Balancing Adequacy and Sustainability

Insights from the Global Aging Preparedness Index

Richard Jackson
President
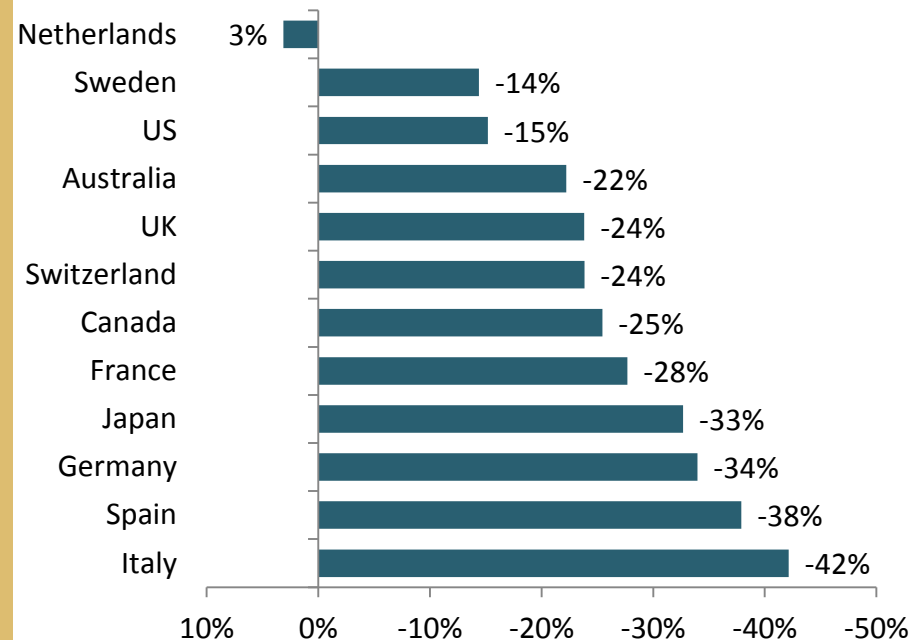**Global Aging Institute**

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www.GlobalAgingInstitute.org

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Global aging will challenge the ability of societies to maintain a decent standard of living for the old without imposing a crushing burden on the young.

- In the developed world, the rising burden of old-age benefit programs is forcing countries to make dramatic reductions in the future generosity of state retirement provision.

- In the developing world, countries are rushing to put in place adequate government or market substitutes for informal family support networks.

- Everywhere, governments are struggling to ensure the sustainability and adequacy of their retirement systems.

Cumulative Percentage Decline in Current-Law Public Pension Benefits to the Elderly Relative to "Current-Deal" Benefits, from 2010 to 2040*

Country	Decline
Netherlands	3%
Sweden	-14%
US	-15%
Australia	-22%
UK	-24%
Switzerland	-24%
Canada	-25%
France	-28%
Japan	-33%
Germany	-34%
Spain	-38%
Italy	-42%

*The "current-deal" projection assumes that retirement ages and replacement rates remain unchanged in the future.

Overview of the GAP Index

Introducing 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 covers twenty countries, including most major developed economies and a selection of economically important emerging markets.

☐ The GAP Index consists of two subindices—a fiscal sustainability index and an 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

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The GAP Index Framework

▫ The GAP Index is based on projections of total government benefit spending and total household income by age through the year 2040.

▫ The GAP Index divides the population into two groups: the elderly (persons aged 60 and older) and the nonelderly (persons under age 60).

▫ The GAP Index assumes a current policy and current behavior baseline, which allows it to serve as a "stress test" for existing retirement policies.

▫ The GAP Index is forward looking: It ranks countries based on where they are heading, rather than where they currently stand.

▫ The GAP Index is relative: The performance of countries on each indicator is measured relative to that of other countries. There are no absolute "preparedness" benchmarks for fiscal sustainability or income adequacy.

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GAP FISCAL SUSTAINABILITY INDEX

PUBLIC BURDEN CATEGORY

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

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

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 LEVEL INDICATOR

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

BENEFIT GROWTH INDICATOR

Growth in total public benefits to the elderly from 2010 to 2040 as a percent of GDP

TAX ROOM INDICATOR

Total government revenue in 2040 as a percent 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 percent of government outlays, assuming cuts in other spending pay for all growth in public benefits

BORROWING ROOM INDICATOR

Net public debt in 2040 as a percent of GDP, assuming borrowing pays for all growth in public benefits

BENEFIT SHARE INDICATOR

Public benefits as a percent of the cash income of the median-income elderly: Average for 2010 to 2040

BENEFIT CUT INDICATOR

Percent of elderly households that would be pushed into poverty by an immediate 10 percent cut in public benefits

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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

INCOME VULNERABILITY CATEGORY

Measures income adequacy for "middle -income" elders and the extent of elderly poverty in each country

FAMILY SUPPORT CATEGORY

Measures the strength of family support networks in each country

TOTAL INCOME LEVEL INDICATOR

Per capita ratio of average after-tax elderly to nonelderly total income in 2040

TOTAL INCOME TREND INDICATOR

Percentage change in the per capita ratio of average after-tax elderly to nonelderly total income from 2010 to 2040

MEDIAN INCOME LEVEL INDICATOR

Per capita ratio of median after-tax elderly to nonelderly cash income in 2040

MEDIAN INCOME TREND INDICATOR

Percentage change in the per capita ratio of median after-tax elderly to nonelderly cash income from 2010 to 2040

POVERTY LEVEL INDICATOR

Percent of the elderly with incomes beneath 50 percent of the median income for all persons in 2010 or the most recent available year

FAMILY TIES INDICATOR

Percent of the elderly living in households with their adult children in 2010 or the most recent available year

FAMILY SIZE INDICATOR

Change in the average number of surviving children of the elderly from 2010 to 2040

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GAP Index Rankings 2nd Edition Rankings

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

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How South Korea Performs on Key Indicators

Public Burden Category
Benefit Level Indicator

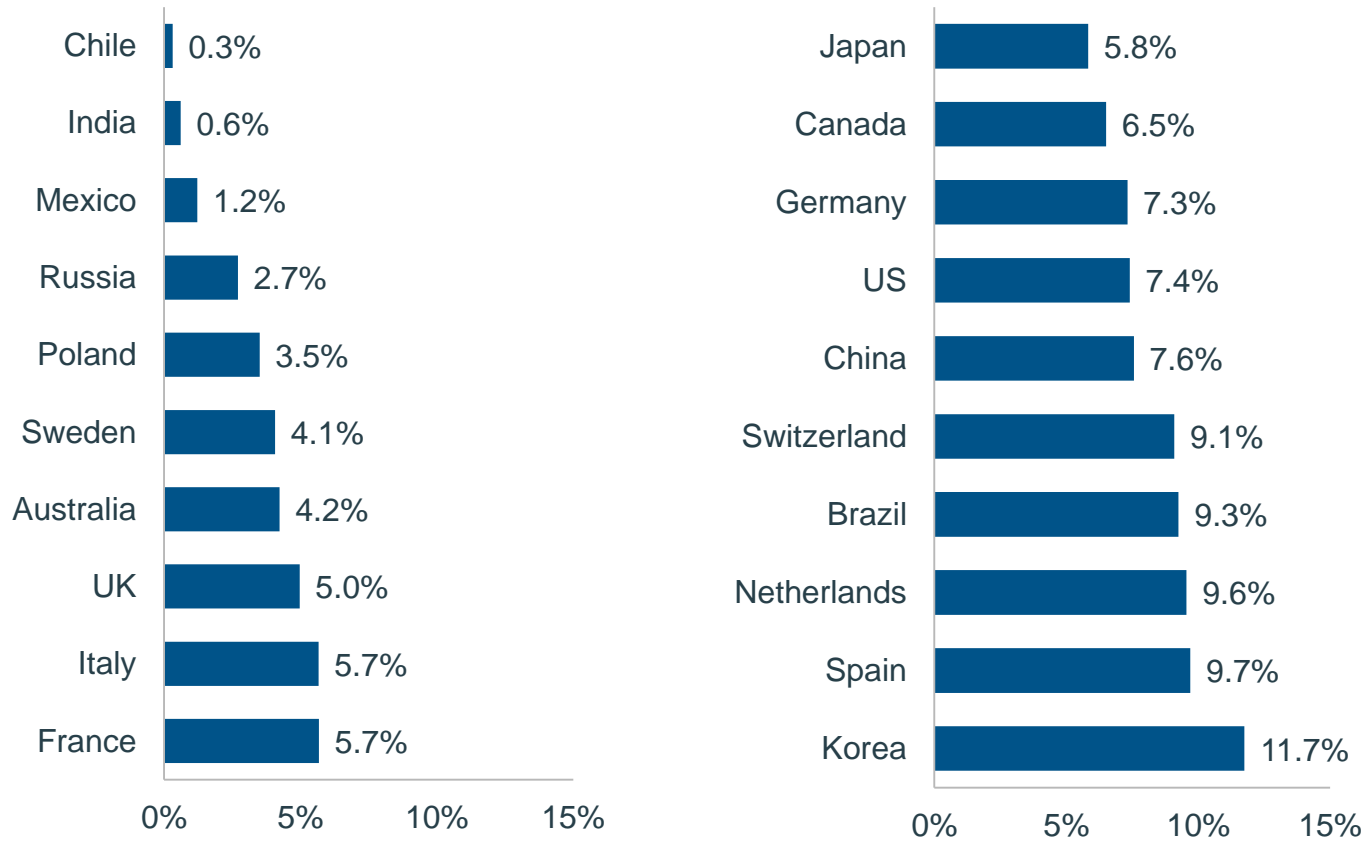### Total Public Benefits to the Elderly, as a Percent of GDP, 2010–2040

		2010	2020	2030	2040			2010	2020	2030	2040
1	India	1.9	2.4	2.5	**2.5**	11	UK	13.9	14.6	17.0	**18.9**
2	Mexico	2.9	3.5	4.1	**4.1**	12	Brazil	10.0	11.5	14.6	**19.3**
3	Chile	6.9	6.6	6.7	**7.2**	13	Sweden	15.2	16.7	18.4	**19.3**
4	Russia	8.2	9.3	10.1	**10.9**	14	Switzerland	10.4	12.4	15.9	**19.5**
5	China	3.4	5.5	8.0	**11.0**	15	Netherlands	10.2	12.9	17.0	**19.8**
6	Australia	9.1	10.3	12.0	**13.4**	16	Japan	15.1	16.6	17.9	**20.9**
7	Poland	11.7	13.5	14.7	**15.2**	17	Spain	13.9	16.1	18.9	**23.6**
8	Canada	9.3	11.8	14.2	**15.8**	18	Germany	17.0	18.4	21.9	**24.3**
9	South Korea	4.5	7.8	12.2	**16.2**	19	France	18.6	20.3	22.6	**24.3**
10	US	11.1	13.6	16.7	**18.5**	20	Italy	20.0	20.5	22.5	**25.7**

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

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Public Burden Category
Benefit Growth Indicator

Growth in Total Public Benefits to the Elderly from 2010 to 2040 as a Percent of GDP

Country	Growth
Chile	0.3%
India	0.6%
Mexico	1.2%
Russia	2.7%
Poland	3.5%
Sweden	4.1%
Australia	4.2%
UK	5.0%
Italy	5.7%
France	5.7%

Country	Growth
Japan	5.8%
Canada	6.5%
Germany	7.3%
US	7.4%
China	7.6%
Switzerland	9.1%
Brazil	9.3%
Netherlands	9.6%
Spain	9.7%
Korea	11.7%

Note: Countries are ranked from best to worst.

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Fiscal Room Category

Tax Room Indicator (%)			Budget Room Indicator (%)			Borrowing Room Indicator (%)		
1	India	20	1	India	9	1	Sweden	-19
2	Mexico	21	2	Mexico	18	2	Chile	-5
3	Chile	23	3	Chile	31	3	Australia	11
4	China	29	4	Russia	32	4	Mexico	33
5	Russia	34	5	Australia	38	5	Russia	38
6	Australia	38	6	Poland	39	6	China	40
7	Poland	40	7	Canada	39	7	South Korea	68
8	South Korea	41	8	Sweden	40	8	Brazil	74
9	Switzerland	41	9	Netherlands	42	9	Canada	76
10	US	41	10	UK	44	10	India	80
11	Japan	42	11	France	45	11	Switzerland	81
12	Canada	43	12	China	47	12	France	82
13	UK	43	13	US	48	13	Poland	82
14	Brazil	44	14	Brazil	50	14	UK	91
15	Spain	46	15	South Korea	50	15	Germany	104
16	Germany	50	16	Italy	51	16	Italy	140
17	Sweden	51	17	Japan	53	17	Netherlands	176
18	Italy	53	18	Germany	54	18	US	177
19	Netherlands	54	19	Switzerland	57	19	Japan	325
20	France	56	20	Spain	59	20	Spain	331

INDICATOR KEY

Tax Room Indicator = Total government revenue in 2040 as a percent of GDP, assuming taxes are raised to pay for all growth in public benefits   **Budget Room Indicator** = Total public benefits to the elderly as a percent of government outlays in 2040, assuming cuts in other spending pay for all growth in public benefits   **Borrowing Room Indicator** = Net public debt in 2040 as a percent of GDP, assuming borrowing pays for all growth in public benefits

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Benefit Dependence Category
Benefit Share Indicator

Public Benefits as a Percent of the Cash Income of the Median-Income Elderly, 2010-2040*

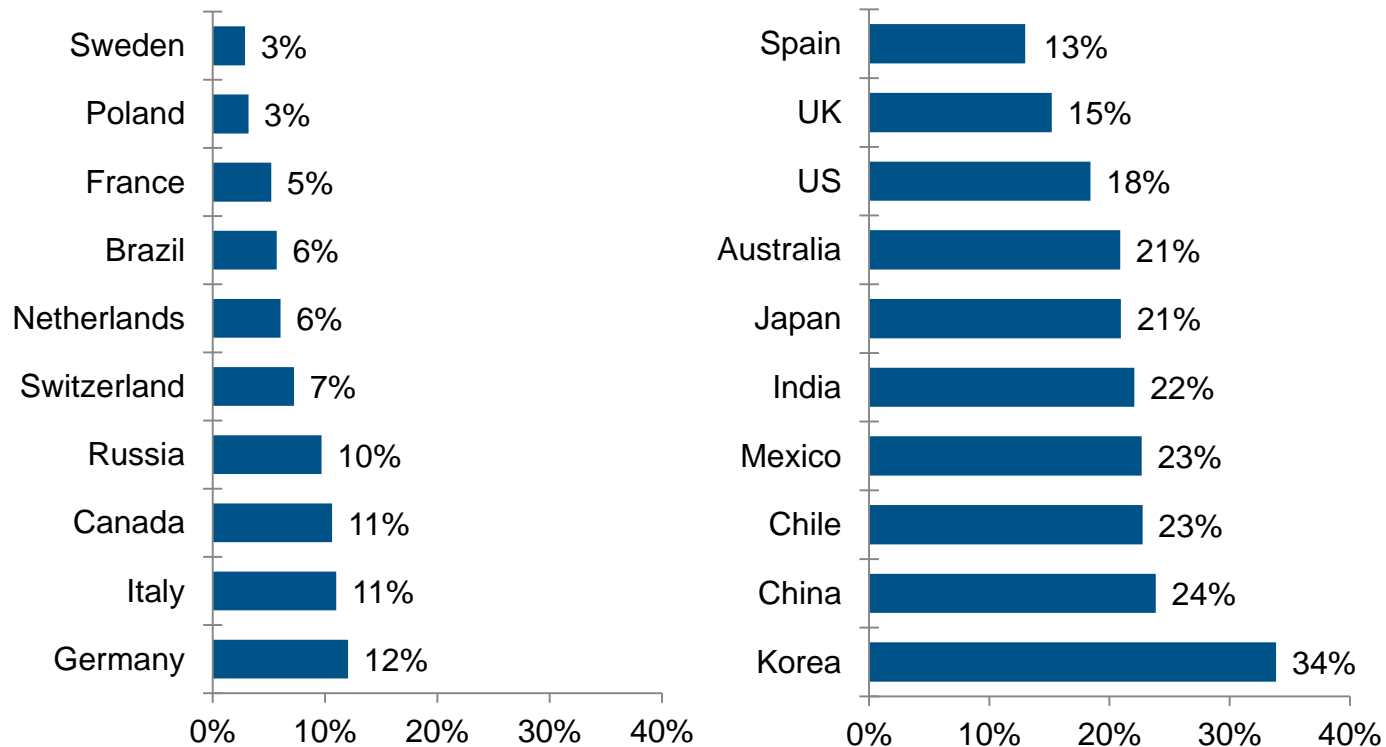|		2010	2020	2030	2040	Average 2007-40			2010	2020	2030	2040	Average 2007-40
1	India	25	25	22	19	**23**	11	Japan	60	57	54	54	**56**
2	Mexico	32	30	28	23	**29**	12	Sweden	63	62	59	58	**60**
3	Switzerland	33	32	30	32	**32**	13	UK	66	62	61	62	**62**
4	South Korea	26	30	35	40	**33**	14	Russia	69	66	63	55	**63**
5	US	39	35	36	37	**37**	15	Germany	73	66	60	60	**64**
6	Chile	55	39	30	26	**37**	16	Brazil	75	65	62	63	**65**
7	China	34	37	37	41	**37**	17	France	73	71	70	71	**71**
8	Canada	39	39	39	39	**39**	18	Italy	78	74	70	68	**72**
9	Netherlands	50	50	50	51	**50**	19	Spain	79	75	71	71	**74**
10	Australia	64	56	50	46	**54**	20	Poland	94	89	85	79	**87**

Note: Countries are ranked from best to worst according to the projected averages for 2010 to 2040.
* Data refer to the third quintile of the elderly income distribution.

Income Vulnerability Category
Poverty Level Indicator

Percent of the Elderly with Incomes beneath 50 Percent of the Median Income for All Persons in 2010 or the Most Recent Available Year

Country	Percent
Sweden	3%
Poland	3%
France	5%
Brazil	6%
Netherlands	6%
Switzerland	7%
Russia	10%
Canada	11%
Italy	11%
Germany	12%

Country	Percent
Spain	13%
UK	15%
US	18%
Australia	21%
Japan	21%
India	22%
Mexico	23%
Chile	23%
China	24%
Korea	34%

Note: Countries are ranked from best to worst.

Income Vulnerability Category
Median Income Level Indicator

Per Capita Ratio of Median After-Tax Elderly to Nonelderly Cash Income, 2010-2040*

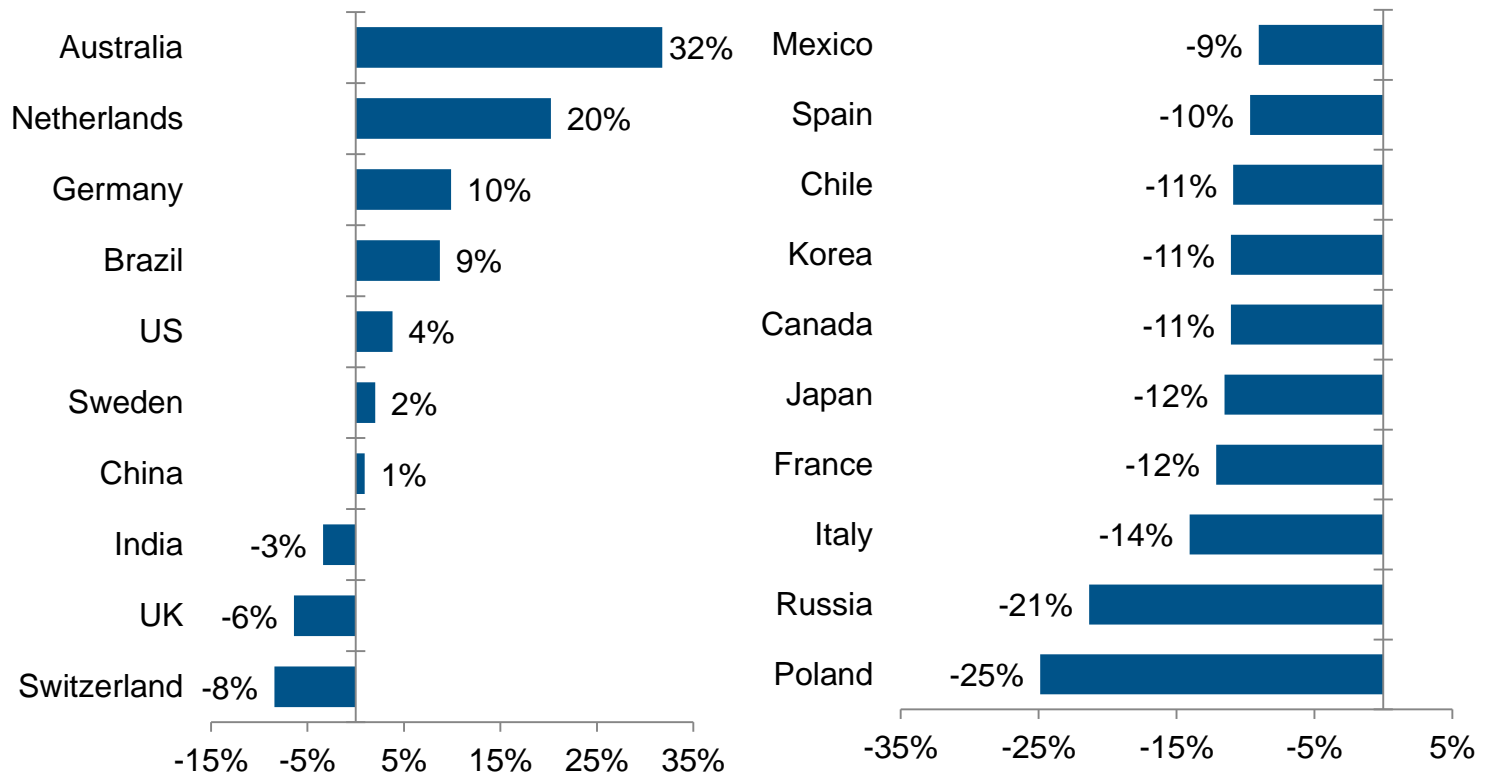|		2010	2020	2030	2040			2010	2020	2030	2040
1	Brazil	1.29	1.25	1.28	**1.40**	11	France	0.93	0.85	0.82	**0.81**
2	US	1.34	1.40	1.41	**1.39**	12	Sweden	0.78	0.80	0.80	**0.79**
3	Australia	0.97	1.06	1.17	**1.28**	13	Switzerland	0.86	0.80	0.79	**0.78**
4	Chile	1.40	1.37	1.29	**1.25**	14	Japan	0.88	0.82	0.75	**0.78**
5	Germany	1.08	1.08	1.15	**1.18**	15	Spain	0.79	0.80	0.74	**0.72**
6	Netherlands	0.96	0.97	1.07	**1.15**	16	India	0.73	0.73	0.72	**0.70**
7	UK	1.08	0.98	1.00	**1.01**	17	South Korea	0.74	0.65	0.64	**0.65**
8	Italy	1.12	1.05	0.97	**0.96**	18	Russia	0.83	0.71	0.65	**0.65**
9	Canada	1.06	1.06	1.00	**0.94**	19	Poland	0.75	0.63	0.64	**0.56**
10	Mexico	0.94	0.93	0.92	**0.85**	20	China	0.50	0.51	0.50	**0.50**

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.

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Income Vulnerability Category
Median Income Trend Indicator

Percentage Change in the Per Capita Ratio of Median After-Tax Elderly to Nonelderly Cash Income from 2010 to 2040*

Country	Value
Australia	32%
Netherlands	20%
Germany	10%
Brazil	9%
US	4%
Sweden	2%
China	1%
India	-3%
UK	-6%
Switzerland	-8%

Country	Value
Mexico	-9%
Spain	-10%
Chile	-11%
Korea	-11%
Canada	-11%
Japan	-12%
France	-12%
Italy	-14%
Russia	-21%
Poland	-25%

Note: Countries are ranked from best to worst.
* Data for both the elderly and nonelderly refer to the third quintile of the income distribution.

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Family Support Category
Family Size Indicator

Average Number of Surviving Children of the Elderly: 2010-2040 and Change from 2010 to 2040

		2010	2020	2030	2040	Change			2010	2020	2030	2040	Change
1	Sweden	2.0	1.7	1.8	2.0	-0.1	11	Australia	2.7	2.1	2.0	2.0	-0.8
2	Poland	2.3	2.3	2.2	2.0	-0.3	12	Italy	2.2	2.1	1.4	1.4	-0.9
3	Russia	1.9	1.7	1.7	1.5	-0.4	13	Canada	2.6	1.8	1.6	1.7	-0.9
4	UK	2.3	1.8	1.8	1.9	-0.4	14	Chile	3.4	2.7	2.5	2.4	-1.0
5	France	2.4	1.9	1.8	1.9	-0.4	15	India	3.8	3.7	3.2	2.6	-1.1
6	Japan	2.0	1.9	1.7	1.5	-0.5	16	Spain	2.7	2.2	1.5	1.4	-1.2
7	Germany	1.9	1.4	1.4	1.4	-0.5	17	South Korea	3.6	2.6	1.7	1.8	-1.7
8	Switzerland	2.0	1.6	1.5	1.6	-0.5	18	Brazil	3.9	3.1	2.4	2.1	-1.7
9	US	2.5	1.9	1.8	1.9	-0.6	19	China	4.3	3.3	2.2	2.0	-2.3
10	Netherlands	2.3	1.6	1.6	1.6	-0.6	20	Mexico	5.0	4.1	3.1	2.6	-2.4

Note: Countries are ranked from best to worst according to the projected change from 2010 to 2040.

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Changing Retirement Attitudes and Expectations in South Korea

Evidence from the
East Asia Retirement Survey

- *A collapse in the expectation of family retirement support:* Just 12 percent of South Korean workers expect to live with their grown children when they are retired and just 6 percent expect to depend on them financially.

- *A high level of concern about the aging of society*: By six-to-one, South Koreans agree that "supporting the growing number of elderly will be a large burden for tomorrow's workers and taxpayers."

- *A strong preference for individual responsibility for retirement income*: 61 percent of South Koreans believe that retirees themselves should be primarily responsible for providing their own retirement income, while just 23 percent believe that government should be responsible.

- *A willingness to support constructive reform*: 75 percent of South Koreans support raising taxes to provide a basic pension benefit to those elderly who are in financial need, 83 percent support raising the retirement age, and 85 percent support requiring workers to save more for retirement.

Survey Countries
China
Hong Kong
Indonesia
Malaysia
Philippines
Singapore
South Korea
Taiwan
Thailand
Vietnam

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