

Business Dynamics Statistics

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NARSC
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Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed.

Background

- Business dynamics are a fundamental part of
 - Innovation
 - Productivity Growth
 - Job Creation
- Measuring business dynamics in official statistics is relatively new, but critical to our understanding of the economy

Remarks By Federal Reserve Chairman Ben Bernanke

... One leading explanation for the strong U.S. productivity growth is that labor markets in the United States tend to be more flexible and competitive, market characteristics that have allowed the United States to realize greater economic benefits from new technologies. For example, taking full advantage of new information and communication technologies may require extensive reorganization of work practices, the reassignment and retraining of workers, and ultimately some reallocation of labor among firms and industries...

August 31, 2006

U S C E N S U S B U R E A U

Background

- Confidential Micro Datasets – RDC Network
- Public Use Datasets a way to open access to wider set of users
 - Census-SUSB
 - BLS-BED
 - OECD-SBS
- None of these incorporate business age in a systematic way.
- Critical to understanding a changing economy
 - Innovation/Life cycle dynamics/Entrepreneurship
 - The role of young/small old/large producers in dynamic economic processes.

The BDS

- New Census public use files (support from Kauffman Foundation)
 - Coverage 1976-2005
 - Private Non Farm Economy, employers
 - Establishment level with firm characteristics
 - Focus on both business and employment dynamics
- Comparison to CBP
 - Value added from links and longitudinal analysis
- Unique Features
 - Long Time Series
 - Incorporates Firm Characteristics
 - Firm age, firm size
 - Interactions of age and size

The BDS

- Statistics
 - Number of Establishment: Births, Deaths and Continuers
 - Job creation
 - From births and expansions
 - Job destruction
 - From deaths and contractions
- By categories
 - Firm Age
 - Firm Size
 - State
 - Industrial Sector
 - State*Sector*Age ...

The BDS

- Other tables planned
 - County (most requested)
 - Metro/Non-Metro
 - NAICS, detail
 - Establishment Age
- Planned Improvements
 - Enterprise counts (Firm survival and growth)

We want feedback as to what is useful to you

The BDS Website

Business Dynamics Statistics - Home - Mozilla Firefox

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http://www.ces.census.gov/index.php/bds

Getting Started Latest Headlines

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Business Dynamics Statistics, BDS

New tool gives insights into dynamics of changing economy

- Unique information on firm age and firm size
- Public-use data

BDS tables show key economic data:

- Number of Establishments
- Establishment Openings/Closings
- Employment
- Job Creation/Job Destruction
- Job Expansions/Job Contractions

The BDS series provides:

- Annual data 1976-2005
 - Firm age and firm size
 - State
 - Standard Industrial Classification sectors
 - Entire economy
- Establishment and firm level
- See BDS tabulations by year at the [BDS Database list](#)

More information about the BDS is in the [Overview](#).

Last Modified Date: December 1st, 2008

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About the BDS

The new Business Dynamics Statistics (BDS) are a product of the [Center for Economic Studies](#) of the U.S. Census Bureau. The annual series describes establishment-level business dynamics along dimensions absent from similar databases including firm age and firm size.

BDS are created from the Longitudinal Business Database ([LBD](#)), a confidential database available to researchers throughout the network of Census [Research Data Centers](#). BDS development at CES was partially funded by the [Kauffman Foundation](#). A unique feature of the BDS is its longitudinal source data that permit tracking establishments and firms over time. The public use BDS tabulations are an effort to make information from the confidential LBD accessible to a broad range of data users. Other efforts currently under way include creating a fully synthetic microdata file based on the LBD.

The BDS series provides annual statistics for 1976-2005. To view BDS tabulations by year select the appropriate series from the [BDS Database list](#).

For more information, contact CES via [email](#).

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The BDS: Multiple Databases

The screenshot shows a web browser window titled "Business Dynamics Statistics - BDS Database List - Mozilla Firefox". The address bar shows the URL "http://www.ces.census.gov/index.php/bds/bds_database_list". The page content includes the U.S. Census Bureau logo and the title "Business Dynamics Statistics: Database List". A warning message states: "Attempting to open/view SAS or CSV datasets directly from this site is known to cause conflicts when using certain browsers/settings. Users who experience this should download the file and view it with local software." Below this, a list of database categories is provided, each with links for SAS, Excel, and CSV formats. The categories include Economy Wide, Sector, Firm Size, Initial Firm Size, Firm Age, and State, as well as various combinations of these factors. At the bottom, there is a "Login" link and the U.S. Census Bureau logo with the tagline "Helping You Make Informed Decisions".

Business Dynamics Statistics - BDS Database List - Mozilla Firefox

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Business Dynamics Statistics: Database List

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Sector ([SAS](#), [Excel](#), [CSV](#))
Firm Size ([SAS](#), [Excel](#), [CSV](#))
Initial Firm Size ([SAS](#), [Excel](#), [CSV](#))
Firm Age ([SAS](#), [Excel](#), [CSV](#))
State ([SAS](#), [Excel](#), [CSV](#))

Firm Age by Firm Size ([SAS](#), [Excel](#), [CSV](#))
Firm Age by Initial Firm Size ([SAS](#), [Excel](#), [CSV](#))
Firm Age by Sector ([SAS](#), [Excel](#), [CSV](#))
Firm Size by Sector ([SAS](#), [Excel](#), [CSV](#))
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The BDS: Economy Wide

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C5

Country: USA
 Unit of Analysis: Active Establishments*
 Source: Longitudinal Business Database 1977-2005
 *Establishment activity is defined by the existence of March 12 employment

US Economy

Year	Estabs	Emp	Denom	Estabs_Entry	Estabs_Entry_Rate	Estabs_Exit	Estabs_Exit_Rate	Job_Creation	Job_Creation_Births	Job_Creation_Continuers	Job_Creation_Rate_Births	Job_Creation_Rate
1977	4,160,507	66,248,543	64,141,963	696,356	17.1	523,544	12.8	13,901,046	5,806,332	8,094,714	9.1	21.7
1978	4,245,864	70,126,368	68,162,009	610,366	14.5	516,328	12.3	14,133,355	4,511,240	9,622,115	6.6	20.7
1979	4,384,157	74,198,347	72,234,088	633,444	14.6	504,711	11.7	14,437,459	4,936,469	9,500,990	6.8	20.0
1980	4,402,609	74,876,595	74,544,860	577,011	13.1	525,114	12.0	12,716,158	4,528,615	8,187,543	6.1	17.1
1981	4,404,385	74,626,595	74,160,542	598,137	13.6	570,051	13.0	13,384,027	5,715,500	7,668,527	7.7	18.0
1982	4,489,039	74,837,672	74,795,788	637,196	14.3	507,410	11.4	13,073,592	5,449,071	7,624,521	7.3	17.5
1983	4,564,314	72,893,113	73,858,297	545,909	12.1	505,405	11.2	12,251,967	4,453,787	7,798,180	6.0	16.6
1984	4,717,932	77,632,335	75,335,226	642,265	13.8	506,032	10.9	15,028,139	5,387,581	9,640,558	7.2	19.9
1985	4,881,174	81,499,428	80,125,024	667,165	13.8	538,610	11.2	14,916,848	5,558,123	9,358,725	6.9	18.6
1986	5,019,138	84,091,938	82,938,964	695,042	14.0	555,357	11.2	15,329,776	5,960,314	9,369,462	7.2	18.5
1987	5,182,767	85,942,305	85,314,804	783,184	15.3	603,078	11.8	15,938,823	6,416,528	9,522,295	7.5	18.7
1988	5,247,910	87,962,070	86,458,797	693,218	13.3	594,229	11.4	16,545,877	6,202,133	10,343,744	7.2	19.1
1989	5,273,258	90,403,900	89,151,420	646,866	12.3	625,194	11.9	16,100,205	5,703,310	10,396,895	6.4	18.1
1990	5,425,109	92,887,083	91,712,566	709,092	13.2	535,195	10.0	15,753,480	5,930,570	9,822,910	6.5	17.2
1991	5,518,633	91,501,918	92,157,029	679,982	12.4	585,453	10.7	14,463,962	5,812,942	8,651,020	6.3	15.7
1992	5,583,896	91,898,491	91,765,790	693,718	12.5	608,031	10.9	15,460,650	5,668,739	9,791,911	6.2	16.8
1993	5,640,727	93,563,105	92,693,902	642,935	11.5	568,247	10.1	15,329,792	5,062,321	10,267,471	5.5	16.5
1994	5,735,204	95,167,595	94,328,205	681,021	12.0	567,789	10.0	15,184,072	5,390,494	9,793,578	5.7	16.1
1995	5,846,615	98,673,413	96,884,692	707,569	12.2	571,735	9.9	16,173,855	5,824,115	10,349,740	6.0	16.7
1996	5,942,544	100,519,452	99,576,336	707,764	12.0	597,199	10.1	15,963,688	5,961,314	10,002,374	6.0	16.0
1997	6,051,318	103,425,287	102,053,990	771,009	12.8	660,145	11.0	18,552,753	6,858,800	11,693,953	6.7	18.2
1998	6,118,308	106,649,399	105,022,476	726,633	11.9	643,020	10.6	18,199,758	6,773,109	11,426,649	6.4	17.3
1999	6,184,206	109,466,850	108,247,207	715,966	11.6	643,221	10.5	18,203,952	6,848,169	11,355,783	6.3	16.8
2000	6,228,447	112,999,553	111,183,802	707,283	11.4	664,200	10.7	19,396,499	7,082,971	12,313,528	6.4	17.4
2001	6,352,209	114,414,540	113,985,996	723,865	11.5	693,222	11.0	18,244,480	6,814,907	11,429,573	6.0	16.0
2002	6,403,359	112,222,026	113,168,263	812,924	12.8	754,839	11.8	19,054,913	7,970,357	11,084,556	7.0	16.8
2003	6,456,672	112,842,266	111,972,086	772,674	12.1	634,440	9.9	18,257,314	6,669,536	11,587,778	6.0	16.3
2004	6,528,488	113,969,250	112,978,319	761,248	11.8	674,720	10.4	17,701,442	6,242,963	11,458,479	5.5	15.7
2005	6,656,400	115,854,839	114,614,291	825,858	12.6	668,194	10.2	18,422,669	7,465,903	10,956,766	6.5	16.1

The BDS: State Statistics

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A1 = 'Country: USA

Year	Estabs	Emp	Denom	Estabs_Entry	Estabs_Entry_Rate	Estabs_Exit	Estabs_Exit_Rate	Job_Creation	Job_Creation_Births	Job_Creation_Continuers	Job_Creation_Rate_Births	Job_Creation_Rate
1977	438,861	6,827,684	6,501,510	87,896	20.6	60,585	14.2	1,737,058	773,551	963,507	11.9	26.7
1978	459,145	7,323,735	7,072,280	82,200	18.3	61,737	13.7	1,707,552	604,035	1,103,517	8.5	24.1
1979	479,343	7,925,069	7,625,760	84,142	17.9	60,787	13.0	1,816,653	667,299	1,149,354	8.8	23.8
1980	494,386	8,257,279	8,091,981	81,431	16.7	63,917	13.1	1,723,428	657,228	1,066,200	8.1	21.3
1981	494,457	8,327,094	8,269,260	78,057	15.8	73,079	14.8	1,733,569	725,252	1,008,317	8.8	21.0
1982	509,084	8,520,757	8,428,863	82,758	16.5	62,736	12.5	1,809,214	793,585	1,015,629	9.4	21.5
1983	517,407	8,162,337	8,338,486	69,091	13.5	64,040	12.5	1,554,090	561,829	992,261	6.7	18.6
1984	534,367	8,823,041	8,491,722	78,492	14.9	61,435	11.7	1,944,956	681,500	1,263,456	8.0	22.9
1985	557,280	9,305,432	9,122,975	83,536	15.2	65,004	11.9	1,940,713	719,232	1,221,481	7.9	21.3
1986	578,997	9,676,865	9,511,162	90,112	15.8	68,098	12.0	2,013,231	809,903	1,203,328	8.5	21.2
1987	604,017	10,059,740	9,920,407	101,391	17.1	73,352	12.4	2,144,369	844,993	1,299,376	8.5	21.6
1988	615,399	10,420,229	10,210,198	88,526	14.5	73,972	12.1	2,212,136	790,196	1,421,940	7.7	21.7
1989	609,496	10,671,614	10,542,536	84,328	13.8	90,289	14.7	2,149,285	747,011	1,402,274	7.1	20.4
1990	644,549	11,212,634	10,949,165	104,962	16.7	66,484	10.6	2,299,740	930,299	1,369,441	8.5	21.0
1991	658,893	10,924,658	11,066,044	90,559	13.9	76,081	11.7	1,928,895	755,525	1,173,370	6.8	17.4
1992	657,733	10,617,376	10,771,933	87,256	13.2	84,533	12.8	1,962,598	790,279	1,172,319	7.3	18.2
1993	647,193	10,569,798	10,584,424	75,334	11.5	81,596	12.5	1,918,394	672,234	1,246,160	6.4	18.1
1994	644,887	10,490,118	10,526,881	79,577	12.3	78,507	12.2	1,778,749	669,869	1,108,880	6.4	16.9
1995	649,519	10,790,647	10,638,043	81,829	12.6	73,570	11.4	1,869,490	651,954	1,217,536	6.1	17.6
1996	657,552	10,971,608	10,881,518	83,159	12.7	72,687	11.1	1,921,618	674,980	1,246,638	6.2	17.7
1997	666,171	11,370,956	11,180,698	89,677	13.5	80,774	12.2	2,276,361	818,034	1,458,327	7.3	20.4
1998	674,678	11,857,170	11,598,117	87,072	13.0	76,349	11.4	2,267,354	834,317	1,433,037	7.2	19.5
1999	684,900	12,190,363	12,038,671	87,777	12.9	76,840	11.3	2,253,758	862,599	1,391,159	7.2	18.7
2000	694,852	12,681,691	12,419,312	87,616	12.7	78,017	11.3	2,449,428	899,496	1,549,932	7.2	19.7
2001	711,600	13,163,277	12,988,665	90,963	12.9	83,463	11.8	2,413,292	876,018	1,537,274	6.7	18.6
2002	720,667	12,827,287	12,975,159	101,767	14.2	91,310	12.8	2,405,148	1,027,855	1,377,293	7.9	18.5
2003	728,894	12,985,258	12,848,015	96,784	13.4	79,278	11.0	2,359,209	873,467	1,485,742	6.8	18.4
2004	733,626	13,136,581	13,005,479	92,259	12.6	85,904	11.8	2,272,473	835,144	1,437,329	6.4	17.5
2005	752,061	13,433,520	13,250,825	103,599	14.0	82,185	11.1	2,370,364	964,926	1,405,438	7.3	17.9

The BDS: Startups and Age

Microsoft Excel - tab_fage_release.xls

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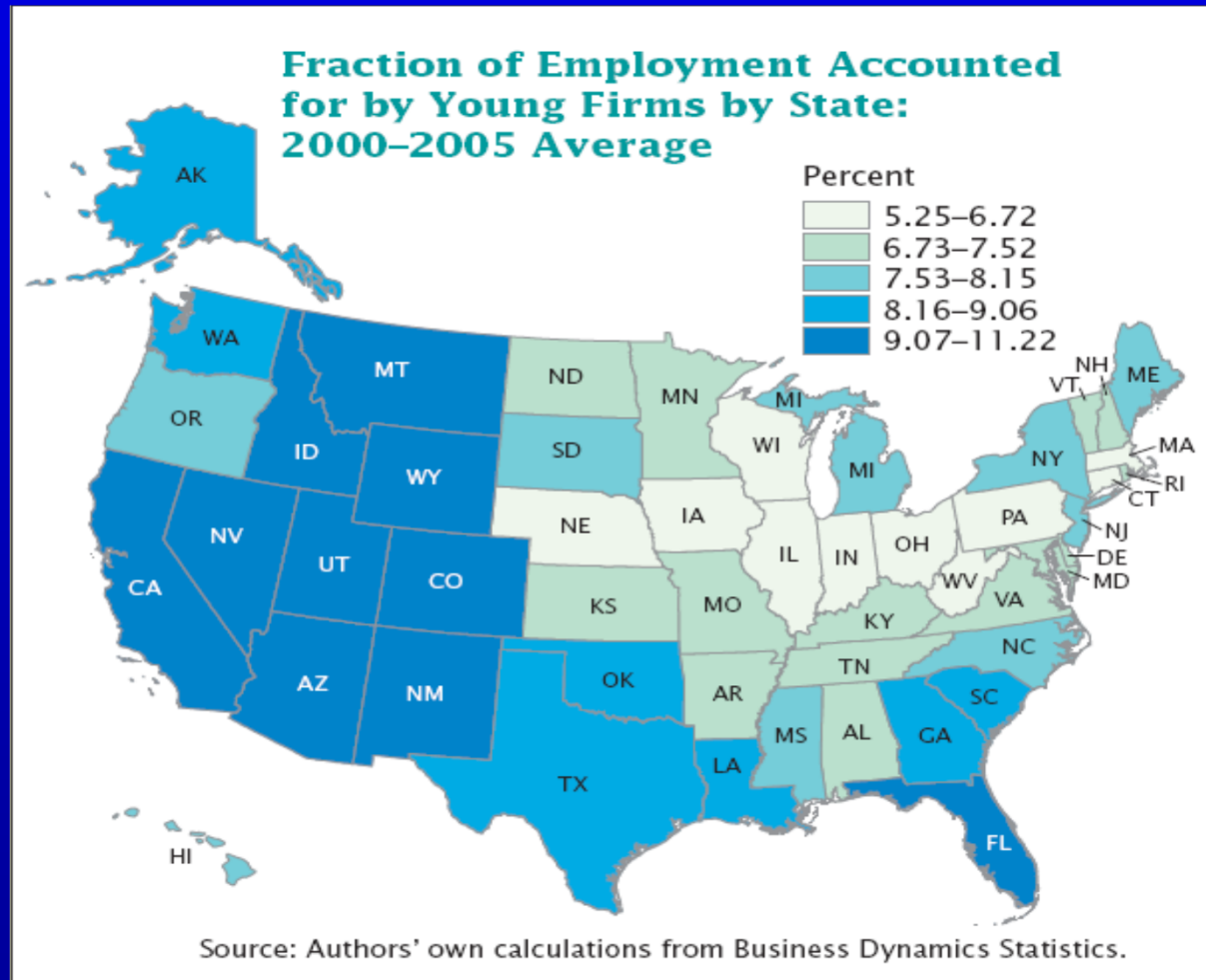
Active Data: Active Worksheet

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A1 = 'Country: USA

	A	B	C	D	E	F	G	H	I	J	K	L	M
398		2003											
399	Firm Age	Estabs	Emp	Denom	Estabs_	Estabs_Entry	Estabs_Exit	Estabs_Exit	Job_Creation	Job_Creation	Job_Creation	Job_Cre	
400	a) 0	503,058	3,125,422	1,562,711	503,058	200.0	0	0.0	3,125,422	3,125,422	0	200.0	200.0
401	b) 1	382,026	2,949,635	3,077,114	808	0.2	115,548	26.1	736,322	16,907	719,415	0.5	23.9
402	c) 2	327,917	2,637,265	2,681,665	17,537	5.0	62,890	17.9	585,019	82,117	502,902	3.1	21.8
403	d) 3	297,426	2,612,074	2,659,372	15,669	5.0	49,534	15.7	537,333	80,927	456,406	3.0	20.2
404	e) 4	275,778	2,673,508	2,721,862	13,935	4.8	39,766	13.7	508,980	77,580	431,400	2.9	18.7
405	f) 5	271,566	2,859,165	2,891,262	13,267	4.7	33,890	12.0	522,403	107,008	415,395	3.7	18.1
406	g) 6 to 10	949,763	10,087,778	10,212,113	41,851	4.3	107,030	10.9	1,715,021	326,616	1,388,405	3.2	16.6
407	h) 11 to 15	703,963	9,117,478	9,166,245	28,589	4.0	62,758	8.7	1,387,942	258,523	1,129,419	2.8	15.1
408	i) 16 to 20	607,603	9,873,911	9,887,759	21,959	3.6	41,267	6.7	1,265,112	281,197	983,915	2.8	12.8
409	j) 21 to 25	453,918	8,358,193	8,344,960	15,722	3.4	27,880	6.1	1,032,774	259,192	773,582	3.1	12.4
410	k) 26+	144,461	3,416,141	3,420,248	7,437	5.1	7,705	5.3	464,421	109,433	354,988	3.2	13.6
411	l) Left Censored	1,539,187	55,131,698	55,346,775	92,842	6.0	86,172	5.6	6,376,567	1,944,614	4,431,953	3.5	11.5
412	m) ALL	6,456,672	112,842,268	111,972,086	772,674	12.1	634,440	9.9	18,257,316	6,669,536	11,587,780	6.0	16.3
413		2004											
414	Firm Age	Estabs	Emp	Denom	Estabs_	Estabs_Entry	Estabs_Exit	Estabs_Exit	Job_Creation	Job_Creation	Job_Creation	Job_Cre	
415	a) 0	523,051	3,126,213	1,563,107	520,676	199.1	0	0.0	3,116,725	3,116,725	0	199.4	199.4
416	b) 1	382,763	2,915,049	3,015,491	351	0.1	120,651	27.2	772,912	13,174	759,738	0.4	25.6
417	c) 2	329,121	2,810,711	2,875,162	12,414	3.5	67,358	19.0	579,268	66,183	513,085	2.3	20.1
418	d) 3	292,757	2,525,182	2,569,427	13,152	4.2	49,447	15.9	487,201	62,852	424,349	2.4	19.0
419	e) 4	268,819	2,531,190	2,558,637	11,815	4.2	41,029	14.5	456,613	66,172	390,441	2.6	17.8
420	f) 5	251,508	2,582,334	2,615,068	10,186	3.9	35,018	13.3	429,219	58,527	370,692	2.2	16.4
421	g) 6 to 10	992,876	10,867,297	10,996,424	39,336	3.8	113,232	11.0	1,647,236	268,023	1,379,213	2.4	15.0
422	h) 11 to 15	691,370	8,700,135	8,757,295	24,489	3.4	64,302	9.1	1,236,806	227,556	1,009,250	2.6	14.1
423	i) 16 to 20	618,881	10,183,610	10,289,418	20,258	3.2	44,648	7.1	1,194,374	244,359	950,015	2.4	11.6
424	j) 21 to 25	447,597	8,254,765	8,272,270	16,902	3.7	29,354	6.5	966,824	222,542	744,282	2.7	11.7
425	k) 26+	223,199	4,936,417	4,921,401	8,778	3.9	12,001	5.3	607,839	178,151	429,688	3.6	12.4
426	l) Left Censored	1,506,546	54,536,349	54,544,623	82,891	5.5	97,680	6.5	6,206,427	1,718,699	4,487,728	3.2	11.4
427	m) ALL	6,528,488	113,969,252	112,978,323	761,248	11.8	674,720	10.4	17,701,444	6,242,963	11,458,481	5.5	15.7
428		2005											
429	Firm Age	Estabs	Emp	Denom	Estabs_	Estabs_Entry	Estabs_Exit	Estabs_Exit	Job_Creation	Job_Creation	Job_Creation	Job_Cre	
430	a) 0	547,746	3,569,440	1,784,720	547,746	200.0	0	0.0	3,569,440	3,569,440	0	200.0	200.0
431	b) 1	399,860	2,900,982	2,995,393	314	0.1	123,245	26.7	773,088	9,525	763,563	0.3	25.8
432	c) 2	332,331	2,673,549	2,765,074	17,487	4.9	67,585	18.9	573,427	83,713	489,714	3.0	20.7
433	d) 3	294,411	2,642,536	2,712,760	14,898	4.8	49,429	15.9	488,994	85,425	403,569	3.1	18.0
434	e) 4	266,712	2,413,287	2,458,658	13,677	4.9	39,419	14.1	441,624	71,807	369,817	2.9	18.0
435	f) 5	246,632	2,412,410	2,465,854	11,774	4.6	33,630	13.1	398,119	66,850	331,269	2.7	16.1

The BDS: Entrepreneurial Activity Across States

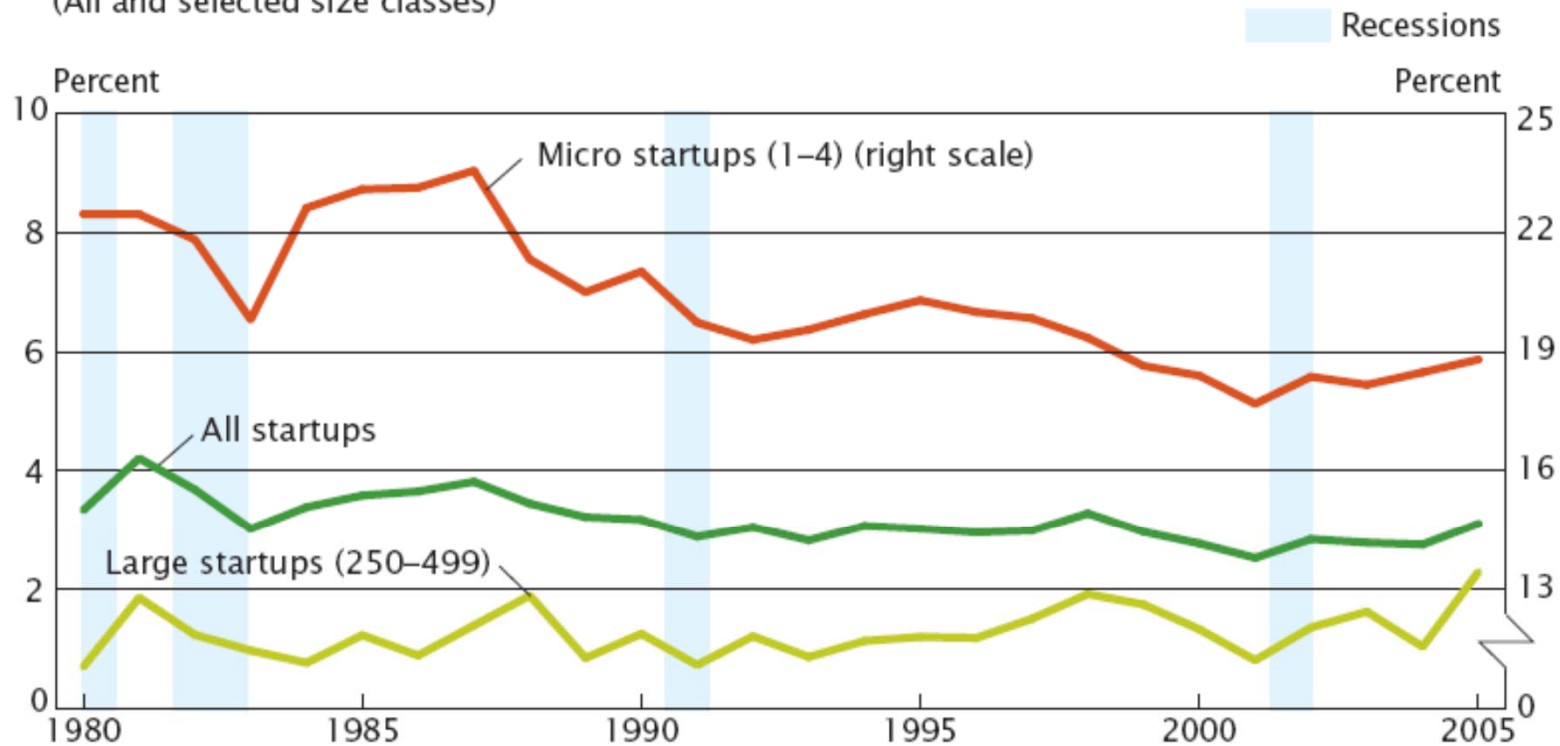


The BDS: Jobs Created from Business Startups in the U.S.

Figure 3-2.

Percent of Jobs Accounted for by New Firms

(All and selected size classes)



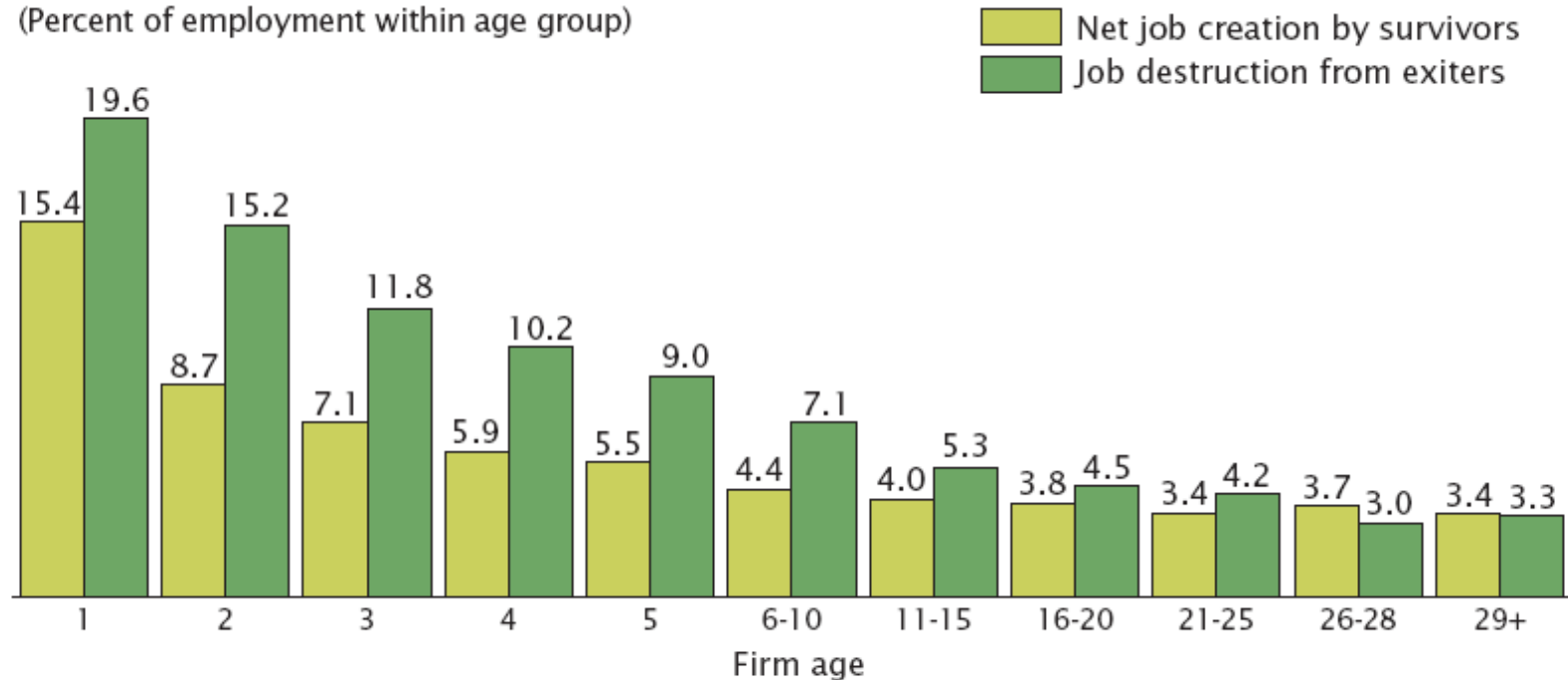
Source: Authors' own calculations from Business Dynamics Statistics.

The BDS: High Growth and Failure of Young Firms

Figure 3-3.

Employment Dynamics for Survivors and Exitters by Firm Age: 1987-2005

(Percent of employment within age group)



Source: Authors' own calculations from Business Dynamics Statistics.

Summary

- New research data set
- Easily accessible
- Rich source of information to examine
 - Business demography
 - Creative destruction/innovation
 - Business cycle dynamics
 - Role of cohorts, young/small vs large/old
 - Labor market dynamics
 - Geographic variation

Future Directions

- Extensions
 - County and NAICS
- Synthetic products
 - avoid disclosure problems
- Early indicators of activity and preliminary releases

Future Directions

- Enterprise Dynamics Statistics
 - Captures rich life dynamics of firms
 - M&A activity including acquisitions, divestitures,
 - Organic growth including greenfield entry, exit
 - Additional information including
 - Trade status
 - Importer, Export...
 - Patent holder..
 - Owner characteristics