

GLOBAL TURNIGN POINTS
for Business and Society

The New Demography

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Demography

- What is demography?
 - Demography is the study of human populations.
- Why should we care about demographic trends?

Economic Importance of Demography

- Production:
 - Relative abundance of labor depresses wages: global redistribution of production.
 - Women's participation in the labor force.
- Consumption:
 - Size of the market.
 - Age structure / population ageing: demand for education, financial services, healthcare, leisure, etc.
- Savings:
 - Age structure of the population.
 - Flows of capital from higher to lower-saving countries.

Political Relevance of Demography

- Allocation of parliamentary seats by district.
- Voting behavior:
 - Life-cycle patterns.
 - Cohort effects.
- International migration:
 - Changes in the demographic makeup of a country.
 - Immigrant communities tend to be concentrated in a handful of cities.
- Nationalism:
 - Demography as integral part of nation-building.
 - Xenophobic political parties and social movements (reaction against immigration).

Impact of Demography on the Welfare State

- In the rich countries (and some emerging economies):
 - Lower birth rates.
 - Higher life expectancy.
- Difficult to reallocate resources across:
 - Education.
 - Healthcare.
 - Old-age pensions.
- Chronic problems with funding “pay-as-you-go” or “defined benefit” welfare programs (as opposed to “defined contribution” programs).

Geopolitical Impact of Demography

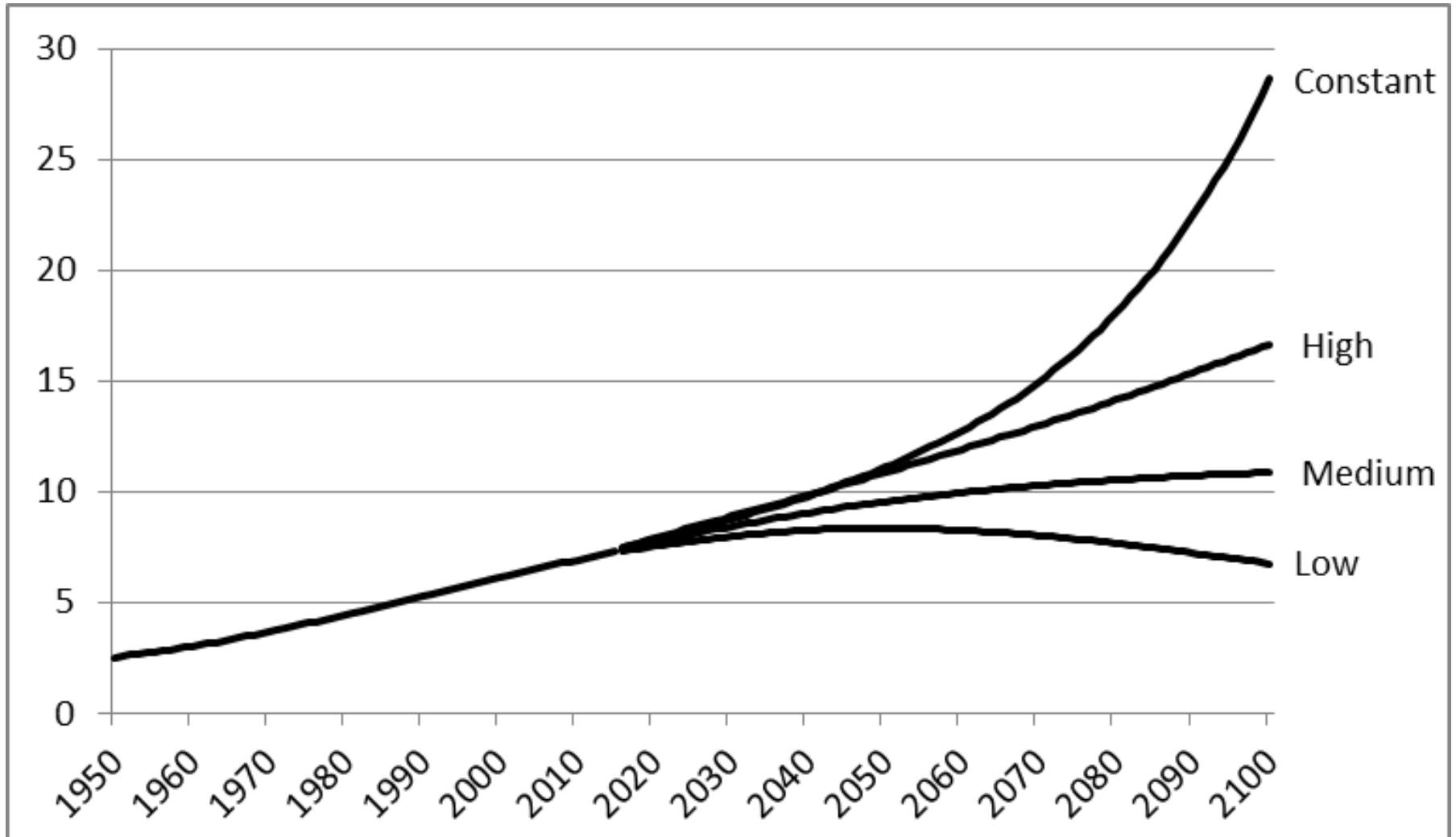
- Population size and global power:
 - Development stars of the 1960s-80s: South Korea, Taiwan, Singapore, and Hong Kong.
 - Development stars of the 1990s & 2000s: China, India, and Brazil.
- Discussion question: are population size and density both relevant from a geopolitical point of view?

What is Demography?

- The systematic, often statistical, study of human populations, especially with reference to size and density, distribution and vital statistics.
- Small demographic alterations can cause large transformations if trends persist for years.
- Demographic reversals take years to occur.
- Demographic policies are hard to design, difficult to implement, and have effects only years into the future.

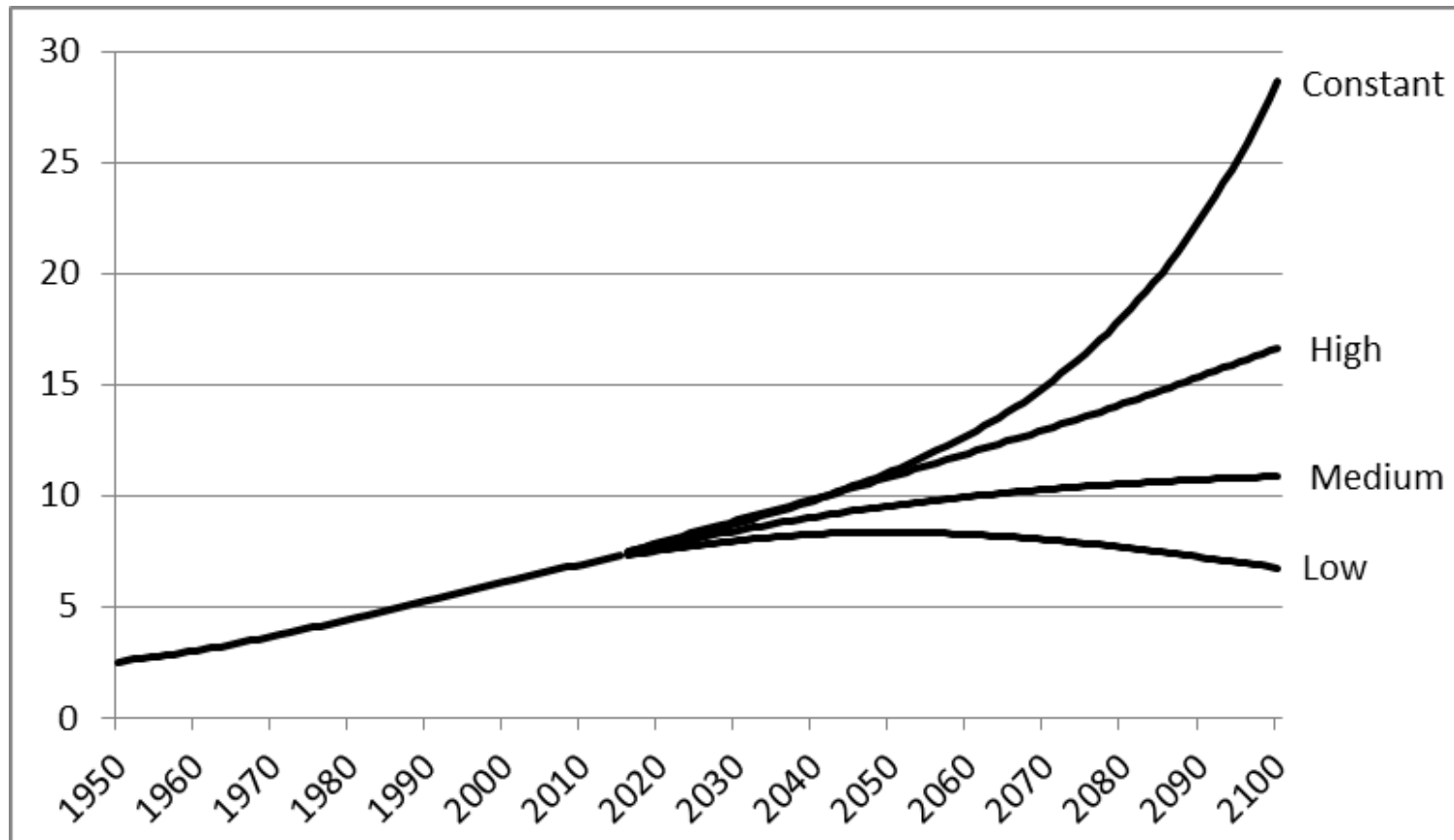
World population projections

1950-2100 (in billions)



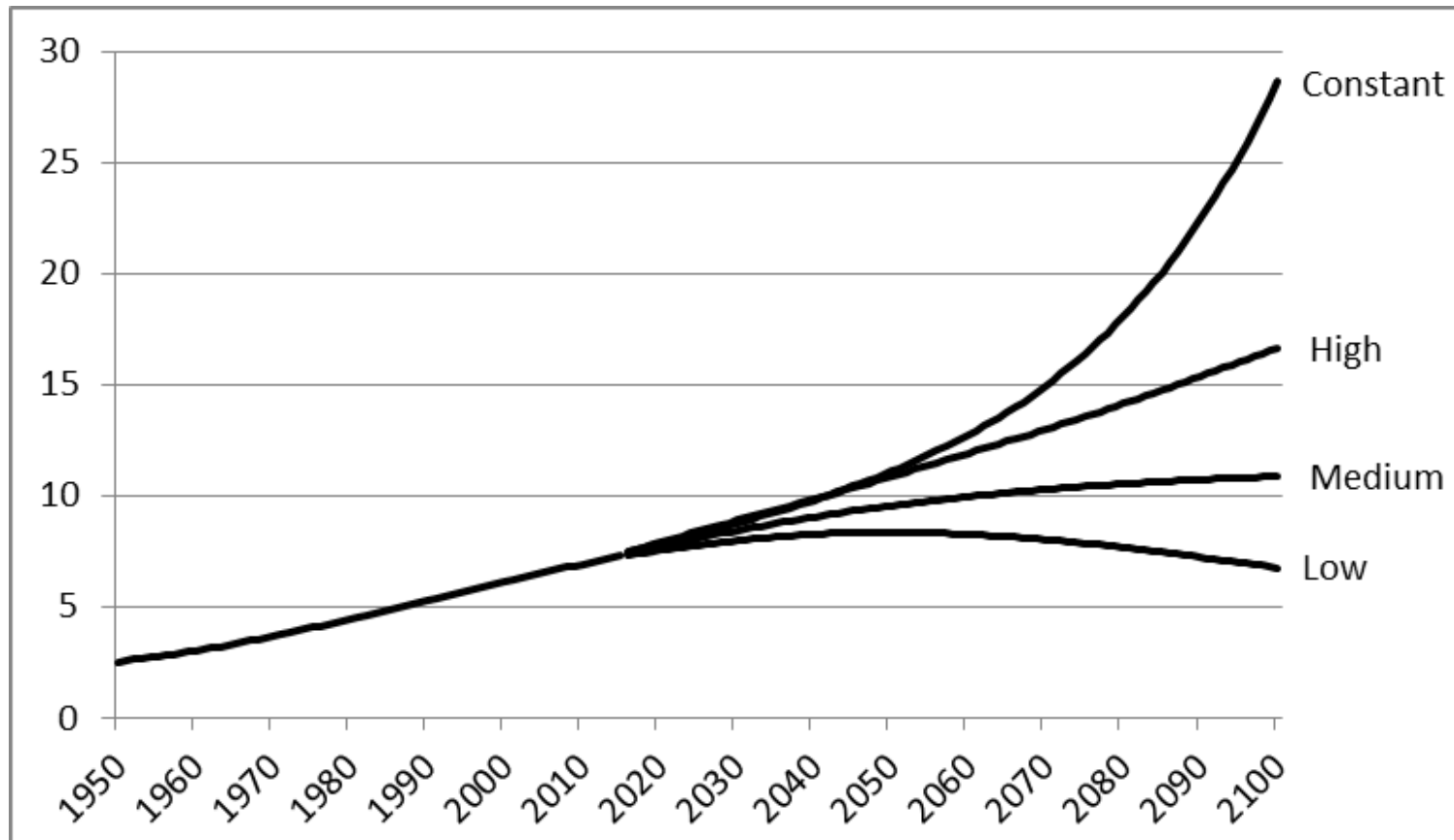
Discussion Question

- Which of the four projections do you believe is least likely?



Discussion Question

- Which of the four projections do you believe is most likely?



We need to make assumptions about key magnitudes

- **Total Fertility** = Children per woman. The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period, and if they were not subject to mortality.
- **Life Expectancy at birth** = The average number of years of life expected by a hypothetical cohort of individuals who would be subject during all their lives to the mortality rates of a given period.

Assumptions

(by the UN Population Division)

- Four different assumptions on fertility:
 - No change.
 - High.
 - Medium. We will use this one.
 - Low.
- Mortality (or life expectancy):
 - Only one variant is used in the projections.

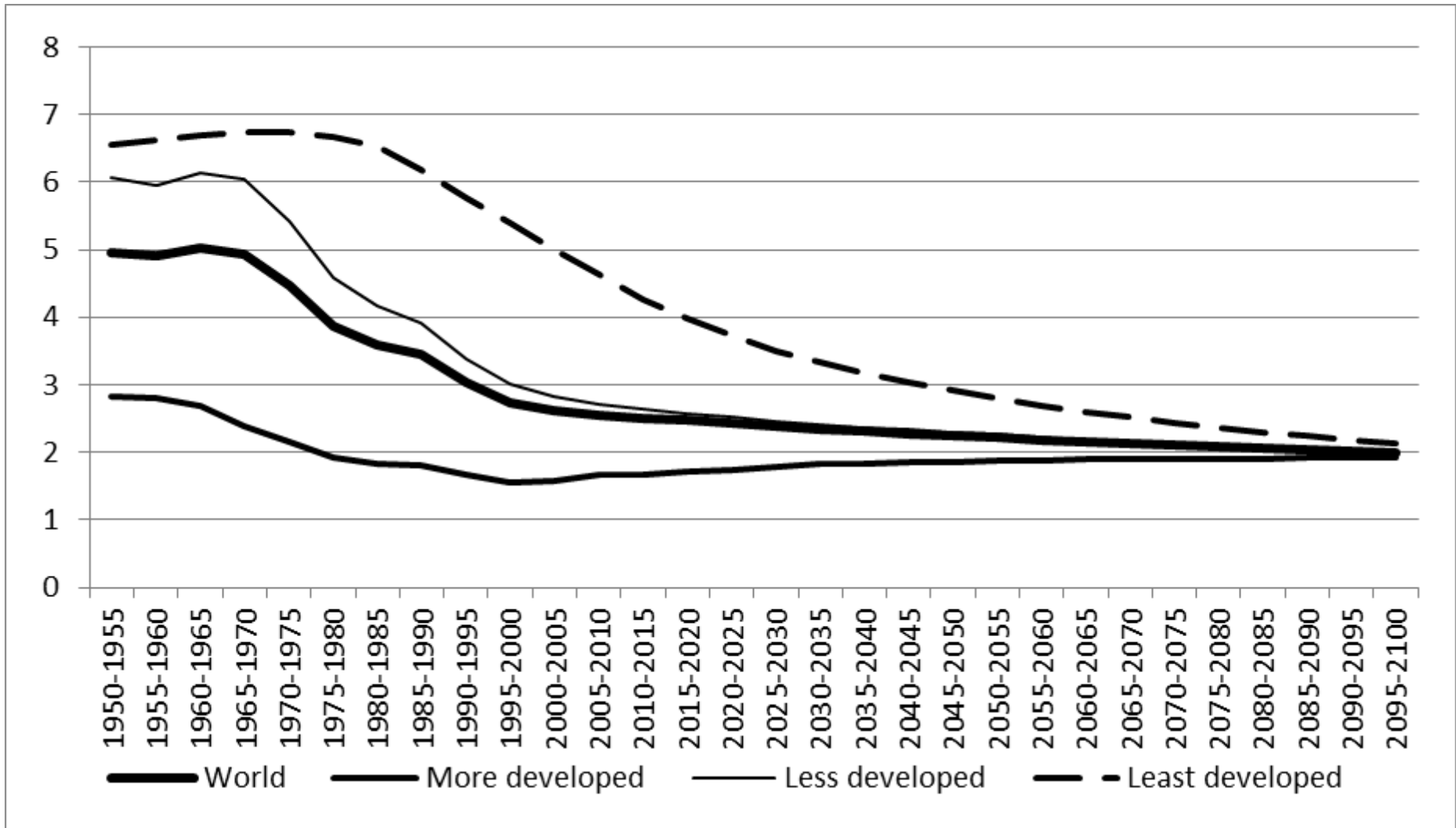
Regions

by Level of Economic Development

- More developed: Europe, US, Canada, Australia, New Zealand, Japan.
- Less developed: Africa, Asia (except Japan), Latin America and the Caribbean, and Oceania (excluding new Zealand).
- Least developed: 49 countries in Africa (34), Asia (9), Oceania (5), and Latin America (1).
 - We will exclude the least developed from the less developed category.

Medium Fertility Projections

(children per woman)



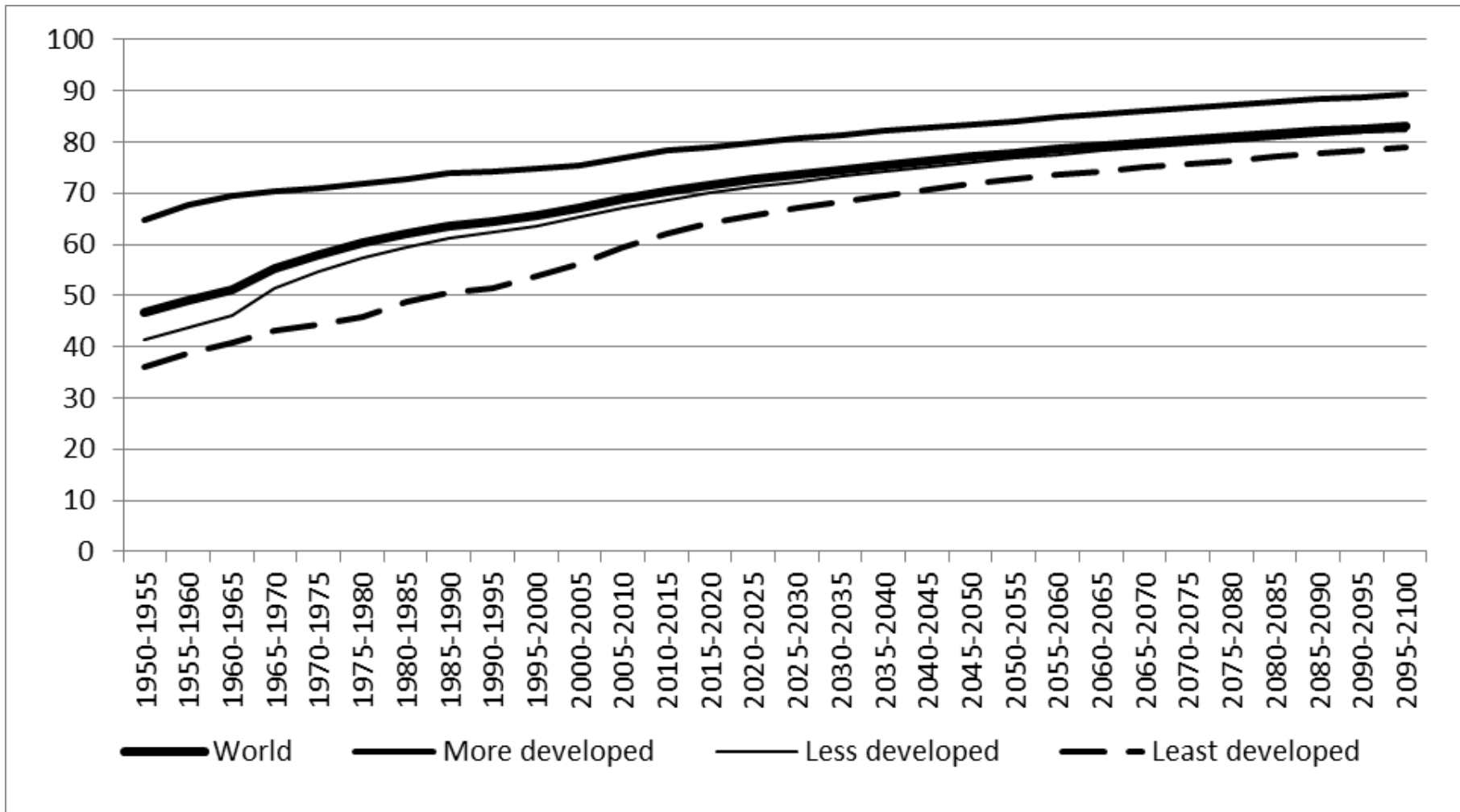
Note: A total fertility rate of 2.1 children per woman is generally considered to be necessary for population replacement.

Source: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

Discussion Question

- Why do demographers assume that a population needs a fertility rate of approximately 2.1 children per woman in order for inter-generational replacement to take place?

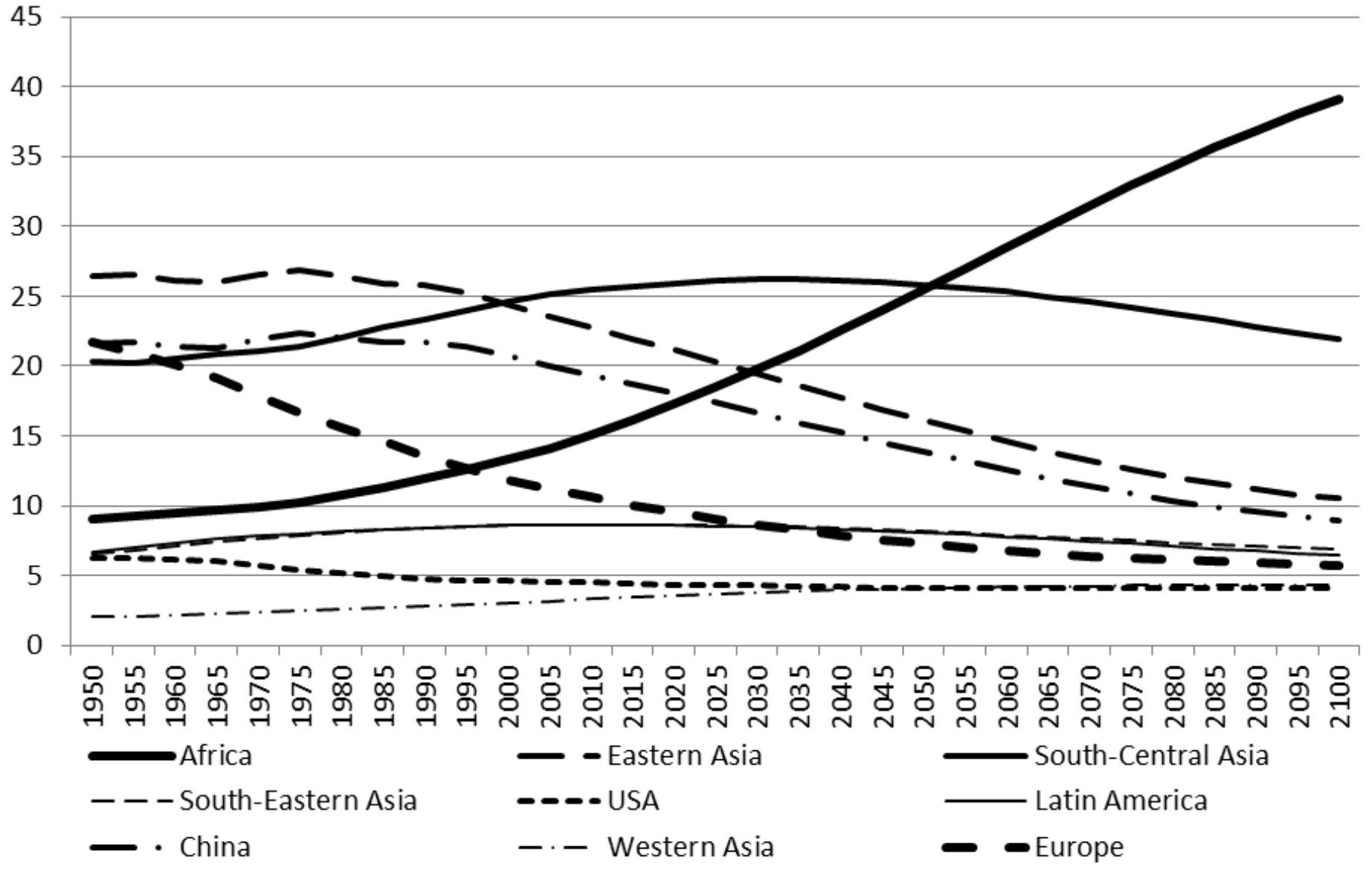
Medium Life Expectancy (in years)



Regions of the World

- Africa.
- Eastern Asia: China, Japan, the two Koreas, Mongolia.
- Southeastern Asia.
- South-Central Asia: From Iran to Bangladesh, plus the “Stans.”
- Western Asia: From Turkey to Iraq, plus the Caucasus and the Arabian peninsula.
- Europe (including the Russian Federation).
- Latin America and the Caribbean.

Regional Distribution of the Population (%)



Discussion Question

- What does the demographic rise of Africa mean for global economic and geopolitical dynamics?

Further Topics

- Changing age structure of the population.
- The millennial generation.
- The population 60+ years of age.

LARGEST “MILLENNIAL” POPULATIONS (AGE 15-35)

Region	2015	2030	2015=100
Asia	1441.5	1397.0	96.9
Sub-Saharan Africa	329.1	490.2	149.0
Latin America & Caribbean	213.0	213.7	100.3
Europe	184.3	158.6	86.1
Western Asia	89.5	102.1	114.1
USA & Canada	97.7	97.9	100.2
Northern Africa	77.2	88.8	115.0
Eastern Europe	79.3	60.1	75.9
Western Europe	45.2	42.2	93.2
World	2354.5	2459.3	104.5

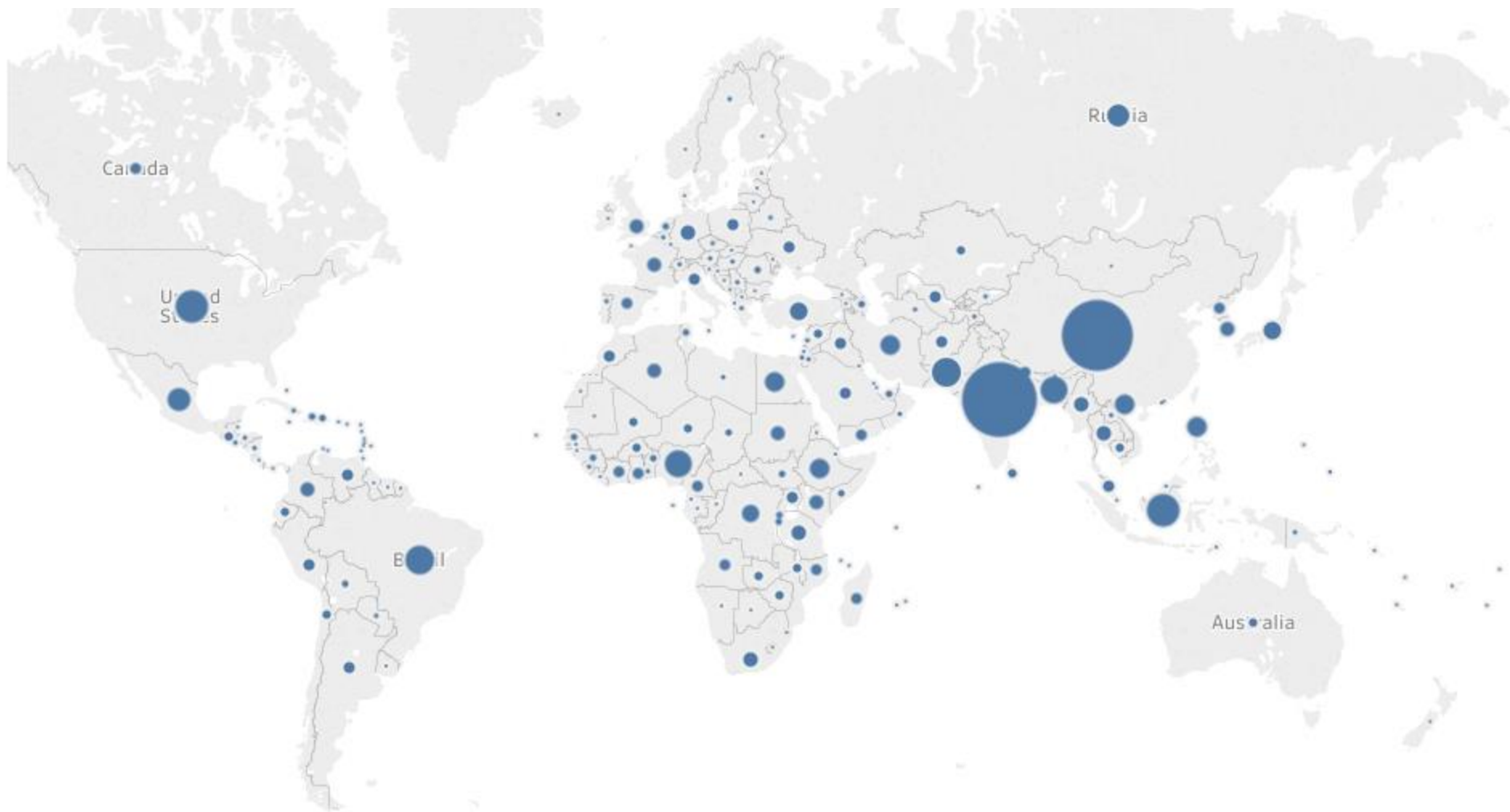
Source: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

TOP 20 COUNTRIES' "MILLENNIAL" POPULATIONS

Top 20 Countries in 2030	2015	2030	2015=100
India	458.6	490.3	106.9
China	413.5	312.2	75.5
Indonesia	85.3	91.9	107.7
Nigeria	60.2	91.5	152.0
USA	88.0	88.6	100.7
Pakistan	68.3	82.9	121.4
Brazil	69.3	64.7	93.2
Bangladesh	59.3	61.1	103.0
Ethiopia	35.6	51.3	144.1
Mexico	43.7	45.7	104.7
DR of Congo	25.3	41.7	165.0
Philippines	35.1	41.1	116.9
Egypt	31.5	37.2	118.0
Russian Federation	39.8	30.7	77.3
Tanzania	17.7	28.6	162.1
Viet Nam	32.4	27.9	86.2
Turkey	25.8	25.6	99.2
Iran	30.8	23.8	77.4
Kenya	16.4	23.1	140.6
Japan	26.4	22.5	85.4

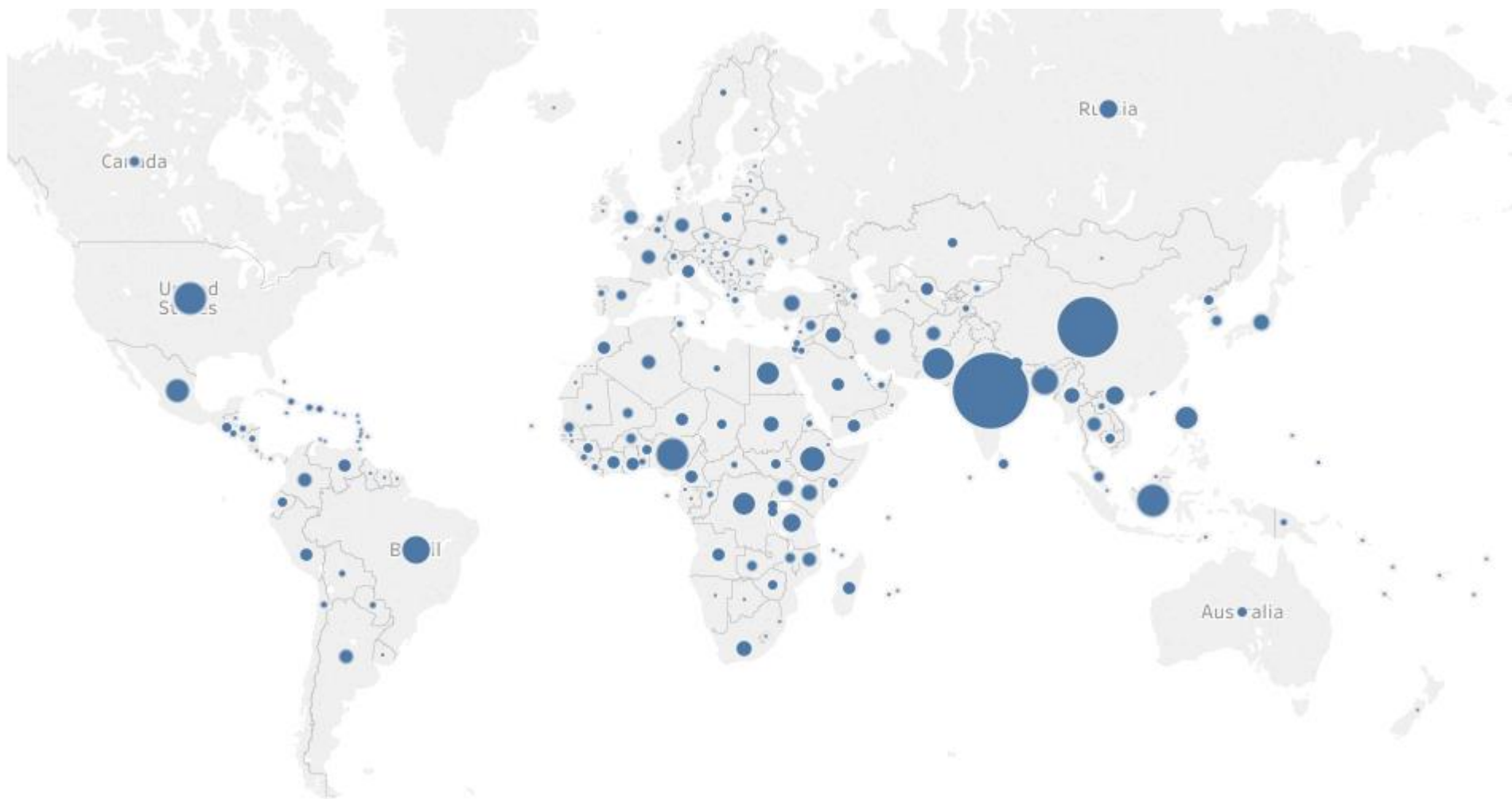
Source: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

POPULATION 15-35 YEARS OLD IN 2015



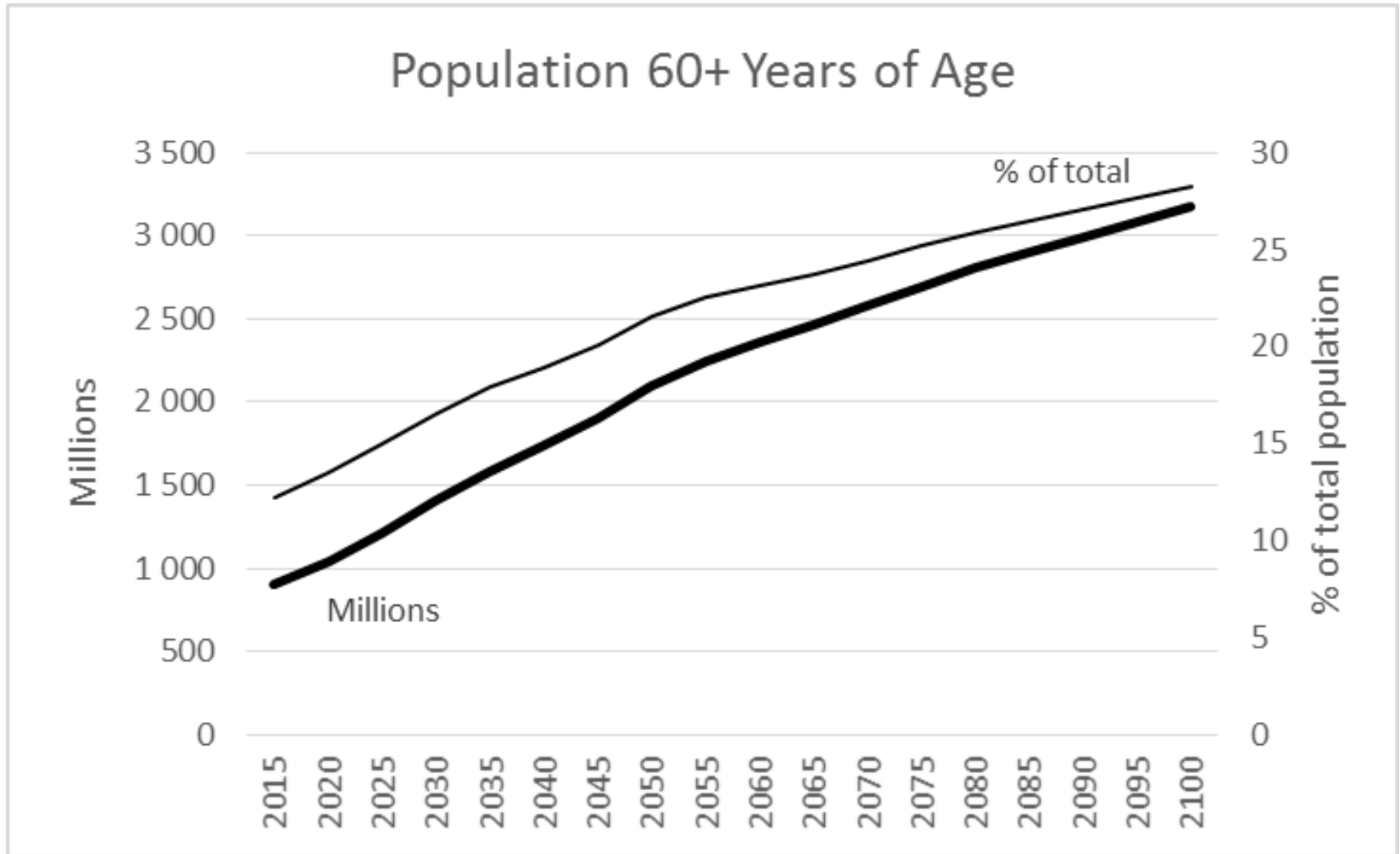
Source: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

POPULATION 15-35 YEARS OLD IN 2030



Source: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

THE 60+ MARKET



Source of the data: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

POPULATION 60+ YEARS OF AGE

Region	2015	2030	2015=100
Asia	508.0	844.5	166.3
Europe	176.5	217.2	123.1
Latin America & Caribbean	70.9	121.0	170.6
Africa	64.4	105.4	163.5
USA & Canada	74.6	104.8	140.5
Sub-Saharan Africa	46.5	74.5	160.4
Eastern Europe	63.1	71.7	113.6
Western Europe	49.5	64.0	129.2
Western Asia	20.3	37.4	183.6
World	900.9	1402.4	155.7

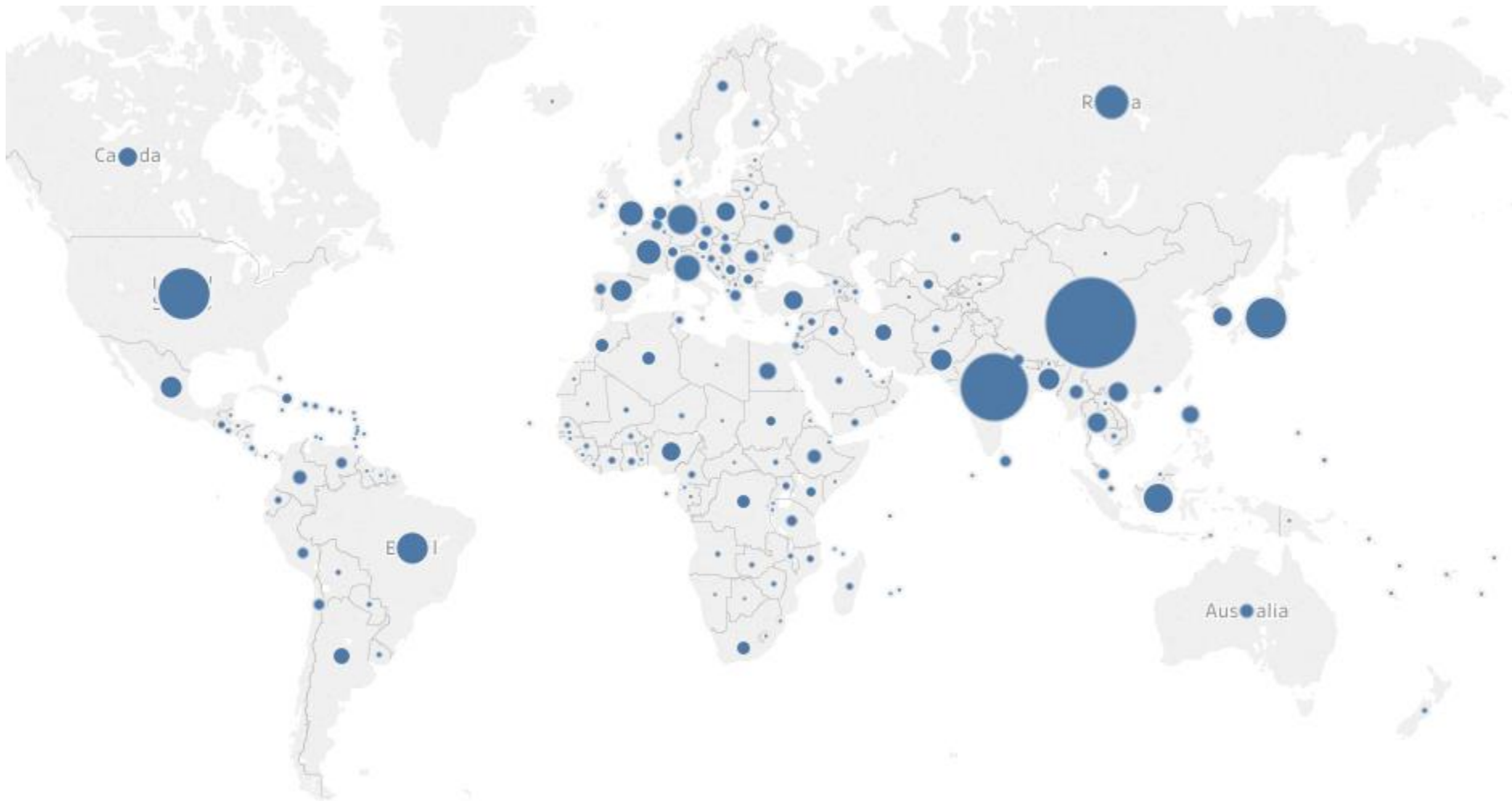
Source of the data: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

TOP 20 COUNTRIES POPULATION 60+

Top 20 Countries in 2030	2015	2030	2015=100
China	209.2	358.1	171.2
India	116.6	190.7	163.6
USA	66.5	92.9	139.6
Japan	41.9	44.8	107.0
Brazil	24.4	42.9	175.8
Indonesia	21.2	39.0	183.8
Russia	28.7	33.2	115.7
Germany	22.3	28.6	128.6
Mexico	12.2	22.1	181.4
Italy	17.1	21.6	126.3
Bangladesh	11.2	21.5	191.6
Pakistan	12.5	20.7	165.7
France	16.2	20.3	125.1
United Kingdom	14.9	19.5	131.1
Viet Nam	9.6	18.4	191.7
Thailand	10.7	18.4	171.1
Republic of Korea	9.3	16.5	177.0
Spain	11.2	15.4	136.6
Turkey	8.8	14.9	168.9
Iran	6.5	12.7	196.0

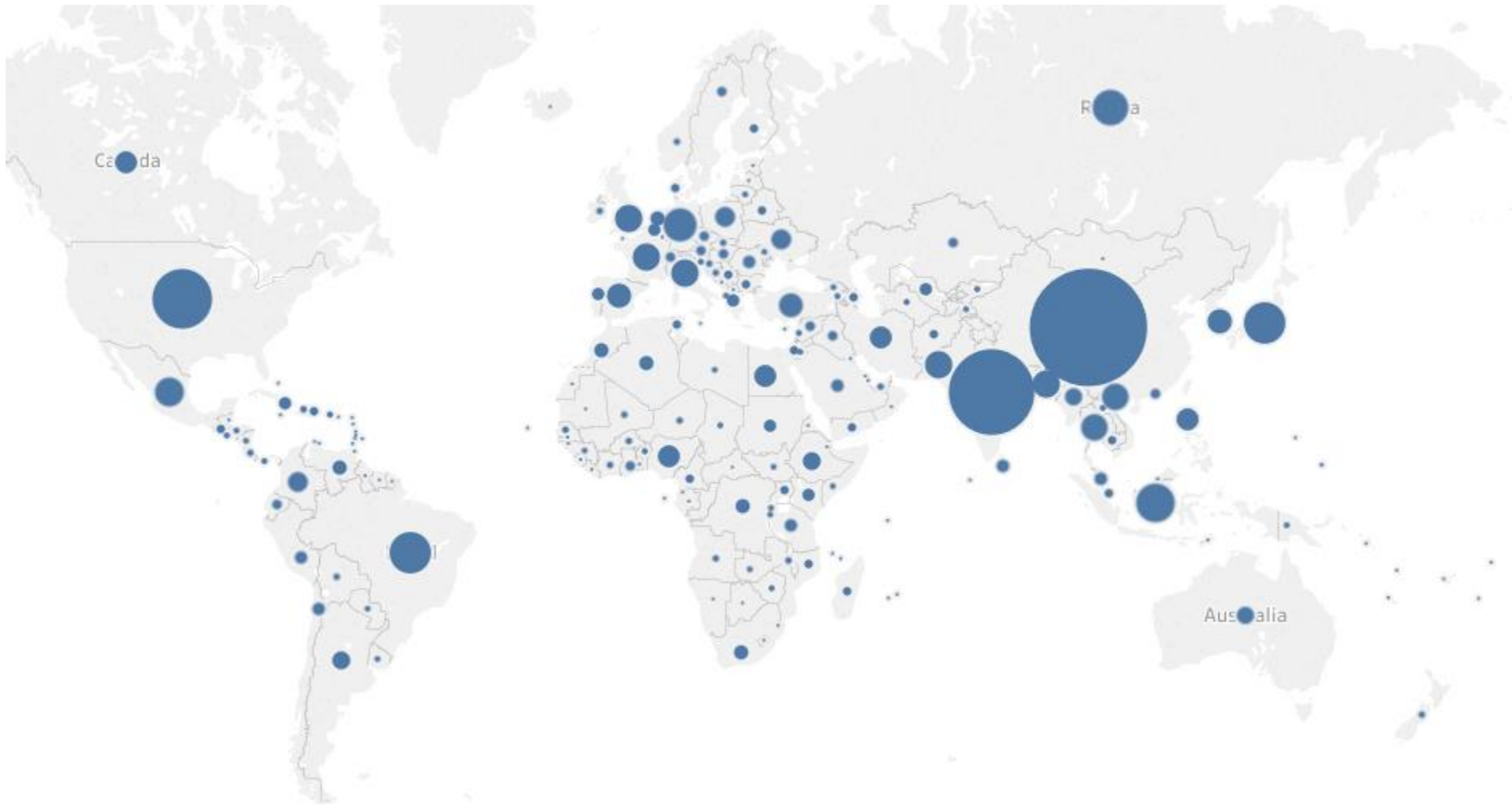
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POPULATION 60+ IN 2015

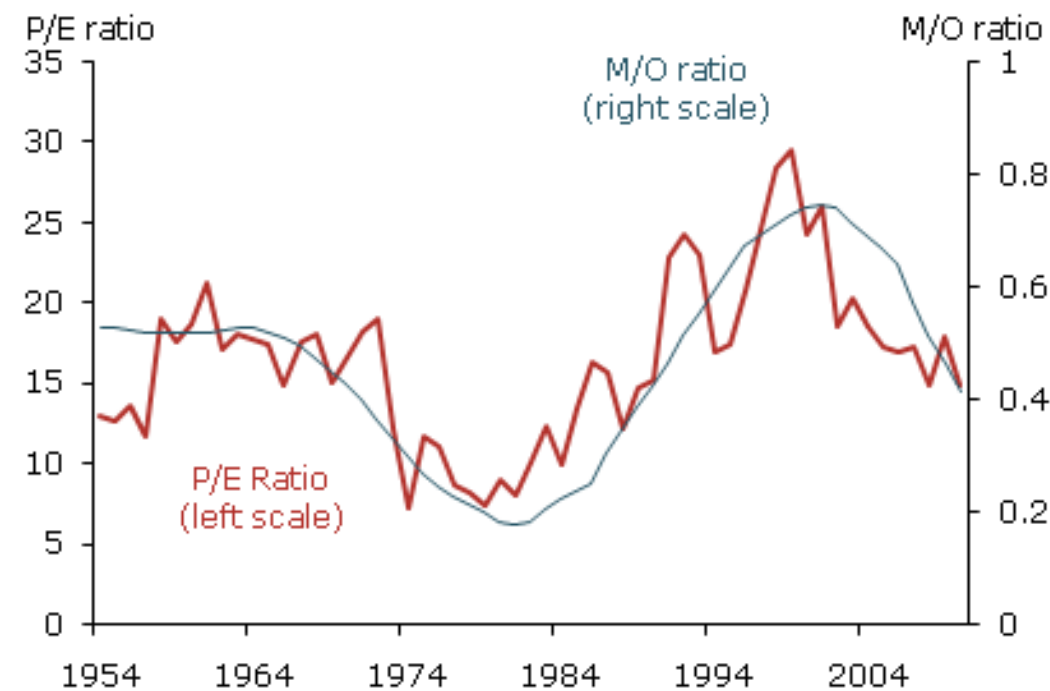


Source of the data: United Nations Population Division, *World Population Prospects: The 2015 Revision*.

POPULATION 60+ IN 2030



Source of the data: United Nations Population Division, *World Population Prospects: The 2015 Revision*.



Ageing and Stock Prices

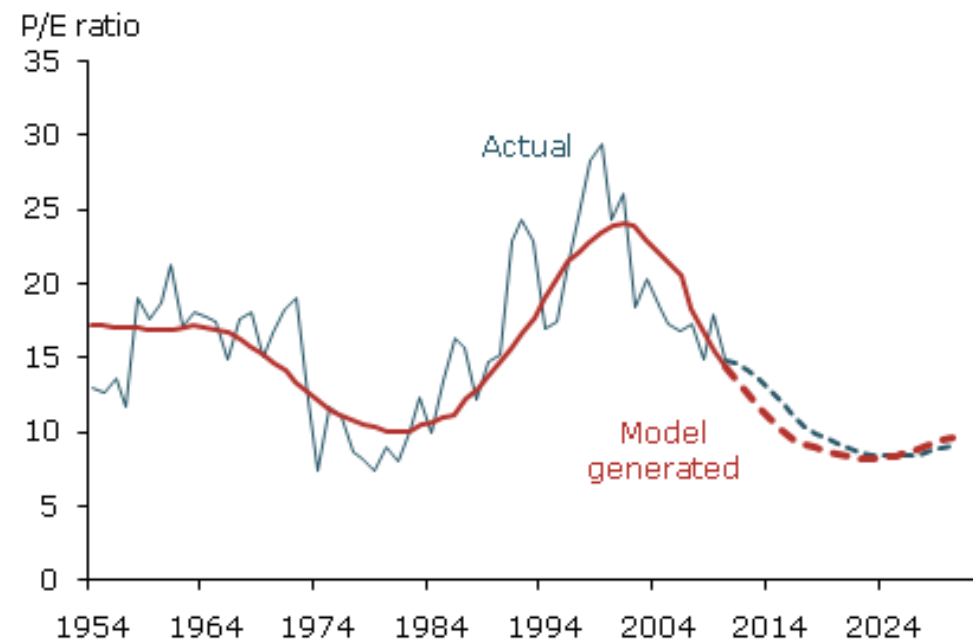
P/E: price/earnings.

M/O: age 40–49/age 60–69.

Source: Zheng Liu and Mark M. Spiegel, “Boomer Retirement: Headwinds for U.S. Equity Markets?” Federal Reserve Bank of San Francisco.

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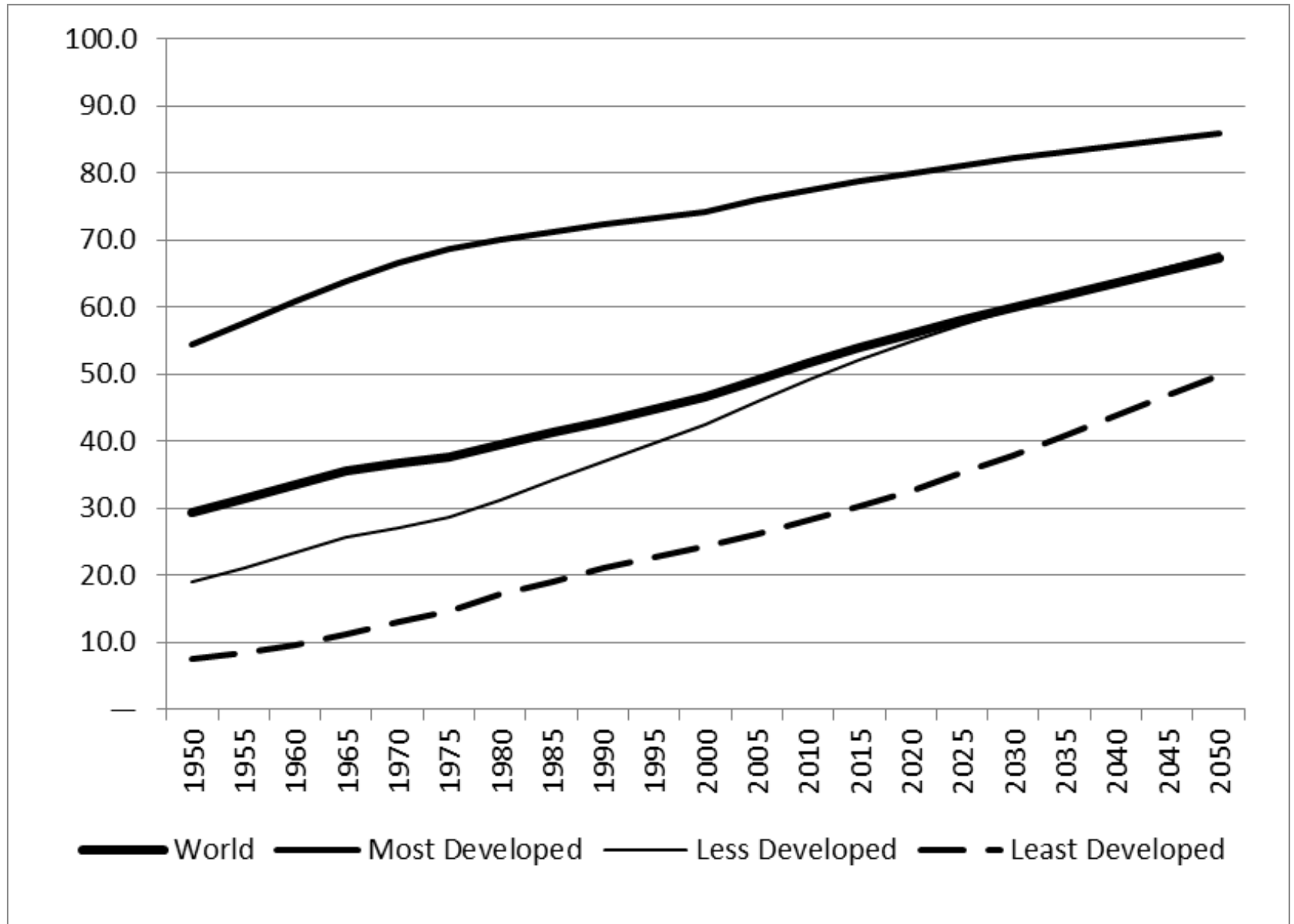
<http://www.frbsf.org/economic-research/publications/economic-letter/2011/august/boomer-retirement-us-equity-markets/>



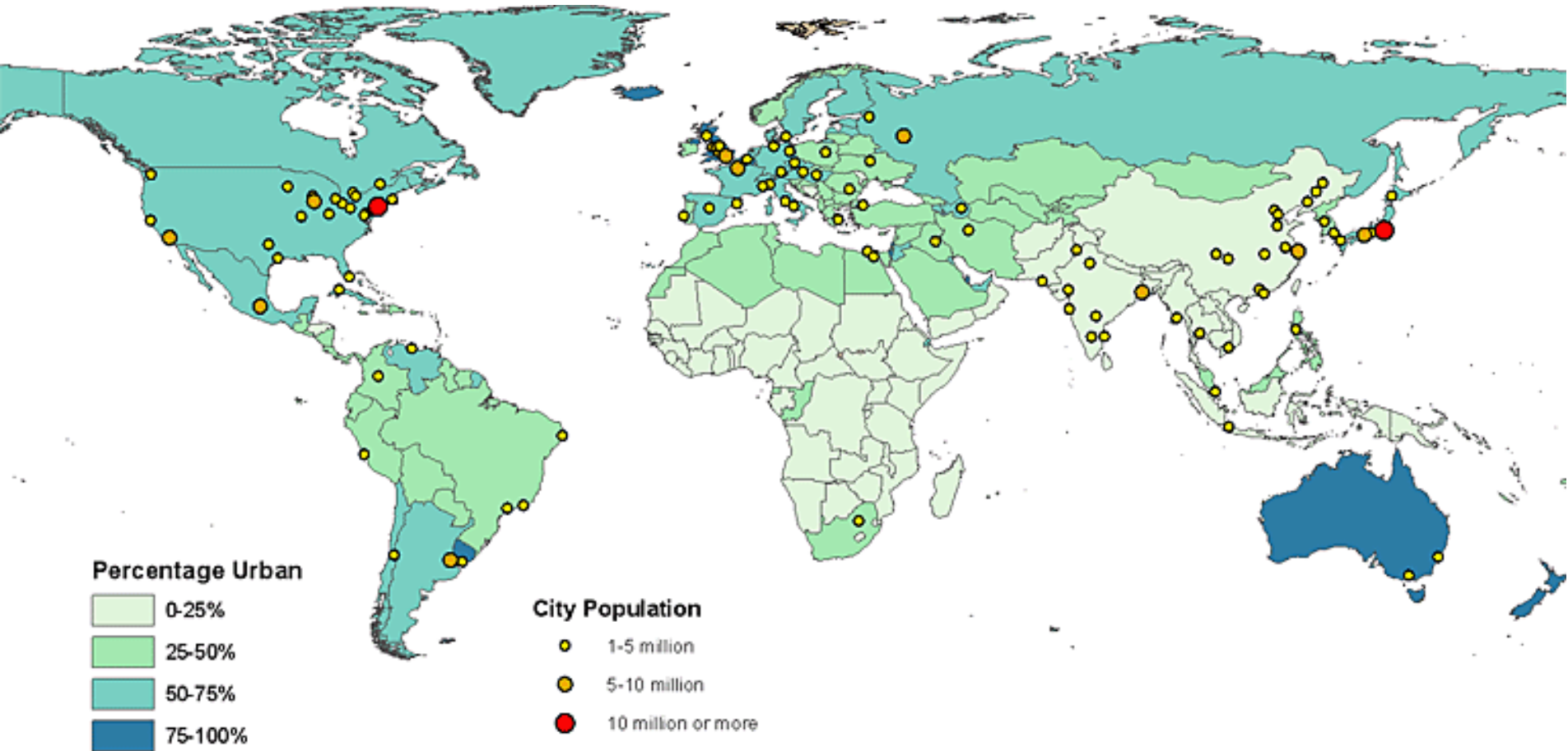
Discussion Question

- What are the consequences of population ageing for the stock market?

Urbanization

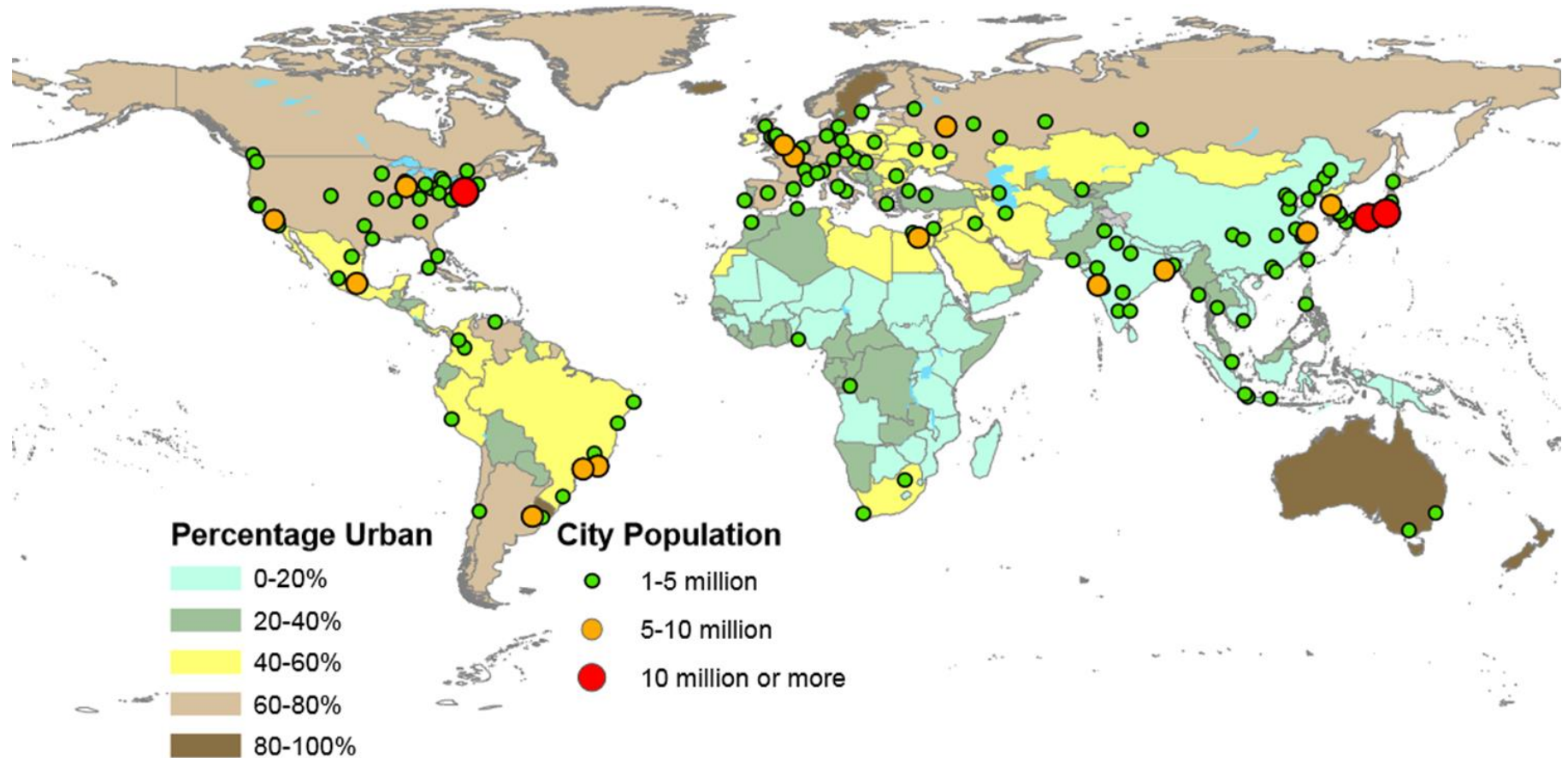


World's Largest Cities 1960



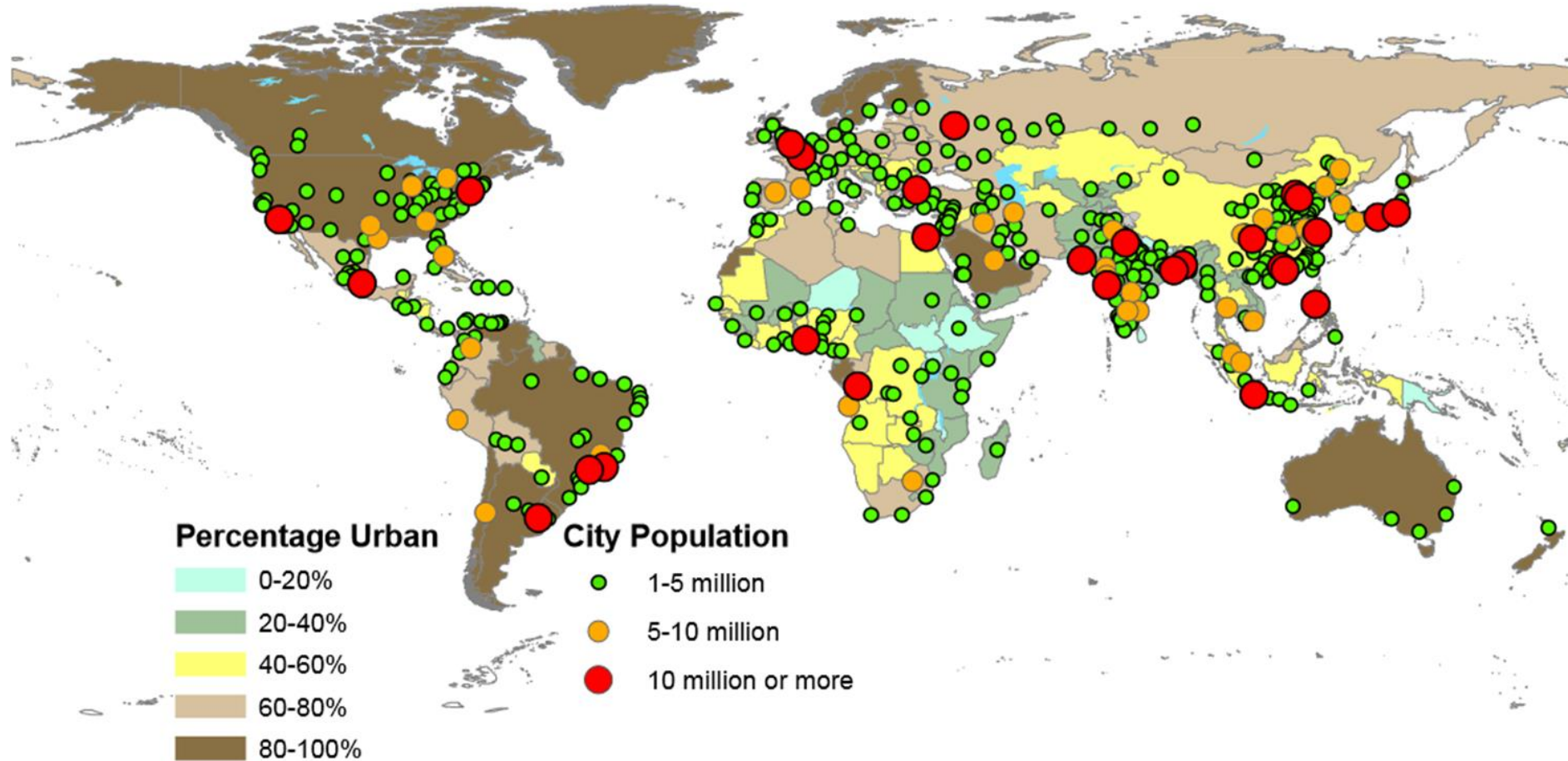
Source: United Nations Population Division, *World Urbanization Prospects, the 2011 Revision*.

World's Largest Cities 1970



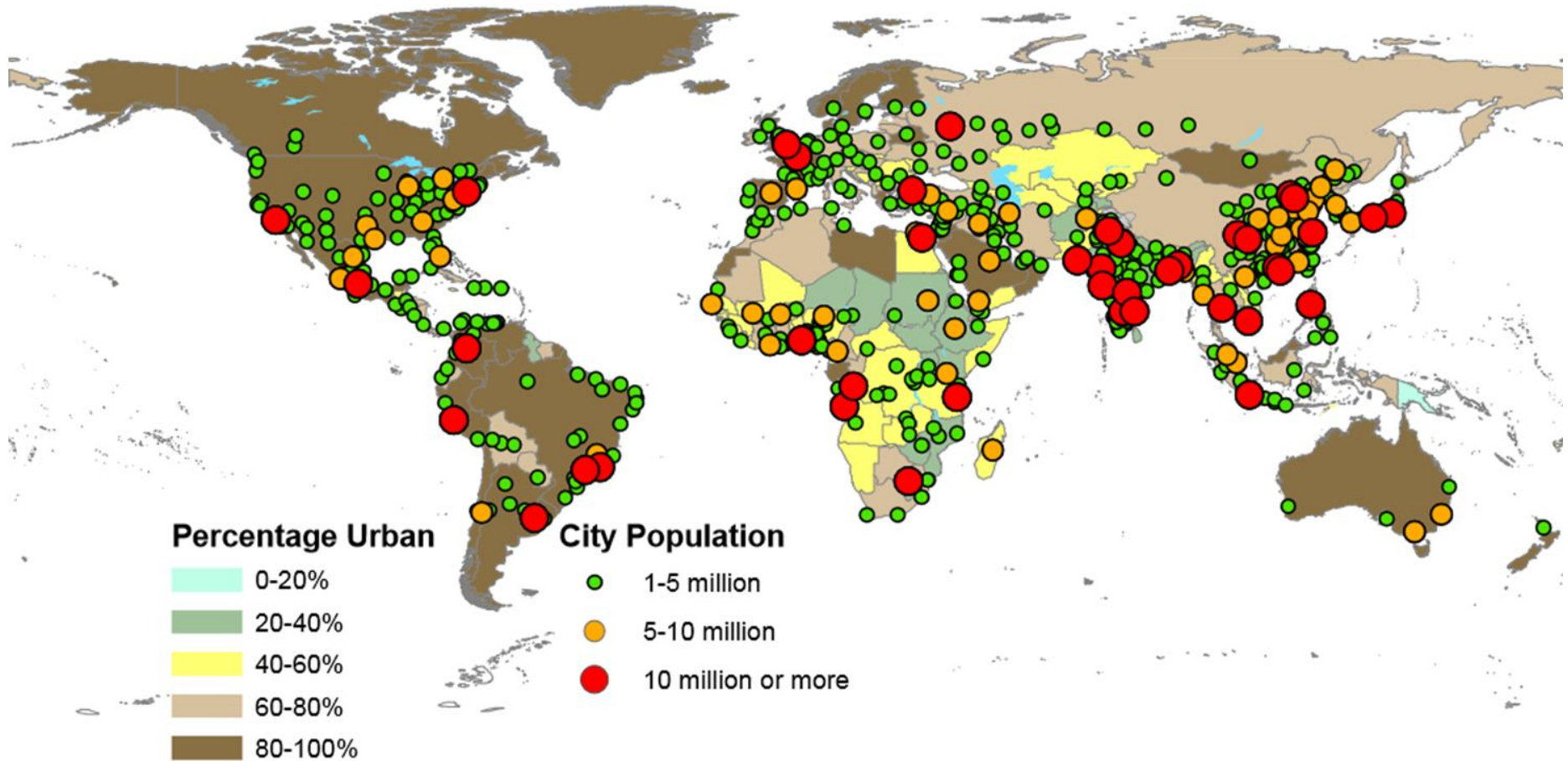
Source: United Nations Population Division, *World Urbanization Prospects, the 2014 Revision*.

World's Largest Cities 2014



Source: United Nations Population Division, *World Urbanization Prospects, the 2014 Revision*.

World's Largest Cities 2030



Source: United Nations Population Division, *World Urbanization Prospects, the 2014 Revision*.

Discussion Questions

- What are the implications of the growth of cities for consumer markets?
- And for food and water?

Global Cities

- A city whose importance and identity transcends the country in which it is situated.
- The place where “the work of globalization gets done” (Saskia Sassen).
- Crucial dimensions: economy, finance, politics, culture, diversity.

Features of Global Cities

- Large, influential, prominent.
- Culturally and ethnically diverse.
- Culturally thriving: museums, music, universities, schools, etc.
- Advanced infrastructure.
- Rich in business services.
- Open, friendly, safe.
- Legally and politically secure.

Drivers of Global Cities

- Agglomeration economies.
- Growth of specialized service firms.
- Coordination of dispersed activities.
- New communication technologies.

Largest City GDPs

City/Metro Area	US\$ bn
Tokyo	1520
New York City	1210
Los Angeles	790
Seoul	774
London	731
Paris	669
Osaka/Kobe	654
Chicago	525
Moscow	520
Shanghai	517

Selected Countries	US\$ bn
Australia	1542
Mexico	1177
Turkey	788
Holland	771
Saudi Arabia	711
Switzerland	631
Iran	548
Sweden	523
Norway	500
Poland	490

Sources of data: Brookings Institution; IMF.

Types of Global Cities

- **Truly global hubs:** London and New York.
- **Regional hubs:** Singapore, Panama, Miami, Dubai.
- **Gateways:** Hong Kong, Sydney.