

Impacts on Economic Security Programs of Rapidly Shifting Demographics

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Life Expectancy in Canada

Year	At Birth		At Age 65	
	Male	Female	Male	Female
1921	58.8	60.6	13.0	13.6
1961	68.4	74.2	13.5	16.1
1991	74.6	80.9	15.7	19.9

Life Expectancy in the United States

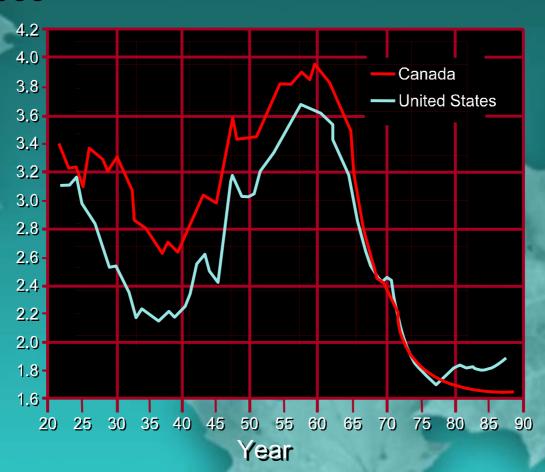
Year	At Birth		At Age 65	
	Male	Female	Male	Female
1920	55.6	57.6	12.2	12.7
1960	66.8	73.2	12.9	15.8
1990	71.8	78.8	15.1	19.0
1998	73.4	79.4	15.7	19.2

Life Expectancy in Mexico

Year	At Birth		At Age 65	
	Male	Female	Male	Female
1960	56.2	59.4	13.8	14.4
1980	64.0	69.9	15.2	16.4
1990	68.7	73.8	16.3	17.5

Total Fertility Rates

1922 to 1988

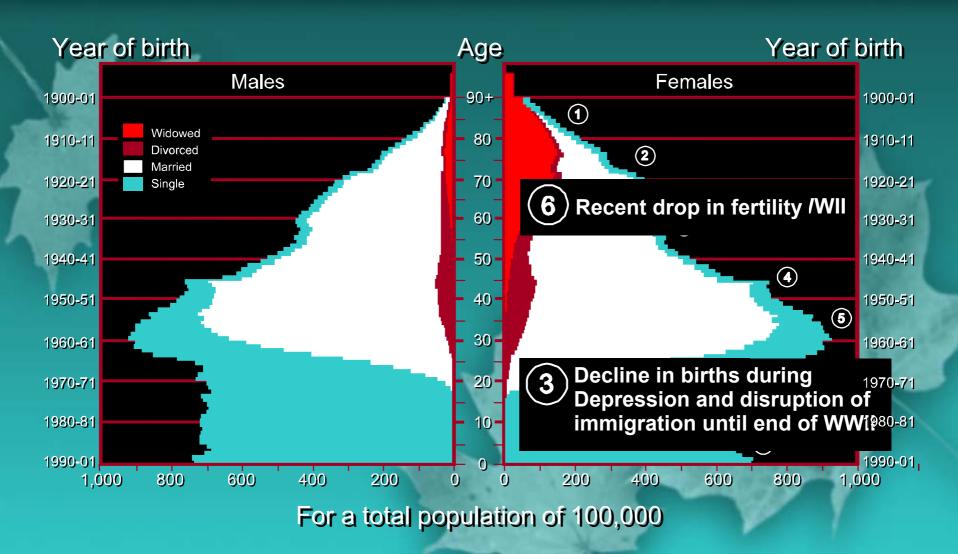


Number of Live Births

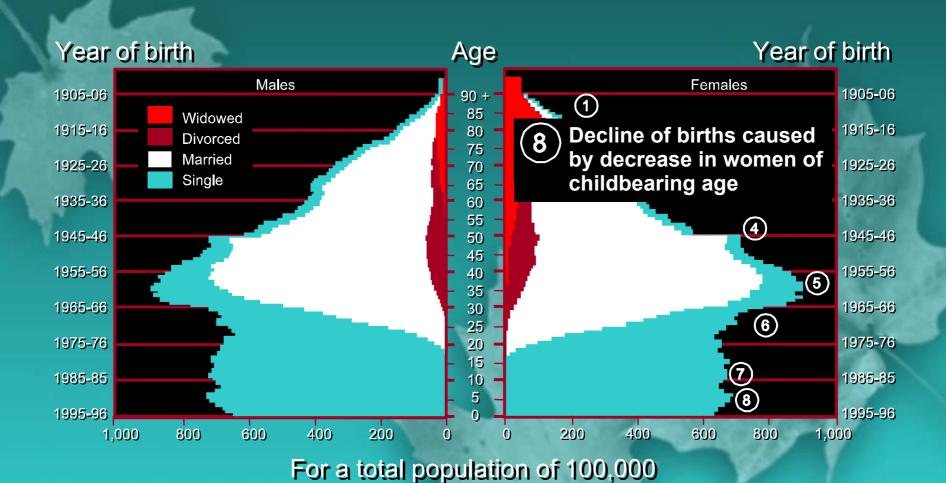
Canada, 1920 to 1994



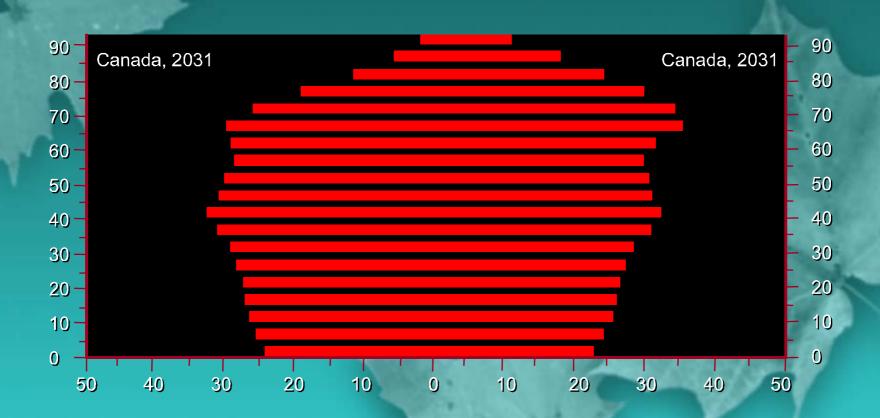
Age Pyramid, 1991



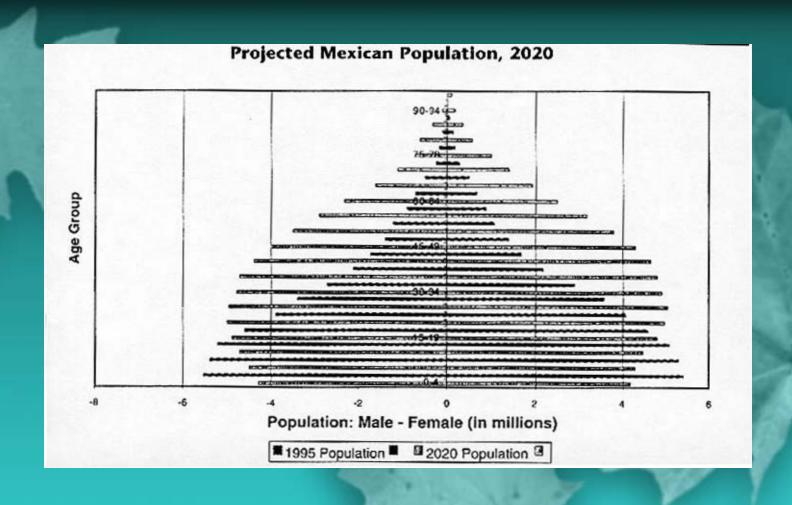
Age Pyramid, 1996



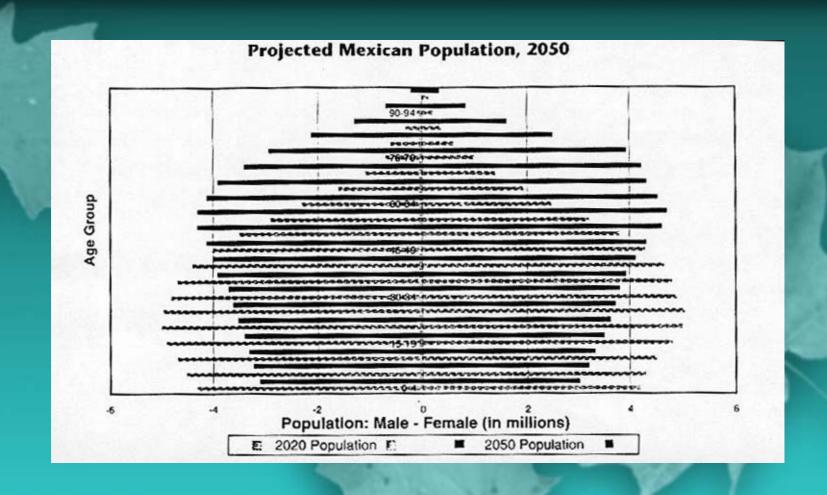
Changes in the Canadian Age Structure



Changes in the Mexican Age Structure



Changes in the Mexican Age Structure



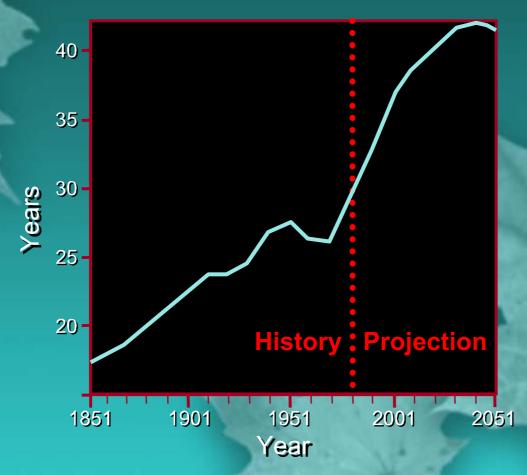
Distribution of Canadian Population by Age-Group

1956 to 2036

Age	1956	1976	1996	2016	2036
Under 20	39.4	35.6	26.7	22.0	20.2
20-64	52.9	55.8	61.1	61.4	55.0
65+	7.7	8.6	12.2	16.6	24.8
75+	2.5	3.2	5.1	7.1	12.8
85+	0.4	0.7	1.2	2.2	3.8

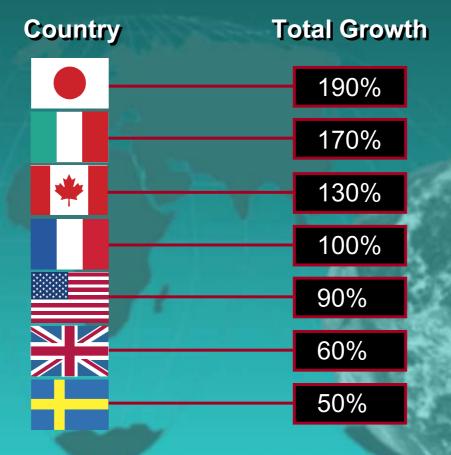
Historical and Future Median Age

Canada, 1851 to 2051



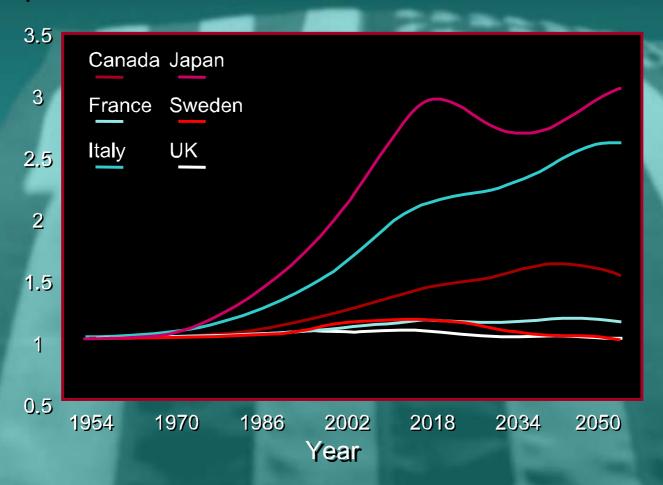
Growth in the Dependency Ratio

Age 65+/Labour Force 2050/1996



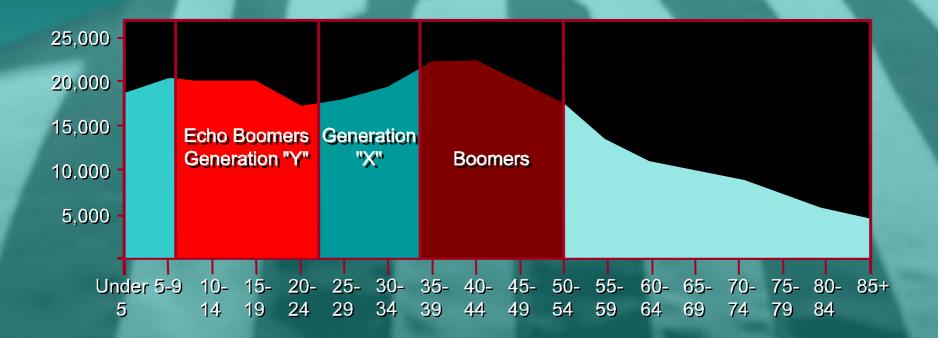
Dependency Ratios Relative to the United States

1954=1

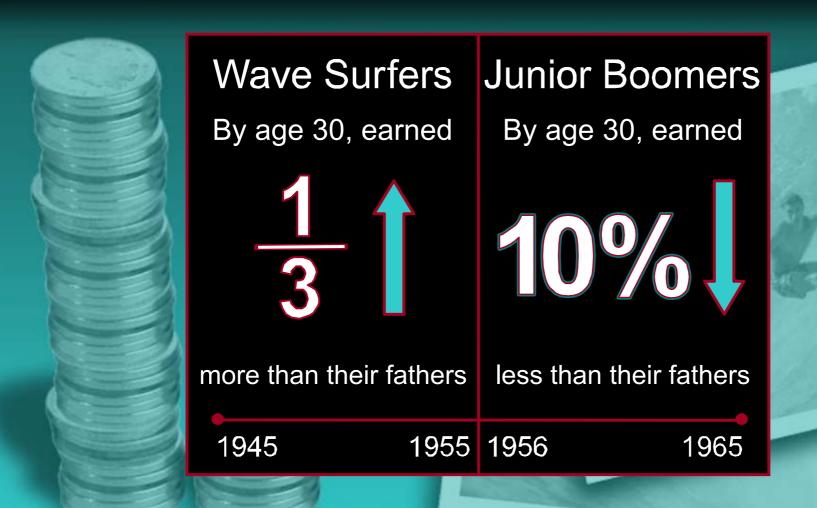


U.S. Population in 2000

Millions

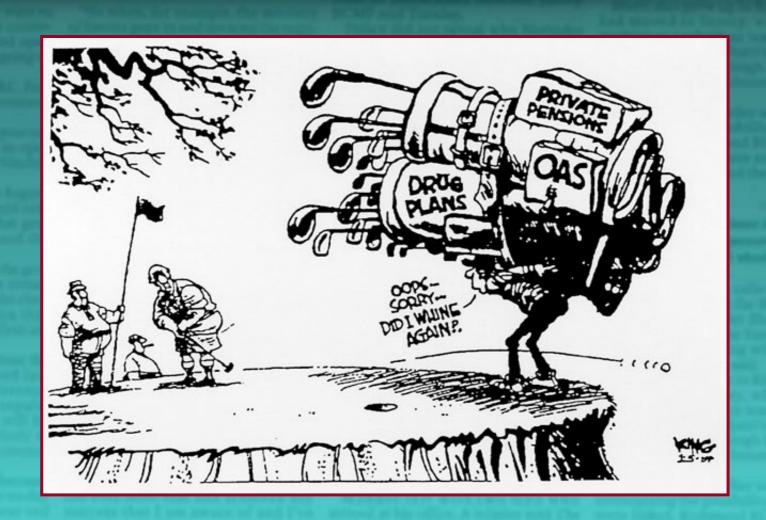


Wave Surfers and Junior Boomers

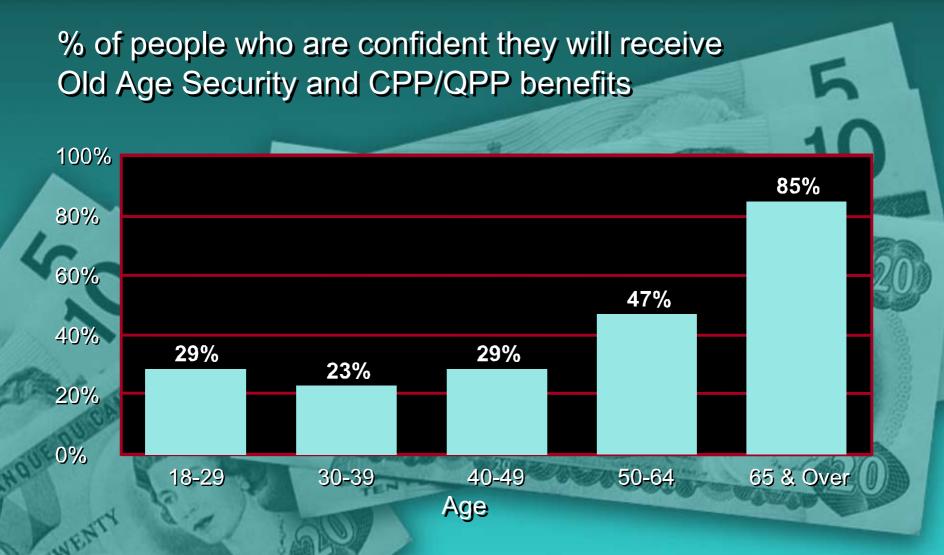




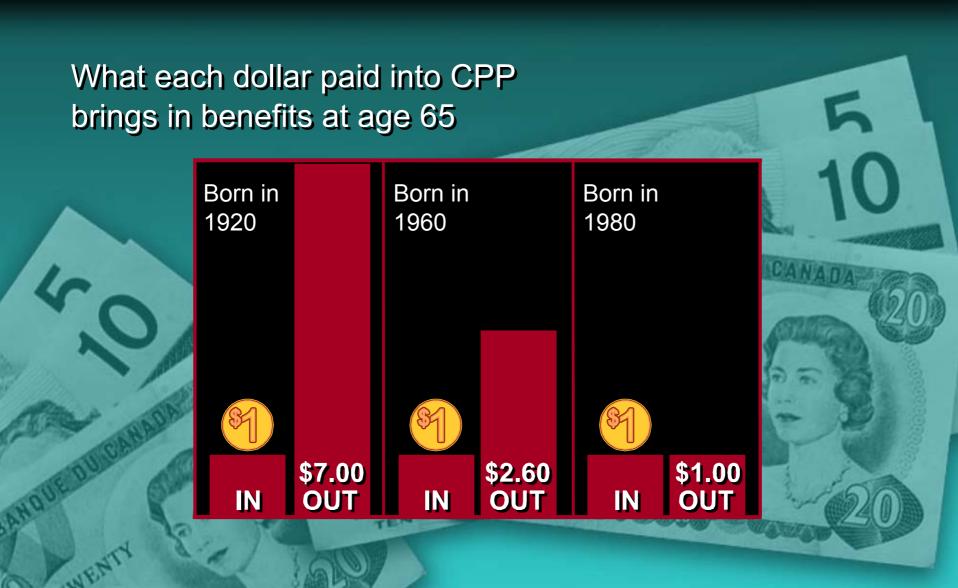




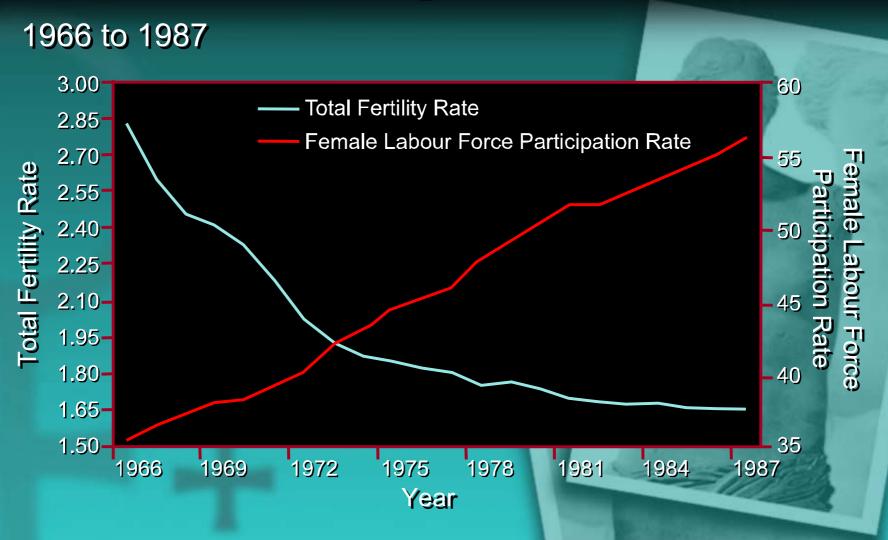
Public Pension Plans



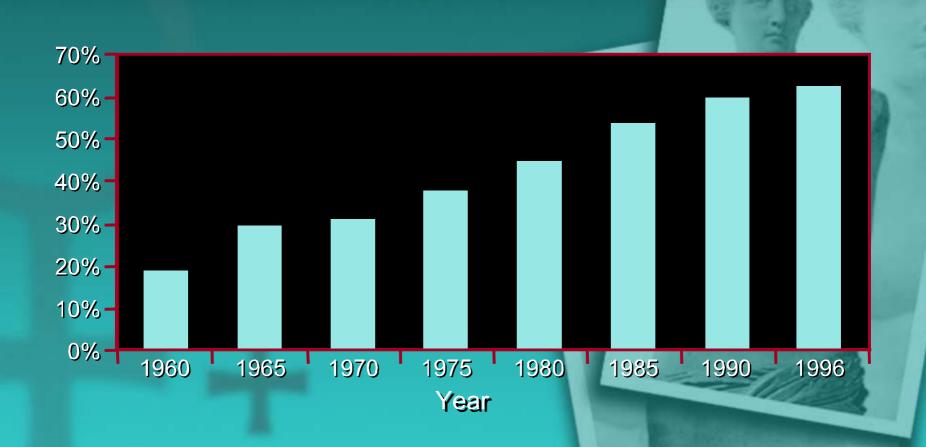
Falling Pension Returns



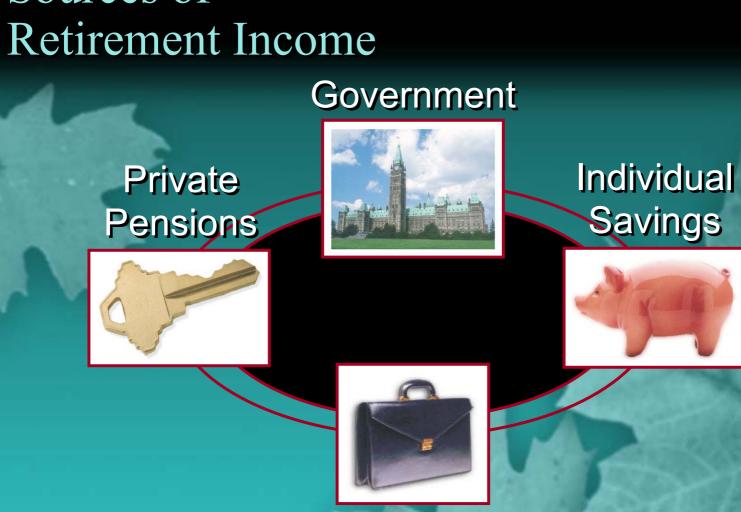
Fertility Rates vs. Female Labour Force Participation Rates



% of Married Mothers
With Children Under Six
Working Outside the Home

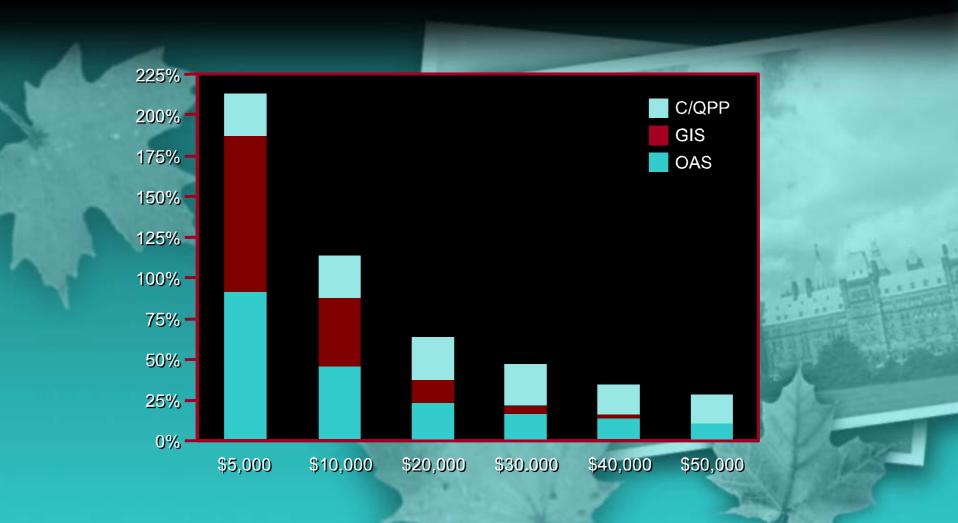


Sources of



Work Earnings

Income from Government-Administered Plans, 1993



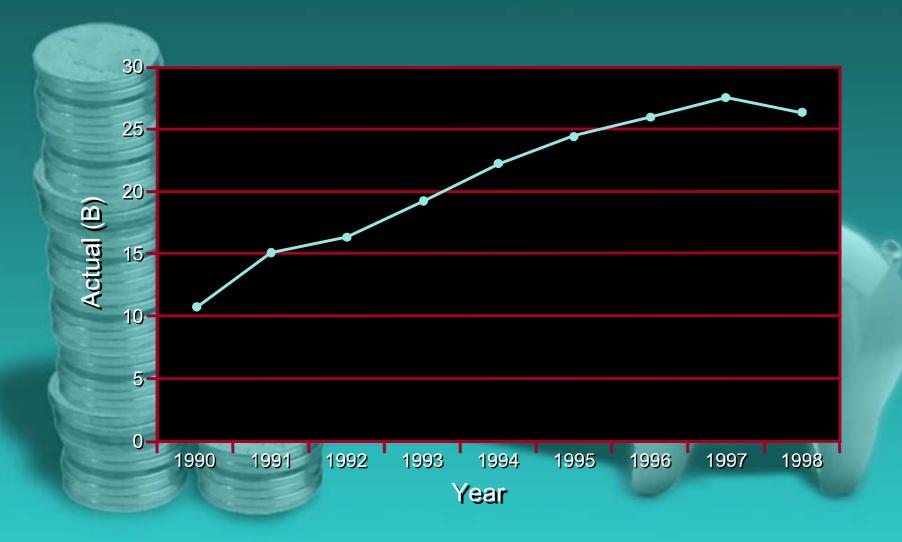
Private Pension Plans

	P	an%	Members%
Defined Benefit	J 4	0%	90%
Defined Contribution	on f	0%	10%

Registered Savings Plans

- Contributions tax deductible (limits)
- Investment income grows tax free
- Benefits fully taxable when taken
- "Deferred Wage" philosophy

RRSP Deposits



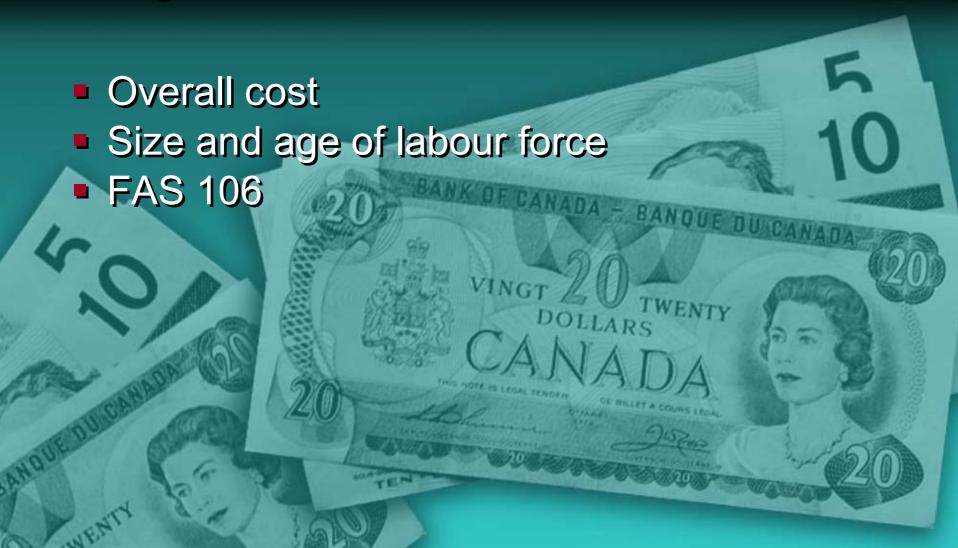
Non-Registered Annual Savings For 70% Replacement

Gender	Age Start	Age at Retirement	
		60	65
Male	25	14.1	10.2
	35	19.8	13.6
	45	32.9	20.3
Female	25	17.5	12.9
	35	24.5	17.2
	45	40.9	25.8

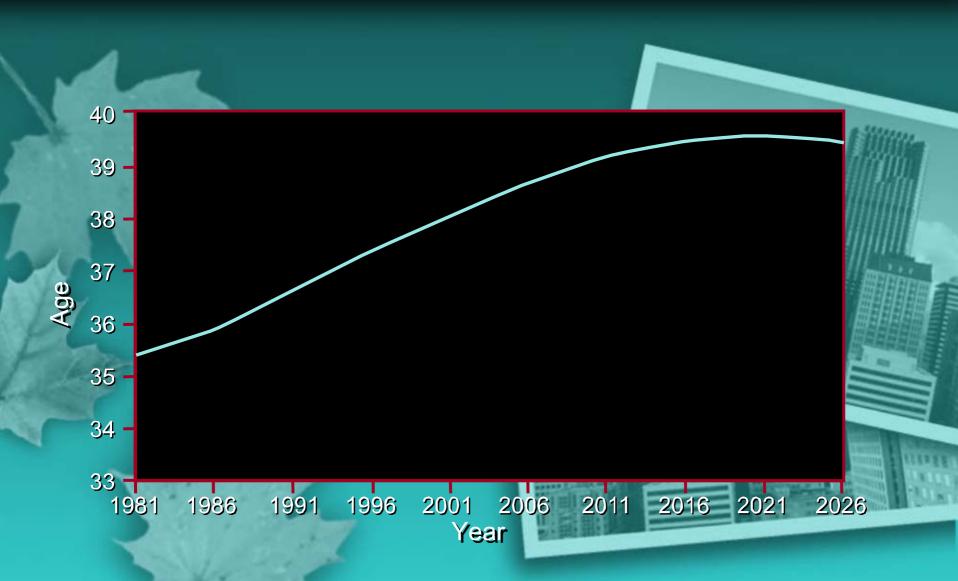
Registered Annual Savings For 70% Replacement

Gender	Age Start	Age at Retirement	
		60	65
Male	25	6.0	4.1
	35	10.0	6.6
	45	19.9	11.8
Female	25	7.0	4.9
	35	11.7	7.9
	45	23.2	14.1

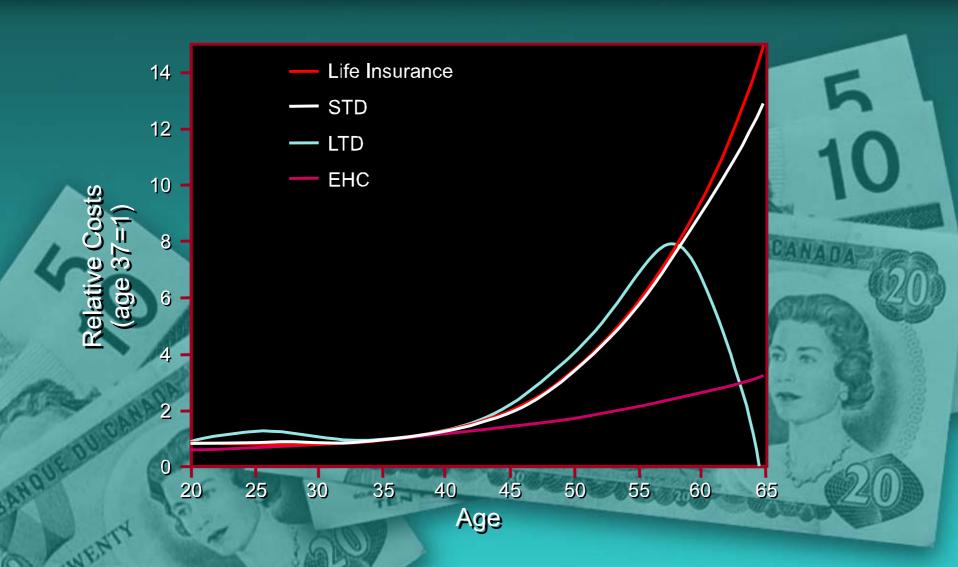
Problems With Fringe Benefits



Average Age of Workforce

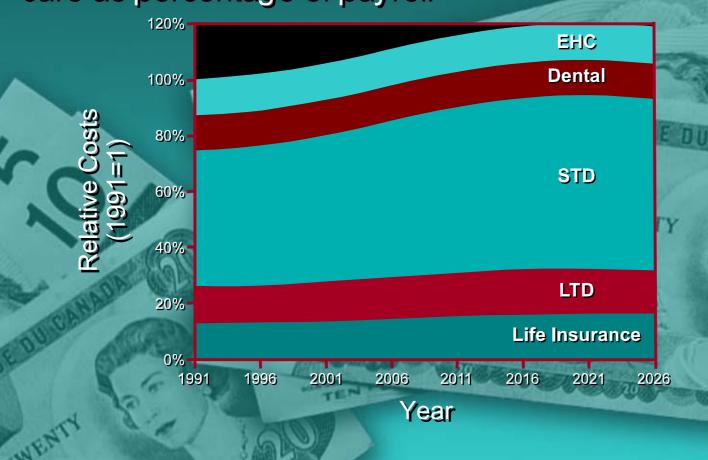


Insurance Costs

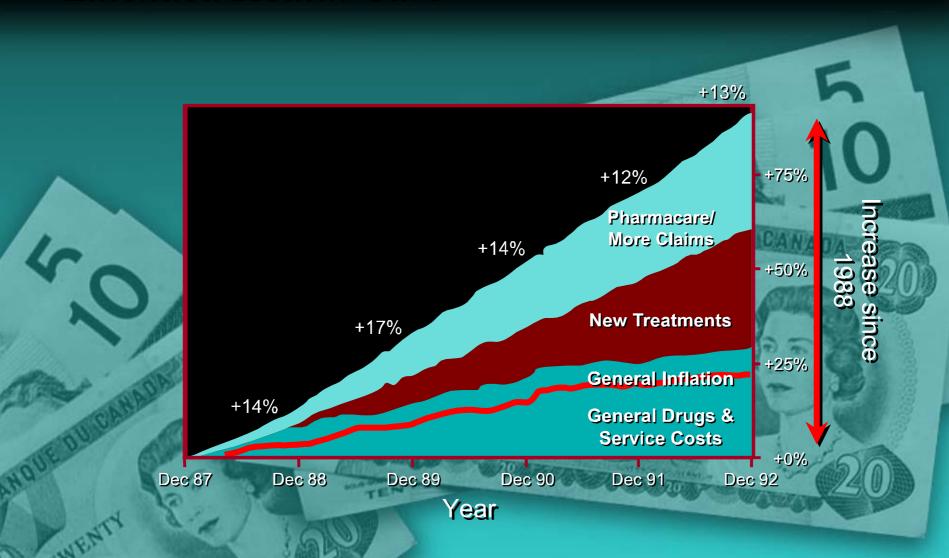


Projected Group Benefit Costs

No inflation in cost of extended health care as percentage of payroll



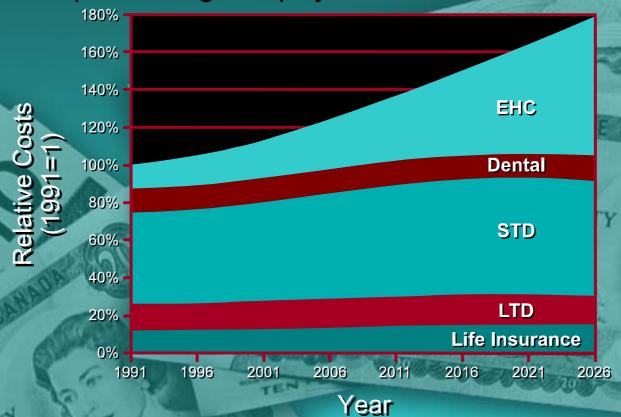
Cost of Claims Extended Health Care



Projected Group Benefit Costs

WENT

5% annual inflation in cost of extended health care as percentage of payroll



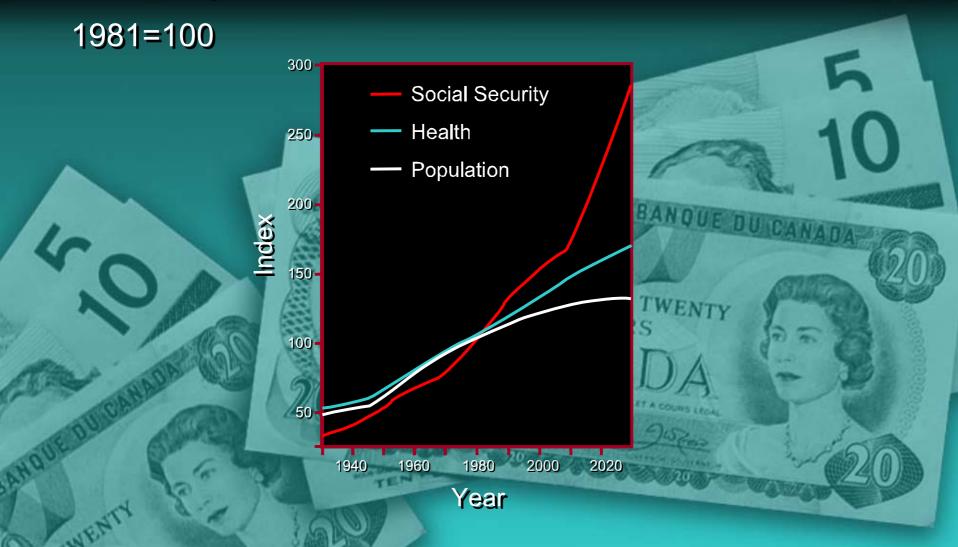
Projected Group Benefit Costs

MENT

10% annual inflation in cost of extended health care as percentage of payroll

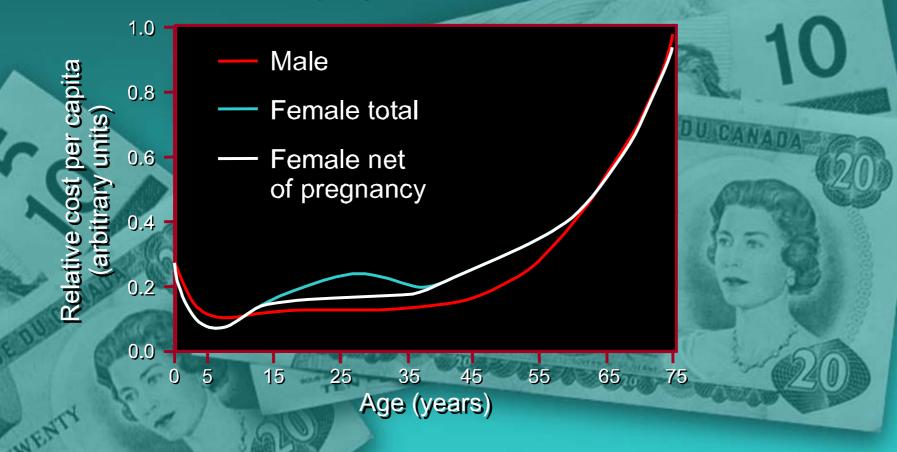


Indexes of Social Security Costs

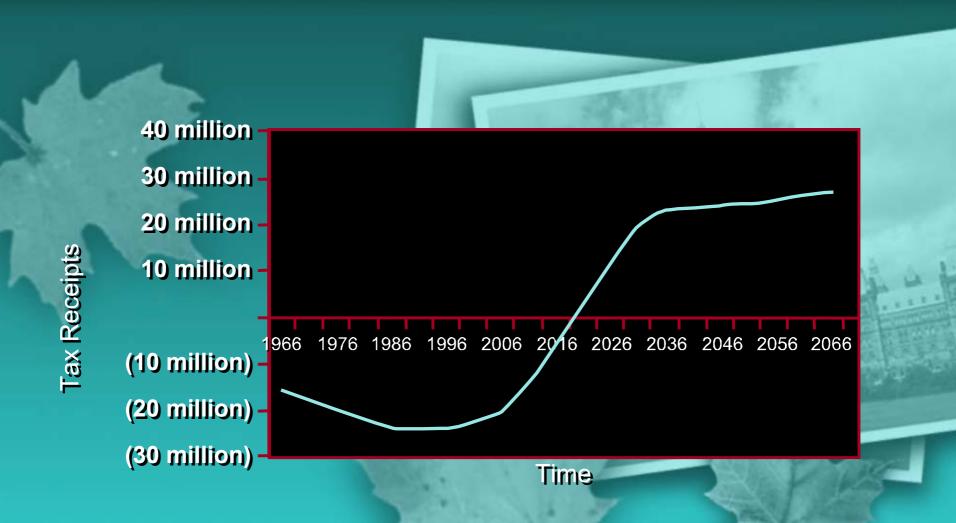


Aging Population It's Effect On Health Care Costs

Relative per capita costs of health care for males and females by age



Government Gain



Net Cost of RPP/RRSPs and Health Care

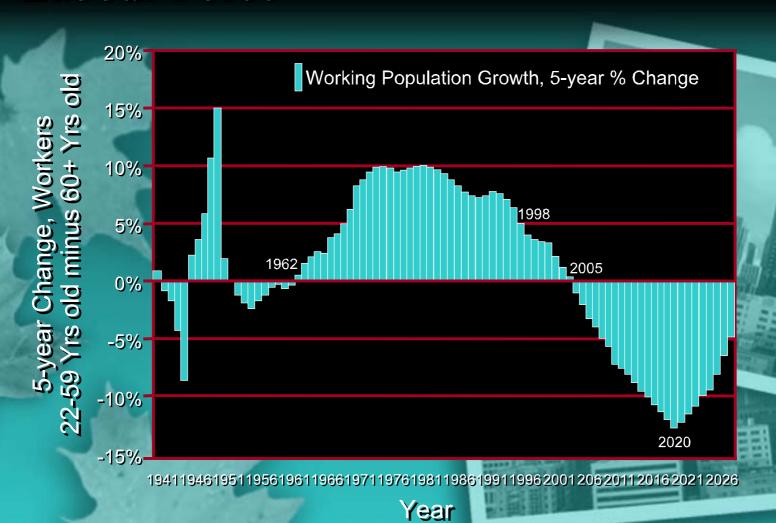
1991 to 2041 (\$Billions)

Year	Net RPP/RRSPs	Health Care	Total
1991	(14.9)	41.6	56.5
1996	(15.1)	45.9	61.0
2001	(14.6)	49.6	64.2
2006	(13.4)	53.2	66.6
2011	(10.5)	56.8	67.3
2016	(5.7)	61.3	67.0
2021	(0.2)	66.4	66.6
2026	5.4	71.3	65.9
2031	10.8	75.9	65.1
2036	14.3	79.2	64.9
2041	15.5	81.1	65.6

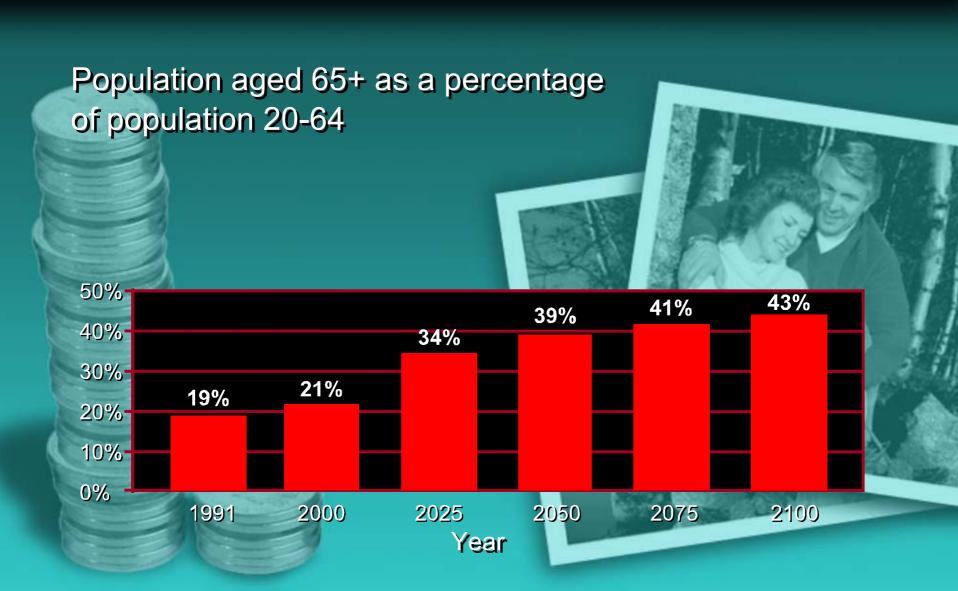
Life Expectancy of Men in the United States



U.S. Male Labour Force

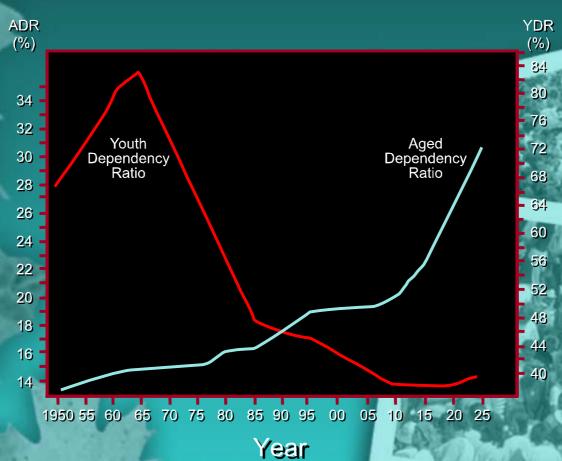


Getting Older

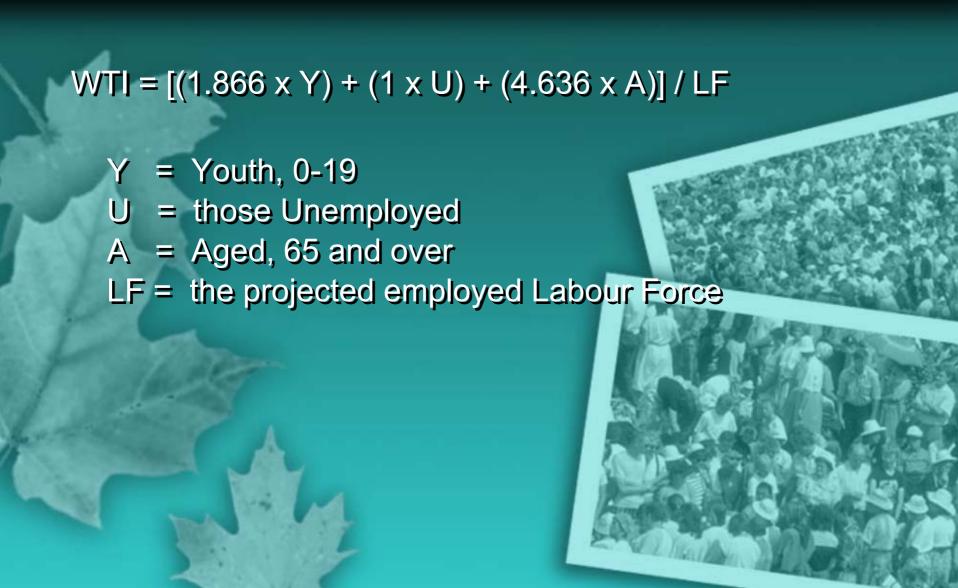


Impact of Demographic Shifts

1950 to 2025

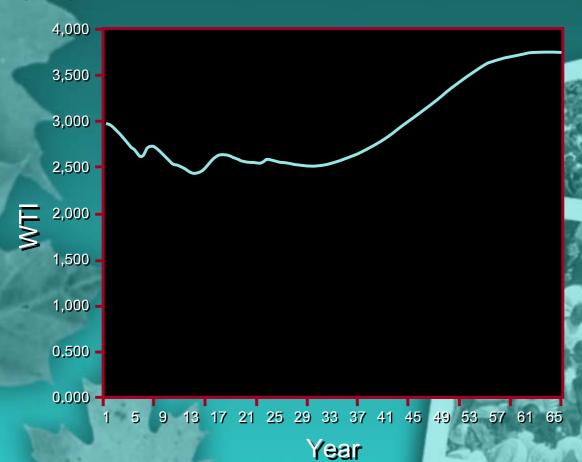


Wealth Transfer Index



Wealth Transfer Index





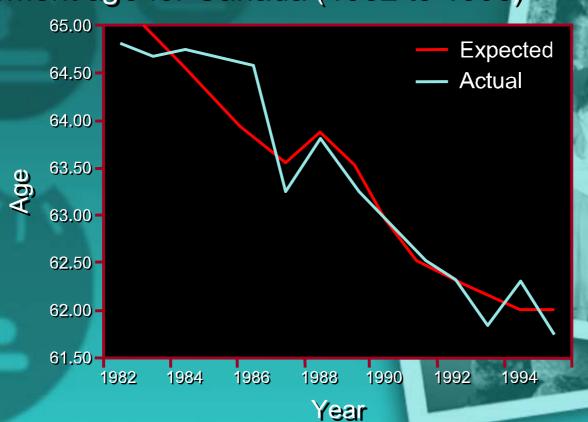
Retirement Age Actual and Expected

Overlay plots of actual vs predicted average retirement age for Canada (1976 to 1995)



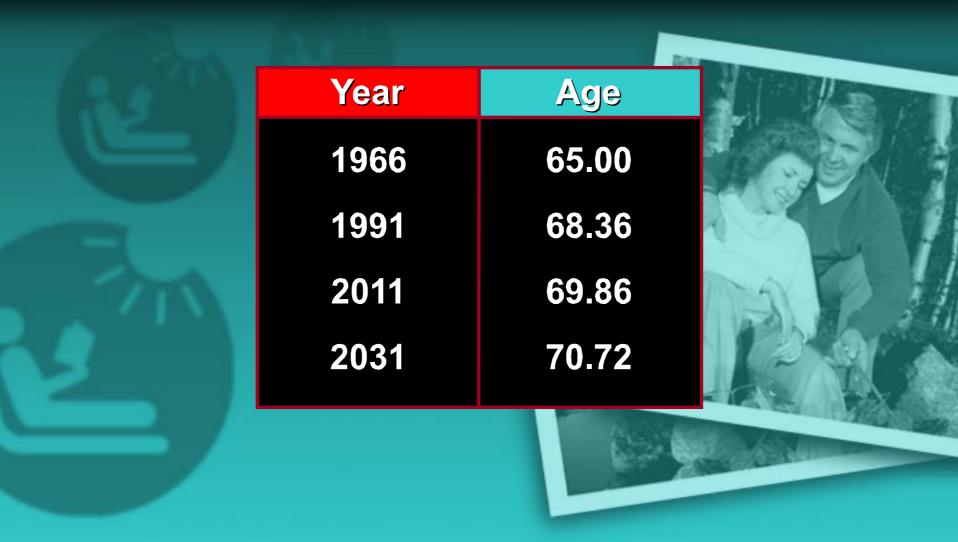
Retirement Age Using Six Year Lag

Overlay plots of actual vs predicted average retirement age for Canada (1982 to 1995)



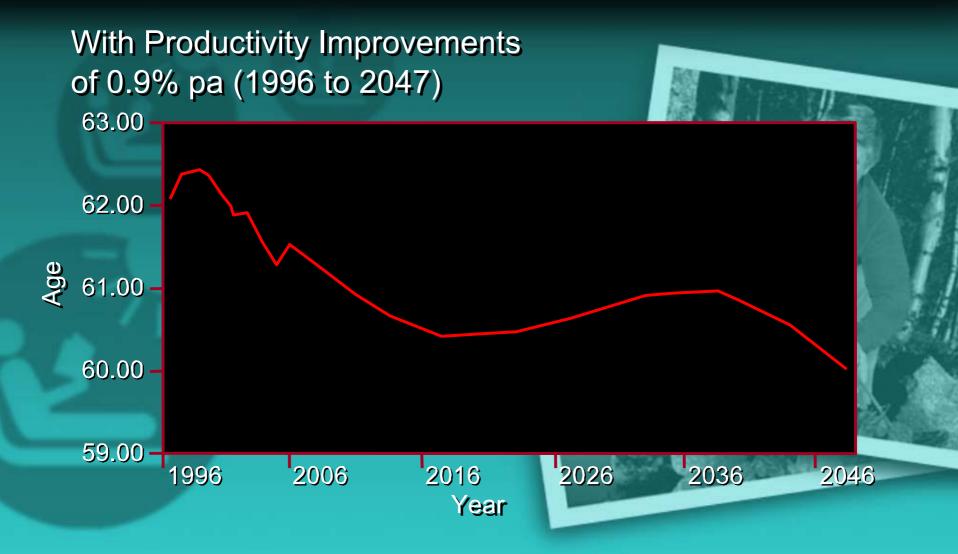


Equivalent Age at Retirement in Canada

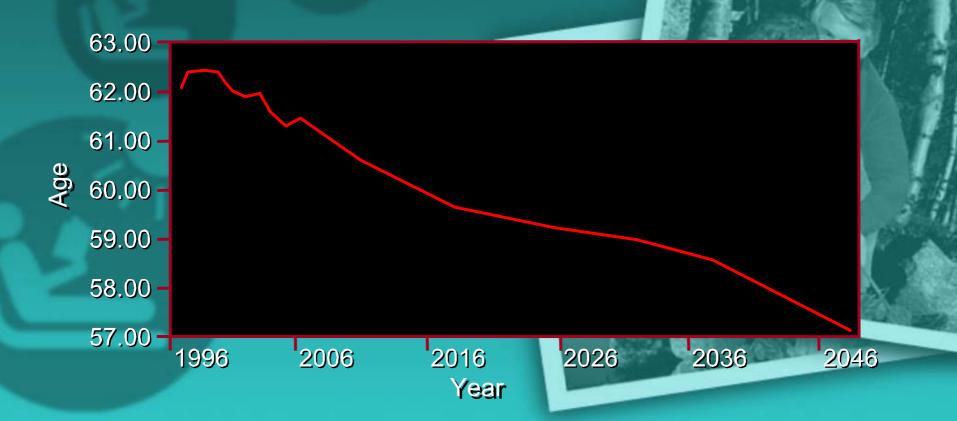


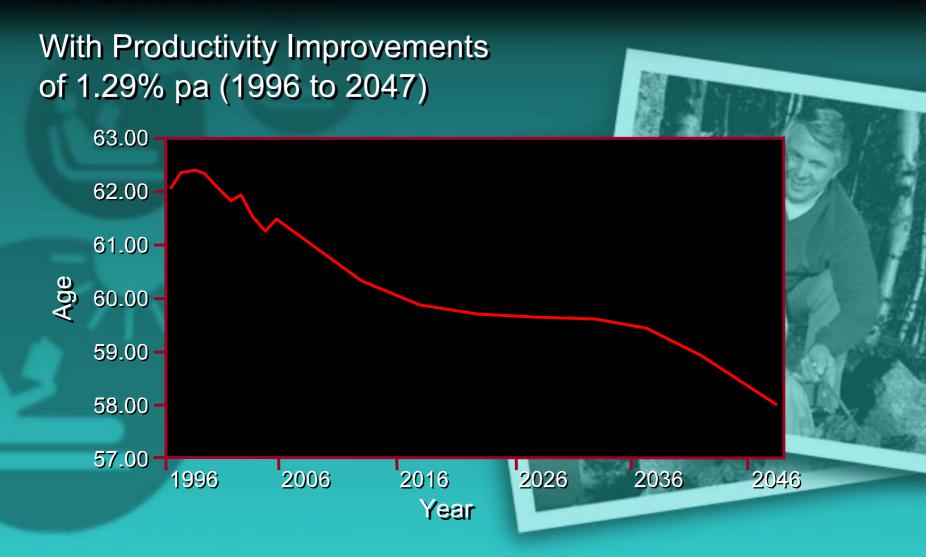
Other Countries

- Females from 60-65
 - Full pension after 40 years (now 37.5)
- Males from 61-65, Females from 56-
- 60
- Males from 60-65, Females from 57-
- 60
- All shift from 65-67
 - Eamalas from 60-65



With Productivity Improvements of 1.5% pa (1996 to 2047)





Market Response to Later Retirement

Workers Bargain For More Favorable Arrangement

May Prefer Flexible Pension to Higher Wages

May Be Against Pension Regs or Income Tax Act

Retirement Is A Multi-Phased Transition

Market Response to Later Retirement

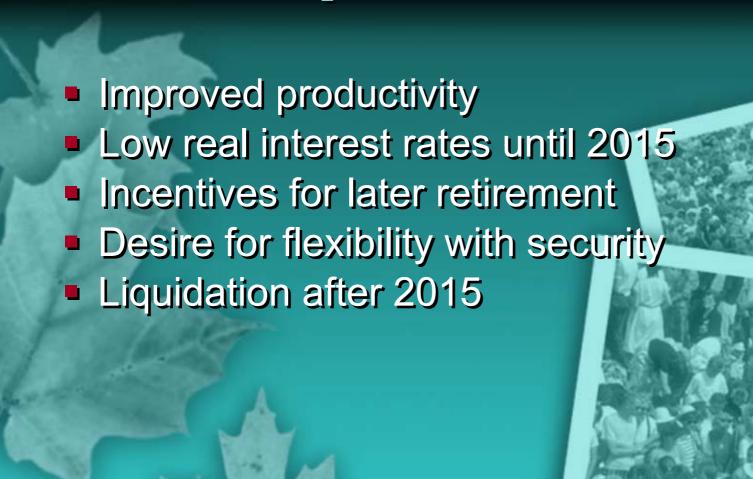
Best Educated Most Likely to Return to Work

Would Prefer Bridge Job With Lifetime E'er

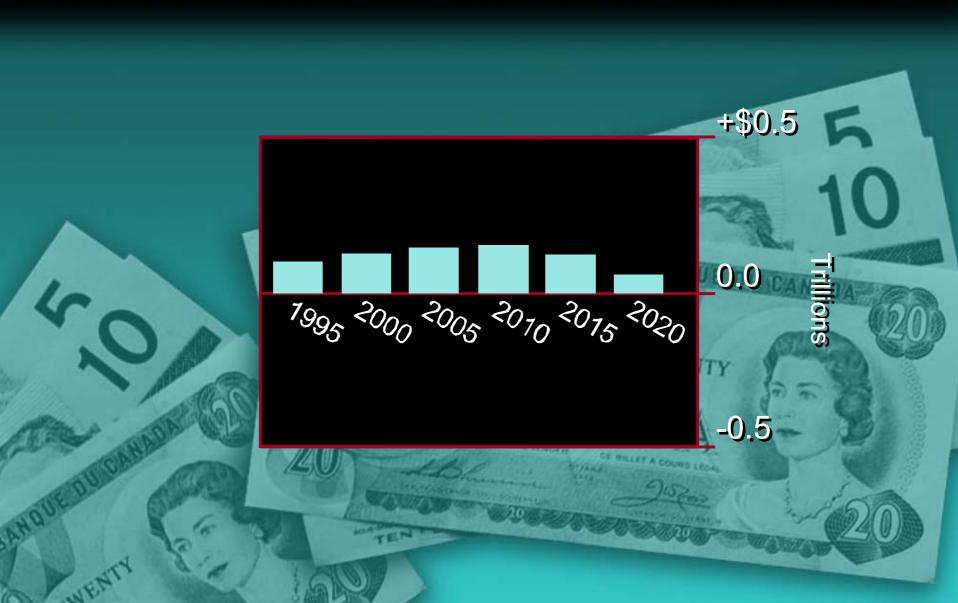
Older Workers Are An Asset

Need More Flexible Systems





When Boomers Cash Out



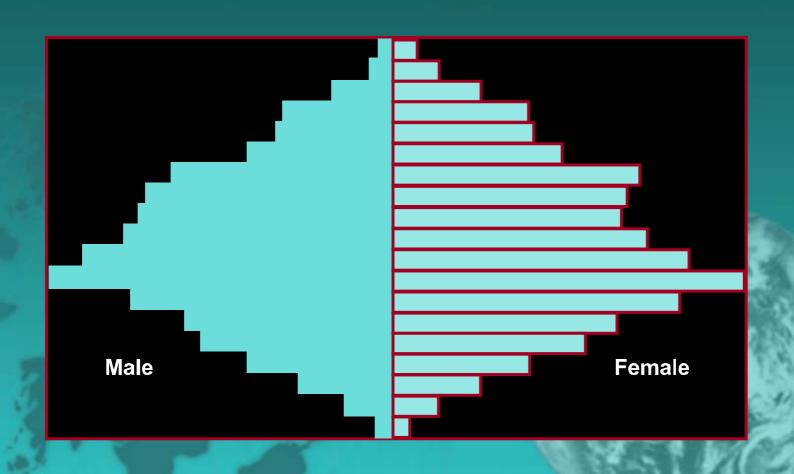
When Boomers Cash Out



Public Policy Alternatives



Foreign Born, 1991



Public Policy Alternatives

- Fertility
- Immigration
- Economic growth
- Age of entitlement



Innovative Products

- Living benefits
- Registered long-term care
- Flexible pensions
- Reverse mortgages
- Prefer personal control

