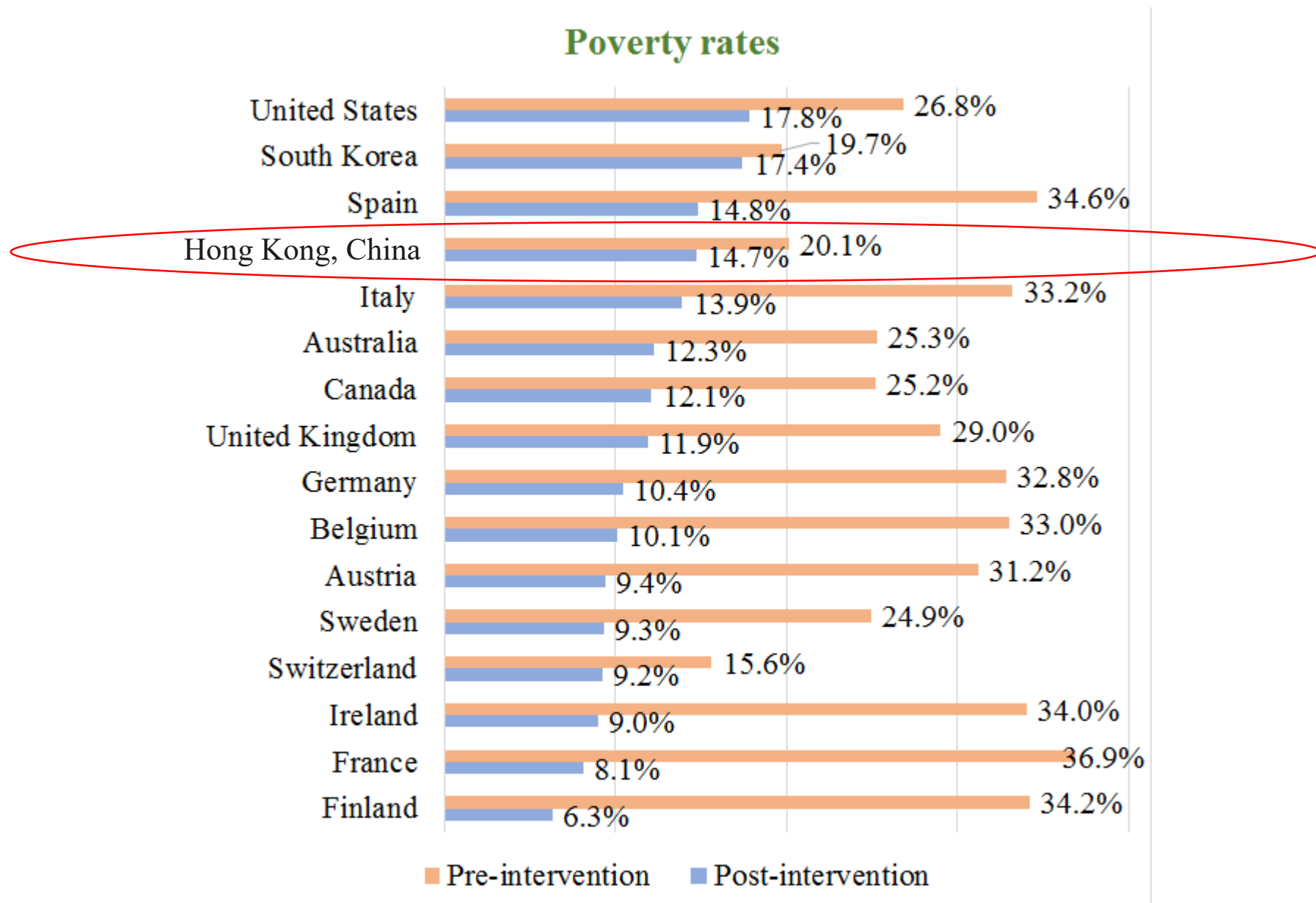
Single-parent poor family

Poor population and poverty rate of single-parent households, 2009-2018



Note:

- Lower share of working households (36.6%)
- 40.9% of working households are part-time position
- 62.5% of the pre-intervention poor households applied for CSSA



Poverty rates in selected OECD countries and Hong Kong in 2017

Poverty-related

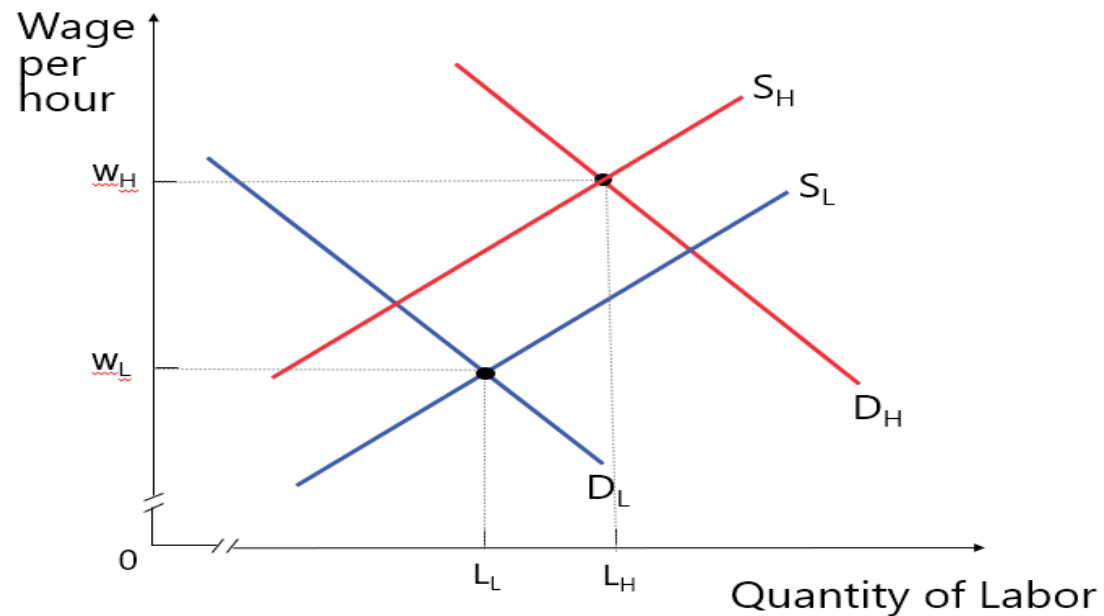
- **Arbitrarily** formulation of poverty line and income threshold
- Discrepancy between threshold/average living standard between urban and rural area
- Poverty statistics should preferably be **based on actual consumption**, instead of income



Sources of Income inequality and poverty

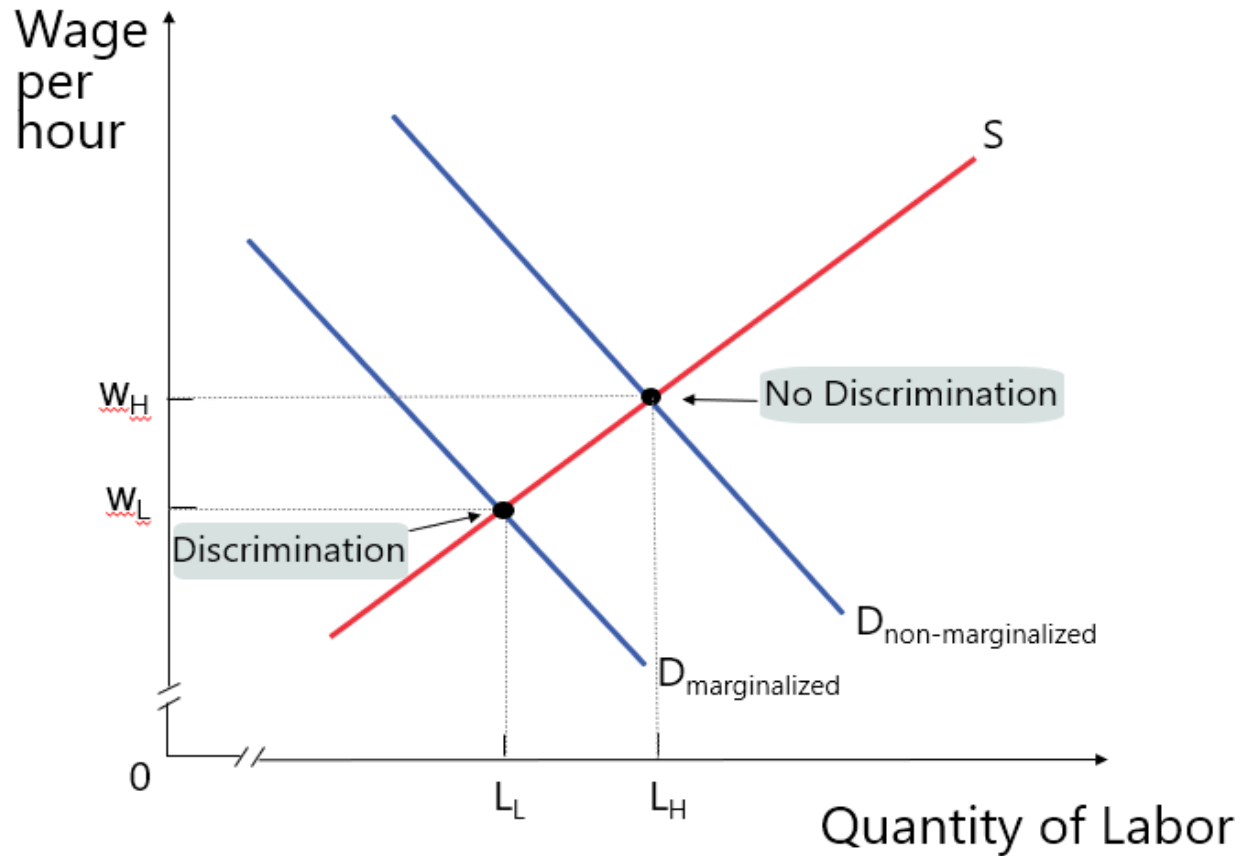
Sources of Income inequality and poverty

1. Different level of human capital (innate ability, education and training)



- **High level of human capital**
 - Larger LD, smaller LS
 - Higher wages
- **Low level of human capital**
 - Smaller LD, larger LS
 - Lower wages

2. Hiring and promotion discriminations in age, gender, race, religion, and the effect on hiring and wage rate



Wages levels with or without discrimination

Labor supply side: if the discriminated are marginalized to certain restricted occupations (e.g. poor female aged 60-65 can **only work as cleaners**), this **occupational crowding effect** causes **an oversupply of workers** relative to demand in these occupations, **resulting in further lower wages and incomes**.

On the contrary, if **women and minorities are restricted** from entering into **male-dominated** occupations, there would also be an **undersupply of (non-marginalized workers)**, with further increase in wages and incomes

3. Occupation and region

➤ Highest:

- Education and public administration (excluding the govt)
- Financing and insurance
- Electricity and gas supply, sewerage and waste management

➤ Lowest:

- Estate management, security and cleaning services
- Miscellaneous activities
- Food and beverage services

Source: C&SD, 2019 Report on Annual Earnings and Hours Survey

<https://www.statistics.gov.hk/pub/B10500142019AN19B0100.pdf>

Median wages in selected industries in Hong Kong (May to June 2019)

Industry	Median hourly wage (\$)	Median Monthly wage (HK\$)
Manufacturing	72.6	17,800
Electricity and gas supply; sewerage, waste management and remediation activities	111.1	28,200
Construction	99.9	23,500
Import and export trade	80.3	18,800
Wholesale	65.2	15,100
Retail trade	53.8	14,000
Land transport	79.6	19,800
Other transportation, storage, postal and courier services	69.1	19,000
Food and beverage services	52.2	13,800
Accommodation services	58.1	16,200
Information and communications	93.8	23,700
Financing and insurance	111.0	28,300
Real estate activities	90.0	23,000
Estate management, security and cleaning services	45.9	13,000
Professional, scientific and technical activities	95.8	24,300
Administrative and support services activities	71.0	17,000
Travel agency, reservation service and related activities	66.5	15,300
Education and public administration (excluding the government)	131.8	29,200
Human health activities; and beauty and body prettifying treatment	89.6	19,500
Miscellaneous activities	51.6	13,100
Other activities	67.9	16,300

4. Technological Advancement

➤ High-skilled workers

- Easier to adapt new technology-biased working mode.
- Process of capital deepening for saving costs increases the labor demand

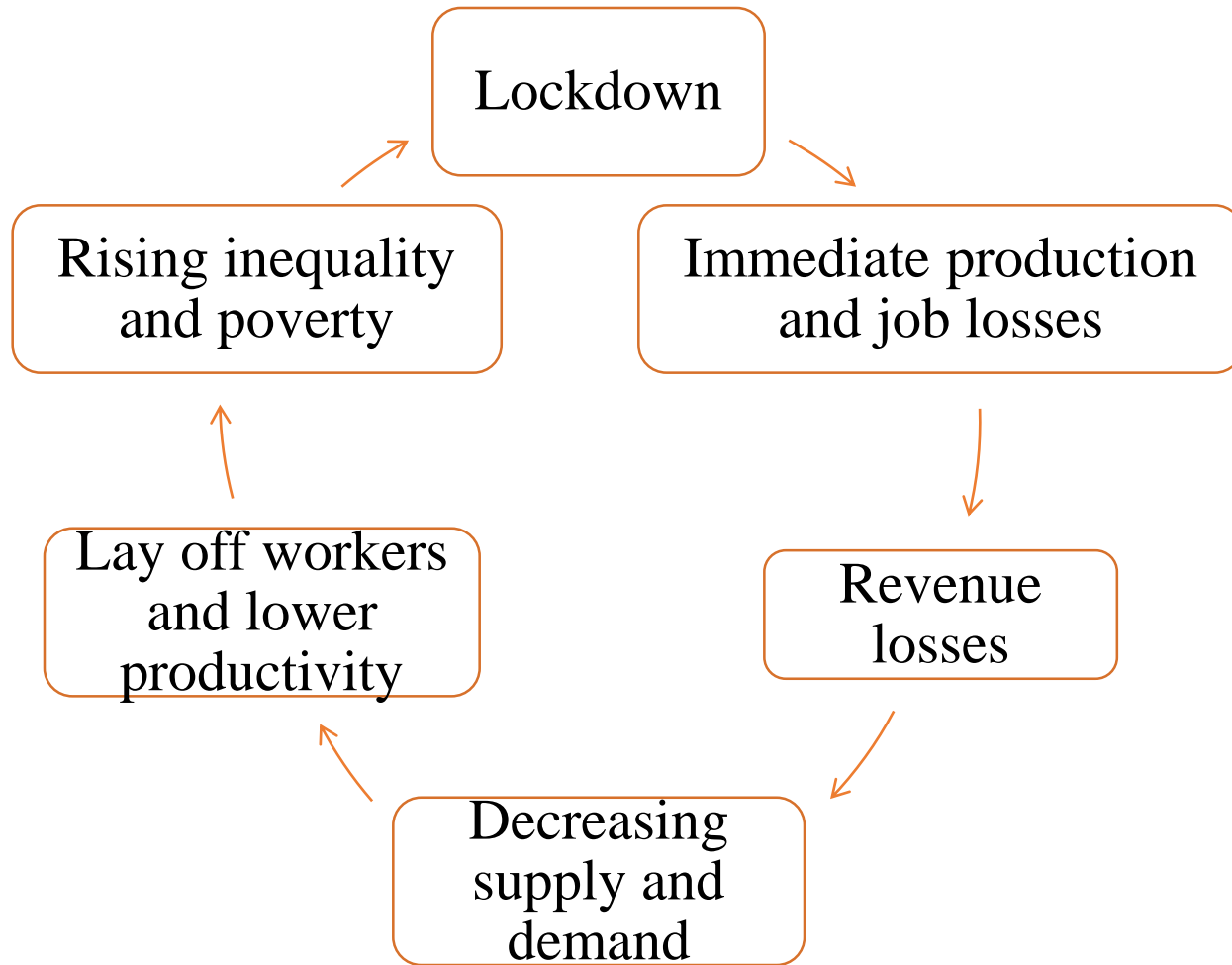
➤ Low-skilled workers

- Being replaced by machines
- Take time to master new technologies

➤ Results

- Higher demand on high-skilled workers and lower demand on low-skilled workers.
- High-skilled workers will receive higher income, whilst earnings of the low and middle skilled workers reduced.
- Technology and Unemployment.
- Will advances in technology (e.g., AI) lead to higher unemployment? – Creative destruction (similar to free trade?).

5. The change of economic condition (e.g. pandemic of COVID-19)



➤ **Developed countries**

- **Negative:** Airlines, Leisure Facilities (tourism-related), Oil and Gas Drilling and Auto Parts and Equipment
- **Positive:** ICT products, food delivery services and medical-related industries

➤ **Lockdown effect in Europe: Gini coefficients rise by 2.2%** [Source: Palomino, J. C., Rodríguez, J. G. and Sebastian, R. (2020) Wage inequality and poverty effects of lockdown and social distancing in Europe, in Covid Economics, The Centre for Economic Policy Research (CEPR), 25, pp. 186-229.]

➤ **Developing countries: Resources constraints** (Cash flows, diagnostic services and medical facilities)

➤ **COVID-19 is likely to push 88 million people into extreme poverty** (living under US\$1.90 a day) in 2020 and **global extreme poverty rate would rise from 8.23% in 2019 to 8.82%** (Poverty and Shared Prosperity Report 2020, the World Bank)

HK: Employment protection or unemployment assistance?

6. Asset ownership and income

➤ Rising asset prices increase inequality

- If the rich own more of these assets than the poor, rising asset (housing or stock...) prices leads to the net worth of the rich rising in relation to the net worth of the poor.
 - <http://america.aljazeera.com/opinions/2014/5/inequality-assetpricesstockspiketettyeconomics.html>
 - Asset prices growth rate of $>$ GDP growth rate → higher inequality ???
 - (land supply and land prices?)
- ### ➤ Life-cycle of earning, saving, and wealth building pattern
- ### ➤ Intergenerational transfer
- ### ➤ Socioeconomic marriage practice of the rich (Seeking wealthy partners)
- ### ➤ **Note: recession recovery policy:** UK and US – **quantitative easing** (wealth effect), China – **fiscal policy**.

Other sources of Income inequality and poverty

7. Tastes and risk preferences

- risk-loving

8. Market structures of both product market and labor market (Market Power)

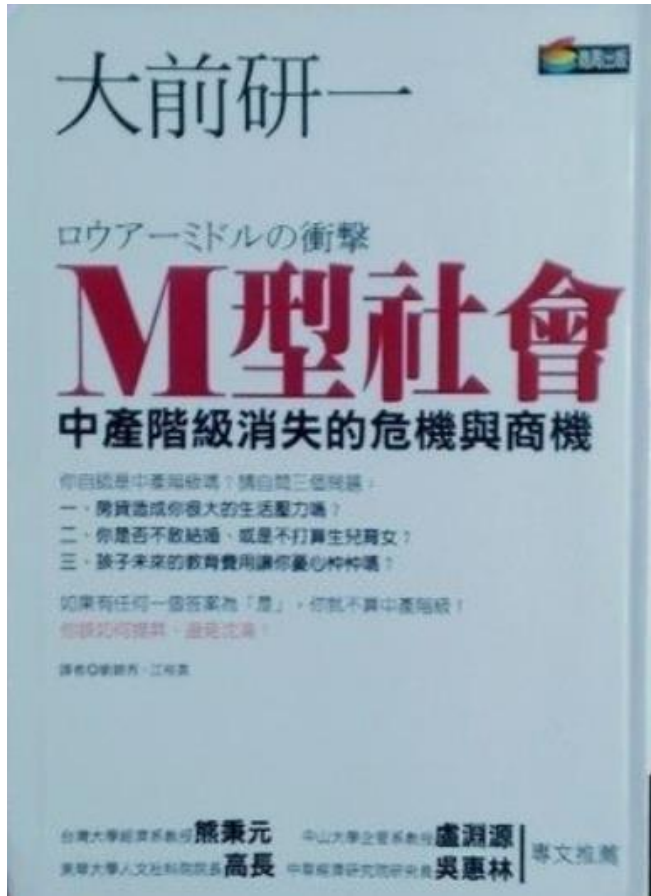
- Monopolistic firm in Product market charges higher product price
- Monopsonistic employer in Labor market pays lower wages

9. **Globalization**

- Global outsourcing: global division of labour
- Migration and the importation of foreign labour

10. Luck or misfortune

M-shaped society (Kenichi Ohmae 大前研一)



- **Well-developed modern society** - the distribution of classes is in a 'normal distribution' pattern, and the middle class forms the bulk of the society.
- **M-shaped society** – two extremes: the middle class in a society gradually disappears. With the advance and consequence of **globalization** (for good or bad) (and **High technology advancement ??**), the middle class (**middle-skill labours??**) is gradually assimilated into either side. The bulk of society is no longer the middle classes.
- Very few people in this middle class may be able to climb up the ladder and be able to be part of the upper class, while most from the middle class will gradually sink to the lower-income group.
- What is worse, the upward social ladder seems to have disappeared – opportunities and fair competition become fewer and fewer. People in the lower class can no longer climb up the ladder: they cannot earn a high-paid job or have stable employment, even if they have a high level of education.
- https://en.wikipedia.org/wiki/M-shaped_society

Alleviation of income inequality and poverty



Policy option

Inequality, growth and poverty

Does inequality matter for poverty?

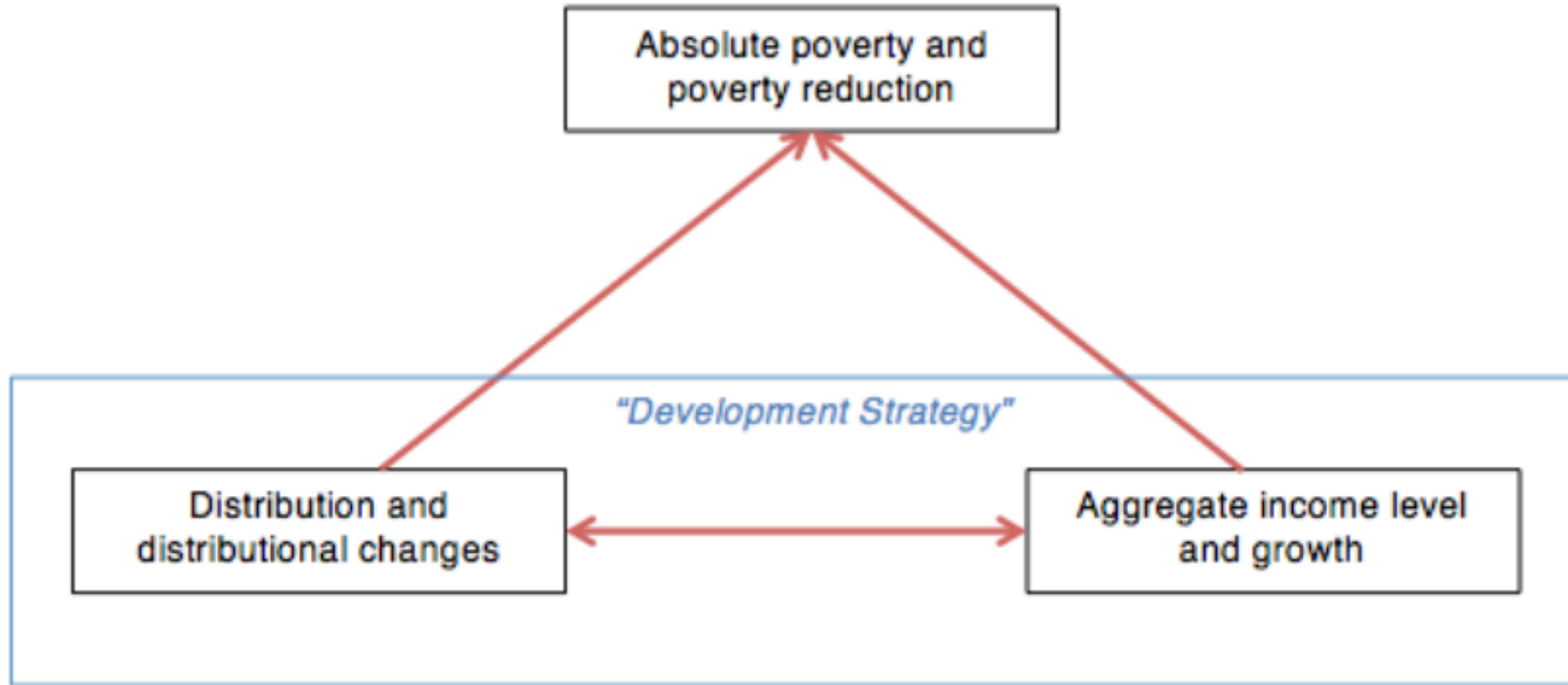
- **Poverty** is when people **don't** have enough money to support **basic needs** and **inequality** is when some people have **more than others**.
- A society in which **some people have tens of millions of dollars** a year to live on and **others only hundreds of thousands** might well be **very unequal**.
- There is **less poverty than in a society where everyone is more equal but only has \$40,000** a year to live upon.

(McKay, A (2002) *Inequality Briefing: Defining and measuring inequality*, Briefing Paper No. 1, March 2002, Economists' Resource Centre, UK Department for International Development.)

- In recent times there has been a **move** towards addressing **poverty and inequality** as a **joint issue** (World Bank twin goals; Oxfam Even it Up; UN sustainable development goals) – **appropriate?**

Does inequality matter for poverty reduction?

Depends on: relationship between inequality, growth and poverty



Growth and inequality

- Economic **growth** **increases** economic inequality
- Economic **growth** **lowers** economic inequality
- Economic **inequality** **promotes** economic growth
- Economic **inequality** **reduces** economic growth
- Economic **inequality** might be **either** good or bad for economic growth.

McKnight A (2019) Understanding the relationship between poverty, inequality and growth: a review of existing evidence. LIP Paper, 8, CASE/216, Centre for Analysis of Social Exclusion, London School of Economics, London, UK.
file:///C:/Users/sklee/Downloads/casepaper216.pdf

Growth **increases** / **decreases** inequality

➤ Growth **increases** inequality

- A high rate of growth **requires great rewards** for investors, managers, and property owners. They are rich and getting richer.

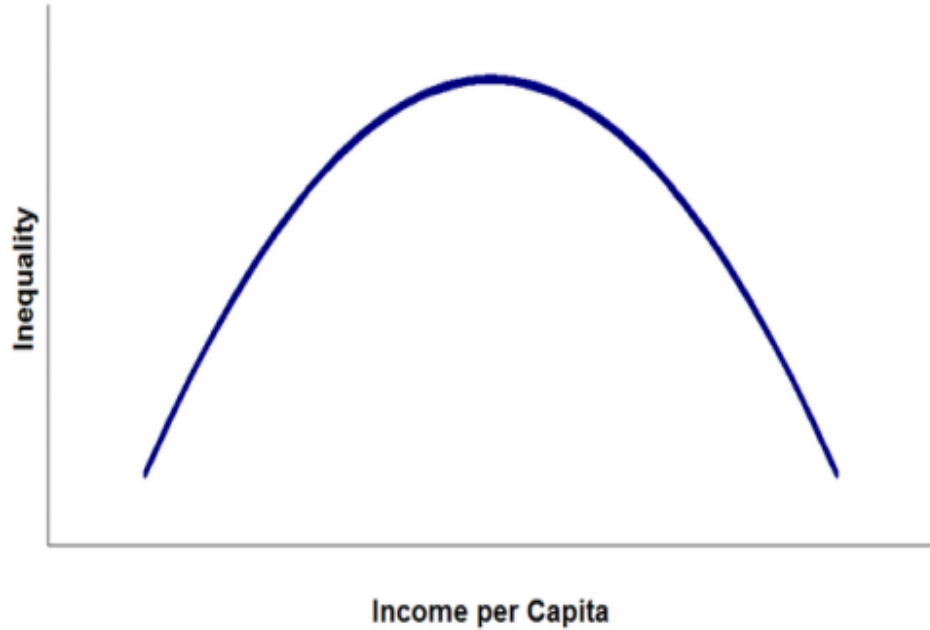
Sheehan, J. (1980) Market-Oriented Economic Policies and Political Repression in Latin America, *Economic Development and Cultural Change*, 28,267-291.

➤ Growth **lowers** inequality

- Economic **growth** is positively associated with **higher investments** and **higher employment**, and **higher income** for a larger number of “**unrich**” people.

<https://ageconsearch.umn.edu/record/49270>

Kuznets curve



https://en.wikipedia.org/wiki/Kuznets_curve

- **Kuznets curve : as an economy develops, economic inequality first increases and then decreases**
- A shift of labour and resources from agriculture to manufacturing during the early stages of economic development, the center of the nation's economy will shift to the cities and creates **inequalities** between the urban manufacturing and rural farming sectors.
- Inequality is then expected to decrease when a certain level of average income is reached and the processes of industrialization – **democratization and the rise of the welfare state** – allow for the benefits from rapid growth, and increase the per-capita income.
- **Empirical findings: inconclusive**

Inequality promotes growth

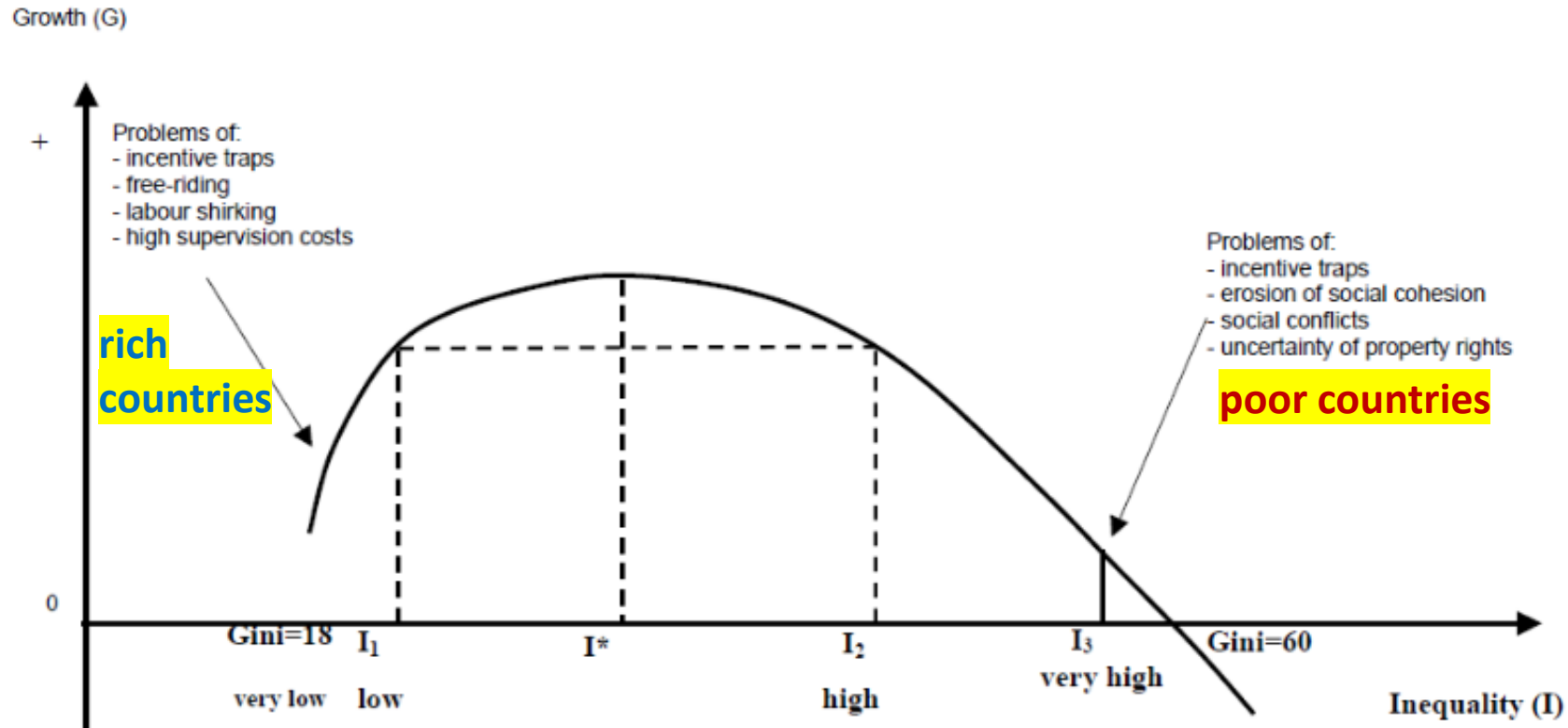
- **Wage inequality** creates **incentives** for individuals to **gain higher levels of education and skills**, to **achieve higher wages and to work harder** to maximise their income from work.
- Inequality can increase the **incentive for workers to move to higher paying technologically advanced sectors** of the economy, generate more innovation, entrepreneurial activity and enterprising behaviour, which in turn generates higher levels of economic growth.
- Inequality can **generate higher savings and investment** which have a positive impact on growth.
- **Tackling inequality can be harmful for growth**

Inequality **reduces** growth

- The tendency of **the rich to invest their savings in non-productive assets** (stock / housing, not capital goods) manifests as **increases in prices** and can simply **lead to property or asset bubbles**, rather than stimulating greater employment or productivity (notably expressed since the 2007/08 financial crisis).
- Reduction of Aggregate demand (since rich spend less) and capital investment; **constraints** in the capacity of middle and low income households to **invest in education and skills**; entrenching the power of existing elites to protect their economic interests.

Inequality might be either good or bad for growth.

Economic inequality that is ‘too low’ or ‘too high’ can, ceteris paribus, be detrimental to economic growth (causes incentive traps).



High levels of **inequality reduce growth** in relatively **poor** countries but **encourage growth** in **richer**. (Barro R. Inequality, Growth, and Investment. In: Hassett KA, Hubbard RG Inequality and Tax Policy. AEI Press ; 2001.)

Inequality-reduction or growth-promotion

➤ Depends on the relationship between inequality and growth

- Higher levels of **inequality** provide the incentives that **drive economic growth** which in turn will accrue **benefits** for the **middle and lower parts** of the distribution through higher real incomes.

Positive: Inequality $\uparrow \rightarrow$ growth $\uparrow \rightarrow$ real incomes of middle and lower parts \uparrow (poverty \downarrow)
 \rightarrow **Growth-promoting policies:** use growth to reduce poverty (allow growing inequality).

- **Inequality has detrimental effects for growth** : fueling household debt and real estate bubbles; reduction of AD

Negative: Inequality $\uparrow \rightarrow$ growth $\downarrow \rightarrow$ real incomes of middle and lower parts \downarrow (poverty \uparrow)
 \rightarrow Inequality $\downarrow \rightarrow$ growth $\uparrow \rightarrow$ real incomes of middle and lower parts \uparrow (poverty \downarrow)
 \rightarrow **Inequality-reducing policy:** reduce inequality, reduce poverty

Positive relationship between Inequality and Poverty

- Using various databases including the Eurostat Incomes and Living Conditions database (EU-SILC), the OECD Income Distribution Database (IDD) and the World Wealth and Income Database (WID), it is observed **that income inequality and income poverty trends have followed similar trends in many countries - positive correlation (levels and change) (negative relationship between growth and inequality)**

Eleni Karagiannaki (2017) “The Empirical relationship between income poverty and income inequality in rich and middle income countries”, LIPpaper 3, Centre for Analysis of Social Exclusion, London School of Economics.

Inclusive growth policy

- As countries **become less poor, inequality-reducing** policies are likely to become relatively **more effective for poverty reduction** than **growth-promoting** policies’.
 - **Poverty reduction** strategies tend to call for **pro-poor or inclusive growth**. Promoting **inclusive growth** requires policymakers to address **both growth and income distribution**, and to foster equality of opportunity, as well as to provide a social security net to protect the most vulnerable. Anti-poverty measures include fostering opportunity, facilitating empowerment and addressing income.
- Consider:
- Growth elasticity of poverty and growth elasticity of inequality
 - Growth elasticity of poverty (inequality) is the percentage reduction in poverty rates (inequality) associated with a percentage change in mean (per capita) income.

The slide features decorative curved lines in shades of green and blue, framing the central text. The lines are layered and have a soft, ethereal quality.

Measures of reducing inequality

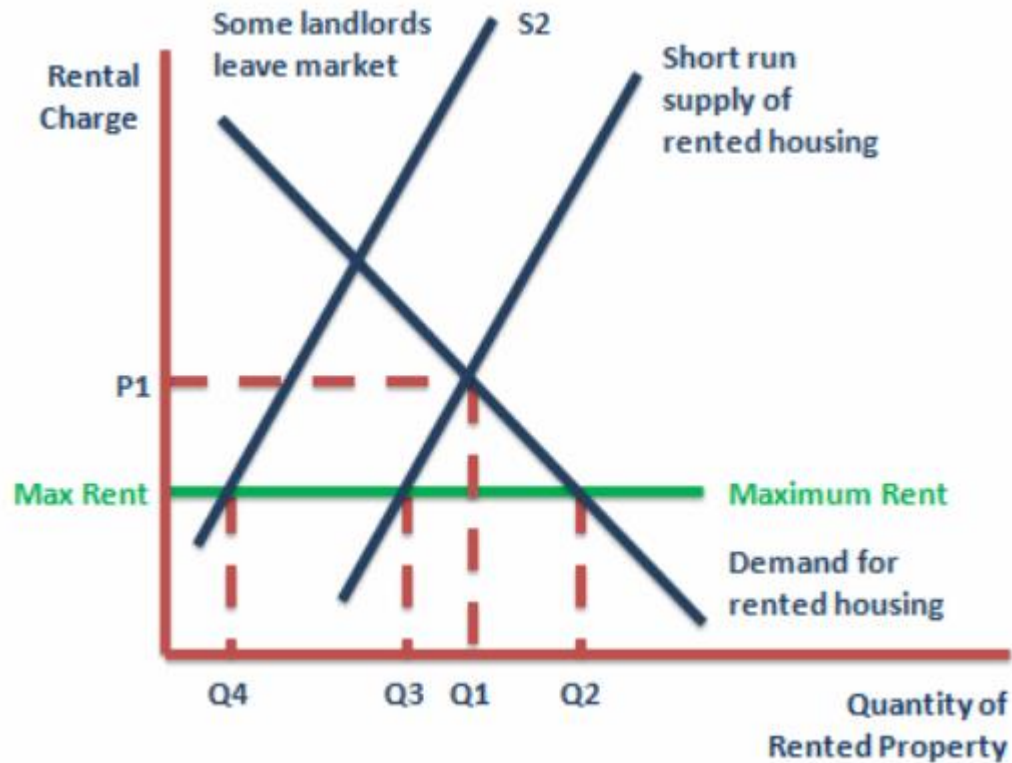
Measures

- Minimum wage
- Rent control (price ceiling)
- Progressive Income tax
- Negative income tax (Tax revenue from the rich to the poor)
- Social Security programs (The retired, the disabled, single parent, ...)
- In-kind transfer programs (Short-term subsidies, student loans, food assistance)
- Subsidized services (Publicly-funded programmes)
- Family-friendly policy
- Alleviation of discrimination
- **Costs and benefits of the measures – trade off**

Government intervention

- Government intervention causes **allocative inefficiency** (Deadweight loss)?
- Minimum wage / maximum rent
 - Competitive market (price taker)
 - Non-competitive market (price maker)
 - A “market” should be a “competitive markets” (theoretically under perfect competition)

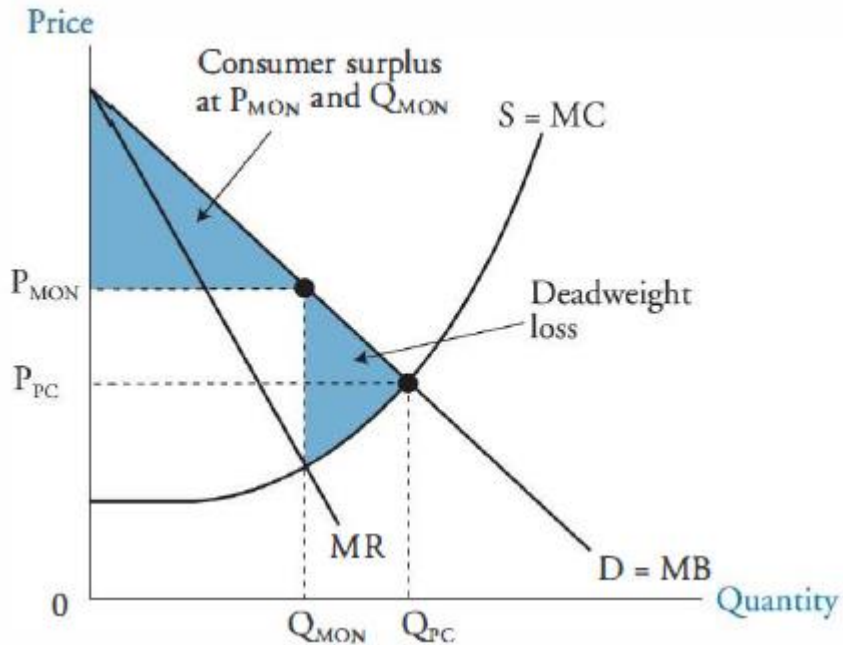
Maximum rent in a competitive market



- Shortages result
- Tenants who are covered by rent-controlled laws want to move want to move
- Formal (rationing coupons) or informal (wait in lines).
- Black markets may emerge.
- Likely to cause in rental supply

<https://www.tutor2u.net/economics/blog/unit-1-micro-revision-on-maximum-rents-in-housing>

Maximum rent in a monopoly market



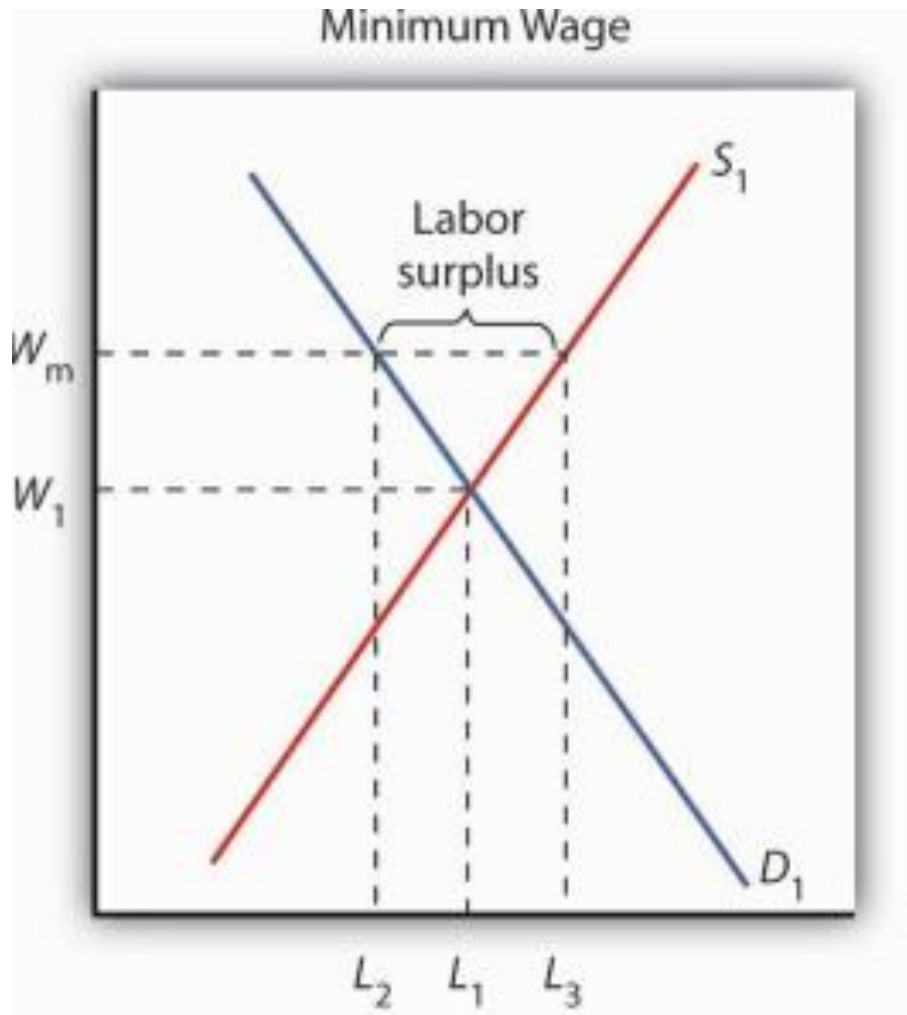
➤ Monopoly Price/Rent

- A monopoly producer lacks competition and hence sets the price far above the otherwise competitive market price would be.
- Higher rent, P_{MON} , lower Q_{MON} , Result in inefficiency

➤ Maximum rent **set at** competitive level, P_{PC}

- Lower rent, larger Q
- Reduce inefficiency

Minimum wage in a competitive labour market



- In a perfectly competitive Labour market: $MRP = W$
- Minimum wage: an antipoverty tool ?
- Those helped by the minimum wage are the workers who are still employed but now receive the higher wage.
- Those who are hurt by the minimum wage are the ones who are now unemployed. Minimum wage \rightarrow unemployment

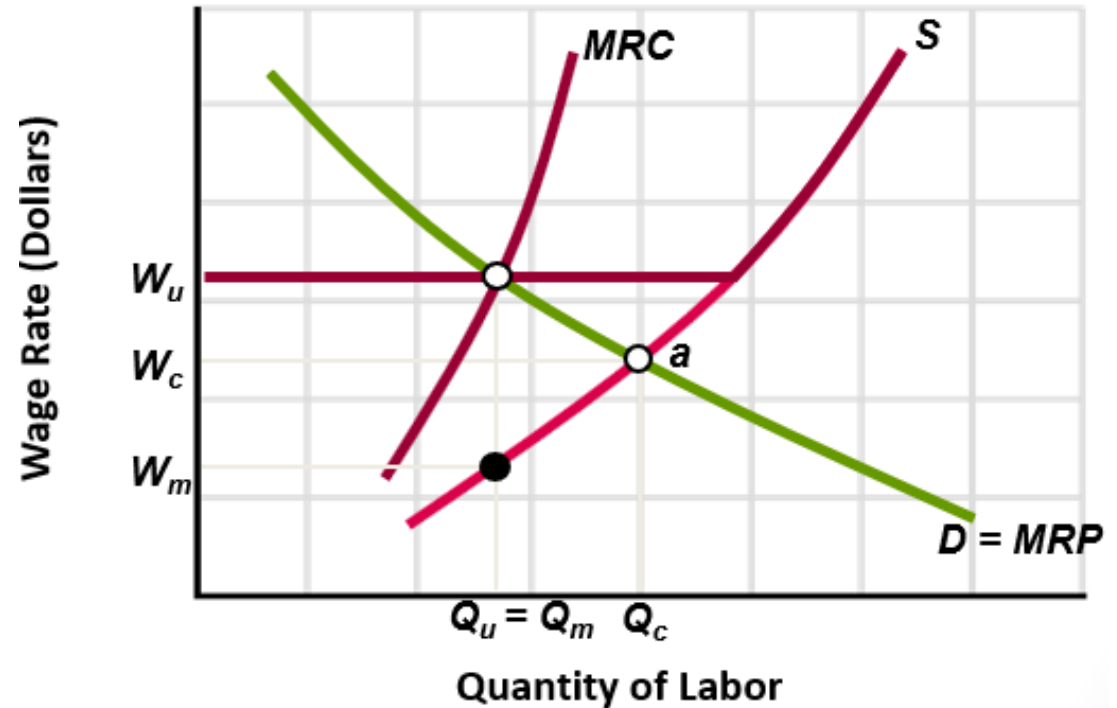
larger wage-elasticity of LD/LS (unskilled worker)

\rightarrow larger unemployment

- Severe unemployment under recession
- Increase labour productivity to increase wages?

Minimum wage in a Monopsony

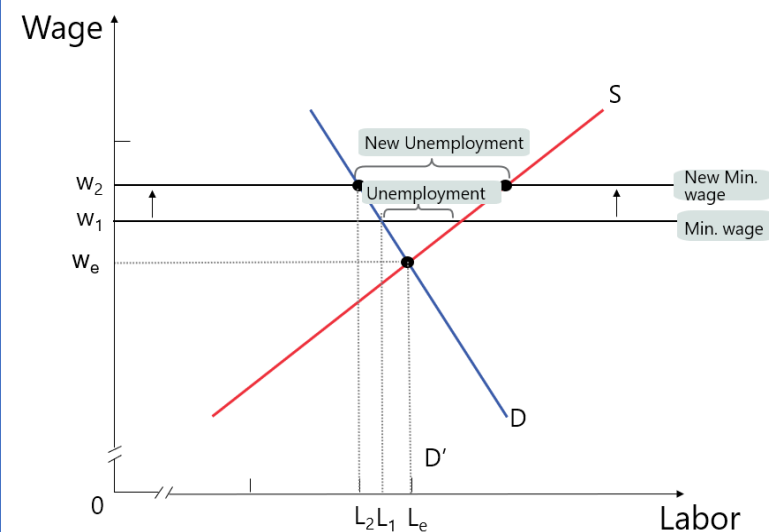
- Employer has buying power
- Characteristics
 - Single buyer
 - Workers have few choices:
geographically / occupationally immobile
 - Firm is a “wage maker”:
 - ➔ higher wage induces a greater quantity of labor supplied.
 - ➔ Upsloping labor supply to firm
 - ➔ MRC higher than wage rate
- Profit maximization: $MRC = MRP$, a monopsonist hires Q_m workers and only pays wage rate W_m , as compared to the competitive wage W_c .
- Labour union force – W_u at Q_m
- **Bilateral monopoly model**
- **Minimum wage** ➔ $W_m \uparrow$ to W_u , at W_c - reduce inefficiency



「抗疫英雄」連午飯也吃不起 組織促調整最低工資至57.4元

- ……早前最低工資委員會表示傾向將最低工資凍薪，關注生活工資聯盟表明反對，認為疫情下基層勞工包括保安員、清潔工及餐飲從業員等，肩負起照顧公眾日常及防疫的需要，促請政府應擔當把關者角色，正視基層在疫下的生活困境，不要將經濟不景的惡果全數讓前線勞工承受。聯盟建議政府將最低工資上調至57.4元，令基層工人足以應付生活開支。
- ..現時本港最低工資為37.5元，..若以每日工作8小時計算，每月工作26天也只有7,800元的薪金。
- 關注生活工資聯盟在10月21日至11月19日，調查全港13區42間連鎖快餐店午餐價格。常見平均價為44.2元，與最低工資差距6.7元...反映現時「最低工資連餐飯都食唔起」，可預期未來若凍結最低工資水平，將令基層勞工的生活雪上加霜。職工盟幹事黃俊業慨嘆，「好唔尊重抗疫英雄，政府點講得出齊心抗疫？」

(資料來源：HK01: 2020-12-08)



Min wage rate \neq actual wage rate
(P.24)

→ unemployment ↑

Based on theory

勞資關係及勞工政策，不但影響社會資源分配的有效性，更影響企業發展的動力。隨著有關2013年《人口政策諮詢文件》的討論，我們嘗試建構一個屬於香港本土的勞工理論架構和論述，以解釋和評估勞工政策對商業、經濟和社會的衝擊、影響，並提出建議。

勞資矛盾的 **危·機**

勞工政策與勞工短缺的分析

香港樹仁大學
商業、經濟及公共政策研究中心

李樹甘 吳祖堯 合著



Welfare and assistance programs in Hong Kong

The poor

Social Welfare Department

- Comprehensive Social Security Assistance (CSSA) Scheme

Working Family and Student Financial Assistance Agency (WFSFAA)

- Kindergarten and Child Care Centre Fee Remission Scheme
- School Textbook Assistance Scheme
- Student Travel Subsidy (STS) Scheme
- Non-Means-Tested Loan Scheme for Full-time Tertiary Students (NLSFT)
- Non-means-tested Loan Scheme for Post-secondary Students (NLSPS)
- Student Travel Subsidy for Tertiary or Post-secondary Students

Transport Department

- Public Transport Fare Subsidy Scheme

The unemployed

Social Welfare Department

- Support for Self-reliance (SFS) scheme

Labour Department

- Youth Employment and Training Programme (YETP)
- Employment Programme for the Middle-aged

Vocational Training Council (VTC) / Employees Retraining Board (ERB)

- Training and Continuing Education

The disabled

Social Welfare Department

- Pre-school Rehabilitation Services
- Services for School Age Disabled Children
- Services for Physically Handicapped Persons
- Services for Mentally Handicapped Persons
- Services for Ex-Mentally Ill Persons
- Services for Visually Impaired Persons
- Services for Hearing Impaired Persons
- Vocational Rehabilitation Services
- Employment/ Business Opportunities and Social Enterprise
- Day Training Services
- Residential Care Services
- Community Support Services / Self-help Organizations of People with Disabilities / Chronic Illness

Labour Department

- Work Orientation and Placement Scheme

Transport Department

- Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities

The elderly

Social Welfare Department

- Old Age Living Allowance (OALA)
- Portable Comprehensive Social Security Assistance (PCSSA) Scheme
- Carer Support Service
- Day Respite Service for Elderly Persons
- Enhanced Home and Community Care Services (EHCCS)
- Integrated Home Care Services (IHCS)
- Homes for the Aged
- Care and Attention Homes for the Elderly
- Nursing Homes

Labour Department

- Employment Programme for the Elderly

Transport Department

- Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities

Department of Health

- Elderly Health Care Voucher Scheme

Welfare and assistance programs

Single parents

Social Welfare Department

- Family Aide Service
- Child Care Services
- Family Life Education
- Foster Care
- Integrated Family Services
- Residential Child Care Services



Food Insecurity in HK

Food Insecurity

- Food insecurity is often linked to poverty in which the rises in global food prices and living expenses affect food security throughout the world, with especially severe effects in low-income families.
- Being food secure means being sure of your ability to secure, at all times, enough food of sufficient quality and quantity, to allow you to stay healthy and participate in society.
- Food Insecurity Experience Scale (FIES) consists of 3 levels of food insecurity
 - **Mild** food insecurity (e.g. worrying about the ability to obtain food).
 - **Moderate** food insecurity (e.g. skipping meals).
 - **Severe** food (e.g. experiencing hunger).



Food Insecurity in Hong Kong

- According to data from the Social Welfare Department in 2017, over 30 000 families have applied for the food bank services and it increased by 30% than in 2009.
- According to another study from the Hong Kong Council of Social Service in 2017, 61% of low-income families were living with food insecurity would be devoted 36% of their family income to food expenses, which is higher than the general average expenditure of households (27%) in Hong Kong.
- Only 24% of the respondent families reported they have enough money to purchase food. A pilot study was conducted by the project team in late 2019, which is further confirmed that many subdivided flat families were experienced serious food insecurity and suffered higher stress in food expenses.

Food Insecurity in Hong Kong

- A pilot study was conducted by the project team of BEPP, **Hong Kong Shue Yan University** and **Industrial Evangelistic**. A total of 130 low-income families in Sham Shui Po district were recruited through purposive snowball sampling, completed the survey.
- Preliminary analyses of this pilot work revealed that among the low-income families, **around 60%** classified as experiencing **moderate** food insecurity and **around 22%** of respondents classified as experiencing **severe** food insecurity, according to the FIES.
- Over half of the respondents have **at least 3 to 4** conditions and behaviors of food insecurity reported in response to the FIES, while over **one-fifth** of the respondents reported all **8 conditions** and behaviors.
- On top of that, approximately 40% of the respondents felt depressed and anxious, and more than 30% of the respondents reported highly stressful.
- These statistics reveal that there will be a need for family living with food insecurity, led by a rapid rise in food expenditure.

Food Insecurity in Hong Kong



- In the 2020 policy address, the Government plan to make the Short-term Food Assistance Service Projects (STFASPs) a **permanent** one.
- The proposed database provides the opportunity to study the food insecurity experiences for the local poor and thus formulating future policies about food insecurity.



Data-response questions

Aim: test the ability of candidates to **apply their (economics) knowledge to unseen information** on statistical data, charts, line graphs and newspaper extracts and comics etc.

DRQ—Teachers' concerns

- Teachers' main concerns about developing DRQ in Economics

- Topic

- Availability of data

- Relevance of the data/information gathered to the questions

- Consistence of real world data with theory

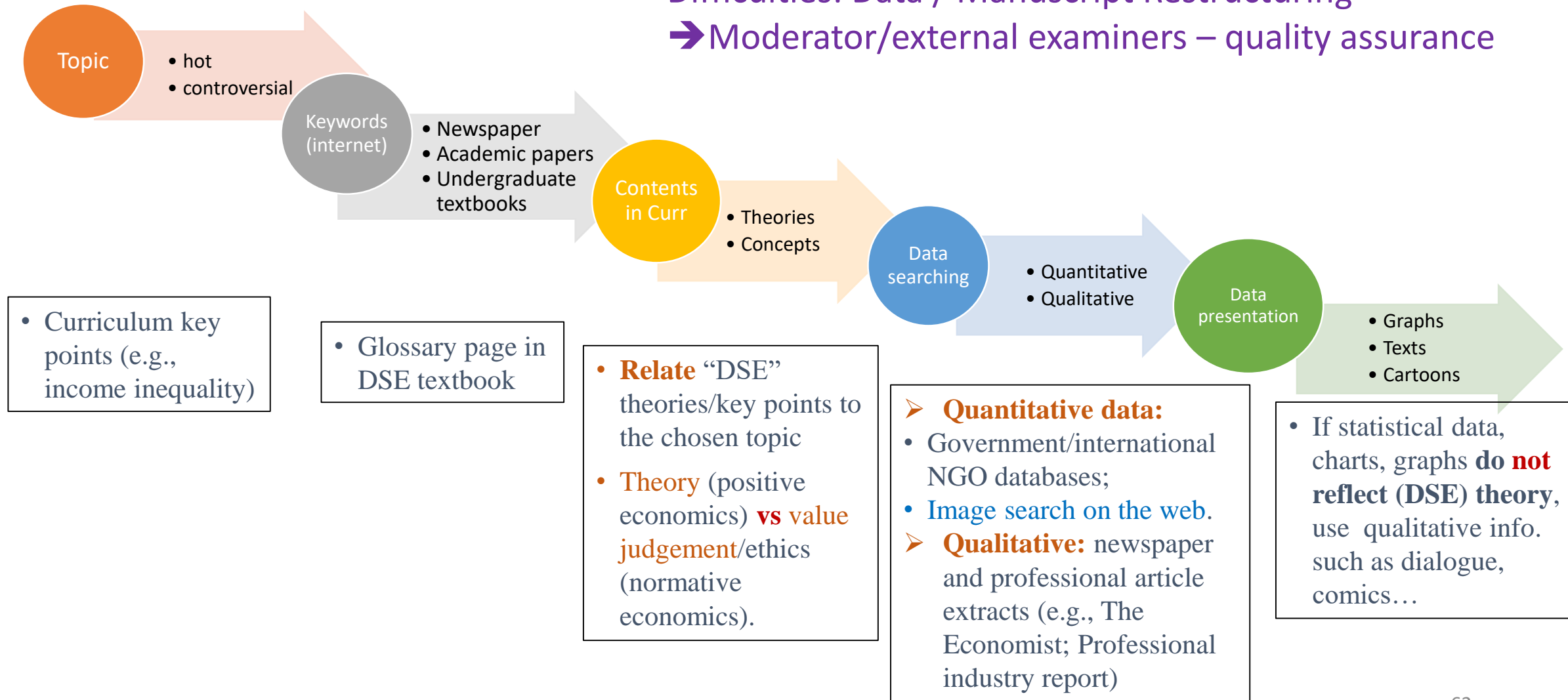
- Level of guidance given to students

- Degree of open-endedness of the questions

Steps of development of DRQ

Difficulties: Data / Manuscript Restructuring

➔ Moderator/external examiners – quality assurance



DRQ

- **Topic:** select current/big/hot/controversial issue or curriculum key points (e.g., income inequality)
- Search **KEYWORDS from the web** (newspapers, professional economic articles and reviews) and undergraduate textbook to more **understand the issue**.
- **Relate** knowledge of the “DSE” theories/key points to the issue. Make use of Glossary page in the DSE textbook
- Select newspaper and professional article extracts
- Select quantitative data from (i) government or international NGO **databases** (ii) **image search on the web**.
- If statistical data, charts, line graphs **do not reflect the (DSE) theory**, use qualitative information such as dialogue, comics...
- **Theory** (positive economics) **vs value judgement/ethics** (normative economics).
- **Moderator/external examiners** – quality assurance

DRQ



- **Three levels:** gradually increase the level of difficulty
 - **Entry-level:** directly extract information (observed facts) from the materials without digestion, e.g. “point out” and “describe” the trend and change, “calculate”, “measure” (closed-ended answers).
 - **Medium-level:** select and generalise information, infer points of view, e.g., “analyse”, “explain” and “elaborate”, e.g., (i) **Explain** why price has increased (given observed outcome--data): caused by many factors (various possible answers - based on theory). (ii) **Any hidden assumptions?**
 - **Advanced-level:** compare and analyse different information sources from multiple angles to demonstrate students’ understanding of the topic outside the material, e.g., “compare” and “evaluate –dilemma
- **Start from** the “entry-level or **“advanced-level”** (several key points: sources of income inequality, disincentive effects of taxes and transfers, **trade-off** between equity and efficiency → **policy choice**)

https://www.edb.gov.hk/attachment/tc/curriculum-development/kla/pshe/references-and-resources/economics/A_DBQ_whole_Eng.pdf

DRQ



➤ Are the material and questions **related**? – based on theory

➤ **Difficulties:**

- **Certain** questions expect students to **propose solutions**, but many students may **fail** to provide logical inferences for solving the problem.
- Real-world data are **not highly consistent with “DSE” theory**.
- less-well known data /too many possible answers

➤ **Facilitate student’s thinking:** Provide more information, assumptions and limitations

- **Provide “hints”** (use economic theory to think about the problem)

“**Explain** whether you support the legalization of drugs (such as cocaine) **from an economic perspective using the concepts** of supply, demand, and elasticity.”

- **Guide** students toward **identifying** the nature of the problem, the number of variable solutions, *compare the merits* of each solution, then **propose a final solution** and even **verify** the validity of the solution.
- **Use global data and qualitative data: dialogue / news/ media articles / comics**

DRQ



- Is the quantity of the material appropriate – **neither insufficient nor excessive:**
 - **shouldn't** focus on students' ability to **speed-read** but the **ability to respond to the data-response questions**. conduct analysis based on theory, not just based on the data.

https://www.edb.gov.hk/attachment/tc/curriculum-development/kla/pshe/references-and-resources/economics/A_DBQ_whole_Eng.pdf



Illustration with a DRQ on income inequality

Sources of Keywords: Curriculum

➤ Efficiency

- Price ceiling, price floor, tax, subsidy and quota
- Deadweight loss

➤ Income inequality

- Measurement: Lorenz, Top decile groups, ... curve and Gini coefficient
- Sources of income inequality: human capital (e.g. skill differentials), discrimination and unequal ownership of capital

➤ Equalizing opportunities

➤ Remedies:

- Trade-off between equity and efficiency for policy choices.
- Disincentive effects of taxes and transfers (negative effects on output and employment)

➔ policy choice

➤ Effects on various stakeholders

- **Comparison within and between countries**, between individuals/households with different demographic characteristics

Sources of Keywords: glossary in textbook

- Gini ratio, Lorenz curve, income distribution
- 3 kinds of taxes (progressive, regressive, proportional)
- Education, technology, discrimination, globalization, recession (business cycle)
- Minimum wage, rent control, unemployment benefits
- ...

Recap: Questions setting

Entry

- Point out, Describe ,Calculate, Measure

Medium

- Analyse, explain, elaborate

Advanced

- Compare, evaluate

A DRQ on income inequality

- A DRQ developed by Dr. Lee can be downloaded from the link below:
- https://www.edb.gov.hk/en/curriculum-development/kla/pshe/references-and-resources/economics/Income_Inequality.html





Training Students Daily practice

Training students: guided questions based on Original text/data

- Use professional / academic articles as the basis.
- Provide the **introduction** section (not abstract) to students.
- Provide tables and figures (if any)

➤ Possible Guided Questions : open-ended

✓ Entry level

- Enhances student's understanding of essential concepts
- Questions have closed-ended answers.
- What are the facts? GDP, labor force, unemployment rate, change, trend ...
- How do you think the data were obtained?
- Write an abstract for this paper

Training students: guiding questions

✓ **Medium level – Analyse, explain, elaborate –**

- What does the information convey?
- **Theory:** $Y = f(X_1, X_2, \dots)$ – **in general**
- What would happen? - Inference from theory (if $X_1 \rightarrow Y$) – **ceteris paribus**
 - One outcome: if interest rate \uparrow , investment will \downarrow
 - various possible outcomes – $P \uparrow$: total revenue may \uparrow or \downarrow , depends on elasticities of D/S
- Explain why? ..(outcome \rightarrow many possible reasons, X_1, X_2, \dots)
- How might the events have developed differently?
- Any assumptions?

✓ **Advanced level: Compare, evaluate – class discussion**

- Compare and analyse different information sources
- Dilemma / controversial
- **Stand one side** (value judgement): **based on knowledge of the consequences** and the costs and benefits: **easy?**
- Propose further study

Training students: DRQ

- Guiding questions based on single-source text/data
 - Use the abstracts to design question
 - Strategy: Modify the abstracts for Q&A structure
- Advanced: Data-response questions based on well-structured text/data
 - Utilize multiple articles to develop a well-structured excerpt
- DSE DRQ

Measuring poverty in Hong Kong

Prior to 2013, the Government of Hong Kong did not officially defined a poverty line. Instead, the Comprehensive Social Security Assistance (CSSA) level has practically been used as the de facto “**poverty line**” since 1971. The standard rates, supplements, and special grants of the CSSA scheme are computed on the basis of an individual’s “basic needs budget” accordingly. Hence, the “**absolute poverty**” concept has been adopted by HKSAR Government to define poverty.

In Sept 2013, the Commission of Poverty (CoP) of the HKSAR Government established the first “poverty line”. Its objectives are: (a) to identify population of the poor for understanding the overall poverty situation; (b) as input for the formulation and implementation of various government policies and measures; and (c) to evaluate policy effectiveness of poverty alleviation. After several rounds of discussions, the CoP finally agreed that the poverty line should be based on the concept of “relative poverty” and set at 50% of the median monthly household income before policy intervention. Conceptually, people are living in “relative poverty” when they cannot enjoy customary lifestyle with socially determined essential needs in the society.

In addition, under normal circumstances, there are always people in poverty statistically based on a “relative poverty” line set at a percentage of the pre-intervention median household income. Therefore, an economic upturn does not reduce a decrease in the size of the poor population.

Last but not least, in order to allocate public funds effectively, as current poverty line primarily assists in quantifying the size of poor population, it does not provide strong justification why those whose income is above the poverty line are still entitled to get certain kinds of government subsidies.

Every year, Census and Statistics Department compiles “Hong Kong Poverty Situation Report”, which includes annual updates of poverty line and the detailed analysis of poverty situation of both overall trend and various selected household groups in terms of demographic characteristics.

Poverty line however does not take assets and liabilities into account. Since poverty line takes household income as the sole indicator for measuring poverty, some “asset-rich, income-poor” persons may be classified as poor. Particularly, retired elders possess considerable amount of savings, stocks or holding properties, their actual living standards might be under-estimated.

DRQ Questions

1. What are the **functions** of the poverty line in Hong Kong?
2. What are the **limitations** of the poverty line?
3. Explain **whether poverty line can help** welfare instruments target effectively to support the poor in need of support in Hong Kong.

Source:

Commission of Poverty, HKSAR Government;

Fong, Florence Meng-soi and Wong, Chack-kie (2017) *Setting the Poverty Line: Policy Implications for Squaring the Welfare Circle in Hong Kong*. In Lau, Maggie K. W. and Gordon, David (eds) *Poverty in a Rich Society: The Case of Hong Kong*. Hong Kong: The Chinese University Press. pp. 84;

Hong Kong Poverty Situation Report 2018, Census and Statistics Department of HKSAR Government;

Townsend (1979) *Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living*. England: Penguin, pp. 31.

Ans

1.
 - a. Identify population of the poor for understanding the overall poverty situation;
 - b. provide useful information for the formulating and implementing various government policies and measures, and
 - c. evaluate policy effectiveness of poverty alleviation.
2.
 - a. Assets and liabilities are not considered. It could not fully reflect the living conditions of some “asset-rich, income-poor” persons.
 - b. Under normal circumstances, there are always people in poverty statistically based on a “relative poverty” line set at a percentage of the pre-intervention median household income. Therefore, an economic upturn does not reduce a decrease in the size of the poor population.
 - c. It does not provide strong justification why those whose income is above the poverty line are still entitled to get certain kinds of government subsidies.

3.
Partially. As the poverty line does not take assets and liabilities into account, only the major social group suffered from this measurement error is some “asset-rich, income-poor” persons, mostly the elderly. Except this, the income-based poverty line is a fairly useful measure for identifying most of the poor population according to the designated threshold of living standard with essential social needs. When the poverty line can identify the poor in various social groups who cannot enjoy a certain level of living standard and thus help formulate different kinds of government policies to match with specific needs.

Education, Technology and Inequality

An economist argued that globalization and the advent of new technologies are the two main causes of income inequality. However, globalization and technological advance are also the main forces driving rapid economic growth., Therefore, inhibiting development of these two phenomena will do far more harm than good in the next century.

He also suggests the best method to improve economic opportunities is to raise the level of and access to education. Education is comprised of many forms: early childhood education, adult education, community colleges, on-the-job training, vocational schools and various online courses. With better skills, lifetime earning power would rise as a result.

With the advances in ICT and global supply chain management, globalization drives rapid development of more labour saving (e.g. automation) and skill intensive technologies. With the rise of superstar managers and growing demand for highly skilled workers who earn extraordinary higher wages, whilst earnings of the low and middle skilled workers remain stagnant or even reduced, wage and income inequalities widen as a result.

Source: International Herald Tribune (2008) Bernanke Links Education and Equality; Rotman, David (21/10/2014). Technology and inequality. MIT Technology Review.

DRQ Question

- Refer to the source , what are the **merits and demerits** of globalization and technological advancement, and how does increased education narrow the gap of economic inequality?

Ans:

- Globalization and technological advancement are the two main causes of deteriorating income inequality and drive rapid economic growth.
- Both increased education directly related to the highly demanded skills would make further progress in globalization and technological development, and lift the lifetime earning power of average individual and mitigate the problem of inequality.

Sources for getting data

Sources for getting data

- Census and Statistics Department, HKSAR Government
- Commission on Poverty, HKSAR Government
- Social Welfare Department, HKSAR Government
- Labour and Welfare Bureau, HKSAR Government
- Labour Department, HKSAR Government
- Legislative Council, HKSAR Government
- Community Care Fund, HKSAR Government
- International Labour Organisation (ILO)
- The Organisation for Economic Co-operation and Development (OECD)
- The Oxfam
- The World Bank

Sources for getting data

- Office of National Statistics, Government of the United Kingdom
- U.S. Bureau of Economic Analysis
- U.S. Bureau of the Census
- U.S. Bureau of Labor Statistics
- The Federal Reserve Bank of St. Louis
- Office of The Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health & Human Services
- The Centre for Economic Policy Research (CEPR)
- MIT Technology Review
- Fortune (Magazine)
- South China Morning Post
- S&P Global Blog
- The Standard

Sources for getting HK inequality data

Executive Summary

1. Introduction
2. Income Distribution
3. Effect of Taxation on Household Income Distribution
4. Effect of Social Benefits on Household Income Distribution
5. Income Dispersion
6. Intervening Factors
7. Analysis on Selected Household Sub-groups
8. International Comparison



Sources for getting HK inequality data

(Cont'd)

Definition of Terms in English

Technical Notes

- A. Measures of Income Dispersion
- B. Estimation Method of the Upper Open-ended Category
- C. Concepts and Methods to Estimate the Effects of Taxation and Social Benefits

Appendix

- A. Detailed Tables
- B. Household Income Distribution under Gross Income Concept
- C. Supplementary Estimation on the Effect of Housing Benefit on Household Income Distribution

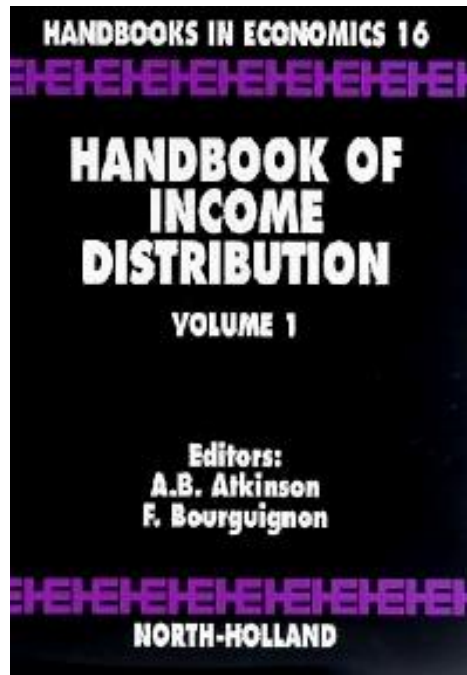


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- 黃洪，2015。「無窮」的盼望－香港貧窮問題探析(增訂版)。



Book Recommendation

- “Handbook of Income Distribution” (Vol 1-2)
- Authors:
Anthony B. Atkinson and François Bourguignon



➤ **Anthony B. Atkinson:**

Centennial Professor, London School of Economics; Fellow, Nuffield College, Oxford; Dan David Prize Winner 2016

➤ **François Bourguignon:**

Emeritus Professor, Paris School of Economics; Dan David Prize Winner 2016; Former Chief Economist (2003–2007), the World Bank

Widening Income Distribution in Post-Handover Hong Kong

Hon-Kwong Lui



Book Recommendation

- “Widening Income Distribution in Post-Handover Hong Kong”
- Authors:
Hon-Kwong Lui

➤ **Hon-Kwong Lui:**

Associate Vice President (Further Education and Projects) cum Professor,
Department of Marketing and International Business, Lingnan
University



Thank you!