Asian Cities: Fostering Growth and Inclusion – A remark

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Session 3 on Urbanization

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City expansion – role of transportation access

- Promotes urbanization process, but in the same time suburbanization occurs
  - 11% people live in less than 1% area of Indonesia

- Type of transportation access matters
  - Jakarta: highways promote suburbanization

- Suburbanization shift the problem(?)

Jakarta

Source: Yudhistira et.al (2019)
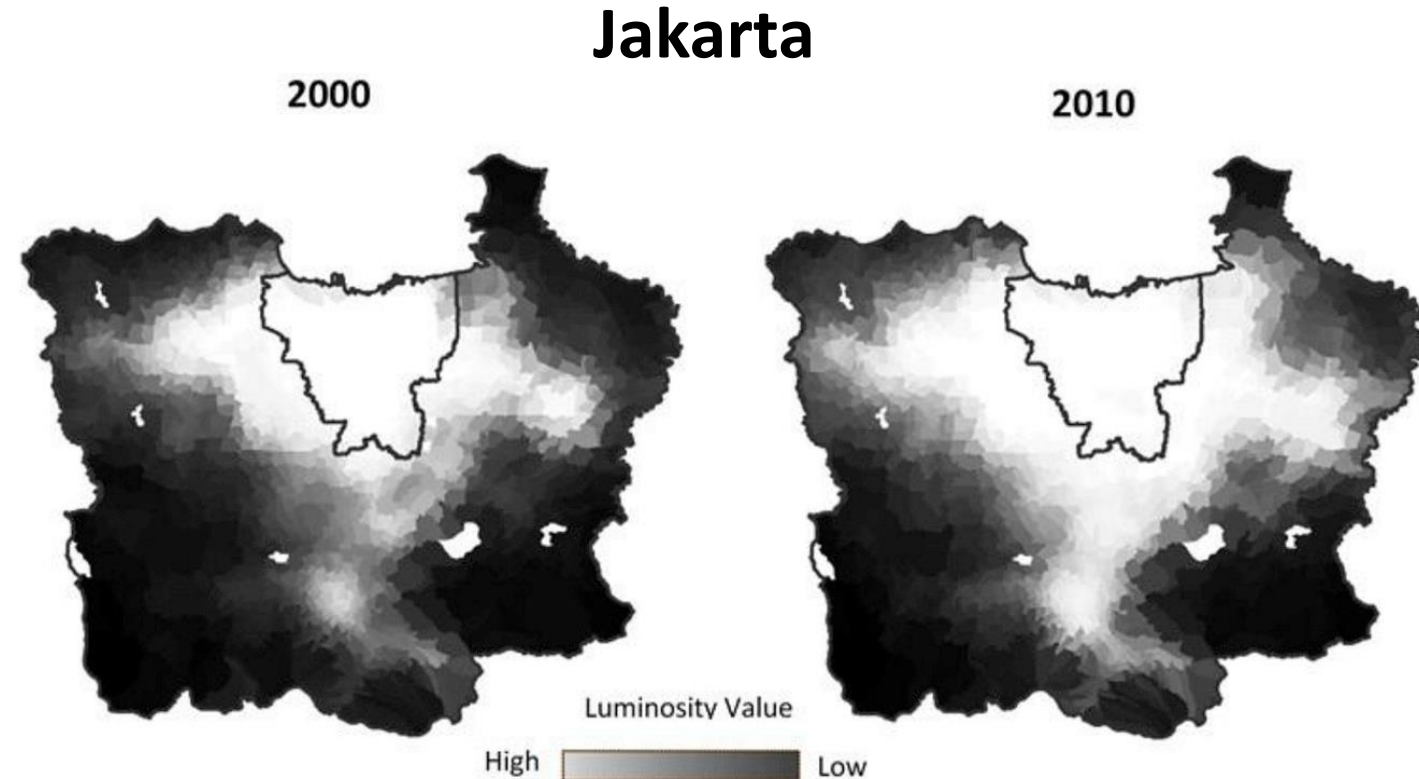
Size or Form?
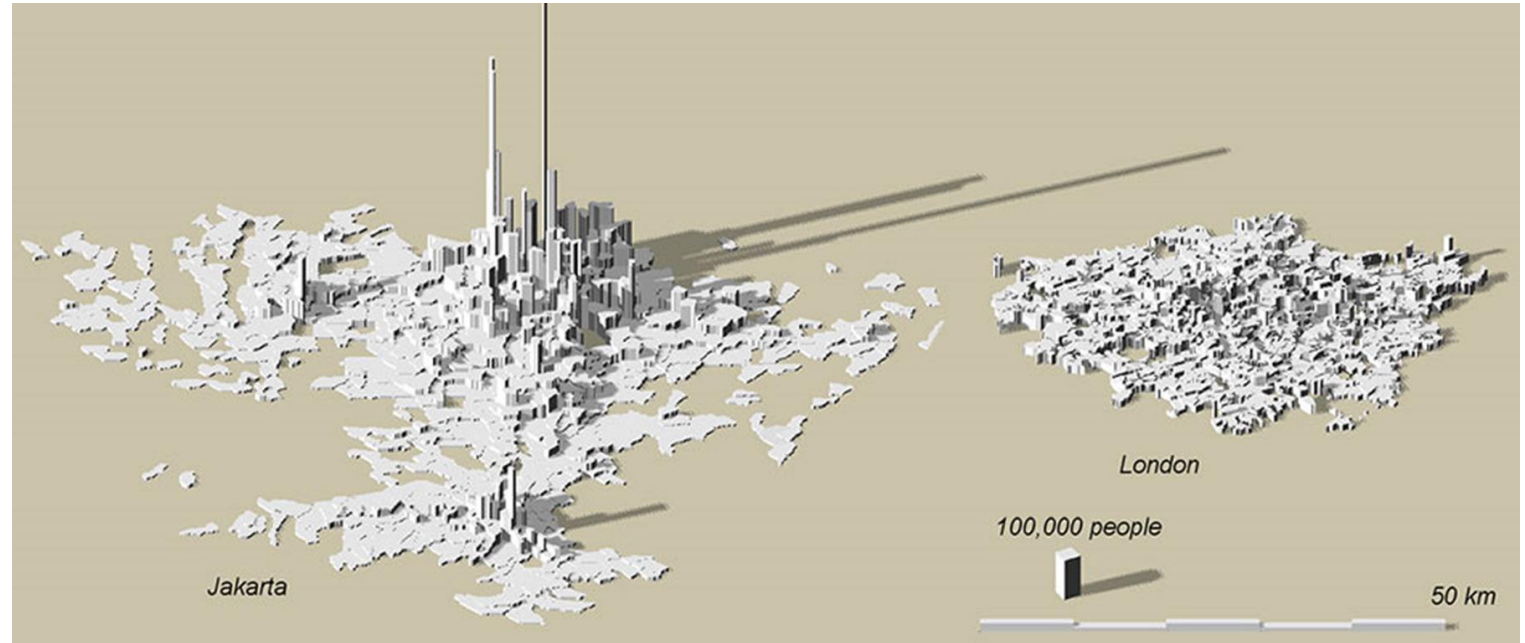
- Some studies show that form, rather than size, promotes more urban externalities
  - Compact vs sparse/sprawl

- Given the empirical evidence, it seems both matter for Asian cities

- **Challenge**: accurate measure of form. Population density may not be enough

Cities as engine of growth…but engine of problem too?

- Road externalities: congestion, pollution

- Empirical evidence on positive relationship between crime at city size in developed countries

- Similarly, positive relationship between inequality and city size is recorded

- Larger cities are host for immigrants and/or various tribes → sorting may create problems
  - Provide debate in US
 - Limited evidence in Asia countries

And is it always linear?

Pooled-OLS Estimates of Household Model on Transport Expenses

	1	2	3	4	5	6	7
Density	0,229ᵃ (0,0036)	0,112ᵃ (0,001)	0,0760ᵃ (0,0024)	0,0745ᵃ (0,0023)	0,0745ᵃ (0,0278)	0,0322ᵃ (0,0067)	0,0586ᵃ (0,0082)
$(Density)^2$						-0,0162ᵃ (0,0004)	-0,00394ᵃ (0,0005)
ln Household Size		0,404ᵃ (0,0125)	0,404ᵃ (0,0126)	0,0824ᵃ (0,0128)	0,0824 (0,0980)	0,446ᵃ (0,0126)	0,197ᵃ (0,0130)
ln Expenditure per Capita		0,511ᵃ (0,0105)	0,470ᵃ (0,0106)	-0,102ᵃ (0,0120)	-0,102 (0,134)	0,498ᵃ (0,0106)	0,129ᵃ (0,0122)
ln Expenditure on Food		-0,064ᵃ (0,0008)	-0,602ᵃ (0,0008)	-0,651ᵃ (0,0001)	-0,651ᵃ (0,0241)	-0,605ᵃ (0,0008)	-0,626ᵃ (0,001)
ln Expenditure on Non-food		0,1457ᵃ (0,003)	0,1452ᵃ (0,003)	0,188ᵃ (0,0005)	0,188ᵃ (0,004)	0,1451ᵃ (0,00386)	0,1830ᵃ (0,005)
Urban			0,450ᵃ (0,0182)	0,570ᵃ (0,0177)	0,570ᵃ (0,180)	0,103ᵃ (0,0203)	0,784ᵃ (0,002)
Adj. R^2	0,007	0,374	0,375	0,392	0,392	0,377	0,416
Observation	544.254	544.254	544.254	544.254	544.254	544.254	544.254
Year FE	N	Y	Y	Y	Y	Y	Y
Prov FE	N	N	N	N	Y	N	Y
Prov*Year FE	N	N	N	N	Y	N	Y

Note: The pooled-OLS estimates presented are derived from the 2005, 2008, 2011, and 2014 datasets. The dependent variable is log of household's annual transport expenses on all column. All regressions include a constant. Robust standard errors are clustered by province in column 5 and 7. ᵃ,ᵇ,ᶜ: significant at 1%, 5%, and 10%

U-Shaped Relationship of Urban Form and Transport Energy Consumption, Indonesia
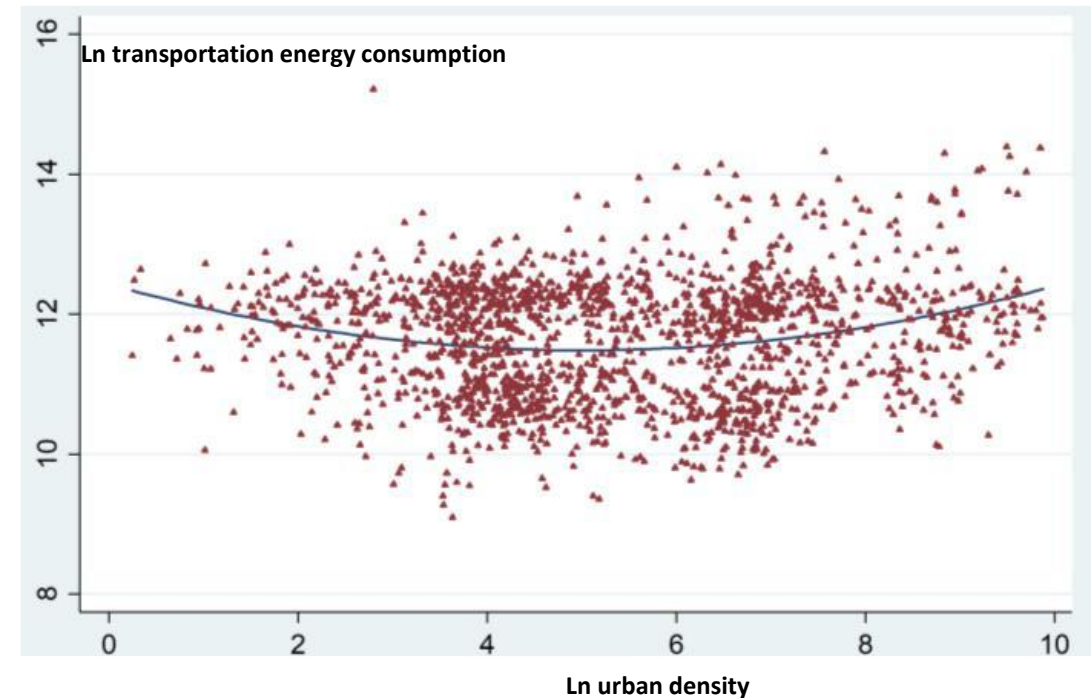
Source: Djuuna (2019)

- Some relations exhibit non-linearity
- U-shaped relationship indicates that agglomeration may not always provide negative/positive externalities.
- Potentially affects the policy implication (**too small/large** might not be good for cities)

Increasing land size through FAR

Artelligent City
Roppongi Hills FACILITIES

ROPPONGI HILLS

- Increasing FAR shifts the supply of land, particularly in central areas.

- Additional incentive may create urban externalities for society
  - Additional FAR to compensate urban open space

- Yet, raises challenges for cities in developing Asia cities:
  - Valuation problems
  - Compensating the potential negative externalities

Tackling primate city issue

- Most countries in developing Asia have primate cities

- Promoting the multicentric urban form rather than stopping the development may be crucial

- Requirements:
  - Integrated transport infrastructure
  - Housing and other local public goods policies

Remarks on remarks

- Promoting urban areas for engine of growth touching multisector policies, including housing, land, transportation, and labor policies

- …But, sometimes those policies may provide adverse effects on other sectors
  - FAR increases housing supply but may promote crime
  - Case of Japan: promoting industrial development in urban areas at the cost of equality during age of miracle.

- Larger cities are also likely to host deglomeration forces (negative externalities). Further policy discussions should be addressed