

## Variable Names and Description of Zip Code Files

Source: 1998 and 2001 Zip Code Business Patterns, US Census Bureau (available at UIUC's main library)

<b>ZIP</b>	<b>Zip Code</b>
<b>PO_NAME</b>	Name of Zip Code Area
<b>STATE</b>	State
<b>MSA</b>	MSA
<b>CBSA_CODE</b>	CBSA Code
<b>MAN98</b>	1998 total manufacturing establishments (MSA)
<b>MAN98_12</b>	1998 total manufacturing establishments, 1-9 employees (MSA)
<b>MAN98_39</b>	1998 total manufacturing establishments, 10+ employees (MSA)
<b>MAN01</b>	2001 total manufacturing establishments (MSA)
<b>MAN01_12</b>	2001 total manufacturing establishments, 1-9 employees (MSA)
<b>MAN01_39</b>	2001 total manufacturing establishments, 10+ employees (MSA)
<b>MAN98US</b>	1998 total manufacturing establishments (US)
<b>MAN98US12</b>	1998 total manufacturing establishments, 1-9 employees (US)
<b>MAN98US39</b>	1998 total manufacturing establishments, 10+ employees (US)
<b>MAN01US</b>	2001 total manufacturing establishments (US)
<b>MANUS01_12</b>	2001 total manufacturing establishments, 1-9 employees (US)
<b>MANUS01_39</b>	2001 total manufacturing establishments, 10+ employees (US)
<b>OFF98</b>	1998 total office establishments (MSA)
<b>OFF98_12</b>	1998 total office establishments, 1-9 employees (MSA)
<b>OFF98_39</b>	1998 total office establishments, 10+ employees (MSA)
<b>OFF01</b>	2001 total office establishments (MSA)
<b>OFF01_12</b>	2001 total office establishments, 1-9 employees (MSA)
<b>OFF01_39</b>	2001 total office establishments, 10+ employees (MSA)
<b>OFF98US</b>	1998 total office establishments (US)
<b>OFF98US12</b>	1998 total office establishments, 1-9 employees (US)
<b>OFF98US39</b>	1998 total office establishments, 10+ employees (US)
<b>OFF01US</b>	2001 total office establishments (US)
<b>OFFUS01_12</b>	2001 total office establishments, 1-9 employees (US)
<b>OFFUS01_39</b>	2001 total office establishments, 10+ employees (US)
<b>INFO98</b>	1998 total information establishments (MSA)
<b>INFO98_12</b>	1998 total information establishments, 1-9 employees (MSA)
<b>INFO98_39</b>	1998 total information establishments, 10+ employees (MSA)
<b>INFO01</b>	2001 total information establishments (MSA)
<b>INFO01_12</b>	2001 total information establishments, 1-9 employees (MSA)
<b>INFO01_39</b>	2001 total information establishments, 10+ employees (MSA)
<b>INFO98US</b>	1998 total information establishments (US)
<b>INFO98US12</b>	1998 total information establishments, 1-9 employees (US)
<b>INFO98US39</b>	1998 total information establishments, 10+ employees (US)
<b>INFO01US</b>	2001 total information establishments (US)
<b>INFOUS01_1</b>	2001 total information establishments, 1-9 employees (US)
<b>INFOUS01_3</b>	2001 total information establishments, 10+ employees (US)
<b>INDEX</b>	Index
<b>NUMSEC</b>	Number of sectors represented in zip code
<b>EST98</b>	Total establishments in zip code, 1998
<b>EST01</b>	Total establishments in zip code, 2001
<b>PCTNGE</b>	National growth effect, percent (N)
<b>PCTIME</b>	<b>Industry mix effect, percent (M)</b>
<b>PCTCSE</b>	<b>Competitive shift effect, percent (S)</b>
<b>PCTGRO</b>	<b>Percent growth establishments, 1998-2001 (R)</b>
<b>ID</b>	<b>Unique zip code ID for ID variable in weights matrix creation window</b>

## (Classical) shift-share analysis

- Decomposition of regional growth into three components

$$R = N + M + S$$

Reference area component, or "growth effect"

Industry mix component, or "mix effect"

"Competitiveness" or "shift" component

### Reference area component

- Sometimes called "national growth effect"
  - Because nation often used as reference area

$$N = \sum_i \left( \underbrace{\frac{E_n^t}{E_n^{t-1}} - 1}_{\text{Total reference area growth rate}} \right) \underbrace{E_{ir}^{t-1}}_{\text{Sector employment in region}}$$

- $E_{ir}$  Industry  $i$ 's local employment
- $E_r$  Total local employment
- $E_{in}$  Industry  $i$ 's reference area employment
- $E_n$  Total reference area employment
- $T$  References period (usually year)

### Industry mix component

$$M = \sum_i \left[ \left( \frac{E_{in}^t}{E_{in}^{t-1}} - 1 \right) - \left( \frac{E_n^t}{E_n^{t-1}} - 1 \right) \right] E_{ir}^{t-1}$$

Difference between industry and total growth rates, reference area (e.g., nation)

### Regional share component

- Or "competitiveness" or "shift" component

$$S = \sum_i \left[ \left( \frac{E_{ir}^t}{E_{ir}^{t-1}} - 1 \right) - \left( \frac{E_{in}^t}{E_{in}^{t-1}} - 1 \right) \right] E_{ir}^{t-1}$$

Difference between industry  $i$  growth in the region and industry  $i$  growth in the reference area