# **BDS VARIABLE CODEBOOK** (2018 Release)

By Variable Name	Type	Length
cty	char	3
eage	char	16
esize	char	12
fage	char	16
fsize	char	15
iesize	char	12
ifsize	char	15
metro	char	2
msa	char	5
sector	char	5
st	char	2
venaics3	char	3
venaies4	char	4
year	num	4

Variable Name	Type	Length
firms	num	8
estabs	num	8
emp	num	8
denom	num	8
estabs_entry	num	8
estabs_entry_rate	num	8
estabs_exit	num	8
estabs_exit_rate	num	8
job_creation	num	8
job_creation_births	num	8
job_creation_continuers	num	8
job_creation_rate_births	num	8
job_creation_rate	num	8
job_destruction	num	8
job_destruction_deaths	num	8
job_destruction_continuers	num	8
job_destruction_rate_deaths	num	8
job_destruction_rate	num	8
net_job_creation	num	8
net_job_creation_rate	num	8
reallocation_rate	num	8

year

Values: 1978-2018 Description: record year

sector

Values: 11,21,22,23,31-33,42,44-45,48-49,51,52,43,54,55,56,61,62,71,72,81

Description: 11 - Agriculture, Forestry, Fishing and Hunting

21 - Mining, Quarrying, and Oil and Gas Extraction

22 - Utilities 23 - Construction 31-33 - Manufacturing 42 - Wholesale Trade 44-45 - Retail Trade

48-49 - Transportation and Warehousing

51 - Information

52 - Finance and Insurance

53 - Real Estate and Rental and Leasing

54 - Professional, Scientific, and Technical Services55 - Management of Companies and Enterprises

56 - Administrative and Support and Waste Management and Remediation Services

61 - Educational Services

62 - Health Care and Social Assistance71 - Arts, Entertainment, and Recreation72 - Accommodation and Food Services

81 - Other Services (except Public Administration)

esize

Values: a) 1 to 4, b) 5 to 9, c) 10 to 19, d) 20 to 99, e) 100 to 499, f) 500 to 999, g) 1000+

and

a) 1 to 19, b) 20-499, c) 500+

Description: Establishment size. A categorical variable defined as the average of the establishment's year t-1

and year t employment. The larger number of size classes—7 in total—are included in all establishment size tables, except those at the msa and county levels. The smaller number of size

classes—3 in total—are included in estab size tables at the msa or county level only.

iesize

Values: a) 1 to 4, b) 5 to 9, c) 10 to 19, d) 20 to 99, e) 100 to 499, f) 500 to 999, g) 1000+

and

a) 1 to 19, b) 20-499, c) 500+

Description: Initial Establishment size. A categorical variable defined for any given consecutive two-year

period as the size at year t-1 except in cases when year t-1 employment is equal to zero in which case initial size is year t employment. The larger number of size classes referenced above—7 in total—are included for all initial establishment size tables, except those at the msa and county levels. The smaller number of size classes—3 in total—are included in initial estab size tables at

the msa or county level only.

## fsize

Values:

a) 1 to 4, b) 5 to 9, c) 10 to 19, d) 20 to 99, e) 100 to 499, f) 500 to 999, g) 1000 to 2499,

h) 2500 to 4999, i) 5000 to 9999, j) 10000+

and

a) 1 to 19, b) 20-499, c) 500+

Description:

Firm size. A categorical variable defined as the average of the firm's year t-1 and year t employment. The larger number of size classes—10 in total—are included in all establishment size tables, except those at the msa and county levels. The smaller number of size classes—3 in total—are included in estab size tables at the msa or county level only.

#### ifsize

Values:

a) 1 to 4, b) 5 to 9, c) 10 to 19, d) 20 to 99, e) 100 to 499, f) 500 to 999, g) 1000 to 2499, h) 2500 to 4999, i) 5000 to 9999, j) 10000+

and

a) 1 to 19, b) 20-499, c) 500+

Description:

Initial firm size. A categorical variable defined for any given consecutive two-year period as the size at year t-1 except in cases when year t-1 employment is equal to zero in which case initial size is year t employment. The larger number of size classes referenced above—10 in total—are included for all initial firm size tables, except those at the msa and county levels. The smaller number of size classes—3 in total—are included in initial estab size tables at the msa or county level only.

## eage

Values:

a) 0, b) 1, c) 2, d) 3, e) 4, f) 5, g) 6 to 10, h) 11 to 15, i) 16 to 20, j) 21 to 25, k) 26+, l) Left Censored

and

a) 0, b) 1 to 5, c) 6 to 10, d) 11+, e) Left Censored

Description:

This is an employment based measure of establishment age. An estab born before 1977 is of unknown age and is assigned an age of "Left Censored". One born during or after 1977 is assigned an age of zero in the first year it reports positive employment, and ages each year thereafter regardless of employment. The larger number of age classes referenced above—12 in total—are included for all estab age tables, except those at the msa and county levels. The smaller number of age classes—5 in total—are included in the estab age tables at the msa or county level only.

### fage

Values:

a) 0, b) 1, c) 2, d) 3, e) 4, f) 5, g) 6 to 10, h) 11 to 15, i) 16 to 20, j) 21 to 25, k) 26+, l) Left Censored

and

a) 0, b) 1 to 5, c) 6 to 10, d) 11+, e) Left Censored

Description:

This is an employment based measure of firm age. A firm born before 1977 is of unknown age and is assigned a firm age of "Left Censored". A firm born during or after 1977 is assigned a firm age as follows:

- 1. One or more pre-existing establishments with prior employment the firm willbe born with a non-zero age based on the earliest year any establishment reported employment.
- 2. One or more pre-existing establishments with no prior employment in any establishment the firm is born with no firm age. The firm will be age zero in the first year any establishment reports employment.
- 3. One or more newly founded establishments with employment the firm will be born with age of zero.
- 4. One or more newly founded establishments with no employment in any establishment the firm will be born with no firm age. The firm will be age zero in the first year any establishment reports employment.

The larger number of age classes referenced above—12 in total—are included for all firm age tables, except those at the msa and county levels. The smaller number of age classes—5 in total—are included in the firm age tables at the msa or county level only.

### firms

Values:

Description:

A simple count of the number of firms in the cell. For state level tables, a firm with establishments in multiple states be counted multiple times, once in each state, irrespective of the portion of the firm residing in that state.

#### estabs

Values:

Description: A simple count of the number of establishments in the cell.

## emp

Values:

Description: Paid employment consists of full- and part-time employees, including salaried officers and

executives of corporations, who are on the payroll in the pay period including March 12. Included

are employees on paid sick leave, holidays, and vacations.

#### denom

Values:

Description: Davis-Haltiwanger-Schuh (DHS) denominator. For time t, denom is the average of employment for

times t and t-1. This variable attempts to prevent transitory shocks from creating a bias to the

relationship between net growth from t-1 to t and size.

## estabs\_entry

Values:

Description: A count of establishments born within the cell during the last 12 months.

## estabs\_entry\_rate

Values:

Description: 100 \* (estabs\_entry at time t divided by the average of estabs at t and t-1).

#### estabs exit

Values:

Description: A count of establishments exiting from within the cell during the last 12 months.

#### estabs exit rate

Values:

Description: 100 \* (estabs\_exit at time t divided by the average of estabs at t and t-1).

## job\_creation

Values:

Description: Count of all employment gains within the cell from expanding and opening establishments

between the week of March 12 of the prior year to the current year.

### job\_creation\_births

Values:

Description: Count of employment gains within the cell from establishment openings (births) between the week

of March 12 of the prior year to the current year.

## job\_creation\_continuers

Values:

Description: Count of employment gains within the cell from continuing establishments that expanded between

the week of March 12 of the prior year to the current year.

## job\_creation\_rate\_births

Values:

Description: 100 \* (job\_creation\_births / denom)

## job\_creation\_rate

Values:

Description: 100 \* (job\_creation / denom)

## job\_destruction

Values:

Description: Count of all employment losses within the cell from contracting and closing establishments

between the week of March 12 of the prior year to the current year.

## job\_destruction\_deaths

Values:

Description: Count of all employment losses within the cell from establishment closings (deaths)

between the week of March 12 of the prior year to the current year.

## job\_destruction\_continuers

Values:

Description: Count of employment losses within the cell from continuing establishments that contracted

between the week of March 12 of the prior year to the current year.

## job\_destruction\_rate\_deaths

Values:

Description: 100 \* (job\_destruction\_deaths / denom)

## job\_destruction\_rate

Values:

Description: 100 \* (job\_destruction divided / denom)

#### net job creation rate

Values:

Description: job\_creation\_rate - job\_destruction\_rate

## reallocation\_rate

Values:

 $Description: \qquad job\_creation\_rate + job\_destruction\_rate - abs(net\_job\_creation\_rate). \ This is often \ referred \ to \ as$ 

an "excess" reallocation rate since it measures the rate of job reallocation over and above that needed to accommodate the net job creation in the cell. A gross reallocation measure is simply the

sum of the job\_creation\_rate and the job destruction\_rate.

## firmdeath firms

Values:

Description: Count of firms that have exited in their entirety during the period. All establishments owned by the

firm must exit to be considered a firm death. This definition of firm death is narrow and strictly applied, so that a firm with 100 establishments would not qualify as a firm death if 99 exited while

1 continued under different ownership.

## firmdeath\_estabs

Values:

Description: Count of establishments associated with firm deaths.

## firmdeath\_emp

Values:

Description: Count of employment associated with firm deaths.

#### metro

Values: M,N,SW

Description: Establishments located in Metropolitan or Micropolitan Statistical Areas are in cells designated

with "M", while those in non-metropolitan areas are aggregated into cells designated with "N". Cells designated as "SW" are establishments that cannot be assigned a sub-state geography, which

are designated as "statewide".

#### msa

Values:

Description: Numeric code for metropolitan and micropolitan statistical areas, as established by Office of

Management and Budget (OMB). The February 2013 definitions are used:

https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/delineation-

files.html

## cty

Values:

Description: Three character numeric code for county within a given state. Users can refer to the CBP county

reference files for listings of valid county codes (https://www.census.gov/programs-

surveys/cbp/technical-documentation/reference/state-county-geography-reference.html). The BDS also includes statewide (999) and unclassified (998) county codes. Statewide county codes are assigned to establishments without a fixed location such as employee leasing establishments. Unclassified establishments are those with a county code that cannot be found in any of the CBP

county reference files.

st

Values: 01,02,04,05,06,08,09,10,11,12,13,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,

30,31,32,33,34,35,36,37,38,39,40,41,42,44,45,46,47,48,49,50,51,53,54,55,56

Description: 01-AL 15-HI 26-MI 37-NC 49-UT

02-AK 16-ID 27-MN 38-ND 50-VT 04-AZ 17-IL 28-MS 39-OH 51-VA 05-AR 18-IN 29-MO 40-OK 53-WA 06-CA 19-IA 30-MT 41-OR 54-WV 08-CO 20-KS 31-NE 42-PA 55-WI

09-CT 21-KY 32-NV 44-RI 56-WY 10-DE 22-LA 33-NH 45-SC 97-nationwide\*

11-DC 23-ME 34-NJ 46-SD 12-FL 24-MD 35-NM 47-TN

13-GA 25-MA 36-NY 48-TX

## vcnaics3

Values:

Description: Vintage consistent 3-digit NAICS 2012 codes

## vcnaics4

Values:

Description: Vintage consistent 4-digit NAICS 2012 codes

<sup>\*</sup>records that could not reliably be assigned a specific state code, are coded as nationwide.