

Economic Perspective on Non-economic Phenomena

4) Marriage and labor market

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Previous lecture(s)

- Family (week 2)
- Gains from marriage
- Decision making within families

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- Matching markets (week 3)
- How men and women form pairs
- How gains from marriage are split due to competition for partners

Labor force participation

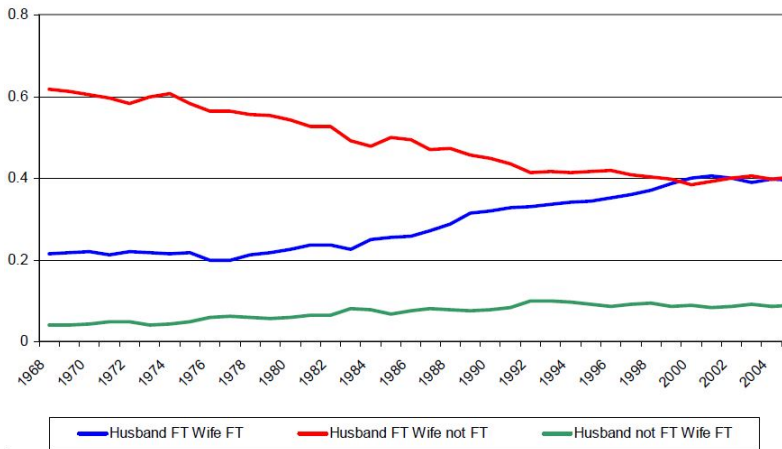
Country	Male Participation Rates					Female Participation Rates				
	1965	1975	1985	1995	2005	1965	1975	1985	1995	2005
US	80.7	77.9	76.3	75.0	73.3	39.3	46.3	54.5	58.9	59.3
Canada	79.9	78.4	77.4	72.7	72.7	33.8	44.4	54.9	57.3	61.4
Australia	85.1	82.2	76.7	74.6	73.0	34.8	44.5	47.1	74.7	58.1
Japan	81.1	81.2	77.9	77.5	73.1	48.8	44.8	47.6	49.3	47.7
France	79.2	74.4	68.4	63.4	63.3*	38.2	41.7	46.4	48.2	51.1*
Germany	80.9	73.4	70.1	68.1	63.9*	40.0	39.3	41.1	47.1	49.6*
Italy	77.5	70.6	65.3	61.6	61.1*	27.8	26.8	30.7	34.4	38.2*
Nether.	NA	80.0	73.8	69.8	72.7	NA	29.5	37.9	48.1	57.8
Sweden	82.2	77.0	72.5	68.9	67.8*	46.6	55.2	61.5	59.5	59.7*
UK	85.4	81.2	76.1	72.0	70.5	41.7	46.6	50.7	53.5	56.2

Source: Comparative Civilian Labor Force Statistics, 10 Countries, 1960-2005,

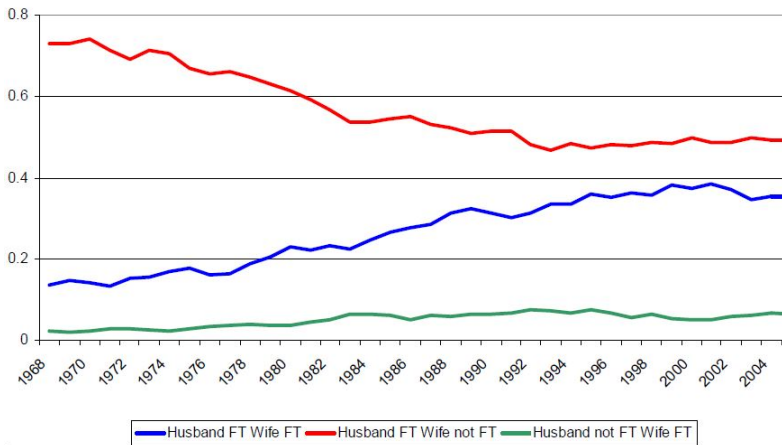
US Department of Labor, 2006.

Note: * Observation from 2004.

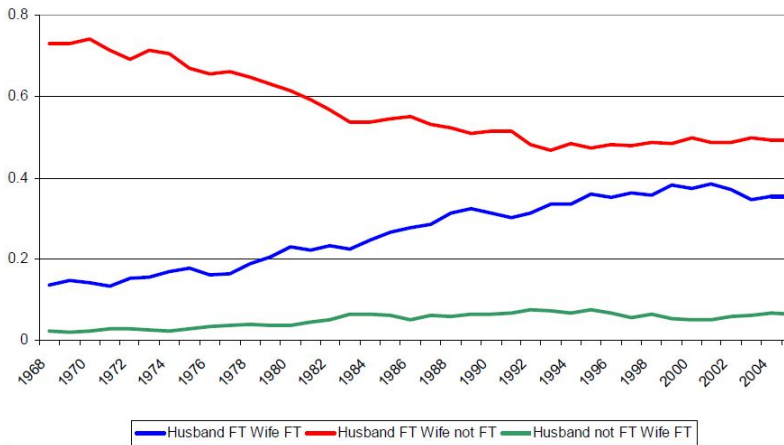
Work patterns of husbands and wives (aged 40-60)



Work patterns of husbands and wives (aged 30-40)



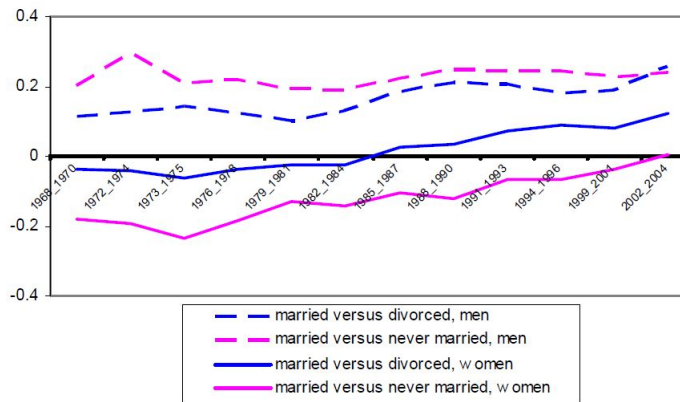
Work patterns of husbands and wives (aged 30-40)



- *Why is there the difference between the age groups?*

Consequence of a different labor force participation

Logs of wage difference



- *Could you think about the reasons for differences and the trends?*

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- Labor supply of men is stable after the decline in the 1960's

Plan for today

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- Policies affecting marriage-specific labour supply

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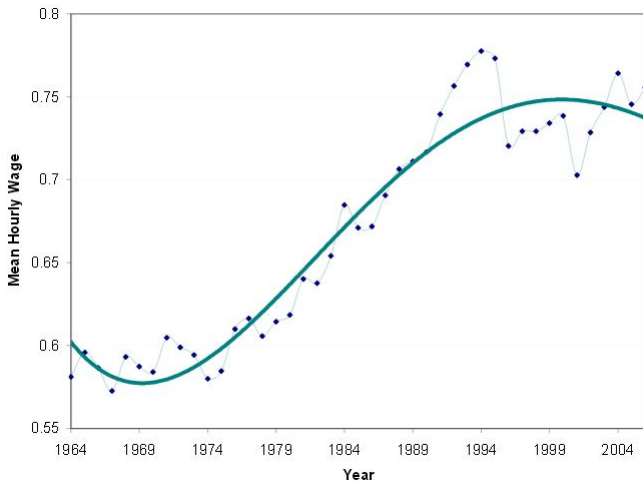
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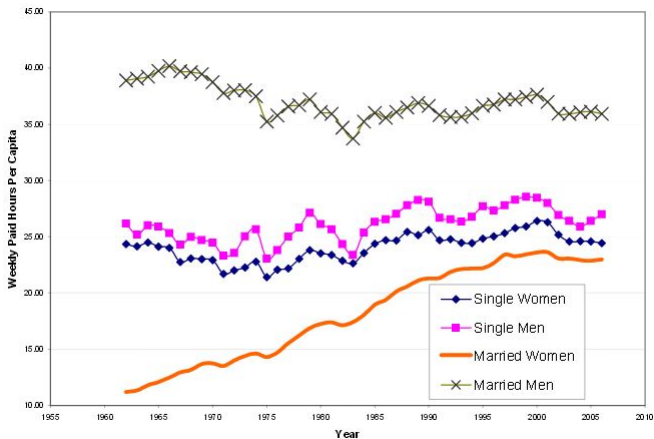
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- UM: Increase in female market labor participation, decrease in male market labor participation
- Non- UM: Not clear, increase in female bargaining power

Change in the average female/male relative wage in the US



Source: Knowles (2012)

Weekly paid hours



Source: Knowles (2012)

Unitary models

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- Calibration to US data implies that married men's labor supply should have fallen, by somewhere between 5-8 hours weekly.
- Reason: The unitary household should respond to a rise in the relative price of the wife's time by
 - reallocating spending to cheaper goods, such as husband's non-working time
 - substituting husband's time inputs for the wife's time in home production

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- Utility depends on: consumption, leisure and either utility from the match (in case of being married) or joy from being single.
- Other assumptions of the model: costless marriage and divorce, wages and quality of single life are stable.

Note: For technical details and the solution, see the paper (reference on the last slide).

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- The model predicts that in response to an increase in women's wages, relative to men's, wives non-working time will weakly increase, relative to that of their husbands.
- The results suggest that bargaining effects raised married-men's labour supply by about 2.1 weekly hours over the period, and reduced that of married woman by 2.7 hours.

Reasons for policies

- *Why it is important to have special family tax treatments?*
- *What problems might it cause?*

Different taxation systems

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- Joint taxation was introduced in the Czech Republic in 2005.
- This allows study of the effect of joint taxation on the labour supply.

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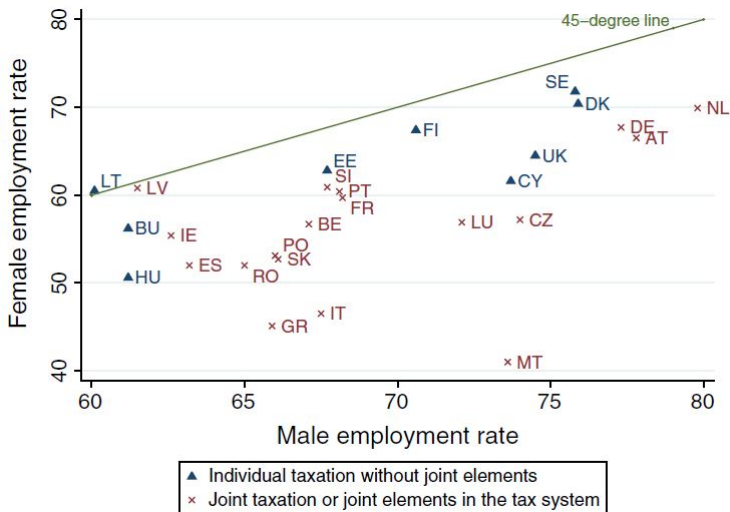
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- The effect of joint taxation on the labor supply of married men is ambiguous, because the substitutions and income effects work in opposite directions.
- The theoretical effect on the labor supply of married women is unambiguously negative.

Evidence of different systems



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- Before 2005, there was a progressive individual tax system with four tax brackets.
- Joint taxation did not change the structure of the tax brackets, but allowed married couples with children to be taxed based on half of their total income.
- In 2008, joint taxation was abolished in the Czech Republic, because a flat tax rate system was introduced.

2005 Tax reform (cont'd)

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- Therefore, the estimated effect of joint taxation in this study should be considered a lower bound of the effect for a similar reform without the voluntary component.
- Assumption: The fact that joint taxation was voluntary implies that it was chosen only by married couples for whom it lowered the tax liability when compared to individual taxation.

Effects of the tax reform

Work incentive effects of the introduction of joint taxation in the Czech Republic.

Tax bracket husband	Tax bracket wife	Change in net gain from a wife's work as a result of the introduction of joint taxation	
		In CZK per month	As % of wife's gross wage
1	1	-257	-2.7%
2	1	-384	-4.1%
2	2	-461	-2.8%
3	1	-1552	-16.5%
3	2	-1302	-7.9%
3	3	-2312	-9.1%
4	1	-1162	-12.4%
4	2	-5190	-31.5%
4	3	-5176	-20.4%
4	4	-3846	-7.6%

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Difference-in-differences: summary of treatment and control groups.

	Treatment group	Control group
1	Married men/women with children (aged 0–17/25)	Unmarried and married men/women without children (or with children aged over 18/25)
2	Married men/women with children aged 10–17/25	Married men/women with children aged 18/26–30
3	Married men/women with children aged 16–17	Married men/women with children aged 18–19 (not in education)
4	Married men/women with children aged 24–25 (in education)	Married men/women with children aged 26–27

Findings

- A 2.9 percentage point decline in the employment probability of Czech married women with children compared to unmarried and childless women and compared to the period before joint taxation in the Czech Republic.

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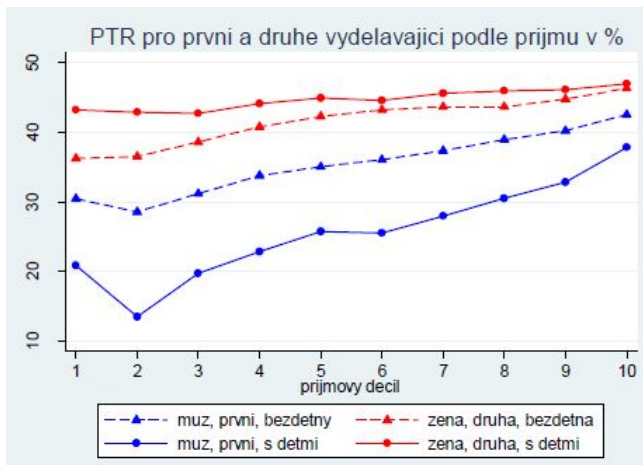
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Findings

- A 2.9 percentage point decline in the employment probability of Czech married women with children compared to unmarried and childless women and compared to the period before joint taxation in the Czech Republic.
- Women who experienced the highest change in work incentives (women with highly-educated husbands) indeed responded with the largest decrease in employment probability, namely by 5.5 percentage points.
- Results for men suggest that married men with children did not adjust their labor supply at the extensive margin in response to the introduction of joint taxation, but they decreased the hours worked slightly.

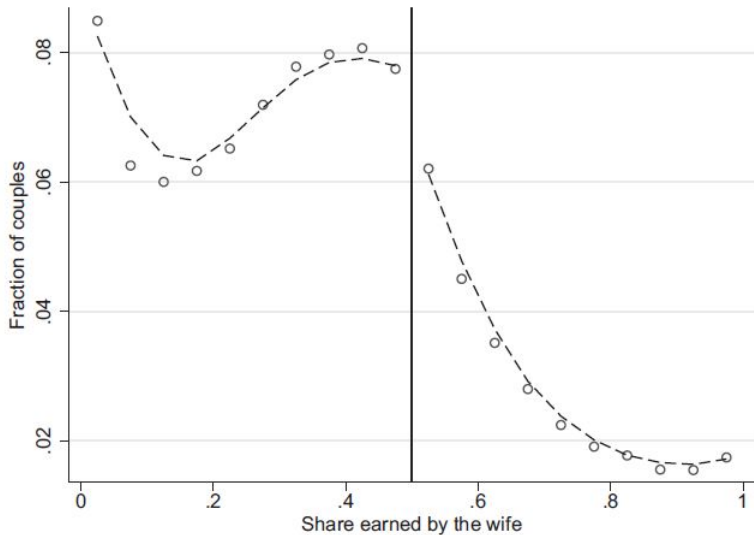
Effect of tax system on labor market in CR

(Participation tax rate for a high and a low earning partner)



● More at seminars

Bertrand et al. 2015



Conclusion

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 - aversion to the situations when wife earning more than her (potential) husband

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 - aversion to the situations when wife earning more than her (potential) husband
- Consequences for
 - marriage formation
 - wife's labor force participation
 - the wife's income conditional on working
 - marriage satisfaction
 - likelihood of divorce
 - division of home production

Suggested readings

- Knowles, John A. "Why are married men working so much? An aggregate analysis of intra-household bargaining and labour supply." *Review of Economic Studies* 80.3 (2012): 1055-1085.
- Blundell, Richard, John Ham, and Costas Meghir. "Unemployment and female labour supply." *The Economic Journal* (1987): 44-64.
- Kalíšková, Klára. "Labor supply consequences of family taxation: Evidence from the Czech Republic." *Labour Economics* 30 (2014): 234-244.
- Bertrand, Marianne, Emir Kamenica, and Jessica Pan. "Gender identity and relative income within households." *The Quarterly Journal of Economics* 130.2 (2015): 571-614.



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