



The Global Aging Preparedness Index

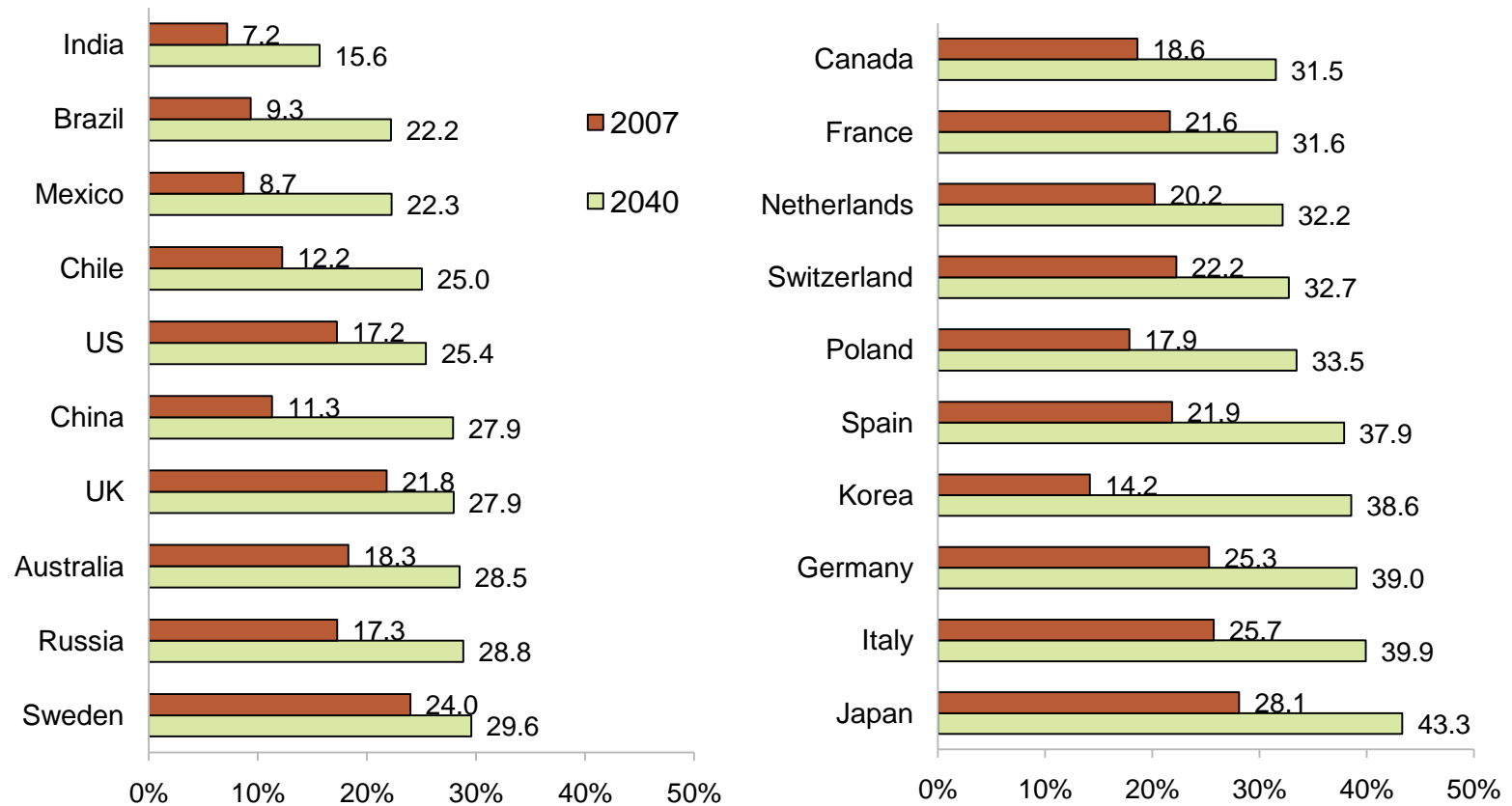
GAPINDEX.CSIS.ORG

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The world stands on the threshold of a stunning demographic transformation. It's called global aging and it promises to affect every dimension of social and economic life. Perhaps most fatefully, it could call into question the ability of societies to maintain a decent standard of living for the old without imposing a crushing burden on the young.

Elderly (Aged 60 and Over), as a Percent of the Population in 2007 and 2040



The GAP Index

- ▣ The GAP Index provides a unique new quantitative assessment of the progress that countries worldwide are making in preparing for the global aging challenge.
- ▣ The GAP Index projections extend through the year 2040 in order to capture the full impact of the demographic transformation now sweeping the world.
- ▣ The GAP Index covers twenty countries, including both developed economies and emerging markets.
- ▣ The GAP Index consists of two subindices—the fiscal sustainability index and the income adequacy index.

GAP Index Countries

Australia
Brazil
Canada
Chile
China
France
Germany
India
Italy
Japan
Korea
Mexico
Netherlands
Poland
Russia
Spain
Sweden
Switzerland
UK
US

GAP FISCAL SUSTAINABILITY INDEX

PUBLIC BURDEN CATEGORY

Measures the magnitude of each country's projected public old-age dependency burden

BENEFIT LEVEL INDICATOR

Total public benefits to the elderly in 2040 as a % of GDP

BENEFIT GROWTH INDICATOR

The growth in total public benefits to the elderly from 2007 to 2040 as a % of GDP

FISCAL ROOM CATEGORY

Measures each country's ability to accommodate the growth in its public old-age dependency burden by raising taxes, cutting other spending, or borrowing

TAX ROOM INDICATOR

Total Government revenue in 2040 as a % of GDP, assuming taxes are raised to pay for all growth in public benefits

BUDGET ROOM INDICATOR

Total public benefits to the elderly in 2040 as a % of government outlays, assuming cuts in other spending pay for all growth in public benefits

BORROWING ROOM INDICATOR

The net public debt in 2040 as a % of GDP, assuming borrowing pays for all growth in public benefits

BENEFIT DEPENDENCE CATEGORY

Measures how dependent the elderly in each country are on public benefits—and thus how politically difficult it may be to reduce those benefits

BENEFIT SHARE INDICATOR

Total public benefits as a % of elderly income: Average for 2007 to 2040

BENEFIT CUT INDICATOR

The % of elderly households that would be pushed into poverty by a 10% cut in public benefits in 2007 or the most recent available year

Public Burden Category

Benefit Level Indicator

Total Public Benefits to the Elderly, as a Percent of GDP, 2007–2040

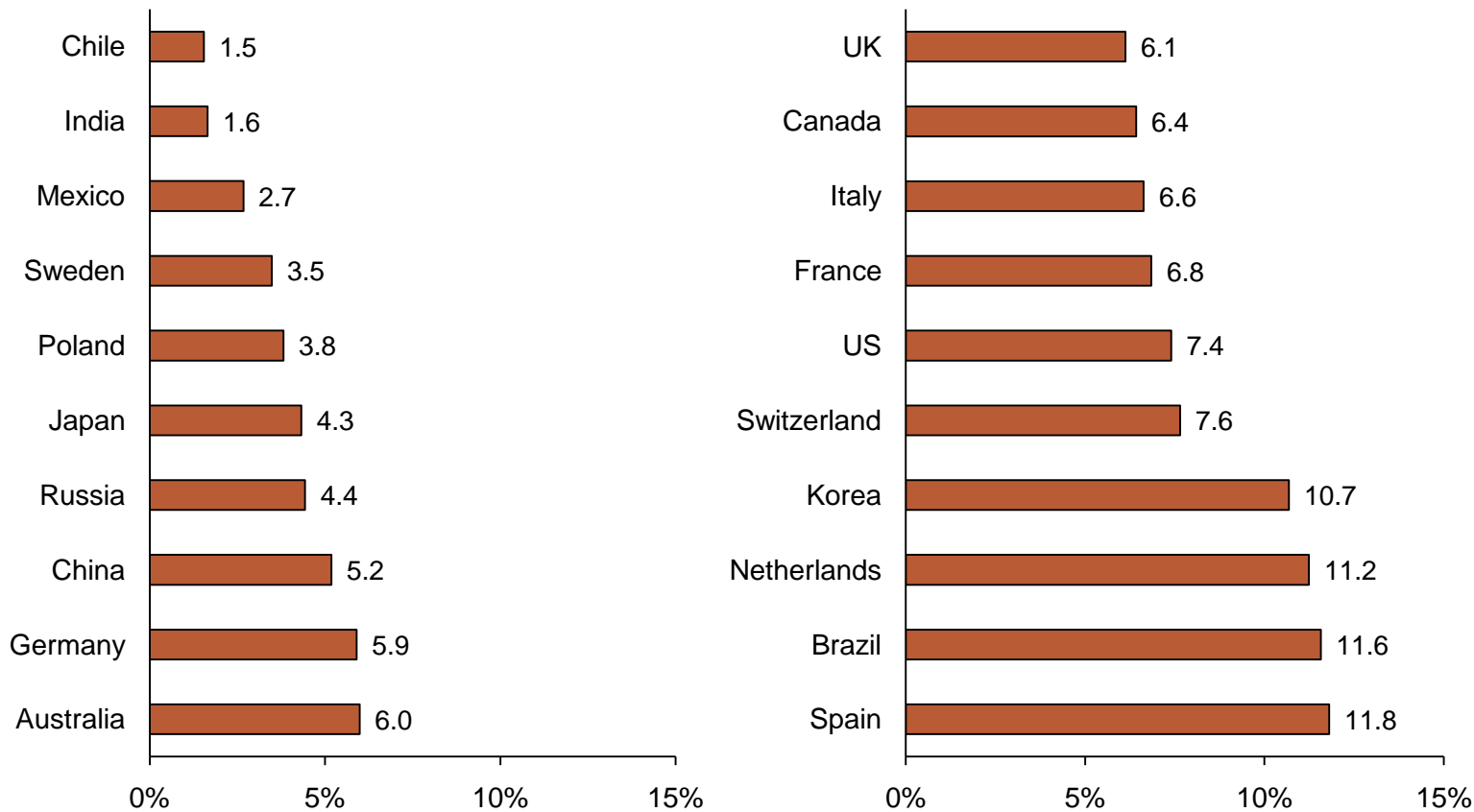
| | 2007 | 2020 | 2030 | 2040 | | 2007 | 2020 | 2030 | 2040 |
|--------------------|------|------|------|-------------|-----------------------|------|------|------|-------------|
| 1 India | 1.9 | 3.1 | 4.2 | 3.6 | 11 Switzerland | 9.8 | 12.6 | 15.7 | 17.4 |
| 2 Mexico | 2.4 | 3.2 | 3.9 | 5.1 | 12 UK | 12.1 | 14.0 | 16.4 | 18.2 |
| 3 Chile | 6.0 | 6.8 | 7.0 | 7.5 | 13 Japan | 14.1 | 15.4 | 15.9 | 18.4 |
| 4 China | 2.8 | 4.6 | 6.1 | 8.0 | 14 Sweden | 15.7 | 16.6 | 18.1 | 19.2 |
| 5 Russia | 5.8 | 7.5 | 8.7 | 10.2 | 15 Brazil | 8.8 | 12.5 | 16.3 | 20.4 |
| 6 Poland | 10.1 | 12.0 | 13.1 | 13.9 | 16 Germany | 15.8 | 17.3 | 20.0 | 21.7 |
| 7 Korea | 3.4 | 7.5 | 11.0 | 14.1 | 17 Netherlands | 12.0 | 15.7 | 20.0 | 23.2 |
| 8 Canada | 8.3 | 10.9 | 13.2 | 14.7 | 18 France | 16.6 | 19.4 | 21.8 | 23.5 |
| 9 Australia | 8.9 | 10.7 | 12.9 | 14.9 | 19 Italy | 18.0 | 19.9 | 22.3 | 24.7 |
| 10 US | 8.9 | 12.5 | 15.1 | 16.3 | 20 Spain | 14.3 | 17.0 | 20.6 | 26.1 |

Note: Countries are ranked from best to worst according to the projection results for 2040.

Public Burden Category

Benefit Growth Indicator

Growth in Total Public Benefits to the Elderly from 2007 to 2040, as a Percent of GDP



Note: Countries are ranked from best to worst.

Fiscal Room Category

Tax Room Indicator

Total Government Revenue as a Percent of GDP, Assuming Taxes Are Raised to Pay for All Growth in Public Benefits, 2007–2040*

| | 2007 | 2020 | 2030 | 2040 | | 2007 | 2020 | 2030 | 2040 |
|---------------|------|------|------|------|----------------|------|------|------|------|
| 1 India | 23.5 | 23.8 | 25.1 | 24.2 | 11 Korea | 33.3 | 36.4 | 39.4 | 42.3 |
| 2 Mexico | 22.6 | 22.9 | 23.4 | 24.4 | 12 Canada | 40.7 | 41.5 | 43.5 | 45.0 |
| 3 Chile | 29.5 | 26.4 | 26.4 | 26.9 | 13 UK | 41.4 | 43.2 | 45.4 | 47.4 |
| 4 China | 21.7 | 23.9 | 25.2 | 27.2 | 14 Brazil | 34.8 | 39.6 | 43.5 | 47.4 |
| 5 Japan | 33.5 | 33.7 | 34.0 | 36.2 | 15 Germany | 43.9 | 43.9 | 45.8 | 47.5 |
| 6 Poland | 40.3 | 39.4 | 39.8 | 40.4 | 16 Spain | 41.1 | 42.4 | 45.6 | 50.3 |
| 7 Russia | 40.0 | 38.0 | 38.9 | 40.5 | 17 Italy | 46.4 | 47.7 | 49.5 | 51.4 |
| 8 Switzerland | 33.9 | 35.9 | 38.8 | 40.6 | 18 Netherlands | 45.7 | 47.8 | 51.5 | 54.7 |
| 9 Australia | 35.7 | 36.6 | 38.7 | 40.6 | 19 France | 49.6 | 52.4 | 54.6 | 56.3 |
| 10 US | 34.0 | 37.6 | 40.3 | 41.7 | 20 Sweden | 56.3 | 55.1 | 56.3 | 57.4 |

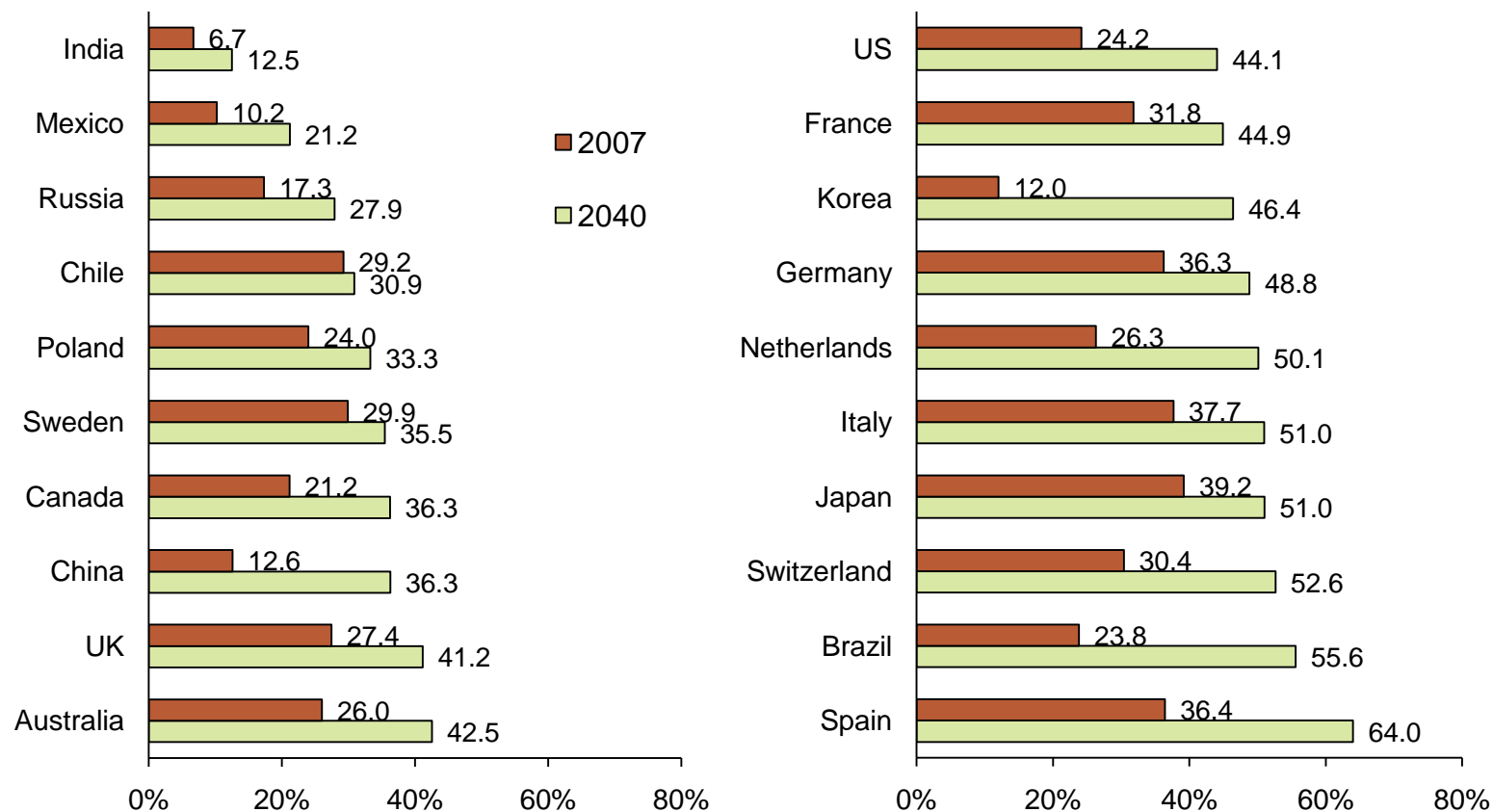
Note: Countries are ranked from best to worst according to the projection results for 2040.

* The projections assume that, beginning in 2015, each country moves to a debt-neutral fiscal balance in its “rest of government” budget.

Fiscal Room Category

Budget Room Indicator

Total Public Benefits to the Elderly as a Percent of Government Outlays in 2007 and 2040, Assuming Cuts in Other Spending Pay for All Growth in Public Benefits*



Note: Countries are ranked from best to worst according to the projection results for 2040.

* The projections assume that, beginning in 2015, each country moves to a debt-neutral fiscal balance in its "rest of government" budget.

Fiscal Room Category

Borrowing Room Indicator

Net Public Debt as a Percent of GDP, Assuming that Borrowing Pays for All Growth in Public Benefits, 2007–2040*

| | 2007 | 2020 | 2030 | 2040 | | 2007 | 2020 | 2030 | 2040 |
|----------------------|-------|-------|-------|--------------|-----------------------|------|-------|-------|--------------|
| 1 Chile | -13.7 | -14.5 | -26.0 | -31.1 | 11 India† | 78.3 | 84.6 | 80.0 | 108.0 |
| 2 Sweden | -25.0 | -12.9 | -14.1 | 17.8 | 12 Germany | 42.9 | 54.7 | 56.7 | 127.2 |
| 3 Russia | 0.0 | 1.6 | -6.2 | 32.0 | 13 Japan | 80.4 | 104.6 | 114.9 | 133.6 |
| 4 China | 1.7 | -1.5 | -1.1 | 39.0 | 14 France | 34.0 | 60.7 | 73.5 | 149.2 |
| 5 Mexico | 31.4 | 44.4 | 43.0 | 66.8 | 15 UK | 28.8 | 58.3 | 76.9 | 152.6 |
| 6 Poland | 17.0 | 32.4 | 41.7 | 70.1 | 16 Italy | 87.1 | 100.8 | 103.6 | 168.2 |
| 7 Australia | -6.6 | -1.1 | 1.3 | 73.9 | 17 Netherlands | 28.0 | 36.5 | 41.3 | 169.1 |
| 8 Korea | -35.8 | -33.4 | -36.8 | 87.4 | 18 Spain | 18.7 | 41.6 | 49.2 | 175.1 |
| 9 Switzerland | 11.0 | 9.3 | 5.8 | 98.9 | 19 Brazil | 42.0 | 37.3 | 37.2 | 175.2 |
| 10 Canada | 23.1 | 32.6 | 32.7 | 104.8 | 20 US | 42.3 | 65.0 | 76.2 | 179.0 |

Note: Countries are ranked from best to worst according to the projection results for 2040.

* The projections assume that, beginning in 2015, each country moves to a debt-neutral fiscal balance in its “rest of government” budget.

† Data for India refer to gross debt.

Benefit Dependence Category

Benefit Share Indicator

Public Benefits, as a Percent of Elderly Income, 2007–2040

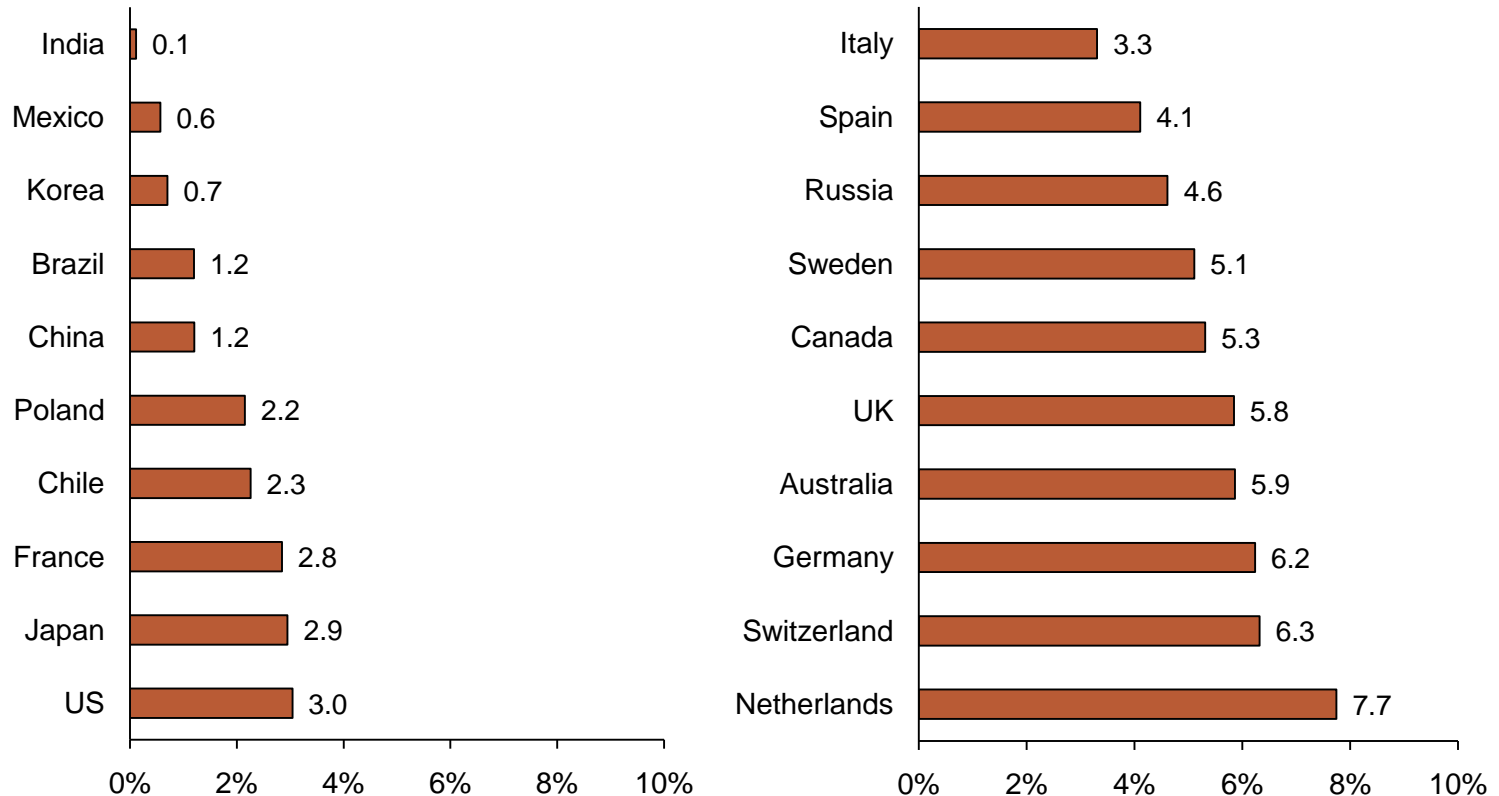
| | | 2007 | 2020 | 2030 | 2040 | Average 2007-40 | | | 2007 | 2020 | 2030 | 2040 | Average 2007-40 |
|----|-------------|------|------|------|------|--------------------|----|-------------|------|------|------|------|--------------------|
| 1 | Mexico | 25.3 | 26.6 | 26.0 | 26.5 | 27.1 | 11 | Netherlands | 49.6 | 48.9 | 49.6 | 51.6 | 49.8 |
| 2 | Chile | 34.8 | 30.6 | 26.9 | 26.3 | 30.8 | 12 | China | 48.0 | 52.5 | 51.0 | 54.8 | 52.1 |
| 3 | India | 27.4 | 32.2 | 34.5 | 26.5 | 31.6 | 13 | Sweden | 53.6 | 52.6 | 51.2 | 52.8 | 52.5 |
| 4 | US | 35.1 | 37.2 | 38.8 | 40.3 | 38.1 | 14 | UK | 51.5 | 52.5 | 52.2 | 55.1 | 52.8 |
| 5 | Australia | 43.1 | 39.5 | 40.3 | 41.2 | 40.5 | 15 | Russia | 57.4 | 55.9 | 57.4 | 54.9 | 56.5 |
| 6 | Korea | 29.9 | 40.9 | 44.0 | 45.9 | 41.3 | 16 | Italy | 60.5 | 58.1 | 55.8 | 55.9 | 57.6 |
| 7 | Japan | 46.9 | 44.5 | 42.2 | 42.6 | 43.9 | 17 | Brazil | 64.2 | 62.6 | 62.3 | 62.2 | 62.8 |
| 8 | Canada | 43.8 | 43.3 | 44.8 | 46.0 | 44.2 | 18 | Spain | 63.1 | 63.3 | 63.0 | 64.2 | 64.0 |
| 9 | Switzerland | 41.5 | 43.6 | 44.9 | 47.1 | 44.3 | 19 | France | 66.7 | 65.8 | 66.2 | 67.4 | 66.3 |
| 10 | Germany | 54.5 | 47.8 | 45.2 | 47.1 | 48.4 | 20 | Poland | 77.1 | 68.6 | 63.0 | 56.7 | 66.8 |

Note: Countries are ranked from best to worst according to the average for 2007 to 2040.

Benefit Dependence Category

Benefit Cut Indicator

Percent of Elderly Households That Would Be Pushed into Poverty Today by a 10 Percent Cut in Public Benefits*



Note: Countries are ranked from best to worst.

* Data refer to various years between 1999 and 2007 and exclude public health benefits. Poor households are households with incomes beneath 50 percent of the median income for all households.

GAP INCOME ADEQUACY INDEX

TOTAL INCOME CATEGORY

Measures the overall level of and trend in the income of the elderly relative to the nonelderly in each country

TOTAL INCOME LEVEL INDICATOR

The ratio of average after-tax elderly to nonelderly income in 2040, including public health benefits

TOTAL INCOME TREND INDICATOR

The % change in the ratio of average after-tax elderly to nonelderly income from 2007 to 2040, including public health benefits

INCOME VULNERABILITY CATEGORY

Measures income adequacy for “middle class” elders and the extent of elderly poverty in each country

MEDIAN INCOME LEVEL INDICATOR

The ratio of median after-tax elderly to nonelderly income in 2040, excluding public health benefits

MEDIAN INCOME TREND INDICATOR

The % change in the ratio of median after-tax elderly to nonelderly income from 2007 to 2040, excluding public health benefits

POVERTY LEVEL INDICATOR

The % of the elderly with incomes beneath 50% of the median income for all persons in 2007 or the most recent available year

FAMILY SUPPORT CATEGORY

Measures the strength of family support networks in each country

FAMILY TIES INDICATOR

The % of the elderly living in households with their adult children in 2007

FAMILY SIZE INDICATOR

The change in the average number of surviving children of the elderly from 2007 to 2040

Total Income Category

Total Income Level Indicator

Ratio of Average After-Tax Elderly to Nonelderly Income, Including Public Health Benefits, 2007–2040

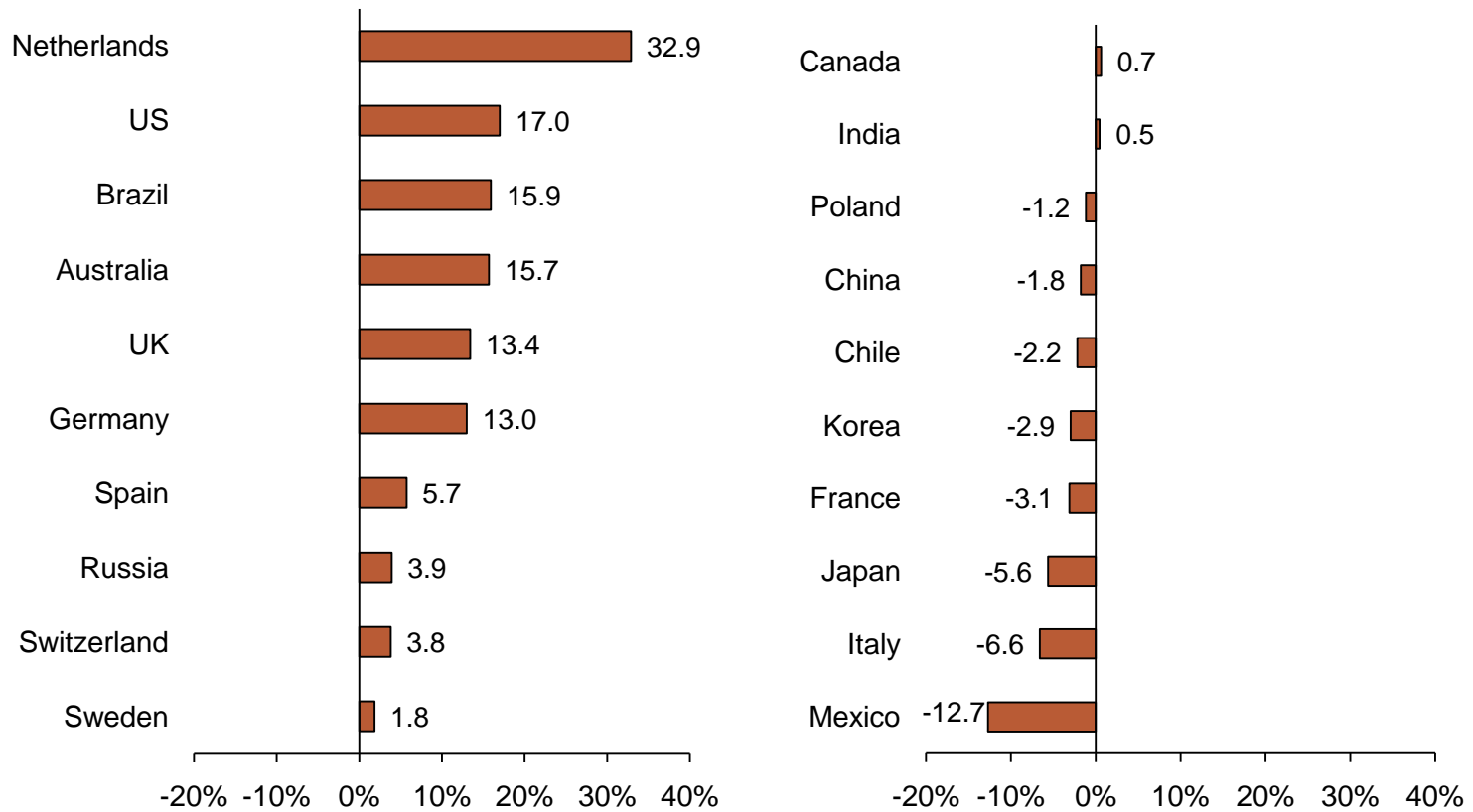
| | 2007 | 2020 | 2030 | 2040 | | 2007 | 2020 | 2030 | 2040 |
|---------------|------|------|------|-------------|----------------|------|------|------|-------------|
| 1 Netherlands | 1.29 | 1.37 | 1.52 | 1.72 | 11 Japan | 1.19 | 1.12 | 1.11 | 1.12 |
| 2 US | 1.43 | 1.54 | 1.62 | 1.67 | 12 Spain | 1.00 | 1.06 | 1.05 | 1.06 |
| 3 Brazil | 1.33 | 1.40 | 1.47 | 1.54 | 13 Italy | 1.12 | 1.12 | 1.09 | 1.04 |
| 4 Germany | 1.31 | 1.43 | 1.48 | 1.48 | 14 Switzerland | 0.86 | 0.87 | 0.88 | 0.89 |
| 5 Chile | 1.41 | 1.45 | 1.39 | 1.38 | 15 Mexico | 0.94 | 0.88 | 0.85 | 0.82 |
| 6 Sweden | 1.26 | 1.21 | 1.27 | 1.28 | 16 Korea | 0.81 | 0.82 | 0.79 | 0.79 |
| 7 Australia | 1.04 | 1.09 | 1.14 | 1.20 | 17 India | 0.78 | 0.83 | 0.85 | 0.78 |
| 8 UK | 1.05 | 1.08 | 1.14 | 1.19 | 18 Poland | 0.75 | 0.70 | 0.76 | 0.74 |
| 9 Canada | 1.13 | 1.11 | 1.11 | 1.14 | 19 Russia | 0.68 | 0.65 | 0.65 | 0.71 |
| 10 France | 1.16 | 1.09 | 1.10 | 1.13 | 20 China | 0.52 | 0.53 | 0.50 | 0.51 |

Note: Countries are ranked from best to worst according to the projection results for 2040.

Total Income Category

Total Income Trend Indicator

Percent Change in the Ratio of Average After-Tax Elderly to Nonelderly Income from 2007 to 2040, Including Public Health Benefits



Note: Countries are ranked from best to worst.

Income Vulnerability Category

Median Income Level Indicator

Ratio of Median After-Tax Elderly to Nonelderly Income, Excluding Public Health Benefits, 2007–2040*

| | 2007 | 2020 | 2030 | 2040 | | 2007 | 2020 | 2030 | 2040 |
|----------------------|------|------|------|-------------|-----------------------|------|------|------|-------------|
| 1 Brazil | 1.23 | 1.24 | 1.26 | 1.30 | 11 Italy | 1.02 | 0.99 | 0.94 | 0.87 |
| 2 Netherlands | 1.00 | 1.02 | 1.13 | 1.27 | 12 Canada | 0.91 | 0.87 | 0.85 | 0.81 |
| 3 US | 1.16 | 1.22 | 1.27 | 1.26 | 13 France | 0.89 | 0.78 | 0.76 | 0.75 |
| 4 Germany | 1.05 | 1.04 | 1.04 | 1.04 | 14 Poland | 0.80 | 0.71 | 0.77 | 0.72 |
| 5 Chile | 1.11 | 1.11 | 1.02 | 0.99 | 15 Switzerland | 0.73 | 0.71 | 0.71 | 0.71 |
| 6 Japan | 1.11 | 1.00 | 0.95 | 0.96 | 16 India | 0.76 | 0.78 | 0.78 | 0.71 |
| 7 Sweden | 0.94 | 0.92 | 0.94 | 0.94 | 17 Russia | 0.64 | 0.59 | 0.58 | 0.61 |
| 8 Australia | 0.89 | 0.85 | 0.88 | 0.93 | 18 Mexico | 0.72 | 0.64 | 0.60 | 0.56 |
| 9 Spain | 0.93 | 0.95 | 0.93 | 0.93 | 19 Korea | 0.59 | 0.57 | 0.53 | 0.52 |
| 10 UK | 0.88 | 0.88 | 0.90 | 0.93 | 20 China | 0.39 | 0.38 | 0.35 | 0.34 |

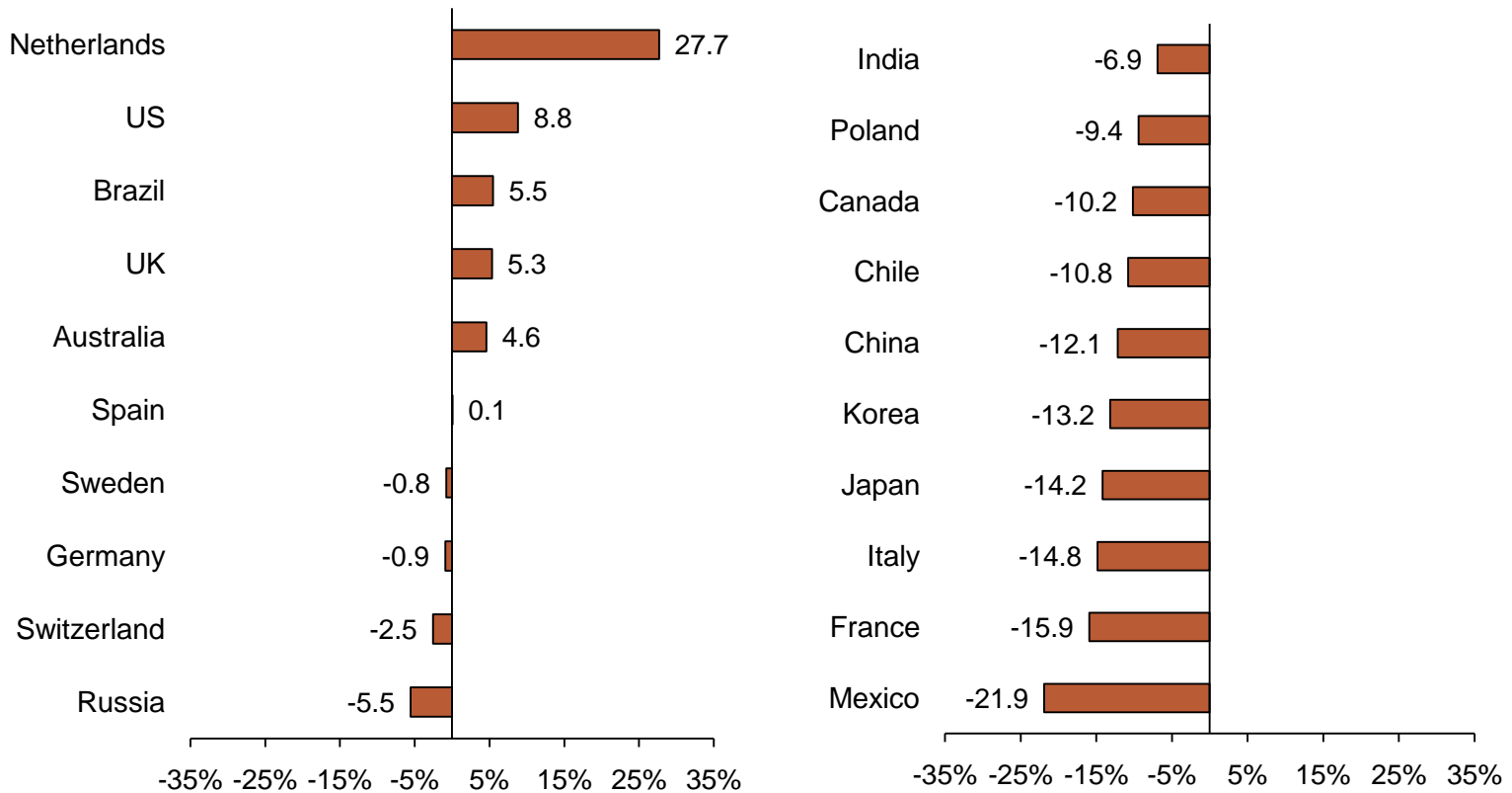
Note: Countries are ranked from best to worst according to the projection results for 2040.

* Data for both the elderly and nonelderly refer to the third quintile of the income distribution.

Income Vulnerability Category

Median Income Trend Indicator

Percent Change in the Ratio of Median After-Tax Elderly to Nonelderly Income from 2007 to 2040, Excluding Public Health Benefits*



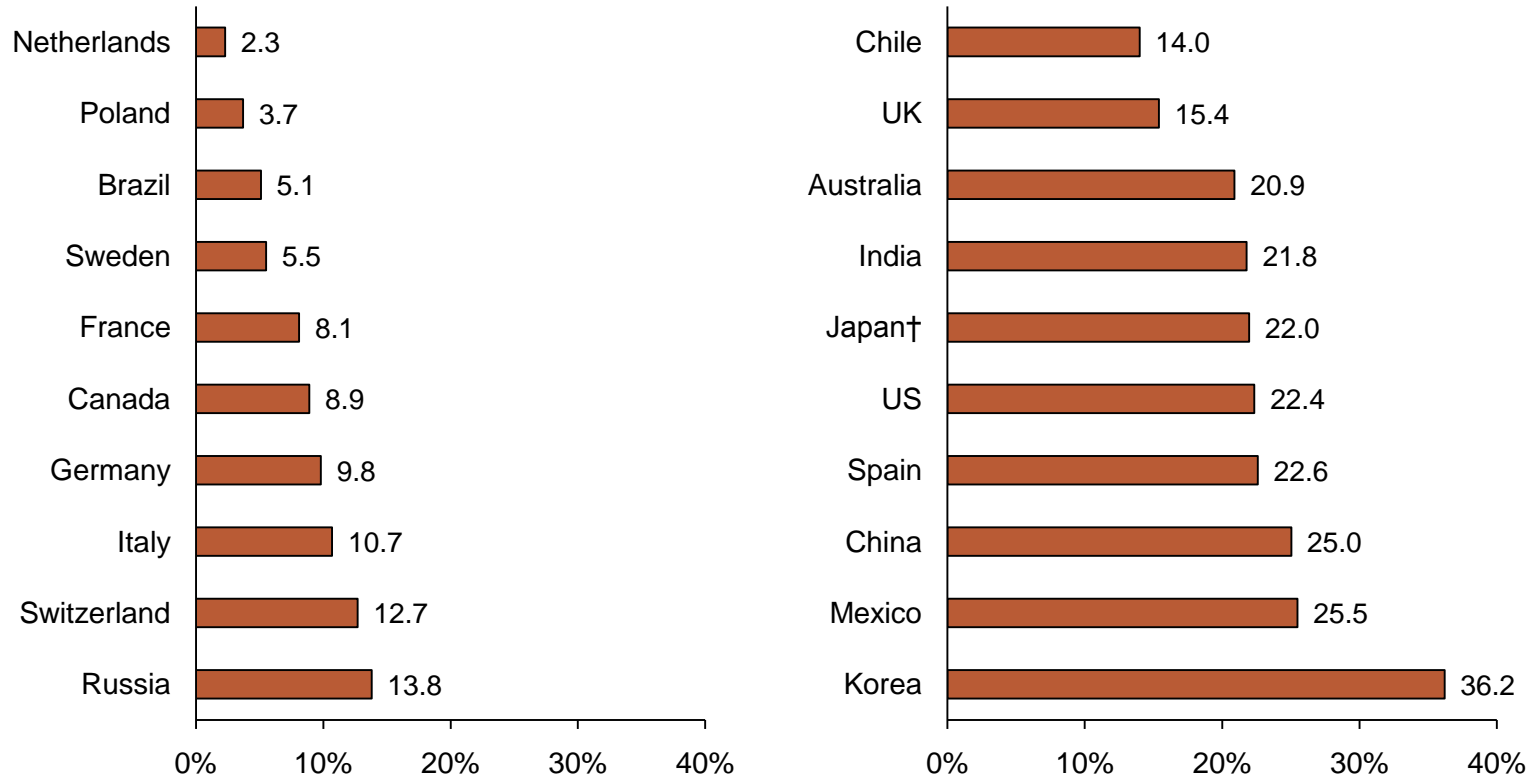
Note: Countries are ranked from best to worst.

* Data for both the elderly and nonelderly refer to the third quintile of the income distribution.

Income Vulnerability Category

Poverty Level Indicator

Percent of the Elderly Living in Poverty Today*



Note: Countries are ranked from best to worst.

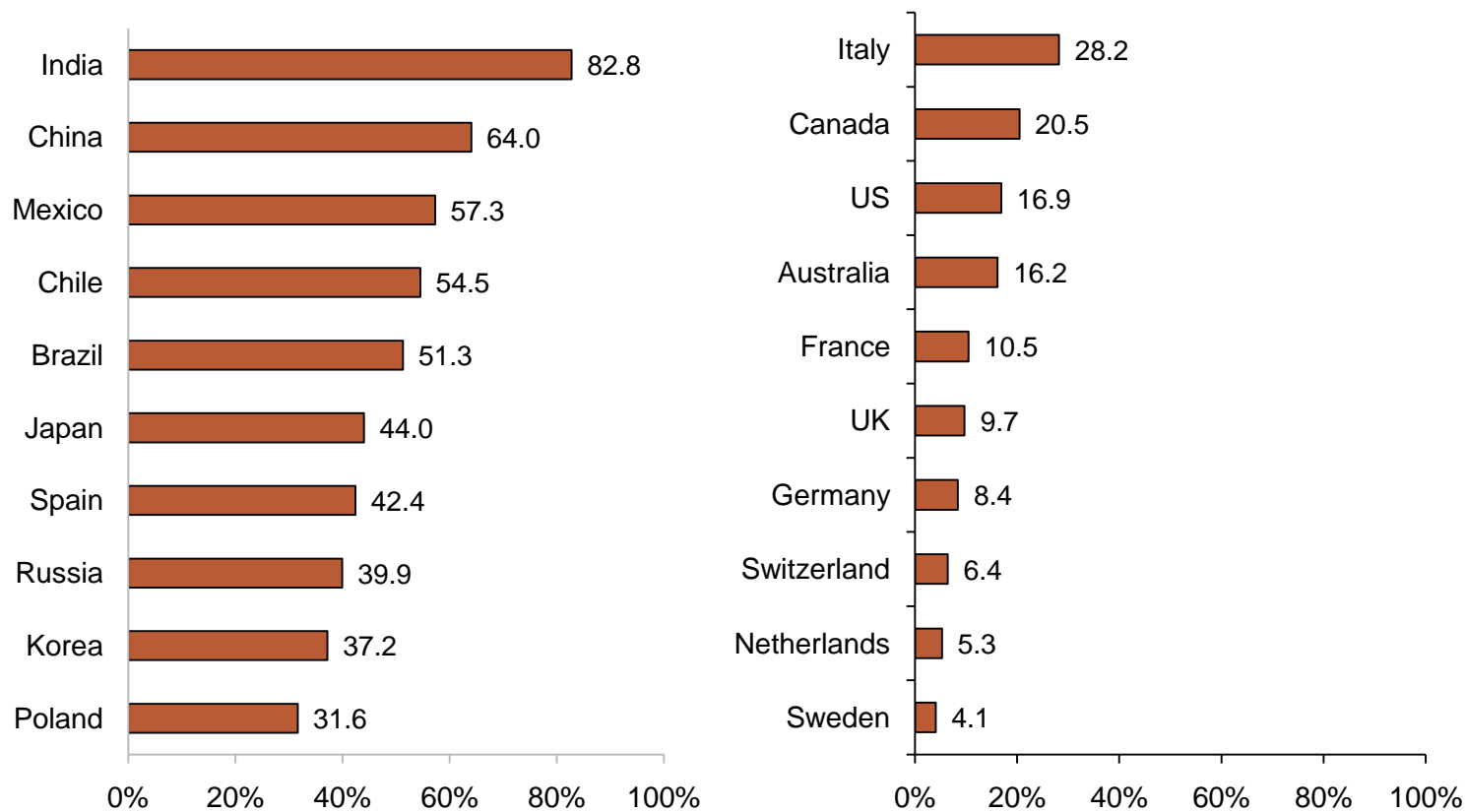
* Data refer to various years between 1999 and 2007 and exclude public health benefits. Poor persons are persons with incomes beneath 50 percent of the median income for all persons.

† Data for Japan refer to elderly aged 65 and older.

Family Support Category

Family Ties Indicator

Percent of the Elderly Living in Households with Their Adult Children in 2007



Note: Countries are ranked from best to worst.

Family Support Category

Family Size Indicator

Average Number of Surviving Children of the Elderly: 2007, 2040, and Change from 2007 to 2040

| | | 2007 | 2040 | Change | | | 2007 | 2040 | Change |
|----|-------------|------|------|--------|----|-------------|------|------|--------|
| 1 | Sweden | 2.1 | 2.0 | -0.2 | 11 | US | 1.9 | 1.0 | -1.0 |
| 2 | Japan | 2.0 | 1.5 | -0.5 | 12 | Australia | 3.0 | 2.0 | -1.0 |
| 3 | Poland | 2.6 | 2.0 | -0.6 | 13 | Netherlands | 2.7 | 1.6 | -1.1 |
| 4 | UK | 2.4 | 1.9 | -0.6 | 14 | Chile | 3.5 | 2.4 | -1.1 |
| 5 | France | 2.5 | 1.9 | -0.6 | 15 | Spain | 2.7 | 1.4 | -1.2 |
| 6 | Germany | 2.1 | 1.4 | -0.7 | 16 | Canada | 3.2 | 1.7 | -1.5 |
| 7 | Switzerland | 2.2 | 1.6 | -0.7 | 17 | China | 3.5 | 2.0 | -1.6 |
| 8 | Russia | 2.2 | 1.5 | -0.7 | 18 | Brazil | 3.8 | 2.1 | -1.7 |
| 9 | India | 3.5 | 2.6 | -0.9 | 19 | Korea | 3.6 | 1.8 | -1.8 |
| 10 | Italy | 2.3 | 1.4 | -0.9 | 20 | Mexico | 5.0 | 2.6 | -2.5 |

Note: Countries are ranked from best to worst according to the projected change from 2007 to 2040.

GAP Index Country Rankings

| Fiscal Sustainability Index | | Income Adequacy Index | |
|------------------------------------|-------------|------------------------------|-------------|
| 1 | India | 1 | Netherlands |
| 2 | Mexico | 2 | Brazil |
| 3 | Chile | 3 | US |
| 4 | China | 4 | Germany |
| 5 | Russia | 5 | UK |
| 6 | Poland | 6 | Australia |
| 7 | Australia | 7 | Sweden |
| 8 | Japan | 8 | Chile |
| 9 | Canada | 9 | Spain |
| 10 | Sweden | 10 | India |
| 11 | US | 11 | Canada |
| 12 | Korea | 12 | Japan |
| 13 | Switzerland | 13 | Poland |
| 14 | Germany | 14 | Switzerland |
| 15 | UK | 15 | Russia |
| 16 | Italy | 16 | France |
| 17 | France | 17 | Italy |
| 18 | Brazil | 18 | China |
| 19 | Netherlands | 19 | Korea |
| 20 | Spain | 20 | Mexico |

GAP Index Reform Strategy Guide

| | 1. Reduce public pension benefits | 2. Reduce health-care cost growth | 3. Extend work lives | 4. Increase funded pension savings | 5. Strengthen poverty floors | 6. Increase fertility rates | 7. Increase immigration |
|-------------|-----------------------------------|-----------------------------------|----------------------|------------------------------------|------------------------------|-----------------------------|-------------------------|
| Australia | ★ | ★★ | ★ | | ★★ | ★ | |
| Brazil | ★★★ | ★ | ★ | ★★ | | ★ | ★ |
| Canada | ★ | ★★ | ★ | | | ★★ | ★ |
| Chile | ★ | | ★ | ★ | ★ | ★ | ★ |
| China | ★ | | ★★ | ★★ | ★★★ | ★★ | ★ |
| France | ★★★ | ★★★★ | ★★★★ | ★★★★ | | ★ | ★ |
| Germany | ★★★ | ★★ | ★★ | ★★ | | ★★★★ | ★★★★ |
| India* | | | ★★ | ★★ | ★★ | | |
| Italy | ★★★★ | ★★ | ★★★★ | ★★ | ★ | ★★★★ | ★★ |
| Japan | ★★★★ | ★★ | | ★★ | ★★ | ★★★★ | ★★★★ |
| Korea | ★ | ★ | | ★★★★ | ★★★★ | ★★★★ | ★★★★ |
| Mexico | | | | ★★ | ★★★★ | | ★ |
| Netherlands | ★★ | ★★★★ | ★★ | | | ★★ | ★★ |
| Poland | ★★★★ | | ★★ | ★★ | | ★★★★ | ★★ |
| Russia | ★ | | ★★ | ★★ | ★ | ★★★★ | ★ |
| Spain | ★★★★ | ★★ | ★★★★ | ★★★★ | ★★ | ★★★★ | ★★ |
| Sweden | ★★ | ★★ | ★ | ★ | | ★ | |
| Switzerland | ★ | ★★ | ★ | | ★ | ★★★★ | ★ |
| UK | ★ | ★★ | ★★ | ★ | ★ | ★ | |
| US | ★ | ★★★★ | | ★ | ★★ | | |

Reform Guide Key: No Stars = Not a Priority ★ = Low Priority ★★ = Significant Priority ★★★ = High Priority

Annex

GAP Index Reform Strategy Guide

| Reform Guide Key | No Stars = Not a Priority | ★ = Low Priority | ★★ = Significant Priority | ★★★ = High Priority |
|---|---------------------------------|--|---|------------------------------|
| Strategy 1: Stars refer to projected current-deal public pension benefits to the elderly in 2040 as a % of GDP | < 5% | 5–10% | 10–15% | > 15% |
| Strategy 2: Stars refer to projected public health benefits to the elderly in 2040 as a % of GDP | < 4% | 4–6% | 6–8% | > 8% |
| Strategy 3: Stars refer to projected labor-force participation rate of the elderly aged 60–74 in 2040 | > 40% | 30–40% | 20–30% | < 20% |
| Strategy 4: Stars refer to projected funded pension benefits as a % of elderly cash income in 2040 | > 25% | 15–25% | 5–15% | < 5% |
| Strategy 5: Stars refer to percent of the elderly living in relative poverty today | < 10% | 10–20% | 20–25% | > 25% |
| Strategy 6: Stars refer to projected total fertility rates for the period 2010-2040 | > 2.0 | 1.8–2.0 | 1.5–1.8 | < 1.5 |
| Strategy 7: Stars refer to a composite measure of net immigration rates and the degree of population aging † | low aging & high immigration | moderate aging & high immigration or low aging & low immigration | moderate aging & low immigration or high aging & high immigration | high aging & low immigration |

* Following our priority categories for strategy seven, India, which has a low net immigration rate and low aging, should receive one star. But because its aging trend is so moderate compared with other Index countries, we make an exception and give it no stars.

† Countries are divided into low-immigration countries (those below the mean for all Index countries) and high-immigration countries (those above the mean). They are also divided into three demographic groups according to the projected elderly share of the population in 2040: low (under 30%), moderate (30-35%), and high (over 35%).

Public Pension Benefits to the Elderly, as a Percent of GDP in 2007 and 2040: Current-Law versus Current-Deal Scenario*

| | 2007 | Current Law 2040 | Current Deal* 2040 | | 2007 | Current Law 2040 | Current Deal* 2040 |
|-----------|------|------------------------|--------------------------|-------------|------|------------------------|--------------------------|
| Australia | 4.6 | 6.5 | 8.0 | Korea | 1.4 | 7.5 | 4.8 |
| Brazil | 6.5 | 13.4 | 16.1 | Mexico | 0.8 | 0.8 | 2.1 |
| Canada | 3.9 | 5.6 | 7.7 | Netherlands | 5.3 | 10.7 | 10.0 |
| Chile | 4.2 | 3.3 | 9.4 | Poland | 7.3 | 8.4 | 15.8 |
| China | 2.2 | 5.5 | 6.0 | Russia | 3.5 | 5.6 | 6.6 |
| France | 11.2 | 12.8 | 19.0 | Spain | 8.0 | 14.7 | 17.4 |
| Germany | 10.0 | 11.9 | 18.5 | Sweden | 8.8 | 9.9 | 11.8 |
| India | 1.4 | 2.2 | 2.7 | Switzerland | 5.4 | 8.5 | 9.2 |
| Italy | 12.3 | 15.1 | 23.5 | UK | 5.8 | 7.9 | 8.1 |
| Japan | 9.1 | 10.1 | 17.4 | US | 4.1 | 6.1 | 6.8 |

* The current-deal scenario assumes that workers in the future on average retire at the same age they do today and that benefits replace the same share of wages.

Strategy 1: Reduce public pension benefits

**Public Pension Benefits to the Elderly, as a Percent of GDP in 2007 and 2040:
Current-Law and Current-Deal Scenario***

| | 2007 | Current Law 2040 | Current Deal* 2040 | Stars | | 2007 | Current Law 2040 | Current Deal* 2040 | Stars |
|-------------|------|------------------|--------------------|-------|-------------|------|------------------|--------------------|-------|
| Mexico | 0.8 | 0.8 | 2.1 | zero | Chile | 4.2 | 3.3 | 9.4 | ★ |
| India | 1.4 | 2.2 | 2.7 | zero | Netherlands | 5.3 | 10.7 | 10.0 | ★★ |
| Korea | 1.4 | 7.5 | 4.8 | ★ | Sweden | 8.8 | 9.9 | 11.8 | ★★ |
| China | 2.2 | 5.5 | 6.0 | ★ | Poland | 7.3 | 8.4 | 15.8 | ★★★ |
| Russia | 3.5 | 5.6 | 6.6 | ★ | Brazil | 6.5 | 13.4 | 16.1 | ★★★ |
| US | 4.1 | 6.1 | 6.8 | ★ | Spain | 8.0 | 14.7 | 17.4 | ★★★ |
| Canada | 3.9 | 5.6 | 7.7 | ★ | Japan | 9.1 | 10.1 | 17.4 | ★★★ |
| Australia | 4.6 | 6.5 | 8.0 | ★ | Germany | 10.0 | 11.9 | 18.5 | ★★★ |
| UK | 5.8 | 7.9 | 8.1 | ★ | France | 11.2 | 12.8 | 19.0 | ★★★ |
| Switzerland | 5.4 | 8.5 | 9.2 | ★ | Italy | 12.3 | 15.1 | 23.5 | ★★★ |

* The current-deal scenario assumes that workers in the future on average retire at the same age they do today and that benefits replace the same share of wages.

Reform Guide Key

Strategy 1: Stars refer to projected current-deal public pension benefits to the elderly in 2040 as a % of GDP

No Stars =
Not a Priority

< 5%

★ =
Low Priority

5–10%

★★ =
Significant
Priority

10–15%

★★★ =
High Priority

> 15%

Strategy 2: Reduce health-care cost growth

Public Health Benefits to the Elderly, as a Percent of GDP in 2007 and 2040

| | 2007 | 2040 | Stars | | 2007 | 2040 | Stars |
|-----------|------|------|-------|-------------|------|------|-------|
| India | 0.2 | 0.9 | zero | Sweden | 4.9 | 6.7 | ★★ |
| China | 0.6 | 2.3 | zero | Spain | 3.1 | 6.9 | ★★ |
| Mexico | 0.7 | 2.8 | zero | Japan | 4.0 | 7.0 | ★★ |
| Chile | 1.1 | 3.3 | zero | Germany | 4.1 | 7.3 | ★★ |
| Russia | 1.5 | 3.5 | zero | UK | 4.0 | 7.5 | ★★ |
| Poland | 1.7 | 3.7 | zero | Switzerland | 3.4 | 7.6 | ★★ |
| Korea | 1.3 | 5.4 | ★ | Canada | 3.6 | 7.7 | ★★ |
| Brazil | 1.4 | 5.4 | ★ | Netherlands | 3.9 | 8.5 | ★★★ |
| Australia | 2.7 | 6.1 | ★★ | France | 4.5 | 9.2 | ★★★★ |
| Italy | 3.4 | 6.7 | ★★ | US | 4.2 | 9.3 | ★★★★ |

Reform Guide Key

No Stars =
Not a Priority

★ =
Low Priority

★★ =
Significant
Priority

★★★★ =
High Priority

Strategy 2: Stars refer to projected public health benefits to the elderly in 2040 as a % of GDP

< 4%

4–6%

6–8%

> 8%

Strategy 3: Extend work lives

Labor-Force Participation Rate of the Elderly Aged 60–74 in 2007 and 2040

| | 2007 | 2040 | Stars | | 2007 | 2040 | Stars |
|-------------|------|------|-------|-------------|------|------|-------|
| Korea | 45.6 | 44.6 | zero | UK | 25.3 | 29.3 | ★★ |
| Japan | 40.9 | 41.7 | zero | China | 31.0 | 27.8 | ★★ |
| US | 36.5 | 41.0 | zero | India | 26.4 | 25.4 | ★★ |
| Mexico | 41.1 | 40.1 | zero | Russia | 18.3 | 24.2 | ★★ |
| Chile | 33.8 | 36.6 | ★ | Germany | 15.7 | 23.5 | ★★ |
| Brazil | 36.7 | 36.6 | ★ | Netherlands | 18.2 | 22.4 | ★★ |
| Australia | 27.0 | 30.2 | ★ | Poland | 11.8 | 21.8 | ★★ |
| Canada | 27.8 | 30.2 | ★ | Spain | 15.2 | 17.6 | ★★★ |
| Sweden | 33.5 | 30.1 | ★ | Italy | 10.5 | 13.9 | ★★★ |
| Switzerland | 30.7 | 30.0 | ★ | France | 7.9 | 8.5 | ★★★★ |

Reform Guide Key

No Stars =
Not a Priority

★ =
Low Priority

★★ =
Significant
Priority

★★★★ =
High Priority

Strategy 3: Stars refer to projected labor-force participation rate of the elderly aged 60–74 in 2040

> 40%

30–40%

20–30%

< 20%

Strategy 4: Increase funded pension savings

Funded Pension Benefits as a Percent of Elderly Cash Income in 2007 and 2040

| | 2007 | 2040 | Stars | | 2007 | 2040 | Stars |
|-------------|------|------|-------|---------|------|------|-------|
| Netherlands | 24.4 | 28.8 | zero | Brazil | 2.2 | 8.2 | ★★ |
| Canada | 26.8 | 28.6 | zero | Russia | 0.4 | 8.1 | ★★ |
| Australia | 15.6 | 28.5 | zero | Mexico | 2.3 | 7.5 | ★★ |
| Switzerland | 20.9 | 25.0 | zero | Japan | 7.3 | 7.1 | ★★ |
| US | 19.6 | 21.1 | ★ | India | 1.7 | 6.9 | ★★ |
| Sweden | 9.3 | 18.8 | ★ | Germany | 2.7 | 6.7 | ★★ |
| Chile | 9.3 | 16.6 | ★ | Italy | 2.9 | 5.9 | ★★ |
| UK | 16.3 | 16.3 | ★ | Spain | 2.9 | 4.6 | ★★★ |
| Poland | 0.0 | 14.3 | ★★ | Korea | 4.1 | 3.9 | ★★★ |
| China | 0.0 | 9.7 | ★★ | France | 1.3 | 1.8 | ★★★ |

Reform Guide Key

No Stars =
Not a Priority

★ =
Low Priority

★★ =
Significant
Priority

★★★ =
High Priority

Strategy 4: Stars refer to projected funded pension benefits as a % of elderly cash income in 2040

> 25%

15–25%

5–15%

< 5%

Strategy 5: Strengthen poverty floors

Percent of the Elderly Living in Poverty Today*

| | 2007 | Stars | | 2007 | Stars |
|-------------|------|-------|-----------|------|-------|
| Netherlands | 2.3 | zero | Chile | 14.0 | ★ |
| Poland | 3.7 | zero | UK | 15.4 | ★ |
| Brazil | 5.1 | zero | Australia | 20.9 | ★★ |
| Sweden | 5.5 | zero | India | 21.8 | ★★ |
| France | 8.1 | zero | Japan† | 22.0 | ★★ |
| Canada | 8.9 | zero | US | 22.4 | ★★ |
| Germany | 9.8 | zero | Spain | 22.6 | ★★ |
| Italy | 10.7 | ★ | China | 25.0 | ★★★ |
| Switzerland | 12.7 | ★ | Mexico | 25.5 | ★★★ |
| Russia | 13.8 | ★ | Korea | 36.2 | ★★★ |

* Data refer to various years between 1999 and 2007 and exclude public health benefits. Poor persons are persons with incomes beneath 50 percent of the median income for all persons.

† Data for Japan refer to elderly aged 65 and older.

Reform Guide Key

No Stars =
Not a Priority

★ =
Low Priority

★★ =
Significant
Priority

★★★ =
High Priority

Strategy 5: Stars refer to percent of the elderly living in relative poverty today

< 10%

10–20%

20–25%

> 25%

Strategy 6: Increase fertility rates

Total Fertility Rate: Average for 2010-2040

| | Average 2010-2040 | Stars | | Average 2010-2040 | Stars |
|-----------|----------------------|-------|-------------|----------------------|-------|
| India | 2.2 | zero | Netherlands | 1.7 | ★★ |
| Mexico | 2.2 | zero | Canada | 1.6 | ★★ |
| US | 2.1 | zero | Switzerland | 1.5 | ★★★ |
| Chile | 1.9 | ★ | Spain | 1.4 | ★★★★ |
| Brazil | 1.9 | ★ | Italy | 1.4 | ★★★★ |
| France | 1.9 | ★ | Russia | 1.4 | ★★★★ |
| Sweden | 1.9 | ★ | Germany | 1.3 | ★★★★ |
| UK | 1.8 | ★ | Japan | 1.3 | ★★★★ |
| Australia | 1.8 | ★ | Poland | 1.3 | ★★★★ |
| China | 1.8 | ★★ | Korea | 1.2 | ★★★★ |

Reform Guide Key

| No Stars = Not a Priority | ★ = Low Priority | ★★ = Significant Priority | ★★★★ = High Priority |
|------------------------------|---------------------|---------------------------------|-------------------------|
| > 2.0 | 1.8–2.0 | 1.5–1.8 | < 1.5 |

Strategy 6: Stars refer to projected total fertility rates for the period 2010-2040

Strategy 7: Increase immigration

| | Aging Group | Immigration Group | Stars |
|-----------|-------------|-------------------|-------|
| India | Low | Low | zero |
| Australia | Low | High | zero |
| Sweden | Low | High | zero |
| UK | Low | High | zero |
| US | Low | High | zero |
| Brazil | Low | Low | ★ |
| Chile | Low | Low | ★ |
| China | Low | Low | ★ |
| Mexico | Low | Low | ★ |
| Russia | Low | Low | ★ |

| | Aging Group | Immigration Group | Stars |
|-------------|-------------|-------------------|-------|
| Canada | Med | High | ★ |
| France | Med | High | ★ |
| Switzerland | Med | High | ★ |
| Netherlands | Med | Low | ★★ |
| Poland | Med | Low | ★★ |
| Italy | High | High | ★★ |
| Spain | High | High | ★★ |
| Germany | High | Low | ★★★★ |
| Japan | High | Low | ★★★★ |
| Korea | High | Low | ★★★★ |

Reform Guide Key

No Stars =
Not a Priority

★ =
Low Priority

★★ =
Significant
Priority

★★★★=
High Priority

Strategy 7: Stars refer to a composite measure of net immigration rates and the degree of population aging*

low aging &
high
immigration

moderate aging
& high
immigration or
low aging & low
immigration

moderate aging
& low
immigration or
high aging &
high
immigration

high aging &
low immigration

* Countries are divided into low-immigration countries (those below the mean for all Index countries) and high-immigration countries (those above the mean). They are also divided into three demographic groups according to the projected elderly share of the population in 2040: low (under 30%), moderate (30-35%), and high (over 35%).