Nonemployment Duration and the Consequences of Job Separations

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Contrasting pictures of job separations

Job mobility literature:

- Emphasizes voluntary or fairly direct transitions between employers.
- Approximately 1/3 of job separations are flows “directly” to a new job.
- Finds that job changes, esp. early in career, lead to better paying and more stable jobs.

Displaced workers literature:

- Emphasizes workers separating involuntarily.
- Finds large and persistent earnings losses compared to stayers.

Framework established by Jacobson, Lalonde, and Sullivan 1993

- Administrative data on earnings
- Displacement identified with mass reductions in employment at the firm ("distressed" firm)
- Emphasis on time since displacement
- Emphasis on comparison with stayers

Our goal is to integrate these two focuses

- Begin from the perspective of the displaced worker literature
  - Administrative data on earnings
  - Displacement identified with “distressed” firm
- Include separators from non-distressed firms in comparisons
- Emphasize the role of nonemployment in earnings outcomes
- Examine the distribution of earnings outcomes

Preliminary findings

- Separators from distressed firms are no more likely to experience a jobless spell or have a longer jobless spell than are other job separators.
  - In fact, separators from distressed firms are less likely to have an observed jobless spell.

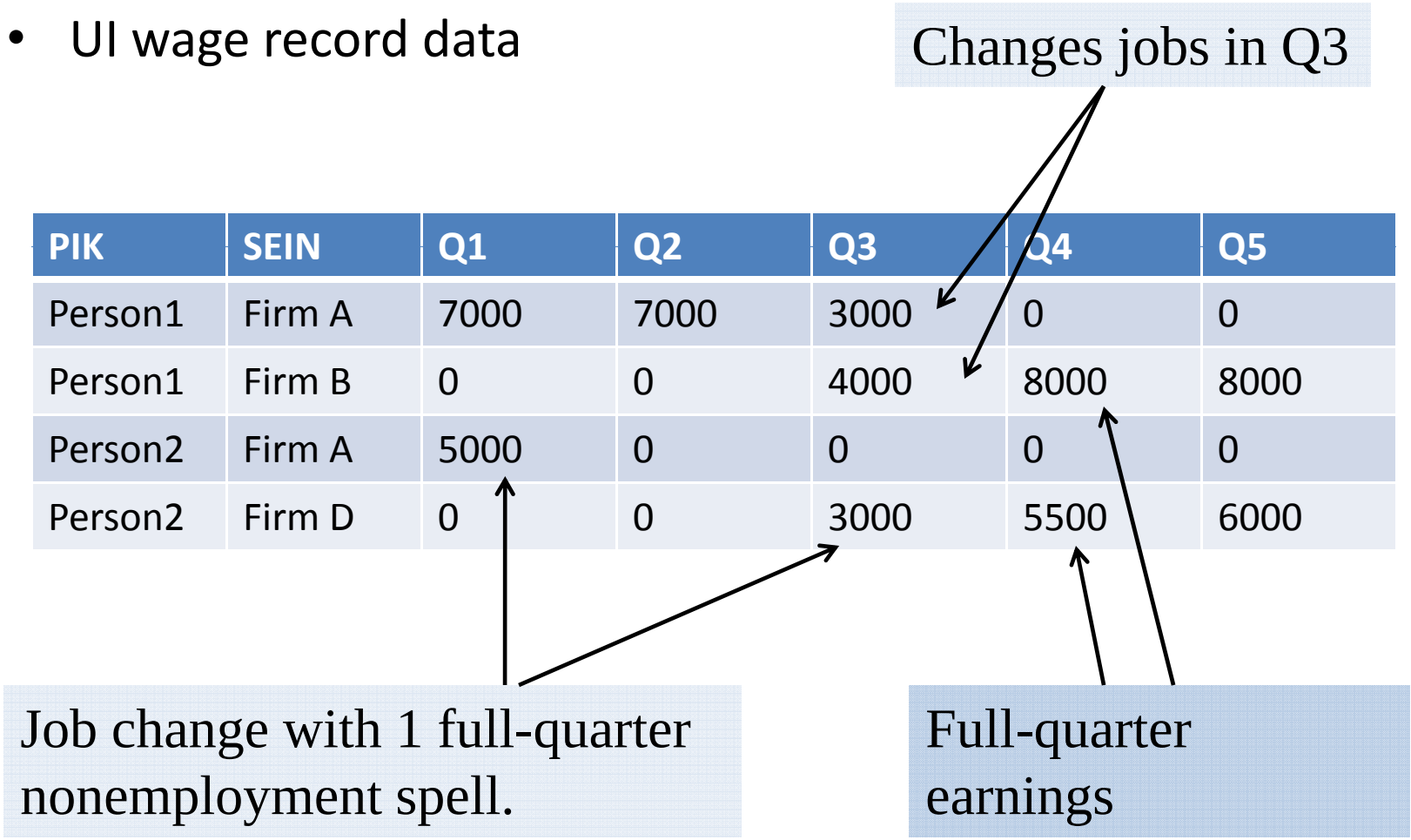
- Presence of a jobless spell after separation is important to earnings, more so than firm distress.
  - Earnings penalty associated with job separation increases with the presence (not necessarily length) of a jobless spell.
  - Separators from distressed firms do no worse, on average, than other separators.

LEHD Administrative Data

- Longitudinal Employer-Household Dynamics
- Longitudinal job histories from state UI wage data
- Firm characteristics from QCEW data
- Worker characteristics from Census surveys and SSA data

Identifying job changes and nonemployment spells in LEHD data

- UI wage record data



PIK	SEIN	Q1	Q2	Q3	Q4	Q5
Person1	Firm A	7000	7000	3000	0	0
Person1	Firm B	0	0	4000	8000	8000
Person2	Firm A	5000	0	0	0	0
Person2	Firm D	0	0	3000	5500	6000

Our LEHD analysis sample

- Five states, 1991:3-2008:4.
  - California, North Carolina, Oregon, Washington, Wisconsin.
- Separators w/1 yr of job tenure at time of separation.
  - Three reference periods: 1995:2, 1999:2, 2001:2.
  - Classify separators by employment change at firm.
  - Exclude firms with fewer than 50 employees.
  - Exclude separations caused by successor/predecessor events.
  - Also identify a comparison group of job stayers.
- More about the distressed separator group:
  - 'Distressed' = Firm experiences 30% drop in year-to-year employment. Similar cut-off to JLS.
  - 5% of separators in a calm year; 10% in recession year.

Nonemployment duration: Estimation

A competing-risks hazard model of re-employment

$$logit(new\ job\ in\ t)_i = \alpha_t + \beta_t X_i + \gamma_t Z_i + \mu_{it}$$

- X_i is a vector of worker characteristics
  - worker age, sex, tenure at separating firm.
- Z_i is a vector of characteristics of the separating firm
  - size, state, growth rate in the year prior to separation, growth rate of the industry within state.

Hazard Model Results

Difference in transition probabilities for 1995 separators (percentage points)

	New job same quarter	New job subsequent quarter	One full-quarter of joblessness	Two full quarters of joblessness
New Jobs				
Firm closed	6.1	10.5	6.6	3.6
Rapidly shrinking firm	4.1	3.6	2.4	2.3
Slowly shrinking firm	1.3	-0.6	0.1	0.0
Slow growing firm	-0.6	-3.4	-1.0	-1.1
Rapidly growing firm	Ref. group			
Recalls				
Firm closed	n/a	n/a	-25.3	-5.7
Rapidly shrinking firm	n/a	n/a	-10.9	-1.4
Slowly shrinking firm	n/a	n/a	-2.6	-0.8
Slow growing firm	n/a	n/a	7.0	-0.7
Rapidly growing firm	Ref. group			

A Puzzle?

- The literature says
  - Layoff/separation ratio increases with size of contraction.
  - Laid off workers experience more unemployment than quitters do.

  Therefore, distressed separators should experience more unemployment than other separators do.
- We measure **non-**, not **un-**employment.
  - Result robust to attachment restrictions.
  - To restricting sample to men.
- Holds in each state.
- Robust to removing temp help firms.
- We eliminate the shortest jobs.

Earnings Outcomes: Descriptive results

% change in quarterly earnings in new job – full-quarter jobs

Distressed Separations	10th	25th	50th	75th	90th
New job same quarter	-33.9	-12.5	5.7	28.4	67.9
New job adj. quarter	-45.3	-21.0	1.6	27.1	65.4
Full-quarter non-employed	-63.3	-36.9	-8.8	18.9	51.6
2 -3 qtrs non-employed	-67.4	-42.4	-14.4	14.4	65.0
4>= qtrs non-employed	-77.6	-52.5	-19.1	23.2	103.5
Second Job Becomes Main	-83.0	-56.6	-17.0	10.3	48.5
All Separators	10th	25th	50th	75th	90th
New job same quarter	-33.1	-10.3	10.2	37.7	89.6
New job adj. quarter	-47.1	-20.3	5.7	35.7	96.8
Full-quarter non-employed	-69.0	-41.4	-10.3	22.3	86.8
2 -3 qtrs non-employed	-69.1	-41.8	-9.2	29.8	118.1
4>= qtrs non-employed	-76.8	-48.7	-7.7	50.3	198.5
Second Job Becomes Main	-81.1	-52.8	-14.4	22.0	66.6
	10th	25th	50th	75th	90th
Job Stayers (distressed firms)	-25.7	-11.5	0.2	13.8	27.3

Length of joblessness and earnings outcomes

We estimate the change in earnings upon re-employment at a new job by length of jobless spell after separation.

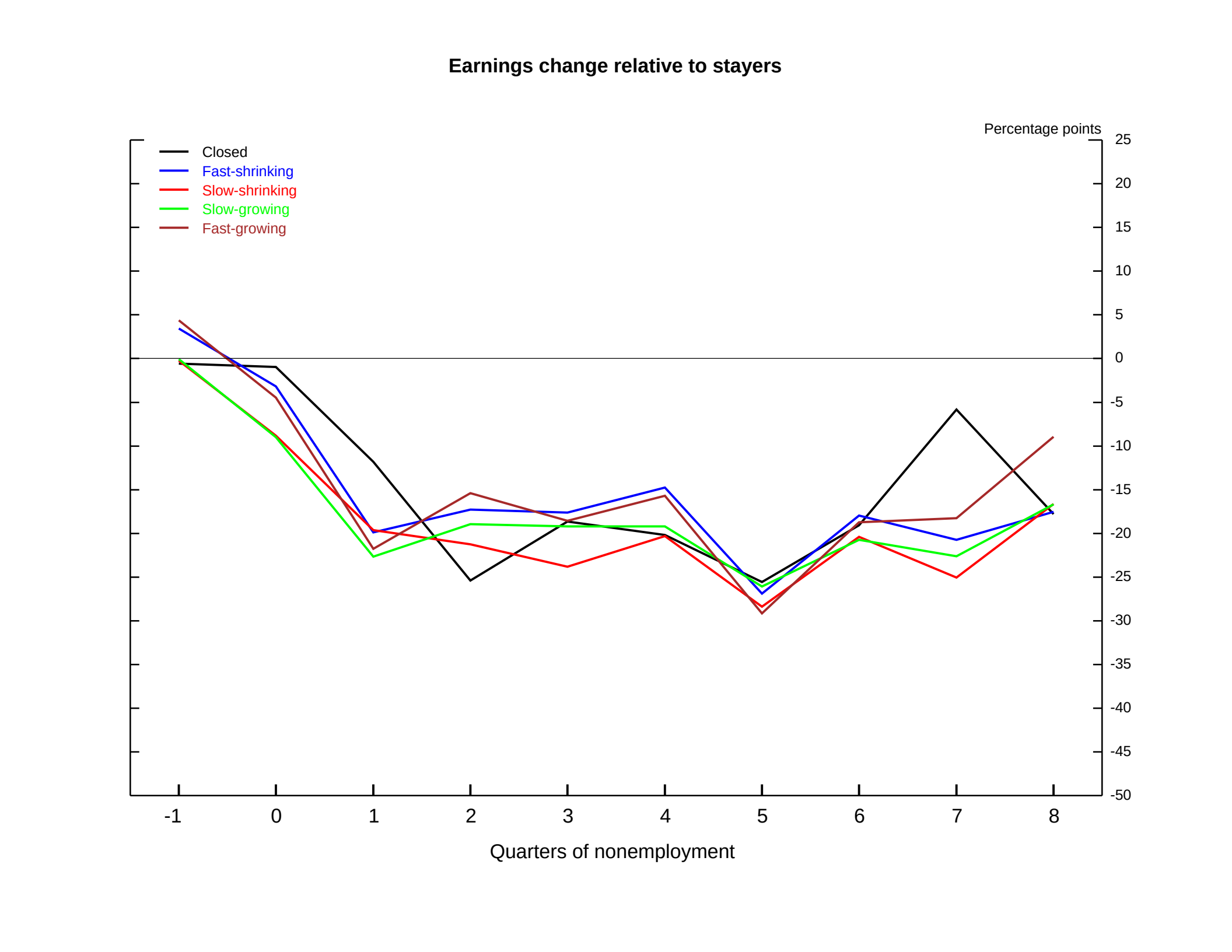
$$\triangle y_{it} = \alpha_t + \beta_t X_i + \gamma_t Z_i + \delta_t S_i g_i + \mu_{it}$$

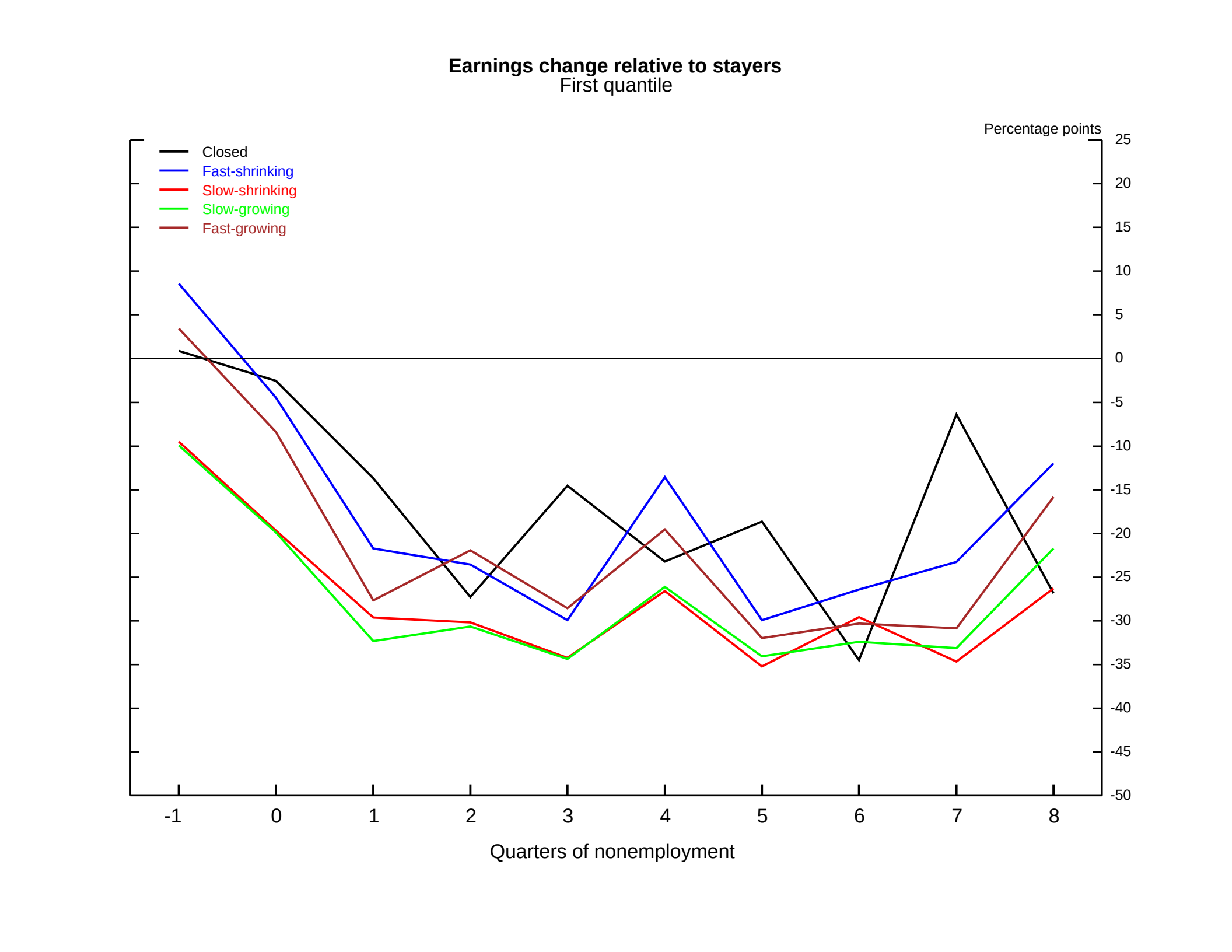
- Δy = change in log earnings from 4 quarters before reference quarter
- X_i = vector of worker characteristics
- Z_i = vector of characteristics of the separating firm, including g
- S_i = dummy variable for separator
- g_i = growth rate category of separating firm
- δ_t = earnings "penalty" for separators relative to stayers

Earnings Outcomes: Regression results

Change in log earnings, relative to stayers, from four quarters before reference quarter to first full quarter of earnings after re-employment, 1995 sample (percentage points)

	Firm closed	Rapidly shrinking firm	Slowly shrinking firm	Slow growing firm	Rapidly growing firm
Nonemployment spell					
New job same quarter	-1	3	0	0	4
New job next quarter	-1	-3	-9	-9	-4
Jobless 1 full-quarter	-12	-20	-20	-23	-22
Jobless 2 full-quarters	-25	-17	-21	-19	-15
Jobless 3 full-quarters	-19	-18	-24	-19	-19
Jobless 4 full-quarters	-20	-15	-20	-19	-16


Earnings change relative to stayers
Percentage points
Closed
Fast-shrinking
Slow-shrinking
Slow-growing
Fast-growing
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
-1
0
1
2
3
4
5
6
7
8
Quarters of nonemployment


Earnings change relative to stayers
First quantile
Percentage points
Closed
Fast-shrinking
Slow-shrinking
Slow-growing
Fast-growing
25
20
15
10
5
0
-5
-10
-15
-20
-25
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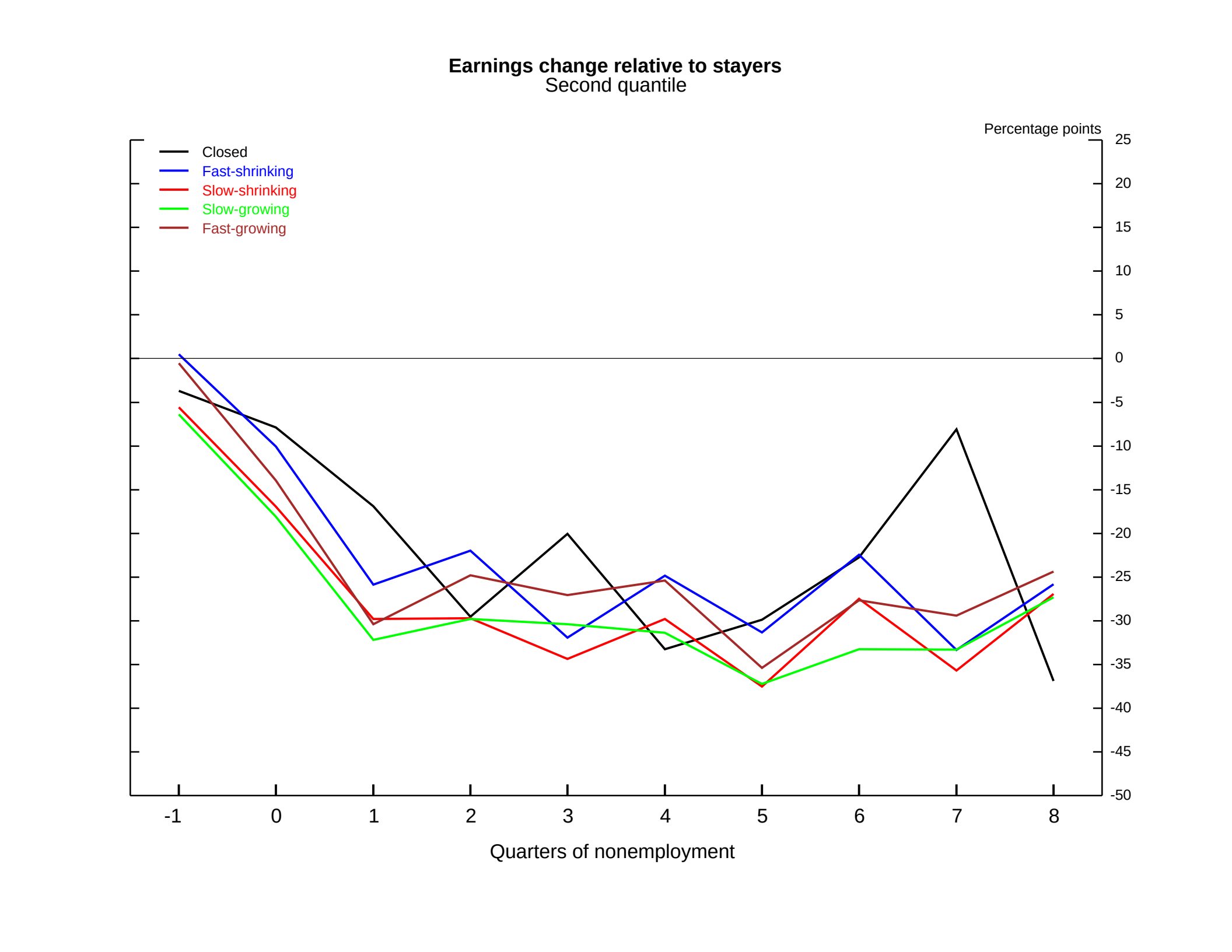
Quarters of nonemployment


Earnings change relative to stayers
Second quantile
Percentage points
Closed
Fast-shrinking
Slow-shrinking
Slow-growing
Fast-growing
25
20
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-10
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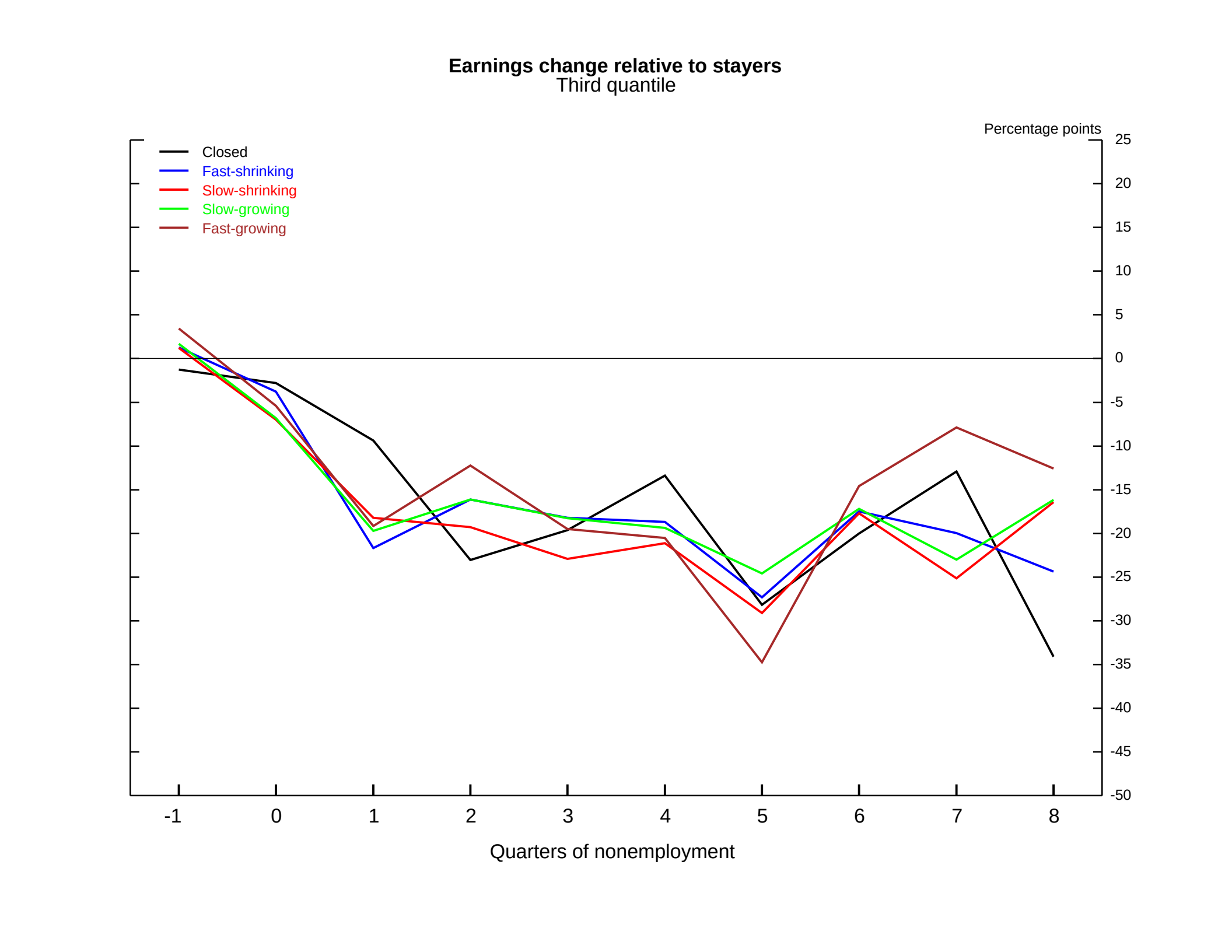
Quarters of nonemployment


Earnings change relative to stayers
Third quantile
Percentage points
Closed
Fast-shrinking
Slow-shrinking
Slow-growing
Fast-growing
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
-1
0
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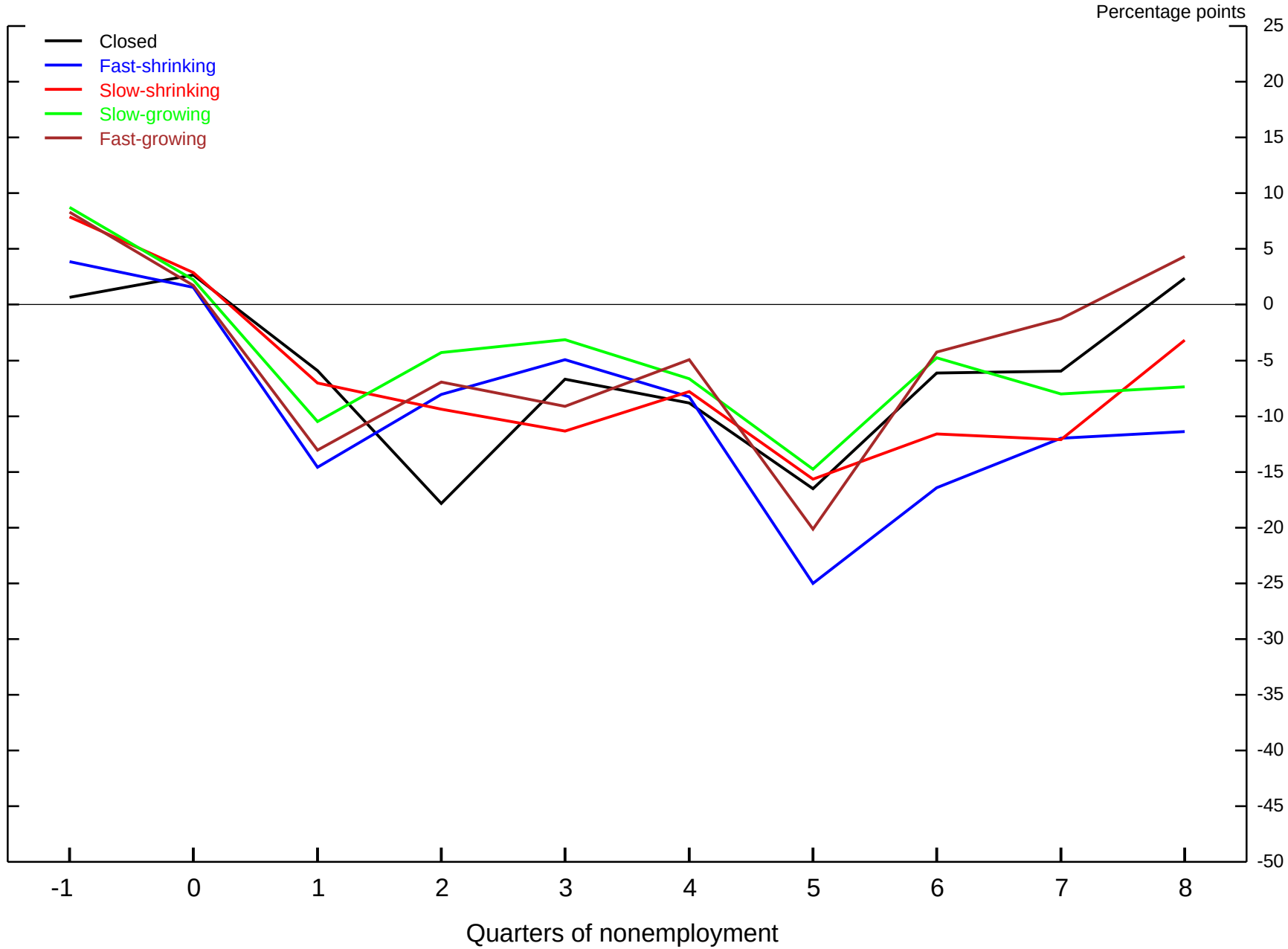
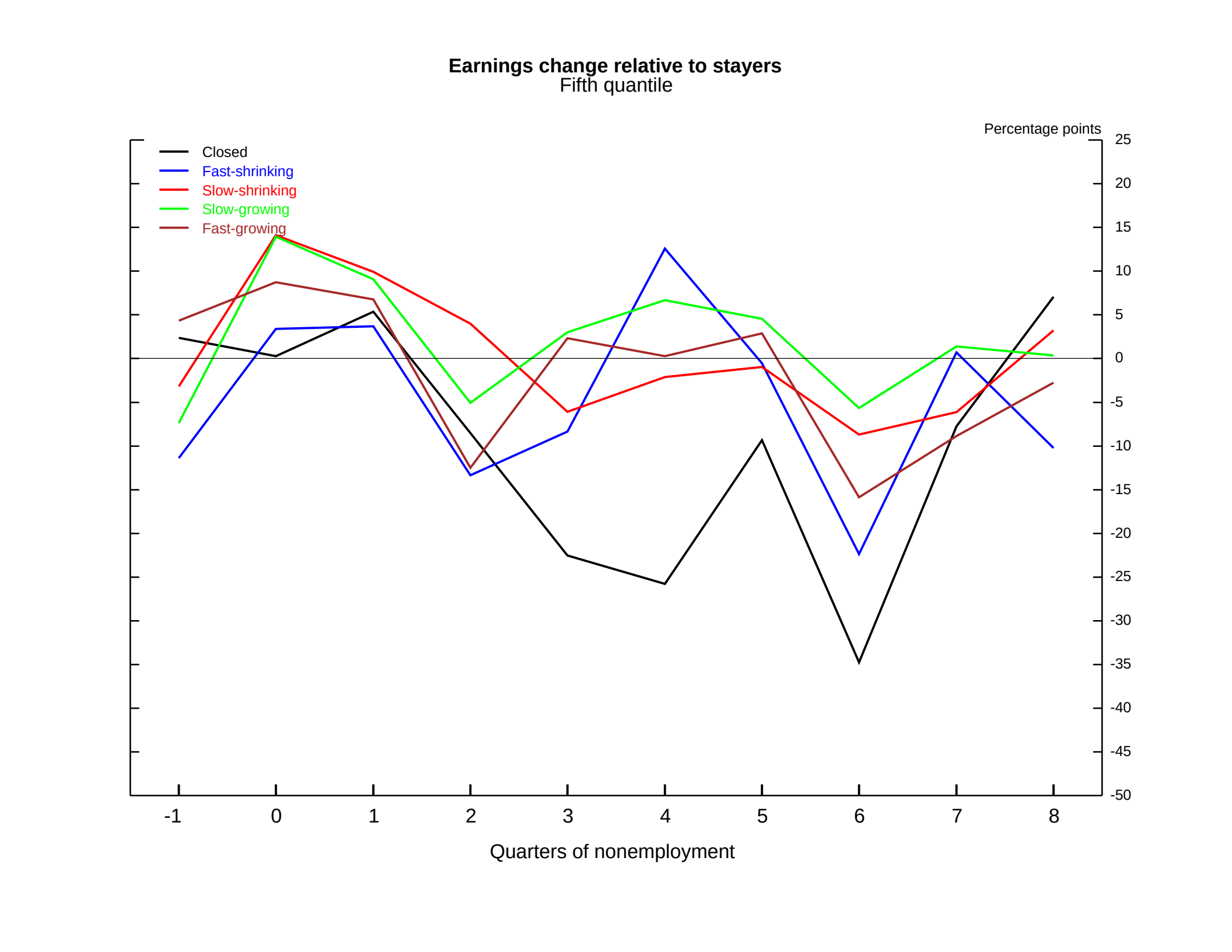
Quarters of nonemployment

Earnings change relative to stayers
Fourth quantile




Earnings change relative to stayers
Fifth quantile
Percentage points
Closed
Fast-shrinking
Slow-shrinking
Slow-growing
Fast-growing
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
-1
0
1
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7
8
Quarters of nonemployment

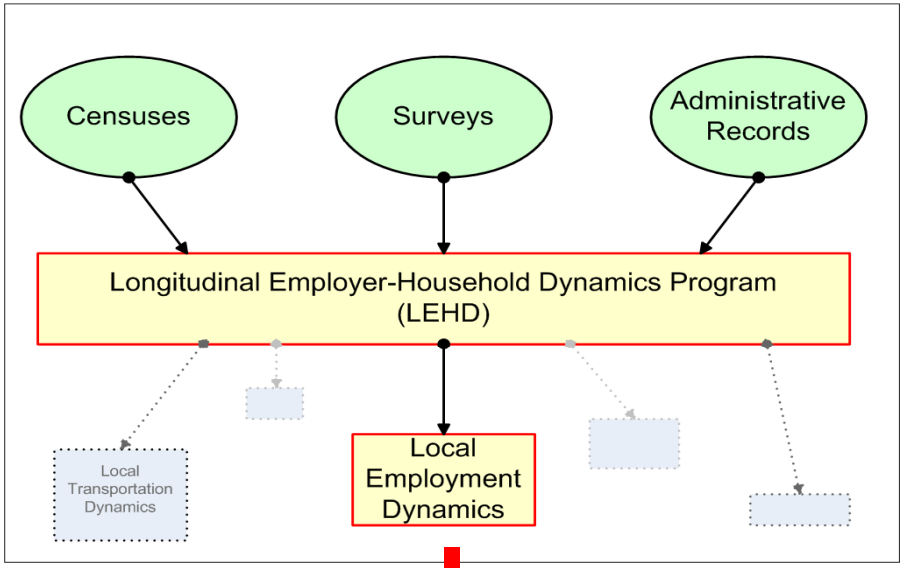
Conclusions and future work

- "Displaced" workers are no more likely to experience an observed jobless spell than are other separators.
  - In fact, they are less likely to have an observed jobless spell.
- The presence of a jobless spell is a stronger predictor of earnings outcomes than is distress.
  - Length of jobless spell is less important.
  - Distressed workers do no worse than other separators.
- Future direction of paper
  - Other years and quarters
  - Out-of-state moves
  - Other heterogeneity in earnings regressions
    - Firm effects, position in wage distribution.

Three papers

- Earnings outcomes by time until re-employment.
- Expand JLS regression to include separators from non-distressed firms.
- Integrate time since displacement and time to re-employment into a single earnings equation.

Data: LEHD Administrative Data



Longitudinal National Frame of Jobs

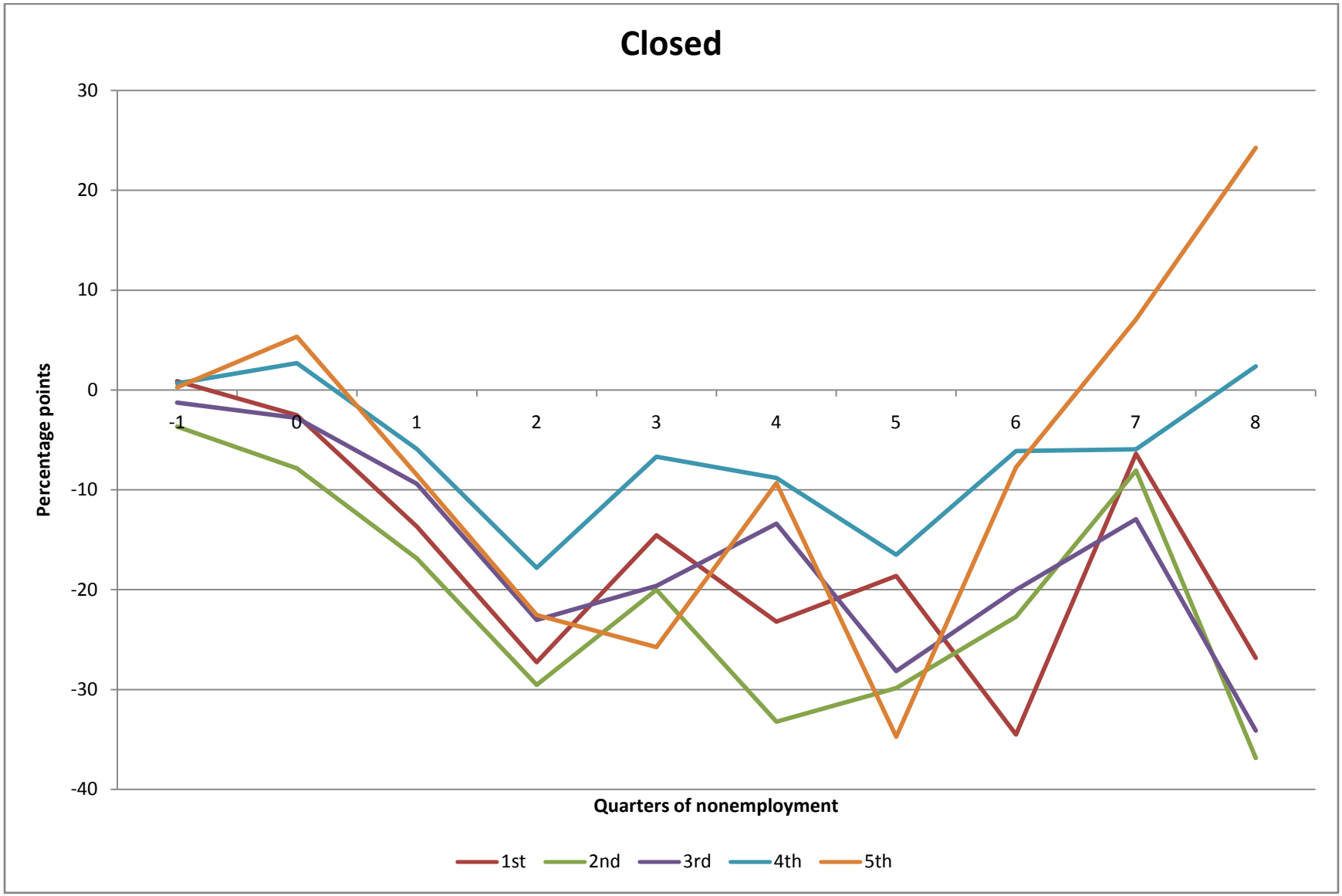
Linked employer-employee data

- Longitudinal job histories from state UI wage data
- Firm characteristics from QCEW data
- Worker characteristics from Census surveys and SSA data
- Voluntary partnership: 49 states + DC
- Length of time series varies by state.

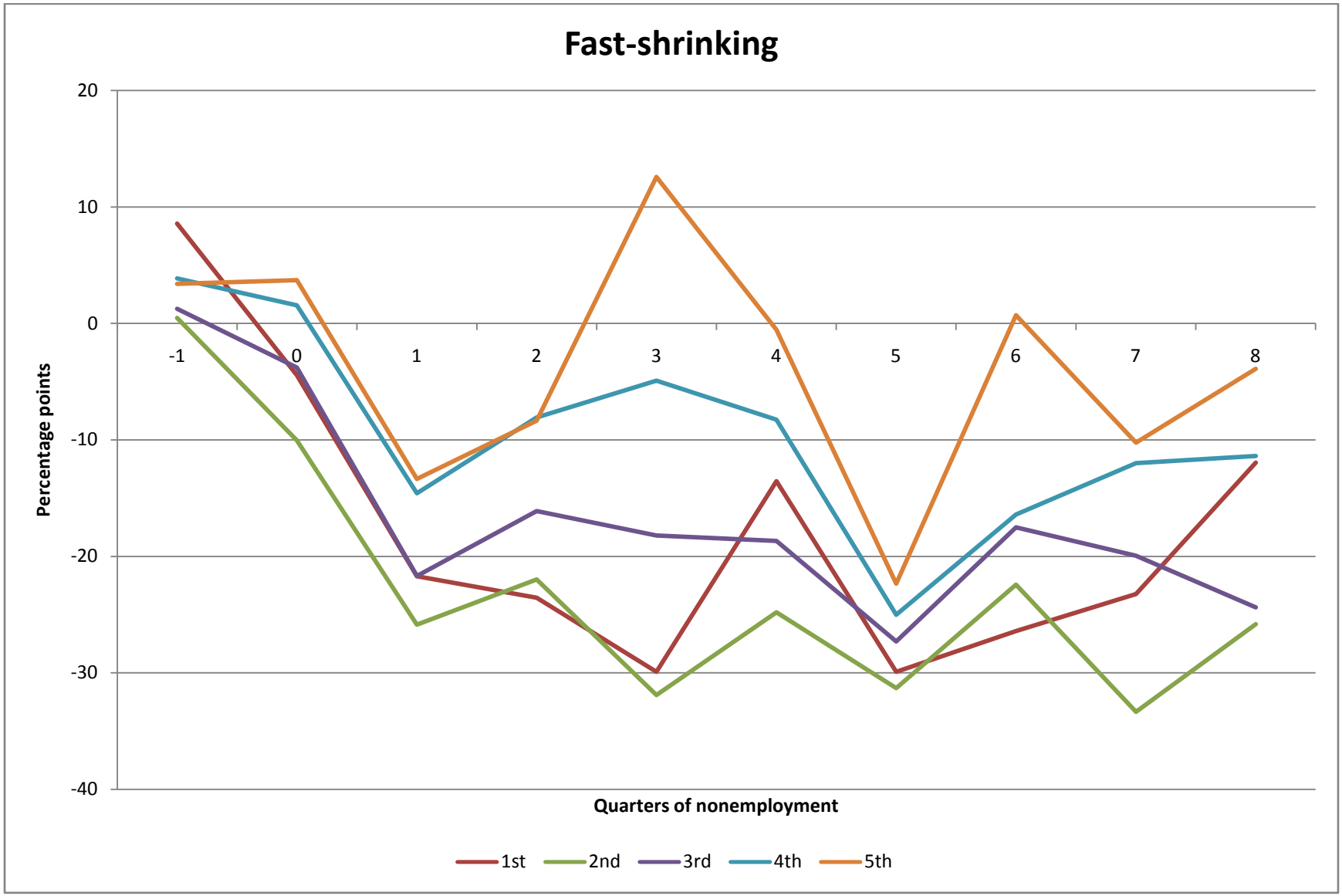
Nonemployment duration: Descriptive results

2001 Job Separators	All Separators	Distressed Separators
New job in same quarter	29.1	31.7
New job in adjacent quarter	17.4	22.0
Full-quarter non-employed	16.6	13.4
Two or three quarters non-employed	8.3	8.9
Four or more quarters of non-employment.	13.7	13.0
No observed new job in state	14.9	10.9

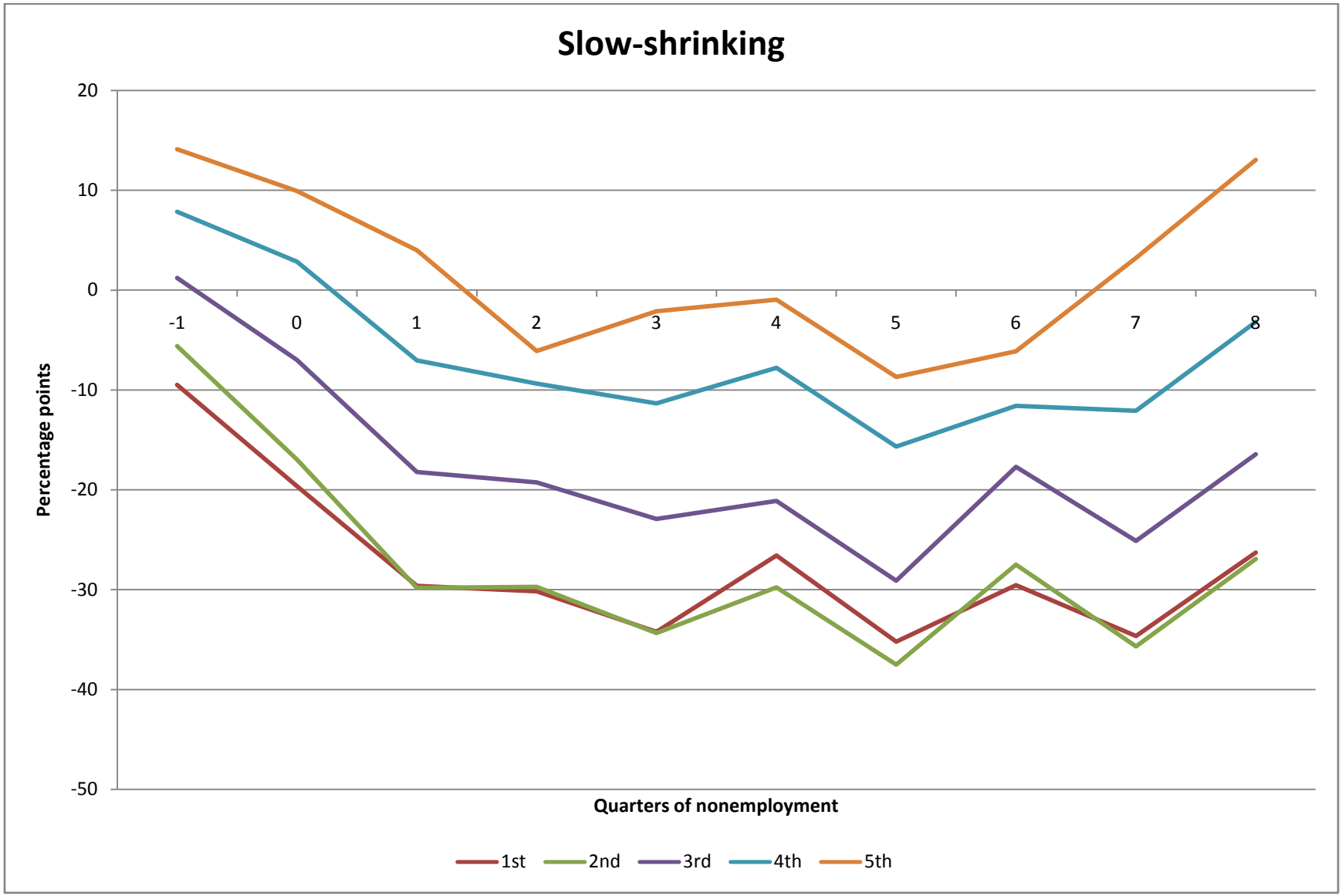
Earnings change relative to stayers



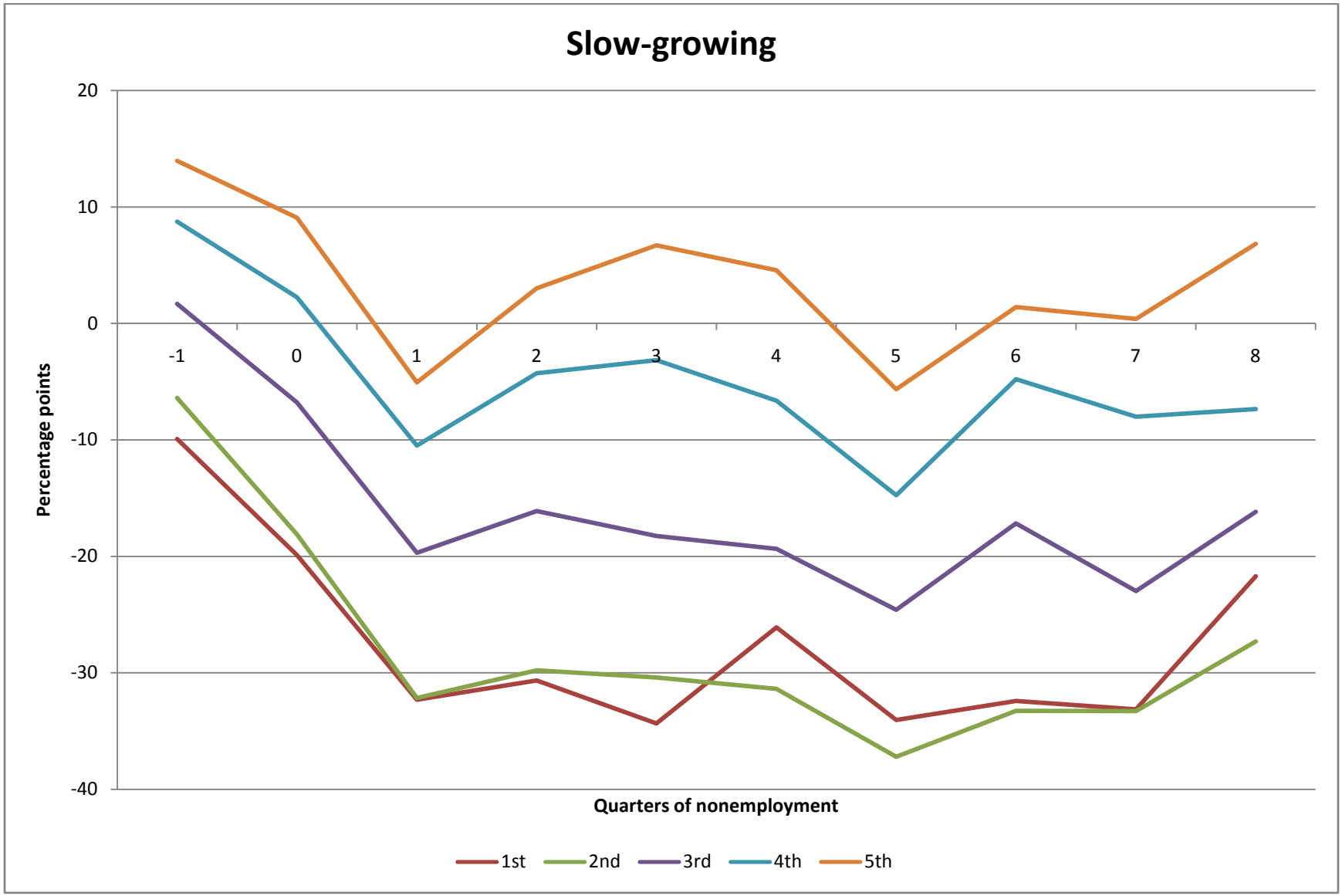
Earnings change relative to stayers



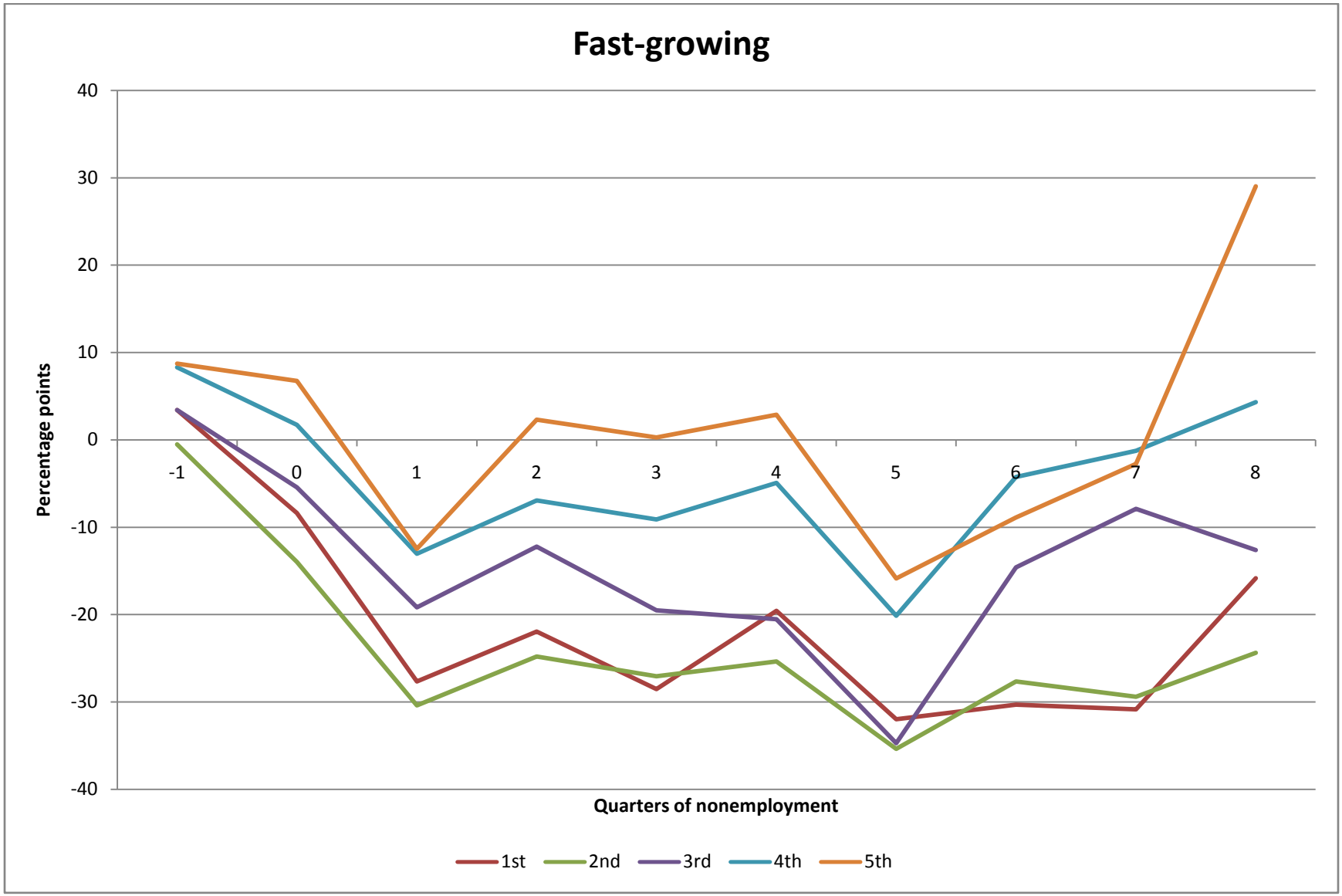
Earnings change relative to stayers



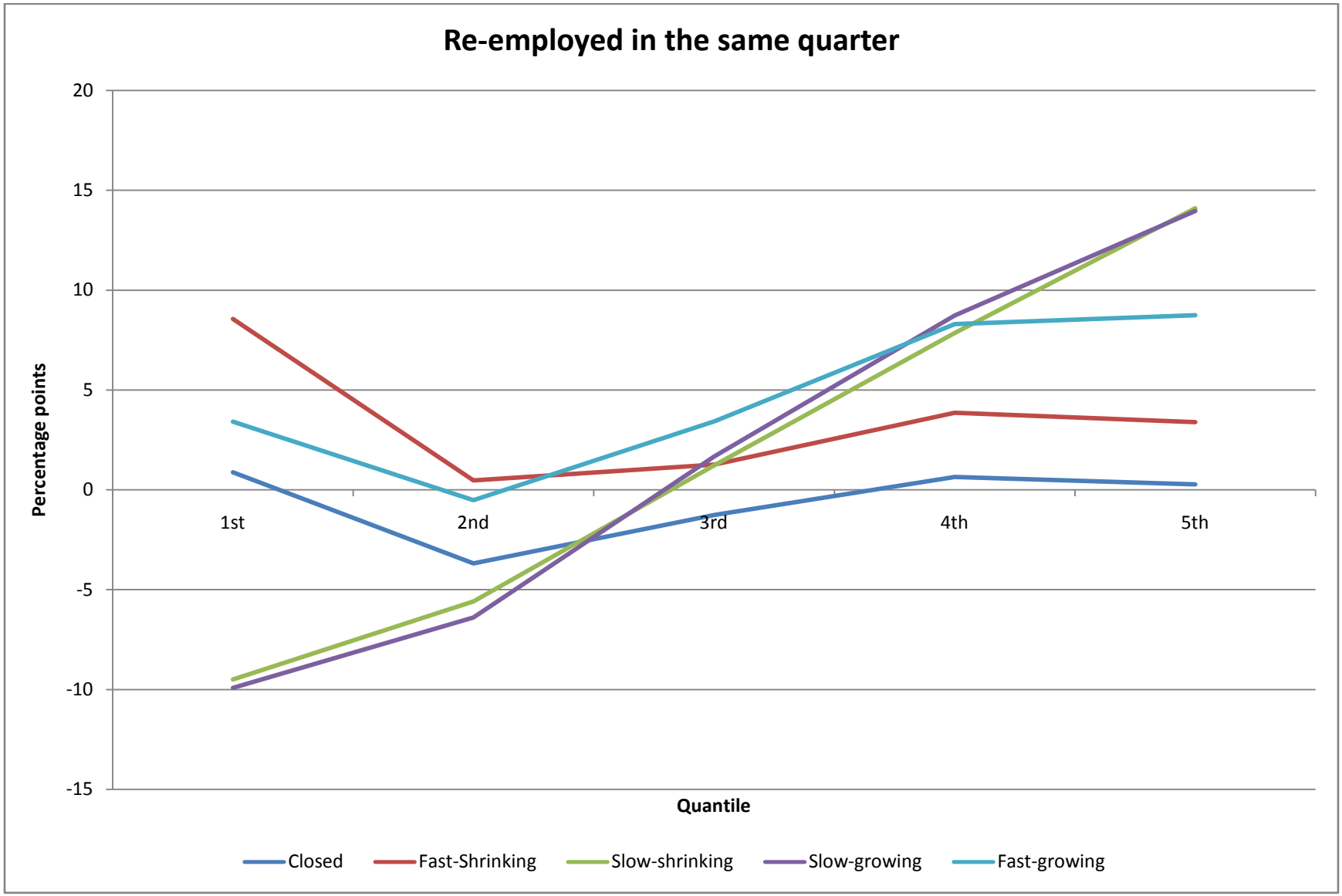
Earnings change relative to stayers



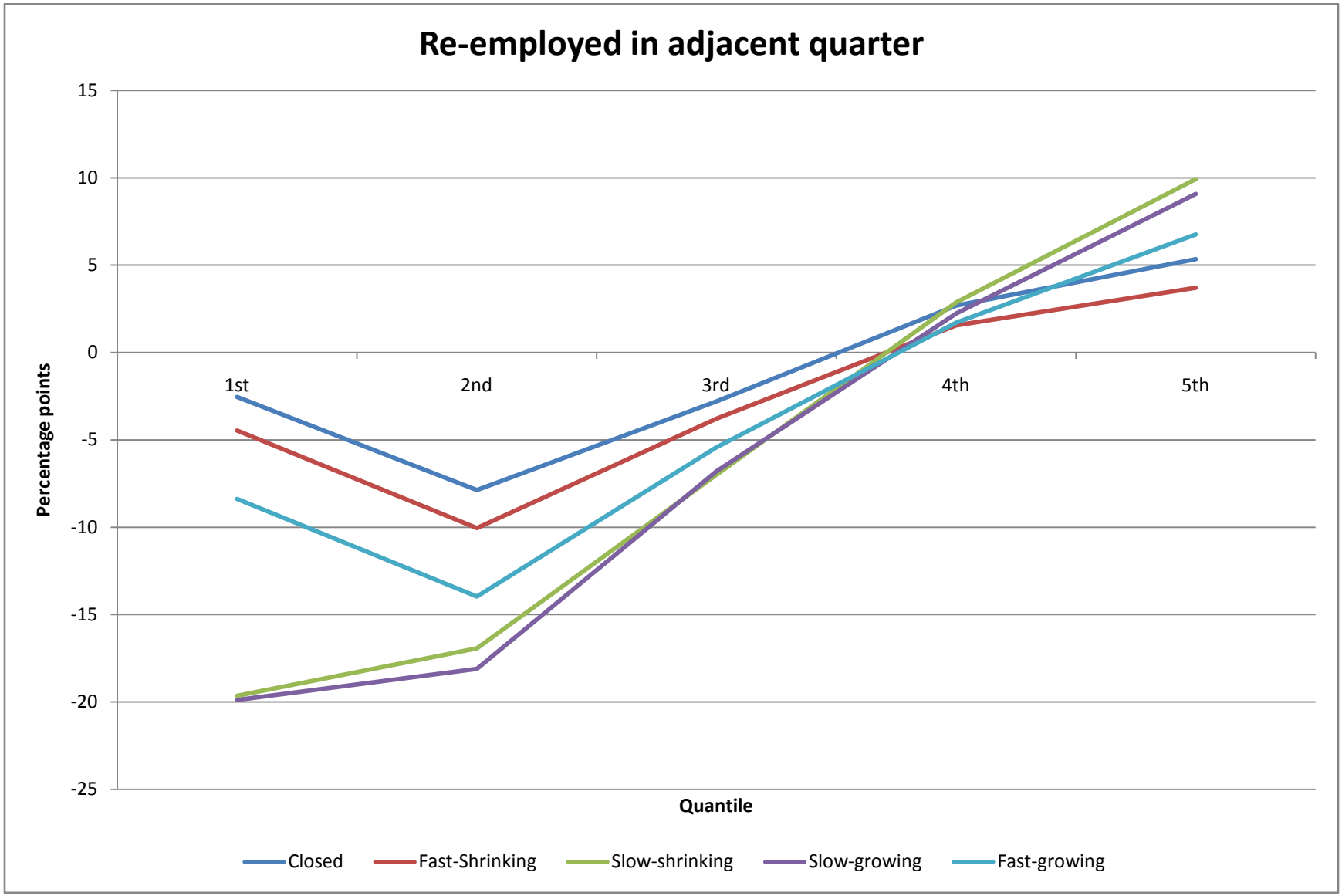
Earnings change relative to stayers



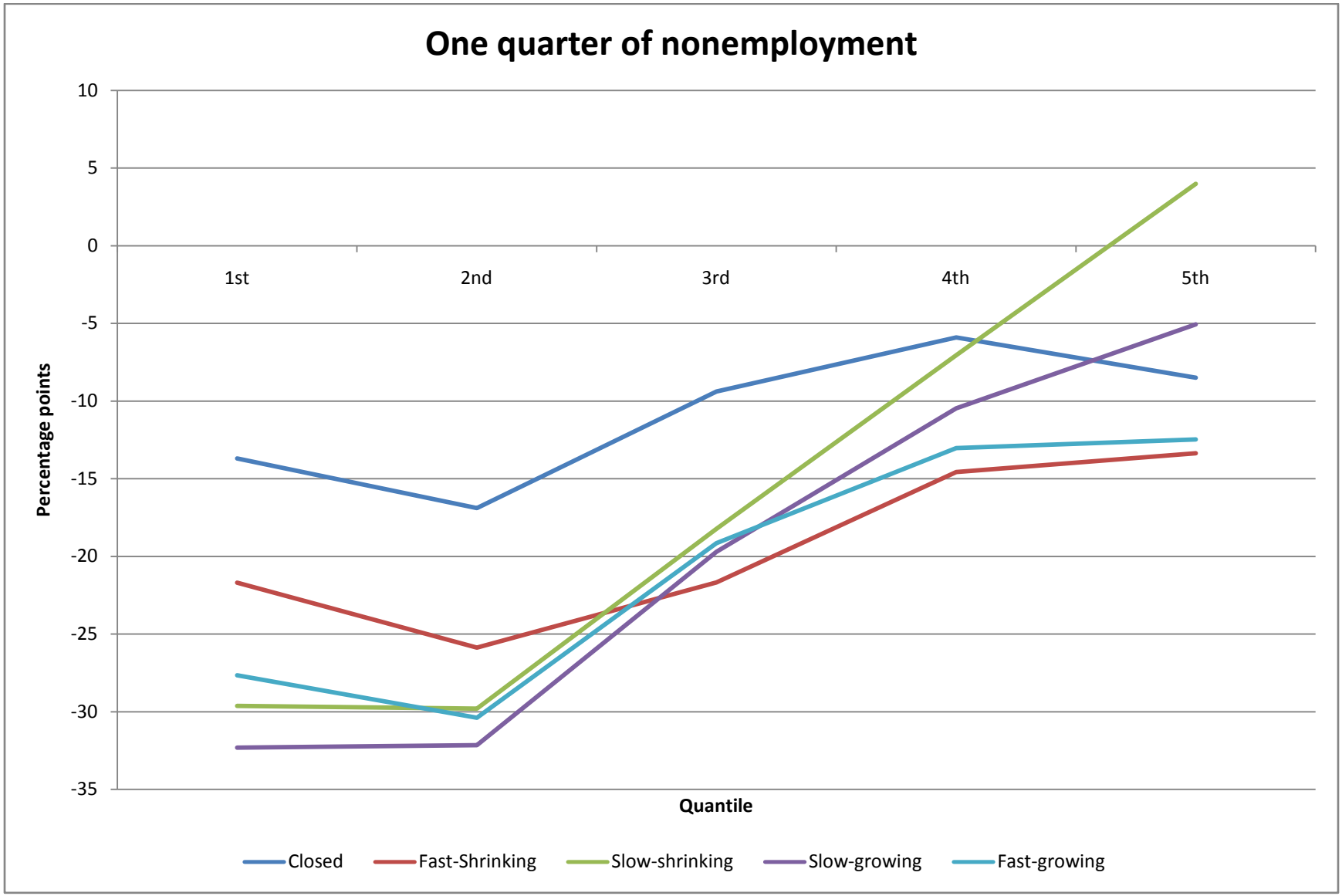
Earnings change relative to stayers



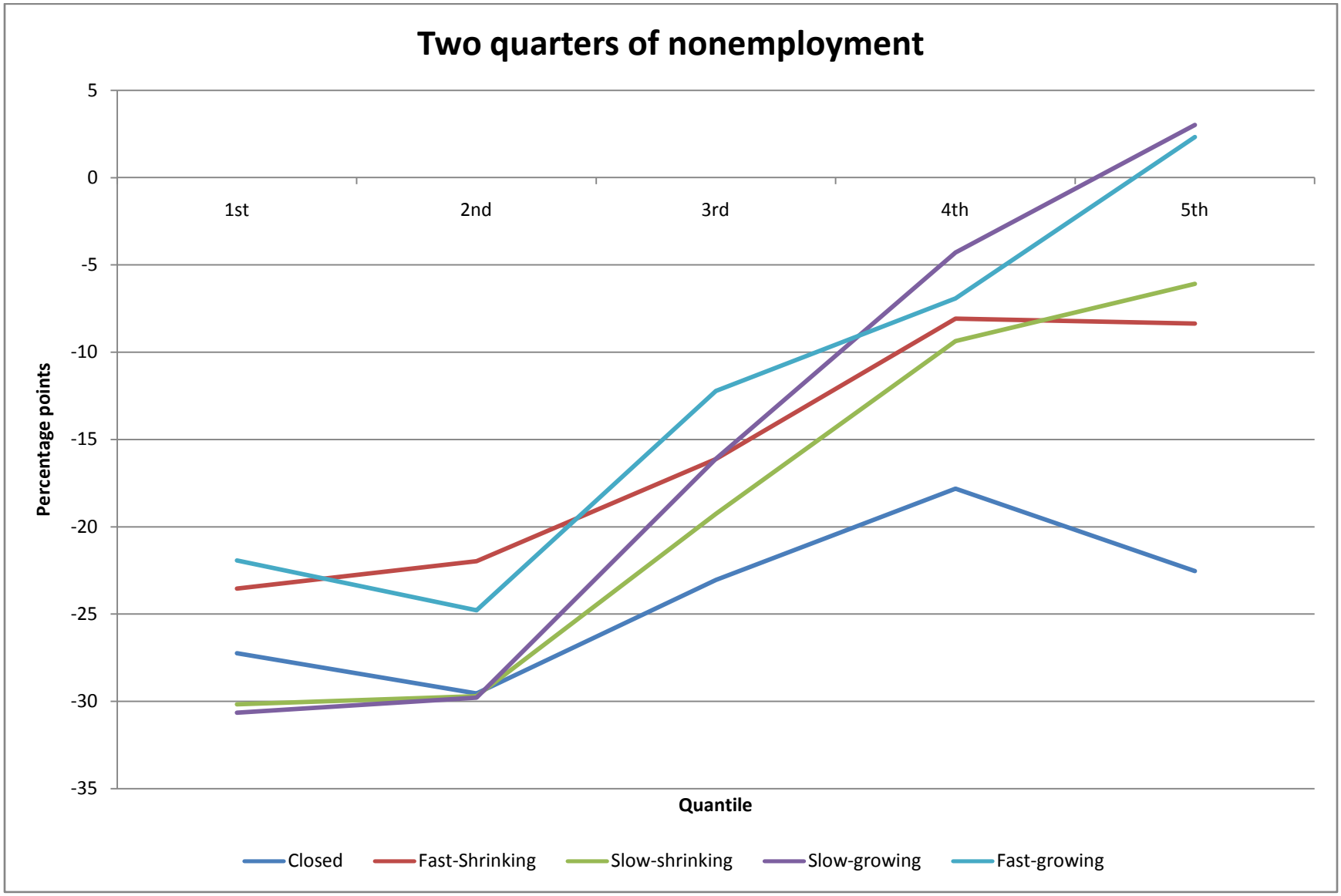
Earnings change relative to stayers



Earnings change relative to stayers



Earnings change relative to stayers



Characteristics of the Sample

	All Separators	Distressed Separators	Job Stayers
	%	%	%
Age at time of separation			
25-34	39.93	36.25	28.21
35-44	34.71	35.62	37.35
45-55	25.37	28.13	34.44
Sex			
% Male	52.15	55.39	52.75
Industry of Separation			
A: Natural Resources & Mining	1.85	2.99	1.53
B: Construction	6.02	5.63	4.42
C: Manufacturing	16.54	27.13	19.74
D: Trade, Transportation & Utilities	21.73	17.59	19.52
E: Information	3.41	5.25	3.43
F: Finance Activities	6.97	6.61	6.35
G: Prof & Business Services	14.28	19.72	9.96
H: Educational & Health Services	15.78	9.21	21.14
I: Leisure & Hospitality	7.56	4.57	4.99
J: Other Services	3.68	1.05	2.79
K: Public Administration	2.18	0.24	6.13
Size of Separating Firm			
Small Firm (<50 emp)	33.28	n/a	24.36
Mid-size Firm (50-500 emp)	32.59	68.61	29.07
Large Firm (>500 emp)	34.13	31.39	46.57
N	2,061,754	149,064	29,406,830