Law of Primate Cities/Rank-Size Rule

Unit 6 - Day 3
Quiz - 13.2, 13.3, and 13.4
Objectives

Content: I can explain how the rank-size rule and the law of primate cities explain the relative size of cities around the world.

Language: I can participate in quick discussions using evidence.
Note-Taking Guide: Law of Primate Cities and Rank Size Rule
Rank-Size Rule (1935)

Cities in a country are ranked according to their size in relation to the population of the country’s largest city.

- **Rank 1** - Largest City
- **Rank 2** - \( \frac{1}{2} \) the number of people as Rank 1 city
- **Rank 3** - \( \frac{1}{3} \) the number of people as Rank 1 city
- **Rank 4** - \( \frac{1}{4} \) the number of people as Rank 1 city
- **Rank n** - \( \frac{1}{n} \) the number of people as Rank 1 city
Rank Size Rule Correlation in Germany

Population (in millions) vs. Cities

- Berlin
- Hamburg
- Munich
- Cologne
- Frankfurt

Population
Rank Size Rule
Rank Size Rule
Problems with Rank-Size Rule

- In some countries the difference between a First Ranked and a Second Ranked city was much less than expected.
  - Example: New York City is only 1.3 times larger than Los Angeles

- Some countries are dominated by PRIMATE CITIES so the changes are larger than expected.
  - Example: Kinshasa, Democratic Republic of Congo is 8 times larger than the next largest city Lubumbashi
Uses for Rank-Size Rule

- Sets a **general classification** for Ranking cities by population in a country.
- Measures **degree of primacy** for a particular city in a country.
- Helps **distinguish countries with special characteristics**
  - Area, Wealth, etc.
Primate City (1939)

- The largest city within a nation which dominates the country not solely in size - being more than twice as large as the second city - but also in terms of influence.
Examples of Primate Cities

- **Paris**, at a population of **2.34 million** is definitely the focus of France, while **Marseilles** has a population of **855,000**
- In the **United Kingdom** the area of **London** has a population of **8.6 million** while the second largest city, **Birmingham** only has around **977,087**.
- **Mexico City** has a population of **8.6 million** while Guadalajara is only about **1.6 million**
<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Magnetic attraction for businesses, services, and people (cumulative effect)</td>
<td>● Urban-rural inequalities</td>
</tr>
<tr>
<td>● Can attract international trade and business</td>
<td>● Uneven development</td>
</tr>
<tr>
<td>● Centralize transportation and communication</td>
<td>● Concentration of Power</td>
</tr>
<tr>
<td>● Enhanced flow of ideas and information among larger populations</td>
<td>● Has a parasitic effect, sucking wealth, natural and human resources into the city</td>
</tr>
<tr>
<td>● Ability to offer high-end goods due to increased <strong>threshold</strong></td>
<td>● Becomes a center for unemployment, crime, and pollution</td>
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</tbody>
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Bangkok: The Classic Primate City

- **Over 40 times larger** than any other city in Thailand
- Political, Financial, Cultural, and Communication center of Thailand
- Much of the economy of rural Thailand is in support of Bangkok
# Thailand’s Largest Cities

<table>
<thead>
<tr>
<th>Name</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Bangkok, Bangkok</td>
<td>5,104,476</td>
</tr>
<tr>
<td><strong>2</strong> Mueang Samut Prakan, Samut Prakan</td>
<td>388,920</td>
</tr>
<tr>
<td><strong>3</strong> Mueang Nonthaburi, Nonthaburi</td>
<td>291,555</td>
</tr>
<tr>
<td><strong>4</strong> Udon Thani, Changwat Udon Thani</td>
<td>247,231</td>
</tr>
<tr>
<td><strong>5</strong> Chon Buri, Chon Buri</td>
<td>219,164</td>
</tr>
<tr>
<td><strong>6</strong> Nakhon Ratchasima, Nakhon Ratchasima</td>
<td>208,781</td>
</tr>
<tr>
<td><strong>7</strong> Chiang Mai, Chiang Mai</td>
<td>200,952</td>
</tr>
<tr>
<td><strong>8</strong> Hat Yai, Songkhla</td>
<td>191,696</td>
</tr>
<tr>
<td><strong>9</strong> Pak Kret, Nonthaburi</td>
<td>182,926</td>
</tr>
<tr>
<td><strong>10</strong> Si Racha, Chon Buri</td>
<td>178,916</td>
</tr>
</tbody>
</table>
Problems of Bangkok

- Flooding
- Garbage/Human Waste
- Transportation
- Recreation Spaces
- Pollution
- Poor Planning
- Finance
- Conflicting demands
- Rapid urbanization/slums
Bangkok’s Dominance

In Thailand...

- 80% of phones are registered to Bangkok Addresses
- 79% of all pharmacists are located in Bangkok
- 45% of doctors are located in Bangkok
- 72% of all registered cars are in Bangkok
Example of Country without a primate city: Australia

<table>
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<th>Rank</th>
<th>Name</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sydney (NSW)</td>
<td>4,627,345</td>
</tr>
<tr>
<td>2</td>
<td>Melbourne (VIC)</td>
<td>4,137,432</td>
</tr>
<tr>
<td>3</td>
<td>Brisbane (QLD)</td>
<td>2,074,222</td>
</tr>
<tr>
<td>4</td>
<td>Perth (WA)</td>
<td>1,738,807</td>
</tr>
<tr>
<td>5</td>
<td>Adelaide (SA)</td>
<td>1,212,982</td>
</tr>
</tbody>
</table>
Arguments for and against Primate Cities in LDCS

FOR
They attract **overseas investment** and benefits that will eventually benefit the whole country (trickle down effect).

AGAINST
They are **unstoppable monsters** that create serious problems, shortages and escalating land prices that make them less attractive places to live.
Regional Primate Cities

The ideas of primate cities can be applied to regions within a country and specific states/provinces.
Does the United States have a primate city? Explain your reasoning.
Is Seattle a regional Primate City for the Northwest? Explain your answer with evidence.
“What are the World’s largest Cities”
“How the rise of the megacity is changing the way we live”

The Guardian