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The New Welfare: The Counter-Ageing Society

**“Lengthening of Life-cycle, Employment,
Pensions and Health”**

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Layout & Distribution: Valéria Kozakova

Health and ageing : The case for Long-Term Care

Philippe Trainar

A. Health and ageing ?

B. What is long term care ?

C. What perspectives for LTC insurance ?

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A. Health and ageing

1. Health and ageing
2. Health expenditures and ageing

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1. Health and ageing

- ▶ Elderly are less healthy than younger people :
 - *A cohort effect : older cohorts benefited from less care when younger*
 - *An age effect : health is deteriorating with oldness*
- ▶ New cohorts of elderly are more healthy than older one
 - *They have benefited from better medical care*
 - *They have enforced more healthy behaviors*
- ▶ Nevertheless younger people feel in poorer health
 - *A subjective feeling : more difficulty with physical tasks + more pain*
 - *An objective effect of early retirement*
- ▶ Trends for the future are less optimistic than for the past
 - *Sum of potential of risk behavior factors is becoming negative because of obesity (risk of a 0,4 year fall in longevity over the next 30 years)*
 - *Rising psychological problems and continuing early retirement effects*

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Changing behaviors and life expectancy

behavioral factors	Evolution in USA over 30 years	Increase in life expectancy
Education	-	+ 0,2 year
Smoking	- 40 %	+ 0,8 year
Drinking	- 40 %	+ 0,1 year
Blood pressure	- 66 %	+ 0,6 year
Cholesterol	- 33 %	+ 0,2 year
Obesity	+ 40 %	- 0,3 year
TOTAL	-	+ 1,4 year

Source : Cutler, Glaeser & Rosen (2007)



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- ▶ Nevertheless younger people feel in poorer health
 - A subjective feeling : more difficulty with physical tasks + more pain
 - An objective effect of early retirement
- ▶ Favorable mortality trends of the past may be reversing in the future
 - Risk behavior factors may turn negative because of obesity (potential fall of 0,4 year in longevity over the next 30 years)
 - Rising psychological problems and continuing early retirement effects



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Effects of earlier complete retirement

Functions	Deterioration in USA
Mobility	- 23/29 %
Daily activities	
Illness conditions	- 8 %
Mental Health	- 11 %

Source : Dave, Rashad & Spasojevic (2006)

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2. Health expenditures and ageing

- ▶ Heterogeneous national context
 - Difference in health system (government or private one)
 - Difference in health organization (Insurance, HMO etc.)
- ▶ Some common features
 - Government health expenditures grew 2 times faster than GDP
 - Growth in real benefit levels explains the lions share : 90 %
 - ageing explains a marginal share of trends & national differences
- ▶ But diverging trends
 - Expenditures grew 1,4 times faster in Japan - 2,4 times faster in USA – 2 times faster in Germany
 - ageing explains 0,5 to 2,0 % growth gap per year a small fraction of real benefit growth but a larger fraction of real benefit growth gap over GDP



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Trends in 10 OECD countries over 1970-2002

% Growth	GDP	Benefit	Ageing	% total	% gap
Australia	3,2	5,6	2,0	83	83
Austria	2,7	4,2	0,5	12	33
Canada	3,2	4,3	2,0	47	182
Germany	2,5	4,6	1,3	28	62
Japan	3,1	5,5	1,9	35	79
Norway	3,6	5,8	0,8	14	36
Spain	3,0	5,8	1,2	21	43
Sweden	2,0	2,9	0,6	21	67
UK	2,3	3,9	0,5	13	31
USA	3,1	6,2	1,6	26	52
MOYENNE	2,9	4,9	1,2	24	60

Source : Hagist & Kotlikoff (2007)



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B. What is Long Term care

1. What differentiate LTC from health care?
2. Is it a raising risk ?

1. What differentiate Long Term Care ?

- ▶ It's defined by loss of autonomy in Activities of Daily Life
- ▶ It's neither health care nor invalidity insurance even if it is triggered by similar causes, neuro-psychiatric triggers being predominant
- ▶ It combines individual, social and public patterns :
 - *Old-ageing trends*
 - *Probability of loss of autonomy among elderly population*
 - *Probability of survival when having lost autonomy*
 - *Probability (effective as well as perceived one) of family support*

Analysis grids for loss of autonomy

LTC = Inability to perform basic everyday activities to old age

Katz Scale of Activities of Daily Living		AGGIR Scale (French public sector)
US Insurers	French Insurers	
Bathing	Bathing	Severely confined or mentally impaired
Dressing	Dressing	Confined or mentally impaired
Transferring	Transferring	Many helps needed
Toileting	Eating	Loss of 1 ADL auto.
Eating		Occasional Help
Continence		Autonomous
Loss of 2 ADL auto.	Loss of 2 ADL auto.	1 of the first 4 categories

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Main material triggers of loss of autonomy

Material Triggers	% of cases
Dementia	15 - 50 %
Cancer	15 - 30 %
Cardio-vascular diseases	15 - 30 %
Other neuropsychiatric diseases	10 - 20 %
Accident	5 - 10 %
Rheumatology	2 - 10 %
Ophthalmic diseases	1 - 3 %

Total is greater than 100 % because many causes may interact



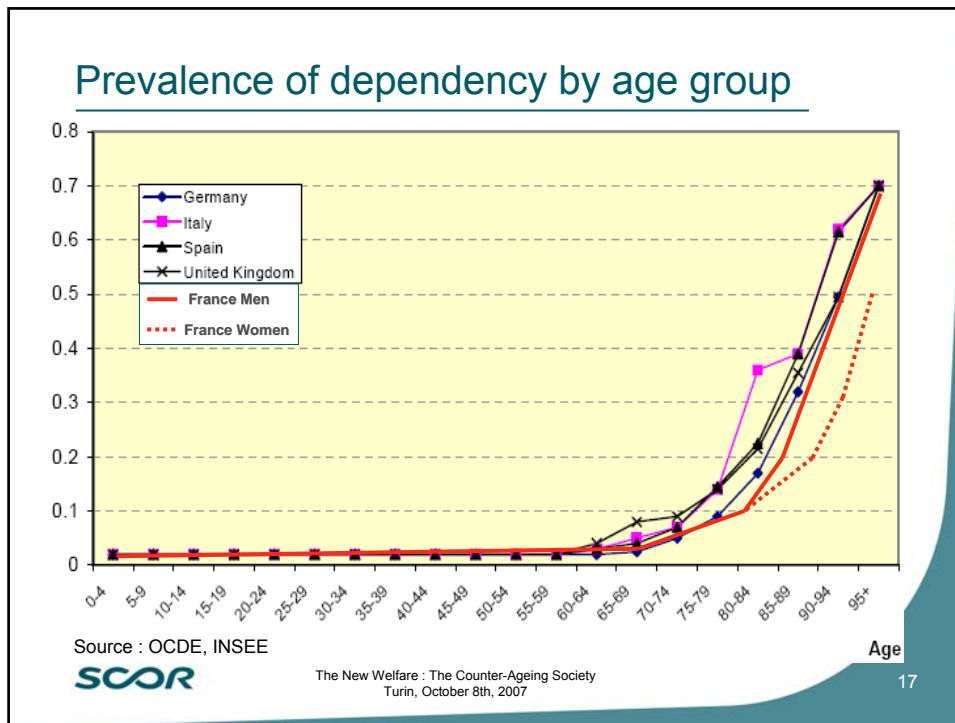
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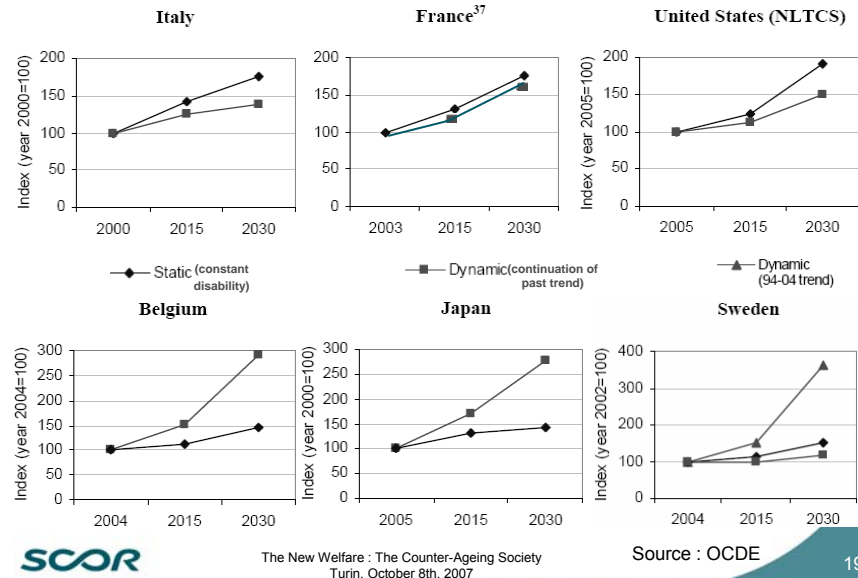
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2. Is it a raising risk ?

- ▶ A huge potential in developed countries :
 - *Old-age longevity is rising*
 - *Labor participation of young to middle-aged women is increasing*
- ▶ But brakes limit LTC insurance's expansion
 - *Trends in severe disability among elderly people are uncertain*
 - *Rising longevity of elderly men vs women reduces needs*
- ▶ Strongly different national situations with regard to LTCI trends
 - *Large growing markets : France (+15% per year)*
 - *Large decreasing markets : USA (-10% per year since 2000)*
 - *Small emerging markets : Spain, Italy, South Korea*
 - *Small stagnant markets : UK, Nordic countries and Germany*

Projected nbr of elderly ≥ 65 with severe disability



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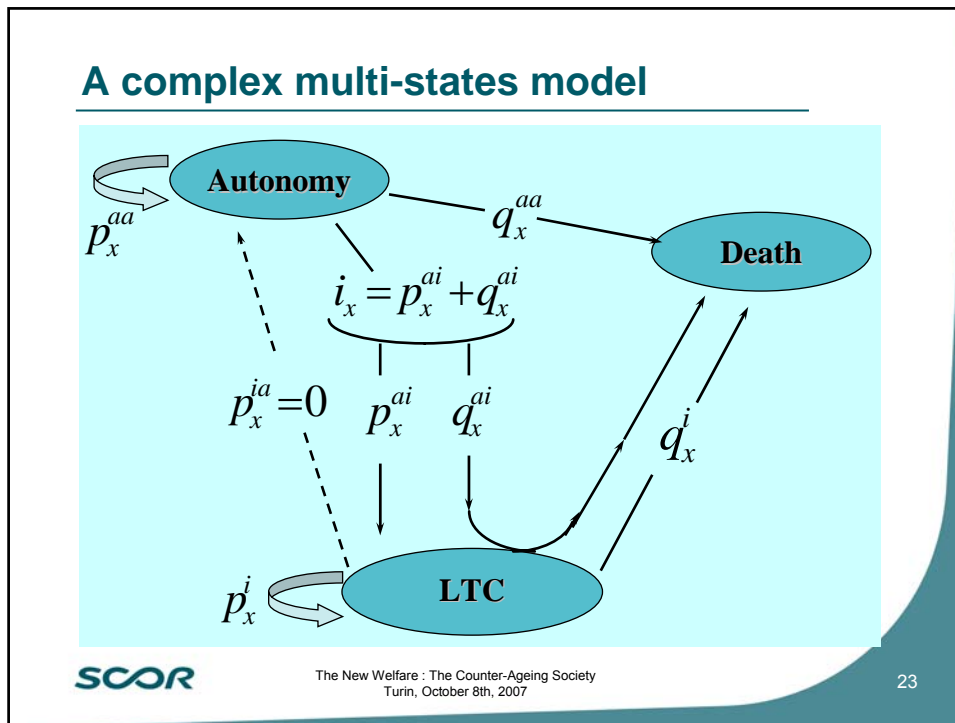
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C. What perspectives for LTC insurance ?

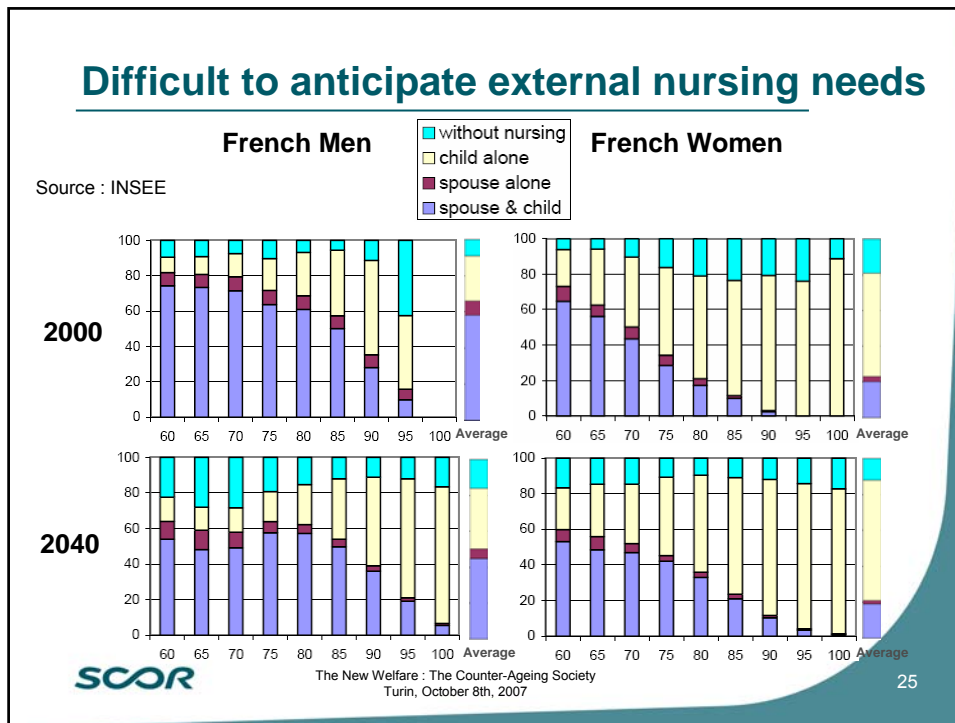
- ✓ Is it an insurable risk ?
- ✓ Is it a profitable market ?
- ✓ Is it a changing market ?
- ✓ Is it a specialized market ?

1. Is it an insurable risk ?

- ▶ A challenging combination of four kind of risks :
 - *Technical : longevity, loss of autonomy rates, survival when dependant*
 - *Market : adverse selection prevalent when buying & dropping coverage*
 - *Social : moral hazard linked to qualitative dimension of ADL evaluation*
 - *Pricing : lack of sufficient experience & uncertainty about future care costs*
- ▶ How to control for these risks ?
 - *Capital adequacy ratio : not fully reliable because of our lack of experience*
 - *Hedging with mortality risk : only partially useful for two reasons :*
 - insured populations are not the same,
 - they have quite different adverse selection behaviors
 - *In depth knowledge of all the LTC risk components : more accurate if :*
 - Moral hazard experience with invalidity and handicap is taken into account
 - A certain stabilization of the products allows enlarged experience
 - *Imposing quantitative limits to individual underwritten risks*
 - Inefficiencies of prices for controlling adverse selection & moral hazard
 - Rationale behind defined annuities (France) & expenditure ceilings (USA)



- ## 1. Is it an insurable risk ?
- ▶ A challenging combination of five kinds of risks :
 - *Technical : longevity, loss of autonomy rates, survival when dependant*
 - *Market : adverse selection prevalent when buying & dropping coverage*
 - *Social relations : survival of spouse, presence of children, neighborhood*
 - *Legal : moral hazard linked to qualitative dimension of ADL evaluation*
 - *Pricing : lack of sufficient experience & uncertainty about future care costs*
 - ▶ How to control for these risks ?
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4. Is it an insurable risk ?

- ▶ A challenging combination of five kinds of risks :
 - *Technical : longevity, loss of autonomy rates, survival when dependant*
 - *Market : adverse selection prevalent when buying & dropping coverage*
 - *Social relations : survival of spouse, presence of children, neighborhood*
 - *Legal : moral hazard linked to qualitative dimension of ADL evaluation*
 - *Pricing : lack of sufficient experience & uncertainty about future care costs*
- ▶ How to control for these risks ?
 - *Capital adequacy ratio : not fully reliable because of our lack of experience*
 - *Hedging with mortality risk : partially accurate :*
 - Mortality is a natural hedge for LTCI
 - But clients are different, with different adverse selection behaviors
 - *In depth knowledge of all the LTC risk components : conditionally accurate :*
 - If moral hazard experience with invalidity and handicap is taken into account
 - If a minimum stabilization of products' design helps enlarge tractable experience
 - *Imposing quantitative ceiling to individual underwritten risks : accurate :*
 - Inefficiency of prices for controlling adverse selection & moral hazard
 - Ceiling are present in French defined annuities & US costs' reimbursements

2. Is it a profitable market ?

- ▶ Difficult to currently assess the profitability of LTCI
 - *Mixed current performances : good in France but not in USA*
 - *Short historical experience (15 to 20 years) for a long term product*
 - *Unstable product mix, especially in USA*
- ▶ Design of profitable products : going along the learning curve
 - *Do not overestimate lapse rates*
 - *Do not underestimate adverse selection of lapses*
 - *Do not underestimate inflation in costs of care (esp. true for US products)*
 - *Implement strict claim management*
 - *Facilitate the monitoring of the many uncertainties, including moral hazard*
 - Premiums have to be revised so as to facilitate the monitoring of the risk
 - The way they can be revised have to be transparent & progressive



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3. Is it a specialized market ?

- ▶ LTCI is a specific product
 - *A complex product which needs specific knowledge*
 - *A product to be designed jointly with reinsurers because of high VaR*
- ▶ It has not to be dedicated to specific companies
 - *It is a diversification product for insurers & reinsurers*
 - *It can be designed as a joint product with other life & health products even if it has often be conceived in standalone*
- ▶ It has to rely on adequate distribution channels
 - *Financial advisors : largely unsuccessful everywhere around the world*
 - *Agents : not able to impede the decline of US market*
 - but who is responsible : agents or too complex products ?
 - *Direct sales by banks, mutual Cies, pension funds : successful in France*
 - but who is responsible : direct sales or simple products ?



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4. Is it a changing market ?

► Two competing models : Disability or Accident & Health model

Product characteristics	French products	US products
<i>Loss of autonomy</i>	3 of 4 ADLs	2 of 6 ADLs = Health
<i>Product rationale</i>	Disability : pre-defined annuities or lump sum, capital for equipment	Health : reimbursement of care costs up to a limit
<i>Clients choices</i>	Level of annuities	List of cares, daily ceiling
<i>Taxation</i>	No tax advantage	Tax qualified products
<i>Experience</i>	20 years / ~3 mio clients	25 years / ~6 mio clients

► Two evolving models :

- *French model : mainly from products covering only severe loss of autonomy to product covering intermediate loss of autonomy and offering associate services => a controlled evolution*
- *US model : several generation of products towards enlarged covers => difficulty of pricing because of the short experience of each generation*



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