#### THE SOCIOECONOMIC GRADIENT IN HEALTH: THE ROLE OF INTRA-HOUSEHOLD RESOURCE ALLOCATION AND DECISION-MAKER'S GENDER

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**25th IAFFE Annual Conference** 

- The family context is likely to play a role in the relationship between socioeconomic status and health:
  - a. The economic situation of other family members plays a role in determining individual levels of health (Burgess, 1945; Gardner and Oswald, 2004; Cai and Kalb, 2006)
  - b. The decision-making process in a family has an important bearing on the intra-household dynamics and welfare of the household (Sundari, 2013)

Thus....

Family arrangements in terms of resource allocation and decision-making are likely to affect individual levels of health.

Objective:

 To contribute to the literature on the fields of health and household economics by analysing the impact of different household financial regimes on the health status of males and females in a number of European countries.

This investigation is interesting for a number of reasons:

1. Understanding the different pathways between individual socioeconomic status and health becomes of special relevance in choosing the most appropriate public policies aimed at improving the well-being of a society.

This investigation is interesting for a number of reasons:

2. The prevalence and duration of health problems place a considerable burden on health and social care systems.

The cost of depression in the European Economic Area has been estimated at €136.3 billion, of which around one third falls on the health care system (McDaid et al., 2008).

This investigation is interesting for a number of reasons:

3. The nature of intra-household arrangements is of relevance for the design of focalized social programmes that aim at raising people's well-being, allowing one to assess whether policy will be effective.

This investigation is interesting for a number of reasons:

- 4. It is important to pay special attention to the gender dimension:
  - a. women today are still at higher risks of financial strain due to their position in the labour force, family role, and lower earnings.
  - b. there is evidence of higher prevalence of mental health problems, such as depression, among women compared to men (Mirowsky and Ross, 1989).

The *main results* can be summarized as follows:

- There is evidence of the collective model assumption, suggesting that the income-pooling hypothesis (unitary approach) is not always supported and that significant inequalities might exist within the same family.
- Specifically, each member of the couple is worse off if his/her partner has most decision-making responsibilities.

The *main results* can be summarized as follows:

 The presence of children in the household plays a role in the effect that household financial regimens exert on individual self-assessed health, especially among females.

## Outline

- Overview of the literature on the socioeconomic gradient in health and intra-household decision-making processes.
- Data set and variables description.
- Econometric model and estimation strategy.
- Results.
- Conclusions and discussion.

- Monetary and material deprivation as determinants of health
  - Lower absolute income has been found to have an adverse impact on health (Frijters et al., 2005; Subramanian and Kawachi, 2006; Wilkinson and Pickett, 2006; Kiuila and Mieszkowski, 2007; and Gunasekara, et al., 2011)
  - Deprivation in terms of material hardship, such as access to material goods and conditions (including food, housing and access to amenities, among others), is also likely to be a crucial determinant of health (Adamson et al., 2006; Ploubidis et al., 2011; and Blázquez et al., 2014, among others).

- Intra-household resource allocation and decisionmaking
  - There is extensive literature on the decision-making processes and power relations within the family.
    - Evidence of a shift from the unitary to the collective approach, suggesting that the equally-shared resources hypothesis is not always supported and that significant inequalities might exist within the same family (Fortin and Lacroix, 1997; Clark et al., 2002; Ward-Batts, 2008; Cherchye et al., 2009, etc.)

- Intra-household resource allocation and decisionmaking
  - There is extensive literature on the decision-making processes and power relations within the family.
    - Evidence of gender differences as regards decision-making power and responsibility within the household (see for instance Mader and Schneebaum, 2013).

- SES-health relationship should be addressed under the "collective" rather than "unitary" approach.
- The family would involve a distribution of resources that may, to some extent, explain the presence of inequalities between members of a couple.
- An important distinction within the framework of collective models between responsibility for the management of household resources and control of (major) household decisions (Pahl, 1989; and Wilson, 1987).

- Pahl (1989) classification of financial regimens:
  - 1. whole-wage system: one partner is responsible for handling and managing the family budget. The responsible partner has access to and control of all the income (earnings and/or social welfare) of the couple.
  - 2. allowance system: the first partner gives the second partner part of his income for basic household expenditure and keeps the major part for himself. Thus, decision-making responsibilities are totally separated: usually the wife is delegated to handling the money for domestic expenses while the husband makes the strategic decisions.

- Pahl (1989) classification of financial regimens:
  - **3.** *shared management or pooling system:* both partners put their income into a common pool, which both have access to. It is also characterized by equal decision-making power and equal responsibility by both partners.
  - 4. *independent management system:* both partners have income, but they have separate bank accounts and they do not have access to each other's income. There is no common budget and each partner has a separate sphere of responsibility in terms of financial management.

## Data set and variables

#### Data set

- The 2010 module on intra-household sharing of resources of the EUSILC.
- Sample: heterosexual couples, with or without children, for 21 countries (Austria, Germany, Belgium, France, Luxembourg, the United Kingdom, Italy, Greece, Spain, Portugal, Cyprus, Malt, Poland, Hungary, Estonia, Latvia, Bulgaria, Czech Republic, Lithuania, Romania, Slovak Republic).
- We eliminate couples with inconsistent responses on the decision-making variables.
- Separate estimations for males and females

## Data set and variables

#### Variables

- SAH: "How is your health in general?". Five-point response scale ranging from very bad to very good.
- Household income and material deprivation
  - Income: household equivalent income.
  - Material deprivation: multidimensional index using 9 items proposed by Eurostat: paying rent, mortgage or utility bills; keeping the home adequately warm; facing unexpected expenses; eating meat or proteins regularly; going on holiday; a television; a washing machine; a car; and a telephone.

## Data set and variables Variables

#### Money management and decision-making

Household Infor	Household Information		
HA010 (Regime of household finances)	How are the incomes you receive in your household dealt with? (All incomes as common resources; Some incomes as common resources and the rest as private resources; All incomes as private resources of the person receiving them; No income in the household)		
Personal Informa	ation: Decision-making (More me, balanced, more my partner)		
PA030: (shopping)	Who in your couple is generally more likely to make decisions on everyday shopping?		
PA040: (children's expenses)	Who in your couple is generally more likely to make decisions on important expenses to make for the child(ren)?		
PA050: (furniture etc.)	Who in your couple is generally more likely to make decisions on expensive purchases of consumer durables and furniture?		
PA060: (borrowing)	Who in your couple is generally more likely to make decisions on borrowing money?		
PA070: (savings)	Who in your household is generally more likely to make decisions on saving money?		

## Data set and variables

#### Variables

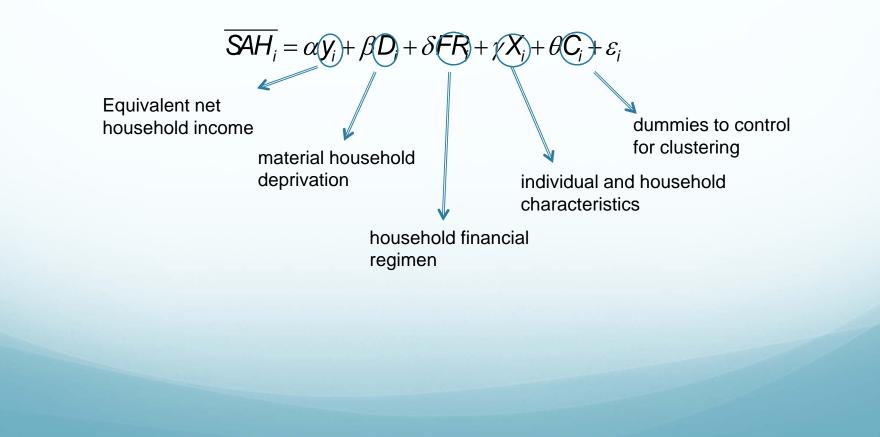
Money management and decision-making

Type of Financial Regimen	Income pooling		Decision- making <sup>(a)</sup>
WholeWage_female	all income pooling	HA010=1	Mainly female
WholeWage_male	all income pooling	HA010=1	Mainly male
Allowance_female	not all income pooling	HA010==2 3	Mainly female
Allowance_male	not all income pooling	HA010==2 3	Mainly male
Pooling	all income pooling	HA010=1	Shared
Independent	not all income pooling	HA010==2 3	Shared
(a) - · · · · · · · · · · ·			

<sup>(a)</sup> Decisions about shopping, child, durables, borrowing and savings are variables PA030-PA070

# Econometric model and research strategy

 Probit-adapted ordinary least squares (POLS) (Van Praag and Ferrer-i-Carbonell (2008: 29-34))



	FEMALE	MALE
Income	0.036*	0.053**
Deprivation	-0.879***	-0.882***
Financial regimen		
WholeWage_female	0.028***	-0.022**
WholeWage_male	-0.101***	-0.019
Allowance_female	0.003	-0.083***
Allowance_male	-0.115***	-0.051*
Independent	0.009	0.007
Pooling (ref. category		
Income_separately	0.040***	0.050***
Consensual Union	0.069**	0.038
Children	0.077***	0.040***
Age	-1.733***	-3.434***
Age2	-0.320	1.597**
Educational Level		
Secondary	0.063***	0.076***
Tertiary	0.145***	0.193***
Primary (ref.		
category)		
Labour Market Status		
Part-time employee	-0.039*	-0.116***
Unemployed	-0.141***	-0.101**
Inactive	-0.147***	-0.424***
Full-time employee		
(ref. category)		

	FEMALE	MALE
Partner's Educational Level		
Secondary	0.067**	0.029
Tertiary	0.138***	0.083***
Primary (ref. category)		
Partner's Labour Market		
Status		
Part-time employee	-0.001	0.002
Unemployed	-0.039	-0.002
Inactive	-0.071*	0.059***
Full-time employee		
(ref. category)		
Country dummies	Yes	Yes
Cons	1.096***	1.501***
Ν	75385	75385
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	FEMALE	MALE
Financial Regime		
WholeWage_female	0.040**	-0.040***
	(0.015)	(0.007)
WholeWage_male	-0.151***	0.020
	(0.017)	(0.015)
Allowance_female	0.012	-0.082***
	(0.020)	(0.021)
Allowance_male	-0.106**	-0.036
	(0.040)	(0.028)
Independent	0.035	0.007
	(0.022)	(0.016)
Interactions		
Children*WholeWage_female	-0.025	0.037
	(0.020)	(0.023)
Children*WholeWage_male	0.111***	-0.086***
	(0.021)	(0.030)
Children*Allowance_female	-0.040*	-0.004
	(0.023)	(0.034)
Children*Allowance_male	-0.024	-0.046
	(0.093)	(0.041)
Children*Independent	-0.086***	0.000
	(0.026)	(0.057)

## **Conclusions and discussion**

- We attempt to contribute to the literature on the fields of health and household economics by analyzing the intra-household resource allocation and decisionmaking on the health status of males and females.
- Family arrangements have important consequences in terms of individual SAH.

## **Conclusions and discussion**

- In particular we find:
  - Each member of the couple is worse off if his/her partner has most decision-making responsibilities.
  - Females health status improves when they have more responsibility in decision-making when all incomes are pooled.
  - The presence of children in the household plays an important role in the relationship between health and household financial regimen, mainly for females.

## **Conclusions and discussion**

- Implications of our results:
  - Control and management of household finances and family structure should be taken into account in the design of effective policies to improve health of targeted members of the household.
  - Gender differences should be also taken into account: women usually spend on household rather than on personal goods while men are more likely to increase personal consumption if their wives are earners.

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