

MAINE BUSINESS INSIDE OUT

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Maine Job Creation from the Expansion or Contraction of Establishments

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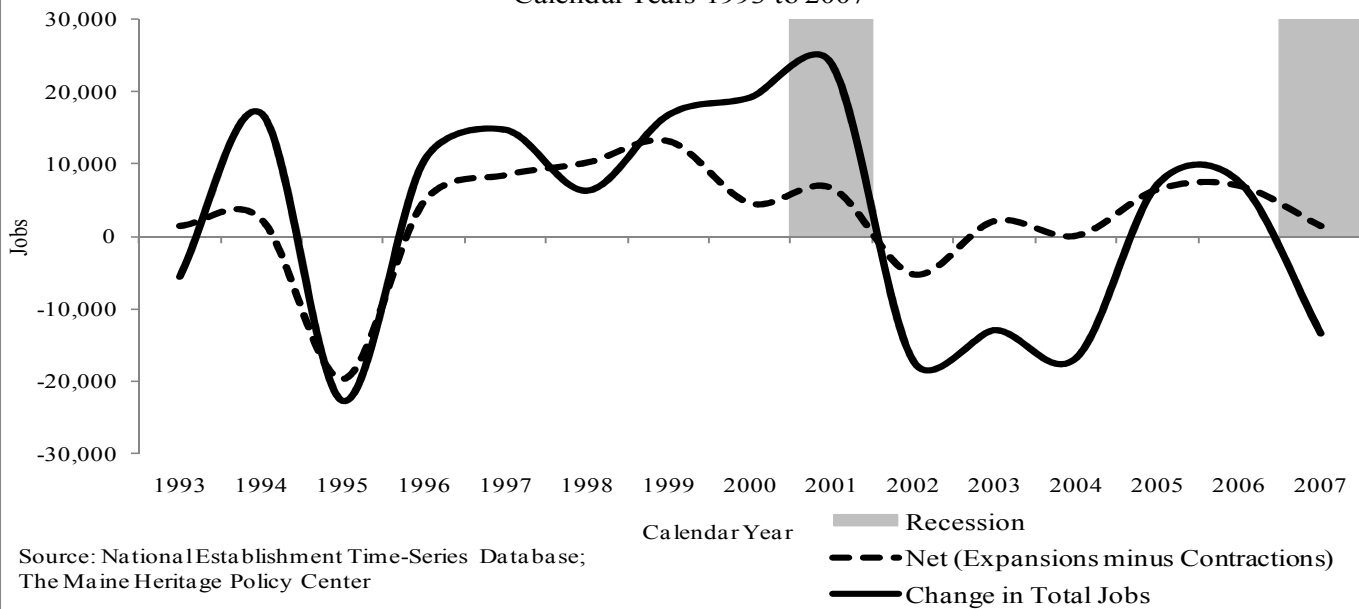
What is Maine’s business climate? That is an age-old question usually answered with one anecdote or another. Depending on one’s vantage point, Maine’s business climate could be too hot, too cold or just about right. Unfortunately, creating public policy using anecdotes often leads to a “shotgun” approach to legislation where a lot of tiny problems gets addressed but no one is able to put together a view of the bigger picture. A large part of the problem has been a lack of detailed empirical data on Maine’s businesses—until now.

This study is the third of many studies that will use a powerful new database of Maine’s businesses called the National Establishment Time-Series (NETS) Database.[1] NETS is based on the far-reaching Duns & Bradstreet Marketing Information file that has nationally tracked more than 36.5 million establishments between 1989 and 2007. The file tracks businesses via an assigned “DUNS number,” the business equivalent of a personal Social Security number. As such, the NETS database is the most comprehensive establishment-level census available.

Maine’s state level file contains data for 161,351 commercial, not-for-profit and government establishments between 1989 and 2007.[2] As of 2007, approximately half of those establishments (84,326) still exist with the remainder having either closed, moved out-of-state, or consolidated. These Maine establishments, in 2007, employed 702,028 people.[3]

Every year in Maine, existing establishments expand their operations while others contract their operations. In the process, the employees of these establishments must make the transition from their old employer to a new employer. Some may end up working within the same industry or region, others will have to retrain and/or relocate. Understanding this dynamic process relating to the expansion and contraction of establishments and their associated jobs is vital to ensuring public policy aids rather than hinders job creation.

Chart 1
Annual Change in Maine Jobs
Calendar Years 1993 to 2007



Maine Jobs

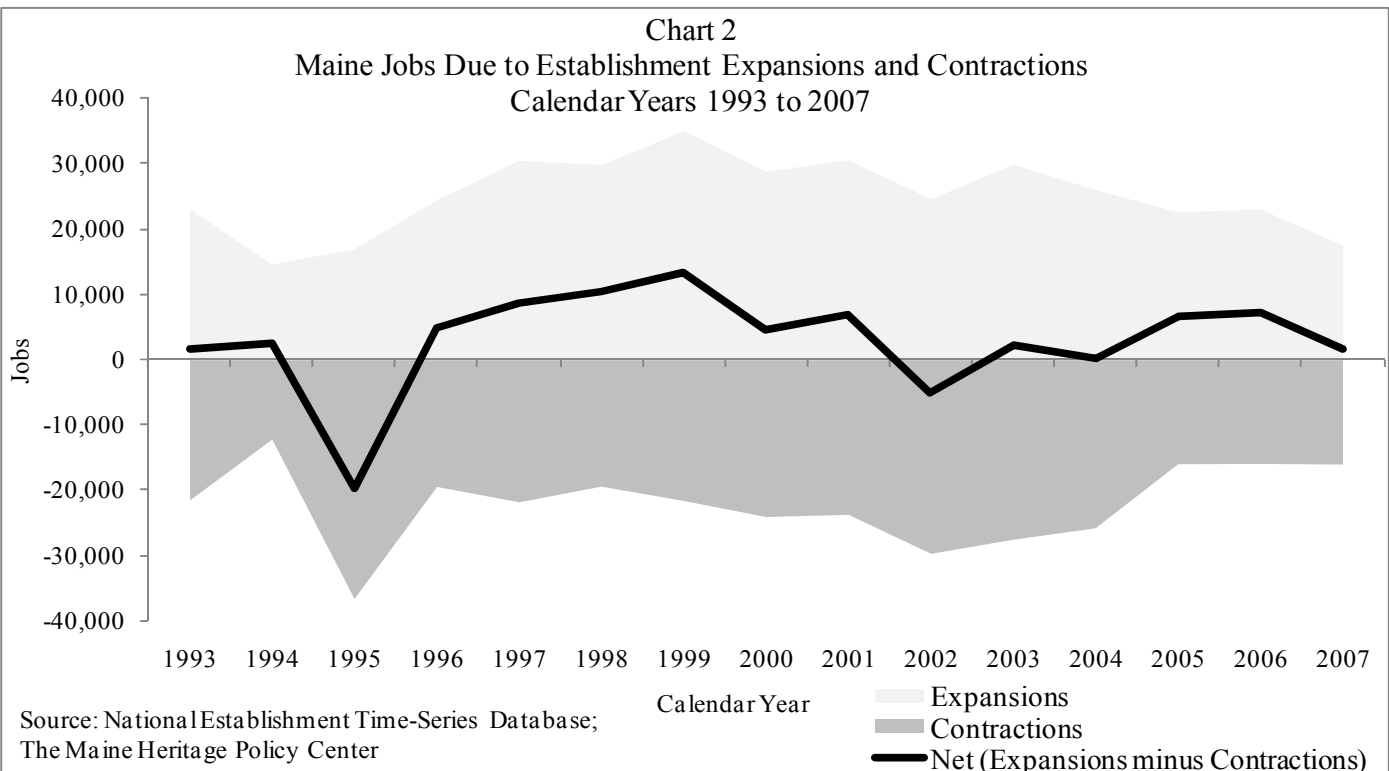
Between 1993 and 2007, Maine establishments, on average, created 25,052 jobs from expansions while destroying 22,061 jobs from contractions—leaving a job gain of 2,991.[4] Over the entire 15-year time-period examined in this study, net expansion has created 44,864 jobs. [5]

Additionally, Chart 1 and Table 1 show that the year-to-year fluctuations in employment are only somewhat influenced by the net job creation from expansions and contractions. The two are 73 percent positively correlated which means that while they generally move together in the same direction, expansions and contractions often reinforce the trend rather than define it. For instance, net job creation from expansions and contractions only drops into negative territory on two occasions (1995 and 2002) while total employment is negative three times as often.

More specifically, Chart 2 and Table 1 shed light on whether expansions or contractions are driving the overall trend. In this case, there is not much difference in volatility between expansions and contractions. The average fluctuation for expansions is 10,129 jobs (plus or

Calendar Year	Change in Total Jobs	Jobs Created by Establishment Expansions	Jobs Lost Due to Establishment Contractions	Net Jobs Created (Expansions minus Contractions)
1993	(5,557)	22,975	21,472	1,503
1994	17,038	14,572	12,135	2,437
1995	(22,767)	16,923	36,624	(19,701)
1996	10,530	24,333	19,421	4,912
1997	14,760	30,342	21,784	8,558
1998	6,343	29,668	19,390	10,278
1999	16,874	34,829	21,598	13,231
2000	19,248	28,683	24,045	4,638
2001	23,869	30,400	23,666	6,734
2002	(17,246)	24,495	29,691	(5,196)
2003	(12,960)	29,738	27,542	2,196
2004	(16,791)	25,909	25,762	147
2005	7,275	22,495	15,926	6,569
2006	7,570	22,953	15,887	7,066
2007	(13,409)	17,462	15,970	1,492
Total	34,777	375,777	330,913	44,864

Source: National Establishment Time-Series Database; The Maine Heritage Policy Center



minus) which is around the average of 25,052 jobs created. The average fluctuation for contractions is 12,245 jobs (plus or minus) around the average of 22,061 jobs destroyed.

This analysis shows that expansions of existing establishments have yielded reliable job growth but offers less in the way of explaining the year-to-year job fluctuations.

Maine Ranking

Table 2 shows the net change of jobs created by expansions and contractions between 1993 and 2007 as a percent of employment in 1993. Maine’s 44,864 jobs created due to establishment expansion equates to a gain of 6.5 percent of Maine’s 1993 workforce. While a sizable employment gain, in relation to the other U.S. states, Maine’s performance ranks a dismal 49th in the country. In stark contrast, the state with the largest job growth due to expansions was Arizona (26.3 percent)—more than four times Maine’s gain.

Additionally, Maine’s largest New England neighbors have had trouble breaking into the top tier job growth due to establishment expansion. In particular three states rank poorly: Massachusetts (11.9 percent, rank 31st), Connecticut (8.7 percent, rank 44th) and Rhode Island (7.3 percent, rank 48th). Only New Hampshire (17.7 percent, rank 15th) and Vermont (18.4 percent, rank 12th) had a relatively strong showing.

Jobs by Industry

A state-wide average can hide vast disparities in job creation among the different industries operating in Maine. Table 4 shows the top 30 job creators due to expansions exceeding contractions between 1993 and 2007 while Table 5 shows the top 30 job losers due to contractions exceeding expansions between 1993 and 2007.[6]

The top 5 job creating industries are Elementary and Secondary Schools (7,637 jobs), Men’s & Boys’ Clothing Stores (7,172 jobs), Offices & Clinics of Medical Doctors (5,089 jobs), Hospitals (4,471 jobs) and Individual and Family Services (3,438 jobs).

The top 5 job losing industries are Ship and Boat Building and Repairing (-7,368 jobs), Life Insurance (-6,781 jobs), Executive Offices (-4,823 jobs), National Security (-4,648 jobs) and Paper Mills

Region	Percent Change in Jobs	Rank
Maine	6.5%	--
Core	5.4%	2
Rim	9.4%	1

Source: National Establishment Time-Series Database; The Maine Heritage Policy Center

State	Percent Change in Jobs	Rank
United States	14.5%	--
Alabama	11.0%	34
Alaska	20.3%	7
Arizona	26.3%	1
Arkansas	13.5%	25
California	17.1%	16
Colorado	22.0%	5
Connecticut	8.7%	44
Delaware	5.5%	50
Florida	24.3%	2
Georgia	19.1%	9
Hawaii	7.4%	47
Idaho	22.9%	3
Illinois	12.9%	28
Indiana	13.0%	27
Iowa	12.2%	30
Kansas	10.2%	40
Kentucky	8.1%	46
Louisiana	14.9%	22
Maine	6.5%	49
Maryland	10.8%	36
Massachusetts	11.9%	31
Michigan	10.6%	37
Minnesota	18.6%	11
Mississippi	9.5%	42
Missouri	13.9%	23
Montana	16.8%	17
Nebraska	11.3%	32
Nevada	22.7%	4
New Hampshire	17.7%	15
New Jersey	10.8%	35
New Mexico	12.8%	29
New York	9.2%	43
North Carolina	16.6%	18
North Dakota	19.1%	8
Ohio	10.2%	41
Oklahoma	18.0%	13
Oregon	21.6%	6
Pennsylvania	10.6%	38
Rhode Island	7.3%	48
South Carolina	10.3%	39
South Dakota	11.1%	33
Tennessee	13.3%	26
Texas	18.7%	10
Utah	15.2%	20
Vermont	18.4%	12
Virginia	13.6%	24
Washington	16.1%	19
West Virginia	8.6%	45
Wisconsin	15.1%	21
Wyoming	18.0%	14

Source: National Establishment Time-Series Database; YourEconomy.org; The Maine Heritage Policy Center

Table 4 Maine Jobs Due to Establishment Expansions and Contractions by Industry Top 30 Job <i>Creators</i> Calendar Years 1993 to 2007			Table 5 Maine Jobs Due to Establishment Expansions and Contractions by Industry Top 30 Job <i>Losers</i> Calendar Years 1993 to 2007		
Industry	Net Jobs Created (Expansions minus Contractions)	Rank	Industry	Net Jobs Lost (Expansions minus Contractions)	Rank
Elementary and Secondary Schools	7,637	1	Ship and Boat Building and Repairing	7,368	1
Men's & Boy's Clothing Stores	7,172	2	Life Insurance	6,781	2
Offices & Clinics of Medical Doctors	5,089	3	Executive Offices	4,823	3
Hospitals	4,471	4	National Security	4,648	4
Individual and Family Services	3,438	5	Paper Mills	3,478	5
Eating and Drinking Places	3,091	6	Civic and Social Associations	3,045	6
Hotels and Motels	2,434	7	Electronic Components and Accessories	2,734	7
Residential Care	2,385	8	Electrical Industrial Apparatus	2,519	8
Admin. of Public Health Programs	2,207	9	U.S. Postal Service	2,135	9
Health and Allied Services, NEC	2,180	10	Admin. of Social & Manpower Programs	2,094	10
Legal Services	2,165	11	Colleges and Universities	1,951	11
Public Order and Safety	2,066	12	Libraries	1,856	12
Computer and Data Processing Services	2,011	13	Footwear, Except Rubber	1,779	13
Misc. Amusement, Recreation Services	1,945	14	Professional & Commercial Equipment	1,588	14
Misc. Business Services	1,941	15	Membership Organizations, NEC	1,330	15
Trucking & Courier Services, Ex. Air	1,579	16	Electrical Goods	1,193	16
Child Day Care Services	1,430	17	Electric Services	1,152	17
Groceries and Related Products	1,424	18	Aircraft and Parts	1,121	18
New and Used Car Dealers	1,348	19	Passenger Transportation Arrangement	1,077	19
Misc. Special Trade Contractors	1,327	20	Misc. Electrical Equipment & Supplies	1,043	20
Lumber and Other Building Materials	1,248	21	Men's and Boy's Furnishings	1,039	21
Real Estate Agents and Managers	1,233	22	Apparel, Piece Goods, and Notions	866	22
Nonresidential Building Construction	1,229	23	Airports, Flying Fields, & Services	807	23
Offices of Other Health Practitioners	1,222	24	Nonstore Retailers	652	24
Holding Offices	1,147	25	Misc. Wood Products	624	25
Personnel Supply Services	1,143	26	Paper and Paper Products	609	26
Plumbing, Heating, Air-Conditioning	1,097	27	Costume Jewelry and Notions	469	27
Admin. of Educational Programs	1,061	28	Broadwoven Fabric Mills, Manmade	422	28
Telephone Communication	1,056	29	Finance, Taxation, & Monetary Policy	415	29
Local and Suburban Transportation	1,030	30	Preserved Fruits and Vegetables	410	30
Total	68,806	--	Total	60,028	--
Source: National Establishment Time-Series Database; The Maine Heritage Policy Center			Source: National Establishment Time-Series Database; The Maine Heritage Policy Center		

(-3,478 jobs).

Overall, the top 30 job creators gained 68,806 jobs while the top 30 job losers lost 60,028 for a net job gain of 8,778 jobs.

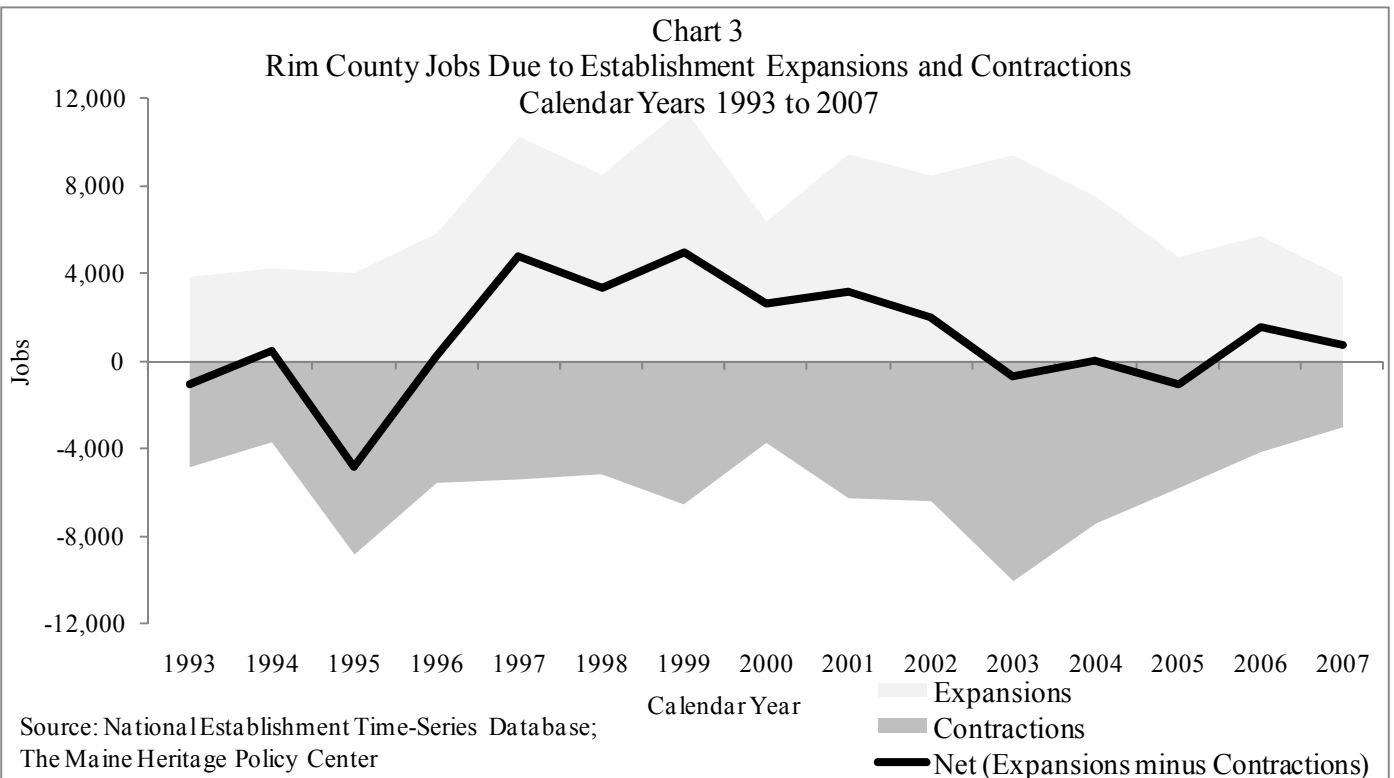
Jobs by Region

A state-wide average can also hide vast disparities in job creation among the different regions of the state.[7] Table 3 shows the percent change in jobs due to establishment expansions and contractions in Maine’s two major regions between 1993 and 2007. The most important fact to note is that both regions show net job creation due to establishment expansions.

The Core counties created 28,606 new jobs while the Rim counties created 16,258 new jobs. While the Core counties created a greater number of jobs, the relative increase in jobs (to 1993 employment) was greater for the Rim counties. As shown in Table 3, the Rim counties increased employment by 9.4 percent while the Core counties increase employment by 5.4 percent.

Calendar Year	Change in Total Jobs	Jobs Created by Establishment Expansions	Jobs Lost Due to Establishment Contractions	Net Jobs Created (Expansions minus Contractions)
1993	(5,753)	3,846	4,886	(1,040)
1994	5,354	4,220	3,739	481
1995	(6,526)	4,011	8,881	(4,870)
1996	3,508	5,824	5,604	220
1997	6,062	10,251	5,439	4,812
1998	2,418	8,525	5,204	3,321
1999	5,775	11,551	6,576	4,975
2000	5,770	6,366	3,762	2,604
2001	7,141	9,455	6,302	3,153
2002	(154)	8,473	6,438	2,035
2003	(5,952)	9,417	10,092	(675)
2004	(3,706)	7,514	7,455	59
2005	(2,161)	4,744	5,852	(1,108)
2006	1,072	5,706	4,190	1,516
2007	(4,732)	3,820	3,045	775
Total	8,116	103,723	87,465	16,258

Source: National Establishment Time-Series Database; The Maine Heritage Policy Center



Conclusion

While establishment expansions have been a reliable and substantial source of new jobs for Mainers, there is still much room for improvement. For instance, Maine ranks a dismal 49th of the 50 states when it comes to creating new jobs from expansions over contractions. That ranking would be worse if not for the job creation in “Elementary and Secondary Schools” which, at 7,637, was nearly twice as much as Maine’s major tourist industries such as Eating and Drinking Places (3,091 new jobs) and Hotels and Motels (2,434 new jobs). This dependency on employment growth generated by the public sector is concerning, especially in light of the current budget crisis, and will be explored more thoroughly in later studies.

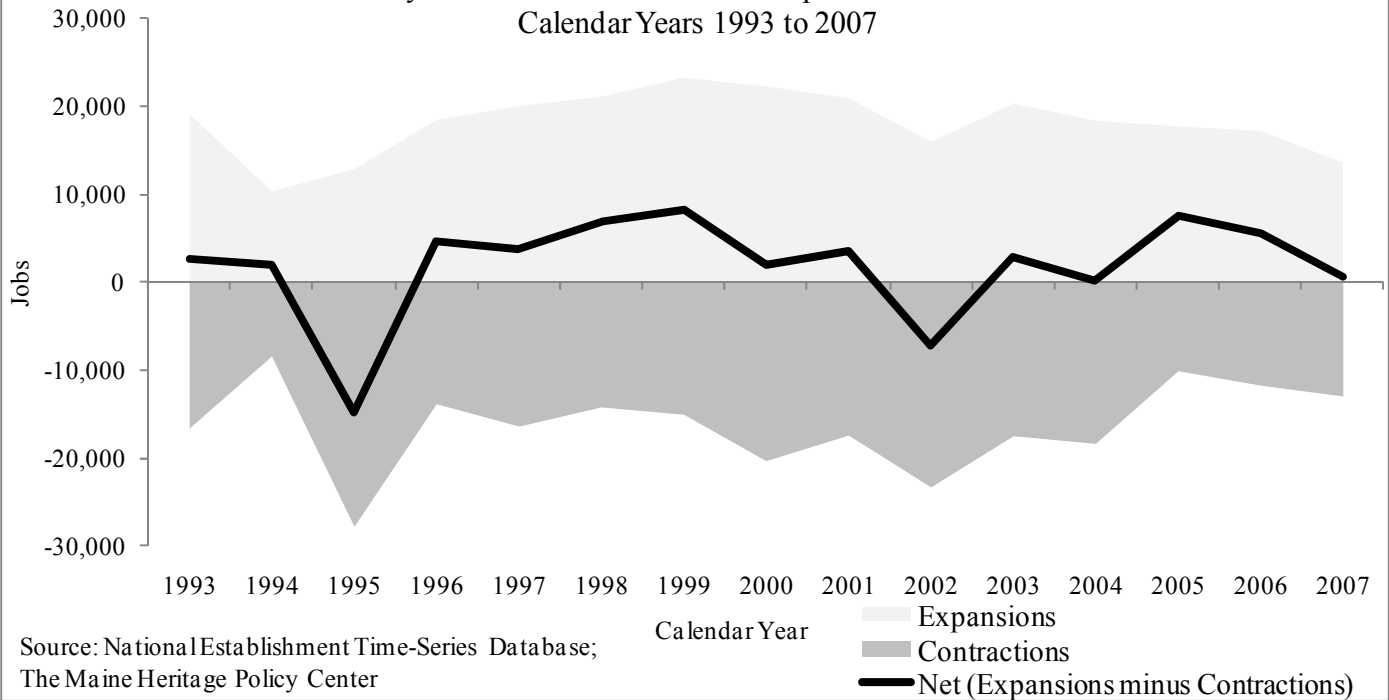
Finally, keep in mind, there are other avenues of job creation, such as the births and deaths of establishments and the in and out migration of establishments, which are explored in more detail in companion studies of the “Maine Business InsideOut” series.

Table 7
Core County Jobs Due to Establishment Expansions and Contractions
Calendar Years 1993 to 2007

Calendar Year	Change in Total Jobs	Jobs Created by Establishment Expansions	Jobs Lost Due to Establishment Contractions	Net Jobs Created (Expansions minus Contractions)
1993	196	19,129	16,586	2,543
1994	11,684	10,352	8,396	1,956
1995	(16,241)	12,912	27,743	(14,831)
1996	7,022	18,509	13,817	4,692
1997	8,698	20,091	16,345	3,746
1998	3,925	21,143	14,186	6,957
1999	11,099	23,278	15,022	8,256
2000	13,478	22,317	20,283	2,034
2001	16,728	20,945	17,364	3,581
2002	(17,092)	16,022	23,253	(7,231)
2003	(7,008)	20,321	17,450	2,871
2004	(13,085)	18,395	18,307	88
2005	9,436	17,751	10,074	7,677
2006	6,498	17,247	11,697	5,550
2007	(8,677)	13,642	12,925	717
Total	26,661	272,054	243,448	28,606

Source: National Establishment Time-Series Database; The Maine Heritage Policy Center

Chart 4
Core County Jobs Due to Establishment Expansions and Contractions
Calendar Years 1993 to 2007



Notes and Sources

- [1] The firm Walls & Associates performs the conversion of the Duns & Bradstreet Marketing Information file into a time-series database that is useful for economic research purposes. The file is proprietary to Walls & Associates which licenses the database to researchers across the country—including the U.S. Department of Commerce’s Census Bureau and the Bureau of Economic Analysis.
- [2] The NETS database is based on establishments, which means that one organization can have numerous establishments in various locations, i.e., Starbucks. Additionally, different establishments can occupy the same location. For example, a organization at a single location could represent two different activities — such as a single organization with both a distribution and retail establishment under the same roof. This structure provides an unprecedented level of geographic and industry classification.
- [3] Though this study will use the term “Maine employment,” it does not mean that those employed are all Maine residents. Since employment is reported on a per establishment basis, there is no information on the residency of the workforce. Therefore, someone living in New Hampshire but working for a Maine establishment would be included in the “Maine employment” number.
- [4] This study draws on data for national comparisons from www.YourEconomy.org (YE) which is based on the national NETS database. YE is a project of the Edward Lowe Foundation. For technical reasons, the YE Web site uses the NETS database for the years 1993 to 2007. For comparative purposes, this study also uses the years 1993 to 2007, though the full Maine NETS database contains data for the years 1989 to 2007.
- [5] Some establishment closures may, in fact, be a form of out-migration of jobs from one region or state to another. For example, a company may decide to consolidate several far-flung establishments under one roof. If the new consolidated establishment is not located in Maine, there is no way to determine that an establishment closure was really a form of out-migration.
- [6] Industry classification is based on the establishment’s 2007 reported industry. However, it is possible that the establishment reported a different industry classification in previous years. This analysis does not take that possibility into consideration which may cause some misreporting of industry classification over the 1993 to 2007 time-period.
- [7] Regions are based on counties as defined below: **Rim Region:** Aroostook, Franklin, Oxford, Penobscot, Piscataquis, Somerset and Washington counties. **Core Region:** Androscoggin, Cumberland, Hancock, Kennebec, Knox, Lincoln, Sagadahoc, Waldo and York counties.

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Maine Business InsideOut is a special series of publications by The Maine Heritage Policy Center which focus on better understanding Maine’s business climate through the use of the cutting-edge National Establishment Time-Series Database. All information is from sources considered reliable, but may be subject to inaccuracies, omissions, and modifications.

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