

The Maine View

Published by The Maine Heritage Policy Center

Vol. 5, Issue No. 12

Maine State Government Employment

November 13, 2007

by J. Scott Moody

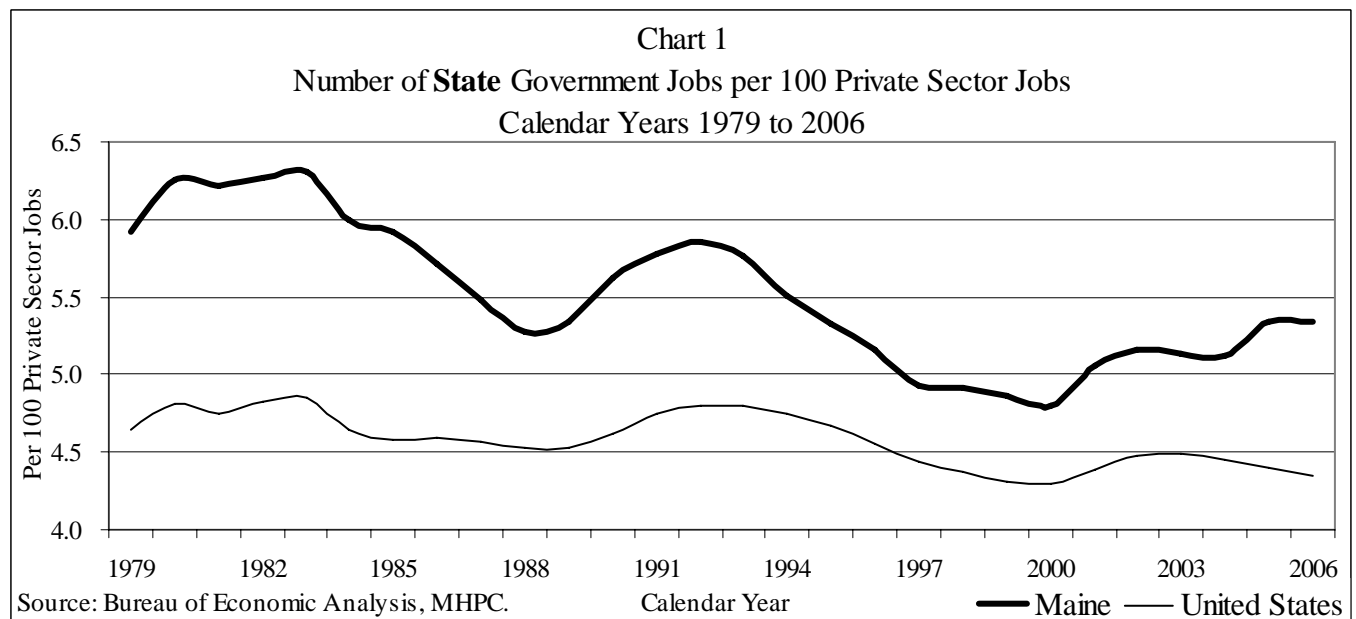
In the private sector, productivity is defined as the sum of all goods and services produced (as measured by Gross Domestic Product) divided by the number of workers. The estimation of private sector productivity is easier than the estimation of government productivity. In the public sector there is no reliable measure of the “goods and services” received because prices are not set on a voluntary basis. Rather, citizens pay taxes to fund a government that is deemed necessary by elected legislators.

Unfortunately, citizens have no direct way to judge whether or not they are getting the most “bang for their buck” for the goods and services provided by the public sector. This study provides an indirect way to better understand the productivity of the state bureaucracy by examining employment levels across the 50 states. The basis of comparison is to examine the number of government jobs for every 100 private sector jobs in Maine versus the national average. There is nothing magical about the national average; however, since it represents an amalgam of 50 states, it is reasonable to assume that being above the national average indicates “low productivity,” via excessive bureaucracy, and vice-versa.

More specifically, this study examines Maine’s state government employment levels. As shown in Chart 1, in 2006, the state government employed 5.35 people for every 100 the private sector employed—hereafter referred to as the “employment ratio.” Relative to the national average of 4.35, Maine’s state government employment ratio is 23 percent higher. Chart 1 also reveals that Maine’s employment ratio was falling steadily between 1979 and 2000; but since 2000 has been on the upswing.

If Maine’s state government employment level had been reduced to the national average in 2006, it could have saved taxpayers up to \$215,330,035. In addition, as previously reported by MHPC, adjusting the state government compensation ratio to the national average would have saved an additional \$200,366,421. As a result, Maine’s tax burden (as measured by tax collections as a percent of personal income), in FY 2006, could have fallen by up to 11.1 percent, to 7.71 percent from 8.67 percent. To put this reduction into perspective, the state individual income tax could have been cut by nearly one-third. One solution to these problems is to eliminate all state government jobs that are vacated due to retirement.

Finally, the study examines several different measures of state government employment provided by the Bureau of Economic Analysis, the Census Bureau and the Maine State Bureau of Budget. Generally speaking, all of the measures point to higher state employment since the late 1990’s.



Introduction

According to the Bureau of Economic Analysis, in 2006, Maine's state government employed 28,108 people (full and part time), or 3.9 percent of the state labor force.

However, aggregate statistics are not always useful when making informed public policy decisions. Rather, policymakers need relative metrics to judge whether or not Maine has too many state government employees, i.e., their level of productivity. As such, this study explores the private versus public sector employment ratio over time and across states.

Employment Ratios

The employment ratio is derived by dividing government employment by private employment. Chart 1 and Table 1 show, in 2006, Maine state government employed 5.35 people for every 100 people employed by the private sector. Relative to the na-

Calendar Year	State		
	National Average	Maine	Percent Difference
1979	4.64	5.92	27.7%
1980	4.81	6.26	30.0%
1981	4.75	6.21	30.8%
1982	4.82	6.26	29.9%
1983	4.85	6.30	29.9%
1984	4.64	6.00	29.3%
1985	4.59	5.92	29.1%
1986	4.60	5.72	24.3%
1987	4.57	5.48	20.0%
1988	4.53	5.27	16.3%
1989	4.53	5.34	18.0%
1990	4.61	5.63	22.0%
1991	4.75	5.78	21.6%
1992	4.80	5.86	22.1%
1993	4.80	5.77	20.2%
1994	4.75	5.50	16.0%
1995	4.68	5.33	14.0%
1996	4.56	5.16	13.1%
1997	4.44	4.92	10.8%
1998	4.37	4.92	12.6%
1999	4.32	4.86	12.6%
2000	4.30	4.80	11.8%
2001	4.38	5.06	15.5%
2002	4.47	5.16	15.4%
2003	4.49	5.13	14.3%
2004	4.46	5.12	14.9%
2005	4.40	5.35	21.4%
2006	4.35	5.35	23.0%

Source: Bureau of Economic Analysis, MHPC.

Table 2
Number of **State** Jobs per 100 Private Sector Jobs by
State and Rank
Selected Calendar Years

State	1980	Rank	1990	Rank	2000	Rank	2006	Rank
U.S. Average	4.81	--	4.61	--	4.30	--	4.35	--
Alabama	6.37	21	6.21	18	5.65	19	6.06	16
Alaska	12.41	2	12.33	2	10.45	3	9.87	2
Arizona	5.55	30	4.78	31	4.15	35	3.69	44
Arkansas	7.00	14	6.39	16	6.42	14	7.06	8
California	3.42	50	3.24	50	3.48	44	3.55	46
Colorado	5.21	34	5.12	29	4.28	33	4.44	33
Connecticut	4.10	41	4.64	33	4.70	28	5.21	22
Delaware	9.23	4	7.62	9	7.92	4	8.14	4
Florida	3.85	46	3.76	46	3.37	47	2.82	49
Georgia	5.09	35	4.64	34	4.30	31	4.67	28
Hawaii	13.03	1	12.27	3	14.42	1	13.78	1
Idaho	7.27	10	7.07	13	6.14	15	5.47	20
Illinois	3.59	49	3.44	48	3.05	49	2.97	48
Indiana	4.80	37	4.52	36	4.14	36	4.15	36
Iowa	5.68	28	5.63	23	4.95	24	5.07	24
Kansas	6.31	22	6.20	19	4.85	25	4.78	27
Kentucky	7.02	12	6.34	17	5.80	17	6.02	17
Louisiana	7.11	11	7.30	11	7.23	9	6.58	11
Maine	6.26	24	5.63	24	4.80	26	5.35	21
Maryland	6.25	25	5.38	27	4.68	29	4.48	32
Massachusetts	4.05	42	4.34	41	4.01	38	3.94	40
Michigan	5.28	33	4.77	32	4.23	34	4.39	35
Minnesota	4.45	38	4.53	35	3.68	43	3.62	45
Mississippi	6.94	17	6.78	15	6.85	10	6.84	9
Missouri	4.43	39	4.27	42	4.73	27	4.64	29
Montana	8.71	6	9.08	5	7.29	8	7.19	7
Nebraska	5.99	26	5.10	30	4.06	37	4.42	34
Nevada	4.14	40	3.45	47	2.75	50	2.76	50
New Hampshire	5.39	32	4.41	38	4.30	32	4.14	37
New Jersey	3.93	44	3.99	43	4.00	39	4.50	31
New Mexico	11.93	3	12.38	1	11.14	2	9.73	3
New York	3.76	47	3.91	44	3.37	46	3.32	47
North Carolina	5.75	27	5.20	28	5.12	21	5.63	19
North Dakota	8.93	5	9.51	4	7.64	6	7.98	5
Ohio	3.90	45	3.83	45	3.46	45	3.79	42
Oklahoma	7.00	13	7.73	8	6.46	12	6.62	10
Oregon	5.66	29	5.72	22	4.38	30	4.56	30
Pennsylvania	3.68	48	3.30	49	3.35	48	3.72	43
Rhode Island	6.96	16	5.58	26	5.22	20	5.02	25
South Carolina	6.94	18	7.09	12	6.43	13	6.09	15
South Dakota	8.64	7	6.91	14	5.11	22	4.98	26
Tennessee	5.08	36	4.46	37	3.85	41	4.07	38
Texas	3.98	43	4.39	40	3.91	40	3.94	41
Utah	7.78	9	7.31	10	6.66	11	6.23	13
Vermont	6.99	15	6.19	20	5.84	16	6.13	14
Virginia	6.78	19	5.61	25	5.10	23	5.14	23
Washington	6.67	20	5.93	21	5.70	18	5.85	18
West Virginia	8.64	8	7.93	7	7.89	5	7.61	6
Wisconsin	5.51	31	4.40	39	3.84	42	4.03	39
Wyoming	6.29	23	8.77	6	7.44	7	6.55	12

Source: Bureau of Economic Analysis, MHPC.

Chart 2
State Budget Savings if Private/Public Compensation Ratio Equalled the National Average
 Calendar Years 1979 to 2006

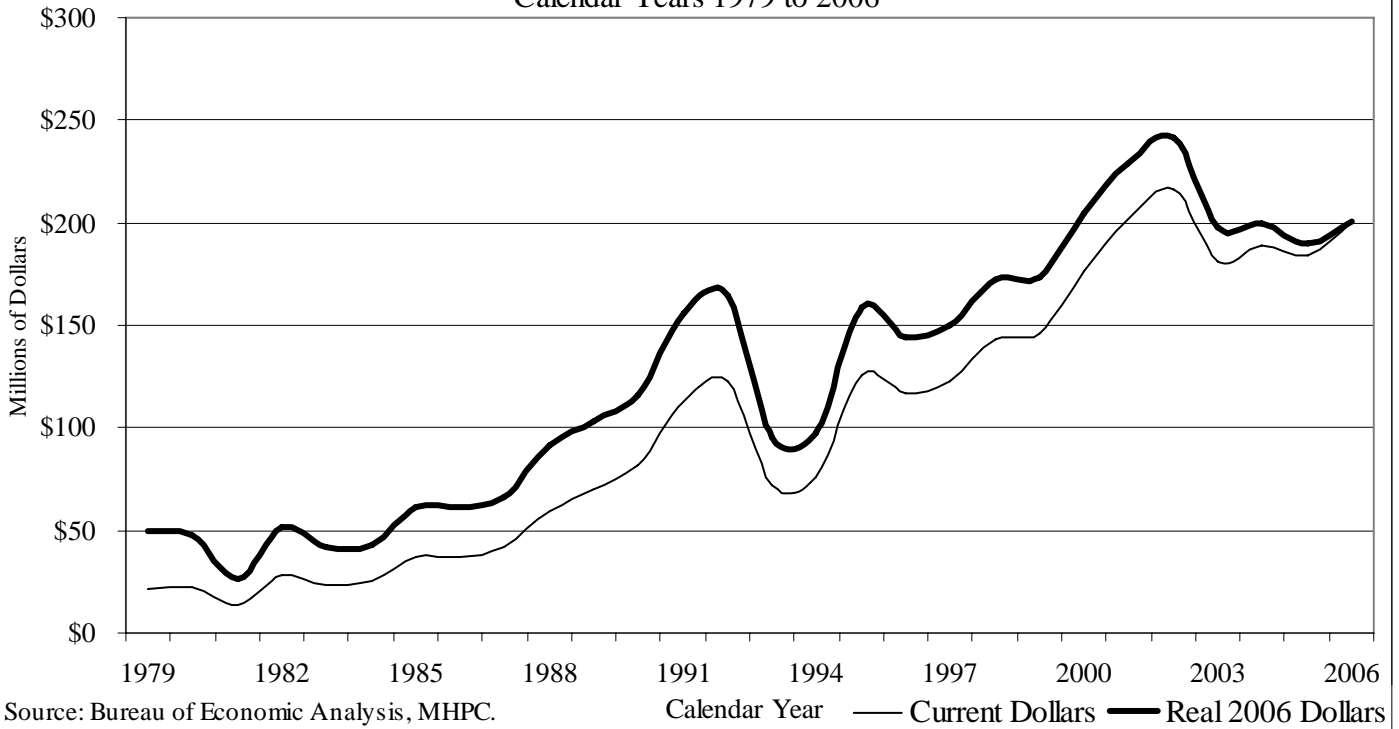
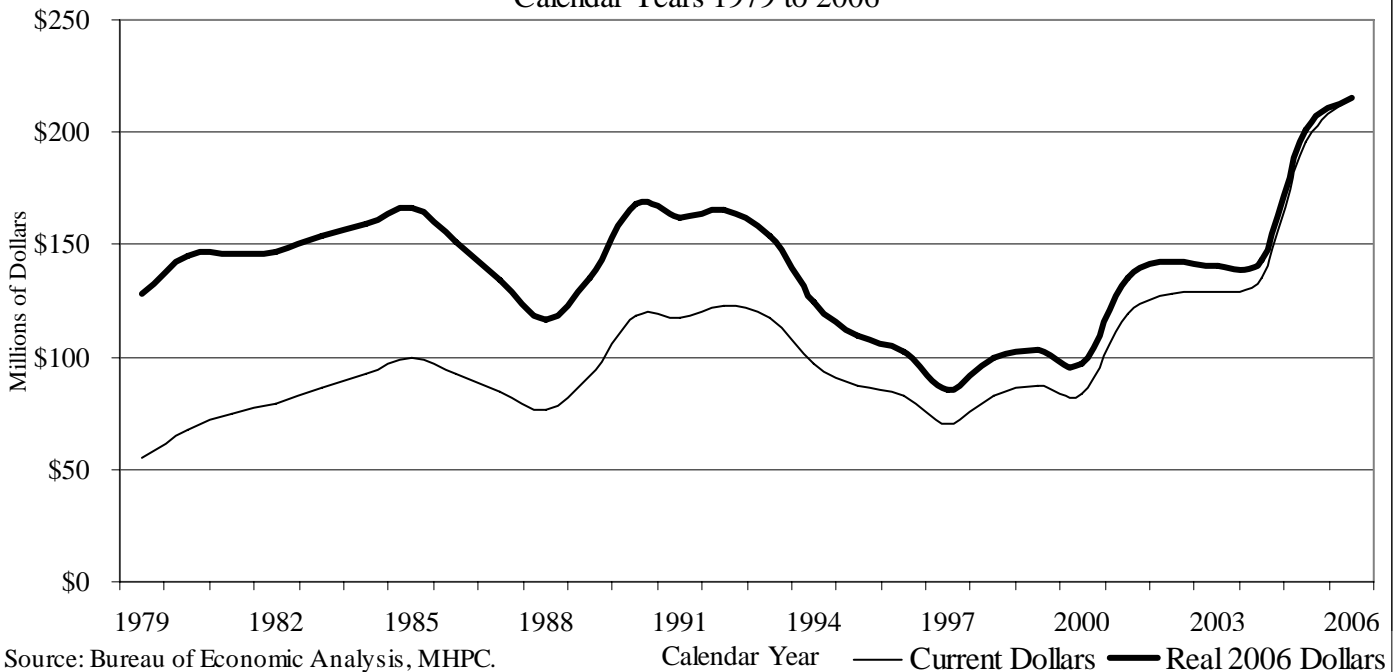


Chart 3
State Budget Savings if Private/Public Employment Ratio Equalled the National Average
 Calendar Years 1979 to 2006



tional average, Maine’s employment ratio has been higher in every year since 1979 and in 2006, stands 23 percent higher. Clearly, Maine’s high levels of state government employment has been a sustained problem.

Table 2 reveals that when compared with the other 49 states, Maine has the 21st highest employment ratio in the country. The trend over time is discouraging because Maine has been moving up from the 24th spot in 1980, the 24th spot in 1990 and the 26th spot in 2000.

Regionally, Maine’s rank is only exceeded by one neighboring state—Vermont which has the 14th highest employment ratio at 6.13. The remaining four New England states all have lower ranks: Connecticut (22nd), Massachusetts (40th), New Hampshire (37th) and Rhode Island (25th).

Lower Private to Public Sector Employment and Compensation Ratios Equals a Lower Level of Taxation

Chart 2, Chart 3 and Table 3 show how much state government spending could have been reduced if either the compensation ratio (Chart 2) or the employment ratio (Chart 3) was lowered to the national average.[1]

In 2006, adjusting the employment ratio to the national average could have saved taxpayers up to \$215,330,035 whereas adjusting the compensation ratio to the national average could

have saved taxpayers up to an additional \$200,366,421. The same pattern holds true over the entire 1969 to 2006 time-period where adjusting the employment ratio could have amounted up to a staggering \$3,933,756,051 (in real 2006 dollars) whereas adjusting the compensation ratio could have saved taxpayers up to \$3,532,793,401 (in real 2006 dollars).

Chart 4 and Table 1 illustrate how the tax savings would have impacted Maine’s level of taxation as a percent of personal income, i.e., tax burden. In other words, the money saved due to the lower employment and compensation ratios could have been used to significantly reduce taxes. For example, in 2006 (the latest year of available tax data), Maine’s tax burden could have been reduced by up to 11.1 percent, to 7.71 percent from 8.67 percent. To put this reduction into perspective, the state individual income tax could have been cut by nearly one-third.

Different Measures of Employment

Chart 5 and Table 4 show various measures of state government employment. Chart 5 illustrates the employment measure used by the Bureau of Economic Analysis (BEA) and this study. BEA measures total employment which is the sum of all full-time and part-time jobs.

According to BEA, Maine state government employment has been steadily rising since 1979 with the exception of the brief

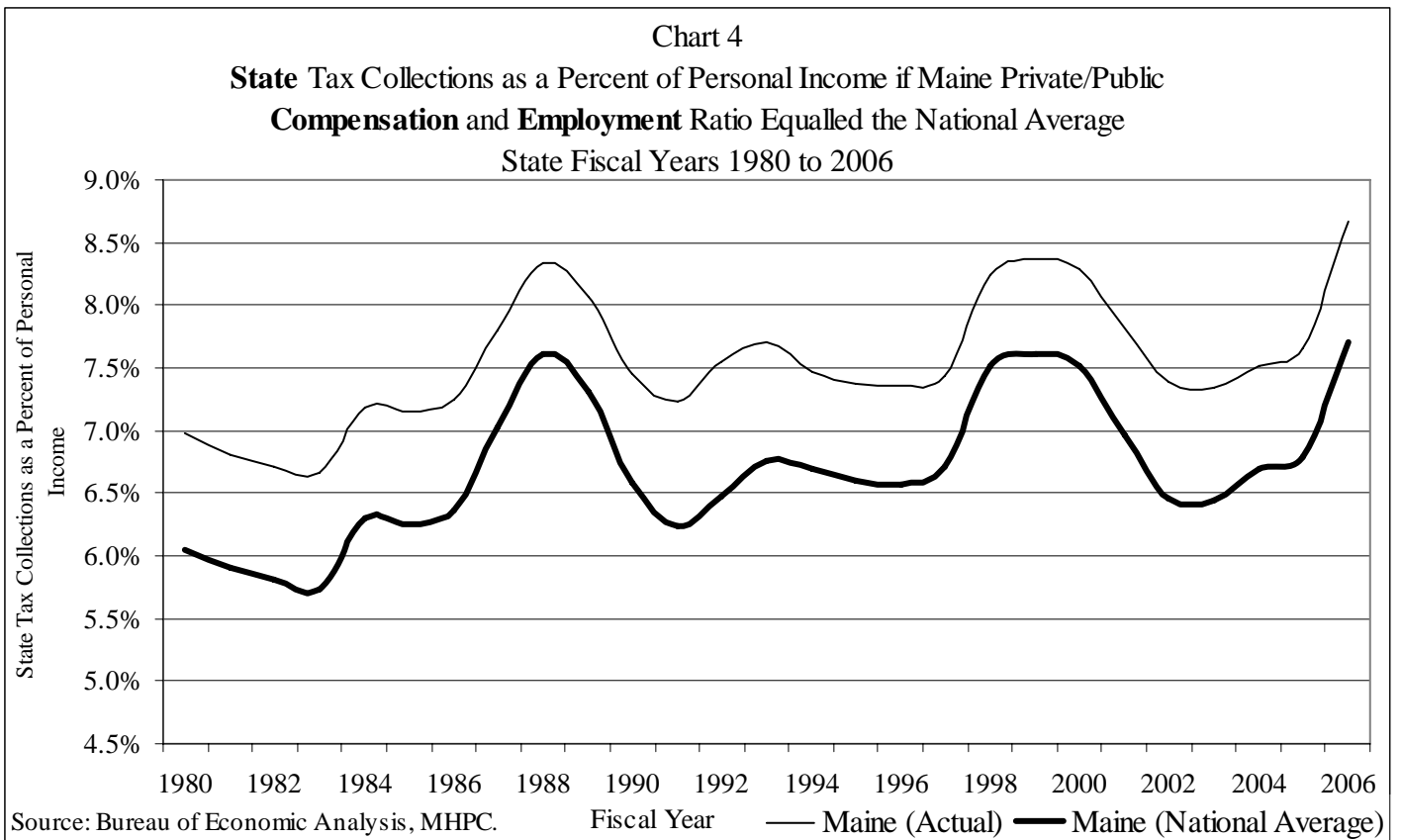


Table 3
Hypothetical: If Maine's Private/Public Compensation Ratio Equaled the National Average
Calendar/Fiscal Years 1979 to 2006

Calendar/ Fiscal Year	State Budget Compensation Savings		State Budget Employment Savings		State Tax Collections as a Percent of Personal Income		
	Nominal (Calendar Years)	Real 2006 Dollars (Calendar Years)	Nominal (Calendar Years)	Real 2006 Dollars (Calendar Years)	Actual State Tax Burden (Fiscal Years)	Hypothetical State Tax Burden (Fiscal Years)	Percent Difference
1979	\$21,266,129	\$49,808,654	\$54,729,126	\$128,184,309	7.00%	n.a.	n.a.
1980	\$22,118,720	\$47,484,753	\$67,409,772	\$144,716,170	6.97%	6.04%	-13.4%
1981	\$13,492,153	\$26,483,440	\$74,446,124	\$146,128,596	6.80%	5.91%	-13.2%
1982	\$27,762,987	\$51,359,624	\$79,480,463	\$147,033,408	6.71%	5.81%	-13.4%
1983	\$23,771,186	\$42,305,450	\$86,716,167	\$154,328,290	6.67%	5.74%	-14.0%
1984	\$25,064,511	\$42,992,023	\$92,957,459	\$159,445,727	7.19%	6.29%	-12.4%
1985	\$36,663,074	\$61,028,527	\$99,709,177	\$165,973,650	7.15%	6.25%	-12.7%
1986	\$37,443,683	\$60,976,740	\$92,916,216	\$151,313,319	7.25%	6.37%	-12.1%
1987	\$41,934,958	\$66,485,617	\$84,810,443	\$134,462,391	7.80%	7.03%	-10.0%
1988	\$59,472,074	\$91,173,598	\$76,225,848	\$116,857,952	8.33%	7.60%	-8.7%
1989	\$70,186,785	\$103,678,912	\$91,775,767	\$135,569,846	8.07%	7.32%	-9.4%
1990	\$81,484,090	\$115,876,259	\$118,284,412	\$168,208,973	7.45%	6.59%	-11.6%
1991	\$113,472,806	\$155,934,587	\$117,741,902	\$161,801,187	7.23%	6.23%	-13.8%
1992	\$122,634,011	\$164,730,283	\$123,089,069	\$165,341,548	7.54%	6.47%	-14.3%
1993	\$72,486,978	\$95,179,445	\$117,512,247	\$154,300,135	7.71%	6.76%	-12.4%
1994	\$75,748,031	\$97,395,361	\$96,959,071	\$124,668,108	7.47%	6.70%	-10.3%
1995	\$125,854,398	\$158,571,213	\$87,088,390	\$109,727,684	7.38%	6.59%	-10.6%
1996	\$116,531,918	\$144,097,114	\$82,735,218	\$102,305,929	7.36%	6.56%	-10.9%
1997	\$123,070,288	\$149,700,368	\$70,200,106	\$85,390,081	7.44%	6.71%	-9.7%
1998	\$143,288,901	\$172,378,887	\$82,741,995	\$99,539,970	8.24%	7.51%	-8.8%
1999	\$146,183,497	\$173,358,022	\$86,759,062	\$102,886,985	8.37%	7.61%	-9.0%
2000	\$176,105,790	\$204,390,141	\$83,871,562	\$97,342,173	8.29%	7.52%	-9.3%
2001	\$201,606,212	\$228,497,672	\$119,361,382	\$135,282,527	7.82%	6.97%	-10.9%
2002	\$216,440,866	\$241,094,348	\$127,808,125	\$142,365,982	7.39%	6.45%	-12.7%
2003	\$181,435,445	\$197,892,840	\$128,979,656	\$140,678,964	7.34%	6.45%	-12.1%
2004	\$188,509,476	\$199,934,188	\$135,186,809	\$143,379,874	7.52%	6.70%	-10.9%
2005	\$184,199,645	\$189,618,915	\$195,442,204	\$201,192,237	7.66%	6.79%	-11.5%
2006	\$200,366,421	\$200,366,421	\$215,330,035	\$215,330,035	8.67%	7.71%	-11.1%
Total	\$2,848,595,035	\$3,532,793,401	\$2,890,267,806	\$3,933,756,051	n.a.	n.a.	n.a.

Source: Bureau of Economic Analysis, MHPC.

1992 to 1997 time-period where employment fell. However, since 1997, state government employment grew by 19.8 percent to 28,108 in 2006 from 23,462 in 1997.

The BEA’s employment data is the most useful since it is the longest running employment data series available—going back to 1979 for state government employment—and it is also the most robust since it uses data from a number of sources including the Census Bureau, the Bureau of Labor Statistics, the Internal Revenue Service, and the U.S. Department of Agriculture.

The Census Bureau publishes similar full—and part-time employment data but it only goes back to 1992 on a yearly basis—potentially to 1990, but 1992 was the latest year available on the Census website. Chart 6 and Table 4 show that the Census Bureau data closely mirrors BEA.

However, an alternative measure to the “jobs” employment is the “full-time equivalent” (FTE) measure. The FTE takes two or more part-time jobs and transforms them into their equivalent full-time job. The Census Bureau also transforms their job based data into FTEs.

Chart 6 and Table 5 show that under the Census Bureau’s FTE measure, the recent change in Maine state government employment is lower than the BEA level at 8.5 percent to 21,680 in

2006 from 19,982 in 1998. This difference suggests that the growth, in a great part, is due to growth in part-time state jobs.

The Maine Bureau of Budget also calculates state FTEs, but the data only goes back to 2000 and does not include higher education.[2] For comparative purposes, the estimate for higher education FTEs from the Census Bureau was added to the Maine Bureau of Budget FTE estimates.

Chart 6 and Table 4 show that under the Maine Bureau of Budget FTE measure, state government employment has increased 3.3 percent to 21,039 in 2006 from 20,375 in 2000. This increase is less than the Census Bureau’s data, although most of this discrepancy is a result of a highly divergent FTE pattern between 2005 and 2006. Census reports FTEs climbing to 21,680 in 2006 from 21,140 in 2005 while Maine Bureau of Budget reports FTEs decreasing to 21,039 in 2006 from 21,330 in 2005.

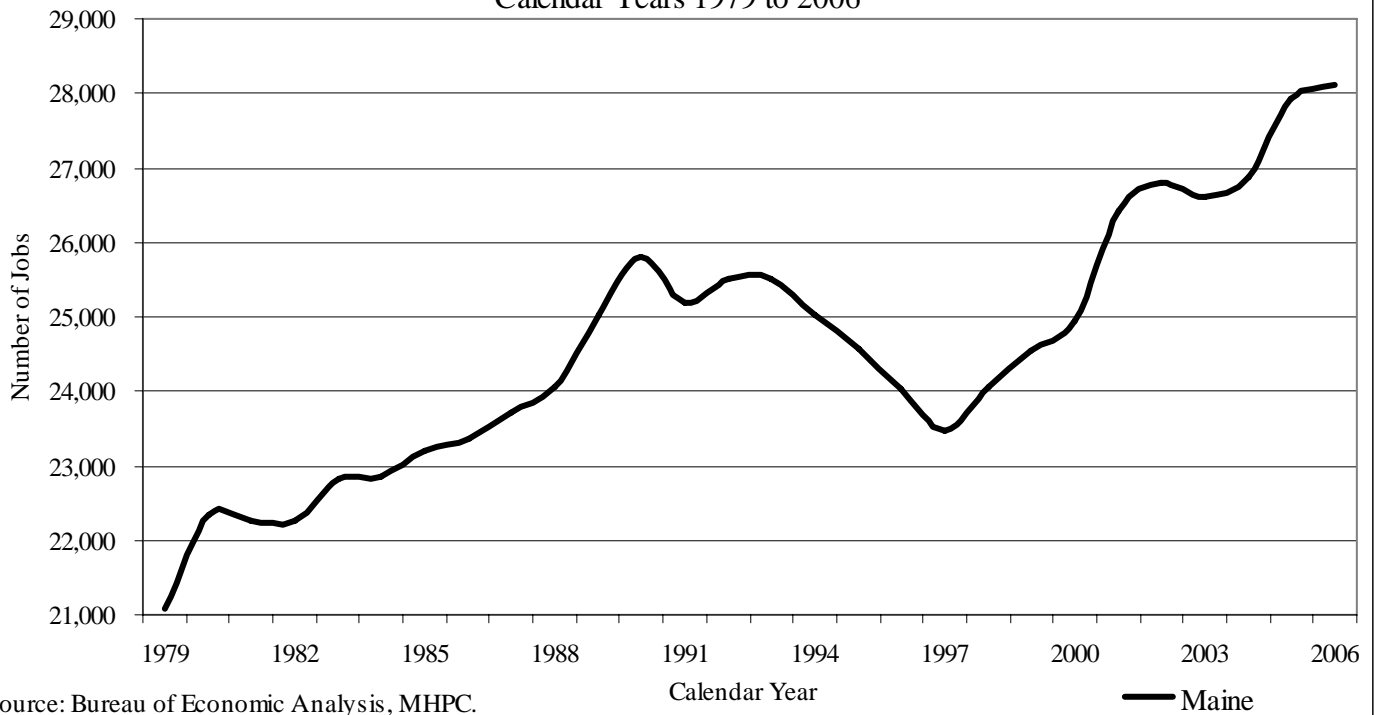
Generally speaking, all of the measures point to higher state employment since the late 1990’s.

Conclusion

Overall with regard to employment, policymakers should be most concerned with Maine’s 21st highest in the nation employment ratio. If Maine’s employment ratio were at the national average in 2006, it would have

Continued on page 8

Chart 5
Number of **State** Government Jobs
Calendar Years 1979 to 2006



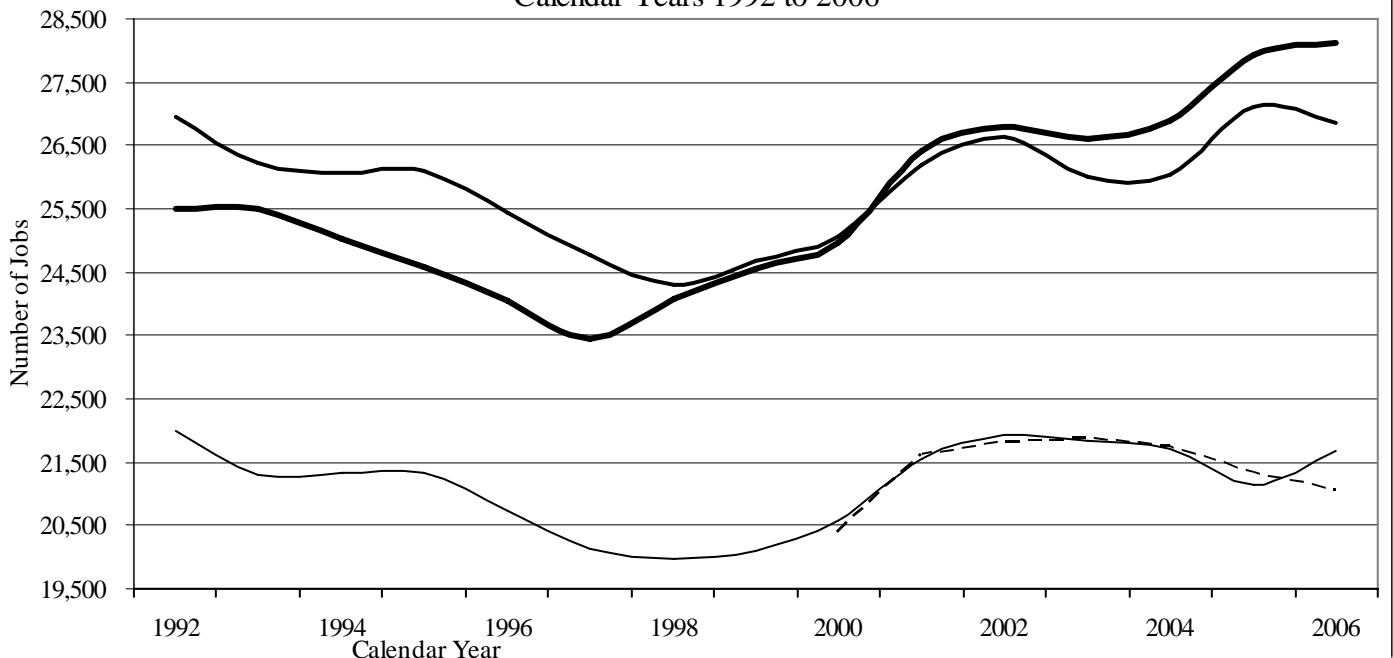
Source: Bureau of Economic Analysis, MHPC.

Table 4
 Various Measures of State Government Employment
 Calendar Years 1979 to 2006

Calendar Year	BEA Total Employment	Census Total Employment	Census FTE	Bureau of Budget FTE	Calendar Year	BEA Total Employment	Census Total Employment	Census FTE	Bureau of Budget FTE
1979	21,069	n.a.	n.a.	n.a.	1994	25,015	26,083	21,331	n.a.
1980	22,339	n.a.	n.a.	n.a.	1995	24,579	26,107	21,332	n.a.
1981	22,274	n.a.	n.a.	n.a.	1996	24,037	25,441	20,730	n.a.
1982	22,268	n.a.	n.a.	n.a.	1997	23,462	24,775	20,127	n.a.
1983	22,828	n.a.	n.a.	n.a.	1998	24,066	24,297	19,982	n.a.
1984	22,844	n.a.	n.a.	n.a.	1999	24,546	24,692	20,093	n.a.
1985	23,212	n.a.	n.a.	n.a.	2000	24,954	25,070	20,568	20,375
1986	23,357	n.a.	n.a.	n.a.	2001	26,412	26,197	21,544	21,610
1987	23,708	n.a.	n.a.	n.a.	2002	26,793	26,650	21,923	21,817
1988	24,063	n.a.	n.a.	n.a.	2003	26,616	26,004	21,830	21,856
1989	25,027	n.a.	n.a.	n.a.	2004	26,879	26,033	21,720	21,735
1990	25,814	n.a.	n.a.	n.a.	2005	27,931	27,107	21,140	21,330
1991	25,184	n.a.	n.a.	n.a.	2006	28,108	26,869	21,680	21,039
1992	25,512	26,960	21,983	n.a.					
1993	25,508	26,225	21,285	n.a.					

Source: Census Bureau, Bureau of Economic Analysis, Maine State Bureau of Budget, MHPC.

Chart 6
 Various Measures of State Government Employment
 Calendar Years 1992 to 2006



Source: Census Bureau, Bureau of Economic Analysis, Maine State Bureau of Budget, MHPC.

BEA Total Employment
 Census Total Employment
 Bureau of Budget FTE
 Census FTE

meant 5,258 fewer state government employees. This reduction in employment would have saved Maine taxpayers up to \$215,330,035.

Yet, the high employment ratio is not the only concern for policymakers. Maine also has a high compensation ratio of 21.3 percent, which is the 8th highest in the country. Overall, a lower employment and compensation ratio could have allowed Maine's tax burden to fall by 11.1 percent in FY 2006. To put this reduction into perspective, the state individual income tax could have been cut by nearly one-third.

One potential solution is to eliminate all vacated state government jobs due to retirement. According to the recent Maine Actuarial Report, 40 percent (6,451) of all state government employees (excluding higher education) are over the age of 50. [3] As the older state employees retire over the next decade, Maine's employment problem will retire with them.

In addition to fixing the employment gap, their retirement will also help the compensation gap since older state employees earn significantly more than younger workers. For example, the average pay for those aged 55 to 59 is \$41,569 whereas the average pay for those aged 25 to 29 is \$31,083—or 34 percent lower.

Finally, policymakers should be aware that another way to resolve the ratio differences is to grow private sector businesses, allowing them to better compensate and hire additional employees. Policymakers must pursue pro-growth economic policies—such as lower regulations, lower taxes and secure property rights—that will promote economic development. Such

Notes and Sources

- [1] For more information on Maine's compensation ratio, see this previous MHPC report: [http://www.maineconomy.org/Portals/0/The%20Maine%20View%20-%20Vol.%20-%20205.%20Issue%20No.%204%20\(final\).pdf](http://www.maineconomy.org/Portals/0/The%20Maine%20View%20-%20Vol.%20-%20205.%20Issue%20No.%204%20(final).pdf) The updated report can be found here: <http://www.maineconomy.org/Portals/0/Issue%20Brief,%20No.%2024.pdf>
- [2] Correspondence with the Maine Bureau of the Budget confirmed that the data only goes back to 2000.
- [3] Retiree Healthcare Plan Actuarial Valuation, June 30, 2006. <http://www.maine.gov/osc/pdf/admin/BA%20GASB%2045%206-30-06%20valuation%20report%2007-01-10.pdf>

policies are a win-win for both the private and public sectors.

Methodology

The employment and compensation data used in this study is from the Bureau of Economic Analysis's Regional Economic Accounts. <http://www.bea.gov/regional/index.htm#state>

When calculating state government employment savings, this analysis assumes the average compensation equals the lower of the average Maine state government compensation or the average U.S. average state government compensation. As a result, the calculated employment savings are conservative estimates, especially if efforts are made to correct the employment ratios before correcting the compensation ratios.

For a full discussion of BEA employment methodology, see: <http://www.bea.gov/regional/pdf/spi2006/11%20Employment.pdf>

The tax collection data used in this study is from the Census Bureau. <http://www.census.gov/govs/www/estimate.html>

The Employment and FTE data from the Census Bureau can be found here: <http://www.census.gov/govs/www/apesst.html>

The FTE data from the Maine Bureau of Budget can be found here: <http://www.maine.gov/osc/finanrept/cafr.htm> (page 161)

All calculations were performed by the author. The data excludes farm and proprietorship income as well as dividends, interest and rents, and personal current transfer receipts. The data was adjusted for inflation using the "Personal Consumption Expenditures" deflator.

J. Scott Moody is vice president of policy and chief economist at The Maine Heritage Policy Center. The author can be reached at jmoody@mainepolicy.org.

The Maine View is a publication of The Maine Heritage Policy Center that provides research, historical perspective, updates and commentary on current public policy issues. All information is from sources considered reliable, but may be subject to inaccuracies, omissions, and modifications.

The Maine Heritage Policy Center is a 501 (c) 3 nonprofit, nonpartisan research, and educational organization based in Portland, Maine. The Center formulates and promotes free market, conservative public policies in the areas of economic growth, fiscal matters, health care, and education – providing solutions that will benefit all the people of Maine. Contributions to MHPC are tax deductible to the extent allowed by law.

© 2007 The Maine Heritage Policy Center
Material from this document may be copied and distributed with proper citation.

P.O. Box 7829 <http://www.maineconomy.org>
Portland, ME 04112 <http://blog.maineconomy.org>
207.321.2550 (p) info@mainepolicy.org
207.773.4385 (f)

Additional MHPC Staff:

Bill Becker
President & Chief Executive Officer

Jason Fortin
Director of Communications

Stephen L. Bowen
Director of Education Reform

Tarren Bragdon
Director of Health Reform Initiatives

Heather Noyes
Director of Development

Sandy Cleveland
Executive Assistant