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# Aging, Dependency, and Healthcare Expenditures: Recent Evolution in Spain

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# Outline

- Introduction
- Aims
- Concepts
- Dependence and social cohesion
- Literature review: LTC Systems compared
- The Spanish case
  - Main features
  - Dependence and other characteristics
- Discussion and conclusions

# Introduction. Justification of the study

High and increasing importance of social aims related to population aging

Demographic patterns in advanced economies

# Aims

1. Comparative analysis of dependent care schemes in a number of developed countries
2. Analysis of the Spanish dependent care system
  - i. Main features
  - ii. Relationship between dependence and other health-related or socio-demographic characteristics

## Concepts (1/2)

### □ Dependence

- WHO (2001): International Classification of Functioning, Disability and Health (ICF)
- European Council (1998): a state in which persons *“by reason of lack or loss of physical, psychological or intellectual autonomy require significant assistance or help in carrying out the usual day-to-day activities”*

## Concepts (2/2)

### □ Long Term Care (LTC)

- Services required by dependent people in order to carry out day-to-day activities
- Includes care provided in care homes, day centres and in households
- No need for highly complex technologies or special skills of the caregivers
- Quite high costs

## Dependent care and social cohesion (1/2)

### □ Dependent care as an economic activity

#### – Employment: high potential

- Social services are labour intensive sectors
- New jobs and/or emergence of illegal employment
- Liberation of workers
- Employment for groups with difficulties in entering the labour market

#### – Economic returns

## Dependent care and social cohesion (2/2)

- Protection from risks associated with aging
  - Dependence as a social risk that can be insured: demographic and social factors
  - Meeting the costs of prolonged LTC may have catastrophic consequences for families
  - Market failures: high individual and social risk, incomplete market, asymmetric information (adverse selection, moral hazard), and merit service



# LTC Systems Compared (1/2)

Country	Type	Financing	Coverage	Provisions	Informal Care†	Expenditure (%GDP)‡	Comments
Sweden	Universal	Local taxes	Partial	Home Inpatient	☺	3.8	Great geographical variation
Finland	Universal	General Taxes High co-payments	Partial	Home Inpatient Cash Sheltered housing	☺	2.9	Becoming more strict, move towards deinstitutionalisation
Norway	Universal	General Taxes	According to service provided	Home Inpatient Cash Sheltered housing	☺ ☺	2.6	
Holland	Assistance	General Taxes Private Insurance		Home Inpatient	☺ ☺	1.7	
Austria	Universal	General Taxes	Total	Cash	☺ ☺ ☺	1.3	
Switzerland	Assistance	Special programmes	Partial	Home Inpatient	☺	1.2	Great High geographical variation and high co-payments
Canada	Assistance	According to place of residence	According to place of residence	According to place of residence	☺ ☺	1.2	High geographical heterogeneity
France	Universal	Taxes and Contributions	Partial	Home Inpatient Cash	☺	1.1	
United Kingdom	Universal (national) and assistance (local)	Local and national taxes	According to amount awarded	Home Care homes	☺	1.1	Expansion of private insurance market
Germany	Universal	Contributions	Total	Home Inpatient Cash Mixed	☺	1	

Sources: Dizy, Ruiz and Fernández (2006) ; Guillén (2006) ; OECD (2005)

† Refers to the importance of family members in the care of dependents. On a scale of 1 to 4.

‡ Oliveira, de la Maisonneuve and Bjørnerud (2006a)

# LTC Systems Compared (2/2)

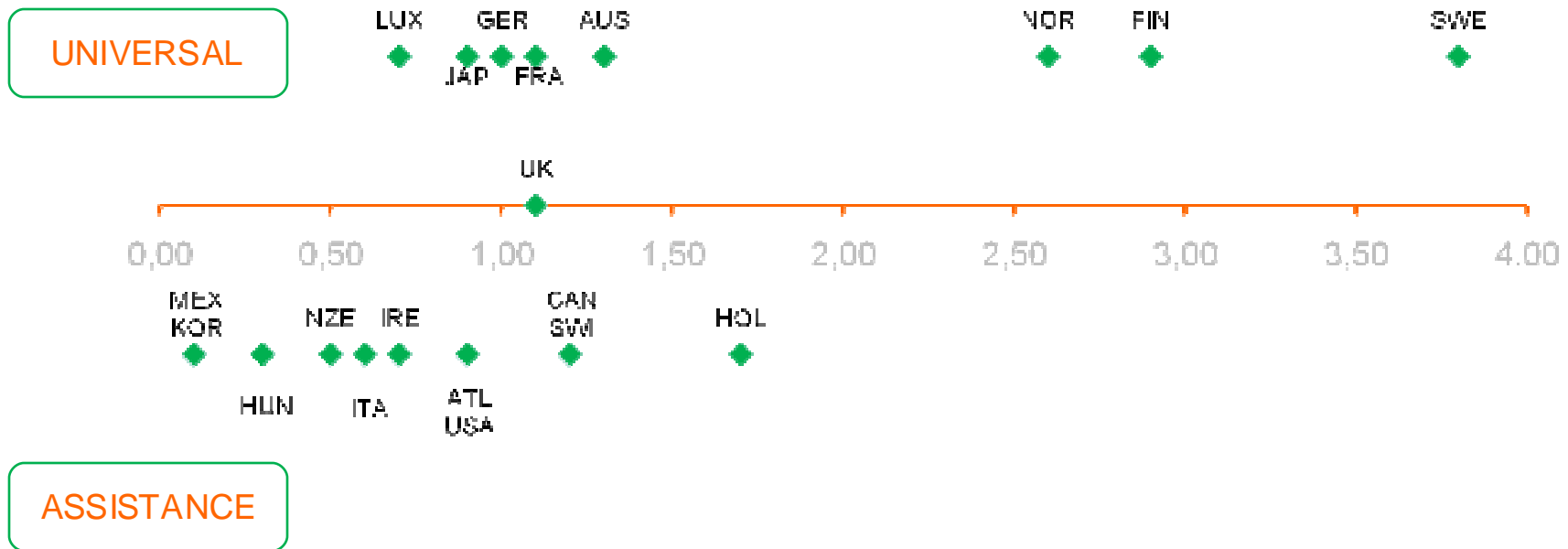
Country	Type	Financing	Coverage	Provisions	Informal Care†	Expenditure (%GDP)‡	Comments
Japan	Universal	Local and national taxes	Total	Home Care homes	☺ ☺ ☺	0.9	
Australia	Assistance	Taxes	Partial according to income	Home Inpatient Support for carers	☺ ☺ ☺	0.9	
The USA	Assistance	Public and Private	Partial	According to Programme	☺ ☺	0.9	Large private market
Ireland	Assistance	Taxes and direct payments	Partial	Home Inpatient Cash Support for carers	☺ ☺	0.7	
Luxembourg	Universal	Taxes and Contributions	Total	Home Care homes Cash Mixed	☺ ☺	0.7	
Italy	Assistance	Local and regional taxes	Partial	Home Care homes	☺ ☺ ☺	0.6	Emphasis on home care services
New Zealand	Assistance (according to requirements)	General Taxes	According to service provided	Home Inpatient	☺ ☺	0.5	
Hungary	Assistance	Contributions	Partial	Home Inpatient	☺ ☺	0.3	LTC integrated into healthcare system
Korea	Assistance (according to income)	-	Partial	Home Day centres Inpatient	☺ ☺ ☺	0.1	
Mexico	Assistance (no resources)				☺ ☺ ☺ ☺	0.1	The social security system covers some geriatric services, but most services are provided by the private market

Sources: Dizy, Ruiz and Fernández (2006) ; Guillén (2006) ; OECD (2005)

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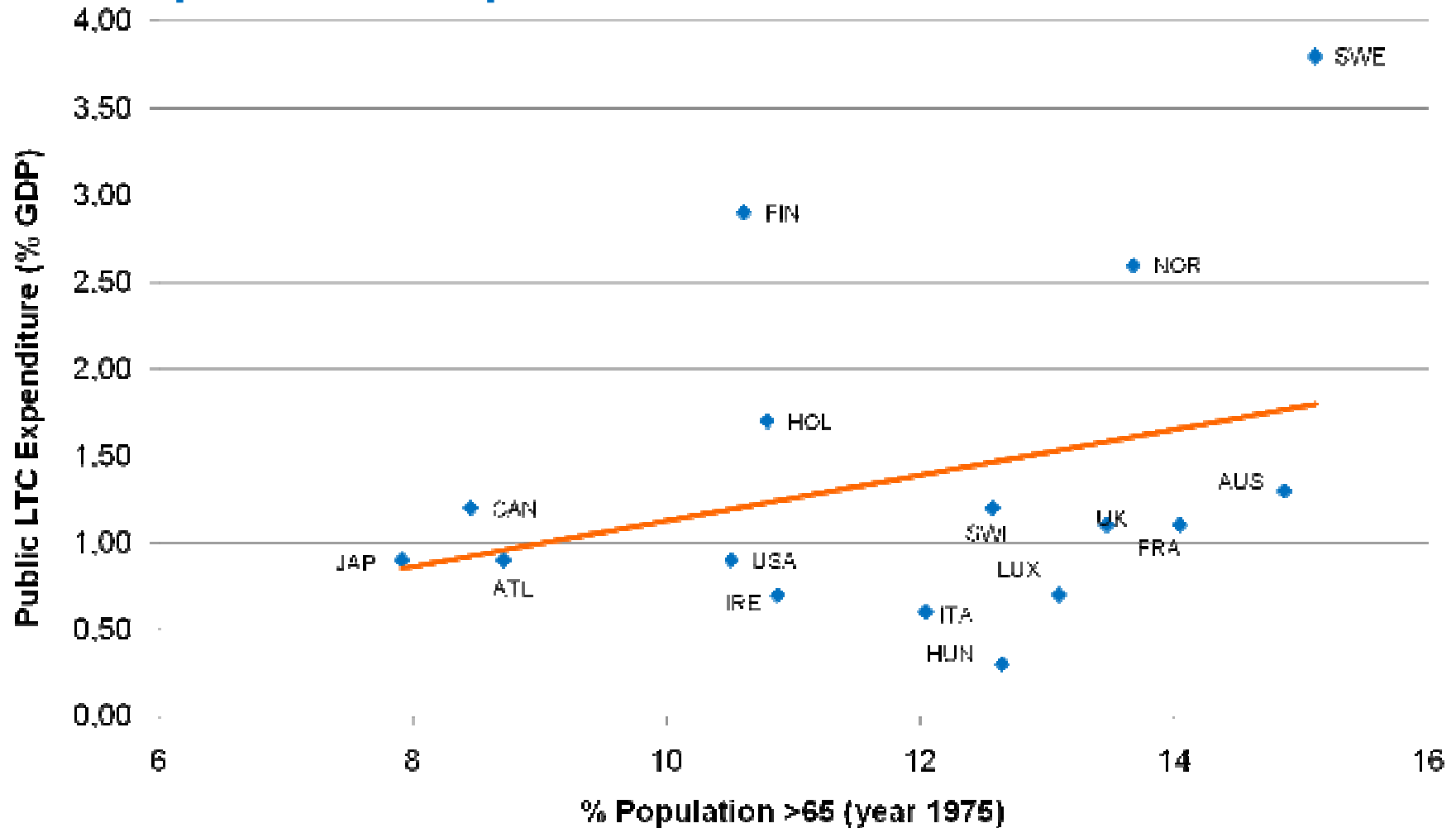
# Type of assistance and LTC public expenditure



**LTC Public Expenditure (% GDP)**

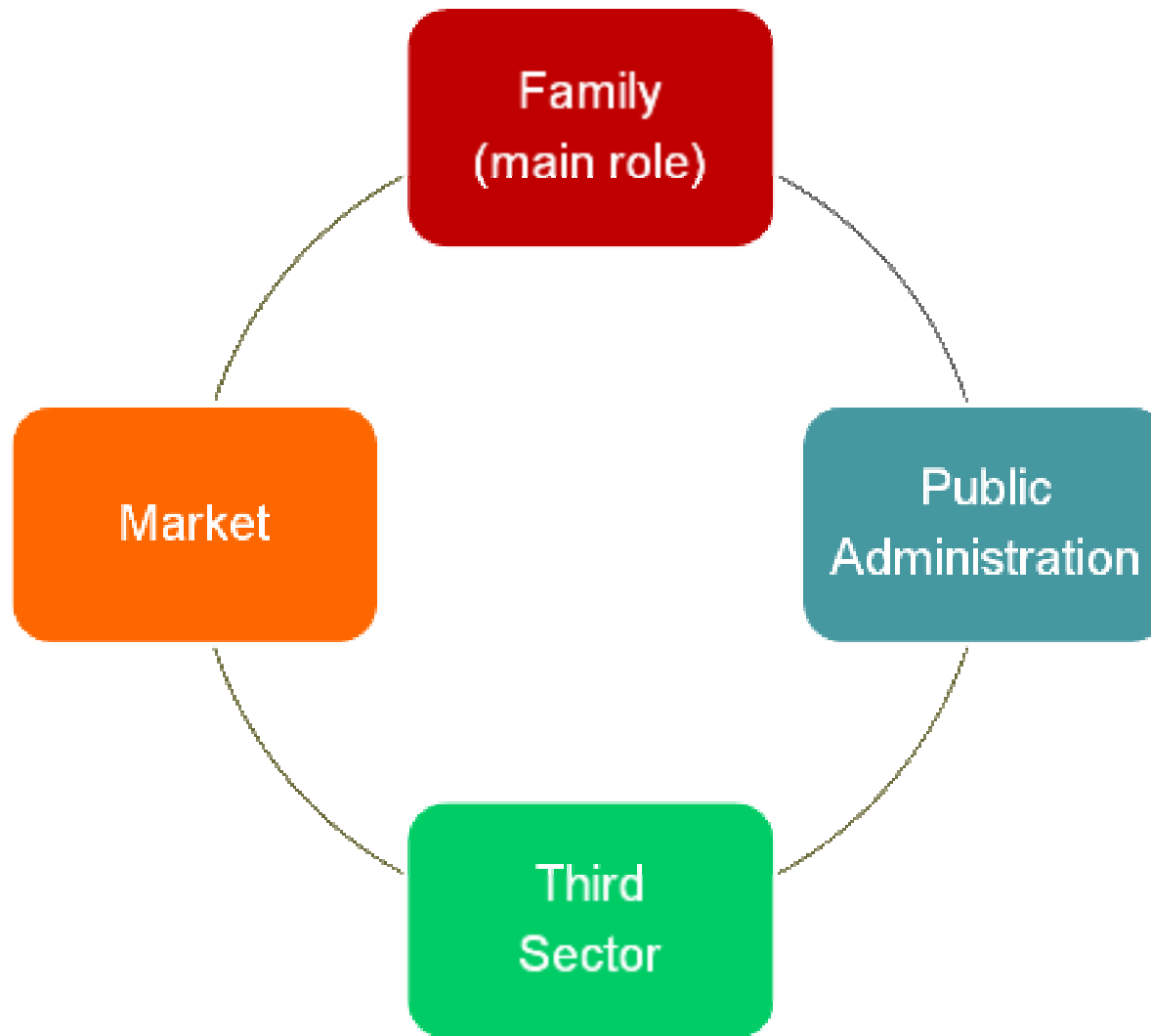
NZE: New Zealand; KOR: Korea; MEX: Mexico; GER: Germany; SWE: Sweden; AUS: Austria; UK: United Kingdom; NOR: Norway; FRA: France; LUX: Luxembourg; HUN: Hungary; SWI: Switzerland; ITA: Italy; IRE: Ireland; HOL: Holland; FIN: Finland; USA: The United States; ATL: Australia; CAN: Canada; JAP: Japan

# Aging in the past and current LTC public expenditure



NZE: New Zealand; KOR: Korea; MEX: Mexico; GER: Germany; SWE: Sweden; AUS: Austria; UK: United Kingdom; NOR: Norway; FRA: France; LUX: Luxembourg; HUN: Hungary; SWI: Switzerland; ITA: Italy; IRE: Ireland; HOL: Holland; FIN: Finland; USA: The United States; ATL: Australia; CAN: Canada; JAP: Japan

# The Spanish case



# The Spanish Case

## New Scenario

- Changes in the family model
- Incorporation of women in the labour market

## Regulation

- Act 39/2006 for the Promotion of Personal Autonomy and Care for Dependent Persons

## National Dependence System

- System for Autonomy and Dependent Care (SADC)

# Spanish SADC

- Dependent care as a subjective right
- Financing through general taxes
- Public network coordinates public and private centres and services
- Three administrative levels: central, regional and local
- Formal co-payment, in accordance with financial capabilities, the type of service provided and its cost
- Services or financial contributions
- Catalogue of priority services
  - Exceptional economic aid for care by non-professional caregivers
- Financial assistance for personal care
- Access to services will be determined by the degree and level of dependence and the applicant's financial capabilities

# Schedule for the Implementation of the SADC

- ❑ 2007 – Care for all major dependent patients begins. It is estimated that there are 200,000 people in this category in Spain.
- ❑ 2008 – Care for level 2 severe dependency.
- ❑ 2009 – Care for level 1 severe dependency.
- ❑ 2011 – Care for level 2 moderate dependency.
- ❑ 2013 – Care for level 1 moderate dependency.
- ❑ 2015 – Total implementation of the SADC



# Explicative factors of the Dynamics of Dependence in Spain

## ➤ **Methods:**

- ❑ Design: In order to quantify the link between certain factors and dependence, a retrospective, ecological and cross-sectional study has been carried out.
- ❑ Context: the whole of Spain. The subjects of the study are all Spanish residents of 65 years or over.
- ❑ Data source: the 2003 National Health Survey (ENS) which was carried out by the Spanish Ministry of Health and Consumer Affairs and the National Statistics Institute (INE).
- ❑ For the purposes of this study, a dependent elderly person is defined as any person of 65 years or over who is dependent in terms of the difficulty he or she has in carrying out 27 activities of daily living included in the ENS for individuals of 65 years or over who took part in the survey

# Explicative factors of the Dynamics of Dependence in Spain

## ➤ **Variables of study:**

- ❑ Grade of dependence: (1) no dependence, (2) mild, (3) moderate or (4) severe dependence
- ❑ Age: there are two age groups within the group of persons 65 or over – those between 65 and 79 – and those 80 or over.
- ❑ Marital status: married, single and other (separated, divorced, widowed).
- ❑ Perceived health declared in the ENS: three categories: bad/very bad, average, good/very good.
- ❑ Use of healthcare services: outpatient services (appointments), hospitalisation and medication.

# Explicative Factors of the Dynamics of Dependence in Spain: Results

Variable		Non-Dependent	Dependence		
			Mild	Moderate	Severe
N ( $\geq 65$ years old)	11.437	8,062	1,300	1,307	768
Sex	-Male	43.49	31.92	31.60	29.04
	-Female	56.51	68.08	68.40	70.96
Age Group	-65-79 years	87.39	70.92	64.80	45.57
	-80 and over	12.61	29.08	35.20	54.43
Marital Status	-Single	31.89	25.40	25.63	19.27
	-Married	37.10	30.18	28.39	30.08
	-Other	31.02	44.42	45.98	50.65
Education Level	-None/Primary	36.46	38.78	37.08	31.46
	-Secondary	56.04	57.22	57.79	64.49
	-Higher	7.49	4.00	5.13	4.05
Self-assessed Health Status	-Very bad/bad	10.16	24.33	37.38	56.79
	-Medium	39.04	49.81	46.58	33.68
	-Good/very good	50.80	25.87	16.04	9.53
Appointments	Average	0.55	0.65	0.70	0.78
Hospitalisation	Average	0.19	0.27	0.36	0.51
Medication	-None	23.73	13.08	8.88	6.64
	-Between 1 and 3	67.42	67.46	61.74	56.38
	-Between 4 and 6	8.42	17.38	25.55	30.73
	-More than 6	0.43	2.08	3.83	6.25

# Multivariate analysis (1/2)

Variables	Dependence Mild		Dependence Moderate		Dependence Severe		
	B	Sig.	B	Sig.	B	Sig.	
<i>&gt; 65 years of age</i>							
Intersection	-8.11	0.00	-10.69	0.00	-19.50	0.00	
Hospitalisation	-0.07	0.46	0.09	0.18	0.21	0.01	
Appointments	0.01	0.28	0.00	0.75	0.01	0.32	
Medication	0.17	0.00	0.27	0.00	0.32	0.00	
Age	0.08	0.00	0.11	0.00	0.20	0.00	
Health Status	Bad	1.12	0.00	1.82	0.00	2.59	0.00
	Medium	0.53	0.00	0.88	0.00	1.03	0.00
	Good	0.00	.	0.00	.	0.00	.
Sex	Male	-0.24	0.02	-0.34	0.00	-0.59	0.00
	Female	0.00	.	0.00	.	0.00	.
Marital Status	Single	-0.16	0.19	-0.08	0.53	-0.15	0.47
	Married	-0.19	0.17	-0.08	0.60	0.26	0.20
	Other	0.00	.	0.00	.	0.00	.
Education Level	Primary	0.25	0.30	0.19	0.45	1.09	0.02
	Secondary	0.36	0.18	0.02	0.94	0.38	0.43
	Higher	0.00	.	0.00	.	0.00	.

## Multivariate analysis (2/2)

Variables	Dependence Mild		Dependence Moderate		Dependence Severe		
	B	Sig.	B	Sig.	B	Sig.	
<i>&gt; 80 years of age</i>							
Intersection	-10.33	0.00	-13.72	0.00	-28.56	0.00	
Hospitalisation	0.41	0.10	0.47	0.05	0.68	0.01	
Appointments	-0.02	0.45	0.00	0.98	0.01	0.41	
Medication	0.18	0.02	0.26	0.00	0.29	0.00	
Age	0.09	0.01	0.14	0.00	0.29	0.00	
Health Status	Bad	0.92	0.01	1.59	0.00	2.88	0.00
	Medium	0.32	0.19	0.39	0.12	1.14	0.00
	Good	0.00	.	0.00	.	0.00	.
Sex	Male	0.09	0.70	-0.17	0.45	-0.84	0.00
	Female	0.00	.	0.00	.	0.00	.
Marital Status	Single	-0.75	0.01	-0.51	0.05	-0.58	0.09
	Married	-0.48	0.13	-0.09	0.75	0.14	0.70
	Other	0.00	.	0.00	.	0.00	.
Education Level	Primary	0.70	0.18	0.61	0.19	2.02	0.02
	Secondary	1.10	0.05	0.35	0.50	1.27	0.15
	Higher	0.00	.	0.00	.	0.00	.

## Discussion and conclusions (1/5)

- ❑ Aging population → increasing pressure on the social system → reforms needed
- ❑ Therefore investment in expanding the Welfare State to incorporate LTC would be highly profitable in terms of social cohesion
  - Direct and indirect jobs
  - Prevent catastrophic financial situations for people who become dependent

## Discussion and conclusions (2/5)

- There are a wide variety of proposals to address aging challenges
- However there are some common traits in the systems in place today: universality, financing through taxes and co-payments, emphasis on home care and the important role of family in LTC

## Discussion and conclusions (3/5)

- ❑ The new system in Spain matches these characteristics in many ways
- ❑ It is expected that the gradual implementation of this system will result in an increase in public expenditure on LTC (from the current 0.3% of the GDP to 1% in 2015)
- ❑ This increase in public expenditure will be compensated for through economic returns
  - Approximately 262,735 direct and 20,000 indirect full-time jobs will be created by 2010



## Discussion and conclusions (4/5)

- ❑ The bi-variant analysis shows some differences in socio-demographic variables in the different grades of dependence
- ❑ Nevertheless the logistic regression analysis shows that the only variable with a clear link to the grade of dependence is age
- ❑ One important implication of these results for the organisation of services is the weak link between the use of healthcare services and dependence, which means that differential management of both systems is adequate

## Discussion and conclusions (5/5)

- In reference to social cohesion, since dependence often causes social exclusion and consequent economic disparities, the implementation of the SADC in Spain will help reduce such disparities in the elderly population and foster the continuance of the decreasing social disparities tendency that began in the second half of the 1980s when the pension system was extended and improved



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**Thanks for your attention!**



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