It's a Man's Job.

Income and the Gender Gap in Industrial Research

Karin Hoisl

Max Planck Institute for Innovation and Competition, Ludwig-Maximilians-University, Munich

Myriam Mariani

Bocconi University, Milano

Lots of research on gender imbalances...

... also in science and academia

Cole & Fiorentine 1991; Cole & Singer 1991; Long 1992; Zuckerman 1991; Levin & Stephan 1998; Amilon at el. 2008; Long et al. 2003; Kahn 1993; Ginther 2004a&b; Kelchtermans & Veugelers, 2012…

…Gender **gap in productivity has closed over time** (especially when citations are taken into account), **but gender-wage gap** remains and it is not fully explained by observable characteristics *(Xie & Shauman 1998; Ginther & Kahn 2006).*

… gender gap in industrial R&D?

Hunt 2010; Hunt et al 2012: **Why don't women patent? "**The gender patenting gap is economically significant: closing the gap among S&E degree holders would increase commercialized patents by 24% and GDP per capita by 2.7%" *(simulations estimates + Furman, Porter and Stern 2002)*

Toivanen & Väänänen (2012) on **inventors' earnings:** Wage gap is 20%. Same immediate reward to patent for males and females, but no long term returns for females.

So far… what contributes to explain the gap?

Human capital skills, education *(Becker 1971, Mincer 1974, England et al. 1994)*

Personal attitudes and socialization: Women less likely to initiate negotiations *(Babcock et al. 2006, Babcock and Laschever 2003)* and lower negotiation skills *(Tsui 1998)*

Preferences: Women different taste for competition *(Dargnies 2012)* and for entering tournaments *(Niederle and Vesterlund 2007);* Lower willingness to perform under pressure *(Datta Gupta et al. 2012, Niederle et al. 2008);* women follow the careers of their husbands *(Frank 1978, Anderson et al. 2003)*

Family commitments: Motherhood-wage penalty: 2/3 of the life time wage growth during first 10 years of employment *(Murphy and Welch 1990)*; Motherhood-wage gap: perceived lower productivity of women with children, thus employers offer lower wages *(Anderson et al. 2003)*; Women with children less productive *(Becker 1985)*; Women choose different jobs because they anticipate breaks in their careers *(Fernandez-Mateo and King 2011)*: flexible jobs with predictable working hours *(Barbulescu and Bidwell 2013; Eccles 1994)*

We explore gender differences in ***income*** and ***(research) outcomes*** in creative, highly skilled jobs, tasked with achieving technological inventions (i.e., industrial R&D)

Why inventors?

- **intellectual ability, competencies, and education key assets** (29% with a PhD; 60% BA or MS degree). Thus, productivity and education, rather than gender or fertility, should drive income.
- **severe under-representations of women** in this job (Hunt et al. 2013). Skills shortage will likely require to activate the potential of female (engineer) workers.
- **creativity and innovation key inputs** for the growth and survival of firms. Understanding core actors can inspire policy actions to improve participation in R&D activities and outcomes.

We find:

- ***No gender differences in technological outcomes***
- ***Gender differences in income: women earn 14.4% less than men***. This gap remains unexplained after controlling for several observable factors such as effort/education/past productivity/age, selection into jobs/tasks…
- ***Parenthood, rather than motherhood, affects income***: with IV for fertility, children negative on income for both male and female inventors (shared workload for raising children)
- ***However, women only 4% of the sample***: few women in engineering or few female researchers make it or survive in this job

… and **selection may affect the income gap too**: the gap would be even larger if a larger representation of women (i.e., less educated, with more children) appeared among the inventors.

DATA

- We use information from the **InnoS&T** survey -- Innovative S&T indicators combining patent data and surveys (EU sponsored project)
- Survey of (randomly selected) inventors listed in EP patents – priority years 2003-2005
- ***DB = 23.052*** inventors (response rate 20%)
- DE, FR, UK, AT, BE, CH, DK, ES, FI, IT, IL, NL, SE, CZ, GR, HU, IE, LU, NO, PL, SI, US, or JP. Survey conducted in 2009-2011
- Questions about invention, inventive process, employer, inventor (gender, background, family status, wage, etc.) **Women: 5% of the full sample. 4% of our sample of 9,799 inventors**.

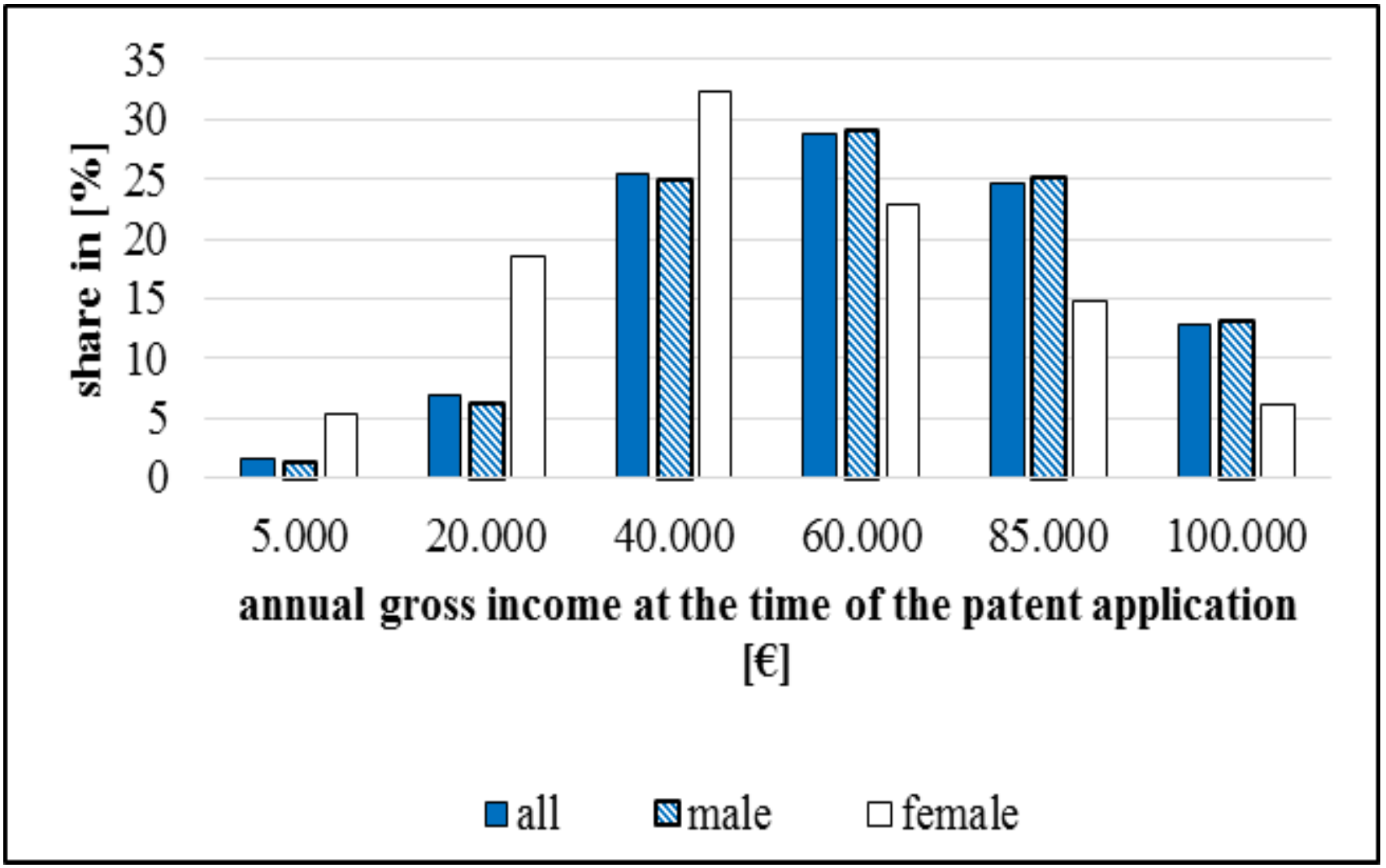
[non-response analysis for completed questionnaires and respondents' patents (compared to non-respondents) are ok]

Share of women inventors: 4%

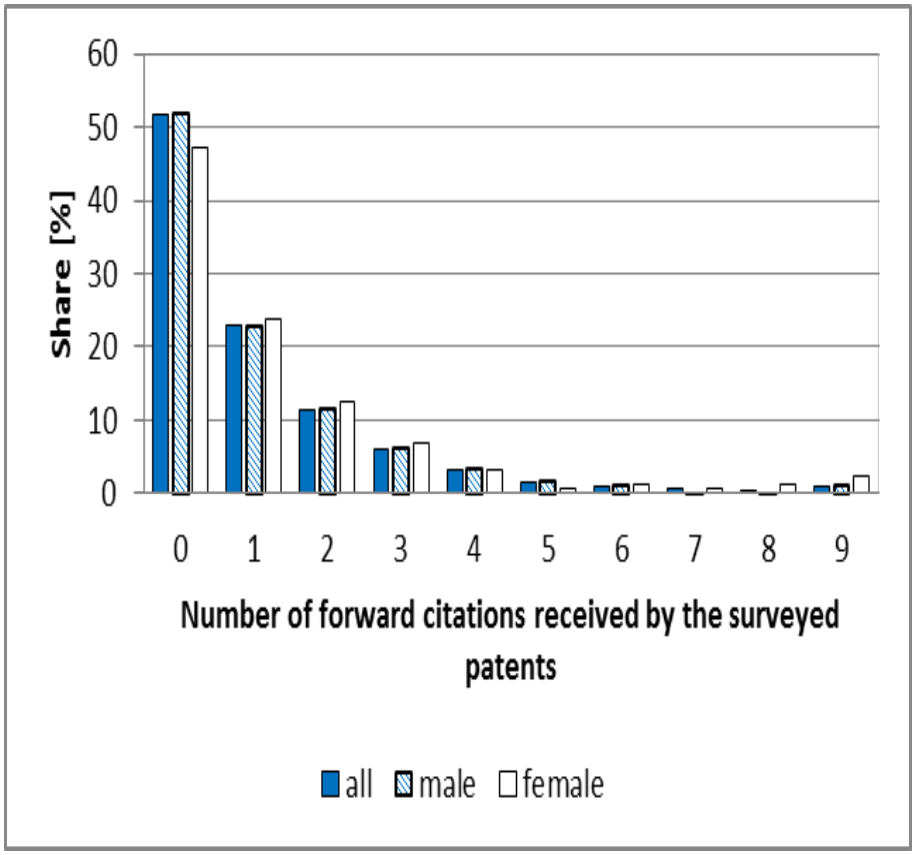
	Male inventors	Female inventors
av age	44	38
% married inventors	0.85	0.72
av # children	1.49	0.87
education (phd)	0.28	0.42
av citations	1.11	1.38

(N = 9,799)

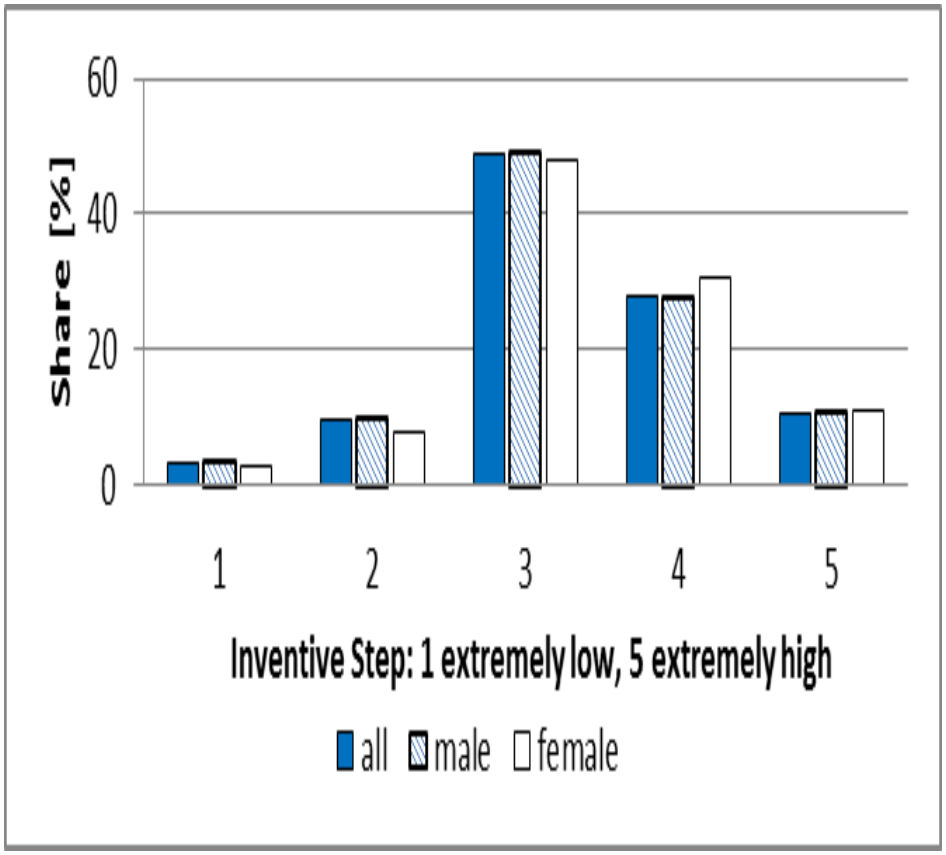
Income Distribution (N = 9,799)



Distribution of research outcomes: forward citations and inventive step



(N = 9,799)



(N = 9,300)

VARIABLES

- ***Income***: annual gross income of the inventors in the year of the surveyed patent;

- ***Output quality***: number of citations received by the surveyed patent in the 5 years after the publication date (adjusted for equivalents); inventive step reported at the EPO.

Inventor's age, education and mobility: *age*, *age*^{2}*; mobility* in the previous 5 years*; Secondary school or lower*, *High school degree*, *Bachelor degree*, *Master degree*, *PhD degree*, *Post-doc degree.*

Inventor's effort and capability: *avg. working hours per week*; *inventor's past productivity* (average number of patents per year since start; adjusted productivity for women: -1year per child); attitude towards *risk* (self-reported variable); *contribution to society*, *advancement*, *and independence* as a motivations to invent.

Inventor's role in the organization: # people "reporting" to the inventor; *top management* position; job in the *R&D department*; *share of time devoted to R&D*.

***Employer features*:** private firm or public research institute; firm size;

Other controls: country, technological, and priority year dummies.

OLS Estimates

	(3)	(4)	(5)	(6)	(3)
	Income (log)			# forward citations (log)	Inventive step
FEMALE (DUMMY)	-0.133***	-0.126***	-0.090**	-0.036	0.006
	[0.025]	[0.025]	[0.036]	[0.048]	[0.023]
NUMBER OF CHILDREN (log)	-	0.029***	0.032***	-0.001	-0.016**
		[0.009]	[0.009]	[0.014]	[0.007]
FEMALE * NO. CHILDREN (log)	-	-	-0.071	0.065	0.010
			[0.048]	[0.063]	[0.030]
MARRIAGE (COHABITING) (DUMMY)	-	0.080***	0.080***	-0.015	0.012
		[0.014]	[0.014]	[0.020]	[0.010]

All controls included: inventor's ***age, co-habiting, education***, ***mobility***, ***effort***, ***job tenure***, ***past productivity***, ***task and type of job, risk attitude, motivations***; type of ***employer***, ***country***, ***technology*** and ***time*** dummies

Thus: no gender difference in technological outcomes.

However: differences in income.

WHY?

It is NOT only effort/education/ "ability"/past productivity/age (control)

It is NOT only selection into different tasks or roles (control)

It is NOT only less "effective" experience b/c of children (adjusted productivity)

It is NOT only employer type (control)

What about children?

The decision to have children is **NOT exogenous** with respect to income

Labor market outcomes and fertility jointly determined + omitted variables still could affect both income and fertility.

In general, existing studies show that if children are considered exogenous: negative effect on labor market outcomes for women. If endogeneity is taken into account: negative effect decreases (Korenman and Neumar 1992; Angrist and Evans 1998; Krapf et al. 2014, and many more).

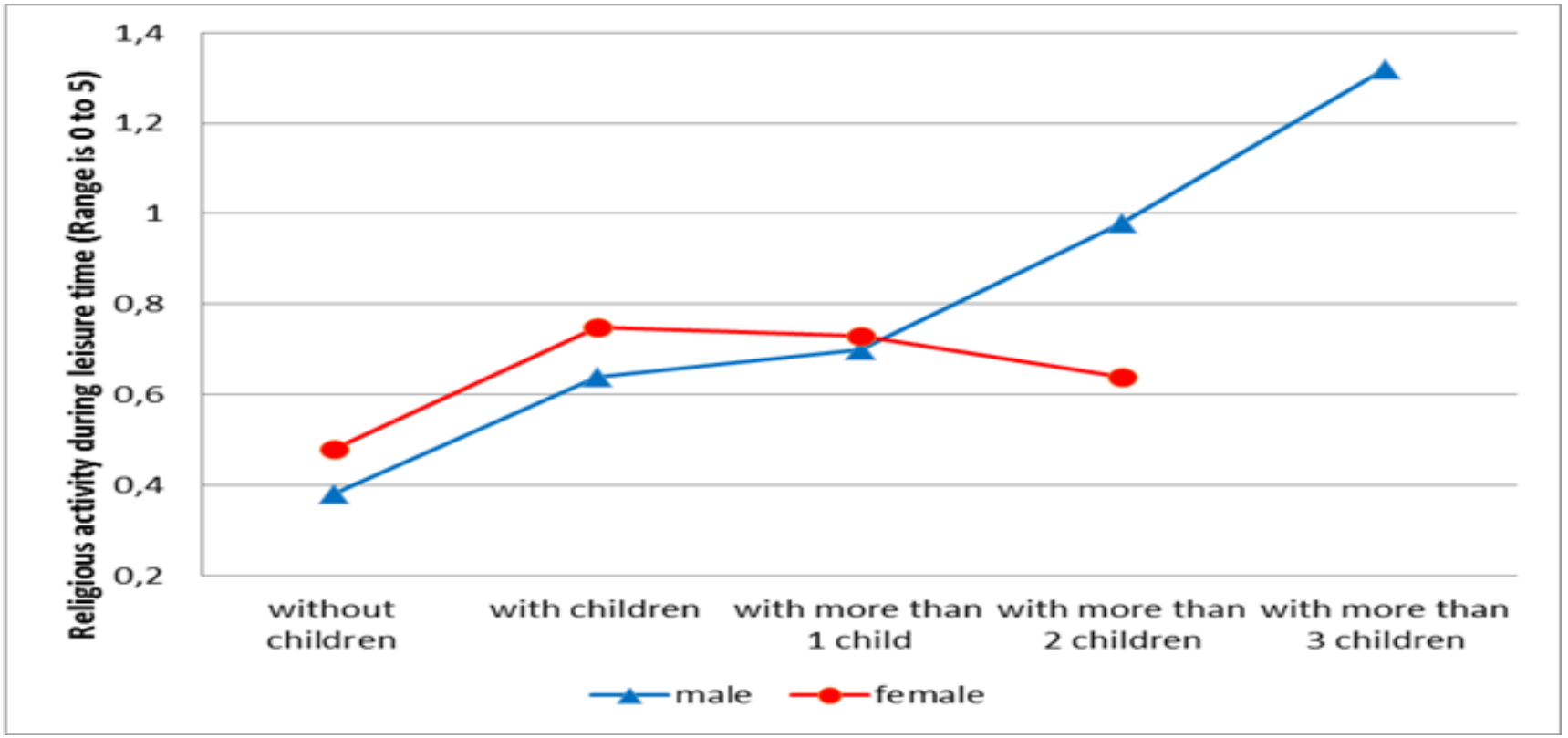
We use the extent to which inventors dedicate **time to religious and spiritual activities during their leisure time as an instrument** (2SLS) to predict the number of children they have.

Expected to have roots in the past, and to affect children directly :

- Religious beliefs are absorbed during childhood, shaped by the family -> **exogenous to labor market outcomes and parenthood** *(Iannaccone 1998, King et al. 2002)*
- **Religious families on average have more children** *(Frejka and Westhoff 2008, Lehrer 1996)* due to several mechanisms and practices

Control variables: number of work hours and number of hours of Leisure Time per week.

Exclusion restriction based on: 1) several other plausible mechanisms that may correlate with religion controlled for; 2) individuals who dedicate spare time to religious activities do not differ systematically from those who do not (or do less). Possible omitted variables (in the error term) correlated with education or effort do not correlate with religiosity.



IV (2SLS) Estimates

	Income (log)		Number of children (log)	
	Second stage estimates		**First stage estimates**	
FEMALE (DUMMY)	**-0.144*** **	**-0.450***	-0.099***	-0.078***
	[0.026]	**[0.247]**	[0.021]	[0.024]
NUMBER OF CHILDREN (log)	-0.156**	-0.167**	-	-
	[0.070]	[0.070]		
FEMALE * NO. CHILDREN (log)	-	0.612	-	-
		[0.489]		
MARRIAGE (COHABITING) (DUMMY)	0.165***	0.161***	0.457***	0.457***
	[0.036]	[0.037]	[0.013]	[0.013]
LEISURE TIME RELIGIOUS ACTIVITIES (log)	-	-	**0.128*** **	**0.131*** **
			[0.010]	**[0.010]**
FEMALE * LEISURE TIME RELIGIOUS ACTIVITIES	-	-	-	-0.068*
				[0.039]

All controls included. F-test and weak identification test suggest instrument has power. Reduced-form regression shows negative association between instrument and dependent variable. Hansen-J with VOLUNTEERING ACTIVITIES during leisure time as additional instrument support exclusion restrictions.

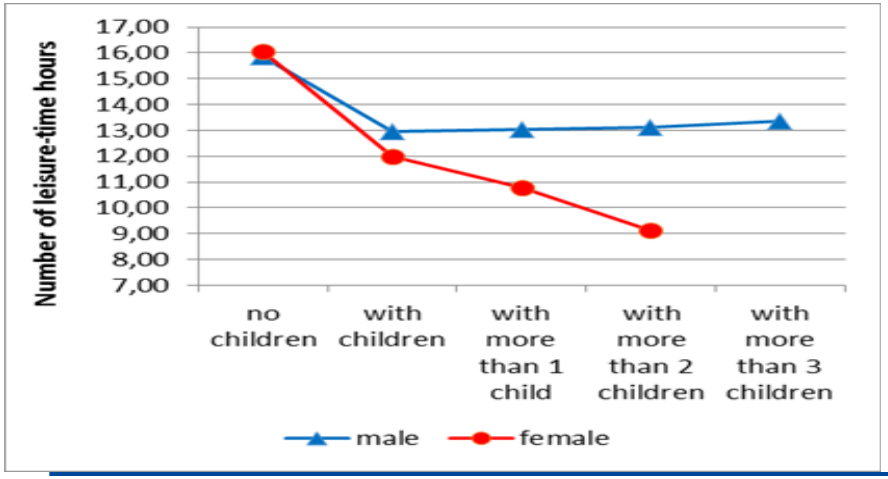
With 2SLS:

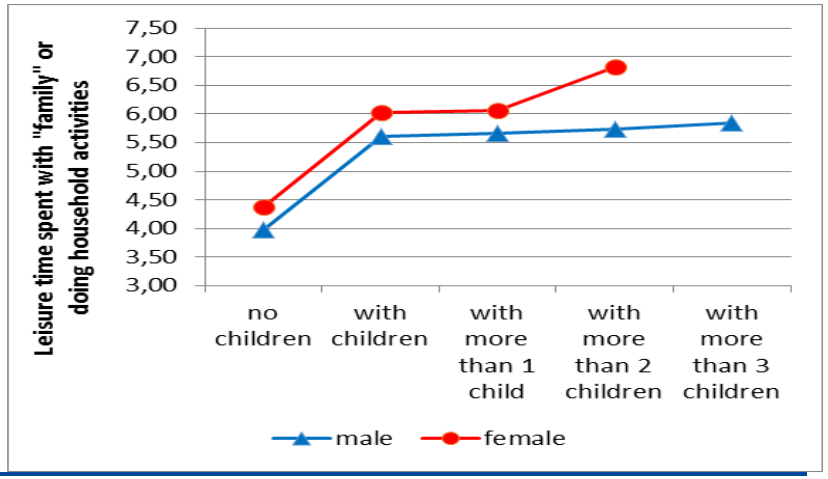
Women: 14.4% lower income than men.

However, children negative and statistically significant (5% level) on both men's and women's incomes: having one more child decreases income by 15.6%.

OLS overestimation: parents establish families when they can undertake the associated responsibilities and afford the costs.

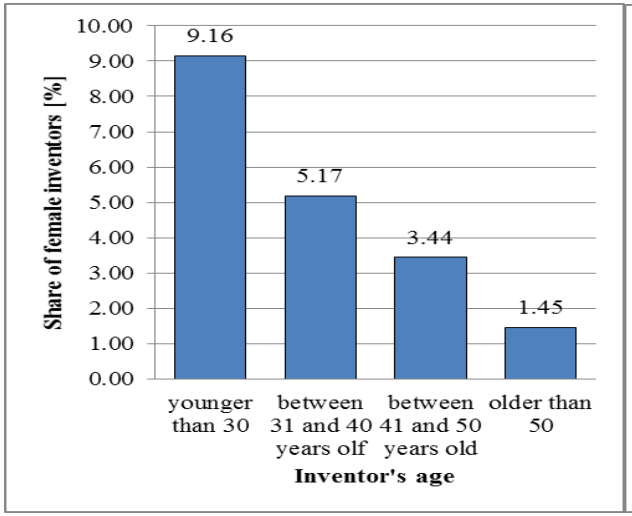
Negative sign in IV: parents in these highly skilled jobs share the workload for raising children, and the price of a relatively lower income than peers with no children.

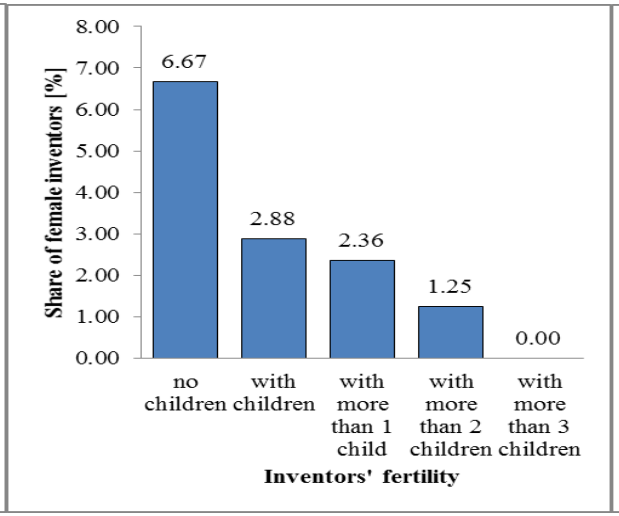


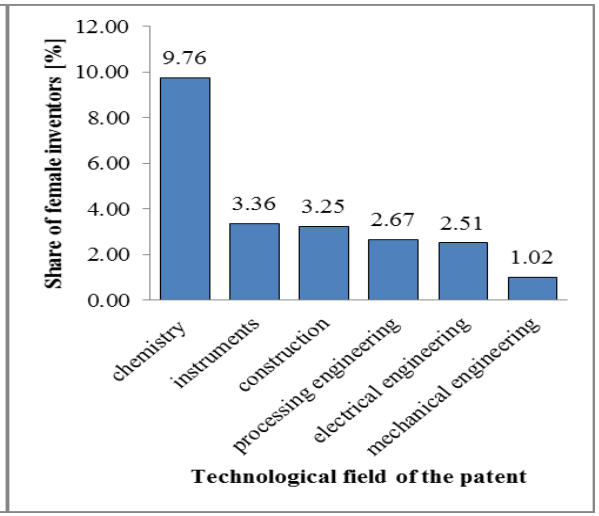


Also, women in this jobs are “selected”:

- Compared to men, women are 5 years younger, better educated, fewer children, less often married
- Selection may be at the time women choose the field of study or their job; or they drop out of their jobs once they have children …







IV by age group shows that the wage gap persists over time but gets smaller for older inventors -> drop out?

Fewer female inventors with more children -> drop out or age profile?

Selection into different fields?

Results hold with:

- **Sampling weights** (on education or children) to show if positive selection of particularly able (with fewer children) female inventors affect our results
- **Propensity score matching** method to match male and female inventors on relevant selection variables (age, level of education, technical field of activity, year of patent filing, and country) -- 414 women and 414 similar male inventors
- **Oaxaca-Blinder decomposition** to understand what portion of the gender gap in income can be attributed to differences in the characteristics of women and men, as well as what portion remains unexplained

To conclude:

- A gender-income gap exists even in this highly skilled and creative job in favor of male inventors.
- It does not correspond to better inventive outcomes.
- Income gap is not fully explained by differences in the inventors' observable characteristics.
- After controlling for the potential endogeneity of fertility, children are negatively correlated with both male and female income.

… In addition, positive selection may lead particularly able females to stay in the job, and affect the income gap too: the gap would be even larger if we had a larger representation of women (i.e., less educated, with more children) among the inventors.

Finally, the 4% female share also points at a clear **inefficiency**: if talent is equally distributed between genders, there is an overreliance on men's and an under-exploitation of women's potential.

Obstacles to women's participation are more **punitive** in highly skilled and creative jobs, in which many workers enjoy working and are willing to give up their leisure time for "leisure work" (*The Economist*, 2014).

Thank you
for your attention!

	Total Sample; N(total)=9,799				Male Inventors; N(male)=9,385				Female Inventors; N(female)=414			
Variable	**Mean**	**Std. Dev.**	**Min**	**Max**	**Mean**	**Std. Dev.**	**Min**	**Max**	**Mean**	**Std. Dev.**	**Min**	**Max**
INCOME ***	62646.7	24688.8	5000	100000	63237.1	24474.6	5000	100000	49263.29	25745.56	5000	100000
FORWARD CITATIONS ***	1.12	1.97	0	43	1.11	1.94	0	43	1.38	2.52	0	28
INVENTIVE STEP	3.33	0.90	1	5	3.33	0.90	1	5	3.40	0.88	1	5
FEMALE (DUMMY)	0.042	0.201	0	1								
MARRIAGE (COHABITING) (DUMMY) ***	0.84	0.36	0	1	0.85	0.36	0	1	0.72	0.45	0	1
NUMBER OF CHILDREN ***	1.46	1.17	0	4	1.49	1.18	0	4	0.87	0.98	0	3
WORKING HOURS ***	44.29	15.08	0	80	44.39	15.12	0	80	42.08	14.09	1	80
HOURS LEISURE TIME	13.81	11.09	0	128	13.80	11.01	0	128	14.01	12.87	0	90
AGE ***	43.44	9.94	20	84	43.66	9.93	20	84	38.34	8.88	22	70
HIGH SCHOOL (DUMMY) **	0.08	0.28	0	1	0.09	0.28	0	1	0.06	0.23	0	1
BACHELOR OR MASTER (DUMMY) ***	0.60	0.49	0	1	0.61	0.49	0	1	0.51	0.50	0	1
PHD (DUMMY) ***	0.29	0.45	0	1	0.28	0.45	0	1	0.42	0.49	0	1
EXPERIENCE ***	15.70	10.30	0	62	15.89	10.33	0	62	11.30	8.59	0	47
PAST PRODUCTIVITY ADJUSTED **	3.17	8.80	0.02	500	3.22	8.95	0.02	500	2.24	4.06	0.06	50
PAST MOBILITY (DUMMY) *	0.32	0.47	0	1	0.32	0.47	0	1	0.36	0.48	0	1
TENURE AT THE ORGANIZATION ***	12.77	10.30	0	62	12.93	10.36	0	62	8.99	8.11	0	47
FIRM SIZE - SMALL FIRM	0.14	0.35	0	1	0.14	0.35	0	1	0.16	0.36	0	1
FIRM SIZE - MEDIUM SIZED FIRM	0.06	0.23	0	1	0.06	0.23	0	1	0.05	0.23	0	1
FIRM SIZE - LARGE FIRM	0.80	0.40	0	1	0.80	0.40	0	1	0.78	0.42	0	1
SHARE RD EMPLOYEES **	0.34	0.38	0	1	0.34	0.38	0	1	0.29	0.39	0	1
RD EMPLOYEES MISSING (DUMMY) ***	0.28	0.45	0	1	0.28	0.45	0	1	0.39	0.40	0	1
PUBLIC RESEARCH ORGANIZATION (DUMMY) ***	0.06	0.24	0	1	0.06	0.23	0	1	0.13	0.34	0	1
ADVANCEMENT REWARD ***	2.14	1.29	1	5	2.13	1.28	1	5	2.37	1.43	1	5
INDEPENDENCE REWARD **	2.93	1.41	1	5	2.93	1.41	1	5	2.98	1.50	1	5
SOCIETY REWARD ***	2.89	1.36	1	5	2.88	1.36	1	5	3.12	1.37	1	5
RISK ATTITUDE ***	7.05	2.35	1	11	7.07	2.34	1	11	6.57	2.53	1	5
TIME DEVOTED TO INVENT (SHARE) ***	32.98	29.90	0	100	32.36	29.62	0	100	46.87	32.83	0	100
TIME ROUTINE TASKS (SHARE) ***	36.57	24.63	0	100	36.76	24.65	0	100	32.19	23.90	0	100
LEADER ***	6.29	14.70	0	100	6.43	14.91	0	100	3.01	8.53	0	95
WORK IN R&D DPT (DUMMY)	0.79	0.40	0	1	0.79	0.41	0	1	0.82	0.39	0	1
TOP MANAGEMENT POSITION (DUMMY) ***	0.06	0.24	0	1	0.07	0.25	0	1	0.03	0.18	0	1
PROJECT SIZE ***	13.49	19.05	0	73	13.08	19.10	0	73	21.30	22.65	0	73
PROJECT SIZE MISSING (DUMMY) ***	0.08	0.26	0	1	0.07	0.26	0	1	0.15	0.35	0	1
PRIO YR 2003 (DUMMY)	0.34	0.47	0	1	0.34	0.47	0	1	0.31	0.46	0	1
PRIO YR 2004 (DUMMY)	0.37	0.48	0	1	0.37	0.48	0	1	0.38	0.49	0	1
PRIO YR 2005 (DUMMY)	0.29	0.45	0	1	0.29	0.45	0	1	0.30	0.46	0	1
LT_RELIGION	0.56	1.10	0	5	0.56	1.09	0	5	0.61	1.16	0	5
LT_VOLUNTEER	0.73	1.15	0	5	0.74	1.15	0	5	0.64	1.14	0	5

In a Chi2-Test or a t-test the difference between the two sub-samples (male and female inventors) turned out to be significant / *** $p<0.01$, ** $p<0.05$, * $p<0.1$

G12 What was your approximate **annual gross income** in the year of the patent application?

❒	Below 10,000 Euro
❒	10,000-29,999 Euro
❒	30,000-49,999 Euro
❒	50,000-69,999 Euro
❒	70,000-99,999 Euro
❒	100,000 and more Euro
❒	No answer

OLS Estimates II

	Income (log)			# forward citations (log)	Inventive step
WORKING HOURS (log)	0.024***	0.024***	0.024***	0.013	0.000
	[0.008]	[0.008]	[0.008]	[0.011]	[0.006]
HOURS LEISURE TIME (log)	0.012*	0.018***	0.018***	-0.002	-0.013***
	[0.006]	[0.006]	[0.006]	[0.009]	[0.005]
AGE (log)	9.173***	8.224***	8.295***	1.325*	-0.160
	[0.635]	[0.647]	[0.648]	[0.740]	[0.396]
AGE SQUARED (log)	-1.148***	-1.029***	-1.039***	-0.191*	0.035
	[0.084]	[0.086]	[0.086]	[0.098]	[0.052]
HIGH SCHOOL (DUMMY)	0.131***	0.128***	0.129***	-0.026	-0.051**
	[0.038]	[0.038]	[0.038]	[0.039]	[0.022]
BACHELOR OR MASTER (DUMMY)	0.259***	0.259***	0.259***	-0.025	-0.061***
	[0.035]	[0.035]	[0.035]	[0.035]	[0.020]
PHD (DUMMY)	0.346***	0.345***	0.345***	0.022	-0.044**
	[0.035]	[0.035]	[0.035]	[0.038]	[0.021]
EXPERIENCE (log)	0.083***	0.081***	0.081***	0.050***	0.025***
	[0.011]	[0.011]	[0.011]	[0.014]	[0.008]
PAST PRODUCTIVITY ADJUSTED (log)	0.044***	0.043***	0.043***	0.030***	0.017***
	[0.004]	[0.004]	[0.004]	[0.006]	[0.003]
PAST MOBILITY (DUMMY)	-0.026**	-0.025*	-0.025**	-0.026	-0.013
	[0.013]	[0.013]	[0.013]	[0.017]	[0.010]
TENURE AT THE ORGANIZATION (log)	-0.027***	-0.027***	-0.027***	-0.042***	-0.004
	[0.009]	[0.009]	[0.009]	[0.012]	[0.007]
FIRM SIZE - MEDIUM SIZED FIRM (DUMMY)	0.089***	0.092***	0.092***	-0.002	-0.020
	[0.022]	[0.022]	[0.022]	[0.029]	[0.016]
FIRM SIZE - LARGE FIRM (DUMMY)	0.103***	0.103***	0.103***	0.040*	-0.035***
	[0.017]	[0.017]	[0.017]	[0.020]	[0.011]
SHARE RD EMPLOYEES	-0.014	-0.013	-0.013	0.043**	0.013
	[0.014]	[0.014]	[0.014]	[0.020]	[0.010]
RD EMPLOYEES MISSING (DUMMY)	-0.024**	-0.021**	-0.021**	0.004	-0.007
	[0.009]	[0.009]	[0.009]	[0.016]	[0.008]
PUBLIC RESEARCH ORGANIZATION (DUMMY)	-0.190***	-0.187***	-0.188***	-0.042	0.083***
	[0.021]	[0.021]	[0.021]	[0.028]	[0.014]

OLS Estimates III

	Income (log)			# forward citations (log)	Inventive step
ADVANCEMENT REWARD (log)	-0.016**	-0.017**	-0.017**	0.001	0.001
	[0.008]	[0.007]	[0.007]	[0.011]	[0.006]
INDEPENDENCE REWARD (log)	-0.016**	-0.015*	-0.015*	-0.001	0.030***
	[0.008]	[0.008]	[0.008]	[0.012]	[0.006]
SOCIETY REWARD (log)	-0.008	-0.009	-0.009	0.026**	0.049***
	[0.008]	[0.008]	[0.008]	[0.012]	[0.006]
RISK ATTITUDE	0.044***	0.042***	0.043***	-0.009	0.076***
	[0.011]	[0.011]	[0.011]	[0.015]	[0.009]
TIME DEVOTED TO INVENT (SHARE)	-0.001***	-0.001***	-0.001***	-0.000	0.001***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
TIME ROUTINE TASKS (SHARE)	-0.000*	-0.000*	-0.000*	-0.000	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
LEADER (log)	0.075***	0.072***	0.072***	0.002	-0.000
	[0.004]	[0.004]	[0.004]	[0.006]	[0.003]
WORK IN R&D DPT (DUMMY)	-0.014	-0.013	-0.013	0.005	-0.030***
	[0.016]	[0.015]	[0.015]	[0.020]	[0.011]
TOP MANAGEMENT POSITION (DUMMY)	0.082***	0.082***	0.082***	-0.031	-0.003
	[0.026]	[0.026]	[0.026]	[0.030]	[0.016]
PROJECT SIZE (log)	-	-	-	0.094***	0.041***
				[0.028]	[0.015]
PROJECT SIZE MISSING (DUMMY)	-	-	-	0.015**	0.030***
				[0.006]	[0.003]
PRIO YR 2004 (DUMMY)	0.015	0.015	0.015	-0.021	-0.011
	[0.009]	[0.009]	[0.009]	[0.015]	[0.007]
PRIO YR 2005 (DUMMY)	0.013	0.012	0.012	-0.083***	-0.011
	[0.010]	[0.010]	[0.010]	[0.015]	[0.008]
Constant	-7.997***	-6.217***	-6.355***	-1.916	1.073
	[1.193]	[1.216]	[1.217]	[1.387]	[0.746]
Observations	9,799	9,799	9,799	9,799	9,300
R-squared	0.471	0.475	0.476	0.065	0.115
F	99.22	99.02	98.48	7.559	12.18

Inventors' Characteristics by Religious Activities

The items in the Table are used as dependent variables and RELIGIOUS ACTIVITY as the main regressor.

VARIABLES					
FEMALE	0.021	[0.053]	WORKING HOURS	-0.005	[0.011]
MARRIAGE (COHABITING)	0.106***	[0.038]	EXPERIENCE	0.022*	[0.013]
NUMBER OF CHILDREN	0.139***	[0.010]	FIRM SIZE	0.072***	[0.024]
TIME DEVOTED TO INVENT	-0.637	[0.614]	SHARE RD EMPLOYEES	-0.007	[0.008]
TIME ROUTINE TASKS	-0.239	[0.535]	PUBLIC RESEARCH ORGANIZATION	-0.063	[0.048]
LEADER	-0.033	[0.025]	EDUCATION	-0.017	[0.023]
TOP MANAGEMENT POSITION	-0.079*	[0.045]	WORK IN R&D DPT	-0.004	[0.032]
ADVANCEMENT REWARD	0.063***	[0.013]	PAST MOBILITY	-0.034	[0.029]
INDEPENDENCE REWARD	0.036***	[0.012]	TENURE AT THE ORGANIZATION	0.000	[0.018]
SOCIETY REWARD	0.068***	[0.012]	RISK ATTITUDE	0.008	[0.009]
HOURS LEISURE TIME	-0.020	[0.015]	PAST PRODUCTIVITY ADJUSTED	0.035	[0.026]

Notes: N = 9,799. Robust standard errors are in parentheses. All regressions control for AGE, AGE SQUARED, country, time, and technological dummies

Oaxaca-Blinder Decomposition Results

Differential					
Prediction_male	10.952***	[0.005]			
Prediction_female	10.617***	[0.034]			
Difference	0.335***	[0.035]			
Specifications in Table 3	Explained		Unexplained		
Specification (1)	0.172***		0.163***		
Specification (2)	0.181***		0.154***		
Specification (3)	0.202***		0.133***		
Specification (4)	0.209***		0.126***		
Specification (4)	**OLS regressions**			**IV regressions**	
Endowments	0.199***	[0.041]	Endowments	0.178**	[0.079]
NUMBER OF CHILDREN (log)	-0.057***	[0.019]		-0.139	[0.253]
EXPERIENCE (log)	0.047*	[0.027]		0.044*	[0.023]
TIME DEVOTED TO INVENT (SHARE)	0.036***	[0.013]		0.034**	[0.015]
LEADER (log)	0.031***	[0.011]		0.033**	[0.015]
AGE (log)	2.281***	[0.572]		2.608**	[1.113]
AGE SQUARED (log)	-2.167***	[0.569]		-2.451**	[0.993]
TENURE AT THE ORGANIZATION (log)	-0.042*	[0.022]		-0.41**	[0.017]
PUBLIC RESEARCH ORGANIZATION (DUMMY)	0.025***	[0.009]		0.026***	[0.010]
Coefficients	0.127***	[0.028]	Coefficients	0.147***	[0.028]
NUMBER OF CHILDREN (log)	0.114***	[0.032]		0.153	[0.429]
AGE (log)	-34.947**	[15.08]		-38.889	[30.392]
AGE SQUARED (log)	16.764**	[7.444]		18.456	[13.341]
TENURE AT THE ORGANIZATION (log)	0.034	[0.022]		0.191*	[0.101]
PAST MOBILITY (DUMMY)	0.067**	[0.031]		-0.067**	[0.027]
PUBLIC RESEARCH ORGANIZATION (DUMMY)	0.021	[0.014]		0.024*	[0.015]
Interaction	0.009	[0.034]	Interaction	0.010	[0.075]