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# Pension Systems: Some Observations

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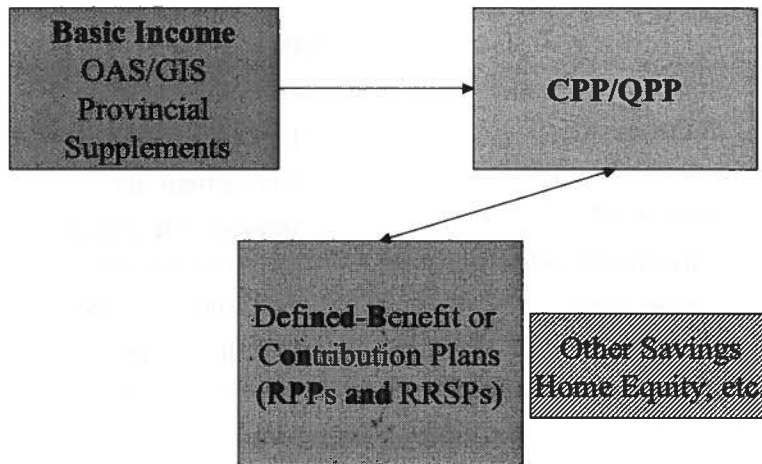
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Includes updates from Workshop suggestions and questions.

## Elements for Discussion

- Components of the Canadian Pension System
- Parameters of a funded plan
- What is the target income in retirement?
- Challenges
- Policy Ideas

## Components



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The three-legged stool analogy is often used to link the basic income support from OAS/GIS, the CPP benefits from a compulsory contribution scheme, and the voluntary contributory plans from the workplace, with or without direct employee contributions.

Other elements are omitted, but may be as important. Examples include:

Other savings

Tax system (clawbacks, credits, etc.)

Healthcare system (pharmacare, continuing care, etc.)

Family structure (#, extended family?)

Community support

Skills of people

More generally, other forms of public consumption provided by the state need to be considered.

## Parameters

- **Contributory Phase**
  - Starting point and duration of contribution period
  - Interest rate
  - Earnings growth
  - Target asset accumulation
  - Gaps in employment
- **Benefit Phase**
  - Annual benefit
  - Life expectancy
  - Retirement age
  - Interest rate during retirement phase on accumulated assets
  - Residual claim on benefit and balance

## Participation rates

- Current Weights
- Fixed Weights

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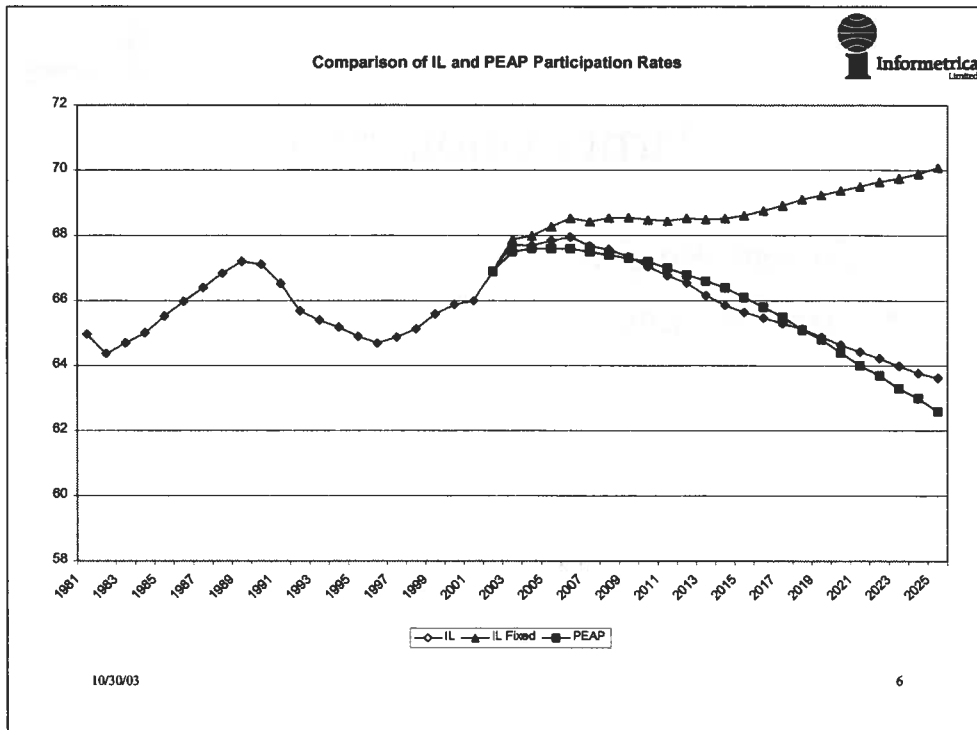
Chart –detail available. Male, female

We have reviewed the rates for young (15-19), (20-24), core (25-54), mature(55-64), elder (65+) in both models. There is little difference in patterns in these forecasts.

May want to add fixed weighted prate to explain decline in rate.

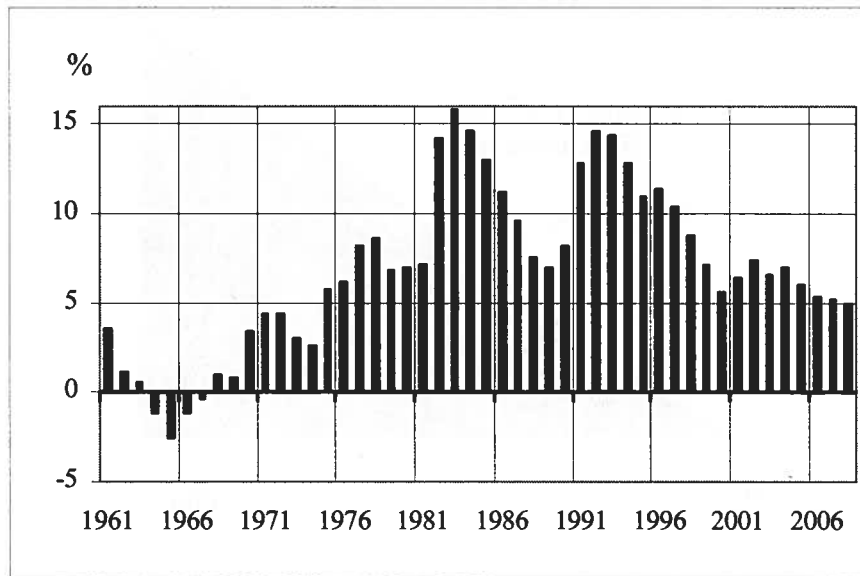
This decline in participation will raise issues about the adequacy of labour supply and suggest the need for more immigration, later retirement, more births, etc.

Don't over-react.



Fixed weight PRATE to IL line, uses 2002 weights. Even though specific rates rise in the future, the aggregate declines because of shifting weights. More people relatively are in groups with lower participation rates, particularly the 55+ groups.

# Output Gap



Size of output gap, based on a 4% unemployment rate for full employment (perhaps too high?) and application of Okun's Law to define potential.

Recall that in the 1960s we thought the unemployment rate was high because of the large share of youth in the labour force. That should lower our target today.

# Contributory Phase

Target

Earnings on Funds  
=  $f(I, \text{cumulant})$

Contributions

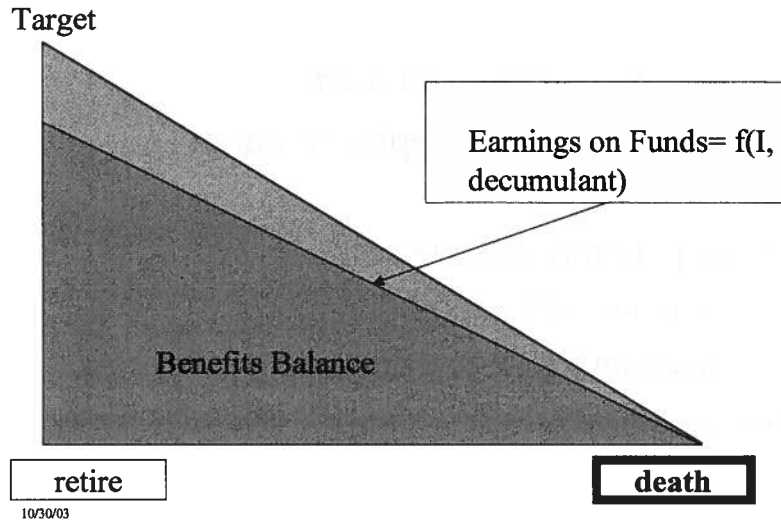
start

retire

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## Benefit Phase



If life expectancy increases are reflected as better years of health quality, then there may be offsetting reductions in health outlays by the state to offset the increased cost of PAYG parts.

## Target Income

- Social Assistance Equivalence
- CPP Benefit – 25% replacement of minimum wage
- Other pension income sources - ?
  - Maximum RPP contribution
  - Maximum RRSP contribution
- Needs-based

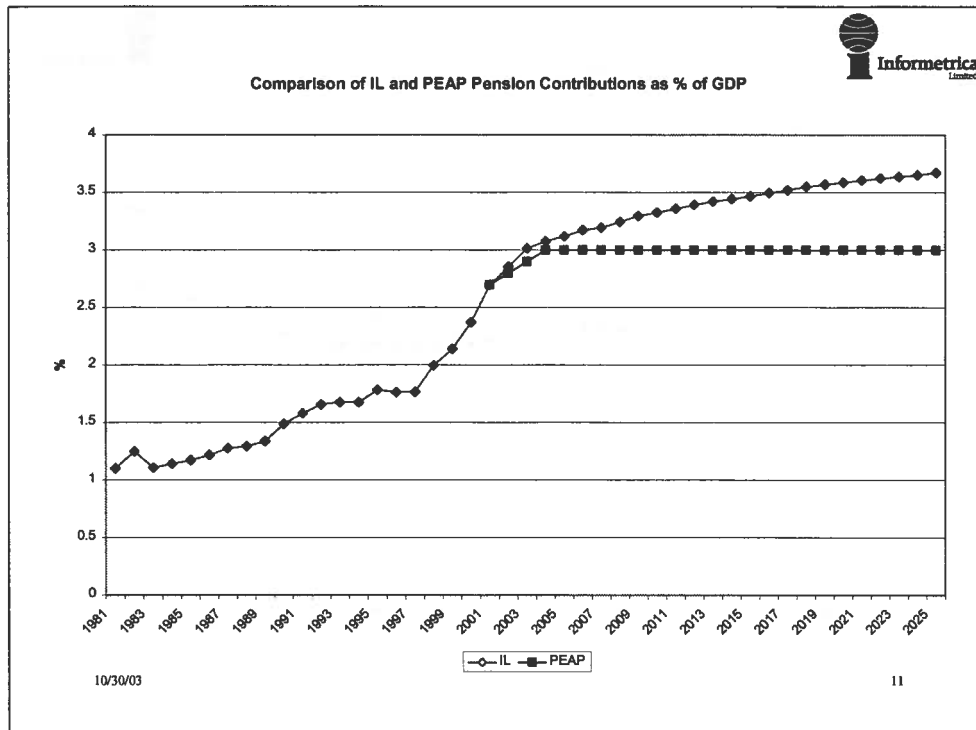
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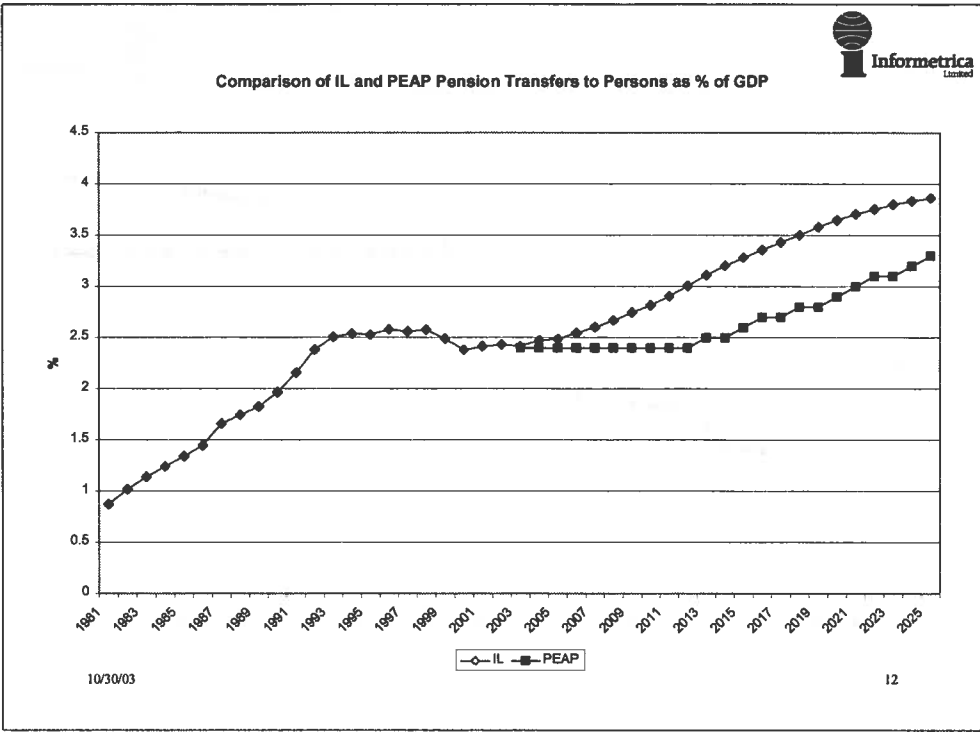
Do we distinguish income provided against needs? Should those needing continuing care receive more income in dollars or in kind? Should it depend on individual or family income situation? How extended should the family definition be?

Target income should be conducted in terms of tax-subsidized programs and public transfers. If people wish to “top up” with other form of savings or work why not?

In life-cycle models, usually start with 100% replacement, less reduced costs from not working and less need for durables replacement.

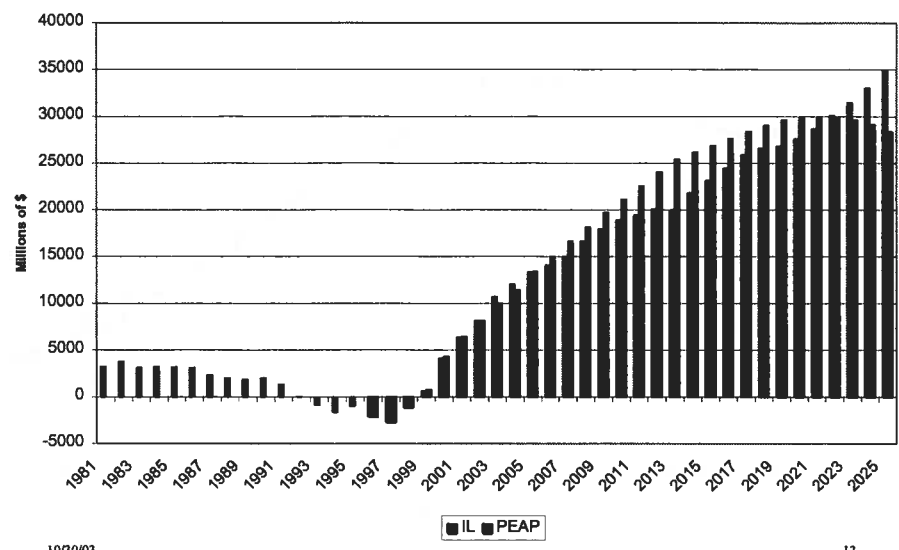


Although we have constant contribution rates from 2003 on, the wage bill grows more rapidly than GDP, raising the share of contributions slightly over the longer term.



Pension benefits rise through 2025, with no enrichment except for indexing. The number of retirees pushes up the growth.

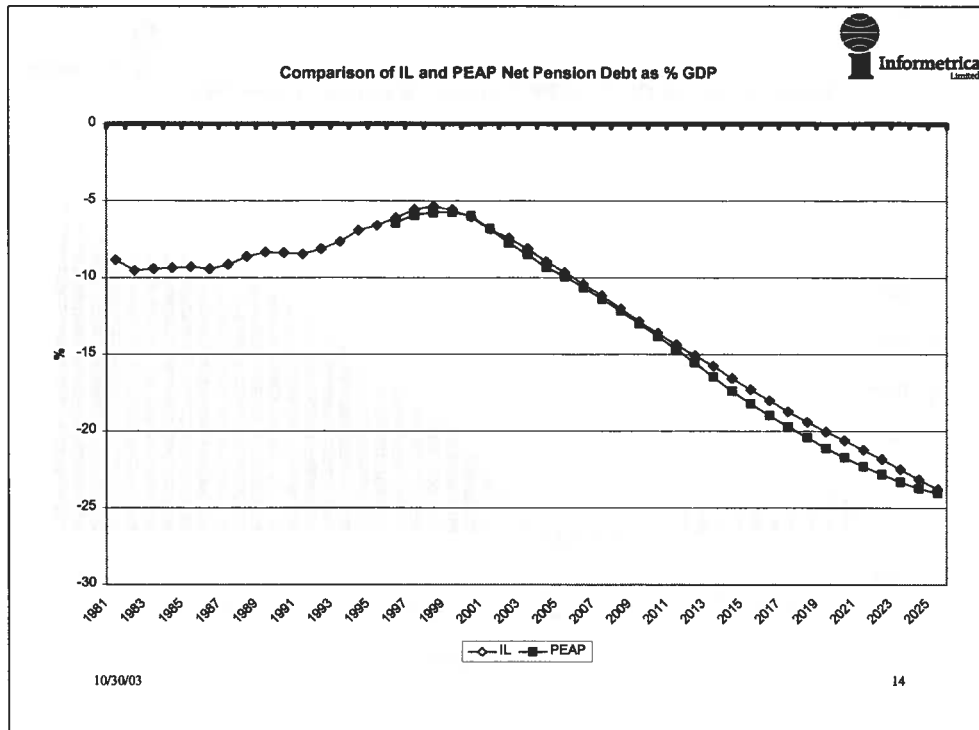
### Comparison of CPP + QPP Pension Balance, IL and PEAP



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PEAP and IL are relatively close in the fiscal surpluses accruing to the public CPP/QPP systems, with surpluses of about \$30 billion in the longer term.

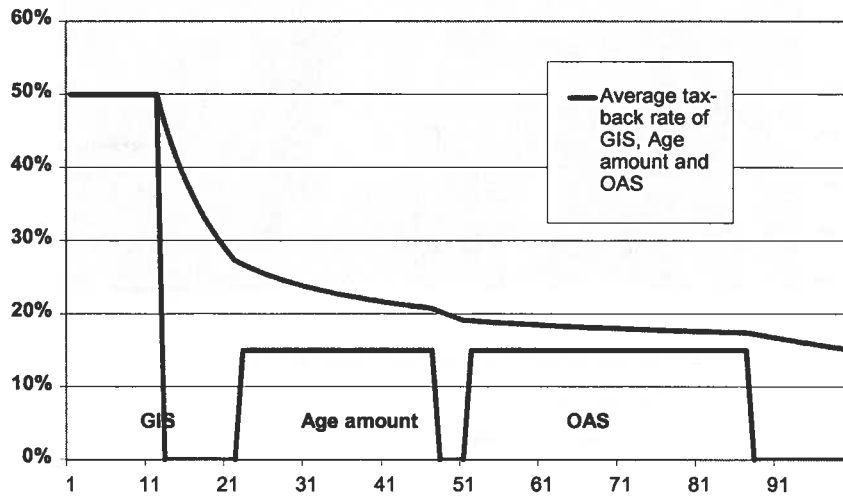


By 2025, combined assets of CPP and QPP are about \$600 billion or 25% of GDP.

This represents a significant share of the underlying assets in the economy. If equity makes up 50% then there is substantial control of publicly-held companies.

This raises issues of corporate governance, conflicts with regulatory aspects of government, and tolerance for bankruptcy as the Cleanser of Choice for corporate errors.

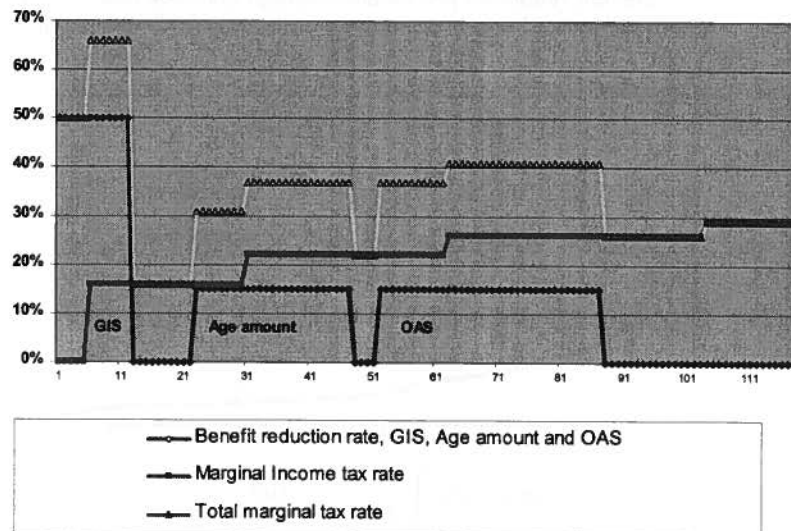
**Benefit reduction profile and average tax-back rate,  
 single persons 65 and over, income other than OAS-GIS (\$000)**



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**Benefit reduction rate and marginal tax rates,  
single persons 65 and over, income other than OAS-GIS (\$000)**



There are three significant benefits for seniors that are phased out somewhere along the income scale: GIS (maximum \$6313), the Age amount (\$3728) and OAS (\$5312).

The GIS is reduced by 50 cents per dollar of income other than OAS. This makes for a 50% tax rate on the first \$12,648 of income.

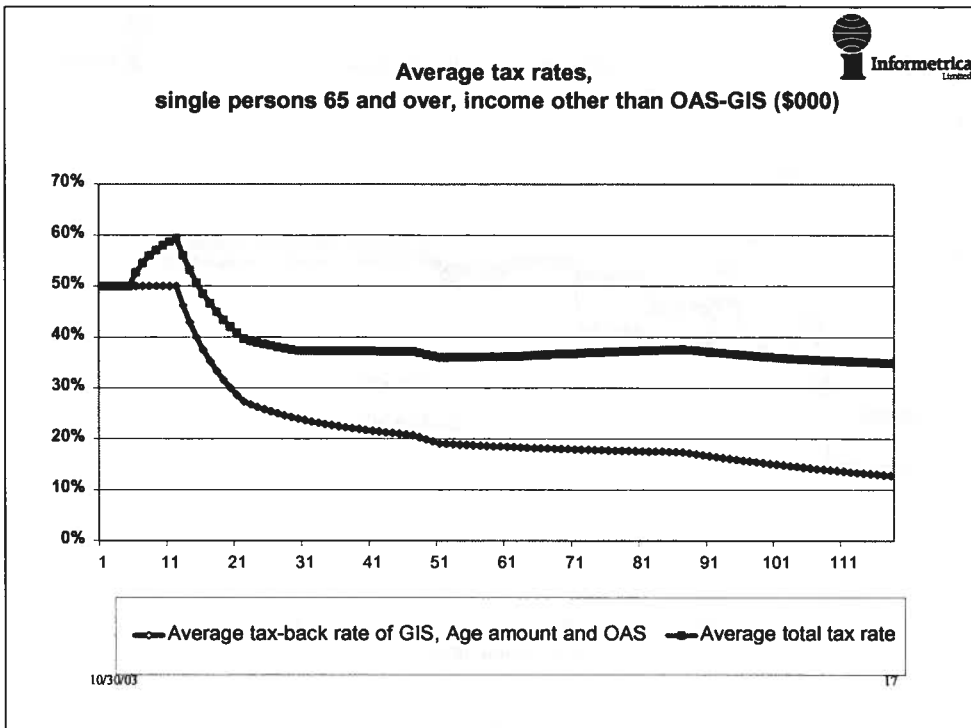
The Age amount is phased out between \$27,749 and \$52,602 of income.

OAS is repaid between \$56,968 and \$92,435 of income.

Income including OAS (but not GIS) is taxed at rates of 16, 22, 26 and 29 per cent by the federal government. Due to the personal amount and the age amount, income tax becomes payable at about \$6,000 of income other than OAS and GIS.

The tax-back rate and the marginal income tax rates combine to give an overall marginal tax rate on income other than OAS and GIS as shown, with a high of 66 per cent and a low of 16 per cent.

Provincial income tax rates and tax-back rates of senior's income and tax benefits have to be added to arrive at the overall marginal tax rate on income other than OAS, GIS and similar provincial benefits.

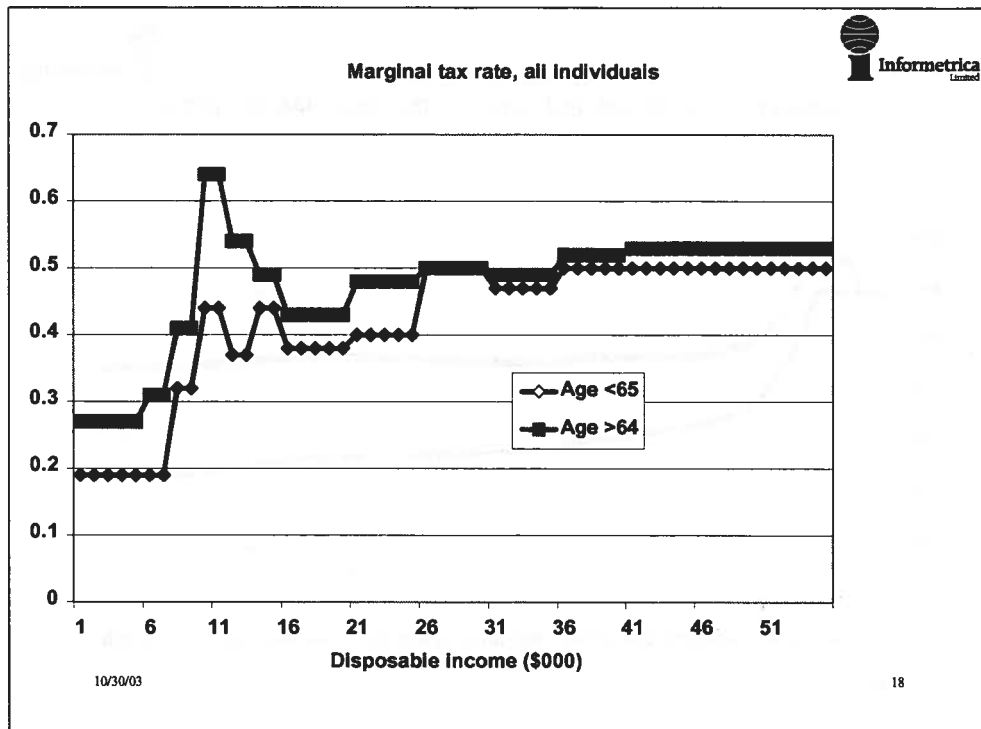


The average federal tax rates on income other than OAS and GIS are shown. Note that the overall average tax rates is in the range of 35 to 40 per cent from about \$20,000 in income.

Because three major benefits for seniors are not available in full or in part for persons with income, seniors face relatively high marginal and average tax rates. The use of tax-deferred retirement savings therefore may not be advantageous to the tax payer. For persons with lower incomes, the 50 per cent GIS reduction rate should make them look for opportunities to declare income before age 65 rather than later. They should avoid RRSPs, and collect their CPP benefits from age 60.

The CPP is only a marginal benefit for many, as contributions gather only a tax credit at the lowest marginal rate, and benefits are taxed at high marginal and average rates (assuming CPP benefits are first in line among income components, which is reasonable given their mandatory nature; anyone who works at any time has some CPP benefit, even those who have no income from other sources after retirement).

The maximum CPP retirement benefit is \$9,465. This is less than the level of income at which the GIS is reduced to 0 (\$12,648). The average CPP benefit is \$6,780 for men and \$3,888 for women.



This slide was made using the marginal tax rate (MTR) facility of SPSS/M. It gives marginal tax rates for individuals of 65 and over, and of those under 65 years of age. To calculate these rates, interest income was increased by a small amount.

The MTR of seniors is considerably higher than that of their juniors for incomes up to about \$30,000. This reflects the tax-back of GIS. Note that in this chart income includes OAS.

To refine this further, one could split the group by single and family. As well, examination of people with children would show high tax-back rates as the Child Tax Benefit is phased out.

## Challenges

- High marginal tax rates for seniors
- Grasshoppers – Ants (33%, 66%)
- Changing Nature of Work
- Rising CPP Assets
- Private Pension Failures
- More contributions needed
- Higher costs of continuing care

## Policy Ideas

- A Seniors Tax System
  - Lower marginal tax rates
  - Tax-free income from assets (e.g., municipal bonds)
- Drawdown of RRSPs when needed (lifecycle balancer)
- Replacement of RRSP Withdrawals
- Increased role of CPP to offset lack of private plan or failures (50% of average industrial wage?)

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The myth continues to be spread that you contribute when tax rates are high, and take down when they are low. This is a fraudulent claim.

RRSPs have the potential for life course balancing and should be encouraged for many purposes. The key is to get people to start early in using them. The ability to replace withdrawals could make it a more prominent saving vehicle.

Should individuals have an option to increase their CPP if corporation does not provide a pension?

## Better Macroeconomic Performance

- Higher real wages – increases contributions and personal savings
- Larger government surpluses – more “room” for enriching pay-as-you-go systems
- Higher productivity – greater capacity for all groups

## Micro Policies

- CPP contributions by anyone
- Public provision for continuing care
- More social employment of older people
- Why stop RRSP contributions at 70?
- Actuarial reduction of CPP benefits available at 60 to everyone?
- GIS available to everyone automatically?
- Index OAS/GIS for productivity gains

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Would people work longer if they could use RRSPs longer?

If a CPP benefit would be available at 60 would people still work and link it up to have adequate income, but delay triggering RPP?

Does the government want people to drop out of labour force or stay in?  
(URATE up)

Or is it really about employment up as an objective?

Failure of people to take-up OAS/GIS is a failure of government program managers. Why?