

Cross-National Evidence on the Burden of Age-Related Transfers



by Gary Burtless

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Dependency burden



- Age structure of the population
- Age pattern of factor income
 - Gross income from **labor**
 - From **capital & land** – interest, dividends, rent, flow of housing services from owner-occupied homes
- Age pattern of PAYGO transfers

Dependency burden

“Dependency tax” on factor income = $\frac{\text{PAYGO Transfers}}{\text{Total Factor Income}}$

$$t = \frac{\sum a_i P_i}{\sum a_i (W_i + R_i)}$$

a_i = Population in age group i

P_i = Average PAYGO transfer in group i

W_i = Average gross wage in group i

R_i = Average capital income in group i

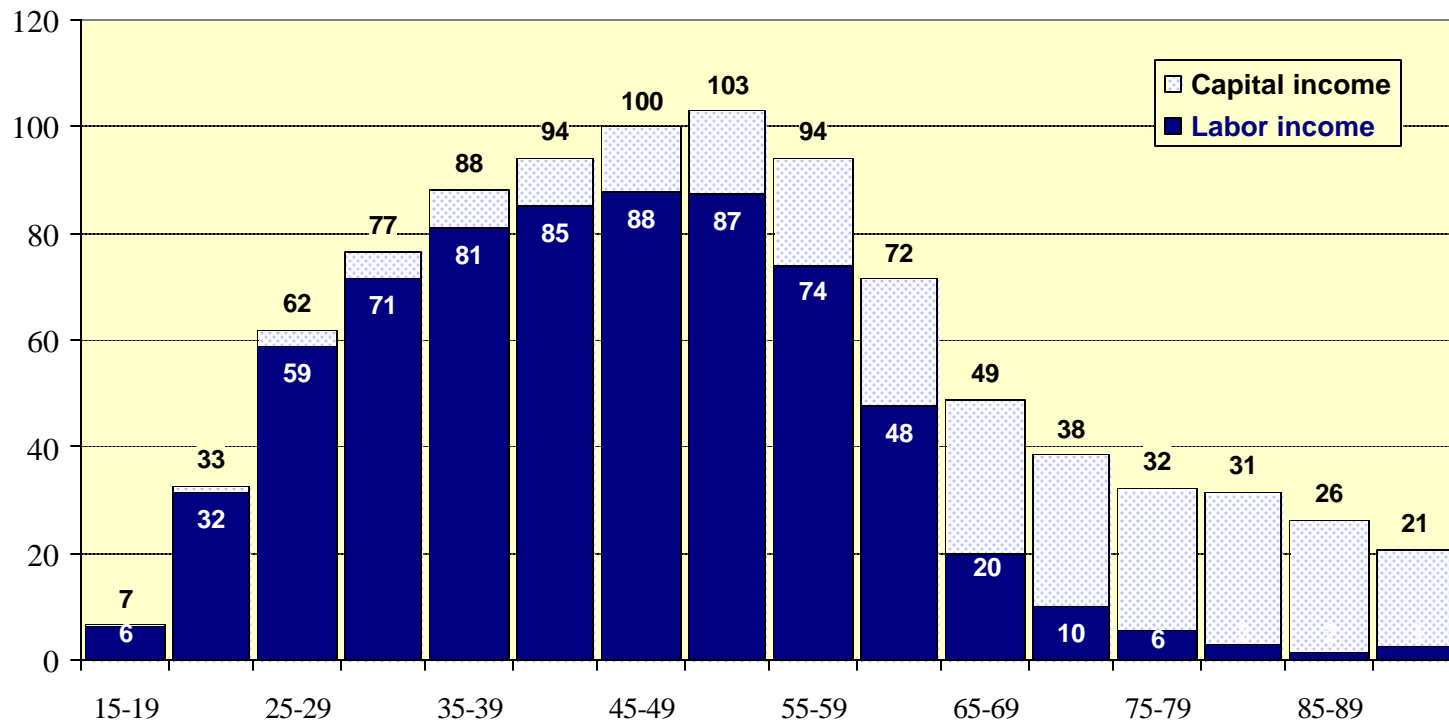
What this paper does



- Tabulate comparable (LIS) data on the age distribution of transfers & factor income
 - Finland
 - Germany
 - United Kingdom
 - United States
- Adjust reported income amounts to NIPA totals
 - To include all employee compensation & capital income flows
 - To reflect under-reporting of wages, self-employment and capital income, and gov't transfers
- Calculate implied dependency tax (t), 2000-2050

Age profile of factor incomes: Unadjusted - Based on LIS income reports

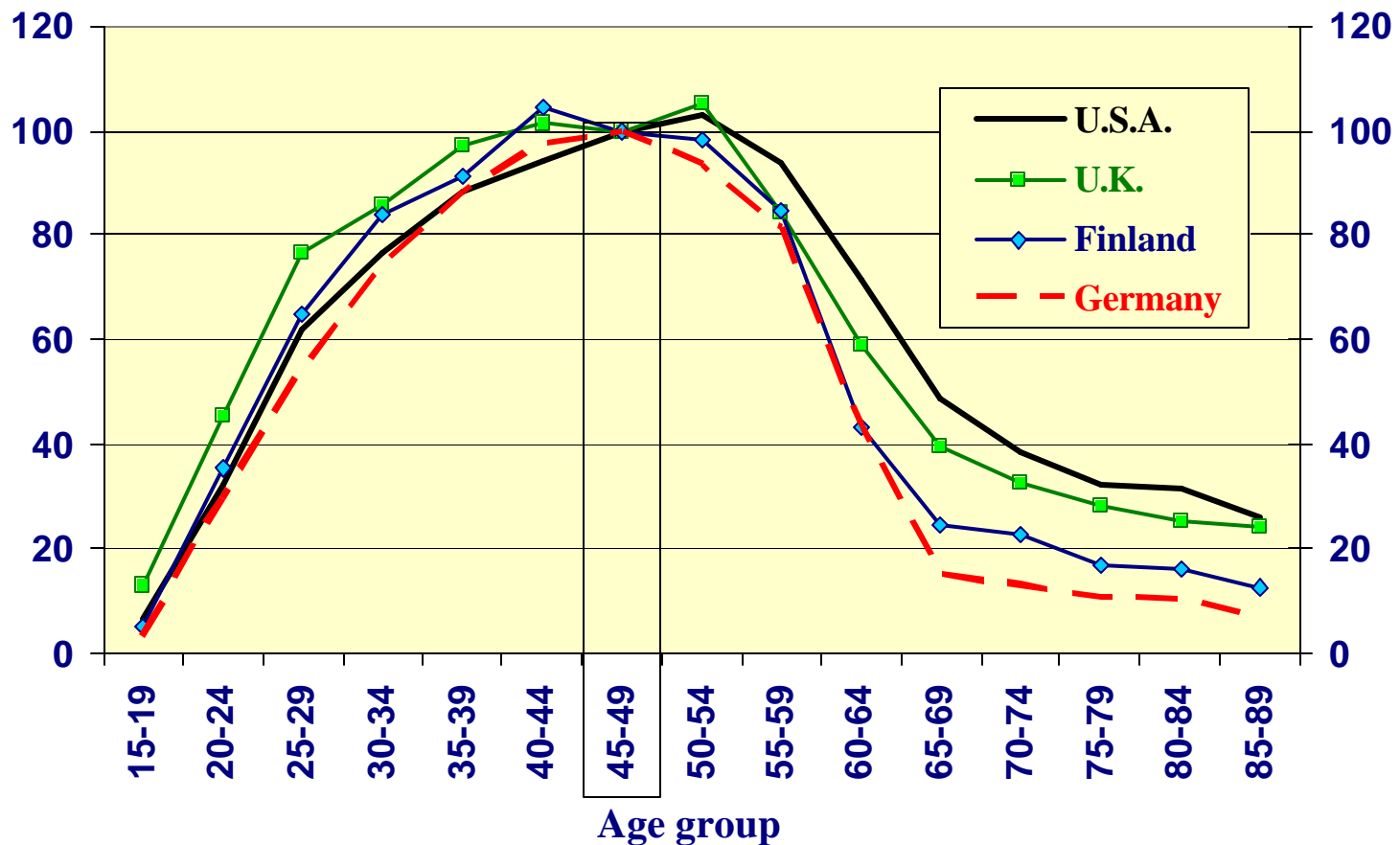
Factor income received by average 45-49 year-old = 100



Age group: United States

Age profile of factor incomes: Adjusted – Based on LIS *and* NIPA income

Gross factor income received as % of average factor income of 45-49 year-olds



Age profile of factor incomes

■ Labor income

- Rises steeply thru mid-40s in all countries
- Falls off faster after age 55 in Europe compared w/ USA
- Labor earnings of Adults 65-69 / Adults 45-49 :
 - 20% in USA
 - 5% in Europe.

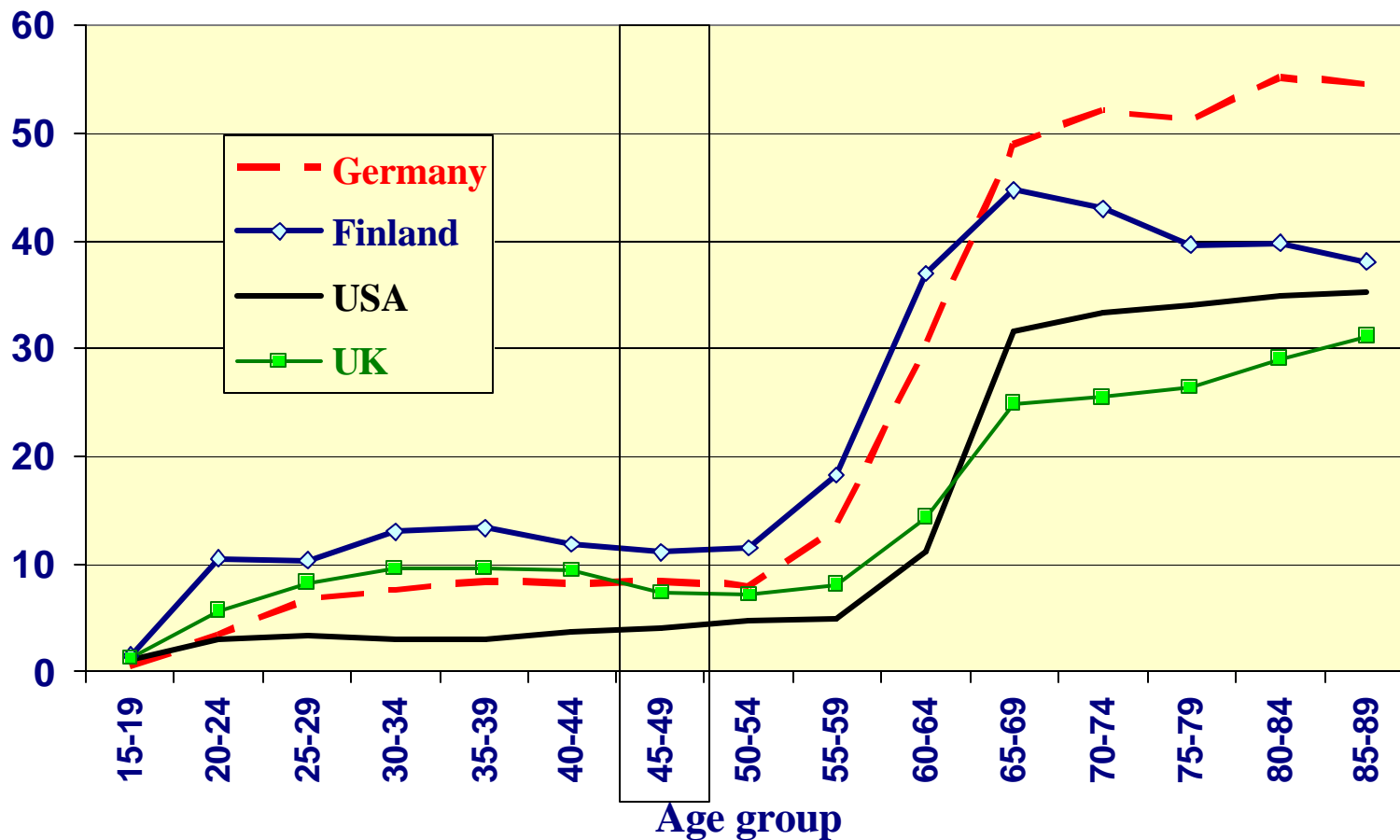
■ Capital income

- Rises thru ages 70 or 75 in all countries
- Higher at older ages in U.K. & USA than either Finland or Germany
 - Older Brits & Americans receive capital incomes that are twice those of older Finns & Germans
 - A surprise given low U.S. saving rate

Age profile of paygo transfers :

Adjusted - Based on LIS *and* NIPA income

Transfers received measured as % of average factor income of 45-49 year-olds

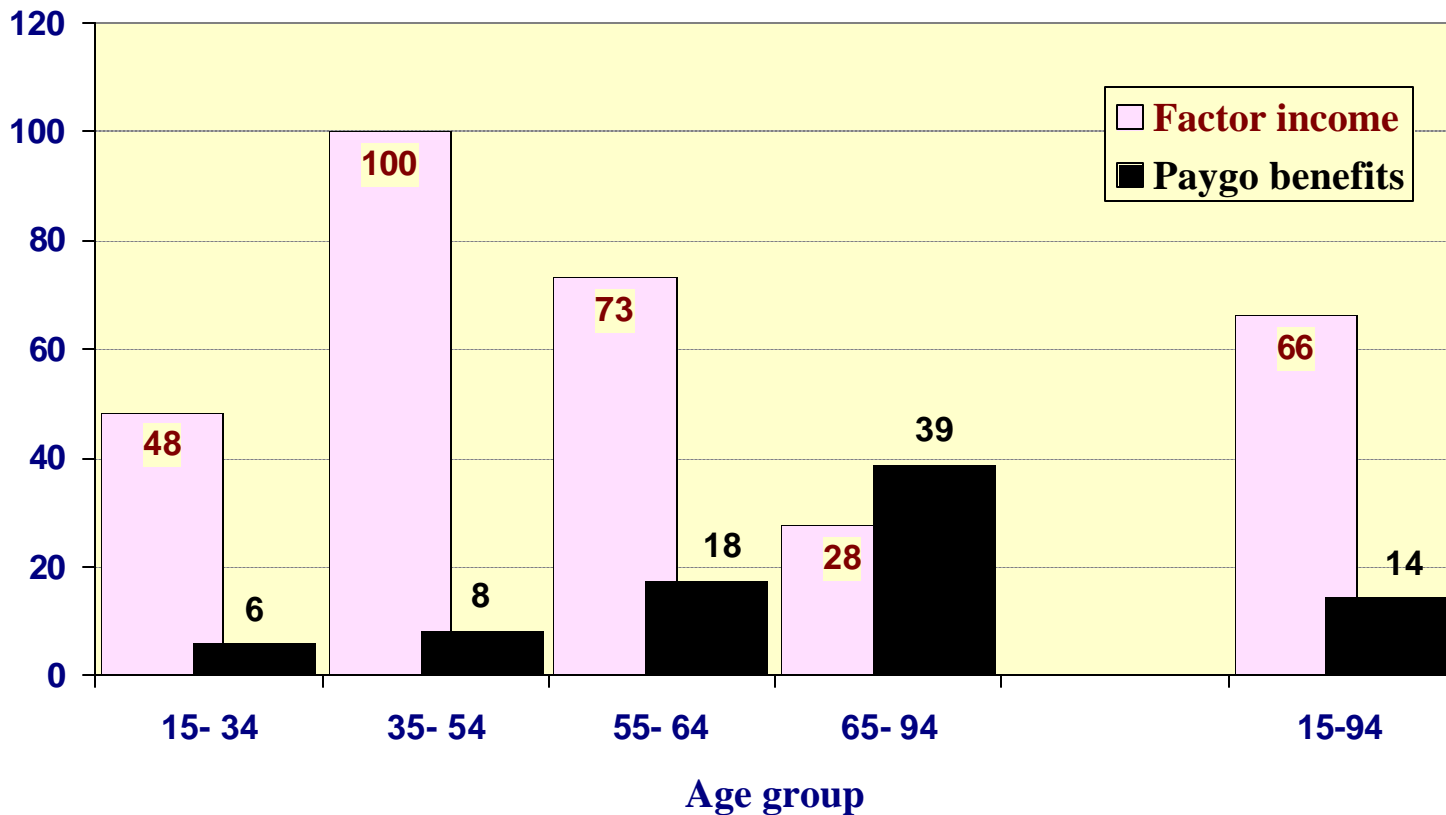


Age profile of paygo transfers

- Transfers are uniformly more generous for Finns & Germans than for Americans (at every age)
- At ages up thru 55, transfers received by Britons are as generous as those in Finland & Germany
- Past age 65 U.K. is the *least* generous of the four countries
- Past age 65, Germany is the *most* generous
- At ages 20-64, Finland is the most generous
- USA & Germany have steeply sloped age-profile of transfers: The aged fare relatively well in both countries

Simplified age profile of factor income & Paygo transfer benefits: Four countries & 2000 population age profile

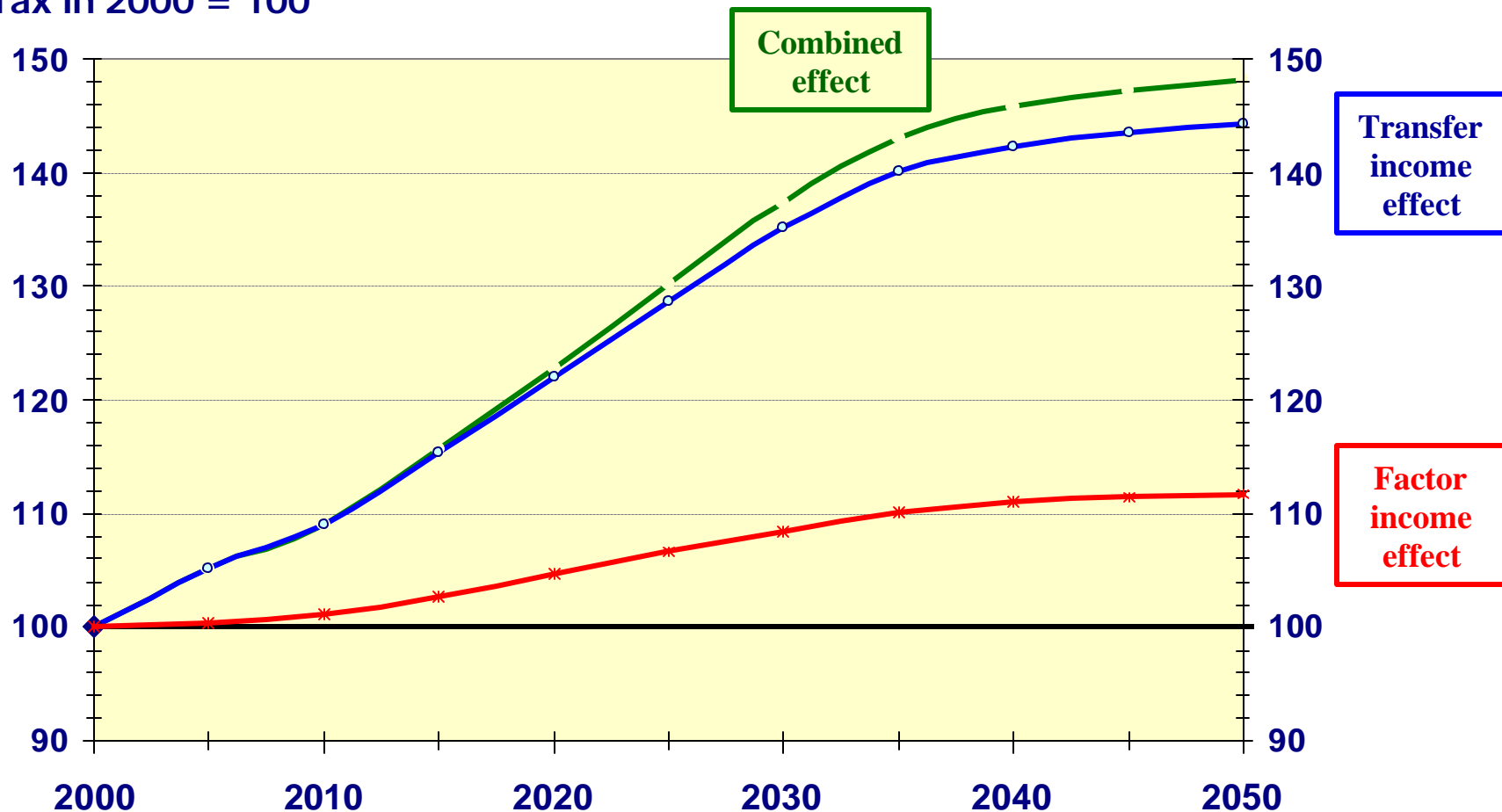
Factor income of
35-54 year-olds = 100



Impact of population aging on tax rate needed to finance paygo transfers:

Four-country average, 2000-2005

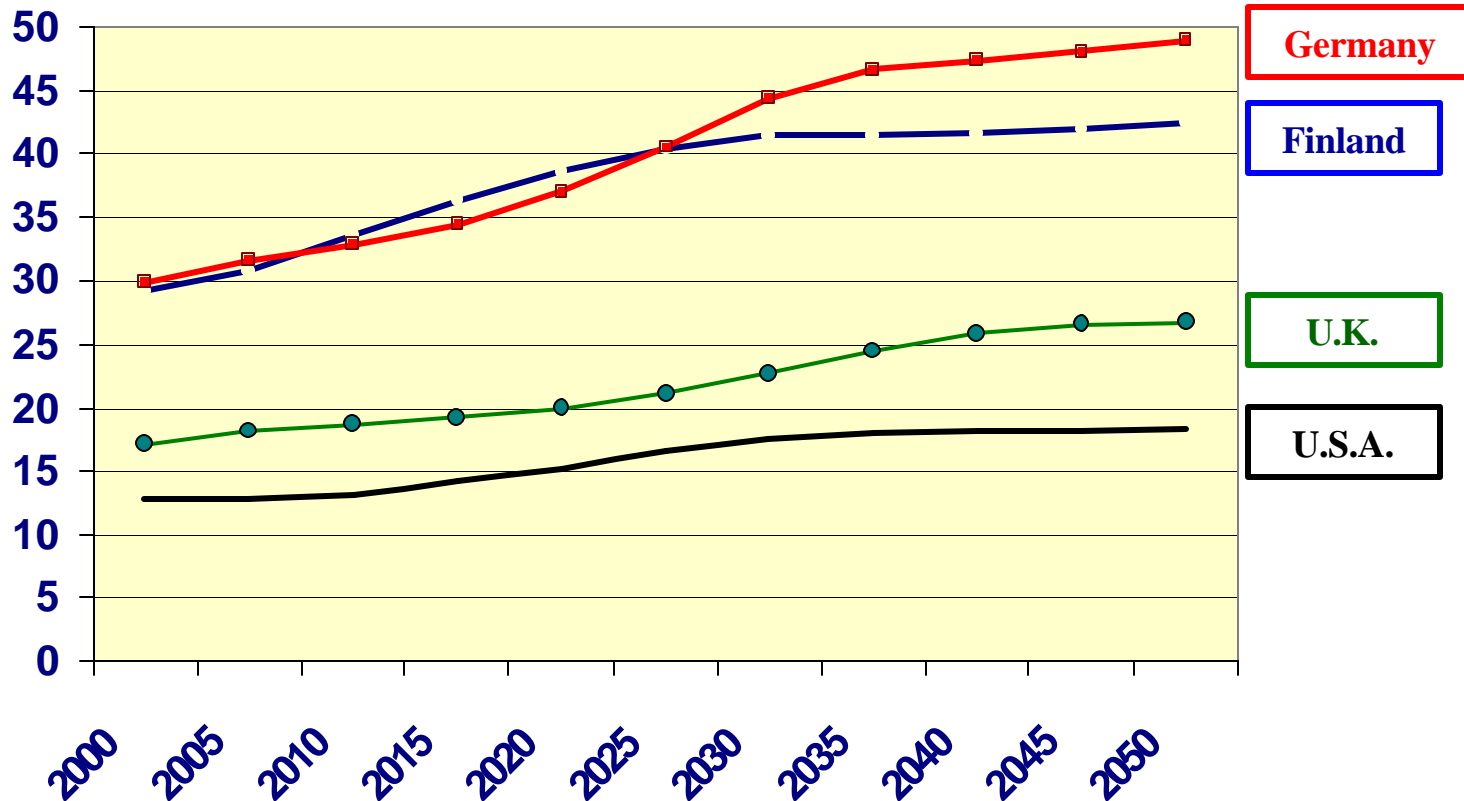
Tax in 2000 = 100



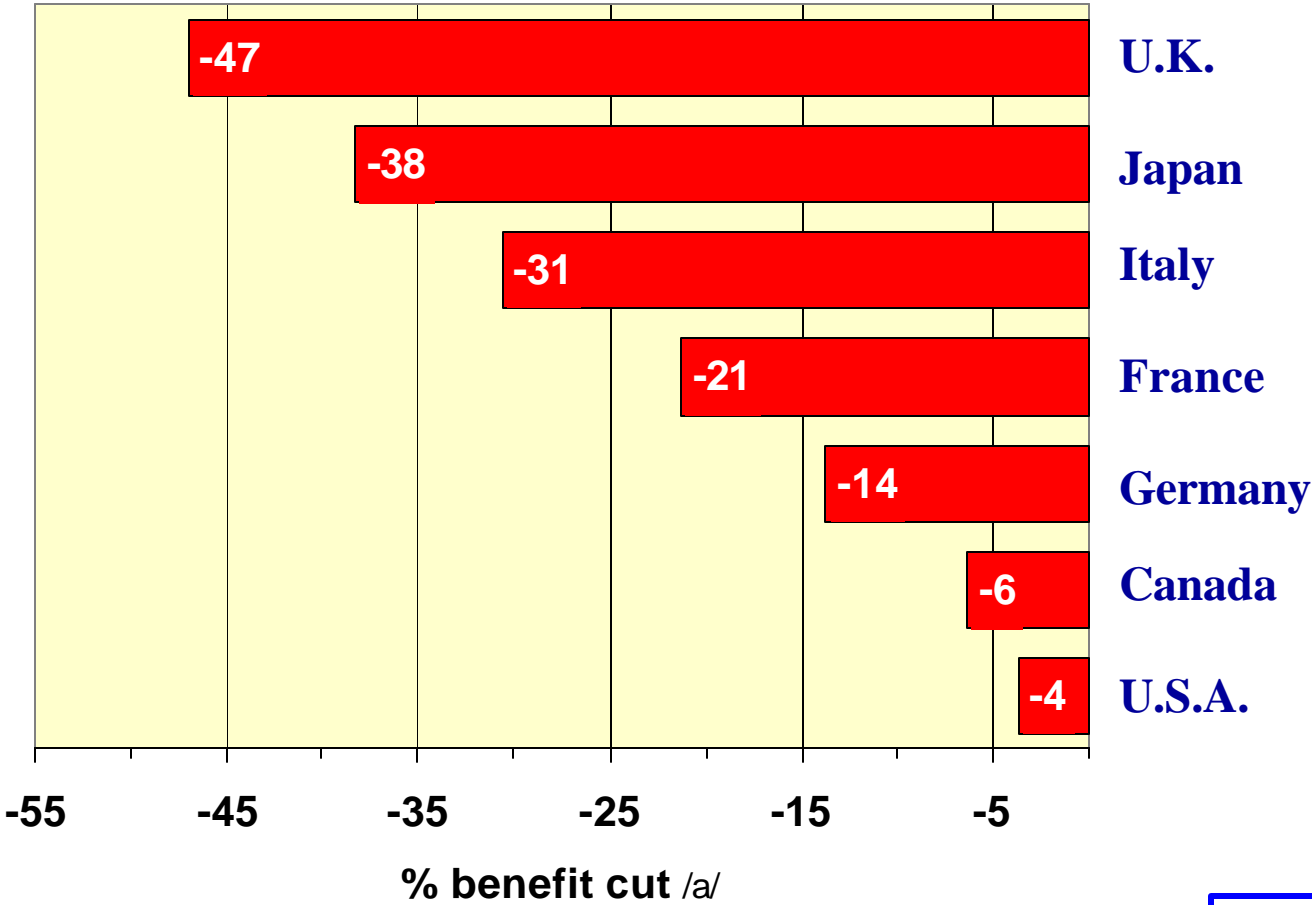
Impact of population aging on tax rate needed to finance paygo transfers:

Four countries, 2000-2005

Implied tax on factor income for Paygo transfers
(% of factor income)



% decline in average old-age pension relative to real average wage, 2000 – 2050



/a/ Decline in wage replacement rate.

Source: OECD