

# Research in Labor Economics

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# What is Labor Economics

- Labor economics is the study of the behavior of employers and employees
- Focus: How employees and employers react to:
  - Wages
  - Prices
  - Profits
  - Nonpecuniary aspects of employment relationship
- The fundamental question: What factors motivate or limit individual choices in the labor market?

# Classical Topics in Labor Economics

- Labor supply
- Labor demand
- The impact of labor supply and labor demand interactions on wage structure
- Why study?
  - What are the sources of income inequality?
  - What are the disincentive effects of attempts to produce a more equal income distribution?

# Extensions of Labor Economics

- Few extensions:
  - Human capital
  - Government policy
  - Discrimination
  - Retirement

# Recent Research Trends in Labor Economics

**Year of publication: 1990-99**

<b>Subfield</b>	<i>Theory</i>	<i>Empirics</i>	<i>Total</i>
Demand for education/formation of human capital	7	29	36
The demand and supply of labor	10	58	68
Organization of labor markets	28	59	87
Firm behaviour/personnel economics	26	23	49
Household economics	8	20	28
Aging and retirement	0	6	6
Crime	2	2	4
<b>Total</b>	<b>81</b>	<b>197</b>	<b>278</b>

AER, Econometrica, the JPE, the QJE, the RES

*Source: List & Rasul (2011)*

# Recent Research Trends in Labor Economics (2000-09)

**Year of publication: 1990-99**

<b>Subfield</b>	<i>Theory</i>	<i>Empirics</i>	<i>Total</i>
Demand for education/formation of human capital	10	46	56
The demand and supply of labor	20	53	73
Organization of labor markets	20	48	68
Firm behaviour/personnel economics	33	28	61
Household economics	12	27	39
Aging and retirement	0	6	6
Crime	4	1	5
<b>Total</b>	<b>96</b>	<b>219</b>	<b>315</b>

AER, Econometrica, the JPE, the QJE, the RES

*Source: List & Rasul (2011)*

- Labor markets often exhibit bizarre economic irregularities:
  - Law of supply does not always hold (Fehr, 2007, AER);
  - Incentive do not always work (Benabou & Tirole 2003, 2006, Bestley & Ghatak 2005, AER; Bandiera et al., 2009, REStud)
- Labor supply has long been at the forefront of empirical research (Blundell & MaCurdy, 1999, HoLE).

- Focus: What factors determine the individual's decision:
  - To work or not to work?
  - How many hours to work?
- The labor supply can be analyzed in two contexts: static and intertemporal



- Intensive margin (Optimal hours of work):
  - Income and substitution effects of wage changes
- Extensive margin (Participation in employment):
  - Single negative substitution effect
  - The impact of the existing welfare system and average taxes on labor force participation

# Empirical Evidence on the Impact of Wages on Labor Supply

	Hours of work	Participation
Males	Reasonably small	Reasonably small
Single females	Reasonable moderate	Small but higher than males
Married females	Significant	Lower than for single females

# Example: Hours of Work in 5 Transition Economies

- Study of hours of work decisions in Albania, Bulgaria, Serbia, Uzbekistan and Tajikistan
- Explanatory variables:
  - Wage: Expected result - Positive
  - Age: Expected result – Positive
  - Gender: Expected result – More for males
  - Other income: Expected result – Negative
  - Education: Expected result – Positive
  - Occupation: Expected sign – Ambiguous
  - Degree of urbanization: Expected result – Positive
  - Marital status: Expected result – Positive
  - Children: Expected result – Ambiguous
  - Children < 7: Expected result – Negative

# Example: Hours of Work in 5 Transition Economies

- Findings:

- Wage elasticities in all studied countries is modest ranging from 0.03 to 0.20
- Older individuals are more likely to be employed in formal labor markets
- Married individuals more likely to be employed in Albania, Bulgaria and Serbia but less likely to be so in Tajikistan and Uzbekistan.
- Males are more likely to be employed than females.
- Individuals with higher levels of education are more likely to be employed

# Example: Hours of Work in 5 Transition Economies

- Findings:

- Probability of being employed falls in Albania and Bulgaria if a household has dependent children below school ages
- Presence of children above school ages (between 7 and 17 years) affects negatively the probability of being employed in Bulgaria and Tajikistan.
- Non-labour income discourages employment in all Balkan states and has no effect in Central Asian countries.
- Non-labour income negatively affects work hours in Serbia and Uzbekistan with no significant effect in Albania, Serbia and Tajikistan.

# Example: Hours of Work in 5 Transition Economies

- Findings:

- Individuals residing in urban areas supply more labour hours in all the countries reviewed except for Uzbekistan
- Employees working in the public sectors of Bulgaria, Serbia, and Tajikistan supply more labour hours than workers in other sectors of occupation.
- Employees engaged in the private sector activities in Albania and Uzbekistan supply more labour hours.

# Labor Supply: Further Extensions

- Intertemporal labor supply
- Household labor supply
- Education versus experience
- Government programs

- Focus: What factors determine the individual producer's decision:
  - To employ?
- Less empirical evidence on labor demand behavior as compared to labor supply



# Example: Payroll Taxes and Employment in Uzbekistan

- How payroll taxes affect individual producer's decision to employ, produce, change prices and wages, and grow?
- Recent empirical evidence: Ambiguous
- Empirical evidence from the study in Uzbekistan:
  - Employment is highly sensitive to changes in the payroll taxes
  - Higher employment sensitivity in service and public sectors
  - Sensitivity of wages to changes in the payroll taxes is rather modest
  - Substitution of labor for capital in manufacturing

# The Interplay of Labor Demand and Labor Supply

- Focus:
- What determines a particular wage structure?
- What determines the level of employment and unemployment?
- The areas explored:
  - Investment to human capital
  - Discrimination (Males vs females, ethnicity, etc.)
  - Differences in employment among more and less less-skilled labor
  - The employer and employee attitudes to risk and incomplete information (including the determinants of allocation of workers resources to searching job opportunities)
  - Labor unions and government policy
  - Unemployment
  - And many other

- Labor economics allows to blend the research with different other economic fields as:
  - Public economics
  - Health economics
  - Development economics
- To name a few

# Where to Start

- Standard labor economics textbooks for undergraduates. Examples: Borjas (2005), Ehrenberg & Smith (2011)
- More advanced labor economics textbooks: Cahuc (2011)
- Labor supply: Killingsworth (2000)
- Labor demand: Hammermesh (2001)
- Any topic: Handbook of Labor Economics

# Topics in Labor Economics Supervised in WIUT

- Labor supply
- Labor demand
- Government policy and labor supply
- Labor supply and health economics

**THANK YOU FOR YOUR ATTENTION!**