

THE COMING GENERATIONAL STORM

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U.S. Demographics

77 million baby boomers

Oldest boomers are 59, youngest are 41

In 2030

- 100% more elderly, 18% more workers
- Entire country will be a lot older than current day Florida

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Dying old – Let's count the ways

Probability of living to

Current Age	Age 80		Age 85		Age 90		Age 95	
	Males	Females	Males	Females	Males	Females	Males	Females
60	73%	83%	58%	70%	39%	52%	22%	30%
65	75%	84%	60%	71%	41%	53%	22%	31%
70	79%	87%	63%	74%	43%	54%	23%	32%

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U.S. workers per oldster

1950
16.0 Workers Per Retiree

2005
3.3 Workers Per Retiree

2030
2.0 Workers Per Retiree

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Forever old

US keeps aging throughout the century

Old old grow most rapidly

In 2050: Those 85+ can fill NY, LA, & Chicago

In 2050: Those 100+ can fill Washington, DC

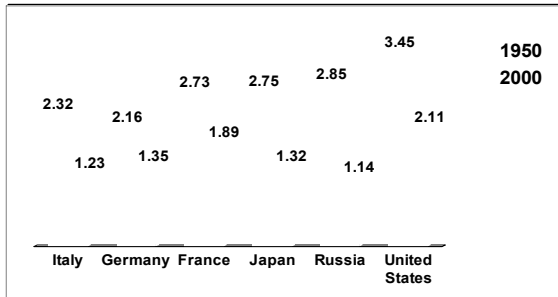
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The Share of the Elderly at Home and Abroad

Country	2002	2030	2050	2070
Germany	17.1%	26.3%	30.6%	31.3%
Japan	18.0%	29.9%	36.8%	37.7%
U.S.	12.4%	19.1%	21.3%	21.6%

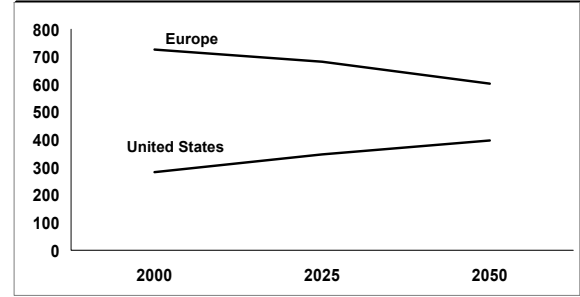
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Fertility rates of developed countries



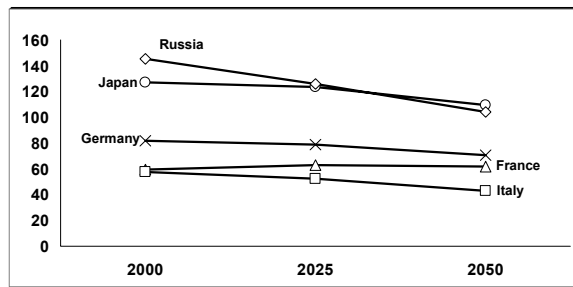
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The aging world and coming population decline in millions



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The aging world and coming population decline in millions



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Global aging

- The U.S. is the young kid on the block
- Japan is 15 years ahead of U.S. wrt aging
- Japan is engaged in national Hari Kara
- Japan's population will halve over century
- Italy, Germany, Spain – all depopulating
- China may become world's oldest nation

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Paying the piper

Social Security + Medicare + Medicaid = \$21,000 Per older

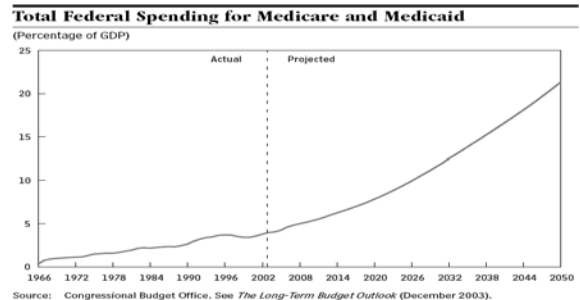
Medicare + Medicaid Spending = \$600 Billion

Medicare & Medicaid benefits are growing like crazy

Medicaid spending > Medicare spending

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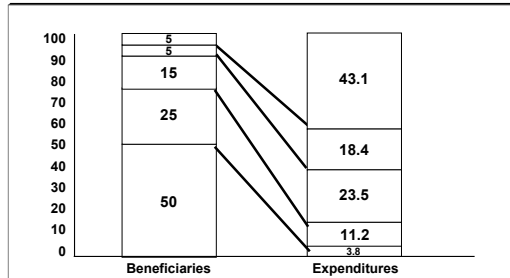
Entitlements as a share of GDP



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The distribution of Medicare costs

Concentration of total annual Medicare expenditures among beneficiaries (percent)



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Source: Congressional budget office

The Rising Cost of Health Care, 1970 - 2002

Country	Annual Growth in Expenditure Per Recipient	Annual Growth in Expenditure Per Capita	Annual Growth in GDP Per Capita	Ratio of Expenditure Growth to GDP Growth
Germany	2.82%	3.12%	1.63%	1.9
Japan	3.07%	4.56%	2.16%	2.1
U.S.	4.24%	4.91%	1.89%	2.6

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Present Value of Projected Government Health Spending as Share of Present Value of GDP

Country	Ratio
Germany	17.4%
Japan	12.9%
U.S.	24.3%

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Source: Christian Hagist and Laurence Kotlikoff

Mind the Gap!

$$\text{Fiscal Gap} = \text{PV Expenditures} - \text{PV Receipts}$$

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Uncle Sam is broke!

$$\text{U.S. Fiscal Gap} = \$65,900,000,000,000!$$

Source: Jagadeesh Gokhale and Kent Smetters

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It's the implicit debt, stupid

Official debt is a side show
Real story – Entitlement payments

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Comparative bankruptcy

U.S. fiscal condition may be worse than Japan's and Western Europe's.

It may be a lot worse than Brazil's.

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Eliminating the Fiscal Gap -- The menu of pain

Immediate and permanent income tax hike

100%

Immediate and permanent discretionary spending cut

146%

Immediate and permanent cut in Medicare and Social Security

67%

19 Source: The U.S. Department of Treasury updated by Jagadeesh Gokhale and Kent Smetters

Delay makes things worse

The fiscal gap is like a credit card bill.
The longer you ignore it, the bigger it gets.

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Economic effects of aging *Relative to the year 2000*

	Reduction in real wages	Increase in taxes on labor	Net reduction in take home pay
By 2030			
USA	10%	13.4%	23.4%
Europe	8%	19.7%	27.7%
Japan	8%	20.3%	28.3%
By 2050			
USA	15%	15.9%	30.9%
Europe	13%	28.5%	41.5%
Japan	12%	32.0%	44.0%

21 Source: Fehr, Jokisch, and Kottlikoff (2004)

Bush fiscal policy *Accelerating U.S. bankruptcy*

Privatizing social security

- Significant immediate tax cuts and huge, but unlikely long-term benefit cuts

Tax reform will be revenue neutral

- Exacerbates fiscal child abuse

No structural reform of medicosts

- Benefits keep growing like crazy

Eating our young

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Fake elixirs

Immigration

Increased fertility

Capital deepening

Technological change

Delayed retirement

Help from employers

Help from dad and mom

²³ Help from kids

Going critical

Countries that can't raise taxes or cut spending, print money

Practice dates to Emperor Diocletian in 300 AD

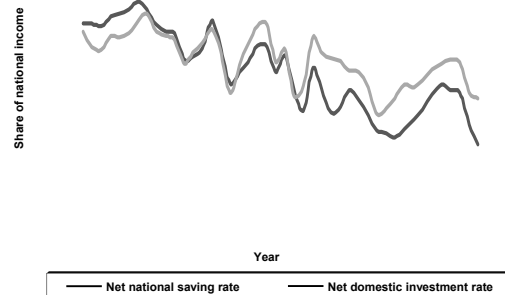
20 hyperinflations in the last century

Do cry for me Argentina

Think about Brazilian interest rates

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U.S. saving and domestic investment, the trade gap, and fiscal policy -- connecting the dots



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Getting to yes

Sensible social security reform

Sensible Medicare and Medicaid reform

Sensible = Radical = Politically Infeasible

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What might be coming

Tax hikes, benefit cuts

Very high Inflation, if not hyperinflation

Very high nominal interest rates

Very high real interest rates

Low growth, high unemployment

Capital shortage and lower real wages

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