

# FDI and Wages

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# Background

- Foreign Direct Investments (FDI) have played a key role in the increased globalization of the last decades.

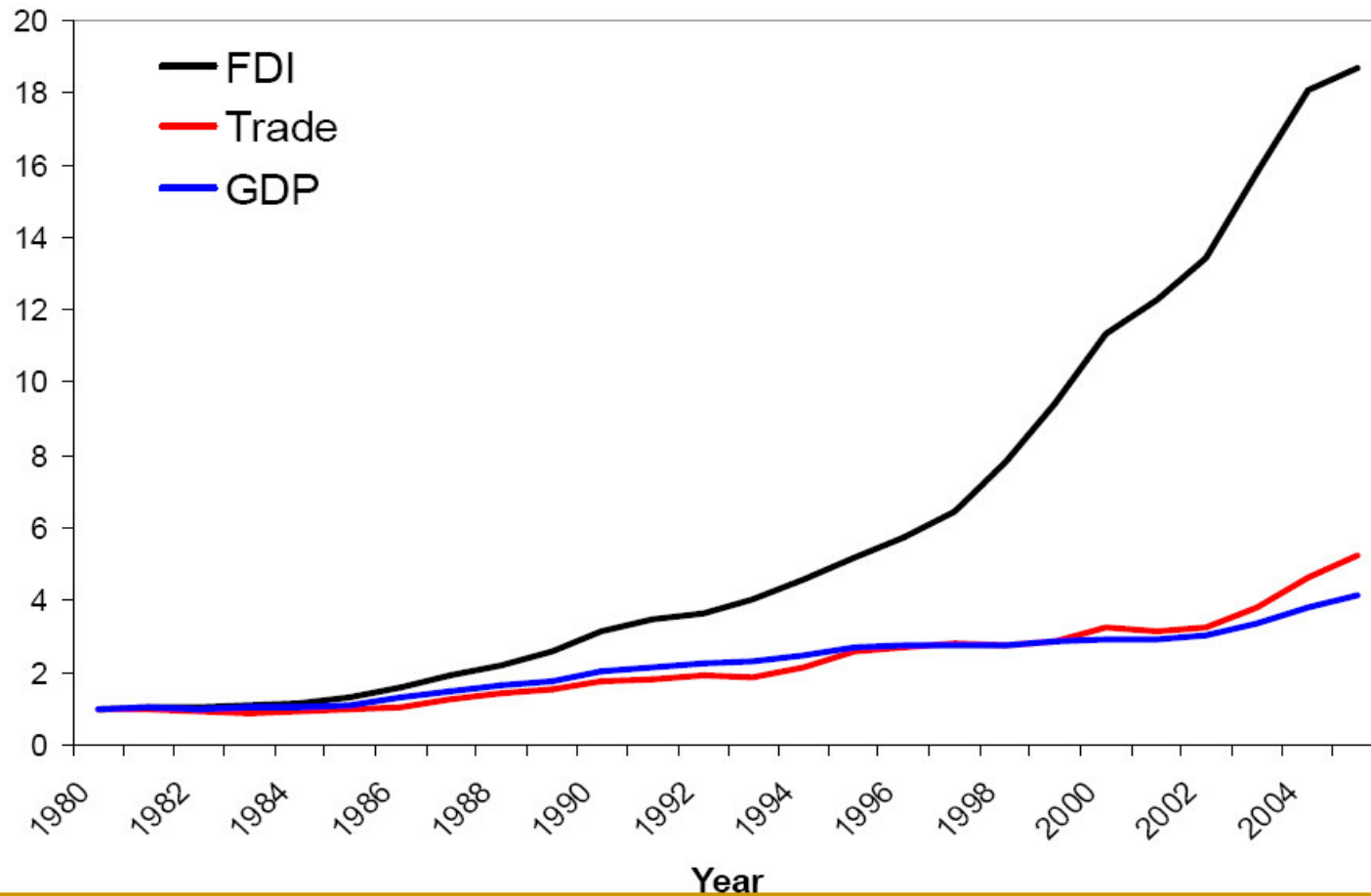
=> an increasing number of workers are employed in affiliates of foreign-owned multinational enterprises (MNEs) world wide.

- What are the labor market consequences of this development? Concerns about the impact on wages and employment.

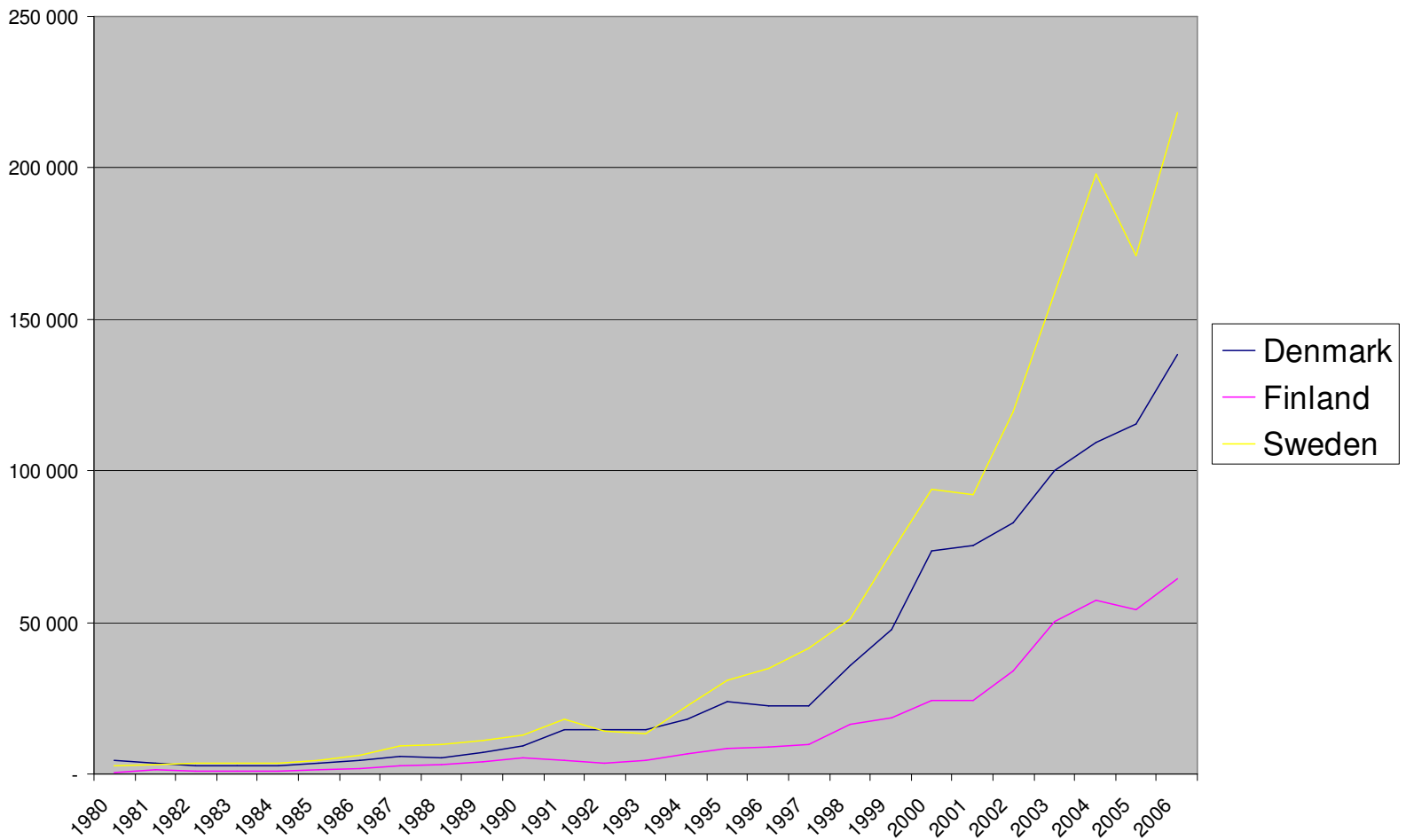
# Labor market consequences

- Weaker bargaining position for employees
    - Downward pressure on wages?
  - “Footloose” nature of multinationals as a threat to domestic jobs
    - Increasing job insecurity?
- ➔ What can we learn from matched employer-employee data?

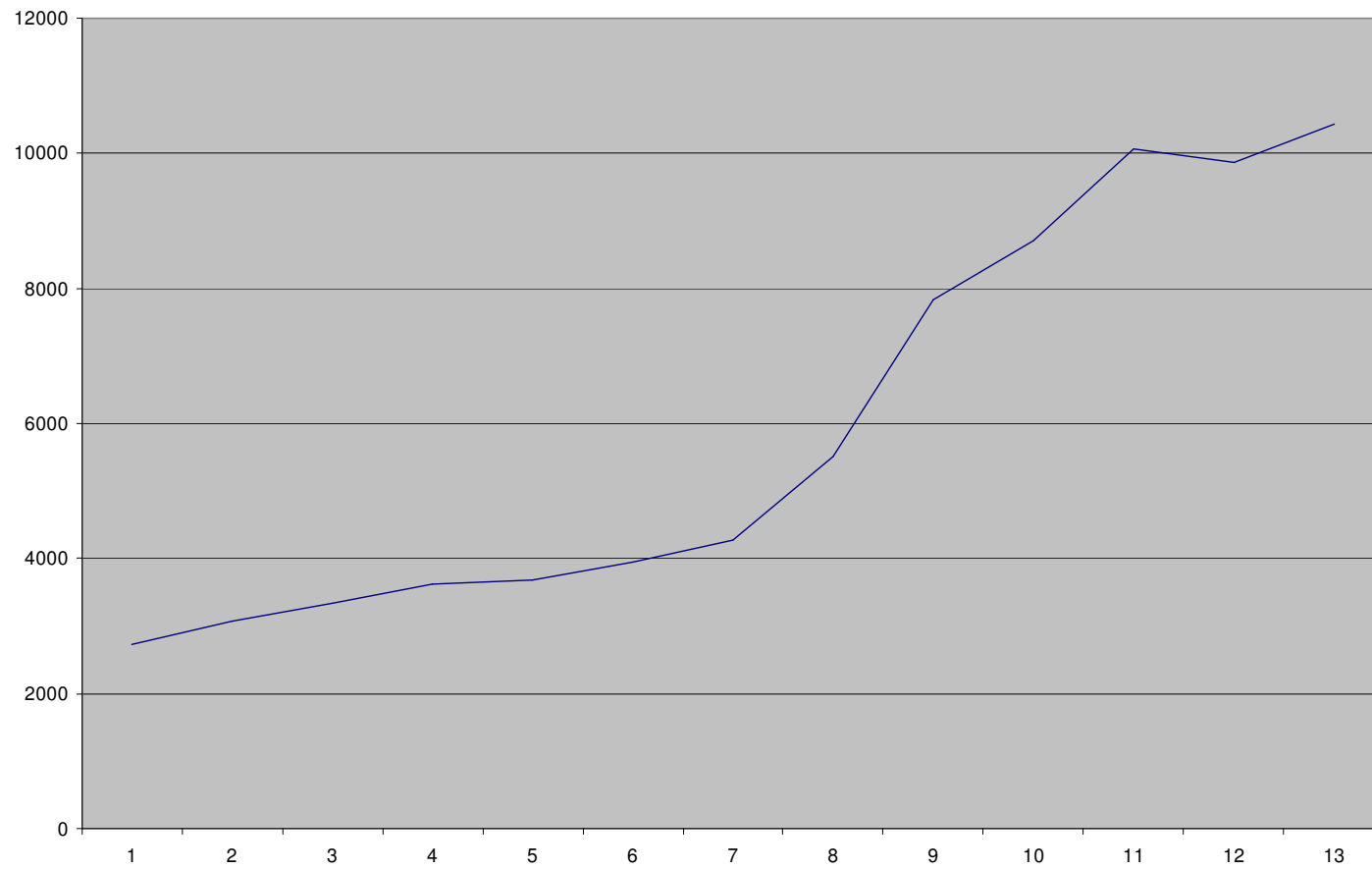
Growth in World Trade, FDI, and GDP, 1980-2005



Inward FDI stocks, 1980-2006 (Millions of \$)



**Number of foreign affiliates in Sweden, 1990-2005**



## Explanations for a positive relationship between foreign ownership and wages.

- Increased labor demand.
- Prevent technological spillovers through labor turnover.
- "Rent-sharing".
- Human capital (and/or other) differences.
- Compensating wage differentials.

# Why foreign ownership and acquisitions may increase wage dispersion

- Wage premium to key employees.
- International differences in wage dispersion. Importing wage dispersion.
- To facilitate acquisitions (“*oil in the machinery*”).



## Examples of international studies on foreign ownership and wage levels . Firm and industry evidence. Higher wages in foreign owned firms

- USA (Lipsey (1994), Aitken et al.(1996), Doms & Jensen (1998), Filicino & Lipsey (1999))
- Canada (Globerman et al. (1994))
- UK (Girma et al. (2001), Conyon (2002))
- Mexico, Venezuela (Aitken et al. (1996))
- Indonesia (Lipsey & Sjöholm (2002, 2004))

Foreign ownership wage premium: 5 – 70 %

Not the end of the story.....

## Foreign ownership and wage dispersion (firm or industry evidence)

- Girma and Görg (2003, 2006).  
Skilled workers benefit from US acquisitions in the UK.  
Unskilled workers benefit only in some industries.
- Huttunen (2004).  
A positive effect from foreign acquisition in Finland on wages that increase with the schooling of the workers.
- Almeida (2007).  
Ambiguous results for Portugal.
- Taylor and Driffield (2005). At the industry level:  
FDI increases wage dispersion in the UK.
- Blonigen and Slaughter (1999) find no such effect in the US.

# Problems with the firm or industry level based literature

For instance:

- Mean wages at the firm or industry level do not take into account differences between individuals within firms.
- Large differences between firms with different nationalities. Both observable and unobservable characteristics.
- Not random which firms that become acquired (selection). Important to have a proper control group of firms.

=> Use data on individuals.

## Individual-level studies

- Martins (2004, 2008): Portugal
  - No foreign wage premium at the individual level. Positive wage effect when studying movers. Discusses selection effects.
- Andrews et al. (2006): Germany
  - Higher wages for individuals in acquired firms. But, small or zero wage effects after selection is taken into account.
- Malchow-Møller et al. (2006): Denmark
  - Higher wages in foreign owned firms. Seems to be due to firm size differences.
- Csengödi et al. (2008a,b)): Hungary
  - U-shaped wage development after a takeover.
- Heyman, Sjöholm and Gustavsson Tingvall (2006, 2007): Sweden
  - Results: Please wait a couple of slides...

## Evidence on wage effects in Sweden

- Heyman, Sjöholm and Gustavsson Tingvall:

### *Wage levels:*

Is there Really a Foreign Ownership Wage Premium?: Evidence from Matched Employer-Employee Data , *Journal of International Economics*, 2007.

### *Wage dispersion:*

Acquisitions, Multinationals, and Wage, RIIE WP 2006.

## Contributions (using matched employer-employee data)

- Estimate comparable *firm* and *individual* level models.
- Individual fixed-effect models (“spell fixed-effects”)
- Evaluate the importance of *firm* vs. *individual* characteristics.
- Ownership and ownership *changes*
- Investigate wage differences between *multinationals*, *foreigned owned firms* and *local firms*.

## Contributions (using matched employer-employee data)

- Compare Domestic → Foreign acquisitions  
with Foreign → Domestic acquisitions.
- Compare different modes of entry; *greenfields vs. acquisitions*.
- Taking into account the endogeneity of foreign acquisitions (Matching and D-I-D).
- Follow the wages for similar workers in similar firms over time.
- Include both manufacturing and services.

# Data

- **Three register-based data sets from Statistics Sweden:**
- **Firm level data**
  - (Detailed information on all Swedish firms with at least 20 employees)
- **Establishment level data**
  - Data on all establishments. Add information on the composition of the labor force with respect to educational level and demographics.)
- **Individual wage data**
  - Detailed information on a very large representative sample of employed individuals. 2 million observations per year.

=> Matched employer-employee data. Now available for the period 1990-2005.



## Ratios Foreigned owned firms / Swedish firms

Industry	Mean wage		Share of skilled employees		Firm size	
	1990	2000	1990	2000	1990	2000
<i>Total</i>	1.18	1.21	2.02	1.72	1.28	1.59
Simple manufacturing (1)	1.04	1.21	2.12	1.70	1.30	3.52
Wood and metals (2)	1.10	1.12	2.49	1.77	2.38	2.11
Electronics,transp. eq. (3)	1.19	0.85	2.94	1.58	1.95	1.28
Energy (4)	1.13	1.04	2.19	1.42	1.76	0.96
Retail trade (5)	1.34	1.43	4.27	3.12	1.04	1.31
Transport serv. (6)	1.08	1.16	1.37	3.01	0.70	1.31
Real estate (7)	1.08	1.25	0.88	1.10	0.86	2.01

## Results 1.

- **Firm level (average wages)**
- Foreign firms do pay higher wages (20%).
- The impact of foreign ownership is reduced when controlling for firm and worker characteristics (12%).
- Individual characteristics are more important than firm characteristics for the foreign ownership wage premium.
- Foreigners acquire high-wage firms.
- Almost no wage difference between foreign and domestically owned MNEs (Multinationality is what matters).

## Results 2.

- **Individual level (full time equivalent wages)**
- After a takeover: no or even a negative effect on wages (increases at a lower rate than what would have been the case if the firm had been acquired).
- The negative impact on wages of an acquisition is larger after two years than after one year.
- If there is a wage difference (in levels) it is between local firms and MNEs.

## Results 3

- **Acquisitions and wage dispersion:**
  - Positive effect on high-skilled.
  - Positive wage effect concentrated to CEO:s and managers.
  - Zero or negative effect on other groups.
  - Results robust w.r.t nationality of firm.
  - Results robust irrespectively if acquired firm is a MNE or not.

## Other wage issues

- FDI and wage spillovers.
- Identify wage effects through labor mobility.
- FDI and the effect on the gender wage gap.

THE END

THANK YOU!

