Indonesia's Urban Development
Towards Inclusive and Sustainable Economic Growth

Taimur Samad
Senior Urban Economist

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Why Urbanization Matters

- Urbanization creates opportunities for increasing economic growth and poverty reduction

- Economic concentration creates agglomeration economies that boost regional development

- Increase the role of cities in boosting regional development, as opposed to creating new growth centers

- Many metropolitan areas are doing very well and should be supported by national government

- Policy needs to be stratified by city size and the challenges faced in each category

Structure of the Presentation

⦿ **Urbanization trends**

- Rapid urbanization consistent with global experience

⦿ **Population and Economic Concentration**

- Is Java too dominant?

- Agglomeration as a measure of metropolitan areas

⦿ **Regional Development and Urbanization**

- Linking urbanization and economic development through the Master Plan for Regional Development (MP3EI)

⦿ **Growth of Major Cities**

- Which cities are growing fastest?

- Core city versus periphery

⦿ **Assessing Metropolitan Performance**

- How does performance vary across metropolitan area?

⦿ **Proposed Policy Actions**

- Differentiate policy based on class size of metropolitan area

Urbanization Trends

*"No country has grown to middle income
without industrializing and urbanizing.
None has grown to high income
without vibrant cities."*
*World Development Report 2009:
Reshaping Economic Geography*

➢ As many countries continue their journeys through middle incomes and beyond, how can urbanization amplify economic prosperity and reduce poverty?

➢ How can policies and investments be prioritized to address pressing challenges at different stages of urbanization?

Which one of these Asian Countries has Urbanized the Fastest?

- China

- India

- Indonesia

- Philippines

- Thailand

- Vietnam

Indonesia has Fastest Urbanization Growth Rate

Compound Annual Growth Rates of Urban Population, 1970-2010
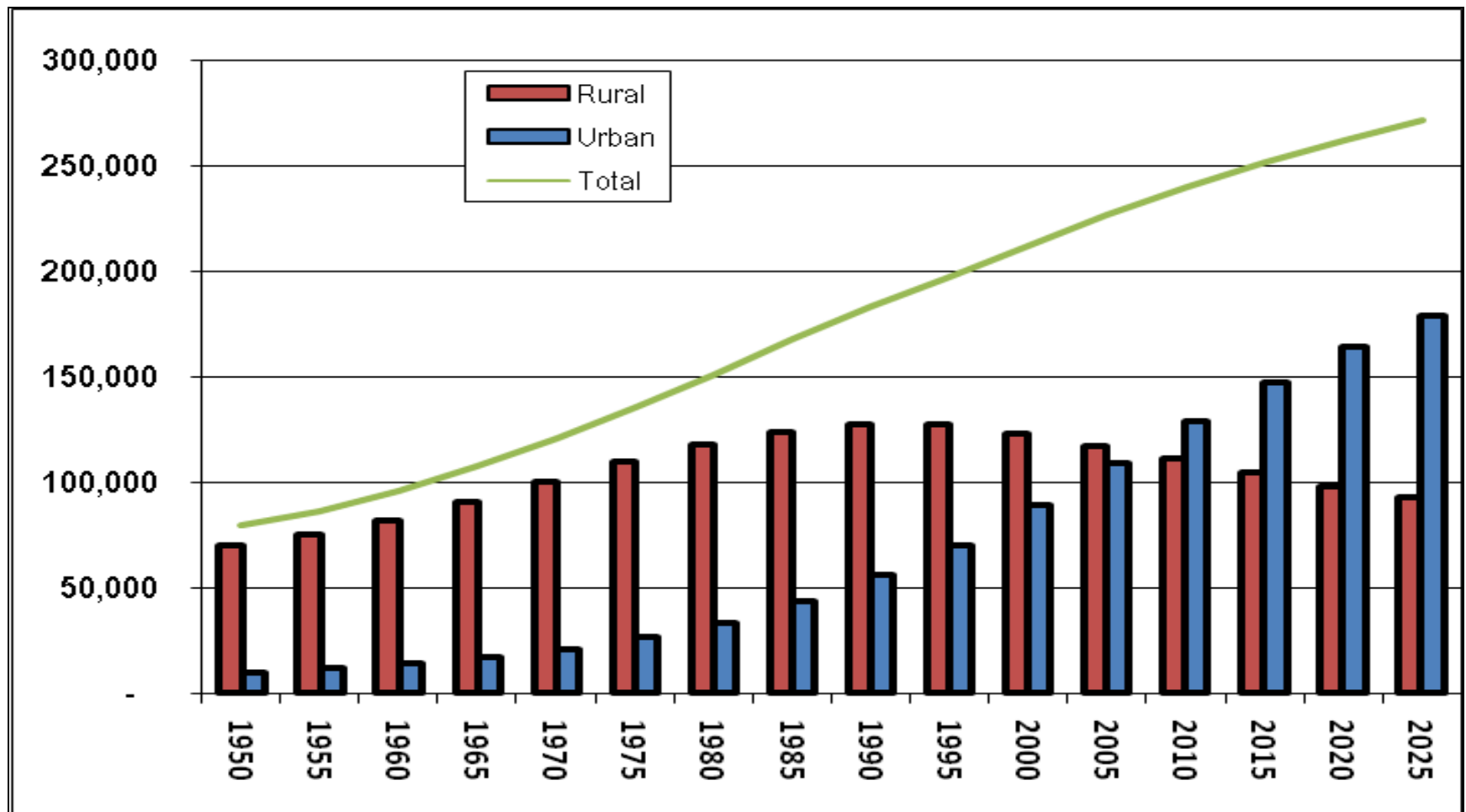

Country	Growth Rate
China	3.8%
India	3.1%
Indonesia	**4.2%**
Philippines	3.4%
Thailand	2.8%
Vietnam	3.1%
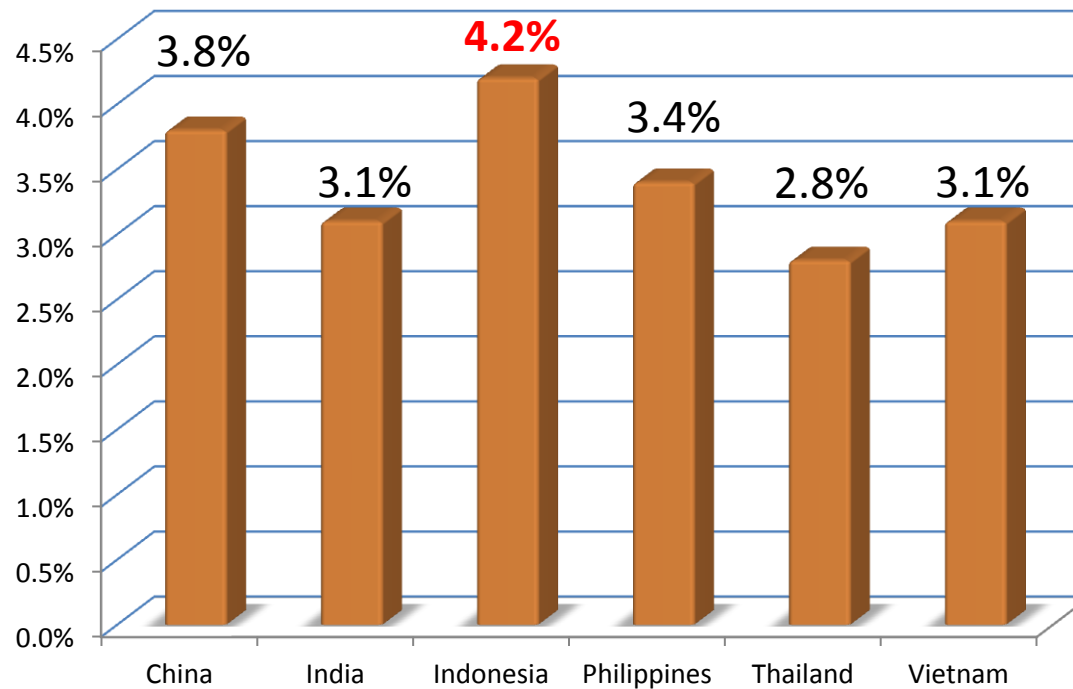
- Source: United Nations World Urbanization Prospects, 2010

Indonesia also has the Largest Share of Urban Population (2010)

- China   47 %
- India   30 %
- Indonesia   54 %
- Philippines   49 %
- Thailand   34 %
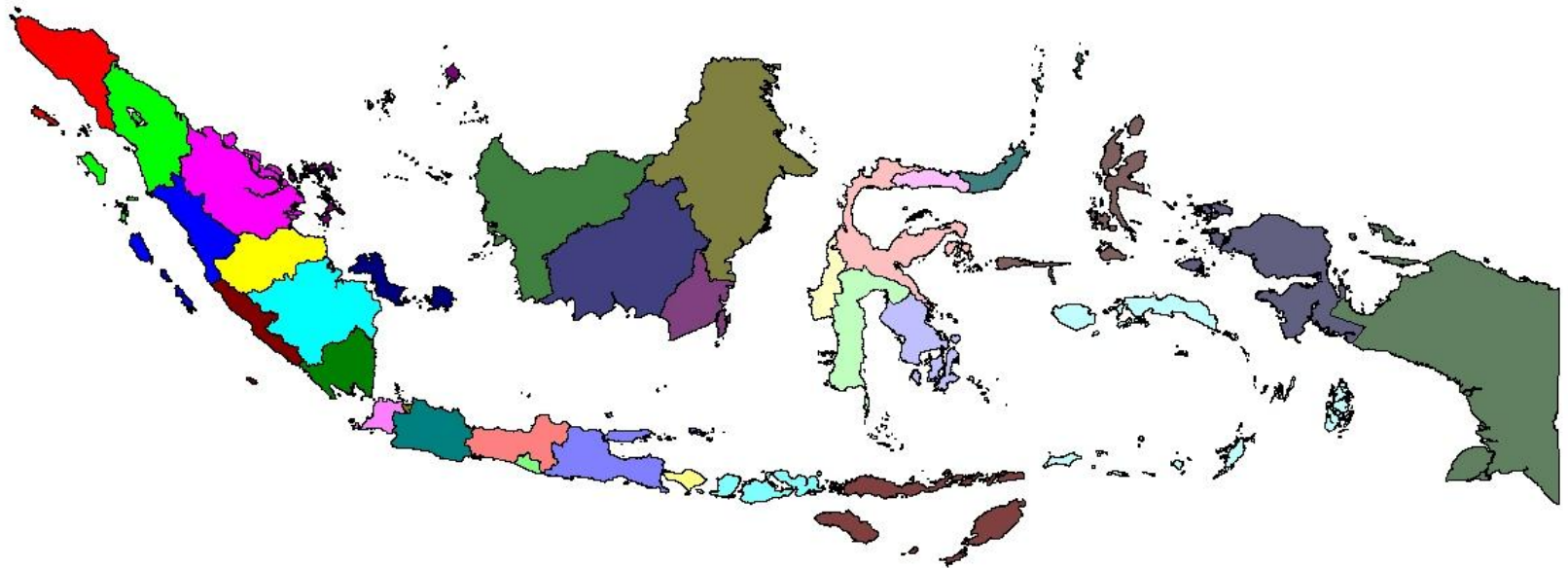- Vietnam   31 %

Urbanization will Continue to be Rapid: 67% by 2025

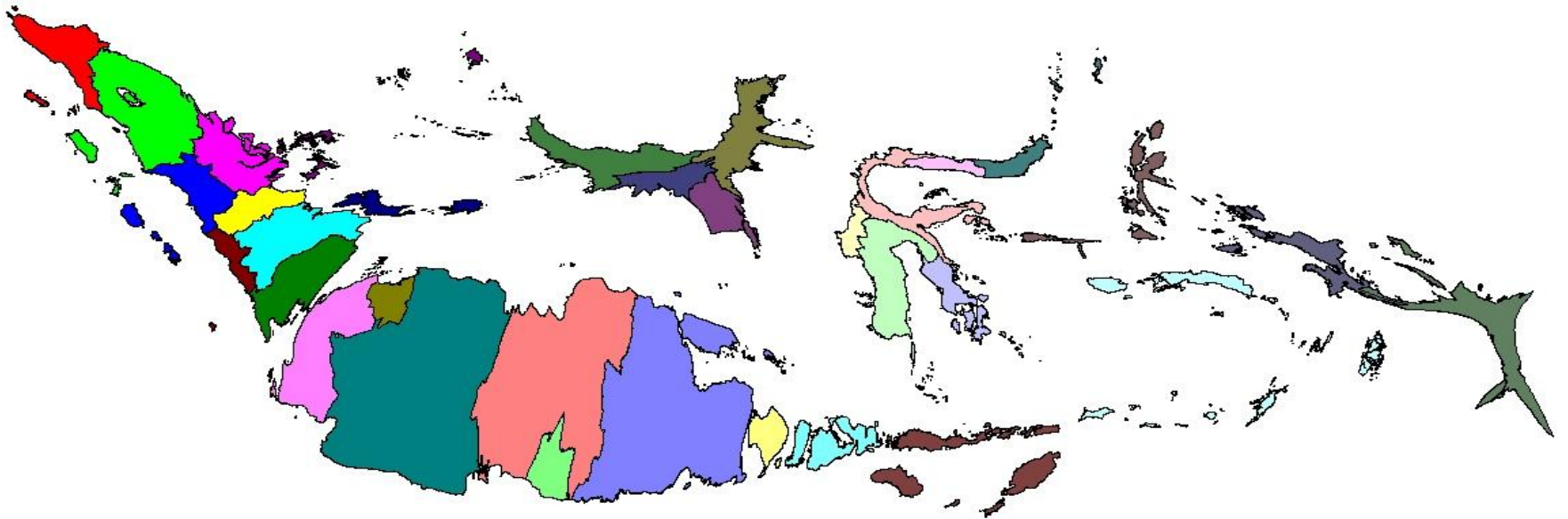**Indonesia will be one of the most urbanized countries globally**

Population and Economic Concentration

Indonesia as we know it

Java has the highest population density
58% of total population
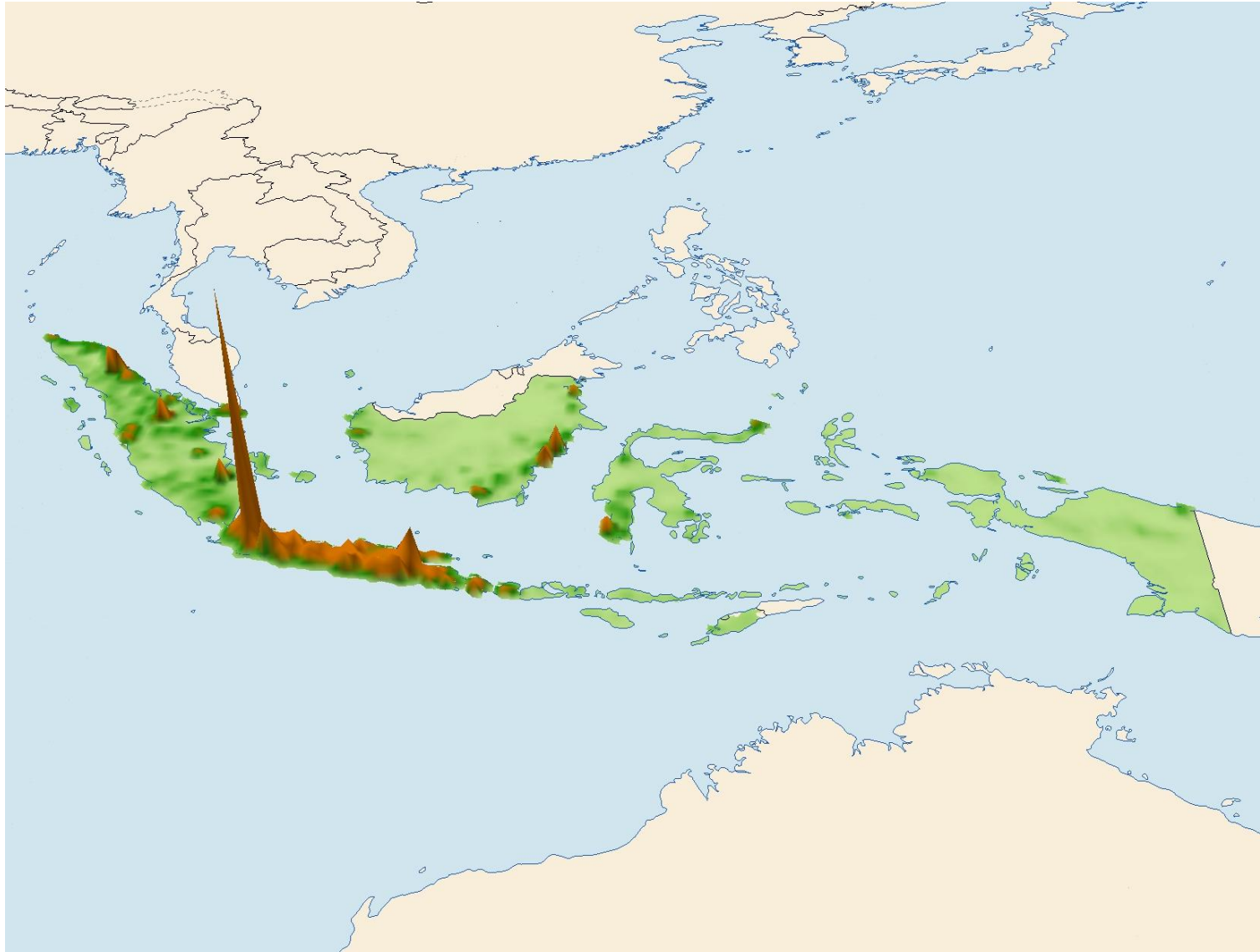

Size shows proportion of provincial population relative to national population

Highest Economic Density in Java

➢Major metropolitan areas of *Jakarta* and *Surabaya* *are dominant* in *Java*.
➢Off Java, economic activity is also concentrated in major urban areas.

What we really need is to link population and economic density

➢Agglomeration Economies

➢Agglomeration Indices
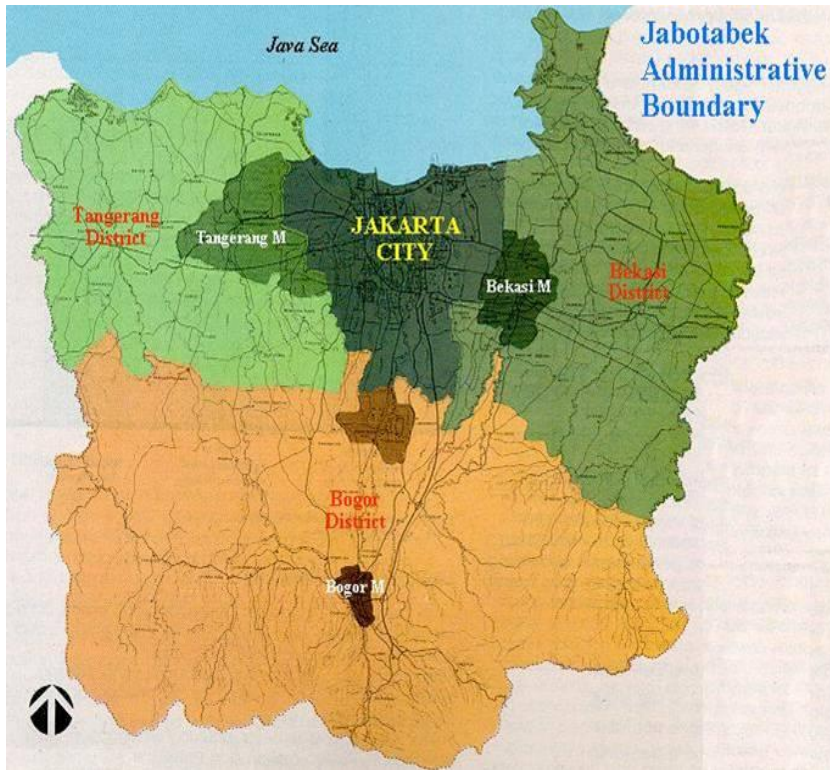
Agglomerations

- **Agglomeration Economies** are positive effects of firms and people locating close to one another.

- **Agglomeration Index (AI)** provides a method to link population and economic densities.

- AI defines **metropolitan areas** based on co-location of economy and people.

Using Agglomerations to Determine Metropolitan Areas

- Criteria used to calculate agglomeration:
  - existence of core urban center
  - minimum population density
  - maximum population commute times to work

- AI defines a metropolitan area as an economic entity:
  - multi-jurisdictional; e.g. Jabodetabek
  - people and economic activity locate across political boundaries

Indonesia's Largest Agglomerations / Metropolitan Areas

Jakarta Metropolitan Area (Jabodetabek)
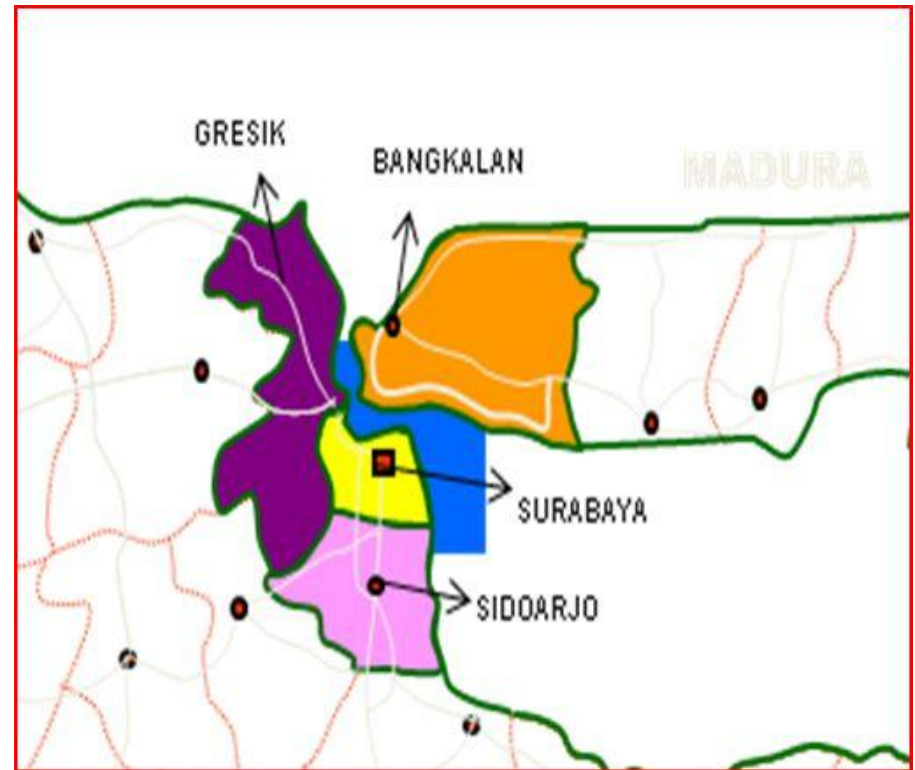
Surabaya Metropolitan Area (Gerbangkertosusila)

Based on population and economic densities alone,

Java appears to be highly urbanized

However, when we use the Agglomeration Index………
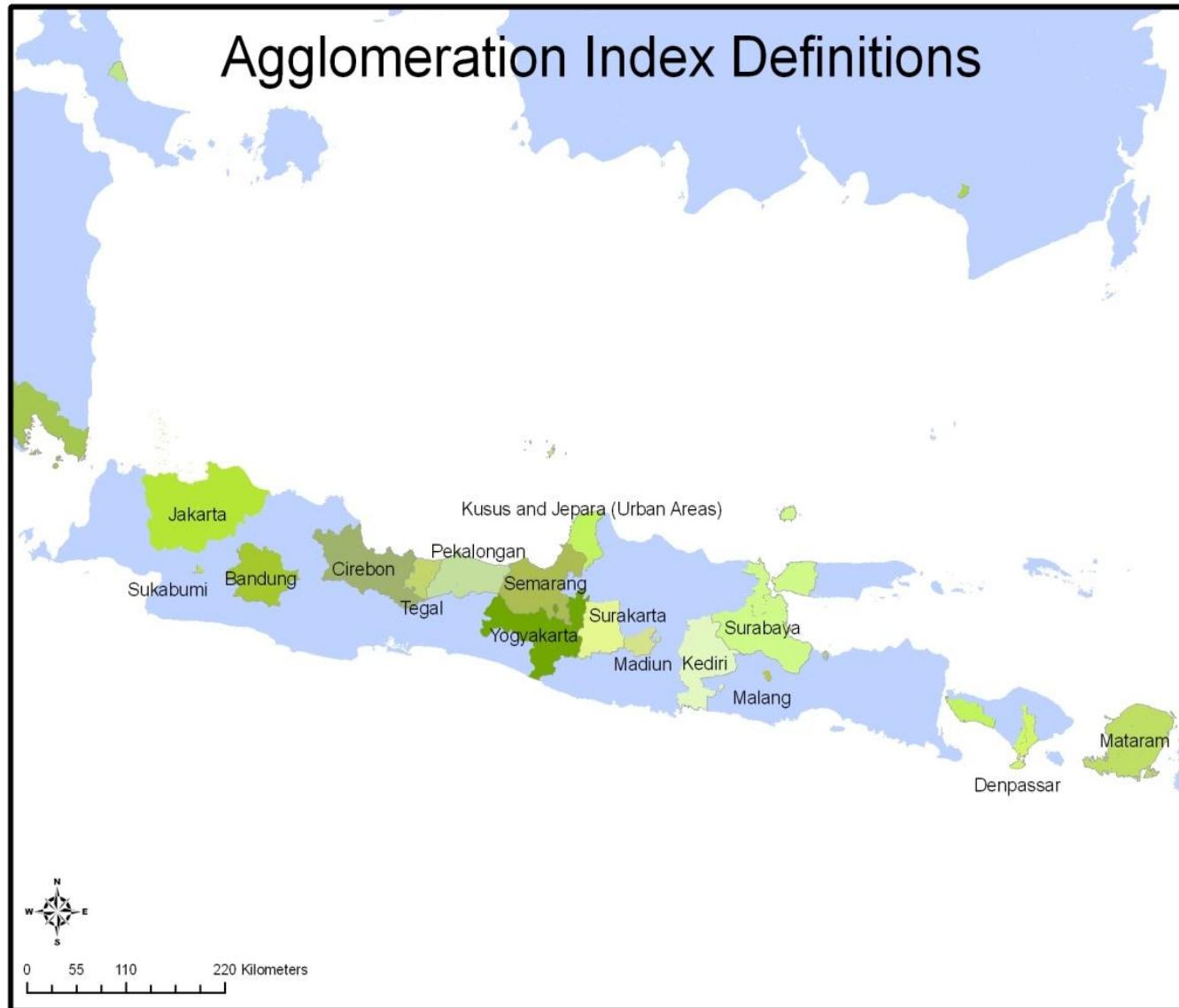
Sumatera's key agglomerations are Medan and Lampung

Sulawesi agglomerations are driven by Agribusiness and Fisheries

Agglomeration Index Definitions
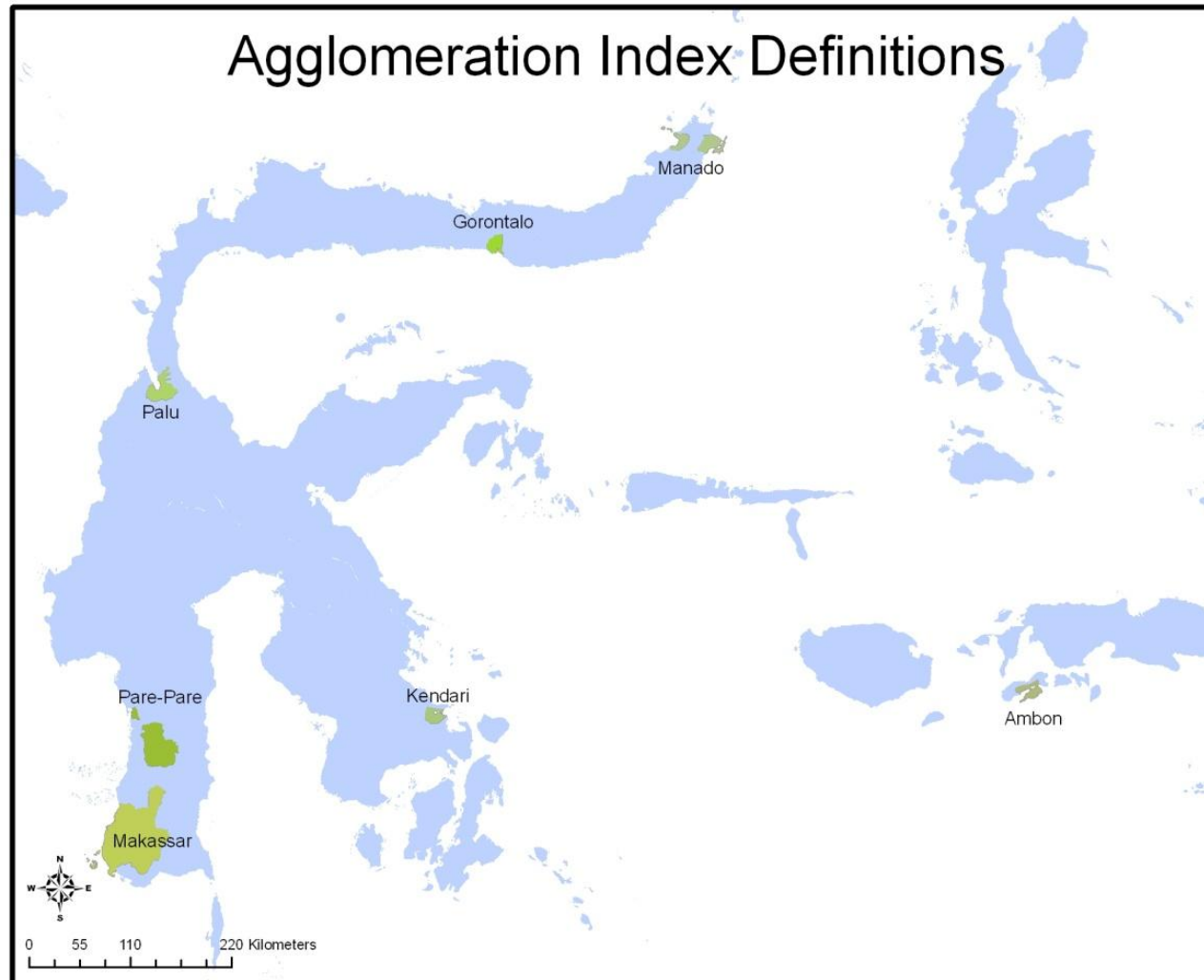
Regional Development and Urbanization

Linking Urban Trends with Economic Transformation Master Plan (MP3EI)

- Agglomerations are areas of economic activity that the Government can support to boost regional growth.

- This would be much more effective and less risky than creating new growth poles.

- The Master Plan for Regional Development has already identified many existing growth centers.

Economic Transformation Master Plan

Differentiated Regional Development Themes

"Plantations Production and Processing Center and National Energy Reserve"

"Mining Production and Processing Center and National Energy Reserve"

"National Plantation, Agriculture, and Fisheries Production and Processing Center"

Sumatera Corridor

Kalimantan Corridor

Sulawesi Corridor

Java Corridor

Bali Nusa Tenggara Corridor

Papua Corridor

"National Industry and Services Booster"

''National Tourism Gate and National Food Support''

"Abundant Natural Resources Processing and Prosperous Human Resources"

MP3EI implies treating each region differently with regard to Policy and Investment

- **Java**
  - improve intra-island connectivity through improved road networks
  - support higher valued manufacturing

- **Sumatra**
  - support natural resource economy
  - develop processing capacity for natural resources

- **Sulawesi**
  - improve maritime connectivity
  - focus on agribusiness and fisheries

MP3EI Implementation can use Agglomerations to Boost Regional Development

First, we need to assess which metropolitan areas are growing and how they are urbanizing.

Second, determine the challenges by class of metropolitan area and opportunities for growth.

Growth of Major Cities

Rapid population growth in major cities

Compound Annual
Growth of Population, 2001-2007

-0.5 - 0.1
0.1 - 1.5
1.5 -1.9
1.9 - 2.2
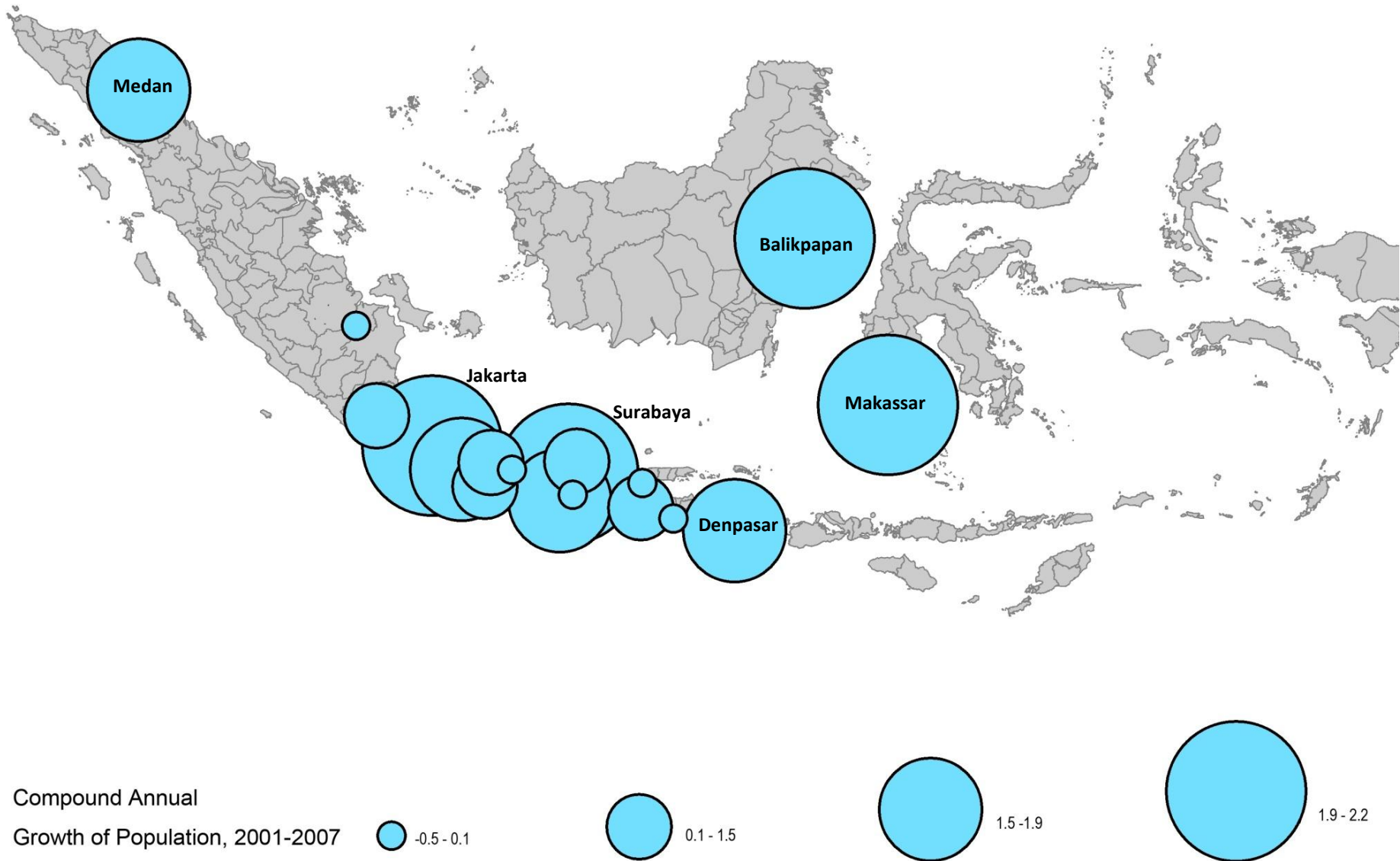
Metropolitan Areas Dominate
Especially Jakarta Metropolitan

Medan
3%

Jakarta Metro
28%

Bandung
2%

Semarang
2%

Surabaya 7%

Makassar 1%

Other urban
14%

Rural
43%
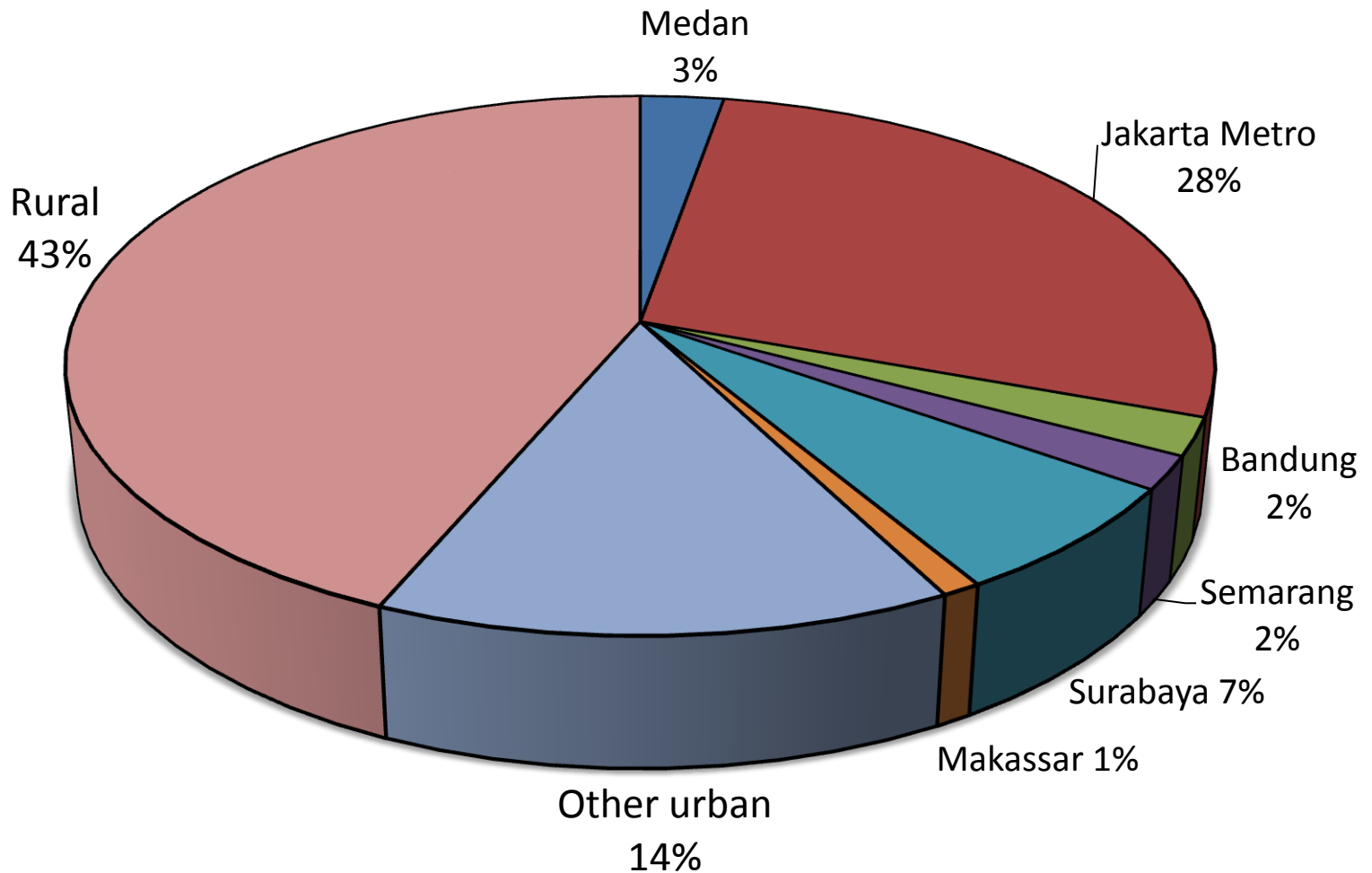
Gross Regional Domestic Product (GRDP) share to Non-oil GDP

Is Jakarta too big and dominant?

NO. Not if Compared to the Dominance of Core Cities Across Asia

City/region	Population (2007)	City Pop/ national pop	City GRDP/ national GDP
Seoul	9,820,000	20.8%	32.9%
Bangkok	11,971,000	17.8%	35.0%
Kuala Lumpur	4,815,000	17.4%	35.8%
Manila	11,553,000	13.0%	47.0%
Ho Chi Minh City	5,929,000	6.9%	24.2%
DKI Jakarta	9,146,000	4.1%	18.0%
Mumbai	16,434,000	1.3%	6.2%
Shanghai	16,407,000	1.3%	2.9%

City is defined only as core only

Also, Population is De-Concentrating from all Major Indonesian Metropolitan Areas

City	1990	1995	2000	2005	2010
DKI Jakarta	15.1%	12.2%	9.7%	9.3%	8.9%
Surabaya	4.5%	3.7%	3.0%	2.8%	2.4%
Bandung	3.8%	3.1%	2.5%	2.4%	2.3%
Medan	3.2%	2.7%	2.2%	2.1%	2.0%
Semarang	2.3%	2.0%	1.7%	1.4%	1.3%
Makassar	1.5%	1.3%	1.2%	1.2%	1.2%
Palembang	2.1%	1.9%	1.7%	1.4%	1.2%
Other Urban	67.6%	73.1%	78.0%	79.3%	80.6%
Total Urban	100.0%	100.0%	100.0%	100.0%	100.0%

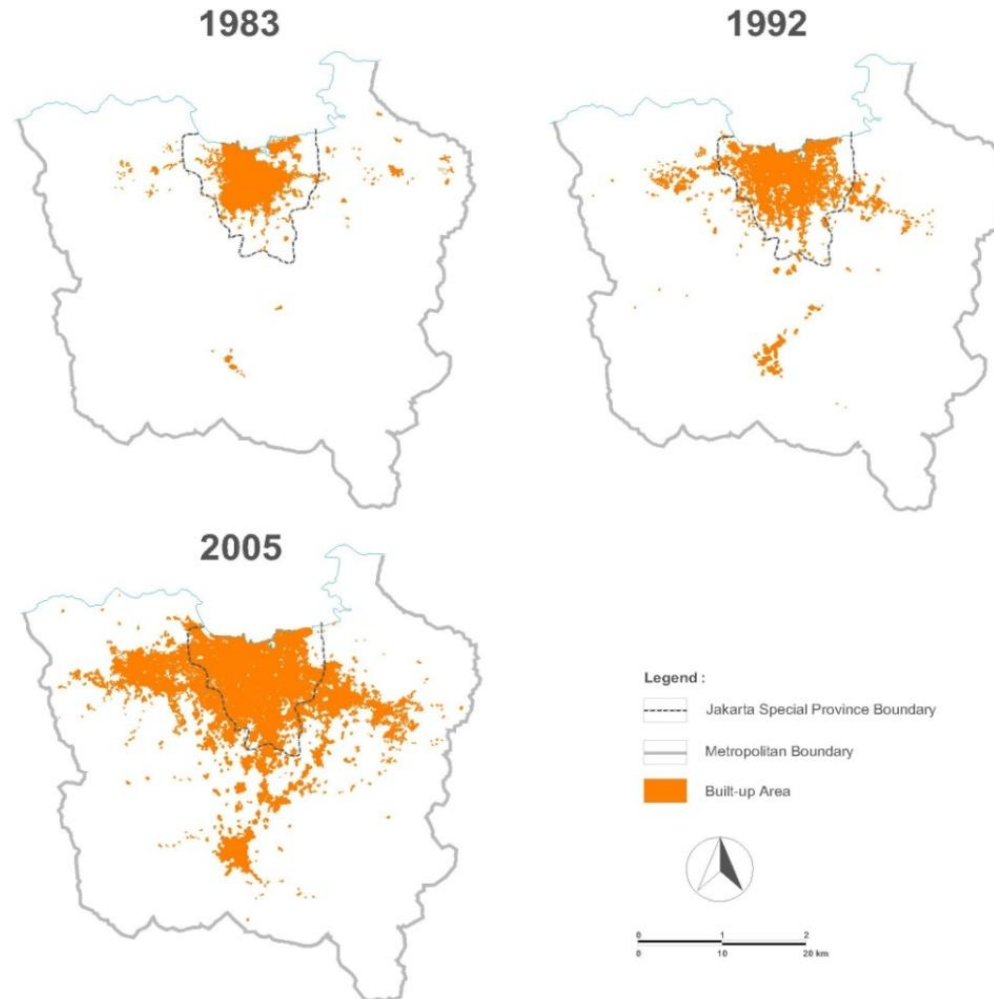Source: World Urbanization Prospects: The 2009 Revision.

How are Indonesia's Largest Cities Urbanizing?

Population growth is primarily in periphery, not in core city.

Metro name	2005			CAGR 1995 - 2005		
	Core	Periphery	Metro	Core	Periphery	Metro
Jakarta	8,820,603	12,799,559	21,620,162	0.44%	2.47%	1.56%
Surabaya	2,611,506	5,974,090	8,585,596	0.33%	1.46%	1.10%
Bandung	2,270,969	5,079,430	7,350,399	0.66%	3.13%	2.26%
Semarang	1,446,533	4,335,017	5,781,550	0.97%	1.15%	1.10%
Medan	2,029,797	1,812,196	3,841,993	1.07%	0.10%	0.59%
Palembang	1,369,239	1,122,731	2,491,970	1.20%	-2.67%	-0.85%
Makassar	1,194,583	1,106,362	2,300,945	1.58%	1.58%	1.58%
Denpasar	574,610	1,208,004	1,782,614	3.97%	1.07%	1.87%

Source: Indonesia Bureau of Statistics (BPS)

Cities are expanding beyond political boundaries:
Example of Jabodetabek

1983

1992

2005

Legend :

- - - - - - Jakarta Special Province Boundary

———— Metropolitan Boundary

■ Built-up Area

Assessing Metropolitan Performance

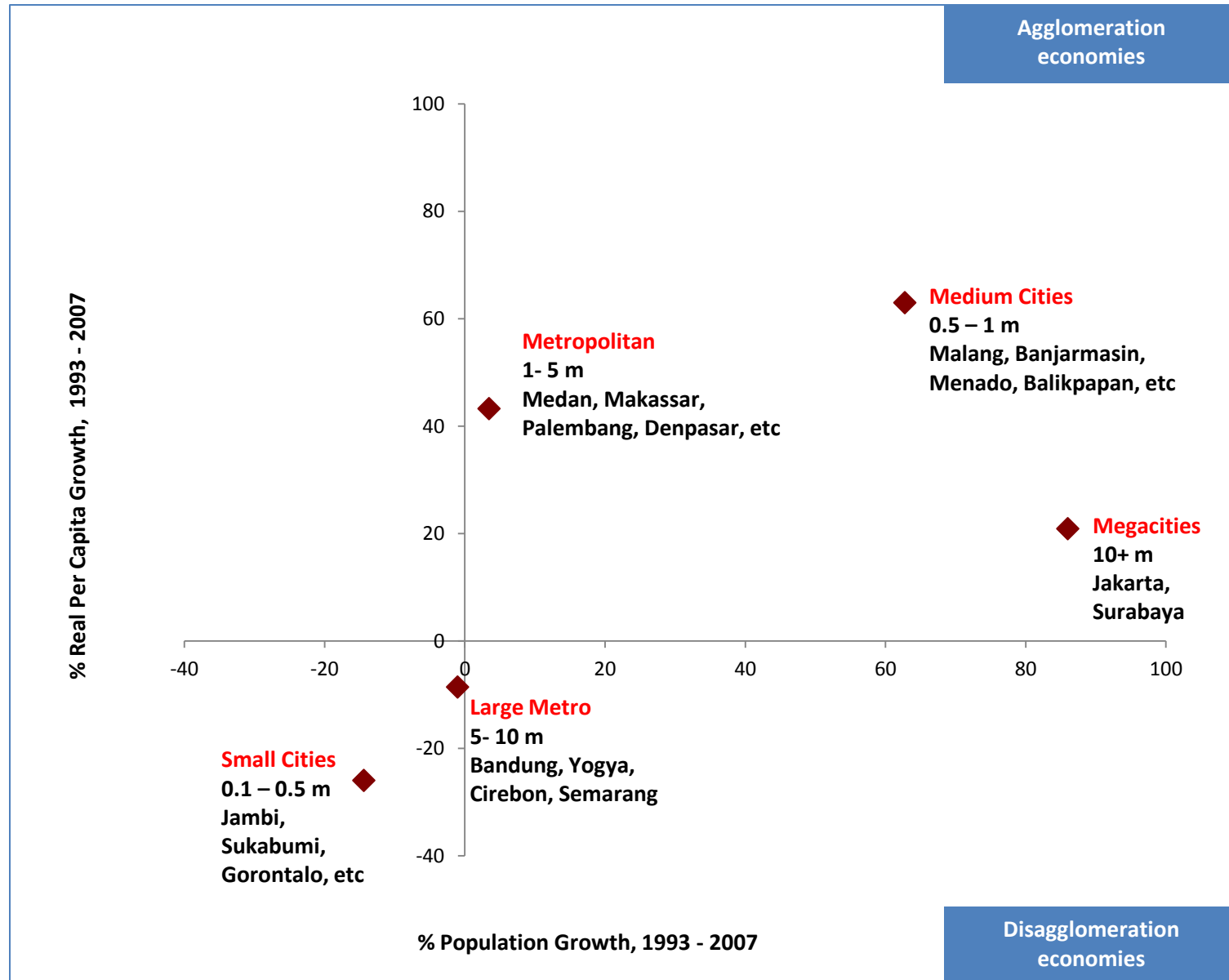# *Differentiate Metropolitan Areas*

- Classify metropolitan areas by class size.

- Observe performance in each class size over time:
  - population growth
  - real per capita income growth

Metropolitan Agglomeration by Population Size

Size category	Cities
Megacities 10 million +	Jakarta, Surabaya
Large Metropolitan 5 – 10 million	Bandung, Yogyakarta, Cirebon, Semarang
Metropolitan 1 – 5 million	Medan, Kediri, Surakarta, Makassar, Bandar Lampung, Padang, Denpasar, Palembang, etc
Medium cities 0.5 – 1 million	Malang, Madiun, Pekan Baru, Banjarmasin, Menado, Samarinda, Pontianak, Balikpapan
Small urban 0.1 – 0.5 million	Jambi, Sukabumi, Palu, Kupang, Bengkulu, Ambon, Banda Aceh, Jayapura, Gorontalo, etc

How has each class of city performed based on population increase and real per capita income growth?

Performance of Agglomerations

Agglomeration economies

% Real Per Capita Growth, 1993 - 2007 (y-axis)

% Population Growth, 1993 - 2007 (x-axis)

Medium Cities
0.5 – 1 m
Malang, Banjarmasin, Menado, Balikpapan, etc

Metropolitan
1- 5 m
Medan, Makassar, Palembang, Denpasar, etc

Megacities
10+ m
Jakarta, Surabaya

Large Metro
5- 10 m
Bandung, Yogya, Cirebon, Semarang

Small Cities
0.1 – 0.5 m
Jambi, Sukabumi, Gorontalo, etc

Disagglomeration economies

Proposed Policy Actions

Based on performance, each class of city requires a different policy treatment and response

Megacities of Jakarta and Surabaya

- Population and income growth moderate

- Transforming economic landscape
  - increasing services, such as finance in core city
  - manufacturing decentralizing to periphery
  - important linkage to international markets

- Challenge with coordination between core city and periphery

- Insufficient trunk infrastructure
  - roadways, water and sewerage, solid waste management

Policy Actions for Megacities of Jakarta and Surabaya

- Improve international connectivity
- Large-scale investment required in infrastructure to facilitate intra-urban links between core and periphery
- Core City: Increase density and support rapid services sector growth
- Periphery: Create manufacturing estates to avoid sprawl of industries
- Improve coordination across districts and with central government regarding planning and priority investments

Large Metropolitan Areas

- Agglomeration sizes of 5-10 million
  - Bandung, Yogyakarta, Cirebon, Semarang (all in Java)

- Population and economic growth stagnant

- Policy Actions:
  - create better domestic connectivity to other high performing urban areas
  - improve business climate
  - assess major constraints to their development

Metropolitan Areas and Medium-sized Cities

- Agglomeration sizes:
  - metropolitan, 1-5 million
  - medium cities, 0.5 – 1 million

- High population and income growth

- Cities have adequate infrastructure

- Policy Actions:
  - greater support and coordination from central government in investment planning and implementation
  - focus on spatial planning and land-use as they continue to expand

Small Cities

- Declining population and contracting income

- Inadequate infrastructure

- Usually close to rural and border areas

- Policy Actions:
  - focus on improving the provision of basic services
  - improve links to rural areas to enhance access to markets

Urbanization Presents an Opportunity

- Urban areas are key drivers of non-oil growth

- Link implementation of Economic Transformation Master Plan (MP3EI) to urbanization and metropolitan development

- Focus on making agglomerations perform better, rather than create new growth centers

- Differentiate strategy by metropolitan class size

Terima kasih

Ferry-boat inland Java - Indonesia (1932)
www.semarang.nl