

# **Developments in Measuring Employment Dynamics**

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# Why Dynamics are Important

- “Churn” is **LARGE** compared to net changes we often focus on
- Measures of dynamics reveal trends often concealed by traditional measures of labor market performance
- Dynamics vary over time, space and sector, revealing important differences in economic structure and performance

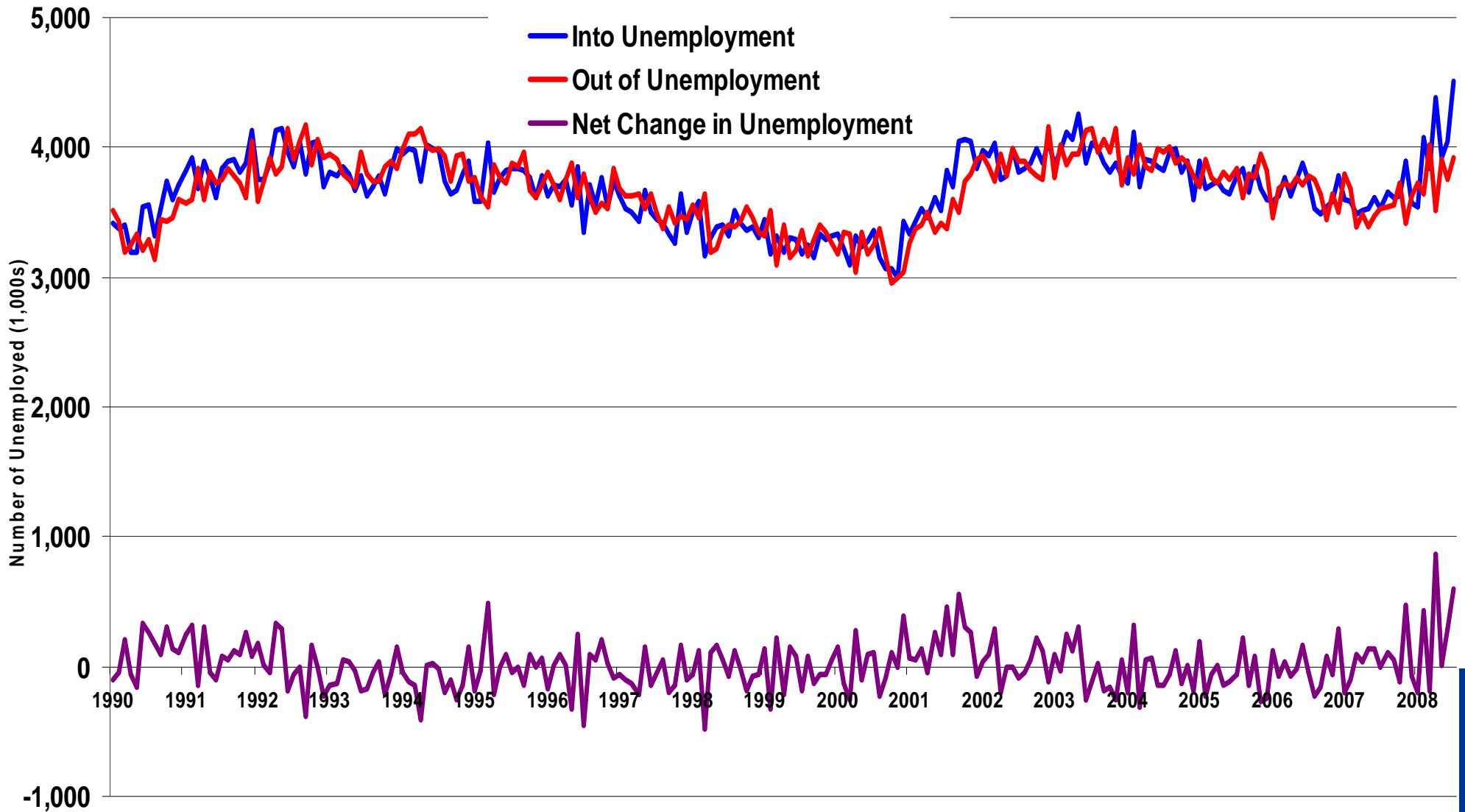
# Some examples of churn measures

- **Labor Market Flow** data from the CPS
- In Aug., the US unemployment level increased by 592,000 as rate jumped to 6.1%
- But this occurred as 2,262,000 previously employed became unemployed, and another 2,217,000 previous non-participants entered unemployment
- At the same time, 2,028,000 unemployed found jobs, and 1,889,000 unemployed left the labor force

# August Unemployment Change

- So the net change of 592,000 came about as 4,511,000 people entered unemployment and 3,917,000 left the ranks of unemployed
- 48% of the 9,376,000 unemployed became so during the month, and 45% of July's unemployed left the ranks
- This is a fairly typical pattern ...

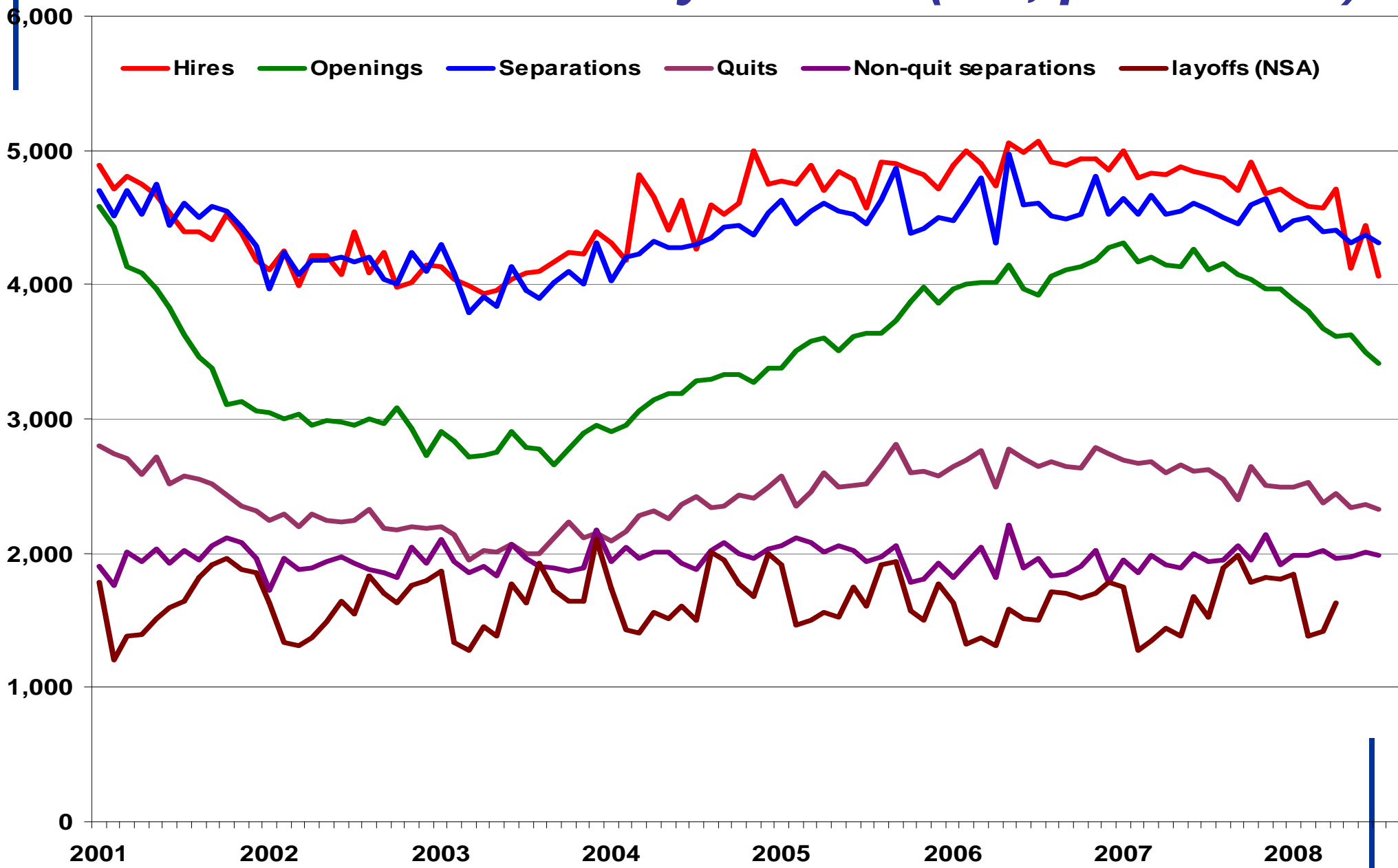
# Unemployment flows over time



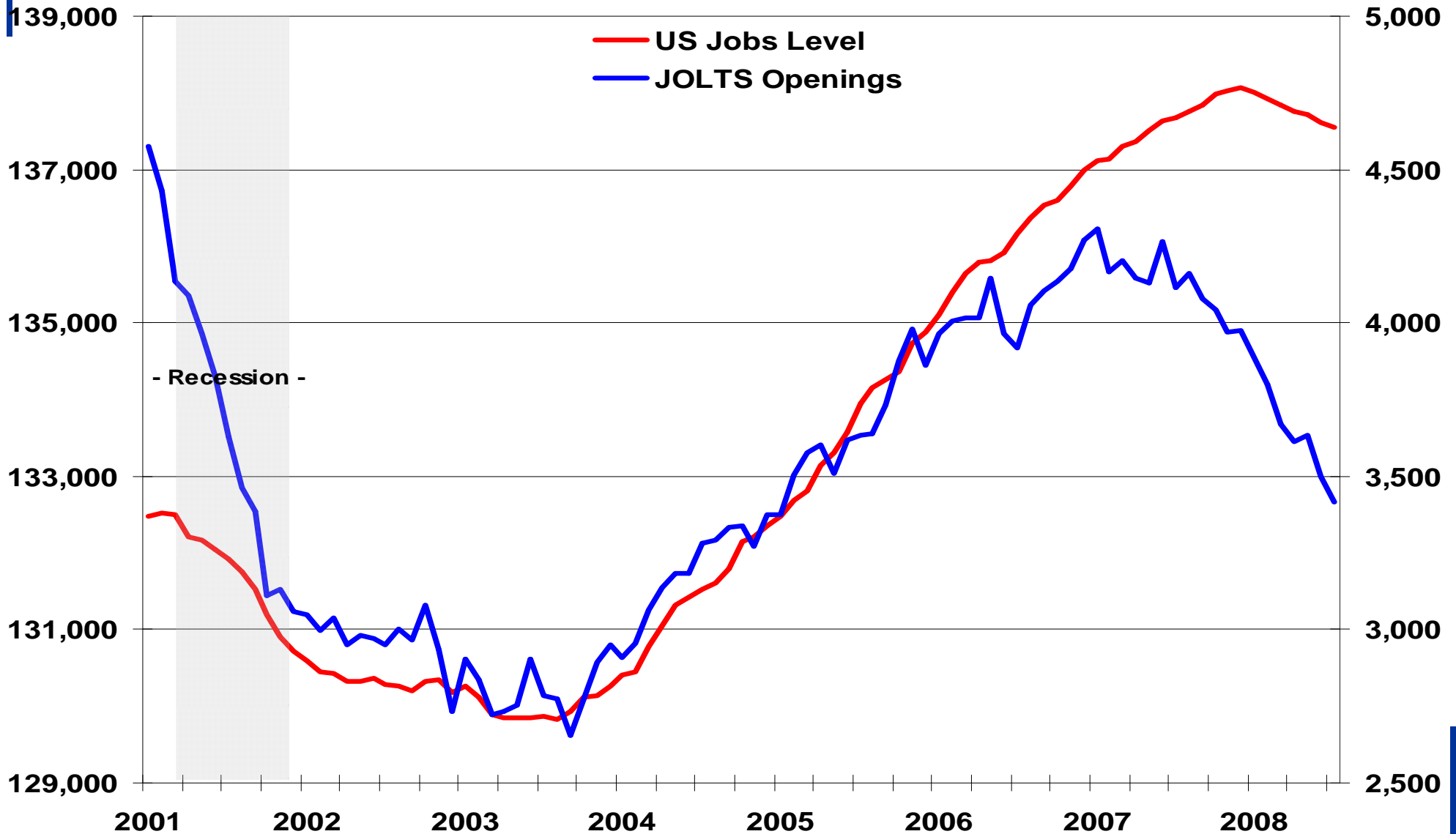
# Another measure of dynamics

- JOLTS (Job Openings and Labor Turnover Survey) conducted by BLS
- Monthly survey 16,000 establishments
- Also reveals movements into and out of jobs of 4 million plus per month
- Insufficient sample to produce state-level estimates (Census Divisions)

# JOLTS Measures of Dynamics (US, per Month)



# JOLTS Openings Relative to US Jobs

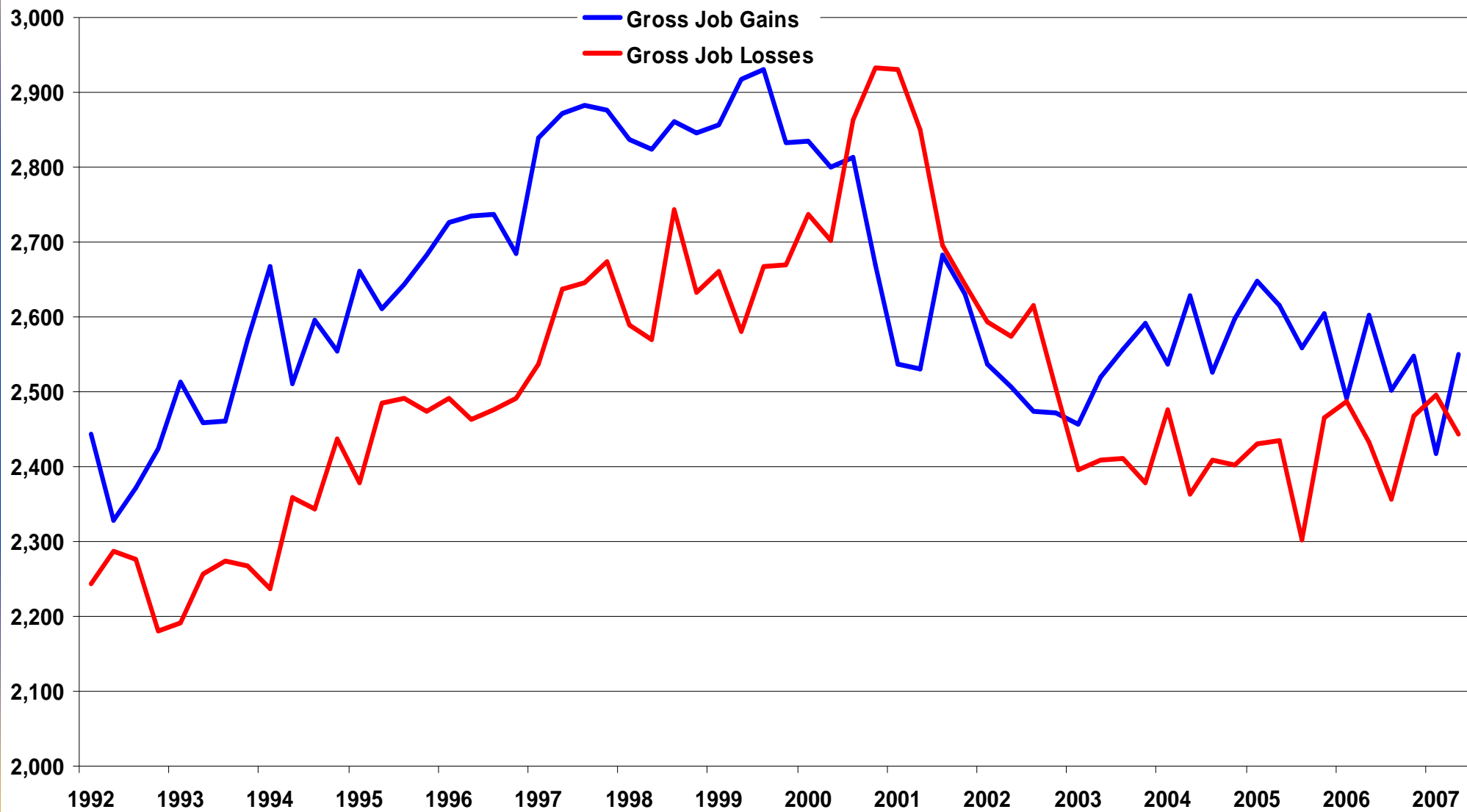


# Another measure - BED

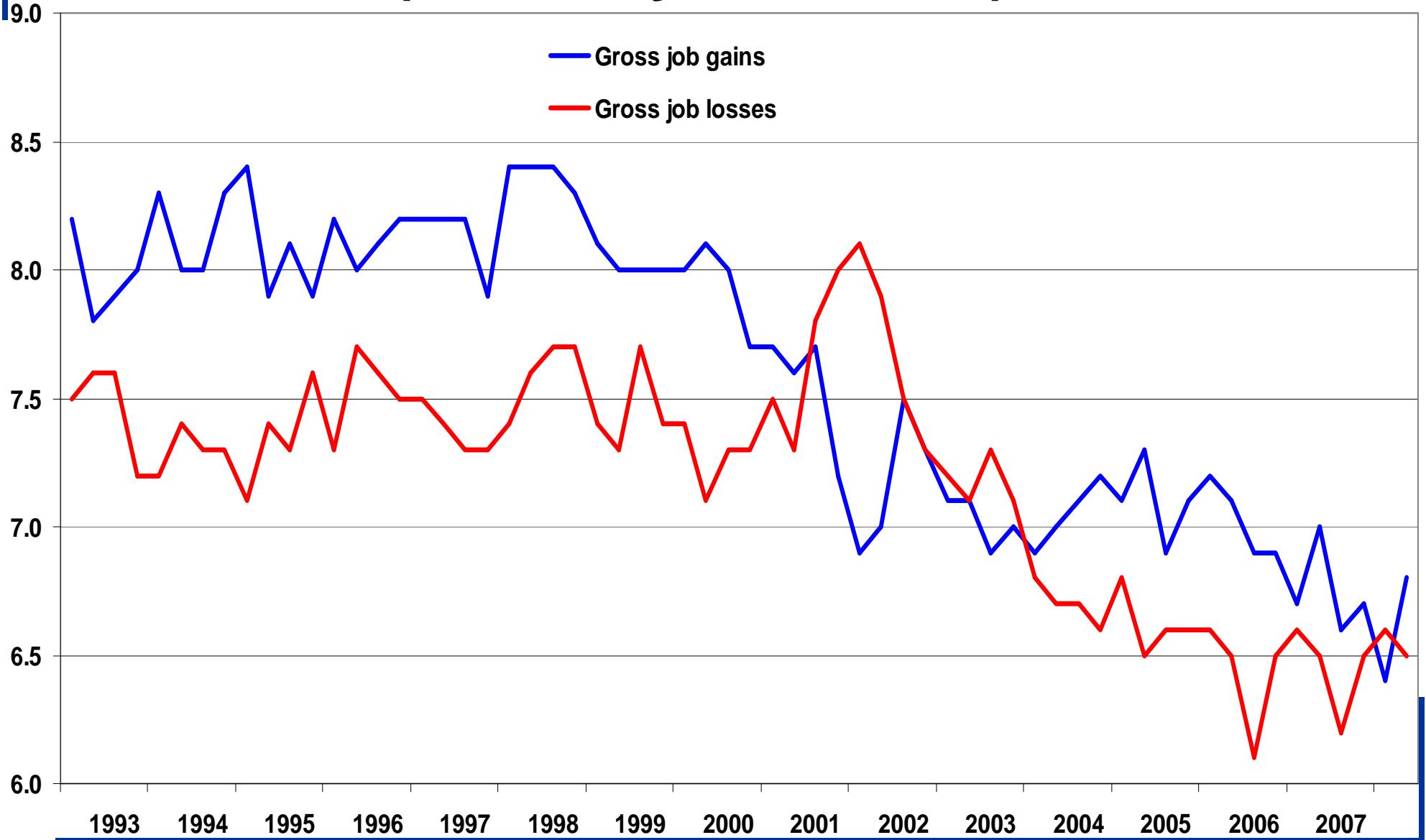
- **Business Employment Dynamics** are derived from state QCEW files (quarterly)
- Aggregation of firm-level employment changes to estimate gross job gains and losses
- Gross job gains due to expanding and new firms, gross job losses from contracting and closing firms

# BED US Gains and Losses

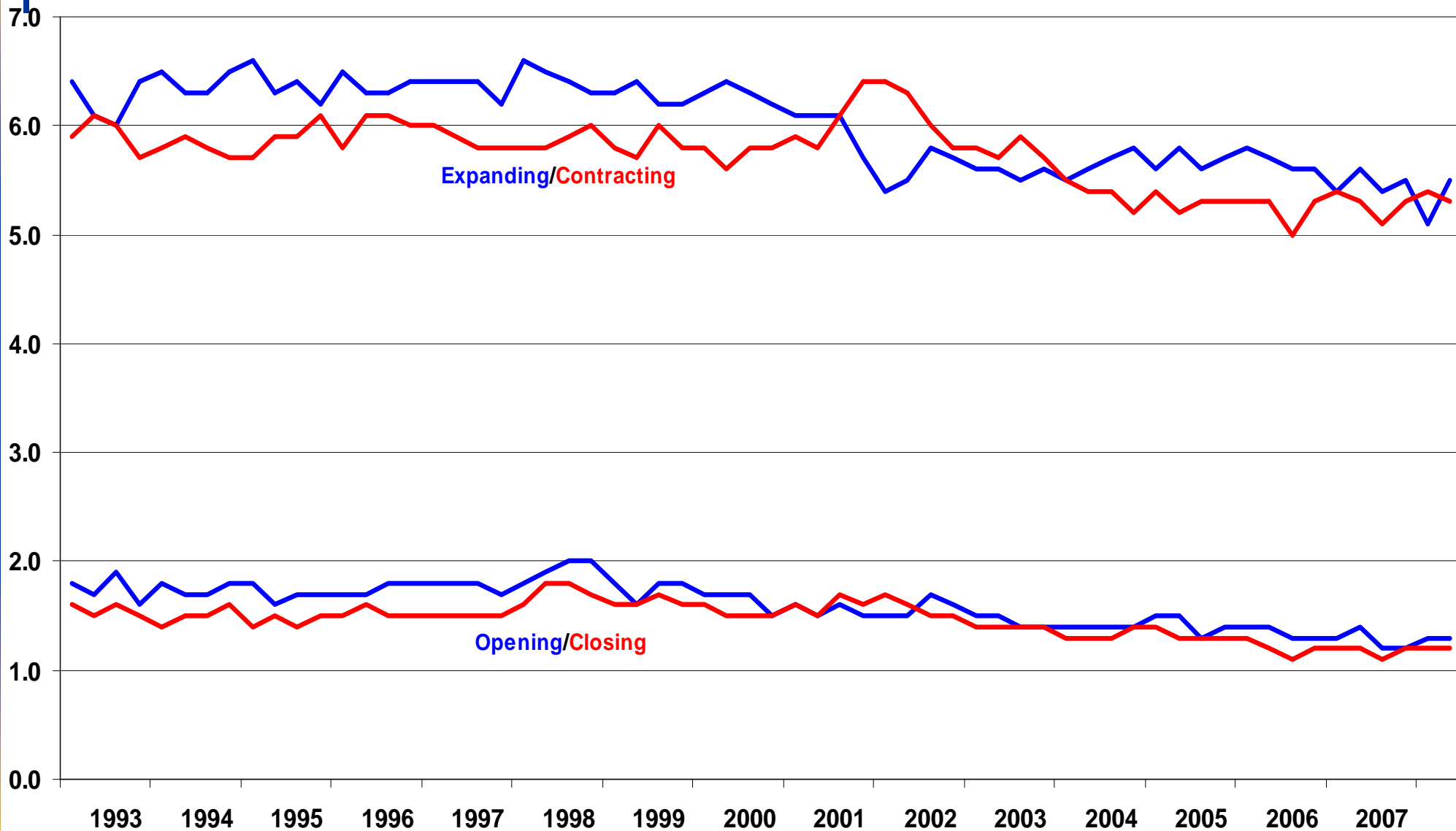
(Monthly averages of quarterly flows, 1,000s)



# Gross Gains and Losses (Quarterly % of Jobs)



# Expanding/Opening vs Contracting/Closing Firms





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## Business Employment Dynamics

BDM FONT SIZE: PRINT:

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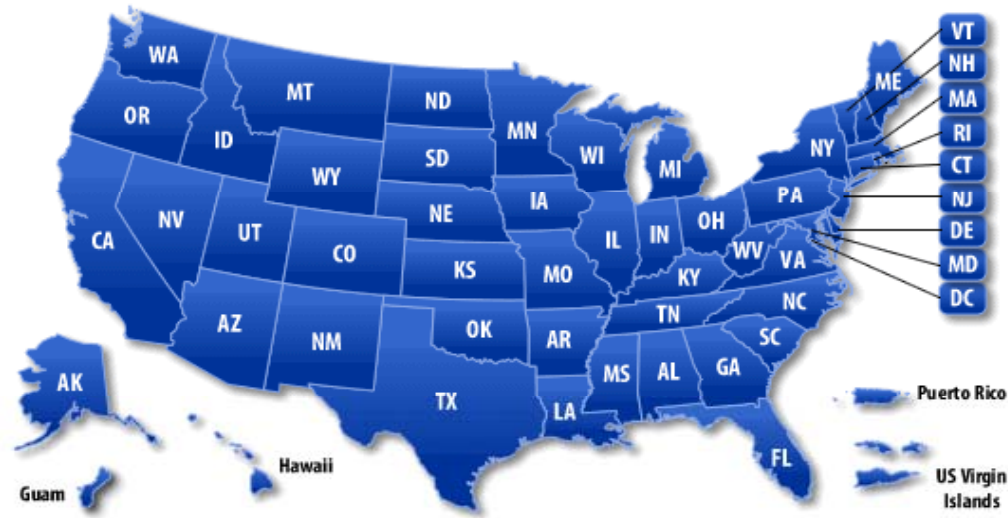
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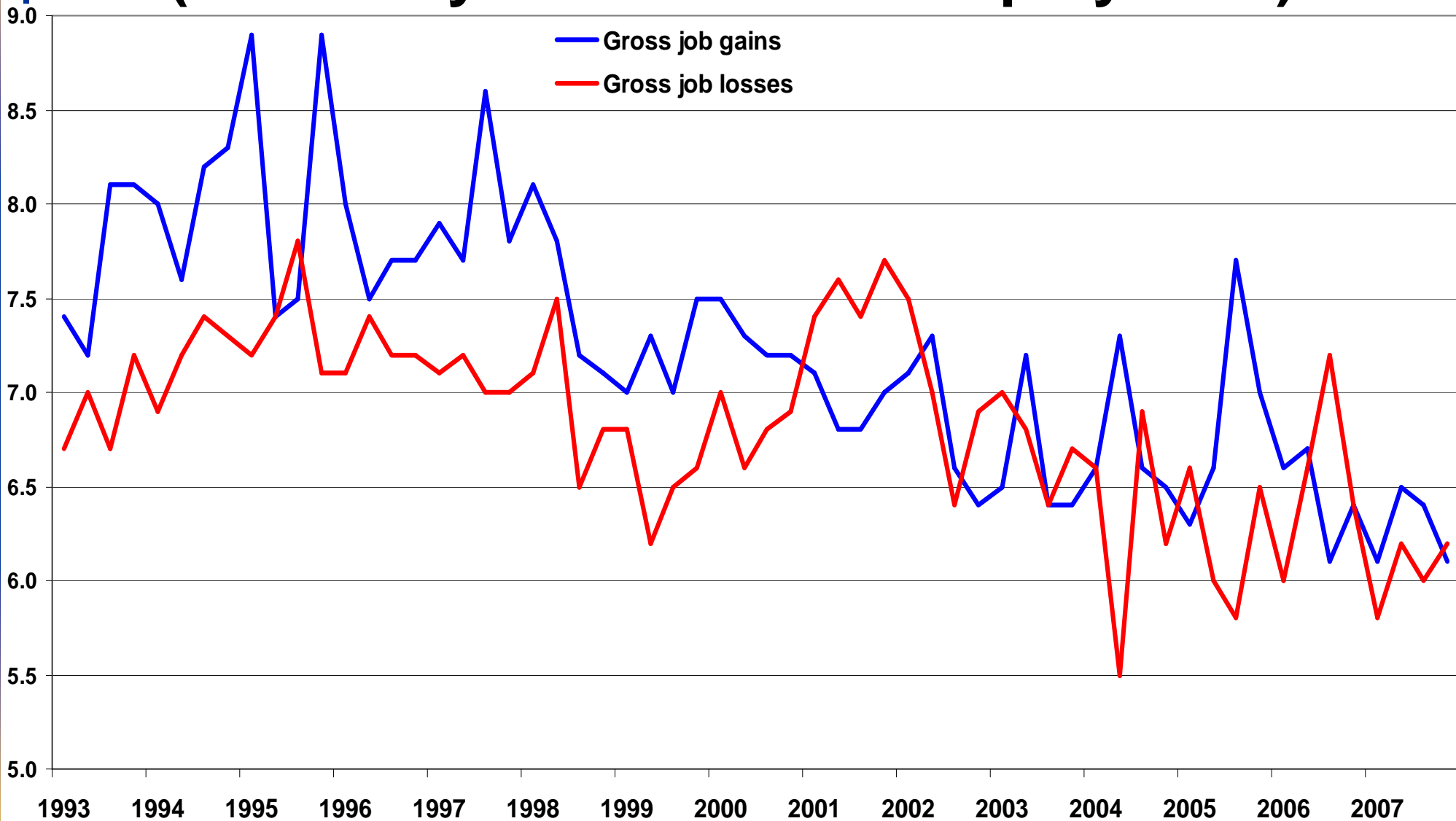
- GROSS JOB GAINS AND LOSSES

## Business Employment Dynamics Data By States

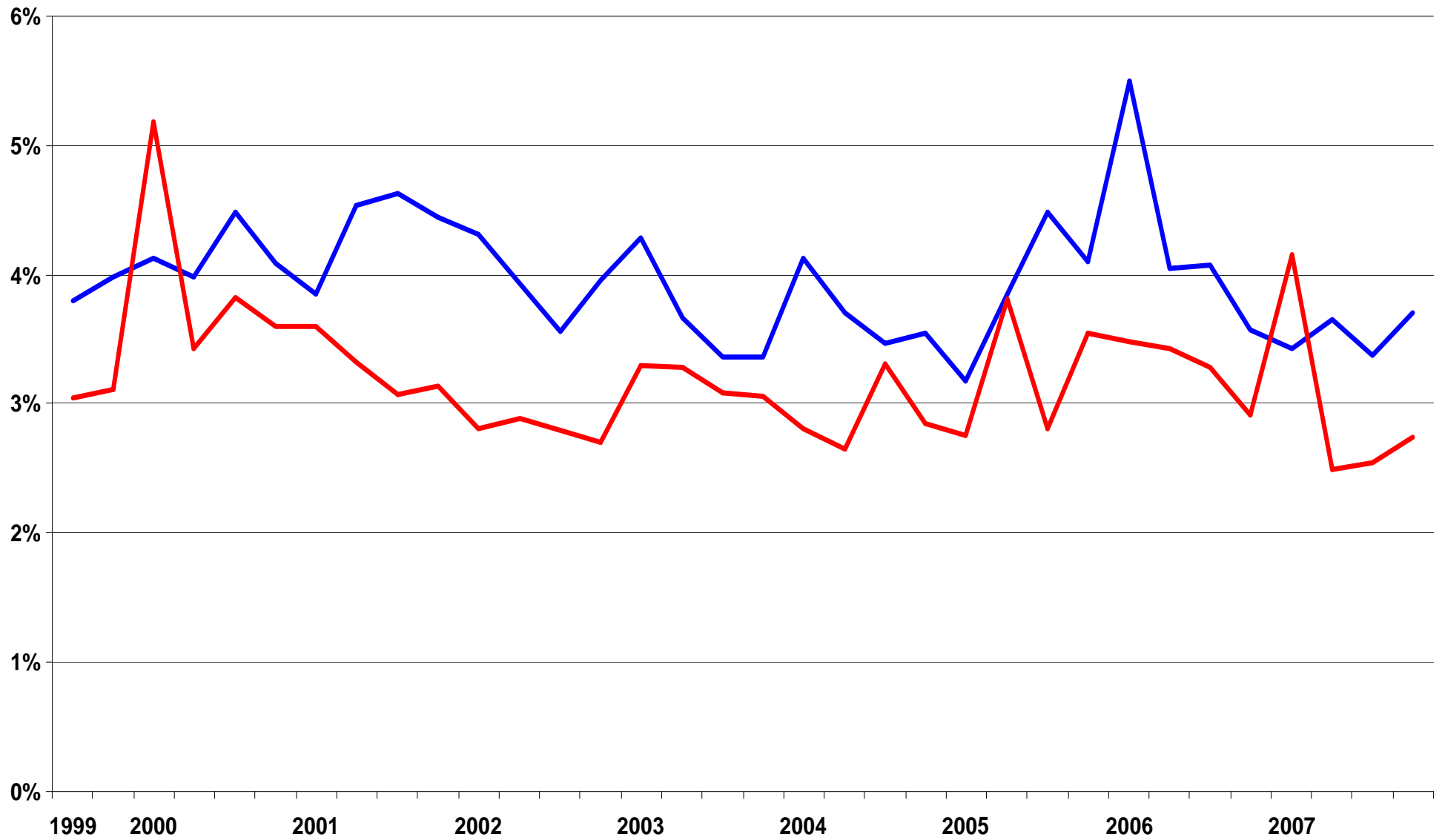


# State-level BED – Minnesota

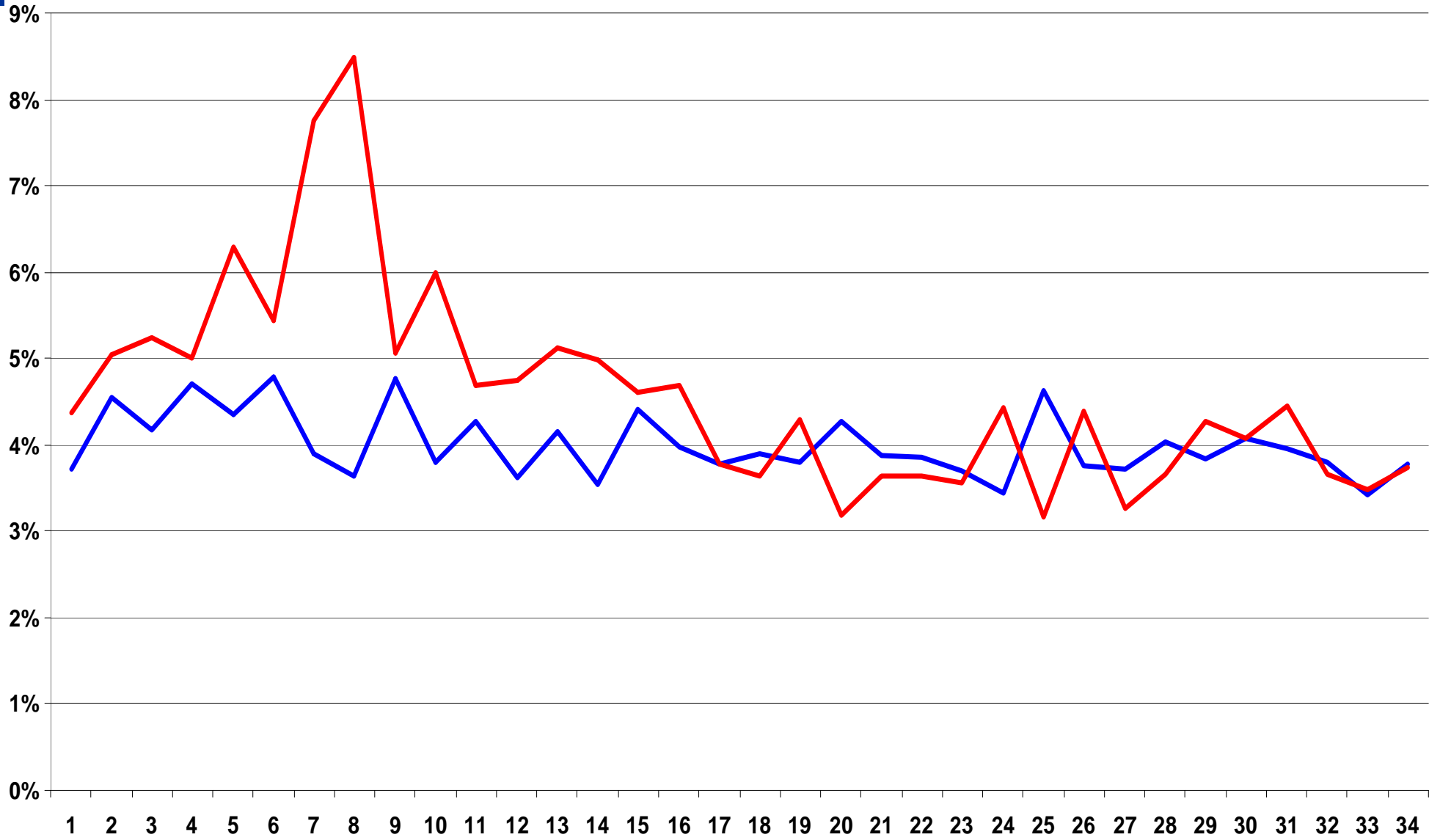
## ( Quarterly flows as % of employment)



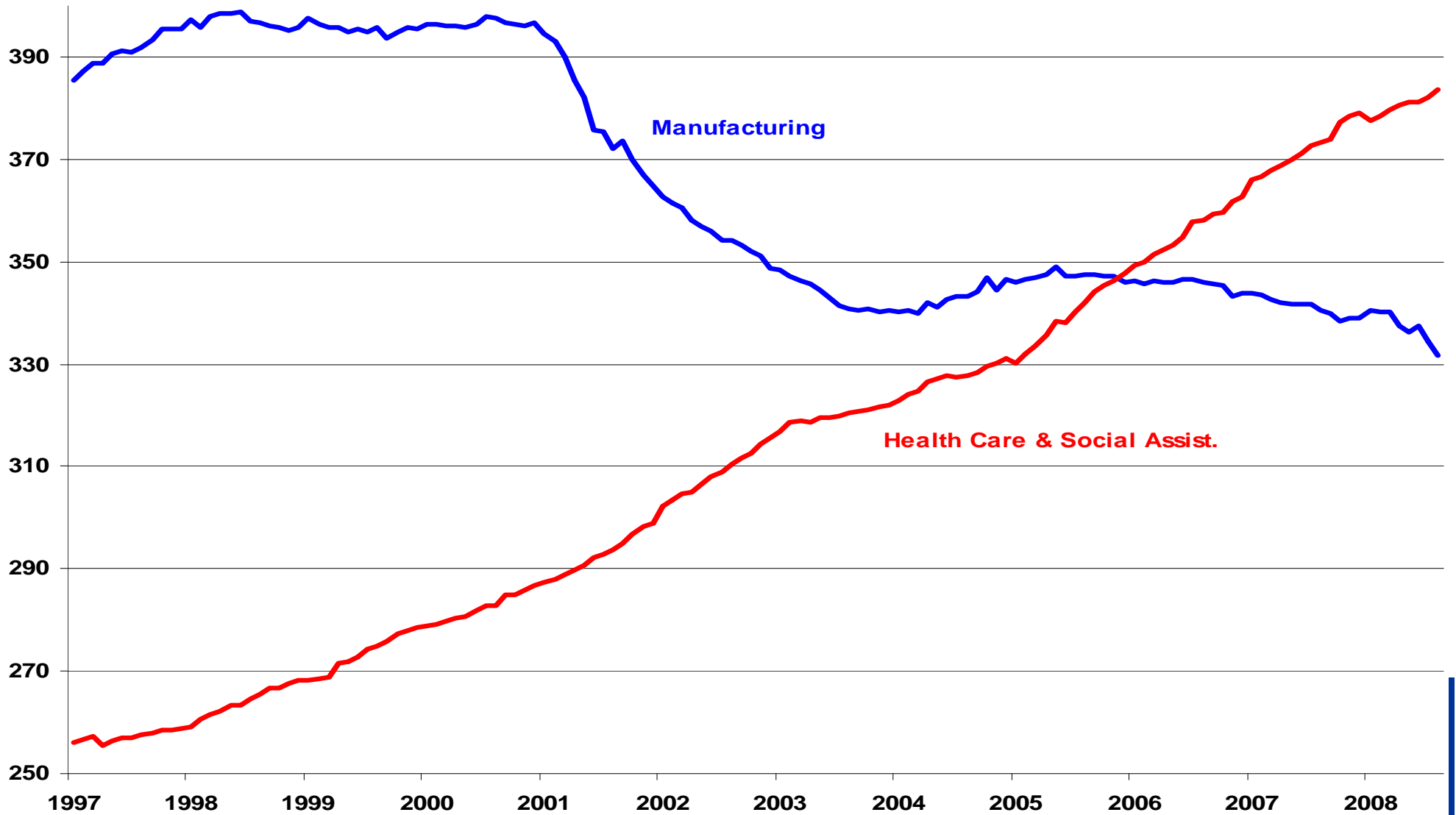
# Health Care & Social Assistance in MN



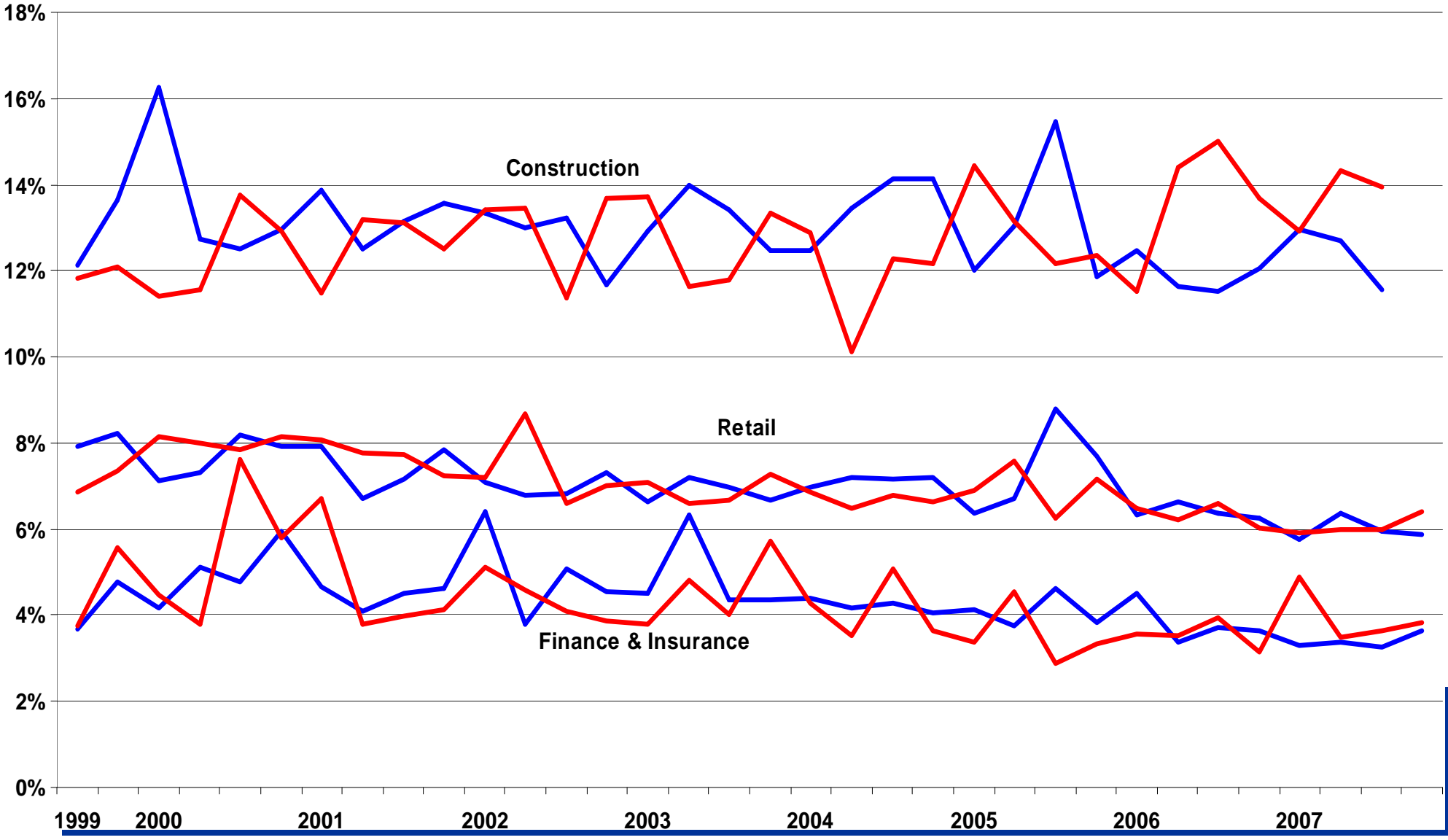
# Manufacturing churn in MN



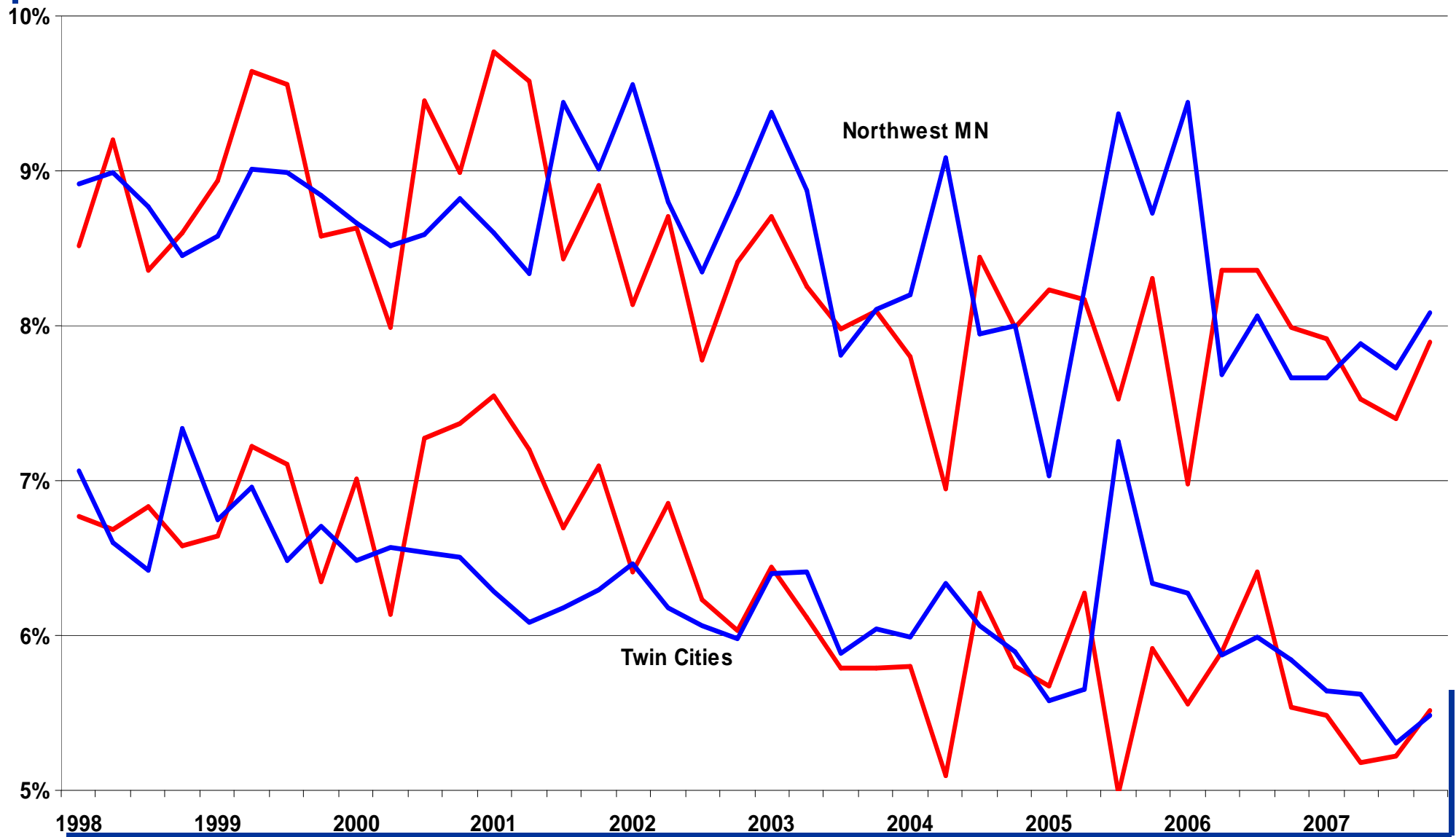
# Health Care vs Manufacturing employment in MN



# Three more industry sectors in MN



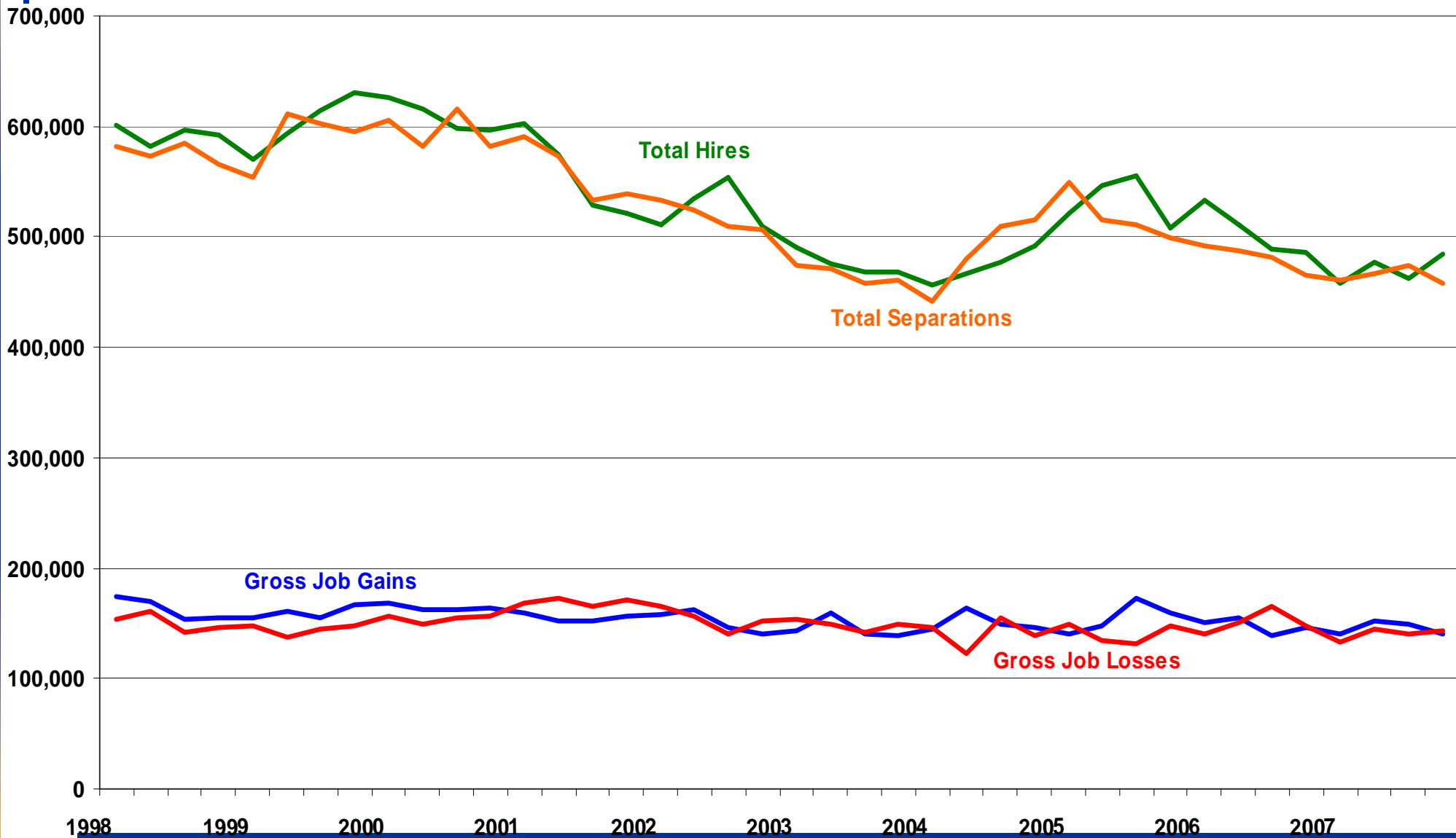
# BED churn across Regions



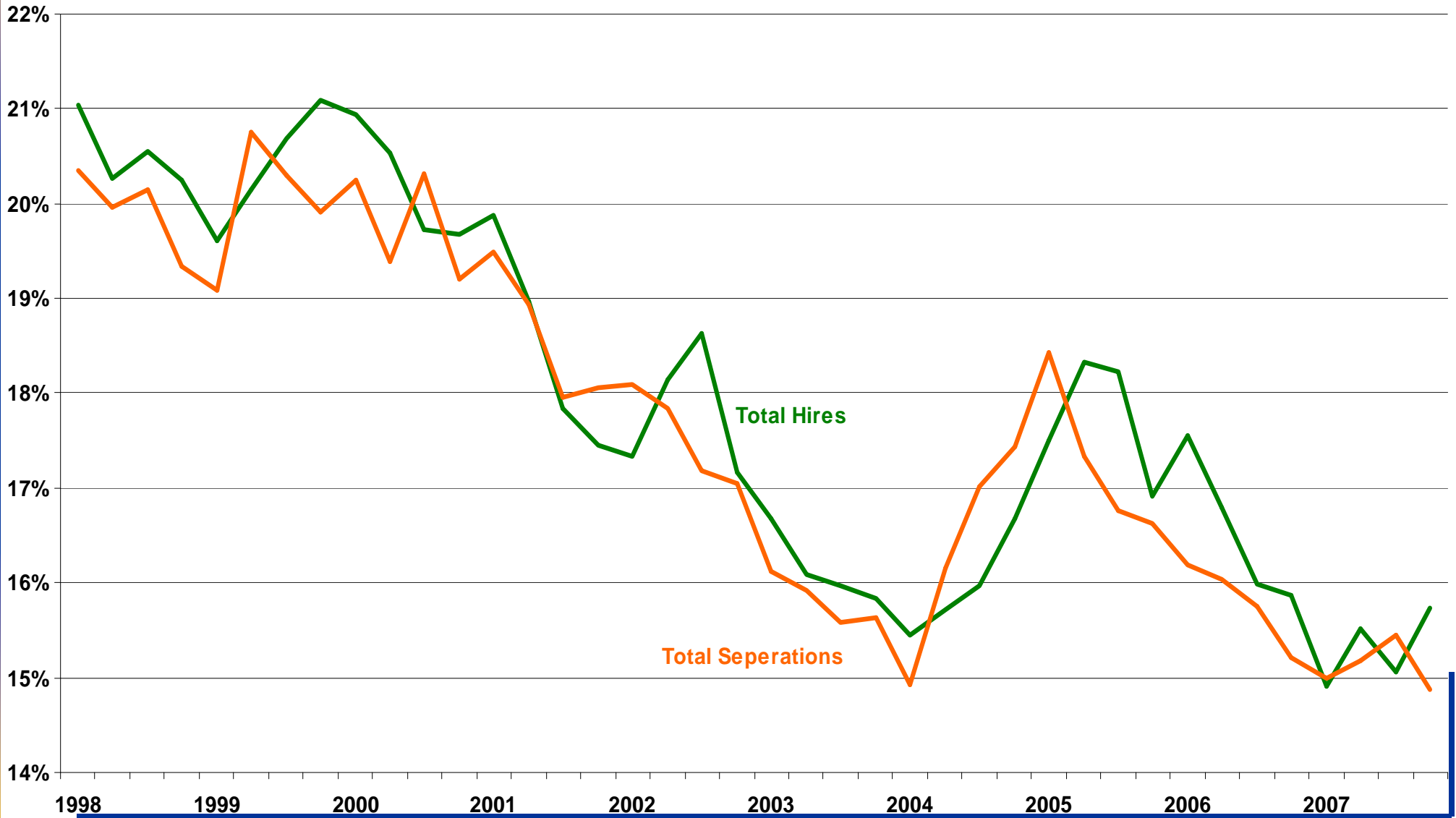
# Using Wage Records to Measure Churn

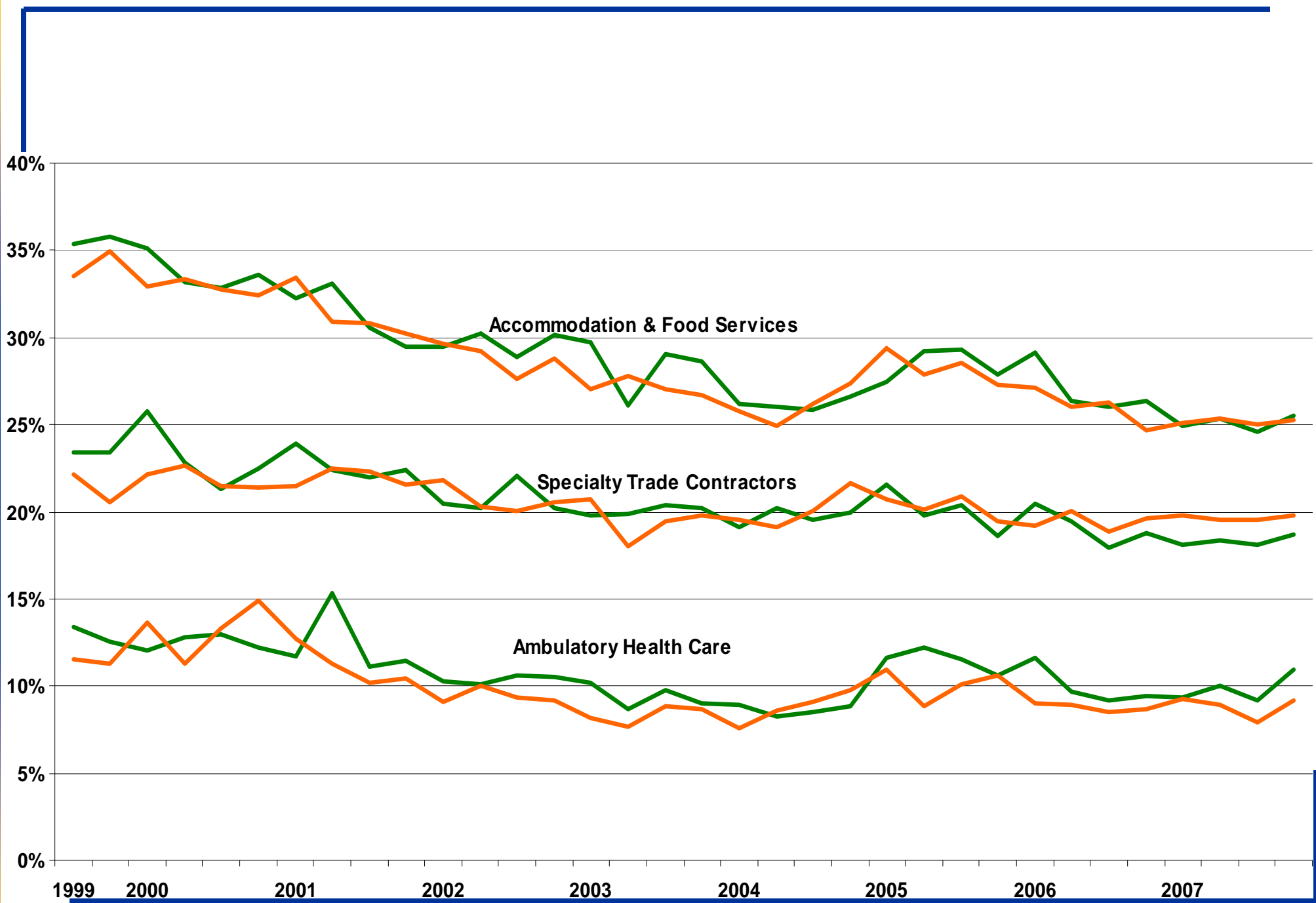
- BED doesn't capture all churn, e.g. people leaving expanding or stable firms or those joining contracting or stable firms
- We use wage records to expand measurement of churn to capture these
- Result is a significant increase in the magnitude of churn, and some important differences in the nature of churn

# Wage Records and Individual Flows



# Individual Churn as a % of Employment





# Closing Observations:

- This type of data is largely untapped – working on dynamic measures by more detailed industry and geographic breakouts
- Data will become more useful as longer time series are gained and more cycles are included
- The magnitude of churn is large and important for understanding changing employment conditions – needs to be the attention of research and policy
- Dynamics vary over time and over space, and can inform and improve relative performance