

# Composite Indicators for the Family Change: 'Familism' vs 'Individualism' in the International Context



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Research project: *Family challenges in the beginning of the XXI century. The impact of family individualization on culture, fertility and social welfare (CSO2013-46440-P).*

# Objectives



- To build up some indexes on family issues from survey data at a micro level that allow us to study individual behaviours in explanatory models and compare across countries.
- To contrast these indexes with macro data at a country level, that allows us to classify the countries according this double perspective.

# Data sources



- 'Soft' data:
  - International Social Survey Programme (**ISSP**) – 2012 **Family and Changing Gender Roles IV** (previous waves will be included, when possible).
- 'Hard' data:
  - OECD Family Database / Social Spending Statistics.
  - UN Statistical Databases.
  - World Bank Databases.
  - Eurostat.
- Still important gaps in the available data, even for OECD countries (e.g. maternal employment rates for Iceland, Japan, Norway...)

# Methodology



- **Composite indicators from the ISSP microdata.**
  - People's opinions, behaviours and attitudes towards different family issues



COMPOSITE INDICATOR(S) AT THE INDIVIDUAL LEVEL

- **Objective macro data from official statistics.**
  - Indicators at a country level – what is 'really' happening



COMPOSITE INDICATOR(S) AT THE COUNTRY LEVEL

# Composite indicators from ISSP data



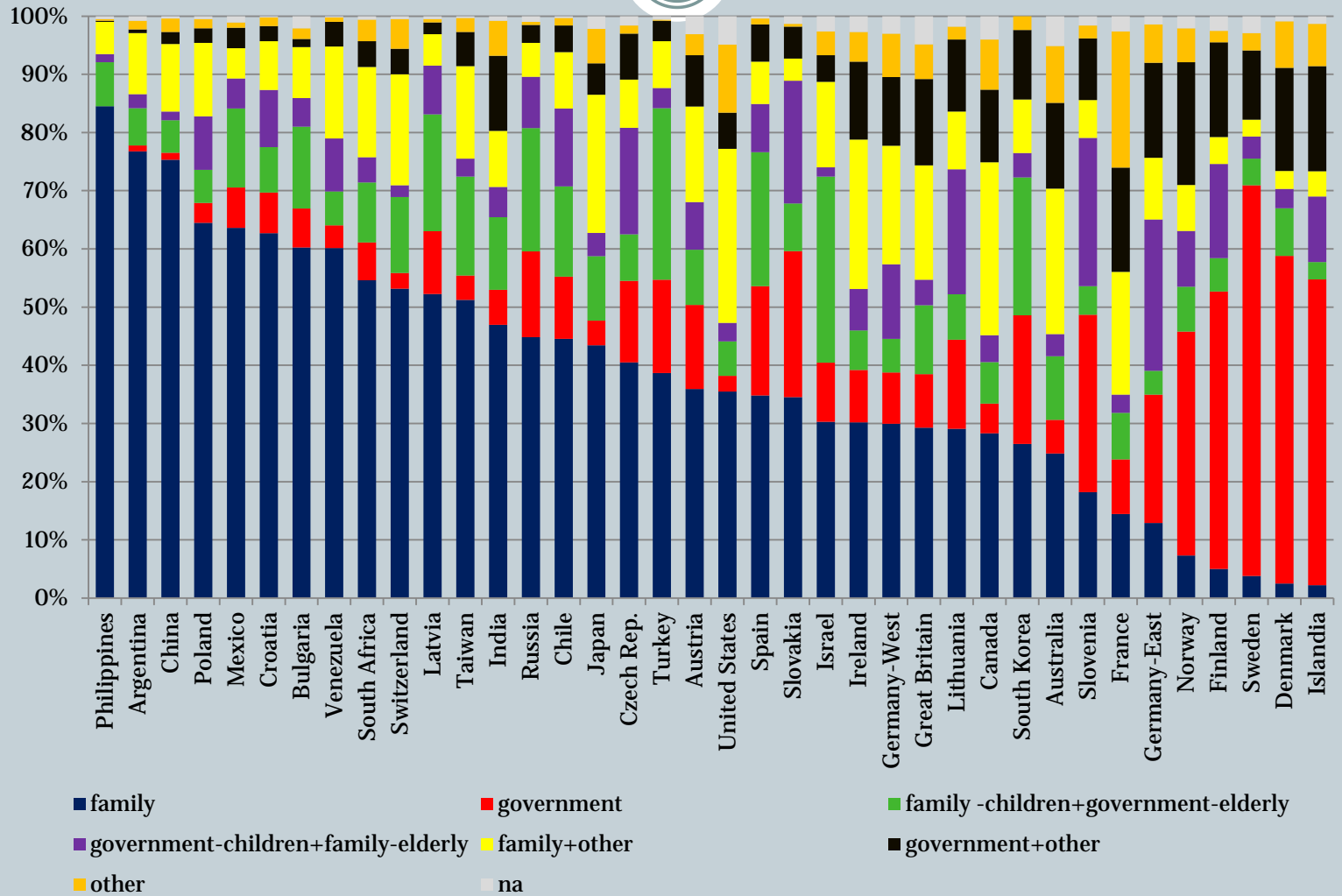
- Index for *'familism'* (care and costs)
  - Index for *'tolerance towards new family forms'*
  - Index for *'domestic tasks and family care'*
  - Index for *'decisions at home (children's education, leisure time and income administration)'*
- Index  
**'equity in the couple'**

# ISSP's composite indicators for 'familism'



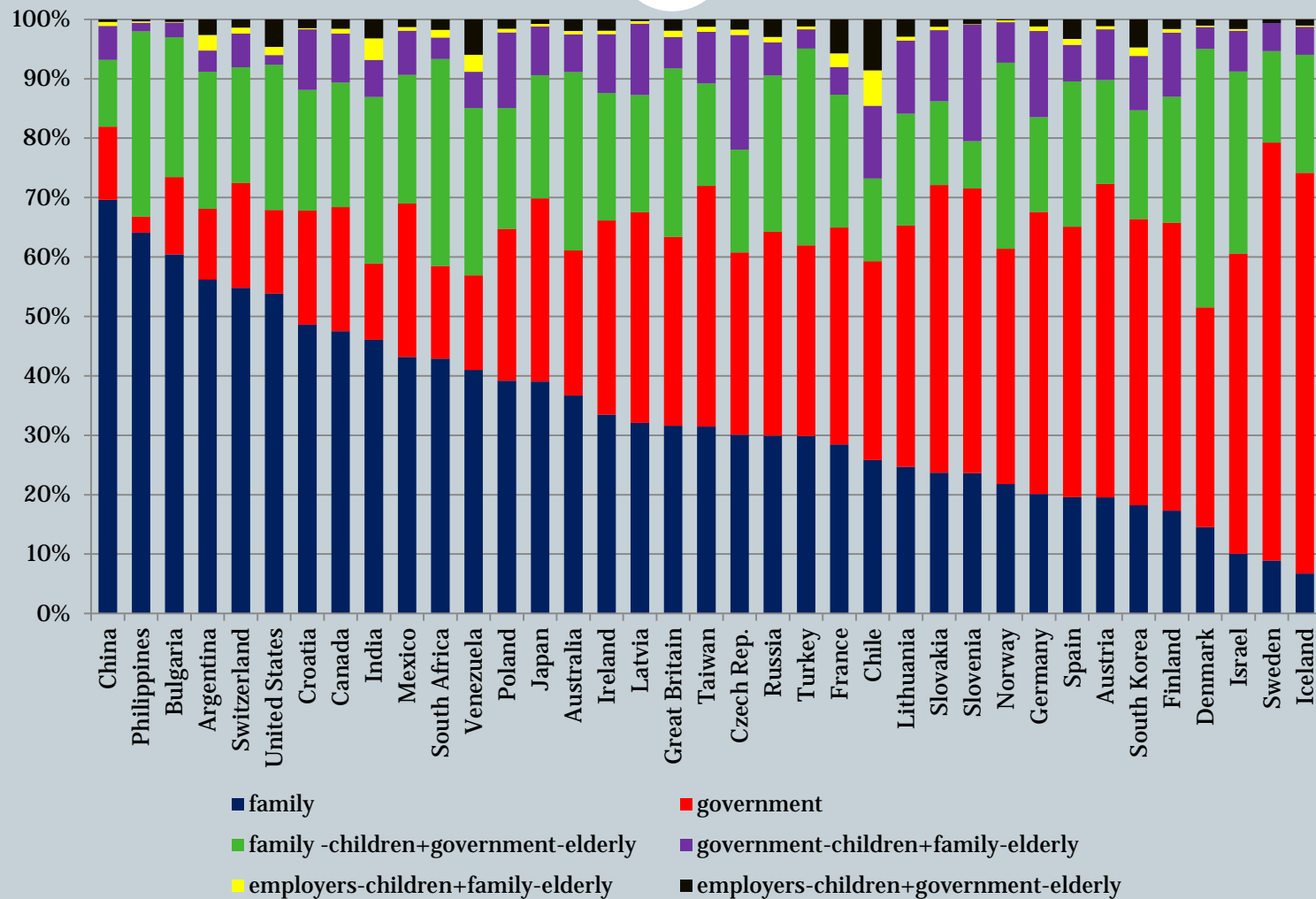
- Who should provide childcare / help to elderly people.
  - Q33. People have different views on **childcare for children under school age**. Who do you think should primarily provide childcare?
  - Q35. Thinking about **elderly people who need some help** in their everyday lives, such as help with grocery shopping, cleaning the house, doing the laundry, etc. Who do you think should primarily provide this help?
- Who should cover the costs of childcare / help to elderly people.
  - Q34. Who do you think should primarily cover the costs for children under school age?
  - Q36. And who do you think should primarily cover the costs of this help to these elderly people?

# Who should take care of the children/elderly?



Source: own elaboration from the ISSP 2012 microdata.

# Who should cover the costs?



Source: own elaboration from the ISSP 2012 microdata.



# Macro composite indicators for 'familism'



1. Average household size, 2012.
1. Labour force participation rate, female 2014.
2. Part time employment, female – 2012/13
3. Maternal employment rates by age of youngest child (0-2), 2013
4. Maternal employment rates by age of youngest child (3-5), 2013
5. Total paid leave available to mothers (Full-rate equivalent, in weeks)
6. Spending in USD PPP on children aged 0-5, 2011.
7. Proportion (%) of total public spending on family benefits and education for children aged 0-5 years.
8. Pension coverage
9. Pension spending (% GDP 2011)
10. Public spending on incapacity (% GDP 2011)
11. Employment rates (%) for women (15-64 year olds) with at least one dependent child aged 0-14

Missing data  
for many  
countries!!

Indicators are  
normalised

# Missing data...



- Some alternative sources have been searched in order to fill the gaps in the data.
- However, still many missing data... so imputation is risky (even cluster analysis is not useful since gaps sometimes affect a whole dimension).
- Three approaches are tried:
  - Factor analysis with the variables with no missing data (5 var., 29 countries).
  - Factor analysis with the countries with values in all considered variables (10 var., 18 countries).
  - Factor analysis with variables for each dimension with less missing values ( 7 var., 25 countries).

# correlation among indicators



	labour force participation rate, female 20144	part time employment, female - 2012-13	maternal employment rates by age of youngest child (0-2), 2013	maternal employment rates by age of youngest child (3-5), 2013	employment rates (%) for women (15-64 year olds) with at least one dependent child aged 0-14
labour force participation rate, female 20144	1	,296	,514*	,568*	,584**
part time employment, female - 2012-13		1	,181	,147	,033
maternal employment rates by age of youngest child (0-2), 2013			1	,529*	,749**
maternal employment rates by age of youngest child (3-5), 2013				1	,875**
employment rates (%) for women (15-64 year olds) with at least one dependent child aged 0-14					1

So, we can sacrifice some indicators... and include Sweden

\* p<0,05

\*\* p<0,01

# Minimum number of variables (5) – all countries



## Results of the factor analysis

component	total	% variance	% cumulative
1	2,184	43,676	43,676
2	1,467	29,339	73,015

	Component	
	1	2
average hh size 2009	-,652	-,650
labour force participation rate, female 20144	,199	,769
part time employment, female - 2012-13	-,204	,800
total paid leave available to mothers (full-rate equivalent, in weeks)	,856	-,282
pension coverage	,790	,234

Female labour participation

coverage

# Factor analysis with all relevant variables



Cumulative % of variance: 76.46	Componente		
	1	2	3
average hh size 2009	-0.671	-0.450	-0.490
labour force participation rate. female 20144	.927	-.232	.032
part time employment. female - 2012-13	.120	-.175	.915
total paid leave available to mothers (full-rate equivalent. in weeks)	-.067	.866	.095
pension coverage	.210	.800	.102
spending in USD PPP on children aged 0-5. 2011	.822	.295	.250
proportion (%) of total public spending on family benefits and education for children aged 0-5 years	.354	.607	-.060
pension spending (% GDP 2011)	.061	.461	.794
public spending on incapacity (% GDP 2011)	.877	.149	-.036
employment rates (%) for women (15-64 year olds) with at least one dependent child aged 0-14	.666	.282	.116

A meaningful interpretation of the factors is not straightforward

Cumulative % of variance: 87.04	component			
	1	2	3	4
average hh size 2009	-.563	-.339	-.486	-.480
labour force participation rate. female 20144	.898	-.286	.139	.105
part time employment. female - 2012-13	.025	-.111	.066	.958
total paid leave available to mothers (full-rate equivalent. in weeks)	-.001	.899	.185	-.052
pension coverage	.112	.620	.555	.034
spending in USD PPP on children aged 0-5. 2011	.607	.008	.702	.311
proportion (%) of total public spending on family benefits and education for children aged 0-5 years	.075	.175	.902	-.027
pension spending (% GDP 2011)	.129	.659	-.023	.690
public spending on incapacity (% GDP 2011)	.882	.095	.220	-.027
employment rates (%) for women (15-64 year olds) with at least one dependent child aged 0-14	.803	.424	-.061	.047

# Cluster analysis (option 1)



## 'Familism-care'

% population who think the **family** should provide care to children and elderly people

% population who think the **government** should provide care to children and elderly people

% population who think the **family** should provide care to children and the **government** to elderly people

## 'Familism-costs'

% population who think the **family** should cover the costs

% population who think the **government** should cover the costs

% population who think the **family** should cover the costs for children and the **government** for the elderly

## Country – indexes

female labour participation

coverage

# Clusters option 1

	FACTORS		ISSP INDICATORS					
clusters	coverage	female labour participation	family care	government care	family-children government-elderly	family costs	government costs	family-children, government-elderly costs
Australia UK France Ireland Canada USA Switzerland	low	very high	high	very low	medium	high	low	medium
Austria Germany Czec Rep. Lithuania Slovakia Slovenia	very high	medium	high	medium	low	medium	medium	low
Chile Mexico Japan Poland Latvia Russia Bulgaria	medium	very low	very high	low	high	high	low	medium
Iceland Sweden Finland Norway Denmark	high	high	very low	very high	very low	medium	high	high
Israel Spain South Korea Turkey	very low	low	high	medium	very high	low	medium	high



**Thanks for your attention!**