



2017 Michigan Economic

COMPETITIVENESS STUDY

Exhibit 108 : Northwood's State Competitiveness Index Rank (1998-2017)

Alabama	32	Montana	22
Alaska	40	Nebraska	6
Arizona	29	Nevada	17
Arkansas	19	New Hampshire	26
California	11	New Jersey	48
Colorado	2	New Mexico	38
Connecticut	49	New York	45
Delaware	37	North Carolina	18
Florida	33	North Dakota	10
Georgia	12	Ohio	30
Hawaii	47	Oklahoma	4
Idaho	8	Oregon	9
Illinois	35	Pennsylvania	42
Indiana	23	Rhode Island	50
Iowa	14	South Carolina	24
Kansas	28	South Dakota	16
Kentucky	43	Tennessee	13
Louisiana	27	Texas	3
Maine	44	Utah	1
Maryland	41	Vermont	39
Massachusetts	46	Virginia	5
Michigan	21	Washington	7
Minnesota	34	West Virginia	20
Mississippi	31	Wisconsin	36
Missouri	25	Wyoming	15

Exhibit 109 : Northwood's State Competitiveness Index Rank (1998-2017)

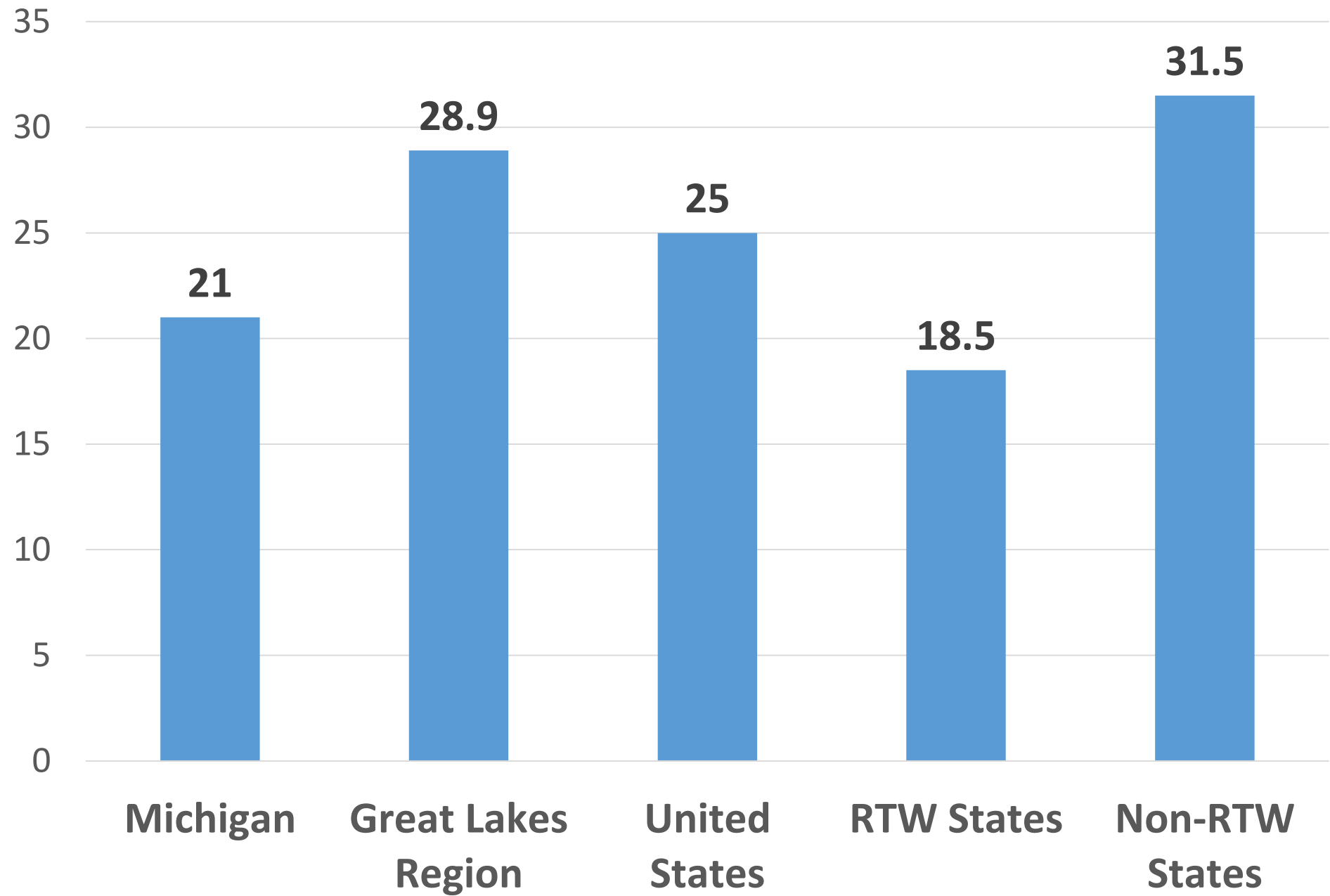


Exhibit 128: Northwood’s State Competitiveness Index Rank (2011-2017)			
Alabama	38	Montana	16
Alaska	37	Nebraska	14
Arizona	26	Nevada	27
Arkansas	35	New Hampshire	28
California	15	New Jersey	46
Colorado	6	New Mexico	45
Connecticut	49	New York	43
Delaware	42	North Carolina	4
Florida	2	North Dakota	7
Georgia	25	Ohio	24
Hawaii	36	Oklahoma	33
Idaho	13	Oregon	10
Illinois	31	Pennsylvania	34
Indiana	8	Rhode Island	50
Iowa	22	South Carolina	18
Kansas	30	South Dakota	23
Kentucky	32	Tennessee	5
Louisiana	47	Texas	3
Maine	41	Utah	1
Maryland	39	Vermont	44
Massachusetts	17	Virginia	12
Michigan	9	Washington	11
Minnesota	18	West Virginia	48
Mississippi	40	Wisconsin	29
Missouri	21	Wyoming	19

Exhibit 124: Percent Increase in Michigan Based Fortune 500 Company Stock Price (Non-Automotive) (03/09 – 8/17)

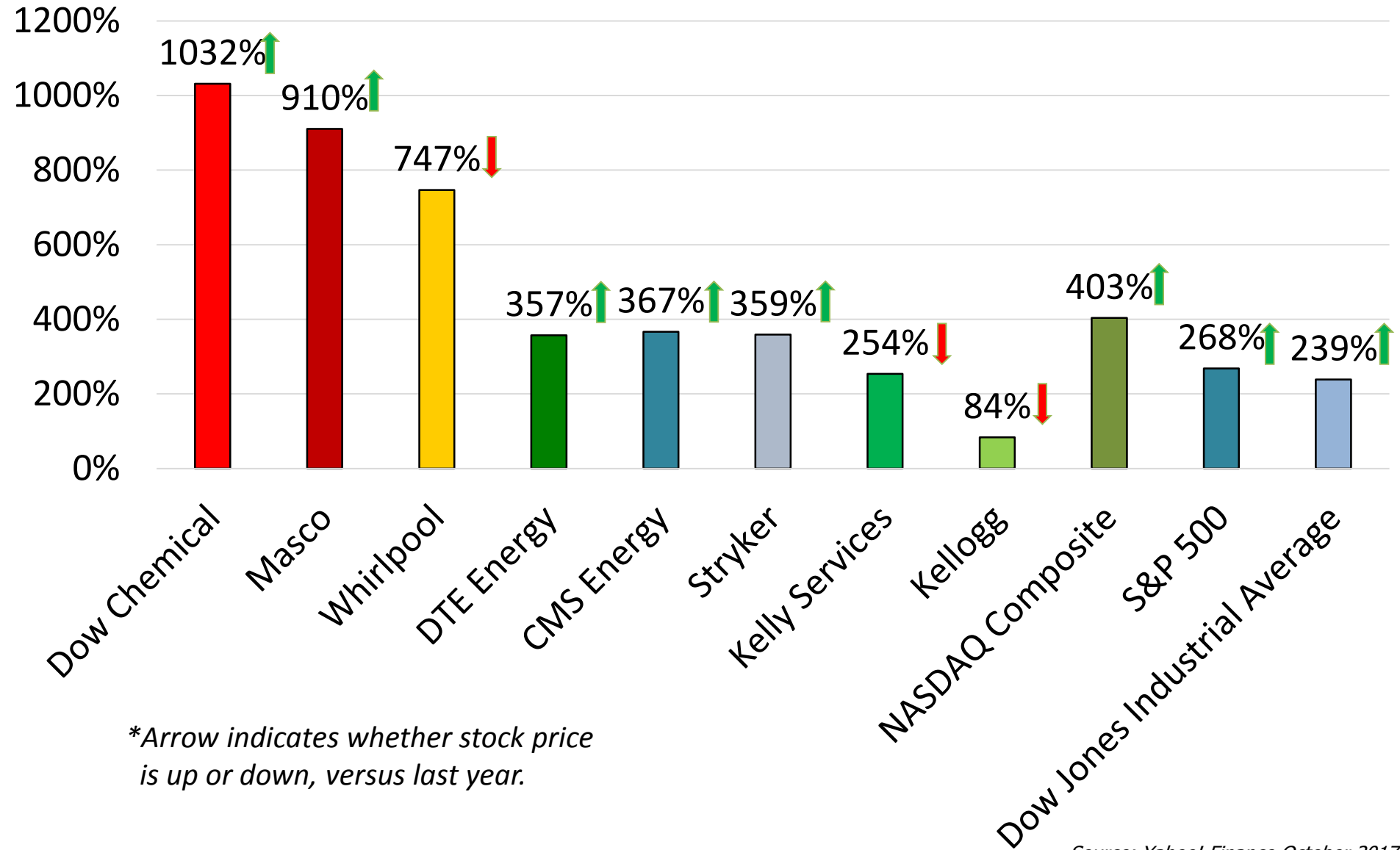


Exhibit 120: Michigan's Economic Performance Ranking

(1998-2017 Data)

	2017	2016	2015	2014	2013	2012
NU State Competitiveness Index: Michigan	21	25	29	30	39	47
Factor 1 – General Macroeconomic Environment	7	10	11	20	31	48
Factor 2 – State Debt and Taxation	11	13	13	12	14	10
Factor 3 – Workforce Composition and Cost	35	38	39	38	43	45
Factor 4 – Labor and Capital Formation	32	35	36	38	44	45
Factor 5 – Regulatory Environment	18	19	25	23	26	24

Exhibit 26: Gross State Product Growth (2011 - 2016)

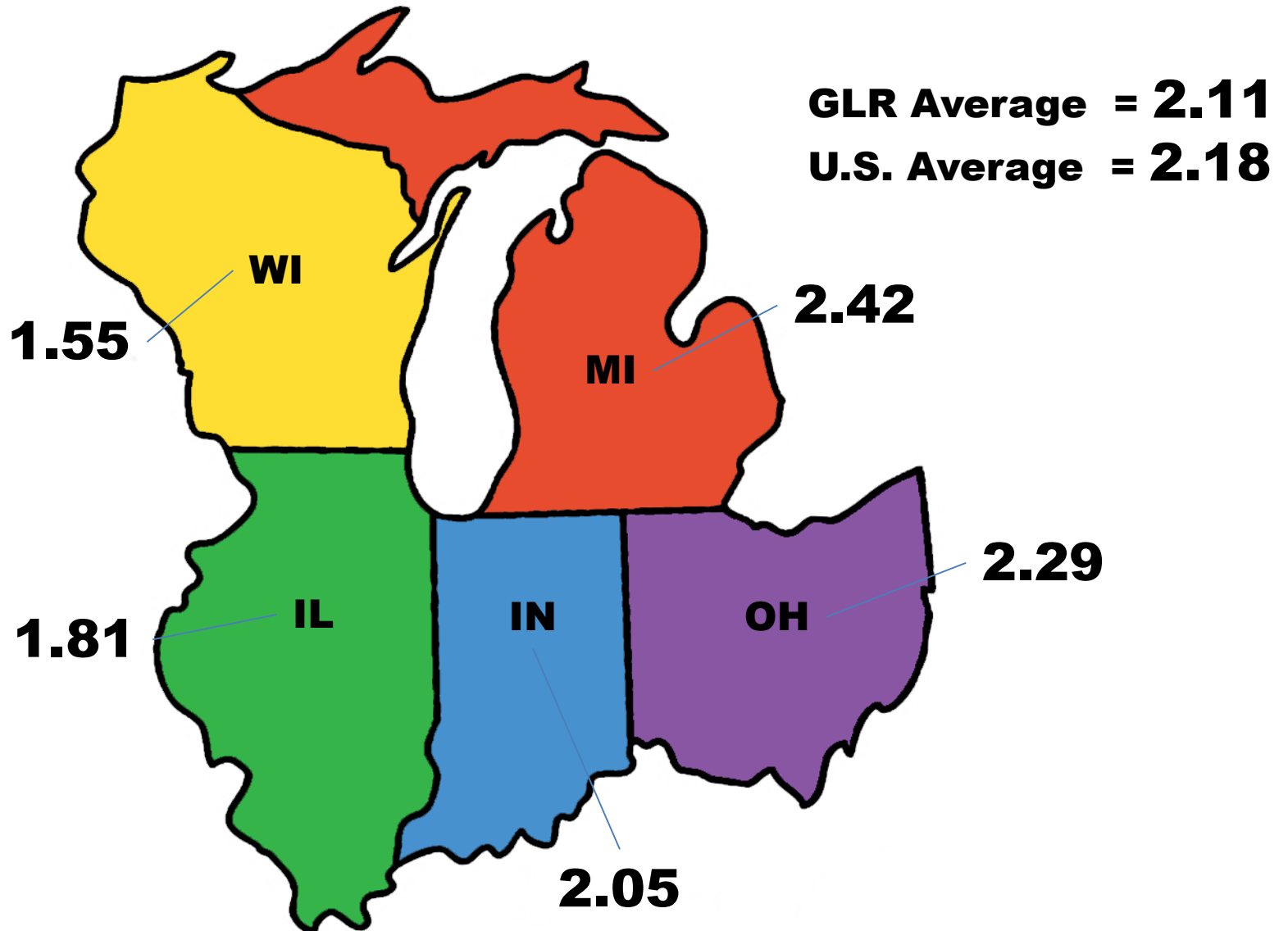
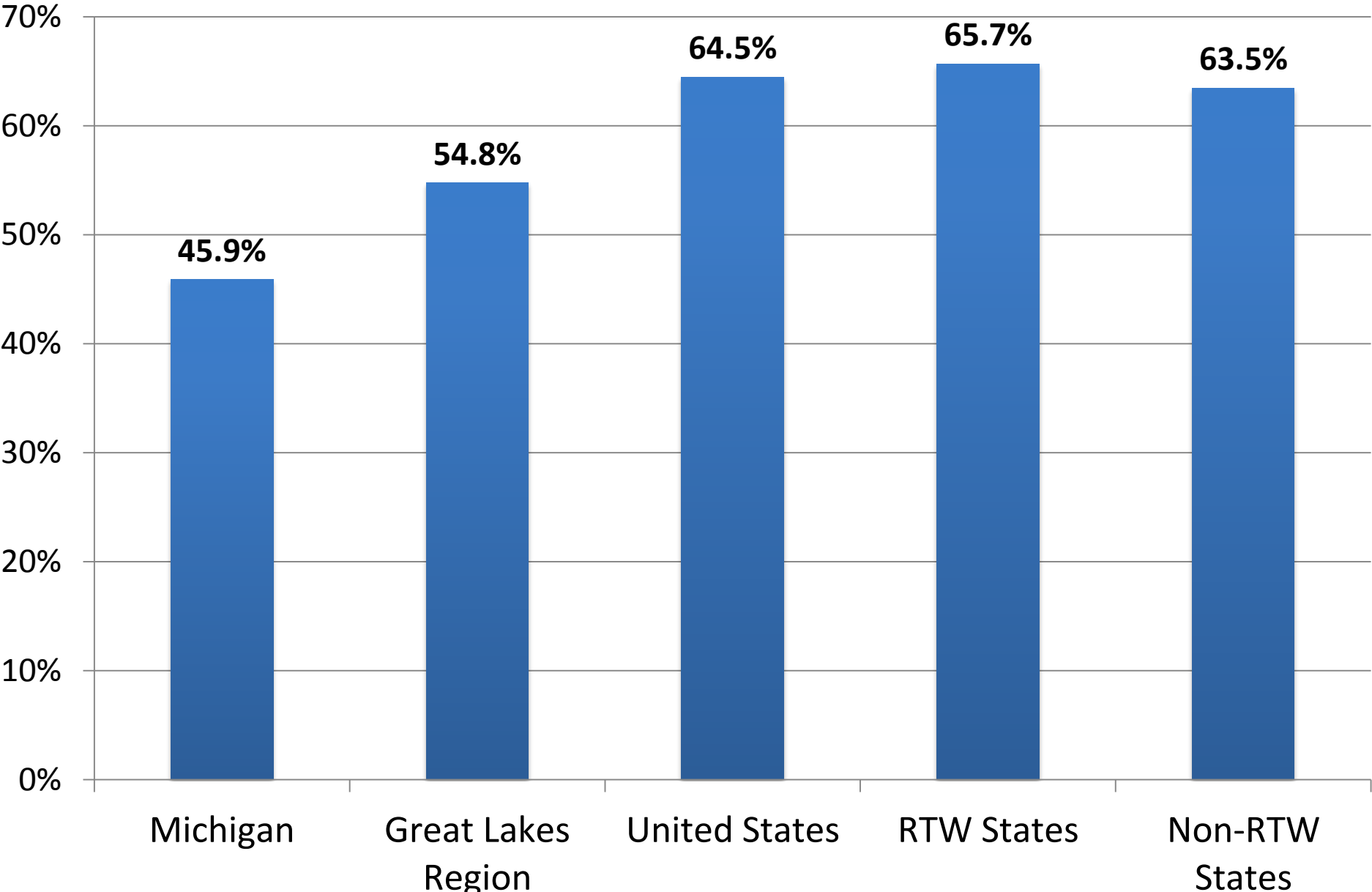
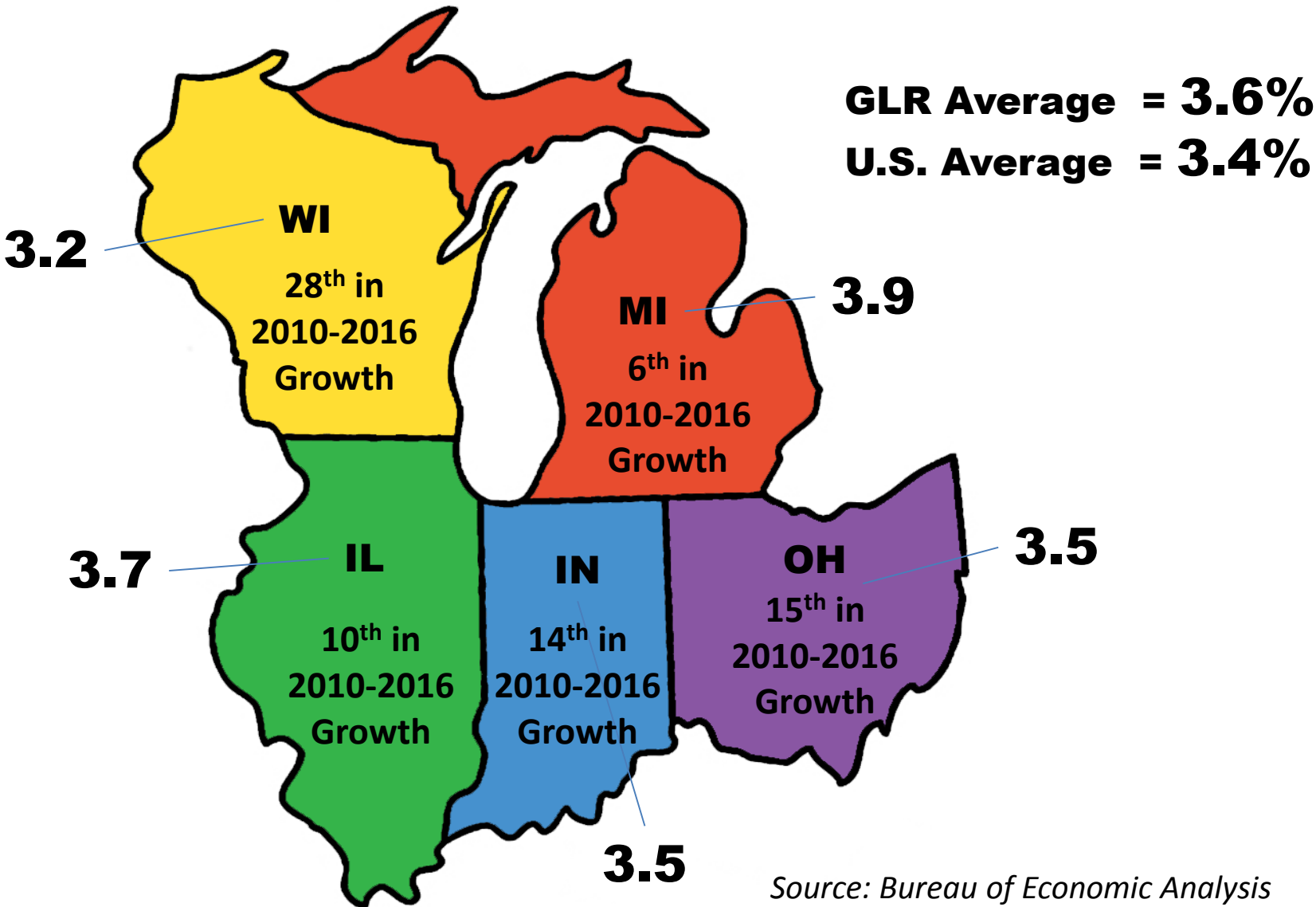


Exhibit 37: Personal Income Per Capita Growth (2000-2016)



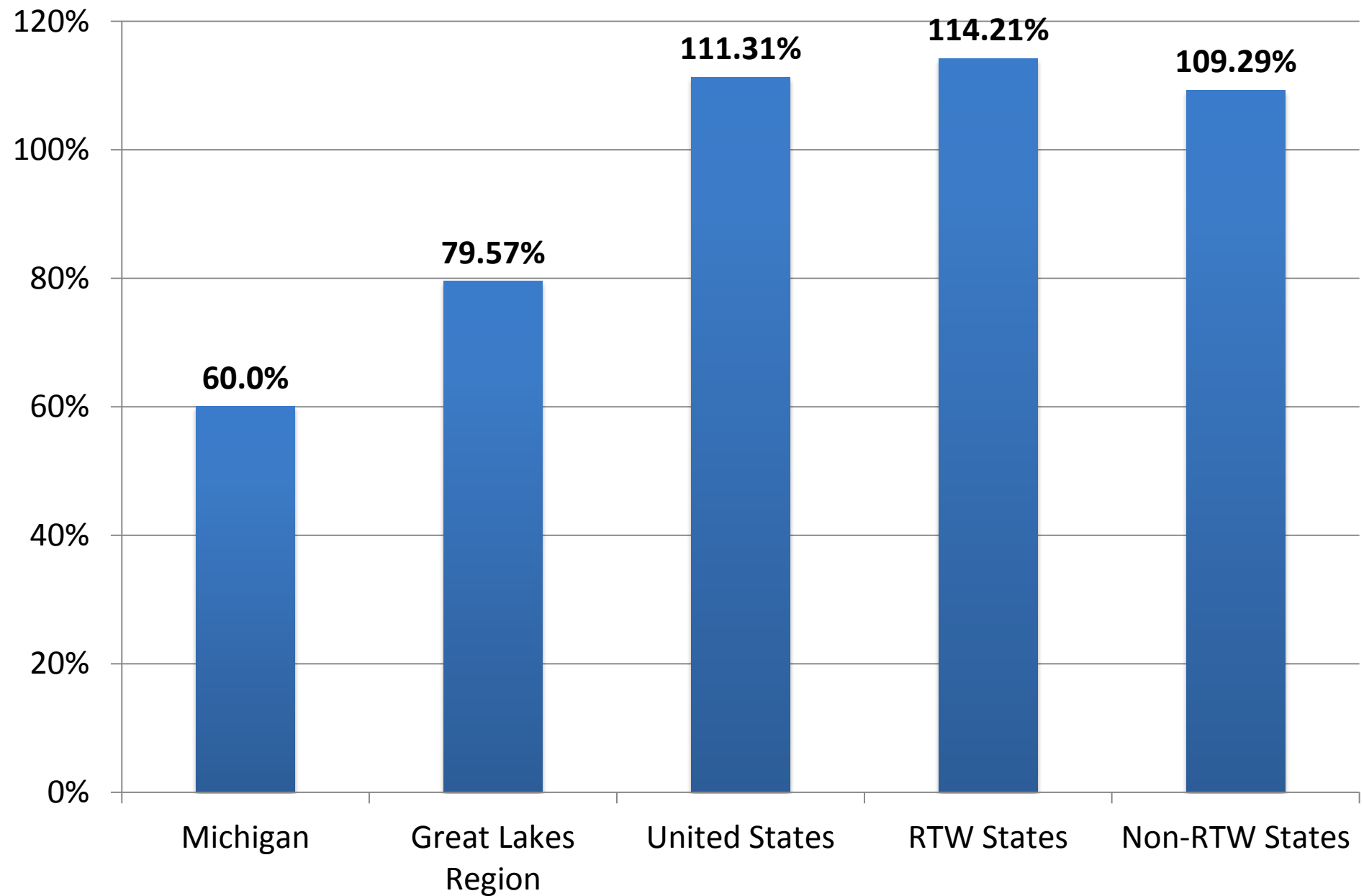
Source: Computed with data from Bureau of Economic Analysis (2000 - 2016)

Exhibit 38: Great Lakes Average Personal Income Per Capita Growth (2010-2016)



Source: Bureau of Economic Analysis

Exhibit 19: Gross State Product Growth (1998-2016)



Source: Computed with data from Bureau of Economic Analysis (1998 – 2016)

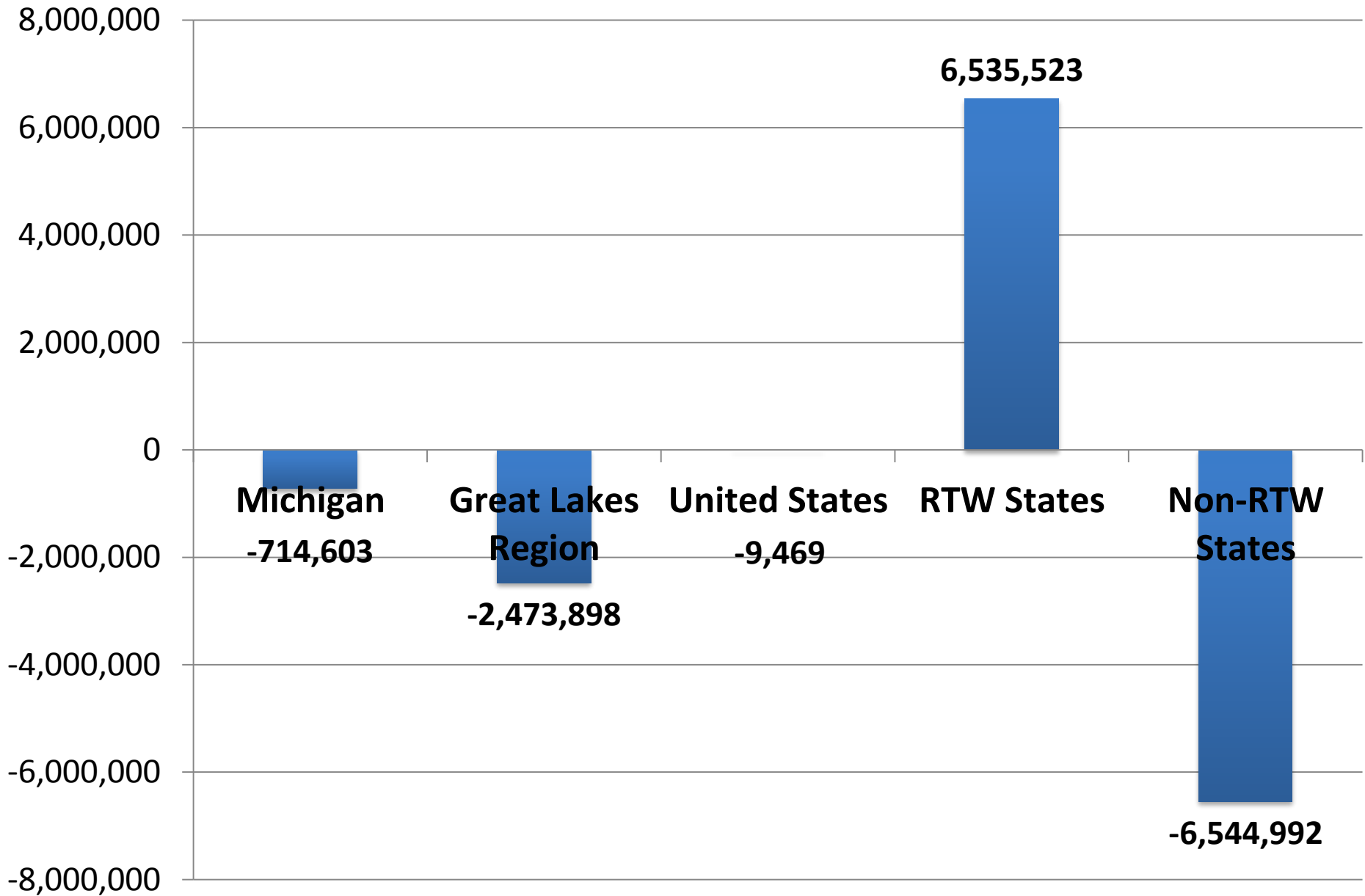
Exhibit 28: U.S. GSP Growth in Great Lakes Region (2011 - 2016)

State	2011	2012	2013	2014	2015	2016	Average GSP
Illinois	2.07	1.91	0.9	1.2	2.3	2.5	1.81
Indiana	2.19	3.30	2.1	0.4	1.7	2.6	2.05
Michigan	3.45	2.25	2.0	1.9	1.4	3.5	2.42
Ohio	2.88	2.16	1.8	2.1	1.8	3	2.29
Wisconsin	1.28	1.45	1.7	1.0	1.8	2.6	1.55
Great Lakes	2.43	2.17	1.6	1.4	2.14	2.9	2.11
U.S.	1.68	1.28	2.66	2.49	1.94	3	2.18

Exhibit 29: U.S. GSP Growth by Region (2011 - 2016)

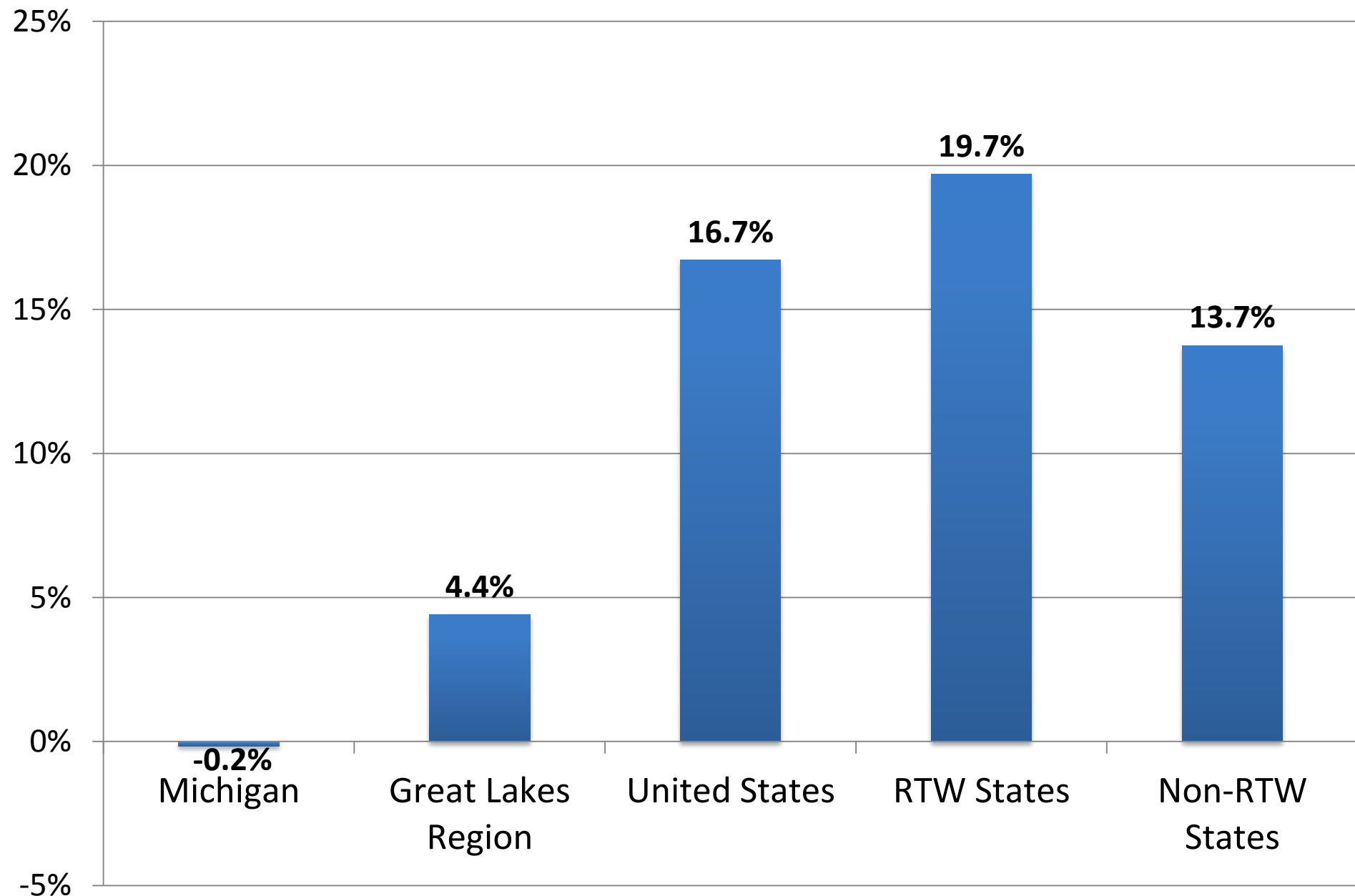
Region	2011	2012	2013	2014	2015	2016	Average
New England	1.04	1.24	1.3	1.6	1.3	3.6	1.68
Mid East	1.20	1.48	0.7	1.7	1.6	2.9	1.59
Great Lakes	2.43	2.17	1.6	1.4	2.14	2.9	2.11
Plains	1.96	2.74	2.5	1.3	1.3	1.7	1.92
South East	0.97	2.12	1.6	1.7	2.2	3.4	2.0
South West	2.97	4.07	3.3	4.3	3.1	0.6	3.06
Rocky Mountains	1.52	2.10	4.1	3.9	3.1	2.9	2.9
Far West	1.51	3.33	2.0	2.7	3.8	4.4	2.96
U.S.	1.68	1.28	2.66	2.49	1.9	3.0	2.18

Exhibit 17: Population Net Migration (2000-2016)



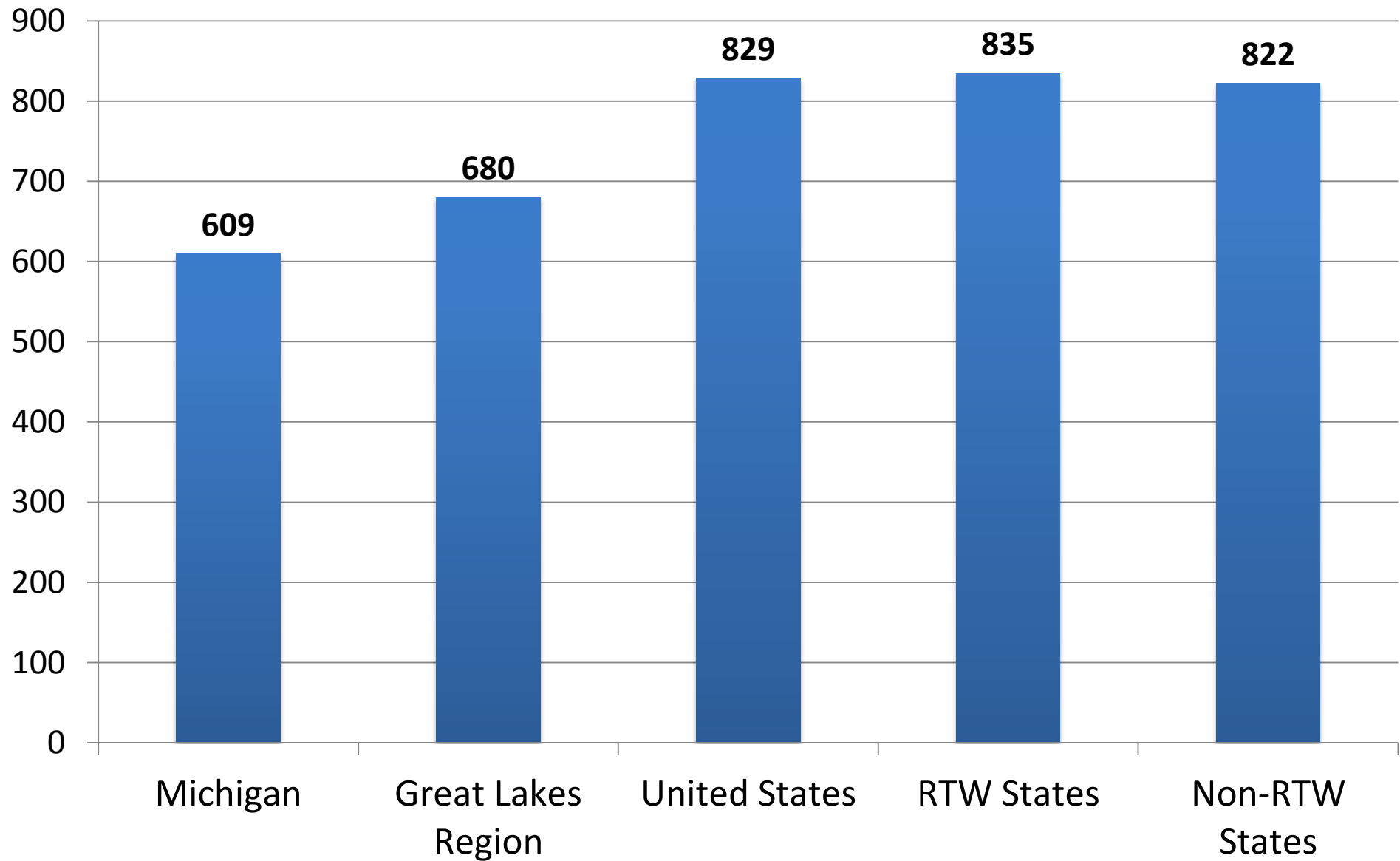
Source: Computed with data from Bureau of Labor Statistics (2000 – 2016)

Exhibit 33: Non-farm Payroll Employment Growth (2000-2016)



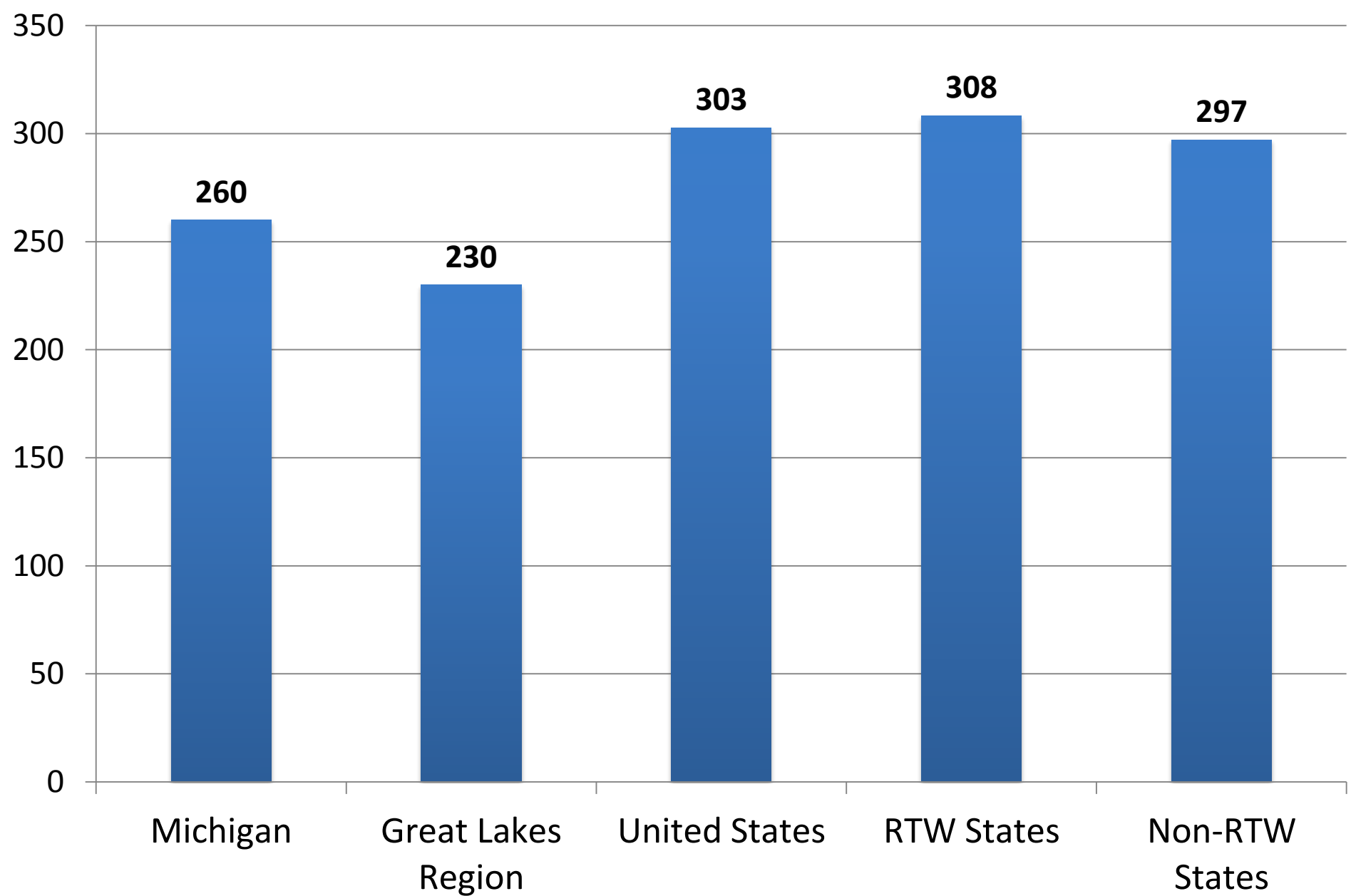
Source: Computed with data from Bureau of Economic Analysis (2000 - 2016)

Exhibit 62: Total Government Employees per 10,000 People (2016)



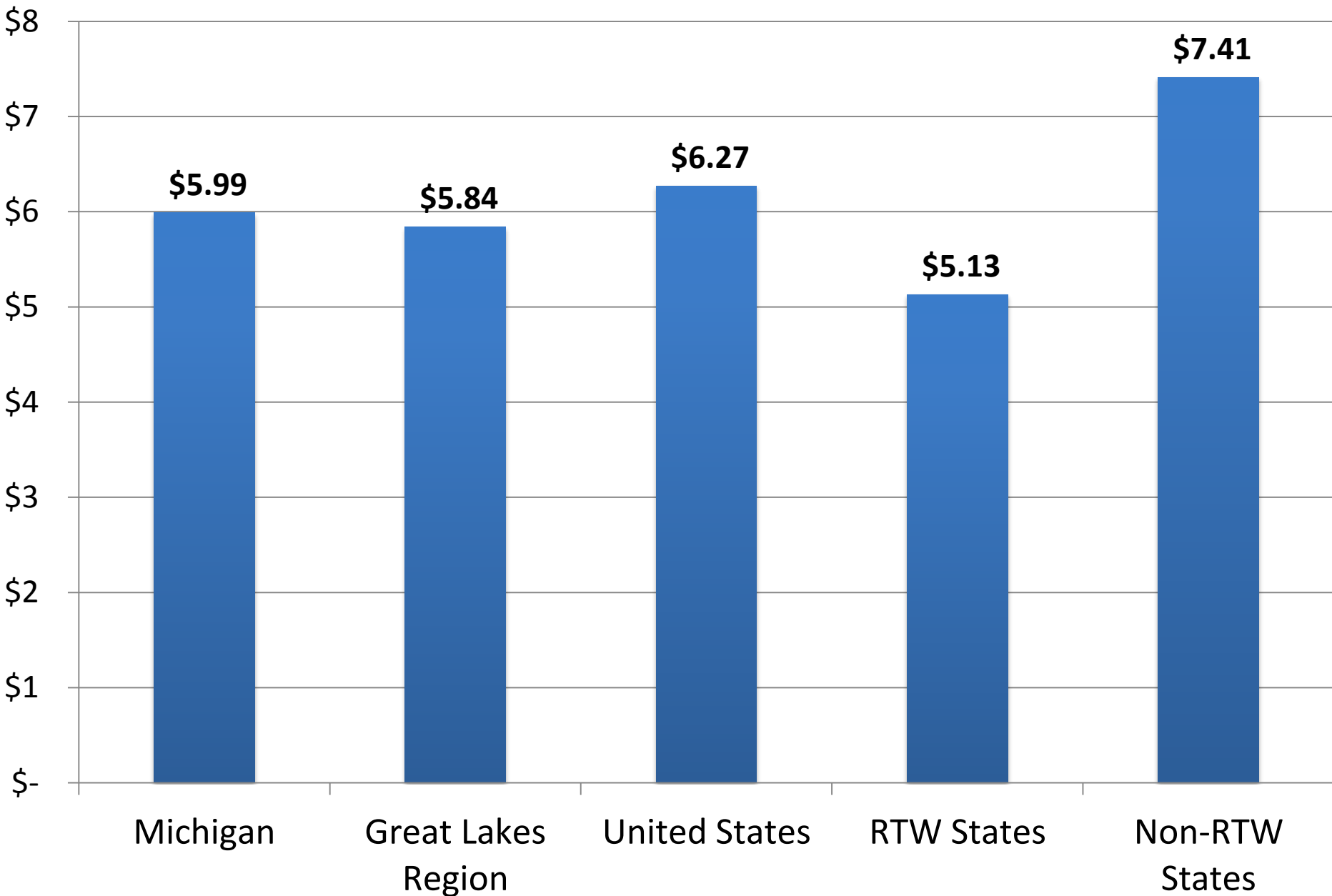
Source: Computed with data from Bureau of Economic Analysis (2016)

Exhibit 88: Kauffman Index of Entrepreneurial Activity (2017)



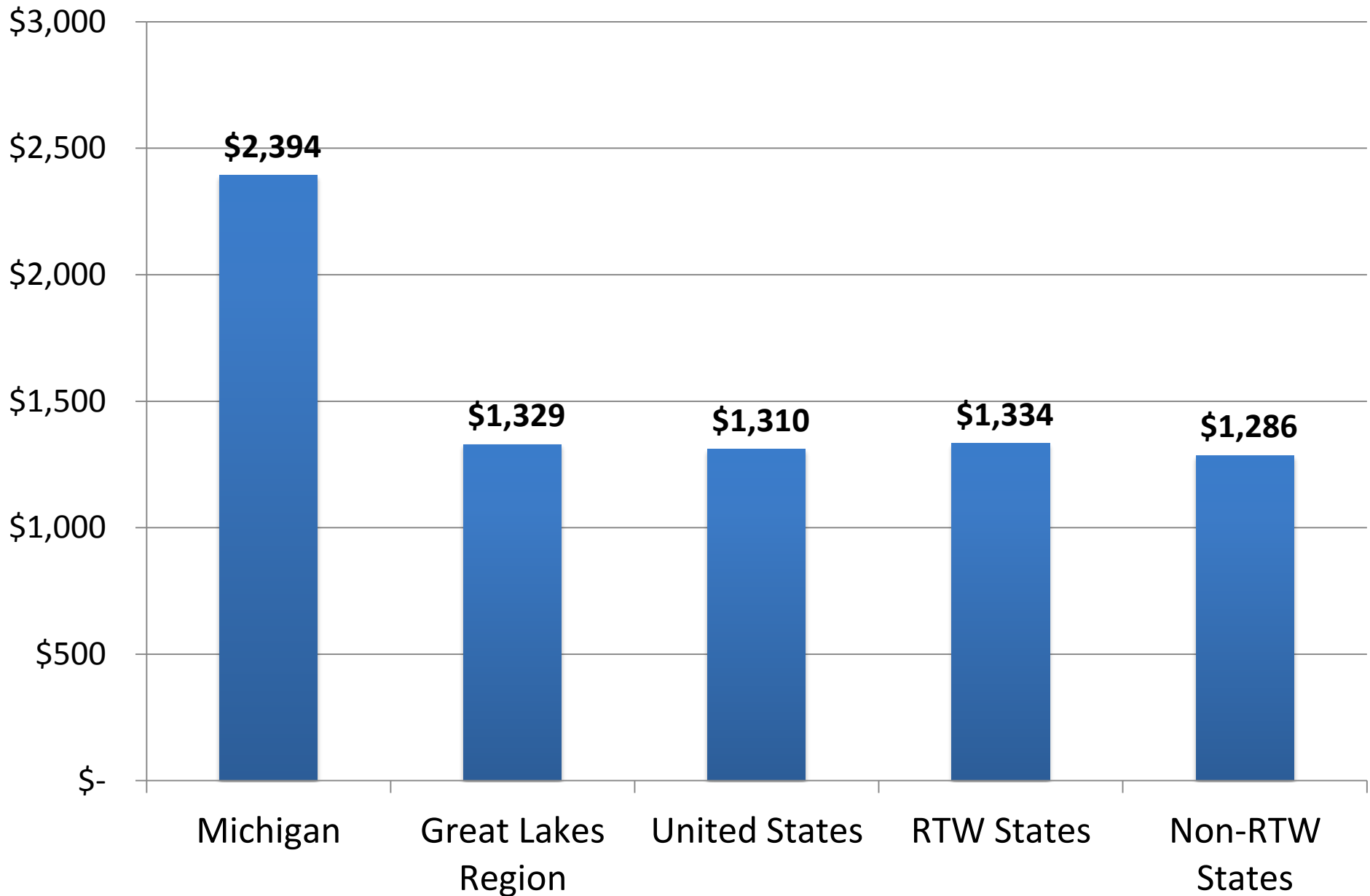
Source: Computed with data from The Kauffman Foundation (2017)

Exhibit 80: Industrial Natural Gas Prices (Avg. Jan.-Apr. 2017)



Source: Computed with data from U.S. Energy Information Administration (Average Jan.-Apr. 2017)

Exhibit 68: Average Price of Annual Car Insurance Policy (2017)



Source: Computed with data from CarInsuranceQuotes.com (2017)

Exhibit 107: State Business Tax Climate Index 2017

State	Overall Index Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemp. Insurance Tax Rank	Property Tax Rank
Wyoming	1	1	1	6	31	38
South Dakota	2	1	1	32	40	23
Alaska	3	27	1	5	29	22
Florida	4	19	1	28	2	10
Nevada	5	34	1	41	43	8
Montana	6	13	21	3	19	9
New Hampshire	7	46	9	2	41	43
Indiana	8	23	11	10	10	4
Utah	9	3	12	17	22	5
Oregon	10	35	32	4	33	18
Great Lakes Region						
Michigan	12	8	14	9	47	25
Illinois	23	26	10	35	38	46
Wisconsin	39	30	43	7	36	34
Ohio	45	45	47	29	4	11

Source: Tax Foundation (2017)

Exhibit 122: An Economic Snapshot of Key Great Lakes Region Cities (2000-2016)

	Metro Compounded Annual GDP Growth Rate (2000-2011)	Metro Compounded Annual GDP Growth Rate (2008-2011)	Metro Compounded Annual GDP Growth Rate (2009-2016)	Metro GDP (2016)	Rank Metro GDP (2011)	Rank Metro GDP (2016)	Number of Employers	City Population (City Proper) (2016)	City Median Household Income/State (2011-2015)
Chicago	0.64	-0.14	1.4	\$651 B	3	3	291,000	2,705,000	\$48,522/\$57,574
Cleveland	-0.15	-1.3	1.5	\$129 B	27	30	232,680	386,000	\$26,150/\$49,429
Columbus	0.53	-1.1	3.2	\$131 B	32	29	64,363	806,064	\$45,659/\$49,429
Detroit	-1.12	-0.6	2.7	\$253 B	14	13	61,868	672,795	\$24,017/\$49,576
Grand Rapids	0.10	-0.2	3.7	\$59 B	66	53	16,153	196,445	\$40,355/\$49,576
Indianapolis	1.14	-0.2	1.4	\$136 B	28	26	69,366	855,164	\$41,987/\$49,255
Lansing	0.10	-0.2	1.2	\$22 B	112	113	15,563	116,020	\$35,563/\$49,576
Milwaukee	1.10	0.3	0.7	\$101 B	35	38	38,017	595,047	\$43,873/\$53,357
U.S. Metro Areas	1.48	0.2	2.0	\$16.8 T	<i>Source: Bureau of Economic Analysis in Real Dollars (2017)</i>				

Exhibit 123: Comparison of Key Michigan Data from 2012 - 2017 Studies

	2012 Study	2013 Study	2014 Study	2015 Study	2016 Study	2017 Study
Average Personal Income Per Capita Growth	2000-2010	2000-2012	2000-2013	2000-2014	2000-2015	2000-2016
	20.3%	27.5%	30.0%	35.1%	41.3%	45.9%
Gross State Product Growth	1998-2011	1998-2012	1998-2013	1998-2014	1998-2015	1998-2016
	26.5%	31.5%	42.1%	48.3%	53.2%	60%
U.S. Population Net Migration	2001-2010	2001-2012	2001-2013	2000-2014	2000-2015	2000-2016
	-554,374	-590,635	-619,174	-647,853	-686,764	-714,603
U.S. Employment Growth	2001-2010	2001-2011	2001-2012	2000-2013	2000-2014	2000-2016
	-16.90%	-13.90%	-5.8%	-4.3%	-2.5%	-0.2%
Total Government Employees Per 10,000 People	2010	2012	2013	2014	2015	2016
	657	618	630	616	612	609
The Kauffman Index of Entrepreneurial Activity	2011	2012	2013	2015	2016	2017
	220	180	290	260	290	260
Industrial Natural Gas Prices	2010	2012	2013	2015	2016	2017
	\$8.23	\$7.42	\$7.92	\$6.58	\$5.73	\$5.99
Median Price of Annual Car Insurance Policy	2012	2013	2014	2015	2016	2017
	\$4,490	\$2,520	\$2,551	\$2,476	\$2,738	\$2,394
Northwood University Competitiveness Index	2012	2013	2014	2015	2016	2017
	47	39	30	29	25	21

Exhibit 1: Michigan is the Comeback State

Michigan		Region Rank	National Rank
1	U.S. Real GDP Growth 1998 – 2016	5 th	50 th
2	U.S. Real GDP Growth 2009 – 2016	1 st	6 th
3	U.S. Per Capita Personal Income Growth 1998–2016	5 th	50 th
4	U.S. Per Capita Personal Income Growth 2009-2016	1 st	3 rd
5	State Corporate Tax Rate 2017	1 st	8 th
6	Overall Business Tax Friendliness 2017	2 nd	12 th

Exhibit 2: Michigan Real GDP Growth in 2017

	Period	Percent Growth	Rank
1 Michigan Real GDP Growth	Q_4 – Q_1 '16 '17	-0.1%	33 rd
2 Michigan Real GDP Growth	Q_1 – Q_2 '17 '17	5.5%	4 th
3 Michigan Real GDP Growth	Q_4 – Q_2 '16 '17	2.7%	13 th

Exhibit 3: Top Metropolitan Areas for Real GDP Growth (2009 – 2016)

National Rank	Metro Area	Growth Rate	State Rank
24 th	Grand Rapids, MI Area	3.7%	1 st
25 th	Midland, MI	3.5%	2 nd
45 th	Detroit, MI Area	2.7%	3 rd
Total 382	National Average	2%	