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Work or children: what makes women more happy and satisfied?

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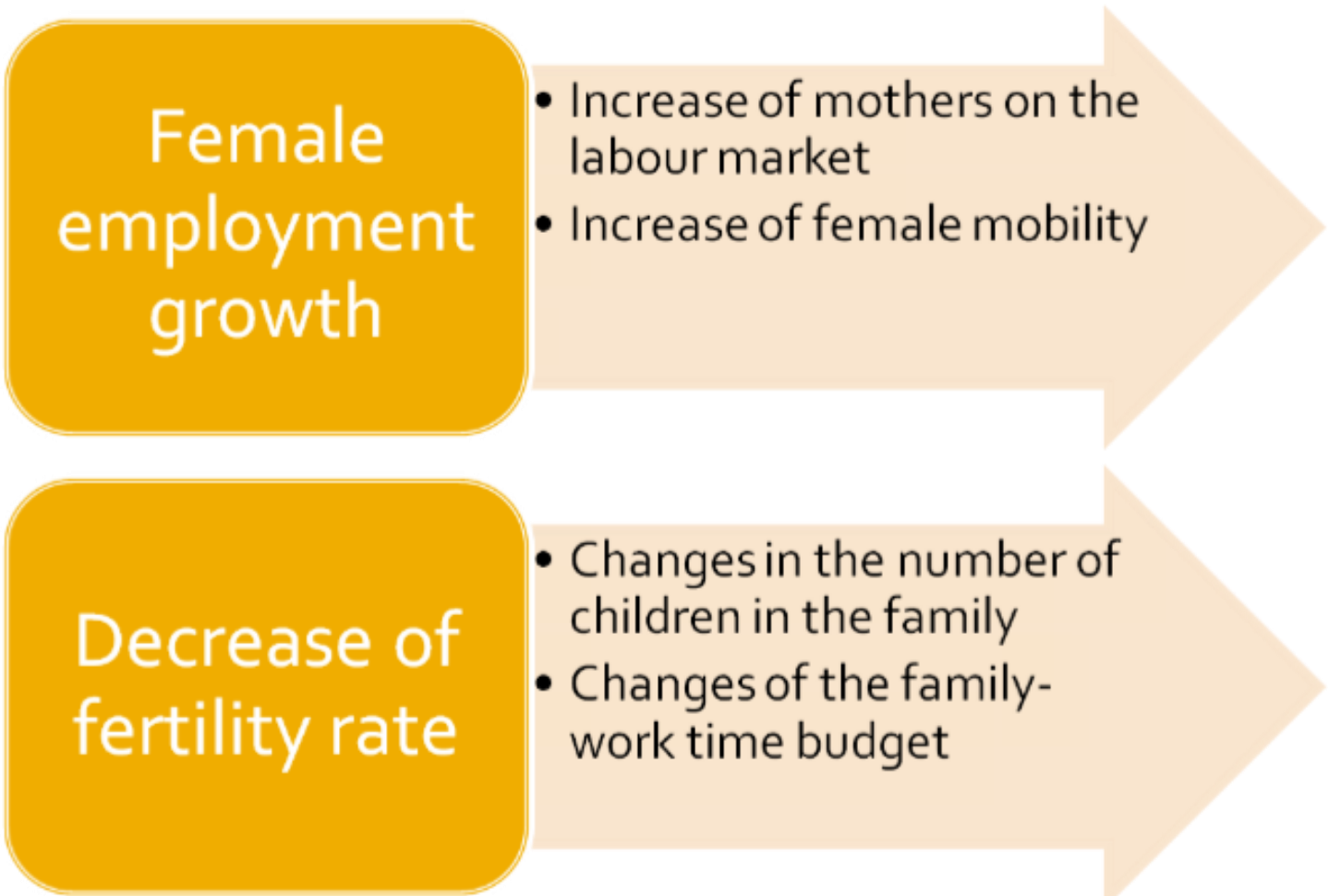
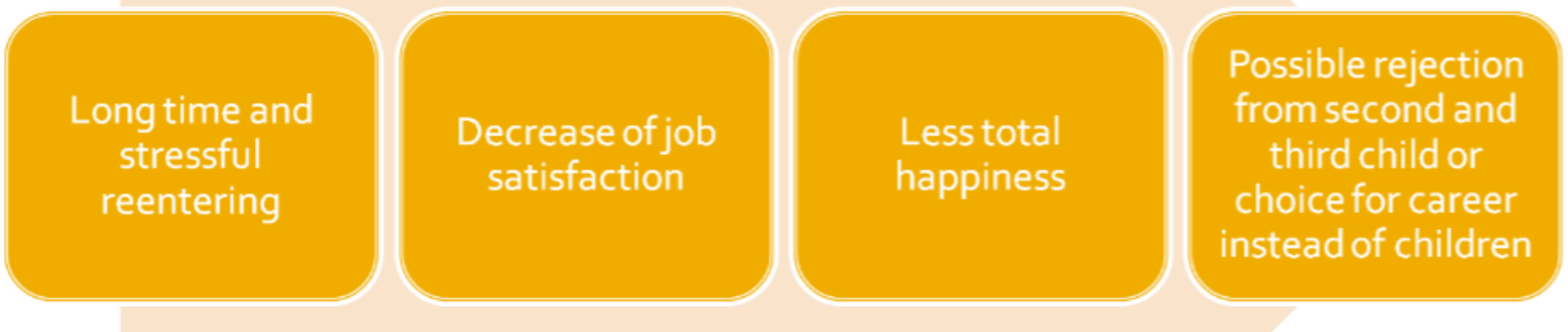
Introduction

- Problem and motivation
- Statistics and background
- Literature review
- Hypothesizes
- Data
- Methodology
- Preliminary results
- Questions to the audience

Problem and motivation



Problem and motivation

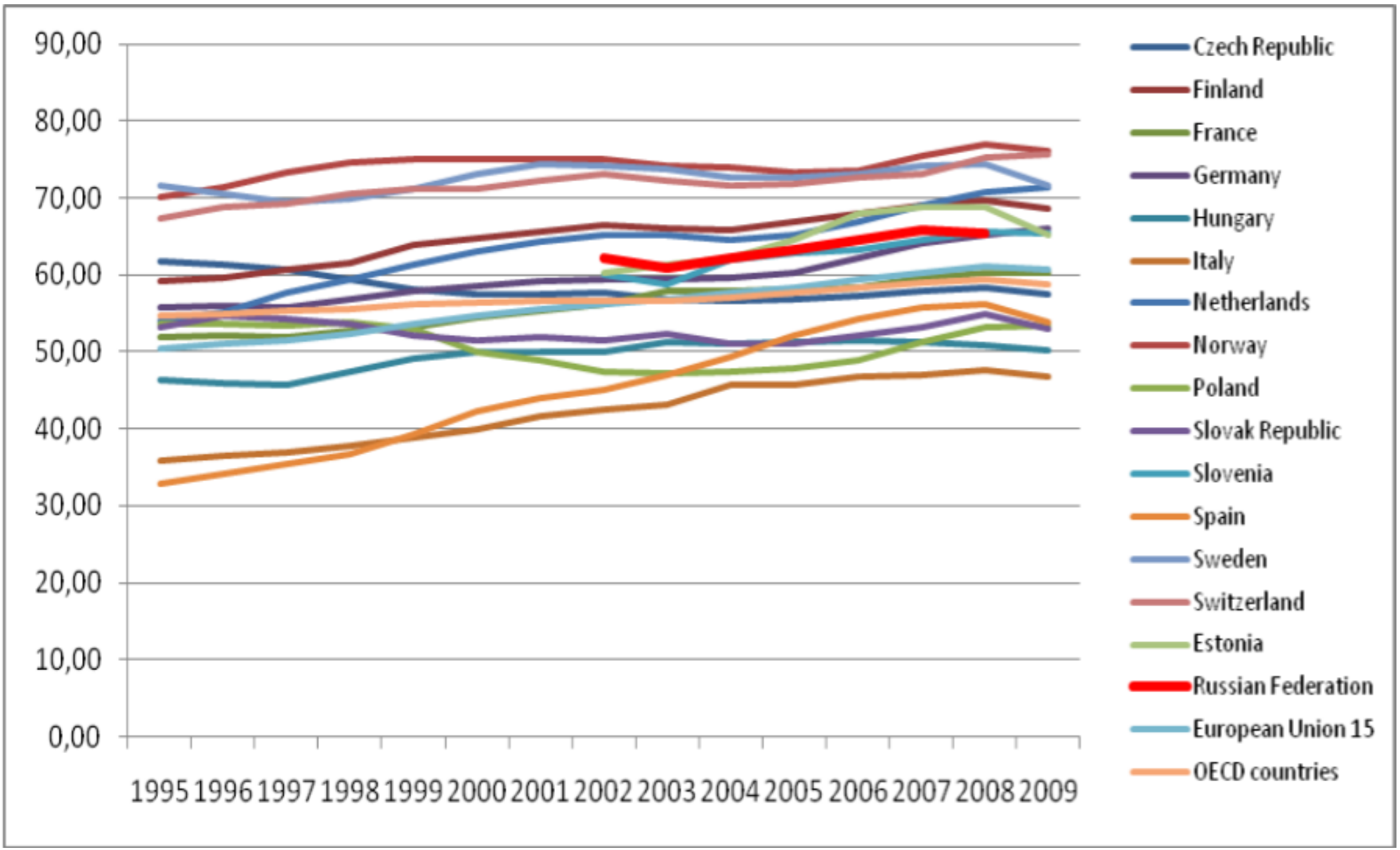


After difficult and longtime reentering of the labour market women may be discouraged to have the second and the third baby (Hoem & Hoem, 1989; Kravdal, 1992). The prospects for a good career decreases the parenthood (Bloom and Trussell 1984; Kiernan 1989; Jacobson and Heaton 1991; Maxwell 1991; Brewster, 1994; etc.).

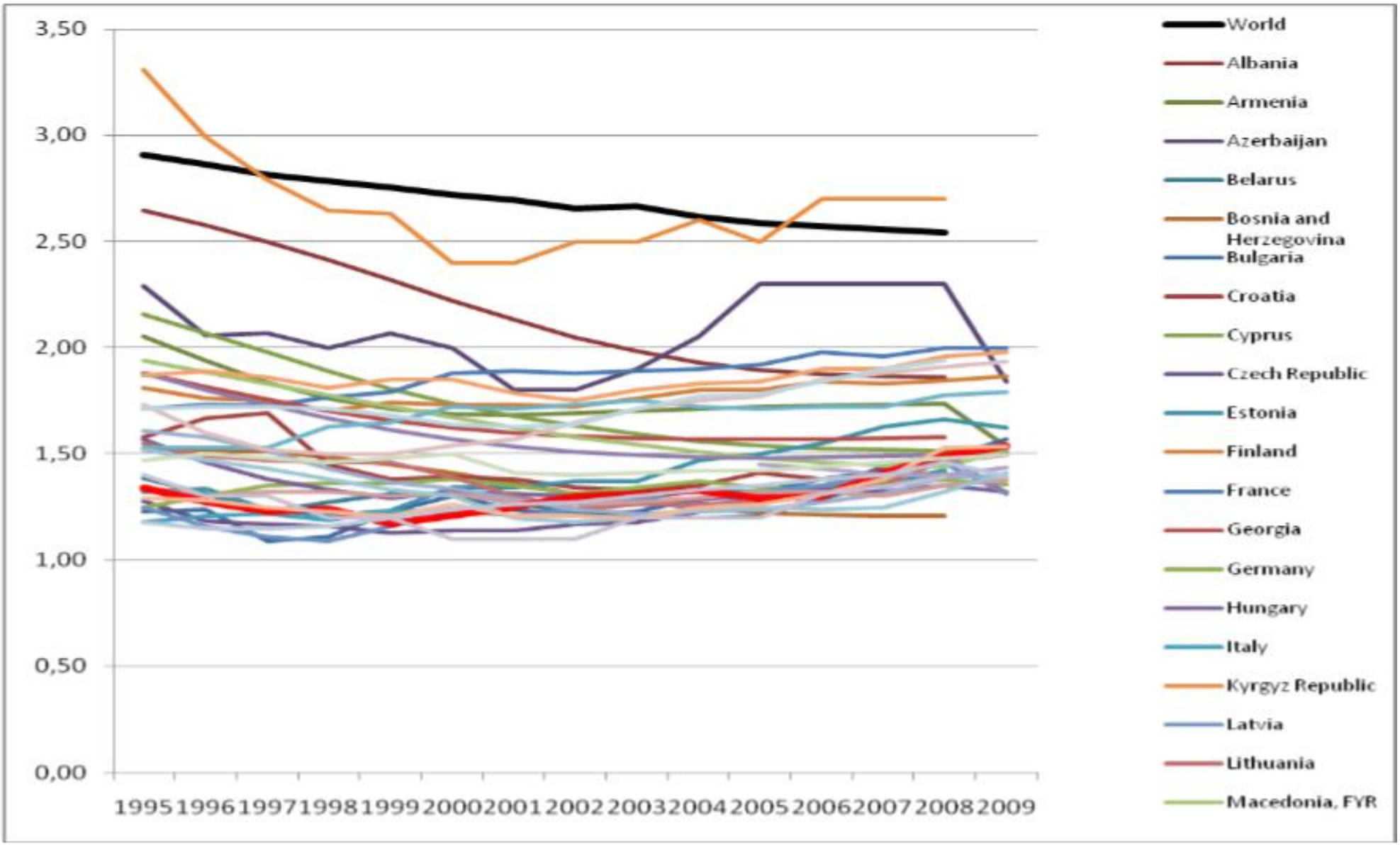
Statistics and background

- However the employment rate for women varies from 33% in 1994 for in Italy to almost 77% in 2008 in Finland the overall tendency towards female employment growth is clear. Kielcolt is right to follow Hochschild that women's sustained movement into the paid labor force impels the hypothesis that the rewards of work have increased relative to those of family life (Kiecolt, 2003)
- Work has become a major source of satisfaction for women, as it is for men. But at home, women still bear primary responsibility for house-work, and work/family conflict adversely affects family functioning (Coltrane, 2000; Glass & Estes, 1997).
- Along with the growth of female employment “every developed society has witnessed a substantial decline in fertility rates from well above replacement levels (3.5 children or more) to well below (two children or fewer)” (Davis, Bernstam, and Ricardo-Campbell 1987). According to the World Bank data world fertility rate went down from 2,8 in 1995 to almost 2,5 in 2009.

Female employment level, OECD



Fertility rate (number of children per woman), OECD



Literature review

- **On the one hand** a large amount of publications make focus on the effect of the increased female employment on fertility rate as a result of the higher opportunity costs associated with the participation on the labor market (Becker, 1991; Cigno, 1991; Ermisch, 2003; Michaud and Tatsiramos, 2008). **On the other hand** huge piece of literature investigates the effect of fertility on employment (Browning, 1992; Nakamura and Nakamura, 1985; Carrasco 2001; Michaud and Tatsiramos, 2008), at the same time some papers show that “the size of the effect of additional children on labor supply depends crucially on how past labor supply and existing children are accounted for” (Michaud and Tatsiramos, 2008).
- In a border context this paper relates to the Life satisfaction theory, Labor Force Participation of Married Women (Mincer, 1962), Theory of the Value of Children (Hoffman and Hoffman, 1973; Friedman et all, 1994), and the Theory of Allocation of Time (Becker, 1965) “The value of children derives from their capacity to reduce uncertainty for individual women and to enhance marital solidarity for couples. From this perspective, it is the mere presence of a child that counts” (Friedman at all, 1994).

Literature review

- The **paper contribution** is that it is focused ***on females only,*** underlying the contradiction between having children and career. Like Kiecolt (2003) I will test the influence of the main independent characteristic of having children along with job characteristics on life satisfaction and happiness.
- Hanson and Sloane (1992) focused on how does the presence of young children affect the job satisfaction of married women in various work roles (e.g., full-time work in the labor force, part-time work in the labor force, and full-time work in the home). As well as Hanson and Sloane I am interested in examining the effect of young children on the job satisfaction of employed women **not only to see** how "the presence of family responsibilities affects their happiness at work" ***but to trace their life satisfaction and happiness as a whole***.
- More over ***the paper focuses on all women*** in order to compare the happiness of those who have children with those who does not have. This is the main distinction from the Berger's paper (2009). Berger did not take into account the happiness of women without children. The main focus of that paper is on German situation for working mothers who are unable to combine family responsibilities with (full-time) work due to insufficient access to appropriate childcare. Berger analyses whether this problem has a significant impact on the mothers' subjective well-being.

Hypothezes

- ***Hypothesis 1*** is grounded on the theory of the Value of Children*: **the number of children has more positive effect on female life satisfaction than having a job.*** This hypothesis stems from the theory of child value and is controversial to the studies by Hochschild (1997) and Duncombe & Marsden (1993) who found out that work-life satisfaction ratio increased and women are more satisfied with their jobs than with home and family life. The modern tendency to prefer career and to postpone birth of children together with the ecological problems enlarged the women reproductive health problem. That is why the value of children may have changed and be more important.
- ***Hypothesis 2: younger women (up to 35 years old) tend to be happier with a job while older women (from 36 to 64) tend to be happier having children****.* This hypothesis is based on the previous results shown by Kiecolt (2003). No difference for countries as well

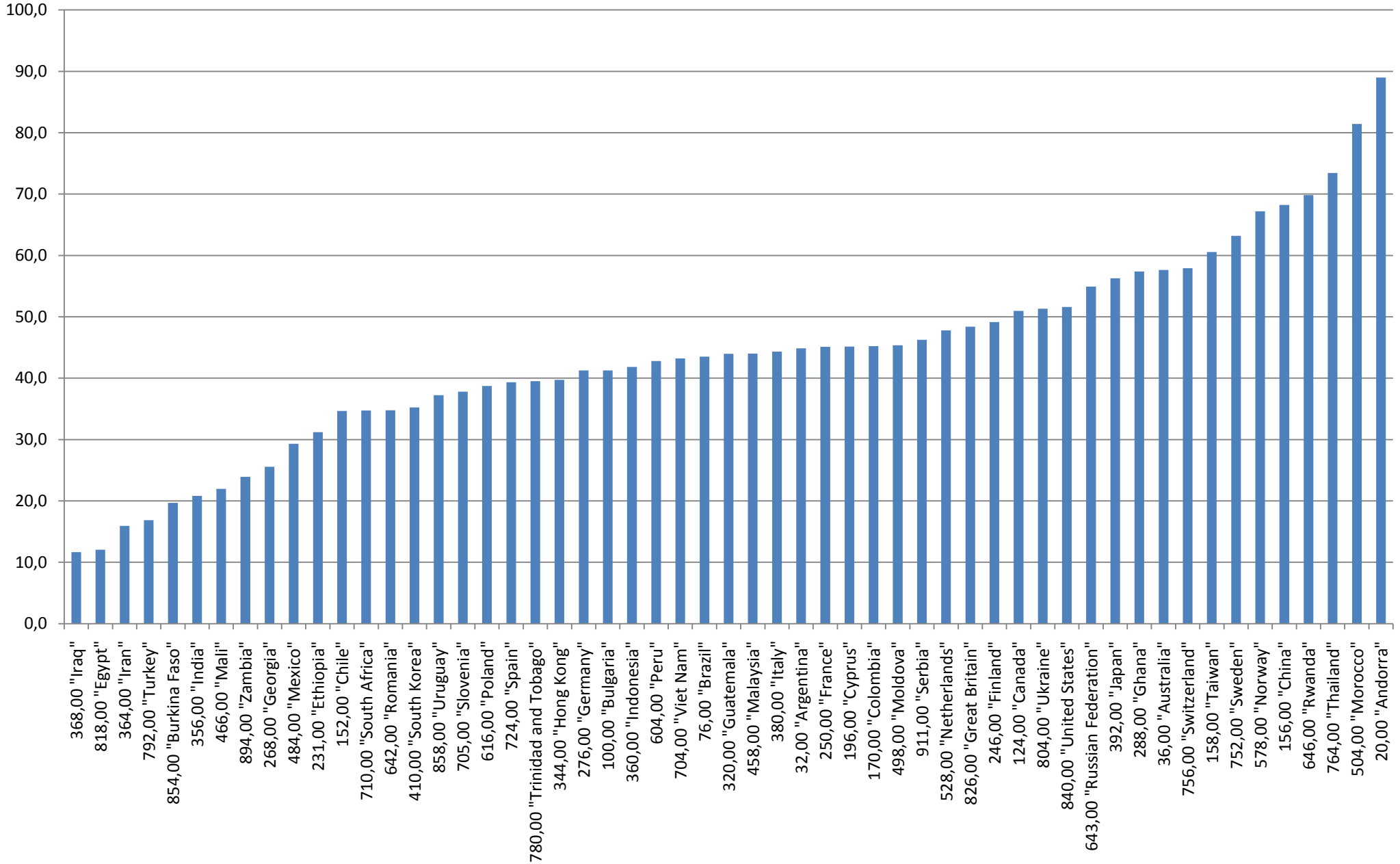
Hypothezes

- ***Hypothesis 3***: ***(the main one) is that in those countries with very liberal Labour Legislation working women with children are the most satisfied with their life and the happiest group of women. While working mothers in the countries with extremely strict labour legislation would be the unhappiest group***. In other words ***the more restricted the Employment Protection Legislation (EPL) the more happier women with the jobs but not with the children.*** Due to the fact that more liberal employment laws cause less barriers for reentering the labour market, women are not afraid to losy their jobs as it is easy for them to find a new one. This could be explained by the barriers of entering the labour market for the newcomers. In case of low level of regulations from the state employers have almost no firing and hiring costs what determines the easiness of hiring process. Then women could easily re-enter the labour market in such countries like USA, UK, Canada. In case of highly regulated labour market the employers bear heavy labour costs and this enhances strong barriers of reentering the labour market. That is why working mothers from such countries as Spain, China, France, Russia and Germany facing all these difficulties could be unsatisfied with their jobs and their lives as a whole.
- ***Hypothesis 4: The more traditionally oriented women are more satisfied with their children than with the jobs,***

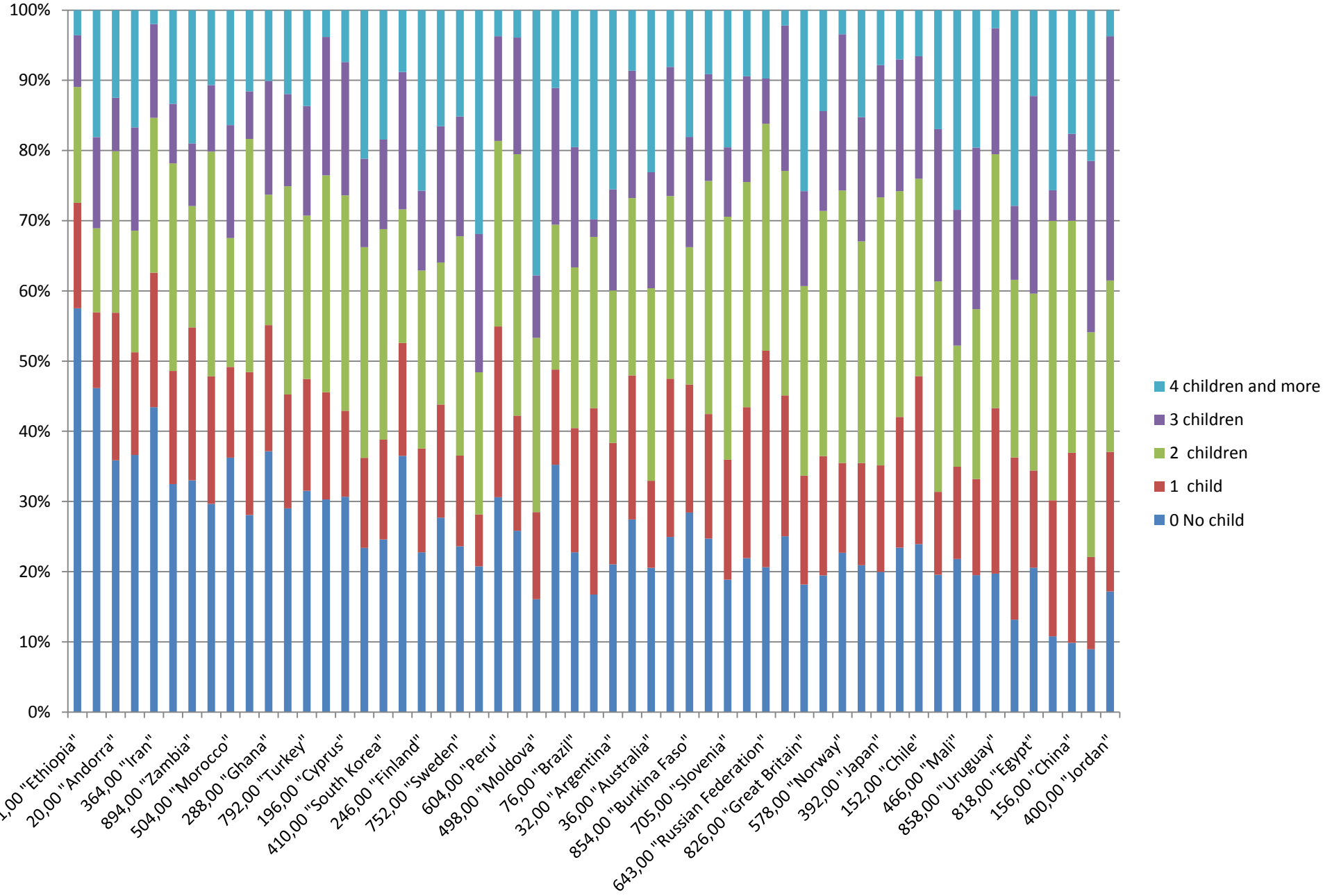
Data

- World Value Survey, wave of 2005-2009
- Women aged 15-64
- Total number 42260 females
- The following status groups are determined among them:
  - Employed without children
  - Employed with children (1, 2, 3 and more)
  - Non-employed without children
  - Non-employed with children

Having a job, % of the sample in WVS by sample



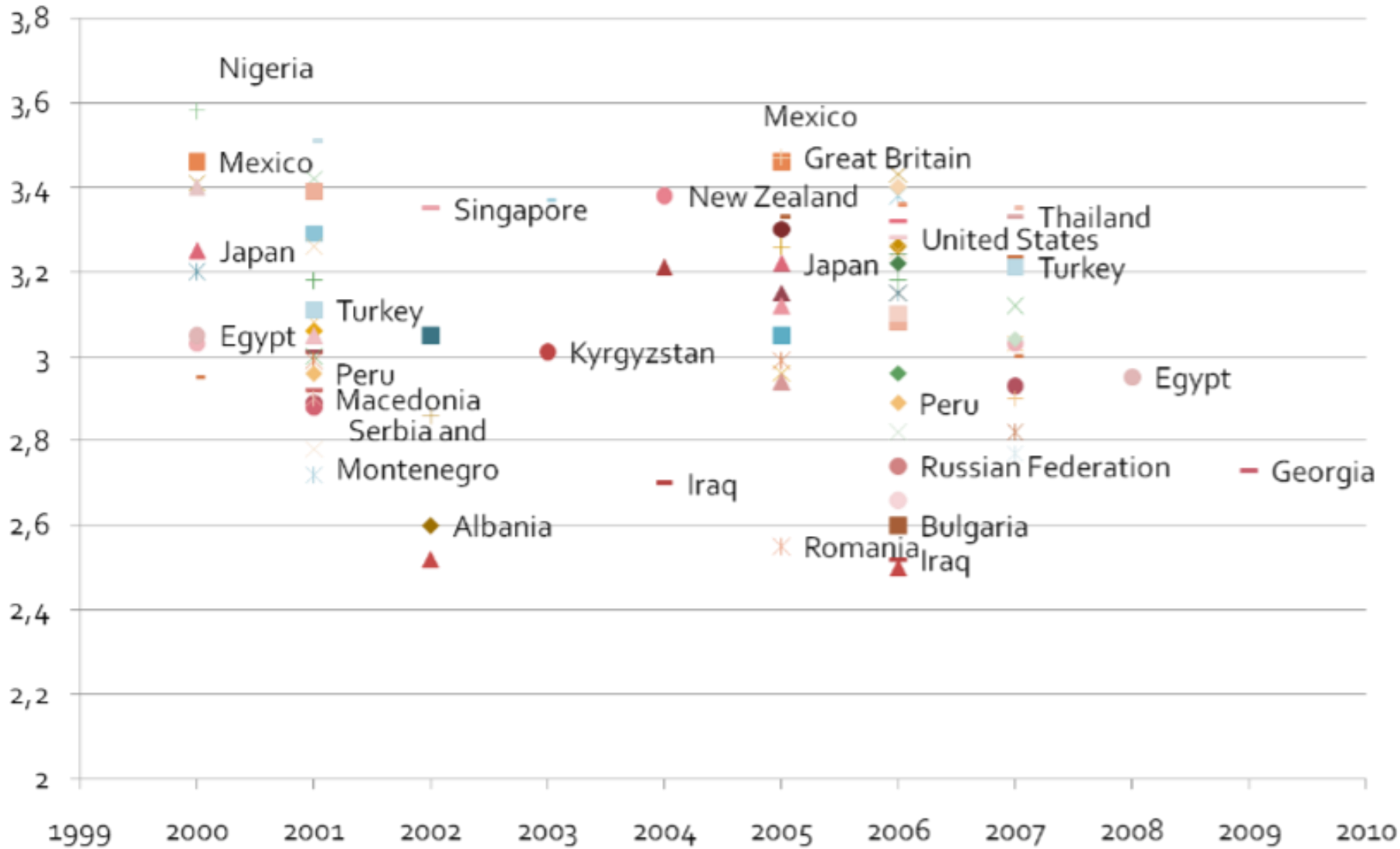
% of those having a child, WVS

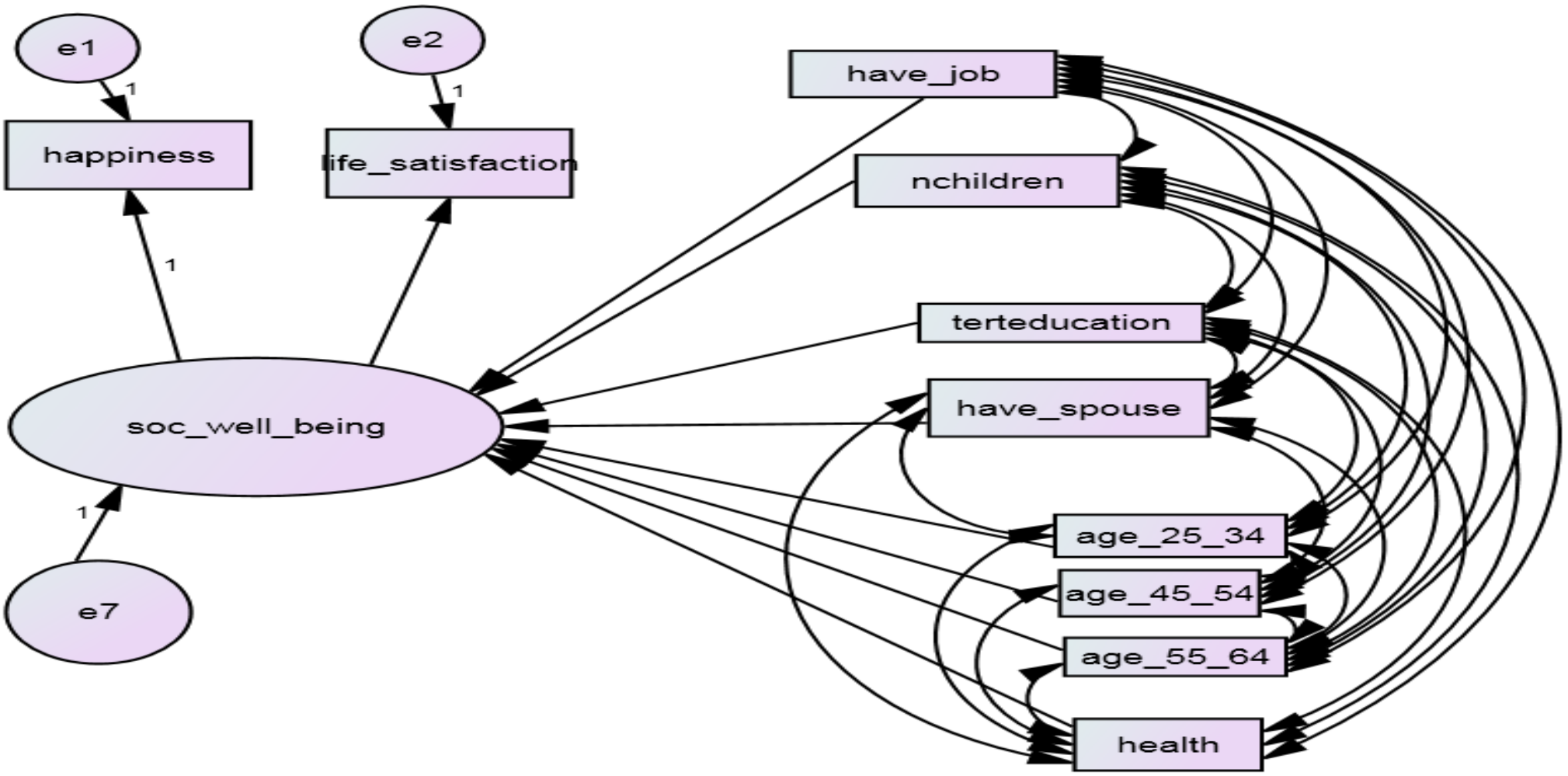


Terms

- Happiness is measured by the 4 point scale (1 – not happy at all,…, 4 – very happy) – transferred to standardized happiness 0…1 index
- Life satisfaction is measured by 10 point scale (1 – dissatisfied,…, 10 – satisfied) - transferred to standardized satisfaction 0…1 index
- Well-being index – sum of the two previous / 2

Mean female country happiness (inverse scale: 1 – totally unhappy, 4 – very happy)




e1
e2
1
1
happiness
life_satisfaction
have_job
nchildren
terteducation
have_spouse
1
1
soc_well_being
age_25_34
age_45_54
age_55_64
health
e7

Methodology

- Two step methodology:
- 1. **individual level analysis** to test the first and second hypothesizes (taking pulled sample for 2005-2009 WVS)
- 2. **country level analysis** to test the third hypothesis (taking the latest data per country from WVS and other indicators from World bank and OECD data sources corresponding the year of the observation)

Methodology

DEPENDENT VARIABLE

Level 1 (individual)

- **Well-being index**

INDEPENDENT VARIABLES

Main tested variables:

- Number of children
- Having job
- Intersection of having children and having job (6 dummies)

Controls:

- Age group (10 year dummies)
- Having tertiary education (dummy)
- Having a spouse (dummy)
- Health (dummy)
- Place of living (3 dummies)

Methodology

DEPENDENT VARIABLE

Level 2 (country)

- **Well-being index**

INDEPENDENT VARIABLES

Main tested variables:

- EPL
- parental leave???
- Duration of maternity leave benefits paid (N weeks)
- Female unemployment rate

Controls:

- GDP per capita
- GINI
- % of urban population
- Life-expectancy for females
- Ex-com country
- HDI
- Birth rate
- % of population of 0-14 years
- Employment population

Preliminary results for all females

Well-being index	Spec 1	Spec 2	Spec 3	Spec 4
have_job	0,033***		0,031***	0,045***
n_children	-	-0,005***	-0,004***	0,001
interaction				-0,007***
age_25_3	-0,009*	-0,001	-0,008*	-0,009*
age_35_4	-0,024***	-0,010***	-0,020**	-0,019***
age_45_5	-0,038***	-0,023***	-0,033***	-0,031***
age_55_6	-0,030***	-0,021***	-0,025***	-0,024***
Higher education	0,022***	0,023***	0,021***	0,020***
Have spouse	0,062***	0,066***	0,066***	0,066***
Be employer	0,034***	0,037***	0,033***	0,033***
Non manual	0,035***	0,034***	0,033***	0,032***
Farmer	-0,022***	-0,022***	-0,020***	-0,020***
N	14067	13770	13710	13710
R2	0.222	0.221	0.223	0.224

Preliminary results for females under 35

Well-being index	Spec 1	Spec 2	Spec 3	Spec 4
have_job	0,014*	-	0,014*	0,026**
n_children	-	-0,012***	-0,009***	-0,002
interaction	-	-	-	-0,012**
Higher education	0,022***	0,019***	0,023***	0,019***
Have spouse	0,039***	0,053***	0,057***	0,053***
Be employer	0,035***	0,037***	0,039***	0,037***
Non manual	0,029***	0,028***	0,029***	0,027***
Farmer	-0,035***	-0,030***	-0,030***	-0,029***
N	4894	4757	4736	4736
r2	0.205	0.204	0.207	0.206

Preliminary results for females after 35

Well-being index	Spec 1	Spec 2	Spec 3	Spec 4
have_job	0,029***	-	0,029***	0,051***
n_children	-	-0,002	-0,001	0,006*
intaraction	-	-	-	-0,009**
Higher education	0,020***	0,023***	0,020***	0,020***
Have spouse	0,077***	0,078***	0,078***	0,078***
Be employer	0,039***	0,043***	0,038***	0,038***
Non manual	0,038***	0,037***	0,036***	0,036***
Farmer	-0.011	-0,015*	-0,013	-0,013
N	7769	7610	7577	7577
R2	0.223	0.223	0.225	0.2256

Preliminary results

Well-being index	All females	Females before 35	Females after 35
Job but no children	0,057***	0,035***	0,074***
Job and children	0,029***	0,002	0,063***
No job but children	0,005	0,003	0,037**
age_25_3	-0,006	-	-
age_35_4	-0,016***	-	-
age_45_5	-0,029***	-	-
age_55_6	-0,023***	-	-
higher_e	0,019***	0,018***	0,020***
have_spo	0,070***	0,054***	0,078***
employer	0,034***	0,037***	0,038***
non_manu	0,033***	0,028***	0,036***
farmer	-0,021***	-0,031***	-0,013
N	13710	4736	7577
R2	0.225	0.206	0.225

Previous results

	Spec 1	Spec 2
job_no children	0,014***	0,017***
job_1child	-0,013**	-0,002
job_2children	-0,020**	-0,010**
job_3 and more	-0,018**	-0,015***
nojob_children	-0,041**	-0,037***
health	0,196	0,187***
urban_popul	0,000***	0,000***
GDP	0,000***	0,000***
GINI	-0,001***	-0,001***
life_expectancy	-0,003***	-0,002***
Nchildren mean	-0,012***	-0,045***
Ex_post_communist	-	-0,064***
Developed country	-	0,019***
_cons	0,654***	0,691***
N	20716	20716
R2	0.1699	0.1777

Previous results

	Spec 1	Spec 2
job_no children	0,012***	0,001
job_1child	-0,017**	-0,022***
job_2children	-0,025***	-0,033***
job_3 and more	-0,034***	-0,043***
nojob_children	-0,043***	-0,034***
GINI	0,004***	-0,002**
life_expectancy	0,001***	0,005***
Nchildren mean	0,008	0,048***
Ex_post_communist	-0,096***	-0,122***
Developed country	-0,188***	-0,087**
Traditional/secular rational	0,026***	0,087***
Survival/self-expression	0,101***	-0,026
EPL	-	-0,045***
_cons	0,186***	0,465
N	15021	9111
R2	0,2282	0,1938

Multilevel regression

Characteristics of model

- Number of countries 35
- Number of observations 26066
- Minimum number of cases per country 458
- Maxim. number of observation per country 1881
- Wald chi2(18) = 2677,25
- Random effects parameters significant

coefficients

	coefficient	St. error
Number of children	-0,0066	0,0008
Have job	0,0044	0,0028
age_25_3	-0,0104	0,0032
age_45_5	-0,0252	0,0035
age_55_6	-0,0176	0,0039
higher_e	0,0336	0,0038
have_spo	0,0526	0,0027
health	0,1852	0,0045
Duration of weeks paid	0,0007	0,0012
Female unemployment rate	-0,0012	0,0030
Birth rate	-0,0251	0,0140
% popul_0-14 years	0,0290	0,0113

Multilevel regression

Characteristics of model

- Number of countries 35
- Number of observations 26066
- Minimum number of cases per country 458
- Maxim. number of observation per country 1881
- Wald chi2(18) = 2677,25
- Random effects parameters strong significance

coefficients

	coefficient	St. error
Job no children	-0,008	0,005
job_1child	-0,032	0,006
job_2children	-0,029	0,005
job_3 and more	-0,047	0,006
No job children	-0,045	0,004
age_25_3	-0,008	0,003
age_45_5	-0,023	0,004
age_55_6	-0,015	0,004
Higher education	0,032	0,004
Have spouse	0,061	0,003
health	0,184	0,005
Duration of weeks paid	0,001	0,001
Female unemployment rate	-0,001	0,003

Main comments and respond

- Endogenity problem - Propensity Score model
- Basic idea:
  - For each observation, find matching observations from the other group with the same (or at least very similar) X values.
  - The Y values of these matching observations are then used to compute the counterfactual outcome for the observation at hand.
  - An estimate for the average causal effect is given as the mean of the differences between the observed values and the “imputed” counterfactual values over all observations.
  - Step 1: Estimate the propensity score, e.g. using a logit model.
  - Step 2: Apply a matching algorithm that uses (Xp) instead of X.

Results from the PSM

	No country level variables	LM country level variables	Country level variables
_treated	-0.0123***	-0.0105***	-0.00943**
St. error	(-4.76)	(-3.36)	(-2.91)
_cons	0.675***	0.673***	0.670***
St error	(299.07)	(245.10)	(234.55)
N	39985	29520	27795

Problems and next step

- But then we got problem with testing the 3 hypothesis as we estimate the pure treatment effect
- IV regression – work out instrumental variable
  - Attitudes towards abortion
  - Women want to have home and children (no data for many countries for 2005-2009)
  - Ideal number of children (only 6 countries have such question)

Thank you for your attention!