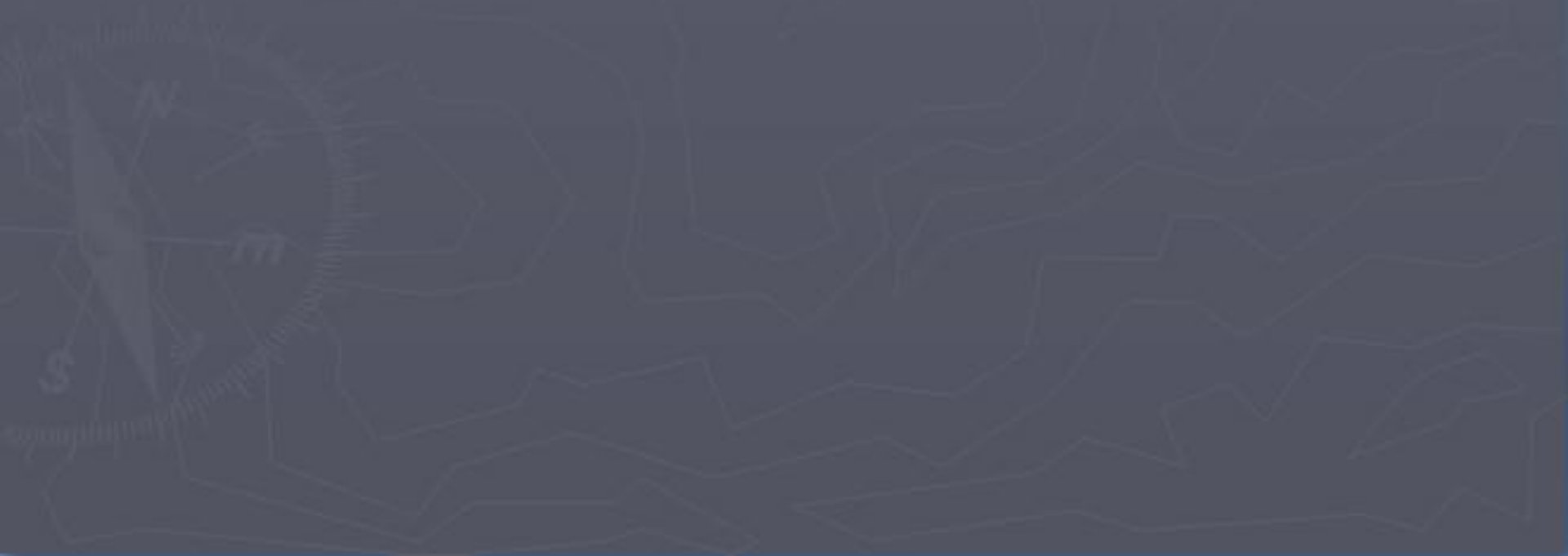


Primate Cities and the Rank-Size Rule



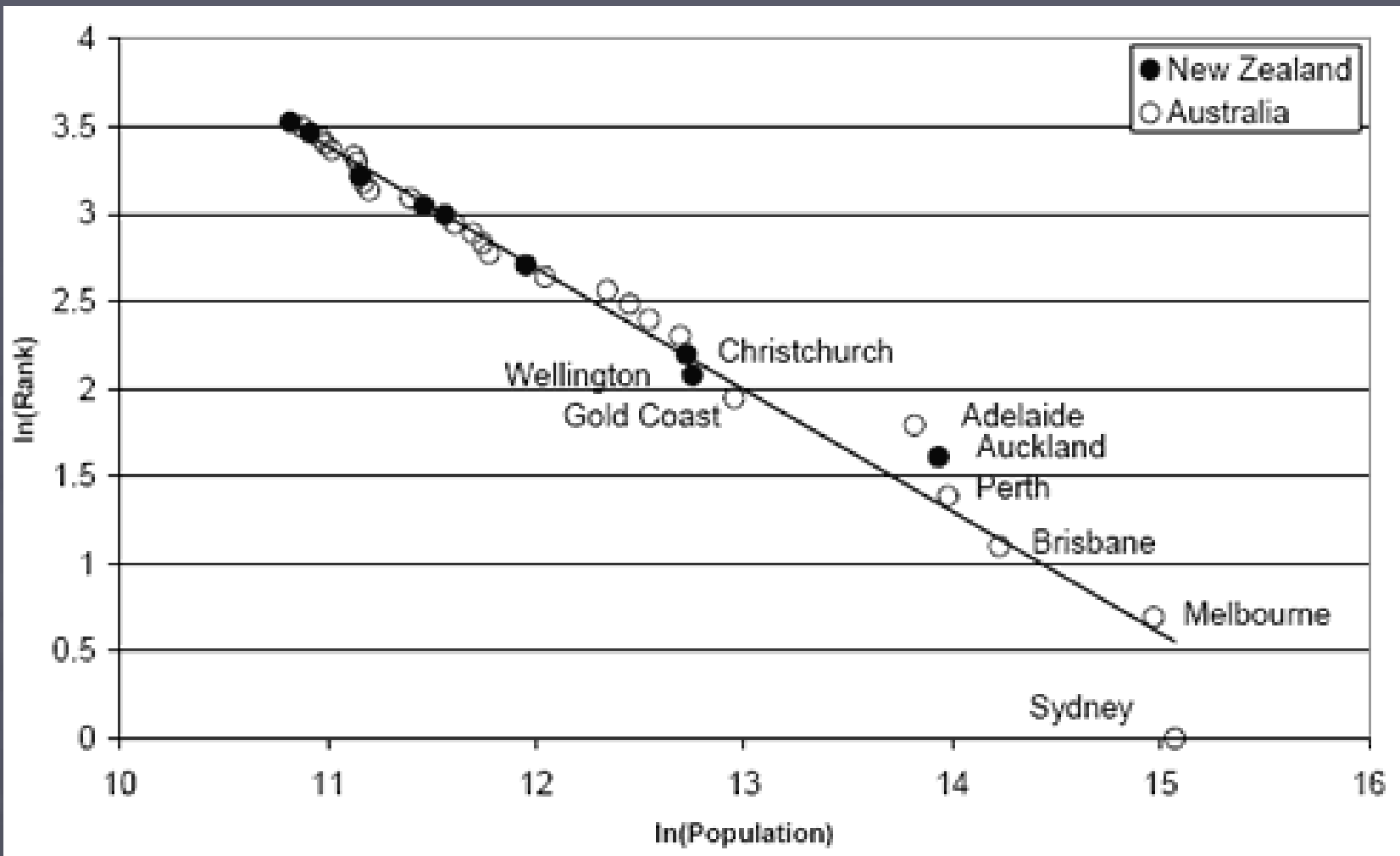
The Rank-Size Rule

- If all cities in a country are placed in order from the largest to the smallest, each one will have a population half the size of the preceding city.
 - Zipf's law applied to distribution of cities (1935)

Rank-Size Rule

- Cities in a country are ranked according to their size in relation to 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 5 – $\frac{1}{5}$ the number of people as Rank 1 city

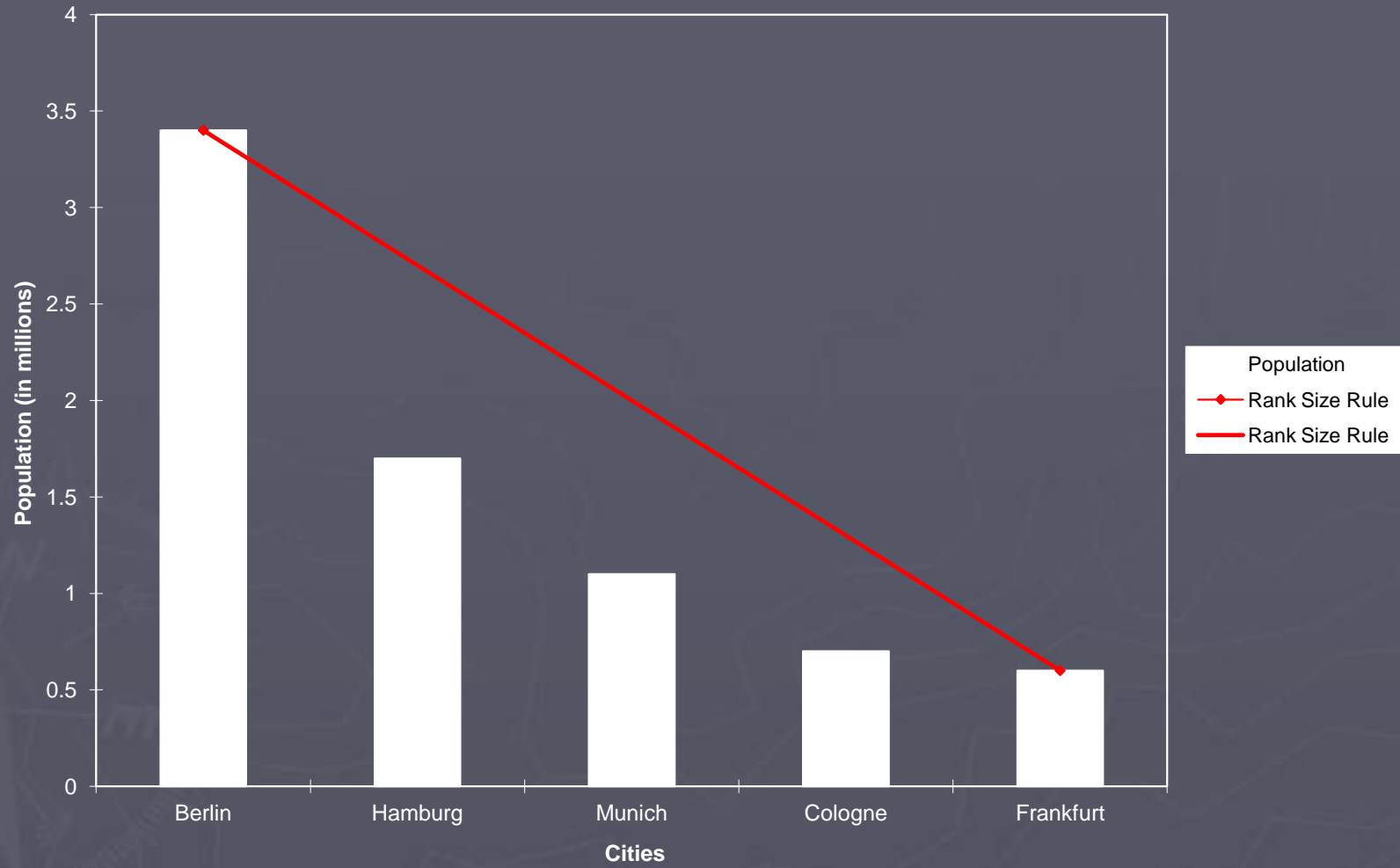
Rank-Size Rule (New Zealand and Australia)



Problems with Rank-Size Rule

- In some countries the differences between a First Ranked and a Second Ranked city was much less than expected
 - Ex. New York City is only 1.3times larger than Los Angeles
- Some countries are dominated by Primate cities so the changes are larger than expected
 - Ex. Kinshasa is 8times larger than the next largest city Lubumbashi

Rank Size Rule Correlation in Germany



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

- 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



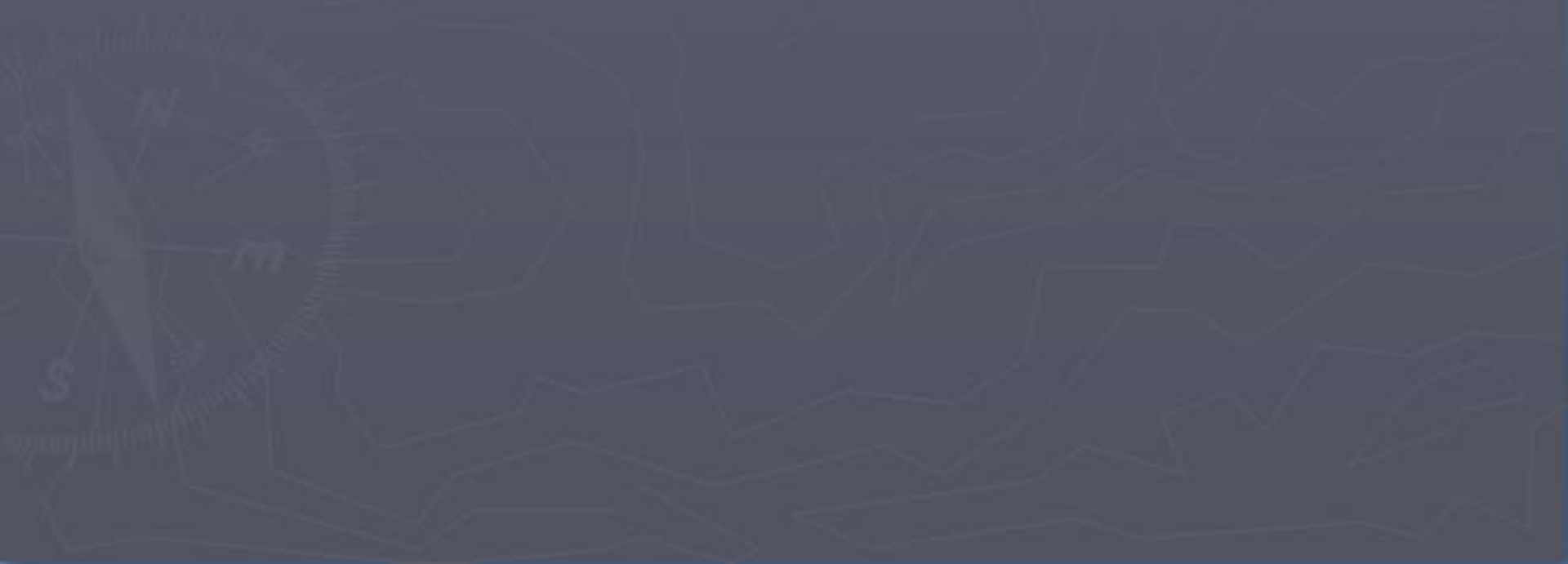
“The primate city is commonly at least twice as large as the next largest city and more than twice as significant.”

- Mark Jefferson, 1939

Examples of Primate Cities

- Paris, at a population of 9.6 million is definitely the focus of France, while Marseilles has a population of 1.3 million.
- In the United Kingdom the area of London has a population of 7 million while the second largest city, Birmingham only has around one million people.
- Mexico City, Mexico has a population of 8.6 million while Guadalajara is only about 1/4th the size at 1.6 million.

Activity: What are the primary advantages and disadvantages of living in a primate city?



Advantages and Disadvantages

Advantages

- Magnetic attraction for businesses, services and people (cumulative effect)
- Can attract international trade and business
- Centralize transportation and communication
- Enhanced flow of ideas and information among larger populations
- Ability to offer high-end goods due to increased threshold

Disadvantages

- Urban-rural inequalities
- Imbalance in development
- Concentration of Power
- Has a parasitic effect, sucking wealth, natural and human resources into city.
- Become centers for unemployment, crime, pollution

Bangkok: The Classic Primate City

- Over 40x larger than any other city in Thailand
- Political, Financial, Cultural, Communication center of Thailand
 - Much of economy of rural Thailand is in support of Bangkok

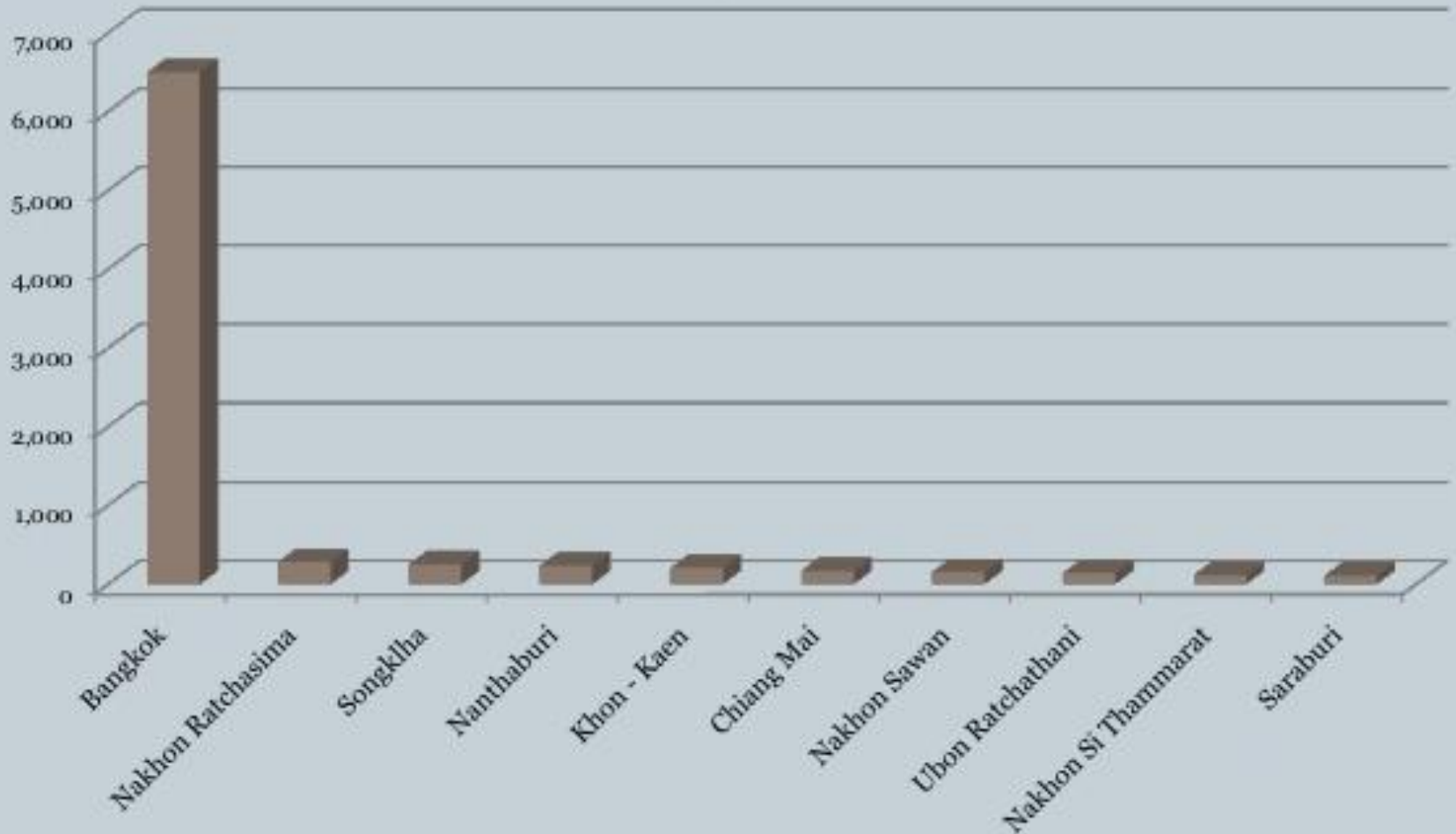


Thailand's Largest Cities

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



Bangkok's Dominance



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 a country without a primate city

Australia

Rank	Name	Population
1	Sydney (NSW)	4,627,345
2	Melbourne (VIC)	4,137,432
3	Brisbane (QLD)	2,074,222
4	Perth (WA)	1,738,807
5	Adelaide (SA)	1,212,982



Arguments for and against Primate Cities in LDCs

FOR

They attract overseas investment and benefits that will eventually benefit the whole country

AGAINST

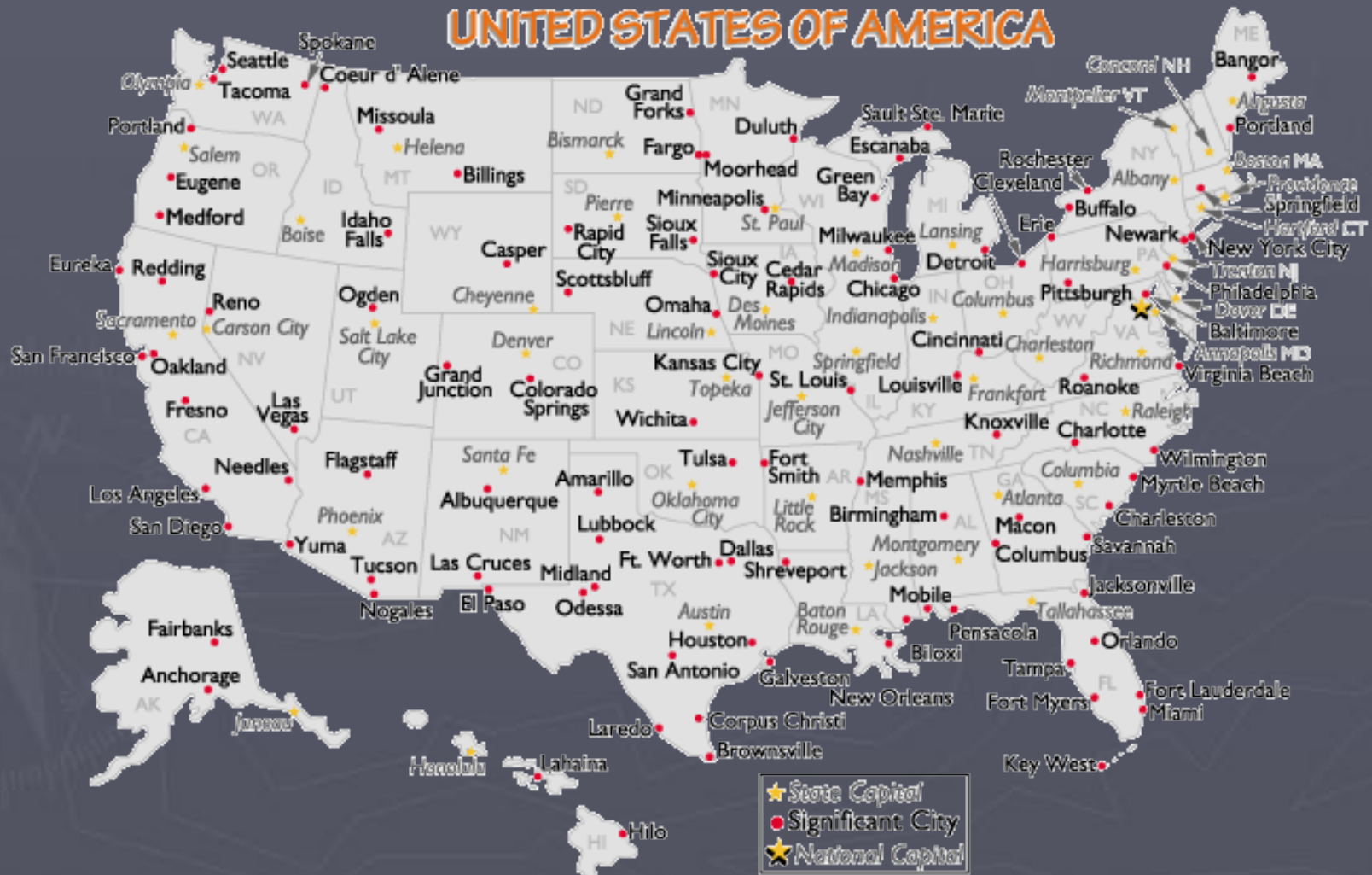
They are unstoppable monsters that create serious problems, shortages and escalating land prices that make them less attractive places to live in.

Regional Primate Cities

- The ideas of Primate cities can be applied to regions within a country and specific states/provinces



Activity: Does the United States Have a Primate City? Explain your reasoning.



Activity: Are the Twin Cities a regional Primate City for the Upper Midwest?
Explain your answer (With Evidence)

