

Thailand's Sustainable Urbanization

Bhanupong

Lecture 30

“All happy families resemble one another, but each unhappy family is unhappy in its own way” *Anna Karenina* by Leo Tolstoy.

Outline

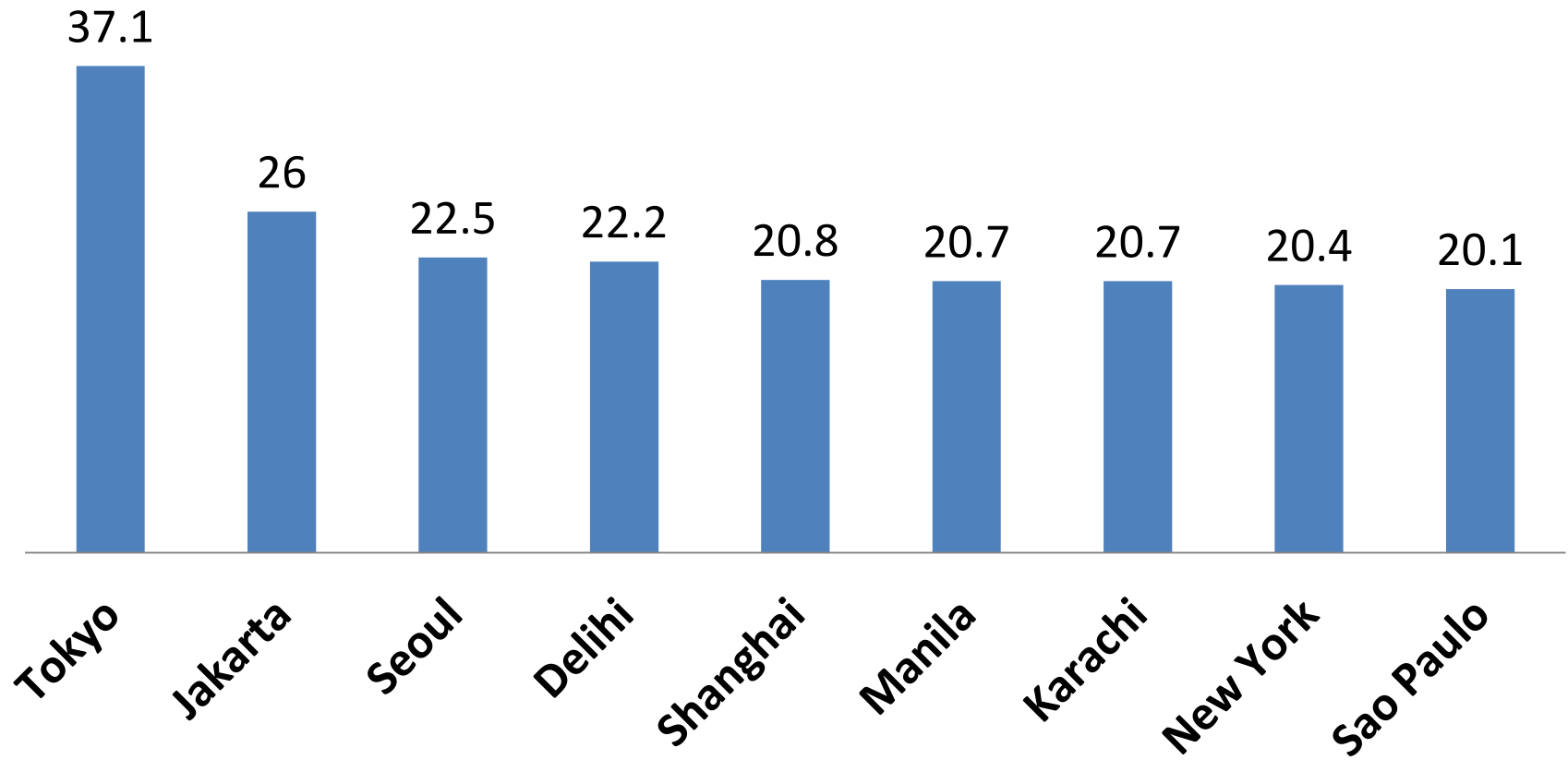
- Urbanization around the world
- Urbanization and poverty
- Rural and urban dynamics: MDG
- Declining Bangkok primacy
- Sustainability of Bangkok

Back in 1950

- Less than one-in-three people lived in urban areas.
- The world had just **two** so-called "megacities" with populations in excess of 10 million: New York and Tokyo.

Megacities in 2012

population in million

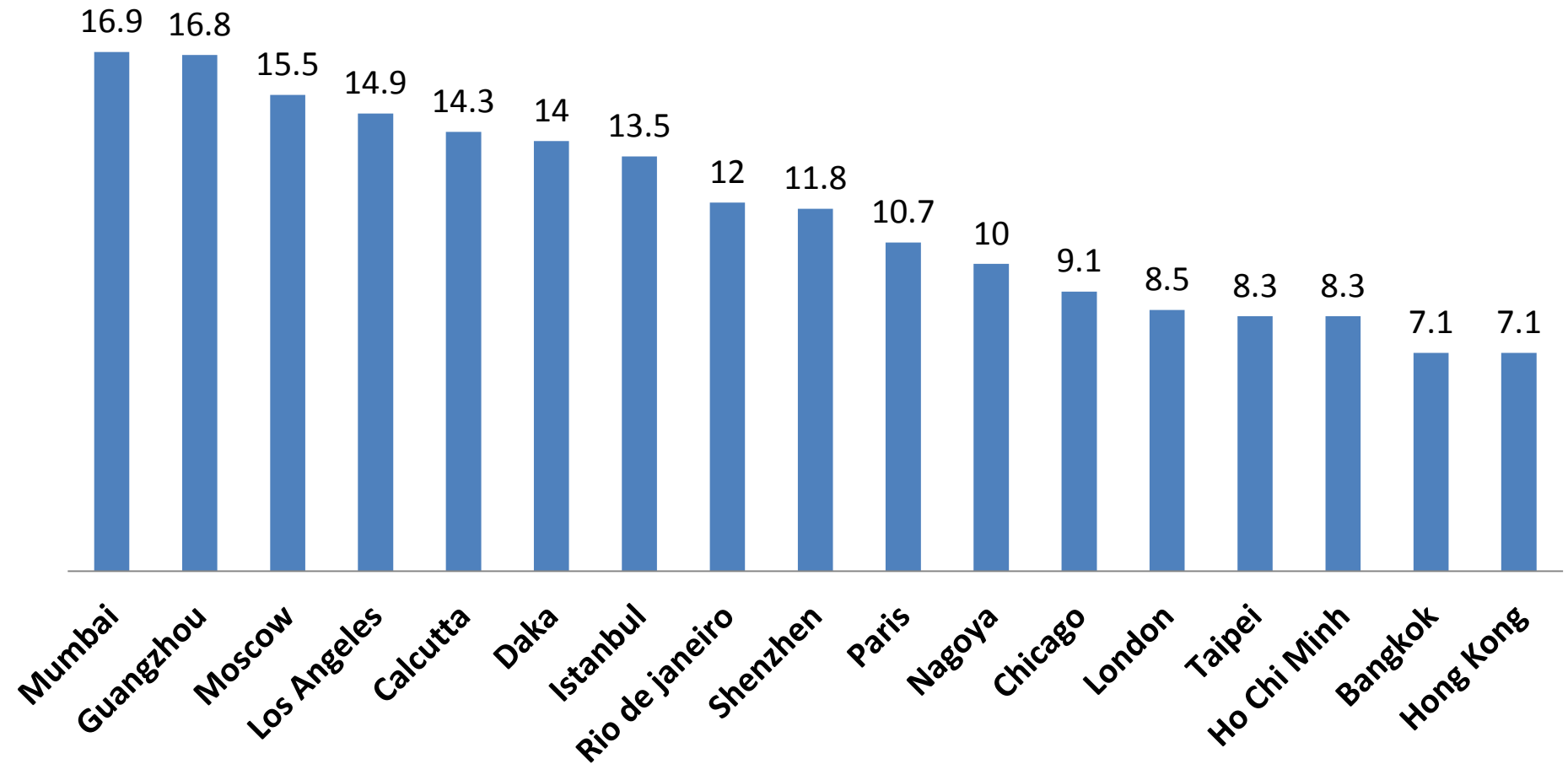


Stylized fact

- The world is fast approaching the point where the *majority* of the human population will be found in urban areas.
- The United Nations estimates that about 180,000 people are being added to the urban population every day.
- The world's **urban infrastructure** has to absorb the equivalent of the population of two Toykos each year.

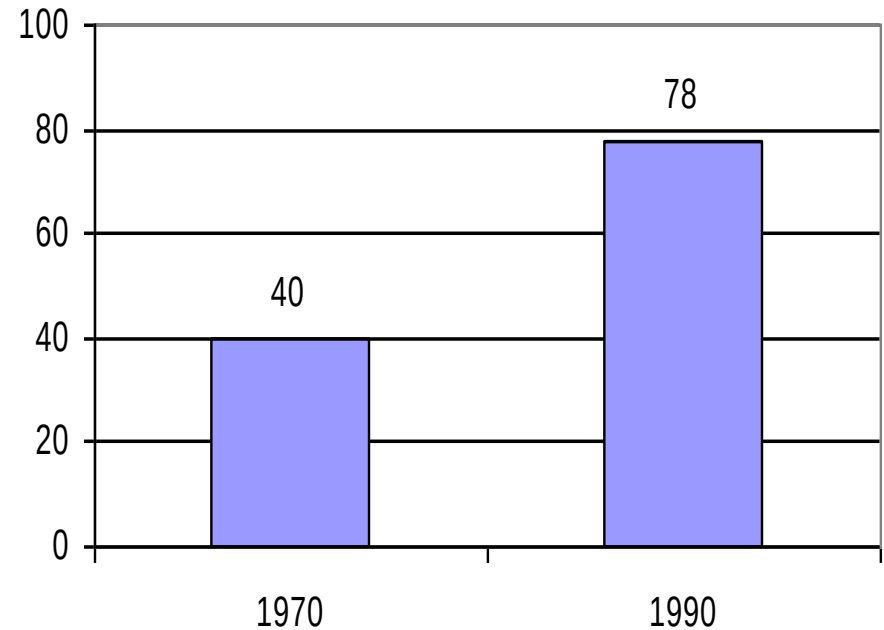
Population in large cities: 2012

■ population in million

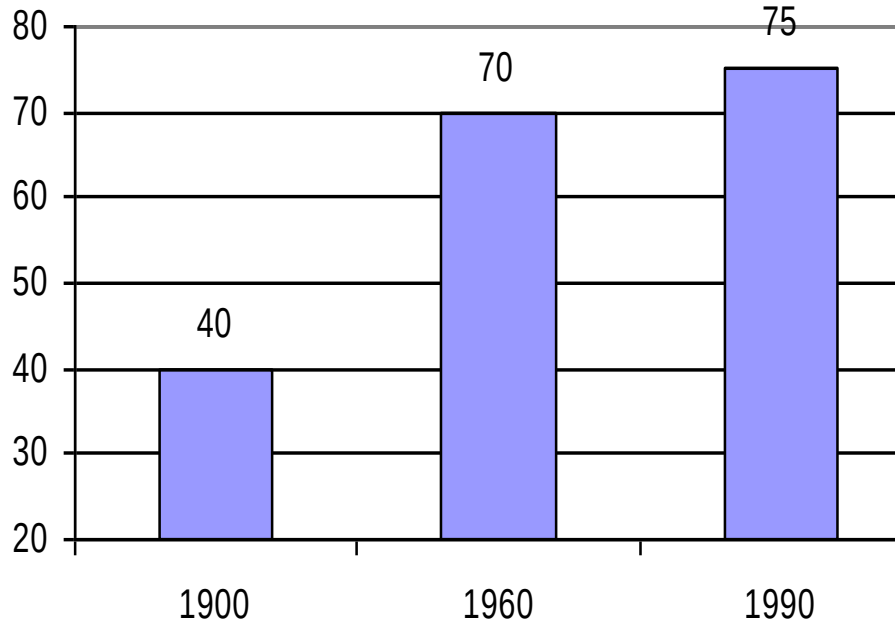


What took the US 90 years to accomplish took Brazil for 30 years, Korea for 20 years

Urbanization in South Korea



Urbanization in USA



Urbanization in rich countries

- In the ***traditional model*** of urbanization, which North America and Europe experienced during the Victorian era, people were pushed away from the countryside by the ***mechanization of agriculture***, and pulled towards urban areas by the offer of jobs and wages.
- North America and Europe's urban areas already account for about 70-80% of the regions' populations, and these are expected to ***stabilize*** at these levels.

A different urbanization process in poor countries

- Sub-Saharan Africa, which has the world's **highest rate of urban migration**, is **not** following the traditional pattern.
- Developing nations are struggling to cope with the huge influx of people into urban areas.
- Some cities' populations are 40 times larger than what they were in 1950.

Gradual vs. rapid urbanization

- The gradual pace, combined with relatively high GDP and education per capita, **allowed** time for the development of political and economic institutions and market instruments essential for an efficient form of urbanization and a reasonable quality of urban life.
- Rapidly urbanizing developing countries require **adaptation** of rural institutions and governance to **urban society**.
- They have little room for timely experimentation and adjustment. (no time to put electrical and phone lines underground: trees must be trimmed regularly to protect electrical lines)

Living in slums

- Because *urban areas in Africa are economically stagnant* or in recession, local authorities do not have the money or expertise to provide services such as access to water, housing, education and healthcare.
- As a result, **70%** of Africa's urban population find themselves living in slums.
- An estimated **one billion** people in **Latin America, Asia, as well as Africa**, live in slums or informal settlements that are not legally recognized.
- Without any intervention, this number could double by 2020

Unmanaged urbanization breeds slums and crime

- The Global Monitoring Report (GMR) 2013, released April 29, 2013 by the World Bank and International Monetary Fund (IMF), states that although urbanization helps pull people out of poverty and advances progress towards the Millennium Development Goals (MDGs),
- Urbanization can also lead to burgeoning growth of slums, pollution, and crime *if not managed well*.

Urbanization and poverty reduction

- Urbanization has been a major force behind poverty reduction and progress towards other MDGs and that with over 80 per cent of global goods and services produced in cities, countries with relatively higher levels of urbanization, such as China, and many others in East Asia and Latin America, have played a major role in lowering extreme poverty worldwide.

Rural vs. Urban

- In South Asia, 60 per cent of urban dwellers have access to sanitation facilities, compared with 28 per cent in rural areas.
- *Build public toilets not rockets.*
- In Sub-Saharan Africa, 42 per cent of the urban population has access to sanitation facilities, compared with 23 per cent of rural residents.
- Access to safe water in urban areas in developing countries was almost complete in 2010, with 96 per cent coverage, compared with 81 per cent of the rural population having access.

The rural-urban divide

- **Megacities** and large cities are the richest and have far better access to basic public services;
- Smaller towns, secondary cities, and areas on the perimeter of urban centers are less rich.
- **Rural areas** are the poorest, but this does not mean unfettered urbanization is a cure-all
- **The urban poor** in many places urgently need better services as well as infrastructure that will keep them connected to schools, jobs and decent health care.

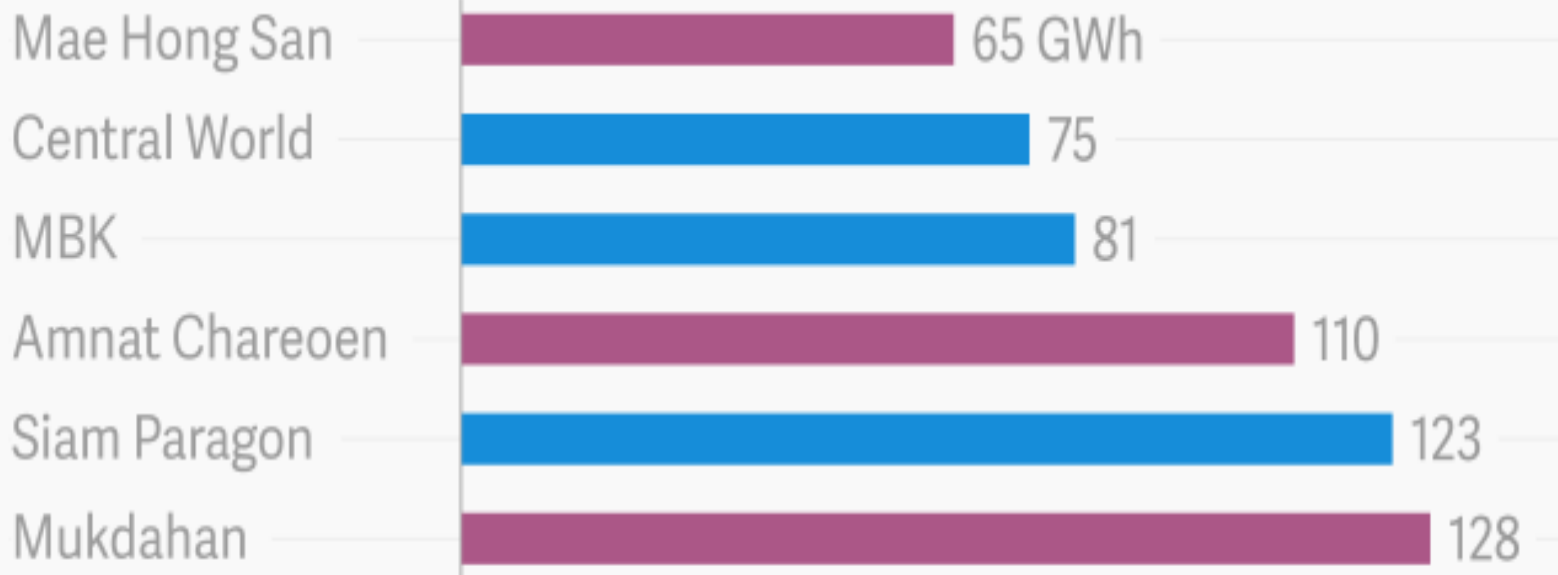
How much luxury retail does one city need?

Bangkok's newest high-end mall, Em Quartier, opened March 27, 2015, featuring brands including Louis Vuitton, Chanel, Dior, Prada, Cartier, Dolce & Gabbana, Tiffany, Fendi, and Balenciaga.

The rural-urban divide: Electricity usage

Bangkok malls (blue) and Thai provinces (maroon)

Electricity usage (2011)



Quartz | qz.com

Data: Mekong Commons

Because of the city's intense climate—it is one of the hottest big cities in the world—Bangkok malls and their massive air conditioning systems consume immense amounts of electricity.

The huge Siam Paragon mall consumes nearly *twice* as much power annually as all of underdeveloped Mae Hong Son province, home to about 250,000 people.

But, urbanization does matter

- Agglomeration, or the clustering of people and economic activity, is an important driver of development and evidence suggests that it can have high pay offs, particularly for countries on the lower rungs of development.
- In order to harness the economic and social benefits of urbanization, policy-makers must plan for efficient land-use, match population densities with the required needs for transport, housing and other infrastructure, and arrange the financing needed for such urban development programs.

Fighting extreme poverty: both urban and rural areas

- Though **extreme poverty** has declined rapidly in many countries, the World Bank estimates that in 2015 there were still 970 million people living on \$1.25 a day.
- Therefore, continued concerted efforts to get extreme poverty as close to zero as possible are needed.
- The challenge of fighting poverty and improving the living conditions of the poor lies in both urban and rural areas.

Infrastructure and services development

- To cope with urban growth, a **coordinated package** of essential infrastructure and services is needed.
- Only by meeting essential needs related to **transportation, housing, water and sanitation as well as education and healthcare can** cities avoid becoming hubs of poverty and squalor
- Stepped up efforts are also needed to improve development in rural areas, where 76 per cent of the developing world's 1.2 billion poor live, with inadequate access to the basic amenities defined by the MDGs.

Urbanization in China

- China's urbanization has followed the **traditional drivers experienced by the West.**
- Its industrial revolution is the most rapid the world has seen, and the Chinese government says it has helped lift more than 200 million people out of poverty.
- Millions of people migrated from rural to urban areas to fill the jobs generated by the economic explosion.
- Many workers receive low wages and live in poor conditions.

An estimated 200,000 people **each year** move to slums on the southern outskirts of the capital, Beijing



A general view of Shenzhen in 1985
Shenzhen, Guangdong province of China



Whatever happened to Shenzhen?

Remember the place that spawned China's meteoric rise in manufacturing?

- The little fishing village opposite Hong Kong on the Pearl River delta that became a sprawl of factories and pollution and 10 million migrants from all over the nation.
- The city has reinvented itself once more with an economy set to overtake Hong Kong this year.
- The sheds full of workers banging out the world's toys and clothes are mostly gone.

Shenzhen in 2015



A model to replicate across China

- Shenzhen reported a 7.8 percent rise in gross domestic product in the first quarter, topping the biggest Chinese cities.
- Gone is the model of cheap labor and foreign investment pioneered by Deng Xiaoping,
- It's now driven by a force current Premier Li Keqiang wants replicated across China: **innovation.**

The board-stuffing electronics lines filled with migrant workers are headed (gone) the same way. In their place are bankers, tech entrepreneurs, researchers and hipsters.

- Deng made Shenzhen a test ground for a market-based economy in 1980, and it succeeded beyond all expectations.
- The city is home to many of China's most successful companies, including telecom giant Huawei Technologies Co., web portal Tencent Holdings Ltd. and Ping An Insurance (Group) Co.

In the Nanshan district, the technology heartland of the city, the per-capita GDP last year was 308,700 yuan (\$49,730), higher than Japan, Germany and Hong Kong.



The world's economy is shaped by urbanization

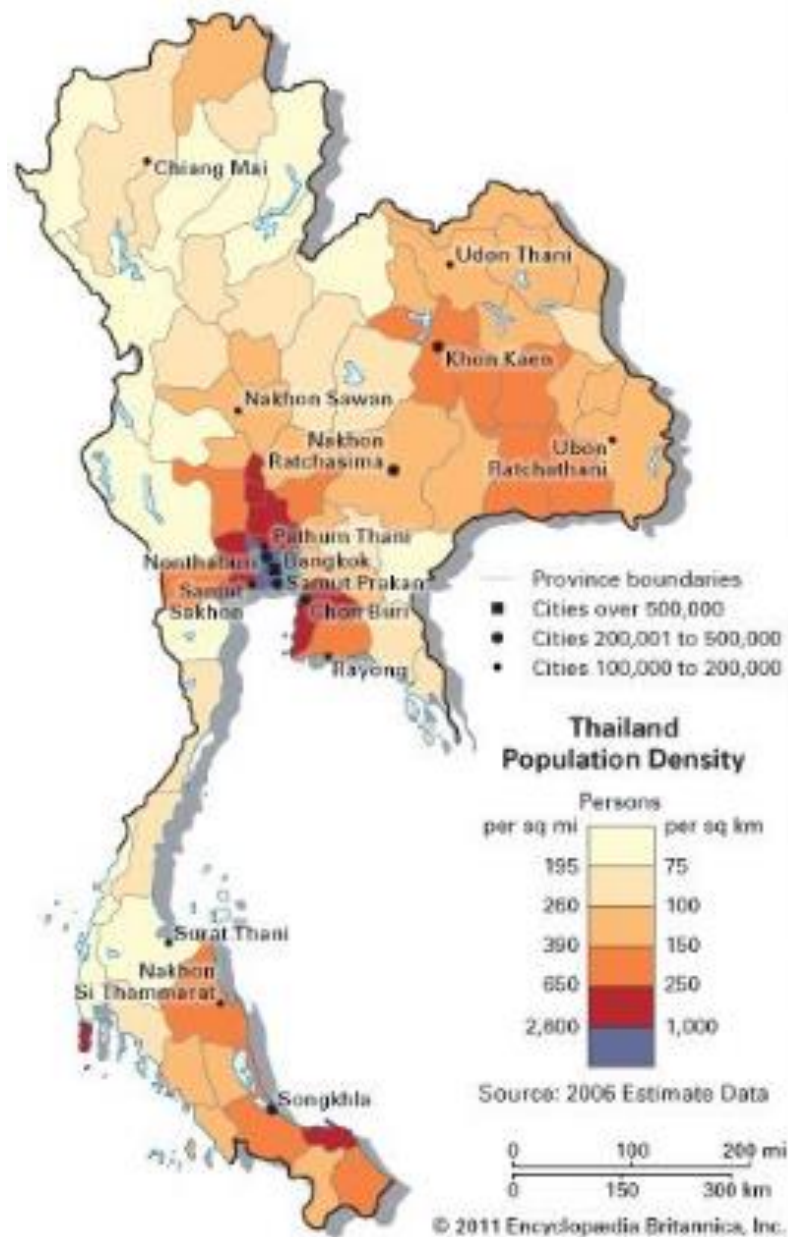
- Out of the top 25 *growth* cities, an astonishing 21 are in the developing world.
- Only New York, London, Los Angeles and Tokyo will outgrow places like Xi'an and Dongguan.
- The upshot is that urbanization as much as globalization is shaping the earth's economy.

Urbanization reduces poverty

- With a fifth of the world's population, 600 urban centers account for some 60% of worldwide GDP.
- All the new entrants will be from emerging markets, a shift that will have profound social consequences.
- Urbanization is **lifting** more people **out of poverty** than any movement in history.

Urban Primacy

- The rapid urbanization in developing countries is also reflected in urban primacy—the share of population in ***the largest city*** in national urban population.
- A degree of concentration is reflected in the share of large population of metropolitan areas in total urban population.
- **Urban primacy** indicates the largest city in a country.
- Such a city is called a primate city.



Urban Primacy: The largest city in a country

- Urban primacy can be defined as the central place in an urban or city network that has acquired or obtained a great **level of dominance**.
- The level of dominance is measured by ***population density*** and the number of functions offered.
- **Higher functions** and population will result in higher dominance.

Examples of primate cities

- Paris (9.6 million) is definitely the focus of France while Marseilles has a population of 1.3 million.
- The United Kingdom has London as its primate city (7 million) while the second largest city, Birmingham, is home to a mere one million people.
- Mexico City, Mexico (8.6 million) outshines Guadalajara (1.6 million).
- A huge dichotomy exists between Bangkok (7.5 million) and Thailand's second city, Nakorn rachsrima (where almost all Thai billionaires have houses in Kao Yai)

Law of the primate city

- Geographer Mark Jefferson (1939) developed the ***law of the primate city*** to explain the phenomenon of huge cities that capture such a large proportion of a country's population as well as its economic activity.
- An excellent example of a primate city is Paris, which truly represents and serves as the focus of France.
- The primate city dominates the country in influence and are the national focal-point.

The law of primate city

- Their sheer size and activity becomes a strong pull factor, bringing additional residents to the city and causing the primate city to become even larger and more disproportional to smaller cities in the country.
- Bangkok is the primate city of Thailand . It has the highest density of population and highest number of functions.
- “People outside Bangkok elect the government, while Bangkok people topple it down.”

The dominance of the primate city

- Primate city dominates the country in influence and are the national focal-point.
- Its sheer size and activity becomes a strong pull factor, bringing additional residents to the city and causing the primate city to become even larger and more disproportional to smaller cities in the country.

Chao Phraya riverside to become iconic upmarket utopia

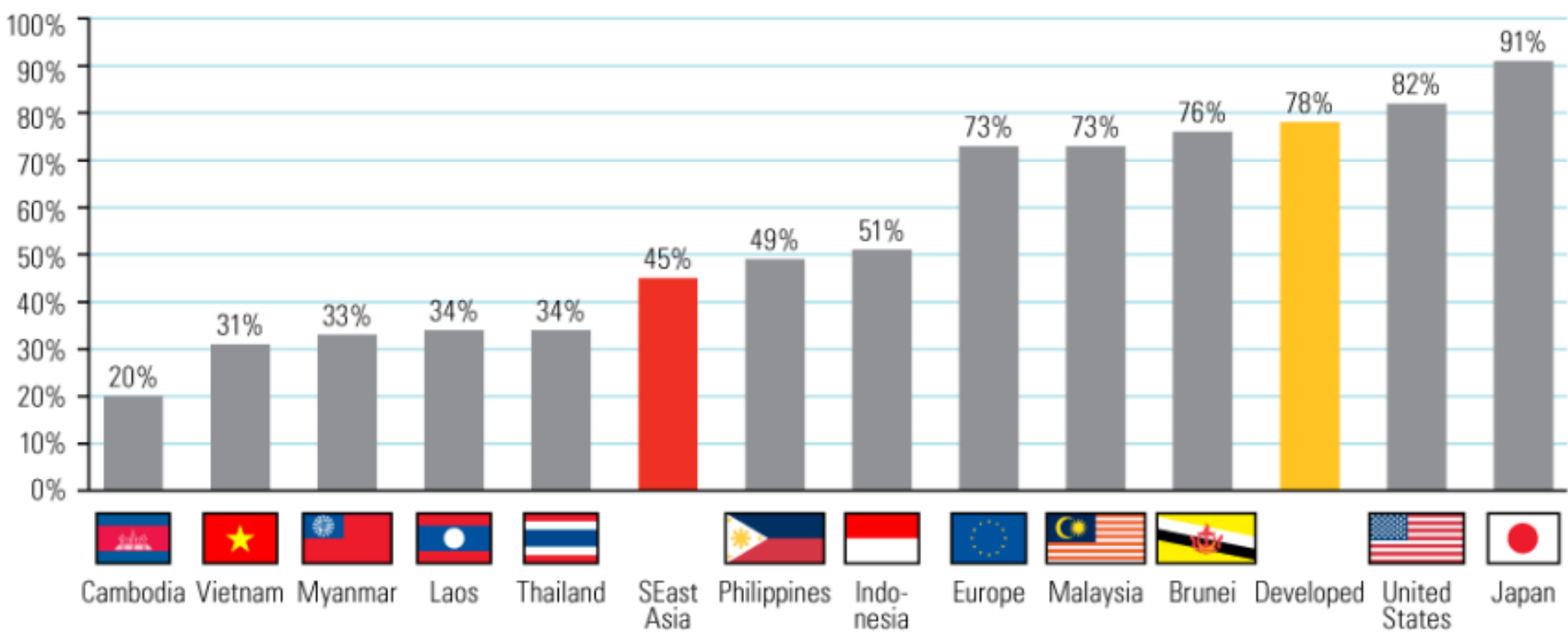


The Chao Phraya riverside area will be Bangkok's new upmarket lifestyle destination when a number of luxury retail, hotel and condominium projects costing more than Bt200 billion in total are completed over the next two-and-a-half years.

Urbanization in Thailand

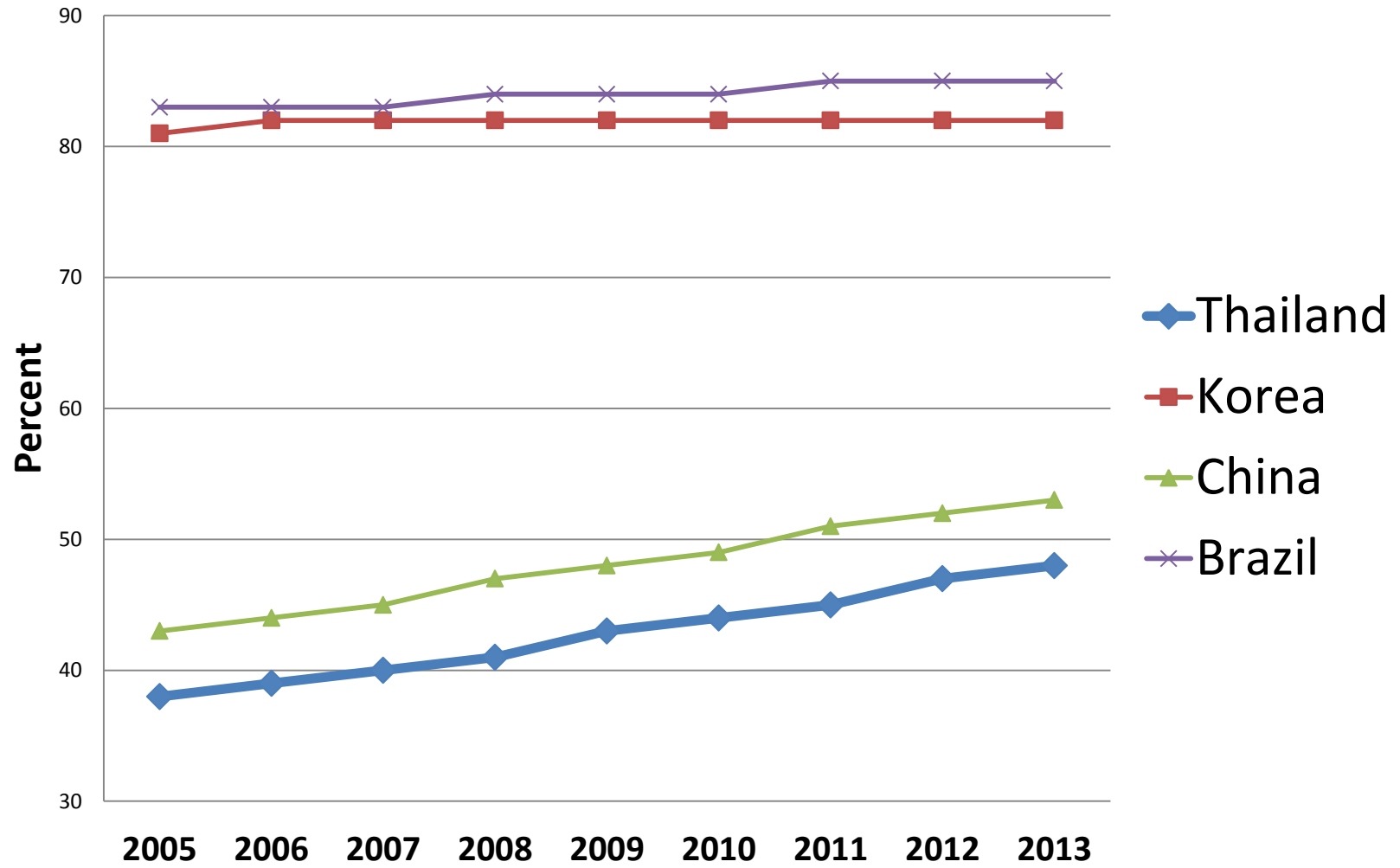
- In 2000, the population density in Bangkok was **4,060** persons per square kilometer.
- The **Bangkok primacy** was clearly demonstrated by its size of population which was **60 times** the density of population in the Northern region, where **67** persons lived per square kilometer.
- *What does the share of Bangkok population tell us?*

Urbanization Remains Low in Southeast Asia



Source: UN Population Database, BofA Merrill Lynch Global Research

Urban population (% total)



Gender imbalance

- Birthrate plunged to 1.6 per woman in 2013 from six in 1970.
- Gender imbalance: 782,716 more females than males between the ages of 15 and 49 in 2010.
- Higher mortality rate in men.
- Men who like men accounted to 3-17 % of the population in 2010, according to Mahidol University's Institute for population and social research.

Turning into a grey society

- The average age for men to get married increased from 24.7 in 1970 to 28.7 in 2010
- For women from 22 to 24.9 years old.
- In 2014, male population, 31.5 mill, female, 33.3 million

Elderly (60+) 9.9 million

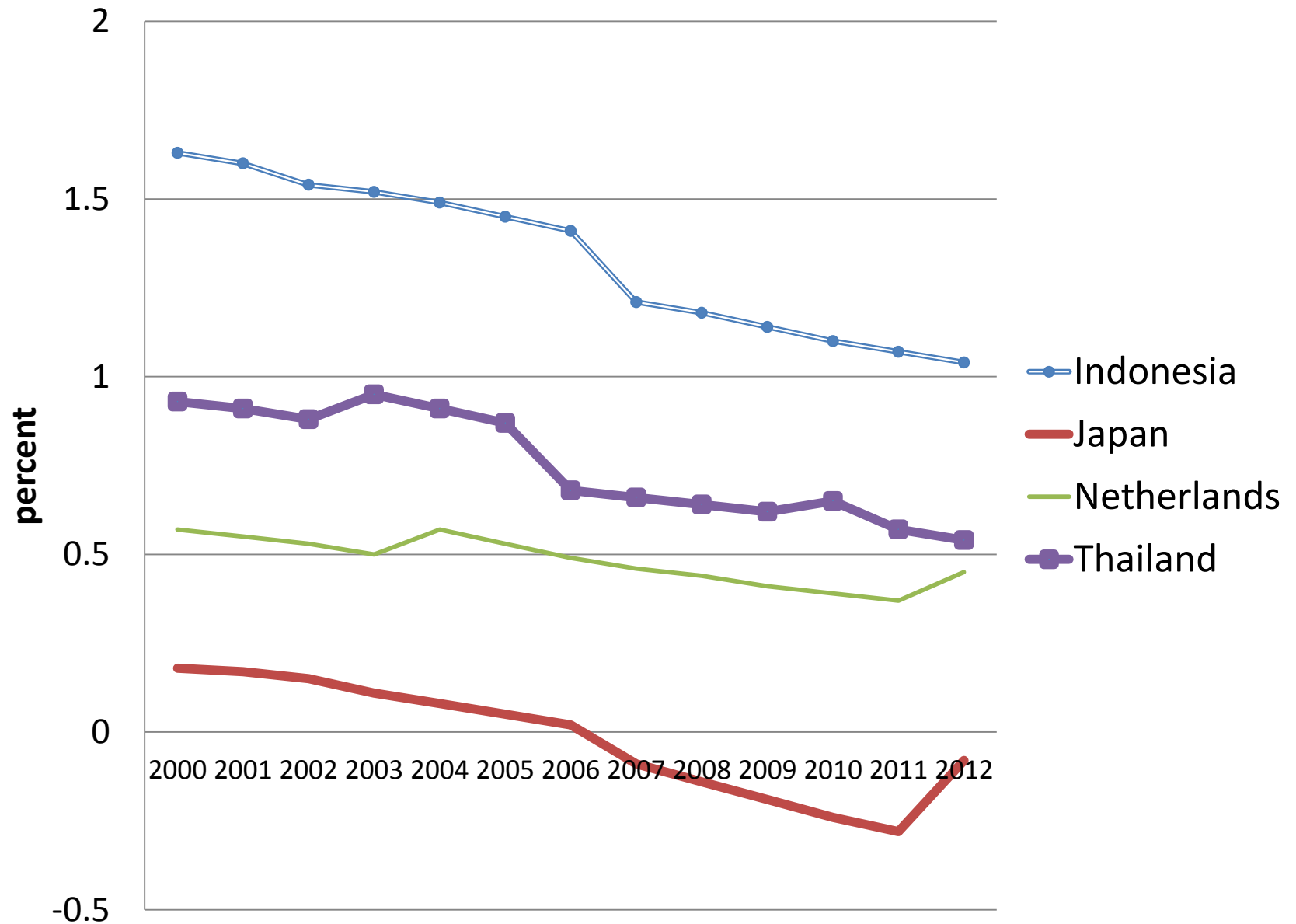
Children 11.9m

Labor force (15-59) 42.9m

Characteristics of Unsustainable Urbanization

1. *Increasing* population density in the primal cities
 2. *Rising* urban poverty
 3. *Worsening* income inequality
 4. *Deteriorating* quality of environment
- *Does Bangkok possesses these conditions?*

Poupopulation Growth Rate



Declining population:

The first stage of decentralization

- The population density in Bangkok has been on the declining trend.
- Between 2000 and 2002, the urban population of the whole kingdom **increased by 3.1 %**, implying increased urbanization for the whole country.
- But the density of population in Bangkok actually **declined by 9 %** to 3,694 persons.
- In 2007, it declined to 3,643 persons.

Population and its growth in 2000

	Size (mil)	% growth
Whole Kingdom	60	1.05
Bangkok	6.3	0.72
Nakorn Rachasrima	2.5	0.71
Khon Kaen	1.7	0.63
Ubon	1.68	0.89
Chiang Mai	1.4	0.74

Cities surrounding Bangkok

	Population size (million)	% growth
Prathum thanee	0.67	4.84
Nakorn Pathom	.80	2.51
Samut Prakan	1.0	2.76
Samut Sakhon	0.45	3.54
Non Thaburi	0.81	3.43

The second stage of decentralization: Moving out of Bangkok

- It has already begun as *industries* are gradually moving away from Bangkok Metropolitan Region, because of higher production and transactions costs in BMR.
- Bangkok has encountered diseconomies of agglomeration. Land prices and rent have gone up.
- If the trend continues, a more balanced process of urbanization will emerge with less concentration of industries in large cities.
- The degree of urbanization in Thailand has been slowing down in all regions.

Declining Bangkok Primacy

- As the impact of diseconomies of scale became apparent, Bangkok started to lose its comparative advantage in production.
- **Both** shares of output and population in Bangkok has been declining.
- Output share of BMR declined from 53 percent in 1993 to 47.4 percent in 2000—confirming the second stage of de-concentration in suburban areas of Bangkok.
- This encouraging trend implies that urbanization process in Thailand is sustainable, because large cities of BMR would not be expanding without limit.

Gradual Urbanization

- The major factor behind the slow urbanization process is the ***sharp drop*** in the population growth rate, reflecting the successful family planning programs.
- The relative size of economic activity in BMR has been declining gradually.

Declining Urban Poverty

- The strength of the economy between 1988 and 1996 had cut the urban poverty from 12.6 percent in 1988 to a mere 3.1 percent in just 8 years.
- When the Thai economy was hit by the financial crisis, the **rise** in poverty incident in 1999 went up to only 3.8 percent.
- The rural people had to bear the brunt of the economic meltdown ***more than*** the city people who created the economic crisis.

Desirable Urbanization

- If the urban sector can provide better job opportunities with more stable income, urbanization is **not** a disaster and therefore should be **welcome**.
- The important question is **how** to prepare labors from rural areas to make them suitable for working in the urban sector.

Education opportunity provided in urban areas

- Disparities in human capital endowment also explain large regional income inequality.
- Urban areas do not only provide jobs for migrant labors, they also provide education for rural people.
- The government imposed the 12 years of compulsory education.
- Remember that education policy made Taiwan and Korea's income distribution patterns differ from Kuznets hypothesis.

We are commuters

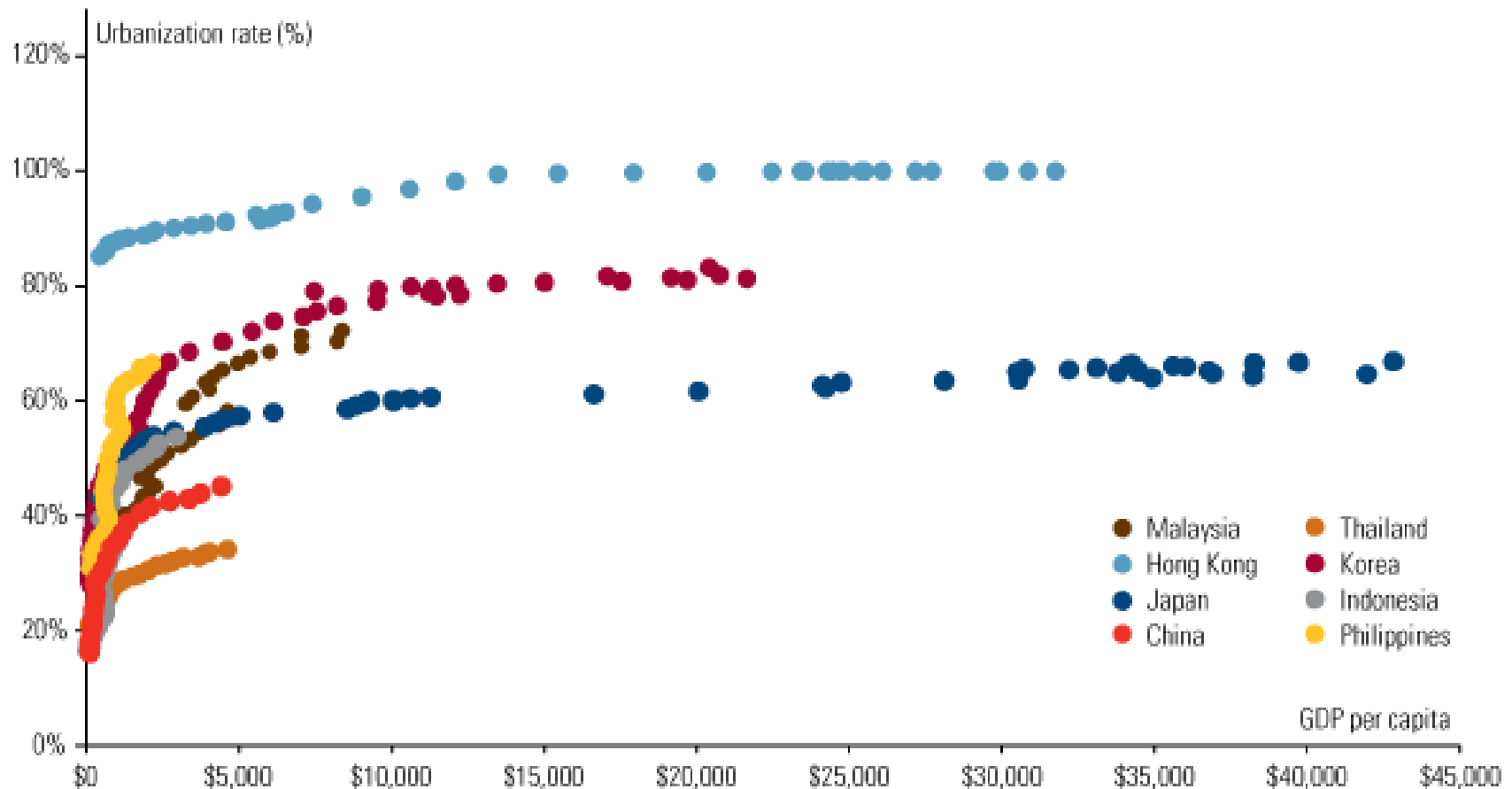
- Urbanization has already spilled over from Bangkok into surrounding provinces.
- A large number of Bangkok's **12 million** people now commute between their residences in Bangkok's suburbs or these five provinces and their offices are in downtown Bangkok.
- Bangkok should learn from the experience of other well-run cities around the world.
- The concept of satellite towns should be explored and introduced in metropolitan Bangkok when and where relevant.

Satellite-town development

- Under the satellite-town concept, now widely applied in many major cities in Germany and other European countries, a city should be divided into many residential areas and suburbs.
- *Each area is made self-sufficient, complete with office and commercial buildings, schools, hospitals, shopping centers and other facilities.*
- This should **reduce the necessity of residents having to take long commute hours.**
- It thereby does away with many urban problems related to large numbers of people moving about, including traffic snarls and air pollution, among other problems, improving people's quality of life.

Under-urbanization in Thailand implies the lack of infrastructure development

Thailand's Under-urbanization Highlights Sustainable Demand for Fixed Capital Investment



Source: World Bank & Morgan Stanley Research

Major problems in big cities

- Health and quality of life
- International industrial competitiveness
- Management and institutional building
- Social cohesion and stability

Green areas

- Bangkok needs more new parks to increase the green-area-per-head ratio to 2.5 square meters from the existing *one* square meter per head.
- Paris has **25** square meter of green area per head.

Conclusion

- There is a stylized fact of urbanization process in developed and developing countries.
- Bangkok primacy has been declining, as the second stage of de-concentration is taking place.
- In contrast to the popular view that Bangkok is facing insurmountable environmental and social problems, Bangkok and its surrounding cities are moving toward sustainable urbanization.
- But Bangkok is still a far cry from being a city offering high quality of life.

Review questions

- Compare and contrast urbanization in Thailand and Africa.
- Provide evidence indicating the sustainability of urbanization process in Thailand.
- What can the public sector do to ease the adverse consequences of urbanization?
- Why has urbanization in Thailand been slowing down in all regions?
- “All happy families resemble one another, but each unhappy family is unhappy in its own way” *Anna Karenina* by Leo Tolstoy. Do you think that happy families in Buri Rum and Bangkok resemble one another, but differ when they are unhappy?

1. International reserve management

China had \$2.8 trillion international reserves at the end of 2010, while Japan's total reserves amounted to \$1.1 trillion at the end of February 2011. South Korea and Thailand also accumulated \$300 and \$140 billion respectively in March 2011.

- 1.1 What are the causes and motivation of holding such a large amount of international reserves?
- 1.2 Are there any adverse consequences of such action?
- 1.3 What kind of policy responses should be to cope with rising international reserves? How effective are they?

2. Giant economies

- China 1.34 billion people are older and more urbanized than ever before, but there is a looming demographic crisis as the effects of the country's one-child policy take their toll.
- India's population, which is far younger, may eclipse China's in the next two decades.

Compare and contrast

	China	India		
Median age	35.5	26.2		
Urban population	47%	30%		
Average life expectancy	73	64		

China and India

- 2.1 Compare and contrast Thailand's statistics (as discussed in the class) with those numbers shown in the table and explain factors contributing to such differences or similarities.
- 2.2 Discuss consequences of high- growth economies on poverty and income distribution.
- 2.3 Examine the likely impact on Thailand if these giant economies slow down in 2011.

George W. Bush, on returning to Yale to accept an honorary degree (The Sunday Times, May 2001)

“To those of you who received honors, awards and distinctions, I say well done. And to the C students, I say you, too, can be president of the United States”

Quotable quotations

“Study without desire spoils the memory, and it retains nothing that it takes in.”

Leonardo da Vinci

“Education is what survives when what has been learned has been forgotten”

B.F. Skinner (1904-1990)

“Live as if you were to die tomorrow. Learn as if you were to live forever.”

Mahatma Gandhi