

Housing in African Cities: why it matters and what is going wrong

Tony Venables, Oxford & IGC

- 2.7 bn new urban dwellers by 2050 -- 1.4 mn per week
 - India, 200k per week 2001-11
 - Africa, 350k per week projected
- LSE/Oxford/WB projects: Urbanization in Africa/ Urbanization and Development
- This talk:
 - Housing and urbanisation
 - Africa: why is private/low-income/formal sector housing largely missing?
 - Learn from Indian experience

Housing and urbanisation

Why housing matters:

- Intrinsic: quality of life
- Asset holding
 - Main way in which most individuals hold wealth
(UK - \$5trn, 1/3 national wealth private residential structures)
 - Salient feature of a growing middle class
- Investment process which creates employment
 - Non-traded
 - Labour intensive
- Long-lived investments that shape liveability and productivity of the city

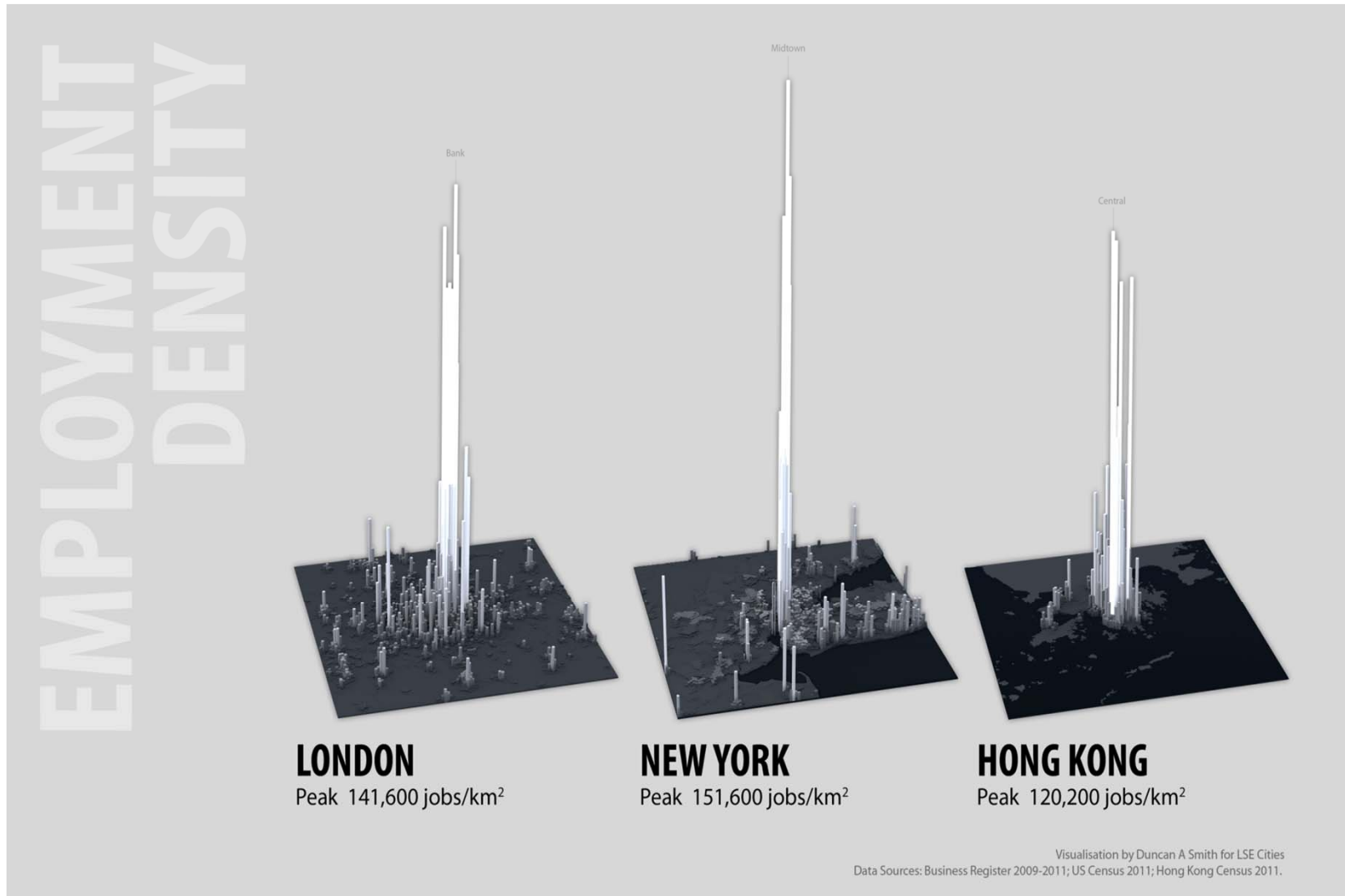
Housing and urbanisation

What makes for a liveable and productive city?

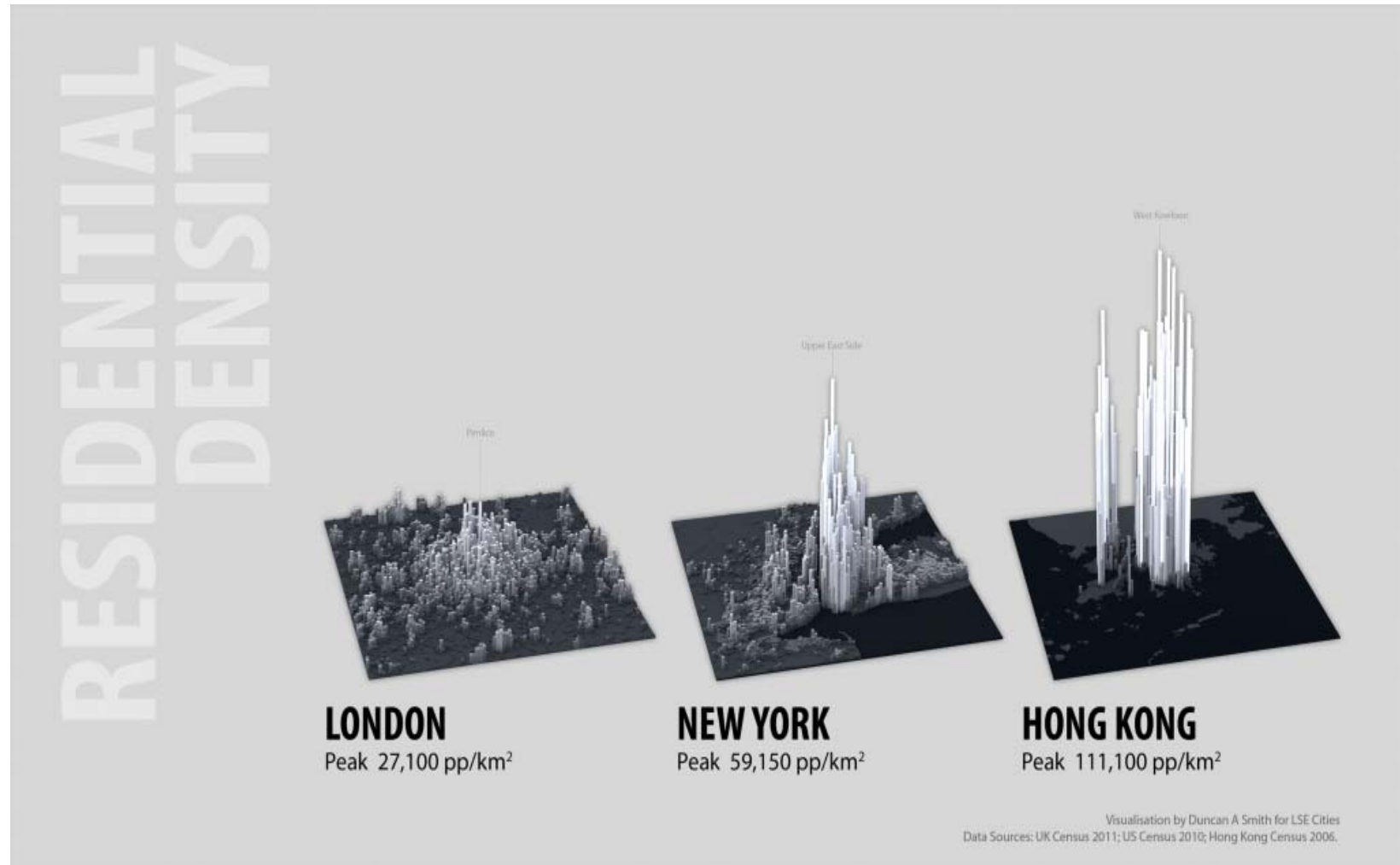
- A productive city has three sorts of structures:
 - Residential:
 - Commercial: jobs and production
 - Infrastructure: transport + utilities
- Urban productivity requires that these elements fit together efficiently
- What does this mean? NB: Land is the scarce factor: how should it be used?
- Text-book answer: *Density and access*
 - Productive activity: clustering to get benefits of agglomeration and increasing returns to scale
 - Residential: centre-periphery gradient of height, density, rent
 - Infrastructure: provides access
 - NB: Land value uplift sufficient to pay for all infrastructure (China, Hong Kong)
- Cost of inefficient urban form? City is relatively high cost → not competitive in tradable activities/ unattractive location for inwards investment

Urban form: employment density

Text-book mono-centric city

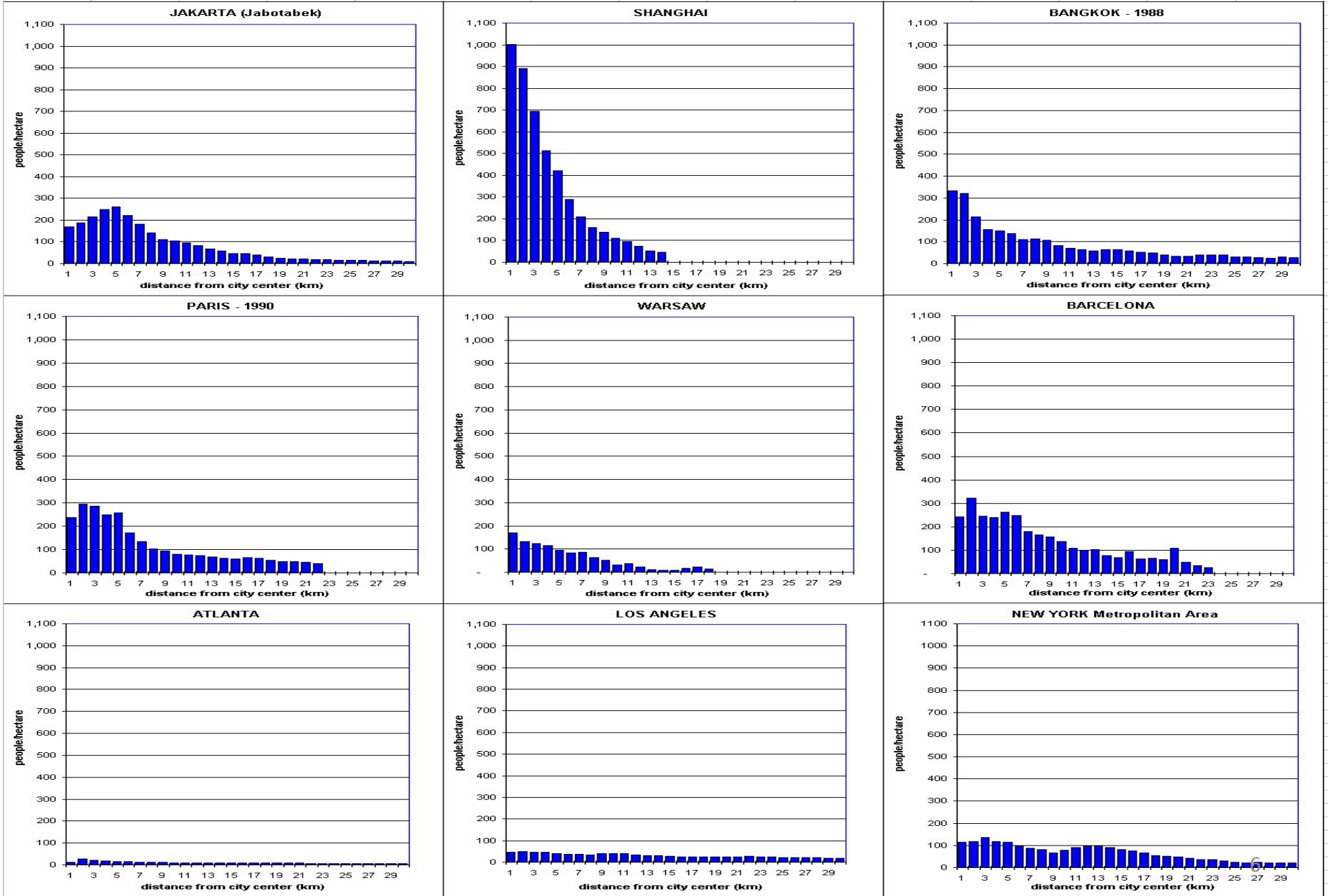


Urban form: residential density



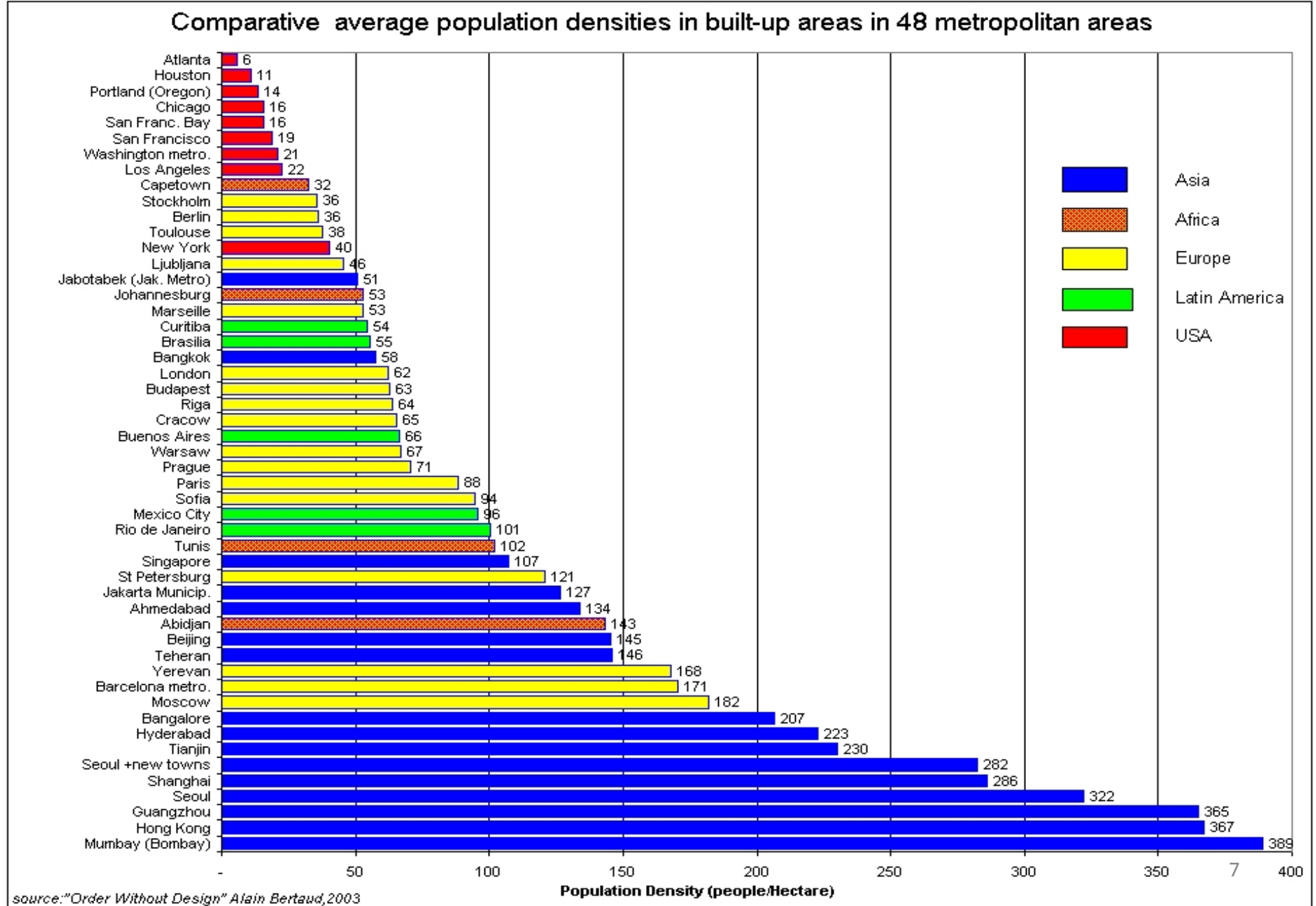
Urban form: residential density

COMPARATIVE POPULATION DENSITIES IN THE BUILT-UP AREAS OF SELECTED METROPOLITAN AREAS

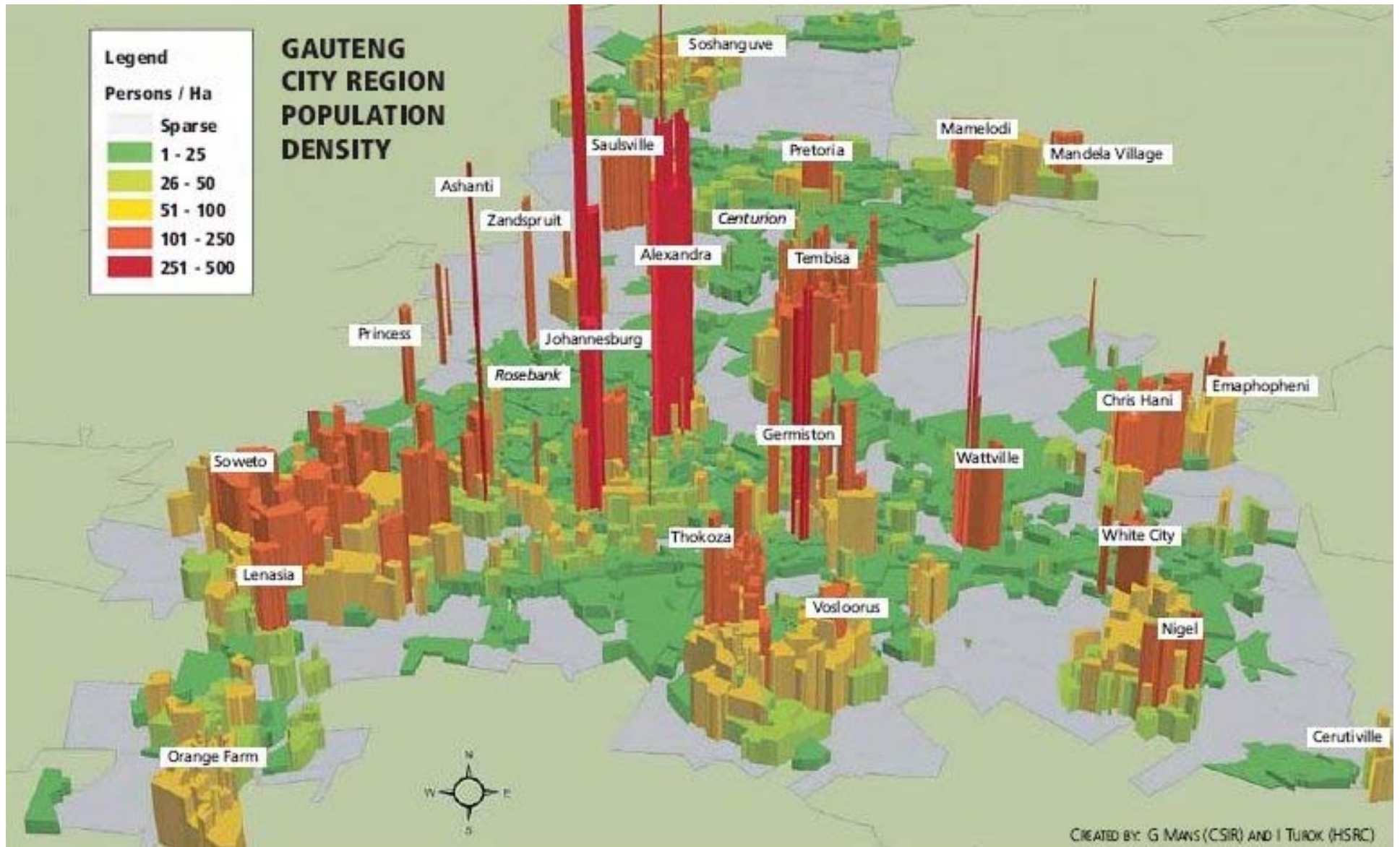


from "Order Without Design", Alain Bertaud, 2001

Urban form: residential density: Asia is dense



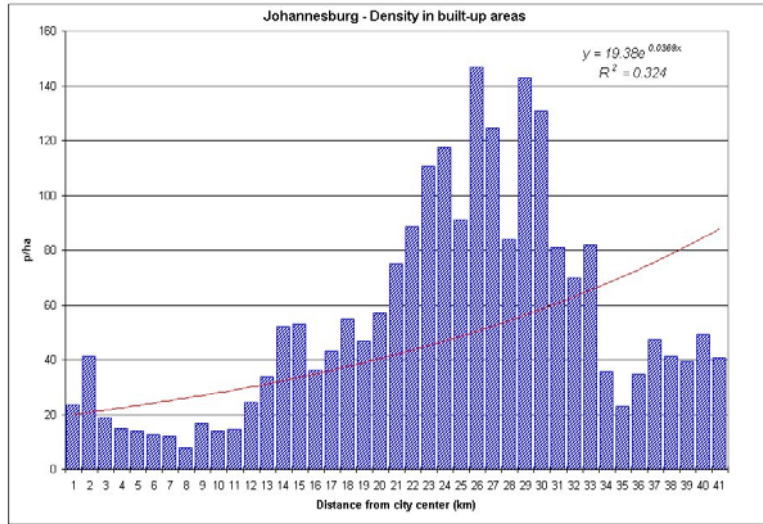
Urban form: residential density



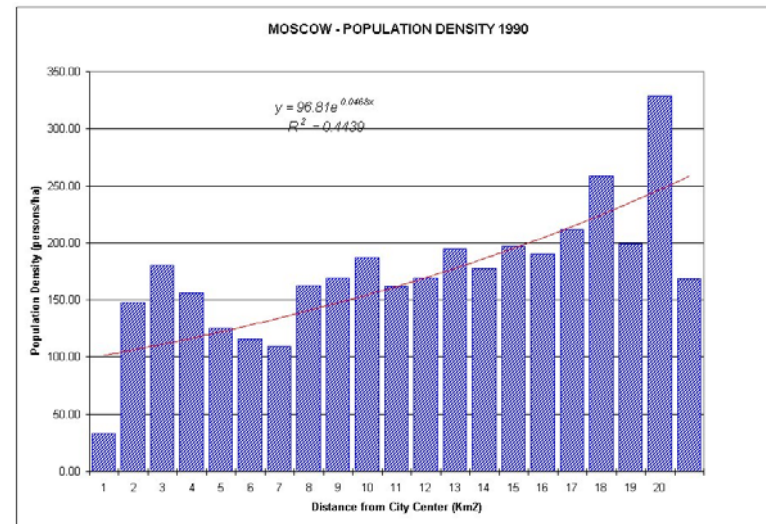
500 per ha = 50,000 per km²

Urban form: residential density with non-market outcomes

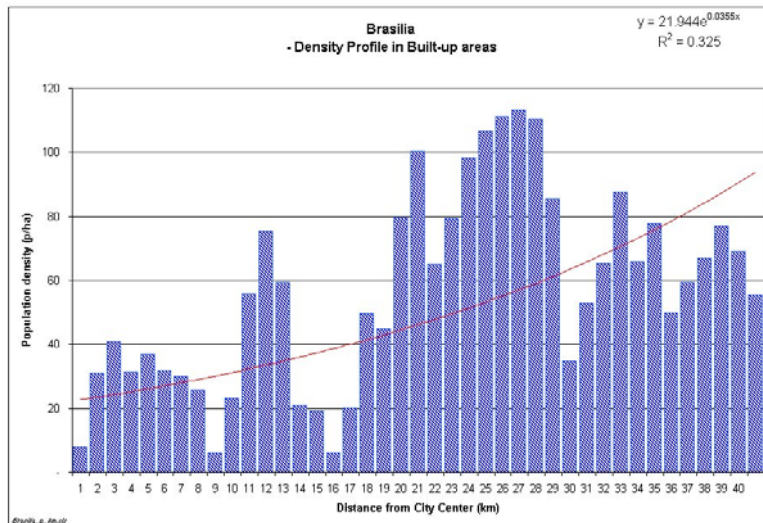
Johannesburg



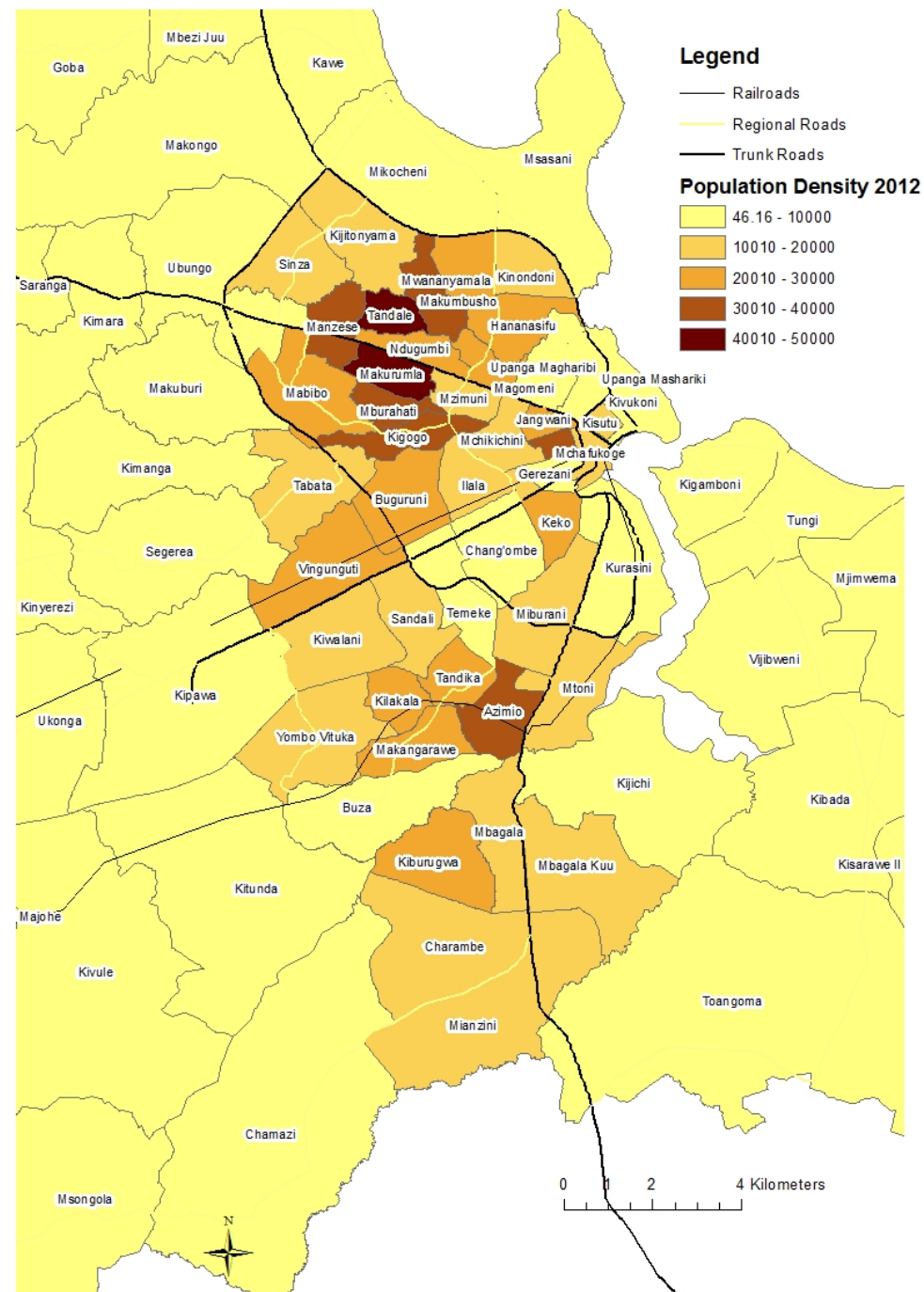
Moscow



Brasilia



Population density, Dar es Salaam 2012

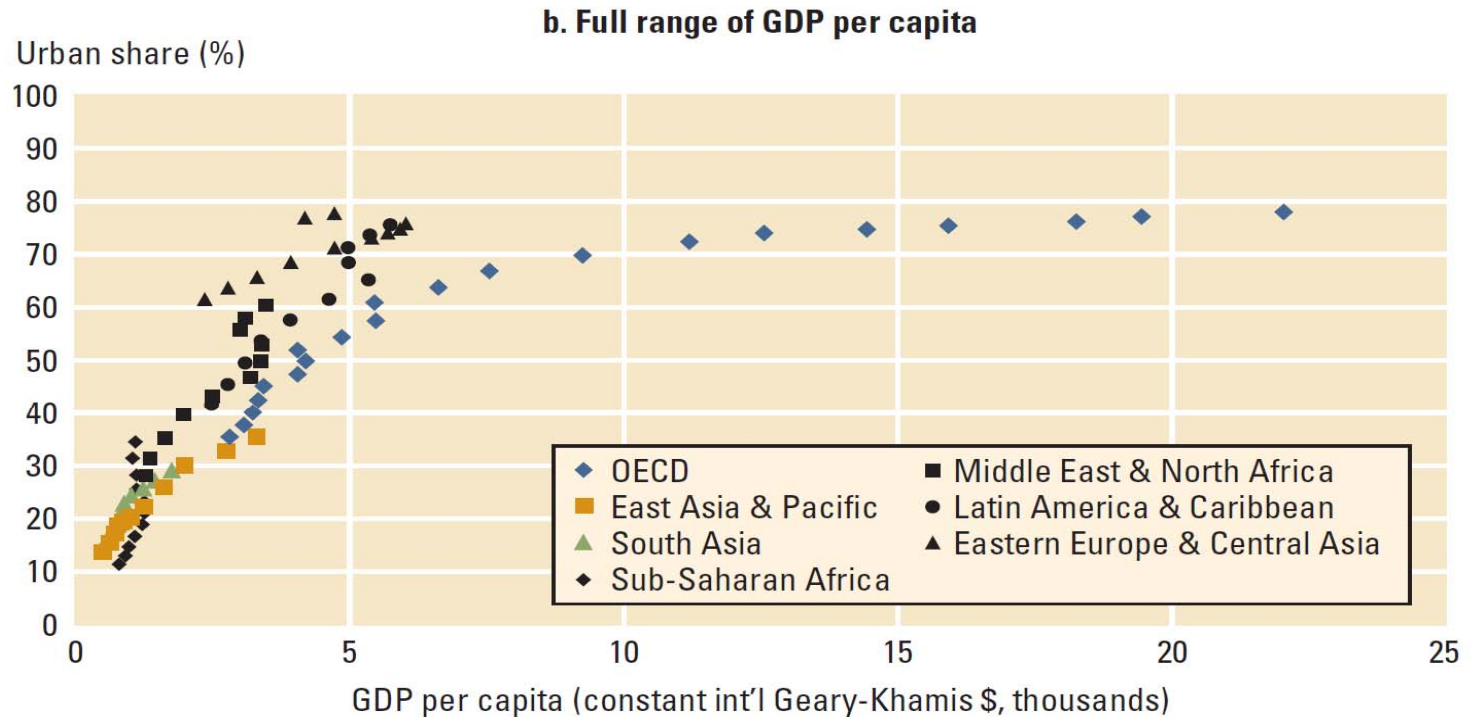


Housing and urbanisation

- Easy to say what an efficient city looks like: how to achieve it?
- How are the elements – residential/commercial/infrastructure - coordinated?
 - Markets:
 - Necessary for efficient land use.
 - BUT: Capital and land market imperfections
 - Externalities: productivity effects from urban scale
 - Expectations and coordination failure
 - Public capital and infrastructure:
 - Direct benefits: ('user-benefits')
 - Encouraging density and scale – 'premium' on top of user-benefit
 - Coordinating expectations
 - Financing
 - Regulation:
 - If done well
- Time dimension of coordination: history-dependence and sequencing

African urban development

- Early urbanization



Sources: Maddison 2006; United Nations 1969; United Nations 1949; United Nations 1952; Historical Database of the Global Environment; United Nations 2006c.

- Infrastructure lagged behind migration
- Environment with multiple market failures/ weak policy environment

African urban development

- Cities low/ flat/ not particularly dense?
 - Eg Dar es Salaam
 - Role of history: trade rather than production
 - Market and policy failure..... (to follow)
- Urbanisation without industrialisation
 - Failure to attract 'export' activities
 - Non-traded activities – government/ resource revenues/ serving hinterland

African housing

- Many cities, near total failure to construct *private/ low-income/ formal/ mass housing*
- Particular failures in housing market: 5 necessary conditions not achieved
 - Affordability of construction costs
 - Legal rights
 - Financial innovation
 - Supporting infrastructure
 - Household access to employment and income

African housing

1: Building costs and building standards:

- Cost of low-standard house in Africa generally >> \$25,000
- Building standards
 - Necessary because of asymmetric information
 - New build
 - Second hand market
 - Set too high?
 - Inherited post-war UK standards. In some cases, raised them:
 - Dar es Salaam minimum plot size
 - high density, 400 - 800m²; medium, 800 - 1,200m²; low, >1,200m²
 - NB: 22,000 per km² requires plot size of 100m²
 - Bifurcated supply: regulations ignored → property hard to value & trade.

African housing

1: Building costs and building standards (continued)

- Input costs
 - Materials: many key inputs high cost -- cement
 - Labour skills:
 - Land: imperfect markets
- The construction sector
 - Lack of small/ medium firms
 - Only 50% WB construction procurement in Africa done by local firms (South Asia 75%, East Asia 95%)

African housing

2: Property rights

- Clarity and security necessary condition for investment in long-lived structures
- Land rights: privatized but not clarified?
 - Often subject to multiple claims
 - Difficult to consolidate
 - Development gains :
 - Captured by elite; few alternative forms of domestic wealth holding; privileged knowledge/access planning permissions
 - Little property tax
 - Property as collateral: need clear title and ability to foreclose fast and efficiently
- Tenancy
 - Highly politicized
 - Rent control / tenant protection undermine the market

African housing

3: Financial innovation.

- Affordable at mortgage \$500-\$800 pa?
 - E.g. house/apartment cost \$15k, 2/3rds mortgage at 5-8% → \$500-\$800 pa
- Typical African terms ~ 20% over 10 years
- Availability of funds?
 - World wide: local savings M-PESA?
- Failure of intermediation:
 - Commercial Banks unwilling to lend – transactions costs?
 - Need specialized mortgage finance? 'Building societies'
- Inflation:
 - Makes mortgages unaffordable
 - Need indexation of principle and repayments
- Policy undermining market:
 - Nigeria: govt offers 6% mortgages when inflation 18%.

African housing

4: Infrastructure

- Local infrastructure – road layout, sanitation
 - Private developers
 - Public – or neither?
- City-wide infrastructure
 - Main transport systems, utilities, sewerage
 - Lagging not leading
 - Inefficient delivery
 - Fail to capture development gain
 - ‘Henry George’ theorem

African housing

5: Access to employment and income

- Consequence of low density is difficulty accessing jobs/ failure to get economies of scale from clustering
- Local density:
 - Service sector
 - Small scale industry
- 'Export ' (tradable) sectors
 - Access to CBD / industrial locations
- Modelling this: cities stuck in low-level trap

Concluding comments

Research agenda: cross-city/ within city

- Build rich data-sets: bottom-up and top-down
- Economic modelling
 - Bring development issues into the standard urban model.
- Descriptives:
 - What are the stylized facts, and how do they vary across cities?
 - Political economy;
- Causal analysis:
 - What are the effects of policy/ infrastructure?

Policy agenda:

- Multiple components in evolving a well-functioning city
- Multiple necessary conditions for each component
- Must **all** be substantially met → joined up policy
 - Legal/ financial/ housing / central government/ city government
- High level coordination needed