

The 2003 CSIS Aging Vulnerability Index

Presentation by

Richard Jackson

Center for Strategic and International Studies

Brussels

March 5, 2003



What is the Aging Vulnerability Index?

The Index assesses the “vulnerability” of twelve developed countries to rising old-age dependency costs.

All projections assume a continuation of historical trends—in fertility, mortality, immigration, labor-force participation, productivity, and health-care costs.

The Index is compiled from indicators in four categories, each dealing with a crucial dimension of the challenge.

The Four Indicator Categories

- ☐ **PUBLIC BURDEN** – the magnitude of the projected old-age dependency burden
- ☐ **FISCAL ROOM** – the “room” governments have to accommodate the growing burden
- ☐ **BENEFIT DEPENDENCE** – the degree of elder dependence on public benefits
- ☐ **ELDER AFFLUENCE** – the relative living standard of old and young

Public Burden Indicators

❑ Benefit Level

The total cost of public benefits to the elderly* in 2040 as a share of the economy

❑ Benefit Growth

The growth in public benefits to the elderly from 2000 to 2040 as a share of the economy

❑ Net Transfer

The net cost of public benefits to the elderly as a share of the after-tax income of the nonelderly



*The elderly in the Index are defined as adults aged 60 and over.

Public Benefits to the Elderly, as a % of GDP

	2000	2040
1. Australia	9%	17%
2. UK	12%	18%
3. US	9%	20%
4. Canada	9%	23%
5. Sweden	13%	23%
6. Belgium	13%	25%
7. Germany	15%	26%
8. Netherlands	12%	26%
9. Japan	12%	27%
10. France	16%	29%
11. Italy	17%	32%
12. Spain	13%	33%

**Benefit Level
Indicator**

Change in Public Benefits to the Elderly from 2000 to 2040, as a % of GDP

1. UK	5.5%
2. Australia	7.6%
3. Sweden	9.7%
4. Germany	10.4%
5. US	11.0%
6. Belgium	11.8%
7. France	13.6%
8. Netherlands	13.9%
9. Canada	14.0%
10. Italy	14.7%
11. Japan	15.2%
12. Spain	20.5%

**Benefit Growth
Indicator**

Net Public Benefits to the Elderly, as a % of the After-Tax Income of the Nonelderly

	2000	2040
1. UK	14%	19%
2. Australia	12%	22%
3. US	13%	27%
4. Sweden	18%	27%
5. Canada	13%	30%
6. Belgium	17%	32%
7. Netherlands	17%	35%
8. Germany	21%	35%
9. Japan	15%	36%
10. France	20%	36%
11. Italy	22%	37%
12. Spain	17%	43%

**Net Transfer
Indicator**

FISCAL ROOM INDICATORS

☐ Tax Room

Total taxes in 2040, assuming governments raise taxes to pay for the growth in public benefits

☐ Budget Room

Benefits to the elderly as a share of the budget in 2040, assuming governments pay for the growth in public benefits by cutting other spending

☐ Borrowing Room

The year the net government debt hits 150% of GDP, assuming governments pay for the growth in public benefits by borrowing



Total Taxes, as a % of GDP

	2000	2040
1. Australia	33%	39%
2. UK	38%	42%
3. US	33%	44%
4. Japan	29%	47%
5. Canada	38%	50%
6. Germany	44%	55%
7. Italy	44%	57%
8. Spain	38%	57%
9. Netherlands	47%	58%
10. Belgium	50%	60%
11. France	48%	62%
12. Sweden	57%	63%

**Tax Room
Indicator**

Public Benefits to the Elderly, as a % of Total Government Outlays

	2000	2040
1. Sweden	25%	37%
2. UK	32%	38%
3. Australia	27%	41%
4. Belgium	28%	45%
5. Canada	23%	49%
6. Germany	33%	49%
7. Netherlands	28%	52%
8. France	33%	53%
9. US	31%	53%
10. Italy	38%	60%
11. Japan	32%	66%
12. Spain	33%	72%

**Budget Room
Indicator**

Net Government Debt in 2001 as a % of GDP and Year Net Debt Reaches 150% of GDP

1. UK	31%	2046
2. Australia	11%	2038
3. Sweden	1%	2037
4. Germany	44%	2033
5. Spain	38%	2029
6. Netherlands	42%	2027
7. US	42%	2026
8. Canada	53%	2024
9. France	42%	2024
10. Belgium	99%	2022
11. Italy	97%	2021
12. Japan	59%	2020

**Borrowing
Room
Indicator**



Benefit Dependence Indicators

☐ Benefit Share

Public benefits as a share of after-tax elderly income in 2040

☐ Family Ties

The share of elders living with their adult children

☐ Poverty Impact

The share of elders who would be pushed into poverty by a 10 percent cut in public benefits

Public Benefits to the Elderly, as a % of After-Tax Elderly Income

	2000	2040
1. Australia	43%	33%
2. US	35%	37%
3. Japan	35%	38%
4. UK	50%	39%
5. Canada	42%	46%
6. Sweden	57%	55%
7. Netherlands	54%	55%
8. Italy	59%	56%
9. Belgium	55%	56%
10. Germany	61%	58%
11. Spain	64%	67%
12. France	67%	70%

**Benefit Share
Indicator**

Percent of the Elderly Living with their Adult Children

1. Japan	50%
2. Italy	42%
3. Spain	41%
4. Canada	20%
5. Australia	20%
6. Belgium	16%
7. US	15%
8. Germany	14%
9. UK	13%
10. France	12%
11. Netherlands	9%
12. Sweden	5%

**Family Ties
Indicator**

Percent of the Elderly Pushed into Poverty by a 10% Cut in Public Benefits

1. Japan	2.0%
2. Italy	2.9%
3. US	2.9%
4. Spain	3.9%
5. Canada	3.9%
6. Australia	4.0%
7. UK	4.1%
8. Sweden	4.5%
9. Netherlands	5.8%
10. France	5.2%
11. Belgium	5.2%
12. Germany	5.7%

**Poverty Impact
Indicator**

Elder Affluence Indicators



❑ Affluence Level

The per capita ratio of after-tax elderly to nonelderly income in 2040

❑ Affluence Trend

The percentage change in the per capita ratio of after-tax elderly to nonelderly income from 2000 to 2040



Per Capita Ratio of After-Tax Elderly to Nonelderly Income

	2000	2040
1. US	1.43	1.77
2. Canada	1.32	1.54
3. Netherlands	1.32	1.51
4. Australia	1.30	1.45
5. Germany	1.25	1.44
6. France	1.29	1.36
7. Japan	1.07	1.34
8. Belgium	1.07	1.19
9. Spain	0.98	1.18
10. Italy	1.32	1.15
11. UK	1.20	1.10
12. Sweden	1.01	1.04

**Affluence Level
Indicator**

Percent Change in the Per Capita Ratio of After-Tax Elderly to Nonelderly Income from 2000 to 2040

1. Japan	26%
2. US	24%
3. Spain	20%
4. Canada	17%
5. Germany	15%
6. Netherlands	14%
7. Australia	12%
8. Belgium	11%
9. France	6%
10. Sweden	3%
11. UK	- 8%
12. Italy	-13%

**Affluence Trend
Indicator**



Based on the indicator results, an overall rank and score are calculated for each country in the Index.

The scores reveal that the twelve Index countries fall into three clear groups—a low, medium, and high vulnerability group.



2003 Aging Vulnerability Index

Rank	Country	Score
------	---------	-------

1.	Australia	-1
----	-----------	----

2.	UK	+7
----	----	----

3.	US	+18
----	----	-----

4.	Canada	+42
----	--------	-----

5.	Sweden	+48
----	--------	-----

6.	Japan	+50
----	-------	-----

7.	Germany	+52
----	---------	-----

8.	Netherlands	+62
----	-------------	-----

9.	Belgium	+63
----	---------	-----

10.	France	+81
-----	--------	-----

11.	Italy	+84
-----	-------	-----

12.	Spain	+93
-----	-------	-----

**Low Vulnerability
Group**

**Medium Vulnerability
Group**

**High Vulnerability
Group**

The Index shows that global aging is pushing much of the developed world toward fiscal and economic crisis.

There is still time to change course. But time is running short. And the problem is worse than is generally supposed.

