EQUILIBRIUM TREND IN HEALTH AND MORTALITY COMPRESSION : THE SPANISH CASE

Rosa GÓMEZ REDONDO(1), Ricard GÉNOVA(2) and Elena ROBLES(1)

(1) Department of Sociology III, UNED, Spain.
(2) Public Health Institute, Public Health Directorate, Comunidad de Madrid, Spain.

18th REVES CONFERENCE, 2006
Amsterdam, The Nederland, 29-31 May, 2006

INTRODUCTION

Spanish population exhibits one of the **highest life expectancies** in the world, although its **mortality transition** took place later than in many other European countries.

During the last 30 years of the XXth century (1970-2001), the more important socio-demographic processes are the following:

Ageing of the population and a **high longevity**

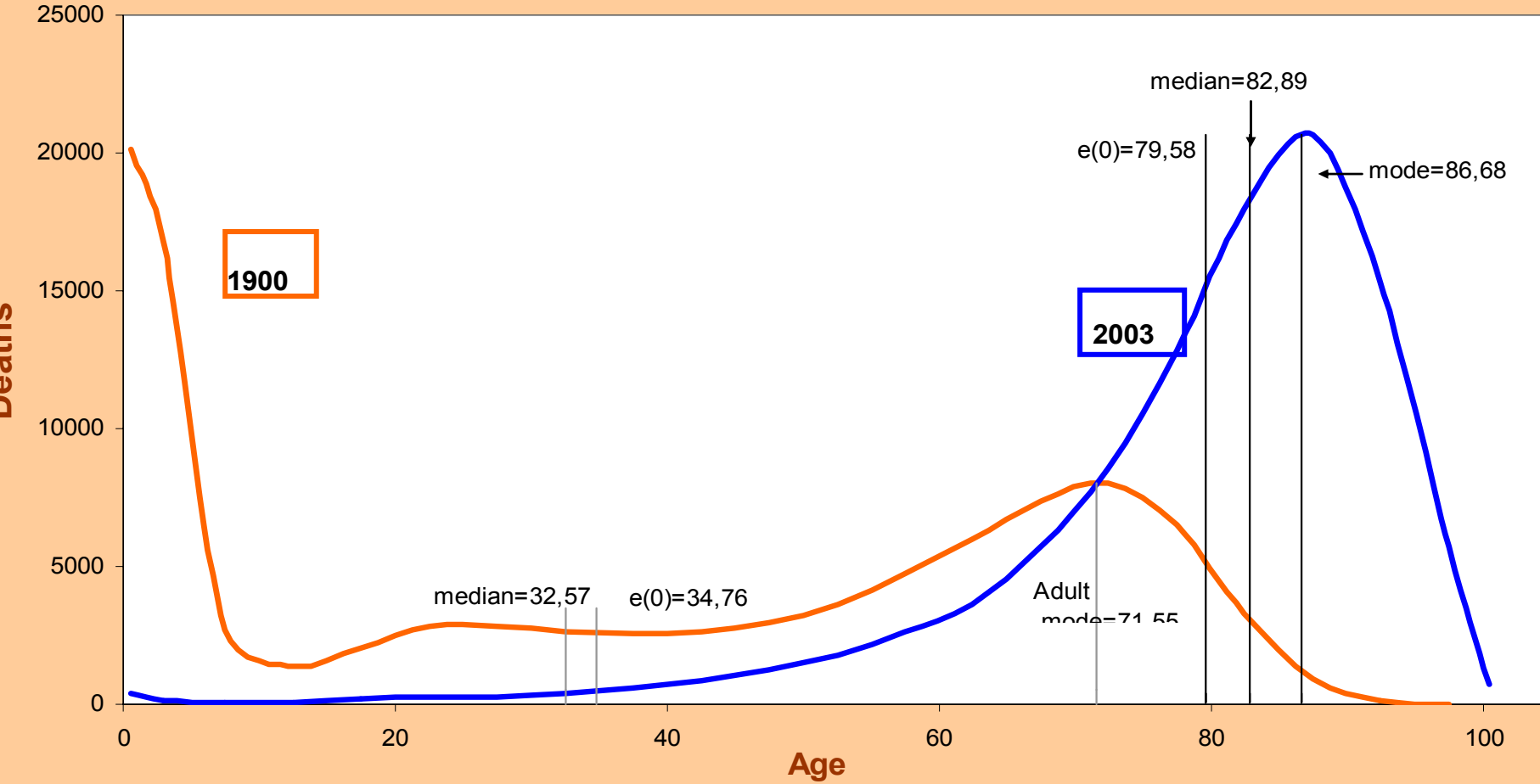
Feminization of the elderly followed by a stabilization of the difference by gender in the life expectancy

Spain is currently within the **last period** of the Health-Epidemiological Transition, and it is experiencing a slow but continuous decline of mortality until the present time

In this work we would like to present new data to contribute to the knowledge about **How to integrate the Disability Transition in the fourth phase** of the Age of Delayed Degenerative Diseases, following the theoretical objective presented recently by Robine and Michel (2004).

Sources : Official National Sources
Our study shows indicators for Healthy and Disability-free Life from **official sources at the national level for the Spanish population**.
Anyway, as **the only source that allows us the study of the evolution** of the disability-free live expectancy for Spanish population is the European Community Household Panel (ECHP), we have obtained the prevalence of disability from this source for the period 1995-2003.

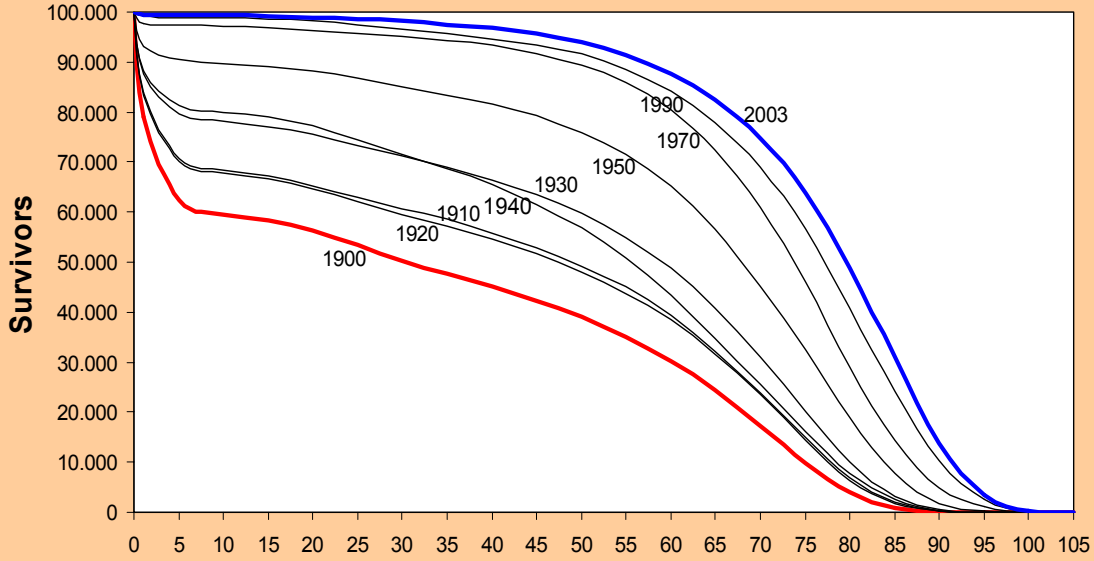
Total population. Years 1900 and 2003.



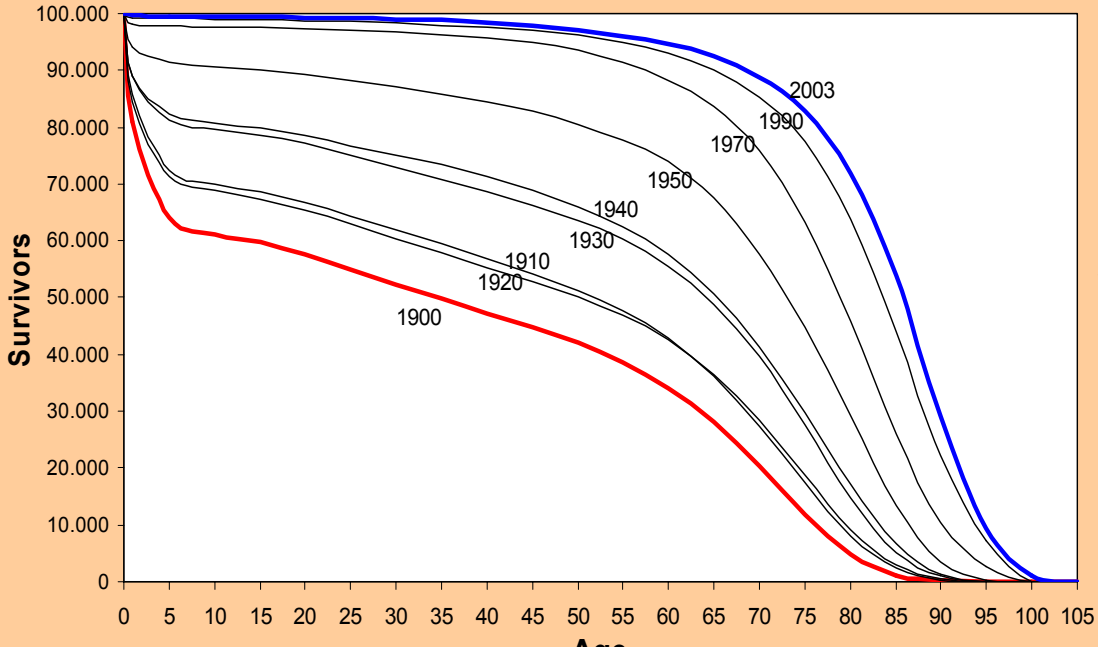
The **compression of mortality** at older ages is evident in the theoretical death series at the beginning of the XXth and XXIth Centuries and across specific indexes of longevity.

Transition from a curve with a **bimodal distribution at 1900** to the **compression of the death**, that we can see in the proximity of the life expectancy, modal age and median in **2003.**

Spain. Survivors by age. 1900 – 2003.



MEN



WOMEN

The **rectangularization** of the survivors curve is clear.
The **mortality structures** of men and women are very different.
Women has evolved faster in the epidemiological transition.

The movement of deaths towards progressively older ages
has not a fixed limit until present times.

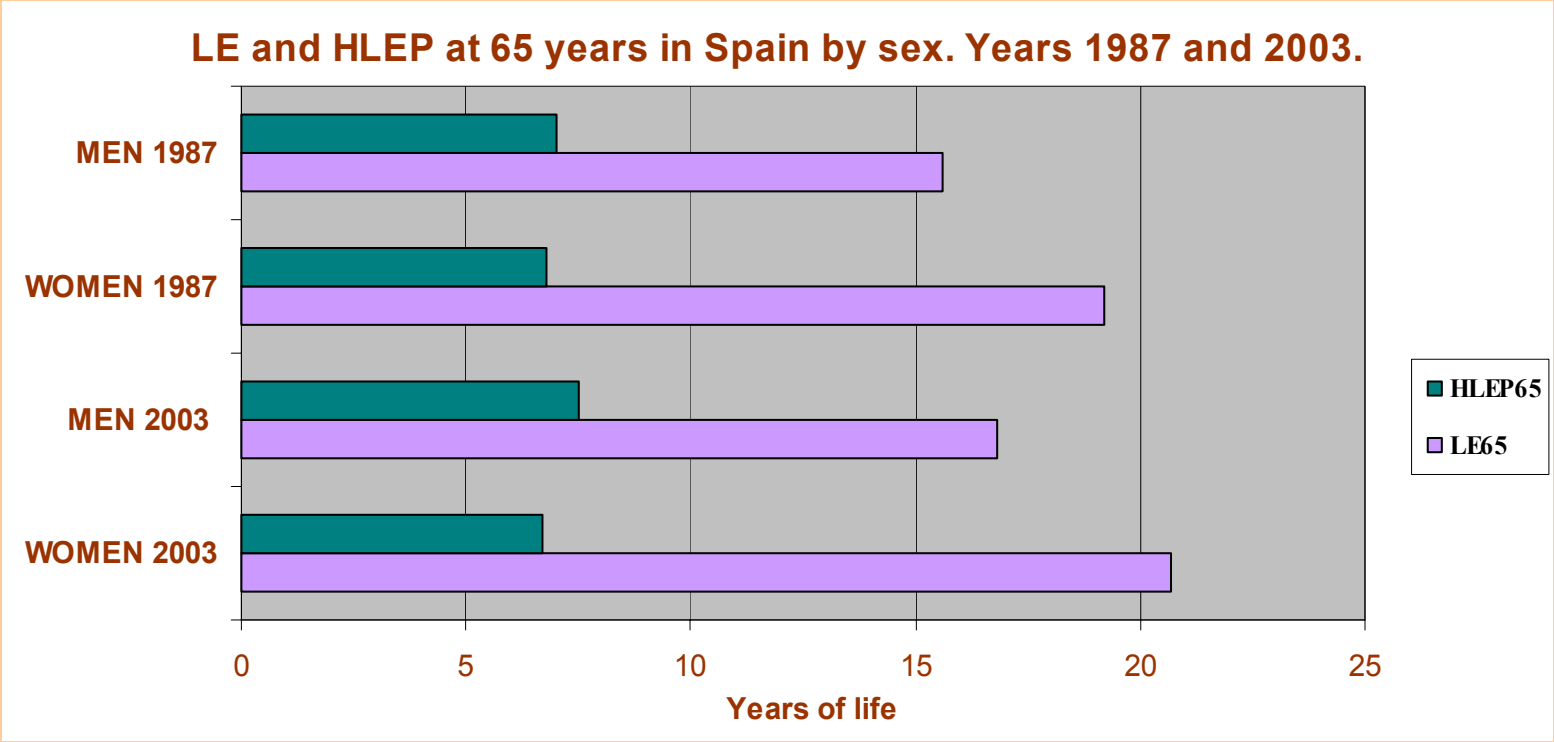
During the last three years, there is a certain **stabilization of the mortality**,
but the historic experience shows that the compression is not absolute.

HEALTHY LIFE EXPECTANCY

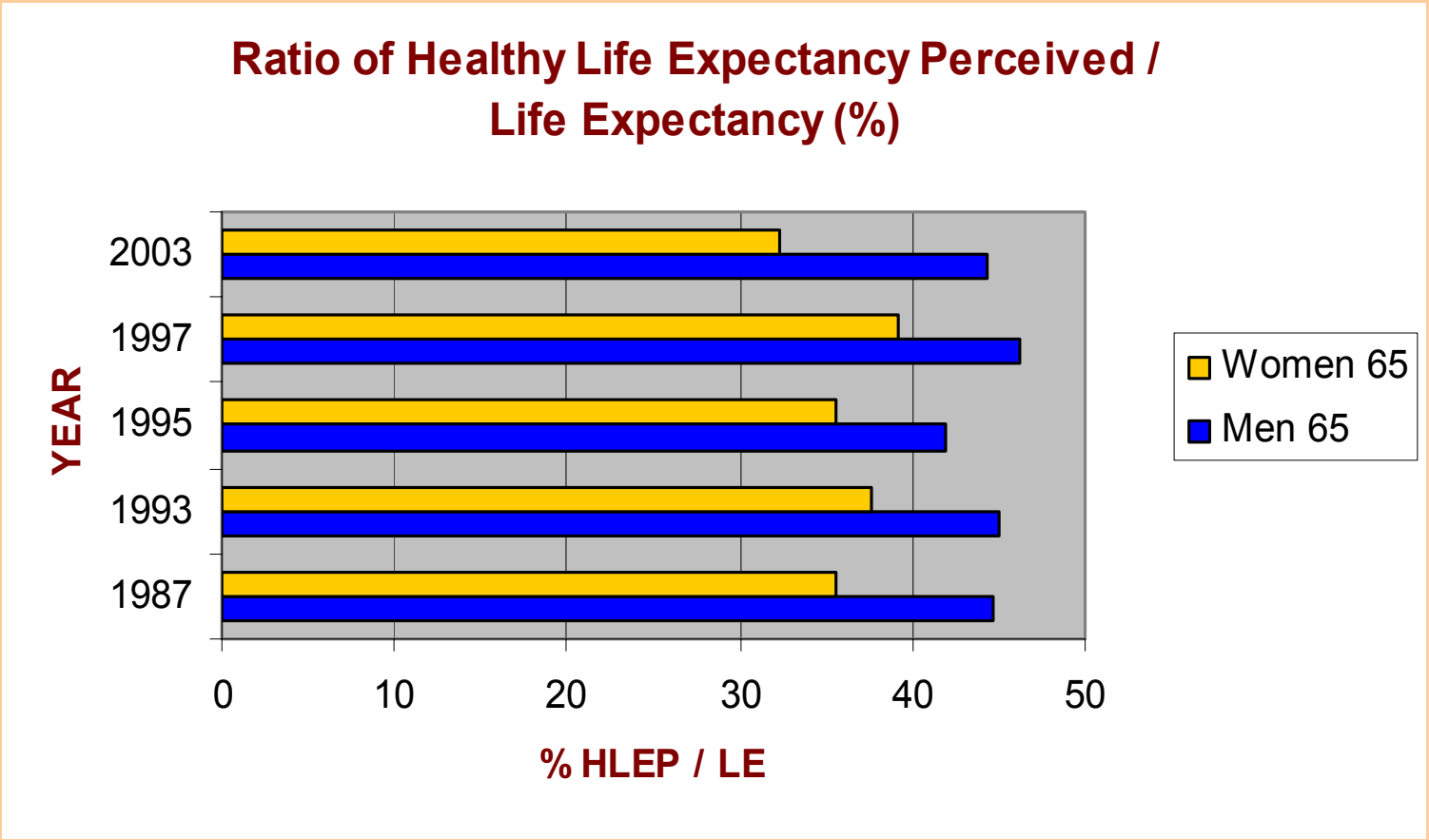
Long life does not mean quality of life during the lived years.

HLEP, healthy life expectancy (perceived), (1986-2003) by
5 National Health Surveys, ENS (Encuesta Nacional de Salud).

In 2003 the **men at 65 years old expect to live 16.80 years, while women expect 20.72**. But if the question is the health condition during these years, the numbers are reduced to around **7.5 for men and less of 7.0 for women** enjoying good health conditions.
In relative terms, this represents a 44% of total Life Expectancy for men, and even more in women that only live in a good health condition 32% out of those years.



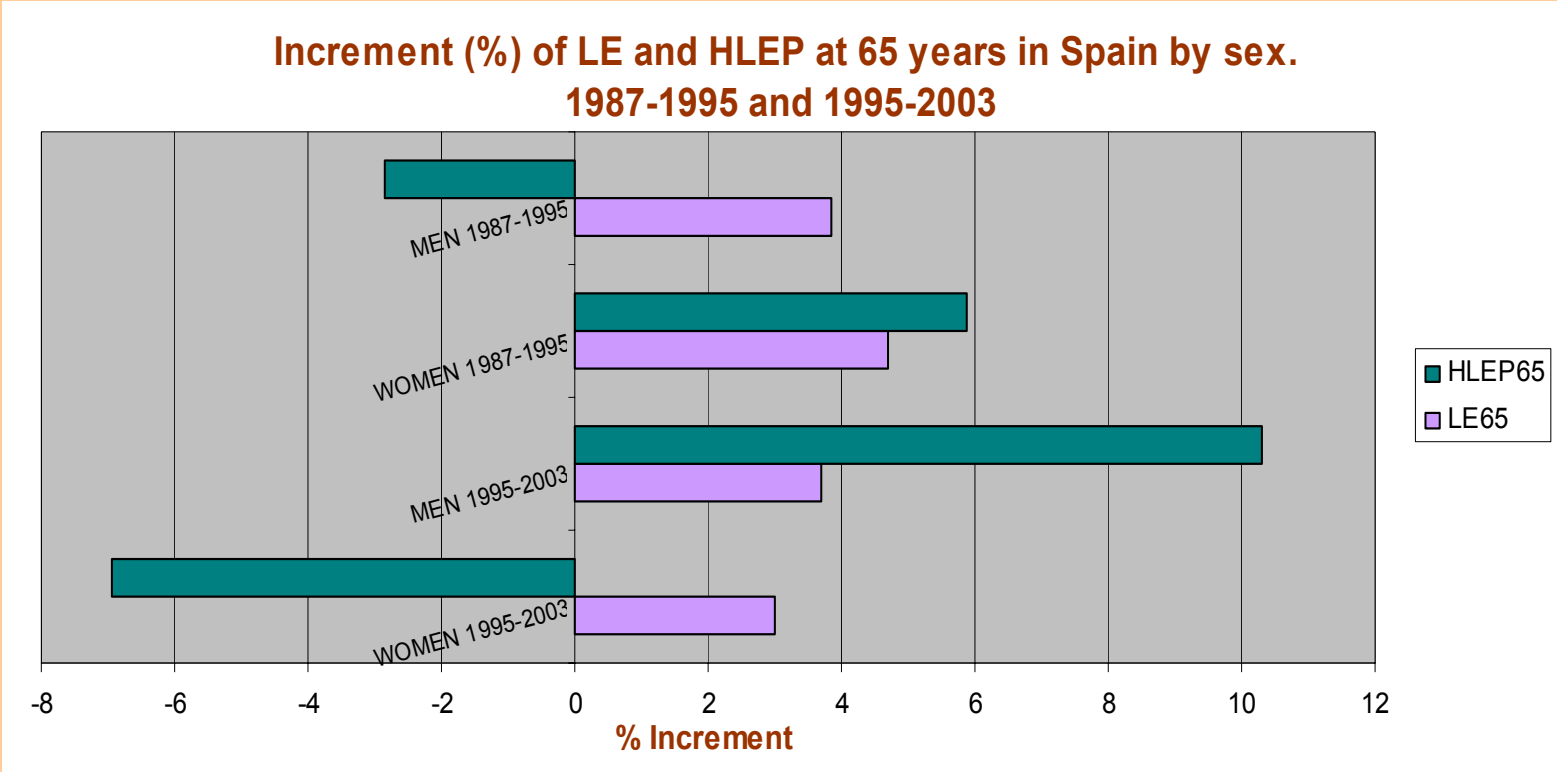
he evolution of **healthy life expectancy perceived** between the Health Surveys **1987** and **2003**,
how that the HLEP has **increased** both for men and women during the whole period.



The different surveys show a number of years of healthy life very **similar for men and women**, but due to the larger longevity of women the **ratio between HLE and LE is lower in women**.

It is important to note the **stabilization of the trend** towards a more healthy life for the period covered by our data. There are also frequent **oscillations** from one survey to the other. The trend is, thus, ill define

The observed situation in differential longevity by gender is paradoxically **inverted** when referring to inequality in health.



The rhythm of the increment of life **(LE)** in populations over 65 years as compared to that followed by the rhythm increment of health **(HLEP)** shows that there was a **small decrement** in the first part of the period for **men** (1987/1995), followed by a notable **recovery** in the second part (1995/2003).
For **women**, the results are **different**: their decrease in health in 2003 might be recovered in the next survey as it happened previously with men.

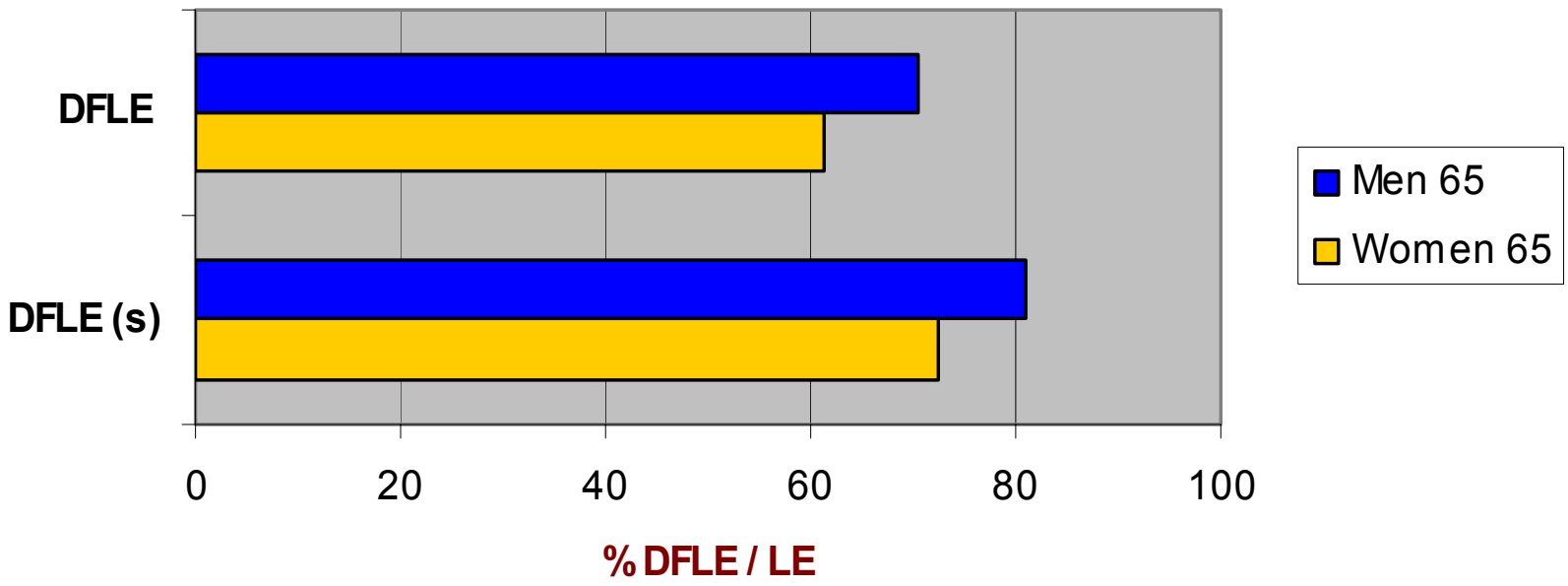
DISABILITY-FREE LIFE EXPECTANCY

Disability is a growing fact along the human life cycle.

DFLE, disability-free life expectancy from the Encuesta de Discapacidad y Minusvali
in **1999 by INE** (Instituto Nacional de Estadística).

From the specific national sources we have only access to **a single description** at
the end of the XXth century because, unfortunately,
the survey of **1999** can not be compared with a previous survey (1986)
due to methodological reasons.

Ratio of Disability-free Life Expectancy / Life expectancy (%), 1999.



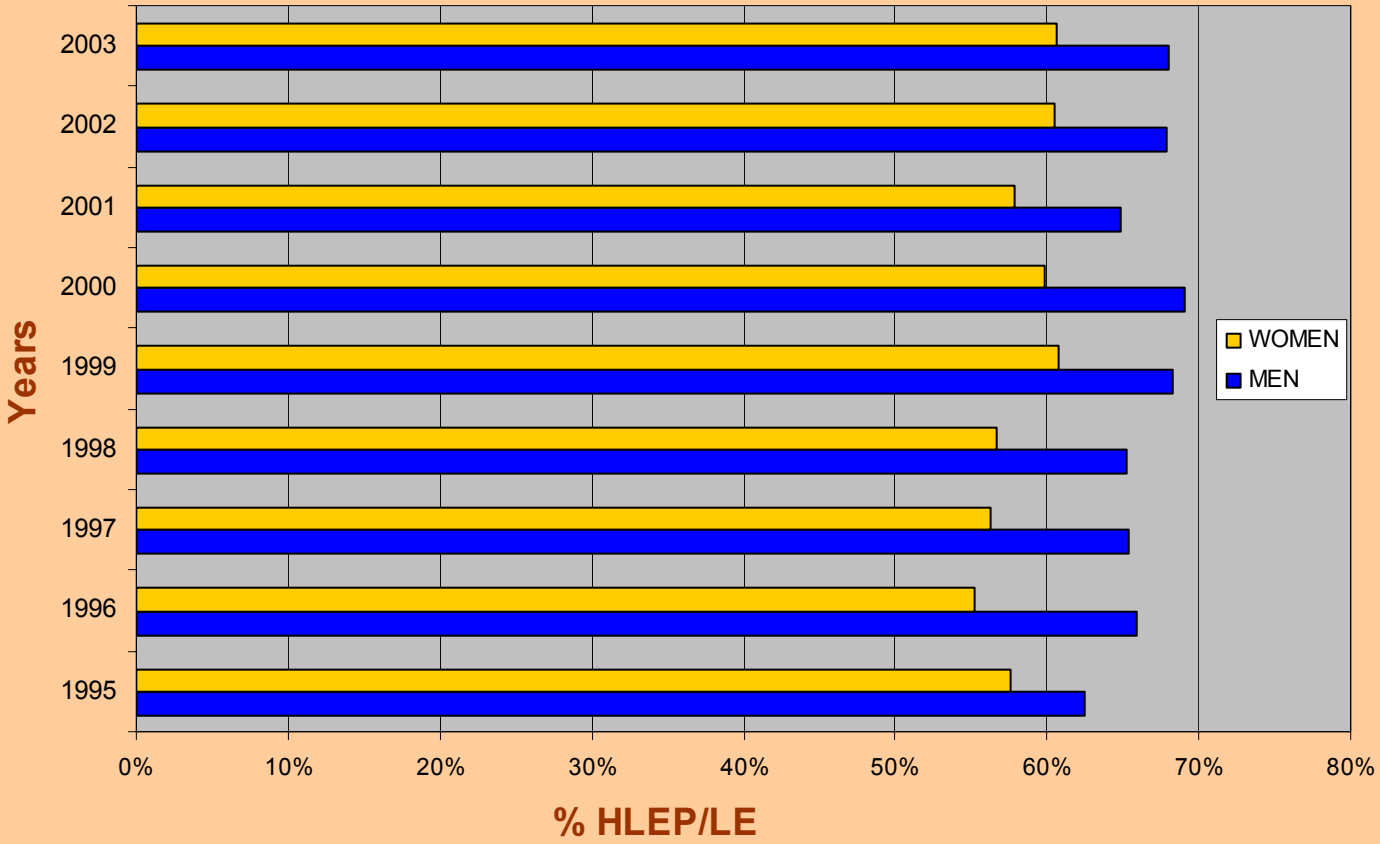
Impairment, Disabilities and Handicaps are common for both genders, but the DFLE represent a **70%** of the **men** life and only the **61%** for the **women**.

In the cases of **severe disability** the corresponding DFLE(s) is slightly higher, around **2 years more** than disability-free, both for men and women.

This is due to a **double effect:** Differential **women disability** and differential **men mortality**. Both factors contribute to a feminization of disability.

More years to live but a **lower health level** for women than for men.

Evolution of the ratio (%) of Disability-free Life Expectancy / Life Expectancy at 65 + in Spain. 1995 to 2003



volution during the last decade **of the quality of life lived by the older population** based on the data from the ousehold Panel (**ECHP**). The DFLE at 65+ years old increased one year of life during the period, with similar gains in the LE.

he evolution of the ratio **DFLE/LE** could suggest a slight increment upon arrival at 65 years old. Nevertheless, due to the cillations **from one year to the other**, it is risky to conclude an increment trend for this ratio during these years.
he main conclusion would be a **trend to equilibrium**.

DISCUSSION

After the advancements in health and longevity during the period, the **self-perceived health** has a trend towards **stability** at the present time.

From the middle **1980's healthy life expectancy** for Spaniards has **increased** slightly considering the period as a whole. Nevertheless the period **has not been homogeneous**, and during the last few years we have observed frequent oscillations at advanced ages.

The **evolution of the DFLE/LE** presents an **equilibrium trend** with a clear **feminization** of disabled population. In a recent EHEMU report, **Carol Jager** (2005) pointed out that Spain is among the group of European countries that follows a **stability trend** in the life spent disability-free.

If we consider disability (**DFLE**) as an indicator of the severity of morbidity, and the **HLEP** as an indicator of the health, the above referred oscillations in both indicators could reflect the **interplay** between the **advances in mortality** and the **control of morbidity**.

This scenario makes it possible a **stabilization of morbility and disability**, with periods of losses in health conditions within a defined context. Consequently, we could conclude that Spanish population is in a period characterized by a **dynamic equilibrium** (Manton, 1982).

The extent of this stability period will depend upon the group of changes of different nature that would eventually upgrade in the Spanish society towards climbing an additional step to reach a **new stage in the disability transition**.

……..THANK YOU FOR YOUR ATTENTION

nDx

YEAR 2004