Rebuilding Retirement Systems Post-COVID-19

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Proverbial "3-legged Stool" of Retirement Security

- ## Public Social Security:
  - Often PAYGO (tax financed)
  - Insurance element: get more if pay in more
  - Welfare element: redistributive

- ## Employer-sponsored Pensions
  - Defined Benefit (DB)
  - Defined Contribution (DC)
  - Hybrid

- ## Private Savings
  - Home
  - Financial assets

Two Main Pension Types:

➢ **Defined Benefit (DB):**

Benefit formula promised

e.g. B_t =2%*(Final Pay)*(Years Service)

Ex: Brazil, US, most European national systems

➢ **Defined Contribution (DC):**

Contribution amount specified:

e.g. C_t=6%*current pay

Ex: Chile, Mexico, US 401(k) plans

→Hybrid (Cash Balance) combine both…

Why fund a pension promise?

Pros

- May reduce uncertainty re future contributions
- Portfolio diversification
- Permits portability
- May deepen K mkt & enhance growth

Cons

- Requires start-up group to 'pay twice' – support retirees and save for themselves
- Admin costs may be higher (maybe not)
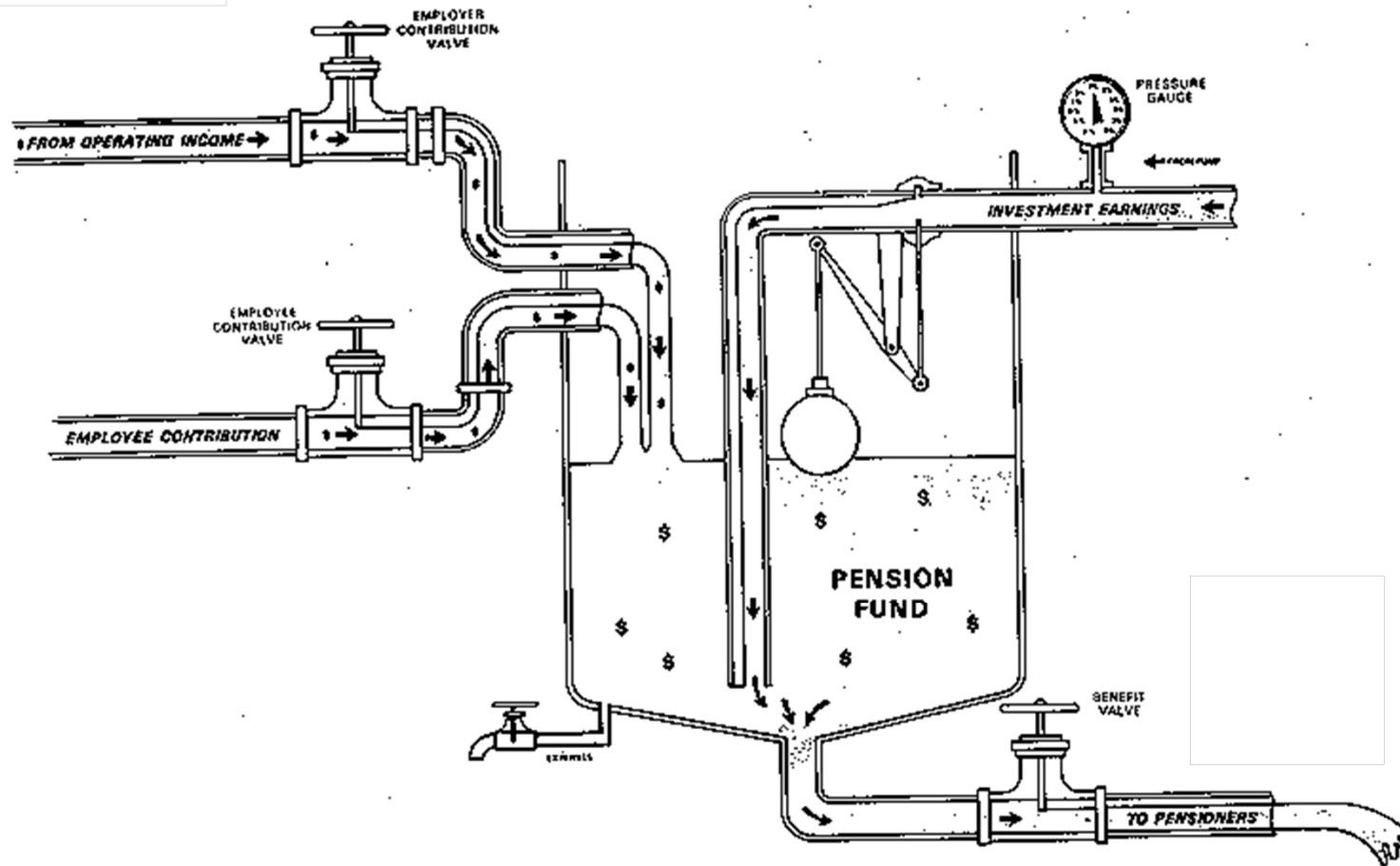- Governance of funds

Financing the promise: PAYGO

BENEFIT VALVE

FROM OPERATING INCOME

TO PENSIONERS
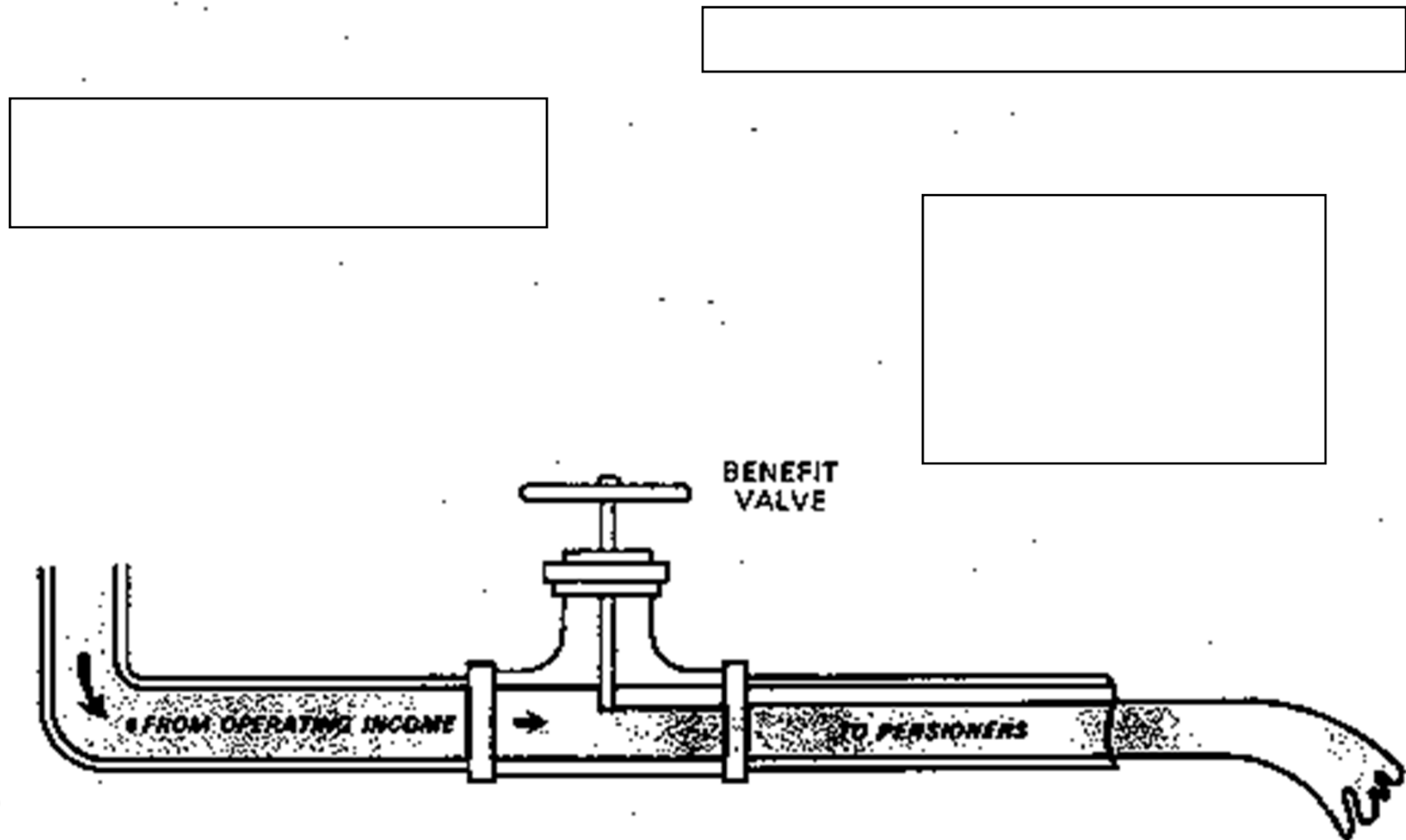
Adapted from Harvard Business Review. (12)

Financing the Promise: Funded Plan

Adapted from Harvard Business Review. (43)

Individual Accounts

	NO	YES
Funded NO	Govt PAYGO: US, most Europe Corp. DB: Germany	Notional accounts: Latvia, Sweden
YES	Provident Funds: Singapore, Malaysia US corp./public DB *(+/-)*	Individual Accounts: US 401(k), Chile, Peru, Mexico, Australia, Sweden

FULL Funding for DB and DC…

$$\text{Assets} = \text{Liabilities}$$

DC full funding requires:

- Assets = Current Account Balance

DB full funding requires:

- Assets = EPV of Promised Benefits

→ Reporting and accounting rules play key role

Pre-COVID-19: Retirement Systems Not Healthy

- Social Security systems facing insolvency

- Private & public DB plans underfunded

- Low returns hurting DC plans

- Rising debt, falling saving

WEF: Underfunded pensions a global time bomb!

Size of the retirement savings gap
$ trillions, 2015

♦ 2015 gap ♦ 2050 gap ♦ Annual growth of gap

China: 11, 119, 7%
India: 3, 85, 10%
UK: 8, 33, 4%
US: 28, 137, 5%
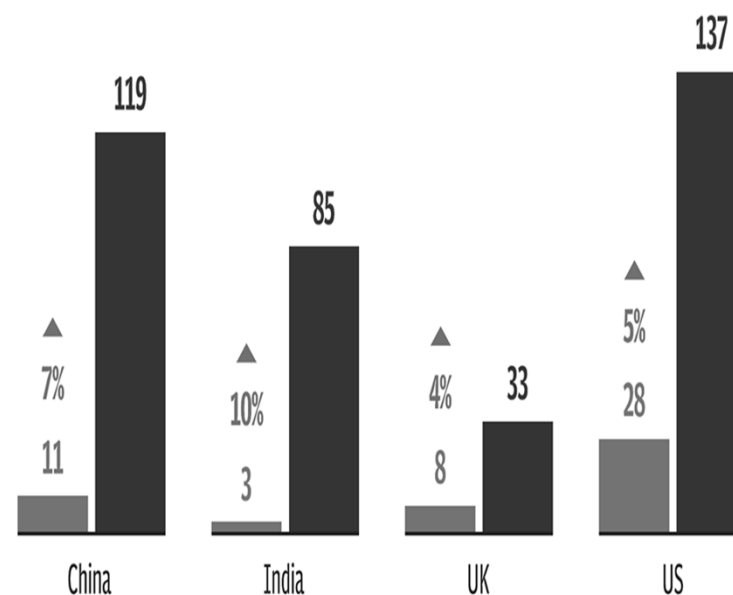
SOURCE: MERCER ANALYSIS

Retirement Savings Gaps, Pre-COVID-19

U.S. 8.3 / 10.9

Netherlands 9.6 / 12.2

U.K. 10.3 / 12.6

Australia 9.9 / 12.6

Canada 9.9 / 12.7

Japan 15.1 / 19.9
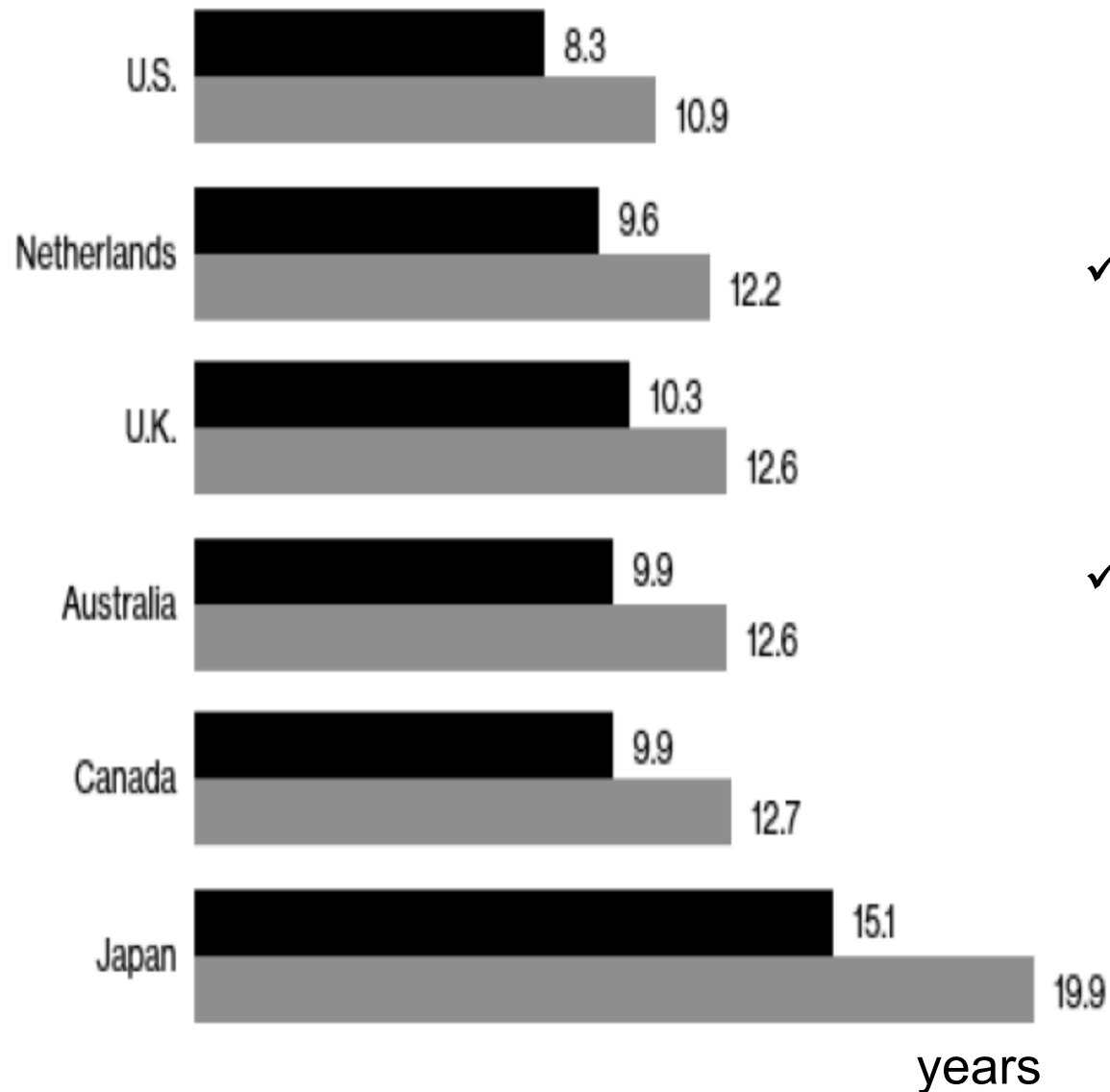
years

✓ Black bars reflect how many years of assets retirees have to live on.

✓ Blue bar refers to life expectancy at retirement.

Melbourne Mercer Pension Sustainability Rankings, Pre-COVID-19

Grade	Countries	Descriptors
A	Netherlands, Denmark	Robust, good benefits, sustainable, good integrity
B+	Australia	Sound but some areas for improvement
B	Finland, Sweden, Norway, Singapore, NZ, Canada, Chile, Ireland, Switz., Germany	
C+	USA, UK, HK, Malaysia, France	Some good features but also major risks, maybe not sustainable
C	Peru, Colombia, Poland, Saudi, Brazil, Spain, Austria, S. Africa, Italy, Indonesia	
D	Korea, China, Japan, India, Mexico, Philippines, Turkey, Argentina, Thailand	Major weaknesses, sustainability in doubt

Preparedness for Healthcare Costs in Retirement, Pre-COVID-19
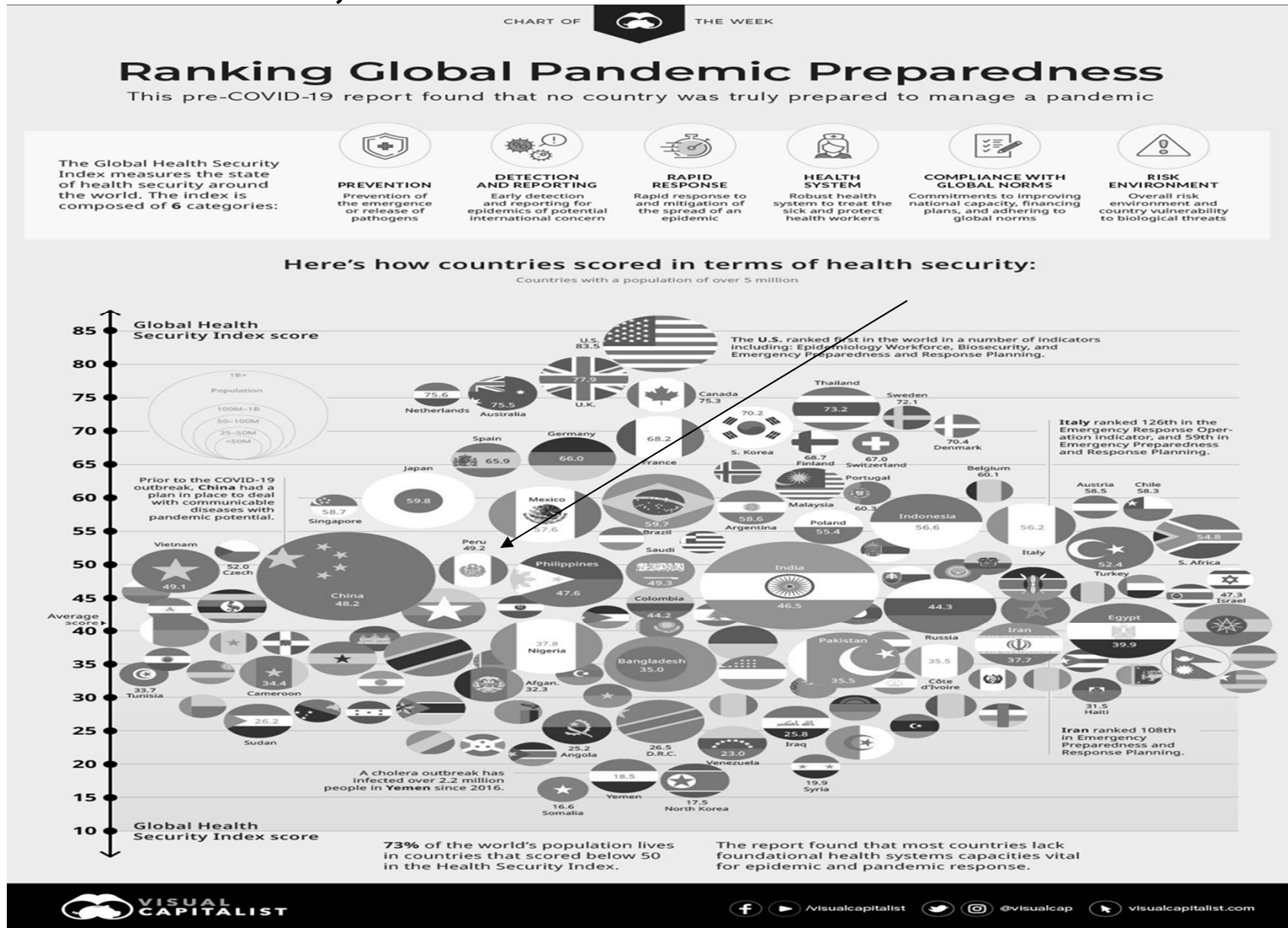
Real GDP Growth Outlook Poor

OECD warns of the serious risk of a second wave of cases

2020 Projected Change in Real GDP

Legend:
- ■ Double-hit Scenario (gray)
- ■ Single-hit Scenario (dark)

Country	Single-hit Scenario	Double-hit Scenario
France	-11.4%	-14.1%
Euro Area	-9.1%	-11.5%
OECD	-7.5%	-9.3%
Brazil	-7.4%	-9.1%
Germany	-6.6%	-8.8%
Mexico	-7.5%	-8.6%
United States	-7.3%	-8.5%
Sweden	-6.7%	-7.8%
World	-6.0%	-7.6%
Japan	-6.0%	-7.3%
India	-3.7%	-7.3%
China	-2.6%	-3.7%
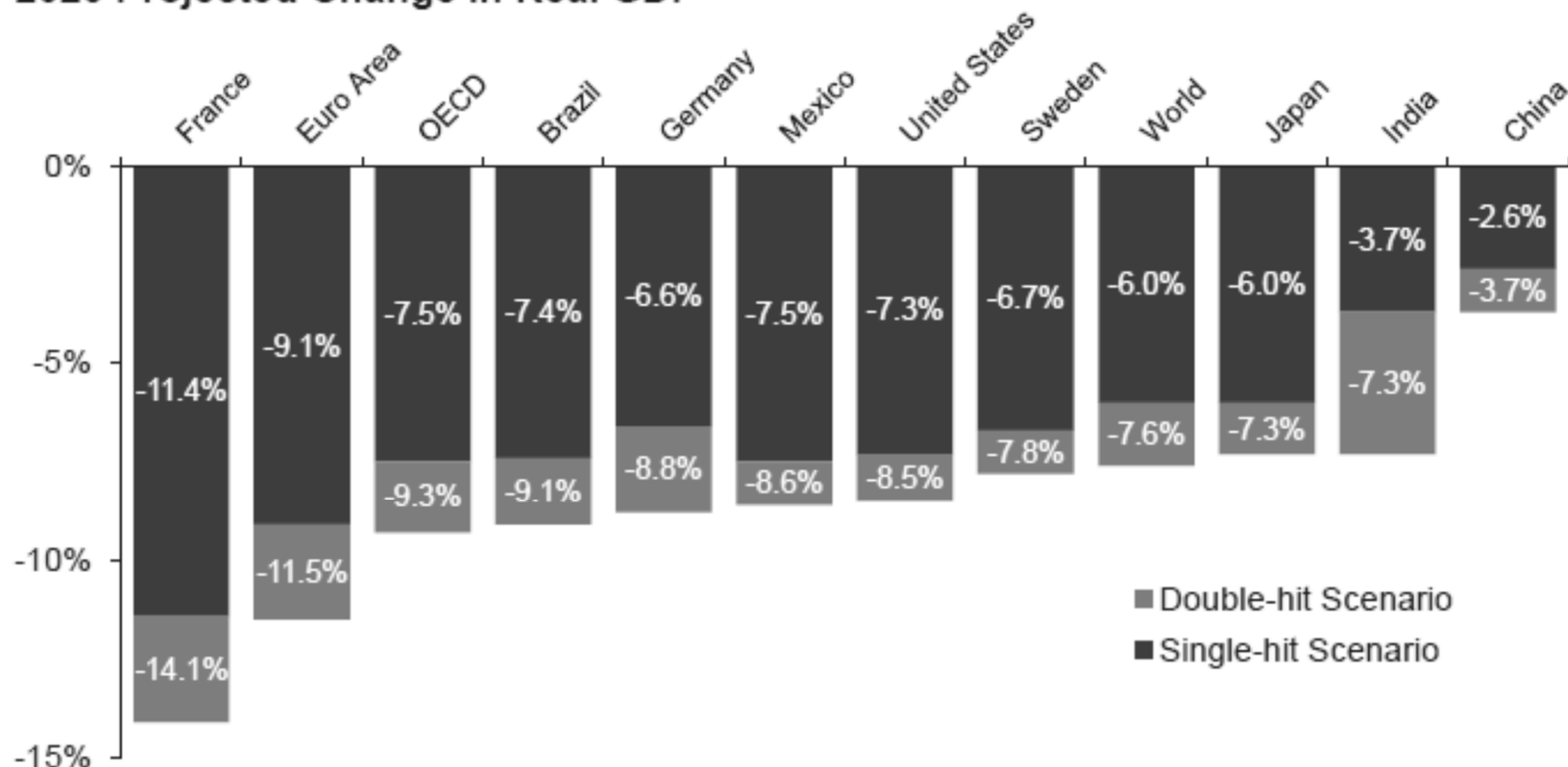
Source: KPMG Economics, OECD, Haver Analytics

Low interest rates forecasted to continue

Federal Funds Rate Adjusted for Core Inflation
CBO projections

CBO Forecast

Recession

10-Year UST Yield

Fed Funds Rate

12% | 8% | 4% | 0% | -4% | -8%

1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030
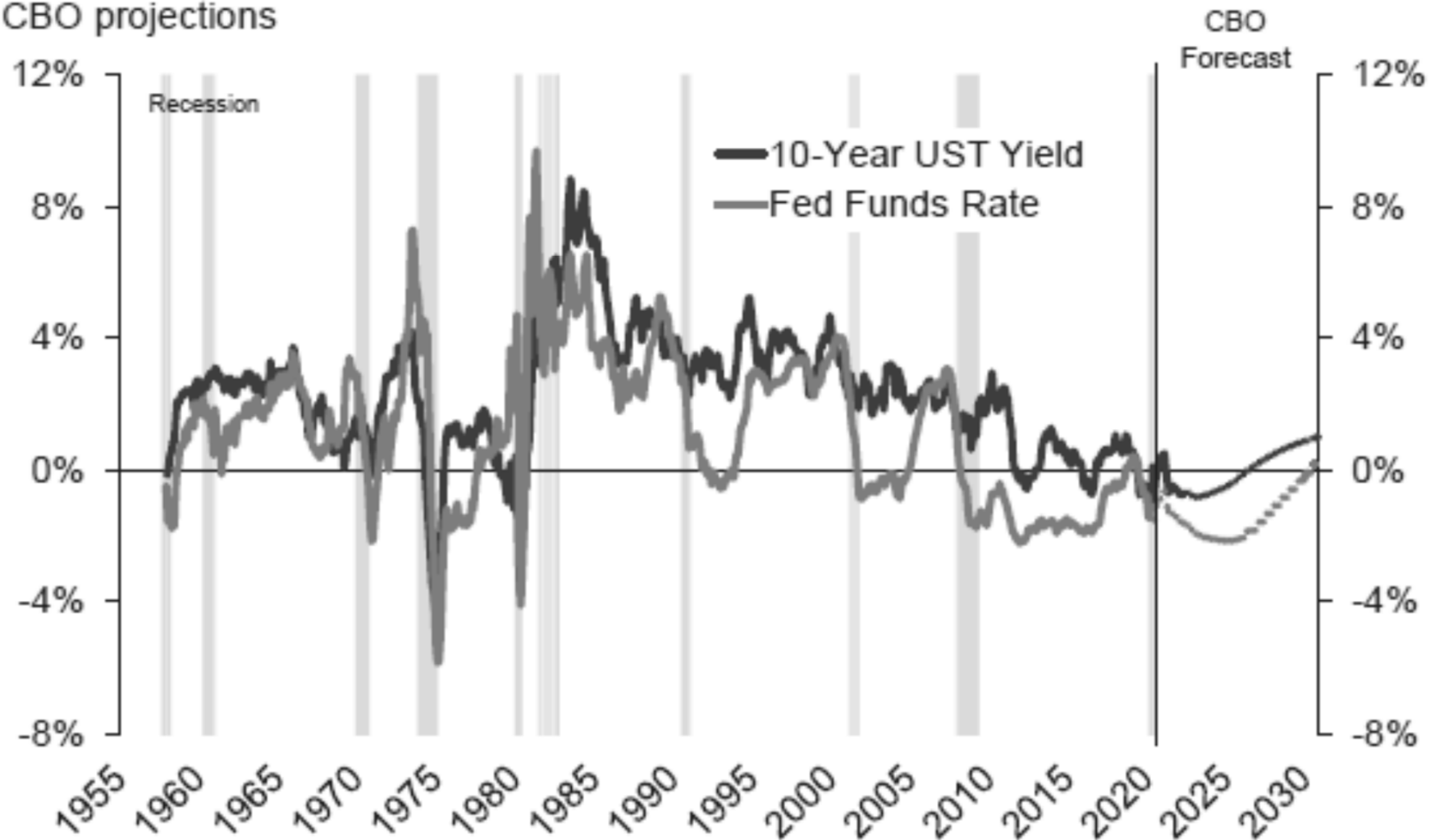
Source: KPMG Economics, Federal Reserve Board, Bureau of Labor Statistics, Haver Analytics (July 2020)

Low returns drive up saving to provide $1/yr of retirement payouts for 25 years

Legend: December '19 ■ March '20

Values shown on chart:
$9.93, $14.74, $19.64, $23.05, $22.22, $21.39, $20.62, $19.96, $19.36, $18.79, $18.23, $17.69

$24.47 $24.54 $24.31 $23.99 $23.72 $23.53 $23.36 $23.17 $22.99 $22.8

Y-axis: $30, $24, $18, $12, $6, $0

X-axis: 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055, 2060, 2065

S&P Global
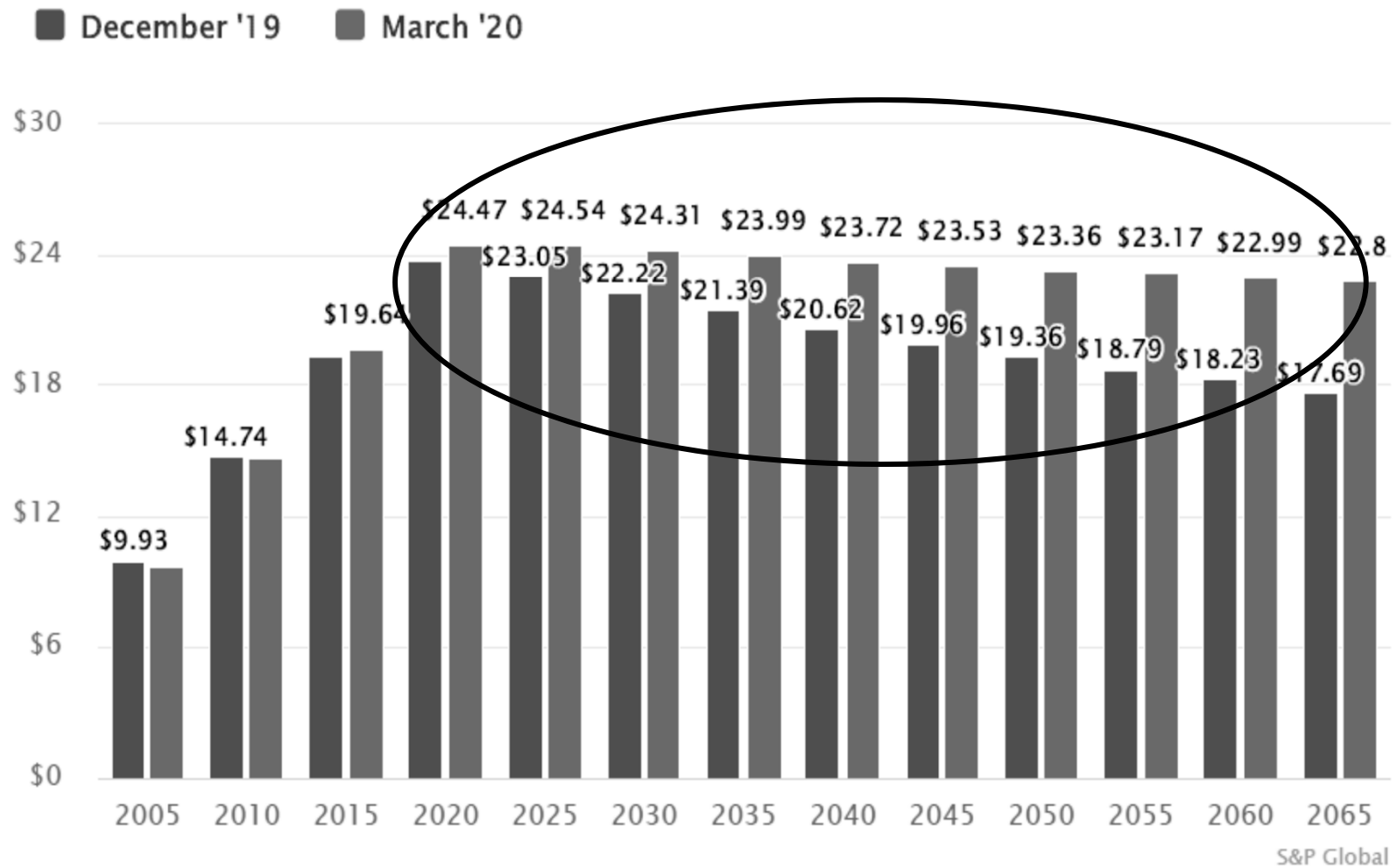
Each vintage reflects a target year for retirement.

Rapid Rollout: Social Insurance Programs Launched/Extended, COVID-19

Countries with social protection responses

Colours range from minimum number of measures (light blue) to maximum (dark blue)

10/13/2020 (ILO)   https://www.social-protection.org/gimi/ShowWiki.action?id=3417&lang=EN

Types of Social Assistance Programs Adopted/Extended, Post COVID-19

Program	Percentage
Special allowance/grant	16.0%
Income/job protection	14.2%
Several functions	12.0%
Health	11.3%
Unemployment	10.4%
Housing/basic services	9.0%
Food and nutrition	8.4%
Children and Family	7.6%
Pensions	5.8%
Sickness	3.9%
Access to education	0.8%
Maternity/parental	0.4%
Employment injury	0.2%
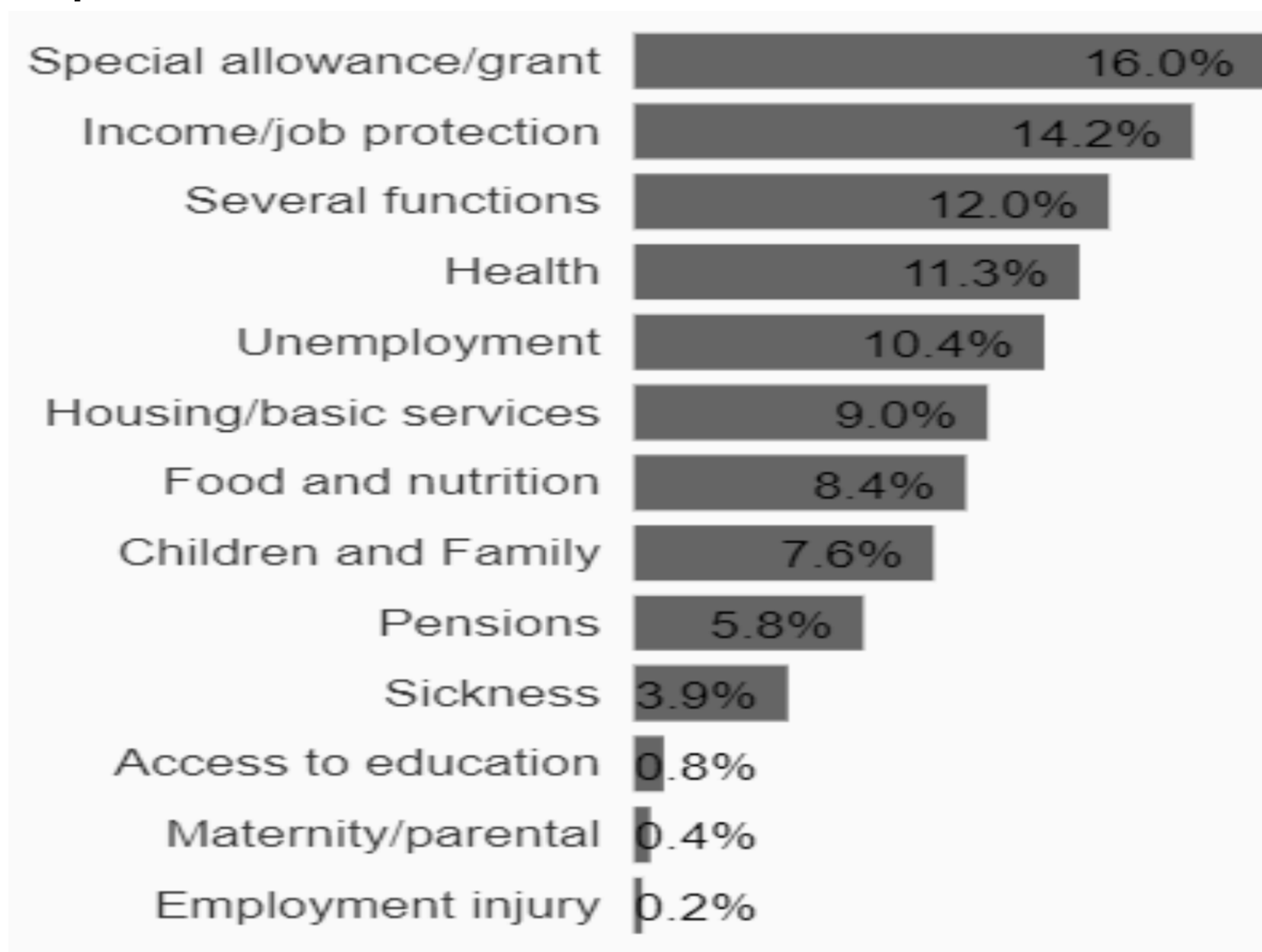
Changes in Self-Employment over Time, Pre-COVID-19

Index of self-employment as a proportion of total employment (2003 = 100)

UK
France
Germany
Italy
US
Japan
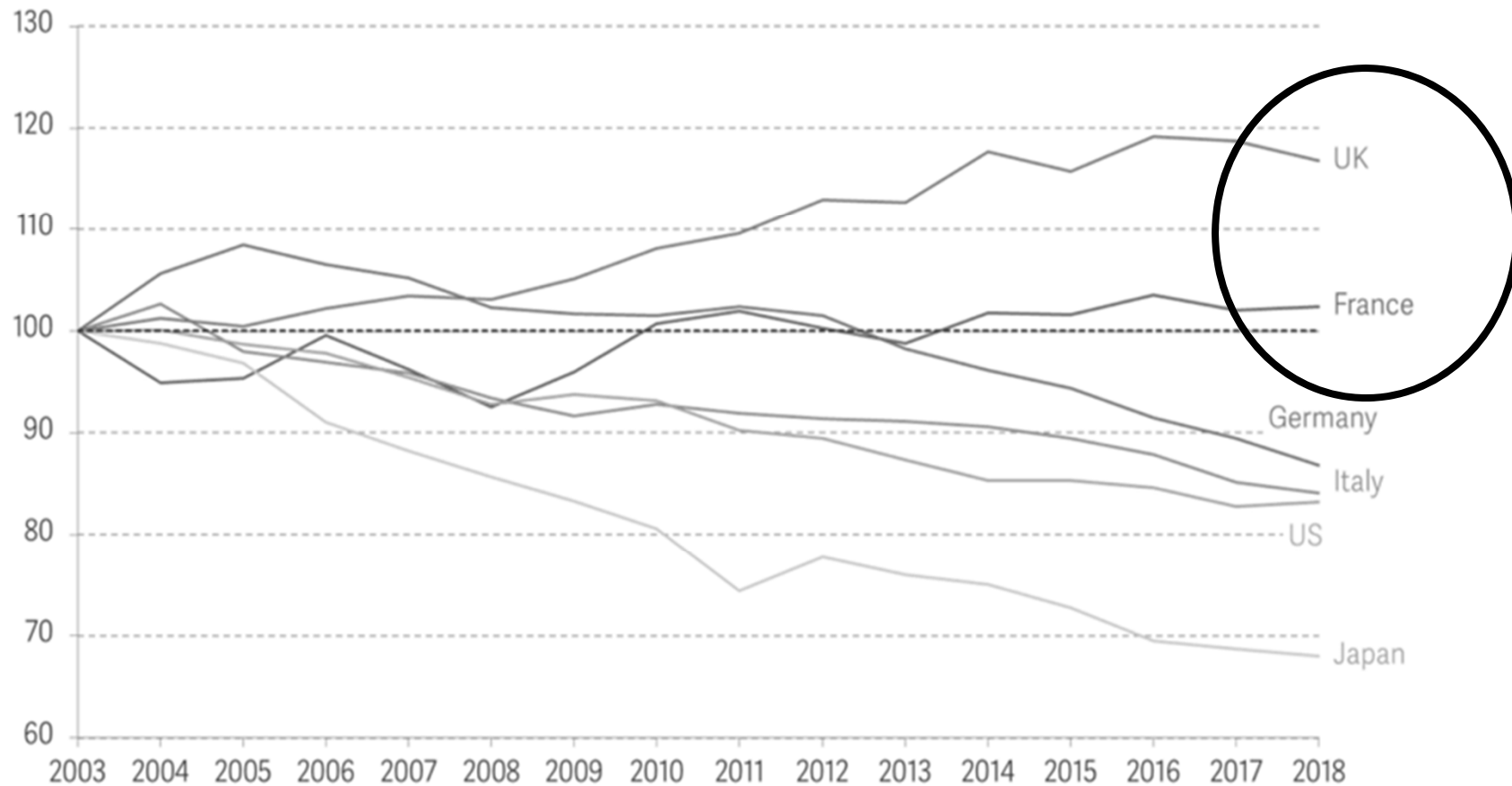
Source: RF analysis of OECD, Self-employment rate (indicator).

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Work From Home? Some can, others cannot.

Working primarily from home is already common in some occupations

Full-time employees primarily working from home as a percent of total full-time employment by detailed occupation, 2018
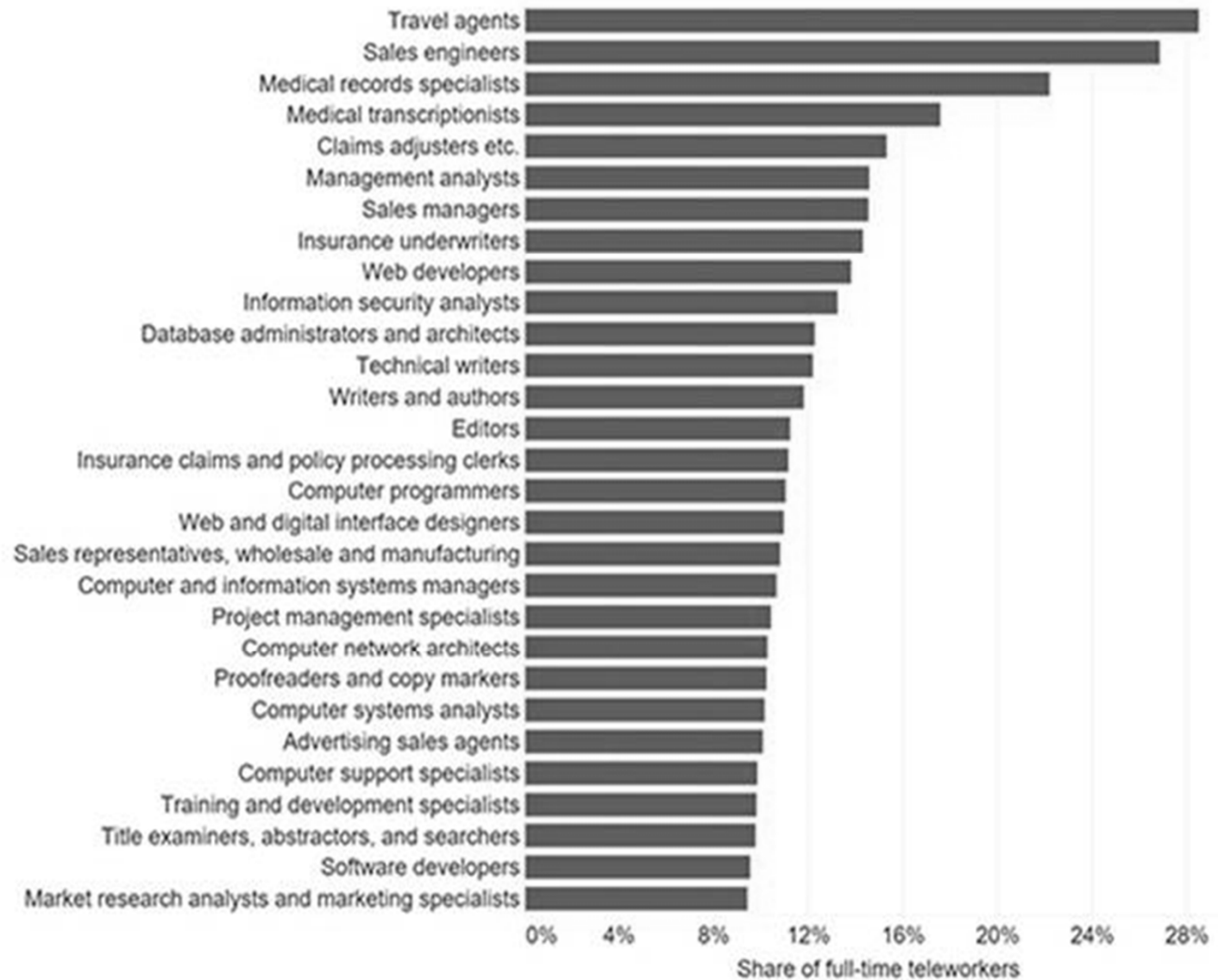
- Travel agents
- Sales engineers
- Medical records specialists
- Medical transcriptionists
- Claims adjusters etc.
- Management analysts
- Sales managers
- Insurance underwriters
- Web developers
- Information security analysts
- Database administrators and architects
- Technical writers
- Writers and authors
- Editors
- Insurance claims and policy processing clerks
- Computer programmers
- Web and digital interface designers
- Sales representatives, wholesale and manufacturing
- Computer and information systems managers
- Project management specialists
- Computer network architects
- Proofreaders and copy markers
- Computer systems analysts
- Advertising sales agents
- Computer support specialists
- Training and development specialists
- Title examiners, abstractors, and searchers
- Software developers
- Market research analysts and marketing specialists

Share of full-time teleworkers

0% 4% 8% 12% 16% 20% 24% 28%

www.conferenceboard.org

Labor Markets May Take Longer to Recover Where Many Rely on Public Transportation

It might take longer to go back to work in metro areas with high shares of workers using public transportation due to the higher risk of contagion

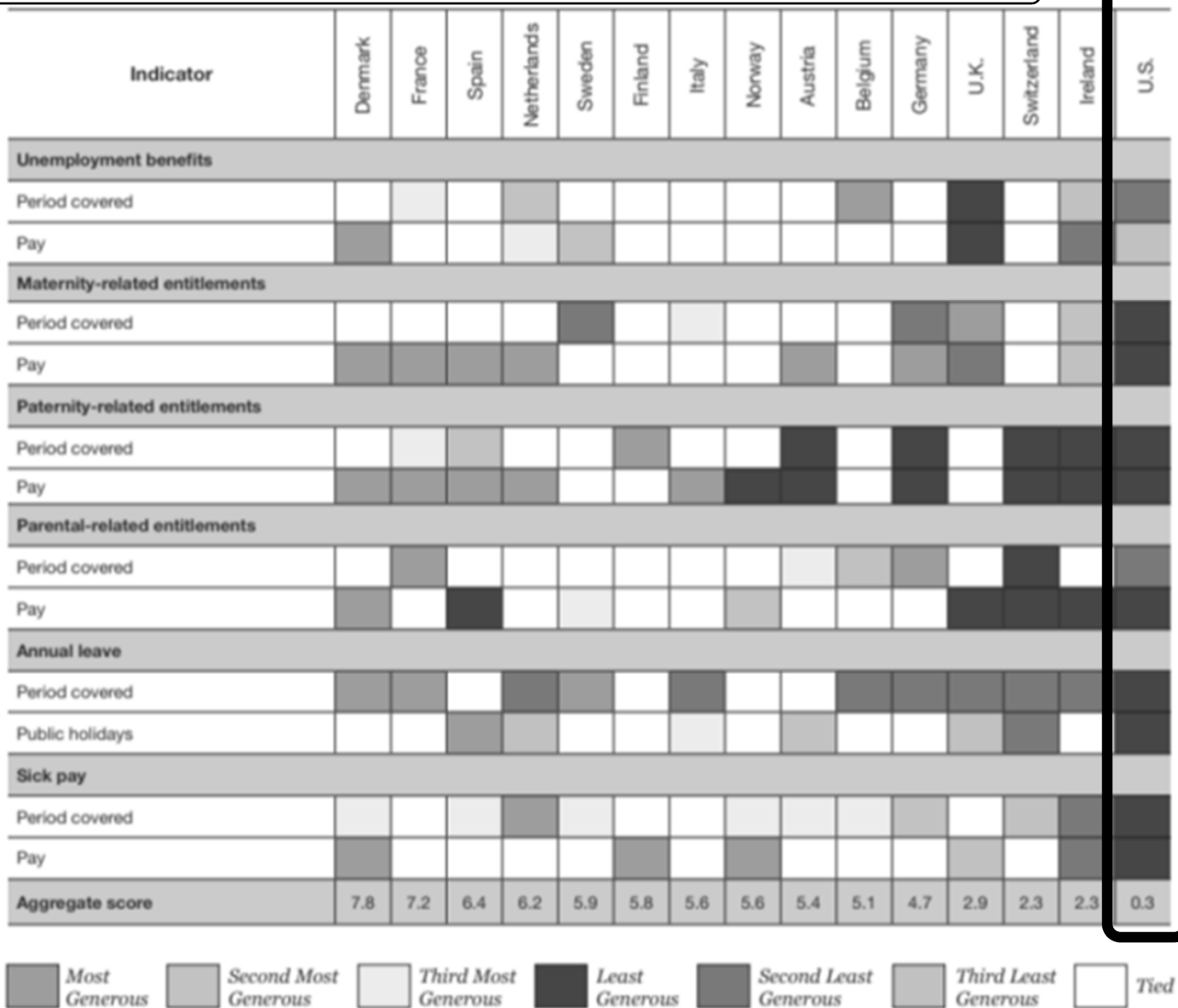*The share of workers commuting to work using public transportation, 2018*

Public transportation type
- Subway or elevated rail
- Other public transportation

New York-Newark-Jersey City, NY-NJ-PA
San Francisco-Oakland-Hayward, CA
Washington-Arlington-Alexandria, DC-VA-MD-WV
Boston-Cambridge-Newton, MA-NH
Chicago-Naperville-Elgin, IL-IN-WI
Bridgeport-Stamford-Norwalk, CT
Seattle-Tacoma-Bellevue, WA
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD
Baltimore-Columbia-Towson, MD
Portland-Vancouver-Hillsboro, OR-WA
Pittsburgh, PA
Los Angeles-Long Beach-Anaheim, CA
Minneapolis-St. Paul-Bloomington, MN-WI
San Jose-Sunnyvale-Santa Clara, CA
Denver-Aurora-Lakewood, CO
Las Vegas-Henderson-Paradise, NV
Albany-Schenectady-Troy, NY
Miami-Fort Lauderdale-West Palm Beach, FL
Cleveland-Elyria, OH
San Diego-Carlsbad, CA
Atlanta-Sandy Springs-Roswell, GA
Vallejo-Fairfield, CA
New Orleans-Metairie, LA
St. Louis, MO-IL
Houston-The Woodlands-Sugar Land, TX
San Antonio-New Braunfels, TX
Austin-Round Rock, TX
Phoenix-Mesa-Scottsdale, AZ
Dallas-Fort Worth-Arlington, TX
Nashville-Davidson--Murfreesboro--Franklin, TN
Indianapolis-Carmel-Anderson, IN

0%   10%   20%   30%

Share of workers using public transportation

www.conferenceboard.org

Job Benefits In the EU & U.S.

Indicator	Denmark	France	Spain	Netherlands	Sweden	Finland	Italy	Norway	Austria	Belgium	Germany	U.K.	Switzerland	Ireland	U.S.
Unemployment benefits															
Period covered															
Pay															
Maternity-related entitlements															
Period covered															
Pay															
Paternity-related entitlements															
Period covered															
Pay															
Parental-related entitlements															
Period covered															
Pay															
Annual leave															
Period covered															
Public holidays															
Sick pay															
Period covered															
Pay															
Aggregate score	7.8	7.2	6.4	6.2	5.9	5.8	5.6	5.6	5.4	5.1	4.7	2.9	2.3	2.3	0.3

Legend: Most Generous · Second Most Generous · Third Most Generous · Least Generous · Second Least Generous · Third Least Generous · Tied

How Much to Save for 50% RR?

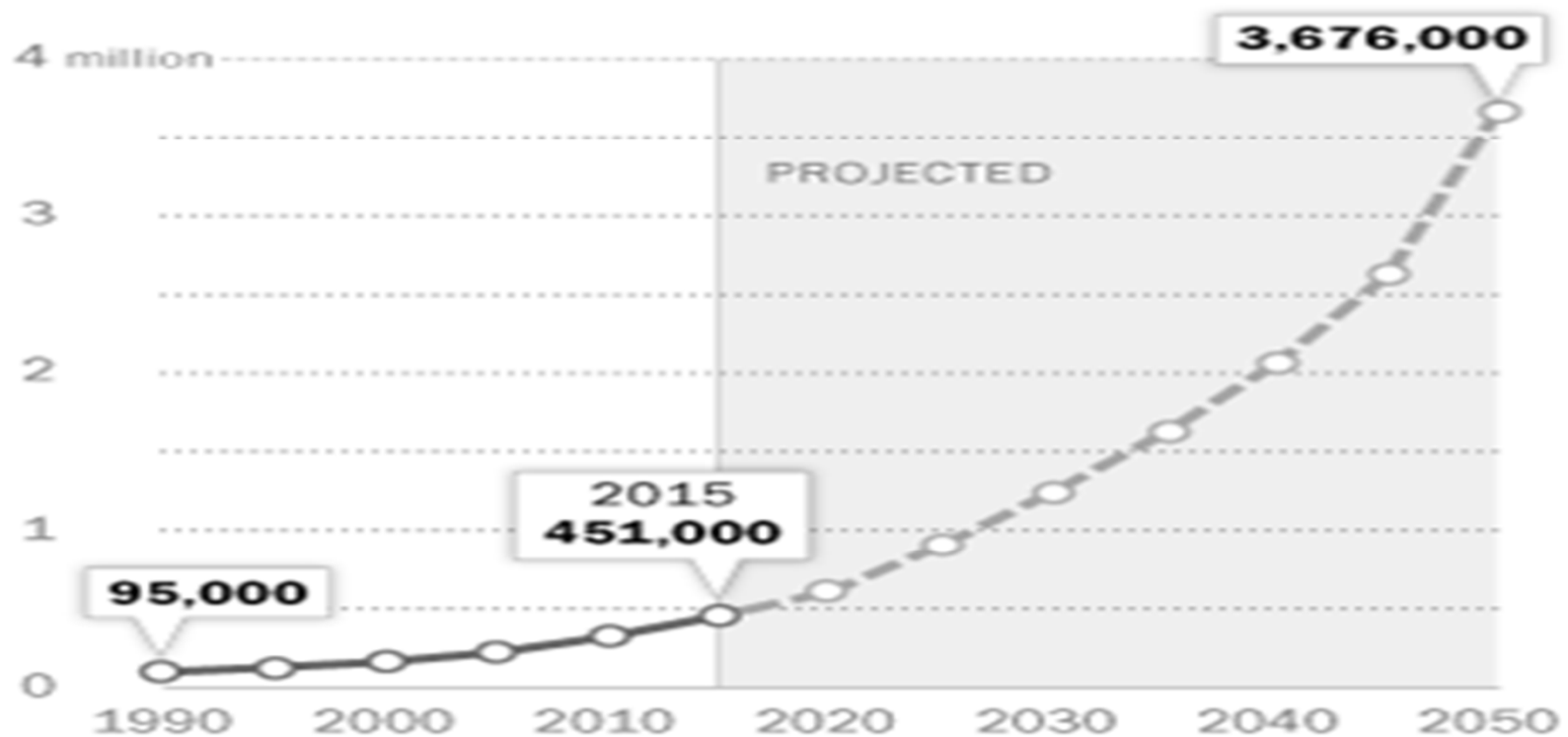| Save for:	r=0.03
20 years	27.5%
30 years	16.5
40 years	11.11

Poter

And Longevity Still Rising

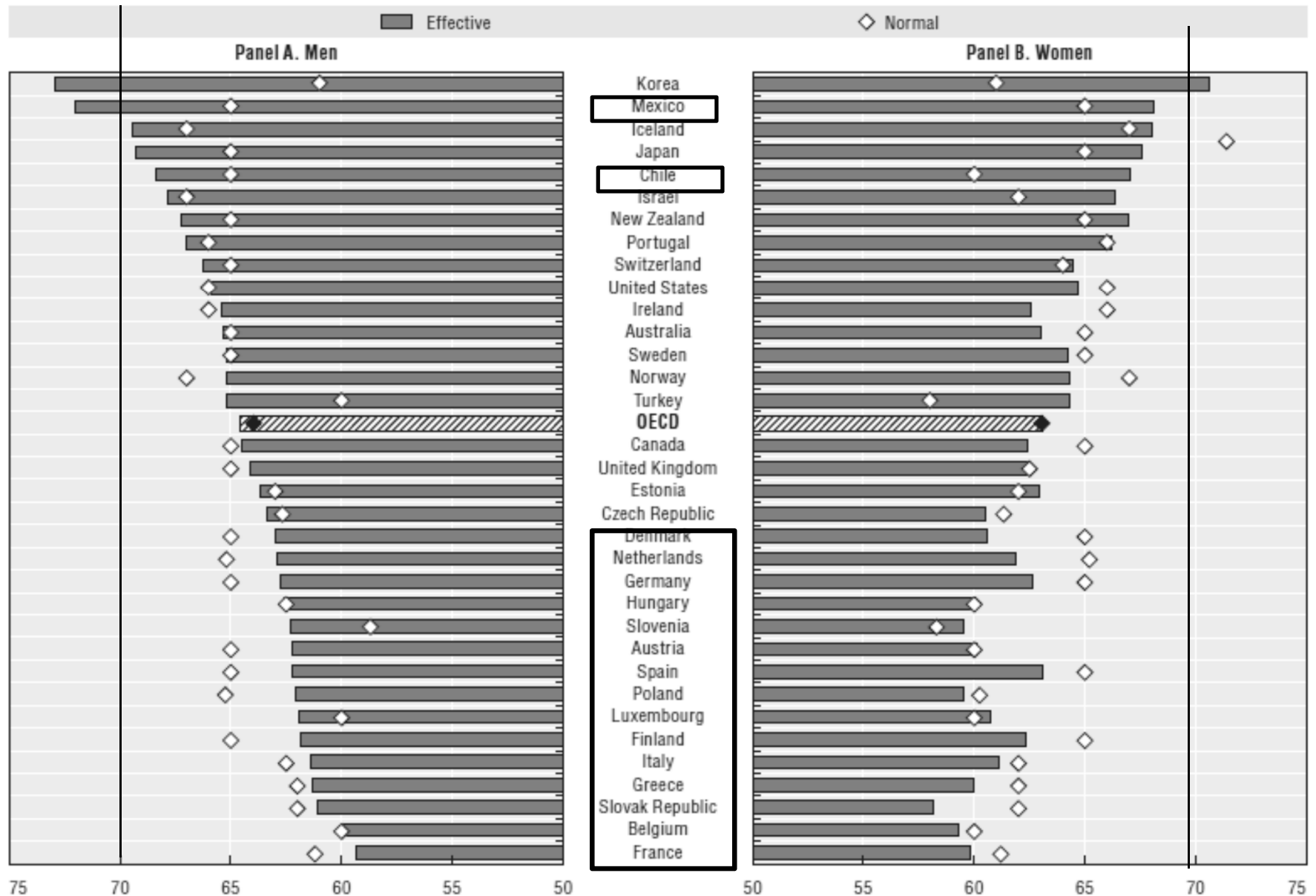## The world's centenarian population projected to grow rapidly

Number of persons ages 100 and older

Source: United Nations, Department of Economic and Social Affairs, "World Population Prospects: 2015 Revision"
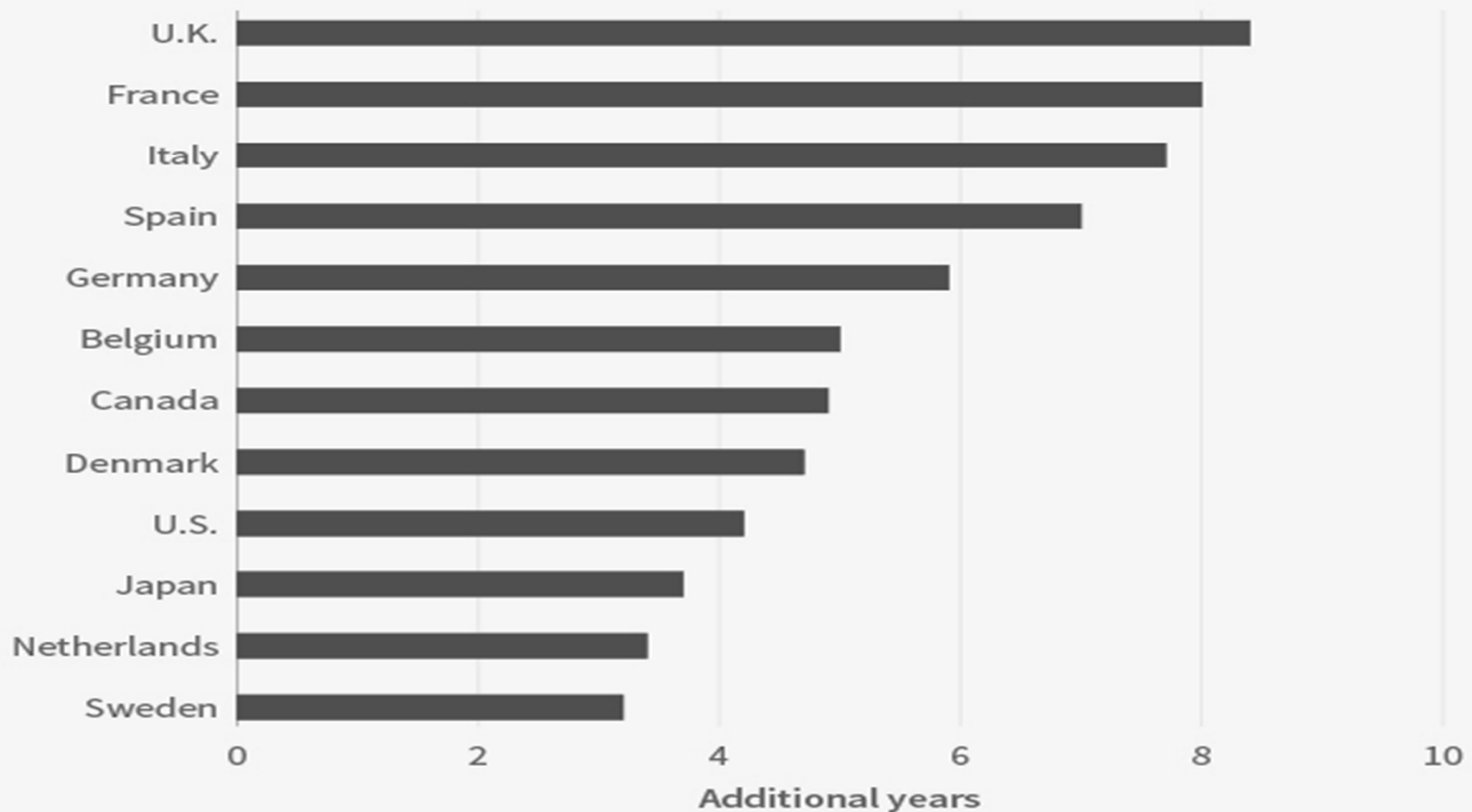
PEW RESEARCH CENTER

Retirement Ages must Rise

Many Have Substantial Capacity to Work

WORK CAPACITY IN OLD AGE
Additional years of work from ages 55 to 69 if men in 2010 worked as much as men of same mortality risk in 1977

Additional years

Source: Authors' calculations using data from the
Social Security Programs and Retirement Around the World project

Pandemic setting poor countries back decades

Rising levels of poverty
The crisis could push tens of millions of people back into poverty.
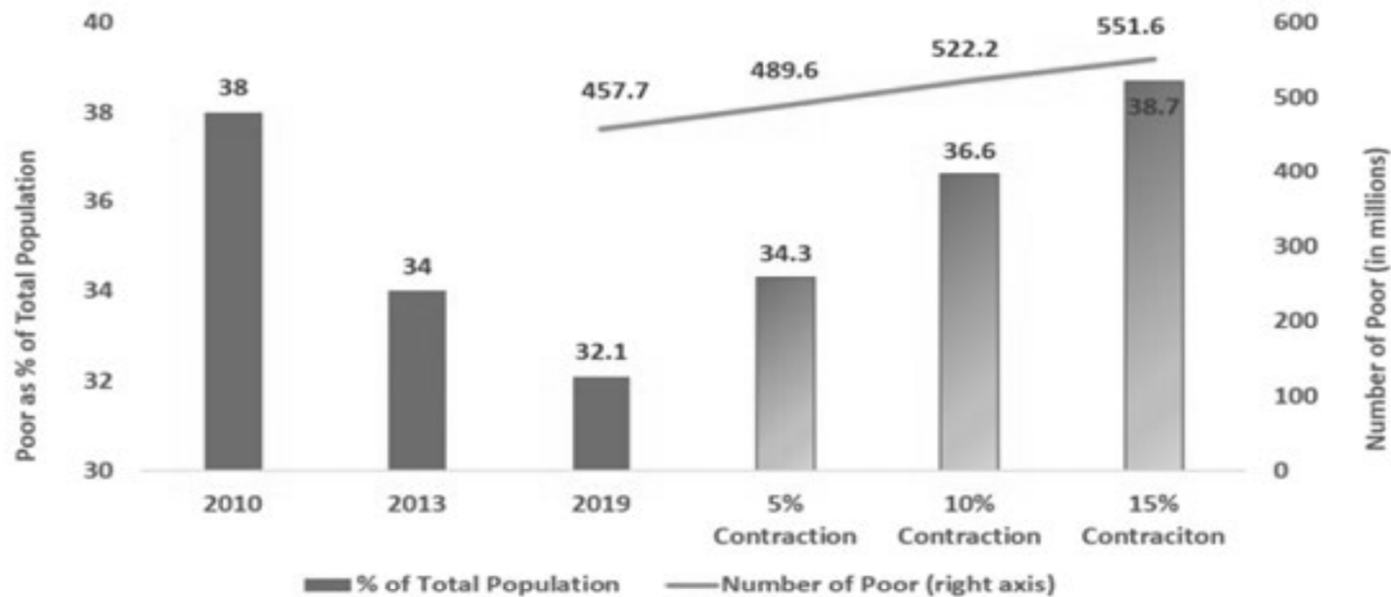
Source: World Bank Povcalnet.
Note: Poverty line defined at 2011 PPP $1.9/day. Scenarios are based on contraction in per capita household consumption. Figures exclude Afghanistan, Cambodia, Eritrea, and Somalia.

IMF fears for the least educated

Crisis could amplify intergenerational inequality
Non-college-educated youth are the most vulnerable.
Tele-workability index by age group and education level

Legend:
- Lower Secondary or less
- Upper secondary
- Post-secondary or Tertiary Professional
- Tertiary (bachelor/master)
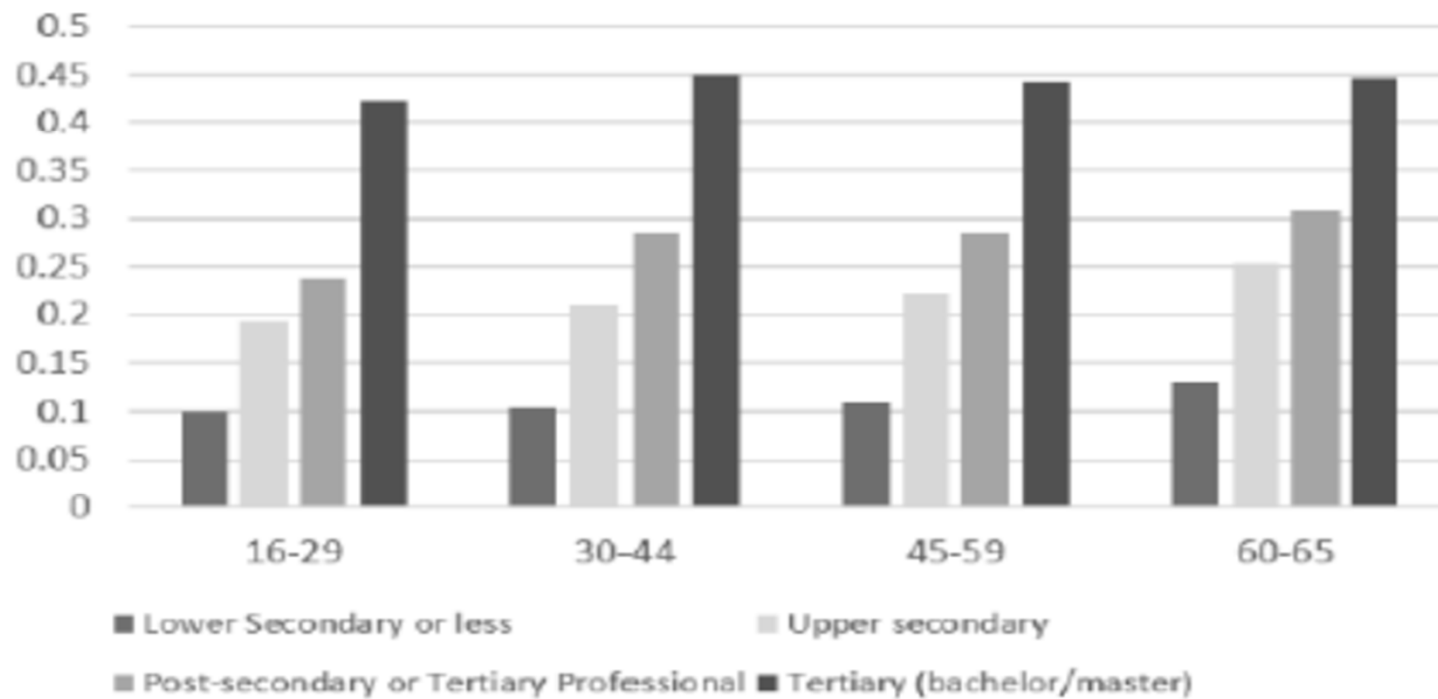
Sources: PIAAC survey; Dingel and Neiman (2020); and staff calculations.

The Way Ahead:

- **<u>Who</u> should manage the risks facing the elderly?**
  - Individuals, families, employers, govt?
  - Funded vs pay as you go?
  - Pension vs health care?

- **<u>How much</u> of GDP should go to the elderly and who should pay for it?**

- **How do we get to <u>political</u> consensus?**

To better manage retirement risk:

❖ Reinvent retirement!

- Build human capital and work longer;

- Invest in financial literacy;

- Save more, invest smarter, diversify better;

- Insure against longevity;

- Make home equity accessible;

- Restructure public/private pensions.

➔ New infrastructure needed to:

prepare/mitigate; better educate; build better financial products and markets for an aging world.

International Pension Research Association (IPRA) www.iprassn.org

- IPRA is a new international organization seeking to improve the quality and impact of research on pensions and related aging issues, to optimize social and economic outcomes for an aging world.

- IPRA's vision is to be the global voice of research in the fields of pensions, aging, and retirement.

- IPRA's values are to promote breadth, originality, and challenging thinking, so as to foster respectful collaboration and engage stakeholders, and, by example, to support integrity and good governance.

- Join now online!

Thank you!

For more information:

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Books and working papers:

http://www.pensionresearchcouncil.org/publications/books.php