A COMPARATIVE STUDY OF DEMOGRAPHIC
AND ECONOMIC ASSUMPTIONS USED FOR
ACTUARIAL VALUATIONS OF SOCIAL
SECURITY SCHEMES

Finland, France, Italy, Japan, Québec, Sweden,
Switzerland, United Kingdom, United States

Presentation to the World Social Security Forum
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12 September 2007
Presentation Background

• Prepared by Charles Cossette, François Boulanger and Gilbert Ouellet of the Québec Pensions Board

• Originally presented at International Conference of Social Security Actuaries and Statisticians, ISSA in Helsinki, Finland on 23 May 2007

• Presenter: Jean-Claude Ménard, OSFI, Canada
CONTEXT OF THE STUDY

❖ Population aging
  - Falling birthrate
  - Increased life expectancy

❖ Subject of the study
  - Interdependence between the demographic environment and the labour market
  - Additional reference for choice of assumptions
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<tr>
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<tr>
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<tr>
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<td>Graziella Rambaldi</td>
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<tr>
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<td>Yoshihiro Yumiba</td>
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<td>Sweden</td>
<td>Nils Holmgren and Lena Lundkvist</td>
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<td>Switzerland</td>
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<td>United Kingdom</td>
<td>James Thompson</td>
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<tr>
<td>United States</td>
<td>Alice Wade</td>
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OUTLINE

- Demographic environment
- Participation in labour market
- Other economic variables
DEMOGRAPHIC ENVIRONMENT

Total fertility rate projections, 2005-2030

Note: Data for Finland and France are the same.
DEMOGRAPHIC ENVIRONMENT

Projected net migration as a percentage of the population, 2005-2030

- UK
- Québec
- Finland
- France
- Sweden
- Swiss
- Italy
- USA
- Canada
DEMOGRAPHIC ENVIRONMENT

Projection of life expectancy at age 65 for men, 2000-2030

- United States
- Italy
- Switzerland
- Sweden
- France
- Finland
- Quebec
- United Kingdom
- Japan

Canada

- 2000
- 2000-2010
- 2010-2020
- 2020-2030
DEMOGRAPHIC ENVIRONMENT
Projection of life expectancy at age 65 for women, 2000-2030

- United States
- Italy
- Switzerland
- Sweden
- France
- Finland
- Quebec
- United Kingdom
- Japan


Canada
DEMOGRAPHIC ENVIRONMENT
Changes in the proportion of population aged 65 and over (in %)

- United States
- Italy
- Switzerland
- Sweden
- France
- Finland
- Quebec
- United Kingdom
- Japan
- Canada

- 2005
- 2010
- 2020
- 2030
DEMOGRAPHIC ENVIRONMENT

Changes in the working-age population (ages 20-64) compared to 2005 (2005=1.0)
PARTICIPATION IN LABOUR MARKET
Activity rates for men aged 55 to 59 (in percentage)
PARTICIPATION IN LABOUR MARKET
Activity rates for men aged 60-64 (in percentage)
PARTICIPATION IN LABOUR MARKET
Activity rates for women aged 25-54 (in percentage)
PARTICIPATION IN LABOUR MARKET
Difference in the activity rates of men and women (aged 25-54) (in percentage points)
PARTICIPATION IN LABOUR MARKET
Projection of average annual employment growth

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PARTICIPATION IN LABOUR MARKET

Changes in the number of contributors compared to 2005
(2005=1.0)
OTHER ECONOMIC VARIABLES

Average inflation rates for the period 2000-2005 and projected inflation rates for 2006-2030

For France, data is only available for 2000-2005.
OTHER ECONOMIC VARIABLES

Average real rate of increase in employment earnings
CONCLUSION

- Significant ageing of the population
- For most of the participants, between now and 2030, a stagnation or reduction in the labour force
- Most project a stability in participation of workers aged 55 to 64
- Difference in participation between men and women will continue to decrease
- Low rates of unemployment and job creation expected
- Low inflation will continue
- Higher real rate of increase in salaries is expected
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Spasibo  спасибо

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