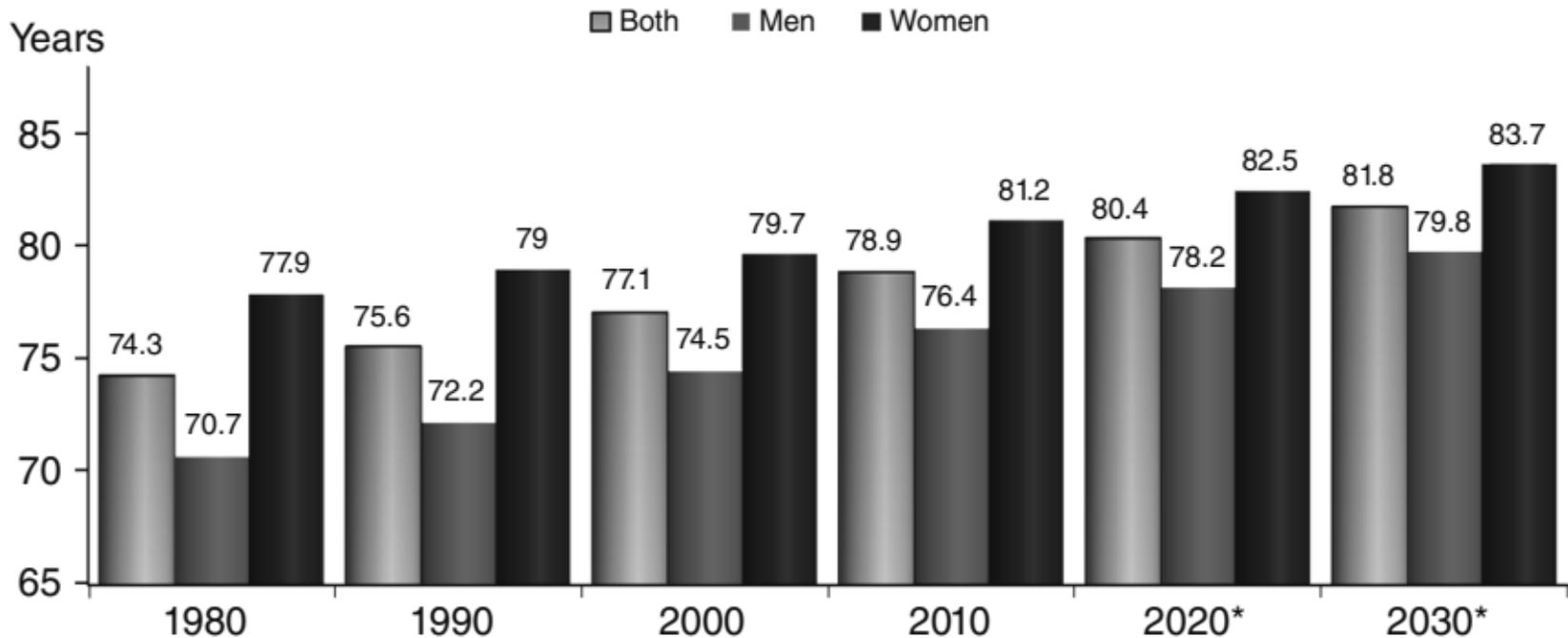


Global Life Expectancy

* Projected.

SOURCES: United Nations; Milken Institute.

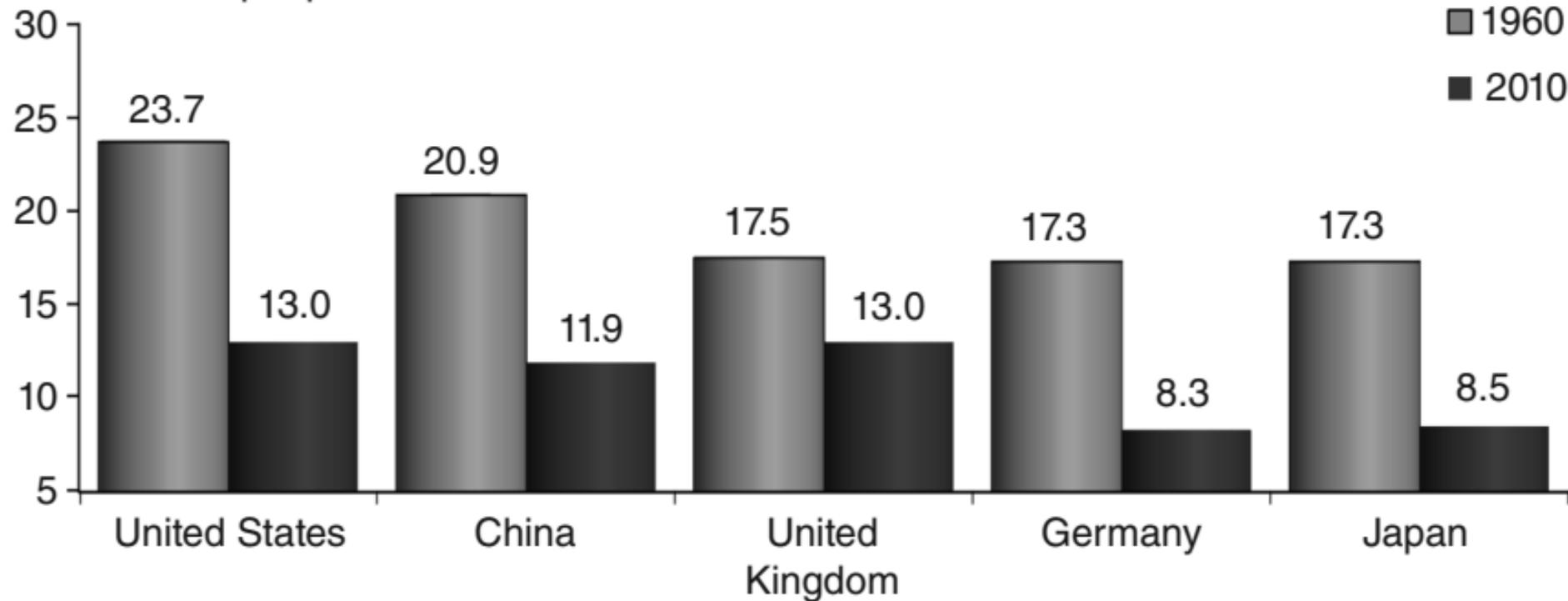


U.S. Life Expectancy at Birth

*Projected.

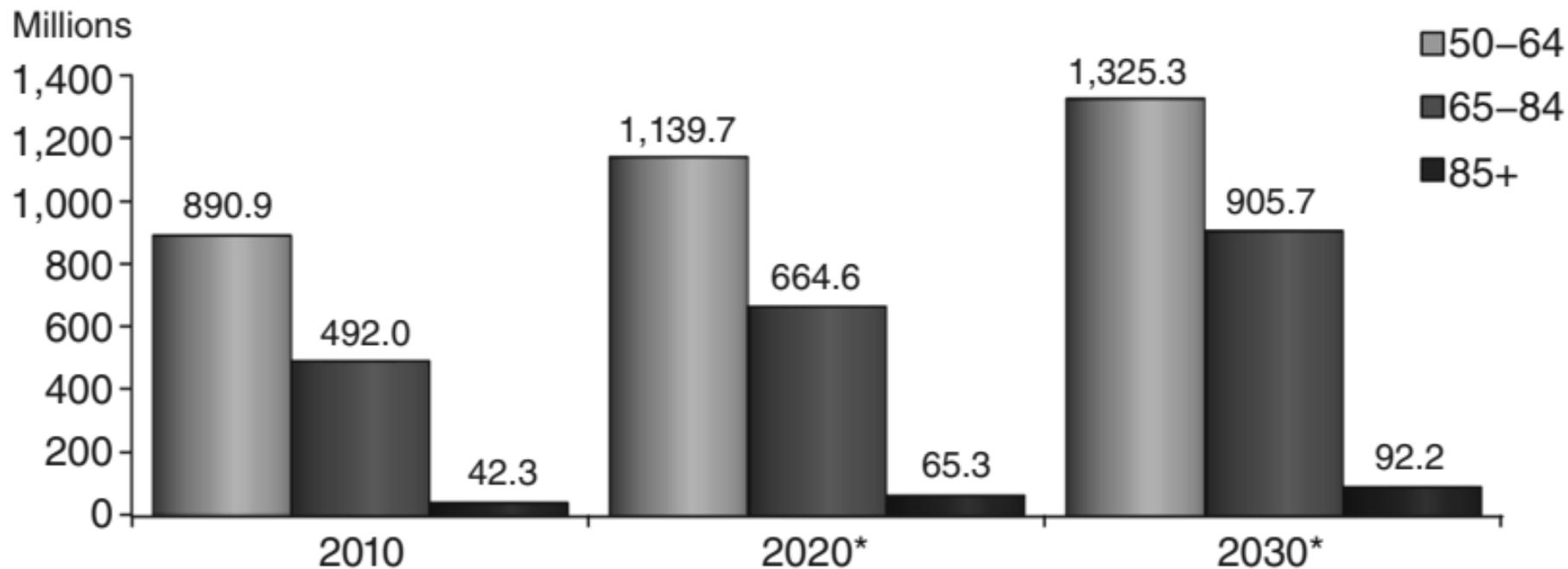
SOURCES: United Nations; Milken Institute.

Per thousand people



Birthrates, per 1,000 People: 1960, 2010

SOURCES: World Bank; Milken Institute.



Aging of the World Population

*Projected.

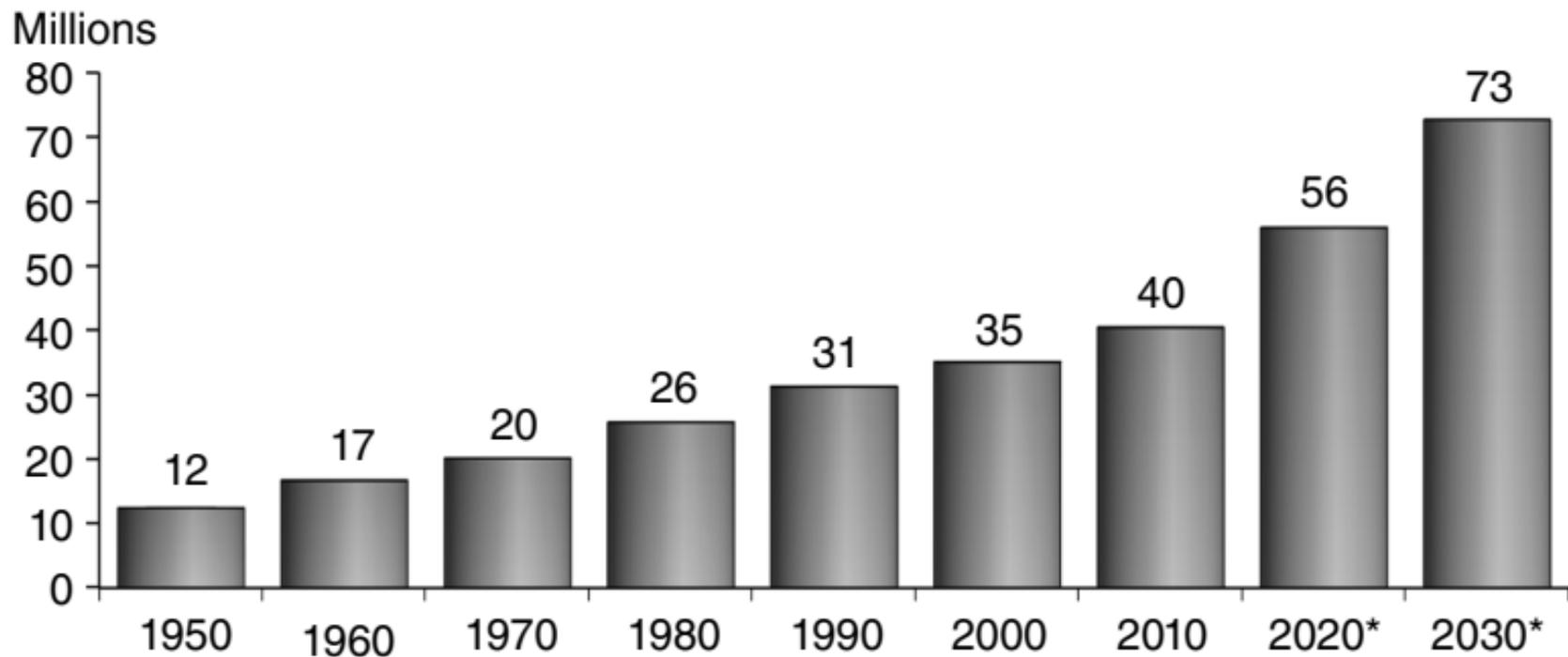
SOURCES: U.S. Census Bureau; Milken Institute.

Selected Countries, Percentage of Population 50+, 2000–2030

Country	2000	2010	2030*
United States	27	32	36
United Kingdom	33	35	39
Germany	35	40	48
Italy	37	39	49
Russia	28	33	41
Japan	38	44	54
China	18	25	40

* Projected.

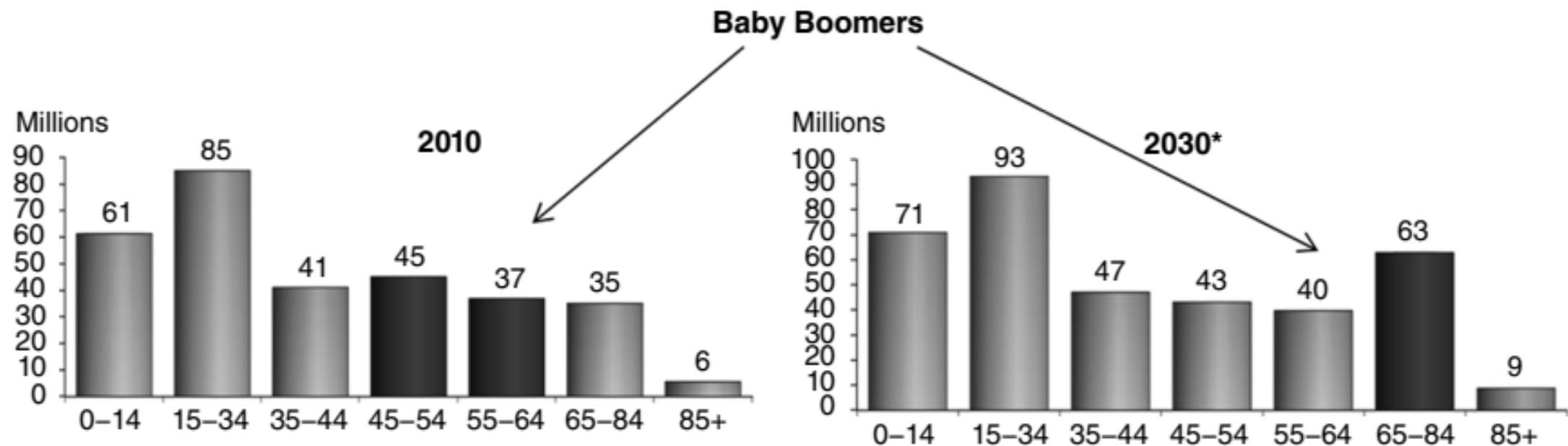
SOURCES: U.S. Census Bureau; Milken Institute.



U.S. Over-65 Population, 1950–2030

* Projected.

SOURCES: U.S. Census Bureau; Milken Institute.

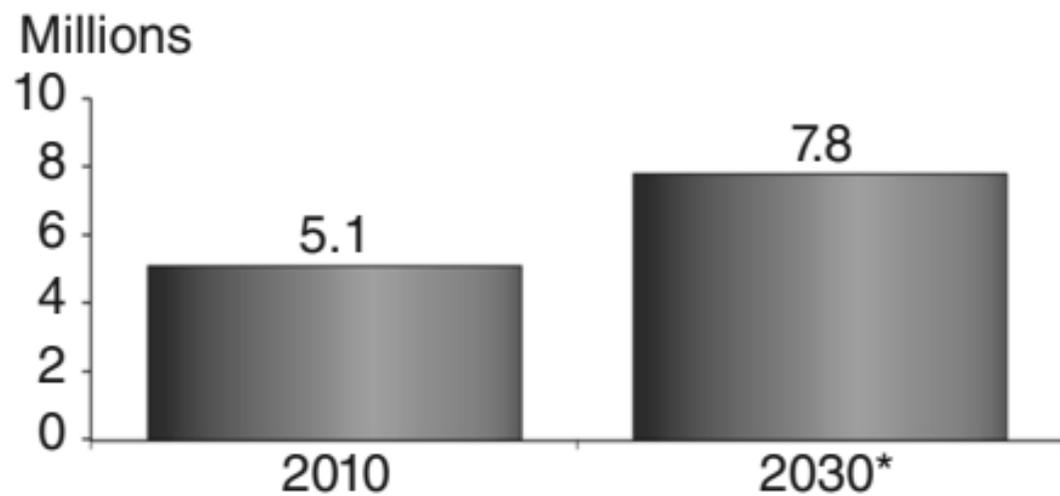


U.S. Population by Age 2010–2030

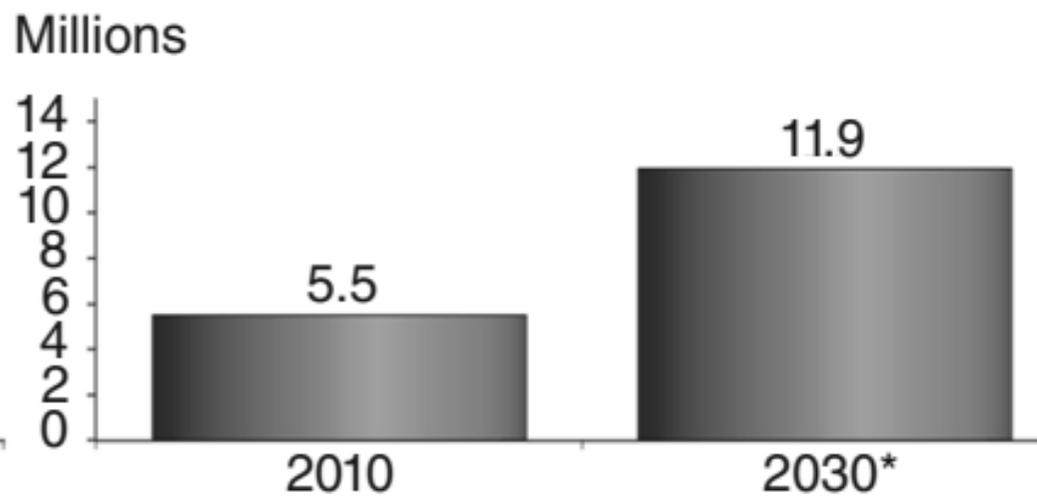
*Projected.

SOURCES: U.S. Census Bureau; Milken Institute.

Alzheimer's, United States



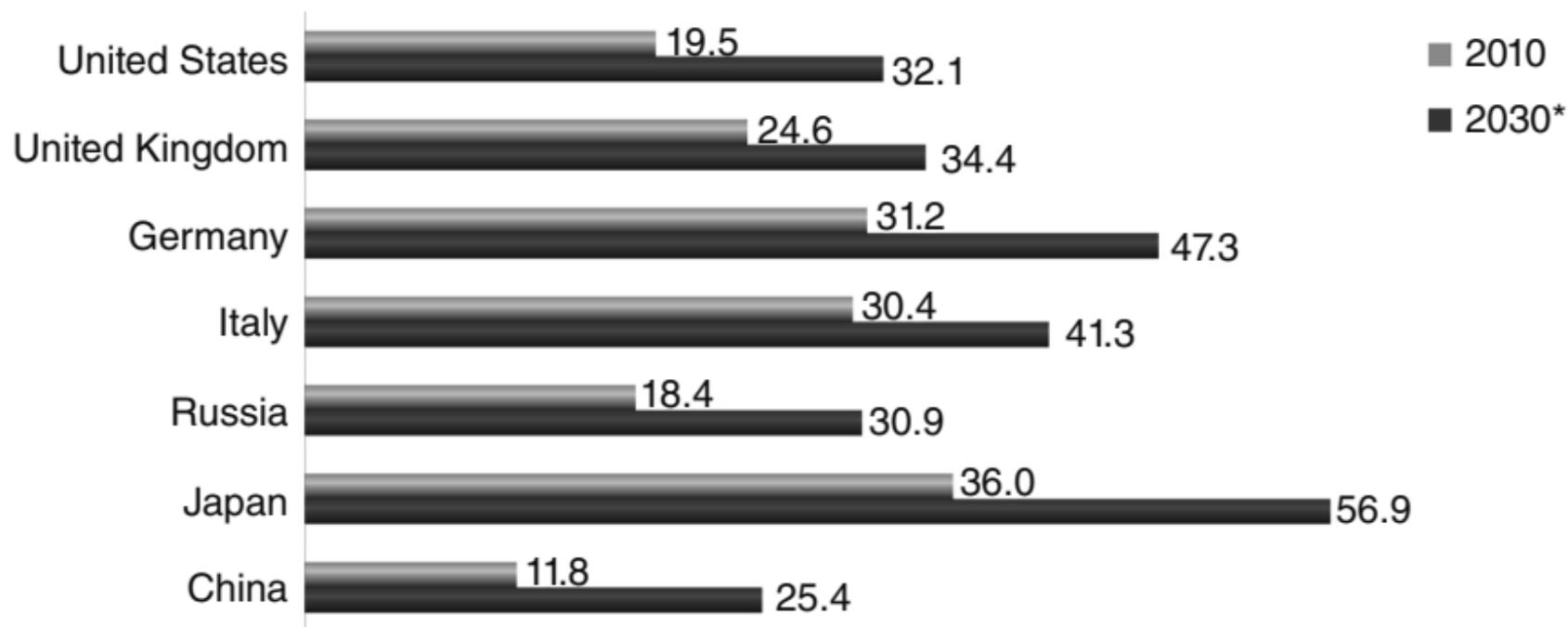
Dementia, East Asia



Alzheimer's and Dementia by the Numbers

*Projected.

SOURCES: Alzheimer's Association; Alzheimer's Disease International; Milken Institute.

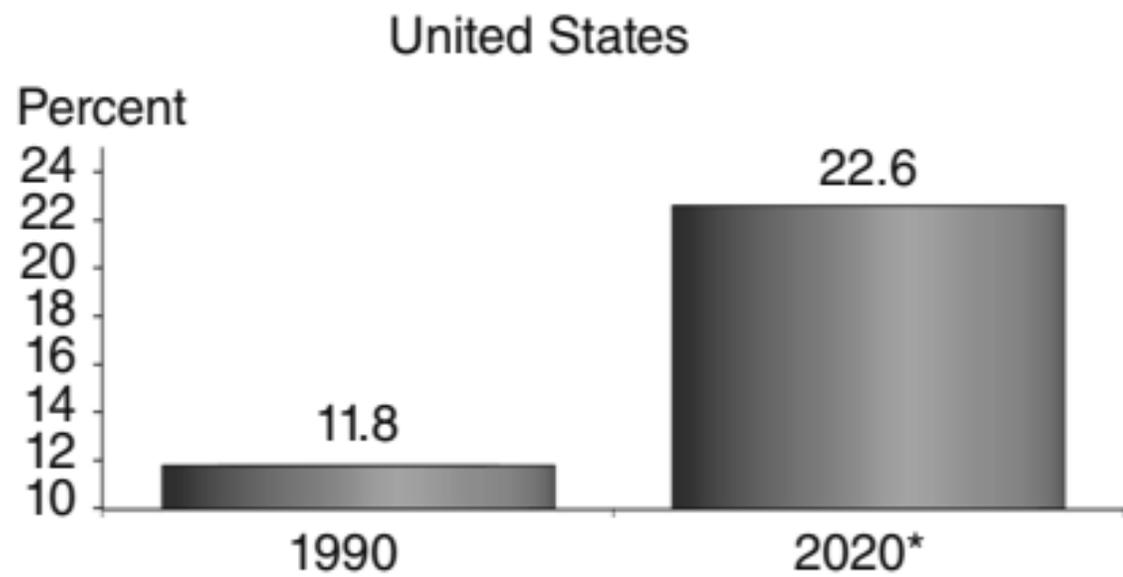
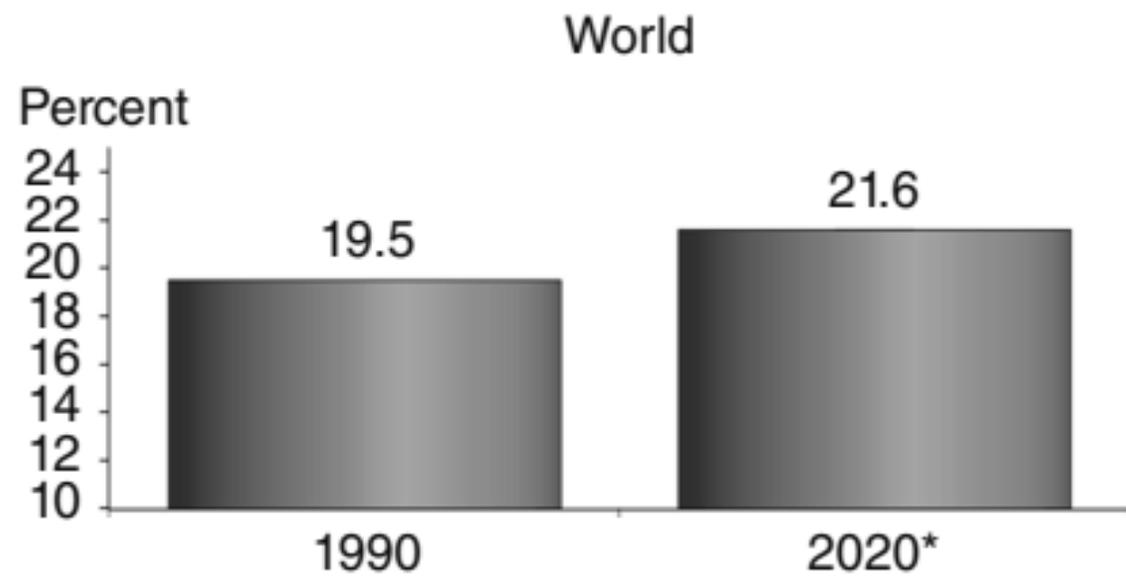


Number of People 65+ Per 100 Working-Age People, 2010, 2030**

*Projected.

**Number of 65+ for every 100 people (15–64 years).

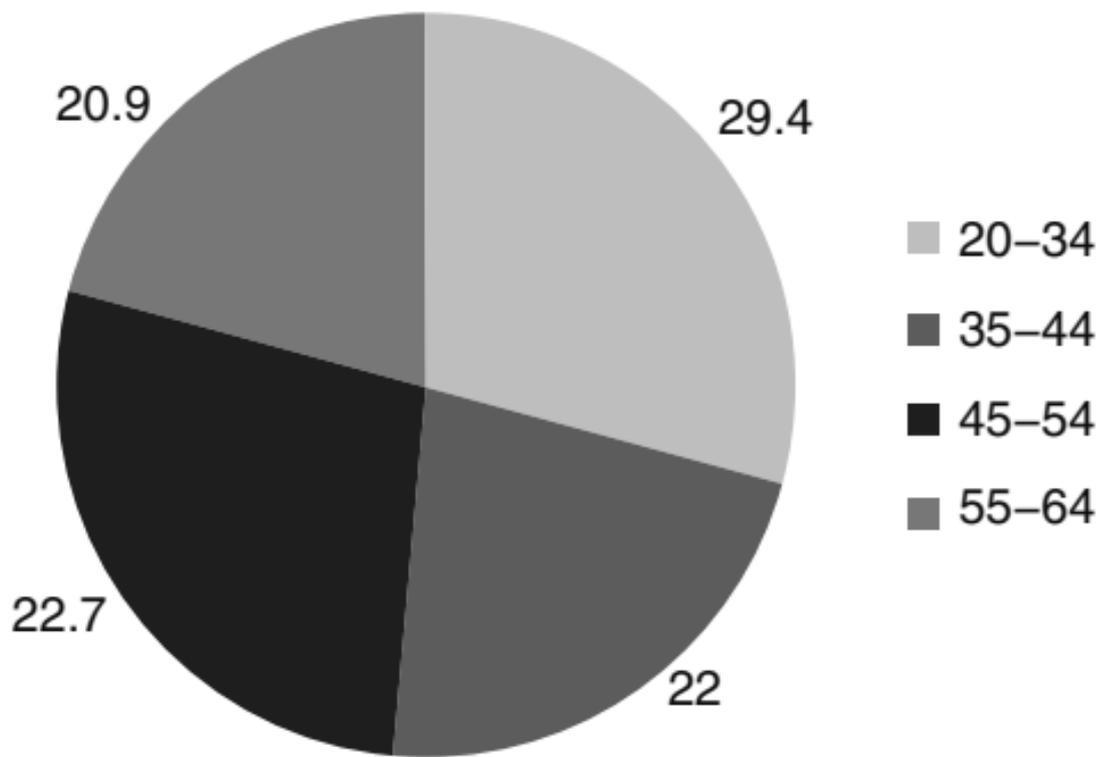
SOURCES: U.S. Census Bureau; Milken Institute.



Rise in the Percentage of Workforce Age 65+

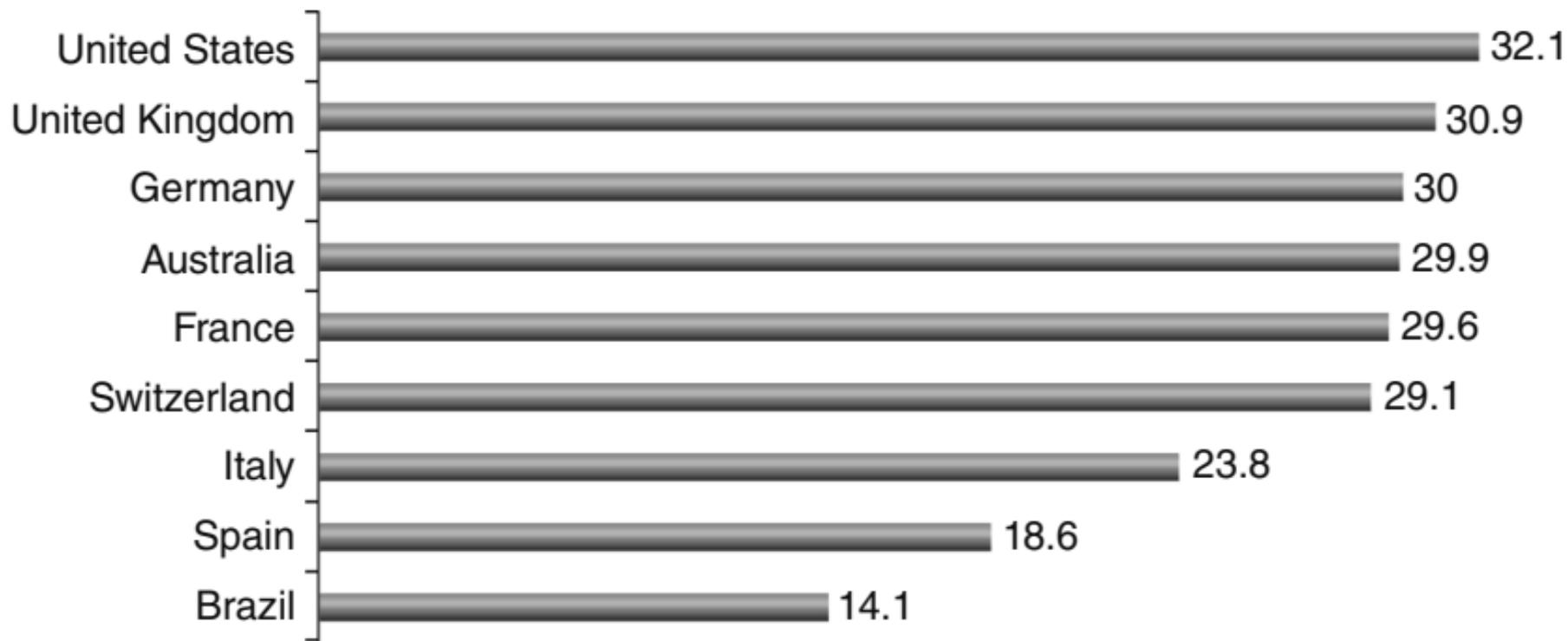
*Projected.

SOURCES: Bureau of Labor Statistics; Milken Institute.



Percentage of New Entrepreneurs, by Age Group

SOURCES: Kauffman Foundation; Milken Institute.



Percent of People Age 50+ Using the Internet

SOURCES: The Nielsen Company; Milken Institute.

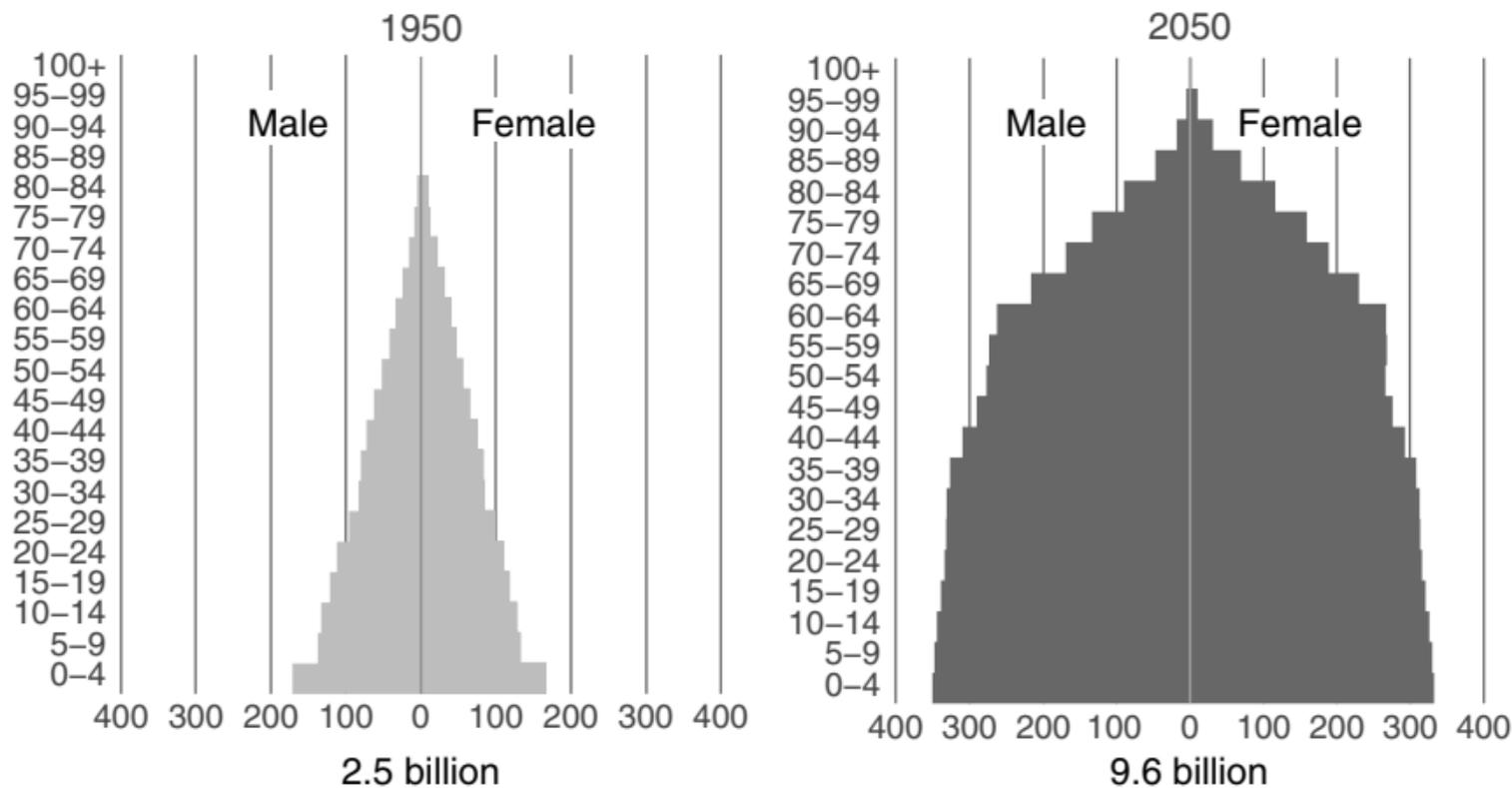


Figure 1.1 World Population by Age and Sex: 1950, 2050 (Projected)

SOURCE: UN World Population Prospects, 2012 Revision.

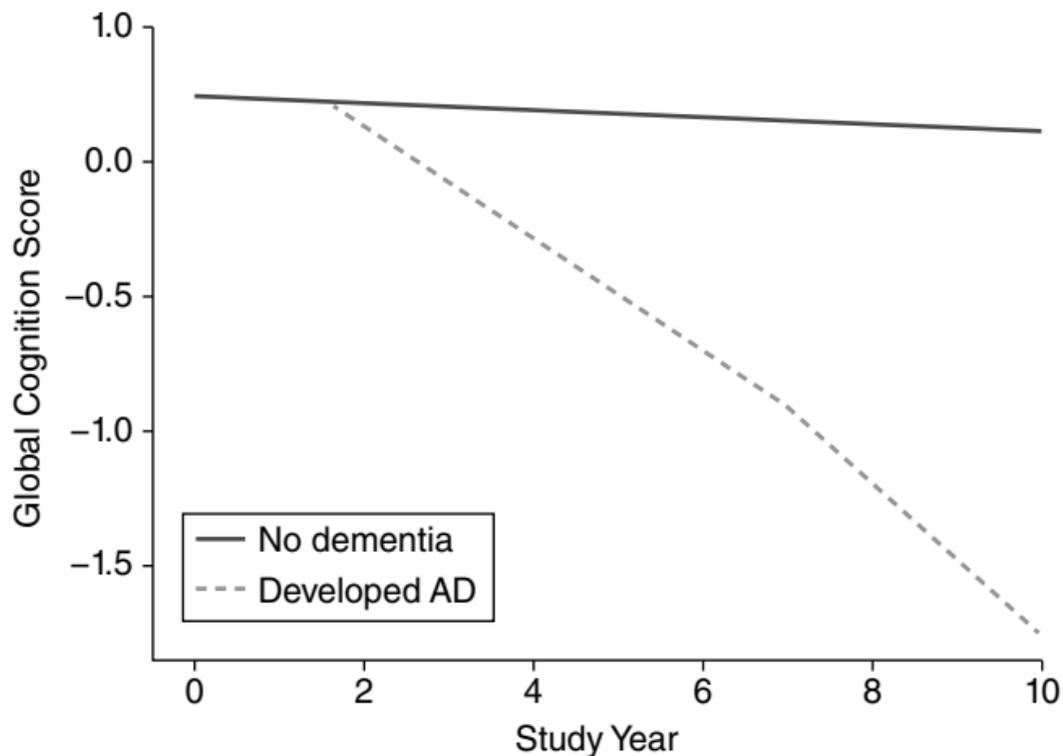


Figure 1.2 Decline in Cognition in People with and without Dementia

SOURCE: R. S. Wilson, S. E. Leurgans, P. A. Boyle, and D. A. Bennett, "Cognitive Decline in Prodromal Alzheimer Disease and Mild Cognitive Impairment," *Archives of Neurology* (2011).

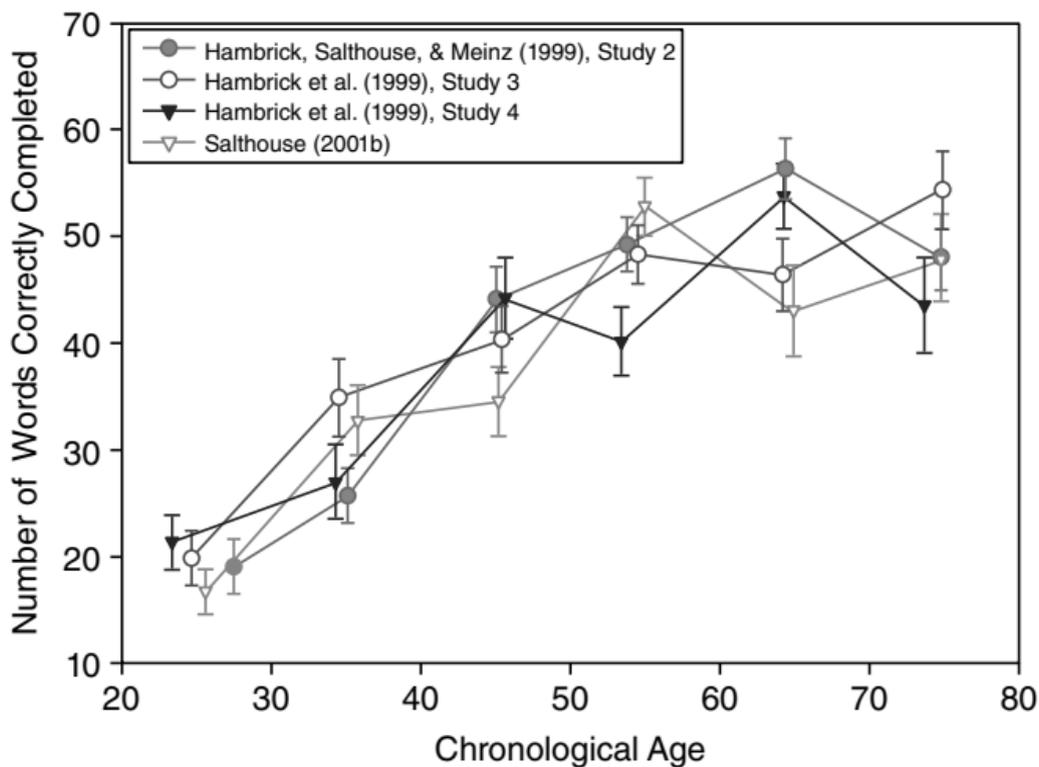
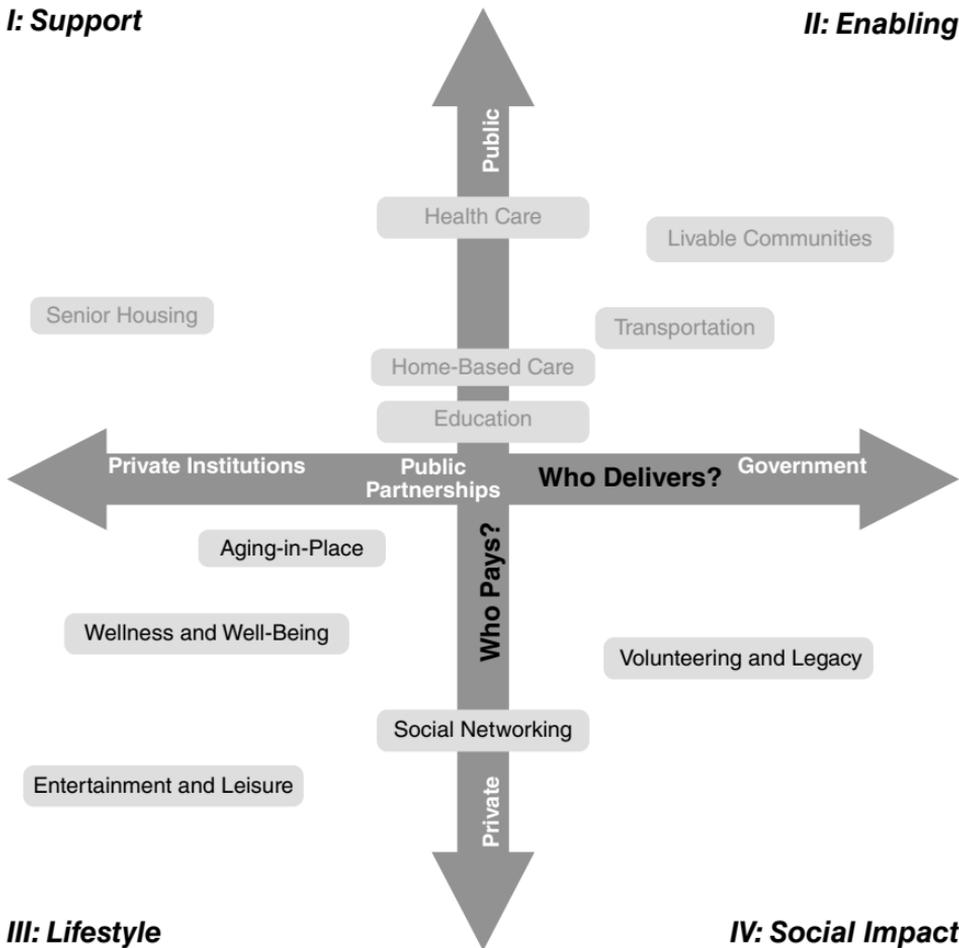


Figure 1.3 Crossword Puzzle Performance by Age

SOURCE: T. Salthouse, "What and When of Cognitive Aging," *Current Directions in Psychological Science* (2004).

I: Support

II: Enabling



III: Lifestyle

IV: Social Impact

Figure 4.1 Mapping Innovation Markets in an Aging Society

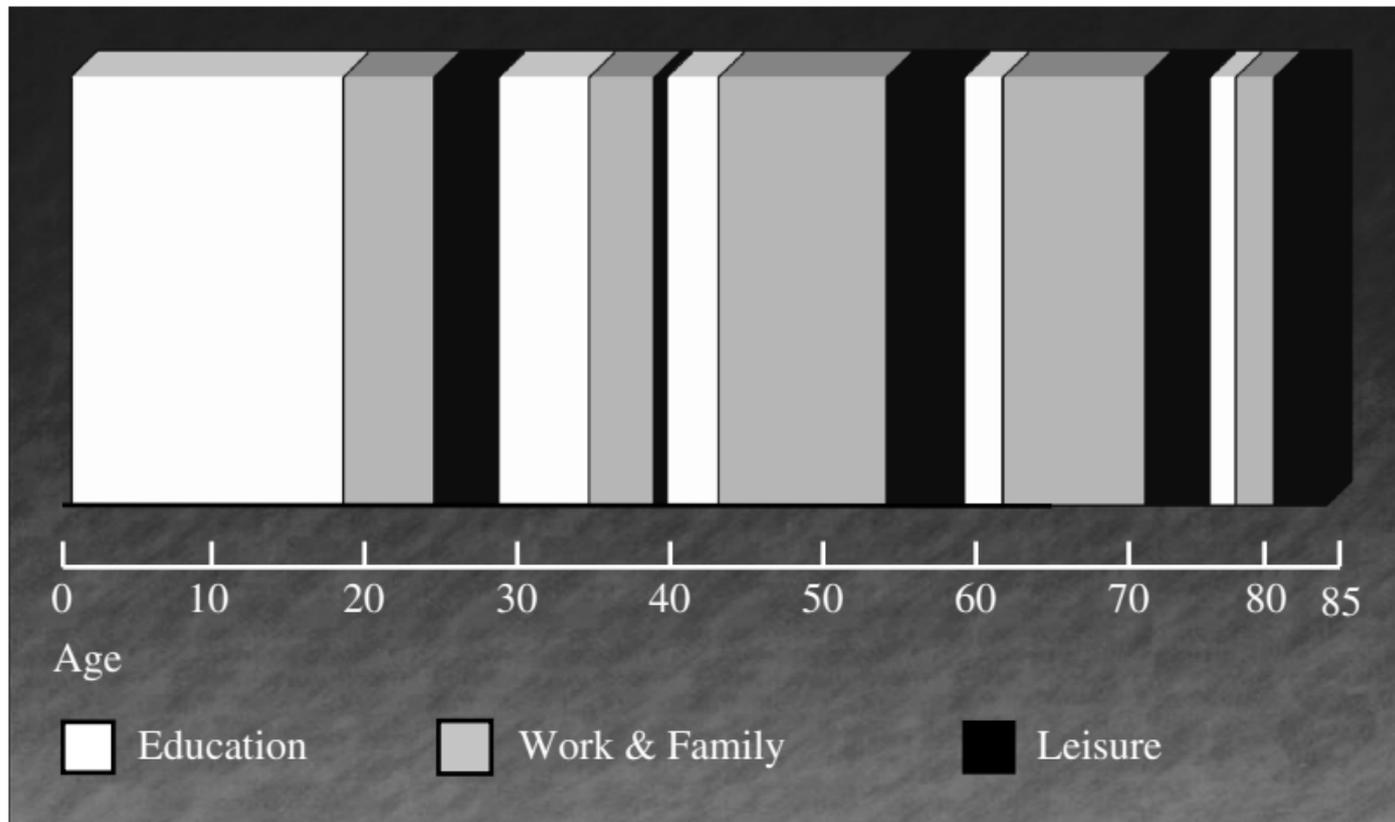


Figure 5.1 Cyclic Lifeplan

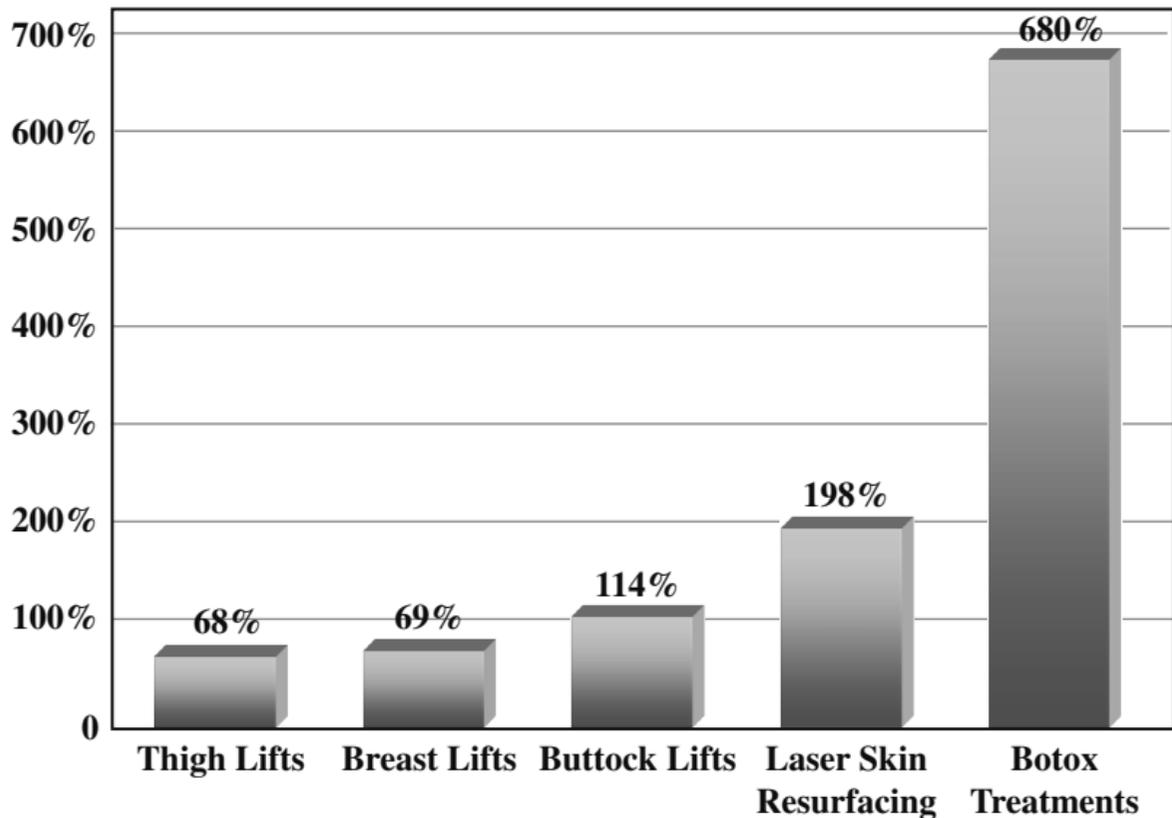


Figure 5.2 Increase in Plastic Surgery Procedures 2000–2012

SOURCE: American Society of Plastic Surgeons

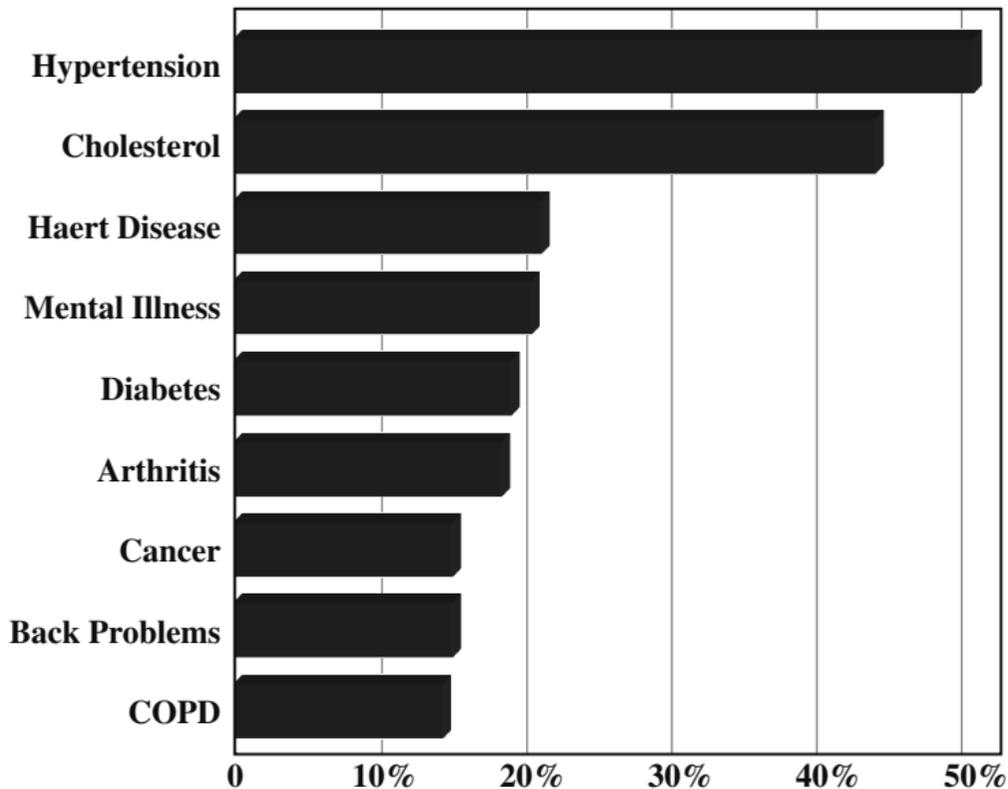


Figure 5.3 Leading Health Problems, Age 50+

DATA SOURCE: AARP Public Policy Institute, "Chronic Condition Prevalence in the 50+ US Population," 2011.

1)	Florida	21%
2)	Arizona	18%
3)	South Carolina	10%
4)	North Carolina	10%
5)	Tennessee	9%
6)	Colorado	7%
7)	Virginia	7%
8)	Texas	7%
9)	New Mexico	6%
10)	California	6%

Figure 5.4 Top Ten Relocation States for Older Americans

DATA SOURCE: 2010 Del Webb Baby Boomer Survey.

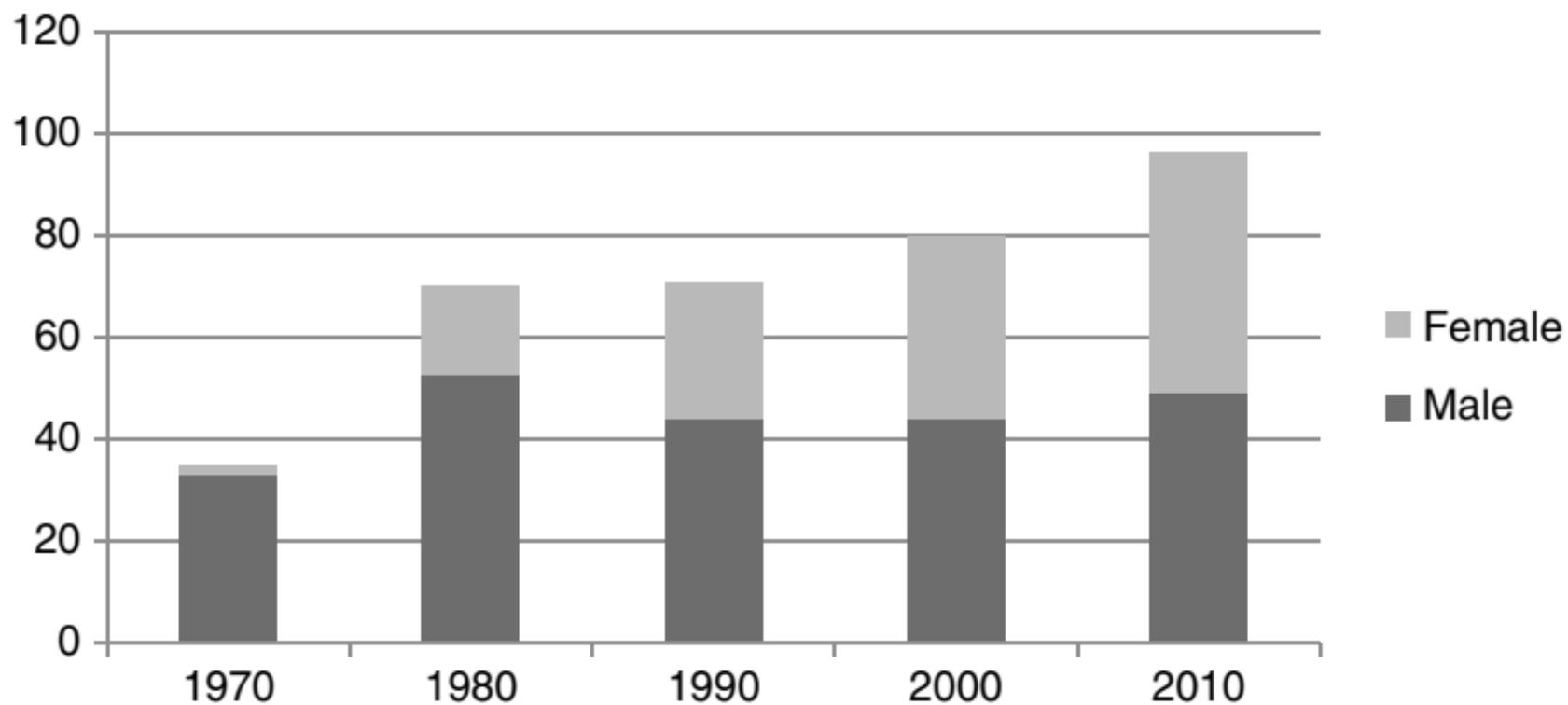


Figure 9.1 First Professional Degrees Awarded, by Gender

SOURCE: National Center for Education Statistics.

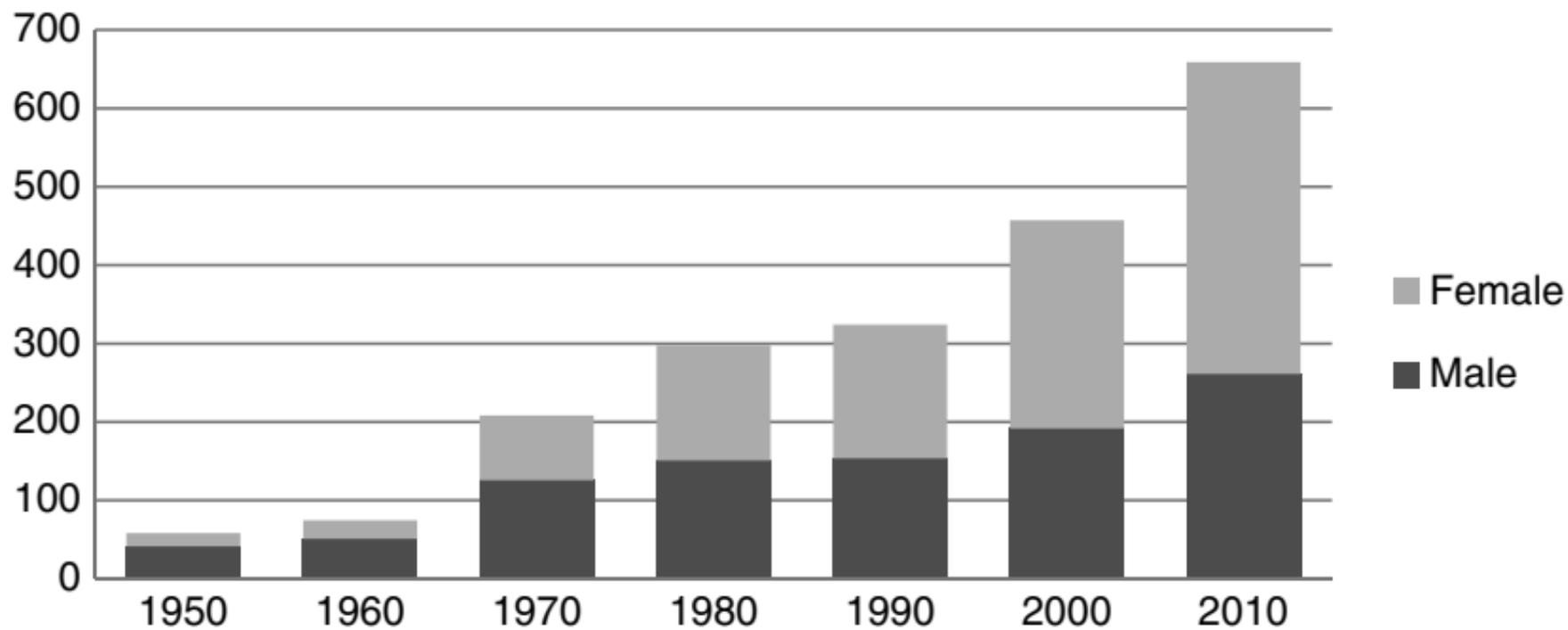


Figure 9.2 MA Degrees Awarded, by Gender

SOURCE: National Center for Education Statistics.

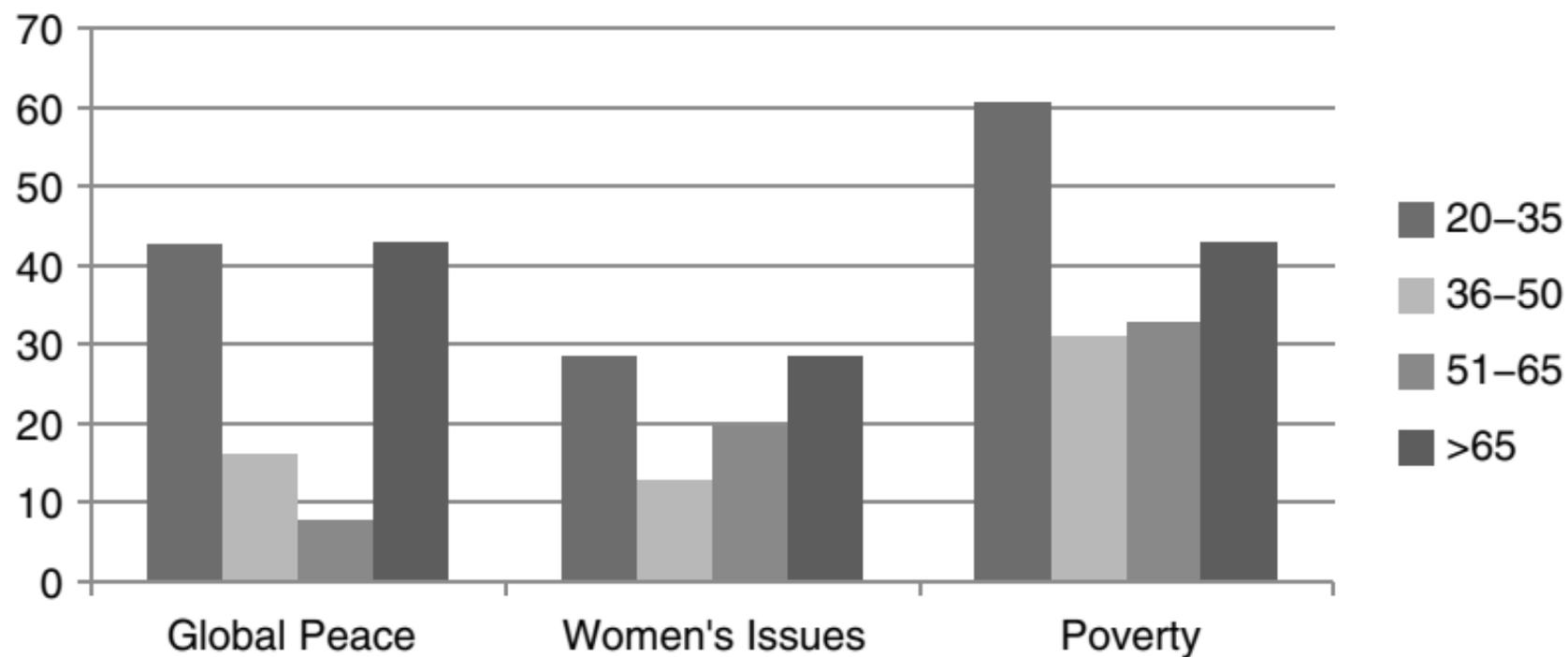


Figure 9.3 Issues Selected as “Very Important” by High-Net-Worth Individuals in Their Philanthropy (by Age Group)

SOURCE: B. Love, S. Raymond, J. Moore, *Giving Through the Generations*, 2009.

Table 10.1 Urban Response to Concerns of Older Residents

Concerns of older Residents about Aging at Home	Urban Service Responses		
Frustration at immobility, dependency on others for errands	Use technology to create links to delivery services, such as grocery valet services	Provide public van transport	Create “virtual community” organizations to provide transportation assistance
Deterioration of the home: costs of housing and improvements	Offer a package of certified “life-span” improvements at reasonable costs	Enforce building codes in rental properties	Facilitate access to federal programs offering financial assistance for home repair
High utility costs	Design certified energy efficiency programs targeted to homes of older residents	Provide energy discounts for senior ratepayers	Offer emergency assistance with high utility bills during extreme weather
Fear of crime: home burglary, assaults on streets	Specialize community policing in NORCs focused on older residents and their needs	Use technology to increase in-home security i.e., alarm systems, “life-alert” devices	Upgrade street lighting
Overall effects of impairments and facilities	“Ageify” the home: bathroom and kitchen modifications, proper lighting	Apply communications technologies	Engage “virtual communities” in household assistance or fund home-care health specialists
Loneliness, isolation from friends and family	Offer transportation access to community social settings such as senior fitness and nutrition centers	Encourage creation of virtual community networks in urban neighborhoods	Expand use of home health care specialists

(continued)

Table 10.1 (Continued)

Concerns of older Residents about Aging at Home	Urban Service Responses		
Fear of falling or illness without ability to communicate	Build on communications technologies, such as visual Skype, to create links to emergency services	Create a community outreach to check on seniors, especially the most frail	Offer home health care specialists to regularly call on older residents
Pain or inadequacy in managing daily activities in the home	Offer community-based home health care appropriate to the level of debilitation	Match community-based home health care with community health care facilities	Create a clearinghouse to help seniors maximize access to federal health financial assistance
Lack of money for cost of living	Use federal subsidy programs for life-span home packages	Offer financial counseling specific to aging needs	Provide technical advice to explore federal income assistance programs
Fear of high volumes of fast traffic	Provide van transportation linked to communications devices for personalized service	Be attentive to traffic flow issues; mitigate with speed bumps, targeted enforcement, signage, and stop lights	Use senior overlay districts to guide zoning and traffic decisions in NORCs
Danger of misusing appliances such as a stove or oven	When replacing appliances, install with age-appropriate controls and handles	Conduct community briefings to include instruction on safety precautions	Assign home health care specialists to monitor home safety conditions

Table 10.2 Targeted Strategies in Cities Addressing Needs of Seniors

Strategy	Examples
Offer affordable housing options suitable for “aging in place”	<p>Cities with low costs of living such as Pittsburgh, Omaha, and Des Moines offer an available stock of quality housing.</p> <p>Some high-cost cities—such as New York and Boston—have made large-scale commitments to enlarge their stock of affordable senior housing.</p>
Undertake a comprehensive approach to planning and zoning for the needs of the elderly	<p>New York City has two “senior overlay districts” to guide enactment of measures related to dwelling units, health facilities, recreational sites, and concentrated services.</p> <p>The New York City chapter of the American Institute of Architects has formed a working group of housing experts to explore adaptive reuse of apartments for seniors in low-rise walk-ups and high-rise elevator buildings.</p>
Address public safety and personal security by targeting crime initiatives and traffic safety measures	<p>Cincinnati deployed its Madisonville Neighborhood Community Problem-Oriented Policing Team to develop a tactical response for a senior housing complex in partnership with the residents.</p> <p>New York City funded the Lincoln Square Neighborhood Center to develop a NORC-supportive Senior Program, including close collaboration with the NYPD to address safety concerns.</p>
Provide access to health care, including quality geriatric services and home health care	<p>Madison, Wisconsin, which ranked first in the Milken study for health care accessibility, manages its own quality health care system.</p> <p>Other small metros, such as Jackson, Mississippi, and Little Rock, Arkansas, have extensive medical capabilities at inexpensive prices.</p> <p>San Francisco’s On Lok Senior Health Services established a national model for the Program of All-inclusive Care for the Elderly (PACE) system of community-based care.</p>

(continued)

Table 10.2 (Continued)

Strategy	Examples
Support overall wellness, including nutrition, recreation programs, and public facilities for fitness activities	<p>Bridgeport/Stamford/Norfolk, Connecticut, is ranked second in the Milken study for its many recreational centers and high levels of physical activity among seniors.</p> <p>San Antonio Sports for Life program offers dozens of competitive sports programs for seniors into their eighties.</p> <p>New York has designed differentiated space in public parks such as Washington Square Park, to assure safe use by people of all ages, including seniors.</p>
Promote financial security through work opportunities, retraining, and income supports	<p>Provo and Salt Lake City (Utah), stand out for opportunities offered to seniors in small business and entrepreneurship, and have strong community college and university programs to assist seniors.</p> <p>Other mid-sized metros such as Omaha, Nebraska, and Des Moines, Iowa, encourage their strong service sectors to create employment opportunities for seniors.</p> <p>Sioux Falls and Rapid City (South Dakota), have high employment rates for seniors in a state with one of the highest per capita levels of funding for senior services.</p>
Enable connectedness and engagement in community life through outreach programs, lifelong learning, intergovernmental involvement, and cultural initiatives	<p>Pittsburgh, with a high concentration of over-65 residents, involves its community colleges in senior connectedness through education and retraining.</p> <p>Boston's Beacon Hill Village uses social networks to connect seniors to transportation, health care, home repairs, and other assistance for aging in place.</p> <p>Portland Community College in Oregon supports Life by Design NW to connect seniors to volunteer leadership and community service.</p> <p>Burlington, Vermont, funds programs to keep seniors engaged in community life at high levels.</p>
Improve accessibility to public transit and modify street environment to be conducive to safety	<p>New York City, Boston, San Francisco, and Washington, D.C., are ranked high in the Milken study for accessible public transit and accessibility to neighborhood grocery and convenience stores. All have extensive subway systems integrated into other public transit.</p> <p>Among cities without subway systems, Salt Lake City has kept fares affordable and Baton Rouge has invested in transportation for seniors.</p> <p>San Francisco offers Silver Ride, to provide rides, trip planning, and accompaniment to medical services.</p>

By 2050, the Hispanic population will increase to 30 percent of total U.S. population

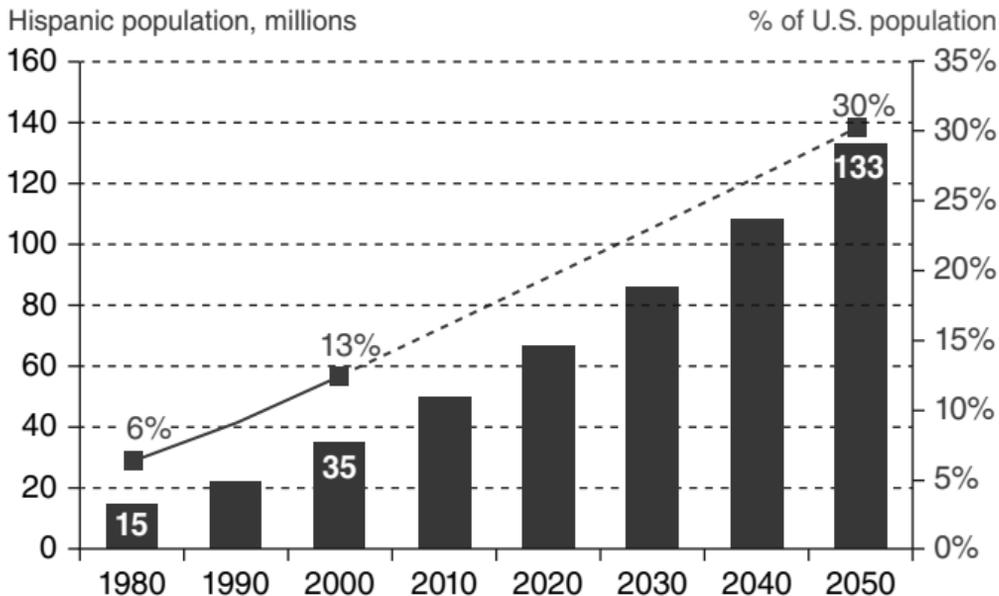


Figure 12.1 Increase in Hispanic Population, 1980–2050

SOURCE: U.S. Census Bureau, 2002b and 2008c; Hayutin, A., Dietz, M., & Mitchell, L. (2010). *New Realities of an Older America: Challenges, Changes and Questions*, Stanford Center on Longevity. Retrieved from: longevity3.stanford.edu/wp.../New-Realities-of-an-Older-America.pdf.

Although increasingly diverse, the older population will remain majority white non-Hispanic.

Population 65+ by race and ethnicity, %

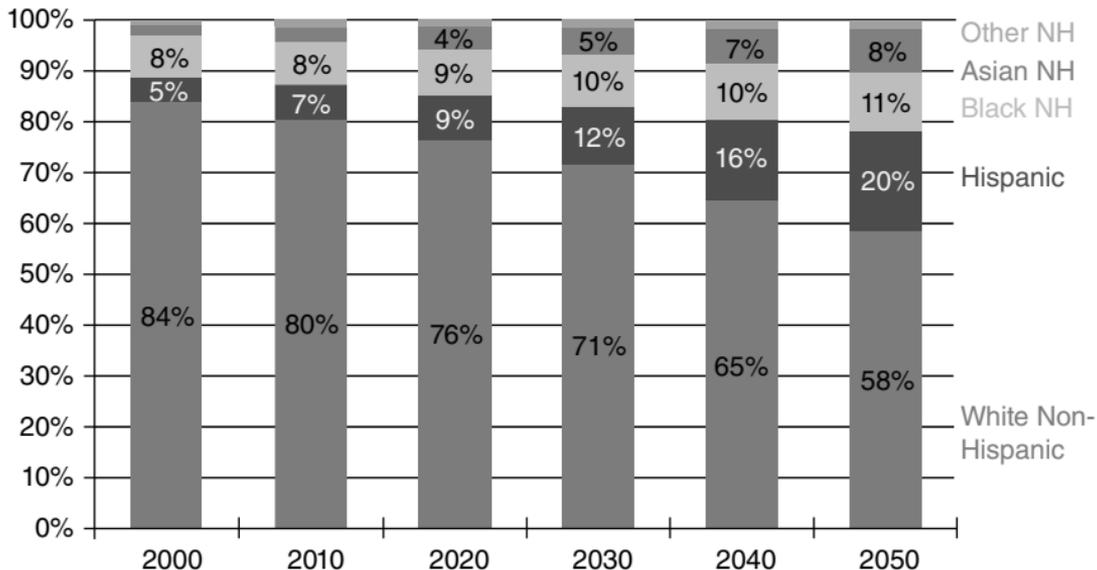


Figure 12.2 Older Population by Race and Ethnicity

NOTE: NH = non-Hispanic; Other NH = non-Hispanic and two or more races, American Indian and Alaskan Native, or Native Hawaiian and Pacific Islander.

SOURCE: U.S. Census Bureau, 2008c; Hayutin, A., Dietz, M., & Mitchell, L. (2010). *New Realities of an Older America: Challenges, Changes and Questions*, Stanford Center on Longevity. Retrieved from: longevity3.stanford.edu/wp.../New-Realities-of-an-Older-America.pdf.

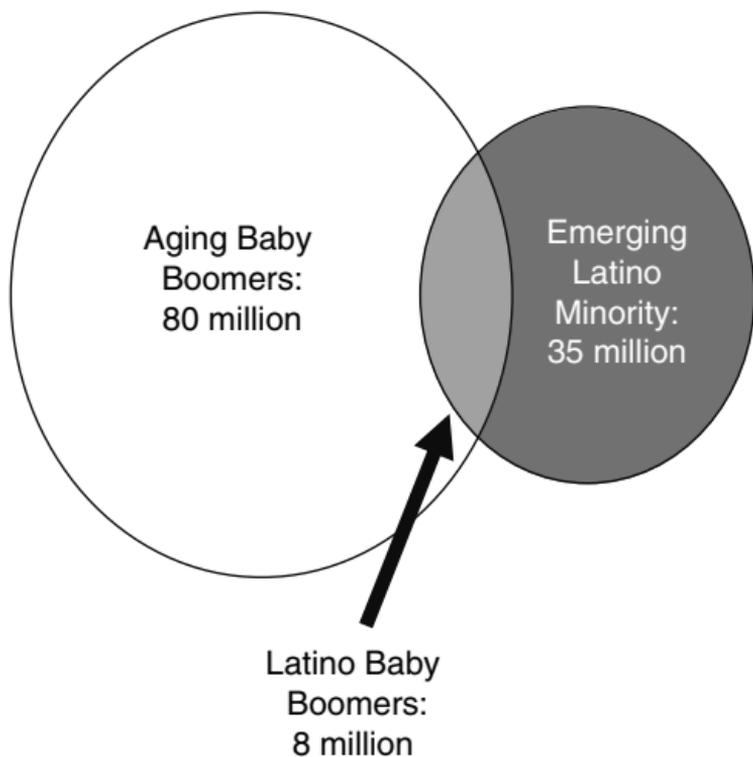
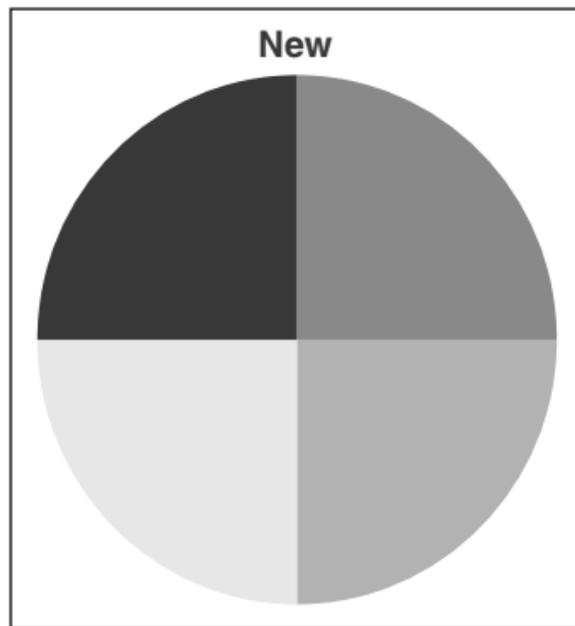
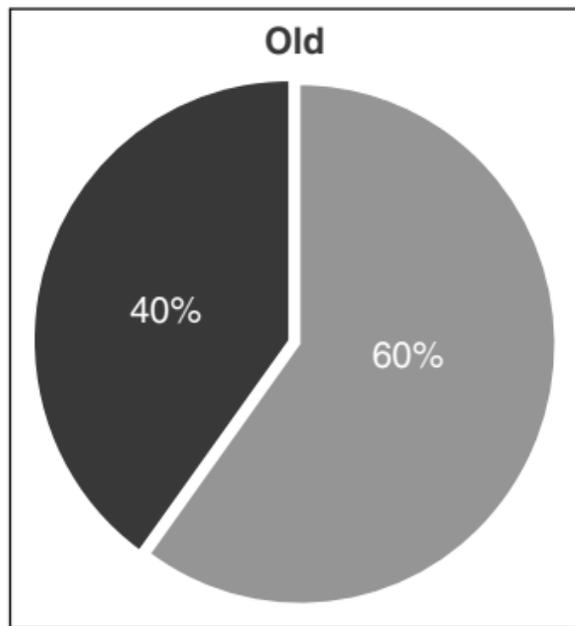


Figure 12.3 A Confluence of Two Populations: The “Hidden Boomers”
DATA SOURCE: UCLA Center for Policy Research on Aging.



Figure 14.1 The Retirement Ecosystem



■ International Equities,
 ■ Small Value, Large Growth
 High Yield, Treasuries,
 Investment-Grade Bonds

■ Inflation ■ Income
 ■ Volatility ■ Longevity (Growth)

Figure 14.2 Rethinking Portfolio Construction

Solving for Volatility The chances of a retiree outliving his or her assets depends not just on average annual total returns but on the pattern of returns:

Beginning portfolio value	Year 1 return	Year 2 return	Year 3 return	Average annual return	Ending portfolio value
Portfolio A—500,000	+6 percent	+11 percent	+7 percent	+8 percent	\$629,481
Portfolio B—500,000	+18 percent	-30 percent	+36 percent	+8 percent	\$561,680
