

The Magic Third Wave: Gender and Income – a longitudinal analysis of the Vienna Career Panel Project

How has the income gap between women and men developed within and between two cohorts of business school graduates during the first six career years?

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ivm Empirical design

- Analysis of income development during the first six career years of two cohorts of business school graduates:
 - Graduation year 1990: n = 245 (62% male, 44 years ±3.3)
 - Graduation year 2000: n = 266 (55% male, 35 years ±3.3)
- Income gap measurement: comparison across cohorts? (distortion by inflation)
- Approach chosen here: % of average male income (after filtering out far outliers for each career year)
- Employment gaps filtered out for the women (negligible for male sample): no "hidden" explanation for income gap
- Previous research (e.g., Strunk et al., 2005) suggests that income gap develops over time: always included as predictor

Career years 1-6 1990 cohort 2000 cohort

ivm Limitations

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- · Specific sample from specific country
- Self-report/recollection of income (although literature suggests only minor distortions for "hard fact" data)
- Different survey designs for the 1990 and the 2000 cohort (retrospective vs. annual survey)
 ^{cr} but: no gender-specific distortions expected

ivm ViCaPP: a short introduction

- Vienna Career Panel Project: since 2000, financed by the Austrian Science Fund (follow-up project approved as well)
- Follows the careers of three (four) cohorts of business school graduates: 1970, 1990, 2000, (2010)
- Data on traits and sociodemographic variables collected once around 2001
- Data on several career-related variables (subordinates, amount of energy invested in job, career satisfaction, income, job type etc.) collected for each career year (retrospectively for 1990 and 1970 cohorts)

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ivm Method

- Mixed linear models for longitudinal data (similar purpose as GLM or OLS regression, but able to handle correlated data like individual time series)
- Dependent variable: % of mean male income (only women of both cohorts included in the analysis)
- Three models calculated
- 1) "small": Career year + cohort
- 2) "medium": Career year + part-time work + weekly work hours + cohort
- "large": Career year + part-time work + weekly work hours + org. type + org. size + org. market position + cohort

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ivm Results

Model	Predictor	Par. est.	. (s.e.)	Effect F
"Small"	Constant	102.9	(3.5)	
n = 190	Career year	-3.6	(0.6)	37.6 **
Marginal R square: 0.06	2000 cohort (vs. 1990 cohort)	-8.3	(3.8)	4.9 *
"Medium"	Constant	91.0	(3.0)	
n = 184	Career year	-3.5	(0.5)	42.3 **
Marginal R square: 0.29	Part-time work (vs. full-time)	-27.3	(3.7)	54.3 **
	Weekly working hours	0.3	(0.1)	12.4 **
	2000 cohort (vs. 1990 cohort)	-6.4	(3.2)	3.9 *
"Large"	Constant	65.8	(7.3)	
n = 166	Career year	-3.3	(0.6)	29.7 **
Marginal R square: 0.33	Part-time work (vs. full-time)	-14.6	(4.9)	8.8 **
	Weekly working hours	0.9	(0.1)	41.0 **
	Other org. than private company	-6.3	(3.3)	3.7
	SME (vs. large organization)	-0.5	(2.4)	<.1
	Org. among market leaders	1.2	(2.0)	.4
	2000 cohort (vs. 1990 cohort)	-6.6	(3.3)	4.0 *

*: p < 0.05

ivm In a nutshell and roughly spoken

- Each career year reduces the proportion of mean male income that women attain by about 3%.
- Workload (part-time work and weekly hours) significantly influence the income gap between women and men, but:
- The women of the 2000 cohort are more than 6% worse off compared to the 1990 cohort, even when controlling for workload and organizational variables.



