

# **THE SHAPE OF THINGS TO COME**

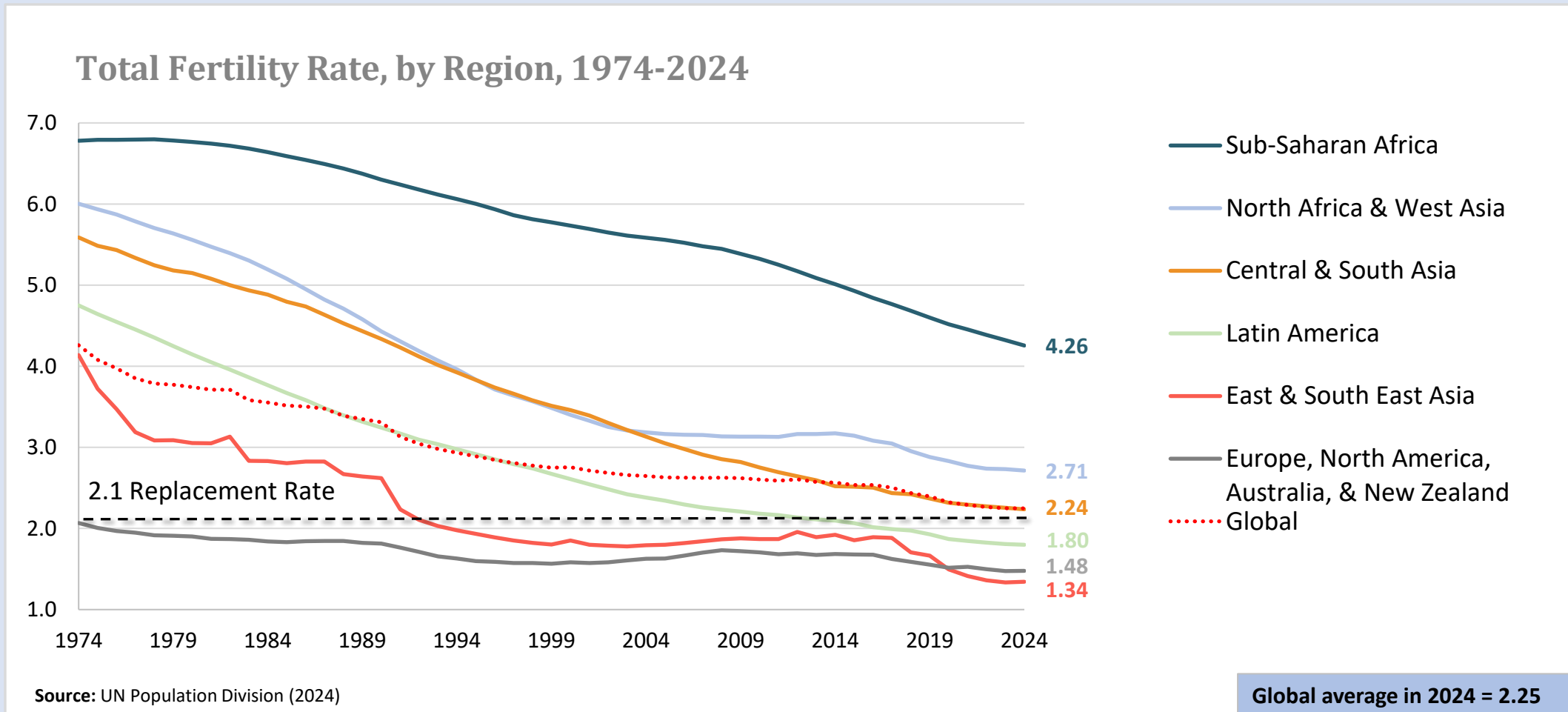
*Demographic Decline, Economic Stagnation,  
and Geopolitical Instability*

**Richard Jackson & Tom Terry**

**Global Aging Institute**

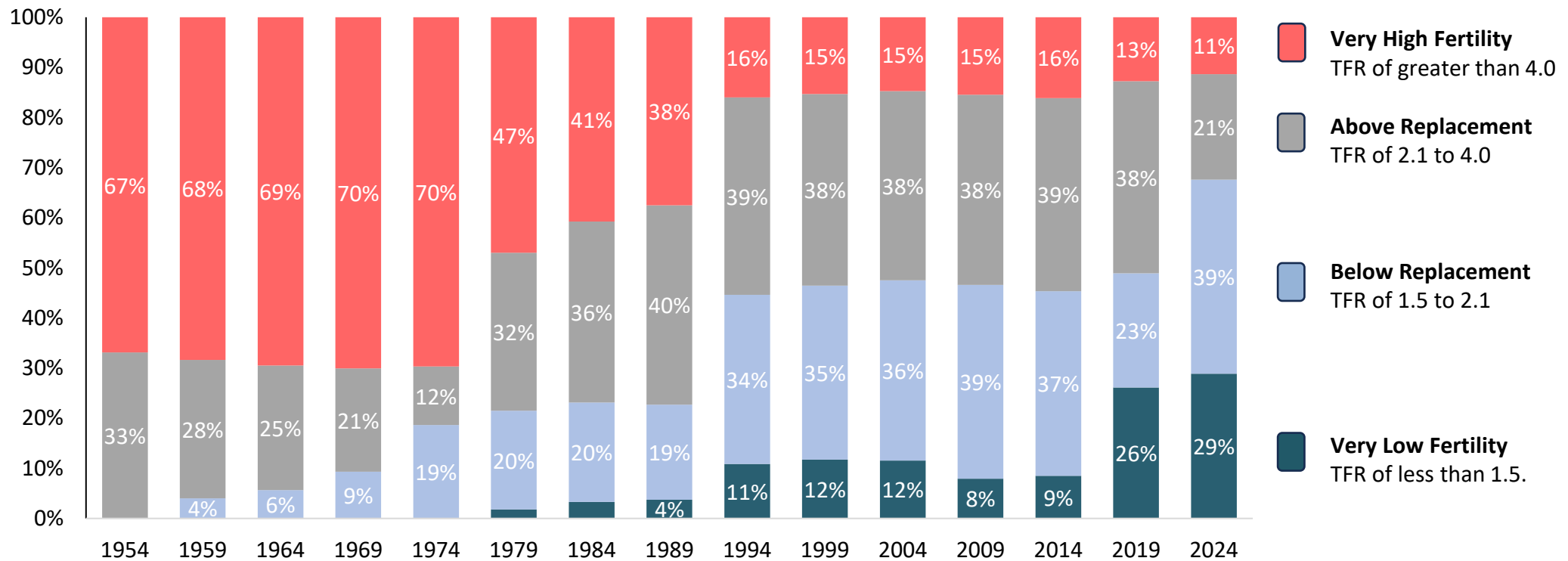
# Demographic Decline

# Plunging birthrates are ushering in an unprecedented new era of population stagnation and decline.



# Two-thirds of humanity now lives in countries where fertility has fallen beneath the replacement rate.

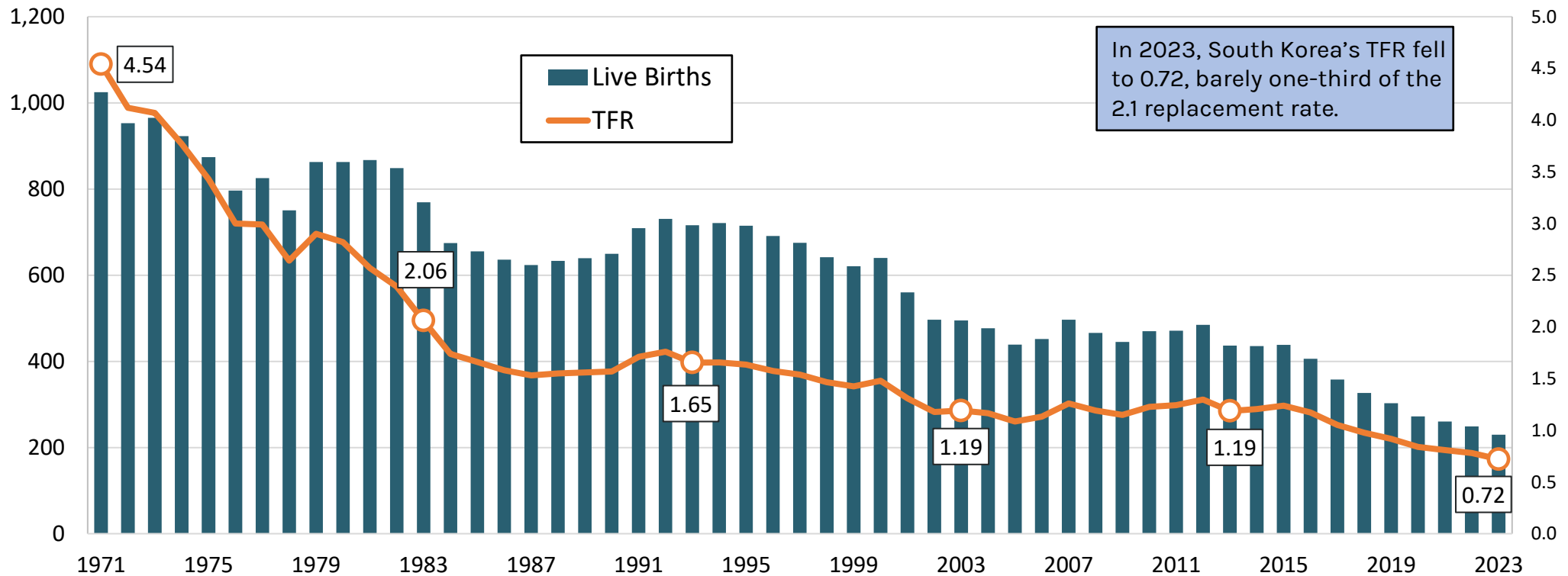
Distribution of the World's Population, by Level of TFR, 1954-2024



Source: UN Population Division (2024)

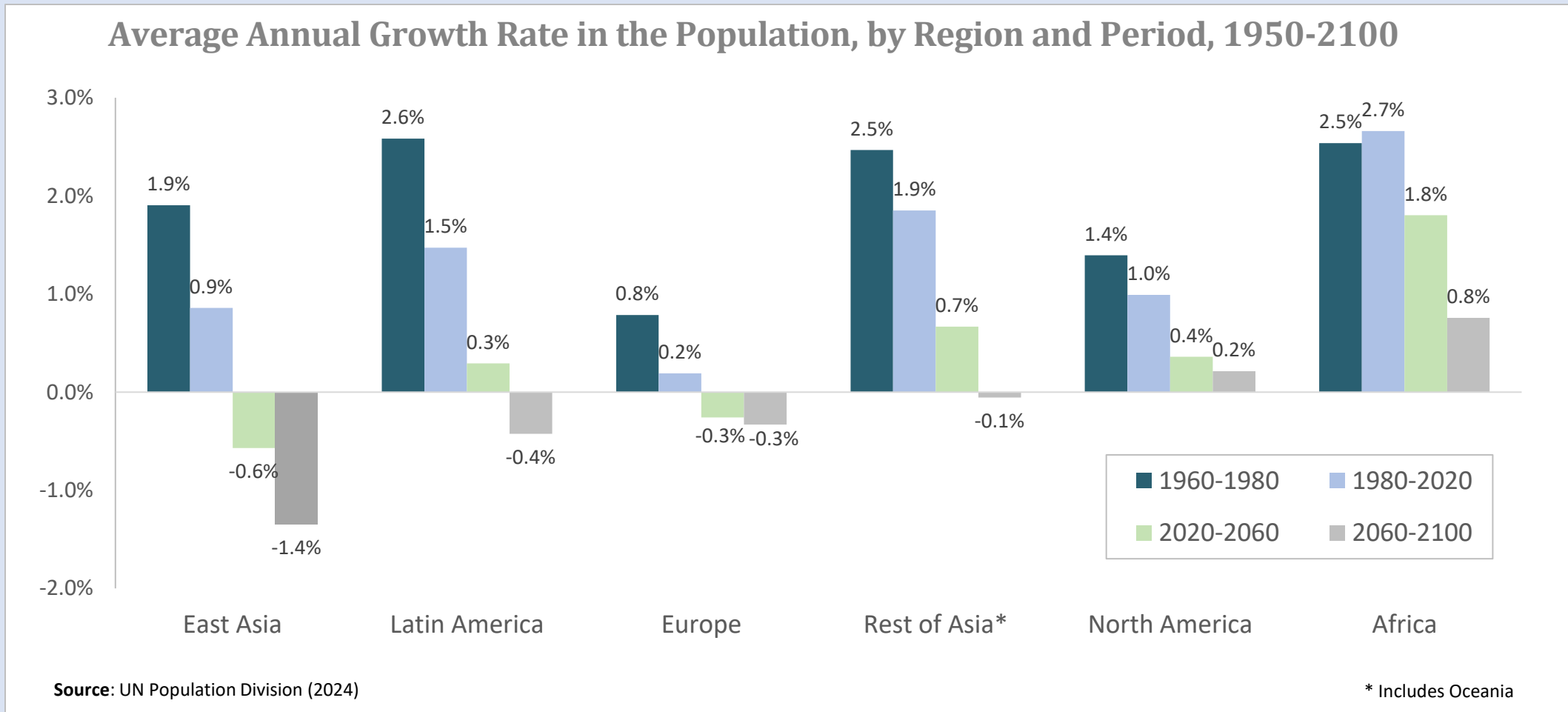
# In some countries, fertility has fallen to levels that would have been inconceivable just a decade ago.

## South Korean Total Fertility Rate and Live Births (in Thousands), 1971-2023

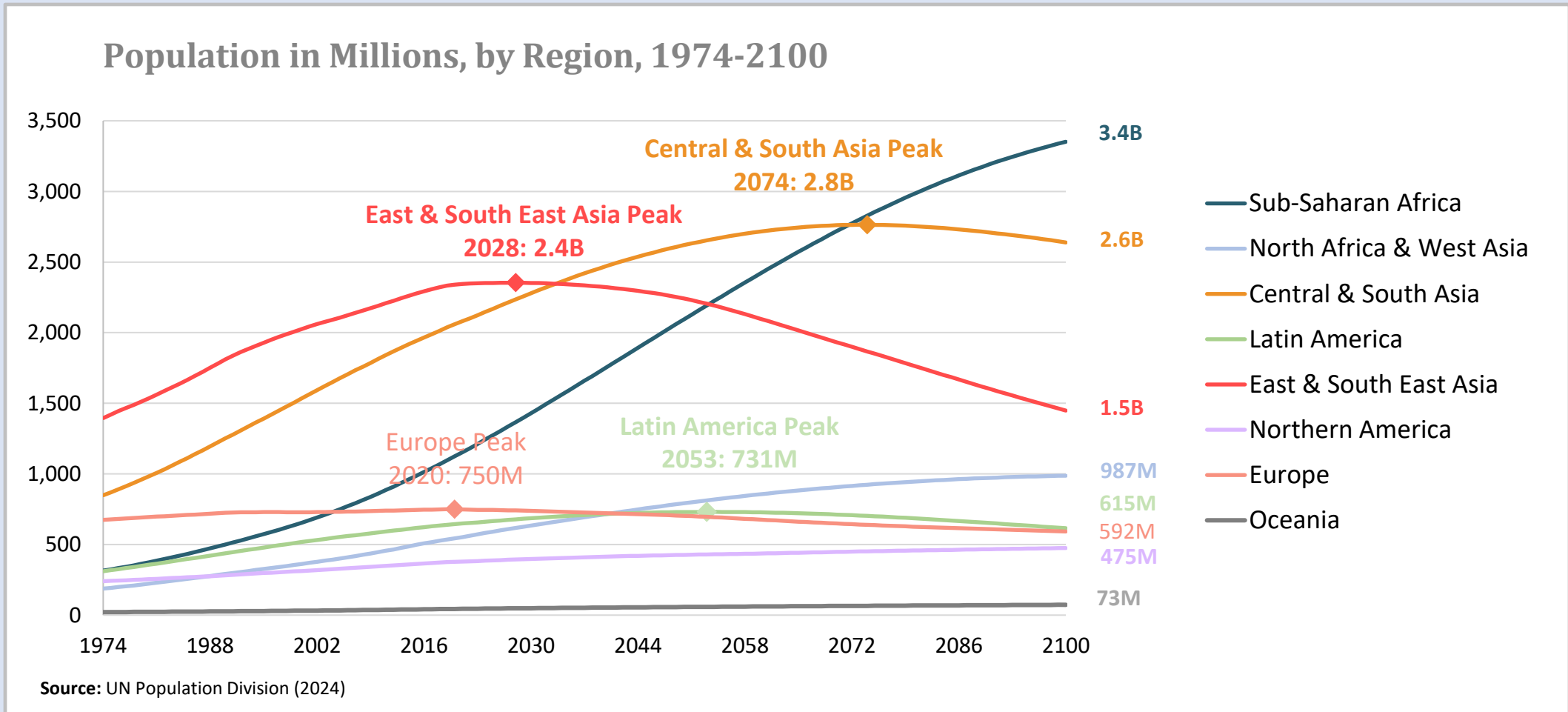


Source: UN Population Division (2024)

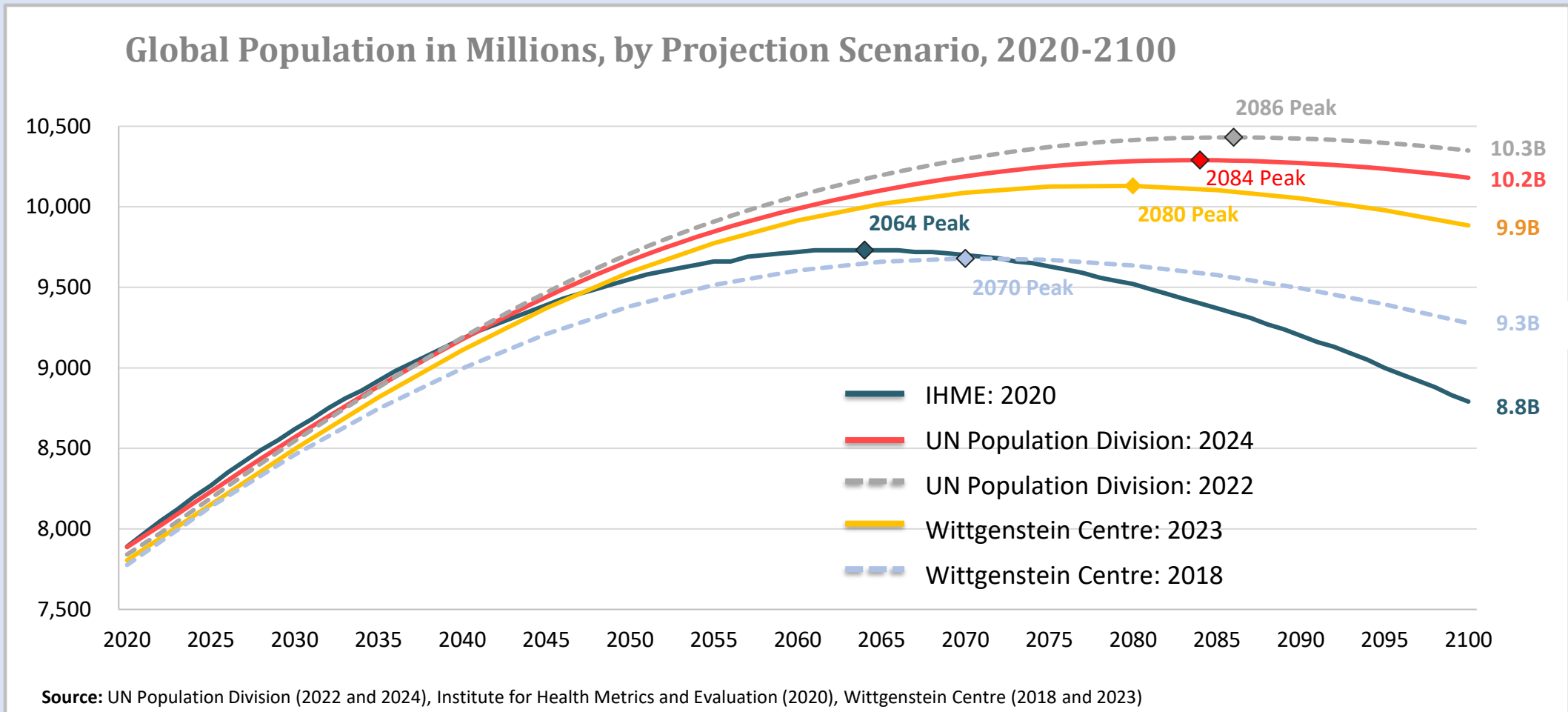
# Population growth is decelerating in all regions of the world—and in many it will soon be thrown into reverse.



# Europe's population is already declining, and East Asia's will begin to decline by the end of the decade.



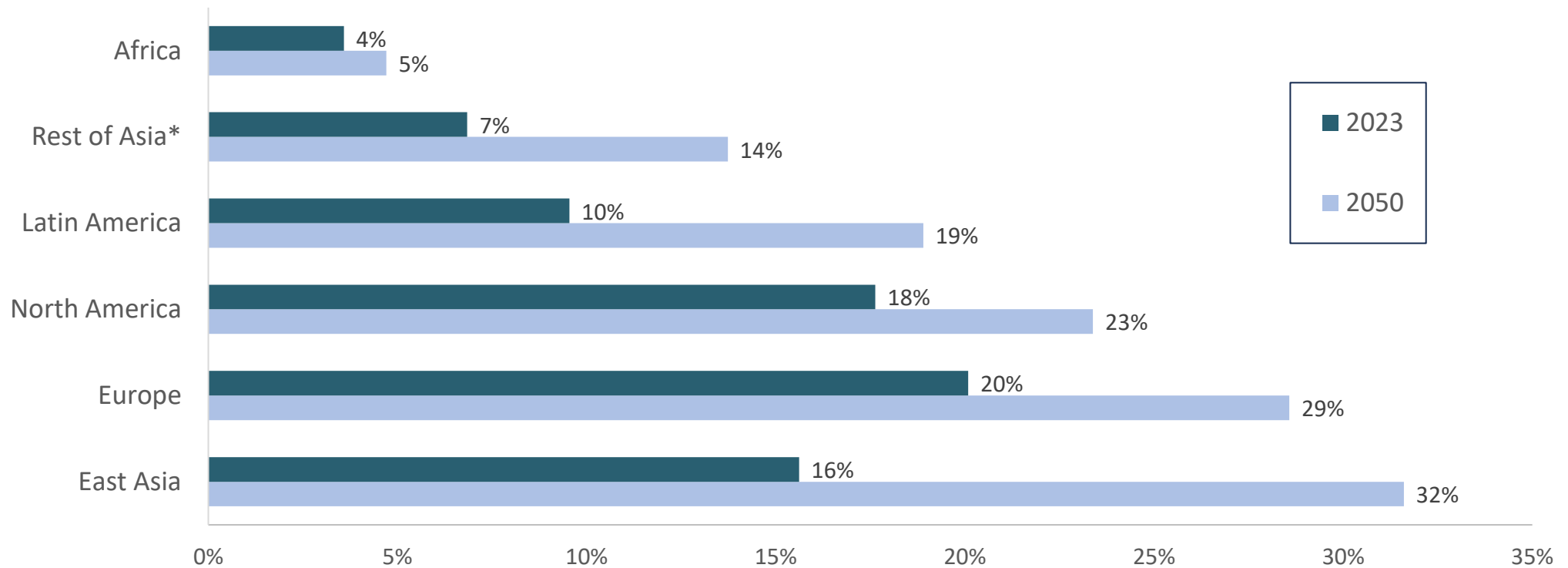
# Most demographers now agree that the world's total population will peak sometime later in the century.





# Falling fertility, along with rising life expectancy, is also leading to a dramatic aging of populations worldwide.

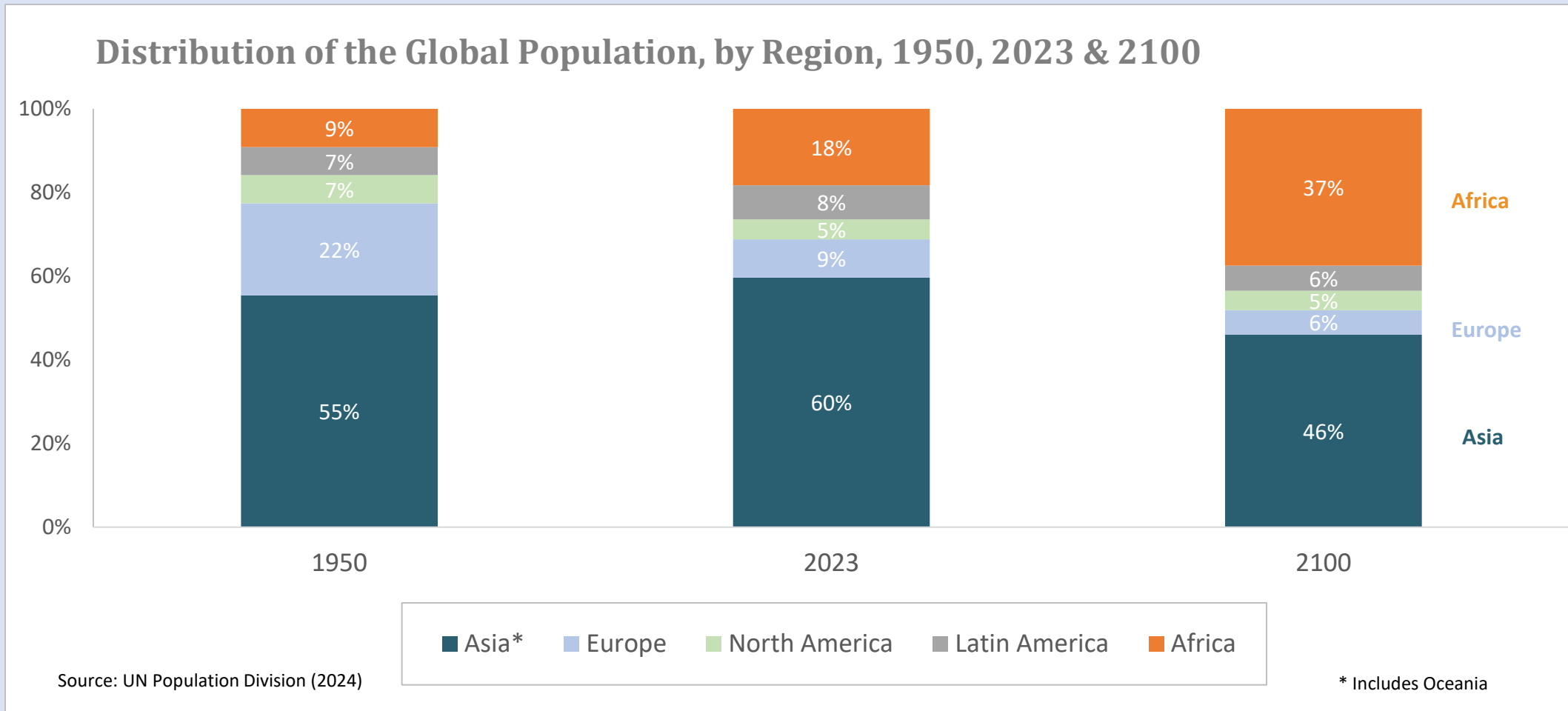
## Elderly (Aged 65 & Over) as a Percent of the Population, by Region, in 2023 & 2050



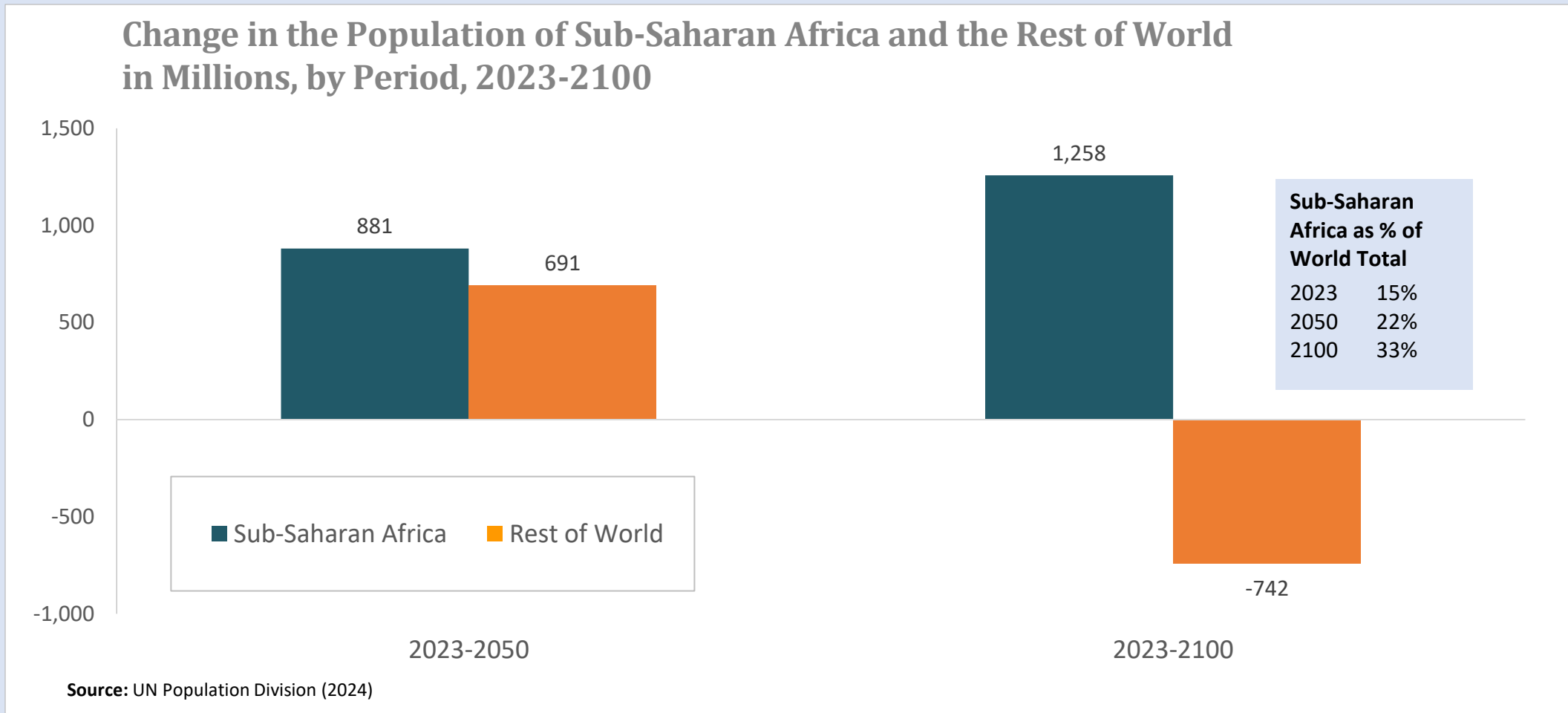
Source: UN Population Division (2024)

\* Includes Oceania

# The coming decades will see a massive shift in the distribution of the global population.

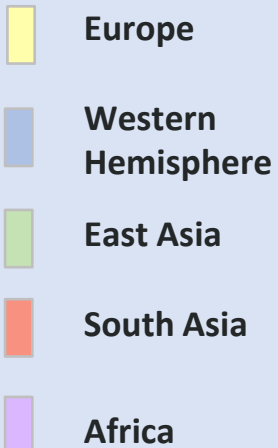


# Over the rest of the century, Sub-Saharan Africa will account for more than all growth in the global population.



# The World's 10 Most Populous Countries in 1950, 2000, 2050 & 2100

	1950		2000		2050		2100	
1.	China (539M)		China (1.3B)		India (1.7B)		India (1.5B)	
2.	India (343M)		India (1.0B)		China (1.3B)		China (637M)	
3.	United States (153M)		United States (280M)		United States (380M)		Pakistan (511M)	
4.	Russia (103M)		Indonesia (215M)		Pakistan (370M)		Nigeria (477M)	
5.	Japan (86M)		Brazil (173M)		Nigeria (357M)		D.R.C. (429M)	
6.	Germany (70M)		Pakistan (153M)		Indonesia (320M)		United States (421M)	
7.	Indonesia (68M)		Russia (147M)		Ethiopia (223M)		Ethiopia (366M)	
8.	Brazil (53M)		Bangladesh (133M)		Brazil (218M)		Indonesia (296M)	
9.	UK (50M)		Japan (130M)		D.R.C. (216M)		Tanzania (262M)	
10.	Italy (46M)		Nigeria (125M)		Bangladesh (214M)		Bangladesh (209M)	
			12. Germany (82M)		13. Russia (136M)		12. Brazil (164M)	
			21. UK (59M)		17. Japan (105M)		17. Russia (126M)	
			22. Italy (57M)		24. Germany (78M)		32. Japan (77M)	
					26. UK (75M)		33. UK (74M)	
					38. Italy (52M)		35. Germany (71M)	
							60. Italy (35M)	



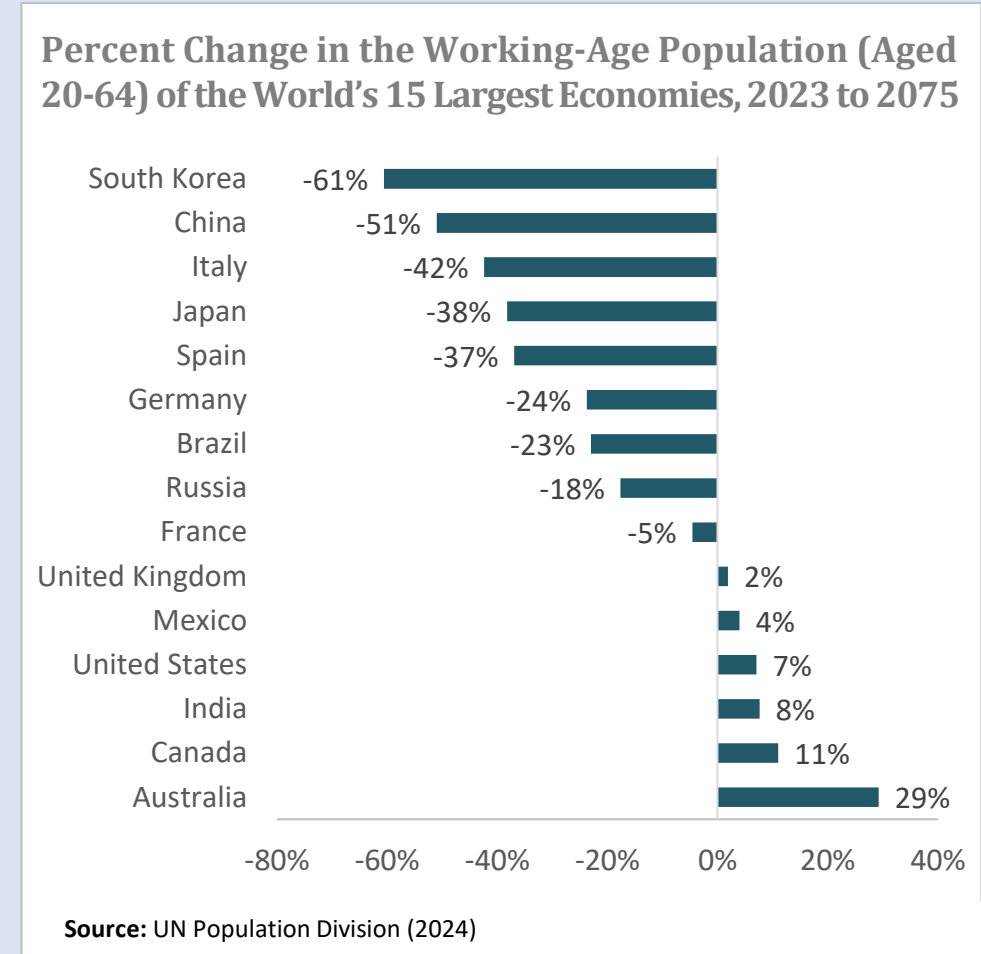
Source: UN Population Division (2024)

# **Economic Stagnation**

# More slowly growing or contracting workforces will become a growing drag on economic growth.

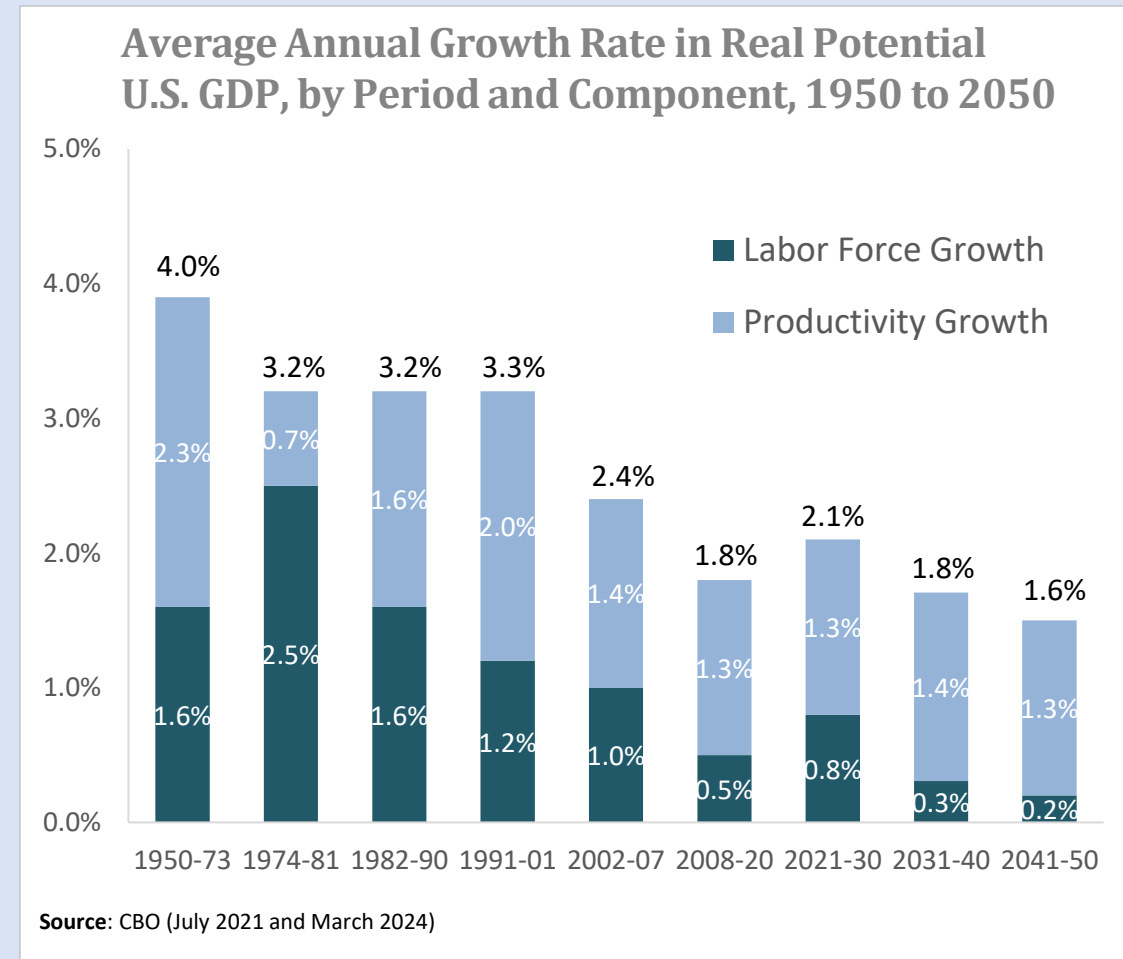
	Average Annual Growth Rate in the Working-Age Population (Aged 20-64) of the G-7 Countries, by Decade, 1980s-2040s						
	1980s	1990s	2000s	2010s	2020s	2030s	2040s
<b>Canada</b>	1.7%	1.1%	1.3%	0.7%	0.4%	0.4%	0.2%
<b>France</b>	1.0%	0.4%	0.6%	-0.3%	0.0%	-0.2%	-0.2%
<b>Germany</b>	1.1%	0.3%	-0.5%	0.1%	-0.9%	-0.7%	-0.4%
<b>Italy</b>	0.9%	0.2%	0.2%	-0.3%	-0.7%	-1.4%	-1.2%
<b>Japan</b>	0.7%	0.4%	-0.4%	-1.0%	-0.6%	-1.3%	-1.3%
<b>UK</b>	0.7%	0.4%	0.7%	0.4%	0.4%	0.3%	0.0%
<b>U.S.</b>	1.3%	1.2%	1.1%	0.6%	0.2%	0.3%	0.1%

Source: UN Population Division (2024)

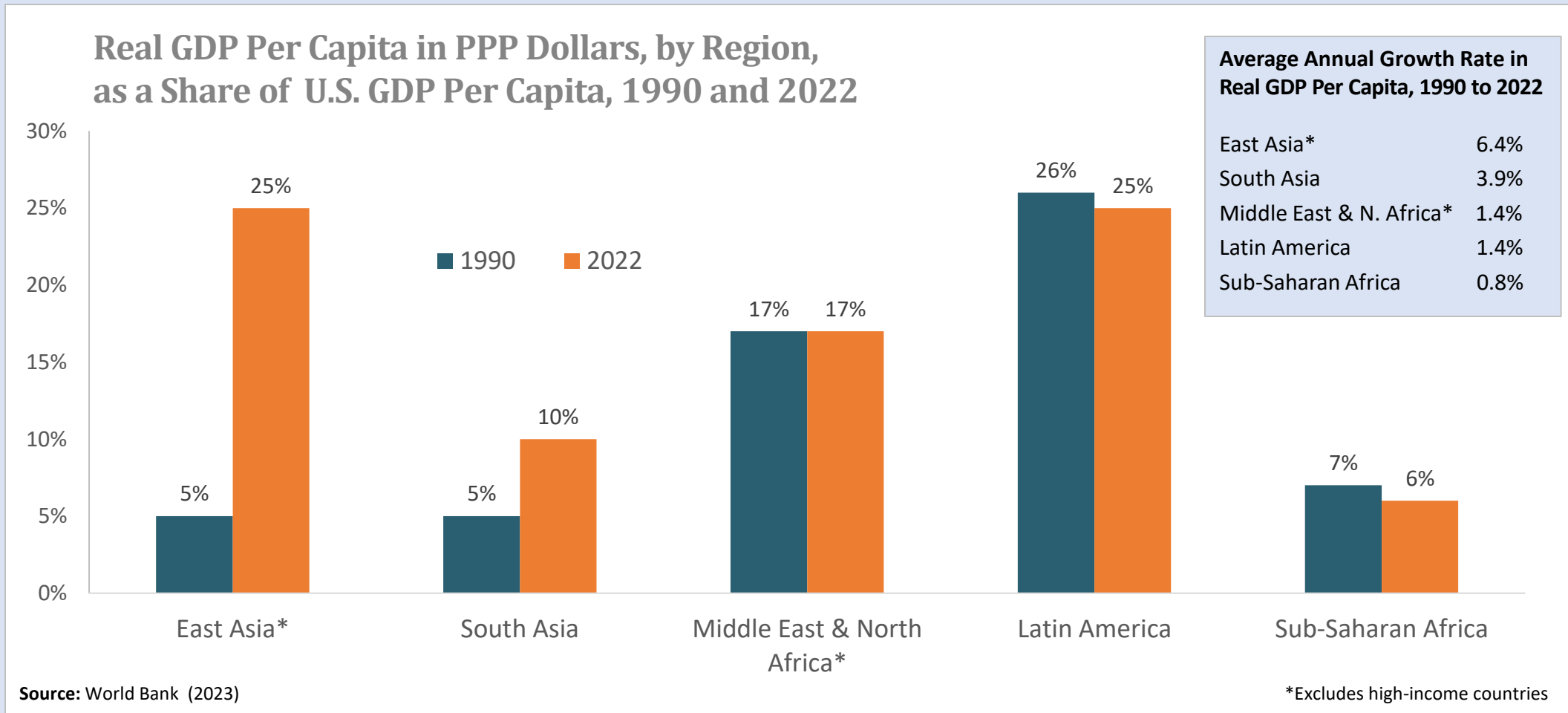


# There are many reasons to think that productivity growth is more likely to slow than to speed up in aging societies.

- ❑ Less capital broadening investment and slower turnover in the capital stock
- ❑ Graying workforces, which may be less flexible, less mobile, and less entrepreneurial
- ❑ Crowding out of private investment from capital markets and public investment from government budgets
- ❑ “Baumol’s cost disease”
- ❑ Anticompetitive business psychology
- ❑ Beggar-thy-neighbor protectionism



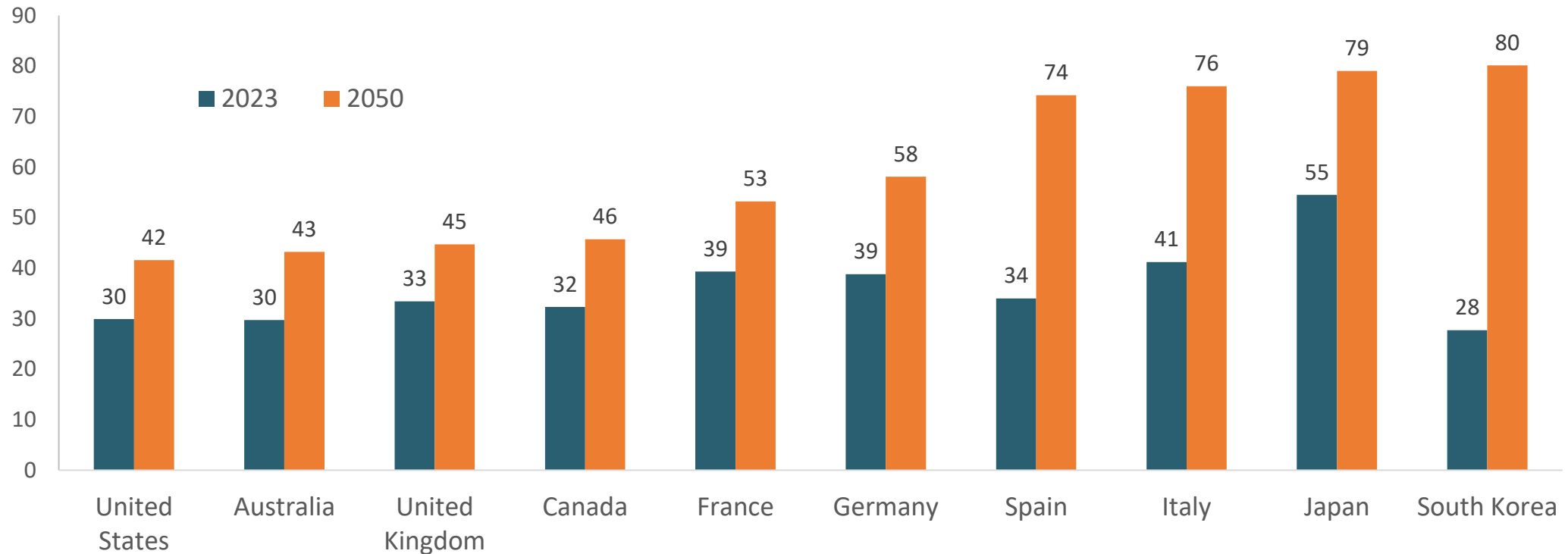
# Middle Income Trap: Not many new countries seem to be joining the developed world club.





# Even as economic growth slows, rising aged dependency ratios will translate into rising fiscal burdens.

Aged Dependency Ratio (Elderly Aged 65 & Over per 100 Adults Aged 20-64), by Country, in 2023 & 2050

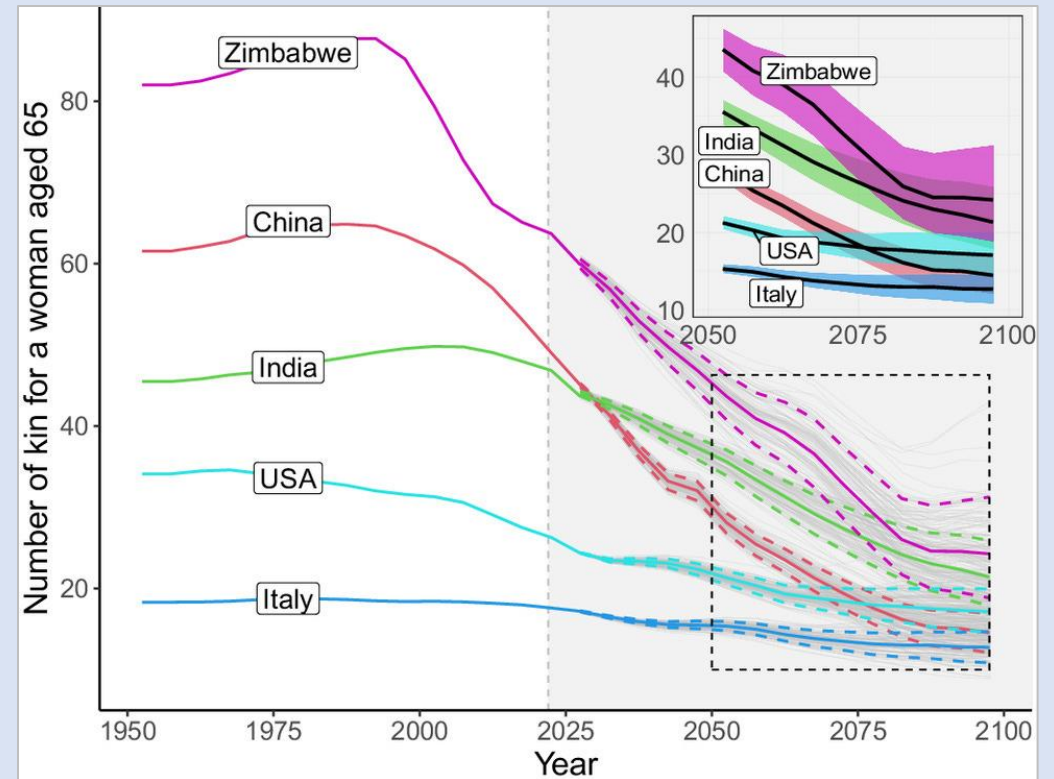


Source: UN Population Division (2024)

# As family support networks come under demographic pressure, new burdens may be shifted to government.

- ❑ What can substitute for the extended family in providing childcare?
- ❑ What can substitute for the extended family in helping young adults successfully “launch”?
- ❑ What can substitute for the extended family in providing care for the frail elderly?
- ❑ “Little Emperor” syndrome in peacetime
- ❑ Growing casualty aversion in wartime

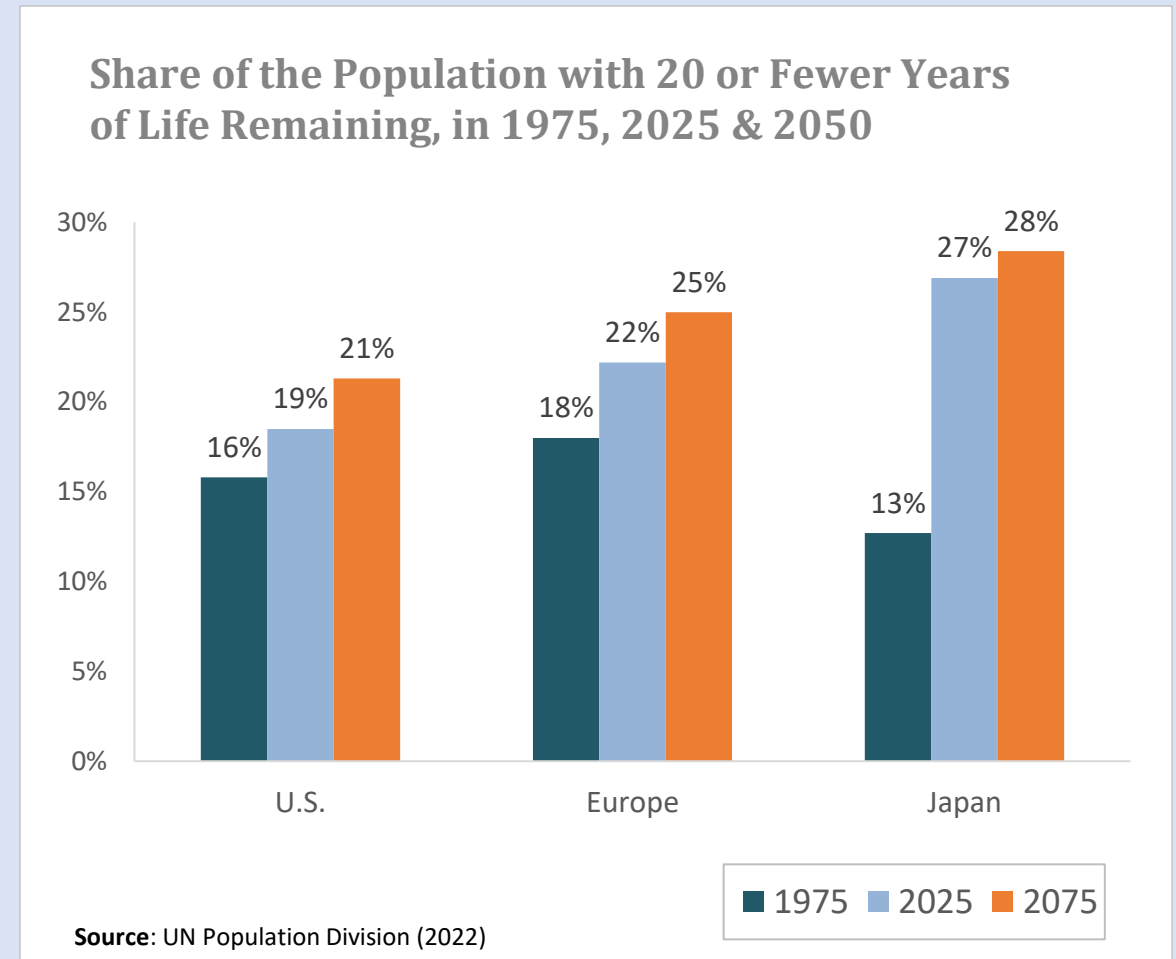
Size of the Extended Family of Women at Age 65, by Country, 1950-2100



Source: PNAS (December 2023)

# Slow-growth, aging societies may be characterized by shorter time horizons and a more risk averse social mood.

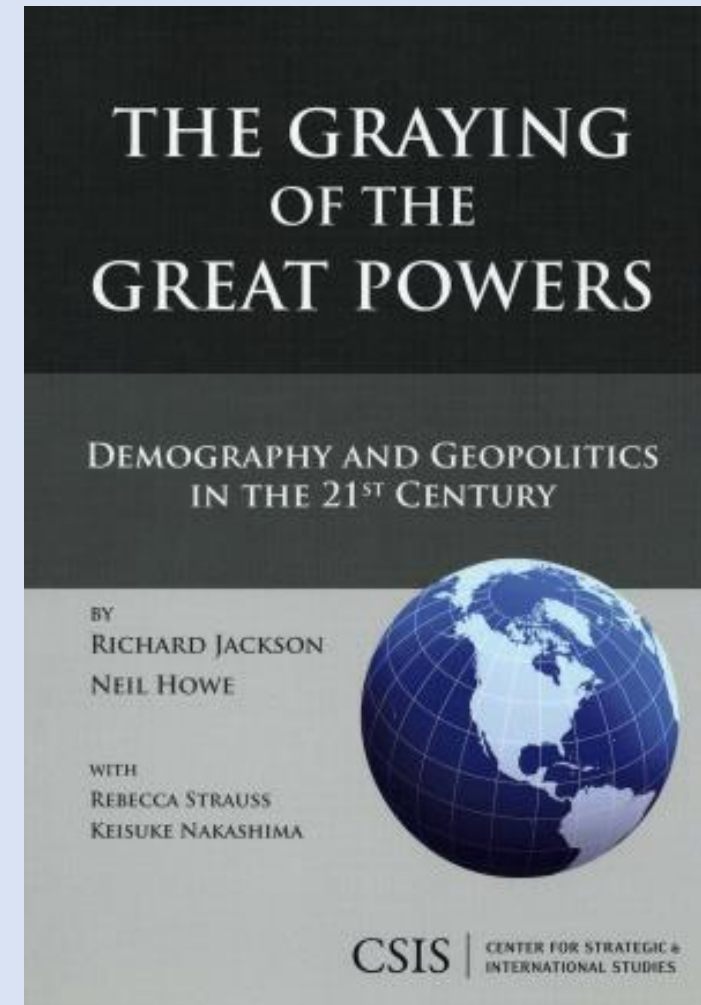
- ❑ At home, aging societies may favor current consumption over investment in the future.
- ❑ Abroad, aging societies may favor ad hoc settlements over decisive confrontations.
- ❑ Extremely youthful societies are often dysfunctional, prone to violence, social unrest, and civil strife.
- ❑ Extremely aged societies may also prove to be dysfunctional in a different way, favoring the past over the future and the old over the young.



# **Geopolitical Instability**

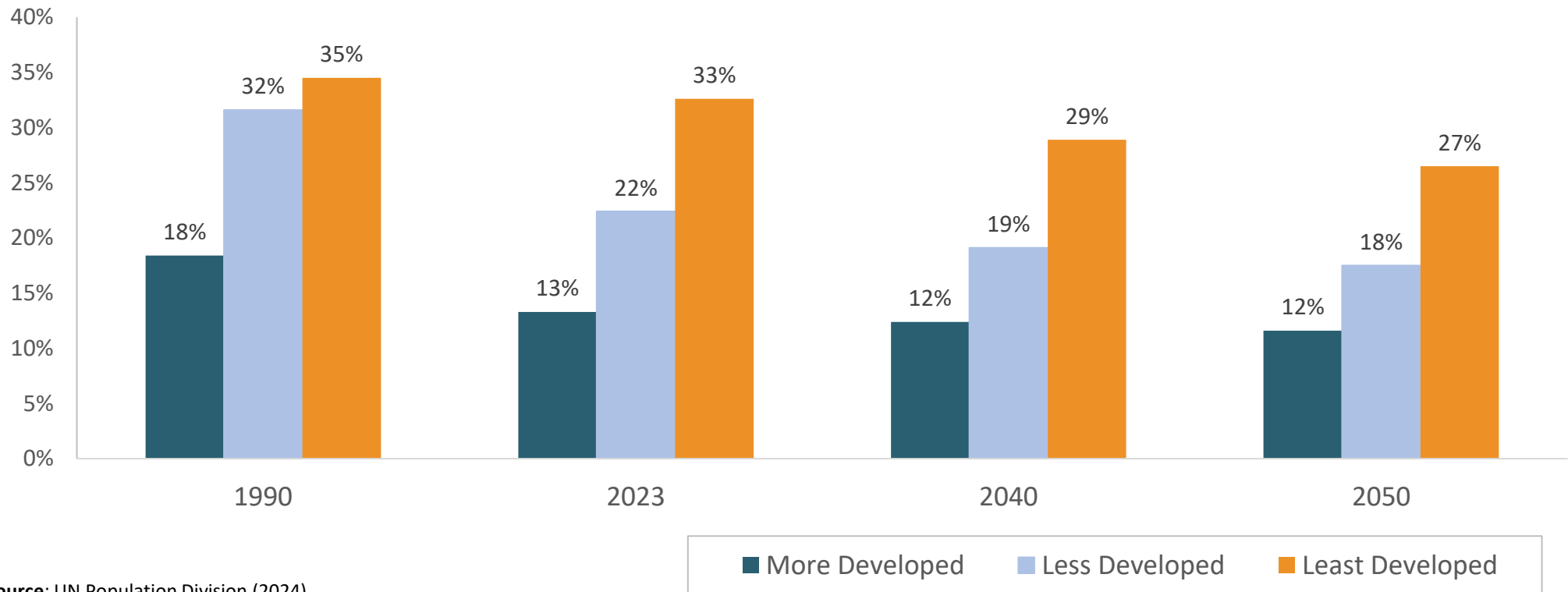
# Population size and economic size are in combination potent twin engines of national power.

- ❑ Population size and economic size underpin the hard power of national defense and the semi-hard power of foreign assistance. They even influence the soft power of business and cultural dominance.
- ❑ In coming decades, a slow-growth, aging developed world may increasingly lack the capacity and the will to maintain today's rules-based world order.
- ❑ While history has many examples of small powers that exercised outsized geopolitical sway, it has few if any examples of geopolitically rising powers that were at the same time demographically and economically declining powers.



# Geopolitical threats: Continuing youth-driven instability in the poorer parts of the developing world

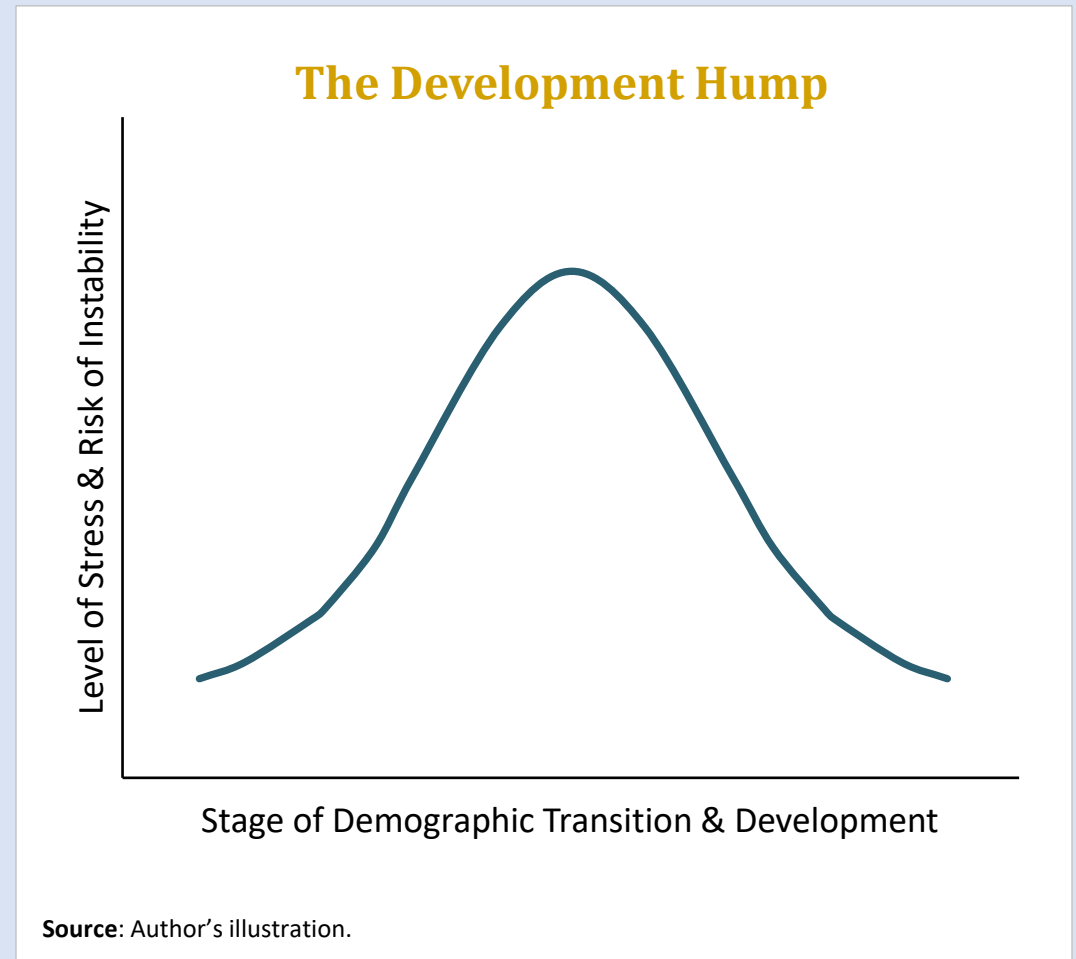
“Youth Bulge” Population Aged 15-24 as a Percent of the Total Population Aged 15 & Over, by Countries’ Development Status, 1990-2050



Source: UN Population Division (2024)

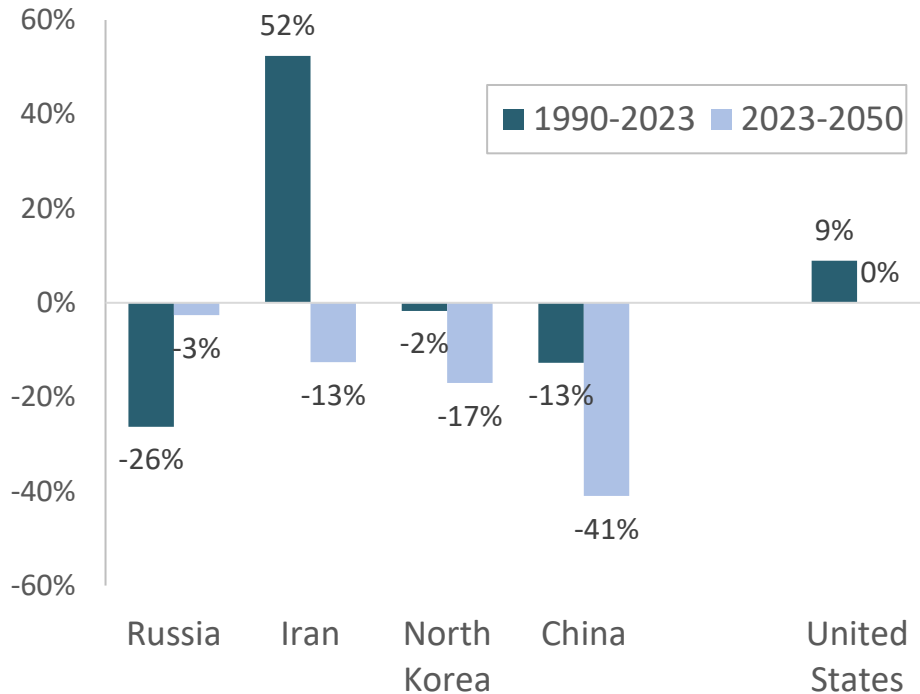
# Geopolitical threats: The appeal of authoritarianism in rapidly developing middle-income countries.

- ❑ Societies undergo tremendous stress as they move from the traditional to the modern.
  - Rapid urbanization
  - Environmental degradation
  - Growing income inequality
  - Growing ethnic competition
  - Religious extremism
- ❑ The appeal of the “China model” to many governments in the developing world lies in its proven ability to leverage the upside of development (economic growth) while managing the downside (social instability).



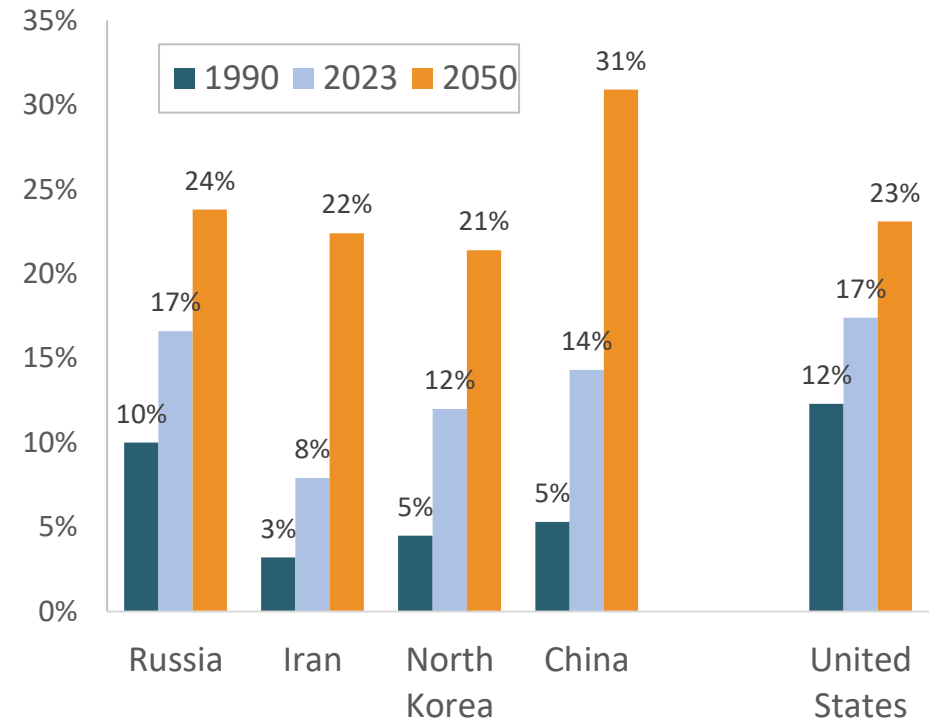
# Two Competing Theories of Great Power Competition: The Geriatric Peace Thesis

Percent Change in the Service-Age Population (Aged 20-34), by Country and Period, 1990 to 2050



Source: UN Population Division (2024)

Elderly (Aged 65 & Over) as a Percent of the Population, by Country, in 1990, 2023 & 2050

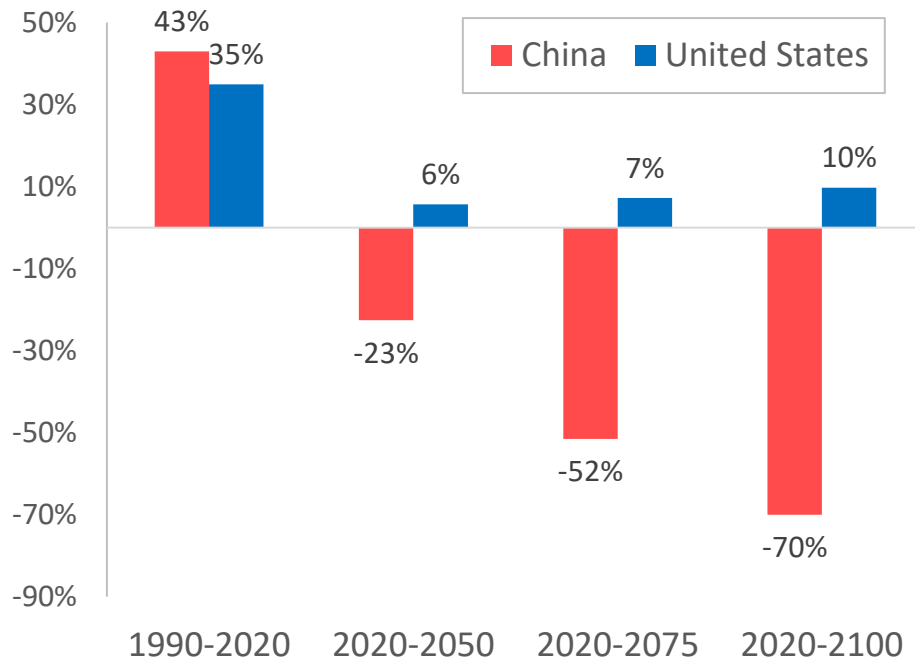


Source: UN Population Division (2024)



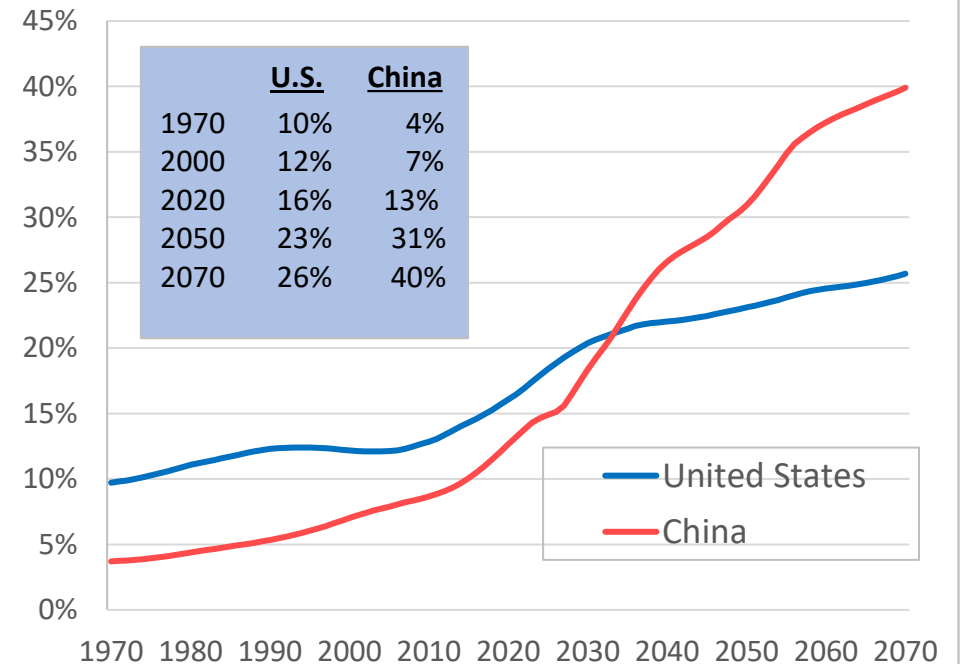
# Two Competing Theories of Great Power Competition: The Thucydides Trap

Percent Change in the Chinese and U.S. Working-Age Population (Aged 20-64), by Period, 1990-2100



Source: UN Population Division (2024)

Chinese and U.S. Elderly (Aged 65 & Over), as a Percent of the Population, 1970-2070



Source: UN Population Division (2024)

# Possible Responses

# Five Big Questions for the Developed Countries

- ❑ **PRONATALISM**: Should we try to encourage larger families—and which types of policies (if any) work?
- ❑ **IMMIGRATION**: Is higher immigration a viable long-term solution?
- ❑ **RETIREMENT**: Can longer work lives rebalance the demographic books?
- ❑ **ENTITLEMENTS**: What are the fairest and most efficient ways to control rising retirement and health-care spending?
- ❑ **NATIONAL SECURITY**: What size and configuration of forces and what new strategies and alliances are needed to successfully navigate the coming global demographic transformation?

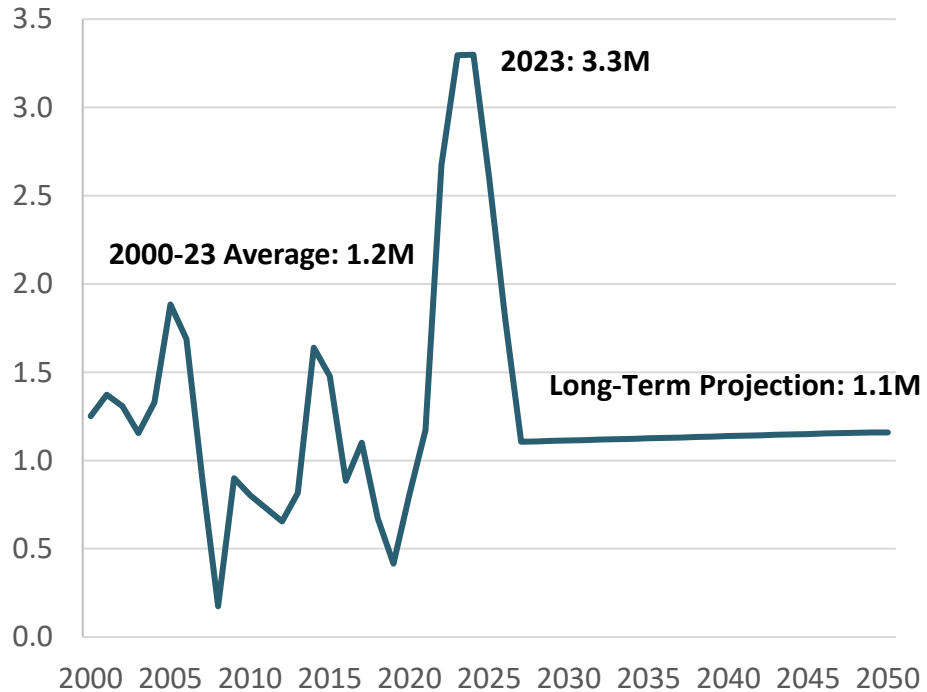


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# Annex

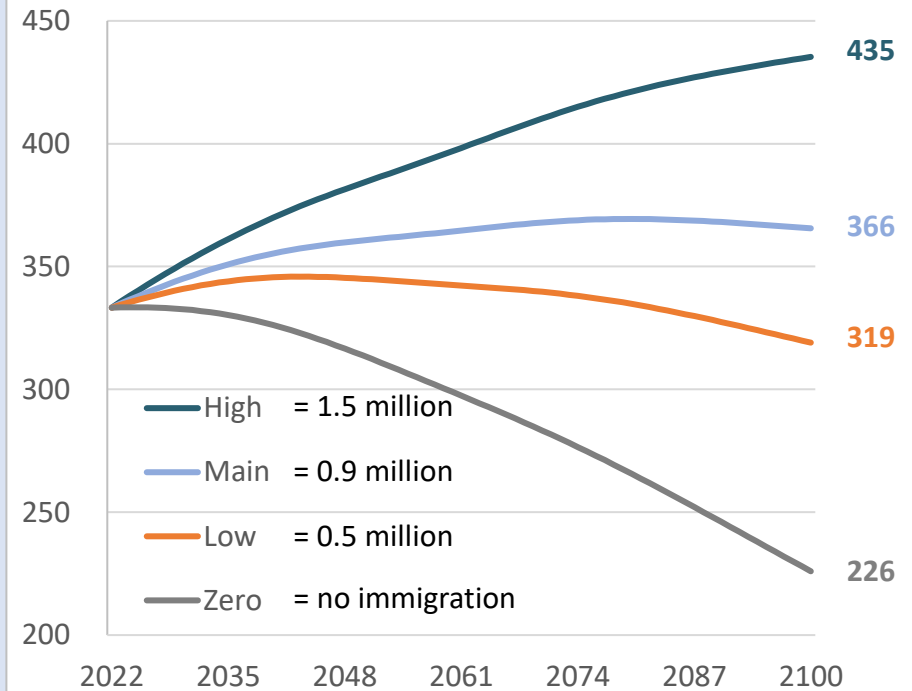
# Immigration can be the decisive population variable in a low-fertility environment.

U.S. Net Immigration in Millions, History and CBO Projection, 2000-2050



Source: CBO (January 2024)

U.S. Population in Millions, by Census Bureau Immigration Scenario, 2022- 2100



Source: Census Bureau (November 2023)

# The scale of the demographic transformation has only recently become apparent.

