

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

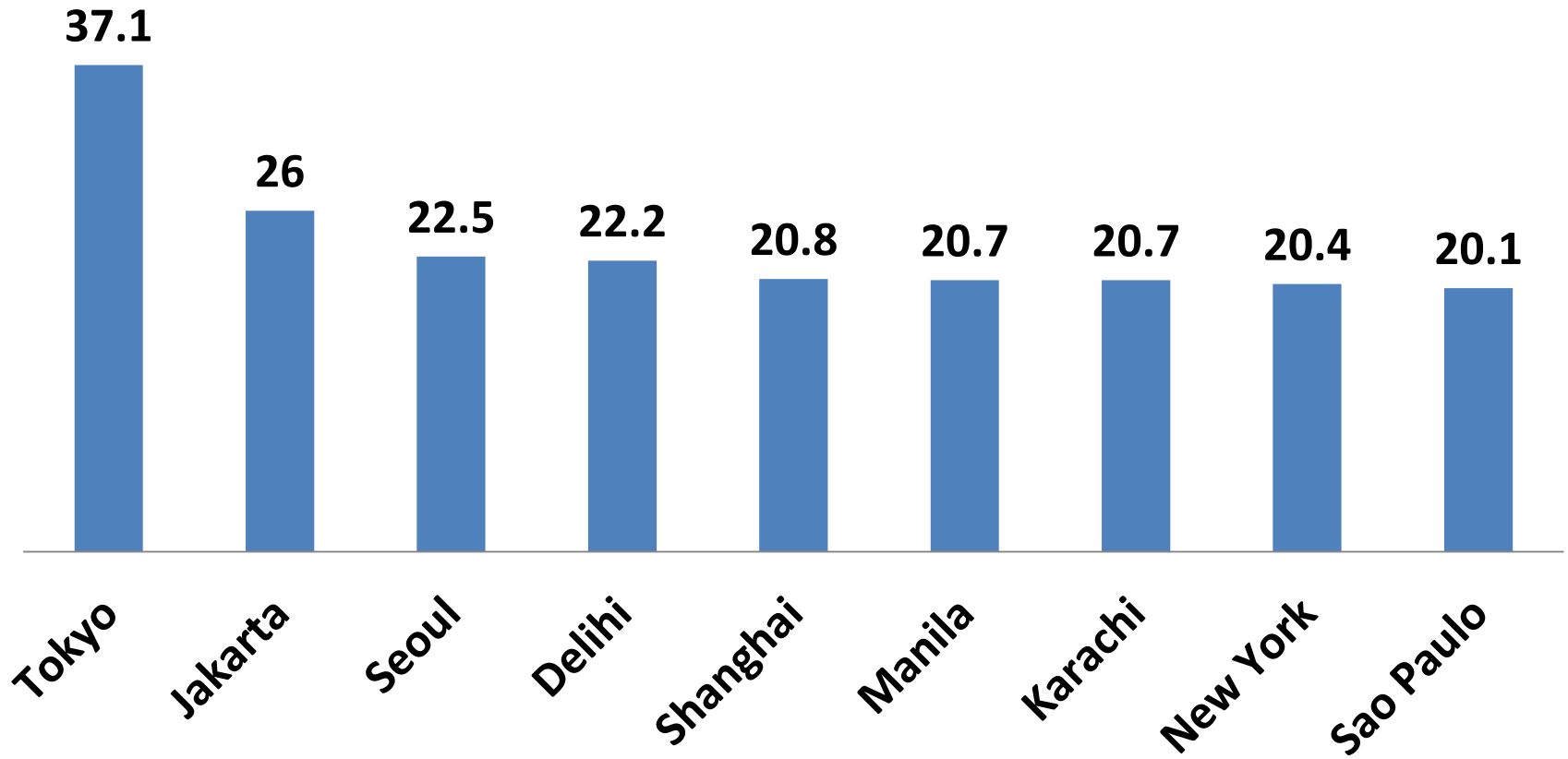
- Urbanization around the world
- Urbanization and poverty
- Rural and urban dynamics: MDG
- Declining Bangkok primacy
- Sustainability of Bangkok

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

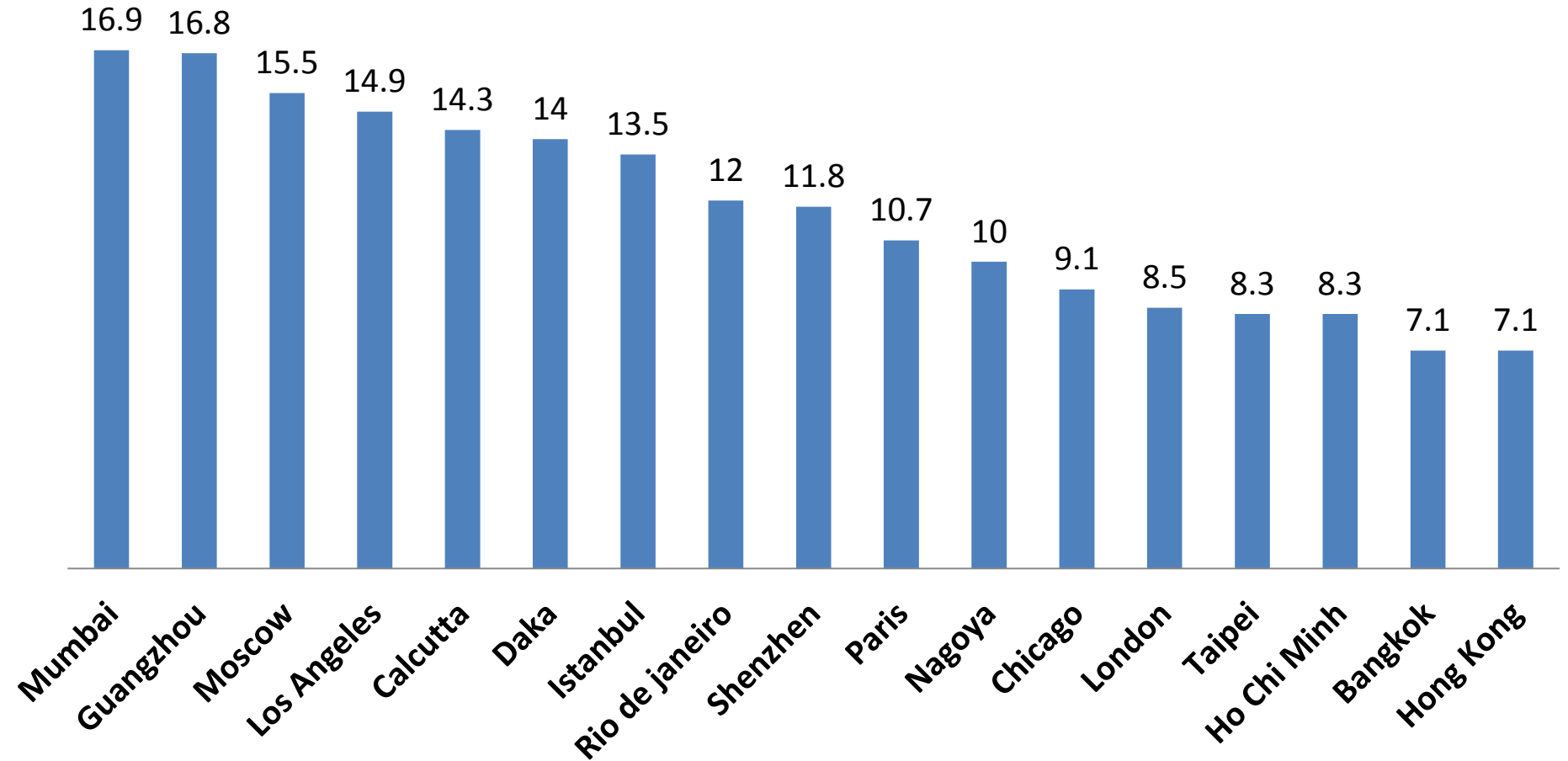


Stylized fact

- 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.

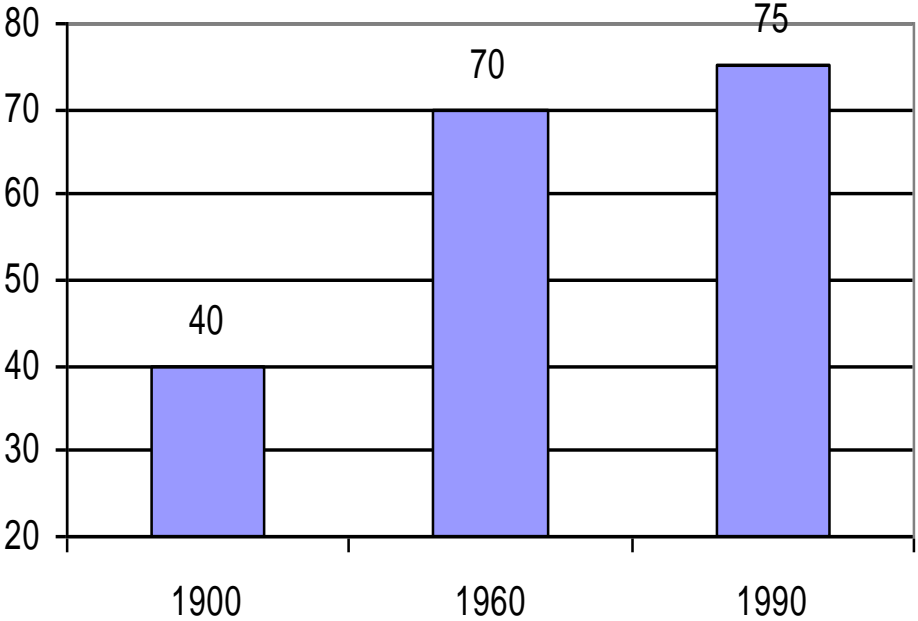
Population in large cities: 2012

■ population in million

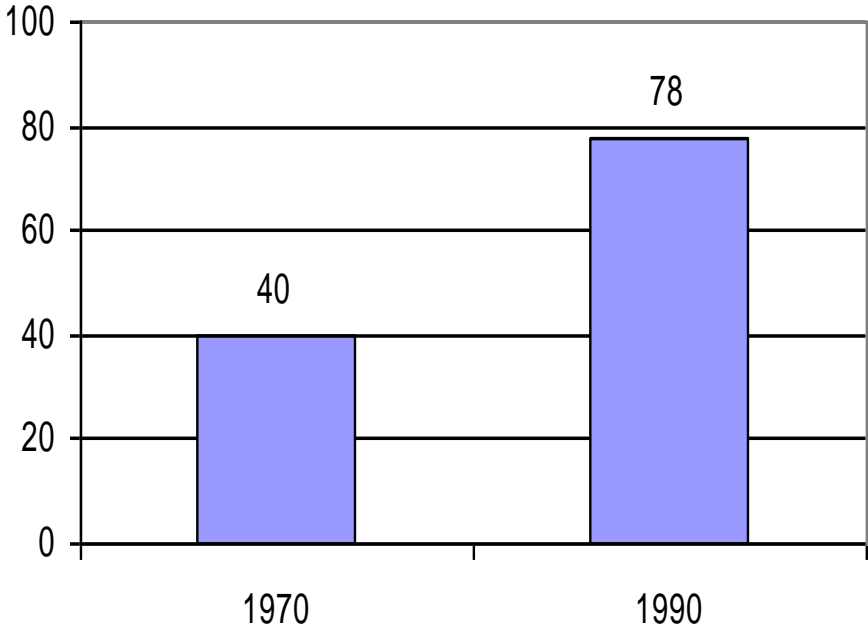


What took the US 90 years to accomplish took Brazil for 30 years, Korea for 20 years

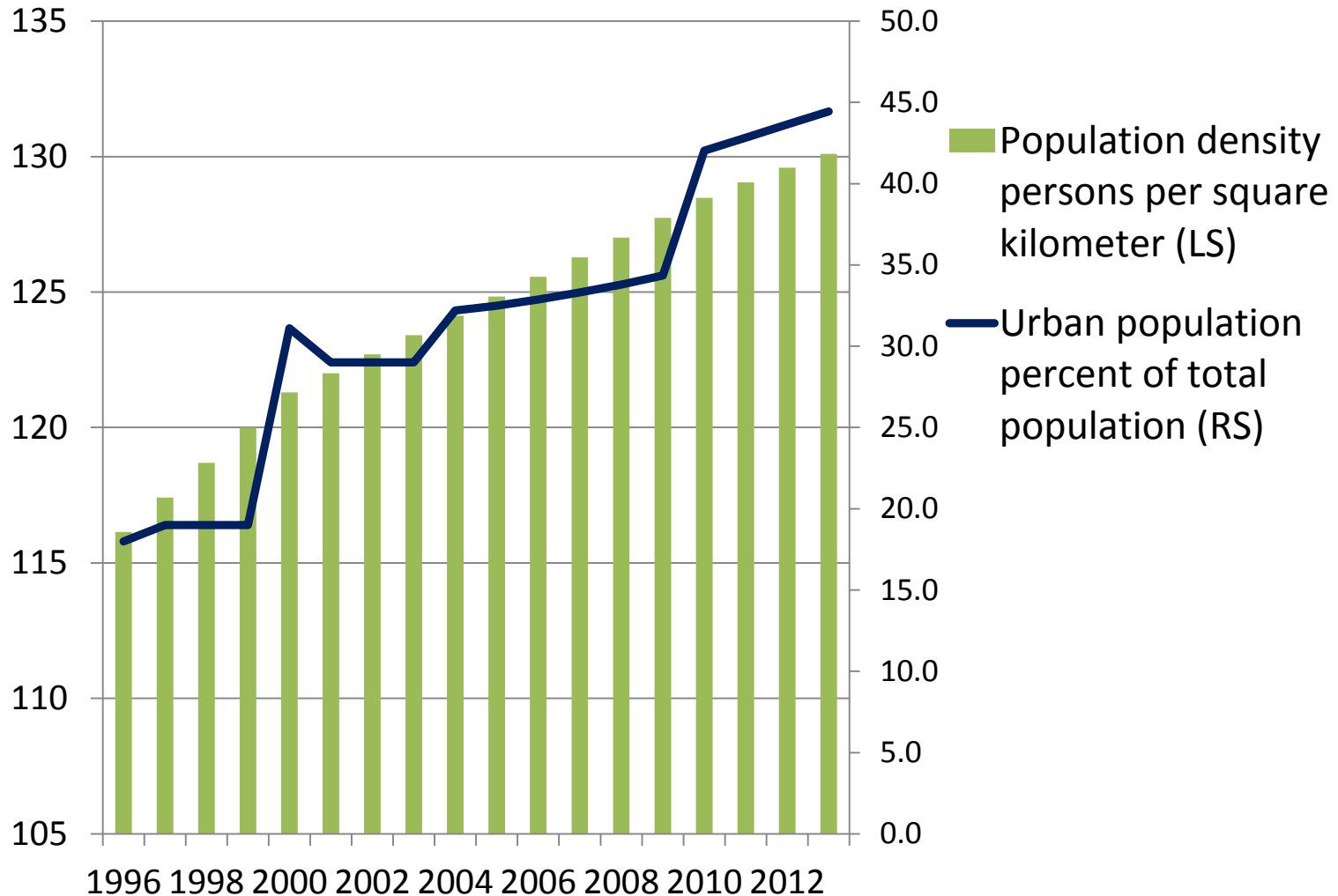
Urbanization in USA



Urbanization in South Korea



Urbanization in Thailand



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)

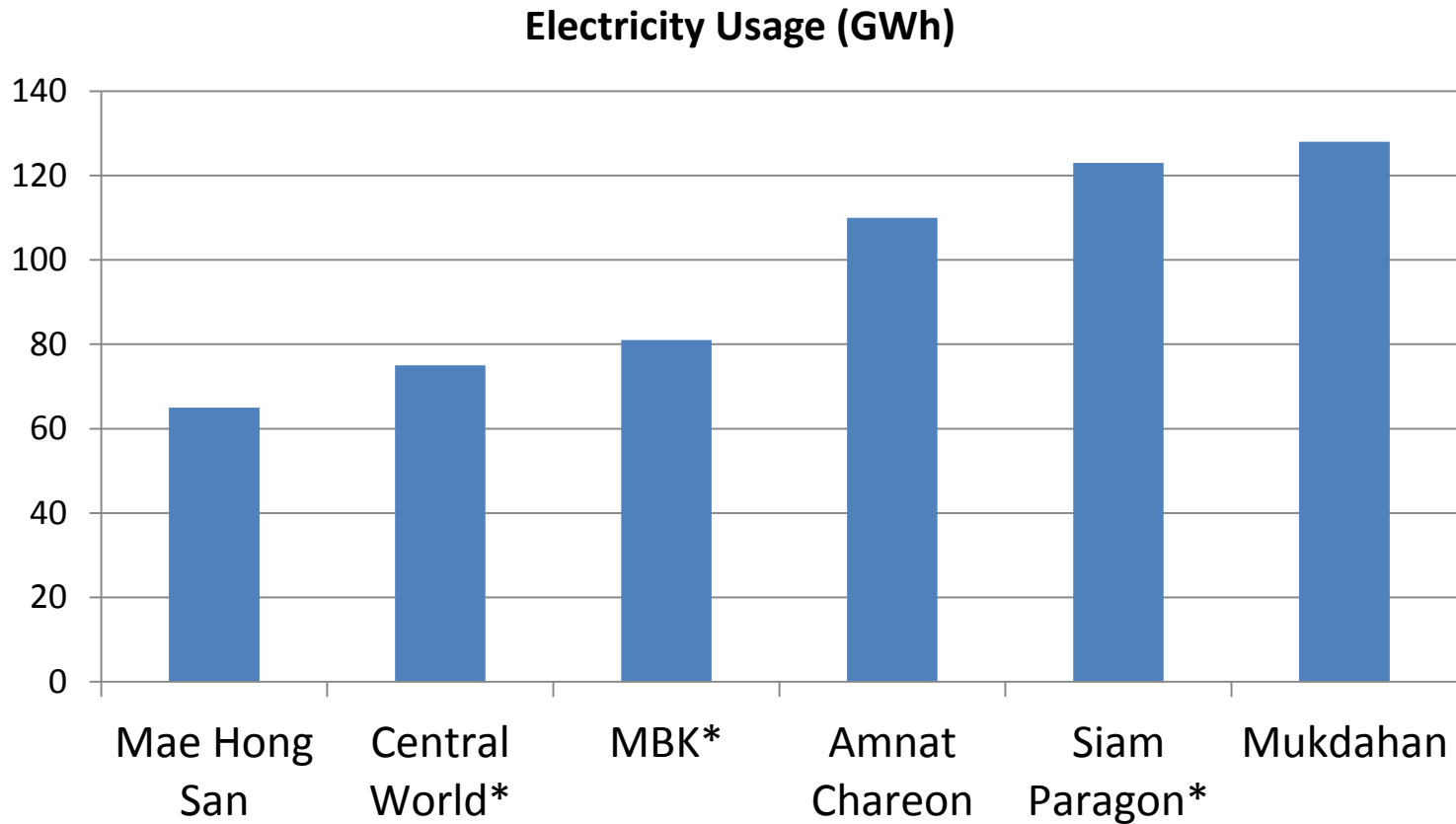
The rural-urban divide

- **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 Shopping Malls (*) and Rural Provinces



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.

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.

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



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.

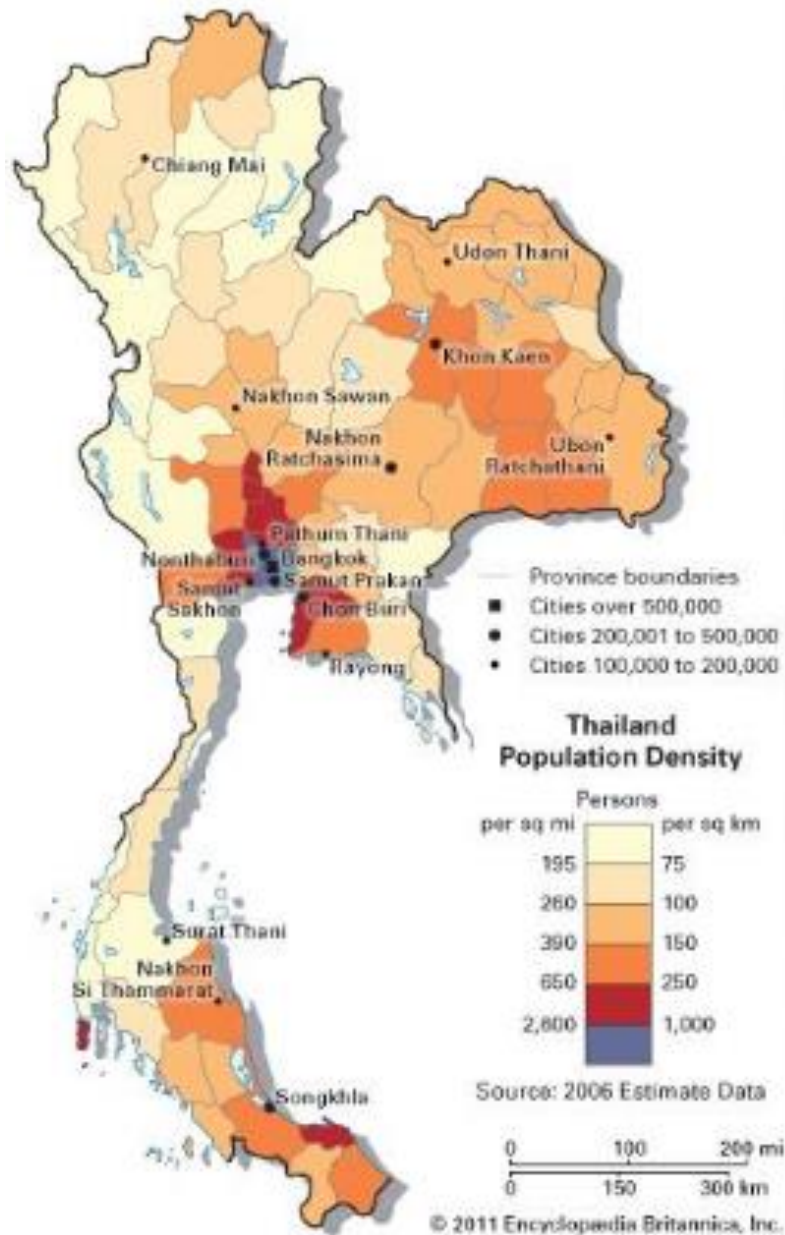
Urbanization reduces poverty

- 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.

Thailand Population Density Bangkok is a primate city in Thailand



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

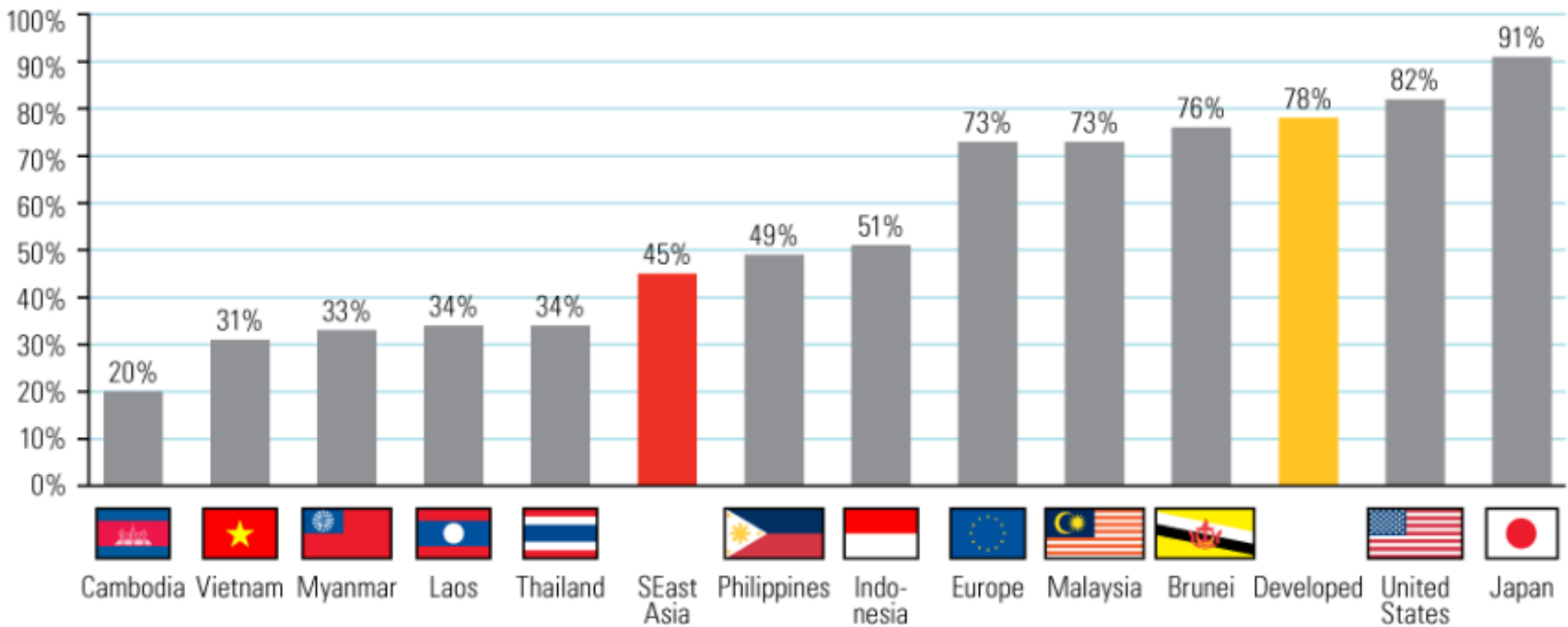
- Primate city dominates the country in influence and are the national focal-point.
- Its sheer size and activity becomes a strong pull factor, bringing additional residents to the city and causing the primate city to become even larger and more disproportional to smaller cities in the country.

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?*

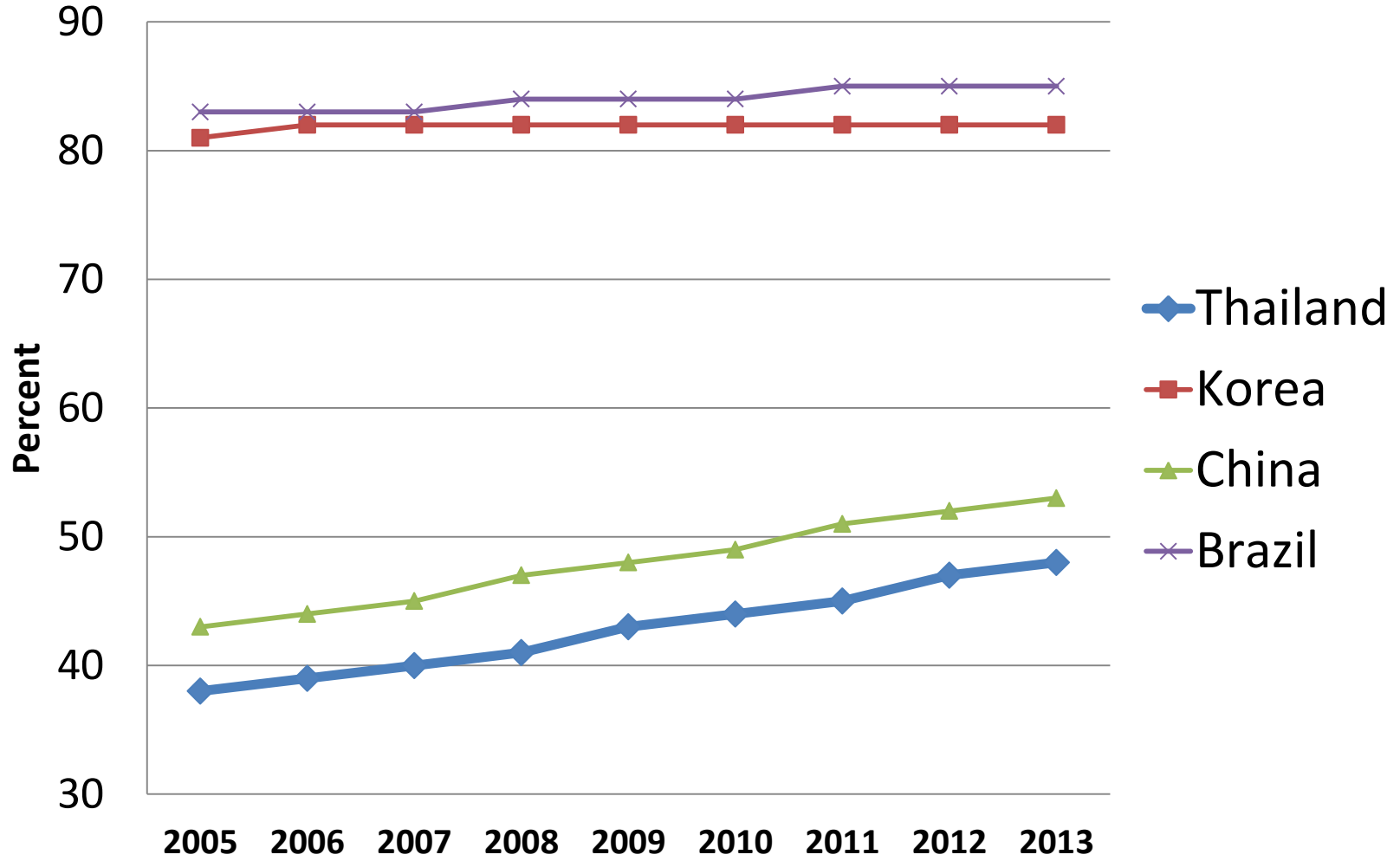
Thailand's rate of urbanization is lower than average SEA countries

Urbanization Remains Low in Southeast Asia



Source: UN Population Database, BofA Merrill Lynch Global Research

Urban population (% total)



By 2016, urbanization rate in Thailand increased to 50%

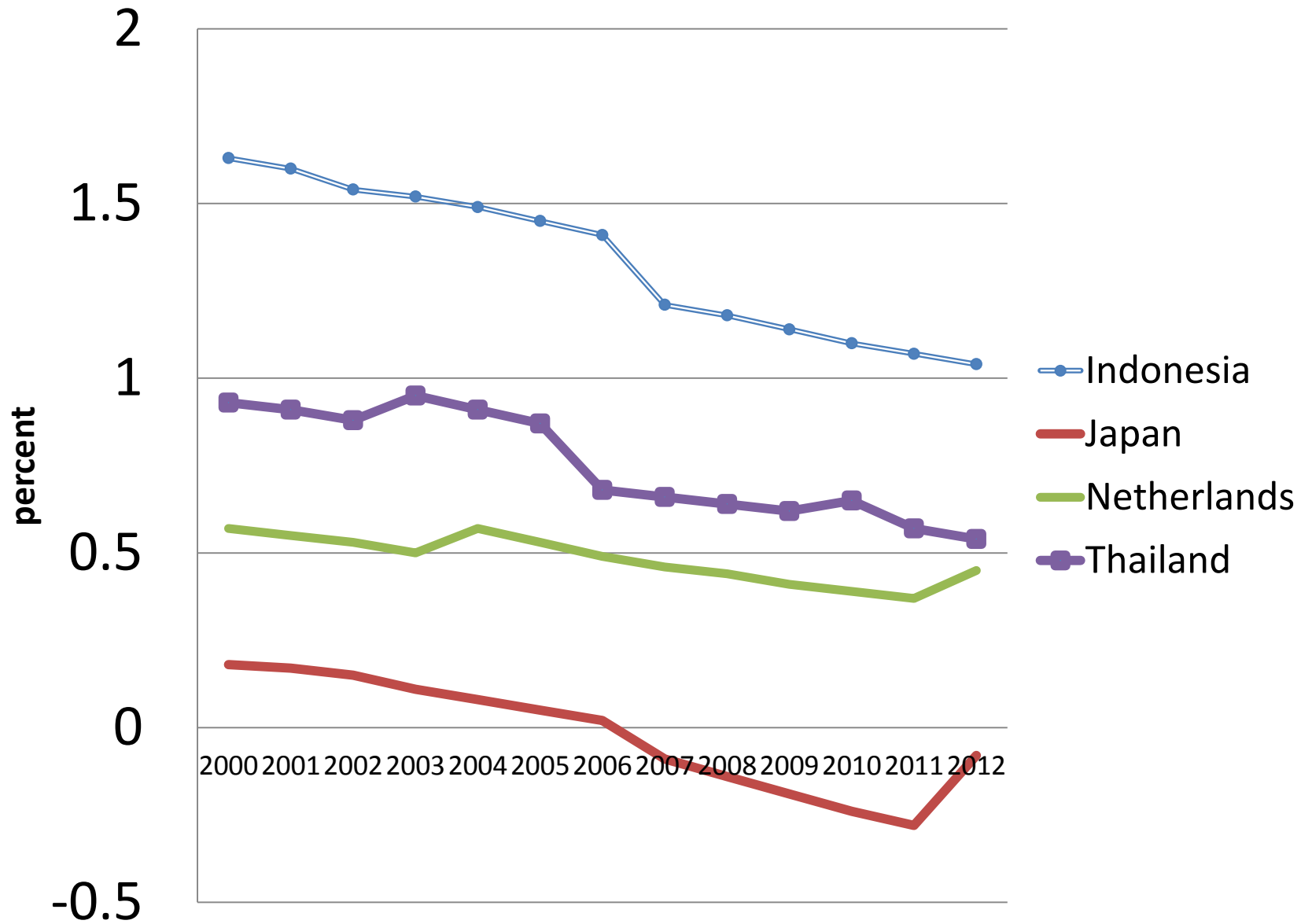
Characteristics of Unsustainable Urbanization

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?*

The current population of **Thailand** is **68,224,736** as of Wednesday, November 30, 2016, based on the latest United Nations estimates

- Thailand population is equivalent to **0.92%** of the [total world population](#).
- Thailand ranks number **20** in the list of countries
- The population density in Thailand is 133 per Km² (346 people per mi²).
- The total land area is 510,844 Km² (197,238 sq. miles)
- **50 %** of the population is **urban** (34,810,313 people in 2016)
- The **median age** in Thailand is **38.5 years**.

Pouplation 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 Bangkok Metropolitan Region would not be expanding without limit.**

Urbanization and population growth

- 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 Bangkok Metropolitan Region 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

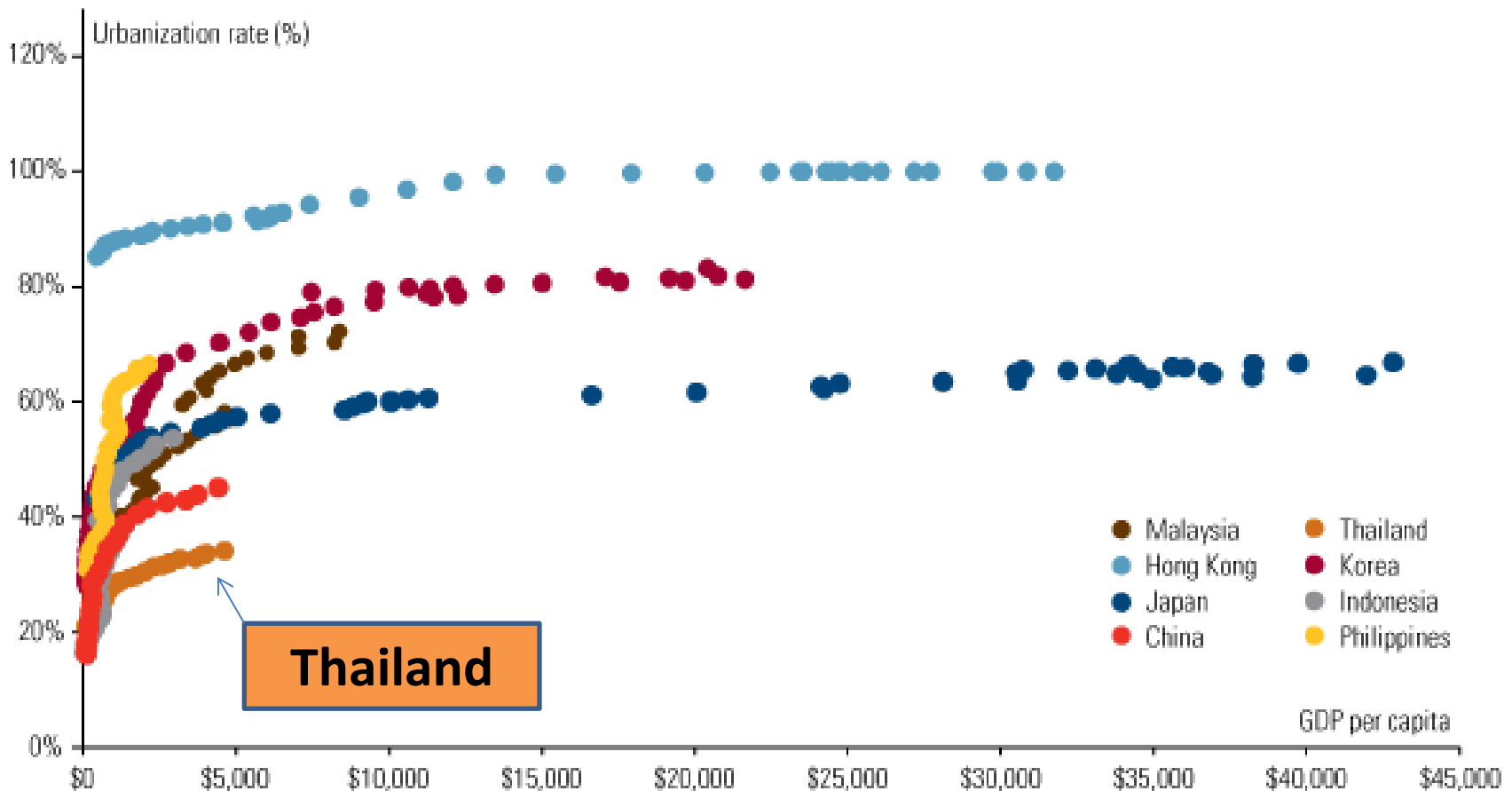
- If the urban sector can provide better job opportunities with more stable income, urbanization is **not** a disaster and therefore should be **welcome**.
- The important question is **how** to prepare labors from rural areas to make them suitable for working in the urban sector.

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.

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

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.

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.

Cities with the most percentage of public green space

Vienna 51%

Singapore 47%

Sydney 46%

Hong Kong 40%

Rio De Janeiro 40%

London 38.40%

Stockholm 30%

Johannesburg-Gauteng 24%

New York City 19.7 % or 14% Park

Score/World Culture Report

San Francisco 17.9%

Portland OR 16.3%

Los Angeles 16.2%

Munich 16%

Berlin 14.40%

Jakarta 10.4%

Paris 9.40%

Amsterdam 9.09%

Chicago 8.5%

Buenos Aires 5%

Tokyo 3.44%

Rome 3%

Shanghai 2.60%

Mumbai 2.50%

Istanbul 1.5%

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?

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